ENOVIA DesignSync
Command Reference - File

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ENOVIA Synchronicity Command Reference

This document contains command descriptions for all ENOVIA Synchronicity DesignSync and ProjectSync® commands. You can run most DesignSync commands from any DesignSync client.

The commands in this reference, along with the Tcl scripting language, are referred to as Synchronicity tcl (stcl). You can include these commands in stcl scripts. For DesignSync, you can create scripts for clients and servers (SyncServers). For ProjectSync, you create server scripts. See the Synchronicity stcl Programmer's Guide to learn how to use the Synchronicity commands in Tcl scripts.

Using this Guide with Different Methodologies

DesignSync features three command references. This command reference is for a file based environment containing only or predominately file/vault based objects.

The file-based command set supports working in the file methodology. The file based command set supports working with individually managed file objects which each have a vault object on DesignSync server that can be directly manipulated and referenced. All the information include in this guide is applicable in a file-based environment. If you are working in a mixed environment containing module or legacy module objects in additional to file objects, you should use the ENOVIA Synchronicity Command Reference: All.

Important: This guide only includes the commands, options, and arguments applicable to file-based usage. This may mean there are some differences from what you see as available commands or options in the DesignSync client.

Organization of the Command Reference

The Synchronicity commands are ordered by methodology and function within the Command Reference.

The command reference sections are organized into the following sections:

- Fundamental Topics - contains the commands that discuss the core concepts underlying the DesignSync system. Understanding these concepts provides a foundation that allows you to properly construct DesignSync Commands and maximize their functionality. These topics include Understanding Fetch Preferences, Using Interrupt, Using Revision Control Keywords, selectors, server-side, wildcards.
- Client Applications - contains the commands that launch DesignSync clients. These topics include DesSync (graphical user interface, or GUI), dss (DesignSync shell), dssc (concurrent version of dss), stcl (Synchronicity Tcl

shell), and stclc (concurrent version of stcl). See DesignSync Help: DesignSync Command Line Shells for details about the shells, as well as the types of command line editing supported by each shell.

- Client Shell Control - contains the commands used within the DesignSync clients to control the clients.
- Workspace Setup - commands used to initially set up a workspace.
- Primary Revision Control - primary commands used daily by the user to manage their data.
- Advanced Revision Control - advanced commands used less often by the user to support advanced revision control functionality.
- Navigational - commands that allow you to move around within the workspace or the server to locate your files.
- Informational - commands that provide information about the revision controlled objects, or the contents of the files.

- URL Sync Object Module - contains the commands that allow you to access (view and modify) the Synchronicity Object Model information.
- TCL Interface - contains the commands that provide additional TCL scripting functionality.
- Third-Party Integrations - contains the commands that provide an interface into the DSMW and DSDFII integrations.
- Administration - contains the commands that provide administration resources, such as data replication, caching, mirrors, authentication, command defaults setup, triggers, etc.
- DesignSync Web Interface - contains the commands that provide an interface into the DesignSync Web interface, including note and notetype manipulation, property type manipulation, etc.

Syntax Description

Every command description has a SYNOPSIS section that shows the syntax for the command. Material within square brackets [ ] is optional. Material within curly brackets { } is required. A vertical bar | indicates mutual exclusion. For example, `[ -keep | -lock ]` means that you can use the `-keep` option or the `-lock` option, but not both.

The command options descriptions are in alphabetical order in the TOC and within the options section. The syntax line also follows alphabetical order except when the command has exclusive options, as shown above. The exclusive options are shown together to improve readability.

Accessing Command Descriptions from Client Shells

The command descriptions in the **Synchronicity Command Reference** are identical to the command-line help you can access from any DesignSync client using the `help`

command or `-help` option. For example, you can enter either of the following commands to get help for the `co` command:

```
dss> help co

dss> co -help
```

You can also launch this file from any DesignSync client by using the `webhelp` command. For example,

```
dss> webhelp co
```

Opens your default web browser on the co command page.

Note: Both the help and webhelp command respect the DesignSync methodology specified in SyncAdmin. When a methodology is specified, Designsync shows the custom help for the module specified. For more information on specifying methodology, see the *ENOVIA Synchronicity DesignSync Administrator's Guide*: General Options.

Fundamental Topics

Understanding Fetch Preference

fetch preference

NAME

```
fetch preference    - How to specify a default fetch state
```

DESCRIPTION

```
DesignSync supports five object states: locked copy (original),
unlocked copy (replica), link to the cache, link to the mirror,
and reference. You have a locked copy when you want to edit an
object to create a new version. You can also have a locked
reference to lock an object that you intend to regenerate
without fetching the last version of the object. The state
you want for unlocked objects -- objects you have fetched
into your work area -- typically depends on your team's
project methodology. For example, if your team employs a
file cache to share files, you would generally have links in
your work area to objects in the cache.

You can specify the object state each time you invoke a
command that affects the state (ci, co, populate, cancel) --
for example, always specifying -share. To simplify specifying
your team's recommended fetch state, your project leader can
define a default fetch state for these commands. Your project
leader uses the SyncAdmin tool to define a default fetch state.

DesignSync determines the fetch state for a given operation
as follows:
  1. Operations use the state option (-lock, -get/-keep, -share,
     -mirror, -reference) specified on the command line.
  2. If no state option is specified, operations use the default
     fetch state as defined by your project leader.
  3. If no default fetch state has been defined, operations use
     the command's default behavior (-get for 'co' and 'populate',
     -keep for ci and 'cancel').
The 'co' and 'populate' commands update the states of modified
objects only.  To update the states of all objects, use the
-unifystate option.

Note:
Use of caches and mirrors is limited to UNIX
machines. DesignSync displays an error message when a
command tries to use an invalid default fetch preference.
```

SEE ALSO

```
ci, cancel
```

EXAMPLES

```
This example demonstrates the behavior of the 'co' command
first without, then with a default fetch state defined.

- No default fetch state defined
  dss> co top.v         # Fetches a copy (default behavior for 'co')
  dss> co -get top.v    # Fetches a copy
  dss> co -share top.v  # Creates link to top.v in the cache

- Default fetch state of 'mirror'
  dss> co top.v         # Creates link to top.v in the mirror
  dss> co -get top.v    # Fetches a copy (explicit option overrides default)
  dss> co -share top.v  # Creates link to top.v in the cache
```

Understanding Server-Side Commands

server-side

NAME

```
server-side         - Understanding and using server-side commands
```

DESCRIPTION

```
Server-side only commands can be run only on the SyncServer. You
run server-side scripts either from your browser, or using the
rstcl command from a DesignSync client:

o From your browser, specify a URL as follows:
  http://<host>:<port>/scripts/isynch.dll?panel=TclScript&file=<filename>

o From a DesignSync client, specify the following command:
  rstcl -server sync://<host>:<port> -script <filename>

where <filename> is the name of your server-side script.

The SyncServer looks for stcl scripts in the following locations (in the
order listed):

  1. Server-specific Tcl scripts (UNIX only):
     <SYNC_DIR>/custom/servers/<host>/<port>/share/tcl
```

```
   2. Site-wide Tcl scripts:
      <SYNC_DIR>/custom/site/share/tcl

   3. Synchronicity-provided Tcl scripts:
      <SYNC_DIR>/share/tcl

      Do not put scripts in <SYNC_DIR>/share/tcl because this
      directory is reserved for Synchronicity scripts, and your
      scripts may be overwritten when you upgrade your
      Synchronicity software.

Important: If you make modifications to your script, use the
ProjectSync Reset Server menu option to force the SyncServer to
reread your script.

When specifying 'sync:' URLs within scripts that are run on the
server, do not specify the host and port. For example, specify:
   sync:///Projects/Asic
not
   sync://holzt:2647/Projects/Asic
Because the script is run on the server itself, host:port
information is unnecessary and is stripped out by the
server, which may lead to incorrect behavior during object-name
comparisons.

You must verify access controls explicitly in server-side scripts.
Access controls are generally ignored in server-side scripts;
the script itself must call the 'access verify' command for access
controls it wishes to honor.  The following server-side script
verifies the built-in AdministrateServer access control:

      if [access verify AdministrateServer $SYNC_User] {
          access reset
          puts "AccessControl files reread."
      } else {
          puts "Permission denied."
      }

If your server-side script operates on RevisionControl notes, you need
to protect the integrity of your data by blocking access to the server
while the script runs:

1. Edit your custom AccessControl file to deny all actions that operate
   on RevisionControl notes, for example:

   access deny Checkin everyone
   access deny Tag everyone

2. Load the modified AccessControl file by using the ProjectSync Access
   Reset menu item.

3. Run your server-side script.

4. Edit your custom AccessControl file and remove the 'access deny'
   commands.

5. Load the modified AccessControl file by using the ProjectSync Access
```

```
   Reset menu item.

See the 'access' commands for more information about custom
AccessControl files.

The following are examples (but not the exhaustive list) of
server-side only commands:
  url users
  url notes
  note setprops
  note query
  access verify
  access reset

For more information on server-side development, see the ENOVIA
Synchronicity stcl Programmer's Guide.
```

SEE ALSO

```
rstcl
```

EXAMPLES

```
The following is an example of passing parameters into a
server side Tcl script.

Assuming the script uses the TclScript panel, the arguments are
passed using the same syntax that browsers use to pass parameters
to CGI scripts. This makes it simple to invoke TclScript panels
from HTML forms.

All of the arguments are packaged as members of an array variable
named SYNC_Parm. The index to the array is the name of the
argument, and the value is the argument value.

For example, to pass the color and shape of an object to a script
called 'DrawShapes.tcl', you would have something like this:

The URL to invoke the script (this example is meant to be a single
line but is displayed across two for enhanced readability):

http://holzt:2647/scripts/isynch.dll?panel=TclScript&file=DrawShapes.tcl
   &color=red&shape=triangle

Within DrawShapes.tcl, you might print out the parameters:

  puts "Color = $SYNC_Parm(color) <br>"
  puts "Shape = $SYNC_Parm(shape)"

In this example, submitting the URL should produce the output:
```

```
  Color = red
  Shape = triangle

You could also execute this script using the rstcl command from a
DesignSync client (dssc in this example):

  dss> rstcl -server sync://holzt:2647 -script DrawShapes.tcl \
       -urlparams color=red&shape=triangle
```

Using Interrupt (Control-c)

interrupt

NAME

```
interrupt           - How to interrupt commands
```

DESCRIPTION

```
To interrupt DesignSync commands, press Control-c. Not all DesignSync
commands can be interrupted; you can only interrupt commands that
perform multiple operations and do not complete immediately. These
commands include cancel, ci, co, import, ls, populate, retire,
setvault, setmirror, tag, and unlock.

When a command is run on multiple files or directories, the command
operates on multiple files or directories at once, as opposed to
processing one file at time, one directory at a time. When a command
is interrupted, before the command stops it will complete its
processing of the current files or directories being operated on.
```

SYNOPSIS

```
Control-c
```

EXAMPLES

```
The following is an example of interrupting a recursive checkin:
  dss> ci -recursive -nocomment -force Sportster
  Beginning Check in operation...

  Checking in: Sportster/code/samp.asm
  Checking in: Sportster/code/samp.lst
  Checking in: Sportster/code/samp.mem
  Checking in: Sportster/code/samp.s19
```

```
Interrupt detected!

Checking in: Sportster/code/sample1.asm

Command Interrupted!

dss>
```

Using Revision Control Keywords

keywords

NAME

```
keywords            - How to use revision control keywords
```

DESCRIPTION

```
The revision control engine used by DesignSync is RCE.
DesignSync supports RCE revision control keywords (or
keys) in your design files. By including keywords in your files,
you can access revision information (such as revision number,
author, and comment log), which is stored in the RCE archive
that underlies your vault.

You use revision control keywords by inserting them in your files,
typically within comments to keep programs that operate on your
files from interpreting the keywords. Keywords are delimited by
preceding and trailing dollar signs ($). There cannot be a space
between a keyword and its dollar-sign delimiters. Keywords are
expanded (keyword substitution) based on the version of the file
that you are checking out. Because the keyword expansion usually
changes the length of the file, keywords should only be used with
files whose format is position independent, such as text files.
You can control keyword expansion using the -keys option to the
ci, co, and populate commands.

Note: Revision control keyword expansion is not supported for:
      o files belonging to collections
      o the initial checkin of module data from "mkmod -checkin"

The following are the revision control keywords. The keywords are
case sensitive.

$Aliases$  List of tag names assigned to the revision
$Author$   Who checked the revision in
$Date$     The date and time the revision was checked in
           For modules and module member objects, the time is
           displayed in GMT. For DesignSync objects, the time is
           displayed in the server's local time.
```

```
$Header$   Concatenation of Source, Revision, Date, Author, and Locker
$Id$       Concatenation of RCSfile, Revision, Date, Author, and Locker
$KeysEnd$  Not expanded, and stops further expansion of keys
$Locker$   Who has locked this revision. If the revision is not
           locked, this value is empty (null).
$Log$      The full name of the archive file ($Source$) followed by
           the comment log (see Notes)
$RCSfile$  The name of the archive file, without the path
$Revision$ The revision number. For modules, the version provided
           is that of the module member.
$Source$   The full name of the archive file, including the path

Notes:
- The $Log$ keyword, when expanded, permanently adds log
  information to your file -- later collapsing the keyword
  leaves the log information in your file. Existing
  log messages are not replaced. Instead, the new log information
  is inserted each time the keyword is expanded. $Log$ is useful
  for accumulating a complete change log in a source file, but can
  result in differences or conflicts when doing merges or
  file comparisons. $Log$ is the only keyword with this behavior.

- When a keyword expansion requires spans multiple lines,
  the comment delimiter at the beginning of the line is repeated on
  subsequent lines. Therefore, make sure that the resulting syntax
  is valid. For example, in a C file, do not specify:

    /* $Log$
    */

  The resulting expansion has invalid comment syntax:

    /* $Log: /home/syncmgr/syncdata/adams/2647/Projects/Test/test.c.rca $
    /*
    /*  Revision: 1.6 Wed Jun 20 09:12:07 2001 Adams
    /*  *** empty comment string *** */

  Whereas if you specify:

    /*
    * $Log$
    */

  The resulting expansion is valid:

    /*
    * $Log: /home/syncmgr/syncdata/adams/2647/Projects/Test/test.c.rca $
    *
    *  Revision: 1.6 Wed Jun 20 09:12:07 2001 Adams
    *  *** empty comment string ***
    */
```

SEE ALSO

```
 co, populate
'
```

EXAMPLES

```
 The following is an example of keywords in a file before and after
 expansion. Note that the keywords appear within comment
 delimiters, in this case  /* and */, such as a C file.

 /*
 * $Aliases$
 * $Author$
 * $Date$
 * $Header$
 * $Id$
 * $Locker$
 * $Log$
 *
 *
 * $RCSfile$
 * $Revision$
 * $Source$
 * $KeysEnd$
 * $Id$
 */


 Following substitution:

 /*
 * $Aliases:  Key-Example  $
 * $Author:  ja $
 * $Date:  Wed Jun 20 11:47:20 2001  $
 * $Header:  /home/syncmgr/syncdata/adams/2647/Projects/Test/test.c.rca  1.1
Wed Jun  20   11:47:20 2001 ja Stable  $
 * $Id:  test.c.rca 1.1 Wed Jun 20   11:47:20 2001 ja Stable  $
 * $Locker: $
 * $Log:  /home/syncmgr/syncdata/adams/2647/Projects/Test/test.c.rca $
 *
 *   Revision: 1.1 Wed Jun  20   11:47:20 2001 ja
 *   Initial revision
 *
 * $RCSfile:  test.c.rca $
 * $Revision:  1.1 $
 * $Source:  /home/syncmgr/syncdata/adams/2647/Projects/Test/test.c.rca $
 * $KeysEnd$
 * $Id$
 */
```

Using Selectors

selectors

NAME

```
selectors           - How to use selectors and selector lists
```

DESCRIPTION


```
DesignSync uses selectors and selector lists to determine the
branch or version of an object to use for revision-control
operations. Understanding and properly using selectors and
selector lists is critical in multi-branch environments, but is
also important when using a single branch.

Note:
DesignSync supports two distinct features: 'select lists'
and 'selector lists'. Select lists, as managed by the
'select' and 'unselect' commands and used by commands that
support the '-selected' option, are an optional way to
specify on which objects DesignSync commands should operate.
Selector lists, as managed by the "setselector" command and
the '-version' and '-branch' options to various commands,
specify on which version or branch of a given object
DesignSync commands should operate.
```

What Are Selectors?

```
A selector is an expression that identifies a branch and version of
a managed object. For example, the version selector 'gold', the branch
selector 'Rel2:Latest', the version number '1.4', and the reserved
keyword 'Latest' are all selectors.
```

Static Selectors Versus Dynamic Selectors

```
Static selectors denote a set of objects whose contents are fixed.
These fixed objects might constitute a group of objects being
prepared for release. Static selectors include version selectors such
as 'gold' and branch selectors with fixed versions, such as
'Rel2:gold'. The objects denoted by a static selector do not change
```

with subsequent checkins.

Dynamic selectors denote a set of objects whose contents are not fixed. A branch selector such as 'Rel2:Latest' is a dynamic selector because the objects denoted by the selector change; a new 'Latest' version is created on the Rel2 branch with each subsequent checkin.

How Does DesignSync Resolve Branch and Version Selectors?

Branch tags and version tags share the same name space. To distinguish version selectors from branch selectors, you append ':<versiontag>' to the branch name; for example, 'Gold:Latest' is a valid branch selector. You can leave off the 'Latest' keyword as shorthand; for example, 'Gold:' is equivalent to 'Gold:Latest'. The selector 'Trunk' is also a valid branch selector; 'Trunk' is a shorthand selector for 'Trunk:Latest'.

You cannot assign the same tag name to both a version and a branch of the same object. For example, a file called 'top.v' cannot have both a version tagged 'Gold' and a branch tagged 'Gold'. However, 'top.v' can have a version tagged 'Gold' while another file, 'alu.v', can have a branch tagged 'Gold'.

Consider adopting a consistent naming convention for branch and version tags to reduce confusion. For example, you might have a policy that branch tags always begin with an initial uppercase letter ('Rel2.1', for example) whereas version tags do not ('gold', for example).

If the selector identifies a version, DesignSync resolves the selector to both the object's version number and branch number. For example, if version 1.2.1.3 is tagged 'Gold', DesignSync resolves 'Gold' as both version 1.2.1.3 and branch 1.2.1. A version selector only resolves if the object has a version tag of the same name; it does not resolve if the tag is a branch tag.

If the selector identifies a branch, DesignSync resolves the selector to both that branch and the Latest version on that branch. If branch 1.2.4 has branch tag 'Rel2', DesignSync resolves 'Rel2:Latest' as both branch 1.2.4 and the Latest version on that branch (say, 1.2.4.5). This behavior is important because some commands (such as 'co') operate on a version, some (such as 'ci') operate on a branch, and others (such as 'tag') operate on either a version or branch. If the tag cannot be resolved as a branch, DesignSync searches for a version of the same name, determines which branch the version is on, and resolves to the Latest version on that branch. For example, suppose an object, 'netlist.txt', has a version tagged 'beta' on its 1.2.4 branch. If the selector is 'beta', DesignSync first searches for a 'beta' branch. Finding no beta branch, DesignSync searches for a 'beta' version. DesignSync finds the 'beta' version, determines its branch, 1.2.4, and resolves to the Latest version on the 1.2.4 branch.

A selector can also specify both a branch and a version, for example, 'Rel2:gold'. This selector resolves if there is a branch 'Rel2' and if a version tagged 'gold' exists on the 'Rel2' branch.

A selector might not match any branch or version of a given object. For example, a file may not have a branch or version tagged 'Gold'. Because selectors can fail, it is common to specify selector lists.

Note: To resolve a selector, DesignSync does not search above the first folder that has a vault association. Thus, if a folder has no selector or persistent selector set, DesignSync searches up the hierarchy only as far as the first folder that has a vault association.

What Are Selector Lists?

You can combine selectors into a selector list, a comma-separated list of selectors. No whitespace between items is allowed. Examples of selector lists are:

```
gold,silver,bronze,Trunk:Latest
auto(Test),Main:Latest
Dev2.1:Latest,Rel2.1:Latest,Trunk
gold, 1.2, 1.2.1:Latest, Trunk
```

Selector lists are used by commands that fetch objects ('co', 'populate', and 'import'). They provide a search order for identifying and retrieving versions. DesignSync operates on each element of a selector list in the same way it operates on an individual selector. If the first selector in the list does not resolve to a version, then DesignSync looks at the next selector in the list. The first matching version is used. The command fails if none of the selectors in the list resolves to a version. In the case of tags, DesignSync first looks for a branch with the specified tag, and if found, resolves to the Latest version on that branch. Otherwise, DesignSync looks for a version with that tag.

For example, if you want to populate with "the most stable configuration", you might define your selector list as 'Green,Yellow,Red,Trunk', where your team's development methodology is to use version tags of 'Green', 'Yellow', and 'Red' to indicate decreasing levels of stability. With this selector list, DesignSync retrieves the first of the following versions it locates:

1. The version tagged 'Green'.
2. The version tagged 'Yellow'.
3. The version tagged 'Red'.
4. The Latest version on the branch tagged Trunk. Trunk (shorthand for Trunk:Latest) is the default tag name for branch 1.

If your team is using a branching methodology and you want to populate with "the most stable configuration", you might define your selector list instead as 'Green:Latest,Yellow:Latest,Red:Latest,Trunk'.

With this selector list, DesignSync retrieves the first of the following versions it locates:

1. The Latest version on the branch tagged 'Green'.
2. The Latest version on the same branch as the version tagged 'Green'.
3. The Latest version on the branch tagged 'Yellow'.
4. The Latest version on the same branch as the version tagged 'Yellow'.
5. The Latest version on the branch tagged 'Red'.
6. The Latest version on the same branch as the version tagged 'Red'.
7. The Latest version on the branch tagged Trunk.

Selector lists are a powerful mechanism, but can also add complexity. To avoid accidental checkins to unintended branches when you have complicated selector lists, the 'ci' and 'co -lock' commands consider only the first selector in a selector list. If the first selector resolves to a branch, the operation continues, otherwise the operation fails.

Note: Using CONFIG statements in sync_project.txt files, you can map a configuration to a single selector or a selector list. See the DesignSync help topic "Using Vault References for Design Reuse" for information.

What Are Persistent Selector Lists?

Some commands (ci, co, populate, import) support persistent selector lists. Persistent selector lists specify what branch or version a command operates on in the absence of an explicit -version or -branch option. Commands that do not obey the persistent selector list typically operate on the current version or current branch of the object in your work area.

You explicitly set the persistent selector list, typically on an entire work area, using the 'setselector' command. You can also set the selector at the same time you set the vault with the 'setvault' command. DesignSync also sets the persistent selector list in the following cases:

- When populating a configuration-mapped folder. This behavior is a performance optimization. See the "populate" help topic for details.
- When populating or checking out with the -overlay option and an object exists on the overlay branch but not on the branch being overlaid (the work area branch). DesignSync may augment the object's persistent selector list with the Auto() selector so that the object is automatically branched when checked in. See the -overlay option description for details.

A persistent selector list is stored in an object's local metadata, or it is inherited from its parent folder. If a persistent selector list has not been defined, the default is 'Trunk'.

You can override the persistent selector list on a per-operation basis with the -version option (for populate, co, and import) or -branch option (for ci). The persistent selector list is not updated when you use the -version or -branch option.

The 'P' data key for the 'ls' command and the 'url selector' command report an object's persistent selector list.

Note: Using CONFIG statements in sync_project.txt files, you can map a configuration to a single selector or a selector list. See the DesignSync help topic "Using Vault References for Design Reuse" for information.

Selector Formats

A selector can have one of several formats:

o <number>

A branch or version number. Branch and version numbers are also known as "dot numerics". Using branch or version numbers as selectors is typically less convenient than using tags or date-based selectors.

A version <number> selector is a static selector; the objects denoted by the version <number> selector are fixed. A branch <number> selector is a dynamic selector; the objects denoted by the branch <number> selector change upon subsequent checkins.

Examples: 1.1, 1.3.2.3 -- version <number> selectors
1, 1.3.4, 1.1.1 -- branch <number> selectors

o <versiontag>

A version selector. If you specify a version selector, DesignSync resolves the selector to both the object's version number and branch number. For more details, see "How Does DesignSync Resolve Branch and Version Selectors?"

A <versiontag> selector is a static selector; the objects denoted by the <versiontag> selector are fixed.

A given tag name might be applied to a branch or to a version (but never both at the same time for the same object). Branch selectors use the syntax '<branchtag>:<versiontag>', for example, 'Rel2:Latest' to differentiate them from version selectors.

If you specify a version selector during the check-in of a new object, the object is created, by default, on the Trunk branch. If you instead intend to check the object into a different branch, be sure to specify a branch selector rather than a version selector.

```
  Examples of version selectors: gold
                                 alpha

o <branchtag>:Latest

  A branch selector that specifies the most recent version on
  the branch. A given tag name might be applied to a branch
  or to a version (but never both at the same time for the same
  object). To specify a branch selector, append ':<versiontag>',
  in this case, ':Latest' to the branch tag name, for example,
  'Rel2.1:Latest'. You can leave off the 'Latest' keyword as
  shorthand.  For example, 'Rel2.1:' is equivalent to
  'Rel2.1:Latest'.

  A <branchtag>:Latest (or <branchtag>:) selector is a dynamic
  selector; the objects denoted by this selector change upon
  subsequent checkins.

  If <branchtag> cannot be resolved as a branch tag, DesignSync
  searches for a version tag of that name and resolves to the Latest
  version on that version's branch.  For more details, see "How Does
  DesignSync Resolve Branch and Version Selectors?"

  The tag 'Trunk' (shorthand for 'Trunk:Latest') has special
  significance; it is the default tag name for branch 1.

  Examples of branch selectors: Trunk          -- branch 1 default
                                                  (shorthand for
                                                  Trunk:Latest)
                                Rel2.1:Latest  -- branch selector of
                                                  most recent Rel2.1
                                                  version
                                Rel2.1:        -- shorthand for
                                                  Rel2.1:Latest

  Notes about using Latest and Date():

  - <branchtag>:Date(<a_date_in_the_future>)is equivalent to
    <branchtag>:Latest. Meaning that as long as the specified date is
    in the future, the <branchtag>:Date selector will resolve to the
    <branchtag>:Latest.  Once the date has been reached, however;
    the last checked in version for the date becomes the version
    indicated for that selector.
  - When used with the 'setselector' command or as part of a
    selector list argument (more than one selector) to
    -version, Latest and Date() must be qualified with a branch:
         <branchtag>:Latest, <branchtag>:Date(<date>)
  - When used as the only selector to a -version option,
    DesignSync augments the selector with the persistent selector
    list. For example, if the persistent selector list is
    'Gold:,Trunk' and you specify 'co -version Latest', the
    selector list used for the operation is
    'Gold:Latest,Trunk:Latest'; the persistent selector list
    remains 'Gold:,Trunk' after the operation.

    Exception: When you check in an object whose branch you have
               locked (having done a 'co' or 'populate' with the
```

```
                -lock option), the date selector augments the
                current branch, not the persistent selector
                list. You typically want to remain working on the
                locked branch even if the persistent selector list
                has changed.

  These restrictions are required to avoid ambiguity about which
  branch a Latest or Date() selector applies to.

o <branchtag>:<versiontag>

  A specific version on a specific branch. The <branchtag> and
  <versiontag> values are themselves selectors.

  Unlike the dynamic <branchtag>:Latest selector, a
  <branchtag>:<versiontag> selector is a static selector; the
  objects denoted by the <branchtag>:<versiontag> selector
  are fixed.

  Examples: Rel2:alpha
            Trunk:Date(yesterday)

  Notes:
   - To specify a specific branch and version, the selector must
     contain both the branch and version. ':<versiontag>' is illegal.
     '<branchtag>:' resolves to the Latest version on the specified
     branch.
   - A selector such as 'Trunk:gold' is valid and indicates a version
     tagged 'gold' only if it is on a branch called 'Trunk'; otherwise,
     the selector fails.
   - A selector of the form 'Gold:Latest' looks for a branch
     tagged Gold, and if found, fetches the Latest version on that
     branch. If a 'Gold' branch is not found, DesignSync looks for a
     version tagged 'Gold', and if found, retrieves the Latest
     version on the branch that the 'Gold' version is on. Selectors
     of the form 'Gold:Date(<date>)' behave similarly.
   - For backward compatibility, DesignSync supports selectors of
     the form '<version_number>:Latest' and
     <version_number>:Date(<date>). DesignSync uses the branch of
     the specified version, and then applies the Latest or Date()
     selector. For example, 1.2:Latest resolves to 1:Latest, and
     1.3.2.1:Date(yesterday) resolves to 1.3.2:Date(yesterday).

o <branchtag>:Date(<date>)

  The most recent version on the specified branch that was
  created on or before the specified date. The 'Date' keyword
  is case insensitive. Note that if you specify a date in the future,
  the selector is equivalent to using the the 'Latest' version
  selector until the date is reached.

  A <branchtag>:Date(<date>) selector is a static selector;
  the objects denoted by this selector date are fixed provided the
  specified date has been reached. If the date is in the future, the
  selector is dynamic until the date is reached.

  For example, <branchtag>:Date(yesterday) will always resolve to
```

```
   yesterday's last checked in version.  But
   <branchtag:Date(<futureDate>) will match <branchtag>:Latest until
   the date specified has been reached, at which point the selector
   will resolve to the last checked in version before the date.

   You specify the Date selector as follows:
      <branchtag>:Date(<date>)
   where <branchtag> is a branch tag. If <branchtag> cannot be
   resolved as a branch tag, DesignSync searches for a version tag
   of that name and resolves to the most recent version created on
   or before the specified date on that version's branch.

   Examples: Trunk:Date(yesterday)  -- Resolves to the last version
                                       checked in yesterday on the
                                       Trunk branch
             gold:date(4/11/00)     -- If no branch is named 'gold',
                                        but there is a version selector
                                        'gold', DesignSync resolves
                                       this selector to the last version
                                       checked in on or before 4/11/00
                                       on the branch containing the
                                       'gold' version
             Rel2:Date(today)       -- Resolves to the last version
                                       checked in today on the Rel2
                                       branch

   See the "Date Formats" section below for details on how to specify
   dates.  See <branchtag>:Latest for more information about specifying
   date selectors.

 o VaultDate(<date>)

   The most recent version on any branch that was created on or
   before the specified date. The 'VaultDate' keyword is case
   insensitive.  Like the Date selector, the VaultDate
   specification can accept a branch tag, in the format:

      <branchtag>:VaultDate(<date>)

   where <branchtag>: is optional.

   A VaultDate(<date>) selector is a dynamic selector; the
   objects denoted by this selector are dependent on the
   date.

   Examples: VaultDate(yesterday)
             VaultDate(4/11/00)
             Rel40:VaultDate(today)

   See the "Date Formats" section for details on how to specify
   dates.
```

File-Based Specific Formats

o Auto(<tag>)

Used for auto-branching, which creates branches on an as-needed basis as opposed to branching an entire project. This methodology is useful for "what if" scenarios. In general, Auto(<tag>) is equivalent to just <tag>. The 'Auto' is significant only for operations that can create branches (ci, co -lock, populate -lock). An Auto(<tag>) selector is a dynamic selector.

The Auto keyword is case insensitive.

Examples: Auto(Dev)
auto(Rel2.1_p1)

Notes:
- The value supplied to the auto-branch selector must be a branch or version name, not a branch selector. 'Auto(Golden:)' and 'Auto(Golden:Latest)' are illegal selectors.
- The current version is always the branch-point version when Auto() creates a new branch.
- If present, Auto(<tag>) must be the first selector in a selector list.
- The auto(<branch>) option is only applicable for legacy modules and DesignSync objects. It is not a valid selector for modules.

Date Formats

This section describes how you can specify dates when using Date(<date>) and VaultDate(<date>) selectors. DesignSync uses a public-domain date parser that supports a wide range of date and time specifications. The parser is the same one used by the Gnu family of tools. Visit a Gnu website for a complete specification. This section documents the more common formats.

Note: If the date specification contains spaces, you must surround the entire selector list with double quotes.
For example: 'Gold:Date(last Tuesday),Trunk'

Year Format:
You can specify the year using 2 or 4 digits. DesignSync interprets 2-digit year specifications between 00 and 69, inclusive, as 2000 to 2069, and specifications between 70 and 99, inclusive, as 1970 to 1999.

If you omit the year, the default is the current year.

Month Format:
You can specify the month as a number (1 through 12), or using the following names and abbreviations:

January	Jan	Jan.
February	Feb	Feb.
March	Mar	Mar.
April	Apr	Apr.
May	May	May.

```
  June           Jun      Jun.
  July           Jul      Jul.
  August         Aug      Aug.
  September      Sep      Sep.      Sept      Sept.
  October        Oct      Oct.
  November       Nov      Nov.
  December       Dec      Dec.

  Note: September is the only month for which a 4-letter abbreviation
        is valid.

If you omit the month, the default is the current month.

Day Format:
You can specify days of the week in full or with abbreviations:

  Sunday         Sun      Sun.
  Monday         Mon      Mon.
  Tuesday        Tue      Tue.      Tues        Tues.
  Wednesday      Wed      Wed.      Wednes      Wednes.
  Thursday       Thu      Thu.      Thurs       Thurs.
  Friday         Fri      Fri.
  Saturday       Sat      Sat.

You can add words such as 'last' or 'next' before a day of the week to
specify a date other than the nearest day of the same name. For
example:

  Thursday        Specifies the most recent past Thursday, or
                  today, if today is Thursday.

  next Thursday   Specifies one week after the most recent Thursday
                  (includes the current day if today is Thursday).

  last Thursday   Specifies one week before the most recent Thursday
                  (includes the current day if today is Thursday).

If you omit the day, the default is the current day.

Note: A comma after a day of the week item is ignored.

Time Format:
You specify the time of the day as hour:minute:second, where hour
is a number between 0 and 23, minute is a number between 0 and 59,
and second is a number between 0 and 59.

Any portion not specified defaults to '0', so a date specification
of 03/04/00 defaults to a time of 00:00:00, which is the start of
the day (end of the previous day).
```

SEE ALSO

select, setselector, setvault, unselect, url selector

EXAMPLES

```
All of the following examples specify the same calendar date:

  Note: The preferred order in the U.S. may be ambiguous compared to
  other countries usage of DD-MM-YY if the number of either the month
  or the day is less than 10. For example, a date such as 9/12/00
  means September 12, 2000 in the U.S. but December 9, 2000 in many
  other countries.

  2000-09-24           # ISO 8601.
  00-09-24             # 00 indicates year 2000.
  00-9-24              # Leading zeros are not required. For
                         example, '9' is equivalent to  '09'.
  09/24/00             # U.S. preferred order. See previous note.
  24-sep-00            # Three-letter month abbreviations
                         are allowed.
  24sep00              # Hyphen and slashes are not required
                         delimiters.
  23 sep 00            # Spaces are permitted, but the entire
                         selector list must be placed within double
                         quotes.

  Note: The following three times represent local time, because no
  time zone is specified.

  20:02:0              # 2 minutes after 20 (8 PM)
  20:02                # 2 minutes  after 20 (8 PM), zero seconds implied
  8:02pm               # 2 minutes after 8 PM

  Note: The following time applies to Eastern U.S. Standard
  Time because the -0500 means 5 hours behind UTC (Coordinated
  Universal Time, also known as Greenwich Mean Time) time.
  The -0500 is a 'time zone item'.

  20:02-0500           # 2 minutes after 8 PM Eastern U.S. Time

  Note: You can combine a time and a date as follows:

  01/24/00 20:02       # 2 minutes after 8 PM on January 24th 2000.
                         Contains spaces, so the entire selector
                         list must be placed within double quotes.
```

Using Wildcards

wildcard

NAME

```
wildcard            - Using wildcard characters in filenames
```

DESCRIPTION

Wildcards are useful when you want to specify a large number of files without having to specify the name of each file. The following wildcards can be used in the filename portion of pathnames and URLs:

?	Matches any single character
[list]	Matches any single character present in list
*	Matches any pattern

Note: In stcl/stclc mode, you need to use a backslash (\) to escape the left bracket ([).

Depending on where wildcards are specified, they are either immediately resolved (static list) or are resolved at the time of an operation (dynamic list).

Exclude lists (-exclude option) are dynamic; wildcards are stored as the actual wildcard characters. When an operation is to be performed on files or directories, each file or directory is checked against the exclude list. If any object matches one of the names in the exclude list, that object is not processed. In addition to specifying -exclude on a per-operation basis, you can also define exclude lists, which apply to all revision-control operations that accept the -exclude option, from the DesignSync graphical interface (Tools->Options->General->Exclude Lists).

Select lists (-selected option) are static; the select list resolves all wildcards to the exact names of the files or directories at the time the select list is created. This static select list can then be used by any revision-control operation that accepts the -selected option. Note that when wildcards are used in a list of objects to be processed by the unselect command, the wildcards are matched against objects in the select list, not against objects in the current directory.

Note: If you use a wildcard with a -recursive option of a DesignSync command, DesignSync first matches that wildcard against the contents of the starting directory, and then processes any matching objects and recurses through any matching directories. DesignSync applies the wildcard only at the starting point, and not throughout the directory hierarchy.

EXAMPLES

This example lists any object in the directory mydir that begins with the 'a', '3', or '#' character, and ends with a '.' followed by any three characters.

```
dss> ls /mydir/[a3#]*.???
```

In stcl, you need to escape the left bracket:

```
  stcl> ls /mydir/\[a3#]*.???

Example of wildcards in exclude lists:

CVS          Ignore any files or directories named "CVS".
foo.obj      Ignore any files or directories named "foo.obj".
src/foo.obj  Ignore any files named "foo.obj" in a directory
             named "src".
src/foo*     Ignore any files or directories beginning
             with "foo" in a directory named "src".
```

Client Applications

DesSync

DesSync Command

NAME

```
DesSync             - Invokes the DesignSync graphical interface
```

DESCRIPTION

```
This command invokes the DesignSync graphical user interface
(GUI). You execute DesSync from your operating system shell, not
from a Synchronicity client shell (dss/dssc/stcl/stclc).  On
Windows platforms, you can also invoke DesSync from the Windows
Start menu, typically:
  Start->Programs->Dassault Systems <VersionNumber>->DesignSync

You can also execute all DesignSync command-line commands from
the GUI.

DesignSync Data Manager User's Guide describes the GUI. From the GUI,
select Help->Help Topics, or click the book icon in the Tool Bar.
```

SYNOPSIS

```
DesSync [-nosplash] [path]
```

OPTIONS

- -nosplash
- -path

-nosplash

```
-nosplash     Prevents the DesignSync splash screen from
              displaying at startup.

              You can also disable the splash screen site-wide or
              by user:

              Site Wide
```

```
---------
Change the last line of SYNC_DIR/bin/DesSync to the include
the flag:

exec .runjava -jar $SYNC_DIR/classes/dsj.jar -nosplash $*:q

User
----
Create a script with the following contents, and put it in the
path ahead of SYNC_DIR/bin:

#!/bin/csh -f
exec ${SYNC_DIR}/bin/DesSync -nosplash $*:q

Note: If you use spaces in your path arguments to the command,
you must places them in quotes.
```

-path

path	The path to the directory/folder that you want DesignSync to expand at startup. You can specify an absolute or relative path. You can also set the DesignSync initial folder through a SyncAdmin option (GUI Options->Initial Folder).

RETURN VALUE

none

SEE ALSO

dss, dssc, stcl, stclc, SyncAdmin

EXAMPLES

- Example of Starting the DesignSync GUI
- Example of Starting the DesignSync GUI without the Splash Screen
- Example of Starting the DesignSync GUI Opened to the Current Directory
- Example of Starting the DesignSync Opened to Specified Path

Example of Starting the DesignSync GUI

This example invokes the DesignSync GUI:

```
% DesSync
```

Example of Starting the DesignSync GUI without the Splash Screen

```
This example invokes the GUI in background mode without displaying
the splash screen:
  % DesSync -nosplash &
```

Example of Starting the DesignSync GUI Opened to the Current Directory

```
This example invokes the GUI and specifies the current directory
as the initial folder:
  % DesSync .
```

Example of Starting the DesignSync Opened to Specified Path

```
This example invokes the GUI and specifies a specific project
directory as the initial folder:
  % DesSync /home/projects/chip/alu
```

dss

dss Command

NAME

```
dss                 - Invokes the DesignSync shell (dss)
```

DESCRIPTION

```
This command invokes the DesignSync shell (dss), a DesignSync
command-line interface. dss is one of the DesignSync client
applications (along with dssc, stcl, stclc, and the DesSync
graphical interface).

You invoke dss from your operating-system (OS) shell in one of
the following ways:

o Specify no arguments to the dss command to enter the dss
  environment, indicated by the 'dss>' prompt. You remain in
  the dss shell until you issue the 'exit' command, which
  returns you to your OS shell.

o Specify a DesignSync command to execute. DesignSync executes the
  command, then returns you to your OS shell.
```

```
On Windows platforms, you can also invoke dss from the Windows
Start menu, typically:
  Start->Programs->Dassault Systems <Version>
       ->DesignSync Shell (dss)

The dss and stcl clients communicate with a Synchronicity server
(SyncServer) through syncd, the Synchronicity daemon. If you do
not already have a syncd process running, dss attempts to start
one.

The syncd process can manage multiple dss/stcl requests per user,
allowing one user to run parallel dss/stcl sessions. However,
syncd handles requests serially, which can cause operations from
one dss session to be blocked while operations from another session
execute. It is therefore recommended that you use dssc, the
concurrent version of dss. The dssc and stclc clients do not use
syncd; they communicate directly with a SyncServer. The dssc
and stclc clients also have the advantage of supporting more
robust command-line editing, including command and filename
completion. The dss client does support DesignSync command
abbreviations, like the dssc and stclc clients.

The only advantage of dss over dssc is that dss start-up time when
a syncd is already running is less than dssc start-up time. If you
frequently run DesignSync commands from your OS shell using the
form "dssc <command>" instead of staying in the dssc shell, use dss
instead of dssc.

If you want to use programming constructs (such as variables,
loops, and conditionals) in conjunction with DesignSync commands,
use stcl or stclc, the Synchronicity Tcl clients.

Note: Both dss and stcl inherit their environments, such as
      environment variable definitions, from syncd. Therefore,
      you must stop and restart syncd (see the syncdadmin command)
      for your dss and stcl sessions to pick up environment changes.
```

SYNOPSIS

```
dss [<command>]
```

OPTIONS

```
none
```

RETURN VALUE

```
Returns the success status of the last executed command: zero (0)
```

```
indicates success, non-zero indicates failure. You can specify a
return value as an argument to the exit command, which is typically
the last command executed.
```

SEE ALSO

```
dssc, stcl, stclc, DesSync, syncdadmin, exit
```

EXAMPLES

- Example of Invoking DSS (DesignSync Shell)
- Example of Running a DSS Command From OS Shell

Example of Invoking DSS (DesignSync Shell)

```
This example invokes the DesignSync shell, from which you can
enter any number of dss commands. Use 'exit' to return to your
OS shell.
  % dss
  Logging to /home/tgoss/dss_01192000_161324.log
  V3.0

  dss> spwd
  file:///home/tgoss/Projects/Sportster/code
  dss> exit
  %
```

Example of Running a DSS Command From OS Shell

```
This example executes the 'co' command while remaining in your
OS shell.

  % dss co -nocomment -lock samp.mem
  Logging to /home/tgoss/dss_01192000_160958.log
  V3.0

  Beginning Check out operation...

  Checking out: samp.mem  : Success - Checked Out  version: 1.1 -> 1.2

  Checkout command finished...
  %
```

dssc

dssc Command

NAME

dssc - Invokes the concurrent version of dss

DESCRIPTION

This command invokes the concurrent version of the DesignSync shell (dssc), a DesignSync command-line interface. dssc is one of the DesignSync client applications (along with dss, stcl, stclc, and the DesSync graphical interface).

You invoke dssc from your operating-system (OS) shell in one of the following ways:

- Specify no arguments to the dssc command to enter the dssc environment, indicated by the 'dss>' prompt. You remain in the dssc shell until you issue the 'exit' command, which returns you to your OS shell.

- Specify a DesignSync command to execute. DesignSync executes the command, then returns you to your OS shell.

  Note: The UNIX shell does not pass a null string ("") to the DesignSync client when dssc is specified with a DesignSync command argument. If your command requires a null string, use the stcl or stclc client with the -exp option.

On Windows platforms, you can also invoke dssc from the Windows Start menu, typically:

```
  Start->Programs->Dassault Systems <version>
       -> DesignSync Concurrent Shell (dssc)
```

The dssc and stclc clients communicate directly with a Synchronicity server (SyncServer). Unlike dss and stcl, no Synchronicity daemon process (syncd) is used. Because syncd handles requests serially, using dssc eliminates a potential bottleneck when you have multiple shells communicating with a SyncServer. The one advantage dss has over dssc is that dss start-up time when a syncd is already running is less than dssc start-up time. If you frequently run DesignSync commands from your OS shell using the form "dssc <command>" instead of staying in the dssc shell, use dss instead of dssc.

The dssc shell supports command-line editing:

Behavior	Control Keys	Special Keys
Forward one character	Ctrl-f	Right arrow
Back one character	Ctrl-b	Left arrow
Beginning of line	Ctrl-a	Home (only supported for Windows platforms)
End of line	Ctrl-e	End (only supported for Windows platforms)

```
Kill rest of line       Ctrl-k
Kill line               Ctrl-u          Esc
                                        (Note: The Esc key
                                        instead invokes vi
                                        command mode if your
                                        <EDITOR> environment
                                        variable is set to vi
                                        or your ~/.inputrc file
                                        contains the line
                                        'set editing-mode vi'.
                                        Note also that the
                                        DesignSync GUI default
                                        editor setting does not
                                        affect the behavior
                                        of the Esc key.)
Delete character        Ctrl-d          Delete
Previous command from
command history         Ctrl-p          Up arrow
Next command from
command history         Ctrl-n          Down arrow
Exit stclc/dssc shell   Ctrl-d
```

The dssc shell also supports command, option, and filename completion, as well as DesignSync command abbreviations. See DesignSync Data Manager User's Guide for details.

If you want to use programming constructs (such as variables, loops, and conditionals) in conjunction with DesignSync commands, use stcl or stclc, the Synchronicity Tcl clients.

SYNOPSIS

```
dssc [<command>]
```

OPTIONS

none

RETURN VALUE

Returns the success status of the last executed command: zero (0) indicates success, non-zero indicates failure. You can specify a return value as an argument to the exit command, which is typically the last command executed.

SEE ALSO

```
dss, stcl, stclc, DesSync, exit
```

EXAMPLES

Example of Invoking DSSC (DesignSync Concurrent Shell)

```
This example invokes the DesignSync shell, from which you can
enter any number of dss commands. Use 'exit' to return to your
OS shell.
  % dssc
  Logging to /home/tgoss/dss_01192000_161324.log
  V3.0

  dss> spwd
  file:///home/tgoss/Projects/Sportster/code
  dss> exit
  %
```

Example of Running a DSSC Command From OS Shell

```
This example executes the 'co' command while remaining in your
OS shell.
  % dssc co -nocomment -lock samp.mem
  Logging to /home/tgoss/dss_01192000_160958.log
  V3.0

  Beginning Check out operation...

  Checking out: samp.mem    : Success - Checked Out  version: 1.1 -> 1.2

  Checkout command finished...
  %
```

stcl

stcl Command

NAME

```
stcl                - Invokes the Synchronicity Tcl interface
```

DESCRIPTION

```
This command invokes the Synchronicity Tcl (stcl) shell. stcl is
one of the DesignSync client applications (along with dss, dssc,
stclc, and the DesSync graphical interface). All DesignSync
commands and commercial Tcl commands are available in the stcl
environment.  Note: To determine the version of Tcl included in
your Synchronicity installation's stcl interpreter, use the
Tcl 'info tclversion' and 'info patchlevel' commands within
an stcl/stclc client shell.

You invoke stcl from your operating-system (OS) shell in one of
the following ways:

 o Specify no arguments to the stcl command to enter the stcl
   shell, indicated by the 'stcl>' prompt. You remain in the stcl
   shell until you issue the 'exit' command, which returns you to
   your OS shell.

 o Specify a script name to execute a Tcl script, which is
   equivalent to sourcing a Tcl script from within the stcl
   environment. For example:
        % stcl myscript.tcl
        ...script executes
        %
   is equivalent to
        % stcl
        stcl> source myscript.tcl
        ...script executes...
        stcl> exit
        %

o Specify the -exp option to directly execute one or more
  DesignSync or Tcl commands. Use a semicolon (;) to
  separate multiple commands, and surround the entire command
  string with single quotes.

On Windows platforms, you can also invoke stcl from the Windows
Start menu, typically:
  Start->Programs-> Dassault Systems <version>->
       -> DesignSync Tcl Shell (stcl)

Use the stcl shell when you need the scripting constructs of Tcl,
such as conditionals (if/then/else), loops (while, for, foreach),
and variable assignment (set). If you do not need Tcl constructs,
dss provides a simpler command environment. With stcl:
  - You cannot abbreviate DesignSync commands. For example,
    you cannot abbreviate 'populate' to 'pop' as you might in
    dss/dssc/stclc.
  - You must use double quotes around objects that contain a
    semicolon (;), such as vaults, branches, and versions. The
    semicolon is the Tcl (and therefore stcl) command separator.
  - You must specify the -exp option to execute a DesignSync
    command from the OS shell. Because stcl is primarily a
    scripting shell, an argument specified without -exp is assumed
    to be a script. With dss, the syntax for specifying a single
    command is simpler.
```

```
For more information on Tcl, including documentation for Tcl
commands, visit these Web sites:

    http://www.tcl.tk
    http://tcl.sourceforge.net

The stcl and dss clients communicate with a Synchronicity server
(SyncServer) through syncd, the Synchronicity daemon. If you do
not already have a syncd process running, stcl attempts to start
one.

The syncd process can manage multiple dss/stcl requests per user,
allowing one user to run parallel dss/stcl sessions. However, syncd
handles requests serially, which can cause operations from one
dss/stcl session to be blocked while operations from another
session execute. It is therefore recommended that you use stclc,
the concurrent version of stcl. The stclc and dssc clients do not
use syncd; they communicate directly with a SyncServer. The stclc
client also has the advantage of supporting more robust command-line
editing, including command and filename completion, as well as
command history search and DesignSync command abbreviations.

One advantage of stcl over stclc is that stcl start-up time when a
syncd is already running is less than stclc start-up time. If you
are frequently running DesignSync commands from your OS shell
using the form "stclc -exp '<command>'" instead of staying in the
stclc shell, use stcl instead of stclc.

Note: Both stcl and dss inherit their environments, such as
      environment variable definitions, from syncd. Therefore,
      you must stop and restart syncd (see the syncdadmin command)
      for your stcl and dss sessions to pick up environment changes.
```

SYNOPSIS

```
stcl [--] [-exp '<command>' | <scriptname>]
```

OPTIONS

- -exp
- --

-exp

```
-exp '<command>' Executes one or more commands. Separate multiple
                 commands with a semicolon, and surround the command
                 expression with single quotes. Using double quotes
                 works, but single quotes facilitate including
                 double quotes within the command expression.
```

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when arguments
                to the command begin with a hyphen (-).
```

RETURN VALUE

```
Returns the success status of the last executed command: zero (0)
indicates success, non-zero indicates failure (an exception was
thrown). You can specify a return value as an argument to the exit
command, which is typically the last command executed.
```

SEE ALSO

```
stclc, dss, dssc, DesSync, syncdadmin, rstcl, exit
```

EXAMPLES

Example of Invoking the stcl shell

```
This example invokes the stcl shell:
  % stcl
  stcl>
```

Example of Using stcl to Run a Script

```
This example invokes a Tcl script that populates a work area:
  % stcl update.tcl
```

Example of Invoking Commands in stcl without Using the Shell

```
This example executes the 'ls' command followed by the 'spwd' command:
  % stcl -exp 'ls;spwd'
```

Example of Invoking Commands that Include a Quoted String

```
This example shows a command string that includes double quotes:
  % stcl -exp 'ci -keep -comment "Fixed defect 4354" file.c'
```

stclc

stclc Command

NAME

```
stclc               - Invokes the concurrent version of stcl
```

DESCRIPTION

```
This command invokes the concurrent version of the Synchronicity
Tcl (stclc) shell. stclc is one of the DesignSync client
applications (along with dss, dssc, stcl, and the DesSync graphical
interface). All DesignSync commands and commercial Tcl
commands are available in the stcl environment. Note: To determine
the version of Tcl included in your Synchronicity installation's
stcl interpreter, use the Tcl 'info tclversion' and
'info patchlevel' commands within an stcl/stclc client shell.

You invoke stclc from your operating-system (OS) shell in one of
the following ways:

 o Specify no arguments to the stclc command to enter the stclc
   shell, indicated by the 'stcl>' prompt. You remain in the stclc
   shell until you issue the 'exit' command, which returns you to
   your OS shell.

 o Specify a script name to execute a Tcl script, which is
   equivalent to sourcing a Tcl script from within the stclc
   environment. For example:
        % stclc myscript.tcl
        ...script executes
        %
   is equivalent to
        % stclc
        stcl> source myscript.tcl
        ...script executes...
        stcl> exit
        %

o Specify the -exp option to directly execute one or more
  DesignSync or Tcl commands. Use a semicolon (;) to
  separate multiple commands, and surround the entire command
  string with single quotes.
```

```
On Windows platforms, you can also invoke stclc from the Windows Start
menu, typically:
  Start->Programs->Dassault Systems <version>
  ->DesignSync Concurrent Tcl Shell (stclc)

Use the stclc shell when you need the scripting constructs of Tcl,
such as conditionals (if/then/else), loops (while, for, foreach),
and variable assignment (set). If you do not need Tcl constructs,
dssc provides a simpler command environment. With stclc:
  - You must use double quotes around objects that contain a
    semicolon (;), such as vaults, branches, and versions. The
    semicolon is the Tcl (and therefore stclc) command separator.
  - You must specify the -exp option to execute a DesignSync
    command from the OS shell. Because stclc is primarily a
    scripting shell, an argument specified without -exp is assumed
    to be a script. With dssc, the syntax for specifying a single
    command is simpler.

For more information on Tcl, including documentation for Tcl
commands, visit these Web sites:

    http://www.tcl.tk
    http://tcl.sourceforge.net

The stclc and dssc clients communicate directly with a
Synchronicity server (SyncServer). Unlike dss and stcl, no
Synchronicity daemon process (syncd) is used. Because syncd handles
requests serially, using stclc eliminates a potential bottleneck
when you have multiple shells communicating with a SyncServer. The
one advantage stcl has over stclc is that stcl start-up time when a
syncd is already running is less than stclc start-up time. If you
are frequently running stcl commands from your OS shell
using the form "stclc -exp '<command>'" instead of staying in the
stclc shell, use stcl instead of stclc.

The stclc shell supports command-line editing:

Behavior                Control Keys     Special Keys
--------                ------------     ------------
Forward one character   Ctrl-f           Right arrow
Back one character      Ctrl-b           Left arrow
Beginning of line       Ctrl-a           Home (only supported
                                         for Windows platforms)
End of line             Ctrl-e           End (only supported
                                         for Windows platforms)
Kill rest of line       Ctrl-k
Kill line               Ctrl-u           Esc
                                         (Note: The Esc key
                                         instead invokes vi
                                         command mode if your
                                         <EDITOR> environment
                                         variable is set to vi
                                         or your ~/.inputrc file
                                         contains the line
                                         'set editing-mode vi'.
                                         Note also that the
```

```
                                        DesignSync GUI default
                                        editor setting does not
                                        affect the behavior
                                        of the Esc key.)
Delete character        Ctrl-d          Delete
Previous command from
command history         Ctrl-p          Up arrow
Next command from
command history         Ctrl-n          Down arrow
Exit stclc/dssc shell   Ctrl-d

The stclc shell also supports command, option, and filename
completion, as well as command history search and DesignSync
command abbreviations.  See DesignSync Data Manager User's Guide for
details.

The stclc shell also supports Unix commands; if you enter a
Unix command which is not also an stcl function, the
interpreter automatically calls the Unix command. In this way,
you can execute Unix programs without using the Tcl 'exec'
command.  Note: If you do not want Unix commands to be
executed automatically, you can set the global variable,
auto_noexec, to disable this behavior.  For details, refer
to Tcl documentation of the Tcl 'unknown' command.
```

SYNOPSIS

```
stclc [--] [-exp '<command>' | <scriptname>]
```

OPTIONS

- -exp
- --

-exp

```
-exp '<command>' Executes one or more commands. Separate multiple
                 commands with a semicolon, and surround the command
                 expression with single quotes. Using double quotes
                 works, but single quotes facilitate including
                 double quotes within the command expression.
```

--

```
--               Indicates that the command should stop looking for
                 command options. Use this option when arguments
                 to the command begin with a hyphen (-).
```

RETURN VALUE

```
Returns the success status of the last executed command: zero (0)
indicates success, non-zero indicates failure (an exception was
thrown). You can also specify a return value as an argument to the
exit command, which is typically the last command executed.

A failure results when an exception is thrown.
```

SEE ALSO

```
stcl, dss, dssc, DesSync, rstcl, exit
```

EXAMPLES

Example of Invoking the stclc shell

```
This example invokes the stclc shell:
  % stclc
  stcl>
```

Example of Invoking a Tcl Script

```
This example invokes a Tcl script that populates a work area:
  % stclc update.tcl
```

Example of Invoking Commands with stclc

```
This example executes the 'ls' command followed by the 'spwd' command:
  % stclc -exp 'ls;spwd'
```

Example of Invoking Commands including a Quoted String

```
This example shows a command string that includes double quotes:
  % stclc -exp 'ci -keep -comment "Fixed defect 4354" file.c'
```

Client Shell Control

alias

alias Command

NAME

```
alias                - Creates, shows, or removes a command alias
```

DESCRIPTION

```
This command defines an alias for a command or series of commands.
The alias persists from one DesignSync session to the next unless
you use the -temporary option.

The symbols $1 through $n provide placeholders for argument
substitution. You can create an alias for a sequence of commands.
Use the symbol '&&' to separate commands on the command line.

You cannot use the alias command to redefine the behavior of
built-in DesignSync commands. For example, if you define an alias
called 'co', DesignSync ignores the alias definition when you use
the 'co' command.

Alias definitions remember the mode, dss/dssc or stcl/stclc, in
which they were defined. For example, if while in stcl/stclc mode you
create an alias containing Tcl constructs, the alias will always
execute in stcl/stclc mode even if you change to dss/dssc mode. Aliases
provide the mechanism for you to define new stcl commands and make
them available from dss/dssc.
```

SYNOPSIS

```
alias  [-args <#>] {-list | -delete <alias_name> | <alias_name>
{<cmd> [&& <cmd> ...]}} [-temporary] [--]
```

OPTIONS

- -args
- -delete
- -list
- -temporary
- --

-args

```
 -args <#>       Number of arguments accepted by the alias. A value of "*"
                 represents any number of arguments.
```

-delete

```
 -delete <name>  Delete the specified alias.
```

-list

```
 -list           Display a list of known aliases.
```

-temporary

```
 -temporary      Temporarily create or delete an alias. Without the
                 -temporary option, the alias definition or deletion
                 persists through future sessions.
```

--

```
 --              Indicates that the command should stop looking for
                 command options. Use this option when arguments
                 to the command begin with a hyphen (-).
```

RETURN VALUE

```
none
```

EXAMPLE

```
This example creates a command called 'lss', which lists a directory
using the "-report status" switch to report whether objects are up
to date.

   stclc> alias -args * -- lss ls -report status {$*}
```

exit

exit Command

NAME

```
exit                - Ends a DesignSync session, or an stcl script
```

DESCRIPTION

```
This command ends your DesignSync shell (dss/dssc/stcl/stclc)
session, or an stcl script. This command is the Tcl exit command
with one extension: the ability to bring down syncd using the
-daemon option.

Note that 'exit' within a script not only stops script execution, but
also exits your DesignSync shell session. To avoid this behavior,
stcl programmers should use 'return' and 'error' in their scripts
instead of 'exit'.

You can optionally specify an integer exit status to pass to the
parent process (OS shell). The default exit status is 0, which
indicates success.
```

SYNOPSIS

```
exit [-daemon [-force]] [<status>]
```

OPTIONS

-daemon

```
-daemon     Brings down syncd when exiting stcl or dss. This option
            has no effect when specified from the DesignSync
            graphical interface, stclc, or dssc, none of which
            communicates with syncd. The syncd process will not exit
            if there is another active dss/stcl session connected
            to syncd or if syncd is locked (see the 'syncdadmin
            lock' command) unless you specify -force.
```

-force

```
-force      Valid only when -daemon is specified, forces syncd to
            exit even if there is another active dss/stcl session
            connected to syncd or if syncd is locked (see
            the 'syncdadmin lock' command).
```

RETURN VALUE

```
The return value is not of the 'exit' command itself, but of
the shell or script that 'exit' is terminating. The default is '0'
(success), but you can specify an alternative value using the
status argument.
```

SEE ALSO

```
syncdadmin
```

EXAMPLES

- Example of Exiting a dssc Session
- Example of Exiting a stcl Session and Stoppping the syncdaemon

Example of Exiting a dssc Session

```
This example exits a dssc session. The default exit status is
0 (success).

  dss> exit
  % echo $status
  0
  %
```

Example of Exiting a stcl Session and Stoppping the syncdaemon

```
This example exits an stcl session, returns a failure exit status,
and brings down syncd.
  stcl> exit -daemon 1
  % echo $status
  1
  %
```

log

log Command

NAME

log - Logs DesignSync commands and results to a file

DESCRIPTION

This command controls the logging of DesignSync commands and command output. Use the run command to execute log files (no editing is needed) in order to repeat a series of commands.

The log file is put in your home directory (as defined by $HOME on UNIX or your user profile, which is managed by the User Manager tool, on Windows platforms) unless you change the default using the -defaultdir option. Note that the run command and the log command use the same default directory to locate files.

The default log filename is dss_<date>_<time>.log, where <date> and <time> reflect when the log file was created. For example, a log file of dss_04052000_111258.log was created on April 5, 2000, at 11:12:58 AM. The time stamp ensures filename uniqueness so that log files from previous DesignSync sessions are retained. If you prefer to always use the same filename so that you do not collect log files from past sessions, you can do so with the log command. If a file with the same name as the specified log file already exists, then it is overwritten without warning. If you do not specify an extension for the log file, a '.log' extension is used by default.

The default file size for the log file is 10MB. If the log file grows beyond the maximum log file size, the contents of the log file is moved to dss_<date>_<time>.bak.log, the log file is zeroed out, and the client continues logging. This process repeats every time the session log limit is reached. DesignSync only maintains one backup file, which essentially has the same maximum size as the log file. For information on changing the default log size, see the DesignSync Data Manager Administrator's Guide.

To prevent large numbers of dss_<date>_<time>.log files from collecting in your log directory, DesignSync automatically deletes log files that are older than 2 days. If more than 20 log files remain, DesignSync deletes all log files older than 1 hour. If you want to retain a log file indefinitely, you must move or rename the file.

If you are an administrator, you can change the logging settings for all users on a LAN or for all users of a particular project. See "The Logging Tab" topic in SyncAdmin online help for more information.

SYNOPSIS

```
log [-defaultdir <dir>] [-off | -on] [-nooutput | -output] [-state]
    [--] [<logFileName>]
```

ARGUMENTS

- Log File Name

Log File Name

<logFileName>	Optionally enter a log file name. If no name is specified, DesignSync uses the default log name, as detailed in the DESCRIPTION section.

OPTIONS

- -defaultdir
- -nooutput
- off
- -on
- -output
- -state
- --

-defaultdir

-defaultdir <dir>	Set the default log directory. This value is saved between sessions. If you have not set a default log directory, then your home directory is used.

-nooutput

-nooutput	Record only the commands being executed. The default is for logging of both commands and command output (-output).

off

-off	Turn logging off. When you specify this option, information is displayed indicating not only that logging is disabled, but also the state of logging if it were enabled (what is being logged, the current log file, and the default log directory).

-on

```
-on                Turn logging on. Turning logging off and
                   then back on appends to the current log file if
                   you do not specify a log filename.
```

-output

```
-output            Record command results as comments in addition
                   to the commands themselves. This behavior is the
                   default.
```

-state

```
-state             Display current logging state. Shows what
                   log file is currently in use, whether logging
                   is enabled, how much detail is being logged,
                   and the name of the default log file directory.
                   Specifying the log command without options has
                   the same behavior as specifying -state.
```

--

```
--                 Indicates that the command should stop looking for
                   command options. Use this option when you
                   specify a log file whose name begins with a
                   hyphen (-).
```

RETURN VALUE

```
none
```

SEE ALSO

```
run
```

EXAMPLES

- Example of Setting the Default Log File Directory
- Example Showing the Current Logging State

Example of Setting the Default Log File Directory

```
This example sets the default directory for the creation of log files
for this and future sessions, and specifies the log file for the
current session as 'pcimaster.log'. Specifying a default log
directory and a log file are mutually exclusive operations, so two
log commands must be used:
  dss> log -defaultdir c:\Logs
  dss> log pcimaster.log
```

Example Showing the Current Logging State

```
This example displays the current logging state:
  dss> log -state    (-state is optional)
  Logging: ON
   Output: Commands Only
  LogFile: c:\Logs\pcimaster.log
  Default Logging Dir: c:\Logs
```

more

more Command

NAME

```
more                - Controls the paging of command output
```

DESCRIPTION

```
This command controls the paging of command output. You can precede
any DesignSync command with "more" to prevent the command output
from scrolling off the window. Output pauses after the number of
lines determined as follows:
  1. As specified by the -lines option.
  2. If -lines is not specified, as determined by the size of your
     window.
  3. If "more" is unable to determine the size of your window (for
     example, you are using a telnet session), the default is 20 lines.

To see the next block of output, press the Return (Enter) key. To
stop the "more" command, use Ctrl-c; the command whose output you are
paging may or may not be interrupted depending on if and when the
command checks for interrupts.

Important: The command whose output you are paging is
           suspended when the output is paused. The operation
           continues when you press the Return key.
```

SYNOPSIS

```
more [-lines <n>] [--] <command>
```

OPTIONS

-lines

```
-lines <n>   Specifies the number of lines to display in the
             window before pausing. A value of "0" means scrolling
             is not controlled; all output is displayed without
             pauses.

             If you do not specify -lines, the "more" command
             defaults to the number of lines that can be displayed
             in your window. In cases where "more" cannot determine
             your window size, the default is 20 lines.

             Note: You must specify -lines before the command
                   you are executing. For example,
                   "more ls -lines 5" is invalid and must instead be
                   "more -lines 5 ls".
```

--

```
--             Indicates that the command should stop looking for
               command options. Use this option when arguments
               to the command begin with a hyphen (-).
```

RETURN VALUE

```
none
```

EXAMPLES

Example Showing More With a Specified Amount of Lines

```
The following example pauses the "ci" operation after each
15 lines of output.
  dss> more -lines 15 ci -nocomment -recursive .
```

Example Showing More with the Default Amount of Lines

```
The following example lists all objects in the current folder,
pausing after each window of output. For example, if your window
size is 40 lines, then each block of output is 40 lines.
  dss> more ls
  ...
```

prompt

prompt Command

NAME

```
prompt              - Sets the dss/dssc command-line prompt
```

DESCRIPTION

```
This command sets the dss or dssc shell command-line prompt. The
prompt can be either the URL of the current working directory, or
the default prompt of 'dss>'.

Note: You can only specify the prompt for dss and dssc shells, not
for stcl or stclc shells.
```

SYNOPSIS

```
prompt [-default | -url]
```

OPTIONS

- -default
- -url

-default

```
-default    Sets the prompt to the string 'dss>'.
```

-url

```
-url        Sets the prompt to the current working directory URL. If
            you change working directories, the prompt
            automatically updates.
```

RETURN VALUE

```
none
```

SEE ALSO

```
dss, dssc, scd, spwd
```

EXAMPLES

```
This example demonstrates the prompt command:
  dss> prompt -url
  file:///home/goss/Projects/Sportster/code> scd ..
  file:///home/goss/Projects/Sportster> prompt -default
  dss>
```

rstcl

rstcl Command

NAME

```
rstcl               - Runs server-side stcl scripts
```

DESCRIPTION

```
This command runs server-side stcl scripts from DesignSync
clients. You can also execute server-side scripts by passing a URL
to the SyncServer from your browser. See the 'server-side' topic or
the ProjectSync User's Guide for details.

You run client-side scripts using the DesignSync run command or the
```

```
Tcl source command. The choice of whether to implement a script as
client-side or server-side depends on what you are trying to
accomplish. You can use client scripts to automate user tasks or
implement enhancements to the built-in user command set. You create
server-side scripts for any of the following reasons:
  - To set server-wide policies (such as triggers or access controls)
  - To create server customizations (such as customized ProjectSync
    panels or data sheets)
  - To reduce the amount of client/server traffic that a
    client-side script accessing vault data would require
  - To execute commands that are only available as server-side
    commands (such as 'access reset' and most ProjectSync commands)

When you execute a script with rstcl, the SyncServer looks for the
specified script in the following locations (in the order listed):

  1. Server-specific Tcl scripts (UNIX only):
     <SYNC_CUSTOM_DIR>/servers/<host>/<port>/share/tcl

  2. Site-wide Tcl scripts:
     <SYNC_CUSTOM_DIR>/site/share/tcl

  3. Enterprise-wide Tcl scripts:
     <SYNC_CUSTOM_DIR>/enterprise/share/tcl

  4. Synchronicity-provided Tcl scripts:
     <SYNC_DIR>/share/tcl

     Do not put scripts in <SYNC_DIR>/share/tcl because this
     directory is reserved for Synchronicity scripts, and your
     scripts may be overwritten when you upgrade your
     Synchronicity software.

rstcl requests mutually exclude each other. I.e. They all acquire the
same exclusive lock, named smdSrvrMetaDataLock. If you analyze your
script and know it to be safe to run in parallel with other scripts,
you may release the exclusive lock from within your script by using
'url syslock -release smdSrvrMetaDataLock'. If your script reads or
writes an external file, it is probably not parallelizable. rstcl
requests and panel= requests (invoked via ProjectSync) never mutually
exclude each other; panel requests are entirely independent of rstcl's
lock.

Notes:
- If you make modifications to your script, use the ProjectSync
  Reset Server menu option to force the SyncServer to reread your
  script.
- When specifying 'sync:' URLs within scripts that are run on the
  server, do not specify the host and port. For example, specify:
    sync:///Projects/Asic
  not
    sync://holzt:2647/Projects/Asic
  Because the script is run on the server itself, host:port
  information is unnecessary and is stripped out by the
  server, which may lead to incorrect behavior during object-name
  comparisons.
- The SYNC_ClientInfo variable is not defined when running
```

```
server-side scripts with rstcl -- you must use the browser-based
invocation. All other SYNC_* variables (SYNC_Host, SYNC_Port,
SYNC_Domain, SYNC_User, and SYNC_Parm if parameters are passed
into the script) are available when using rstcl.
```

SYNOPSIS

```
rstcl [-output <file>] -server <serverURL> -script <script>
      [-urlparams <name>=<value>[&<name>=value[...]]]
```

OPTIONS

-output

```
 -output <file>     Specifies the file to which script output is
                    written. If omitted, the output is displayed.
```

-server

```
-server <serverURL> Specifies the URL of the SyncServer that will
                    execute the script. Specify the URL as follows:
                      sync://<host>[:<port>]
                    where 'sync://' is required, <host> is
                    the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (if omitted, defaults to 2647/2679). For
                    example, you might specify the following:
                      -server sync://serv1.abco.com:1024
```

-script

```
-script <script>    Specifies the name of the script to be
                    executed. This script must be in one of the Tcl
                    script directories on the SyncServer specified
                    by the -server option. The Tcl directories are
                    (in the order in which they are searched):

                    1. Server-specific Tcl scripts (UNIX only):
                    <SYNC_DIR>/custom/servers/<host>/<port>/share/tcl
```

```
                    2. Site-wide Tcl scripts:
                    <SYNC_DIR>/custom/site/share/tcl

                    3. Enterprise-wide Tcl scripts:
                    <SYNC_DIR>/custom/enterprise/share/tcl

                    4. Synchronicity-provided Tcl scripts:
                    <SYNC_DIR>/share/tcl

                    The script can contain Tcl constructs and
                    Synchronicity commands, including server-side only
                    commands.
```

-urlparams

```
 -urlparams <params> Specifies the parameters that are passed into
                     the script. Specify each parameter as a
                     name/value pair separated by an equal sign (=),
                     and separate multiple parameters with an
                     ampersand (&):
                       <param1>=<value1>&<param2>=<value2>...
                     For example:
                       -urlparams Name=Joe&IDNum=1234

                     Parameters are passed into the script using the
                     global variable SYNC_Parm, which is a Tcl
                     array. The array keys are the names of the
                     parameters. To access the value of a parameter
                     from within the script, use the following syntax:

                       $SYNC_Parm(<param_name>)

                     For example, the following Tcl line would
                     display the value of the 'name' parameter:

                       puts "The name is: $SYNC_Parm(name)"

                     Note: If any parameter name or value
                     contains whitespace, surround the entire
                     parameter list with double quotes. For example:
                          -urlparams "name=Joe Black&IDNum=1234"
```

RETURN VALUE

```
 o If -output is not specified, returns (and displays) the script
   output.
 o If -output is specified, output is written to the specified file
   and the return value is an empty string.

 If the script has an error, a Tcl exception is thrown from the
 client side and the Tcl stack trace is output. Proper usage
 for handling exceptions would be to provide an exception handler
```

```
when you use the rstcl command:
  if [catch {rstcl -server ...} result] {
      # Something bad happened.
      # 'result' contains the output generated by the script
      #   prior to the error and the Tcl stack trace.
  } else {      # All is fine.
      # 'result' contains whatever output is generated
      # by the script.
  }

If the -output option to the rstcl command was specified, then
the exception is still thrown, but the script output and Tcl stack
trace are written to the specified output file.
```

SEE ALSO

```
server-side, run, url syslock
```

EXAMPLES

```
A common use of rstcl is to run the 'access reset' command, which
restarts the SyncServer. See the 'access reset' command for details.

Most ProjectSync-related scripts must be run on the server and
could therefore use rstcl. This example creates a ProjectSync note
using the 'note create' command, which is a server-side only
command, and displays the URL of the new note. This output is then
returned to the rstcl command in callNoteCreate.tcl.

 1.In the <SYNC_CUSTOM_DIR>/site/share/tcl directory on the
 holzt:2647 server is the noteCreate.tcl script, which contains
 the following:

   set noteUrl [note create -type Note \
     [list Title $SYNC_Parm(title)] [list Body $SYNC_Parm(body)] \
     [list Author $SYNC_Parm(author)] ]
   puts "$noteUrl"

 2. On the client side, the callNoteCreate.tcl script provides an
 exception catcher in case the noteCreate.tcl script fails.

   if [catch {rstcl -server sync://holzt:2647 -script noteCreate.tcl \
        -urlparams "author=Goss&title=This is a note.&body=New note."} \
        result] {
       puts "Couldn't create the note!"
   } else {
       puts "Created note: $result"
   }

 3. From stcl, run the client script:
```

```
  stcl> source callNoteCreate.tcl
  Created note: sync:///Note/SyncNotes/Note/3
```

You could also run the rstcl command directly from the command line (no exception catcher). Doing so creates a second note:

```
  stcl> rstcl -server sync://holzt:2647 -script noteCreate.tcl \
        -urlparams "author=Goss&title=Another note.&body=New note."
  sync:///Note/SyncNotes/Note/4
```

record

record Command

NAME

```
record              - Captures command output
```

DESCRIPTION

```
This command captures the output from a command and stores it in a
variable. stcl programmers can use this command as a debugging aid.

The two required arguments to the record command are the command to
execute and the variable in which to store the command output.
Note that 'record' differs from 'set' in that 'record' stores
the command output whereas 'set' would store the command's return
value (see Examples for an illustration).

The record command returns or throws whatever the command being executed
produces. Therefore, replacing any command with a corresponding
record command does not affect script execution.

The record command runs in transaction mode and caches data about a
file in memory. Subsequent operations may use the cached data, even
when file has been updated on the disk.
```

SYNOPSIS

```
record <command> <variable>
```

OPTIONS

```
none
```

RETURN VALUE

```
Same as the command being executed.
```

SEE ALSO

```
puts
```

EXAMPLES

Example of Recording to a Variable

```
The following example stores the result of an ls command in the
variable 'listing':
  stcl> record ls listing
```

Example Showing Typical Usage of Record

```
This example shows how grouping operators are commonly used with
the record command:

  catch {record {ci -new -keep -rec -com $comment *.cds} text} ret
```

Example Showing Using Command Arguments with Record

```
This example demonstrates the different behavior of the 'record'
command:

  stcl> record {co -lock -nocom top.v} x
  {Objects succeeded (1)} {}
  stcl> puts $x

  Beginning Check out operation...

  Checking out: top.v : Success - Checked Out  version: 1.1 -> 1.2

Versus the 'set' command:

  stcl> set x [co -lock -nocom top.v]
```

```
Beginning Check out operation...

Checking out: top.v : Success - Checked Out  version: 1.1 -> 1.2
{Objects succeeded (1)} {}
stcl> puts $x
{Objects succeeded (1)} {}
stcl>
```

Workspace Setup

Enterprise DesignSync Development Area

sda

sda Command

```
sda                  - Synchronicity development area commands
```

DESCRIPTION

```
The sda commands allow you to manage your DesignSync development
areas. For more information on development areas, see the
Enterprise Design Administration User's Guide.

Note: The sda commands must be run from your OS shell, not from
      within the DesignSync interfaces.
```

SYNOPSIS

```
sda <sub_command> [<sub_command_options>]

Usage: sda [cd|gui|join|ls|mk|rm]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
sda cd, sda gui, sda join, sda ls, sda mk, sda rm
```

EXAMPLES

See specific "sda" commands.

sda cd

sda cd Command

NAME

sda cd - Change development area and launch a tool command

DESCRIPTION

This command allows the user to launch a tool from a development area they have created via "sda mk" or joined via "sda join". The tool runs using the development setting defined for the area.

The sda cd command performs the following sequence of actions:

1. If the -update option is selected, updates the development instance directory associated with an external development area.

2. Sets up the environment by setting the following environment variables:
   - SYNC_DEVAREA_DIR - set to the requested development area directory.
   - SYNC_DEVAREA_TOP - set to the leaf name of the top module or directory in the development area.
   - SYNC_DEV_ASSIGNMENT - set to the assignment associated with the development area.
   - SYNC_DEVELOPMENT_DIR - set to the top of the development instance directory.
   - SYNC_PROJECT_CFGDIR - set to the directory holding the development setting for the assignment associated with the development area.
   - SYNC_WS_DEVAREA_TOP - set to the leaf name of the top module or directory in the development area. This variable can then be used for the starting directory in any commands you construct within the specified tool.

3. Runs all of the set up scripts defined for the tools associated with the development area. Running all the scripts is required to support inter-tool dependencies and shell tools.
   Note: When a shell is defined as a tool, it should be defined to ignore the startup script for the shell. Any aliases, etc. defined in the startup script will not be available; however when a tool suite is defined, the admin can specify a script with the desired environment settings.

4. Sets the current directory for the tool to the starting directory. The starting directory is the directory defined in the tool's definition. If no starting directory is specified, then the directory defined in the tool suite is used. If no starting

directory is specified in the tool suite either, the development area is used.
The starting directories can be specified with environment variables and may be relative to the development area.

5. Starts the requested tool. If the tool is graphical, the tool is spawned (detached) from sda. If the tool is non-graphical, on UNIX, the tool runs in the same shell as sda.

   Note: When a non-graphical tool is started, the sda process ends.

If you run the command without specifying a development area or a tool, or the user specified an ambiguous argument, the command starts in interactive mode. In interactive mode, the user is prompted for the command arguments and options needed. Any arguments specified with the -gui command option are passed to the GUI and the appropriate fields are selected on the "Change Area" tab.

SYNOPSIS

```
sda cd [<area_name>] [<tool>] [-development <name>] [-gui]
       [-suite <suite_name>] [-[no]update] [-version <version>]
```

ARGUMENTS

- Development Area Name
- Tool

Development Area Name

area_name	The development area name of the DesignSync Development. This argument is required and the development area must already exist.

Tool

tool	The tool name specified must be a tool that is defined for use with the specified development area. The list of available tools can be viewed from the development instance for the assignment associated with the area. Note: When a shell is defined as a tool, it should be defined to ignore the startup script for the shell. Any aliases, etc. defined in the startup script will not be available.

OPTIONS

-development

-development <name>	Specify the name of the development if the area name is not unique for the user. Area names are unique within a development for a given user, but are not required to be unique across all developments.

-gui

gui	Starts the sda graphical user interface mode with the "Change Area" tab selected. If this option is used with the tool argument, the tool argument is silently ignored.

-suite

-suite <suite>	Specify the suite name for the tool suite, if the tool name is not unique across all tool suites for the development assignment.

-[no]update

-[no]update	Specifies whether the development instance definition should be updated, if it is an external area. -noupdate does not update the external development instance from the server before setting the environment variables for the area and starting the tool. (Default when the development setting is 'Mirror=False') -update performs the update of the external area before performing any other actions. (Default when 'Mirror=True') If the area is not an external area and this option is specified, the tool exits without launching the tool. Note: If -update is explicitly specified, and no

```
                        tool is specified, DesignSync assumes the
                        desired action is the update and does not
                        prompt for tool in interactive mode.
```

-version

```
 -version          Specify the version number of the tool suite if the
  <version>        tool suite name is not unique within the
                   development assignment. This option must be
                  specified if there are multiple tools with the same
                  name in multiple tool suites with the same name.
```

RETURN VALUE

```
There is no TCL return value for this command.
```

SEE ALSO

```
sda gui, sda join, sda ls, sda mk, sda rm
```

EXAMPLES

- Running sda cd in Interactive Mode
- Running sda cd in non-interactive mode

Running sda cd in Interactive Mode

```
This example runs sda cd in interative mode, supplying no
arguments. It is run from a Windows client and launches the
DesignSync GUI which is configured as a tool for this development
area.
Note that the list of areas is prefixed with the development name for
ease of idenfitication.

C:\workspaces\chipNZ214> sda cd
Logging to C:\Users\fyl\dss_11042013_100431.log
V6R2014x

Which development area would you like to work with?
[1] (Chip-NZ214) documenter-1_rmsith
[2] (Chip-QR2) verifier-1_thopkins
[3] (Chip-NZ214) developer-1_rsmith
[E] <EXIT sda>
Select the number preceding the development area name or 'E' to exit
 [1-3,E]: 1
```

```
Synchronizing the local development with the server ...
Contacting host: serv1.ABCo.com:2164 ...
Synchronization complete

Which tool would you like to launch?
[1] Authoring Tool
[2] DesSync
[E] <EXIT sda>
Select the number preceding the tool name or 'E' to exit (1-2,E): 2

c:\workspaces\chipNZ214>
```

Running sda cd in non-interactive mode

```
This example specifies the area and tool and the -noupdate option.
Note that it does not enter interactive mode, nor does it attempt to
synchronize the development area.  This example automatically
launches the GUI tool, without requiring the -GUI option because of
the way the tool is defined.

C:\workspaces\chipNZ214> sda cd Chip-NZ214 DesSync -noupdate
Logging to C:\Users\fyl\dss_11042013_103110.log
V6R2014x
[The DesignSync Development Area Manager launches in separate window]
c:\workspaces\chipNZ214>
```

sda gui

sda gui Command

NAME

```
sda gui             - Start the sda area management graphical user
                      interface
```

DESCRIPTION

```
This command is used to start the graphical user interface
sda tool. The sda GUI tool is a tabbed dialog based tool for
development area management. When the GUI is opened from this
command, it displays the most recently used tab.

For information on using the sda GUI tool, see the Enterprise DesignSync
Administration User's Guide

Note: If you are running this from UNIX, you must use an environment that
supports running graphical clients.
```

SYNOPSIS

```
sda gui
```

RETURN VALUE

```
This command has no TCL return value.  If the GUI is unable to
launch, the command returns an appropriate error message.
```

SEE ALSO

```
sda cd, sda join, sda ls, sda mk, sda rm
```

EXAMPLES

- Starting sda GUI in the Background

Starting sda GUI in the Background

```
This example starts the sda GUI as a background process on UNIX,
leaving the terminal free to type additional commands if needed.

> sda GUI &
```

sda join

sda join Command

NAME

```
sda join            - Allow the user to join an existing development
                      area
```

DESCRIPTION

```
This command allows the user to join an existing eligible shared
area of a development. Eligible shared areas are located by
finding the participating development servers, looking at the
developments on those servers and identifying the shared areas that
have a local path and have not already been joined. For information
on defining a development server, see the DesignSync Data Manager
Administrator's Guide.
```

```
If you don't specify arguments to sda join, it starts in interactive
mode, prompting you for any information needed that was not provided
on the command line.
```

SYNOPSIS

```
sda join [<area_name>] [-development <name>] [-gui]
```

ARGUMENTS

- Area Name

Area Name

```
area_name          The name of the DesignSync development area. The
                   area must already exist. If the area is not
                   provided, or cannot be uniquely identified from the
                   name, you are prompted for the area name in
                   interactive mode.

                   If an invalid area is specified, and the -gui
                   option is used, the GUI starts on the
                   "Join Area" tab and allows you to select a
                   valid Area.
```

OPTIONS

- -development
- -gui

-development

```
-development       Specify the development name if the area name is
 <name>            not unique for the user. Area names are unique
                  within a development for a given user, but are not
                  required to be unique across all developments.
```

-gui

```
-gui               Starts the sda graphical user interface mode
                   with the "Join Area" tab selected.
```

RETURN VALUE

```
There is no TCL return value for this command. If the command fails,
DesignSync returns an appropriate error.
```

SEE ALSO

```
sda cd, sda gui, sda ls, sda mk, sda rm
```

EXAMPLES

sda ls

sda ls Command

NAME

```
sda ls              - List the areas or developments relevant to the
                      user
```

DESCRIPTION

```
This command lists the areas or developments that are currently
active for the user, or registered with the development servers
defined in SyncAdmin.  For more information on defining development
servers, see the DesignSync Data Manager Administrator's Guide.
```

SYNOPSIS

```
sda ls [-area | -development] [-gui] [-noheader]
       [-report brief | normal | verbose]
```

OPTIONS

- -area
- -development
- -gui
- -noheader
- -report

-area

-area	Show all of the areas, sorted by name, that are currently active for the user.

-development

-development	Show all the developments available from the development servers associated with the distribution. Development servers are associated with a distribution using SyncAdmin.

-gui

-gui	Starts the sda graphical user interface mode with the "List Areas," or "List Developments" tab selected.

-noheader

-noheader	Specifies omitting column headers for the command line reports. This option is silently ignored when the -gui option is specified. If this option is not specified, the command line reports include column headers.

-report

-report brief|normal|verbose	Specifies the amount of output supplied by the command. When -area is specified: -report brief - lists area names. -report normal - lists the area name, development name, and assignment associated with the area. -report verbose - includes all the information from -report normal and the path to the area directory, development's local instance directory, and status (enabled, disabled, or deleted.) When -development is specified: -report brief - lists development names. -report normal - lists the development name and its supported assignments. -report verbose - includes all the information in -report normal and the data URL, selector, development path, server URL, and status (enabled, disabled, or deleted.)

RETURN VALUE

```
This command does not return any TCL values. If the command succeeds,
it displays the list of development areas.  If the command fails, it
fails with an appropriate error.
```

SEE ALSO

```
sda cd, sda gui, sda join, sda mk, sda rm
```

EXAMPLES

- Example Showing the List of Development Areas

Example Showing the List of Development Areas

```
This example shows a list of the defined development areas. Note that
this command runs at the shell, not in the dss/stcl environment.

$> sda ls
Logging to /home/rsmith/dss_08112016_103913.log
3DEXPERIENCER2021x

Development   Development Area    Assignment
-----------   ----------------    ----------
ChipNZ214     documenter-1_rsmith QATester
```

sda mk

sda mk Command

NAME

```
sda mk              - Make a new development area
```

DESCRIPTION

- Running in Interactive Mode
- Tips for Naming Your Development Area
- External Development Areas
- Note for File-Based Development

This command creates a new development area in the specified location and registers the development area with the development server managing the development. The development server and the development the area uses must already exist. For more information on defining a development server, see the DesignSync Data Manager Administrator's Guide. For more information on development areas, see the Enterprise DesignSync Administrator's Guide.

The sda mk command performs the following sequence of actions.

- Creates the development area directory, if necessary.
- Sets up the environment by creating environment variables to point to the new development area. The environment variables are:
  - SYNC_DEVAREA_DIR - the new development area directory.
  - SYNC_DEVELOPMENT_DIR - the top-level of the development instance directory.
  - SYNC_PROJECT_CFGDIR - the setting for the assignment associated with the development area.
- Populates the development area with the development's data using the development URL from the development instance definition; the selector from the assignment associated with the development area; the version of DesignSync tools specified with the assignment; and any settings specified in the setting for the assignment, for example, the fetch state setting. The development data is populated into a sub-directory of the development area named by using the leaf name of the containing server data. For more information see the appropriate note for your usage model.

  Note: For Windows development areas, the fetch state is automatically set to -get mode (Fetch Unlocked Copies).

Note: Server access may require a username and password. If your password for the server is not already saved by the client, you may be prompted to enter it in order to access the server data. For more information, see the notes section.

For information on defining a development server, see the DesignSync Data Manager Administrator's Guide.

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

Running in Interactive Mode

Running sda mk with no arguments causes the command to enter the interactive mode. In interactive mode, you are prompted for the command arguments and options needed.

If you specify ambiguous or incomplete arguments, sda mk will enter interactive mode only to resolve the unspecified or ambiguous arguments.

Any arguments that are specified with the -gui command option will be passed to the GUI and the appropriate fields will be pre-filled or

selected on the "Make Area" tab.

Tips for Naming Your Development Area

A development area name must start with an alphanumeric character and be composed of alphanumeric characters, including dot (.), dash (-), or underscore (__). Development names must be unique within a development server. Development area names must be unique for a development instance.

The command provides a unique default development area name in the following format:
<Assignment>-<count>_<creator>
Where:
<assignment> corresponds to the assignment selected previously, or entered with the -assignment option.
<count> is the next available number, starting from 1, of areas created. This is used to ensure the uniqueness of the name.
<creator> Username of the creator of the development area.

For example, User rsmith creating the first development area for the assignment Developer, has a default development area name of "Developer-1_rmsith"

Note: Development areas are checked for uniqueness in the name/instance pair. You cannot have to development areas for the same instance using the same name. You can have two development areas with the same name if they are for different development instances.

External Development Areas

An external development area is a development area whose physical presence is on a different network from the development server that it is associated with. External development areas are only allowed if the "Allow External Development Areas" parameter from the development definition on the development server is set to TRUE.

When a user creates a new development area, the sda mk command looks up the development instance path from the development definition on the development server. If the sda mk is run on a different network and can't find the development instance path, the command knows to create an external development area. The command then verifies that there is a local development instance directory for the development to host the new development area by checking for the existence of the directory located in the "External Path" parameter of the development definition on the development server. If this directory does not already exist, the command creates it.

The external development directory is similar in structure to the development instance created locally by the development server. The data replication root directory is replaced by a simple

```
file cache directory. None of the external development's directory
hierarchy is mirrored and no data is pushed to this directory
directly from the development server. This is simply a local copy.

If the external development directory does already exist, its local
development definition and the setting for the selected assignment
is updated.

After the external development directory is in place and up to date,
the normal development area creation procedure continues with the
creation of the relevant environment variables and the data
population.
```

Note for File-Based Development

```
If the development data is file based, the data is populated into a
sub-directory of the development area directory with the leaf name of
the development URL, which is the directory name of the directory
holding the data on the server. This structure allows the user to
place unmanaged, peer, or derived data in the development area
outside the data's directory cone.

Server authentication for Windows systems using file-based methodology
requires that any servers referenced (by REFERENCE statements in
sync_project.txt files) are pre-authenticated by saving the
username/password for the server in order to populate the referenced
data. To pre-authenticate your server, use the password -save command
to save the username/password for the server.
```

SYNOPSIS

```
sda mk [<area_name> [<dev_name>]] [-assignment <assignment>] [-gui]
       [-path <path>] [-shared]
```

ARGUMENTS

- Area Name
- Development Name

Area Name

```
<area_name>     The new area name for the development.
                If no area name is specified, and the command is not
                run interactively, DesignSync uses the default name,
                in the format:
                <Assignment>-<count>_<creator>
                Where:
                <assignment> corresponds to the assignment
                  selected previously, or entered with the -assignment
```

option.
<count> is the next available number, starting from 1, of areas created. This is used to ensure the uniqueness of the name.
<creator> User name of the creator of the development area.

Development Name

<dev_name>	The development name of the DesignSync development instance to which the new development area is associated. The development must already exist.

OPTIONS

-assignment

-assignment <assignment>	Specifies an assignment from a predefined list of available assignments for the development. The assignment can be used to specify a module view or a different selector, one other than the default defined with the development, for the populate. If no assignment is specified, the "<Default>" assignment is assumed. The assignment determines the settings associated with the development area.

-gui

-gui	Starts the sda graphical user interface mode with the "Make Area," tab selected.

-path

-path <path>	Specifies the area directory; the local directory path where the development data will be populated. If the directory already contains managed data, the URL and selector of the data already fetched into the directory must match the URL and selector of the development combined with the assignment.

```
Note: If you specify this option and the "Allow
user-defined development area paths" parameter is
set to FALSE, the command exits with an error.
```

-shared

```
-shared          Designates the development area as a shared
                 development area. Shared development areas can be
                joined by other users. All users of a shared
                development area conduct their work in the same
                development area directory.
```

RETURN VALUE

```
This command does not return any TCL values.  The command output displays
information about success or failure of the command and status messages.
```

SEE ALSO

```
sda cd, sda gui, sda join, sda ls, sda rm, replicate
```

EXAMPLES

- Example of Running sda mk in Interactive Mode

Example of Running sda mk in Interactive Mode

```
$> sda mk
Logging to C:\home\rsmith\logs\dss_03132014_103149.log
V6R2019x
Contacting host: serv1.ABCo.com:2647 ...

Which development would you like to create a development area for?
[1] Chip-NZ8
[2] Chip-QR2
[3] ROM-NZx
Select the number preceding the development name or 'E' to exit (1-3): 1

Which assignment will be assigned to this development area?
[1] developer
[2] documenter
[3] verifier
Select the number preceding the assignment or 'E' to exit (1-3): 2

Please specify the name for the new development area
[documenter-1_rsmith]:
```

```
Please specify the path for the development area directory
[c:\Developments\rsmith\documenter-1_rsmith]:
C:\User\rsmith\DevAreas\nz8ChipDev

Should this be a shared development area (y/n) [n]:

The development area 'nz8ChipDev' for development 'Chip-NZ8' has been
created at c:\User\rsmith\DevAreas\nz8ChipDev
```

sda rm

sda rm Command

NAME

```
sda rm              - Remove an existing development area and its
                      contents
```

DESCRIPTION

```
This command removes a development area from its development
definition on the development server and attempts to remove the
local development area directory. If the development area is a shared
development area, only the last user to remove the development area
is allowed to remove the local development area directory. The
command does not remove any design data from the repository server.

Invoking sda rm without any arguments, or with incomplete or
ambiguous arguments, causes the command to enter the interactive
mode. In interactive mode, the user is prompted for the command
arguments and options needed and must confirm the answers.

In interactive mode, orphaned development areas, development areas
where a development instance can't be found;  are displayed
preceded with a "!" and shared development areas are displayed
preceded with a "*".

Any arguments specified with the -gui command option are passed to
the GUI and the appropriate fields are pre-filled on the Remove Area
tab. The GUI ignores the -noconfirm option if it is used.
```

SYNOPSIS

```
sda rm [<area_name>] [-development <name>] [-gui] [-noconfirm]
```

OPTIONS

-development

```
-development      Specify the development name if the area name is
 <name>           not unique for the user. Area names are unique
                 within a development for a given user, but are not
                 required to be unique across all developments.
```

-gui

```
-gui              Starts the sda graphical user interface mode
                  with the "Remove Area," tab selected.
```

-noconfirm

```
-noconfirm         By default, the removal requires confirmation.  Use
                   the -noconfirm option to perform the removal
                  without confirmation.

                   Note: The GUI interface always requires
                   confirmation.  If -noconfirm is specified with
                   -gui, the -noconfirm option is silently ignored.
```

RETURN VALUE

```
This command does not return any TCL values.  The command output displays
information about success or failure of the command and status messages.
```

SEE ALSO

```
sda cd, sda gui, sda join, sda ls, sda mk
```

EXAMPLES

Example Showing Removing a Development

```
$> sda rm nz8ChipDev
** You are removing both the development area definition and the
development area directory. **
Are you sure you want the remove development area 'nz8ChipDev' from
development 'Chip-NZ8'? (y/n) [n]:y
You have successfully removed development area 'nz8ChipDev' from
development 'Chip-NZ8'.
$>
```

Example Showing Removing a Development in Interactive Mode

```
$> sda rm
Which development area would you like to remove?
[1] nz8ChipDev (Chip-NZ8)
[2] nz8ChipDev (ROM-NZx)
[3] Chip-QR2
[4] ROM-NZx
* Shared development area
Select the number preceding the development area name (1-5):1

** You are removing both the development area definition and the
directory. **
Are you sure you want the remove development area 'nz8ChipDev' from
development 'Chip-NZ8'? (y/n) [n]:y
You have successfully removed development area 'nz8ChipDev' from
development 'Chip-NZ8'.
```

Exclude from Workspace

exclude

exclude Command

NAME

```
exclude             -  Commands for excluding objects from operations
```

DESCRIPTION

```
The exclude command allow you to control which unmanaged objects are
automatically excluded from check in or add operations on a per
directory basis.

Using the exclude commands, you can add, remove, or display the
glob-style exclusion patterns.  The exclusions are stored in one or
more syncexclude files.

Note: These exclusions are only applicable to unmanaged files.  If a
```

```
file is managed by the SyncServer, and you wish to exclude it from an
operation, such as populate, ci, or tag, you must use exclude lists
or filters (for example "populate -exclude *.doc").

The exclude files can be maintained either using these commands, a
graphical interface in the DesSync client, or by manually editing the
exclude file.  For more information on the files, the file format,
and using the various interfaces, see the DesignSync User's Guide:
Working with Exclude Files.
```

SYNOPSIS

```
exclude <exclude_command> [<exclude_command_options>]

Usage: exclude [add | list | remove]
```

ARGUMENTS

```
See individual commands.
```

OPTIONS

```
See individual commands.
```

RETURN VALUE

```
See individual commands.
```

SEE ALSO

```
ci
```

EXAMPLES

```
See individual commands.
```

exclude add

exclude add Command

NAME

exclude add - Add objects to exclude from operations

DESCRIPTION

This command appends the supplied pattern(s) to the end of the specified .syncexclude[*] file. If the specified file doesn't already exist, DesignSync will create it and place the supplied pattern(s) in it. Exclusions are processed in the order they appear in the file. You can edit the file to adjust the positioning of the exclusions or add an exclusion pattern with a higher priority.

Specify the pattern in one of the following forms:
-<pattern>
+<pattern>

When you use the "-<pattern>" form, you exclude objects that match the specified pattern at the folder level.

When you use the "- .../<patern>" form, you exclude objects that match the specified pattern at the folder level and any subfolders.

When you use the "+[.../]<pattern>" you create an exception to a previously excluded pattern. An example of using an exclude with an exception might be excluding all .doc files unless they're in the documentation subdirectory. So in the base-level .syncexclude, you could have this:

Exclude all doc files -".../*.doc"
and in a .syncexclude file within the documentation directory, you could have this:

+".../*.doc"

Any other sub-folders of the base folder would inherit excepting the unmanaged .doc files from revision control operations. The documentation directory and any subfolders of the documentation directory would allow .doc files to be included in revision control operations.

Note: Any changes to exclude files affect only unmanaged files. If a managed object matches the pattern, it remains unaffected. To exclude managed files, you must use -exclude or -filter, or an exclude list, as applicable. For more information on other types of exclusions, see the DesignSync User's Guide.

You must have write permissions in order to create or append to the file.

This command supports the command defaults system.

SYNOPSIS

```
exclude add <argument> [--] <pattern>[ <pattern>...]
```

ARGUMENTS

File Path Argument

```
<FilePath>    The path and name of the .syncexclude file. All
              .syncexclude files must begin with ".syncexclude" but
              can contain an extension which must begin with a "."
              character. For example, you could create a .syncexclude
              file that contains the module name, such as
              ".syncexclude.Chip." This allows you to include
              multiple .syncexclude files in the same directory. If
              the file extension does not being with a period, ".",
              it will not be understood by the system as a
              .syncexclude file.

              If the specified file does not exist, DesignSync
              automatically creates it.  If you do not have write
              permissions to create or modify the file, the command
              fails with an appropriate error.
```

Folder Path Argument

```
<FolderPath>  The path to the location of the .syncexclude file(s).
              If there are multiple .syncexclude files within the
              directory, the pattern is added to all of the
              .syncexclude files.

              The command does not operate in a folder recursive
              manner.  Only files at the specified directory level are
              updated.

              If there is no .syncexclude file in that folder,
              DesignSync automatically creates a new file called
              .syncexclude.  If you do not have write permissions to
              create or modify the file, the command fails with an
              appropriate error.
```

OPTIONS

- --

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when the pattern
                supplied to the command begins with a dash (-).
```

PATTERN

- Pattern for Exclude

Pattern for Exclude

```
<pattern>       Specifies a space-separated list of patterns that
[...<pattern>] exclude or include unmanaged objects (collections,
                folders, or files) from check in or add
                operations, which would change the object from an
                unmanaged to a versionable object.

                Specify any pattern to exclude from operations that
                create managed objects or display unmanaged
                objects. Wildcards are allowed. Any patterns that end
                in foward-slash (/) apply to the folder and any
                files within the folder.  Do not use the backslash (\)
                character as a folder indicator. For specific usage
                information, see the Examples.
```

RETURN VALUE

```
No TCL value is returned.  If the command succeeds, DesignSync
displays a success message.  If the command fails, DesignSync
displays a message to explain the failure.
```

SEE ALSO

```
ci, exclude list, exclude remove, ls
```

EXAMPLES

- Example Showing Adding an Exclusion to the Exclude File
- Example Showing Adding an Folder-Based Exclude

Example Showing Adding an Exclusion to the Exclude File

```
This example excludes all unmanaged objects that end with a .log
suffix from revision control operations, such as ci.

Note: Because this is excluding a pattern, it requires the "--"
option to indicate that the next "-" is associated with the pattern,
not indicating an option.


dss> exclude add . -- -*.log
```

Example Showing Adding an Folder-Based Exclude

```
This example excludes all unmanaged objects in a folder that matches
the specified pattern. In this example, we have a directory
structure like this:
 rom
  doc
   rom.doc
   rom.fm
   rom.pdf
   rom.log
  log
   generatelog.log
   errorlog.log

Using our previous example, we have at the rom folder level a
.syncexclude that contains *.log.  But the log files within the .log
directory are files that should be checked in.  This plus exception
crteated in the same file allows the .log folder and all files within
to be operated on.

dss> exclude add . -- +../log/
```

Arguments

exclude add Command

NAME

```
exclude add         -  Add objects to exclude from operations
```

DESCRIPTION

```
This command appends the supplied pattern(s) to the end of the
specified .syncexclude[*] file. If the specified file doesn't
already exist, DesignSync will create it and place the supplied
pattern(s) in it. Exclusions are processed in the order they appear
```

```
in the file. You can edit the file to adjust the positioning of the
exclusions or add an exclusion pattern with a higher priority.

Specify the pattern in one of the following forms:
-<pattern>
+<pattern>

When you use the "-<pattern>" form, you exclude objects that match
the specified pattern at the folder level.

When you use the "- .../<patern>" form, you exclude objects that
match the specified pattern at the folder level and any
subfolders.

When you use the "+[.../]<pattern>" you create an exception to
a previously excluded pattern.  An example of using an exclude with
an exception might be excluding all .doc files unless they're in the
documentation subdirectory.  So in the base-level .syncexclude, you
could have this:

# Exclude all doc files -".../*.doc"
 and in a .syncexclude file within the documentation directory, you
 could have this:

 +".../*.doc"

Any other sub-folders of the base folder would inherit excepting the
unmanaged .doc files from revision control operations. The
documentation directory and any subfolders of the documentation
directory would allow .doc files to be included in revision control
operations.

Note: Any changes to exclude files affect only unmanaged files.  If
a managed object matches the pattern, it remains unaffected.  To
exclude managed files, you must use -exclude or -filter, or an
exclude list, as applicable. For more information on other types of
exclusions, see the DesignSync User's Guide.

You must have write permissions in order to create or append to the
file.

This command supports the command defaults system.
```

SYNOPSIS

```
exclude add <argument> [--] <pattern>[ <pattern>...]
```

ARGUMENTS

- File Path Argument
- Folder Path Argument

File Path Argument

```
<FilePath>    The path and name of the .syncexclude file. All
              .syncexclude files must begin with ".syncexclude" but
              can contain an extension which must begin with a "."
              character. For example, you could create a .syncexclude
              file that contains the module name, such as
              ".syncexclude.Chip." This allows you to include
              multiple .syncexclude files in the same directory. If
              the file extension does not being with a period, ".",
              it will not be understood by the system as a
              .syncexclude file.

              If the specified file does not exist, DesignSync
              automatically creates it.  If you do not have write
              permissions to create or modify the file, the command
              fails with an appropriate error.
```

Folder Path Argument

```
<FolderPath>  The path to the location of the .syncexclude file(s).
              If there are multiple .syncexclude files within the
              directory, the pattern is added to all of the
              .syncexclude files.

              The command does not operate in a folder recursive
              manner.  Only files at the specified directory level are
              updated.

              If there is no .syncexclude file in that folder,
              DesignSync automatically creates a new file called
              .syncexclude.  If you do not have write permissions to
              create or modify the file, the command fails with an
              appropriate error.
```

OPTIONS

- --

--

```
--            Indicates that the command should stop looking for
              command options. Use this option when the pattern
              supplied to the command begins with a dash (-).
```

PATTERN

Pattern for Exclude

```
<pattern>      Specifies a space-separated list of patterns that
[...<pattern>] exclude or include unmanaged objects (collections,
               folders, or files) from check in or add
               operations, which would change the object from an
               unmanaged to a versionable object.

               Specify any pattern to exclude from operations that
               create managed objects or display unmanaged
               objects. Wildcards are allowed. Any patterns that end
               in foward-slash (/) apply to the folder and any
               files within the folder.  Do not use the backslash (\)
               character as a folder indicator. For specific usage
               information, see the Examples.
```

RETURN VALUE

```
No TCL value is returned.  If the command succeeds, DesignSync
displays a success message.  If the command fails, DesignSync
displays a message to explain the failure.
```

SEE ALSO

```
ci, exclude list, exclude remove, ls
```

EXAMPLES

Example Showing Adding an Exclusion to the Exclude File

```
This example excludes all unmanaged objects that end with a .log
suffix from revision control operations, such as ci.

Note: Because this is excluding a pattern, it requires the "--"
option to indicate that the next "-" is associated with the pattern,
not indicating an option.


dss> exclude add . -- -*.log
```

Example Showing Adding an Folder-Based Exclude

```
This example excludes all unmanaged objects in a folder that matches
the specified pattern. In this example, we have a directory
structure like this:
 rom
  doc
   rom.doc
   rom.fm
   rom.pdf
   rom.log
  log
   generatelog.log
   errorlog.log

Using our previous example, we have at the rom folder level a
.syncexclude that contains *.log.  But the log files within the .log
directory are files that should be checked in.  This plus exception
crteated in the same file allows the .log folder and all files within
to be operated on.

dss> exclude add . -- +../log/
```

exclude add Command

NAME

```
exclude add         -  Add objects to exclude from operations
```

DESCRIPTION

```
This command appends the supplied pattern(s) to the end of the
specified .syncexclude[*] file. If the specified file doesn't
already exist, DesignSync will create it and place the supplied
pattern(s) in it. Exclusions are processed in the order they appear
in the file. You can edit the file to adjust the positioning of the
exclusions or add an exclusion pattern with a higher priority.

Specify the pattern in one of the following forms:
-<pattern>
+<pattern>

When you use the "-<pattern>" form, you exclude objects that match
the specified pattern at the folder level.

When you use the "- .../<patern>" form, you exclude objects that
match the specified pattern at the folder level and any
subfolders.

When you use the "+[.../]<pattern>" you create an exception to
a previously excluded pattern.  An example of using an exclude with
an exception might be excluding all .doc files unless they're in the
```

```
documentation subdirectory.  So in the base-level .syncexclude, you
could have this:

# Exclude all doc files -".../*.doc"
 and in a .syncexclude file within the documentation directory, you
 could have this:

 +".../*.doc"

Any other sub-folders of the base folder would inherit excepting the
unmanaged .doc files from revision control operations. The
documentation directory and any subfolders of the documentation
directory would allow .doc files to be included in revision control
operations.

Note: Any changes to exclude files affect only unmanaged files.  If
a managed object matches the pattern, it remains unaffected.  To
exclude managed files, you must use -exclude or -filter, or an
exclude list, as applicable. For more information on other types of
exclusions, see the DesignSync User's Guide.

You must have write permissions in order to create or append to the
file.

This command supports the command defaults system.
```

SYNOPSIS

```
exclude add <argument> [--] <pattern>[ <pattern>...]
```

ARGUMENTS

- File Path Argument
- Folder Path Argument

File Path Argument

```
<FilePath>    The path and name of the .syncexclude file. All
              .syncexclude files must begin with ".syncexclude" but
              can contain an extension which must begin with a "."
              character. For example, you could create a .syncexclude
              file that contains the module name, such as
              ".syncexclude.Chip." This allows you to include
              multiple .syncexclude files in the same directory. If
              the file extension does not being with a period, ".",
              it will not be understood by the system as a
              .syncexclude file.

              If the specified file does not exist, DesignSync
              automatically creates it.  If you do not have write
              permissions to create or modify the file, the command
```

```
                fails with an appropriate error.
```

Folder Path Argument

```
 <FolderPath>   The path to the location of the .syncexclude file(s).
                If there are multiple .syncexclude files within the
                directory, the pattern is added to all of the
                .syncexclude files.

                The command does not operate in a folder recursive
                manner.  Only files at the specified directory level are
                updated.

                If there is no .syncexclude file in that folder,
                DesignSync automatically creates a new file called
                .syncexclude.  If you do not have write permissions to
                create or modify the file, the command fails with an
                appropriate error.
```

OPTIONS

- --

--

```
 --             Indicates that the command should stop looking for
                command options. Use this option when the pattern
                supplied to the command begins with a dash (-).
```

PATTERN

- Pattern for Exclude

Pattern for Exclude

```
 <pattern>      Specifies a space-separated list of patterns that
 [...<pattern>] exclude or include unmanaged objects (collections,
                folders, or files) from check in or add
                operations, which would change the object from an
                unmanaged to a versionable object.

                Specify any pattern to exclude from operations that
                create managed objects or display unmanaged
                objects. Wildcards are allowed. Any patterns that end
                in foward-slash (/) apply to the folder and any
                files within the folder.  Do not use the backslash (\)
```

```
character as a folder indicator. For specific usage
information, see the Examples.
```

RETURN VALUE

```
No TCL value is returned.  If the command succeeds, DesignSync
displays a success message.  If the command fails, DesignSync
displays a message to explain the failure.
```

SEE ALSO

```
ci, exclude list, exclude remove, ls
```

EXAMPLES

Example Showing Adding an Exclusion to the Exclude File

```
This example excludes all unmanaged objects that end with a .log
suffix from revision control operations, such as ci.

Note: Because this is excluding a pattern, it requires the "--"
option to indicate that the next "-" is associated with the pattern,
not indicating an option.


dss> exclude add . -- -*.log
```

Example Showing Adding an Folder-Based Exclude

```
This example excludes all unmanaged objects in a folder that matches
the specified pattern. In this example, we have a directory
structure like this:
 rom
  doc
   rom.doc
   rom.fm
   rom.pdf
   rom.log
  log
   generatelog.log
   errorlog.log

Using our previous example, we have at the rom folder level a
```

```
.syncexclude that contains *.log.  But the log files within the .log
directory are files that should be checked in.  This plus exception
crteated in the same file allows the .log folder and all files within
to be operated on.

dss> exclude add . -- +../log/
```

exclude list

exclude list Command

NAME

```
exclude list          -  Show object patterns excluded from operations
```

DESCRIPTION

```
This command shows the contents of the exclude list files, allowing
you to see which patterns are excluded or included by the files in
the directory or .syncexclude file specified.

The command can display in either text or Tcl list form, to allow either
for easy viewing or additional processing.

This command supports the command defaults system.
```

SYNOPSIS

```
exclude list [-format text|list] <path>
```

ARGUMENTS

- File Path Argument
- Folder Path Argument

File Path Argument

```
<FilePath>    The path and name of the .syncexclude file.
```

Folder Path Argument

```
<FolderPath>   The path to the location of the .syncexclude file(s).
```

```
If there are multiple .syncexclude files within the
directory, the list of patterns for all the
.syncexclude files within the directory are returned
in the order in which they are processed.

The command does not operate in a folder recursive
manner. Only files at the specified directory level
and higher in the folder hierarchy; back to the
workspace root folder, are displayed
```

OPTIONS

- -format

-format

```
-format list|text  Determines the format of the output.
                   Valid values are:
                   o text   Display a text table with headers and
                            columns.  Objects are shown in processing
                           order.

                   o list   Tcl list structure, designed for further
                            processing, and for easy conversion to a
                            Tcl array structure. (Default) This means
                            that it is a list structure in name-value
                            pair format. The structure is:
                            {
                               <path> <pattern>
                               ...
                            }
```

RETURN VALUE

```
Empty string if -format value is text. Tcl list if the -format value
is list.
```

SEE ALSO

```
exclude add, exclude remove
```

EXAMPLES

- Example Showing Listing the Exclusions in text format
- Example Showing Listing the Exclusions in List Format

Example Showing Listing the Exclusions in text format

```
This example shows the contents of a .syncexclude list in text
format. This .syncexclude file removes .log and .doc and includes
.readme, which was removed by a higher level .syncexclude.


dss> exclude list -format text
 File                                          Rule
 ----                                          ----
 C:/home/workspaces/Chip-ZN32/.syncexclude  -*.log
 C:/home/workspaces/Chip-ZN32/.syncexclude  -*.doc
 C:/home/workspaces/Chip-ZN32/.syncexclude  +*.readme
```

Example Showing Listing the Exclusions in List Format

```
This example shows the contents of a .syncexclude list in text
format. This .syncexclude file removes .log and .doc and includes
.readme, which was removed by a higher level .syncexclude.

dss> exclude list
{C:/home/workspaces/Chip-ZN32/.syncexclude -*.log}
{C:/home/workspaces/Chip-ZN32/.syncexclude -*.doc}
{C:/home/workspaces/Chip-ZN32/.syncexclude +*.readme}
```

exclude remove

exclude remove Command

NAME

```
exclude remove         -  Remove objects from being excluded
```

DESCRIPTION

```
This command searches all the specified .syncexclude files and removes
all occurrences of the specified pattern(s). The pattern specified
must exactly match the pattern in the .syncexclude file(s). If the
pattern uses wildcards in the .syncexclude file, you must use the
same wildcard pattern when specifying its removal.  Also, a wildcard
that, if processed, would match the pattern, does not remove an
entry.  For example, if the pattern in the file was:
 -dss*.log
specifying this pattern:
 -*.log
does not remove the pattern from the syncexclude file because it is
not an exact match.
```

To view the list of patterns in the file, so you can correctly match the exclude pattern to remove it, you can use the exclude list command.

You must have read and write access to the .syncexclude files and directory.

This command supports the command defaults system.

SYNOPSIS

```
exclude remove <path> [--] <pattern>{<pattern>...]
```

ARGUMENTS

File Path Argument

<FilePath>	The path and name of the .syncexclude file.

Folder Path Argument

<FolderPath>	The path to the location of the .syncexclude file(s). If there are multiple .syncexclude files within the directory, the pattern is removed from all of the .syncexclude files that contain that pattern. The command does not operate in a folder recursive manner. Only files at the specified directory level are updated.

OPTIONS

--

--	Indicates that the command should stop looking for command options. Use this option when the pattern supplied to the command begins with a dash (-).

PATTERN

- Pattern for Exclude

Pattern for Exclude

```
<pattern>      Specifies a space-separated list of patterns that
[...<pattern>] must exactly match a pattern specified in the
               .syncexclude files affected by the command.
```

RETURN VALUE

```
Returns the number of removals. If there are no patterns that match
the specified pattern, the removal number is zero "0". If the command
fails, returns an error explaining the failure.
```

SEE ALSO

```
exclude add, exclude list
```

EXAMPLES

- Example Showing Removing an Exclusion from the Exclude File

Example Showing Removing an Exclusion from the Exclude File

```
This example shows removing one of the exclusions created in an
exclude add example.
dss> exclude remove . -- -*.log
 2
```

populate

populate Command

NAME

```
populate            - Fetches or updates specified objects
```

DESCRIPTION

```
This command fetches the specified objects from the server
into your current workspace folder or a folder you specify
with the -path option.

Typically, you create your work area, or workspace, and perform your
first populate, an initial populate, as a full populate.  Once your
work area is populated, you can use the populate, co, and ci commands
to selectively check out and check in specific objects. You should
also populate periodically to update your work area with newly
managed objects, as well as newer versions of objects you have
locally.

Populate is used to create or update the objects in your
workspace. Populate features many ways to control the data brought
into your workspace. Because of the complexity of the populate
features, the description section is divided into sections that
detail the major features and functionality of populate.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

Object States

```
Upon populating your workspace, DesignSync determines in what
state to leave the fetched objects in your work area:
  1. DesignSync obeys the state option (-get, -lock, -share,
     -mirror, -reference) specified on the command line.
  2. If no state option is specified, DesignSync uses the default
     fetch state as specified by your project leader. See
     the "fetch preference" help topic for more information.
  3. If a default fetch state is not defined, the default
     behavior for 'populate' is -get.

Important: For both incremental and full populate operations,
DesignSync changes the state of only those objects that need
updating.  DesignSync does not change the state of up-to-date
```

objects during the populate operation.

The following methods let you override the default behavior to change the states of all objects during a populate operation:

- To change the state of up-to-date objects during a populate, use the -unifystate option. To change the state of all objects that need an update as well as up-to-date and locally modified objects, use -unifystate with the -force option.
- Unlocked locally modified objects are not overwritten unless you specify -force. For example, if you modify a fetched file, then execute a 'populate -share' command, your locally modified file is not replaced by a link to a file in the cache unless you also specify -force. Locked files are not overwritten by the -force option.
- To make populating with links to the mirror a fast operation, links are created only if no object (locally modified or not) or link already exists in your work area. You must specify -unifystate to change the state of existing objects and links in this case. Use -force, as well, to overwrite locally modified objects that are not locked and to remove objects that are not in the current configuration.

Note: If the object is designated as uncachable, attempts to place objects in the cache (populate -mirror; populate -share) will automatically populates the workspace with unlocked copies (-keep mode). For more information on cachability, see the "caching" commands.

How Populate Handles Selectors

DesignSync determines what versions of objects to populate as follows:

1. DesignSync obeys the selector list specified by the -version option.
2. If -version is not specified, DesignSync uses the persistent selector list of the top-level folder being populated. The default persistent selector is 'Trunk', in which case DesignSync checks out the Latest versions from Trunk.

Notes:

- If you specify a selector or a selector list for the populate operation using the -version option and the selector does not exactly match the workspace selector, an incremental populate is no longer valid. In this case, DesignSync performs a full populate even if the -incremental option is specified. See "Incremental Versus Full Populate" above for more information.

Important: The persistent selector lists of individual managed objects (files or collections) and subfolders are not obeyed by the 'populate -recursive' operation.

- A 'populate -recursive' command without the -version option populates a work area based on the persistent selector list of the top-level folder you are populating, skipping any subfolder or managed object that has a persistent selector list that differs from the top-level folder. You must issue the populate command separately for any skipped subfolder.

- A 'populate -recursive -version <selectorList>' command uses the specified selector list and ignores all persistent selector lists. In the case of '-version Latest', the persistent selector list of the top-level folder being populated is augmented with 'Latest' and that augmented persistent selector list is used for the populate operation.

The supported DesignSync use models (single-branch development, project branching, and auto-branching) assume that persistent selector lists across a work area are consistent. Use caution when using commands that leave you with inconsistent local metadata, such as using 'setselector' or 'mkbranch' on individual objects.

See the "selectors" help topic for details on selectors, selector lists, and persistent selector lists. For more information about how the -version switch is managed, see the -version in OPTIONS.

Populate Log

Because populate operations can be long and complex, you may want to specify a log file to contain only the output of the populate command to store for later reference.

You can specify the log file on an as needed basis using the -log option or by setting a log file name using the command defaults system. If the log file specified does not exist, DesignSync creates it before it begins the populate command processing. If the log file does exist, DesignSync appends the new populate information to the file.

Tip: If you set a default log value for populate, check the file size periodically and, if the file is getting too large to use comfortably, rename the file to save the information, or remove the file if you no longer need it.

Notes:

- If a log file is defined in the command defaults system and two users run populate simultaneously, the populate output may become interlaced in the log file.

- Regardless of whether you create a populate log, the DesignSync client log file contains the output of the populate command along with all the other commands typed into the DesignSync client session.

How Populate Handles Collections with Local Versions

For collection objects that have local versions (for example, custom generic collections), the populate operation handles local versions in the following way.

When you populate a folder containing a collection object, the populate operation removes from your workspace any local version of the object that is unmodified. (Because these local versions exist in the vault, you can refetch them.) The operation then fetches from the vault the specified collection object (with the local version number it had at the time of checkin).

If the current local version in your workspace is modified, the populate operation fails unless you specify 'co -force'. (The -force option lets the local version with the modified data be replaced with the local version of the object you are checking out.) Note: The current local version is the one with the highest local version number. DesignSync considers a local version to be modified if it contains modified members or if it is not the local version originally fetched from the vault when the collection object was checked out or populated to your workspace.

The -savelocal option tells the populate operation what to do with local versions in your workspace other than a current local version that is modified. For information, see OPTIONS.

Setting up Your Workspace

Before you can use populate to maintain your workspace, you must set up your workspace.

Note: The Workspace Wizard from the DesignSync graphical user interface simplifies the task of setting up a work area by taking you through a step-by-step process.

The typical steps when you set up a new workspace are:

1. Associate a local folder with a vault folder. See the setvault command for details. This also creates the workspace root, if one does not already exist at the level of the local folder or above.

2. Optionally set the persistent selector list for the folder as part of the setvault command or with the setselector command. If you do not set the persistent selector list, it is inherited from the parent folder. This step is necessary only if you are working on a branch other than the default Trunk branch.

3. Optionally associate a local folder with a mirror directory. See the "setmirror" command for details. If the mirror directory for your project later changes, run the setmirror command from

the same directory in which the original setmirror command was run. That will update the workspace's mirror association, which will be inherited by lower level directories. Run the populate command with the options '-recursive -mirror -unifystate' to correct existing workspace links to mirror files. This will correct the links so that they point to the mirror directory's new location.

4. Populate the work area with the specified design objects from the vault. Populate determines the set of versions from the persistent selector list or from the -version option, if applicable. Apply the -recursive option to create a local hierarchy that matches the vault's hierarchy. Without -recursive, populate only fetches the specified objects.

Incremental Versus Full Populate

By default, the populate command attempts to perform an incremental populate which updates only those local objects whose corresponding vaults have changed. Avoiding a full populate improves the speed of the populate; however, some circumstances make a full populate necessary. In the following cases, DesignSync automatically performs a full populate:

- If you are populating with a different configuration to that of the work area (having used setselector, setvault, 'populate -version', or 'co -version' to change a selector), DesignSync performs a full populate. For example, if your last full populate specified the VendorA_Mem configuration, but you now want VendorB_Mem files, then DesignSync automatically performs a full (nonincremental) populate. If the selector you specify resolves to the same exact selector as that of the work area, DesignSync does perform the incremental populate. In this case, the selectors must be an exact match; for example, a selector which resolves to 'Main' does not match 'Main:Latest'. If you are populating with a new configuration, consider using the -force option to remove objects of the previous configuration from your work area.

- If you use the -lock option, DesignSync performs a full populate.

- If you use the -unifystate option, DesignSync performs a full populate.

- If you perform a nonrecursive populate on a subfolder, all of the folders above the subfolder are invalidated for subsequent incremental populate operations. Incremental populate works by exploiting the fact that if a folder is up-to-date, all of its subfolders are also up-to-date, making it unnecessary to recurse into them. Because a recursive populate was not performed for the subfolder, DesignSync cannot ensure that its subfolders are up-to-date; thus, all incremental populates are invalidated up the

hierarchy.

- If you perform a nonrecursive populate on a folder, DesignSync essentially runs a full populate rather than the default incremental populate. Your next populate is incremental from the last recursive populate. If you have not previously run a recursive populate, the subsequent populate is a full populate.

- If the ProjectSync configuration file, sync_project.txt, has been updated through the ProjectSync interface (Project->Edit or Project->Configuration), thus updating the DesignSync REFERENCEs, DesignSync performs a full populate. If, however, the configuration in the sync_project.txt file is hand-edited and not updated using ProjectSync, you must specify the -full option to force a full populate.

Note: If you are using a mirror (by specifying -mirror or having a default fetch state of Links to mirror), an incremental populate does not necessarily fetch new objects checked in, nor remove links to objects deleted by team members until after the mirror has been updated.

For the following cases, perform a full populate instead of an incremental populate:

- If you have excluded a folder by using the -exclude, or -noemptydirs option with the populate command, a subsequent incremental populate will not necessarily process the folder of the previously excluded object. DesignSync does not automatically perform a full populate in this case. To guarantee that previously excluded objects are fetched, specify the -full option for the subsequent populate operation.

- For modules, DesignSync tracks changed members and therefore always performs an incremental populate. Specify a full populate to force data that has been manually removed, removed locally, or renamed locally to be fetched again from the server. If the file was renamed, you may have to specify the -force option as well.

  Also, specify a full populate if you have an unchanged, but out-of-date or out-of-sync version in your workspace to force DesignSync to fetch the up-to-date version of the object.

- If the ProjectSync configuration file, sync_project.txt, has been hand-edited, thus updating the legacy module REFERENCEs, use the -full option to perform a full populate. If, however, the sync_project.txt file has been changed through the ProjectSync interface (Project->Edit or Project->Configuration), DesignSync performs the full populate without your having to specify -full. For more information, see "Interaction with Legacy Modules" below.

- If the system clock on the SyncServer machine where your vault is located is turned back (for example, to correct clock skew between machines), you must perform a full (nonincremental)

```
    populate to synchronize the client and server metadata.

  o If you interrupt a populate operation (using Control-c, for
    example), you should use populate -full on your next populate
    of that folder.

The default populate mode is -incremental; however, your project
leader can set this default using SyncAdmin.

If you are updating mirrors, use the -incremental option. If you
specify the -full option, mirror updates can take a long time
to complete.

Note: If you remove objects from the work area by using operating
   system commands rather than DesignSync commands, an incremental
   populate cannot fetch these objects. Use the -unifystate or
   -full option to fetch them.
```

How Populate Handles Retired Objects

```
When you populate with the Latest versions of design objects from a
given branch, DesignSync does not populate objects for which that
branch is retired. Objects in your local work area whose branches
have been retired from the vault are not deleted during the
populate operation unless you specify -force.

It is important to note that objects on retired branches remain
part of past configurations. When you use the populate command to
retrieve a configuration other than 'Latest', objects from retired
branches are fetched. The populate command fetches objects from
retired branches, thereby preserving past configurations, if the
selector used for the operation is any of the following:
  o A version tag other than 'Latest', even if the version
    tag points to the Latest version
  o A version number, even if that number corresponds to the
    Latest version
  o <branchtag>:Date(<date>) or <branchtag>:VaultDate(<date>)

Note: If the selector specifies a branch in the form
      '<branchtag>:', DesignSync augments the selector to
      be <branchtag>:Latest, meaning, 'Get the Latest version
      from the specified branch'. In this case, objects
      from retired branches are not fetched.

Note: For information about how retired files by cross-branch merge
operations, see "Merging Across Branches."
```

Merging Across Branches

```
In multi-branch environments, you use the populate command to
merge branches. In many cases, a new branch that is created is
eventually merged back into the main development branch.
```

The branch being merged is populated into a workspace containing the destination branch using the populate command with the -merge and -overlay options. This type of merge is called "cross-branch merge."

As with all populate operations, cross-branch merging uses the filter and exclude filter lists set on the workspace, in the command defaults system,on the command line.

Merging includes two basic types of merging: file contents, and structural changes.

- File content merging:
  File content merging is applicable to all DesignSync objects. DesignSync merges the contents of files with the same natural path to the best of its ability. If the files are binary files which cannot be merged, populate returns an error message.

- Structural changes for DesignSync objects.
  Structural changes for DesignSync objects are non-content based changes to the DesignSync objects that can affect the merge results.

  - Removed objects: If an object is present in the local workspace, but not in the merge version, the object in the local workspace is unchanged. If you want to remove it from the merged version, you must explicitly remove or retire the object.

  - Added objects: If an object is not present in the local workspace, but is present in the merge version, the object is added to the local workspace. The merge action sets the following local metadata properties:

    - The current version is set to the fetched version, providing a meaningful branch-point version when you check the object into branch A.
    - The current branch information is undefined.
    - The persistent selector list for the object may be augmented to ensure that branch A is automatically created when you check in the object, thus eliminating the need to use ci -new. The following list explains how the persistent selector list is handled by the operation.
      1. If the first selector in the persistent selector list is a VaultDate() or Auto() selector, then the persistent selector list is not modified.
      2. If the first selector is of the form <branch>:<version>, then the first selector is modified to be Auto(<branch>).
      3. Otherwise, the first selector is modified to be Auto(<selector>). The object may be automatically checked in to the DesignSync vault, depending on the value of the persistent selector.

  - Retired objects:

    - If the object is active in the workspace and retired on the branch version, the workspace version is unchanged.
    - If the object is retired or does not exist in the workspace,

and is retired or does not exist on the branch, the workspace version is unchanged.
- If the object is retired in the workspace and active on the branch version, the version from the branch version is merged with the workspace version. The object remains retired and must be unretired in order to be checked in.

After a cross-branch merge has been performed, you can view the status of the affected files using the ls command with the -merged <state> -report D options. The -merged option allows you to restrict the list to a particular type of merge operation (add, remove, rename, all) and the -report D option shows you the current state of the object in your workspace. For more information, see the ls command help.

When a merge is performed on a DesignSync object, a merge edge is created automatically to maintain a list of the changes incorporated by the merge. This identifies a closer-common ancestor to provide for quicker subsequent merges.

For more information about merging, see the -merge and -overlay options, and the DesignSync Data Manager User's Guide topic: "What Is Merging?"

Populate Versus Checkout

The co and populate commands are similar in that they retrieve versions of objects from their vaults and place them in your work area. They differ in several ways, most notably:
- You typically use the co command to operate on objects that you already have locally, whereas populate updates your work area to reflect the status of the vault.
- The co command considers the persistent selector list for each object that is checked out, whereas populate only considers the persistent selector list for the folder that is being populated.

Note: The co and populate commands are gradually being merged.

Understanding the Output

The populate command provides the option to specify the level of information the command outputs during processing. The -report option allows you to specify what type of information is displayed:

If you run the command with the -report brief option, the populate command outputs a small amount of status information including, but not limited to:
- Failure messages.
- Warning messages.
- Informational messages concerning the status of the populate

- Success/failure/skip status

If you do not specify a value, or the command with the -normal option, the populate command outputs all the information presented with -report brief and the following additional information:

- Informational messages for objects that are updated by the populate operation.
- Messages for objects excluded from the operation (due to exclusion filters or explicit exclusions).

If you run the command with the -report verbose option, the populate command outputs all the information presented with -report normal and the following additional information:

- Informational message for every object examined but not updated.

If you run the command with the -report error option, the populate command outputs the following information:

- Failure messages.
- Warning messages.
- Success/failure/skip status messages.

Forcing, Replacing, and Non-Replacing Modes

You can use these three modes to specify how the populate command updates your work area:

- Forcing mode (specified with the -force option) synchronizes your work area with the incoming data, including locally modified objects. In this mode, the populate command updates the managed objects in your work area. It replaces or removes managed objects regardless of whether the objects have been locally modified. Thus, forcing modifies your work area to match the set of objects being fetched. Note: The default -noforce option operates as if -replace has been specified.

- Replacing mode (specified with the -replace option) also synchronizes your work area with the incoming data, but without affecting locally modified objects (the default behavior).

  Note: Retired files that have been kept or re-added to the workspace are considered locally modified.

  Replacing mode, unlike forcing mode, leaves intact managed objects that have been locally modified.

- Non-replacing mode (specified with the -noreplace option) is the least disruptive mode; this mode might require you to clean up the resulting work area data.

  In this mode, the populate command takes the incoming data and overlays it on top of the existing work area's data. It leaves intact both managed objects with local modifications and managed objects that are not members of the module being

```
    fetched. Thus, the work area essentially becomes a union of the
    data from the previous version and that of the module being
    fetched.

    Non-replacing mode, unlike forcing mode, leaves intact any
    objects that have been locally modified, and, unlike the
    replacing mode, leaves unmodified managed objects intact.
    See the -[no]replace option below for more details.

Notes:
o Unmanaged objects in your work area are not affected by any of
  these modes.
o The following are illegal combinations of options:
  -replace and -noforce, as well as inverse options, such
  as -replace and -noreplace.
```

SYNOPSIS

```
populate [-[no]emptydirs] [-exclude <object>[,<object>...]]
         [-[no]force] [-full | -incremental]
         [[-lock [-keys <mode> | -from {local | vault}]] |
         [-get [-keys <mode> | -from {local | vault}]]
         [-share] | [-mirror] | [-reference] [-lock -reference] ]
         [-log <filename>] [-[no]merge]
         [[-overlay <selector>[,<selector>...]]|
         [-version <selector>[,<selector>...]]] [-path <path>]
         [-[no]recursive] [-[no]replace]
         [-report {error|brief|normal|verbose}] [-[no]retain]
         [-savelocal <value>] [-trigarg <arg>] [-[no]unifystate] [--]
         [<argument> [<argument>...]]
```

ARGUMENTS

- DesignSync Object
- DesignSync Folder

```
The populate command accepts multiple arguments. If you want
to populate the current folder, you need not specify an
argument.  Otherwise, specify one or more of the following
arguments:
```

DesignSync Object

```
<DesignSync object> Fetches the object from its vault.
```

DesignSync Folder

```
<DesignSync folder> Fetches the contents of the specified folder.
                    You can also use the -path option to specify
                    a folder to be fetched.
```

OPTIONS

-[no]emptydirs

```
-[no]emptydirs      Determines whether empty directories are
                    removed or retained when populating a
                    directory. Specify -noemptydirs to remove
                    empty directories or -emptydirs to retain
                    them. The default for the populate operation
                    is -noemptydirs.

                    For example, if you are creating a directory
                    structure to use as a template at the start of
                    a project, you may want your team to populate
                    the empty directories to retain the directory
                    structure. In this case, you would specify
                    'populate -rec -emptydirs'.
```

If a populate operation using -noemptydirs empties a directory of its objects and if that directory is part of a managed data structure (its objects are under revision control), then the populate operation removes the empty directory. If the empty directory is not part of a managed data structure, then the operation does not remove the directory or its subdirectories. (A directory is considered part of the managed data structure if it has a corresponding folder in the DesignSync vault or if it contains a .SYNC client metadata directory.)

Notes:

- When used with 'populate -force -recursive', the -noemptydirs option removes empty directories that have never been managed.
- When used with the -mirror option, the -noemptydirs option does not remove empty directories (unless -force -recursive is used) and does not populate directories that are empty in the mirror.
- When the -noemptydirs option is used with '-report verbose', the command might output messages that additional directories are being deleted. Those are directories created by the populate, to mimic the directory structure in the vault. If no data is fetched into those directories (because no file versions match the selector), then those empty directories are deleted.

If you do not specify -emptydirs or -noemptydirs, the populate command follows the DesignSync registry setting for "Populate empty directories". By default, this setting is not enabled; therefore, the populate operation removes empty directories. To change the default setting, your Synchronicity administrator can use the SyncAdmin tool. For information, see SyncAdmin help. You typically want consistent behavior for all users, so adding the setting to the site registry is recommended.

-exclude

-exclude <objects> Specifies a comma-separated list of objects (files, collections, or folders) to be excluded from the operation. Wildcards are allowed.

If you exclude objects during a populate, a

subsequent incremental populate will not necessarily process the folders of the previously excluded objects. DesignSync does not automatically perform a full populate in this case. To guarantee that previously excluded objects are fetched, specify the -full option for the subsequent populate operation.

The '-exclude' option is ignored if it is included in a 'populate -mirror' operation.

Do not specify paths in your arguments to -exclude. Before operating on each object (such as during a recursive populate), DesignSync compares the object's leaf name (with the path stripped off) to the exclude list to see if there is a match. Because the object's path is removed, the object will not match any object in the exclude list specified with a path. For example, if you specify '-exclude bin/*.exe', you will not successfully exclude bin/foo.exe or any other *.exe file. You need to instead specify '-exclude *.exe', or '-exclude foo.exe' if you want to exclude only 'foo.exe'. The result is that you cannot exclude a specific instance of an object -- you exclude all matching objects.

In addition to objects you specify using the -exclude option, the field, "These objects are always excluded", from the Tools->Options-> General->Exclude Lists dialog box in DesignSync lists objects that are always excluded from revision-control operations.

-[no]force

-[no]force

Specifies whether to overwrite locally modified objects in order to match the workspace to the data being requested. To do so, the populate operation deletes locally managed objects that are not part of the populate command line, deleting objects that have been filtered out. 'populate -force' only removes managed data, not unmanaged data.

Use this option with caution, because you might not be able to retrieve lost changes.

By default (-noforce):
o Locally modified objects are not overwritten by the populate operation. Specify -force if you want to overwrite locally modified objects. If the object is locked, the object

is unaffected by the populate operation whether -force is specified or not.

- Objects that are not part of the specified configuration remain in your work area. If you want to delete objects that are not part of the configuration, including retired objects, specify -force. Unmanaged objects are never deleted.

The behavior of 'populate -mirror' without -force is different from populate with other states (see the description of -mirror). Therefore, -force with -mirror has the additional effect of changing the state of existing objects in your work area, resulting in a hierarchy that exactly reflects the mirror directory.

Using -force with -unifystate changes the state of all objects including locally modified objects, in which case, local modifications are overwritten and objects are fetched according to the specified state or the default fetch state.

Using -force with -noemptydirs for populate removes all existing empty directories from the workspace.

The -force option is mutually exclusive with both the -overlay and -noreplace options.

-from

-from <where>

Specifies whether the object is fetched from the vault ('-from vault') or from the cache or mirror ('-from local'). By default, DesignSync fetches from the cache or mirror ('-from local'), a performance optimization specific to the 'co -lock', 'co -get', 'populate -lock', and 'populate -get' commands. For details, see the Performance Optimization Overview in the DesignSync Data Manager Administrator's Guide. Note that this option is silently ignored when the optimization is not possible, including when the -keys option is specified.

The -from option can only be used with the -lock or -get fetch modes. It cannot be used with the -share, -mirror, -reference, or the -lock -reference combination fetch modes. If the -keys option is specified with the -from option, the -from option is silently ignored.

-full

-full

Performs a non-incremental populate by processing all objects and folders.

Note: DesignSync performs an incremental populate by default. It automatically reverts to a full populate when necessary. For more information, see the "Incremental Versus Full Populate" section in the description.

To change the default populate mode, your Synchronicity administrator can use the SyncAdmin tool.

Note: Do not use the -full option to change the states of objects in your work area (for example, changing from locked to unlocked objects or unlocked objects to links to the cache). DesignSync changes the states of only those objects that need an update. Use the -unifystate option to change the state of objects in your work area.

-get

-get

Fetch unlocked copies.

You can change whether the local object is read-only (typical when using the locking model) or read/write (typical when using the merging model) by default by using the "Check out read only when not locking" option from the Tools->Options->General dialog box in the DesignSync graphical interface. Your project leader can also set this option site-wide using SyncAdmin.

This option is the default object-state option unless a default fetch preference has been defined. See the "fetch preference" help topic for more information.

Using -force with -noemptydirs for 'populate -get' removes all existing empty directories. Using -force with -emptydirs, however, creates empty directories for corresponding empty vault folders.

The -get option is mutually exclusive with the other fetch modes: -lock, -share, -mirror, and -reference.

-incremental

```
-incremental        Performs a fast populate operation by
                    updating only those folders whose
                    corresponding vault folders contain
                    modified objects.
                    Note: DesignSync performs an incremental
                          populate by default. It automatically
                          reverts to a full populate when necessary.
                   For more information, see the "Incremental
                  Versus Full Populate" section in the
                  description.

                   To change the default populate mode, your
                   Synchronicity administrator can use the
                   SyncAdmin tool.

                   Note: Do not use the -incremental option to
                         change the states of objects in your work
                         area (for example, changing from locked to
                         unlocked objects or unlocked objects to
                         links to the cache).  DesignSync changes
                         the states of updated objects only.  For
                         an incremental populate, DesignSync only
                         processes folders that contain objects
                         that need an update.  State changes,
                         therefore are not guaranteed.  Use the
                         -unifystate option to change the state of
                         objects in your work area.
```

-keys

```
-keys <mode>        Controls processing of vault
                    revision-control keywords in populated
                    objects.  Note that keyword expansion is not
                    the same as keyword update. For example, the
                    $Date$ keyword is updated only during checkin;
                    its value is not updated during checkout or
                    populate. The -keys option only works with the
                    -get and -lock options. If you use the -share
                    or -mirror option, keywords are automatically
                    expanded in cached or mirrored objects, as if
                     the '-keys kkv' option was used.

                    Available modes are:

                    kkv - (keep keywords and values) The local
                    object contains both revision control keywords
                    and their expanded values; for example,
                    $Revision: 1.4 $.
```

kk - (keep keywords) The local object contains revision control keywords, but no values; for example, $Revision$. This option is useful if you want to ignore differences in keyword expansion, such as when comparing two different versions of an object.

kv - (keep values) The local object contains expanded keyword values, but not the keywords themselves; for example, 1.4. This option is not recommended if you plan to check in your local objects. If you edit and then check in the objects, future keyword substitution is impossible, because the value without the keyword is interpreted as regular text.

ko - (keep output) The local object contains the same keywords and values as were present at check in.

The -keys option can only be used with the -lock or -get fetch modes. It cannot be used with the -share, -mirror, -reference, or the -lock -reference combination fetch modes. If the -keys option is specified with the -from option, the -from option is silently ignored.

-lock

-lock

Lock the branch of the specified version for each object that is populated. Only the user who has the lock can check in a newer version of the object on that branch.

Use the -lock option with the -reference option to populate with locked references. For more information, see the -lock -reference option. Locked references are useful if you intend to generate objects and want to lock them before regenerating, as opposed to editing the previous version. Upon generation of the objects, they automatically become locked copies rather than locked references. Obtaining locked references for generated objects is faster because DesignSync does not fetch the previously generated objects. If the objects exist already in the workspace, DesignSync deletes them. If the objects exist and are locally modified, the operation fails. If you intend to overwrite the modifications, use -force to create the locked references. If the default fetch state is 'reference' and you specify the -lock option without the -reference option, DesignSync leaves

locked copies of the objects in your workspace; you must explicitly apply the -reference option with the -lock option if you want locked references in your workspace.

The -lock option is mutually exclusive with the fetch modes: -get, -share, and -mirror and with the -merge option.

Notes:
o If you specify 'populate -lock', then by default the populate operation also uses the '-from local' option. The result is that the populate operation locks the object in the vault and keeps local modifications in your workspace. See the -from option for information.

-lock -reference

-lock -reference

Use the -lock option with the -reference option to populate with locked references. Locked references are useful if you intend to generate objects and want to lock them before regenerating, as opposed to editing the previous version. Upon generation of the objects, they automatically become locked copies rather than locked references. Obtaining locked references for generated objects is faster because DesignSync does not fetch the previously generated objects. If the objects exist already in the workspace, DesignSync deletes them. If the objects exist and are locally modified, the operation fails. If you intend to overwrite the modifications, use -force to create the locked references. If the default fetch state is 'reference' and you specify the -lock option without the -reference option, DesignSync leaves locked copies of the objects in your workspace; you must explicitly apply the -reference option with the -lock option if you want locked references in your workspace.

The -lock -reference combination of option is mutually exclusive with the fetch modes: -get, -share, and -mirror.

Note: You should not use the -reference option with Cadence data collection objects. When the -reference option is used on Cadence collections, DesignSync creates a reference in the metadata for the collection object but member files are not processed and are not included in the

metadata.

-log

-log <filename>	Specify the name of the populate log file. If the filename doesn't exist, DesignSync creates it. If the file does exist, DesignSync appends the new information to the end of the log file. The filename can be specified with an absolute or relative path. If you specify a path for the log file, the directory you specify must already exist and you must have write permissions to the directory in order for the log to be placed into it, DesignSync does not create the path.

-merge

-[no]merge	Indicates whether to populate with the Latest versions from the branch specified by the persistent selector list and merge them with the current, locally modified versions. The default value is -nomerge. If you are not doing an overlay merge (see -overlay) and the current version is not locally modified, the -merge defaults to a -get and fetches the new version without merging. By definition, a merge expects a locally modified object, so the -force option is not required. The -merge option supports the merging work model (as opposed to the locking work model) where multiple team members can check out and edit the Latest version concurrently. The first team member to check in creates the next version. Other team members must merge the new Latest version into their local copy before they can check in their changes. If there are no merge conflicts, the merge succeeds, leaving the merged files in your work area. If there are conflicts, DesignSync issues a warning, and you must edit the merged file to resolve the conflicts before DesignSync allows you to check in the merged version. Conflicts are shown as follows: <<<<<<< local Lines from locally modified version

```
  =======
  Lines from selected server version
  >>>>>>> versionID
```

DesignSync considers the conflicts resolved when the file no longer contains any of the conflict delimiters (exactly 7 less-than, greater-than, or equal signs starting in column 1). The status of an object, as displayed by ls or from the List View in the DesignSync graphical interface, indicates if conflicts exist. The url inconflict command also determines whether a file has conflicts.

Most merges are between two versions on the same branch (the current branch and the branch specified by the persistent selector list are typically the same). However, a merge can also be performed across branches by setting the persistent selector list to a different branch. Following the merge, you are on the branch associated with the version specified by the persistent selector list (a 'merge to' operation). If you want to stay on the current branch instead, use the -overlay option. Overlay ('merge from') merges are more common when merging branches. See the -overlay option for details.

Note:

- The -merge option implies -get, but you can also explicitly specify -get. For general DesignSync objects, the -merge option is mutually exclusive with all other state options (-lock, -share, -mirror, -reference, and -lock -reference).
  You can use -lock with -merge for modules and their members.
- The -merge and -version options are mutually exclusive unless you specify '-version Latest'.

-mirror

-mirror

Create symbolic links from the work area to objects in the mirror directory. This option requires that you have associated a mirror directory with your work area (see the 'setmirror' command).

For performance reasons, links are created only when objects do not exist in your work area. To update mirror links for existing objects, use -unifystate with the -mirror option. For

example:

populate -recursive -full -unifystate -mirror

The -unifystate option does not affect locally modified objects or objects that are not part of the configuration. Use -force with -unifystate to update the links, replacing locally modified objects and removing objects that are not part of the current configuration.

When used with the -mirror option, the -noemptydirs option does not populate directories that are empty on the mirror. Using the -force option with the -noemptydirs option removes all empty directories from the workspace. Using -force with -emptydirs for 'populate -mirror', however, populates empty directories that exist in the mirror.

The -mirror option is mutually exclusive with the other fetch modes: -lock, -get, -share, and -reference. The -mirror option is also mutually exclusive with the -keys and -from options. The -mirror option cannot take an exclude filter. If the -exclude option is specified with the -mirror fetch mode, the populate silently ignores the -exclude option.

Note:
- This option is not supported on Windows platforms.
- The -exclude option is ignored if it is included in a 'populate -mirror' operation.
- If you specify -mirror, an incremental populate does not necessarily fetch new objects checked in, nor remove links to objects deleted by team members until after the mirror is updated.
- When populating a custom generic collection from a mirror, always use 'populate -mirror' from the folder containing the collection object or from a folder above the folder containing the object.

-overlay

-overlay <selectors> Replace your local copy of the module or DesignSync non-module object with the versions specified by the selector list (typically a branch tag). The current-version status, as stored in local metadata, is unchanged. For example, if you have version 1.5 (the Latest version) of the module or DesignSync object and you overlay version 1.3, your current version is

still 1.5. You could then check in this overlaid version. This operation is equivalent to checking out version 1.3, then using 'ci -skip' to check in that version.

The behavior of the overlay operation depends on the presence of a local version and the version you want to overlay:

- If both the local version and the overlay version exist, the local version is replaced by the overlay version.
- If there is no local version but an overlay version exists, DesignSync creates a local copy of the overlay version.
- If a local version exists but there is no overlay version, the local version is unaffected by the operation.
- If the overlay version was renamed or removed, the local object is not changed, but metadata is added to it, indicating the change. This information can be viewed using the ls command with the -merged option.

Typically, you use -overlay with -merge to merge the two versions instead of overlaying one version onto another. The combination of -overlay and -merge lets you merge from one branch to another, the recommended method for merging across branches. Following the overlay merge, you are working on the same branch as before the operation.

You specify the version you want to overlay as an argument to the -overlay option. The -overlay and -version options are mutually exclusive. The -version option always updates the 'current version' information in your work area, which is not correct for an overlay operation.

- To use -overlay to specify a branch, specify both the branch and version as follows: '<branchtag>:<versiontag>', for example, 'Rel2:Latest'. You can also use the shortcut, '<branchtag>:', for example "Rel2:". If you don't explicitly specify the branch selector in this way, DesignSync does not resolve the selector as a branch selector.

When doing an overlay (with or without -merge), a number of combinations for the state of a module or DesignSync object on the two branches must be considered. For more information, see the "Merging Across Branches" section above. Hierarchical references in modules are not updated during an overlay.

```
Notes:
o The -overlay option implies -get, but
  you can also explicitly specify -get.
o The -overlay option is mutually exclusive
  with the other state options (-mirror,
  -share, -lock, -reference) and -version.
```

-path

```
-path <path>        Specify the name of an alternate local folder
                    to populate instead of the current folder. The
                    populate command uses the vault and persistent
                    selector list associated with the specified
                    folder.
                    Note: Using -path is equivalent to changing
                          folders, executing the populate
                          command, then changing back to the
                          original folder.

                    If you specify a folder using the -path option
                    but the folder does not exist, DesignSync
                    - verifies that a corresponding vault exists
                    - creates the folder
                    - populates the specified folder, creating
                    any interim folders necessary to replicate
                    the vault hierarchy locally.

                    If you specify the -target option but the
                    folder does not exist, DesignSync creates
                    the folder.
                    Generally, however, if the vault does not
                    exist, DesignSync does not create the
                    folder and leaves the workspace unchanged.

                    Note: If the folder specified by -path does not
                    exist, but corresponds to a vault with
                    unpopulated DesignSync REFERENCES, DesignSync
                    has no way to resolve these mappings. In this
                    case, populate does not create the specified
                    folder, leaving the workspace unchanged.

                    The -path option used to be the -dir option.
                    The -dir option is still provided for backwards
                    compatibility, but is not documented
                    separately.
```

-[no]recursive

```
-[no]recursive      Specifies whether to perform this operation on
                    the specified folder (default), or to traverse
                   its subfolders.
```

If you invoke 'populate -recursive' and specify a folder, populate operates on the folder in a folder-centric fashion, fetching the objects in the folder and its subfolders. To filter the set of objects on which to operate, use the -exclude option.

Note: The populate operation might skip subfolders and individual managed objects if their persistent selector lists differ from the top-level folder being populated; see the Description section for details.

If you specify -norecursive when operating on a folder, DesignSync operates only on objects in the specified folder. In this case, populate does not traverse the vault folder hierarchy.

If you perform a -norecursive populate, then for the subsequent populate DesignSync performs a full populate even if the -full option is not specified.

Note: DesignSync cannot perform an incremental populate following a nonrecursive populate, because it cannot ensure that the objects in the work area subfolders are up-to-date.

-reference

-reference

Populate with DesignSync references to objects in the vault. A reference does not have a corresponding file on the file system but does have local metadata that makes the reference visible to Synchronicity programs. Populate with references when you want your work area to reflect the contents of the vault but you do not need physical copies. Use the -reference option with the -lock option to populate with locked references. Locked references are useful if you intend to generate objects and want to lock them before regenerating, as opposed to editing the previous versions.

Note: You should not use the -reference option with Cadence data collection objects. When the -reference option is used on Cadence collections, DesignSync creates a reference in the metadata for the collection object but member files are not processed and are not included in the metadata.

-[no]replace

-[no]replace	This option determines how to handle locally modified objects when synchronizing your work area. The -replace option specifies that the populate operation updates locally unmodified workspace objects. This option leaves intact all managed objects and all unmanaged objects. If an object has been removed from the vault being fetched as a result of a retire, rmvault, or any other similar operation, -replace removes the file from the workspace if it has not been locally modified. The -noreplace option specifies that the populate operation updates managed objects that have not been locally modified. The -noreplace option leaves intact all unmanaged objects. If an object has been removed from the vault being fetched as a result of a retire, rmvault, or any other similar operation, -noreplace does not remove the corresponding file in the workspace. (Default) Notes: o See "Forcing, Replacing, and Non-Replacing Modes" above to see how the -force option interacts with the -[no]replace option. o If you use populate -version to populate a directory containing a module, DesignSync uses the -noreplace option unless -replace is explicitly specified. o If you apply the -filter or -hreffilter options, populate applies the -[no]replace option on the filtered data. o With a recursive operation, populate applies -replace and -noreplace behaviors to the top-level module and then to each referenced submodule.

-report

-report error| brief|normal| verbose	Specifies the amount and type of information displayed by the command. The information each option returns is discussed in detail in the "Understanding the Output" section above. error - lists failures, warnings, and success failure count. brief - lists failures, warnings, module

create/remove messages, some informational messages, and success/failure count.

normal - includes all information from brief, and lists all the updated objects, and messages about objects excluded by filters from the operation. (Default)

verbose - provides full status for each object processed, even if the object is not updated by the operation.

-[no]retain

-[no]retain

Indicates whether to retain the 'last modified' timestamp of the fetched objects as recorded when each object was checked into the vault. If the workspace is set to use a mirror, or the populate is run using -share, this will also apply to the object placed in the mirror or LAN cache if the object doesn't already exist in the mirror or cache. The links in your work area to the cache or mirror have timestamps of when the links were created.

If you specify the -reference option, no object is created in your work area, so there is no timestamp information at all.

If an object is checked into the vault and the setting of the -retain option is the only difference between the version in the vault and your local copy, DesignSync does not include the object in populate operations.

If you do not specify '-retain' or -noretain', the populate command follows the DesignSync registry setting for Retain last-modification timestamps. By default, this setting is not enabled; therefore, the timestamp of the local object is the time of the populate operation. To change the default setting, your Synchronicity administrator can use the SyncAdmin tool. For information, see SyncAdmin Help.

The mirror system, by default,fetches objects into the mirror with the -retain option. The mirror administrator, however, can define mirrors to use the -noretain option. The default setting should agree with the Retain last-modification timestamp registry setting to maintain consistency. See the "Mirror Administration Server Registry Settings" topic

for setting of the co or populate options for mirrors.

Note: When fetching from the cache or mirror (by specifying the '-from local' option), the last modified timestamp comes from the file in the cache or mirror, not from the version that was checked into the vault. If the file was fetched into the cache or mirror with the -retain option, these two timestamps are the same. But if the file was fetched into the cache or mirror with the -noretain option and then fetched into the workspace with both the '-from local' and '-retain' options, the 'last modified' timestamp used is the time the object was fetched into the cache or mirror.

-savelocal

-savelocal <value>

This option affects collections that have local versions.

When it fetches an object, the populate operation first removes from your workspace any local version that is unmodified. (To remove a local version containing modified data, specify 'pop -force'.) Then the populate operation fetches the object you are checking out (with the local version number it had at the time of checkin).

The -savelocal option specifies the action that the populate operation takes with modified local versions in your workspace (other than the current, or highest numbered, local version). (DesignSync considers a local version to be modified if it contains modified members or if it is not the local version originally fetched from the vault when the collection object was checked out or populated to your workspace.)

Specify the -savelocal option with one of the following values:

save - If your workspace contains a local version other than the local version being fetched, the populate operation saves the local version for later retrieval. See the 'localversion restore' command for information on retrieving local versions that were saved.

fail - If your workspace contains an object with a local version number equal to or higher

than the local version being fetched, the populate operation fails. This is the default action.

Note: If your workspace contains an object with local version numbers lower than the local version being fetched and if these local versions are not in the DesignSync vault, the populate operation saves them. This behavior occurs even when you specify '-savelocal fail'

delete - If your workspace contains a local version other than the local version being fetched, the populate operation deletes the local version from your workspace.

If you do not specify the -savelocal option, the populate operation follows the DesignSync registry setting for SaveLocal. By default, this setting is "Fail if local versions exist" ('-savelocal fail'). To change the default setting, a Synchronicity administrator can use the Command Defaults options pane of the SyncAdmin tool. For information, see SyncAdmin Help.

Note:
- You may need to use the -force option with the -savelocal option to allow the object being fetched to overwrite a locally modified copy of the object. For an example scenario, see EXAMPLES.
- The -savelocal option affects only objects of a collection defined by the Custom Type Package (CTP). This option does not affect objects that are not part of a collection or collections that do not have local versions.

-share

-share

Fetch shared copies. Shared objects are stored in the file cache directory and links to the cached objects are created in the work area.

Notes:
This option is not supported on Windows platforms.

The -share option is mutually exclusive with the other fetch modes: -lock, -get, -mirror, and -reference. The -share option is also mutually exclusive with the -keys and -from options.

-trigarg

```
-trigarg <arg>      Specifies an argument to be passed from the
                    command line to the triggers set on the
                    populate operation. If the argument contains
                    whitespace, enclose the argument within
                    double quotation marks ("") if using the dss
                    command shell or braces ({}) if using the stcl
                    command shell.
```

-[no]unifystate

```
-[no]unifystate     Indicates whether to set the state of all objects
                    processed, even up-to-date objects, to the
                    specified state (-get, -lock, -share, -mirror, or
                    -reference) or to the default fetch state if no
                    state option is specified.  See the
                    "fetch preference" help topic for more
                    information.

                    By default, populate changes the state of only
                    those objects that are not up-to-date
                    (-nounifystate). If the -unifystate option is
                    specified, DesignSync changes the state of the
                    up-to-date objects, as well, and thus performs
                    a full populate.

                    The -unifystate option does not change the state
                    of locally modified objects; use -force with
                    -unifystate to force a state change, thus
                    overwriting local modifications. The -unifystate
                    option does not change the state of objects not
                    in the configuration; use -force with
                    -unifystate to remove objects not in the
                    configuration.
                    The -unifystate option does not cancel locks;
                    you can check in the locked files, use the
                    'cancel' command to cancel locks you have
                    acquired, or use the 'unlock' command to cancel
                    team members' locks.

                    Note: The -unifystate option is ignored when
                    you lock design objects.  If you populate with
                    locked copies or locked references, DesignSync
                    leaves all processed objects in the requested
                    state.
```

-version

```
-version <selector>  Specifies the versions of the objects to
```

populate. The selector list you specify (typically a version or branch tag) overrides the persistent selector lists of the objects you are populating. If you specify the -recursive option, the specified selector list is used to populate all subfolders during populate.
You can also specify a ProjectSync configuration; see "Interaction with Legacy Modules" in the Description section.

If you specify a date selector (Latest or Date(<date>)), DesignSync augments the selector with the persistent selector list to determine the versions to populate. For example, if the persistent selector list is 'Gold:,Trunk', and you specify 'populate -version Latest', then the selector list used for the populate operation is 'Gold:Latest,Trunk:Latest'.

For details on selectors and selector lists see the topic describing selectors.

Note:
- Using the -version option with the populate command does not change the workspace selector, even during the initial populate of an object. To set the workspace selector as part of the populate command, specify the selector explicitly, using the <object>;<selector> syntax.
- If you use the -version option with the -incremental option, and the selector you specify does not exactly match the workspace selector, the incremental populate does not occur. DesignSync performs a full populate instead. See "Incremental Versus Full Populate" in the description section for more information.
- When using -version to specify a branch, specify both the branch and version as follows: <branchtag>:<versiontag>, for example, Rel2:Latest. You can also use the shortcut, <branchtag>:, for example Rel2:. If you do not explicitly specify the branch selector in this way, DesignSync does not resolve the selector as a branch selector.
- When you specify a version-extended name that reflects the object's version, for example, "file.txt;1.3", populate ignores the -version option.
- Specify '-version <branchtag>:Latest' only if necessary. In some cases, DesignSync augments the selector to be <branchtag>:Latest. When you append ':Latest', it may not match the work area selector. This mismatch

```
    invalidates your next incremental populate
    resulting in a slower, full populate.
  o The -version option is mutually exclusive
    with -merge unless you specify '-version
    Latest', the default.
  o The -version and -overlay options are
    mutually exclusive.
  o When you use populate with the -version option
    to fetch a directory containing legacy
    modules, by default DesignSync uses the
    -noreplace
```

RETURN VALUE

```
In dss/dssc mode, you cannot operate on return values, so the return
value is irrelevant.

In stcl/stclc mode, two lists are returned, where the first list
is non-empty if at least one object was successfully processed,
and the second list is non-empty if at least one object failed.

Notes:
 - "successfully processed" may not mean "successfully populated".
   For example, a populate of an object that you already have in
    your work area is considered a success even though no checkout
   occurs.
 - Scripts should only test for non-empty lists to determine
   success or failure. The actual content of the non-empty
   lists might change in subsequent releases.
 - If all objects fail, an exception occurs (the return value is
   thrown, not returned).
 - Objects reported as "excluded by filter," may have been excluded
   either with the -filter option (for modules) or with the -exclude
   option (for any DesignSync objects.)
```

SEE ALSO

```
caching, ci, co, command defaults, localversion, retire, selectors,
setselector, setvault, url contents
```

EXAMPLES

- Example of Creating a new work area from a DesignSync vault
- Example of Creating a New Work Area from a DesignSync Vault Branch
- Example of Updating an Existing Workspace with a Full Populate
- Example of Updating the State of Objects in the Workspace
- Example of Performing a Merge into a Workspace
- Example of Replacing Modified Files with the Server Versions

Example of Creating a new work area from a DesignSync vault

```
The following example creates a new work area containing unlocked
copies of every object in the vault hierarchy:

  dss> scd /home/tgoss/Projects/Asic
  dss> setvault sync://myhost.myco.com:2647/Projects/Asic .
  dss> populate -recursive -get

Because -version is not specified, the persistent selector list of
the current folder determines what versions to populate. The local
Asic folder has not had a 'setselector' command applied to it or
any parent folder, so the default persistent selector list is
'Trunk'. By default, DesignSync performs an incremental populate
of the Latest versions on the specified branch (Trunk). Note that
this operation does not fetch objects whose 'Trunk' branch is
retired.
```

Example of Creating a New Work Area from a DesignSync Vault Branch

```
The following example differs from the previous example in that the
work area is for the Rel2.1 branch, not Trunk, and the work area
contains links to a cache directory instead of local copies:

  dss> scd /home/tgoss/Projects/Asic
  dss> setvault sync://myhost.myco.com:2647/Projects/Asic@Rel2.1:Latest .
  dss> populate -recursive -share
```

Example of Updating an Existing Workspace with a Full Populate

```
The following example performs a full (nonincremental) recursive
populate on the current folder, fetching unlocked copies of files
for updated objects. Note that the states of objects that are not
updated DO NOT change.

  dss> populate -recursive -full -get
```

Example of Updating the State of Objects in the Workspace

```
By default, the states of up-to-date objects do not change during
a populate operation.  The following example updates the states of
the objects that are up-to-date, allowing you to unify the states
of all objects in your work area.  The -unifystate option causes
DesignSync to perform a full populate rather than an incremental
populate.

  dss> populate -recursive -unifystate -get
```

Example of Performing a Merge into a Workspace

The following example merges Latest versions from the current branch into the local versions. You perform this operation when your team uses the merging (nonlocking) work model and you and other team members have been modifying the same objects. It is more common to use the 'co -merge' command to operate on just those objects you want to check in.

```
dss> populate -merge
```

Note that the merge operation fetches from the branch specified by the folder's persistent selector list, not from the current branch. However, these two branches are typically the same unless you have changed the persistent selector list with the setselector command. In this case, you would be merging across branches instead of from the same branch. This method for merging between two branches is not recommended; use the -overlay option.

The following example merges one branch (Dev) into another (Main). This operation is typically performed by a release engineer who manages the project vault. The work area is first populated with the Latest versions from 'Main'. Then the Latest versions from Dev are merged into the local versions. The -overlay option indicates that after the operation, the current branch and version information (as stored in local metadata) should be unchanged. Following the merge and after any merge conflicts are resolved, a check-in operation checks the merged version into 'Main'.

```
dss> url selector .
Main:Latest
dss> populate -recursive
dss> populate -recursive -merge -overlay Dev:Latest
  [Resolve any merge conflicts]
dss> ci -recursive -keep .
```

Example of Replacing Modified Files with the Server Versions

This example shows use of the populate operation that deletes local versions.

Note: The DesignSync Milkway integration has been deprecated. This example is meant to be used only as a reference.

Mike checks out the Milkyway collection object top_design.sync.mw, which fetches local version 4 of that object to his workspace. He modifies the object and creates local version 5. Then he checks in top_design.sync.mw. The check-in operation does not remove local versions, so Mike now has local version 5 (unmodified) and local version 4 in his workspace. (Note: Because the checkin removes local version 4's link to with the original check-out operation of top_design, DesignSync now considers local version 4 to be modified.)

Ben checks out top_design.sync.mw (local version 5). He creates local version 6 and checks the object in.

Mike does some work on top_design, which creates local versions 6, 7, and 8 in his workspace. Then he decides to use Ben's version of the top_design object instead.

Mike uses populate to fetch the latest versions of Milkyway collection objects to his workspace. He doesn't want to save his local versions of the object, so he uses the '-savelocal delete' option to delete local versions other than the local version being fetched. In addition, he uses the -force option. (Because he created local versions 6, 7, and 8 of top_design in his workspace, DesignSync considers the top_design object to be locally modified and by default the populate operation does not overwrite locally modified objects. To successfully check out top_design, Mike must use '-force'.)

```
stcl> cd /home/tjones/top_design_library
stcl> populate -savelocal delete -force
```

Before fetching top_design.sync.mw from the vault, the populate operation first deletes all local versions that are unmodified. So the populate operation deletes Mike's local version 6 because that was the version originally fetched and its files are unmodified.

Because Mike specified the -force option, the populate also deletes Mike's local version 8 (the current local version containing modified data for the object).

Because Mike specified '-savelocal delete', the populate operation deletes local version 7, which is not in the vault and is not the modified data Mike agreed to delete when he specified '-force'. If Mike specified '-savelocal save', DesignSync would save local version 7. Local version 4 is also deleted.

Finally, Mike's populate operation fetches the top_design object (Ben's local version 6) from the vault.

Mike continues to modify the top_design object, creating local version 7, which he checks in.

Ben has local versions 5 and 6 in his workspace. He populates his workspace containing the top_design collection object (local version 7), specifying '-savelocal fail'. The populate operation removes local version 6 from his workspace because it is unmodified. The operation saves local version 5 even though it is modified. (Ben's checkin of local version 6 removed local version 5's link to with the original checkout of top_design, so DesignSync now considers local version 5 to be modified.) The populate also takes place despite the fact that Ben specified '-savelocal fail'. The populate operation takes this action because local version 5 has a number lower than the local version being fetched. If Ben had instead specified '-savelocal delete', the populate operation would delete local version 5.

setmirror

setmirror Command

NAME

```
setmirror           - Maps a mirror directory to a working directory
```

DESCRIPTION

```
This command associates a local working directory with a mirror
directory. The mirror directory, as conveyed to you by your project
leader, will contain a set of data for your project that is
automatically updated by a Mirror Administration Server (MAS) at your
site to exactly mimic the data set defined for your project vault.
For example, your team may always want the Latest version of files on
the main Trunk branch.  Another team may want a mirror for a
development branch, that always contains the file versions on that
branch with a specific tag.

Each site will have a MAS for its LAN, which automatically maintains
the site's mirrors, based on the definition of each mirror.  Once your
workspace is associated with a mirror, you can use the '-mirror' option
to DesignSync revision control commands.  The '-mirror' option results
in symbolic links in your workspace, leading to files in the mirror.

All subdirectories of the local working directory inherit the
mirror location you specify with setmirror. You cannot use
setmirror on a subdirectory to specify a different mirror directory
than is set for the parent directory.

Note:
To resolve the mirror location, DesignSync does not search above the
root of a workspace where a setvault has been applied. Thus, if a
setvault has been applied to a folder (/Projects/ASIC/alu) and you
apply the 'setmirror' command at a higher-level folder (for example,
/Projects/ASIC), the 'setmirror' command is ignored at and below
the folder where the setvault occurred (/Projects/ASIC/alu).

By default, 'setmirror' stores the path to a mirror exactly as it was
specified to the 'setmirror' command. To instead have 'setmirror'
resolve the path, see the "DesignSync Client Commands Registry Settings"
topic in the DesignSync Data Manager User's Guide.

To remove the association between a working directory and a mirror
directory (an 'unsetmirror' operation), specify an empty string ("")
as the mirror directory argument. When specifying an empty string as
the mirror directory argument, the 'setmirror' command must be run from
within a DesignSync shell. An Operating System shell cannot pass an
empty string value to a DesignSync shell.
```

```
Executing setmirror without any arguments displays the mirror
for the current directory, or an empty string if the current
directory has no mirror set.

Note:
Mirrors can be treated in the same way as your DesignSync
work areas. For example, you can use commands such as the url
commands or ls on mirror directories.
```

SYNOPSIS

```
setmirror [--] [<mirrorDirectory> <localWorkingDirectory>]
```

OPTIONS

- --

--

```
--          Indicates that the command should stop looking for
            command options. Use this option when arguments
            to the command begin with a hyphen (-).
```

RETURN VALUE

```
none
```

SEE ALSO

```
url mirror, populate, ci, co, cancel
```

EXAMPLES

```
This example creates an association between a local
working directory /home/goss/Projects/ASIC and the mirror
directory /users/admin/Projects/mirror/ASIC.
 dss> setmirror /users/admin/Projects/mirror/ASIC /home/goss/Projects/ASIC
 ASIC:  Success Set Mirror
 dss> scd  /home/goss/Projects/ASIC
 dss> setmirror
 file:///users/admin/Projects/mirror/ASIC
```

setselector

setselector Command

NAME

```
setselector         - Sets the persistent selector list
```

DESCRIPTION


```
This command sets the persistent selector list, as stored in an
object's local metadata, for the specified objects. Any previous
selector list is overwritten or cleared.

Note that two commands other than 'setselector' can also update the
persistent selector list of an object:

  o The setvault command supports the following syntax:
    setvault [-recursive] <vault>@<selectorList> <workareaFolder>
    which is equivalent to doing a 'setvault' followed by
    a 'setselector'.

  o The populate command sets the persistent selector of the
    workspace when a version is specified using the -version option.

Note:
To resolve a selector, DesignSync does not search above the workspace root
of
a workspace. Thus, if the workspace root is set on a folder
(/Projects/ASIC/alu) and you apply the 'setselector' command at a
higher-level folder (for example, /Projects/ASIC), the 'setselector'
command is ignored at and below the folder where the setvault
occurred (/Projects/ASIC/alu).

For single-branch environments, you may not need the setselector
command. The default persistent selector list is 'Trunk', which is
the default branch tag for branch 1. If you will not be working
with additional branches, this default 'Trunk' selector may be
sufficient.

The 'P' data key for the 'ls' command and the 'url selector'
command report an object's persistent selector list.

To clear, or unset, the persistent selector list, specify an empty
string ("") as the selector-list argument. Clearing the persistent
selector list restores the default behavior of having an object
inherit its persistent selector list from the parent folder. Any
```

```
persistent selector list in local metadata is removed.

Note:  You cannot unset the selector list from the UNIX command line
using the  DesignSync Concurrent Shell (dssc) client because null
strings ("") are not passed from the UNIX command line to the
DesignSync client.  In order to clear the persistent selector list
without invoking a DesignSync client, you must use the Synchroncity
Tcl Shell (stcl) with the -exp option, for example:
  $ stcl -exp 'setselector "" <argument>'

The object arguments to the 'setselector' command can be versionable
objects (files or collections), local folders, or top-level
modules. The object's persistent selector list is set to the
specified value.  If you are doing a recursive setselector, all
subfolders and objects in the hierarchy have their persistent
selector lists cleared (unless a subfolder is configuration-mapped;
see Configuration Mapping).

Important: Persistent selector lists set on subfolders or
individual managed objects in a work area are not obeyed by the
'populate -recursive' command. Therefore, the 'setselector' command
issues a warning when you set the persistent selector list on an
object to a value that differs from its inherited value.
```

Notes for Using setselector

```
The following DesignSync commands use the persistent selector list
to determine what version or branch to operate on: populate, ci,
co, import. You can override the persistent selector list on a
per-operation basis with the -version option (for populate, co, and
import) or -branch option (for ci). However, using -version or
-branch does not change the persistent selector list.
```

Valid Selectors for Files-Based Objects

```
The selector-list argument is a comma-separated list of one or more
selectors. The list cannot contain whitespace. When you specify a
selector list, the command uses the first valid selector in the
list. Valid selectors are:
 o Branch and version numbers:
  - 1.2.4 (A branch has an odd number of period-separated numbers.)
  - 1.2.4.1 (A version has an even number of period-separated
              numbers.)
o Version tags
o Branches specified as:
  - <branchtag>:<version>
  - <branchtag>:Latest
  - <branchtag>:  (equivalent to <branchtag>:Latest)
o Date selectors specified as:
  - <branchtag>:Date(<date>)
  - VaultDate(<date>)
o Auto-branch selectors specified as:
```

```
  - Auto(<tag>)
  Note: Auto-branches cannot be specified for modules.

Note:
You must specify branches explicitly in selector lists.
To do so, specify both the branch and version as follows:
'<branchtag>:<versiontag>', for example, 'Rel2:Latest'.
You can also use the shortcut, '<branchtag>:', for
example "Rel2:".  If you don't explicitly specify the
branch selector in this way, DesignSync does not resolve
the selector as a branch selector. See the "selectors"
topic for details on selector lists, including descriptions
of these selector types.
```

SYNOPSIS

```
setselector [-recursive] [-selected] [--]
            <selector>[,<selector>...] <argument> [argument>...]
```

SELECTORS

- -selector

-selector

```
<selector>      Set the persistent selector, or selector list to the
                argument.  For a full list of allowed selectors, see
                the command Description section.
```

ARGUMENTS

- Workspace Folder
- Workspace Objects

Workspace Folder

```
<workspace folder>  Sets the selector on the specified workspace
                    folder.
```

Workspace Objects

```
<workspace object>  Sets the select on the specified workspace
                    object.  The object cannot be a member of a
                    module.
```

OPTIONS

-recursive

```
 -recursive        Perform this operation on all objects in all
                   subfolders in the hierarchy. DesignSync sets the
                   selector list on the top-level folder, and clears
                   the persistent selector list for each object in
                   the hierarchy. Clearing the persistent selector list
                  restores the default behavior of inheriting the
                  persistent selector list from the folder on which
                  the setselector command was applied.
```

-selected

```
 -selected         Perform this operation on objects in the select
                   list (see the 'select' command) as well as the objects
                   specified on the command line. If no objects are
                   specified on the command line, this option is
                   implied.

                   Note: 'Select lists' and 'selector lists' are two
                   distinct features. 'Select lists', as managed
                   by the 'select' and 'unselect' commands and used
                   by commands that support the '-selected' option,
                   are an optional way to specify on which objects
                   DesignSync commands should operate. 'Selector
                   lists', as managed by the 'setselector' command
                   and the '-version' and '-branch' options to
                   various commands, specify on which version or
                   branch of a given object DesignSync commands
                   should operate.
```

--

```
 --                Indicates that the command should stop looking for
                   command options. Use this option when arguments
                   to the command begin with a hyphen (-).
```

RETURN VALUE

```
 In dss/dssc mode, you cannot operate on return values, so the return
```

```
value is irrelevant.

In stcl/stclc mode, two lists are returned, where the first list
is non-empty if at least one object was successfully processed,
and the second list is non-empty if at least one object failed.

Notes:
 - Scripts should only test for non-empty lists to
   determine success or failure. The actual content of a non-empty
   list currently takes the form "Objects succeeded (n)" and
   "Objects failed (n)", where 'n' is the number of objects that
   succeeded or failed. However, these return values are subject to
   change in a future release.
 - If all objects fail, an exception occurs (the return value is
   thrown, not returned).
```

SEE ALSO

```
ci, co, tag, selectors, setvault, url selector
```

EXAMPLES

Example Using the Persistent Selector List in a multi-branch environment

```
The team methodology is that 'gold', 'silver', and 'bronze' are
version tags, and 'Main' is the branch tag for the Main
branch. Therefore, for each object fetched by the populate
operation, DesignSync uses the following search order:
  1. Fetch the version tagged 'gold'.
  2. Fetch the version tagged 'silver'.
  3. Fetch the version tagged 'bronze'.
  4. Fetch the Latest version on the 'Main' branch.

The following example sets the persistent selector list for local
folder MUX1, and all objects and subfolders within it, to
'gold,silver,bronze,Main:Latest'.

  dss> setselector -recursive gold,silver,bronze,Main:Latest MUX1
  dss> scd MUX1
  dss> populate
```

Example of Using Setselector to Auto-Branch

```
In the following example, you want to auto-branch off the 'Trunk'
branch to try 'what if' scenarios. You recursively set the
```

```
persistent selector list for local folders Mod1 and Mod2 to
'Auto(Dev),Trunk'.

  dss> setselector -recursive Auto(Dev),Trunk Mod1 Mod2

When you check in an object, DesignSync uses the Auto(Dev)
selector, which checks in the new version to the 'Dev' branch,
creating the branch if necessary. If you check out an object,
DesignSync fetches the Latest version from the 'Dev' branch if
'Dev' exists, or the Latest version from 'Trunk' otherwise.

The following example clears the persistent selector list for
the current folder and all subfolders so that the persistent
selector list is inherited from the parent folder:

  dss> setselector -rec "" .

The following example sets the persistent selector list for file
'test1.v' to 'Rel2.1:Latest'. Future checkins and checkouts of
'test1.v' will take place, by default, on the Rel2.1 branch.

  dss> setselector Rel2.1:Latest test1.v

Note that using 'setselector' on individual files is
not recommended, because inconsistent selector lists between
objects and the top-level folder are not obeyed during
populate operations.
```

setvault

setvault Command

NAME

```
setvault            - Associates a vault with a work area
```

DESCRIPTION

- Using setvault with DesignSync objects

```
This command maps a local folder (directory) to a revision-control
vault folder (repository). If there is no workspace root directory
already set above the local folder, the root directory will be
defined one level above the highest folder level containing a defined
vault connection by default or as defined on the Workspace panel in
SyncAdmin. For more information Workspace root definition, see the
DesignSync Data Manager Administrator's Guide.

Note: You can remove the mapping using the unsetvault command.
```

Using setvault with DesignSync objects

```
Setting the vault is the first step in placing design data under
revision control or checking out (populating) data that is already
managed.

Every local folder and file has a default client vault
even if you have not explicitly set the vault. Client vaults:
  - Reside in the location determined during installation of
    your client
  - Cannot be accessed by other users, so you should only use
    the client vault to manage private data
  - Are always identified using a file: URL

You must explicitly set the vault for a folder before you can check
in objects contained in the folder.

Typically, you use server (remote) vaults, which are managed by
Synchronicity servers (SyncServers), instead of client
vaults. Server vaults:
  - Can reside on your local host, but often reside on another host
  - Can be accessed by any user who is authorized to do so
  - Are always identified using a sync: URL

When you set the vault on a folder, that vault association is
stored in the local metadata for that folder. Each subfolder
inherits its vault association from its parent folder; the vault
association is not stored in metadata unless the subfolder has
an explicit setvault applied to it. Every versionable object (file
or collection) in the hierarchy inherits its vault from the
parent folder, although once a revision-control operation has been
performed on the object, the vault association is stored in that
object's metadata. Therefore, anytime you want to change a vault
setting (as opposed to setting the vault for the first time), use
the -recursive option. The recursive operation removes all vault
associations that are stored in metadata, which causes all objects
in the hierarchy to inherit their vault associations from the
folder on which the setvault is applied.

Notes:

o To resolve a selector, DesignSync does not search above the root of
  a workspace where a setvault has been applied. Thus, if a folder
  has no selector or persistent selector set, DesignSync searches
  up the hierarchy only as far as the first folder that has a vault
  association.

o If the number of characters in the path to the vault exceeds 1024,
  revision control operations may fail.

o Vault settings on subfolders in a work area are not obeyed
  by the 'populate -recursive' command. Consider using
  REFERENCEs in sync_project.txt files to redirect a subfolder to a
```

different vault. See the Design Reuse book in DesignSync Data Manager User's Guide for more information.

When you use the 'setvault' command:
- The specified SyncServer must be running.
- If you specify a vault that does not exist, you get a warning so you can make sure that your vault path is correct. When you specify a new vault, the vault folder is not created until you check in design data.
- The local folder on which you are setting the vault must exist.
- You must have write permission for the parent folder of the folder for which you are setting the vault. You need write permission in order for DesignSync to create local metadata (as stored in .SYNC directories) for the parent folder.

SYNOPSIS

```
setvault [-recursive] [--] <vaultURL>[@<selector>[,<selector>...]]
         <localFolder>
```

ARGUMENTS

Vault URL

<vaultURL> Specify the new location on the server for the top-level module or DesignSync object or folder. module should be specified in the following form: <protocol>://<host>:<port>/[Modules|Projects/] <path>

- o Protocol indicates whether to use a standard connection or an SSL connection. For a standard connection use "sync" as the protocol. For an SSL connection, use "syncs" as the protocol.
- o Host is the machine on which the vault's SyncServer is running. Specify a full domain name, such as myhost.myco.com. You can specify just the machine name ('myhost' in this example) if you are on the same LAN as the SyncServer host machine.
- o port is the SyncServer port. You can omit the port specification if the SyncServer is using the default port of 2647.
- o path is the path to the vault you are creating or accessing. For a client vault, the path is the full, absolute path on your local machine. For a server vault, the path is relative to the server root as specified during the SyncServer installation.

```
                Note: You must specify a top-level module folder.  The
                setvault command does not work on referenced modules.
```

Local Folder

```
 <localFolder>  Specify the local folder to set as the
                workspace path for the DesignSync folder.
```

OPTIONS

- -recursive
- --

-recursive

```
 -recursive     The vault associations for all objects in the work
                area are updated so that they inherit the specified
                vault. Use -recursive when you are changing a
                vault specification (as opposed to setting the
                vault for the first time).

                CAUTION: If a subfolder had an explicit setvault
                applied to it (so that the vault information is
                stored in the folder's local metadata), that vault
                association is removed and the subfolder reverts
                to inheriting its vault association from the parent
                folder.
```

--

```
 --             Indicates that the command should stop looking for
                command options. Use this option when arguments
                to the command begin with a hyphen (-).
```

RETURN VALUE

```
 none
```

SEE ALSO

```
 unsetvault, populate, unlock, tag, cancel, ci, co, url vault,
 setselector, selectors
```

EXAMPLES

Example of Associating a Server Vault with the Current Folder

```
This example associates a server vault with the current folder.
The vault directory 'Projects/Sportster' is relative to
the server root directory that was specified during server
installation.
  dss> setvault sync://holzt.myco.com:2647/Projects/Sportster .
```

Example of Associating a Server Vault with a Specified Directory

```
You can specify the local folder using relative or absolute paths,
and you can omit the port specification because the SyncServer is
using the default port of 2647:
  dss> setvault sync://holzt.myco.com/Projects/Sportster ../Sportster
  dss> setvault sync://holzt.myco.com/Projects/Sportster
/home/goss/Sportster
```

Example of Changing the Vault Association Recursively in a Workspace

```
This example changes the vault association for a work area, which
requires the -recursive option, and sets the work area persistent
selector list to 'auto(Debug),Main:Latest':
  dss> setvault -rec \
       sync://holzt.myco.com/Projects/Sportster@auto(Debug),Main:Latest .
```

Example of Associating a Local Vault with a Specified Directory

```
This example creates an association between the local folder
'/home/goss/lunarLander' and the client vault
'file:///home/goss/myVault/lunarLander'.
  dss> setvault file:///home/goss/myVault/lunarLander /home/goss/lunarLander

Note: Client vaults cannot be shared across project teams. Only
specify a client vault when you alone will be accessing the data.
```

unsetvault Command

NAME

```
unsetvault          - Disassociates a vault from a work area
```

DESCRIPTION

```
This command removes the mapping between a local folder or object and
a revision-control vault or folder (repository) by removing the
associated metadata for the object.  This metadata is stored in the
.SYNC directory within each DesignSync workspace folder.

The primary uses for this command are to unset a vault
association incorrectly applied to a folder, or, if a folder is
copied from one workspace to another workspace, to remove the
metadata associated with the original workspace.

If you specify an entire folder, the .SYNC directory is completely
removed.  If you specify a specific object, only the metadata for
that object is removed.

The unsetvault command is not applicable to any of the following data
objects:
  o Cached objects
  o Mirrored objects

If the unsetvault is used on any of the above data objects, or used
with the -recursive option on a folder containing any of the above
objects, the command fails without removing the vault association of
any of the objects in the workspace.

Note: Unsetvault does not remove a vault setting inherited from the
parent folder.
```

SYNOPSIS

```
unsetvault [-[no]recursive] <argument> [..]
```

ARGUMENTS

- DesignSync Object
- Workspace Folder

DesignSync Object

```
<DesignSync     Specify the name of the DesignSync object to
 object>        disassociate from the server vault.
```

Workspace Folder

```
<Workspace      Specify the local workspace folder to remove the
 folder>        vault association from.
```

OPTIONS

-[no]recursive

```
-[no]recursive  Controls whether the vault associations for all
                objects in the work area are removed.

                -recursive removes the vault association for all
               objects, including subfolders, in the workspace.

                Note: The -recursive option is only valid for
                folders.

                CAUTION: If a subfolder had an explicit setvault
                applied to it (so that the vault information is
                stored in the folder's local metadata), that vault
                association is also removed.

                -norecursive removes the vault association for the
                specified object or folder, but does not traverse the
                folder structure.
```

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when arguments to
                the command begin with a hyphen (-).
```

RETURN VALUE

```
If the command is successful, DesignSync returns an empty
string ("").  If the command fails, DesignSync returns an error
explaining the failure.
```

SEE ALSO

```
setvault, populate, ci, co, url vault, setselector, selectors
```

EXAMPLES

```
This example shows using unsetvault to remove the vault setting from
chip workspace directory.  Note that after the vault setting has been
removed, the directory shows the default client_vault URL, indicating
that the vault association has not been set.

stcl> url vault ./chip

 sync://srv2.ABCo.com:2647/Projects/chip

stcl> unsetvault chip

 Removing all metadata in /home/rsmith/workspaces/chip

stcl> url vault ./chip
 file:///home/rsmith/syncdata/client_vault/home/rsmith/workspaces/example

stcl>
```

unsetvault

unsetvault Command

NAME

```
unsetvault          - Disassociates a vault from a work area
```

DESCRIPTION

```
This command removes the mapping between a local folder or object and
a revision-control vault or folder (repository) by removing the
associated metadata for the object.  This metadata is stored in the
.SYNC directory within each DesignSync workspace folder.

The primary uses for this command are to unset a vault
association incorrectly applied to a folder, or, if a folder is
copied from one workspace to another workspace, to remove the
metadata associated with the original workspace.

If you specify an entire folder, the .SYNC directory is completely
removed.  If you specify a specific object, only the metadata for
that object is removed.
```

```
The unsetvault command is not applicable to any of the following data
objects:
  o Cached objects
  o Mirrored objects

If the unsetvault is used on any of the above data objects, or used
with the -recursive option on a folder containing any of the above
objects, the command fails without removing the vault association of
any of the objects in the workspace.

Note: Unsetvault does not remove a vault setting inherited from the
parent folder.
```

SYNOPSIS

```
unsetvault [-[no]recursive] <argument> [..]
```

ARGUMENTS

DesignSync Object

```
<DesignSync      Specify the name of the DesignSync object to
 object>         disassociate from the server vault.
```

Workspace Folder

```
<Workspace       Specify the local workspace folder to remove the
 folder>         vault association from.
```

OPTIONS

-[no]recursive

```
-[no]recursive  Controls whether the vault associations for all
                objects in the work area are removed.

                -recursive removes the vault association for all
               objects, including subfolders, in the workspace.
```

Note: The -recursive option is only valid for folders.

CAUTION: If a subfolder had an explicit setvault applied to it (so that the vault information is stored in the folder's local metadata), that vault association is also removed.

-norecursive removes the vault association for the specified object or folder, but does not traverse the folder structure.

--

-- Indicates that the command should stop looking for command options. Use this option when arguments to the command begin with a hyphen (-).

RETURN VALUE

If the command is successful, DesignSync returns an empty string (""). If the command fails, DesignSync returns an error explaining the failure.

SEE ALSO

setvault, populate, ci, co, url vault, setselector, selectors

EXAMPLES

This example shows using unsetvault to remove the vault setting from chip workspace directory. Note that after the vault setting has been removed, the directory shows the default client_vault URL, indicating that the vault association has not been set.

```
stcl> url vault ./chip

 sync://srv2.ABCo.com:2647/Projects/chip

stcl> unsetvault chip

 Removing all metadata in /home/rsmith/workspaces/chip

stcl> url vault ./chip
 file:///home/rsmith/syncdata/client_vault/home/rsmith/workspaces/example
```

```
stcl>
```

Primary Revision Control

cancel

cancel Command

NAME

```
cancel              - Cancels a previous checkout operation
```

DESCRIPTION

- Notes on Using cancel with Collections
- Notes on Using cancel with File-Based Objects
- Auto-Branching for File Objects and Legacy Modules Objects

```
This command effectively performs an "un"checkout operation on the
specified locked object. This operation unlocks objects previously
locked in that work area and leaves the objects in the specified
state.

If the object was modified locally, it remains in your directory by
default.  If you specify the "-force" option, the object is
re-fetched from the server and the local modifications are
discarded.

You lock a branch by checking out an object by using the '-lock'
option with the 'co', 'populate', or 'ci' commands. Only one user can
have a lock on an object at a time. Having a lock
prohibits other users from checking in changes to that branch;
however, other users (or the same user in different work
areas) can independently lock, unlock, and check in changes to other
branches. The cancel command only cancels a checkout you have
performed. To unlock a file locked by another user, use the unlock
command.

DesignSync determines what state to leave files in your work area
after the cancel operation completes as follows:
  1. DesignSync obeys the state option (-keep, -share,
     -mirror, -reference) specified on the command line.
  2. If no state option is specified, DesignSync uses the default
     fetch state as specified by your project leader. See
     the "fetch preference" help topic for more information.
  3. If a default fetch state is not defined, the default
     behavior for 'cancel' is -keep.

Note: If the object being operated on has been designed uncachable,
cancel automatically ignores the -share and -mirror option and
performs the operation in -get mode.  For more information, see the
```

caching commands.

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.

Notes on Using cancel with Collections

If you specify a collection member as the object to be operated on, DesignSync skips the object and warns that the object is not versionable. If DesignSync attempts to operate on a collection member specified implicitly (through the use of wildcards or a recursive operation), DesignSync silently skips the object. You can change this behavior by using the SyncAdmin "Map operations on collection members to owner" setting. If you select this setting and DesignSync attempts to operate on a collection member during a revision control operation, DesignSync determines the member's owner collection and operates on the collection as a whole.

Notes on Using cancel with File-Based Objects

If an object was explicitly excluded from a cancel operation by -exclude (for DesignSync objects) the command output message indicates that the object was "excluded by filter."

Auto-Branching for File Objects and Legacy Modules Objects

You can create a new, locked branch by using 'co -lock' with a selector and autobranching. This branch can be unlocked without creating a new version by:

- Using 'cancel' from the workspace where the branch was locked.
- Using 'unlock' on the vault.
- Using 'ci' from the workspace where the branch was locked, without making modifications.

In these cases, the lock is removed from the vault, the auto-created branch is removed, and the branch tag is deleted. If the branch is removed but still exists in the metadata of a workspace, some commands (such as the 'url' commands and 'vhistory') will fail with "No such version.

SYNOPSIS

```
cancel [-exclude <object>[,<object>...]] [-[no]force]
 [-keep | -share | -mirror | -reference] [-[no]selected]
```

```
[-[no]retain] [-trigarg <arg>] [--] [<argument> [<argument>...]]
```

ARGUMENTS

- DesignSync File Object
- DesignSync Folder

DesignSync File Object

<DesignSync object>	Specify a versionable file on the server or in your workspace (local) to cancel the lock on the object. Note: If you specify a collection member as the object to be operated on, DesignSync skips the object and warns that the object is not versionable. For more information on collections are processed by the cancel command, see the Notes section of the command Description.

DesignSync Folder

<DesignSync folder>	Specify a DesignSync folder in your workspace to cancel the lock on all objects in the folder. To unlock all objects in sub-folders of the specified folder, use the -recursive option.

OPTIONS

- -exclude
- -[no]force
- -keep
- -mirror
- -[no]recursive
- -reference
- -[no]retain
- -[no]selected
- -share
- -trigarg
- --

-exclude

-exclude <fn>	Specifies a comma-separated list of files and directories to be excluded from the operation. Wildcards are allowed. Do not specify paths in your arguments to -exclude. Before operating on each object (such as during a recursive cancel), DesignSync compares the object's leaf name (path stripped off) to the exclude list to see if there is a match. Because the object's path is removed, the object will not match any object in the exclude list specified with a path. For example, if you specify '-exclude bin/*.exe', you will not successfully exclude bin/foo.exe or any other *.exe file. You need to instead specify '-exclude *.exe', or '-exclude foo.exe' if you want to exclude only 'foo.exe'. The result is that you cannot exclude a specific instance of an object -- you exclude all matching objects. In addition to objects you specify using the -exclude option, the "These objects are always excluded" field from the Tools->Options-> General->Exclude Lists dialog box in DesignSync lists objects that are always excluded from revision-control operations.

-[no]force

-[no]force	Specifies whether to overwrite locally modified objects with the server version after removing the lock on the objects. -noforce does not remove the file if a file has been locally modified. It does remove the lock, leaving the locally modified file in the workspace. (Default) -force removes the lock and the file even when the object was modified locally. Note: If a file is locally modified, and you do not specify -force in conjunction with -share or -mirror, the cancel operation fails.

-keep

-keep	Specifies whether to keep a local copy of objects after canceling a lock operation. You can change whether the local file is read-only or read/write by default by using the "Check out read only when not

locking" option from the
Tools->Options->General dialog box in the
graphical interface.

This option is the default object-state option
unless a default object state has been defined
(see the "fetch preference" help topic for
more information).

Note:
- A locally modified object is left in your
  directory by default unless you choose
  "-force", in which case the object is
  re-fetched from the server and the local
  modifications are discarded.

- If you fetch an object as a locked reference
  (using co -lock -reference, for example),
  specifying 'cancel -keep' for that object
  cancels the lock and fetches the file. To
  cancel the lock and keep a reference to the
  file, use 'cancel -reference'.

-mirror

-mirror

Create a symbolic link to the file in the
mirror directory. This option requires that
you have associated a mirror directory with
your working directory with the setmirror
command. In addition, the effective workspace
selector (set using 'setselector', 'setvault',
or the -branch option) must match the mirror
workspace selector.

Note:
o This option is not supported on Windows
  platforms.
o When operating on a mirror directory, the
  cancel operation does not require an exact
  match between the workspace selector and
  the mirror selector in the case of
  <BranchName>: or Trunk selectors.
  The cancel operation considers:
  - A selector of 'Trunk' to be the same as
    'Trunk:' and 'Trunk:Latest'
  - A selector of <BranchName>: to be the same
    as <BranchName>:Latest

-[no]recursive

-[no]recursive

Determines whether to cancel the lock on the
objects in the specified folder or all objects

in the folder and all objects in the subfolders. This option is ignored if the argument is not a DesignSync folder.

-norecursive removes locks only from objects in the specified folder. It does not remove locks from any subfolders of the specified argument. (Default)

-recursive removes locks from the specified folder and all subfolders.

Note: On GUI clients, -recursive is the initial default.

-reference

-reference

Keep a reference to the file in the directory after the cancel operation. A reference does not have a corresponding file on the file system but does have DesignSync metadata that makes it visible to Synchronicity programs.

Note: When operating on a collection object, you should not use the -reference option. When the -reference option is used on a collection, DesignSync creates a reference in the metadata for the collection object but member files are not processed and are not included in the metadata.

-[no]retain

-[no]retain

Retain the 'last modified' timestamp of the checked-out object as recorded when the object was checked into the vault.

The -retain option is applicable only when the cancel operation is dealing with physical copies, as is the case when you specify the -keep option. The -share and -mirror options create links to shared objects, so timestamps cannot be set on a per-user basis. The -share and -mirror options automatically use -retain behavior; objects in the mirror/cache retain their original timestamps. However, links in your work area to the cache/mirror have timestamps of when the links were created. If you specify the -reference option, no object is created in your work area, so there is no timestamp information at all.

If you do not specify '-retain' or -noretain', the cancel command follows the DesignSync registry setting for Retain last-modification timestamps. By default, this setting is not enabled; therefore, the timestamp of the local object is the time of the cancel operation. To change the default setting, your Synchronicity administrator can use the SyncAdmin tool. For information, see the SyncAdmin help.

-[no]selected

-[no]selected

Determines whether the operation is performed just on the objects specified at the command line or on objects specified at the command line and objects in the select list (see the 'select' command)

-noselected cancels the locks only for objects specified on the command line. (Default)
-selected cancels the locks for objects specified on the command and in the select list.

Note: If no objects are specified on the command line, the -selected option is implied.

-share

-share

Keep a copy of the file in the cache directory, and create a link from the working directory to the file in the cache.

Note: This option is not supported on Windows platforms.

If you use 'cancel -share' on a collection object, for any collection member that is a symbolic link, DesignSync creates a symbolic link to the member object itself and not to the cache. Note: Collections existing entirely of symbolic links are not supported.

-trigarg

-trigarg <arg>

Specifies an argument to be passed from the command line to the triggers set on the cancel operation. If the argument contains

whitespace, enclose the argument within double quotation marks ("") if using the dss command shell or braces ({}) if using the stcl command shell.

--

--	Indicates that the command should stop looking for command options. Use this option when an argument to the command begins with a hyphen (-).

RETURN VALUE

In dss/dssc mode, you cannot operate on return values, so the return value is irrelevant.

In stcl/stclc mode, two lists are returned, where the first list is non-empty if at least one object was successfully processed, and the second list is non-empty if at least one object failed.

Notes:
- Scripts should only test for non-empty lists to determine success or failure. The actual content of a non-empty list currently takes the form "Objects succeeded (n)" and "Objects failed (n)", where 'n' is the number of objects that succeeded or failed. However, these return values are subject to change in a future release.
- If all objects fail, an exception occurs (the return value is thrown, not returned).
- Objects reported as "excluded by filter," may have been excluded either with the -filter option (for modules) or with the -exclude option (for DesignSync objects.)

SEE ALSO

caching, co, command defaults, ci, select, switchlocker, unlock

EXAMPLES

This example cancels the checkout of all files ending in '.v', except those whose filenames begin with 'new', leaving links to files in the cache.

```
dss> cancel -share -exclude new* *.v
```

ci

ci Command

NAME

```
ci                    - Checks in the specified objects
```

DESCRIPTION


```
This command checks in the specified objects, creating a new version
in each object's vault.

Note: The check-in operation requires that your work area folder be
associated with a DesignSync vault location on the server. Otherwise,
the operation will fail.

Usually, you need to set up the vault association only once, as the
first step in placing design data under revision control or before
you do an initial populate of the work area. For modules, the vault
association occurs automatically during populate operations. To
determine if your work area is associated with a vault, use the
url vault command.  For information on setting up the association,
see the setvault command. For information on setting up the
association with a module, see the mkmod and populate commands.

If you copied managed data into your workspace, ci detects that,
and fails. To omit this check, see the "Advanced Registry Settings"
topic in the DesignSync Data Manager Administrator's Guide.

Note: DesignSync requires the names of objects being checked in
contain only characters that are part of the standard ASCII character
set. You should also avoid the following characters, which are
explicitly disallowed only for module names, to minimize confusion:
~ ! @ # $ % ^ & * ( ) , ; : | ` ' " = [ ] / \ < >
Using SyncAdmin, you can explicitly disallow any or all of these
reserved characters in object and path names. For more information,
see the DesignSync Administrator's Guide.
```

This command supports Enterprise Design Synchronization. For more information on Enterprise Design Synchronization, see How Checkin Works with Enterprise Design Synchronization below.

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.

Versions and Branches

A version is a permanent, immutable snapshot of your design object. Each version is assigned a unique, consecutive version number that you can use to retrieve or otherwise identify the object in the future.

Version numbers take the form of 1.1, 1.2, 1.3, and so on, where the number following the period identifies the version, and the '1' preceding the period identifies the branch (branch 1, also known as Trunk). A branch is a line of development. Projects that require multiple lines of development (parallel development) can define multiple branches. Version numbers on branches other than Trunk still take the form <branch>.<version>, where <branch> is an odd number of period-separated numbers. For example, version 1.2.4.3 is the third version on branch 1.2.4, where 1.2.4 is the fourth branch off version 1.2, where 1.2 is the second version on branch 1.

Because branch and version numbers are not memorable, you can apply symbolic names, called tags, to versions and branches. Tags also let you associate related versions of different design objects, called configurations. See the "tag" help topic for details.

Changing Checkin Comments

The checkin comments for files checked into a vault can be modified using the url setprop command. The <new checkin comment> is optional on the command line and the user is prompted for it if not specified. Here is the syntax:

```
  url setprop <versionURL> log [<new checkin comment>]
```

If the user changing the comment is not the author of the version, a note with the user name and date and stating that the comment was changed is prepended to the new comment.
For example:

```
  stcl> url setprop [url vault new_d]1.5 log "New comment set from \
  other user"
  New comment set from other user
  stcl> url getprop [url vault new_d]1.5 log
  Comment changed by JerryL Jun 02 2005, 08:19:13 EDT
  New comment set from other user
```

```
  stcl>

If a comment is not specified at the command line, and DesignSync is
set to use a file editor for comments, the designated file editor is
launched, otherwise a comment can be entered interactively on the
command line.  For more information on defining a file editor for
comments, see the DesignSync Administrator's Guide, "General
Options."

Note: The client-side minimum comment length is checked.
```

Understanding the Output

```
The ci command provides the option to specify the level of
information the command outputs during processing. The -report option
allows you to specify what type of information is displayed:

If you run the command with the -report brief option, the ci command
outputs the following information:
 o Failure messages.
 o Warning messages.
 o Informational messages concerning the status of the checkin
   operation.
 o Success/failure/skip status.

If you do not specify a value, or the command with the -normal
option, the ci command outputs all the information presented with
-report brief and the additional information for each successful
object checkin, excluded objects, or omitted objects.

If you run the command with the -report verbose option, the ci command
outputs all the information presented with -report normal and
information about each object examined or filtered.

If you run the command with the -report error option, the ci command
outputs the following information:
 o Failure messages.
 o Warning messages.
 o Success/failure/skip status messages.
```

Object States

```
DesignSync determines what state to leave objects checked into
your work area as follows:
  1. DesignSync obeys the state option (-keep, -lock, -share,
     -mirror, -reference) specified on the command line.
  2. If no state option is specified, DesignSync uses the default
     fetch state as specified by your project leader. See
     the "fetch preference" help topic for more information.
  3. If no default fetch state is defined, the default
     behavior for ci is -keep.
```

Important:

- The ci command processes only locked or modified objects. DesignSync changes the state of only those objects that have been checked in. To set all of the objects in your work area to the same state, use 'populate -unifystate'. To check in unmanaged (new) objects, use 'ci -new'.

- PreFolder check-in triggers fire on folders that contain locked or modified objects being checked in. For some check-in operations like recursive checkins with -force or -new options, preFolder triggers might also fire on folders that do not contain modified or locked objects being checked in.

- If the object is designated as uncachable, attempts to place objects in the cache (ci -mirror; ci -share) will automatically populates the workspace with unlocked copies (-keep mode). For more information on cachability, see the "caching" commands.

By default (unless you use the -force option), DesignSync does not create a new version when you attempt to check in an object that is not locally modified. An object is defined as "locally modified" if its timestamp has been changed.

For collections that have local versions, the check-in operation usually does not change the set of local versions in your workspace. However, there is an exception to this behavior. The check-in operation changes the set of local versions in your workspace when the originally fetched state of the object was Cache or Mirror. In this case, the check-in operation replaces files linked to the cache or mirror with physical copies.

Determining the Objects to be Checked In

By default, DesignSync only checks in modified objects. An object is considered modified when it meets the following criteria:

* The current timestamp of the object in the workspace is later than the fetched timestamp of the object.
* The current size or checksum of the object is different than the fetched object size or checksum.

Determining Which Branch is Selected for the Check In

Arguments to the ci command must represent versionable objects (files or collections), or local folders (only meaningful when you use the -recursive option). The ci command operates on the current or specified branch of each of these objects. When you are in a multi-branch design environment, DesignSync determines what branch you want to check into as follows:

1. DesignSync obeys the -branch option, operating on the Latest

```
      version on the specified branch. Using this option is not
      typical, however, because the default behavior (without
      -branch) is usually the correct and intuitive behavior.

   2. If -branch is not specified and you have the current branch
      locked in your work area, DesignSync checks into the current
      branch.

   3. Otherwise, DesignSync uses the first selector of the object's
      persistent selector list ('Trunk' by default, or as defined
      by the setselector command). If the selector does not
      resolve to 'Trunk' or some other valid branch for the object
      (specified as <branch>:<version>, for example Rel2:Latest),
      the operation fails.

      Complex selector lists are a powerful capability for populate
      and check-out operations, but they can be dangerous for
      check-in operations. When creating a new version, there should
      be no uncertainty as to which branch to create the version
      on. Therefore, ci considers only the first selector in the
      persistent selector list.

See the "selectors" help topic for details on selectors,
selector lists, and persistent selector lists.
```

Filtering or Excluding Objects From Checkin

```
DesignSync features two ways to control the objects being checked
in.  For objects in source control, exclude lists are used
to exclude DesignSync objects. Exclusion lists can be saved with
command defaults or specified using the -exclude option.

For objects that are not in source control, exclude files can be
created on a per directory basis to prevent unmanaged objects from
being checked in.  Objects that are excluded by exclude files cannot
be reincluded by a filter. Exclude files are processed before the
filter and exclude options set either by the command defaults or
specified on the command line.

If you specify a collection member as the object to be operated on,
DesignSync skips the object and warns that the object is not
versionable. If DesignSync attempts to operate on a collection member
specified implicitly (through the use of wildcards or a recursive
operation), DesignSync silently skips the object. You can change this
behavior by using the SyncAdmin "Map operations on collection members
to owner" setting. If you select this setting and DesignSync attempts
to operate on a collection member during a revision control
operation, DesignSync determines the member's owner collection and
operates on the collection as a whole.
```

Interaction with Mirrors

```
When using a mirror (associated with a workspace with the
setmirror command), objects are written directly to the mirror
directory.  You must have write privileges to the mirror directory.
For the mirror write-through to occur, the effective workspace
selector (set using setselector, setvault, or the -branch
option) must also match the mirror workspace selector.  You can
disable this behavior using SyncAdmin->Site Options->Mirror
Write-through.

Notes:

o When operating on a mirror directory, the check-in operation
  does not require an exact match between the workspace selector
  and the mirror selector in the case of <BranchName>: or Trunk
  selectors.  The check-in operation considers:

  - A selector of 'Trunk' to be the same as 'Trunk:' and
   'Trunk:Latest'

  - A selector of <BranchName>: to be the same as <BranchName>:Latest
```

SYNOPSIS

```
ci [-branch <branch> | -branch auto(<branch>)]
   [-[no]comment"<text>" | -cfile <file>] [-datatype ascii | binary]
   [-[no]dryrun] [-exclude <object>[,<object>...]] [-[no]force]
   [-[no]iflock] [-keep [-keys <mode>] | -lock [-keys <mode>] |
    -share | -mirror | -reference] [-[no]new] [-[no]recursive]
   [-report {error | brief | normal | verbose}] [-[no]retain]
   [-[no]selected] [-[no]skip] [-tag <tagname>] [-trigarg <arg>] [--]
   [<argument> [<argument>...]]
```

ARGUMENTS


```
Specify one or more of the following arguments:
```

DesignSync File Objects

```
<DesignSync object> Checks the object into its vault. If the object is
                    unmanaged, apply the -new option.
```

DesignSync Folder Objects

```
<DesignSync folder> The ci command does not check in local folders,
```

```
                    but checks in their contents if you specify the
                    -recursive option. If the folder contains
                    unmanaged objects, apply the -new option.
```

OPTIONS

-branch

```
 -branch <branch>    Performs the checkin on the branch specified by
 | -branch           the branch or version tag, auto-branch selector,
   auto(<branch>)    or branch numeric. This option overrides the
                     object's persistent selector list. If a version is
                     retrieved in the workspace, this is used as the
                     branch-point version for any new branch created.

                     For a checkin using an auto-branch selector, for
                     example Auto(Golden), if there already exists a
                     version 'Golden', the checkin fails.  However, if
                     'Golden' exists as a branch, the effective
                     selector is 'Golden:Latest'; the checkin succeeds
                     and no new branch is needed. If there is neither
                     a version nor a branch named 'Golden' for the
                     object, a new branch is created and it is named
                     'Golden'. If a version is retrieved in the
                     workspace, this is used as the branch-point
```

version for the new branch created. For example, if version 'Golden' is retrieved in the workspace, it is used as the branch-point version. If version 'Golden' is retrieved but it has no metadata information as a consequence of being removed from the vault earlier, DesignSync uses the latest version on branch '1' as the branch-point version. Finally, if there is no vault (in this case, the -new option must be specified), DesignSync creates a new vault (branch 1). Branch 1 is named 'Golden'.

Notes:
- The -branch option accepts a branch tag, a version tag, a single auto-branch selector tag, or a branch numeric. It does not accept a selector or selector list.
- The -skip option is required when you are checking into a branch other than the current branch unless your current version is the branch-point version and there are no versions on the branch. For example, if you have version 1.4, you can only create versions 1.5, 1.4.1.1, 1.4.2.1, and so on, unless you use -skip.
- The persistent selector list of the object you are checking in is not updated by the check-in operation. Subsequent operations that use the persistent selector list will not follow the branch you just checked into. If you want to continue working on this branch, you must set the persistent selector list with the setselector command.

-[no]comment

-[no]comment "<text>"	Specifies whether to check in the specified object with or without a description of changes. If you specify -comment, enclose the description in double quotes if it contains spaces. The check-in comment is appended to the check-out comment if one was specified. The comments associated with a version are also called the "log". The ampersand (&) and equal (=) characters are replaced by the underscore (_) character in revision control notes. If you specify -nocomment, and the object was checked out with comments ('co -comment'), the check-out comments are retained during check-in. If you do not specify -comment, -nocomment, or -cfile, DesignSync prompts you to enter a check-in comment either on the command or by

spawning the defined file editor. The -cfile option is mutually exclusive with -[no]comment. For more information on defining a file editor, see the DesignSync Data Manager Administrator's Guide, "General Options."

Note: If the -tag option is specified along with the -comment option, the comment text is used as both the tag comment and the checkin comment.

-cfile

-cfile <file>	Specifies a file containing a text comment to use as the description of the new release. DesignSync accepts a comment of any length up to 1MB. Long comments may be truncated in the output of commands that show comments. If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (_) character in revision control notes. This option respects the minimum comment length. The -cfile option is mutually exclusive with -[no]comment. If you do not specify one of the three options, -comment, -cfile, or -nocomment, DesignSync prompts you to enter a check-in comment either on the command line or by spawning the defined file editor. For more information on defining a file editor, see the DesignSync Data Manager Administrator's Guide, "General Options."

-datatype

-datatype ascii| binary	Indicates whether to disable the autodetect feature of DesignSync and create the object being checked in with the specified data type. The datatype option can only be specified when the object is initially created. -datatype ascii creates the new object with a data type of ascii. -datatype binary creates the new object with a data type of binary. Binary objects cannot be merged, they can only be replaced. ZIP vaults are always checked in using binary mode, regardless of whether the vault's data type is designated as ascii. Note: For vault objects, this option only applies for when checking in new data. To change the data

type of an existing object, use the url setprop command.

-[no]dryrun

-[no]dryrun

Specifies whether to treat the operation as a trial run; if -dryrun is specified, no objects are actually checked in. By default (-nodryrun), ci performs a standard checkin.

The -dryrun option helps detect problems that might prevent the checkin from succeeding. Because local object and vault states are not changed, a successful dry run does not guarantee a successful checkin. Errors that can be detected without state changes, such as a vault or branch not existing, merge conflicts, or a branch being locked by another user are reported. Errors such as permissions or access rights violations are not reported by a dry run. Note that a dry run checkin is significantly faster than a normal checkin.

-exclude

-exclude <objects>

Specifies a comma-separated list of objects (files, collections, or folders) to be excluded from the operation. Wildcards are allowed.

Do not specify paths in your arguments to -exclude. Before operating on each object (such as during a recursive checkin), DesignSync compares the object's leaf name (with the path stripped off) to the exclude list to see if there is a match. Because the object's path is removed, the object will not match any object in the exclude list specified with a path. For example, if you specify '-exclude bin/*.exe', you will not successfully exclude bin/foo.exe or any other *.exe file. You need to instead specify '-exclude *.exe', or '-exclude foo.exe' if you want to exclude only 'foo.exe'. The result is that you cannot exclude a specific instance of an object -- you exclude all matching objects.

In addition to objects you specify using the -exclude option, the "These objects are always excluded" field from the Tools->Options->General->Exclude Lists dialog box in DesignSync lists objects that are always excluded from revision-control operations.

-[no]force

-[no]force	Specifies whether to force the creation of a new version even if it is identical to the previous version. By default (-noforce), the timestamp of the file in the workspace is compared with the timestamp of the version in the vault. If the timestamp of the file to be checked in has not changed, then no new version is created. You might use -force to synchronize version numbers across several objects. Note that you must have a local copy of the object in your work area for a new version to be created. A new version is not created if the object does not exist or is a reference. Note: Use the -force option only if necessary. Using the -force option slows the check-in process because ci must process all objects and not just the locked or modified objects.

-[no]iflock

-[no]iflock	Specifies whether to check in all modified objects in the checkin selection or only the ones that locked objects. -The noiflock option (Default) searches the entire selection of ci for modified files to checkin. This means different things for different operations, for example, it can mean all the files recursively in a directory, or all the files that match a specified selector. This can be a labor-intensive option, but it can also pick up any changes that might have been forgotten. The -iflock option only checks in files that are locked in the workspace. This provides a quicker checkin operation as well as security to prevent accidental modifications to unintended files.

-keep

-keep	Leave a local copy of the object in the work area after checking it in. This option is the default object-state option unless a default object state has been defined (see the "fetch preference" help topic for more information).

You cannot use this option when you have enabled Link-In of large files.

Note: 'ci -keep' is equivalent to following the check-in operation with 'co -get'.

You can change whether the local object is read-only or read/write by default by using the "Check out read only when not locking" option from the Tools->Options->General dialog box in the DesignSync graphical interface, or your project leader can set this option site-wide using SyncAdmin.

-keys

-keys <mode>

Controls processing of RCS-style revision-control keywords in objects that remain in your work area after checkin. Note that keyword expansion is not the same as keyword update. For example, the $Date$ keyword is updated only during checkin; its value is not updated during checkout or populate.

Available modes are:

kkv - (keep keywords and values) The local object contains both revision control keywords and their expanded values; for example, $Revision: 1.4 $.

kk - (keep keywords) The local object contains revision control keywords, but no values; for example, $Revision$. This option is useful if you want to ignore differences in keyword expansion, such as when comparing two different versions of an object.

kv - (keep values) The local object contains expanded keyword values, but not the keywords themselves; for example, 1.4. This option is not recommended if you plan to check in your local objects. If you edit and then check in the objects, future keyword substitution is impossible, because the value without the keyword is interpreted as regular text.

ko - (keep output) The local object contains the same keywords and values as were present at check in.

Note:
- The -keys option works only with the -keep

and -lock options. If you use the -share or -mirror option, keywords are automatically expanded in cached or mirrored objects, as if the '-keys kkv' option was used.

- The EnableKeywordExpansion setting controls the expansion of keys during a check-in operation. This setting overrides the -keys option; if disabled, there is no expansion of keys, regardless of the use of the -keys option. By default, this setting is enabled; the check-in operation expands keywords. To change the default setting, your Synchronicity administrator can use the SyncAdmin tool. For information, see SyncAdmin help.

- The check-in operation detects binary files and collections and does not expand keywords when operating on these objects, even if the Enable Keyword Expansion setting is on.

-lock

-lock	Keep a locked local copy of the object in the work area after checking it in. Use this option if you want to create a new version of the object while continuing to make changes. Unless you use this option, the branch is unlocked after the check-in operation. Note: To enforce the -lock option, you have to modify the access control file for DesignSync revision control operations. See Access Control guide for more information. For examples, see the "Using access filter to Check an Action" section in the "Sample Access Controls" topic.

-mirror

-mirror	Create a symbolic link from the work area to to the object in the mirror directory. This option requires that you have associated a mirror directory with your work area (see the "setmirror" command). Note: o This option is not supported on Windows platforms. o If you have checked in objects using the -mirror option, incremental populates by team members do not necessarily fetch the new

```
  objects until after the mirror has been
  updated.
o The ci command does not allow this option if
  you use it when checking in module objects;
  in this case, ci issues an error message, but
  continues to check in other DesignSync objects.
o When operating on a mirror directory, the
  check-in operation does not require an exact
  match between the workspace selector and the
  mirror selector in the case of <BranchName>:
  or Trunk selectors.
  The check-in operation considers
  - A selector of 'Trunk' to be the same as
    'Trunk:' and 'Trunk:Latest'
  - A selector of <BranchName>: to be the same
    as <BranchName>:Latest
```

-[no]new

```
-[no]new        Performs the initial checkin of unmanaged objects;
                objects that are not under revision control.
                By default (without -new), the check-in operation
                processes only managed objects. It is not an
               error to specify this option with managed objects.

                Tip: Use the -new option only if you are checking
                in previously unmanaged objects. Using the -new
                option slows the check-in process because ci must
                process all objects and not just the locked or
                modified objects.

                Checking in a new object creates a new version
                (1.1) on a new branch (branch 1). The new version
                is created on the branch specified using the
                -branch option. If the -branch option is not
                specified, the version is created on the branch
                defined by the first selector in the persistent
                selector list. If the selector is not a valid
                branch selector (specified using the
                <branch>:<version> syntax), the default branch
                tag 'Trunk' is applied -- DesignSync expects
                every branch to have a tag. For example, if you
                apply 'setselector VaultDate(yesterday)' to a
                folder and then check in a previously unmanaged
                object from that folder, the object's new branch
                is tagged 'Trunk' because 'VaultDate(yesterday)'
                is not a valid branch tag name.  See the
                "selectors" help topic for more details about how
                DesignSync resolves selectors.

                The -new option also has the effect of unretiring
                a branch when you check in a new version onto a
                retired branch. When you unretire a branch, the
                retire information is removed. Viewing the
```

history of the object will not show that the object was retired.

-recursive

-[no]recursive	Specifies whether to perform this operation in just the specified folder(s) (default) or in its subfolders also. Note: You cannot specify the -recursive option with the -branch option when creating a new module branch. If you specify -norecursive when operating on a folder object, DesignSync does not operate on objects within that folder.

-reference

-reference	Keep a reference to the object in the work area after the check-in operation. A reference does not have a corresponding file on the file system but does have DesignSync metadata that makes it visible to Synchronicity programs. References are useful when you want to have the complete context of the objects in a project, but do not need the objects locally. Note: Synchronicity recommends against using the -reference option when operating on a collection object. If you use the -reference option, DesignSync creates a reference in the metadata for the collection object but member files are not processed and are not included in the metadata.

-report

-report error| brief|normal| verbose	Controls the amount and type of information displayed by ci command. The information each option returns is discussed in detail in the "Understanding the Output" section above. error - lists failures, warnings, and success failure count. brief - lists failures, warnings, module create/remove messages, some informational messages, and success/failure count.

normal - includes all information from brief and lists all the updated objects, and messages about objects excluded by filters from the operation. (Default)

verbose - provides full status for each object processed, even if the object is not updated by the operation.

-[no]retain

-[no]retain

Indicates whether to retain the 'last modified' timestamp of the objects that remain in your work area. If you are using the -share option or a mirror is set on the workspace, then this also applies to the object put into the file cache or mirror. The links for the cache or mirror in your work area use the link creation time as the "last modified" time.

If you specify the -reference option, no object is created in your work area, so there is no timestamp information at all.

If you do not specify '-retain' or -noretain', the ci command follows the DesignSync registry setting for Retain last-modification timestamps. By default, this setting is not enabled; therefore, the timestamp of the local object is the time of the check-in operation. To change the default setting, your Synchronicity administrator can use the SyncAdmin tool. For information, see SyncAdmin Help.

The mirror system by default fetches objects into the mirror with the -retain option. The mirror administrator can configure mirrors to use the -noretain option. The default setting should agree with the Retain last-modification timestamp registry setting to maintain consistency. See the "Mirror Administration Server Registry Settings" topic for setting of the co or populate options for mirrors.

-[no]selected

-[no]selected

Specifies whether to perform this operation on objects in the select list (see the "select" command), as well as the objects specified on the command line. If no objects are specified on the

command line, -selected is implied. By default (-noselected), ci operates only on the objects specified on the command line.

-share

-share

Put a copy of the object in the file cache directory, and create a link in the work area to that cached object.

Note: This option is not supported on Windows platforms.

If you use 'ci -share' on a collection object, DesignSync checks in the symbolic link, unless it is a link to a cache.

-[no]skip

-[no]skip

Specifies whether to check in the version even if it is not derived from the Latest version (the branch contains higher-numbered versions). By default (-noskip), versions are not skipped.

This situation can occur when you check out the Latest version without a lock and other users check in new versions prior to your checkin, or when you have intentionally checked out an older version of the object.

You also typically need -skip when using -branch to check into a branch other than the current branch. See -branch for details.

You must specify -force if the version you are checking in is not locally modified.

You must have local copies of the file versions that you want to check in. You cannot have links to a cache or mirror directory.

Caution: Changes in skipped versions are not reflected in the new Latest version and are effectively lost. Use the -skip option when you are intentionally promoting an older version of an object to be the Latest.

-tag

-tag <tagname>	Tags the object version on the server with the specified tagname. If the user does not have access to add a tag, the object is checked in without a tag. For more information on access controls, see the ENOVIA Synchronicity Access Control Guide. For more information on version tags, see the tag command.

-trigarg

-trigarg <arg>	Specifies an argument to be passed from the command line to the triggers set on the check-in operation. If the argument contains whitespace, enclose the argument within double quotation marks ("") if using the dss command shell or braces ({}) if using the stcl command shell.

--

--	Indicates that the command should stop looking for command options. Use this option when an argument to the command begins with a hyphen (-).

RETURN VALUE

In dss/dssc mode, you cannot operate on return values, so the return value is irrelevant.

In stcl/stclc mode, two lists are returned, where the first list is non-empty if at least one object was successfully processed, and the second list is non-empty if at least one object failed.

Notes:

- "successfully processed" may not mean "successfully checked in". For example, attempting to check in an object that is not locally modified is considered a success even though no new version is created.
- Scripts should only test for non-empty lists to determine success or failure. The actual content of a non-empty list currently takes the form "Objects succeeded (n)" and "Objects failed (n)", where 'n' is the number of objects that succeeded or failed. However, these return values are subject to change in a future release.
- If all objects fail, an exception occurs (the return value is thrown, not returned).

```
- Objects reported as "excluded by filter," may have been excluded
  either with the -filter option (for modules) or with the -exclude
  option.
- If a comment editor is defined, but cannot be used, the command
  automatically switches to the interactive command-line comment
  mode.
```

SEE ALSO

```
caching, cancel, co, command defaults, select, selectors, setmirror,
setselector, tag, unlock
```

EXAMPLES

Example of Checking in a File without a Comment

```
The following example checks in the file 'pcimaster.vbh' without a
comment, leaving a link to the cache in the work area:
  stcl> ci -nocomment -share pcimaster.vbh
```

Example of Checking in New Files

```
The following example uses the -new option to check in previously
unmanaged files 'alu.v' and 'decoder.v'. A check-in comment is
provided. Note that no state option is specified, so the default
fetch preference is used (or -keep, the default for ci, if no
default fetch preference is defined):
  stcl> ci -comment "Beta versions" -new alu.v decoder.v
```

Example of Checking in Recursively

```
The following example recursively checks in an entire work area,
while retaining locks on the objects:
  stcl> ci -rec -nocomment -lock .
```

Example of a Dry-Run Checkin Showcasing Wildcard Usage

```
The following example performs a dryrun checkin because of the
complex wildcarding used to specify the objects to be checked in:
  stcl> ci -dryrun -recursive -exclude *.vg,*.log pci*.* alu
```

Example of Checkin to a Branch

```
This example shows the typical "project branching" approach to
working with multiple branches. The project leader, who has a work
area containing all objects in the project, creates new branches
off the current versions, sets the persistent selector list to use
the new branch, then checks into the new branch. Team members set
their selector lists to point to the new branch and then populate.
Project Leader:
  stcl> mkbranch -rec Rel2.1 .
  stcl> setselector -rec Rel2.1:Latest .
  stcl> ci -com "Creating 1st version on Rel2.1 branch" top.v
Team Members:
  stcl> setselector -rec Rel2.1:Latest .
  stcl> populate
```

CO

co Command

NAME

```
co                  - Checks out the specified objects
```

DESCRIPTION


```
This command checks out the specified objects (files or
collections). A checkout retrieves a working copy of a specified
version of an object from the revision-control vault and places it
in your work area.

Important: You must use the populate command rather than the
co command when fetching modules or module objects. The co
command does not support modules.
```

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.

Object States

Upon checking out the specified objects, DesignSync changes the state of all processed objects--the objects that need an update, as well as the up-to-date objects, as follows:

1. DesignSync obeys the state option (-get, -lock, -reference, -share, -mirror) specified on the command line.
   Note: If objects are designed uncachable, the -share and -mirror states are silently ignored and the objects are populated with -keep. For more information, see the caching commands.
2. If no state option is specified, DesignSync uses the default fetch state as specified by your project leader. See the "fetch preference" help topic for more information.
3. If a default fetch state is not defined, the default behavior for 'co' is -get.

DesignSync changes the states of all objects being processed, even if they are already up-to-date. Specify the -nounifystate option if you want to change the state of only the objects that need an update.

If your team is using the locking design methodology:

- You check out an object with a lock (-lock option) if you plan to edit the object. DesignSync locks the branch associated with the version you are checking out, prohibiting other team members from creating new versions on that branch. You, the holder of the lock, reserve the right to create the next version on that branch.
- You "fetch" -- check out without a lock -- an object if you want read-only access to that object. You use the -get, -mirror, or -share option depending on your team's sharing methodology and the platform you are on (-mirror and -share are only available on Unix platforms).

If your team is using the nonlocking, or merging, design methodology, you always fetch objects, even if you plan to edit them. If you and another team member edit copies of the same object, the first person to check in the object creates the next version. The other person must first merge (-merge option) the changes from this new Latest version into his or her local copy, manually resolve any merge conflicts, then check in the merged object.

Determining the Objects to be Checked Out

```
Arguments to the 'co' command must be versionable objects (files
and collections), or local folders (only meaningful when you use
the -recursive option).

DesignSync determines what version of a design object you want to
check out as follows:
  1. DesignSync obeys the selector list specified by the -version
     option.
  2. If -version is not specified, DesignSync uses the
     object's persistent selector list. The default persistent
     selector is 'Trunk', in which case DesignSync checks out
     the Latest version from Trunk.

See the "selectors" help topic for details on selectors,
selector lists, and persistent selector lists.

In multi-branch environments, you use the 'co' and 'populate'
commands to merge branches. In most cases, each new branch that is
created is eventually merged back into the main development
branch. See the -merge and -overlay options for more information
on merging.

Note: If you specify a collection member as the object to be
operated on, DesignSync skips the object and warns that the
object is not versionable. If DesignSync attempts to operate on
a collection member specified implicitly (through the use of
wildcards or a recursive operation), DesignSync silently skips
the object. You can change this behavior by using the SyncAdmin
"Map operations on collection members to owner" setting. If you
select this setting and DesignSync attempts to operate on a
collection member during a revision control operation,
DesignSync determines the member's owner collection and
operates on the collection as a whole.
```

Checking Out Objects with Different Version Selectors

```
When checking out multiple objects with different version selectors
in a single operation, you can specify the version number or the
branch selector of the objects you are checking out as
an object;selector specification.  The selector specified (in
an object;selector) can be any legal selector, such as:
in a single operation, specify the version number or the branch
 o Trunk:Latest (branch selector)
 o golden (version selector)
 o auto
 o selector list (comma separated)
   Note: The selector specified in an object;selector will always
         override any selector previously set (via setselector).
         The object (in an object;selector) can be:
 o A relative path (in which case 'pwd' will get prefixed)
 o A URL
 o An absolute path
to the co command. Instead of only accepting an object to operate on,
```

Note: You can perform "co object;selector" only on files and not folders.

Checkout Versus Populate

The 'co' and 'populate' commands are similar in that they retrieve versions of objects from their vaults and place them in your work area. They differ in several ways, most notably:

- The 'co' command operates on objects that you already have locally, whereas 'populate' updates your work area to reflect the status of the vault. For example, you use 'co' to change the object state or to get a different version of a local object. You use 'populate' to retrieve versions of newly managed objects created by other team members. Note that for 'co', the object does not actually need to be local if you specify the exact name of the object (no wildcards are allowed). For example, 'co top.v' succeeds if the vault contains 'top.v'. However, it is more typical to use 'populate' to retrieve objects that are not currently in your work area.
- You must use the populate command rather than the co command when fetching modules or module objects. The co command does not support modules.
- The 'co' command considers the persistent selector list for each object that is checked out, whereas 'populate' only considers the persistent selector list for the top-level folder that is being populated.

How the Check-Out Operation Handles Collections with Local Versions

For collection objects that have local versions (for example, custom generic collections), the check-out operation handles local versions in the following way.

When you check out a collection object, the check-out operation removes from your workspace any local version of the object that is unmodified. (Because these local versions exist in the vault, you can refetch them.) The operation then fetches from the vault the specified collection object (with the local version number it had at the time of checkin).

If the current local version in your workspace is modified, the check-out operation fails unless you specify 'co -force'. (The -force option lets the local version with the modified data be replaced with the local version of the object you are checking out.) Note: The current local version is the one with the highest local version number. DesignSync considers a local version to be modified if it contains modified members or if it is not the local version originally fetched from the vault when the collection object was checked out or populated to your workspace.

The -savelocal option tells the check-out operation what to do with

```
local versions in your workspace other than a current local version
that is modified. For information, see OPTIONS.
```

Auto-Branching

```
You can create a new, locked branch by using 'co -lock' with a
selector and autobranching. This branch can be unlocked without
creating a new version by:

 o Using 'cancel' from the workspace where the branch was locked.
 o Using 'unlock' on the vault.
 o Using 'ci' from the workspace where the branch was locked, without
   making modifications.

In these cases, the lock is removed from the vault, the auto-created
branch is removed, and the branch tag is deleted. If the branch is
removed but still exists in the metadata of a workspace, some commands
(such as the 'url' commands and 'vhistory') will fail with "No such
version.
```

SYNOPSIS

```
co  [-[no]comment "text"] [-[no]force] [-exclude <object>[,<object>...]]
    [[-lock [[-keys <mode>] | [-from {local | vault}]] [-merge]
    [-reference]] | [-get  [[-keys <mode>] | [-from {local | vault}]]
    [-overlay <selector>[,<selector>...]]] | -share  |  -mirror |
     -reference] [-merge] [-[no]recursive] [-[no]retain]
    [-savelocal <value>] [-[no]selected] [-trigarg <arg>]
    [-[no]unifystate] [-version <selector>[,<selector>...]]
    [--] [<argument> [<argument...]]
```

ARGUMENTS

- DesignSync Object
- DesignSync Folder

DesignSync Object

```
<DesignSync object> Fetches the object from its vault.
```

DesignSync Folder

```
<DesignSync folder> Fetches the contents of the specified folder.
                    You can also use the -dir option to specify
                    a folder to be fetched.
```

OPTIONS

-comment

-[no]comment "text"	Specifies whether to check out the specified objects with a description attached. By default (-comment), co requires a comment. If you specify -nocomment, you can still provide comments when you check in the objects. Enclose the description in double quotes if it contains whitespace. When you check in the objects, DesignSync appends check-in comments, if there are any, to the check-out comments to create a "version log". The ampersand (&) and equal (=) characters are replaced by the underscore (_) character in revision control notes. If you specify -comment without specifying text for the comment, or if -comment is set as the default, DesignSync prompts for a comment either interactively on the command line or with the defined file editor. For more information about using the defined file editor, see the

DesignSync Data Manager Administrator's Guide, "General Options."

-exclude

-exclude <objects>

Specifies a comma-separated list of objects (files, collections, folders) to be excluded from the operation. Wildcards are allowed.

Do not specify paths in your arguments to -exclude. Before operating on each object (such as during a recursive checkin), DesignSync compares the object's leaf name (path stripped off) to the exclude list to see if there is a match. Because the object's path is removed, the object will not match any object in the exclude list specified with a path. For example, if you specify '-exclude bin/*.exe', you will not successfully exclude bin/foo.exe or any other *.exe file. You need to instead specify '-exclude *.exe', or '-exclude foo.exe' if you want to exclude only 'foo.exe'. The result is that you cannot exclude a specific instance of an object -- you exclude all matching objects.

In addition to objects you specify using the -exclude option, the "These objects are always excluded" field from the Tools->Options-> General->Exclude Lists dialog box in DesignSync lists objects that are always excluded from revision-control operations.

-force

-[no]force

Indicates whether to allow the version being checked out to overwrite a locally modified copy of the object. The default (-noforce) prevents overwriting of locally modified objects. Use this option with caution, because changes in the local copy are lost.

Using -force with -unifystate changes the state of all objects including locally modified objects, in which case, local modifications are overwritten and objects are fetched according to the specified state or the default fetch state.

-from

```
 -from <where>          Specifies whether the object is fetched from
                        the vault ('-from vault') or from the cache or
                        mirror ('-from local').  By default,
                        DesignSync fetches from the cache or
                        mirror ('-from local'), a performance
                        optimization specific to the 'co -lock',
                        'co -get', 'populate -lock', and
                        'populate -get' commands. For details, see the
                        Performance Optimization Overview in the
                        DesignSync Data Manager Administrator's Guide. Note
that
                        this option is silently ignored when the
                        optimization is not possible, including when
                        the -keys option is specified.
```

-get

```
 -get                   Fetch an unlocked copy.

                        You can change whether the local object is
                        read-only (typical when using the locking
                        model) or read/write (typical when using the
                        merging model) by default by using the
                        "Check out read only when not locking" option
                        from the Tools->Options->General dialog box in
                        the DesignSync graphical interface. Your project
                        leader can also set this option site-wide
                        using SyncAdmin.

                        This option is the default object-state option
                        unless a default fetch preference has been defined
                        (see the "fetch preference" command-line topic for
                        more information).
```

-keys

```
 -keys <mode>           Controls processing of RCS-style
                        revision-control keywords in objects during
                        checkout. Note that keyword expansion is not
                        the same as keyword update. For example, the
                        $Date$ keyword is updated only during checkin;
                        its value is not updated during checkout or
                        populate.

                        Available modes are:

                        kkv - (keep keywords and values) The local
                        object contains both revision control keywords
                        and their expanded values; for example,
                        $Revision: 1.4 $.
```

kk - (keep keywords) The local object contains revision control keywords, but no values; for example, $Revision$. This option is useful if you want to ignore differences in keyword expansion, such as when comparing two different versions of an object.

kv - (keep values) The local object contains expanded keyword values, but not the keywords themselves; for example, 1.4. This option is not recommended if you plan to check in your local objects. If you edit and then check in the objects, future keyword substitution is impossible, because the value without the keyword is interpreted as regular text.

ko - (keep output) The local object contains the same keywords and values as were present at check in.

Note:
- The -keys option works only with the -get and -lock options. If you use the -share or -mirror option, keywords are automatically expanded in cached or mirrored objects, as if the '-keys kkv' option was used.

- The EnableKeywordExpansion setting controls the expansion of keys during a check-out operation. This setting overrides the -keys option; if disabled, there is no expansion of keys, regardless of the use of the -keys option. By default, this setting is enabled; the check-out operation expands keywords. To change the default setting, your Synchronicity administrator can use the SyncAdmin tool. For information, see SyncAdmin help.

- The check-out operation detects binary files and collections and does not expand keywords when operating on these objects, even if the Enable Keyword Expansion setting is on.

-lock

-lock

Lock the branch after retrieving the specified version from the vault. Only the user who has the lock can check in a newer version of the object on that branch. Use this option when your project team uses the locking model (as opposed to the merging model) and you intend to make changes to an object. Use the 'ci' or 'cancel' command to remove the lock.

You can use the -lock option to acquire a lock for an object you have already edited. In this case, DesignSync locks the object and retains your edited version without overwriting it. DesignSync only locks the object if there have been no other changes checked in for the object and if no other users have acquired a lock on the object since you last fetched it.

Note: If you specify 'co -lock', then by default the check-out operation also uses the '-from local' option. The result is that the check-out operation locks the object in the vault and keeps local modifications in your workspace. See the -from option for information.

Use the -lock option with the -reference option to check out a locked reference. Locked references are useful if you intend to generate an object and want to lock it before regenerating, as opposed to editing the previous version. Upon generation of the object, it automatically becomes a locked copy rather than a locked reference. Getting locked references for generated objects is faster because DesignSync does not fetch the previously generated object. If the object exists already in the workspace, DesignSync deletes it. If the object exists and is locally modified, the operation fails. If you intend to overwrite the modifications, use -force to create the locked reference. If the default fetch state is 'reference' and you specify the -lock option without the -reference option, DesignSync leaves locked copies of the objects in your workspace; you must explicitly apply the -reference option with the -lock option if you want locked references in your workspace.

-merge

-merge

Fetch the Latest version of the object on the branch specified by the persistent selector list, and merge it with the current, locally modified version. If you are not doing an overlay merge (see -overlay) and the current version is not locally modified, the -merge defaults to a -get and fetches the new version without merging. By definition, a merge expects a locally modified object, so the -force option is not required.

```
Merging is not supported for collection objects
(for example, Cadence collections).

The -merge option supports the merging work
model (as opposed to the locking work model)
where multiple team members can check out and
edit the Latest version concurrently. The
first team member to check in creates the next
version. Other team members must merge the new
Latest version into their local copy before
they can check in their changes.

If there are no merge conflicts, then the merge
succeeds, leaving you the merged file in
your work area. If there are conflicts,
DesignSync issues a warning, and you must edit
the merged file to resolve the conflicts
before DesignSync allows you to check in the
merged version. Conflicts are shown as
follows:
  <<<<<<< local
  Lines from locally modified version
  =======
  Lines from selected server version
  >>>>>>> versionID

DesignSync considers the conflicts resolved
when the file no longer contains any of the
conflict delimiters (exactly 7 less-than,
greater-than, or equal signs starting in
column 1). The status of an object, as
displayed by 'ls' or from the List View in the
DesignSync graphical interface, indicates if
conflicts exist. The 'url inconflict'
command also determines whether a file has
conflicts.

Most merges are between two versions on the
same branch; the current branch and
the branch specified by the persistent
selector list are typically the same. However,
a merge can also be performed across branches
by setting the persistent selector list to a
different branch. Following the merge, you are
on the branch associated with the version
specified by the persistent selector
list. This is a "merge to" operation. If you
want to stay on the current branch instead,
use the -overlay option. Overlay, or "merge
from", merges are more common when merging
branches. See the -overlay option for details.

Notes:
o Although -merge is intended to be used
  with the merging work model, you can
  specify -lock with -merge to lock the
  branch as part of the merge operation.
```

o The -merge option implies -get unless you specify -lock. You can also explicitly specify -get.
o The -merge option is mutually exclusive with -mirror and -share.
o The -version and -merge options are mutually exclusive unless you specify '-version Latest'.

-mirror

-mirror

Create a symbolic link from the work area to the object in the mirror directory. This option requires that you have associated a mirror directory with your work area (see the setmirror command). In addition, the effective workspace selector (set using 'setselector', 'setvault', or the -branch option) must match the mirror workspace selector.

Note:
o This option is not supported on Windows platforms.
o When operating on a mirror directory, the check-out operation does not require an exact match between the workspace selector and the mirror selector in the case of <BranchName>: or Trunk selectors.
The check-out operation considers
- A selector of 'Trunk' to be the same as 'Trunk:' and 'Trunk:Latest'
- A selector of <BranchName>: to be the same as <BranchName>:Latest

-overlay

-overlay <selectors>

Replace your local copies with the versions specified by the selector list. The current-version status, as stored in local metadata, is unchanged. For example, if you have version 1.5 (the Latest version) of a file and you overlay version 1.3, your current version is still 1.5. You could then check in this overlaid version. This rollback operation is equivalent to checking out version 1.3, then using 'ci -skip' to check in that version.

Note: The overlay operation overlays specified local copies even if you checked out those versions with a lock.

Typically, you use -overlay with -merge to merge the two versions instead of overlaying one version on another. The combination of -overlay and -merge lets you merge from one branch to another, the recommended method for merging across branches. Following the overlay merge, you are working on the same branch as before the operation.

The -overlay and -version options are mutually exclusive. You specify the version you want to to overlay as an argument to the -overlay option. The -version option always updates the 'current version' information in your work area, which is not correct for an overlay operation.

Note:
- To use -overlay to specify a branch, specify both the branch and version as follows: '<branchtag>:<versiontag>', for example, 'Rel2:Latest'. You can also use the shortcut, '<branchtag>:', for example "Rel2:". If you don't explicitly specify the branch selector in this way, DesignSync does not resolve the selector as a branch selector.
- The -overlay option implies -get, but you can also explicitly specify -get.
- The -overlay option is mutually exclusive with -mirror, -share, -lock, and -version options.

-[no]recursive

-[no]recursive — Indicates whether to perform this operation on all objects in all subfolders of the specified folders. This behavior (-recursive) is the default behavior of the graphical interface, but not of the command line interface.

-reference

-reference — Create a reference to an object in the vault. A reference does not have a corresponding file on the file system but does have local metadata that makes the reference visible to Synchronicity programs. Create a reference when you want your work area to reflect the contents of the vault but you do not need a physical copy. Use the -reference option with the -lock option to create a locked reference. Locked references are useful if you intend to generate an object and want to lock it before regenerating,

as opposed to editing the previous version.

Note: Synchronicity recommends against using the -reference option when operating on a collection object. If you use the -reference option, DesignSync creates a reference in the metadata for the collection object but member files are not processed and are not included in the metadata.

-[no]retain

-[no]retain

Indicates whether to retain the 'last modified' timestamp of the checked-out objects as recorded when the object was checked into the vault. If the workspace is set to use a mirror, or the checkout is run using -share, this will also apply to the object placed in the mirror or LAN cache if the object doesn't already exist in the mirror or cache. The links in your work area to the cache or mirror have timestamps of when the links were created.

If you specify the -reference option, no object is created in your work area, so there is no timestamp information at all.

If an object is checked into the vault and the setting of the -retain option is the only difference between the version in the vault and your local copy, DesignSync does not include the object in checkout operations.

If you do not specify '-retain' or -noretain', the co command follows the DesignSync registry setting for Retain last-modification timestamps. By default, this setting is not enabled; therefore, the timestamp of the local object is the time of the check-out operation. To change the default setting, your Synchronicity administrator can use the SyncAdmin tool. For information, see SyncAdmin Help.

The mirror system, by default,fetches objects into the mirror with the -retain option. The mirror administrator, however, can define mirrors to use the -noretain option. The default setting should agree with the Retain last-modification timestamp registry setting to maintain consistency. See the "Mirror Administration Server Registry Settings" topic for setting of the co or populate options for mirrors.

Note: When fetching from the cache or mirror (by specifying the '-from local' option), the last modified timestamp comes from the file in the cache or mirror, not from the version that was checked into the vault. If the file was fetched into the cache or mirror with the -retain option, these two timestamps are the same. But if the file was fetched into the cache or mirror with the -noretain option and then fetched into the workspace with both the '-from local' and '-retain' options, the 'last modified' timestamp used is the time the object was fetched into the cache or mirror.

-savelocal

-savelocal <value> This option affects collections that have local versions.

When it checks out an object, the check-out operation first removes from your workspace any local version that is unmodified. (To remove a local version containing modified data, specify 'co -force'.) Then the check-out operation fetches the object you are checking out (with the local version number it had at the time of checkin).

The -savelocal option specifies the action that the check-out operation takes with modified local versions in your workspace (other than the current, or highest numbered, local version). (DesignSync considers a local version to be modified if it contains modified members or if it is not the local version originally fetched from the vault when the collection object was checked out or populated to your workspace.)

Specify the -savelocal option with one of the following values:

save - If your workspace contains a local version other than the local version being fetched, the check-out operation saves the local version for later retrieval. See the 'localversion restore' command for information on retrieving local versions that were saved.

fail - If your workspace contains an object with a local version number equal to or higher than the local version being fetched, the check-out operation fails. This is the default

action.

Note: If your workspace contains an object with local version numbers lower than the local version being fetched and if these local versions are not in the DesignSync vault, the check-out operation saves them. This behavior occurs even when you specify '-savelocal fail'.

delete - If your workspace contains a local version other than the local version being fetched, the check-out operation deletes the local version from your workspace.

If you do not specify the -savelocal option, the check-in operation follows the DesignSync registry setting for SaveLocal. By default, this setting is "Fail if local versions exist" ('-savelocal fail'). To change the default setting, a Synchronicity administrator can use the Command Defaults options pane of the SyncAdmin tool. For information, see SyncAdmin Help.

Note:
- You may need to use the -force option with the -savelocal option to allow the object being checked out to overwrite a locally modified copy of the object. For an example scenario, see EXAMPLES.
- The -savelocal option only affects objects of a collection defined by the Custom Type Package (CTP). This option does not affect objects that are not part of a collection or collections that do not have local versions.

-[no]selected

-[no]selected	Indicates whether to perform this operation on objects in the select list (see the "select" command), as well as the objects specified on the command line. By default, (-noselected), co does not use the select list. If no objects are specified on the command line, the -selected option is implied.

-share

-share	Fetch a shared copy. Shared objects are stored in the file cache directory and a link to the cached object is created in the work area.

Note: This option is not supported on
Windows platforms.

-trigarg

-trigarg <arg> Specifies an argument to be passed from the command line to the triggers set on the check-out operation. If the argument contains whitespace, enclose the argument within double quotation marks ("") if using the dss command shell or braces ({}) if using the stcl command shell.

-[no]unifystate

-[no]unifystate Sets the state of all objects processed, even up-to-date objects, to the specified state (-get, -lock, -share, -mirror, or -reference) or to the default fetch state, if no state option is specified. See the "fetch preference" help topic for more information.

By default, 'co' changes the state of all processed objects that need an update as well as up-to-date objects (-unifystate). If the -nounifystate option is specified, DesignSync changes the state of only the objects that need an update.

The -unifystate option does not change the state of locally modified objects; use -force with -unifystate to force a state change, thus overwriting local modifications. The -unifystate option does not cancel locks; you can check in the locked files, use the 'cancel' command to cancel locks you have acquired, or use the 'unlock' command to cancel team members' locks.

Note: The -unifystate option is ignored when you lock design objects. If you check out locked copies or locked references, DesignSync leaves all processed objects in the requested state.

-version

-version <selector> Specifies the versions of the objects to be checked out. The selector list you specify (typically a version or branch tag) overrides the object's persistent selector list, but the

persistent selector list is not modified.

If you specify a date selector (Latest or Date(<date>)), you must specify a branch or version with it. For example, you want to check out the latest version of 'Gold:,Trunk' specify 'co -version Latest'.

If you specify the specific version number for the Latest version of objects on a retired branch, the co command fetches the objects into your workspace. If you specify the version as a branch selector for a retired branch, the co command does not fetch the specified retired files.

Note:
- If the selector you specify using -version does not exactly match the work area selector, your next populate will be automatically forced to be full (non-incremental). See the 'populate' command description for more information.
- To use -version to specify a branch, specify both the branch and version as follows: '<branchtag>:<versiontag>', for example, 'Rel2:Latest'. You can also use the shortcut, '<branchtag>:', for example "Rel2:". If you don't explicitly specify the branch selector in this way, DesignSync does not resolve the selector as a branch selector.
- Specify '-version Latest' only if necessary because in some cases, DesignSync augments the selector to be '<branchtag>:Latest'. Appending ':Latest' to the selector might not match the work area selector. This mismatch invalidates your next incremental populate resulting in a slower, full populate.
- The -version option is mutually exclusive with the -mirror and -merge options unless you specify '-version Latest'. You do not have to specify -version with -mirror.
- The -version and -overlay options are mutually exclusive.

--

-- Indicates that the command should stop looking for command options. Use this option when an argument to the command begin with a hyphen (-).

RETURN VALUE

```
In dss/dssc mode, you cannot operate on return values, so the return
value is irrelevant.

In stcl/stclc mode, two lists are returned, where the first list
is non-empty if at least one object was successfully processed,
and the second list is non-empty if at least one object failed.

Notes:
 - "successfully processed" may not mean "successfully checked
   out". For example, attempting to check out an object that you
   already have in your work area is considered a success even though
   no checkout occurs.
 - Scripts should only test for non-empty lists to
   determine success or failure. The actual content of a non-empty
   list currently takes the form "Objects succeeded (n)" and
   "Objects failed (n)", where 'n' is the number of objects that
   succeeded or failed. However, these return values are subject to
   change in a future release.
 - If all objects fail, an exception occurs (the return value is
   thrown, not returned).
 - If a comment editor is defined, but cannot be used, the command
   automatically switches to the interactive command-line comment
   mode.
```

SEE ALSO

```
ci, populate, cancel, localversion, select, setmirror, setselector,
selectors, command defaults
```

EXAMPLES

- Example of Checking Out a File with a Lock
- Example of Checking Out a File From a Branch
- Example of Updating File Links in the Current Directory Recursively
- Example of Merging a File into Your Work Area
- Example of Merging From a Different Branch
- Example of Checking out and Locking a File Reference
- Example of Checking Out Objects With Different Version Selectors
- Example of Checking Out a Collection Object

Example of Checking Out a File with a Lock

```
The following example checks out for editing the Latest version of
a single file. The branch is locked to prevent others from checking
in a newer version until after the changes are made and the file is
checked in, or the checkout is canceled.

  dss> co -lock -comment "Trying an experiment" pcimaster.vbh
```

```
After making changes to the file, you check in using the following
command, creating a new version:

  dss> ci -comment "Experimental version" -keep pcimaster.vbh
```

Example of Checking Out a File From a Branch

```
In the following example, the version of 'top.v' associated with
the 'Gold' tag is fetched. If 'Gold' is a branch tag, then the
Latest version of 'top.v' on that branch is fetched. Otherwise, the
version tagged 'Gold' is fetched. If 'top.v' does not have a branch
or version tagged 'Gold', the checkout fails.

 dss> co -get -version Gold top.v
```

Example of Updating File Links in the Current Directory Recursively

```
In the following example, an entire work area is updated to have
links to the Latest versions in the cache directory:

  dss> co -rec -share *

Links are only created for those objects you already have in your
work area. If your intent is to have your work area reflect the
current status of the vault, including any new files that are not
in your work area, use the populate command instead:

 dss> pop -rec -share
```

Example of Merging a File into Your Work Area

```
The following example demonstrates the non-locking (merging) design
methodology. The vault for 'alutest.txt' contains four versions:
1.1 through 1.4. Two developers, Ann and Bill, fetch (check out
without a lock) version 1.4 of 'alutest.txt':

  dss> co -get alutest.txt

Both Ann and Bill make modifications to their local copies, and
Bill checks in his changes first:

  dss> ci -nocomment -keep alutest.txt

The checkin succeeds, creating version 1.5 in the vault. Later, Ann
tries to check in the file, but DesignSync errors because a new
Latest version exists in the vault. An 'ls' command on
'alutest.txt' confirms the status of the file as 'Needs Merge'.
Ann must merge the changes contained in the Latest version
```

into her local copy:

```
dss> co -merge alutest.txt
```

DesignSync merges version 1.5 with Ann's local copy and informs Ann if there are any merge conflicts. Ann must resolve any conflicts before she can check in the merged file. (See the -merge option description for information on resolving conflicts.) Once conflicts are resolved, Ann's local file contains both her changes and Bill's changes, and Ann can now check in the file, creating version 1.6:

```
dss> ci -nocomment alutest.txt
```

Example of Merging From a Different Branch

In the following example, you are working on the main development branch (Trunk), but need to pick up some bug fixes that were made on another branch (Dev). Because you are merging from another branch, you use the combination of -merge and -overlay:

```
dss> co -merge -overlay Dev:Latest alu.v decoder.v
```

DesignSync fetches the Latest versions of 'alu.v' and 'decoder.v' from the 'Dev' branch and merges them into your local copies from the 'Trunk' branch.

If you wanted to pick up all the changes from another branch, you would use the 'populate -merge -overlay' command.

Example of Checking out and Locking a File Reference

In the following example, you have a managed object that you intend to regenerate. You want to obtain a lock, but you do not want to fetch the existing object as you intend to overwrite its contents. You use the -lock and -reference options to create a locked reference:

```
dss> co -reference -lock -nocomment top.netlist
```

Example of Checking Out Objects With Different Version Selectors

This example shows the checkout of multiple objects with differing version selector.

```
stcl> co file1;1.2 file2;bugfix:Latest file3;rdy_for_testing
```

This will fetch version 1.2 of file2, the Latest version of file2 on the bugfix branch, and the version of file3 tagged "rdy_for_testing" on the default Trunk ("1") branch.

```
You can also use wildcards. For example,
   stcl> co "f*;1.5"
will fetch version 1.5 of all object names beginning with "f*".

You cannot check out folders by specifying the version selector.
For example:
   stcl> co -rec "subdir;1.5
will fetch items into the "subdir" folder, ignoring the selector
"1.5".
```

Example of Checking Out a Collection Object

```
This example shows the checkout of a collection object that deletes
local versions.

Note: The DesignSync Milkway integration has been deprecated. This
example is meant to be used only as a reference.

Mike checks out the Milkyway collection object top_design.sync.mw,
which fetches local version 4 of that object to his workspace. He
modifies the object and creates local version 5. Then he checks in
top_design.sync.mw. The check-in operation does not remove local
versions, so Mike now has local version 5 (unmodified) and local
version 4 in his workspace. (Note: Because the checkin removes
local version 4's link to with the original check-out operation of
top_design, DesignSync now considers local version 4 to be
modified.)

Ben checks out top_design.sync.mw (local version 5). He creates
local version 6 and checks the object in.

Mike does some work on top_design, which creates local versions 6,
7, and 8 in his workspace. Then he decides to use Ben's version of
the top_design object instead.

Mike checks out the top_design object (local version 6) from the
vault. He doesn't want to save his local versions of the object, so
he uses the '-savelocal delete' option to delete local versions
other than the local version being fetched. In addition, he uses
the -force option. (Because he created local versions 6, 7, and 8
of top_design in his workspace, DesignSync considers the top_design
object to be locally modified and by default the checkout operation
will fail. To successfully check out top_design, Mike must use
'-force'.)

stcl> cd /home/tjones/top_design_library
stcl> co top_design.sync.mw -savelocal delete -force

Before fetching top_design.sync.mw from the vault, the check-out
operation first deletes all local versions that are unmodified. So
the check-out operation deletes Mike's local version 6 because that
was the version originally fetched and its files are unmodified.
```

```
Because Mike specified the -force option, the checkout also deletes
Mike's local version 8 (the current local version containing
modified data for the object).

Because Mike specified '-savelocal delete', the check-out operation
deletes local version 7, which is not in the vault and is not the
modified data Mike agreed to delete when he specified '-force'.
If Mike specified '-savelocal save', DesignSync would save local
version 7. Local version 4 is also deleted.

Finally, Mike's check-out operation fetches the top_design object
(Ben's local version 6) from the vault.

Mike continues to modify the top_design object, creating local
version 7, which he checks in.

Ben has local versions 5 and 6 in his workspace. He checks out the
top_design collection object (local version 7), specifying
'-savelocal fail'. The check-out operation removes local version 6
from his workspace because it is unmodified. The operation saves
local version 5 even though it is modified. (Ben's checkin of local
version 6 removed local version 5's link to with the original
checkout of top_design, so DesignSync now considers local version 5
to be modified.) The checkout also takes place despite the fact that
Ben specified '-savelocal fail'. The check-out operation takes this
action because local version 5 has a number lower than the local
version being fetched. If Ben had instead specified 'co -savelocal
delete', the checkout would delete local version 5.
```

populate

populate Command

NAME

```
populate            - Fetches or updates specified objects
```

DESCRIPTION

- Forcing, Replacing, and Non-Replacing Modes

```
This command fetches the specified objects from the server
into your current workspace folder or a folder you specify
with the -path option.

Typically, you create your work area, or workspace, and perform your
first populate, an initial populate, as a full populate.  Once your
work area is populated, you can use the populate, co, and ci commands
to selectively check out and check in specific objects. You should
also populate periodically to update your work area with newly
managed objects, as well as newer versions of objects you have
locally.

Populate is used to create or update the objects in your
workspace. Populate features many ways to control the data brought
into your workspace. Because of the complexity of the populate
features, the description section is divided into sections that
detail the major features and functionality of populate.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

Object States

```
Upon populating your workspace, DesignSync determines in what
state to leave the fetched objects in your work area:
  1. DesignSync obeys the state option (-get, -lock, -share,
     -mirror, -reference) specified on the command line.
  2. If no state option is specified, DesignSync uses the default
     fetch state as specified by your project leader. See
     the "fetch preference" help topic for more information.
  3. If a default fetch state is not defined, the default
     behavior for 'populate' is -get.

Important: For both incremental and full populate operations,
DesignSync changes the state of only those objects that need
updating.  DesignSync does not change the state of up-to-date
objects during the populate operation.

The following methods let you override the default behavior
to change the states of all objects during a populate operation:
  o To change the state of up-to-date objects during a populate,
    use the -unifystate option.  To change the state of all
    objects that need an update as well as up-to-date
    and locally modified objects, use -unifystate with the -force
    option.
  o Unlocked locally modified objects are not overwritten unless
    you specify -force. For example, if you modify a fetched file,
    then execute a 'populate -share' command, your locally modified
```

file is not replaced by a link to a file in the cache unless you also specify -force. Locked files are not overwritten by the -force option.
- To make populating with links to the mirror a fast operation, links are created only if no object (locally modified or not) or link already exists in your work area. You must specify -unifystate to change the state of existing objects and links in this case. Use -force, as well, to overwrite locally modified objects that are not locked and to remove objects that are not in the current configuration.

Note: If the object is designated as uncachable, attempts to place objects in the cache (populate -mirror; populate -share) will automatically populates the workspace with unlocked copies (-keep mode). For more information on cachability, see the "caching" commands.

How Populate Handles Selectors

DesignSync determines what versions of objects to populate as follows:

1. DesignSync obeys the selector list specified by the -version option.
2. If -version is not specified, DesignSync uses the persistent selector list of the top-level folder being populated. The default persistent selector is 'Trunk', in which case DesignSync checks out the Latest versions from Trunk.

Notes:
- If you specify a selector or a selector list for the populate operation using the -version option and the selector does not exactly match the workspace selector, an incremental populate is no longer valid. In this case, DesignSync performs a full populate even if the -incremental option is specified. See "Incremental Versus Full Populate" above for more information.

Important: The persistent selector lists of individual managed objects (files or collections) and subfolders are not obeyed by the 'populate -recursive' operation.

- A 'populate -recursive' command without the -version option populates a work area based on the persistent selector list of the top-level folder you are populating, skipping any subfolder or managed object that has a persistent selector list that differs from the top-level folder. You must issue the populate command separately for any skipped subfolder.

- A 'populate -recursive -version <selectorList>' command uses the specified selector list and ignores all persistent selector lists. In the case of '-version Latest', the persistent selector list of the top-level folder being populated is augmented with 'Latest' and that augmented persistent selector

list is used for the populate operation.

The supported DesignSync use models (single-branch development, project branching, and auto-branching) assume that persistent selector lists across a work area are consistent. Use caution when using commands that leave you with inconsistent local metadata, such as using 'setselector' or 'mkbranch' on individual objects.

See the "selectors" help topic for details on selectors, selector lists, and persistent selector lists. For more information about how the -version switch is managed, see the -version in OPTIONS.

Populate Log

Because populate operations can be long and complex, you may want to specify a log file to contain only the output of the populate command to store for later reference.

You can specify the log file on an as needed basis using the -log option or by setting a log file name using the command defaults system. If the log file specified does not exist, DesignSync creates it before it begins the populate command processing. If the log file does exist, DesignSync appends the new populate information to the file.

Tip: If you set a default log value for populate, check the file size periodically and, if the file is getting too large to use comfortably, rename the file to save the information, or remove the file if you no longer need it.

Notes:

- If a log file is defined in the command defaults system and two users run populate simultaneously, the populate output may become interlaced in the log file.
- Regardless of whether you create a populate log, the DesignSync client log file contains the output of the populate command along with all the other commands typed into the DesignSync client session.

How Populate Handles Collections with Local Versions

For collection objects that have local versions (for example, custom generic collections), the populate operation handles local versions in the following way.

When you populate a folder containing a collection object, the populate operation removes from your workspace any local version of the object that is unmodified. (Because these local versions exist in the vault, you can refetch them.) The operation then

fetches from the vault the specified collection object (with the local version number it had at the time of checkin).

If the current local version in your workspace is modified, the populate operation fails unless you specify 'co -force'. (The -force option lets the local version with the modified data be replaced with the local version of the object you are checking out.) Note: The current local version is the one with the highest local version number. DesignSync considers a local version to be modified if it contains modified members or if it is not the local version originally fetched from the vault when the collection object was checked out or populated to your workspace.

The -savelocal option tells the populate operation what to do with local versions in your workspace other than a current local version that is modified. For information, see OPTIONS.

Setting up Your Workspace

Before you can use populate to maintain your workspace, you must set up your workspace.

Note: The Workspace Wizard from the DesignSync graphical user interface simplifies the task of setting up a work area by taking you through a step-by-step process.

The typical steps when you set up a new workspace are:

1. Associate a local folder with a vault folder. See the setvault command for details. This also creates the workspace root, if one does not already exist at the level of the local folder or above.

2. Optionally set the persistent selector list for the folder as part of the setvault command or with the setselector command. If you do not set the persistent selector list, it is inherited from the parent folder. This step is necessary only if you are working on a branch other than the default Trunk branch.

3. Optionally associate a local folder with a mirror directory. See the "setmirror" command for details. If the mirror directory for your project later changes, run the setmirror command from the same directory in which the original setmirror command was run. That will update the workspace's mirror association, which will be inherited by lower level directories. Run the populate command with the options '-recursive -mirror -unifystate' to correct existing workspace links to mirror files. This will correct the links so that they point to the mirror directory's new location.

4. Populate the work area with the specified design objects from the vault. Populate determines the set of versions from the persistent selector list or from the -version option, if

applicable. Apply the -recursive option to create a local hierarchy that matches the vault's hierarchy. Without -recursive, populate only fetches the specified objects.

Incremental Versus Full Populate

By default, the populate command attempts to perform an incremental populate which updates only those local objects whose corresponding vaults have changed. Avoiding a full populate improves the speed of the populate; however, some circumstances make a full populate necessary. In the following cases, DesignSync automatically performs a full populate:

- If you are populating with a different configuration to that of the work area (having used setselector, setvault, 'populate -version', or 'co -version' to change a selector), DesignSync performs a full populate. For example, if your last full populate specified the VendorA_Mem configuration, but you now want VendorB_Mem files, then DesignSync automatically performs a full (nonincremental) populate. If the selector you specify resolves to the same exact selector as that of the work area, DesignSync does perform the incremental populate. In this case, the selectors must be an exact match; for example, a selector which resolves to 'Main' does not match 'Main:Latest'. If you are populating with a new configuration, consider using the -force option to remove objects of the previous configuration from your work area.

- If you use the -lock option, DesignSync performs a full populate.

- If you use the -unifystate option, DesignSync performs a full populate.

- If you perform a nonrecursive populate on a subfolder, all of the folders above the subfolder are invalidated for subsequent incremental populate operations. Incremental populate works by exploiting the fact that if a folder is up-to-date, all of its subfolders are also up-to-date, making it unnecessary to recurse into them. Because a recursive populate was not performed for the subfolder, DesignSync cannot ensure that its subfolders are up-to-date; thus, all incremental populates are invalidated up the hierarchy.

- If you perform a nonrecursive populate on a folder, DesignSync essentially runs a full populate rather than the default incremental populate. Your next populate is incremental from the last recursive populate. If you have not previously run a recursive populate, the subsequent populate is a full populate.

- If the ProjectSync configuration file, sync_project.txt, has been updated through the ProjectSync interface

(Project->Edit or Project->Configuration), thus updating the DesignSync REFERENCEs, DesignSync performs a full populate. If, however, the configuration in the sync_project.txt file is hand-edited and not updated using ProjectSync, you must specify the -full option to force a full populate.

Note: If you are using a mirror (by specifying -mirror or having a default fetch state of Links to mirror), an incremental populate does not necessarily fetch new objects checked in, nor remove links to objects deleted by team members until after the mirror has been updated.

For the following cases, perform a full populate instead of an incremental populate:

- If you have excluded a folder by using the -exclude, or -noemptydirs option with the populate command, a subsequent incremental populate will not necessarily process the folder of the previously excluded object. DesignSync does not automatically perform a full populate in this case. To guarantee that previously excluded objects are fetched, specify the -full option for the subsequent populate operation.

- For modules, DesignSync tracks changed members and therefore always performs an incremental populate. Specify a full populate to force data that has been manually removed, removed locally, or renamed locally to be fetched again from the server. If the file was renamed, you may have to specify the -force option as well.

  Also, specify a full populate if you have an unchanged, but out-of-date or out-of-sync version in your workspace to force DesignSync to fetch the up-to-date version of the object.

- If the ProjectSync configuration file, sync_project.txt, has been hand-edited, thus updating the legacy module REFERENCEs, use the -full option to perform a full populate. If, however, the sync_project.txt file has been changed through the ProjectSync interface (Project->Edit or Project->Configuration), DesignSync performs the full populate without your having to specify -full. For more information, see "Interaction with Legacy Modules" below.

- If the system clock on the SyncServer machine where your vault is located is turned back (for example, to correct clock skew between machines), you must perform a full (nonincremental) populate to synchronize the client and server metadata.

- If you interrupt a populate operation (using Control-c, for example), you should use populate -full on your next populate of that folder.

The default populate mode is -incremental; however, your project leader can set this default using SyncAdmin.

If you are updating mirrors, use the -incremental option. If you specify the -full option, mirror updates can take a long time

to complete.

Note: If you remove objects from the work area by using operating system commands rather than DesignSync commands, an incremental populate cannot fetch these objects. Use the -unifystate or -full option to fetch them.

How Populate Handles Retired Objects

When you populate with the Latest versions of design objects from a given branch, DesignSync does not populate objects for which that branch is retired. Objects in your local work area whose branches have been retired from the vault are not deleted during the populate operation unless you specify -force.

It is important to note that objects on retired branches remain part of past configurations. When you use the populate command to retrieve a configuration other than 'Latest', objects from retired branches are fetched. The populate command fetches objects from retired branches, thereby preserving past configurations, if the selector used for the operation is any of the following:

- A version tag other than 'Latest', even if the version tag points to the Latest version
- A version number, even if that number corresponds to the Latest version
- <branchtag>:Date(<date>) or <branchtag>:VaultDate(<date>)

Note: If the selector specifies a branch in the form '<branchtag>:', DesignSync augments the selector to be <branchtag>:Latest, meaning, 'Get the Latest version from the specified branch'. In this case, objects from retired branches are not fetched.

Note: For information about how retired files by cross-branch merge operations, see "Merging Across Branches."

Merging Across Branches

In multi-branch environments, you use the populate command to merge branches. In many cases, a new branch that is created is eventually merged back into the main development branch.

The branch being merged is populated into a workspace containing the destination branch using the populate command with the -merge and -overlay options. This type of merge is called "cross-branch merge."

As with all populate operations, cross-branch merging uses the filter and exclude filter lists set on the workspace, in the command defaults system,on the command line.

Merging includes two basic types of merging: file contents, and structural changes.

o File content merging:
  File content merging is applicable to all DesignSync objects.
  DesignSync merges the contents of files with the same natural path
  to the best of its ability. If the files are binary files which
  cannot be merged, populate returns an error message.

o Structural changes for DesignSync objects.
  Structural changes for DesignSync objects are non-content based
  changes to the DesignSync objects that can affect the merge
  results.

  - Removed objects: If an object is present in the local workspace,
    but not in the merge version, the object in the local workspace
    is unchanged. If you want to remove it from the merged version,
    you must explicitly remove or retire the object.

  - Added objects: If an object is not present in the local workspace,
    but is present in the merge version, the object is added to the
    local workspace. The merge action sets the following local
    metadata properties:

      o The current version is set to the fetched version, providing
        a meaningful branch-point version when you check the object
        into branch A.
      o The current branch information is undefined.
      o The persistent selector list for the object may be augmented
        to ensure that branch A is automatically created when you
        check in the object, thus eliminating the need to use ci
        -new. The following list explains how the persistent
        selector list is handled by the operation.
        1. If the first selector in the persistent selector list is a
           VaultDate() or Auto() selector, then the persistent
           selector list is not modified.
        2. If the first selector is of the form <branch>:<version>,
           then the first selector is modified to be Auto(<branch>).
        3. Otherwise, the first selector is modified to be
           Auto(<selector>). The object may be automatically checked
           in to the DesignSync vault, depending on the value of the
           persistent selector.

  - Retired objects:

      o If the object is active in the workspace and retired on the
        branch version, the workspace version is unchanged.
      o If the object is retired or does not exist in the workspace,
        and is retired or does not exist on the branch, the workspace
        version is unchanged.
      o If the object is retired in the workspace and active on the
        branch version, the version from the branch version is merged
        with the workspace version. The object remains retired and
        must be unretired in order to be checked in.

After a cross-branch merge has been performed, you can view the
status of the affected files using the ls command with the -merged
<state> -report D options. The -merged option allows you to restrict

the list to a particular type of merge operation (add, remove, rename, all) and the -report D option shows you the current state of the object in your workspace. For more information, see the ls command help.

When a merge is performed on a DesignSync object, a merge edge is created automatically to maintain a list of the changes incorporated by the merge. This identifies a closer-common ancestor to provide for quicker subsequent merges.

For more information about merging, see the -merge and -overlay options, and the DesignSync Data Manager User's Guide topic: "What Is Merging?"

Populate Versus Checkout

The co and populate commands are similar in that they retrieve versions of objects from their vaults and place them in your work area. They differ in several ways, most notably:

- You typically use the co command to operate on objects that you already have locally, whereas populate updates your work area to reflect the status of the vault.
- The co command considers the persistent selector list for each object that is checked out, whereas populate only considers the persistent selector list for the folder that is being populated.

Note: The co and populate commands are gradually being merged.

Understanding the Output

The populate command provides the option to specify the level of information the command outputs during processing. The -report option allows you to specify what type of information is displayed:

If you run the command with the -report brief option, the populate command outputs a small amount of status information including, but not limited to:

- Failure messages.
- Warning messages.
- Informational messages concerning the status of the populate
- Success/failure/skip status

If you do not specify a value, or the command with the -normal option, the populate command outputs all the information presented with -report brief and the following additional information:

- Informational messages for objects that are updated by the populate operation.
- Messages for objects excluded from the operation (due to exclusion filters or explicit exclusions).

If you run the command with the -report verbose option, the populate

command outputs all the information presented with -report normal and the following additional information:
 o Informational message for every object examined but not updated.

If you run the command with the -report error option, the populate command outputs the following information:
 o Failure messages.
 o Warning messages.
 o Success/failure/skip status messages.

Forcing, Replacing, and Non-Replacing Modes

You can use these three modes to specify how the populate command updates your work area:

- Forcing mode (specified with the -force option) synchronizes your work area with the incoming data, including locally modified objects. In this mode, the populate command updates the managed objects in your work area. It replaces or removes managed objects regardless of whether the objects have been locally modified. Thus, forcing modifies your work area to match the set of objects being fetched. Note: The default -noforce option operates as if -replace has been specified.

- Replacing mode (specified with the -replace option) also synchronizes your work area with the incoming data, but without affecting locally modified objects (the default behavior).

  Note: Retired files that have been kept or re-added to the workspace are considered locally modified.

  Replacing mode, unlike forcing mode, leaves intact managed objects that have been locally modified.

- Non-replacing mode (specified with the -noreplace option) is the least disruptive mode; this mode might require you to clean up the resulting work area data.

  In this mode, the populate command takes the incoming data and overlays it on top of the existing work area's data. It leaves intact both managed objects with local modifications and managed objects that are not members of the module being fetched. Thus, the work area essentially becomes a union of the data from the previous version and that of the module being fetched.

  Non-replacing mode, unlike forcing mode, leaves intact any objects that have been locally modified, and, unlike the replacing mode, leaves unmodified managed objects intact. See the -[no]replace option below for more details.

Notes:
o Unmanaged objects in your work area are not affected by any of

```
  these modes.
o The following are illegal combinations of options:
  -replace and -noforce, as well as inverse options, such
  as -replace and -noreplace.
```

SYNOPSIS

```
populate [-[no]emptydirs] [-exclude <object>[,<object>...]]
         [-[no]force] [-full | -incremental]
         [[-lock [-keys <mode> | -from {local | vault}]] |
         [-get [-keys <mode> | -from {local | vault}]]
         [-share] | [-mirror] | [-reference] [-lock -reference] ]
         [-log <filename>] [-[no]merge]
         [[-overlay <selector>[,<selector>...]]|
         [-version <selector>[,<selector>...]]] [-path <path>]
         [-[no]recursive] [-[no]replace]
         [-report {error|brief|normal|verbose}] [-[no]retain]
         [-savelocal <value>] [-trigarg <arg>] [-[no]unifystate] [--]
         [<argument> [<argument>...]]
```

ARGUMENTS

- DesignSync Object
- DesignSync Folder

```
The populate command accepts multiple arguments. If you want
to populate the current folder, you need not specify an
argument.  Otherwise, specify one or more of the following
arguments:
```

DesignSync Object

```
<DesignSync object> Fetches the object from its vault.
```

DesignSync Folder

```
<DesignSync folder> Fetches the contents of the specified folder.
                    You can also use the -path option to specify
                    a folder to be fetched.
```

OPTIONS

- -[no]emptydirs
- -exclude

-[no]emptydirs

-[no]emptydirs	Determines whether empty directories are removed or retained when populating a directory. Specify -noemptydirs to remove empty directories or -emptydirs to retain them. The default for the populate operation is -noemptydirs. For example, if you are creating a directory structure to use as a template at the start of a project, you may want your team to populate the empty directories to retain the directory structure. In this case, you would specify 'populate -rec -emptydirs'. If a populate operation using -noemptydirs empties a directory of its objects and if that directory is part of a managed data structure (its objects are under revision control), then the populate operation removes the empty directory. If the empty directory is not part of a managed data structure, then the operation does not remove the directory or its subdirectories. (A directory is considered part of the managed data structure if it has a

```
                    corresponding folder in the DesignSync vault
                    or if it contains a .SYNC client metadata
                    directory.)

                    Notes:
                      o When used with 'populate -force
                        -recursive', the -noemptydirs option removes
                        empty directories that have never been
                        managed.
                      o When used with the -mirror option, the
                        -noemptydirs option does not remove empty
                        directories (unless -force -recursive is
                        used) and does not populate directories that
                        are empty in the mirror.
                      o When the -noemptydirs option is used with
                        '-report verbose', the command might output
                        messages that additional directories are
                        being deleted. Those are directories created
                        by the populate, to mimic the directory
                        structure in the vault.  If no data is
                        fetched into those directories (because
                        no file versions match the selector),
                        then those empty directories are deleted.

                    If you do not specify -emptydirs or
                    -noemptydirs, the populate command follows
                    the DesignSync registry setting for "Populate
                    empty directories". By default, this setting
                    is not enabled; therefore, the populate
                    operation removes empty directories. To change
                    the default setting, your Synchronicity
                    administrator can use the SyncAdmin tool. For
                    information, see SyncAdmin help. You typically
                    want consistent behavior for all users, so
                    adding the setting to the site registry is
                    recommended.
```

-exclude

```
 -exclude <objects>  Specifies a comma-separated list of objects
                     (files, collections, or folders) to be excluded
                    from the operation. Wildcards are allowed.

                    If you exclude objects during a populate, a
                    subsequent incremental populate will not
                    necessarily process the folders of the
                    previously excluded objects. DesignSync does
                    not automatically perform a full populate in
                    this case. To guarantee that previously
                    excluded objects are fetched, specify the
                    -full option for the subsequent populate
                    operation.

                    The '-exclude' option is ignored if it is
```

included in a 'populate -mirror' operation.

Do not specify paths in your arguments to -exclude. Before operating on each object (such as during a recursive populate), DesignSync compares the object's leaf name (with the path stripped off) to the exclude list to see if there is a match. Because the object's path is removed, the object will not match any object in the exclude list specified with a path. For example, if you specify '-exclude bin/*.exe', you will not successfully exclude bin/foo.exe or any other *.exe file. You need to instead specify '-exclude *.exe', or '-exclude foo.exe' if you want to exclude only 'foo.exe'. The result is that you cannot exclude a specific instance of an object -- you exclude all matching objects.

In addition to objects you specify using the -exclude option, the field, "These objects are always excluded", from the Tools->Options-> General->Exclude Lists dialog box in DesignSync lists objects that are always excluded from revision-control operations.

-[no]force

-[no]force

Specifies whether to overwrite locally modified objects in order to match the workspace to the data being requested. To do so, the populate operation deletes locally managed objects that are not part of the populate command line, deleting objects that have been filtered out. 'populate -force' only removes managed data, not unmanaged data.

Use this option with caution, because you might not be able to retrieve lost changes.

By default (-noforce):

- Locally modified objects are not overwritten by the populate operation. Specify -force if you want to overwrite locally modified objects. If the object is locked, the object is unaffected by the populate operation whether -force is specified or not.
- Objects that are not part of the specified configuration remain in your work area. If you want to delete objects that are not part of the configuration, including retired objects, specify -force. Unmanaged objects are never deleted.

The behavior of 'populate -mirror' without

-force is different from populate with other states (see the description of -mirror). Therefore, -force with -mirror has the additional effect of changing the state of existing objects in your work area, resulting in a hierarchy that exactly reflects the mirror directory.

Using -force with -unifystate changes the state of all objects including locally modified objects, in which case, local modifications are overwritten and objects are fetched according to the specified state or the default fetch state.

Using -force with -noemptydirs for populate removes all existing empty directories from the workspace.

The -force option is mutually exclusive with both the -overlay and -noreplace options.

-from

-from <where>

Specifies whether the object is fetched from the vault ('-from vault') or from the cache or mirror ('-from local'). By default, DesignSync fetches from the cache or mirror ('-from local'), a performance optimization specific to the 'co -lock', 'co -get', 'populate -lock', and 'populate -get' commands. For details, see the Performance Optimization Overview in the DesignSync Data Manager Administrator's Guide. Note that this option is silently ignored when the optimization is not possible, including when the -keys option is specified.

The -from option can only be used with the -lock or -get fetch modes. It cannot be used with the -share, -mirror, -reference, or the -lock -reference combination fetch modes. If the -keys option is specified with the -from option, the -from option is silently ignored.

-full

-full

Performs a non-incremental populate by processing all objects and folders.

Note: DesignSync performs an incremental populate by default. It automatically reverts to a full populate when necessary.

For more information, see the "Incremental Versus Full Populate" section in the description.

To change the default populate mode, your Synchronicity administrator can use the SyncAdmin tool.

Note: Do not use the -full option to change the states of objects in your work area (for example, changing from locked to unlocked objects or unlocked objects to links to the cache). DesignSync changes the states of only those objects that need an update. Use the -unifystate option to change the state of objects in your work area.

-get

-get

Fetch unlocked copies.

You can change whether the local object is read-only (typical when using the locking model) or read/write (typical when using the merging model) by default by using the "Check out read only when not locking" option from the Tools->Options->General dialog box in the DesignSync graphical interface. Your project leader can also set this option site-wide using SyncAdmin.

This option is the default object-state option unless a default fetch preference has been defined. See the "fetch preference" help topic for more information.

Using -force with -noemptydirs for 'populate -get' removes all existing empty directories. Using -force with -emptydirs, however, creates empty directories for corresponding empty vault folders.

The -get option is mutually exclusive with the other fetch modes: -lock, -share, -mirror, and -reference.

-incremental

-incremental

Performs a fast populate operation by updating only those folders whose corresponding vault folders contain modified objects.

Note: DesignSync performs an incremental populate by default. It automatically reverts to a full populate when necessary. For more information, see the "Incremental Versus Full Populate" section in the description.

To change the default populate mode, your Synchronicity administrator can use the SyncAdmin tool.

Note: Do not use the -incremental option to change the states of objects in your work area (for example, changing from locked to unlocked objects or unlocked objects to links to the cache). DesignSync changes the states of updated objects only. For an incremental populate, DesignSync only processes folders that contain objects that need an update. State changes, therefore are not guaranteed. Use the -unifystate option to change the state of objects in your work area.

-keys

-keys <mode>

Controls processing of vault revision-control keywords in populated objects. Note that keyword expansion is not the same as keyword update. For example, the $Date$ keyword is updated only during checkin; its value is not updated during checkout or populate. The -keys option only works with the -get and -lock options. If you use the -share or -mirror option, keywords are automatically expanded in cached or mirrored objects, as if the '-keys kkv' option was used.

Available modes are:

kkv - (keep keywords and values) The local object contains both revision control keywords and their expanded values; for example, $Revision: 1.4 $.

kk - (keep keywords) The local object contains revision control keywords, but no values; for example, $Revision$. This option is useful if you want to ignore differences in keyword expansion, such as when comparing two different versions of an object.

kv - (keep values) The local object contains expanded keyword values, but not the keywords

themselves; for example, 1.4. This option is not recommended if you plan to check in your local objects. If you edit and then check in the objects, future keyword substitution is impossible, because the value without the keyword is interpreted as regular text.

ko - (keep output) The local object contains the same keywords and values as were present at check in.

The -keys option can only be used with the -lock or -get fetch modes. It cannot be used with the -share, -mirror, -reference, or the -lock -reference combination fetch modes. If the -keys option is specified with the -from option, the -from option is silently ignored.

-lock

-lock

Lock the branch of the specified version for each object that is populated. Only the user who has the lock can check in a newer version of the object on that branch.

Use the -lock option with the -reference option to populate with locked references. For more information, see the -lock -reference option. Locked references are useful if you intend to generate objects and want to lock them before regenerating, as opposed to editing the previous version. Upon generation of the objects, they automatically become locked copies rather than locked references. Obtaining locked references for generated objects is faster because DesignSync does not fetch the previously generated objects. If the objects exist already in the workspace, DesignSync deletes them. If the objects exist and are locally modified, the operation fails. If you intend to overwrite the modifications, use -force to create the locked references. If the default fetch state is 'reference' and you specify the -lock option without the -reference option, DesignSync leaves locked copies of the objects in your workspace; you must explicitly apply the -reference option with the -lock option if you want locked references in your workspace.

The -lock option is mutually exclusive with the fetch modes: -get, -share, and -mirror and with the -merge option.

Notes:
o If you specify 'populate -lock', then by default the populate operation also uses the '-from local' option. The result is that the populate operation locks the object in the vault and keeps local modifications in your workspace. See the -from option for information.

-lock -reference

-lock -reference

Use the -lock option with the -reference option to populate with locked references. Locked references are useful if you intend to generate objects and want to lock them before regenerating, as opposed to editing the previous version. Upon generation of the objects, they automatically become locked copies rather than locked references. Obtaining locked references for generated objects is faster because DesignSync does not fetch the previously generated objects. If the objects exist already in the workspace, DesignSync deletes them. If the objects exist and are locally modified, the operation fails. If you intend to overwrite the modifications, use -force to create the locked references. If the default fetch state is 'reference' and you specify the -lock option without the -reference option, DesignSync leaves locked copies of the objects in your workspace; you must explicitly apply the -reference option with the -lock option if you want locked references in your workspace.

The -lock -reference combination of option is mutually exclusive with the fetch modes: -get, -share, and -mirror.

Note: You should not use the -reference option with Cadence data collection objects. When the -reference option is used on Cadence collections, DesignSync creates a reference in the metadata for the collection object but member files are not processed and are not included in the metadata.

-log

-log <filename>

Specify the name of the populate log file. If the filename doesn't exist, DesignSync creates it. If the file does exist, DesignSync appends

the new information to the end of the log file.

The filename can be specified with an absolute or relative path. If you specify a path for the log file, the directory you specify must already exist and you must have write permissions to the directory in order for the log to be placed into it, DesignSync does not create the path.

-merge

-[no]merge

Indicates whether to populate with the Latest versions from the branch specified by the persistent selector list and merge them with the current, locally modified versions. The default value is -nomerge.

If you are not doing an overlay merge (see -overlay) and the current version is not locally modified, the -merge defaults to a -get and fetches the new version without merging. By definition, a merge expects a locally modified object, so the -force option is not required.

The -merge option supports the merging work model (as opposed to the locking work model) where multiple team members can check out and edit the Latest version concurrently. The first team member to check in creates the next version. Other team members must merge the new Latest version into their local copy before they can check in their changes.

If there are no merge conflicts, the merge succeeds, leaving the merged files in your work area. If there are conflicts, DesignSync issues a warning, and you must edit the merged file to resolve the conflicts before DesignSync allows you to check in the merged version. Conflicts are shown as follows:

```
<<<<<<< local
Lines from locally modified version
=======
Lines from selected server version
>>>>>>> versionID
```

DesignSync considers the conflicts resolved when the file no longer contains any of the conflict delimiters (exactly 7 less-than, greater-than, or equal signs starting in column 1). The status of an object, as

displayed by ls or from the List View in the DesignSync graphical interface, indicates if conflicts exist. The url inconflict command also determines whether a file has conflicts.

Most merges are between two versions on the same branch (the current branch and the branch specified by the persistent selector list are typically the same). However, a merge can also be performed across branches by setting the persistent selector list to a different branch. Following the merge, you are on the branch associated with the version specified by the persistent selector list (a 'merge to' operation). If you want to stay on the current branch instead, use the -overlay option. Overlay ('merge from') merges are more common when merging branches. See the -overlay option for details.

Note:
- The -merge option implies -get, but you can also explicitly specify -get. For general DesignSync objects, the -merge option is mutually exclusive with all other state options (-lock, -share, -mirror, -reference, and -lock -reference).
  You can use -lock with -merge for modules and their members.
- The -merge and -version options are mutually exclusive unless you specify '-version Latest'.

-mirror

-mirror

Create symbolic links from the work area to objects in the mirror directory. This option requires that you have associated a mirror directory with your work area (see the 'setmirror' command).

For performance reasons, links are created only when objects do not exist in your work area. To update mirror links for existing objects, use -unifystate with the -mirror option. For example:

```
populate -recursive -full -unifystate -mirror
```

The -unifystate option does not affect locally modified objects or objects that are not part of the configuration. Use -force with -unifystate to update the links, replacing locally modified objects and removing objects

that are not part of the current configuration.

When used with the -mirror option, the -noemptydirs option does not populate directories that are empty on the mirror. Using the -force option with the -noemptydirs option removes all empty directories from the workspace. Using -force with -emptydirs for 'populate -mirror', however, populates empty directories that exist in the mirror.

The -mirror option is mutually exclusive with the other fetch modes: -lock, -get, -share, and -reference. The -mirror option is also mutually exclusive with the -keys and -from options. The -mirror option cannot take an exclude filter. If the -exclude option is specified with the -mirror fetch mode, the populate silently ignores the -exclude option.

Note:
- This option is not supported on Windows platforms.
- The -exclude option is ignored if it is included in a 'populate -mirror' operation.
- If you specify -mirror, an incremental populate does not necessarily fetch new objects checked in, nor remove links to objects deleted by team members until after the mirror is updated.
- When populating a custom generic collection from a mirror, always use 'populate -mirror' from the folder containing the collection object or from a folder above the folder containing the object.

-overlay

-overlay <selectors> Replace your local copy of the module or DesignSync non-module object with the versions specified by the selector list (typically a branch tag). The current-version status, as stored in local metadata, is unchanged. For example, if you have version 1.5 (the Latest version) of the module or DesignSync object and you overlay version 1.3, your current version is still 1.5. You could then check in this overlaid version. This operation is equivalent to checking out version 1.3, then using 'ci -skip' to check in that version.

The behavior of the overlay operation depends on the presence of a local version and the version you want to overlay:

o If both the local version and the overlay version exist, the local version is replaced by the overlay version.
o If there is no local version but an overlay version exists, DesignSync creates a local copy of the overlay version.
o If a local version exists but there is no overlay version, the local version is unaffected by the operation.
o If the overlay version was renamed or removed, the local object is not changed, but metadata is added to it, indicating the change. This information can be viewed using the ls command with the -merged option.

Typically, you use -overlay with -merge to merge the two versions instead of overlaying one version onto another. The combination of -overlay and -merge lets you merge from one branch to another, the recommended method for merging across branches. Following the overlay merge, you are working on the same branch as before the operation.

You specify the version you want to overlay as an argument to the -overlay option. The -overlay and -version options are mutually exclusive. The -version option always updates the 'current version' information in your work area, which is not correct for an overlay operation.

o To use -overlay to specify a branch, specify both the branch and version as follows: '<branchtag>:<versiontag>', for example, 'Rel2:Latest'. You can also use the shortcut, '<branchtag>:', for example "Rel2:". If you don't explicitly specify the branch selector in this way, DesignSync does not resolve the selector as a branch selector.

When doing an overlay (with or without -merge), a number of combinations for the state of a module or DesignSync object on the two branches must be considered. For more information, see the "Merging Across Branches" section above. Hierarchical references in modules are not updated during an overlay.

Notes:
o The -overlay option implies -get, but you can also explicitly specify -get.
o The -overlay option is mutually exclusive with the other state options (-mirror, -share, -lock, -reference) and -version.

-path

```
-path <path>          Specify the name of an alternate local folder
                      to populate instead of the current folder. The
                      populate command uses the vault and persistent
                      selector list associated with the specified
                      folder.
                      Note: Using -path is equivalent to changing
                            folders, executing the populate
                            command, then changing back to the
                            original folder.

                      If you specify a folder using the -path option
                      but the folder does not exist, DesignSync
                      - verifies that a corresponding vault exists
                      - creates the folder
                      - populates the specified folder, creating
                      any interim folders necessary to replicate
                      the vault hierarchy locally.

                      If you specify the -target option but the
                      folder does not exist, DesignSync creates
                      the folder.
                      Generally, however, if the vault does not
                      exist, DesignSync does not create the
                      folder and leaves the workspace unchanged.

                      Note: If the folder specified by -path does not
                      exist, but corresponds to a vault with
                      unpopulated DesignSync REFERENCES, DesignSync
                      has no way to resolve these mappings. In this
                      case, populate does not create the specified
                      folder, leaving the workspace unchanged.

                      The -path option used to be the -dir option.
                      The -dir option is still provided for backwards
                      compatibility, but is not documented
                      separately.
```

-[no]recursive

```
-[no]recursive        Specifies whether to perform this operation on
                      the specified folder (default), or to traverse
                     its subfolders.

                      If you invoke 'populate -recursive' and specify a
                      folder, populate operates on the folder in a
                      folder-centric fashion, fetching the objects in
                      the folder and its subfolders. To filter the set
                      of objects on which to operate, use the -exclude
                      option.

                      Note: The populate operation might skip
```

subfolders and individual managed objects
if their persistent selector lists differ
from the top-level folder being populated;
see the Description section for details.

If you specify -norecursive when operating on
a folder, DesignSync operates only on objects in
the specified folder. In this case, populate
does not traverse the vault folder hierarchy.

If you perform a -norecursive populate, then for
the subsequent populate DesignSync performs a
full populate even if the -full option is not
specified.

Note: DesignSync cannot perform an incremental
populate following a nonrecursive populate,
because it cannot ensure that the objects
in the work area subfolders are up-to-date.

-reference

-reference

Populate with DesignSync references to objects
in the vault. A reference does not have a
corresponding file on the file system but does
have local metadata that makes the reference
visible to Synchronicity programs. Populate
with references when you want your work area to
reflect the contents of the vault but you do
not need physical copies. Use the -reference
option with the -lock option to populate with
locked references. Locked references are
useful if you intend to generate objects
and want to lock them before regenerating,
as opposed to editing the previous versions.

Note: You should not use the -reference option
with Cadence data collection objects. When
the -reference option is used on Cadence
collections, DesignSync creates a
reference in the metadata for the
collection object but member files are not
processed and are not included in the
metadata.

-[no]replace

-[no]replace

This option determines how to handle locally
modified objects when synchronizing your work
area.

The -replace option specifies that the populate

operation updates locally unmodified workspace objects. This option leaves intact all managed objects and all unmanaged objects. If an object has been removed from the vault being fetched as a result of a retire, rmvault, or any other similar operation, -replace removes the file from the workspace if it has not been locally modified.

The -noreplace option specifies that the populate operation updates managed objects that have not been locally modified. The -noreplace option leaves intact all unmanaged objects. If an object has been removed from the vault being fetched as a result of a retire, rmvault, or any other similar operation, -noreplace does not remove the corresponding file in the workspace. (Default)

Notes:
- See "Forcing, Replacing, and Non-Replacing Modes" above to see how the -force option interacts with the -[no]replace option.
- If you use populate -version to populate a directory containing a module, DesignSync uses the -noreplace option unless -replace is explicitly specified.
- If you apply the -filter or -hreffilter options, populate applies the -[no]replace option on the filtered data.
- With a recursive operation, populate applies -replace and -noreplace behaviors to the top-level module and then to each referenced submodule.

-report

-report error|brief|normal|verbose	Specifies the amount and type of information displayed by the command. The information each option returns is discussed in detail in the "Understanding the Output" section above. error - lists failures, warnings, and success failure count. brief - lists failures, warnings, module create/remove messages, some informational messages, and success/failure count. normal - includes all information from brief, and lists all the updated objects, and messages about objects excluded by filters from the operation. (Default)

verbose - provides full status for each object processed, even if the object is not updated by the operation.

-[no]retain

-[no]retain

Indicates whether to retain the 'last modified' timestamp of the fetched objects as recorded when each object was checked into the vault. If the workspace is set to use a mirror, or the populate is run using -share, this will also apply to the object placed in the mirror or LAN cache if the object doesn't already exist in the mirror or cache. The links in your work area to the cache or mirror have timestamps of when the links were created.

If you specify the -reference option, no object is created in your work area, so there is no timestamp information at all.

If an object is checked into the vault and the setting of the -retain option is the only difference between the version in the vault and your local copy, DesignSync does not include the object in populate operations.

If you do not specify '-retain' or -noretain', the populate command follows the DesignSync registry setting for Retain last-modification timestamps. By default, this setting is not enabled; therefore, the timestamp of the local object is the time of the populate operation. To change the default setting, your Synchronicity administrator can use the SyncAdmin tool. For information, see SyncAdmin Help.

The mirror system, by default,fetches objects into the mirror with the -retain option. The mirror administrator, however, can define mirrors to use the -noretain option. The default setting should agree with the Retain last-modification timestamp registry setting to maintain consistency. See the "Mirror Administration Server Registry Settings" topic for setting of the co or populate options for mirrors.

Note: When fetching from the cache or mirror (by specifying the '-from local' option), the last modified timestamp comes from the file in the cache or mirror, not from the version that was checked into the vault. If the file was fetched

into the cache or mirror with the -retain option, these two timestamps are the same. But if the file was fetched into the cache or mirror with the -noretain option and then fetched into the workspace with both the '-from local' and '-retain' options, the 'last modified' timestamp used is the time the object was fetched into the cache or mirror.

-savelocal

-savelocal <value>

This option affects collections that have local versions.

When it fetches an object, the populate operation first removes from your workspace any local version that is unmodified. (To remove a local version containing modified data, specify 'pop -force'.) Then the populate operation fetches the object you are checking out (with the local version number it had at the time of checkin).

The -savelocal option specifies the action that the populate operation takes with modified local versions in your workspace (other than the current, or highest numbered, local version). (DesignSync considers a local version to be modified if it contains modified members or if it is not the local version originally fetched from the vault when the collection object was checked out or populated to your workspace.)

Specify the -savelocal option with one of the following values:

save - If your workspace contains a local version other than the local version being fetched, the populate operation saves the local version for later retrieval. See the 'localversion restore' command for information on retrieving local versions that were saved.

fail - If your workspace contains an object with a local version number equal to or higher than the local version being fetched, the populate operation fails. This is the default action.

Note: If your workspace contains an object with local version numbers lower than the local version being fetched and if these local versions are not in the DesignSync vault, the

populate operation saves them. This behavior occurs even when you specify '-savelocal fail'

delete - If your workspace contains a local version other than the local version being fetched, the populate operation deletes the local version from your workspace.

If you do not specify the -savelocal option, the populate operation follows the DesignSync registry setting for SaveLocal. By default, this setting is "Fail if local versions exist" ('-savelocal fail'). To change the default setting, a Synchronicity administrator can use the Command Defaults options pane of the SyncAdmin tool. For information, see SyncAdmin Help.

Note:
- You may need to use the -force option with the -savelocal option to allow the object being fetched to overwrite a locally modified copy of the object. For an example scenario, see EXAMPLES.
- The -savelocal option affects only objects of a collection defined by the Custom Type Package (CTP). This option does not affect objects that are not part of a collection or collections that do not have local versions.

-share

-share

Fetch shared copies. Shared objects are stored in the file cache directory and links to the cached objects are created in the work area.

Notes:
This option is not supported on Windows platforms.

The -share option is mutually exclusive with the other fetch modes: -lock, -get, -mirror, and -reference. The -share option is also mutually exclusive with the -keys and -from options.

-trigarg

-trigarg <arg>

Specifies an argument to be passed from the command line to the triggers set on the populate operation. If the argument contains whitespace, enclose the argument within double quotation marks ("") if using the dss

command shell or braces ({}) if using the stcl command shell.

-[no]unifystate

-[no]unifystate

Indicates whether to set the state of all objects processed, even up-to-date objects, to the specified state (-get, -lock, -share, -mirror, or -reference) or to the default fetch state if no state option is specified. See the "fetch preference" help topic for more information.

By default, populate changes the state of only those objects that are not up-to-date (-nounifystate). If the -unifystate option is specified, DesignSync changes the state of the up-to-date objects, as well, and thus performs a full populate.

The -unifystate option does not change the state of locally modified objects; use -force with -unifystate to force a state change, thus overwriting local modifications. The -unifystate option does not change the state of objects not in the configuration; use -force with -unifystate to remove objects not in the configuration.
The -unifystate option does not cancel locks; you can check in the locked files, use the 'cancel' command to cancel locks you have acquired, or use the 'unlock' command to cancel team members' locks.

Note: The -unifystate option is ignored when you lock design objects. If you populate with locked copies or locked references, DesignSync leaves all processed objects in the requested state.

-version

-version <selector>

Specifies the versions of the objects to populate. The selector list you specify (typically a version or branch tag) overrides the persistent selector lists of the objects you are populating. If you specify the -recursive option, the specified selector list is used to populate all subfolders during populate.
You can also specify a ProjectSync configuration; see "Interaction with Legacy Modules" in the

Description section.

If you specify a date selector (Latest or Date(<date>)), DesignSync augments the selector with the persistent selector list to determine the versions to populate. For example, if the persistent selector list is 'Gold:,Trunk', and you specify 'populate -version Latest', then the selector list used for the populate operation is 'Gold:Latest,Trunk:Latest'.

For details on selectors and selector lists see the topic describing selectors.

Note:

- Using the -version option with the populate command does not change the workspace selector, even during the initial populate of an object. To set the workspace selector as part of the populate command, specify the selector explicitly, using the <object>;<selector> syntax.
- If you use the -version option with the -incremental option, and the selector you specify does not exactly match the workspace selector, the incremental populate does not occur. DesignSync performs a full populate instead. See "Incremental Versus Full Populate" in the description section for more information.
- When using -version to specify a branch, specify both the branch and version as follows: <branchtag>:<versiontag>, for example, Rel2:Latest. You can also use the shortcut, <branchtag>:, for example Rel2:. If you do not explicitly specify the branch selector in this way, DesignSync does not resolve the selector as a branch selector.
- When you specify a version-extended name that reflects the object's version, for example, "file.txt;1.3", populate ignores the -version option.
- Specify '-version <branchtag>:Latest' only if necessary. In some cases, DesignSync augments the selector to be <branchtag>:Latest. When you append ':Latest', it may not match the work area selector. This mismatch invalidates your next incremental populate resulting in a slower, full populate.
- The -version option is mutually exclusive with -merge unless you specify '-version Latest', the default.
- The -version and -overlay options are mutually exclusive.
- When you use populate with the -version option to fetch a directory containing legacy

```
modules, by default DesignSync uses the
-noreplace
```

RETURN VALUE

```
In dss/dssc mode, you cannot operate on return values, so the return
value is irrelevant.

In stcl/stclc mode, two lists are returned, where the first list
is non-empty if at least one object was successfully processed,
and the second list is non-empty if at least one object failed.

Notes:
 - "successfully processed" may not mean "successfully populated".
   For example, a populate of an object that you already have in
    your work area is considered a success even though no checkout
   occurs.
 - Scripts should only test for non-empty lists to determine
   success or failure. The actual content of the non-empty
   lists might change in subsequent releases.
 - If all objects fail, an exception occurs (the return value is
   thrown, not returned).
 - Objects reported as "excluded by filter," may have been excluded
   either with the -filter option (for modules) or with the -exclude
   option (for any DesignSync objects.)
```

SEE ALSO

```
caching, ci, co, command defaults, localversion, retire, selectors,
setselector, setvault, url contents
```

EXAMPLES

- Example of Creating a new work area from a DesignSync vault
- Example of Creating a New Work Area from a DesignSync Vault Branch
- Example of Updating an Existing Workspace with a Full Populate
- Example of Updating the State of Objects in the Workspace
- Example of Performing a Merge into a Workspace
- Example of Replacing Modified Files with the Server Versions

Example of Creating a new work area from a DesignSync vault

```
The following example creates a new work area containing unlocked
copies of every object in the vault hierarchy:

  dss> scd /home/tgoss/Projects/Asic
  dss> setvault sync://myhost.myco.com:2647/Projects/Asic .
```

```
  dss> populate -recursive -get
```

```
Because -version is not specified, the persistent selector list of
the current folder determines what versions to populate. The local
Asic folder has not had a 'setselector' command applied to it or
any parent folder, so the default persistent selector list is
'Trunk'. By default, DesignSync performs an incremental populate
of the Latest versions on the specified branch (Trunk). Note that
this operation does not fetch objects whose 'Trunk' branch is
retired.
```

Example of Creating a New Work Area from a DesignSync Vault Branch

```
The following example differs from the previous example in that the
work area is for the Rel2.1 branch, not Trunk, and the work area
contains links to a cache directory instead of local copies:
```

```
  dss> scd /home/tgoss/Projects/Asic
  dss> setvault sync://myhost.myco.com:2647/Projects/Asic@Rel2.1:Latest .
  dss> populate -recursive -share
```

Example of Updating an Existing Workspace with a Full Populate

```
The following example performs a full (nonincremental) recursive
populate on the current folder, fetching unlocked copies of files
for updated objects. Note that the states of objects that are not
updated DO NOT change.
```

```
  dss> populate -recursive -full -get
```

Example of Updating the State of Objects in the Workspace

```
By default, the states of up-to-date objects do not change during
a populate operation.  The following example updates the states of
the objects that are up-to-date, allowing you to unify the states
of all objects in your work area.  The -unifystate option causes
DesignSync to perform a full populate rather than an incremental
populate.
```

```
  dss> populate -recursive -unifystate -get
```

Example of Performing a Merge into a Workspace

```
The following example merges Latest versions from the current
branch into the local versions. You perform this operation when
your team uses the merging (nonlocking) work model and you and
other team members have been modifying the same objects. It is more
```

common to use the 'co -merge' command to operate on just those objects you want to check in.

```
dss> populate -merge
```

Note that the merge operation fetches from the branch specified by the folder's persistent selector list, not from the current branch. However, these two branches are typically the same unless you have changed the persistent selector list with the setselector command. In this case, you would be merging across branches instead of from the same branch. This method for merging between two branches is not recommended; use the -overlay option.

The following example merges one branch (Dev) into another (Main). This operation is typically performed by a release engineer who manages the project vault. The work area is first populated with the Latest versions from 'Main'. Then the Latest versions from Dev are merged into the local versions. The -overlay option indicates that after the operation, the current branch and version information (as stored in local metadata) should be unchanged. Following the merge and after any merge conflicts are resolved, a check-in operation checks the merged version into 'Main'.

```
dss> url selector .
Main:Latest
dss> populate -recursive
dss> populate -recursive -merge -overlay Dev:Latest
  [Resolve any merge conflicts]
dss> ci -recursive -keep .
```

Example of Replacing Modified Files with the Server Versions

This example shows use of the populate operation that deletes local versions.

Note: The DesignSync Milkway integration has been deprecated. This example is meant to be used only as a reference.

Mike checks out the Milkyway collection object top_design.sync.mw, which fetches local version 4 of that object to his workspace. He modifies the object and creates local version 5. Then he checks in top_design.sync.mw. The check-in operation does not remove local versions, so Mike now has local version 5 (unmodified) and local version 4 in his workspace. (Note: Because the checkin removes local version 4's link to with the original check-out operation of top_design, DesignSync now considers local version 4 to be modified.)

Ben checks out top_design.sync.mw (local version 5). He creates local version 6 and checks the object in.

Mike does some work on top_design, which creates local versions 6, 7, and 8 in his workspace. Then he decides to use Ben's version of the top_design object instead.

```
Mike uses populate to fetch the latest versions of Milkyway
collection objects to his workspace. He doesn't want to save his
local versions of the object, so he uses the '-savelocal delete'
option to delete local versions other than the local version being
fetched. In addition, he uses the -force option. (Because he
created local versions 6, 7, and 8 of top_design in his workspace,
DesignSync considers the top_design object to be locally modified
and by default the populate operation does not overwrite locally
modified objects. To successfully check out top_design, Mike must
use '-force'.)

stcl> cd /home/tjones/top_design_library
stcl> populate -savelocal delete -force

Before fetching top_design.sync.mw from the vault, the populate
operation first deletes all local versions that are unmodified. So
the populate operation deletes Mike's local version 6 because that
was the version originally fetched and its files are unmodified.

Because Mike specified the -force option, the populate also deletes
Mike's local version 8 (the current local version containing
modified data for the object).

Because Mike specified '-savelocal delete', the populate operation
deletes local version 7, which is not in the vault and is not the
modified data Mike agreed to delete when he specified '-force'.
If Mike specified '-savelocal save', DesignSync would save local
version 7. Local version 4 is also deleted.

Finally, Mike's populate operation fetches the top_design object
(Ben's local version 6) from the vault.

Mike continues to modify the top_design object, creating local
version 7, which he checks in.

Ben has local versions 5 and 6 in his workspace. He populates his
workspace containing the top_design collection object (local
version 7), specifying '-savelocal fail'. The populate operation
removes local version 6 from his workspace because it is
unmodified. The operation saves local version 5 even though it is
modified. (Ben's checkin of local version 6 removed local version
5's link to with the original checkout of top_design, so DesignSync
now considers local version 5 to be modified.) The populate also
takes place despite the fact that Ben specified '-savelocal
fail'. The populate operation takes this action because local
version 5 has a number lower than the local version being
fetched. If Ben had instead specified '-savelocal delete', the
populate operation would delete local version 5.
```

tag

tag Command

NAME

```
tag                 - Assigns a tag to a version or a branch
```

DESCRIPTION


```
This command assigns a symbolic name, called a tag, to a version
(version tag) or branch (branch tag). You also use this command to
move (-replace) or remove (-delete) existing tags.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports Enterprise Design Synchronization. For more
information on Enterprise Design Synchronization, see the Enterprise
Design Administration User's Guide.

This command supports the command defaults system.
```

Working with Tags

```
Tagging a set of versions creates a group of objects, sometimes
called a configuration, that is a representation of your design files
that correspond to a known state, such as a development or release
milestone. For example, you might tag the current versions of your
design files 'Alpha' when you have reached the Alpha milestone.

Once you have tagged your set of versions, the tag can be used as a
selector to identify what objects commands operate on. For example,
you might specify 'populate -version Gold' to populate all versions
that are tagged 'Gold' (the 'Gold' configuration). See the
"selectors" help topic for more information on selectors.

Versions and branches can have more than one tag assigned to
them. For example, an object that did not change between releases
might have both 'rel2.1' and 'rel2.2' applied to the same version.

Note: If you tag a version with a tag that already exists on that
version, the system will respond with a 'success' message.
```

Branch Tags Versus Version Tags

Branch tags and version tags share the same name space. To distinguish version selectors from branch selectors, you append ':<versiontag>' to the branch name; for example, 'Gold:Latest' is a valid branch selector. You can leave off the 'Latest' keyword as shorthand; for example, 'Gold:' is equivalent to 'Gold:Latest'. The selector 'Trunk' is also a valid branch selector; 'Trunk' is a shorthand selector for 'Trunk:Latest'.

You cannot assign the same tag name to both a version and a branch of the same object. For example, a file called 'top.v' cannot have both a version tagged 'Gold' and a branch tagged 'Gold'. However, 'top.v' can have a version tagged 'Gold' while another file, 'alu.v', can have a branch tagged 'Gold'.

Consider adopting a consistent naming convention for branch and version tags to reduce confusion. For example, you might have a policy that branch tags always begin with an initial uppercase letter ('Rel2.1', for example) whereas version tags do not ('gold', for example).

If the selector identifies a version, DesignSync resolves the selector to both the object's version number and branch number. For example, if version 1.2.1.3 is tagged 'gold', DesignSync resolves 'gold' as both version 1.2.1.3 and branch 1.2.1. A version selector only resolves if the object has a version tag of the same name; it does not resolve if the tag is a branch tag. For example, if branch 1.2.1 is tagged 'RelA', and the latest version on that branch is 1.2.1.3, then DesignSync resolves 'RelA:Latest' as version 1.2.1.3; however, DesignSync does not resolve selector 'RelA' at all, because there is no version tag of that name.

Tagging Files-Based DesignSync Objects

Tags for DesignSync vaults use the object versions in your work area to determine the appropriate version or branch to tag in the vault. Once a tag operation has completed, the new tags are visible to other users of the vault. If the version you want to tag is not the version in your workspace, use the -version option to specify the correct version or branch to tag.

If you want to tag a locally modified DesignSync object, you must specify the -modified option.

Note: If you tag a directory that includes unmanaged objects, the tag operation does not return an error for the unmanaged objects, but rather fails silently.

Tag Name Syntax

```
The first argument to the 'tag' command is the tag name.
Tag names:
  - Can contain letters, numbers, underscores (_), periods (.),
    hyphens (-), and forward slashes (/). All other characters,
    including whitespace, are prohibited.
  - Cannot start with a number and consist solely of numbers
    and embedded periods (for example, 5, 1.5, or 44.33.22),
    because there would be ambiguity between the tag name and
    version/branch dot-numeric identifiers.
  - Cannot be any of the following reserved, case-insensitive keywords:
    Latest, LatestFetchable, VaultLatest, VaultDate, After,
    VaultAfter, Current, Date, Auto, Base, Next, Prev, Previous,
    Noon, Orig, Original, Upcoming, SyncBud, SyncBranch, SyncDeleted.
    Also, avoid using tag names starting with 'Sync' (case-insensitive),
    because Synchronicity may define new keywords in the future
    using that naming convention.

    Notes:
    o The Connected Software and Connected Semiconductor apps do
      not support the use of forward slash (/) in Tag names.
    o DesignSync vaults and legacy modules have an additional
      restriction: tag or branch names cannot end in --R.

The 'Latest' reserved keyword is of particular importance. 'Latest'
is always associated with the most recent (highest numbered)
version of a design object on a given branch. Although not actually a
tag, you can generally specify 'Latest' as you would a user-defined
version tag. Note that the default command behavior in many cases
is to operate on the latest version on the current or specified
branch, so you typically do not need to specify 'Latest'. See the
"selectors" help topic for more details on selectors, including the
use of 'Latest'.

The 'Trunk' tag, although not a reserved keyword, has special
significance for DesignSync. By default, DesignSync tags branch 1
as 'Trunk' when you initially check in a design object. Because
'Trunk' is a tag (shorthand for 'Trunk:Latest'), you can move
or delete it, although doing so is not recommended.  Due to this
special significance, the 'Trunk' tag is always expected to be a
branch tag, and you cannot add this as a version tag. For example,
you can specify 'tag -branch 1 Trunk myfile', but you cannot
specify 'tag -version 1.1 Trunk myfile'.
```

Determining the Objects to be Tagged

```
Each object argument to the 'tag' command can be:

 o A local managed object (file or collection object). By default,
   the current version in your work area is tagged unless you
   specify the -branch option or -version option.

   Note: If you specify a collection member as the object to be
   operated on, DesignSync skips the object and warns that the
   object is not versionable. If DesignSync attempts to operate on
```

a collection member specified implicitly (through the use of wildcards or a recursive operation), DesignSync silently skips the object. You can change this behavior by using the SyncAdmin "Map operations on collection members to owner" setting. If you select this setting and DesignSync attempts to operate on a collection member during a revision control operation, DesignSync determines the member's owner collection and operates on the collection as a whole.

- A folder, which is useful only for recursive tagging. You can specify either a local folder (a folder in your work area) or a vault folder:

  - If you specify a local folder, the tag operation uses the objects in that local folder to determine which objects to tag in the corresponding vault folder. If the tag operation encounters a module, it does not tag the module. To tag a module, specify the server URL of the module. If the tag operation encounters a legacy module, tag handles the module as a customary DesignSync workspace, tagging the objects and continuing to traverse the hierarchy according to the -recursive option selected. Note, however, that the tag command will not stop at submodule boundaries. (The -nomodulerecursive option is no longer supported.)

  - If you specify a vault folder, the tag operation tags each object in the vault folder. Note: If you specify a vault folder for a recursive tag operation, the operation does not create new configuration maps for legacy DesignSync REFERENCEs.

- A version object, although to identify a particular version, you typically specify a local object and the -version option. The -version option is ignored if you specify a version object.

- A branch object. The latest version on the specified branch is tagged unless you specify the -branch option, in which case a branch tag is applied to the branch object you specified -- the argument to the -branch option is ignored.

Note: Tag supports both filter and exclude which can affect which objects available for tagging.

Interaction with Objects from a Mirror

If a work area contains a link to a mirror, the tag operation uses the version that resides in the mirror directory to determine which object version to tag in the vault, even though the version in the mirror directory may not be the Latest version in the vault. For example, if your work area contains a link to version 1.3 of fileA in the mirror directory, a tag operation tags version 1.3 in the vault, even though fileA's 'Latest' version in the vault is 1.4.

Notes:

o The tag operation considers an object that is a link to a mirror as unmodified and does not fail for that object. The same is true for members of collections: if all members of a collection are symbolic links, then the collection is not considered by the tag operation as modified, even if a member symbolic link was deleted.

o Synchronicity does not recommend tagging a work area that contains links to a mirror directory. A mirror directory is updated constantly; if you tag objects while the mirror's objects are changing, the result may be a configuration different from the one you intended.

SYNOPSIS

```
tag [-branch <branch> | -branch auto(<branch>) | -[no]delete |
     -[no]replace |  -version <selector>]
    [-exclude <object>[,<object>,...]] [-[no]modified]
    [-[no]recursive] [-report <mode>] [-[no]selected]
    [-trigarg <arg>] [-warn <mode>] [--] <tagname>
    [<argument> [<argument> ...]]
```

ARGUMENTS

The tag command accepts a <tagname> followed by multiple arguments on which to apply the tag. See "Tag Name Syntax" above for the allowable values for the tagname.

Specify one or more of the following arguments:

DesignSync Object

<DesignSync object> Tags the vault corresponding to the specified local managed object.

DesignSync Folder

<DesignSync folder> Tags the vaults corresponding to the objects in the specified folder. If the folder contains a legacy module, tag handles the module as a customary DesignSync workspace, tagging the objects and continuing to traverse the hierarchy

```
according to the -recursive option selected.
Note, however, that the tag command will not stop
at submodule boundaries.  (The -nomodulerecursive
option is no longer supported.)
```

OPTIONS

-branch

```
-branch <branch>
| -branch
  auto(<branch>)
```

Tags the branch specified by the branch or version tag, auto-branch selector, or branch numeric. This option overrides the object's persistent selector list. If <branch> resolves to a version, the branch of that version is tagged. The -version and -branch options are mutually exclusive. The -branch option is not applicable to operations on a module snapshot.

For a tag using an auto-branch selector, for example Auto(Golden), if 'Golden' exists as a branch, the 'Golden:Latest' version is tagged. If no branch named 'Golden' exists for the object, the tag operation fails.

Note: The -branch option accepts a single branch tag, a single version tag, a single auto-branch selector tag, or a branch numeric. It does not accept a selector or selector list.

-[no]delete

```
-[no]delete
```

Indicates whether to delete the specified version or branch tag.

Note: Because a tag can apply to either a

branch or a version (not both), DesignSync determines which kind of tag is specified and deletes it. You can define access controls to selectively control the deletion of branch and version tags.

The -delete option is mutually exclusive with the -branch, -replace, and -version options. You cannot specify a specific version or branch because only one version or branch of an object can have a given tag, so just specifying the object itself is sufficient.

-exclude

-exclude <objects> Specifies a comma-separated list of objects to exclude from the operation. Wildcards are allowed.

Do not specify paths in your arguments to -exclude. Before operating on each object (such as during a recursive tag operation), DesignSync compares the object's leaf name (path stripped off) to the exclude list to see if there is a match. Because the object's path is removed, the object will not match any object in the exclude list specified with a path. For example, if you specify '-exclude bin/*.exe', you will not successfully exclude bin/foo.exe or any other *.exe file. You need to instead specify '-exclude *.exe', or '-exclude foo.exe' if you want to exclude only 'foo.exe'. The result is that you cannot exclude a specific instance of an object -- you exclude all matching objects.

In addition to objects you specify using the -exclude option, the "These objects are always excluded" field from the Tools->Options-> General->Exclude Lists dialog box in the DesignSync graphical user interface lists objects that are always excluded from revision-control operations.

-[no]modified

-[no]modified Indicates whether to tag the versions in the vault corresponding to the modified objects in your work area. If you specify -nomodified (default), when the tag operation encounters a locally modified object, the operation displays an error for the object and does not tag any version of that object in the vault.

Note: This option affects modified objects only. If a work area object is unmodified, the tag operation tags the version in the vault that matches the one in your work area.

-[no]recursive

-[no]recursive

Specifies whether to perform this operation on the specified folder or to traverse its subfolders. The default value is -norecursive.

If you specify a local folder (a folder in your work area), the tag operation uses the local folder hierarchy to determine which objects to tag in the vault. If you specify a vault folder, the operation traverses the vault folder hierarchy, tagging objects in that hierarchy.

When 'tag -recursive' is invoked, the DesignSync client scans all of the subdirectories, determining the file versions to tag. Tag requests are then sent to the server, with up to 1000 objects included in each request. On the server, each file version in the request is processed. For each file version, access control is checked, and the file version then tagged (if allowed by access controls). The results from processing the set of up to 1000 objects are then returned to the DesignSync client. The next set of up to 1000 objects are then processed by the server, and so on.

By default, the tag operation is nonrecursive; it tags objects in the specified folder only.

-[no]replace

-[no]replace

Indicates whether to move the tag to the target version or branch, even if the specified tag is already in use on another version or branch. By default (-noreplace), a tag operation fails if the tag is already in use, because a tag can be attached to only one version or branch of an object at a time. Note that you can move a tag from a branch to a version or a version to a branch. DesignSync provides a warning message when you do so.

Note: If you specify a comment, the tag operation replaces the comment with the new comment.

If you do not specify a comment, the operation removes the previous comment associated with tag.

-report

-report <mode>

Specifies the contents of a report on the tag operation.

Available modes are:

o brief - This mode lists:
- Objects that were not tagged.
- Objects skipped by the tag operation because it created a new configuration map.
- A count of successes and failures for the tag operation. Note: This count is output only if you are using the stcl/stclc command shell.

If the -report option is not specified, the default mode is '-report brief'.

o normal - This mode provides the same output as the brief mode but in addition lists objects that were successfully tagged. (Default)

o verbose - Displays the same information as 'normal' and a skip notice for any objects excluded by the -filter or -exclude options.

-[no]selected

-[no]selected

Indicates if the command should use the select list (see the 'select' command) or only the arguments specified on the command line.

-noselected indicates that the command should not use the select list. (Default) If -noselected is specified, but there are no arguments selected, the tag command fails, even if there are valid arguments in the select list.

-selected indicates that the command should use the select list and any objects specified on the command line. If -selected is not specified, and there are no objects specified on the command line, the tag command uses the select list for the command.

-trigarg

```
 -trigarg <arg>      Specifies an argument to be passed from the
                     command line to the triggers set on the tag
                     operation. If the argument contains
                     whitespace, enclose the argument within double
                     quotation marks ("") if using the dss command
                     shell or braces ({}) if using the stcl command
                     shell.
```

-version

```
 -version <selector> Specifies the version to tag. If the selector
                     resolves to a branch, the Latest version on
                     that branch is tagged. By default (-version not
                     specified), the current version in your work
                     area is tagged. The -version and -branch
                     options are mutually exclusive.

                     The -version option checks for retired files (as
                     of version 4.2 sp1). If the selector resolves to a
                     branch that is retired, it skips tagging the retired
                     files.

                     Note: The retired state only affects adding or
                     replacing a version tag when -version is specified.
                     It does not affect deleting a version tag.

                     If you specify a date selector (Latest or
                     Date(<date>)), DesignSync augments the
                     selector with the persistent selector list
                     to determine the version to be tagged. For
                     example, if the persistent selector list
                     is 'Gold:,Trunk' and you specify
                     'tag -version Latest <tag>', then the
                     selector list used for the tagging
                     operation is 'Gold:Latest,Trunk:Latest'.

                     Note:

                     To use -version to specify a branch, specify
                     both the branch and version as follows:
                     '<branchtag>:<versiontag>', for example,
                     'Rel2:Latest'. You can also use the shortcut,
                     '<branchtag>:', for example "Rel2:".  If
                     you don't explicitly specify the branch
                     selector in this way, DesignSync does not
                     resolve the selector as a branch selector.
```

-warn

-warn <mode>	Provides additional checks depending on the <mode>. The -warn option supports the 'exists' mode, which makes sure the named object still exists before allowing the tag. This is rarely needed and only applicable in those cases where someone else has removed the vault file since you checked it out. This could happen if: o A UNIX 'rm' command was used. (Note: 'rm' is not recommended; use 'rmvault' instead.) o The 'rmvault -nokeepvid' command was used, then the object was checked in again with 'ci -new'. (Note: The '-nokeepvid' option is not recommended; use the default option, '-keepvid'.

--

--	Indicates that the command should stop looking for command options. Use this option when an argument to the command begins with a hyphen (-).

RETURN VALUE

In dss/dssc mode, you cannot operate on return values, so the return value is irrelevant.

In stcl/stclc mode, two lists are returned. The first list is a count of objects successfully processed; the second list is a count of objects that failed to be processed. The first list is non-empty if at least one object was successfully processed. The second list is non-empty if at least one object failed.

Notes:
- Scripts should only test for non-empty lists to determine success or failure. The actual content of a non-empty list currently takes the form "Objects succeeded (n)" and "Objects failed (n)", where 'n' is the number of objects that succeeded or failed. However, these return values are subject to change in a future release.
- If all objects fail, an exception is thrown.

SEE ALSO

ci, co, command defaults, mkbranch, populate, select, setselector, url tags, url resolvetag, vhistory

EXAMPLES

Example of Tagging All Files Matching a Wildcarded String

```
This example adds the REL3_STABLE version tag to all managed '.v'
files in the current work area except template.v. Because -version
and -branch are not specified, the versions corresponding to the
current (last-fetched) objects in the work area are tagged.

  stcl> tag -exclude template.v REL3_STABLE *.v
```

Example of Tagging a Specified Version of Files

```
This example tags the 'Latest' versions on the current branch of all
'.v' and '.h' files in the current work area with the 'stable' tag,
moving the tag from older versions if necessary.

  stcl> tag -version Latest -replace stable *.v *.h
```

Example Showing Tagging Modified File in the Workspace

```
This example shows that you cannot tag a file version you have
modified in your work area. (To tag the modified file version, you
must first check it in and then use 'tag' to tag the new version in
the vault.) To tag the version in the vault instead of the modified
version in your work area, you can use the -modified option:

  For this example, assume that the file alu.v has been modified.

  dss> tag test alu.v

  Beginning Tag operation...

  Tagging: sync://alusrvr.ABCo.com:30090/Projects/ALU/alu.v;1.1 :
  Failed: Modified object exists in the workspace.
  To tag the modified version, check it in and then tag it.
```

```
To tag the version in the vault, use tag -modified.

Tag operation finished.

{} {Objects failed (1)}

dss> tag test alu.v -modified

Beginning Tag operation...
Tagging: alu.v   : Added tag 'test' to version '1.1'
Tag operation finished.

{Objects succeeded (1)} {}
```

Example of Tagging Locked Files

This example shows that tagging a locked file tags the last-fetched version (in this example, version 1.1). You cannot tag the upcoming version (1.2).

```
dss> co -lock -nocom test.asm
Checking out: test.asm : Success - Checked Out version: 1.1 -> 1.2
dss> tag Alpha test.asm

Beginning Tag operation...
Tagging: test.asm   : Added tag 'Alpha' to version '1.1'
Tag operation finished.

{Objects succeeded (1)} {}

dss> tag -version 1.2 -replace Alpha test.asm
Tagging: sync:///test.asm;1.2:Failed:som:
Error 88: Tag:Version doesn't exist
Tag operation finished.

{} {Objects failed (1)}
```

Example of Using Exclude to Restrict Which Files are Tagged

o This example shows the exclude syntax for vault objects.

```
stcl> ls [url vault .]

Directory of: sync://srv2.ABCo.com:2647/Projects/Sportster/code

Time Stamp            WS Status  Version   Type        Name
----------            ---------  -------   ----        ----
12/28/2005 11:00                                     samp.asm;
12/28/2005 11:00                                     samp.lst;
12/28/2005 11:00                                     samp.mem;
12/28/2005 11:00                                     samp.s19;
12/28/2005 11:00                                     sample1.asm;
```

```
12/28/2005 11:00                                        test.asm;
12/28/2005 11:00                                        test.mem;
stcl> tag -exclude {samp.asm;1,test.mem;1} -rec -version Latest \
stcl> testtag [url vault .]

Beginning Tag operation...

samp.asm;1 : Excluded from operation by filter
Tagging:
sync://srv2.ABCo.com:2647/Projects/Sportster/code/sample1.asm;1
  : Added tag 'testtag' to version '1.2'
test.mem;1 : Excluded from operation by filter
Tagging:
sync://srv2.ABCo.com:2647/Projects/Sportster/code/samp.s19;1
  : Added tag 'testtag' to version '1.1'
Tagging:
sync://srv2.ABCo.com:2647/Projects/Sportster/code/samp.mem;1
  : Added tag 'testtag' to version '1.2'
Tagging:
sync://srv2.ABCo.com:2647/Projects/Sportster/code/test.asm;1
  : Added tag 'testtag' to version '1.2'
Tagging:
sync://srv2.ABCo.com:2647/Projects/Sportster/code/samp.lst;1
  : Added tag 'testtag' to version '1.1'

Tag operation finished.

{Objects succeeded (5)} {}
stcl>
```

Example of Tagging a Branch

This example adds the branch tag 'Rel2.1' to the Trunk branch of all files in a work area (a recursive tag):

```
dss> tag -recursive -branch Trunk Rel2.1 .
```

Example of Deleting a Tag

This example deletes a version tag 'gold' and a branch tag 'Rel2.1'. Note that the syntax is the same; DesignSync determines if the specified tag is a branch tag or a version tag.

```
dss> tag -delete gold samp.lst
Deleting Tag: samp.lst         : Deleted version tag 'gold'
dss> tag -delete Rel2.1 samp.lst
Deleting Tag: samp.lst         : Deleted branch tag 'Rel2.1'
```

Example of Adding a Tag to a Branch or Version

o This example adds a 'Gold' branch tag to the branch tagged
  Silver, or if no such branch exists, the branch associated with
  the version tagged Silver:

```
dss> tag -branch Silver Gold test.asm
```

Examples of Tagging an Object on the Server

The following two examples add a tag 'beta' to the 1.2 version of 'top.v'. If 'top.v' is in the local work area, you would specify 'top.v' as the argument with a '-version 1.2' option. But in this case, the version object itself is specified, so 'top.v' need not be in your work area. The first example uses version-extended naming. The second example uses the -version option.

```
dss> tag beta sync://apollo:2647/Projects/Sportster/code/top.v;1.2

dss> tag beta -version 1.2 \
sync://apollo:2647/Projects/Sportster/code/top.v
```

Advanced Revision Control

import

import Command

NAME

```
import              - Fetches an object, leaving it unmanaged
```

DESCRIPTION

```
This command fetches local copies of the specified objects from the
specified vault to your current workspace. Unlike fetching with the
"co" command, imported files do not retain their association with the
vault (are no longer managed).

The "import" command can be used to switch an object's vault
association. Perform the import on the object and then run the ci
command on the  new, unmanaged, object to check it into the new
vault.

Note: The selector list can be used to select what versions to fetch.
If the select list is used, it is inherited from parent folder (the
folder into which the objects are imported). If the selector is not
appropriate for the vault from which you are importing use the
-version option to specify the version. For DesignSync objects, the
selector list will pick up tagged versions or version numbers.  For
modules, the selector list can only specify version numbers.
```

SYNOPSIS

```
import  [-force] [-version <selector>] [--]
       <argument> <object> [<object>...]
```

ARGUMENTS

- Vault URL

Vault URL

```
<vault URL>         Specifies the DesignSync vault URL for the object
                    being imported.  Specify the vault (for example:
                    sync://system:30138/Projects/Sportster/test/runit;)
```

```
                    when the object being imported is not a member of
                    a module.
```

OBJECTS

- DesignSync File Object

DesignSync File Object

```
 <DesignSync object> Specifies the file object to import. You cannot
                     import folders.
```

OPTIONS

- -force
- -version
- --

-force

```
 -force              Overwrites a local object if the object has the
                     same name as an object being imported.  When
                     -force is not specified, the default behavior is
                     to not overwrite local objects and return an
                     error message explaining why the objects were not
                     imported.
```

-version

```
 -version <selector>  Specifies the version of the objects or
                      individual member vault being imported.

                      If no version is specified, DesignSync inherits
                      the selector of the parent folder (the folder
                      into which the objects are imported).

                      Note: To use -version to specify a branch,
                      specify both the branch and version as follows:
                      '<branchtag>:<versiontag>', for example,
                      'Rel2:Latest'. You can also use the shortcut,
                      '<branchtag>:', for example "Rel2:".  If
                      you don't explicitly specify the branch
                      selector in this way, DesignSync does not
                      resolve the selector as a branch selector.
```

--

```
--                  Indicates that the command should stop looking for
                    command options. Use this option when arguments
                    to the command begin with a hyphen (-).
```

RETURN VALUE

```
none
```

SEE ALSO

```
co, selectors
```

EXAMPLES

- Example of Moving Files to a New Vault Associated with a Workspace

Example of Moving Files to a New Vault Associated with a Workspace

```
This example performs a "switch vault" operation, where files from
one vault are imported into a work area, then checked into another
vault (the vault associated with the work area).

  dss> scd /users/jane/myworkdir
  dss> import -version Trunk sync://cassini:2647/Projects/Saturn/Rocket \
       rover.doc lander.doc
  rover.doc:   Success Imported
  lander.doc:  Success Imported

  dss> ls rover.doc lander.doc
  Time Stamp         Status  Version          Locked By   Name
  ----------         ------  -------          ---------   ----
  05/04/2000 09:24        -  Unmanaged                    rover.doc
  05/04/2000 09:24        -  Unmanaged                    lander.doc

Jane can now check these files into the vault associated with her
work area:

  dss> ci -new -nocom -keep rover.doc lander.doc
```

mkbranch

mkbranch Command

NAME

```
mkbranch            - Creates a new branch
```

DESCRIPTION


```
This command creates a new branch for the specified objects. The new
branch is tagged with the specified branch name (sometimes called a
branch name "tag".  For more information, see the tag help
topic). The branch-point version -- the version off which the branch
is created -- depends on the object type:

The 'mkbranch' command does not set the local workspace to use the
new branch (your local metadata is not modified). If you want future
operations to take place on the new branch, change your persistent
selector to point to the appropriate branch. For example:
    dss> mkbranch Dev top.v
    dss> setselector Dev:Latest top.v

In addition to the manual creation of branches with 'mkbranch',
which supports the "project branching" design methodology,
DesignSync supports the "auto-branching" design methodology.
See the "selectors" help topic for more information.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

Branching File-based Objects

```
The behavior of the file-based object branch depends whether you
branch from the workspace object version or the server object
version.

  o For a local object (file or collection object, or local folder
    if you specify -recursive), the branch point is the
    last-retrieved (current) version in your work area. If
    DesignSync cannot determine the current version (for example,
    the object is not under revision control), the mkbranch command
    fails. If the local object is locked (for example, you have
    version 1.4 -> 1.5), the branch is still created off the
    current version (1.4), because the upcoming version (1.5) does
    not yet exist in the vault. You cannot specify the -version
    option with local objects.

  o For a vault, or vault folder if you specify -recursive, you
    must specify the -version option and provide a selector list
    (typically a version tag or version number) to identify the
    branch-point version.
```

SYNOPSIS

```
mkbranch [-exclude <string>,[<string>...]]
         [-[no]recursive] [-[no]selected] [-version <selector>] [--]
         <branchname> [<argument> [<argument> ...]]
```

ARGUMENTS

Branch Name

```
<branchname>          Specifies the name to use for the new branch.

                      Note: Branch names cannot end in --R.
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object or folder to
                    branch.
```

OPTIONS

-exclude

```
-exclude <objects>   Specifies a comma-separated list of objects
                     to be excluded from the operation. (Legacy
                     modules only) Wildcards are allowed.

                     Do not specify paths in your arguments to
                     -exclude. Before operating on each object
                     (such as during a recursive 'mkbranch'),
                     DesignSync compares the object's leaf name
                     (path stripped off) to the exclude list to see
                     if there is a match. Because the object's path
                     is removed, the object will not match any
```

object in the exclude list specified with a path. For example, if you specify '-exclude bin/*.exe', you will not successfully exclude bin/foo.exe or any other *.exe file. You need to instead specify '-exclude *.exe', or '-exclude foo.exe' if you want to exclude only 'foo.exe'. The result is that you cannot exclude a specific instance of an object -- you exclude all matching objects.

In addition to objects you specify using the -exclude option, the "These objects are always excluded" field from the Tools->Options->General->Exclude Lists dialog box in DesignSync lists objects that are always excluded from revision-control operations.

-[no]recursive

-[no]recursive

Determines whether to branch the specified object or any subfolders.

-norecursive branches only the specified object.(Default)

-recursive branches the specified object and any subfolders of the object. If the command argument is a vault folder, DesignSync operates on all vaults in the folder and its subfolders. If the command argument is a local folder, DesignSync operates on all files and collections objects in the folder and its subfolders.

If a recursive 'mkbranch' operation encounters a vault folder on the SyncServer that is configuration-mapped to another vault folder (using DesignSync REFERENCEs), the 'mkbranch' operation creates a new configuration map on the SyncServer instead of branching the objects in the vault folder.

Note: You can recursively branch vaults within legacy module folders.

-[no]selected

-[no]selected

Indicates if the command should use the select list (see the 'select' command) or only the arguments specified on the command line.

-noselected indicates that the command should

not use the select list. (Default) If -noselected is specified, but there are no arguments selected, the mkbranch command fails, even if there are valid arguments in the select list.

-selected indicates that the command should use the select list and any objects specified on the command line. If -selected is not specified, and there are no objects specified on the command line, the mkbranch command uses the select list for the command.

-version

-version <selector> Specifies the version off of which the branch is created. This option is required unless the argument contains a version specifier.

Notes:
- o You can specify a dynamic selector as the argument to the -version option, for example, '-version Rel2:Latest'; however, doing so is not recommended because you are attempting to freeze dynamically changing objects. Instead, specify a fixed version selector, for example, '-version rel2_revision1'.
- o If you do choose to specify a branch using the -version option, specify both the branch and version as follows: '<branchtag>:<versiontag>', for example, 'Rel2:Latest'. You can also use the shortcut, '<branchtag>:', for example "Rel2:". If you don't explicitly specify the branch selector in this way, DesignSync does not resolve the selector as a branch selector.

--

-- Indicates that the command should stop looking for command options. Use this option when arguments to the command begin with a hyphen (-).

RETURN VALUE

In stcl/stclc mode, two lists are returned, where the first list is non-empty if at least one object was successfully processed,

```
and the second list is non-empty if at least one object failed.

Notes:
 - Scripts should only test for non-empty lists to
   determine success or failure. The actual content of a non-empty
   list currently takes the form "Objects succeeded (n)" and
   "Objects failed (n)", where "n" is the number of objects that
   succeeded or failed. However, these return values are subject to
   change in a future release.
 - If all objects fail, an exception occurs (the return value is
   thrown, not returned).
```

SEE ALSO

```
selectors, setselector, select, tag, command defaults
```

EXAMPLES


```
Note: The following examples demonstrate the syntax and behavior of
mkbranch, but do not necessarily show a recommended use model.
```

Example of Branching Two Files From Your Workspace

```
In the following example, a new "Dev" branch is created off the
current versions of two local files. Note that the persistent
selector list before and after the operation is unchanged; you must
manually change the persistent selector list if you want to work on
the new branch. Note: This example demonstrates the syntax and
behavior of 'mkbranch', but does not show a recommended use
model. When branching individual objects (as opposed to entire
projects), use the auto-branching option on checkin or checkout.

  dss> ls -report PR samp.asm test.mem
  Selector    Version          Name
  --------    -------          ----
  Trunk       1.3              samp.asm
  Rel2.1      1.2.1.2          test.mem

  dss> mkbranch Dev samp.asm test.mem

  Beginning MkBranch operation...

  Branching: samp.asm   : Success - Created branch 1.3.1, tagged Dev
```

```
  Branching: test.mem   : Success - Created branch 1.2.1.2.1, tagged Dev

  MkBranch operation finished.

  dss> ls -report PR samp.asm test.mem     <== Selector is unchanged
  Selector    Version          Name
  --------    -------          ----
  Trunk       1.3              samp.asm
  Rel2.1      1.2.1.2          test.mem

  dss> setselector Dev samp.asm test.mem   <== Set the selector to
                                           <== work on the new branch

  Beginning Set Selector operation...

  Finished Set Selector operation.

  dss> ls -report PR samp.asm test.mem
  Selector    Version          Name
  --------    -------          ----
  Dev         1.3              samp.asm
  Dev         1.2.1.2          test.mem
```

Example Showing Branching The File Objects in the Workspace Recursively

```
The following example branches an entire work area. The
-recursive option traverses the hierarchy and creates a branch
called "Rel2.1" off the current version of every object:

  dss> mkbranch -recursive Rel2.1 .
```

Example Showing Branching the Server Version of a File

```
The following example makes a branch called "main" off version
1.1 on a file "test.mem". Because the vault for "test.mem" is
specified, the -version option is required to identify the
branch-point version. Note that there must have already been two
branches off version 1.1, because the new branch is 1.1.3.

  stcl> mkbranch main -version 1.1 [url vault test.mem]

  Beginning MkBranch operation...

  Branching:   sync://myhost:2647/Projects/Sportster/code/test.mem; :
  Success - Created branch 1.1.3, tagged main

  MkBranch operation finished.

  {Objects succeeded (1)} {}

In the previous example, if version 1.1 of "test.mem" had a version
tag called "Alpha", you could specify that tag instead of the
```

```
version number:

  stcl> mkbranch main -version Alpha [url vault test.mem]
```

Example Branching the Entire Project from the Server

```
The following example is typical of a release engineer creating a
new project branch off an existing configuration, for example
to create a patch release:
  stcl> mkbranch -version Rel3.1 -rec Patch1 sync://host:2647/Projects/Asic

The following example also shows a release engineer branching an
entire project. In this case, the engineer has a local work area
populated with the latest versions of all files. He places
version tags on these latest versions to identify the branch points
for the new branch. He then branches from those branch-point versions.

  stcl> populate -recursive
  stcl> tag -recursive bp-Rel30 .
  stcl> mkbranch -recursive -version pb-Rel30 [url vault .] Rel30
```

mkfolder

mkfolder Command

NAME

```
mkfolder            - Creates a folder (directory)
```

DESCRIPTION

```
This command creates one or more folders (directories), either on
the local file system or on the server.

o You can specify the folder as a relative path, an absolute path,
  a "file:" URL, or a "sync:" URL.
o The permissions of the new folder are inherited from the parent
  folder.
o When creating local folders (not specifying the "sync:" protocol),
  you must have write privileges for the parent directory.
o When specifying a folder name that contains whitespace, use
  double quotes.
o DesignSync creates whatever folders are needed to create
  the specified path (similar to UNIX's 'mkdir -p' command).
o The ability to create server-side folders ("sync:" protocol) can
  be accessed controlled using the MakeFolder action.
o When creating folders, you must use a legal name.  If characters
  are restricted, you cannot use them in folder names.  For more
```

```
   information on restricted characters, see Exclude Lists in the
   DesignSync Data Manager Administrator's Guide.
 This command is subject to access controls on the server. See the
 ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
 mkfolder [--] <foldername> [<foldername>...]
```

OPTIONS

- --

--

```
  --          Indicates that the command should stop looking for
              command options. Use this option when arguments
              to the command begin with a hyphen (-).
```

SEE ALSO

```
 mvfolder, rmfolder
,
```

EXAMPLES

```
 The following examples show variations of creating folders:
  dss> mkfolder asic                          # relative path
  dss> mkfolder ../asic                       # relative path
  dss> mkfolder /home/goss/Projects/asic      # absolute path
  dss> mkfolder file:////home/goss/Projects/asic   # file: protocol
  dss> mkfolder sync://holzt:2647/Projects/asic   # sync: protocol
  dss> mkfolder asic1 ../asic2                # create two folders
  dss> mkfolder "asic 1"                      # foldername has whitespace
  dss> mkfolder asic/decoder/synth            # creates asic and decoder
                                              #   folders if necessary
```

mvfile

mvfile Command

NAME

```
mvfile              - Moves the specified object
```

DESCRIPTION

```
This command moves or renames the specified object. The object can be
a file or a Cadence cell view (collection object).

Notes: To move a Cadence collection, use mvfile with the
       -noallconfigs option.  No other collection types can be
       moved with mvfile.

With the mvfile command, you can specify a relative or absolute
path to the object. You can move unmanaged and managed objects. To
move a folder, use the mvfolder command.

For unmanaged objects, the mvfile operation is equivalent to an
operating-system move operation (for example, Unix 'mv').

For managed objects, the mvfile operation when not using -allconfigs:
  1. Moves the object locally, if run from the workspace.
  2. Retires the current branch of the object's vault.
  3. Creates a new vault for the new object name. The initial
     version in the new vault is created from the current object
     in your work area (as though you executed 'ci -new' on the
     object after it was moved locally). At this time, a default
     check-in comment is added. The comment includes the user,
     time of check-in, and version URL from where the new vault
     originated.
By leaving the existing vault intact, configurations containing the
object prior to being moved are preserved. The new vault contains
only version 1.1 of the moved object; the new vault does not
contain the version history of the moved object. The branch tags
of the current branch, if any and the selector at the time of the
move are retained for the moved object. The fetch state of the
moved object is the same as the original object; for example,
if you had a link to a cached file prior to the move, you
have a link to a cached file after the move.

For managed objects, the mvfile operation with -allconfigs option:
  1. Moves the object locally, if done from the workspace.
  2. Creates a new vault and then moves all configurations of
     the original object to the new object.
  3. Removes the old vault.
     The new vault contains all versions that were there in the
     old vault. So, if the old vault had file X with version Y,
     the new vault also has file X with version Y. It also contains
     the version history of the moved object. In addition, since
     the old vault is removed, all existing configurations will
     contain the new vault name and not the original vault name.

Note: The mvfile command with or without the -allconfigs option
      does not update the "Objects" list on RC notes.
```

When using the -noallconfigs option (default), you cannot move:

- Server-side objects (as specified with the sync:// protocol).
- DesignSync references. You must fetch a local copy, link to the cache, or link to the mirror first.
- Generic collection objects.
- Objects on a locked branch. You must release the lock first.
- Managed symbolic links to files or folders.
- Collection members, such as the files that make up a Cadence cell view.

When using the -allconfigs option, you cannot move:

- Cache or mirror links. You must fetch a local copy or a reference first.
- Collection objects.
- Objects on a locked branch. You must release the lock first.
- Managed symbolic links to files or folders.
- Collection members, such as the files that make up a Cadence cell view.

The following additional restrictions apply:

- The source and destination locations must be on the same file system.
- The destination object or vault cannot already exist.
- The path of the destination object must already exist; no components of the destination path are created for you.
- When not using -allconfigs option with managed objects, the checkin to create the new vault is always done with the '-keys kkv' option; revision-control keywords, if any, are retained and their values are updated.
- For managed objects, the vault folders for both source and destination locations must be on the same SyncServer (the vault set to the same sync://<host>:<port>). Otherwise, an error about crossing domain boundaries results.
- When not using the -allconfigs option with managed objects, you cannot rename the object, and then rename it back to the original name.
- Cadence cell view (.sync.cds) collection objects can only be moved to a Cadence cell folder.
- Cadence cell view objects must always be named with a .sync.cds extension.
- ProjectSync notes do not migrate to the new vault, unless the -allconfigs option is used.
- When the -allconfigs option is used, RevisionControl notes are not affected, remaining associated with the original vault.
- If there are restricted characters are enabled, no restricted character can be used in the natural path of the object.

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.

SYNOPSIS

```
mvfile [-allconfigs] <object> <destination>
```

ARGUMENTS

Object

```
object          The object that you want to move or rename. The
                object can be a local file or Cadence cell view
                (.sync.cds) collection object. You can specify an
                absolute or relative path.
```

Server URL object

```
serverURL       Specifies the URL of object to be moved. Specify the
                URL as follows:
                sync://<host>[:<port>]/<path>/<filename>; or
                syncs://<host>[:<port>]/<path>/<filename>;
                where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                For example:
  sync://serv1.abco.com:1024/Projects/Chip/Chip.c;

                If you specify a server URL file, you must use the
                -allconfigs options to move the entire vault.
```

Destination

```
destination     The destination can be:
                  - The folder into which the object is
                    moved. The object retains its current name.
                  - The new name of the object (a rename operation).
                  - Both a folder and new name for the moved
                    object.
                You can specify an absolute or relative path.
```

Server URL Destination

```
serverURL       Specifies the URL of new object location. Specify the
                URL as follows:
                sync://<host>[:<port>]/<path>/<filename>; or
                syncs://<host>[:<port>]/<path>/<filename>;
                where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                For example:
  sync://serv1.abco.com:1024/Projects/NewChip/NewChip.c;
```

OPTIONS

- -[no]allconfigs

-[no]allconfigs

```
- [no]allconfigs   Determines whether to update the location of the
                   specified objects in all configurations that use
                   the object.

                   -noallconfigs does not update the configurations.
                   When this option is specified, ProjectSync notes
                   linking to the old objects are not updated and
                   might break.

                   -allconfigs moves the vault file in the repository
                   and, if successful, moves file in the local
                   workspace transferring the metadata from the old
                   file to the new file. This updates all
                   configurations containing objects to the new
                   object. All attachments, such as ProjectSync
                   notes, are migrated to the new vault of the moved
                   object.

                   When attempting mvfile -allconfigs where the vault
                   is on a pre-4.2 server, you will get an error
                   message.
```

RETURN VALUE

```
None. An exception is thrown if the command fails.
```

SEE ALSO

```
mvfolder, rmfile, retire, ci, command defaults
```

EXAMPLES

Example Showing Renaming a File

```
The following example renames a file:
  dss> mvfile top.v mod1.v
  top.v: Success Moved
```

Example Showing Moving the File to a New Folder

```
The following example moves a file to a new folder (newdesign)
while keeping the same name (test.mem):
  dss> mvfile ../test.mem /home/tgoss/newdesign
  test.mem: Success Moved

Note that in the preceding example, if the object is managed,
the destination folder must previously have had its vault set
to the same SyncServer as the original folder or an error will
result.
```

Example Showing Renaming a File on the Server

```
The following example renames a file on the server.
 dss> mvfile -allconfigs
sync://srv1.ABCo.com:2647/Projects/ChipDesign/Chip.c;
sync://srv1.ABCo.com:2647/Projects/ChipDesign/NewChipDesign.c;

 Chip.c;: Success Moved
```

Example Showing Moving a File on the Server

```
This following example moves a file to a different folder on the
server.
dss> mvfile -allconfigs
sync://srv1.ABCo.com:2647/Projects/ChipDesign/Chip.c;
sync://srv1.ABCo.com:2647/Projects/NewChipDesign/Chip.c;

 Chip.c;: Success Moved
```

Example Showing Renaming and Moving a Cadence Cell View

```
The following example moves a Cadence cell view to a new folder and
renames it. Note that a cell view collection object must have a
.sync.cds extension:
  dss> mvfile symbol.sync.cds ../and5/symbol2.sync.cds
  symbol.sync.cds: Success Moved
```

Example Showing The History of a Moved File

```
The following example demonstrates that the move of a managed
object retires the current branch of the existing vault, and creates
a new vault with no version history. The renamed object retains the
original object's branch tags and selector. The 'vhistory' command
is used before and after the move for comparison purposes.

  stcl> vhistory top.v
  Object:          file:///home/tgoss/Projects/Sportster/top/top.v
  Vault URL:       sync://myserver:30020/Projects/Sportster/top/top.v;
  Current version: 1.2.1.1
  Current state:   Copy
  ----------------------------
  Branch:       1.2.1
  Branch tags:  rel21

  ----------------------------
  Version:      1.2.1.1
  Version tags: Latest
  Derived from: 1.2
  Date:         Tue Feb 22 14:05:46 2000; Author: tgoss
  Branching off for rel21 release

  ================================================================

  stcl> url selector top.v
  rel21
  stcl> mvfile top.v mod1.v
  top.v: Success Moved
  stcl> vhistory mod1.v
  Object:          file:///home/tgoss/Projects/Sportster/top/mod1.v
  Vault URL:       sync://myserver:30020/Projects/Sportster/top/mod1.v;
  Current version: 1.1
  Current state:   Copy
  ----------------------------
  Branch:       1
  Branch tags:  rel21

  ----------------------------
  Version:      1.1
  Version tags: Latest
  Date:         Tue Feb 22 14:06:24 2000; Author: tgoss

  ================================================================
```

```
stcl> url selector mod1.v
rel21
stcl> ls top.v
No such object: file:///home/tgoss/Projects/Sportster/top/top.v
stcl> co -get -version rel21 top.v

Beginning Check out operation...

Checking out: top.v           : Success - Fetched  version: 1.2.1.1

Checkout operation finished.

{Objects succeeded (1)} {}
stcl> ls -nohead top.v
Copy       <Retired> Up-to-date  1.2.1.1         top.v
stcl>
```

mvfolder

mvfolder Command

NAME

```
mvfolder            - Moves the specified folder
```

DESCRIPTION

```
This command moves or renames the specified folder. This folder may
exist in either the workspace, on the server, or in both places. You
can specify a relative or absolute path. To move a file or Cadence
cell view, use mvfile.

You can move a managed or unmanaged folder. For unmanaged folders,
the mvfolder operation is equivalent to an operating-system move
operation (for example, Unix 'mv'). A managed folder is one that has
a corresponding vault folder (a setvault has been performed on the
the folder). Both the local folder and vault folder are moved.
You can use the 'mvfolder' command only on a vault folder on the
server, without affecting your workspace.  There is an example of
this in the Examples section.

IMPORTANT:
  If you use mvfolder to rearrange the subdirectory structure within a
  vault folder hierarchy, the hierarchy of the original structure is lost.
  Because directories are not versioned, whatever data is fetched will be
  fetched into local workspace directories whose structure mimics that of
  the vault, at that point in time. Use mvfolder on a managed folder only
  if you are certain about changing the vault's directory structure.

You cannot move:
```

```
  - Your current folder or any parent folder.
  - Cadence cell-view folders. A cell-view folder is moved as part
    of a mvfile of a Cadence cell view (.sync.cds) collection object.

The following additional restrictions apply:
  - The source and destination locations must be on the same file
    system.
  - For managed folders, the vault folders for both source and
    destination folders must be on the same SyncServer
    (the vault set to the same sync://<host>:<port>).
    Otherwise, an error about crossing domain boundaries results.
  - The path of the destination folder must already exist; no
    components of the destination path are created for you.
  - A Cadence cell folder can only be moved to a Cadence library
    folder.
  - The folder names must contain only printable characters, and
    may not include any characters that have been restricted.  For
    more information on restricted characters, see Exclude Lists in
    the DesignSync Administrator's Guide.

Note: If the folder is a legacy module configuration, notify project
leaders and module administrators to remove each hierarchical
reference specifying the old project folder and add a new
hierarchical reference for the new project folder. For more
information, see the edithrefs, addhref and rmhref commands.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

Any attachments, such as ProjectSync notes, associated with objects
in a folder are retained. Notelinks are updated to reflect
the new vault path.

This command supports the command defaults system.
```

SYNOPSIS

```
mvfolder [--] <folder> <destination>
```

ARGUMENTS

- Folder
- Destination

Folder

```
folder          The local or server-side folder that you want to move
                or rename. You can specify an absolute or relative
                path.
```

Destination

```
destination     The destination can be:
                  - The folder into which the folder is moved.
                    The source folder retains its current name.
                  - The new name of the folder (a rename operation).
                  - Both a folder and new name for the
                    moved folder.

                The path to the destination must exist; no portions
                of the path are created for you. You can specify an
                absolute or relative path.

                If the destination already exists as a folder, then
                the folder being moved is placed inside of the
                destination folder.
```

OPTIONS

- --

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when arguments
                to the command begin with a hyphen (-).
```

RETURN VALUE

```
None. An exception is thrown if the command fails.
```

SEE ALSO

```
mvfile, rmfolder, mkfolder, scd, command defaults
```

EXAMPLES

- Example Showing Renaming a Folder
- Example Showing Moving a Folder to a New Path
- Example Showing Moving a Cadence Cell to a Different Library
- Example Showing a Vault Rename

Example Showing Renaming a Folder

```
The following example renames a folder:
  dss> mvfolder mod1 mod2
  mod1: Success Moved
```

Example Showing Moving a Folder to a New Path

```
The following example moves a folder to a new folder (newdesign)
while keeping the same name (mod1):
  dss> mvfolder ../mod1 /home/tgoss/newdesign
  mod1: Success Moved

Note that in the preceding example, if a setvault has been applied
to the original folder, the destination folder must previously have
had its vault set to the same SyncServer or an error will result.
```

Example Showing Moving a Cadence Cell to a Different Library

```
The following example moves a Cadence cell to a different library
and renames it.
  dss> mvfolder ASIC/and2 TTLLib/and
  and2: Success Moved
```

Example Showing a Vault Rename

```
The following example shows a vault folder being renamed directly,
without requiring a corresponding workspace directory.

stcl> scd sync://lotti:30158/Projects
stcl> ls

Directory of: sync://lotti:30158/Projects

Time Stamp             WS Status  Version   Type        Name
----------             ---------  -------   ----        ----
                                                       Test
stcl> mvfolder Test TestHere
Test: Success Moved
stcl> ls

Directory of: sync://lotti:30158/Projects

Time Stamp             WS Status  Version   Type        Name
----------             ---------  -------   ----        ----
                                                       TestHere
stcl>
```

purge

purge Command

NAME

```
purge                - Purges specified branches or versions of
                       objects from the vault
```

DESCRIPTION


```
This command deletes specified branches or versions of
an object on a single branch in the vault. You can use this command
to clean up the vault by deleting old versions of objects. You also
can remove an entire branch: all branch tags, all version data, and
all version tags on the deleted branch.

Your server must be at release DS 4.2, or higher, to use this command
to delete branches. Your server must be at release V6R2012 to use
this command to purge module branches or versions.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

Restrictions

```
o The purge command does not follow DesignSync REFERENCEs or
  hierarchical references and operate on referenced data. If you
  use 'purge -recursive' on a directory hierarchy, the purge
  operation skips hierarchical elements based on REFERENCEs or
  hierarchical references.

o The purpose of the purge command is to purge old versions on a
  single branch in the vault. The command does not support
  selectors with multiple entries. If you specify a purge of a
  vault object, you specify the branch to purge and the purge
  operation deletes versions from that branch only. If you specify
  a purge of a workspace object but you do not specify the -branch
  option, the purge operation uses the current branchid of the
  object and purges only that branch. The operation ignores a
  selector.

o You can specify a purge of objects in a workspace or directly
```

defined by their vault URLs. If you specify a purge of a workspace directory, the purge operation traverses the workspace hierarchy to find all the objects for the purge operation. Then the operation deletes corresponding vault objects that have the appropriate branchid. If you use the purge command on workspace objects, it is possible that the purge operation will remove a version in the vault that is currently located in your workspace. This action is deliberate, since 'purge' is intended to clean up the vault independent of existing workspaces.

Note: The purge command deletes versions from the vault; the command never affects data in your workspace.

- The 'purge -recursive' command fails if you specify a directory for which you have not set the vault, even if that directory contains a subdirectory for which the vault is set. For example, suppose you have the following directory hierarchy in your workspace:
  Directory A (vault not set)
    Directory B (vault not set)
      Directory C (vault is set)

  If you use 'purge -recursive' and specify Directory A or Directory B, the purge operation fails and never finds Directory C. In this example, to purge files in Directory C, you must specify that directory with the 'purge -recursive' command.

- To remove a branch with side branches, you must first remove the side branches.

- Locked branches cannot be removed. You must first unlock the branch before deleting it.

- The branch numbers of deleted branches cannot be reused.

Triggers and Revision Control Notes and 'purge'

The purge command generates the same triggers and creates the same revision control notes as the rmversion command. Administrators should carefully consider which pre- and post-command triggers and revision control notes to enable. For example, the purge command causes triggers for 'rmversion'.

Error Handling

If an error occurs, the purge command reports the error but does not throw an exception. The command proceeds with all other objects still left in the list of objects to purge.

The purge operation reports an error only when:
- There is an error in the command option
- Objects specified do not exist

```
- None of the versions selected for the purge can be deleted

Failure to delete a version or a failure to access an object is
reported in the overall failure count for the operation, not as an
error.
```

Using Purge with Files-Based Objects

```
With this command you can specify:
 - One or more objects in your workspace.
 - A folder in your workspace. (Note: You must specify '-recursive'
   in order to purge a folder.)
 - A vault URL for the object or folder.
 - A branch to remove.

Note: Wildcards (such as '*') are allowed for all arguments except
module instance names.

You cannot delete:
 - Branchpoint versions (for example, if 1.2.1 is a branch, you
 cannot delete version 1.2)
 - Version 1.1
 - The only version on a branch if it is not a .1 version
 - The Latest version of a locked branch
 - Tagged versions (unless the -force switch is used).
 - Version .1 when:
    o Another version on the branch could not be deleted.
    o Additional branch tags exist on the branch specified with
    the -branch switch and you do not specify '-force.'
    o Additional branch tags exist on the branch, the -branch switch
    is used with a branch numeric, and you do not specify '-force.'
 - The Latest version on branch 1 if the vault was previously
 removed with 'rmvault -keepvid' and then recreated.

Note:  Do not attempt to remove an entire vault by specifying branch
  1. Instead, use the rmvault command to delete the entire vault.
```

SYNOPSIS

```
purge [-branch <branchname>] [-[no]dryrun]
      [-exclude <object>[,<object>...]] [-[no]force]
      [-keepsince <date>] [-keepversions <n>][-[no]recursive]
      [-report <mode>] [--] <argument> [<argument>...]
```

ARGUMENTS

- DesignSync Object
- DesignSync Folder

```
Specify one or more of the following arguments:
```

DesignSync Object

```
<DesignSync object>  Purges the specified DesignSync object from the
                     server. This object can be a vault URL, or an
                     object in your workspace.
```

DesignSync Folder

```
<DesignSync folder>  Purges a local folder and the objects within it.
                     (Note: You must specify '-recursive' in order to
                     purge a folder.)
```

OPTIONS

-branch

```
-branch              Specifies the branch identifier of the objects you
<branchname>         want to purge. You can specify only one branch
                     with this option.

                     For the <branchname>, specify a branch tag (for
                     example, rel40) or branch numeric (for
                     example, 1.4.2) only. Do not specify a colon
                     (:) with the branchname.

                     If you do not specify the -branch option, the
                     purge command uses the current branch
                     identifier of the object.

                     Note: If you use a server URL to specify an object
                     for purging, you must also specify the -branch
                     option.
```

-dryrun

```
-[no]dryrun    Determines whether this command performs a purge, or
               creates a report showing what files will be purged when
               the command is run.
               The -nodryrun option performs the purge.(Default)
               The -dryrun option generates the list of what will be
               purged when the purge command is run.
               This option can be used with any of the report modes.
```

-exclude

```
-exclude <objects>
                  Excludes one or more objects (files,
                  collections, or folders) from the purge
                  operation. Specify objects in a comma-separated
                  list. Wildcards are allowed.

                  The purge operation excludes objects specified
                  with '-exclude' in addition to objects always
                  excluded from revision-control operations.
```

-[no]force

```
-[no]force     Determines whether this command purges a tagged
               version or branch.
               -noforce ignores versions or branches that are
               tagged. (Default)
               -force purges the tagged versions and branches along
              with the rest of the specified versions. On vault
              objects, when used with -keepversions 0,' -force
              removes the branch (and the .1 version) even when the
              branch includes tags.
```

-keepsince

```
-keepsince <date>
                  Keeps all versions created after the specified
                  date and deletes the other versions of an
                  object on a single branch in the vault. For
                  example, purge -keepsince "10 September 2003"
                  keeps all versions of the object that were
                  created after 10 September 2003 and deletes all
                  other versions on the branch.

                  For <date>, specify a date or a
                  relative time, enclosed in double quotation
                  marks (" "). For example:
```

```
stcl> purge -keepsince "10 days ago" top.v

Note: If you use the -keepversions option in
combination with the -keepsince option, the
purge operation keeps those versions specified
by each option. For example, if you specify:

purge -keepversions 3 -keepsince "Jan 1 2004"

the purge operation deletes all versions of the
object from the vault except for the last 3
versions or any versions created after the Jan
1, 2004.

If you use the -keepsince option with
-keepversions 0 and -keepsince specifies that some
versions cannot be deleted, the branch is not
removed. The -keepsince option takes precedence
over -keepversions 0.
```

-keepversions

```
-keepversions <n>  Keeps the last <n> versions of an object (on a
                   single branch in the vault) and deletes the
                   other versions. The default is 1.

                   For example, 'purge -keepversions 3' keeps only
                   the last 3 versions of the object and deletes
                   all other versions from the vault.

                   To delete all versions, use '-keepversions 0'.

                   To delete a branch completely, identify the
                   branch with the -branch switch and specify
                   '-keepversions 0'. If you do not specify a branch,
                   the current branch is picked up from the metadata
                   when the command is issued on a workspace file.
```

-recursive

```
-[no]recursive     Determines whether to perform the purge on objects
                   in the specified folder or on objects in the
                  specified folder and all subfolders in the
                  hierarchy.
                   The -norecursive option purges only objects in the
                   specified folder. (Default)
                   The -recursive options purges objects in the
                  specified folder and all subfolders in the
                  hierarchy.
```

-report

```
 -report <mode>     Specifies the amount of output generated
                    by the purge operation.

                    Available modes are:
                     o brief - Displays:
                       - The name and version of each object
                         successfully deleted.
                       - A message if no versions are selected for
                         deletion.
                       - Error messages.

                     o normal (the default mode) - Displays:
                       - A statement that the command is gathering
                         versions to be deleted.
                       - A statement reporting the number of
                         versions being deleted.
                       - Versions successfully deleted, each with
                         its full vault URL.
                       - A message if no versions are selected for
                         deletion.
                       - Error messages.

                     o verbose - Displays:
                       - A statement that the command is gathering
                         versions to be deleted.
                       - Information on the progress of the command
                         as it gathers versions for deletion,
                         including:
                         - Each directory traversed
                         - Each object found
                         - The number of versions on the branch to
                           be deleted
                       - A list of versions deleted and versions
                         kept (with the reason why the version was kept)
                       - Summary information about versions gathered
                         for deletion.
                       - A statement reporting the number of
                         versions being deleted.
                       - Each item being skipped (with the reason it
                         is skipped)
                       - Versions successfully deleted, each with
                         its full vault URL.
                       - A message if no versions are selected for
                         deletion.
                       - Error messages.
```

--

```
 --             Indicates that the command should stop looking
                for command options. Use this option when
                arguments to the command begin with a
```

```
                hyphen (-).
```

RETURN VALUE

```
The return value from the purge command is a string in the form:
    {Objects succeeded (n)} {Objects failed (n)}

The Objects succeeded count is the number of versions that were
successfully deleted.

The Objects failed count includes objects for which the version
deletion failed, objects not under revision control, and objects
for which version information for the object could not be fetched
from the vault.
```

SEE ALSO

```
rmversion, rmvault, command defaults
```

EXAMPLES

Example of Purging All but a 4 Versions of a Collection Object

```
This example deletes from the vault all versions of the top_design
Milkyway collection object in the current workspace except for the
last 4 versions.

   stcl> purge -keepversions 4 top_design.sync.mw
```

Example of Using Keep Since to Maintain 30 Days of Versions

```
This example deletes from the vault all versions of each object in
the current workspace directory except for versions created in the
last 30 days. The purge operation works recursively through all of
the data in your workspace.

   stcl> purge -keepsince "30 days ago" -rec .
```

Example of Using both the -keepsince and -keepversions Options

```
This example deletes from the vault all versions of each object in
Ted's ALU workspace except for the last 5 versions of the object OR
versions that were created in the last 30 days. The purge operation
works recursively through all of the data in Ted's ALU workspace.

   stcl> purge -keepversions 5 \
               -keepsince "30 days ago" -rec /home/ted/ProjectWork/ALU
```

Example of Purging Versions from the Server

```
This example deletes all versions of each object in the asic folder
on the Trunk branch in the vault, except for the last 4 versions. The
purge operation deletes these objects from the vault whether they are
in the user's workspace or not.

stcl> purge -keepver 4 sync://S1.ABC.com:2647/Projects/asic -branch
     Trunk
```

Example of Making then Purging a Branch

```
This example shows the user creating a "V11" branch of the "runit"
file, then immediately removing that branch via 'purge'.  The
'vhistory' output preceding the 'purge' shows the branch and version
information, from the user's perspective.  The verbose output from
'purge' uses the internal representation of that same data.

stcl> mkbranch V11 runit

Beginning MkBranch operation...

Branching:   runit                          : Success - Created branch
1.1.2, tagged V11

MkBranch operation finished.

{Objects succeeded (1)} {}

stcl> vhistory -all runit
Object:     file:///c|/barbg/work dir/Sportster/test/runit
Vault URL:  sync://srv2.ABCo.com:2647/Projects/Sportster/test/runit;
Current version: Refers to: 1.1
Current state:   Reference
----------------------------
Branch:       1
Branch tags:  Trunk

----------------------------
Version:      1.1
```

```
Version tags: Latest
Date:         Fri Oct 28 16:13:52 2005; Author: tbarbg2

----------------------------
Branch:       1.1.2
Branch tags:  V11
This branch does not yet have any versions.

============================================================================

stcl> purge -report verbose -branch V11 -keepversions 0 runit
Gathering versions for deletion...
    Object c:\barbg\work dir\Sportster\test\runit :
        0 existing version on branch "V11" (branchid "1.1.2") :
        This is a stub branch
        deleting version 1.1.2.1
Purge version gathering summary:
    Objects processed: 1
    Versions selected for removal: 1
    Versions retained: 0
Deleting 1 version...
sync://srv2.ABCo.com:2647/Projects/Sportster/test/runit;1.1.2.1: \
 Success Deleted
{Objects succeeded (1)} {}
stcl>
```

retire

retire Command

NAME

```
retire              - Marks a branch as obsolete
```

DESCRIPTION

```
This command marks a branch of a given object as obsolete. Retiring
a branch:
  o Prevents the branch from participating in future 'populate with
    latest versions' operations
  o Prevents new versions from being created on the branch (unless
    the -new option is used during the checkin, in which case the
    branch is unretired)

When you perform a retire, the time, date, and the username of the
user performing the retire are recorded and can be viewed as part of
the branch's version history. If the file is unretired, the retire
information is removed and cannot be accessed again.

Tip: If you want to preserve the retire information in the version
```

history, you can include the information in the checkin comment either by unretiring the file with the ci command with the -new -comment options, or by doing a ci -force after performing a retire -unretire on the file.

Note: If you specify a collection member as the object to be operated on, DesignSync skips the object and warns that the object is not versionable. If DesignSync attempts to operate on a collection member specified implicitly (through the use of wildcards or a recursive operation), DesignSync silently skips the object. You can change this behavior by using the SyncAdmin "Map operations on collection members to owner" setting. If you select this setting and DesignSync attempts to operate on a collection member during a revision control operation, DesignSync determines the member's owner collection and operates on the collection as a whole.

A typical first step when team members join a project is to populate their work areas with the Latest versions from a given branch of all active design objects. By retiring a branch, you prevent objects that are no longer needed (are obsolete) from being fetched into their work areas, thereby limiting exposure to the object.

You can perform many operations on retired branches. For example, you can fetch data from a retired branch. You can also tag files on a retired branch if they are in your workspace. For information on when you cannot tag files on a retired branch, see the tag command's -version option description. However, operating on an object on a retired branch is not typical.

It is important to note that objects on retired branches remain part of past configurations. When you use the populate command to retrieve a particular configuration other than 'Latest', objects from retired branches are fetched. The populate command determines what configuration to retrieve from the persistent selector list of the folder you are populating (Trunk:Latest by default, or as set by the 'setselector' command). You can override the folder's persistent selector list by specifying 'populate -version <selectorList>'. The populate command fetches objects from retired branches, thereby preserving past configurations, if the selector used is any of the following:

- A version tag other than 'Latest', even if the version tag points to the Latest version
- A version number, even if that number corresponds to the Latest version
- <branchtag>:Date(<date>) or <branchtag>:VaultDate(<date>)

Note: If the selector for a populate operation resolves to a branch, DesignSync augments the selector to be <branch>:Latest, meaning, 'Get the Latest version from the specified branch'. In this case, objects from retired branches are not fetched.

See the "selectors" help topic for more information on selectors and the "populate" help topic for details on the populate command.

```
Caution:
  o You cannot retire the branch of an object that is locked unless
    you specify the -force option, which removes the lock even if it
    is held by someone else.
  o By default, the local copy of an object on a retired branch is
    deleted unless the local copy is modified or you have specified
    the -keep option. However, if you specify -force (to unlock the
    object first), even a modified local copy is deleted. To unlock
    the object but keep your local copy, specify both -force and
    -keep.

    Note that when you specify the -branch option, DesignSync does
    nothing to the local work area objects. The branch is retired,
    but the local object is never deleted and the object's local
    metadata is unchanged, even if you specified -force.

You can unretire a retired branch in two ways:
  o Execute a 'retire -unretire' command on the branch.
-OR-
  o Check in a new version of the object onto the retired branch
    using the '-new' option to the ci command.

To determine whether the branch is retired you can:

 o Use 'ls -report status' command and the List View in the graphical
   user interface indicate if the current branch of an object in your
   work area is retired.

 o Use the 'url retired' command or view the data sheet for the
   object's vault to see the retired status.

 o Use the vhistory command with the -BX options (or in report
   -normal or report -verbose mode) to see the state of the branch
   and the username, time and date associated with the retire.


This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

SYNOPSIS

```
retire [-branch <branch> | -branch auto(<branch>)] | [-[no]force]
       [-[no]keep] [-[no]recursive] [-[un]retire] [-[no]selected]
       [-trigarg <arg>] [--] [<argument> [<argument>...]]
```

ARGUMENTS

- Server URL
- Workspace Object
- DesignSync Folder

Server URL

<server object>	Specify a vault or vault-folder object on the server to retire in the specified branch.

Workspace Object

<workspace object>	Specify a versionable object in the local workspace to retire in the specified branch. Note: If a workspace object is locked when the retire operation is performed, the retire is performed on the branch of the objects in the workspace instead of on the selector for the workspace. This can happen if the user changes the selector but does not repopulate the workspace with the updated branch files.

DesignSync Folder

<DesignSync folder>	Specify a folder containing DesignSync objects with the -recursive option to retire all the objects, including sub-folders, within a folder. Notes: You can retire only the objects within a folder, without retiring the sub-folder structure, by specifying the folder name with the * wildcard. Non-module directories are not explicitly checked into DesignSync so you cannot remove a folder itself, only the contents of a folder. If a folder becomes empty as a result of a retire, it remains in the vault allowing you to unretire the contents if needed.

OPTIONS

- -branch
- -[no]force
- -[no]keep
- -[no]recursive
- -[un]retire
- -[no]selected
- -trigarg
- --

-branch

-branch <branch> | -branch auto(<branch>)	Retires the branch specified by the branch or version tag, auto-branch selector, or branch numeric. The -branch option accepts a single branch tag, a single version tag, a single auto-branch selector tag, or a branch numeric. It does not accept a selector or selector list. This option overrides the object's persistent selector list. If <branch> resolves to a version, the branch of that version is retired. If you do not specify the -branch option, the command uses the branch specified by the workspace selector or the sync URL to retire the specified objects. Notes: When you use the -branch option, DesignSync operates only on the vault and does nothing with local work area objects. The local object is never deleted and the object's local metadata is unchanged. If the retire command is run on a workspace containing locked files and the -branch option is not specified and -force is not specified, the retire fails. If -force is specified, the retire succeeds but is run against the branch currently populated in the workspace regardless of the selector value.

-[no]force

-[no]force	Specifies whether the branch should be removed even if the branch, or objects in the branch are locked. -noforce does not remove the branch if the branch, or objects in the branch are locked. (Default) -force unlocks locked branches (even if locked by someone else) prior to retiring them. This option also deletes local objects if the object was modified locally. To keep your local objects, specify -keep. The -force and -branch options are mutually exclusive, because local objects are never deleted or otherwise affected when you specify

-branch.

-[no]keep

-[no]keep	Specifies whether to keep or delete local copies of objects after their branches are retired. -nokeep deletes local objects unless either the object has been modified locally, or the -branch option is specified. (Default) Note: When you use the -force option, even locally modified objects are deleted unless you explicitly specify -keep. -keep preserves all local objects after the branch is retired. The objects become unmanaged by DesignSync. If a locked reference is retired with -keep (and -force, to unlock the object's branch), a DesignSync reference remains in the workspace You cannot use the -keep option if the local state of the object being retired is a link to the mirror. Because the SyncServer removes retired objects from the mirror directory, there would be no way to link to the retired object. The -keep option is ignored when unretiring an object, because 'retire -unretire' never affects local objects.

-[no]recursive

-[no]recursive	Indicates whether the retire command operates on the specified argument or all subfolders in the argument's hierarchy. -norecursive operates only on the specified argument. (Default) If the argument is a folder specified with a wilcard (<folder>/*), the contents of any sub-folders are not retired, but the contents of the specified folder are retired. -recursive operates on all subfolders in the specified argument's hierarchy.

-[un]retire

-[un]retire	Indicates whether the retire command is intended to retire the branch or reinstate the branch. -retire is provided to support the command defaults system. (Default) It retires the branch. -unretire reinstates branches as active, permitting future populate operations to fetch the latest objects on the branches. Note: An alternative way to unretire a branch is to perform a 'ci -new' command on an object. Refer to the ci command for details.

-[no]selected

-[no]selected	Determines whether the operation is performed just on the objects specified at the command line or on objects specified at the command line and objects in the select list (see the 'select' command) -noselected adds only objects specified on the command line. (Default) -selected adds objects specified on the command and in the select list.

-trigarg

-trigarg <arg>	Specifies an argument to be passed from the command line to the triggers set on the retire operation. If the argument contains whitespace, enclose the argument within double quotation marks ("") if using the dss command shell or braces ({}) if using the stcl command shell.

--

--	Indicates that the command should stop looking for command options. Use this option when arguments to the command begin with a hyphen (-).

RETURN VALUE

none

SEE ALSO

```
url retired, ls, co, select, selectors, command defaults
```

EXAMPLES

Example of Retiring Files

```
The following example retires the current branches of any '.v'
files in the current work area that begin with either 'cpu' or
'mem' and removes the local copy of the file if present. After
retiring the branch, users will not get these objects when
populating the Latest versions from that branch, and new versions
of the objects cannot be created on the retired branch.
  dss> retire cpu*.v mem*.v

However, if a version of 'cpu1.v' is tagged 'rel1', then the following
populate command successfully fetches that version even though the
branch is retired:
  dss> populate -version rel1
```

Example of Retiring a Branch

```
The following example retires the 'Main' branch of all files in the
current folder. All local files remain and their metadata is
unchanged after the retire operation even though -keep was not
specified because -branch was specified.
  dss> retire -branch Main *
```

Example of Retiring a Specific File on a Branch

```
The following example retires the 'Main' branch of 'top.v' by
specifying its URL:
  dss> retire \
  "sync://apollo:2647/Projects/Sportster/top/top.v;Main:Latest"
or, in stcl/stclc mode, you might specify:
  stcl> retire [url vault top.v]Main:Latest
```

rmfile

rmfile Command

NAME

```
rmfile              - Deletes the specified object
```

DESCRIPTION

```
This command deletes the specified object from the local file
system. The object can be a file or a collection object. You can
specify a relative or absolute path to the object. You cannot
delete an object on the server ('sync:' protocol). Deleting an
object does not affect the vault or module for that object.

Notes:
o You cannot delete a member of a DesignSync collection
  object.

o If you use rmfile to delete a collection object that has obsolete
  local versions, the command deletes all of the files making up
  those obsolete local versions.

This command supports the command defaults system.
```

SYNOPSIS

```
rmfile [-trigarg <arg>] [--] <object> [<object> [...]]
```

ARGUMENTS

- Object

Object

```
object              The object that you want to delete. The object
                    can be a local file or collection object. You
                    can specify an absolute or relative path.
```

OPTIONS

- -trigarg
- --

-trigarg

```
-trigarg <arg>      Specifies an argument to be passed from the
                    command line to the triggers set on the
                    delete file operation. If the argument contains
                    whitespace, enclose the argument within
                    double quotation marks ("") if using the dss
                    command shell or braces ({}) if using the stcl
                    command shell.
```

--

```
--                  Indicates that the command should stop looking
                    for command options. Use this option when
                    arguments to the command begin with a
                    hyphen (-).
```

RETURN VALUE

```
none
```

SEE ALSO

```
command defaults, mvfile, retire, rmfolder, rmversion
```

EXAMPLES

Example of Removing a Specific File in the Current Working Directory

```
Delete top.v, which is in the current working directory:
  dss> rmfile top.v
  top.v: Success Deleted
```

Example of Removing Two Files

```
Delete two files: one absolute, one relative:
  dss> rmfile /home/Projects/ASIC/top.v ../decoder.v
  top.v: Success Deleted
  decoder.v: Success Deleted
```

Example of Removing a File with a Leading "-"

```
Delete a file called '-myfile':
  dss> rmfile -- -myfile
  -myfile: Success Deleted
```

Example of Removing a Member of a Collection

```
Deleting a file that is a member of a collection object fails. You
must delete the collection object itself. The following example
shows deletion of a Cadence cell view collection:
  dss> scd /home/Projects/smallLib/and2/verilog
  dss> rmfile pc.db
  pc.db: Deletion of this object is not supported
  Operation failed.
  dss> scd ..
  dss> rmfile verilog.sync.cds
  verilog.sync.cds: Success Deleted
```

rmfolder

rmfolder Command

NAME

```
rmfolder            - Deletes the specified folder
```

DESCRIPTION

```
This command deletes the specified folder from the local or server
file system. You can specify a relative or absolute path for a local
folder. Use the 'sync:' protocol to specify a server-side folder.

When this command is used with the -norecursive option, you cannot
delete a folder unless it is empty:
  - For local (client) folders, the folder cannot contain files,
    links, or folders. A folder containing a Synchronicity .SYNC
    metadata folder (for example, the folder you are deleting
    contains DesignSync references) can be deleted.
  - For server folders, the folder cannot contain vaults or other
    folders. A folder containing a sync_project.txt file can be
    deleted.

If your vault is associated with a mirror, any folder removed from
the vault is also removed from the mirror.
```

```
You cannot delete your current folder or any parent folder to your
current folder.

You cannot delete any folder or file if you do not have UNIX
permissions.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

SYNOPSIS

```
rmfolder [-[no]keepvid] <folder> [-[no]recursive] [-trigarg <arg>]
         [<folder> [...]]
```

ARGUMENTS

- Folder

Folder

```
folder              The local or server-side folder that you
                    want to delete. You can specify an absolute
                    or relative path.
```

OPTIONS

- -[no]keepvid
- -[no]recursive
- -trigarg

-[no]keepvid

```
-[no]keepvid        Determines whether the version number of the
                    Latest version in a deleted vault (due to
                    'rmfolder -recursive' on a server-side folder) is
                    remembered. This behavior is important if a
                    vault of the same name is later created.

                    -nokeepvid does not store the version
                               number. (Default)

                    -keepvid stores the version number.

                    See the rmvault command for more details.
```

-[no]recursive

-[no]recursive	Determines whether to remove the specified folder and all subfolders in the hierarchy beneath it. The -norecursive option deletes the folder only if it's empty. This command is similar to the UNIX -rmdir command. The -recursive option deletes the contents of the folders and all subfolders. For local (client) folders, deletes as many folders and files as UNIX permissions allow. If an object was checked out "-lock" in the workspace being recursively removed, the lock is silently canceled prior to the object's removal. For server folders, access-control permissions are checked recursively for all vaults contained in the folders to be deleted. If all the access control checks pass, then the command deletes as many folders and files as UNIX permissions allow. If any access-control permission fails, the entire deletion operation is canceled. CAUTION: 'rmfolder -recursive', when used on a server folder, will delete vaults contained in the folder hierarchy even if a vault is locked or has one or more tagged versions. This behavior is in contrast to 'rmvault', which requires the -force option to delete a vault that is locked or has tagged versions. The default is -norecursive.

-trigarg

-trigarg <arg>	Specifies an argument to be passed from the command line to the triggers set on the delete folder operation. If the argument contains whitespace, enclose the argument within double quotation marks ("") if using the dss command shell or braces ({}) if using the stcl command shell.

RETURN VALUE

```
none
```

SEE ALSO

```
mkfolder, rmfile, rmversion, rmvault, command defaults
```

EXAMPLES

Example of Removing Folder without Recursive

```
The following example demonstrates the use of rmfolder without the
-recursive option. The folder 'alu' contains one file, alu.v, which
must be deleted before the alu folder can be deleted.
  dss> rmfolder alu
  alu: som: Error 54:  Folder Not Empty.
  dss> rmfile alu/alu.v
  alu.v: Success Deleted
  dss> rmfolder alu
  alu: Success Deleted
```

Example of Removing Folders Recursively

```
The following example demonstrates the use of rmfolder with the
-recursive option. The folder 'alu' contains one file, alu.v, which
must be deleted before the alu folder can be deleted.
  dss> rmfolder -recursive alu
  alu: Success Deleted
```

Example of Removing a Folder on the Server

```
This example deletes an empty folder on a server:
  dss> rmfolder sync://holzt:2647/Projects/Sportster/Temp
  Temp: Success Deleted
```

Example of Removing a Folder Containing References

```
This example shows that you can delete a folder containing
references:
```

```
dss> ls -report O

Directory of: file:///home/ tgoss/Projects/Sportster/top/alu

Object Type      Name
-----------      ----
Referenced File  alu.gv
Referenced File  alu.v
Referenced File  mult8.gv
Referenced File  mult8.v
dss> scd ..
dss> rmfolder alu
alu: Success Deleted
```

rmvault

rmvault Command

NAME

```
rmvault             - Deletes the specified vault
```

DESCRIPTION

```
This command deletes the specified vault. This command does not
remove any corresponding files in your local work area. This command
does not remove vaults in modules.  To remove modules, use the rmmod
command.  To remove objects in modules, use the remove command.

Important:
  Deleting a vault removes all versions of a design object from the
  SyncServer and should therefore be used with caution.  It is
  recommended that you use the retire command to retire a branch
  that is no longer used instead of deleting the vault. Use rmvault
  only when you are certain the vault will never again be needed
  and you need to reclaim disk space (for example, at the end of a
  project.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

You must use the -force option to delete a vault that has a locked
branch or has one or more tagged versions.

You can use version-extended names to specify a vault by specifying
a file followed by a semicolon (but no version number). For example,
"top.v;" is the vault specification for top.v.

   Notes:
     - You cannot use wildcards (such as '*') when using
       version-extended names.
```

```
      - When in stcl/stclc mode, you must surround version-extended
        names (or any URL with a semicolon) with double quotes.

When you delete a vault, you have the option of deleting all the
vault metadata or retaining metadata about the last
version number used by the vault. These behaviors, which are
controlled by the -nokeepvid and -keepvid options and a registry
setting, are important if a vault of the same name will later be
created. See the description of the -[no]keepvid options for details.

This command supports the command defaults system.
```

SYNOPSIS

```
rmvault [-[no]force] [-[no]keepvid] [-trigarg <arg>] [--]
<vault> [<vault> [...]]
```

OPTIONS

- -[no]force
- -[no]keepvid
- -trigarg
- --

-[no]force

```
-[no]force    Determines whether you can delete a vault with a locked branch
              or tagged versions.
              -noforce prevents you from from deleting a vault that has
                       tagged versions or locked branches. (Default)

                -force allows you to delete a vault that has tagged
                     versions or locked branches. Use this option
                     with caution:
                - A tagged version may be a necessary part of
                  a configuration.
                - A locked branch typically indicates someone is
                  editing the design object and therefore the
                  design object is still active.
```

-[no]keepvid

```
-[no]keepvid  Determines whether information about the version ID
              of the Latest version in the vault is retained, which
              is important if a vault of the same name is later
              created.
```

For example, assume you delete the vault for top.v which has 1.1 as the Latest version, and you or another user later creates another top.v file (ci -new top.v). If you deleted the vault with -keepvid, the first version in the newly created vault is 1.2. If you specified -nokeepvid, the first version is 1.1.

The -nokeepvid behavior can cause problems if there are versions of the original top.v vault in mirrors, or user's work areas. For example, if a user's work area contains the old 1.1 version, DesignSync will not fetch the new 1.1 version when the user performs a populate. This would true anytime the latest version number of the new vault was the same as the version number in the workspace of the old vault. Had the vault been deleted with the -keepvid option, the populate would succeed, fetching version 1.2 (the first version in the newly created vault). Therefore, you should use -keepvid if a vault of the same name might later be created. However, the retained vault metadata does use a small amount of disk space, so if you want to reclaim all disk space used by a vault, use -nokeepvid.

If you do not specify -keepvid or -nokeepvid, the default is -keepvid behavior. You can redefine the default behavior using SyncAdmin. See "Command Defaults" in SyncAdmin help for details.

-trigarg

-trigarg <arg> Specifies an argument to be passed from the command line to the triggers set on the delete vault operation. If the argument contains whitespace, enclose the argument within double quotation marks ("") if using the dss command shell or braces ({}) if using the stcl command shell.

--

-- Indicates that the command should stop looking for command options. Use this option when arguments to the command begin with a hyphen (-).

RETURN VALUE

none

SEE ALSO

```
rmfile, rmversion, rmfolder, retire, command defaults
```

EXAMPLES

Example of Removing the Vault for a Single File

```
Delete the vault for top.v, where top.v is in my current work area.
The double quotes are required in stcl/stclc mode.
  stcl> rmvault 'top.v;'
```

Example of Removing the Vault using URL Vault

```
Delete the vault for top.v using the 'url vault' command instead of
version-extended naming:
  stcl> rmvault [url vault top.v]
```

Example of Removing the Vault using the Server URL

```
Delete all the vaults in the vault folder 'top'. This command
does not delete vaults in any folder under 'top' (rmvault
is not recursive).
  stcl> rmvault sync://localhost:2647/Projects/Sportster/top/*
```

rmversion

rmversion Command

NAME

```
rmversion           - Deletes versions from the vault
```

DESCRIPTION

```
This command deletes the specified version from the vault. You delete
versions from a vault, a process known as pruning, to free up disk
space. Use this command with caution; you cannot recover a deleted
version. This command does not affect files in your local work area.

You cannot delete:
  - Tagged versions (unless you use the -force option).
  - Version 1.1.
  - Version .1 when other versions exist on the branch
  - Version .1 when the version is upcoming. (For example, suppose you
    have a branch 1.4.1 that has no versions, but the branch is
    locked. In this case the upcoming version is 1.4.1.1, which
    cannot be deleted.)
  - Branch-point versions (for example, if 1.2.1 is a branch, you
    cannot delete version 1.2).
  - The Latest version on a locked branch (for example, if
    someone checks out version 1.3 with a lock, you
    cannot delete version 1.3 from the vault until the lock is
    released).

Use version-extended names to specify a version. A
version-extended name consists of a filename followed
by a semicolon and a version number or tag name (for example,
top.v;1.2 or top.v;rel13).
 Notes:
  - You cannot use wildcards (such as '*') when using
    version-extended names.
  - When in stcl/stclc mode, you must surround version-extended
    names (or any URL with a semicolon) with double quotes.
  - DesignSync does not reuse version numbers once they have
    been deleted from the vault. For example, assume the vault
    contains top.v;1.1, top.v;1.2, and top.v;1.3, and you
    use rmversion to delete top.v;1.2 and top.v;1.3. If you or
    another user later creates a new version of top.v
    (ci -new top.v), DesignSync names the new version top.v;1.4.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

SYNOPSIS

```
rmversion [-[no]force] [-report <mode>] [-trigarg <arg>] [--]
          <version> [<version> [...]]
```

ARGUMENTS

- DesignSync Object

```
Specify one or more of the following arguments:
```

DesignSync Object

```
<DesignSync object> Removes the specified DesignSync object from the
                    server. This object can be a version-extended
                    vault URL, or an object in your workspace.
```

OPTIONS

- -force
- -report
- -trigarg
- --

-force

```
-[no]force     Determines whether you can delete tagged versions from
               the vault.

               -noforce does not delete tagged versions.(Default)

               -force deletes tagged versions. Use this option with
               caution because deleting a tagged version changes
               (possibly damaging) a configuration.
```

-report

```
-report <mode>
              Specifies the amount of output generated by the
              rmversion operation.

              Available modes are:
              o brief - Displays error messages. (Note: This mode
                does not display versions successfully deleted.)
              o normal - (the default mode) Displays:
                - The name and version number of each version
                  deleted.
                - Error messages.
              o verbose - Displays:
                - For vault objects, the full vault URL path of each
                  version being deleted.
                - The name and version number of each version
                  deleted.
                - Error messages.
```

-trigarg

```
-trigarg <arg> Specifies an argument to be passed from the
               command line to the triggers set on the
               delete version operation. If the argument contains
               whitespace, enclose the argument within
               double quotation marks ("") if using the dss
               command shell or braces ({}) if using the stcl
               command shell.
```

--

```
--             Indicates that the command should stop looking for
               command options. Use this option when arguments
               to the command begin with a hyphen (-).
```

RETURN VALUE

```
none
```

SEE ALSO

```
rmfile, rmfolder, rmvault, retire, tag, command defaults
```

EXAMPLES

- Example of Removing a File Version
- Example of Removing a File Specified with a Path
- Example of Removing Multiple Files with Associated Tags

Example of Removing a File Version

```
Delete version 1.2 of top.v, where top.v is in my current work area.
The double quotes are required in stcl/stclc mode.
  stcl> rmversion "top.v;1.2"
```

Example of Removing a File Specified with a Path

```
Delete version top.v;1.2 specifying an absolute path to the
file in the local work area. In dss/dssc mode, the quotes are optional.
  dss> rmversion "/home/Projects/ASIC/top.v;1.2"
```

Example of Removing Multiple Files with Associated Tags

```
Delete two versions of top.v, both of which have tags associated
with them.
  dss> rmversion -force top.v;1.2 top.v;rel13
```

select

select Command

NAME

```
select              - Identifies specific objects to be processed
```

DESCRIPTION

```
This command builds a list of objects on which commands can
operate. You might use a select list when you are going
to perform multiple operations on the same set of objects.
Many commands that accept objects as command arguments
support the '-selected' option. When you specify '-selected',
the command operates on this pre-built select list in addition to
any objects you specify as arguments.

You can specify wildcards when selecting objects. Use the
'unselect' command to remove objects from the select list.

Commands that operate on a select list can also operate on
objects you select from the DesignSync graphical interface.
Select one or more objects from the List View, then enter a
command from the command bar.
Notes:
  o The "Synchronize graphical and command-line interfaces "
    option from Tools->Options->GUI Options must be selected.
  o Selecting objects graphically clears your current select list.
```

SYNOPSIS

```
select [--] {-show | <argument> [<argument>...]}
```

ARGUMENTS

- DesignSync Object

DesignSync Object

```
<DesignSync object> Most DesignSync objects can be selected.
<DesignSync folder>
```

OPTIONS

-show

```
-show    Lists the objects in your select list.
```

--

```
--       Indicates that the command should stop looking for
         command options. Use this option when arguments
         to the command begin with a hyphen (-).
```

RETURN VALUE

```
In dss/dssc mode, you cannot operate on return values, so the return
value is irrelevant.

In stcl/stclc mode, there is no return value except when you specify
-show, in which case the return value is a Tcl list of the
objects in your select list.
```

SEE ALSO

```
unselect, cancel, ci, co, ls, tag, vhistory
```

EXAMPLES

Example of Using Select on the Command Line to Select Files

```
This example selects all files that begin with 'samp' or have a
'.mem' extension, then checks out the selected files and 'top.v'.
Note that 'samp.mem' matches both the arguments to the select
```

```
command but is stored only once in the select list.
  dss> select samp* *.mem
  Already Selected: c:\Projects\Sportster\code\samp.mem
  dss> select -show
  file:///c|/Projects/Sportster/code/samp.asm
  file:///c|/Projects/Sportster/code/samp.lst
  file:///c|/Projects/Sportster/code/samp.mem
  file:///c|/Projects/Sportster/code/samp.s19
  file:///c|/Projects/Sportster/code/sample1.asm
  file:///c|/Projects/Sportster/code/test.mem
  dss> co -selected -lock -nocomment top.v
```

Example of Using Select within a Script

```
This example runs an stcl script called select.tcl, which
displays a message for each object in a directory with a '.v'
extension.
   # -- script start --
   select *.v
   foreach obj [select -show] {
       puts "$obj is selected."
   }
   # -- script end --

   stcl> run ./select.tcl
   file:///c|/Projects/Sportster/top/alu/alu.v is selected.
   file:///c|/Projects/Sportster/top/alu/mult8.v is selected.

   stcl>
```

setowner

setowner Command

NAME

```
setowner            - Sets the owner on the object specified
```

DESCRIPTION

```
This command sets the ownership of an object to the name specified.
The object can be project, project configuration, DesignSync vault
branch or module branch.

The owner of a branch is the creator of the initial version of the
branch unless a different owner is specified with the
setowner command. For example, the default owner of the main branch
```

```
(branch 1) is the creator of version 1.1 . The owner of an object's
main branch is also, by definition, the owner of the object's vault.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
setowner [--] <argument> <owner>
```

OPTIONS

- --

--

```
--          Indicates that the command should stop looking for
            command options. Use this option when arguments
            to the command begin with a hyphen (-).
```

RETURN VALUE

```
none
```

SEE ALSO

```
url owner, switchlocker
```

EXAMPLES

- Example of Setting the Ownership for a Project
- Example of Setting the Owner of a Branch

Example of Setting the Ownership for a Project

```
This example sets the ownership for the project
ASIC to 'johndoe':
  dss> setowner sync://myserver:myport/Projects/ASIC johndoe
```

Example of Setting the Owner of a Branch

```
 This example sets the owner of the main branch of reg5.v to barbg:
   dss> setowner "sync://holzt:2647/Projects/Sportster/decoder/reg5.v;1"
barbg
```

switchlocker

switchlocker Command

NAME

```
 switchlocker        - Changes the current owner of a lock
```

DESCRIPTION

```
 This command changes the lock owner of a branch. This command is
 particularly useful when two or more people are working on the same
 branch.

 The following design scenario highlights the function of switchlocker.

   UserA and UserB share the same work area and will be editing
   the same design object. UserA checks out the object for
   editing, thereby locking the branch. The object is modified by
   UserA or UserB, or both (assuming the proper permissions have
   been set on the object). UserB then needs to check in the
   changes (maybe UserA is unavailable to perform the
   checkin). UserB can use the switchlocker command to take lock
   ownership and then perform the checkin.

 This command is subject to access controls on the server. See the
 ENOVIA Synchronicity Access Control Guide for details.

 This command supports the command defaults system.
```

SYNOPSIS

```
 switchlocker [--] <locker> <argument>
```

ARGUMENTS

- Username of New Locker
- DesignSync Object

Username of New Locker

<locker>	Username of the new locker of the file.

DesignSync Object

<DesignSync object>	Specifies the object being switched. If the object is on a branch or is not the current version, you must specify the branch or version information for the object.

OPTIONS

- --

--

--	Indicates that the command should stop looking for command options. Use this option when the object you specify begins with a hyphen (-).

RETURN VALUE

none

SEE ALSO

cancel, unlock, setowner, url properties, command defaults

EXAMPLES

- Example of Switching the Locker for a DesignSync File-Basd Objects

The following examples shows how two users with a shared work area might use switchlocker. User 'goss' must take over the lock from 'barbg' before 'goss' can check in the file.

Example of Switching the Locker for a DesignSync File-Basd Objects

This example shows using switchlocker on a DesignSync file-based object, top.v.

```
dss> ls -report RU top.v
Version          Locked By   Name
-------          ---------   ----
1.2 -> 1.3       barbg*      top.v

dss> ci -nocomment top.v

Beginning Check in operation...

Checking in: top.v   : Failed:som: Error 102: Locked By Other User.

dss> switchlocker goss top.v
SwitchLocker:       success
dss> ls -report RU top.v
Version          Locked By   Name
-------          ---------   ----
1.2 -> 1.3       goss*       top.v
dss> ci -nocomment top.v

Beginning Check in operation...

Checking in: top.v    : Success - New version: 1.3
dss>
```

unlock

unlock Command

NAME

```
unlock              - Releases the lock on the specified object(s)
```

DESCRIPTION

- Note on File-Based Objects
- Auto-Branching

```
This command releases the lock on a specified object(s). This command
is used primarily to release object locks on the server. To release a
lock on an object you have checked out in your work area, use the
'cancel' command instead of 'unlock'. Use the 'unlock' command to
remove a lock held by someone else, or if you no longer have the
object that you checked out in your work area.

Only one user can have a lock on a given branch of an object at a
time. Having a lock prohibits other users from checking in changes to
that branch; however, other users (or the same user in different work
areas) can independently lock, unlock, and check in changes to other
branches.
```

To remove a lock and change states, use the 'cancel' command.
Also, if you have a lock taken away from you by another user (with the 'unlock' command), you should cancel your checkout (with the 'cancel' command) to return your local object to a consistent state.

Unlock is equivalent to performing 'cancel -keep' on an object because unlock does not affect the local copy of the file in the work area. The unlock action replaces locked references in the workspace with copies.

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.

Note on File-Based Objects

You lock a branch by checking out an object with the -lock option to the co, populate, or ci command, or by using the lock command on a module branch.

Exclude lists are used to exclude objects from the unlock. Filter lists are used to include or exclude module objects or to include DesignSync objects. Exclude lists are used to exclude DesignSync objects.

Note: When -exclude is used to exclude an object, the command output message indicates that the object was "excluded by filter."

Auto-Branching

You can create a new, locked branch by using 'co -lock' with a selector and autobranching. This branch can be unlocked without creating a new version by:

- Using 'cancel' from the workspace where the branch was locked.
- Using 'unlock' on the vault.
- Using ci from the workspace where the branch was locked, without making modifications.

In these cases, the lock is removed from the vault, the auto-created branch is removed, and the branch tag is deleted. If the branch is removed but still exists in the metadata of a workspace, some commands (such as the 'url' commands and 'vhistory') will fail with "No such version.

SYNOPSIS

```
unlock [-branch <branch> | -branch auto(<branch>)]
       [-exclude <object>[,<object>...]] -[no]recursive]
       [-[no]selected] [-trigarg <arg>] [--]
       [<argument> [<argument> ...]]
```

ARGUMENTS

- DesignSync Object
- DesignSync Folder
- DesignSync Vault

DesignSync Object

<DesignSync object>	A versionable file or collection object, in which case the current branch is unlocked. Note: If you specify a collection member as the object to be operated on, DesignSync skips the object and warns that the object is not versionable. If DesignSync attempts to operate on a collection member specified implicitly (through the use of wildcards or a recursive operation), DesignSync silently skips the object. You can change this behavior by using the SyncAdmin "Map operations on collection members to owner" setting. If you select this setting and DesignSync attempts to operate on a collection member during a revision control operation, DesignSync determines the member's owner collection and operates on the collection as a whole.

DesignSync Folder

<DesignSync folder>	Specify a DesignSync folder on the server or in your workspace (local) to unlock all objects in the folder. To unlock all objects in sub-folders of the specified folder, use the -recursive option.

DesignSync Vault

<DesignSync vault>	Specify a DesignSync vault to unlock the initial branch of the objects in the vault.

OPTIONS

-branch

-branch <branch> | -branch auto(<branch>)	Unlocks the branch specified by the branch or version tag, auto-branch selector, or branch numeric. By default (without -branch), the current branch of each specified object is unlocked. This option overrides the object's persistent selector list. If <branch> resolves to a version, the branch of that version is unlocked. Note: The -branch option accepts a single branch tag, a single version tag, a single auto-branch selector tag, or a branch numeric. It does not accept a selector or selector list.

-exclude

-exclude <objects>	Specifies a comma-separated list of objects to exclude from the operation. Wildcards are allowed. Do not specify paths in your arguments to -exclude. Before operating on each object (such as during a recursive unlock operation), DesignSync compares the object's leaf name (path stripped off) to the exclude list to see if there is a match. Because the object's path is removed, the object will not match any object in the exclude list specified with a path. For example, if you specify '-exclude bin/*.exe', you will not successfully exclude bin/foo.exe or any other *.exe file. You need to instead specify '-exclude *.exe', or '-exclude foo.exe' if you want to exclude only 'foo.exe'. This means, however, that you cannot exclude a specific instance of an object -- you exclude all matching objects. In addition to objects you specify using the

	-exclude option, the "These objects are always excluded" field from the Tools->Options->General->Exclude Lists dialog box in the DesignSync graphical user interface lists objects that are always excluded from revision-control operations.

-[no]recursive

-[no]recursive	Determines whether to unlock the objects in the specified folder or all objects in the folder and all objects in the subfolders. This option is ignored if the argument is not a DesignSync folder. -norecursive removes locks only from objects in the specified folder. (Default) -recursive removes the locks from the objects in the specified folder and all subfolders. Note: On GUI clients, -recursive is the initial default.

-[no]selected

-[no]selected	Determines whether the operation is performed just on the objects specified at the command line or on objects specified at the command line and objects in the select list (see the 'select' command) -noselected unlocks only objects specified on the command line. (Default) -selected unlocks objects specified on the command and in the select list. Note: If no objects are specified on the command line, the -selected option is implied.

-trigarg

-trigarg <arg>	Specifies an argument to be passed from the command line to the triggers set on the unlock operation. If the argument contains whitespace, enclose the argument within double quotation marks ("") if using the dss command shell or braces ({}) if using the stcl command shell.

--

--	Indicates that the command should stop looking for command options. Use this option when arguments to the command begin with a hyphen (-).

RETURN VALUE

The command has no Tcl return value.

The command does provide a list of the objects processed by the command and information about whether the command succeeded, failed, or was skipped.

Note: If an object was "excluded by filter," it may have been excluded either with the -filter option (for modules) or with the -exclude option (for DesignSync objects.)

SEE ALSO

cancel, ci, co, command defaults, populate, select, selectors, switchlocker
,

EXAMPLES

Example of Unlocking Specific Files

This example unlocks the 'Rel2.1' branch of the 'alu.v' and 'decoder.v' files.

```
dss> unlock -branch Rel2.1 alu.v decoder.v
```

Example of Unlocking the Contents of a Directory Recursively

In the following example, a developer went on vacation while having many of the files in the 'code' vault folder locked. The following command recurses the 'code' vault folder and removes the locks.

```
dss> unlock -rec sync://host:2647/Projects/Sportster/code
```

```
Beginning Unlock operation...

Unlocking: sync://host:2647/Projects/Sportster/code/samp.asm; : Not locked
Unlocking: sync://host:2647/Projects/Sportster/code/samp.lst; : Unlocked.
Unlocking: sync://host:2647/Projects/Sportster/code/test.mem; : Unlocked.
Unlocking: sync://host:2647/Projects/Sportster/code/test.asm; : Not locked
Unlocking: sync://host:2647/Projects/Sportster/code/samp.mem; : Unlocked.
Unlocking: sync://host:2647/Projects/Sportster/code/test.lst; : Not locked
Unlocking: sync://host:2647/Projects/Sportster/code/test.s19; : Unlocked.

Unlock operation finished.
```

unselect

unselect Command

NAME

```
unselect            - Removes files from the 'selected' list
```

DESCRIPTION

```
This command removes specified files from the list of selected
objects. Many commands that accept filenames also support the
-selected option, which feeds this pre-built list of files to the
command for processing. As with most commands that accept
filenames, wildcard file specifications are also supported.
```

SYNOPSIS

```
unselect [-quiet] [-all | [--] <argument> [<argument>...]]
```

ARGUMENTS

- DesignSync Object

DesignSync Object

```
<DesignSync object> Most DesignSync objects can be selected.
<DesignSync folder>
```

OPTIONS

-all

```
-all     Remove all objects from the select list.

         This option is mutually exclusive with specifying an
         argument to this command.
```

-quiet

```
-quiet   Do not report the names of objects being deselected.
```

--

```
--       Indicates that the command should stop looking for
         command options. Use this option when arguments
         to the command begin with a hyphen (-).
```

RETURN VALUE

```
none
```

SEE ALSO

```
select, cancel, ci, co, ls, tag
```

EXAMPLES

Example of Removing Specified Objects from the Select List

```
This example removes foo1.v and all files that match bar*.v from
the select list:
  dss> unselect foo1.v bar*.v
```

Example of Removing All Objects from the Select List

```
This example removes all objects from the select list:
  dss> unselect -all
```

upload

upload Command

NAME

```
upload              - Upload/Update compressed IP stored in DesignSync
```

DESCRIPTION


```
The command allows you to upload or update a tar or gzipped tar
archive to DesignSync in an efficient manner so that, instead of
replacing the archive with the next version, DesignSync updates
only the elements within the archive file that have changed from the
previous version.

By performing a change (delta) calculation and only checking in the
changed object set, DesignSync provides both improved speed during
checkin and checkout and reduces the amount of disk space required
for storing the IP.

The user running the upload should examine the tar file to make sure
it contains none of
the following:
 o unnecessary or undesired parent directories
 o absolute path directories

These should be removed before performing the upload.

Notes:
 o The executables (binaries) for tar or gtar must be on the user's
   path in order for the command to work.

 o DesignSync also provides a graphical user interface for uploading
   IP through the DesignSync Web Interface.  For more information, see
   the DesignSync Administrator's Guide.

This command is subject to Access Controls on the server.

This command supports the command defaults system.
```

Understanding How a Temporary Directory is used for Upload

The compressed archive is exploded in a temporary directory and compared against the last version, if applicable, on the server and only the changed object set is checked in.

Tip: For optimal operation, DesignSync recommends that the upload directory contain at least 2.5* the size of the uncompressed archive file.

By default, this operation is performed in the temporary directory specified by the Upload_Tmp_Dir registry setting or the SYNC_TMP_DIR environment variable. If neither of these is set, DesignSync uses the /tmp directory on the repository server. For more information on setting the Upload_Tmp_Dir registry setting, or the SYNC_TMP_DIR environment variable, see the DesignSync Administrator's Guide.

You can optionally specify either a local directory or an alternate location on the server. This is especially useful for servers where you cannot control the server space consumption; specifying an alternative disk partition or performing the delta comparison locally allows you to make sure you have enough space to perform the operation. Specifying an option on the command line overrides any existing settings.

Order of Precedence for Temp Directory:

Note: DesignSync will use this order to determine which tmp directory to use for the upload operation. If there is no set value, DesignSync will check the next location on this. If there is a value set, but DesignSync is unable to use it, for example, because of incorrect write permissions, the command will fail.

1. If the -vault option is used, and -servertmpdir or -localtmpdir is specified, the value of <tmpdir> is used. If the -workspace option is specified, the workspace is used as the tmp directory.

2. If the command defaults system is used to set a value -servertmpdir or -localtmpdir, that value is used as the tmp directory.

3. If the UploadTmpDir registry setting is specified, that value is used as the tmp directory.

4. If the SYNC_TMP_DIR environment variable is set on the server machine, that value is used as the tmp directory.

5. If the TMPDIR environment variable is set on the server machine, that value is used as the tmp directory.

6. If no other values are set, DesignSync uses the /tmp directory on

```
    the server machine.
```

SYNOPSIS

```
upload [-branch <branchname>] [-[no]collections]
       [-[no]comment <comment>] [-[no]new]
       [-report brief | normal | verbose] [-tag <tagname>]
       [-vault <vaulturl> [-servertmpdir <tmpdir>] |
       [-vault <vaulturl> [-localtmpdir <tmpdir>] |
       [ -workspace <path>] <tarfile>
```

ARGUMENTS

- Tar file

Tar file

```
<tarfile>          Specify a tar or gzipped tar archive to upload or
                   update on the server. The archive can be
                   specified with an absolute or relative path.  The
                   file extension for the tar file must be either
                   .tar or .tgz in order for DesignSync to
                   recognize the file.

                   NOTE: If the tar file contains .SYNC directories,
                   they are automatically ignored and not checked in
                   with the archive.
```

OPTIONS

- -branch
- -[no]collection
- -[no]comment
- -localtmpdir
- -[no]new
- -report
- -servertmpdir
- -tag
- -vault
- -workspace

-branch

```
-branch            Specifies the branch on which to place the
 <branchname>      archive. You can specify only one branch with this
```

option. If no branch is specified, DesignSync uploads to the Trunk branch. You cannot specify a branch tag for the initial archive upload, which is always checked into the Trunk branch.

For the <branchname>, specify a branch tag (for example, rel40) or branch numeric (for example, 1.4.2) only. Do not specify a colon (:) with the branchname.

If a temp directory (other than the /tmp default) is specified for the upload, and the -branch option is used, the specified branch must already exist on the server.

The -branch option is mutually exclusive with the -new option.

-[no]collection

-[no]collection

Specifies whether the compressed package includes collections objects. For more information on collection handling, see the DesignSync Administrator's Guide.

-nocollection specifies that the compressed archive does not contain collection objects. This allows the upload process to use reference mode, improving the speed of operations. (Default)

-collection specifies that the compressed archive contains collection objects. The upload process will not attempt to use reference mode which would process collections incorrectly.

-[no]comment

-[no]comment ["<comment>"]

Specifies whether a text description of the upload is stored with the checked in version.

-nocomment performs the upload with no comment.(Default)

-comment <text> stores the value of <text> as the module comment. To specify a multi-word comment, use quotation marks ("") around the comment text.

-localtmpdir

-localtmpdir <tmpdir>	When -vault is used, the -localtmpdir option is used to specify a tmp directory path on the local (client) machine to be used for the upload operation. When the upload is completed, any objects placed in this directory during upload are removed.

-[no]new

-[no]new	Performs the initial checkin of the archive. The initial archive checkin must be performed on the Trunk branch. -nonew is used to update the archive in revision control. If the archive does not exist and -nonew is selected, the command fails. (Default) -new is used to create or update the archive. If the archive exists and the -new option is specified, the archive is updated. The -new option is mutually exclusive with the -branch option.

-report

-report brief | normal| verbose	Controls the amount and type of information displayed by the command. brief mode reports the generated tag. Normal mode additionally reports a list of the changes in the archive, including: added files, retired files and changed files. Verbose mode is equivalent to normal mode.

-servertmpdir

-servertmpdir <tmpdir>	When -vault is used, the -servertmpdir option is used to specify a tmp directory path on the repository server to be used for the upload operation. When the upload is completed, any objects placed in this directory during upload are removed.

-tag

```
-tag <tag>          Applies the specified tag to the data being
                    imported. This tag can be used to get the data
                    later, or example, when populating the archive
                    into a workspace.

                    If the tag already exists it moves to the new
                    version.

                    Note: An automatically generated tag, in the form
                    Archive.<#> is also applied to the data being
                    imported, where the initial value of # is 1, and
                    then the number is incremented as archive is
                    updated.
```

-vault

```
-vault <vaultURL>    Specify the vault URL and optionally a server or
  [-servertmpdir <tmpdir>] local path to use as a temporary upload
  | [-localtmpdir <tmpdir>] directory.

                     Specify the vault URL in the format:
                    sync[s]://<host>:<port>/[<Project>...]/<vault>

                     If the vault does not exist, then it will be
                     created, if the command is run with the -new
                     option.

                     When you specify an alternate tmp directory for
                     upload, you can specify a server path on on the
                     repository server or a local path on the
                     client system. For more information on
                     specifying a server path, see the -servertmpdir
                     option. For more information on specifying a
                     local path, see the -localtmpdir option.

                     This option is mutually exclusive with
                     -workspace. Either -workspace or -vault must be
                     specified.
```

-workspace

```
-workspace           Specify an existing, unmodified workspace
 <path>              as a staging area to unpack the new archive,
                    determine the changes necessary and send only
                    the changes to the server.  If this is used for
                    an initial upload, the archive is unpacked in
                    the workspace and the entire contents of the
                    archive is uploaded. For the initial upload,
                    DesignSync uses the persistent selector to
                    determine the module/vault for checkin.
```

```
 This is a performance enhancement that minimizes
the server processing time needed to compute the
deltas by pre-computing the deltas in the
workspace.

 The workspace must be owned and writable by the
 person running the command.

 The -workspace option is mutually exclusive
 with -vault and -branch. The -workspace option
 is only supported for UNIX workspaces.
```

RETURN VALUE

```
This command does not return any TCL values. DesignSync provides
status messages while the command runs.  If the command fails,
DesignSync returns an error explaining the failure.
```

SEE ALSO

```
defaults, access, ci
```

EXAMPLES

- Example of Performing an Initial Upload
- Example of Performing an Upload Using a File-Based Workspace
- Example of Specifying a Server Temporary Directory for File-based Upload
- Example of Specifying a Local Temporary Directory for File-based Upload

Example of Performing an Initial Upload

```
This example shows performing an initial upload to a file-based vault.

Note: This example has been run in normal mode, which means that each
object processed in the tar file is listed in the command output.
For brevity, these lines have been removed.

dss> upload -comment "IP rel 1.0 handoff" -vault
sync://serv1.ABCo.com:2647/Projects/customerIP -new FinalIP.tar

 Operation continuing, please wait...
 sync://serv1.ABCo.com:2647/Projects/customerIP  Success Folder Made
 Logging to /home/rsmith/dss_04042014_123427.log
 3DEXPERIENCE6R2022x

 Beginning Tag operation...
```

```
  ... [List of tag files removed]

 Tag operation finished.
```

Example of Performing an Upload Using a File-Based Workspace

```
 This example updates an IP checked into a file-based vault.  It uses a
 workspace as its temporary storage area rather than the server which
 reduces the processing time needed on the server.

 Note: This example has been run in normal mode, which means that each
 object in the tar file is listed in the command output as it is
 populated, checked in, and tagged.  For brevity, the individual
 object detail lines have been removed.

 dss> upload -comment "IP rel 2.0 handoff" -workspace
 ~rsmith/workspaces/customerIP FinalIP.tar

  Beginning populate operation at Fri Apr 04 02:22:56 PM EDT 2014...
  ...

  Populated '/home/rsmith/workspaces/customerIP'

  Finished populate operation.

  Beginning Check in operation...
  ...

  Checkin operation finished.

  Beginning Tag operation...
  ...

  Tag operation finished.
```

Example of Specifying a Server Temporary Directory for File-based Upload

```
 This example updates an IP checked into a file-based vault.  It uses a
 specified directory on the server as its temporary storage area
 rather than the server default which allows you to make sure that the
 space you need  for the operation is available.

 Note: This example has been run in normal mode, which means that each
 object in the tar file is listed in the command output as it is
 populated, checked in, and tagged.  For brevity, the individual
 object detail lines have been removed.

  dss> upload -vault sync://serv1.ABCo.com:2647/Projects/CustomerIP
 -servertmpdir /home/syncadmin/tmp -comment "Uploaded IP"
 ./FinalIP.tar
   Beginning Check in operation...
  Checking in: ...
```

```
...
Checkin operation finished.

Beginning Tag operation...
...
Tag operation finished.
dss>
```

Example of Specifying a Local Temporary Directory for File-based Upload

```
This example updates an IP checked into a file-based vault.  It uses a
specified directory on the client machine as its temporary storage
area rather than the server default which allows you to make sure
that the space you need for the operation is available and reduces
processing time on the server.

Note: This example has been run in normal mode, which means that each
object in the tar file is listed in the command output as it is
populated, checked in, and tagged.  For brevity, the individual
object detail lines have been removed.

  dss> upload -vault sync://serv1.ABCo.com:2647/Projects/CustomerIP
 -localtmpdir ~/tmpfiles -comment "Uploading new version" FinalIP.tar

 Beginning Check in operation...
 Checking in: ...
 ...
 Checkin operation finished.

 Beginning Tag operation...
 ...
 Tag operation finished.
 dss>
```

Navigational

cd

cd Command

NAME

```
cd                  - Changes your current directory
```

DESCRIPTION

```
This command is the standard Tcl 'cd' command. It lets you change
your current directory as viewed by the operating system. You can
specify a relative or absolute path. Specifying 'cd' without an
argument puts you in your home directory (as defined by $HOME on
UNIX or your user profile, which is managed by the User Manager
tool, on Windows).

In general, use 'scd' (Synchronicity 'cd') instead of 'cd' when using
DesignSync. See the help for 'scd' for a full comparison of these
commands.
```

SYNOPSIS

```
See a Tcl language reference manual.
```

SEE ALSO

```
scd, pwd, spwd
```

pwd

pwd Command

NAME

```
pwd                 - Displays the path of the current directory
```

DESCRIPTION

This command is the standard Tcl 'pwd' command. It displays the path of the current working directory as viewed by the operating system.

In general, use the 'spwd' (Synchronicity 'pwd') command instead of 'pwd' when using DesignSync. See the help for 'spwd' for a full comparison of these commands. In most cases, however, the 'spwd' and 'pwd' commands differ only in that 'pwd' returns a path whereas 'spwd' returns a URL.

Refer to a Tcl language reference manual for a full description of the standard 'pwd' command.

SYNOPSIS

See a Tcl language reference manual.

SEE ALSO

spwd, cd, scd

scd

scd Command

NAME

scd - Changes your current location

DESCRIPTION

The 'scd' (Synchronicity 'cd') command lets you change your current location. Your location is typically a local folder, which corresponds to a file-system directory, but can be any container object. A container object is an object that contains other objects, such as a folder or a vault.

Specify a relative path, absolute path, or file: URL for local (client-side) folders, or a sync: URL for server-side container objects. Specifying 'scd' without an argument puts you in your home directory (as defined by $HOME on UNIX or your user profile, which is managed by the User Manager tool, on Windows platforms).

In dss/dssc, you can use the 'prompt' command to specify that your command-line prompt be the URL of your current location.

```
The standard Tcl 'cd' command and 'scd' differ in that 'cd'
operates on file-system directories, whereas 'scd' operates on
DesignSync container objects, such as folders and vaults. In the
common case of local folders, these commands behave similarly
because there is often a one-to-one correspondence between the
file-system directory and a DesignSync folder:
  dss> cd /home/tgoss/Projects/Sportster
  dss> pwd
  /home/tgoss/Projects/Sportster
  dss> spwd
  file:///home/tgoss/Projects/Sportster

  dss> scd /home/tgoss/Projects/Sportster
  dss> pwd
  /home/tgoss/Projects/Sportster
  dss> spwd
  file:///home/tgoss/Projects/Sportster

The behavior of 'scd' and 'cd' differ in the following cases:
  o You must use 'scd' when specifying server-side objects -- any
    object you identify with a sync: URL, such as vaults, branches,
    and server-side folders.
  o You cannot use 'scd' to navigate into Synchronicity client
    metadata directories (.SYNC). DesignSync does not recognize
    these directories as Synchronicity folders because you should not
    operate on these directories. However, you can use 'cd'
    because .SYNC directories are valid file-system directories.
      dss> scd .SYNC    <-- Fails
      The system cannot find the path specified:
         /home/tgoss/Projects/Sportster/code/.SYNC
      dss> cd .SYNC     <-- Succeeds
      dss> pwd
      /home/tgoss/Projects/Sportster/code/.SYNC
      dss> spwd
      file:///home/tgoss/Projects/Sportster/code
  o When used in server-side scripts, "cd /" puts you at the
    file-system root of the SyncServer host (/), whereas "scd /"
    puts you at the SyncServer's root directory as specified when
    the SyncServer was installed (for example,
    /usr1/Synchronicity/syncdata/gilmour/2647/server_vault).
```

SYNOPSIS

```
scd [--] [<path> | <URL>]
```

OPTIONS

- --

--

```
--              Indicates that the command should stop
                looking for command options. Use this option
                when the path begins with a hyphen (-).
```

RETURN VALUE

```
none
```

SEE ALSO

```
spwd, cd, pwd, prompt
```

EXAMPLES


```
The following examples illustrate common uses of the 'scd'
command. In the first two examples, you could use 'cd' to
accomplish the same result. In the other examples, you must use 'scd'.
```

Example of Specifying an Absolute Path Name

```
The following example specifies an absolute path name and changes the
local folder to file:///home/userdir/test (DesignSync converts the
path to a URL).

  dss> scd /home/userdir/test
  dss> spwd
  file:///home/userdir/test
```

Example of Specifying a Relative Path Name

```
The following example specifies relative path names. For example, if
your current folder is /home/userdir and it contains the
subfolder 'test', either of the following commands changes to the
test folder:
```

```
dss> scd ./test
dss> scd test
```

Example of Specifying a Server-Side Vault Location

```
The following example changes your location to a vault
(server-side) folder:

  dss> scd sync://host3:2024/Projects/asic/test
  dss> spwd
  sync://host3:2024/Projects/asic/test
```

Example of Navigating on the Server

```
The following example shows that once you are located in a
server-side folder, you can use relative paths to navigate:

  dss> spwd
  sync://host3:2024/Projects/asic/test
  dss> scd ..
  dss> spwd
  sync://host3:2024/Projects/asic
  dss> scd code
  dss> spwd
  sync://host3:2024/Projects/asic/code
```

Example of Changing to a Calculated Server Directory

```
You can change location to a vault object (because it is a container
object that contains versions). You can either use a command that
computes the location (for example, the 'url vault' command)
or you can explicitly specify the URL:

  stcl> scd [url vault file5.v]
  stcl> spwd
  sync://host3/2024/Projects/asic/test/file5.v;

Note: If you specify the URL, you must precede the semicolon with a
backslash or surround the URL with double quotes to prevent
stcl from treating the semicolon as a command separator:

  stcl> scd sync://host3:2024/Projects/asic/test/file5.v\;
  stcl> spwd
  sync://host3/2024/Projects/asic/test/file5.v;
```

spwd

spwd Command

NAME

```
spwd                - Displays the URL of the current location
```

DESCRIPTION

```
The 'spwd' (Synchronicity 'pwd') command displays the URL of
the current location -- folder or other container object -- as
selected by the most recent 'scd' command. A container object is
any object that contains other objects, such as a folder or a vault.

The standard Tcl 'pwd' command and 'spwd' differ in that 'pwd'
operates on operating-system directories whereas 'spwd' operates on
Synchronicity container objects. Also, 'pwd' returns an absolute
path, whereas 'spwd' returns a URL. In most cases, there is a
one-to-one correspondence between the current working directory and
a Synchronicity folder, so you can use either command. For example:
  dss> scd /home/tgoss/Projects/Sportster
  dss> pwd
  /home/tgoss/Projects/Sportster
  dss> spwd
  file:///home/tgoss/Projects/Sportster

There are cases where 'spwd' and 'pwd' return different values:
  - If you use 'scd' to go to a server-side location, 'spwd'
    returns that location, whereas 'pwd' is unaffected (returns
    the location prior to the 'scd' command). This
    difference is because 'cd' and 'pwd' do not recognize
    server-side (sync:) objects.
       stcl> pwd
       /home/tgoss/Projects/Sportster
       stcl> spwd
       file:///home/tgoss/Projects/Sportster
       stcl> scd [url vault .]
       stcl> spwd
       sync://apollo:2647/Projects/Sportster
       stcl> pwd
       /home/tgoss/Projects/Sportster
  - If you use 'cd' to go to a metadata (.SYNC) directory, 'pwd'
    returns the path to the .SYNC directory, whereas 'spwd' is
    unaffected (returns the location prior to the 'cd' command).
    This difference is because DesignSync does not
    recognize .SYNC directories as folders so that users are
    discouraged from operating on them. For example:
       stcl> pwd
       /home/tgoss/Projects/Sportster/code
       stcl> spwd
       file:///home/tgoss/Projects/Sportster/code
       stcl> cd .SYNC
       stcl> pwd
       /home/tgoss/Projects/Sportster/code/.SYNC
       stcl> spwd
       file:///home/tgoss/Projects/Sportster/code
```

- When used from a server-side script, 'pwd' returns paths relative to the file-system root directory (/) whereas 'spwd' returns URLs relative to the SyncServer's root directory.

SYNOPSIS

```
spwd
```

OPTIONS

```
none
```

RETURN VALUE

```
Returns the URL of the current location.
```

SEE ALSO

```
scd, pwd, cd
```

EXAMPLES

Example of Using spwd on a Local Folder

```
This example shows the return value from the 'spwd' command
when the previous 'scd' command selected a local folder. In this
common case, 'pwd' returns the same value, except as a path instead
of a URL.

 dss> scd /home/syncmgr/test
 dss> spwd
 file:///home/syncmgr/test
 dss> pwd
 /home/syncmgr/test
```

Example of Using spwd on a Vault Folder

```
This example shows the return value from 'spwd' when the previous
'scd' selected a vault folder.

 stcl> scd [url vault test_dir]
 stcl> spwd
 sync://host3:2024/Projects/ASIC/test_dir
```

Example of Using spwd on a Vault File Object

```
This example shows the result of 'spwd' when the previous 'scd'
selected a vault object.

 stcl> scd [url vault myfile.txt]
 stcl> spwd
 sync://host3:2024/Projects/ASIC/test_dir/myfile.txt;
```

Informational

annotate

annotate Command

NAME

```
annotate            - Shows last modification information per line
```

DESCRIPTION

```
This command opens the selected text file object and displays last
modification information.  The last modification information tells
you:
 o The last-modified version for the line.
 o The author credited with the changes
 o The date the modification was checked in.

The annotate command supports the command line default system.
```

SYNOPSIS

```
annotate [-back <number> | -from <selector>] [-output <filename> ]
[-version <selector>] [-[no]white] [--] <argument>
```

ARGUMENTS

- Workspace File
- Server File

Workspace File

```
<workspace file>  Displays the specified file version loaded in the
                  workspace. You may specify the file as either an
                  absolute or relative path.  Because this command
                  only supports a single argument, You may not use
                  wildcards, even if the wildcard selection results
                  in only a single file being identified.
```

Server File

<server file>	Displays the specified file version. Specify the object with the sync URL in the format: sync://<host>:<port>/<path>/<object>;<selector>

OPTIONS

-back

-back <number>	Specifies the number of versions to consider when creating the annotated document. The versions included in the annotation begin with the specified version (-version option, if selected) and each version is processed until the specified number of versions back is reached, then the annotated file is generated. If neither the -back nor the -from option is specified, the annotate includes the entire object history, beginning with the vault root. (Default) Note: -back is mutually exclusive with -from.

-from

-from <selector>	Specifies the selector of the first version to consider when created the annotated document. The versions included in the annotation begin with the specified version (-version) and end with the version that resolves to the selector specified with the -from option. The specified selector must resolve to a version on a path from the annotated version to the vault root. Note: For module member version, the selector must be the module member version number. If neither the -back nor the -from option is specified, the annotate includes the entire object history, beginning with the vault root. (Default)

Note: -from is mutually exclusive with -back.

-output

-output <file>	Sends the results of the annotate command to the named file. The contents can then be processed or viewed as needed.

-version

-version <selector>	Specifies the version of a file to display. If no version is specified, DesignSync uses the version loaded in the workspace. (Default) You may specify any valid single selector. Note: When you use a version number to specify a module member, use the module version of the module containing the module member version you're interested in.

-[no]white

-[no]white	Specifies whether to ignore leading and trailing whitespace changes. -nowhite indicates the whitespace changes are considered a modification. Therefore if the indentation level was changed, the line is considered modified. (Default) -white indicates the whitespaces changes are not considered a modification. For example, if a user changes the indent level, the line is not considered modified. The last textual change (or embedded whitespace change) made is considered the last modification.

--

--	Indicates that the command should stop looking for command options. Use this option when arguments to the command begin with a hyphen (-).

RETURN VALUE

```
If the annotate command is successful, DesignSync returns an
empty string (""). If the command cannot run, DesignSync throws an
error message explaining the failure.
```

SEE ALSO

```
ls, vhistory, selectors
```

EXAMPLES

```
This example shows the annotate command with a fragment of the
collection.ctp script included in the sample directory:

dss> annotate collection.ctp
  Beginning Annotate operation...
  ...
 1.1          (barb    9-Apr-06): # Get the base name of a file.
 1.1          (barb    9-Apr-06): proc collectionCTP::getBase
  {filename} {
 1.2.1.3      (ian     1-Mar-07):     set tail [collectionCTP::tail
  $filename]
 1.2.1.2      (ian     1-Feb-07):     set dot [string first
  . [collectionCTP::tail $filename]]
 1.1          (barb    9-Apr-06):     if {$dot == -1} {
 1.1          (barb    9-Apr-06):         return $filename
 1.1          (barb    9-Apr-06):     }
 1.2.1.3      (ian     1-Mar-07):     set bit [expr [string length
  $filename] - [string length $tail] + $dot - 1]
 1.2.1.3      (ian     1-Mar-07):     return [string range $filename
  0 $bit]
 1.1          (barb    9-Apr-06): }
```

compare

compare Command

NAME

```
compare              - Compares two defined sets of files or objects
```

DESCRIPTION

- Understanding the Types of Possible Compare Operations
- Understanding the Output

```
The 'compare' command allows you to compare two versions of a module,
two legacy configurations in a vault, or to compare workspaces to
modules, vaults, legacy configurations or other workspaces.

Note: The compare command compares only collections and not
collection members. The compare command doesn't compare empty
directories.

The compare command has a number of standard arguments, and then a
specification of what can be compared, in the form of either 0, 1 or
2 arguments, plus 0, 1, or 2 selectors. The arguments can be any
directory path or module instance. For more information on arguments,
see the ARGUMENTS section. The selectors can be any valid selector or
selector list, except that they may NOT contain the Date() or
VaultDate() items. For more information on selectors, see the
selectors topic.

Note: The compare command works from the path of the object, not from
the UUID, this means that if an object has moved, it may be reported
twice, one in the original location and once in the new location.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

Understanding the Types of Possible Compare Operations

```
The following table describes the action of the compare command
when you specify one or more selectors and one more arguments.

The selectors can be any valid selector or selector list, except that
they may NOT contain the Date() or VaultDate() items. For more
information on selectors, see the selectors topic.

The arguments can be any directory path or module instance. For more
information on arguments, see the ARGUMENTS section.

Any combination not indicated is disallowed.

Notes:
o This command is not intended to provide a way to compare two
  different modules, so there is no way to specify two module URLs.

o For space considerations, the values of selector1/selector2 and the
  arguments allowed are represented as sel1/sel2 and arg1/arg2.

sel sel2 arg1  arg2   Description
```

```
--- ---- ---- -----   -----------
No  No   Yes  No      Compare the contents of the specified argument
                     against the server version.

sel1 sel2 arg1 arg2   Description
---- ---- ---- ----   -----------
No   No   No   No     Compare the current workspace directory path against
                     the associated server version.

sel1 sel2 arg1 arg2   Description
---- ---- ---- ----   -----------
No   No   Yes  Yes    Compare the two arguments.

sel1 sel2 arg1 arg2   Description
---- ---- ---- ----   -----------
Yes  No   Yes  No     Compare the specified argument against the
                     version indicated by the specified selector.

                     The selector value is always evaluated against
                     the server version of the argument. If you've
                     filtered data out of your workspace and do not
                     use the corresponding filters on the compare
                     command, you see that data listed as present on
                     the server, but not in your workspace.

sel1 sel2 arg1 arg2   Description
---- ---- ---- ----   -----------
Yes  No   No   No     Compare the current workspace against the
                     specified selector. This uses the server
                     version that corresponds to the persistent
                     selector set on the workspace, rather than the
                     current workspace module version.

                     The selector value is always evaluated against
                     the server version of the module or DesignSync
                     vault.  If you've filtered data out of your
                     workspace and do not use the corresponding
                     filters on the compare command, you see that
                     data listed as present on the server, but not
                     in your workspace.

sel1 sel2 arg1 arg2   Description
---- ---- ---- ----   -----------
Yes  Yes  No   No     Compare the two specified versions. Both are
                     server versions identified by selector, for
                     example you might compare Rel1:Beta against
                     Re1:Gold, or Rel2:Beta. Neither of these is
                     required to be populated into a workspace on
                     your system in order to do the comparison.

sel1 sel2 arg1 arg2   Description
---- ---- ---- ----   -----------
Yes  Yes  Yes  No     Compare the two specified selector versions
                     for the argument given. If the argument is a
                     workspace path, the command uses the vault
                     associated with the workspace path.
```

Understanding the Output

The output can be formatted for easy viewing (-format text) or optimized for Tcl processing (-format list). Both viewing formats show the same information, but may have different names. In the table below, the Column Titles column shows the text output column header and the Property Names column shows list output key value.

This information is returned by the compare command regardless of what report mode you specify. Different report modes add additional information as described in the Options section under -report.

Understanding Status Values in the Ouput

The following table describes the status values:

Column Titles	Property Names	Description
Identical	identical	The objects are the same.
Different versions	different_versions	The objects are the same but are at different versions.
Different objects	different_objects	The objects are the same natural path and the same versions, but they do not have the same unique ID values.
First only	first_only	The object is present in the first area only.
Second only	second_only	The object is present in the second area only.
Different states	different_states	The objects are the same version, but in different states, for example one item is modified or absent (in reference mode) while the other is not.
modified	modified	The objects are the same (same version and same uids), but both are modified and therefore the files might be different.
Content identical	identical_content	The objects are the same (same version, same uid, same checksum), but the versions are different. Note: If your workspace is populated in share, reference, or mirror mode, DesignSync does not retain checksum information and

these workspaces will never
register as Content identical.

Using Compare with File-Based Objects

You can run the compare command to:

- Compare two workspaces. If you are running a simulation in your workspace, and a co-worker is running simulations in his workspace, but you are seeing different results, you can compare your workspaces to see what is different.

- Report items that are the same and history information when different. Also, in order to understand what the changes are, you can see the checkin comment history from the different versions back to their common ancestor.

- Produce output for further processing. For example, having compared your workspace with that of someone else, you would like to take the list of what is different and tag those items.

- Compare the workspace version to a server version. For example, you can see differences in your local workspace, or changes from the original or other versions.

- Compare two server versions. For example, you can compare the a version on one branch or a version on another branch, or compare two tagged released versions against each other to see how they differ.

Understanding Columns Returned When Comparing File Objects

Note: The column title for the path properties may change depending on whether you are comparing workspaces (Workspace Version) or legacy modules (Configuration Version).

Column Titles	Property Names	Description
Workspace/ Configuration Version	path1	The path of the first argument specified by the command.
Workspace/ Configuration Version	path2	The path of the second argument specified by the command.
Status	state	The status value shows the result of the comparison. The next table shows all the status values possible. Note: The list view shows the overall status (state) of the files, and the specific information about both versions being

```
                        compared.

Name          name      Name of the object being compared.

              type      Type of object being compared.  Type values
                        include:
                        o file
                        o module
                        o folder
                        o project
```

SYNOPSIS

```
compare [-format list|text] [-[no]history] [-[no]same]
        [-exclude <string>] [-output <file> | -stream <stream>]
        [-[no]path] [-recursive | -norecursive]
        [-report silent|brief|normal|verbose]
        [-selector <selector> ] [-selector2 <selector2>]
        [--] [argument [argument]]
```

ARGUMENTS

- DesignSync Folder
- Server Folder

DesignSync Folder

```
<DesignSync folder> Compares the contents of the specified folder,
                    and, when used with the recursive option, all
                    subfolders.
```

Server Folder

```
<server folder>     Compares the contents of the specified folder
                    on the server, and when used with the -recursive
                    option, all subfolders. Specify the object with
                    the sync URL in the format:
                    sync://<host>:<port>/<path>/<folder>
```

OPTIONS

- -exclude
- -format
- -[no]history
- -output
- -[no]path

-exclude

```
-exclude <expr>    Excludes items that match the given regular
                   expression.

                   The expression is matched against the object
                   path that would be reported. If '-path' is
                   specified, the command matches the expression
                   against the relative path; if '-fullpath' is
                   specified, the command matches the expression
                   against the full path, else against the object
                   leaf name.

                   By default, the 'compare' command does not
                   exclude the objects in the global exclude lists
                   (set using Tools->Options->General->Exclude
                   Lists or using SyncAdmin:General->Exclude Lists).
                   To exclude these objects from a 'compare' listing,
                   apply the -exclude option with a null string:
                      compare -exclude ""
                   The objects in the global exclude lists are
                   appended to the 'compare' exclude list if
                   you exclude other values:
                      compare -exclude "README.txt"
```

-format

```
-format list|text  Determines the format of the output.
                   Valid values are:
                   o text   Display a text table with headers and
                            columns. (Default) Objects are shown in
                            alphabetical order.

                   o list   Tcl list structure, designed for further
                            processing, and for easy conversion to a
                            Tcl array structure. This means that it
                            is a list structure in name-value pair
                            format. The top level structure is:
                            {
                               path1 <path>
                               path2 <path>
                               type folder
                               objects <object_list>
                            }
```

```
path1 and path2 are the areas compared,
and may be local workspace paths, or
configuration URLs in the form:
sync://machine:port/path@config

The "selector" part is the originally
supplied selector name, rather than
any name resulting from selector
expansion.

object_list is then defined as a list of
items of the form:
{
   name <object name>
   type1 folder | file
   type2 folder | file
   objects <object_list>
   state <status>
   props1 <prop_list>
   props2 <prop_list>
}

The "name" is the name of the object, and
may contain the relative path from the
starting point if the '-path' argument
was specified.

Note: When comparing a module hierarchy,
the top level list includes a
"modules" property whose value is a
list of the results for each module in
the hierarchy.

The "type1" and "type2" properties
indicate whether the object is a folder,
file, or module. Note that collection
objects have a type file, also all
symbolic links, whether to files or
directories, have a type of "file". The
reason that all links are "file" is to be
consistent with the "ls" command which
treats links as files.

The type may be different on the two
sides. A folder or module have object
lists; which a file object does not have.
A file has props1 and props2 lists which
folders and modules do not have.

The state value contains the status of
the object.  For more information on
status values, see the Status table in
the "Understand the Output" section
above.

The props1 and props2 are lists of
```

properties for the object from path1 and path2, in the form:

```
{
   version <version>
   state <state>
   ancestor <version>
   history <history_list>
}
```

To process the results, use the "compare-foreach" function below.

-[no]history

-[no]history	Determines whether the command returns the version history of the version being compared from the common ancestor of the two versions. -nohistory does not return version history information. (Default) -history returns the checkin comment and other details for the version history back to the common ancestor of the two versions being compared.

-output

-output <file> | -stream <stream>	Outputs the result to the specified file or stream. The output file is used to preserve the results for later viewing or distribution. If the specified file already exists, it is overwritten with the new information. The stream option passes the results to named Tcl stream. Depending on whether you open the stream using the Tcl 'open' command in write (w) or append (a) mode, you can overwrite or append to an existing file. Note: The -stream option is only applicable in the stcl and stclc Tcl shells, not in the dss and dssc shells. If neither -output nor -stream is specified, the command output is displayed on the screen.

-[no]path

-[no]path — Controls the format of the path that is reported for each object. Objects are reported on a per-directory basis, with each directory path given as a full URL. The items within the directory can be reported as:

-nopath displays simple object names with no directory path. (Default)

-path display a relative path to the start of the command.

Notes:
o If the -report silent option is specified, the -path option is automatically used.

o The 'contents' option to report as a full url (-fullpath) is not supported by this command, because each object will potentially have two full URLs for the two areas being compared.

-[no]recursive

-[no]recursive — Determines whether the compare command operate on the specified argument or all subfolders in the the argument's hierarchy.

-recursive performs this operation on all subfolders in the hierarchy.

-norecursive performs this operation on the specified folder only. (Default)

-report

-report — Controls the level of additional information reported as the command progresses.

o silent Returns only the primary return data for the command - the data that has been compared, and whether the data is the same.

Note: Using format -text, the relative path is returned in silent mode, unless the -fullpath option is specified.

o brief Includes header lines showing what was compared and status lines where a long command might be performed without any output, such as when gathering data from

a remote server. Directories that contain only items on one side, or for which all items are identical on both sides are not expanded to show their contents.

o normal — Expands directories that would be skipped in brief output mode, because they are present in one area only, or because all items are identical on both sides. (Default)

o verbose — Includes information on configuration mappings.

In the output from brief mode, a directory may be shown with the message "(Nothing / all identical on this side)". This message indicates either that all items under this folder are the same on both sides or that there are items to report only on this side of the comparison.

Note: The version is shown as 'Unknown' if the version of the file in the workspace cannot be determined from the local metadata. If an object has no local metadata, its Version will be 'Unmanaged'. Recreated files will appear as 'Unmanaged', because they have no local metadata (their metadata was removed by a previous 'rmfile').

-[no]same

-[no]same — Determines whether the output includes only items that are different or items that are the same and items that are different.
-nosame reports only items that are different. (Default)
-same reports items that are the same, in addition to items that are different.

-selector

-selector <selector> — Specifies the selector to compare. When only one selector option is used, the object specified by the selector is compared to a workspace. You cannot use a Date() or VaultDate() selector.

Note: When specifying a selector, you must distinguish between branch and version selectors. If you are specifying a branch and the branch is anything other than Trunk, specify both the branch and version as follows:
'<branchtag>:<versiontag>', for example,

'Rel2:Latest'. You can also use the shortcut,
'<branchtag>:', for example, 'compare -selector B1:'
or 'compare -selector B1:gold'.

-selector2

-selector2 <selector2>

Specifies a second selector when comparing two modules, legacy module configurations, or directories in the vault. You cannot use a Date() or VaultDate() selector.

Note: When specifying a selector, you must distinguish between branch and version selectors. If you are specifying a branch and the branch is anything other than Trunk, specify both the branch and version as follows:
'<branchtag>:<versiontag>', for example, 'Rel2:Latest'. You can also use the shortcut, '<branchtag>:', for example, 'compare -selector B1:' or 'compare -selector B1:gold'.

--

--

The command option '--' indicates that following arguments should not be taken as options, but as paths that begin with a '-'.

RETURN VALUE

Empty string if -format value is text.
Tcl list if the -format value is list.
Empty string if -output or -stream is used with -format.

When run from a server-side script, the server-side URL used in the results is relative to the server root (meaning the host:port information is omitted), for example:
"sync:///Projects/p1."

SEE ALSO

compare-foreach, contents, contents-foreach, command defaults

EXAMPLES

Example of Comparing Two Selectors

```
Compare the two given selectors, using the 'url vault' of the current
working directory to identify the server to work from.

  dss> compare -selector relA -selector2 relB -recursive
```

Example of Comparing Two Selectors with a URL

```
Compare the two given selectors, starting from the given URL.

  dss> compare -selector relA -selector2 relB \
       sync://saturn.ABCo.com:30003/Modules/df2test -recursive
```

Example of Comparing the Current Directory Against Another Directory

```
Compare my current directory against the other one given. Compare
only this directory and not the sub-directory contents.

  dss> compare . /home/users/fred/Modules/P1 -norecursive

  (Note: You are not required to specify the -norecursive option;
  the behavior of the compare command is nonrecursive by default.)
```

Example of how to use '-format list' option

```
To find which objects in your workspace have or do not have a
specific tag, use 'compare' to compare the workspace with the tag
configuration. Then report the items that do or do not match.

 Create an auto-loaded Tcl proc:

 proc has_tag {dir tag {no_tag 0}} {

     record {set cres [compare -selector $tag $dir -same -recursive \
             -format list -path -report verbose]} nolog

     compare-foreach obj1 obj2 $cres {
       if {[info exists obj1(version)]} {
```

```
            if {[info exists obj2(version)] && \
                 ([string compare $obj1(version) $obj2(version)] == 0)} {
                if {!$no_tag} {
                    puts $obj1(name)
                }
            } else {
                if {$no_tag} {
                     puts $obj1(name)
                }
            }
          }
        }

}
```

Note that this will not include unmanaged objects. To report unmanaged files, modify the code to add an "else" clause to the first "if" statement.

The code can be changed to return a list of the objects by changing the "puts" statements to commands to build a return list. See standard Tcl programming documentation for how to do that.

See the ENOVIA Synchronicity stcl Programmer's Guide for details on auto-loading.

To report which files in the workspace have a "baseline" tag:

```
stcl> has_tag . baseline
code/samp.s19
code/samp.lst
stcl>
```

To report which files in the workspace do not have a "baseline" tag:

```
stcl> has_tag . baseline 1
code/samp.asm
code/test.mem
code/sample1.asm
code/samp.mem
code/test.asm
top/alu/alu.v
stcl>
```

Example of Comparing the Workspace Version to the Server Version

This example shows comparing the workspace version to the server version.

```
dss> compare /home/users/jsmith/workspace/proj1 -recursive
```

Example of Comparing Two Workspace Directories

```
Compare the two given workspace directories. Note that to compare
your current workspace against someone else's, you must specify both
directories.

  dss> compare /home/users/fred/workspace/proj1 . -recursive
```

compare-foreach

compare-foreach Command

NAME

```
compare-foreach     - Function to process the results of a compare
                      command
```

DESCRIPTION

```
This routine loops over the items in a "compare" results list, and
processes each item in turn.
```

SYNOPSIS

```
compare-foreach <var1> <var2> <result_list> <tcl_script> [-nofolder]
                [-path]
```

ARGUMENTS

- Loop Variables
- Result List
- Tcl Script

Loop Variables

```
var1, var2      These are the loop variables. They are treated as Tcl
                arrays, and on each loop around contain the set of
                properties for the next object in the result_list,
                with var1 containing the "props1" properties and var2
                the "props2" properties. In addition to the
                properties in the "props1/2" values for each object,
                the arrays will contain a "name" property and a
                "type" property, which are the name and type
                properties for the object.
```

Result List

result_list	This is the list of objects to be processed. It must be the result value of a call to the "compare" command with the "-format list" option.

Tcl Script

tcl_script	This is the piece of Tcl code that is executed on each loop.

OPTIONS

-nofolder

-nofolder	If specified, then the tcl_script will not be called for Folder type objects in the result_list.

-path

-path	The "name" property on each loop is usually just the "name" property for the object. However, if this option is specified, and a recursive "compare" was performed, then the "name" property is the relative path to each object. Normally, you would run "compare" with the -path option, in which case the "name" property contains an appropriate relative path. If you did not do that, then passing the "-path" option to compare-foreach will mean that the "name" property contains the relative path for each item, thus allowing you to differentiate between items with the same name in different folders.

SEE ALSO

compare

EXAMPLE

- Example of Using compare-foreach On a Result List From compare

Example of Using compare-foreach On a Result List From compare

```
Example of using the compare-foreach to parse a compare.

set result_list [compare -selector RelA -selector2 RelB -rec -format list]

compare-foreach obj1 obj2 $result_list {
    puts "Object: $obj1(name), state1: $obj1(state), state2: $obj2(state)"
}
```

contents

contents Command

NAME

```
contents            - Lists the contents of a configuration or a
                      module
```

DESCRIPTION

- Using Contents on File-Based Objects

```
The 'contents' command provides a simple way to list the contents
of a DesignSync configuration and the member items of a module.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

Using Contents on File-Based Objects

```
You can run the contents command to list folder contents for
DesignSync vaults, for example, list all files you created on a new
branch.

Note: You can also use the contents-foreach function to perform
operations on the contents of the output. See the 'contents-foreach'
command for more information.
```

SYNOPSIS

```
contents [-exclude <object> [,<object>...]]
         [-format <text| list>] [-fullpath]
         [-output <file>] [stream <stream>] [-[no]path]
         [-[no]recursive]
         [-report {silent | brief | normal | verbose}]
         [-selector <selector>] [-[no]versions] [--] <argument>
```

ARGUMENTS

- Workspace or Server Folder

```
Specifies one  of the following argument:
```

Workspace or Server Folder

```
<DesignSync object> Specifies the workspace folder or server
                    folder for which you want to list the
                    contents.
```

OPTIONS

- -exclude
- -format
- -fullpath
- -output
- -path
- -recursive
- -report
- -selector
- -stream
- -version
- --

-exclude

```
-exclude<string>    Specifies the items to exclude from the contents
                    report.

                    If you specify -filter (modules only)and
                    -exclude, then the exclude conditions are applied
                    after filtering the contents thus taking
                    precedence.

                    Note: The global exclude list is added in if
                          either a -exclude or a -filter option is
```

```
                specified, even if the value of the option
                is an empty string "".
```

-format

```
 -format <list       Specifies the format of the output. The format can
     | text>         be:
                     o text -plain text (default)
                     o list -Tcl list structure

                   The format when "-format list" is used is a Tcl list
                   that is designed for further processing, and for easy
                   conversion to a Tcl array structure. This means that
                   it is a list structure in name-value pair format. The
                   top level structure is:
                   {
                      path <path>
                      name <path>
                      config <config>
                      objects <object_list>
                      type folder
                   }

                   "path" is the starting point path given, and may be
                   local workspace paths, or a vault path.

                   "name" is the vault path for which the contents were
                   fetched. It will match the "path" value if a server
                   path was specified.

                   "config" is the configuration being listed, that is
                   selector value.

                   object_list is then defined as a list of items of the
                   form:
                   {
                      name <object name>
                      type folder | file
                      objects <object_list>
                      props <prop_list>
                   }

                   The "name" will include the full or relative path if
                   the -fullpath or -path arguments are used.
                   For information on how the -path an -fullpath options
                   are handled when you specify a module as an argument,
                   see the section 'Understanding the path option'.

                   The "type" indicates whether the object is a folder or
                   file (note that collection objects have a type file).
                   Only a folder has an objects list - this property may
                   not always be present.

                   All file objects may have a props list, which is a list
```

of properties for that object, and has the form:

```
{
   version <version>
}
```

A file object has the version property only if the -versions argument was given. So, if -versions is not given, then file objects will not have a props property -- this property may not always be present. (Although it may seem unnecessary overhead to have the props sub-list for a single property, i.e. version, this structure is maintained for compatibility and for future extensions.)

Note that there is no order implied on the objects in the object_lists. In particular, these items may not be sorted. This is different to the text output, where the items within a directory will always be reported in alphanumeric order. The reason for this is that generally the list output will be further processed, and that further processing can decide whether it needs to sort the results.

For legacy modules, any sub-module configuration references are placed immediately below the referencing module.

To process the results, use the contents-foreach function.

-fullpath

-fullpath	Reports the path for each object within the directory as a full URL.

-output

-output <file>	Output the result to the specified file, which is overwritten if it already exists. Default is to send output to the screen if the -format value is text or to return it as the result of the function if the -format value is list.

-path

-[no]path	Controls the path that is reported for each object. Objects are reported on a per-directory basis, with each directory path given as a full

URL. The items within the directory can be reported as:

- Leaf names (the default, unless '-report silent' is specified)

- Relative path to the start of the command (-path). This is the default if '-report silent' is specified.

Note: The exclude list affects what objects are reported at the full, relative, or leaf of the path as appropriate. See the -exclude option for details.

-recursive

-[no]recursive

Specifies whether to perform this operation i just the specified folder (default) or in its subfolders.

If you use the -recursive option and specify a folder, the contents command operates in a folder-centric fashion. The contents listed can be further refined using the -exclude option.

-report

-report <mode>

Controls level of additional information reported as the command progresses.

Valid values are:

o silent - Only the primary output is given - the list of objects and versions. In this case, for the text output, the default is to show the relative path name (-path).

o brief - Displays the same information as 'normal'.

o normal - Include header information and progress lines where a long command might be performed, such as when scanning the vault. (Default)

o verbose - Include information on configuration mappings.

-selector

-selector <selector>	A valid selector or selector list. Note: The selector cannot contain Date() or VaultDate() items. You should distinguish between branch and version selectors. If you are specifying a branch other than Trunk, specify both the branch and version as follows: '<branchtag>:<versiontag>', for example, 'Rel2:Latest'. You can also use the shortcut, '<branchtag>:', for example, 'contents -selector B1:'.

-stream

-stream <stream>	Output to the given stream (which should be the result of a Tcl 'open' function call). Default is to send output to the screen if the -format value is text or to return it as the result of the function if the -format value is list.

-version

-[no]versions	Include the version numbers for the objects listed.

--

--	The command option '--' indicates that following arguments should not be taken as options, but as paths that begin with a '-'.

RETURN VALUE

Empty string if -format value is text.
Tcl list if the -format value is list.
Empty string if -output or -stream is used with -format.

When run from a server-side script, the server-side URL used in the results is relative to the server root. For example, sync:///@Trunk:Latest. The {host}:{port} is omitted. If the server-side script is run from a browser (via a ProjectSync URL), then the script must format the output for display within an HTML page.

SEE ALSO

```
contents-foreach, ls, ls-foreach, compare, compare-foreach,
command defaults
```

EXAMPLES

Example Showing Contents of Server for Current Working Directory

```
This example shows the contents of the server (vault or module)
associated with the current workspace.

  dss> contents

This example shows the same contents, but includes version numbers
and paths in the output.

   dss> contents -config Rel1 -recursive -fullpath -versions

Gathering configuration data from vault
 sync://svr1.ABCo.com:30002/Projects/P1@Rel1

Contents of:
file:///home/users/username/myprojects/P1
Vault:
sync://svr1.ABCo.com:30002/Projects/P1@Rel1

Version Object Name
1.2      sync://svr1.ABCo.com:30002/Projects/P1/file1.txt
1.4      sync://svr1.ABCo.com:30002/Projects/P1/file2.txt
1.1      sync://svr1.ABCo.com:30002/Projects/P1/file4.txt
1.5      sync://svr1.ABCo.com:30002/Projects/P1/file5.txt

sync://svr1.ABCo.com:30002/Projects/P1/subdir@Rel1

Version Object Name
1.5     sync://svr1.ABCo.com:30002/Projects/P1/subdir/file7.txt
1.2     sync://svr1.ABCo.com:30002/Projects/P1/subdir/file8.txt

Note: In this example, if the -fullpath option were not specified,
then the relative path would be used for the Object Name.
```

Example Showing Contents Output to a Stream

```
This example shows the contents of the configuration Rel4, for the vault
directory structure starting at the vault location given. It sends
the output results to the specified open stream.

  dss> contents -config Rel4 sync://svr1.ABCo.com:30002/Projects/P1
       -stream $p
```

contents-foreach

contents-foreach Command

NAME

```
contents-foreach    - Function to process the results of a contents
                      command
```

DESCRIPTION

```
This routine loops over the items in a "contents" results list, and
processes each item in turn.

Note: The only property types typically available for each object
are, name, type, and version. The name and type properties are always
present in the contents output; "versions" is only present when the
"-versions" option was specified to the contents command.
```

SYNOPSIS

```
contents-foreach var result_list tcl_script [-nofolder] [-path]
```

ARGUMENTS

- var
- results_list
- tcl_script

var

```
var             This is the loop variable. It is treated as a Tcl
                array, and on each loop around contains the set of
                properties for the next object in the result_list.
                In addition to the properties in the "props" value
                for each object (i.e. the version), the array will
```

contain a "name" property and a "type" property, which are the name and type properties for the object.

Note: For modules, the contents-foreach function returns a value of "Module" for the "type" property.

results_list

result_list — This is the list of objects to be processed. It must be the result value of a call to the "contents" command with the "-format list" option.

tcl_script

tcl_script — This is the piece of Tcl code that is executed on each loop.

OPTIONS

- -nofolder
- -path

-nofolder

-nofolder — If specified, then the tcl_script will not be called for Folder type objects in the result_list.

-path

-path — The "name" property on each loop is usually just the "name" property for the object. However, if this option is specified, and a recursive "contents" was performed, then the "name" property is the relative path to each object. Normally, you would run "contents" with the -path or -fullpath option, in which case the "name" property contains an appropriate relative or full path. If you did not do that, then passing the "-path" option to contents-foreach will mean that the "name" property contains the relative path for each item, thus allowing you to differentiate between items with the same name in different folders.

SEE ALSO

```
contents
```

EXAMPLE

```
This example shows using processing the compare-foreach command to
process the results from a compare command.

 set result_list [contents -selector RelA:Latest -version -rec -format list]

 contents-foreach obj $result_list -nofolder { puts "Object: $obj(name),
 version: $obj(version)" }
```

datasheet

datasheet Command

NAME

```
datasheet           - Displays an object's data sheet
```

DESCRIPTION

```
This command displays the data sheet for the specified object.
The information that is displayed depends on the object type. For
example, the data sheet for a file in your working folder contains
information such as lock status, modification status, version
number, and associated tags.

DesignSync displays the information in a browser window. On Windows
platforms your system's default browser is used, and the data sheet
is displayed in an existing browser window if one is available.  On
UNIX, the browser is determined by a registry setting in one of the
DesignSync client registry files. You can override the
installation- or site-wide default browser using the SyncAdmin
tool. On UNIX, DesignSync invokes a new browser to display the data
sheet even if you have a browser already running.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
datasheet <object>
```

OPTIONS

```
None.
```

RETURN VALUE

```
None.
```

EXAMPLES

```
This example displays the data sheet for top.v.

  dss> scd Projects/Sportster/top
  dss> datasheet top.v

This example displays the data sheet for the top.v vault.
  stcl> datasheet "sync://holzt:2647/Projects/Sportster/top/top.v;"

This example displays the data sheet for version 1.2 of top.v.
  stcl> datasheet [url vault top.v]1.2
```

diff

diff Command

NAME

```
diff                - Compares files and versions of files
```

DESCRIPTION

- Notes for Collection Objects

```
The file/version comparison facility has three components:
  - The DesignSync 'diff' command, which is documented here.
  - The DesignSync GUI Tools->Compare Files commands. Performing
    comparisons from the GUI simplifies the selection of files and
    versions for comparison, and also provides shortcuts to
    perform the most common types of comparisons. The GUI commands
```

```
    ultimately invoke the DesignSync diff command. See DesignSync
    Help for details on the Compare Files commands.
  - The graphical interface. DesignSync provides the capability to
    display diff results in a graphical diff client.
    Note: The graphical interface client does not directly understand
    DesignSync versions; you must invoke it from the DesignSync
    'diff' command using the -gui option, or the DesignSync GUI
    Advanced Comparison dialog in order to compare versions.
```

Notes for Collection Objects

```
The built-in diff command supports comparing cell views members from
different versions of a cell view, or comparing local modification of
a cell view to different server versions of the cell view.

Important: When specifying collection objects as the files to
compare, you must use the -member option to specify the relative path
of the cell view.  This provides the location on the server of the
cell view within the collection and indicates to DesignSync that the
object is a cell view within a collection. To find the relative path
of a cell view, use the url members command with the -relative option.
```

SYNOPSIS

```
diff [-ancestor <commonAncestorFile>] [-binary] [-case] [-embed]
     [-kk] [-member <cellview_path>]  [-output <resultFile>]
     [-standard | -unified | -syncdiff | -annotate | -gui]
     [-version <id>] [-white]
     {[-file1] <fileA>} [[-file2] <fileB>]  [--]
```

ARGUMENTS

- File Object

File Object

```
<file>            You can specify one or two files as simple
                  filenames, relative pathnames, absolute pathnames,
                  collection cell view versions, or URLs to
                  DesignSync objects. You can also specify versions
                  by appending the filename with a semicolon (;) and
                  a version number or tag name (including Latest and
                  Orig).

                  Note: When in stcl/stclc mode, you must surround
                  filenames that have spaces or version-extended
                  names with double quotes, for example:
```

"foo.bar;1.5"The file argument can be specified with or without the -file/-file2 options. You can use version-extended filenames (see Description section).

OPTIONS

-ancestor

-ancestor <fn> Specifies the common ancestor for a three-way comparison. You can use version-extended filenames (see Description section).

For example, two users fetch the same version of a file, and each makes changes to their copy. By specifying the original unmodified version as the common ancestor, the first user's modified copy as fileA and the second user's modified copy as fileB, the diff operation can indicate who made which changes and whether the changes would conflict when merged.

Specify an asterisk as the ancestor (-ancestor *) to have diff automatically calculate the closest common ancestor of the two file versions (using 'url resolveancestor'). This option is always a file version.

Note: Only -syncdiff and -annotate output formats support three-way comparisons.

-annotate

-annotate	Uses a column format to display the entire comparison text. The first column displays the line number in fileA. The second column displays the line number in fileB. The third column indicates whether the line is changed and what has changed. The final column provides the text of the line indicated. This option is mutually exclusive with the -gui, -standard, -syncdiff, and -unified options.

-binary

-binary	Performs a fast comparison of the files, reporting only whether the files are identical or not. Because differences between binary files cannot be reported, a fast binary comparison is automatically performed if 'diff' detects that either of the files being compared is a binary file. Note that the -kk, -embed, -white, and -case diff options are ignored when performing a binary comparison.

-case

-case	Ignore character case differences.

-embed

-embed	Ignore differences in the amount of whitespace within a line. For example, using -embed, there is no difference between a sentence with one space between each word and the same sentence with three spaces between each word.

-file1

-file1 <fileA>	Specifies the first file or version to be compared. In most cases, this should be the older version of the two being compared. For more information about what can be specified for <fileA>, see the <file> argument. If you do not specify the fileB argument, then fileA is compared to its Original (;Orig) version, which is the version that you checked out prior to making local modifications.

Note: The -file1 and -file2 switches are optional; you can specify fileA and fileB without the switches. However, you must either specify both switches or omit both switches. The following syntax is invalid:
diff -file1 a.txt b.txt

-file2

-file2 <fileB> Specifies the second file or version to be compared. For more information about what can be specified for <fileA>, see the <file> argument. If omitted, fileB is assumed to be the Original (;Orig) version of fileA.

FileB should generally be the version with the more recent changes. If fileB is older than fileA, then the comparison succeeds, but the results are the inverse of the actual modifications. For example, if you add a line to the newer file, but specify the newer file as fileA, then diff reports that this line was deleted from fileB rather than indicating that the line was added to fileA. In some cases, this inverse report is useful; for example, when backing out a set of changes.

-gui

-gui Invokes the defined graphical Diff utility to display the comparison results. DesignSync provides a graphical utility, or, if you have a preferred diff tool, you may configure your system to use that tool.

For information configuring DesignSync to recognize your graphical Diff utility, see the ENOVIA DesignSync Administrator's Guide.

Note: The -kk, -embed, -white, and -case diff options are controlled by registry keys for the graphical Diff utilities. The registry key settings override any command line options specified. The -output option is ignored.

This option is mutually exclusive with the -annotate, -standard, -syncdiff, and -unified options.

-kk

```
-kk             Stands for "keep keywords", ignores differences in
                RCE keyword values by hiding the keyword values
                (collapsing the keywords) prior to
                comparing the files. RCE keywords are tokens, such
                as $Revision$, $Author$, and $Log$ (see Notes),
                that you can add to your files to provide
                revision information, such as revision number,
                author, and comment log.

                For example, if the first lines of fileA and fileB are:
                   fileA:   $Revision: 1.1 $
                   fileB:   $Revision: 1.3 $
                then diff reports the difference unless you specify
                -kk, in which case diff collapses each line to:
                   $Revision$.

                Differences in keyword usage and placement are
                always reported. For example:
                   fileA:   $Revision: 1.1 $
                   fileB:   $Author: Goss $
                diff reports the difference irrespective of
                whether you specify -kk because the keywords
                themselves, not just the keyword values, are
                different.

                Notes:
                - $Log$, when expanded, permanently adds
                  log information to your files. The -kk option
                  does not hide these log messages prior to
                  performing a comparison. Diff programs such as
                  tkdiff may flag differences or conflicts
                  (if log information has been edited by hand)
                  if you use $Log$ in your files.
                - The diff command honors the $KeysEnd$ keyword;
                  any expanded keywords after $KeysEnd$ are compared
                  fully and literally.
```

-member

```
-member          Specifies the relative path of the collection object
<collection_path> member. This option is used to indicate to the
                 system that the files specified are within a
                collection and to provide the relative path to the
                cell view.

                 Note: If you have specified a cell view within a
                 collection as the file argument, this option is
                 required.
```

-output

-output <fn>	Specifies an output file for the diff results. By default, the results are displayed in the shell window. The -output option is ignored if you specify -gui. Caution: Any existing file of the same name is overwritten without warning.

-standard

-standard	Displays differences in standard Unix diff format. This option is mutually exclusive with the -annotate, -gui, -syncdiff, and -unified options.

-syncdiff

-syncdiff	Displays the changed text with margin annotations indicating the changes. This option is mutually exclusive with the -annotate, -guide, -standard, and -unified options.

-unified

-unified	Displays differences in unified diff format. This option is mutually exclusive with the -annotate, -gui, -standard, and -syncdiff options.

-version

-version <selector>	Specifies another version of fileA to compare to to fileA. If the selector resolves to a branch, the Latest version on that branch is used for the comparison. When using the -version option, you only need to specify fileA for comparison. The system implicitly processes the two specified versions of fileA without requiring you to type one version as fileB.

-white

```
-white          Ignore leading and trailing whitespace. For
                example, using -white, there is no difference
                between UNIX and PC line endings, or different
                indentation levels, as long as the rest of the line
                content matches.
```

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when arguments
                to the command begin with a hyphen (-).
```

SEE ALSO

```
DesSync, url resolveancestor, keywords
```

EXAMPLES

Examples of Comparing a File against the Original Version

```
Example showing compare of a working copy of a file against the
original version to see what changes you have made. All of the
following specifications are equivalent:

  dss> diff foo.bar
  dss> diff "foo.bar;Orig" foo.bar
  dss> diff -v Orig foo.bar
```

Examples of Comparing a File Against the Latest Server Version

```
Example showing compare of a working copy against the latest version
on the same branch, using unified diff format:

  dss> diff -unified foo.bar "foo.bar;Latest"
  dss> diff -unified -version Latest foo.bar
```

Example of Comparing a File Against A Specified Version

```
Example showing compare of a working copy of a file on
the Trunk branch against the latest version on the "rel30" branch:

  dss> ls -report H samp.asm
    Branch Tags  Name
    -----------  ----
          Trunk  samp.asm
  dss> diff -v rel30: samp.asm
```

Example of Comparing Original File Against Latest Server Version

```
This example shows how the latest server version of the file differs
from the original version.

  dss> diff "foo.bar;Orig" "foo.bar;Latest"
```

Example of Showing Conflicts in Your Local Version

```
This example shows how to find conflicts between your locally
modified copy and the latest checked-in version:

  dss> diff -ancestor "foo.bar;Orig" foo.bar "foo.bar;Latest"

or equivalently, use the "*" notation to have "diff" calculate
the common ancestor automatically:

  dss> diff -ancestor * foo.bar "foo.bar;Latest"
```

Examples of Comparing Collection Cell View Versions

```
These examples show different ways of specifying the same comparison
of member file from different versions of a cell view version.

stcl> diff -member verilog/verilog.v [url vault verilog.sync.cds]1.2 \
[url vault verilog.sync.cds]1.3

stcl> diff -member verilog/verilog.v -version 1.2 \
{verilog.sync.cds;1.3}

stcl> diff -member verilog/verilog.v {verilog.sync.cds;1.2} \
{verilog.sync.cds;1.3}
```

Example of Comparing Against the Local Cell View Version

```
This example shows comparing the local version of a member with a
specified cell view version.

stcl> diff -member verilog/verilog.v {verilog.sync.cds;1.3} \
verilog.sync.cds
```

help

help Command

NAME

```
help                - Provides help on the Synchronicity command set
```

DESCRIPTION

```
This command provides a variety of help related functions,
displaying the information in the output window. Help is available
for:
 - All DesignSync command-line commands
 - DesignSync topics such as using wildcards or running server-side
   scripts
 - ProjectSync command-line commands

For compound commands such as the 'url' and 'note'
commands, surround the command with double quotes and put
exactly one space between the two keywords of the command (see
Example section).

Every DesignSync command has '-help', '-?', and '-usage' options
that you can specify to get full or brief help.

Note:
   You can access other DesignSync and related products and
   integrations documentation from the DesignSync Documentation Main
   Menu:

   - (Windows only) Select "DesignSync Documentation" from the
     Windows Start menu, typically:

       Start->Programs->Dassault Systems DesignSync <version>->
         DesignSync Documentation

   - Enter the following URL from your Web browser:

       http://<host>:<port>/syncinc/doc/index.html

     where <host> and <port> are the SyncServer host and port. Use
```

```
    this server-based invocation when you are not on the same
    local area network (LAN) as the Synchronicity installation.

  - Enter the following URL from your Web browser:

      file:///$SYNC_DIR/share/content/doc/index.html

    where $SYNC_DIR is the location of the Synchronicity
    installation. Specify the value of SYNC_DIR, not the variable
    itself. Use this invocation when you are on the same LAN as
    the Synchronicity installation. This local invocation may be
    faster than the server-based invocation, does not tie up a
    server process, and can be used even when the SyncServer is
    unavailable.
```

SYNOPSIS

```
help  [-all] [-brief] [-output <file>] [-summary] [<topic> [...]]
```

OPTIONS

- -all
- -brief
- -output
- -summary

-all

```
-all          Displays help information for all available
              commands and topics. When used with the -brief
              option, displays only synopsis information. When
              used without any other options or arguments,
              displays a list of available commands (same as
              specifying the help command without any options or
              specifying the -summary option).

              Note: When you use the -all option and specify one or
              more topic names, the entire help file (full
              documentation on all commands and topics) is
              displayed. Because of the size of the help file,
              this operation may take a while to complete.
```

-brief

```
-brief        Displays the synopsis information for each specified
              topic. The synopsis for individual DesignSync
              commands is typically the command usage, while for
```

```
                other topics, it is a brief topic summary. If you do
                not specify one or more topics, brief help is
                displayed for all commands.
```

-output

```
 -output <file> This option is used to write help topics to a text
                file instead of displaying them. When used with the
                -all option, a file is created containing all the
                available topics. This can be combined with the
                -brief option to provide a full synopsis of all
                topics.

                Caution: If the file specified already exists,
                its contents will be erased.
```

-summary

```
 -summary       Displays the list of available help
                topics. This option is the same as specifying
                the help command without any options or arguments.
```

RETURN VALUE

```
 none
```

EXAMPLES

```
 The following example returns brief (synopsis) information for
 the 'ci' and 'co' commands:
   dss> help -brief ci co

 The following example returns help information for the 'url vault'
 command. The double quotes are required, and there must be exactly
 one space between 'url' and 'vault':
   dss> help "url vault"

 You can get the same help information by using the command's -help or -?
 option:
   dss> url vault -help
 or
   dss> url vault -?
```

locate

locate Command

NAME

```
locate              - Finds a specified object on the search paths
```

DESCRIPTION

```
This command searches the Synchronicity paths for a specified
object, either a file or directory. You can find either the first
occurrence of the object (the default) or all occurrences of the
object.

On the server side, the following paths are searched in this order:

 <SYNC_CUSTOM_DIR>/servers/<host>/<port>
 <SYNC_CUSTOM_DIR>/site
 <SYNC_CUSTOM_DIR>/enterprise
 <SYNC_DIR>

On the client side, the following paths are searched in this order:

 <SYNC_USER_CFGDIR>
 <SYNC_SITE_CUSTOM>
 <SYNC_ENT_CUSTOM>
 <SYNC_DIR>

The environment variables match the following paths:
Variable name:             Path:
--------------             -----
SYNC_DIR                   Synchronicity installation directory
SYNC_CUSTOM_DIR            <SYNC_DIR>/custom.
SYNC_SITE_CUSTOM           <SYNC_CUSTOM_DIR>/site.
SYNC_ENT_CUSTOM            <SYNC_CUSTOM_DIR>/enterprise
SYNC_USER_CFGDIR           User-specific customization files
                            (UNIX default <HOME>/.synchronicity)
                            (Windows default %AppData%\Synchronicity)

You cannot specify path names containing the ".." relative path
notation. If you try to include this notation, the locate command
throws an exception.

On the client side, you must run this command in stcl/stclc mode.
```

SYNOPSIS

```
locate [-env | -path | -url] [-first | -all] [-nothrow] [-reverse]
       [--] <ObjectName>
```

ARGUMENTS

- Object Name

Object Name

ObjectName	The name of the file or directory you want to locate.

OPTIONS

- -all
- -env
- -first
- -nothrow
- -path
- -reverse
- -url
- --

-all

-all	Returns all occurrences of ObjectName in the search paths. The default behavior is -first.

-env

-env	Returns environment variables in place of literal path names. For example, instead of returning: /home/john/syncinc/custom/site/share/tcl/test.txt this command returns: <SYNC_CUSTOM_DIR>/site/share/tcl/test.txt The -env, -path, and -url options are mutually exclusive; -path is the default.

-first

-first	Returns the first occurrence of ObjectName in the search paths. This behavior is the default.

-nothrow

-nothrow — If the object is not found on the search paths, returns an empty string. Without this option, the locate file command throws an exception when the search object is not found.

-path

-path — Returns the full file system path of the object. The -env, -path, and -url options are mutually exclusive; -path is the default.

-reverse

-reverse — When used with the -all option, returns the path in reverse search order. You get an error if you try to use this option without the -all option.

-url

-url — Returns the server URL, prepended by:

- Server area: /syncserver
- Custom area: /syncsite
- Enterprise area: /syncent
- Installation area: /syncinc

If you use the server-side -url option, specify the path to the search object relative to the one of the share/content directories:

<SYNC_CUSTOM_DIR>/servers/<host>/<port>/share/content
<SYNC_CUSTOM_DIR>/site/share/content
<SYNC_CUSTOM_DIR>/enterprise/share/content
<SYNC_DIR>/share/content

This option is only available when run from the server. The -env, -path, and -url options are mutually exclusive; -path is the default.

--

-- — Indicates that the command should stop looking for command options. Use this option when you specify an object whose name begins with a

```
                    hyphen (-).
```

RETURN VALUE

```
When you use the -first option, returns a string indicating where
the specified object was first located in the search path. When you
use the -all option, returns a list of the places where the
specified object was found in the search paths.

The format of the path returned depends on the options you use.
```

EXAMPLES

Examples of using locate

```
The following example searches for a file called test.txt. A user
has put copies of the file in two of the directories on the search
path (<SYNC_CUSTOM_DIR>/site/test.txt and <SYNC_DIR>/test.txt).

The command

  locate -env test.txt

returns the first location found on the search path:

  $SYNC_CUSTOM_DIR/site/test.txt

When used with the -all option, the command finds the file in two
of the directories on the search path.

  {$SYNC_CUSTOM_DIR/site/test.txt} {$SYNC_DIR/test.txt}

In both cases, the -env option causes the paths to be displayed using
environment variables.
```

Example of Using -nothrow with locate

```
The following example uses the same problem as the previous example,
but includes the use of the -nothrow option to avoid throwing an
exception if the file is not found. Without the -nothrow option, you
need to write Tcl code to deal with exceptions. For example:

#Trying to find file
if [catch {set filename [locate share/test.txt]} msg] {
  puts "The file was not found on the search path. The result is $msg"
```

```
}

The -nothrow option lets you write simpler and less error-prone
code that gets the same result:

#Trying to find file
set filename [locate -nothrow share/tcl/test.txt]
if {$filename == ""} {
  puts "The file was not found on the search path.\n"
}
```

ls

ls Command

NAME

```
ls                  - Lists information about the specified objects
```

DESCRIPTION

- Notes for Files-Based Objects
- Report Options
- Report Data Keys Table
- Status Values for File-Based Objects

```
This command lists information about the specified objects. You
typically specify objects such as folders, files, and
collection objects such as Cadence cell views and CTP collections.

Note: The ls command reports revision control information about a
collection member as if it were the collection itself. In other
words, if a collection is locked and has version 1.1, then that
information appears in the ls output for all of the collection's
members. The only exception is when the collection is modified; in
this case the ls command shows which members are modified or new.

With the ls command you can also specify server-side DesignSync
objects such as vaults, branches, and versions; however, the 'ls'
command is optimized to give you quick information about workspace
objects. By default, 'ls' reports information accessed only from
local metadata, although you can choose to view server information as
well. (See "Report Options" below for details).  You cannot view
server-side module objects with ls.

If you specify a container object -- an object that contains other
```

objects, such as folders and vaults -- 'ls' returns information about the container object's contents.

You can use wildcards to specify objects to be listed. If you do not specify an argument or the -selected option, then the default is to list the contents of the current folder.

All mirror directories can be treated in the same way as your DesignSync work areas.

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.

Notes for Files-Based Objects

To list objects in vaults according to criteria such as a configuration name, use the 'contents' command. Use the 'compare' command to compare objects in vaults, configurations, and workspaces.

Report Options

The -report option lets you specify what information 'ls' returns. You can specify one of the predefined modes (silent, brief, normal, verbose, status), or you can specify one or more data keys to specify exactly the information you want. For example, if you want to see objects' names, fetched times, and last-modified times, specify '-report NFM'.
Note that:
- All data keys must be uppercase.
- The object's name is always included in the listing whether or not you specify the 'N' key.
- If you specify an unused key (such as 'E'or 'Q'), it is ignored.
- Some keys return values on a single line, while others can span multiple lines. Single-line values are always displayed first, followed by multi-line output.

Note: You can add or remove keys from the predefined modes using the + and - keys with the report data keys listed below. For example, report -normal specifies the MDVLN data keys. If instead of specifying D, workspace status, you chose to specify S, status, you could type 'ls -report normal-D+S' (or '-report MSVLN').

Tip: Because report -normal is the default, 'ls -report normal-D+S' could also be specified as 'ls -report -D+S'; the normal option is implied.

The predefined modes are defined as follows:

```
   Mode        Data Key Definition
   -------     -------------------
   brief       N
   normal      MDVLN
   status      MSRUN
   verbose     OMSRUNCTAX
   silent      !
```

The default behavior if -report is not specified is '-report normal'. The 'normal' data keys (MDVLN) generate a quick listing because these keys do not access the server vault. To view more detailed status including revision control status and the username of the locker, specify '-report status'. The 'status' report accesses the server vault and therefore is typically not as fast as the 'normal' report.

Note: The '-report normal' command shows the fetched version rather than the upcoming version for locked or auto-branched objects. Use '-report status' which includes the 'R' report key to show the upcoming version instead.

Report Data Keys Table

The following table lists the -report data keys. The table indicates whether the data key accesses the server vault or gathers the data locally and thus can provide a quicker listing. The table also provides the property name corresponding to each data key.

Data Key	Property Name	From Vault?	# of Lines	Description
!	N/A	N/A	N/A	Silent output. Use the '!' key with no other data keys to suppress the listing, although errors are still displayed. If the '!' key is used with other data keys, it is ignored. This key is useful with the -addselect option when you are only interested in defining your select list.
A	branchtags	Yes	Multi	Branch tags. Use 'H' for single-line format.
C	comments	Yes	Multi	Original and checkout log comments. Original Log comments include: o author o creation time of the current version o check-in comments, if any. Checkout Log comments, if any, include: o check-out comments o changes made from the Revision Log field on the

				DesignSync GUI (File=>Properties=>Revision Control).
D	wsstatus	No	Single	Workspace status. These options are explained more fully in the status values table. Values include: o Absent - for objects fetched but no longer present. o Locally Modified - for objects that have been modified in the workspace. o Moved - workspace object has moved. o Null - for objects in the same state as when the directory was last updated. o Unresolved Conflicts Workspace status is a subset of the 'S' revision control status key, displaying status information available from the workspace, however some status information is not reported by the 'S' report option, so you might need to specify both 'S' and 'D' for complete status.
F	fetchtime	No	Single	Fetched time. Note: If you used 'populate -mirror' to fetch the object to your work area, then the fetchtime for the object is listed as 0.
G	tags	Yes	Single	Version tags. Use 'T' for multi-line format.
H	branchtags	Yes	Single	Branch tags. Use 'A' for multi-line format.
I	uid	No	Single	Object UID.
L	fetchedstate	No	Single	Fetched state. Options include: o Copy o Lock o Mirror o Reference - for unlocked references o Cache o Checkin Excluded - unmanaged object, excluded by exclude file. o Null (" ")- for unmanaged or non-versionable objects. The fetched state displays with header "Type" in the report table. Note: The fetched state for Locked references is "Lock", not "Reference". Use the 'V' mode, which displays "Refers to" for

				references, with 'L' to determine whether an object is a locked reference.
M	mtime	No	Single	Last-modified time. For a listing of vault locks, shows lock time. For references, this field is empty (" ").
N	name	No	Single	Name and, if -path or -fullpath is specified, the path. Note that objects' names are displayed even when 'N' is not specified.
O	type	No	Single	Object Type: o File, o Folder o Project o Absent File (a locked reference or deleted file) o Referenced File o Link to File o Link to Folder o Cached File o Mirrored File o Vendor-specific object types such as Cadence and Synopsys libraries, cells, and cell views, or CTP collection object types. For vault objects, types include: o File o Version o Branch Point Version. For non-versionable objects: o Non-versionable. Note: When running the ls-foreach function, the property type name used is otype.
P	selector	No	Single	Persistent selector list (as defined by the "setselector" command, or "Trunk" by default).
Q	csum	No	Single	The checksum of the object. If the object is not in source control, the checksum is 0.
R	upcoming	Yes	Single	Current version, and upcoming version if object is locked or auto-branched. For a locked reference, 'R' shows the current version and upcoming version to which it refers.
S	status	Yes	Single	Server status. These options are explained more fully in the status values table. Values include: o Up-to-date o Needs Merge o Needs Update o Absent - indicates a locked reference or a file deleted from the operating system o Unknown.

				The status is preceded by [Retired] if the current branch is retired. See the Status Value table below for descriptions of these values.
T	tags	Yes	Multi	Version tags. Use 'G' for single-line format.
U	user	Yes	Single	Username of the locker, or empty if the object is not locked. If the object is locked in this location, the report displays an asterisk (*) after the username.
V	version	No	Single	Fetched version. Display options include: o Version number o Unmanaged - for an object with no local metadata. For example, recreated files display as Unmanaged, because their metadata was removed by a previous rmfile. o Null ("") - for non-versionable objects. Note: This does not show the upcoming version. To show the upcoming version for an object, use the 'R' option.
W	objtype	No	Single	Web object types include: o Folder, o File, o Project, o Link to Folder. For vault web objects, object types include: o File, o Version o Branch Point Version.
X	owner	No	Single	Owner of the object. For collections - the collection to which a collection member belongs. For a folder - all the modules that own the folder.
Y	memberof	No	Single	This field is blank.
Z	size	No	Single	Size of the object in bytes. For collection objects, this option displays either the total number of member files in the collection, or the size of the objects in bytes. For more information on choosing the display value for Z, see the SyncAdmin help file.
	error	Yes	Multi	Error message. If ls is unable to fetch data for an object, the 'error' property automatically displays with the error.

Status Values for File-Based Objects

The following table describes the status values. Server status values are specified using the 'S' key or the '-report status' option. Workspace status values are specified using the -'D' key, or the '-report normal' option. For ease of use, this list is in alphabetical order.

Status Value	Description
Added By merge, Needs Checkin	Indicates that the file was introduced to the work area by a merge or overlay operation and does not exist on the current branch. These objects do not show as modified by the ls command. Note: If a file was added by merge, but is no longer present in the workspace, it will display with a status of "Added by merge, Needs Checkin", not a status of "Absent".
Absent	Indicates an object that is unexpectedly absent from the workspace. Typically an object is listed as "Absent" if it was deleted from the workspace using operating system commands, leaving behind the local metadata. Note: If a file was added by merge, but is no longer present in the workspace, it will display with a status of "Added by merge, Needs Checkin", not a status of "Absent".
Locally Modified	Indicates that the file has been edited since it was fetched and a more recent version has not been checked into the branch, or that an add has been performed on a module member that has not been checked into the module.
Needs Merge [<change>]	Indicates that a file has been locally modified and the version is not correct for the current selector.
Needs Update [<change>]	Indicates that you have an incorrect version on the given branch.
Remove for Merge	Indicates that an object present in the workspace was removed, being retired on the branch being merged into the workspace. To remove the file on the server in the current branch, remove this file using the retire command. This is a workspace status value. Note: Objects that were removed with rmvault are no longer present on the DesignSync server and do not show up in any ls query.
Unknown	Indicates that the version of the file in the workspace cannot be determined from the local metadata.
Unresolved Conflicts	Indicates that a merge of version contents resulted in conflicts. Any object marked as

	containing unresolved conflicts is considered locally modified.
Up-to-date	Indicates that the file is currently the correct version for the selector.
[Retired]	Indicates that the current branch is retired. This is not a state of its own; rather it is a prefix to one of the other states. For example, the status column might contain: [Retired] Locally Modified Because the [Retired] status is a prefix to other status terms, sorting causes retired items to be grouped either at the beginning or end of the listing, independent of the items' local state. Note: Retired is not a valid state for module members.

SYNOPSIS

```
ls [-[no]addselect] [-[un]changed] [-exclude <string>]
   [-format list | text] [-[no]header] [-[un]locked] [-[un]modified]
   [-[no]needsmerge [-branch <branch>]] [-[un]managed]
   [-merged added|rename|remove|all|""]
   [-output <file> | -stream <stream>] [-[no]path | -fullpath]
   [-[no]recursive] [-report <mode>[+<mode>][-<mode>]]
   [-[no]selected] [-[non]versionable] [-workspace | -vault>]
   [-writableunlocked] [--] [<argument> [<argument>...]]
```

ARGUMENT

- Server Folder
- Server Object
- DesignSync Object or Unmanaged Objects

Server Folder

<server folder>	Provides information about the specified object on the server, and if you specify the -recursive option, all subfolders. Specify the object with the sync URL in the format: sync://<host>:<port>/<path>/<folder>

Server Object

<server object>	Provides information about the specified object on the server. Specify the object with the sync

```
                    URL in the format:
                    sync://<host>:<port>/<path>/<object>
```

DesignSync Object or Unmanaged Objects

```
 <DesignSync object |  Provides information about the specified
  DesignSync folder |  DesignSync object or folder. If you specify a
  unmanaged object |    folder, you can use the -recursive option to
  unmanaged folder>     get information about all subfolders contained
                        in the specified folder.
```

OPTIONS

-[no]addselect

```
 -[no]addselect      Indicates whether objects matching the ls
                     specification should be added to the select list.

                     -noaddselect does not add the objects displayed
                     by ls to the select list. (Default)

                     -addselect adds the objects that match your 'ls'
                     specification to your select list. You can use
```

this option in conjunction with '-report !' to suppress 'ls' output if you only want to update your select list.

-branch

-branch <branch>

Use the -branch option with the -needsmerge or -noneedsmerge option to compare objects against the specified branch rather than against the current branch.

Specifying the -branch option without the -needsmerge or -noneedsmerge option generates an error. Specifying -branch with -changed or -unchanged generates an error, as the -changed option only compares objects against the current branch. The -branch option accepts a branch or version tag or a branch numeric. It does not accept a selector or selector list. If <branch> resolves to a version, the branch of that version is used for the comparison.

-[un]changed

-[un]changed

Determines whether to show only objects that are identical (up-to-date) in both the vault and in the workspace, or only objects with different versions in the vault and the workspace. Objects can have different version in the vault or workspace if local modifications are made or if there is a newer version on the server than the last version fetched.

-unchanged shows only objects that are up-to-date.

-changed shows only objects that are not up-to-date. An object is considered changed if it is locally modified, if there is a newer version in the vault, or if there's a structural change to a module, such as moved or removed module members. The -changed option is a combination of the -unmanaged and -modified options and the "Needs Update" state. To show objects that are locally modified without checking whether there are newer versions in the vault, use the (faster) -modified option. Unmanaged objects or module members that have been added, but not checked in are always considered changed.

Specifying both -changed and -unchanged is equivalent to specifying neither option: 'ls'

displays both changed and unchanged objects. If -changed is specified with either -modified or -needsmerge or -unchanged is specified with either -unmodified -noneedsmerge, only the -[un]changed option is processed, because the changes include both merge information and modified information. If -changed is specified with either -unmodified or -noneedsmerge, or -unchanged is specified with either -modified or -needsmerge , ls returns an error, as these options are mutually exclusive.

The -[un]changed options only apply to workspaces. They are silently ignored for 'ls' of vault objects.

-exclude

-exclude <string> Specifies a glob-style expression to exclude matching object names from the listing. The string you specify must match the name of the object as it would have appeared in the listing. Generally, you can specify the leaf name of the objects. If you use the -fullpath option, you must specify a glob expression that matches the full path, for example, file:///home/karen/Projects/Asic/test.v. If you use the -path option, you must specify a glob expression that matches the relative path, for example, ../top*.

Important: The exclude option is applied after the -filter option and is used to further refine the filter.

By default, the 'ls' command does not exclude the objects in the global exclude lists (set using Tools->Options->General->Exclude Lists or using SyncAdmin:General->Exclude Lists). To exclude these objects from an 'ls' listing, apply the -exclude option with a null string:

```
ls -exclude ""
```

The objects in the global exclude lists are appended to the 'ls' exclude list if you exclude other values:

```
ls -exclude "README.txt"
```

-format

-format Specifies whether the format of the 'ls' output should be a Tcl list or formatted text:

list Display a list with the following format:

```
                    {
                     name <name>
                     type file | folder | version | branch
                     props <prop_list>
                     objects <object_list>
                    }

                  For a list of properties, see the
                  "Report Options" table above.  Container
                  objects, including folders and branch-point
                  versions, have an 'objects' list containing
                  their subcomponents.  The list is the return
                  value of the 'ls' command and is echoed to
                  the screen by the dss/stcl shells.  If
                  '-format list' is used with the '-output'
                  or '-stream' option, a formatted list is
                  generated in the file or stream.

                  The ls command does not operate on
                  Module branches or versions.

                  To process the results, use the
                  ls-foreach function.

          text    Display a text table with headers and
                  columns. (Default)  Objects shown in
                  alphabetical order.  If 'format text' is
                  used, 'ls' has no return value, but 'ls'
                  prints the text table to the screen.

          Notes:
          o If an error occurs while accessing an object's
            vault data, the text output prints an error
            message preceding the object. For list output,
            the message precedes the list and the object's
            property list includes an 'error' property
            containing the error message. In both cases,
            the object's revision control status is
            'Unknown'.
          o If '-format' is used with '-report silent' or
            '-report !', the silent option overrides
            the '-format' option and the list or text
            output is suppressed.
          o For recursive listings, if multiple objects
            have the same leaf name, use the -path or
            -fullpath option to differentiate between
            these objects.
```

-fullpath

```
 -fullpath          Display object names as full URLs. By default,
                    only the object name is displayed.
                    The -path and -fullpath options are mutually
                    exclusive.
```

-[no]header

-[no]header	Indicates whether the command should display with field headers before each column in the output. -noheader does not display the fielder header. -header displays a field header at the top of the 'ls' output.(Default)

-[un]locked

-[un]locked [-workspace| -vault]	Determines whether to display only objects that are locked or objects that are not locked. Specifying the -workspace or -vault option allows you to further restrict the ls output to searching in only the local workspace or searching only on the server. Specifying -workspace provides a faster response to time because the 'ls' command accesses only the local metadata and not the server data. -unlocked shows only objects that are currently unlocked. -locked shows only objects that are currently locked by any user. You can differentiate between objects locked by you and others by noting the fetched state (shown with header "Type"). If you have a lock on the object, the fetched state is "Lock". Specifying both -locked and -unlocked is equivalent to specifying neither option: 'ls' displays both locked and unlocked objects.

-[un]managed

-[un]managed	Determines whether to filter the ls output to show either objects under revision control or objects not under revision control. This option checks the workspace metadata. If the file has been removed on the server, it still displays as managed if the workspace has not been updated. -unmanaged shows only objects that are not under

revision control.

-managed show only objects that are under revision control.

Specifying both -managed and -unmanaged is equivalent to specifying neither option: 'ls' displays both managed and unmanaged objects.

This option only applies to DesignSync file-based objects in workspaces. The option is silently ignored for 'ls' of vault file-based objects.

Note: The url registered command queries the server to determine if the object is managed.

-merged

-merged added|rename|remove all|""	Determines whether to display only objects that have been modified as the result of a merge into into the workspace. You must specify a modifier to -merged. The modifiers behave as follows: o added - restricts the command output to only those objects added by the merge. o rename - restricts the command output to only those files that have a different natural path on the merged branch. These files need to be renamed in order to complete the merge. o remove - restricts the command output to only those objects that are not present on the merged branch. o all - includes all the objects specified by the added, removed and renamed modifiers. o "" - removes the defaults set with the command default system for the -merged option.

-[un]modified

-[un]modified	Determines whether to show only objects that have been modified in the workspace, or only objects that have not been modified in the workspace. These options examine only the workspace for modifications. To compare the workspace against the server to determine whether or not the objects have been modified, use the -[un]changed options.

-unmodified shows only objects that are not modified in the workspace.

-modified show only objects that are modified in the workspace. Unmanaged objects are always considered locally modified.

Note: Objects that are "Absent" in the workspace are considered modified.

Specifying both -modified and -unmodified is equivalent to specifying neither option: 'ls' displays both modified and unmodified objects. If -changed is specified with -modified or -unchanged is specified with -unmodified, the -[un]modified option is ignored, because is a subset of the -[un]changed option. If -changed is specified with -unmodified, or -unchanged is specified with -modified, ls returns an error, as these options are mutually exclusive.

This option only applies to workspaces. The option is silently ignored for 'ls' of vault objects.

-[no]needsmerge

-[no]needsmerge [-branch <branch>]

Determines whether to show only objects that require a merge or only objects that do not require a merge. By default, this command compares workspace files against server files in the same branch. To compare objects against another branch, specify the -branch option.

-noneedsmerge shows only objects that do not require a merge.

-needsmerge shows only objects that need merging.

Note: the -needsmerge option displays objects in which both the server and workspace version of an object indicate changes. A merge may not actually be possible, depending on the situation. Specifying both -needsmerge and -noneedsmerge is equivalent to specifying neither option: 'ls' lists the objects that need to be merged and those that do not. If -needsmerge is specified with -change or -noneedsmerge is specified with -unchanged, the -[no]needsmerge option is ignored, because is a subset of the -[un]changed option. If -needsmerge is specified with -changed, or -noneedsmerge is specified with -unchanged, ls returns an error, as these options

are mutually exclusive.

This option only applies to workspaces. The option is silently ignored for 'ls' of vault objects.

-output

-output <file> Prints results to named file. The named file is created or overwritten, but not appended to. To append, use the '-stream' option. The -output and -stream options are mutually exclusive.

-path

-path Include relative paths in object names. By default, only the object name is displayed. With -path, the path of the object relative to the directory specified as an argument during an 'ls -recursive' operation (not necessarily relative to the current directory) is displayed.
The -path and -fullpath options are mutually exclusive.

-[no]recursive

-[no]recursive Indicates whether the ls command should operate on the specified argument or all subfolders in the argument's hierarchy.

-norecursive operates only on the specified argument. (Default)

-recursive operates on all subfolders in the specified argument's hierarchy.

If 'ls -recursive' is invoked in a Cadence Cell folder or above, 'ls' does not descend into the Cadence View folders, and so does not list member files, unless the following advanced registry key is set:
HKEY_CURRENT_USER\Software\Synchronicity\General\AllowRecursion\Cadence View Folder=dword:1.
See DesignSync Data Manager User's Guide: Advanced Registry Settings for details.

If the DesignSync site is configured for managed links and 'ls -recursive' is invoked in a directory containing soft links, 'ls' does not follow the links and instead lists only the

objects that are physically present within the directory structure. If the site is configured to treat links as copies of the linked files or directories, 'ls -recursive' does traverse the directory structure. For more information on managed symbolic links, see the SyncAdmin help.

Note: For recursive listings, if multiple objects have the same leaf name, use the -path or -fullpath option to differentiate between these objects.

-report

-report <mode>

Specifies what information about each object should be displayed. Available report modes are:

- o silent Displays no output (equivalent to '-report !').
- o brief Displays just the object name (equivalent to '-report N'). Because no vault information is needed, a brief listing is very fast.
- o normal Displays common fields that do not require server vault access (equivalent to '-report MDVLN'). This behavior is the default when -report is not specified.
- o verbose Displays most fields (equivalent to '-report OXMSRUNCTA').
- o status Displays status fields (equivalent to '-report MSRUN').
- o K[K...] Displays the fields corresponding to the data keys, where K is a data key listed in the Report Options table above.
- o +K[K...] Displays additional fields corresponding to the data keys specified. This is used to provide addition information when using a predefined mode such as 'brief' or 'normal'.
- o -K[K...] Removes from the display the fields corresponding to the data keys specified. This is used to reduce the amount of information returned when using a predefined mode such as 'brief' or 'normal'.

-[no]selected

-[no]selected

Indicates if the command should use the select list (see the 'select' command) or only the arguments specified on the command line.

-noselected indicates that the command should not

use the select list. (Default) If -noselected is specified, but there are no arguments selected, the ls command operates on the current directory.

-selected indicates that the command should use the select list and any objects specified on the command line. If -selected is not specified, and there are no objects specified on the command line, the ls command operates on the current directory.

-stream

-stream <stream> Prints results to named Tcl stream. Depending on whether you open the stream using the Tcl 'open' command in write (w) or append (a) mode, you can overwrite or append to an existing file.
Note: The -stream option is only applicable in the stcl and stclc Tcl shells, not in the dss and dssc shells. The -output and -stream options are mutually exclusive.

-[non]versionable

-[non]versionable Determines whether to restrict the report returned to displaying only non-versionable and excluded objects or only objects that are versionable and included. If this option is not specified, all objects, versionable/non-versionable, excluded and included, are displayed. (Default) An object is excluded if it is unmanaged and matches a pattern in an applicable exclude file. Other non-versionable objects include objects that are members of a versioned collection, which cannot be managed separately.

-[non]versionable displays only the non-versionable and excluded objects

-versionable displays versionable objects only.

For more information on exclude files, see the DesignSync Data Manager User's Guide: Working with Exclude Files.

-workspace/-vault

-workspace | -vault	Determines whether to use only the workspace metadata or query only the vault (server) for the objects being displayed by the ls command. -workspace shows only items that are locked or unlocked in the local workspace. (Default) -vault shows only items present in the local workspace that are locked or unlocked in the vault. Using the -workspace option provides faster results because it does not check the server for objects locked or unlocked outside of the specified workspace, however -vault can provide more complete results.

-writeableunlocked

-writableunlocked	Displays unlocked objects with write access in the workspace. Use -writableunlocked to verify that you have locks on all editable objects, so that you do not accidentally edit an object already locked by another user. This option only applies to workspaces. The option is silently ignored for 'ls' of vault objects.

--

--	Indicates that the command should stop looking for command options. Use this option when arguments to the command begin with a hyphen (-).

RETURN VALUE

- Empty string if -format value is text.
- Tcl list if the -format value is list.
- Empty string if -output or -stream is used with -format.

SEE ALSO

ls-foreach, compare, compare-foreach, contents, contents-foreach, select, unselect, vhistory, command defaults,

EXAMPLES

Example Showing the Contents of the Current Folder

```
List the contents of the current folder.  By default, 'ls' reports
data keys MDVLN -- last modified time, workspace status, fetched
version, fetched state (shown as Type), and name.  In this example,
AddBlock is a directory.  SubMod is an unlocked reference, whereas
top.v is a locked reference.

  stcl> ls

  Directory of: file:///home/karen/Projects/Rel40

  Time Stamp       WS Status  Version          Type        Name
  ----------       --------   -------          ----        ----
  04/11/2003 10:13                                       AddBlock
                              Refers to: 1.1   Reference   SubMod
  04/11/2003 09:12 Locally    1.2.1.1          Copy        test.v
                   Modified
                              Refers to: 1.1   Lock        top.v
  04/10/2003 10:16            1.1              Copy        x.v
```

Example Showing the Contents of the Specified Folder

```
List only the specified file and the objects in the ABlk directory
using absolute paths, and add the files to the select list:

  dss> scd /home/Projects
```

```
dss> ls -addselect -fullpath top.v ABlk/*
Time Stamp       WS Status Version  Type  Name
----------       --------- -------  ----  ----
03/27/2003 11:12           1.1      Lock  file:///home/Projects/ABlk/x.v
03/27/2003 11:13           1.1      Copy  file:///home/Projects/top.v

Directory of: file:///home/Projects/ABlk/Add

Time Stamp       WS Status Version  Type  Name
----------       --------- -------  ----  ----
03/27/2003 11:12           1.1      Copy  file:///home/Projects/ \
ABlk/Add/Add.v

dss> select -show
file:///home/Projects/ABlk/x.v
file:///home/Projects/top.v
file:///home/Projects/ABlk/Add/Add.v
```

Example Showing Objects that Need to be Merged

```
List each object that needs to be merged with its version on the Dev
branch:

  stcl> scd ~/Projects/Rel40
  stcl> ls -needsmerge -branch Dev

  Directory of: file:///home/karen/Projects/Rel40

  Time Stamp       WS Status   Version      Type        Name
  ----------       ---------   -------      ----        ----
  03/27/2003 13:20 Locally     1.3          Copy        test.v
                   Modified
```

Example Showing Objects that do not Need to be Merged

```
List each object that does not need to be merged with its version on
the Dev branch:

  stcl> ls -noneedsmerge -branch Dev

  Directory of: file:///home/karen/Projects/Rel40

  Time Stamp       WS Status    Version     Type        Name
  ----------       ---------    -------     ----        ----
  03/27/2003 11:13              1.1         Copy        top.v
```

Example Showing a Recursive Directory Listening

```
List the changed (not up-to-date) objects in the HTMLHelp folder and
```

```
all subfolders, and display only the object names (brief format):

  stcl> ls -recursive -changed -report brief HTMLHelp

  Directory of: file:///home/karen/Projects/DesSync/HTMLHelp

  Name
  ----
  Customizing_History.htm
  DSGetStart_GUI.htm
  Editing_and_Organizing_Bookmarks.htm
  Get_Tags_Versions.htm
  Go_Menu.htm

  Directory of: file:///home/karen/Projects/DesSync/HTMLHelp/PrintDoc

  Name
  ----
  file.bmp
  unlock.bmp
```

Example Showing the ls Output in List Format

```
Output these changed objects in a list format.  (The list output is
formatted below but doesn't appear that way in the actual list output
unless you list to a file or stream.)

  stcl> ls -recursive -changed -report brief -format list HTMLHelp
  {name HTMLHelp type folder objects
    {
     {name Customizing_History.htm type file}
     {name DSGetStart_GUI.htm type file}
     {name Editing_and_Organizing_Bookmarks.htm type file}
     {name Get_Tags_Versions.htm type file}
     {name Go_Menu.htm type file}
     {name PrintDoc type folder objects
       {
          {name unlock.bmp type file}
          {name file.bmp type file}
       }
     }
   }
  }
```

Example Showing Locked Objects in the Workspace

```
List objects locked in my local workspace.  This command does not
access the SyncServer and does not indicate objects locked by other
users:

  stcl> scd ~/Projects/DesSync/HTMLHelp
```

```
stcl> ls -locked -workspace

Directory of: file:///home/karen/Projects/DesSync/HTMLHelp

Time Stamp       WS Status  Version     Type     Name
----------       ---------  -------     ----     ----
03/27/2003 15:06            1.2         Lock     working_folder.htm
```

Example Showing All Locked Objects

```
List objects locked in workspace or by others.  This command accesses
the SyncServer. The working_folder.htm file is locked in the
workspace, whereas the ocean_arrow_sm.gif file is locked by another
user.

  stcl> ls -locked

  Directory of: file:///home/karen/Projects/DesSync/HTMLHelp

  Time Stamp       WS Status   Version      Type        Name
  ---------        ---------   -------      ----        ----
  03/27/2003 15:05             1.2          Copy        ocean_arrow_sm.gif
  03/27/2003 15:06             1.2          Lock        working_folder.htm
```

Example Showing All Locked Objects with Users

```
List objects locked in workspace and on server. Display using the
'status' report mode which shows the revision control status, the
upcoming version, and the locker of each object:

  stcl> ls -locked -report status

  Directory of: file:///home/karen/Projects/DesSync/HTMLHelp

  Time Stamp       WS Status Server Status Version    Locked By
            Name
  ----------       --------- -------------  -------    ---------
           ----
  03/27/2003 15:05              Up-to-date     1.2 -> 1.3 linda
           arrow_sm.gif
  03/27/2003 15:06              Up-to-date     1.2 -> 1.3 karen*
           work_folder.htm
```

Example Showing Locked Server Objects Using Status Report Mode

```
List only objects locked on the server.  Display using 'status'
report mode which shows the revision control status, the upcoming
version, and the locker of each object.
```

```
  This example uses -vault <vaultURL>

dss> ls -locked -vault sync://src:2647/Projects/Help/image
-report status

 Directory of: sync://src:2647/Projects/Help/image

 Time Stamp           WS Status   Server Status  Version   Locked By
 Name
 ----------           ---------   -------------  -------   ---------
 ----
 04/30/2012 14:14                              -           mhopkins
 delete-file.gif;1
 04/30/2012 14:14                              -           mhopkins
 delete_local_folder.gif;1
 04/30/2012 14:14                              -           mhopkins
 delete_server_folder.gif;1
 04/30/2012 14:14                              -           mhopkins
 delete_vault.gif;1
 04/30/2012 14:14                              -           mhopkins
 delete_version.gif;1
 04/30/2012 14:14                              -           mhopkins
 delete_workspace_mod_dialog.gif;1
```

Example Showing Locked Workspace Objects in Status Report Mode

```
This example uses -vault <workspace name> (in this case "." for
current workspace directory)

dss> ls -locked -vault . -report status

 Directory of:
 file:///c|/Workspaces/Help/image

 Time Stamp             WS Status   Server Status  Version
 Locked By    Name
 ----------             ---------   -------------  -------
 ---------    ----
12/13/2006 13:43                      Up-to-date  1.7 -> 1.8
 mhopkins*    delete-file.gif
12/13/2006 13:43                      Up-to-date  1.5 -> 1.6
 mhopkins*    delete_local_folder.gif
12/13/2006 13:43                      Up-to-date  1.5 -> 1.6
 mhopkins*    delete_server_folder.gif
12/13/2006 13:43                      Up-to-date  1.5 -> 1.6
 mhopkins*    delete_vault.gif
12/13/2006 13:43                      Up-to-date  1.5 -> 1.6
 mhopkins*    delete_version.gif
12/13/2006 13:43                      Up-to-date  1.4 -> 1.5
 mhopkins*    delete_workspace_mod_dialog.gif
```

Example Showing Unmanaged Objects in Current Folder

```
List unmanaged objects in the current folder, displaying only the
name, last-modified time, and size of each file:

  stcl> ls -unmanaged -report MZ

  Directory of: file:///home/karen/Projects/DesSync/HTMLHelp

  Time Stamp                  Size  Name
  ----------                  ----  ----
  04/14/2003 14:03              50  about_ds.htm
```

Example Showing Unlocked Writable Objects in the Workspace

```
List objects that are writeable but which I have not yet locked:

  stcl> ls -writableunlocked

  Directory of: file:///home/karen/Projects/DesSync/HTMLHelp

  Time Stamp       WS Status   Version       Type     Name
  ----------       ---------   -------       ----     ----
  04/14/2003 14:03             Unmanaged              about_ds.htm
  03/27/2003 15:06             1.3           Copy     warn_excluded.htm
```

Example Showing Excluding Objects

```
Exclude objects from a listing:

  stcl> ls -exclude x.v,top.v

  Directory of: file:///home/karen/Projects/Rel40

  Time Stamp       WS Status    Version          Type        Name
  ----------       ---------    -------          ----        ----
  04/11/2003 10:13                                          AddBlock
                               Refers to: 1.1   Reference   SubMod
  04/14/2003 13:56             Unmanaged                    mult.v
  04/15/2003 12:45             Unmanaged                    streamfile
  04/11/2003 09:12             1.2.1.1          Copy        test.v

  You can also specify the excluded objects using an absolute
  URL.  The name in the glob-style expression must match the format
  listed, in this case, by using the -fullpath option:

  stcl> ls -exclude file:///home/karen/Projects/Rel40/test.v -fullpath

  Directory of: file:///home/karen/Projects/Rel40

  Time Stamp        ...  Name
  ----------        ...  ----
  04/11/2003 10:13  ...  file:///home/karen/Projects/Rel40/AddBlock
```

```
                    ...  file:///home/karen/Projects/Rel40/SubMod
  04/14/2003 13:56  ...  file:///home/karen/Projects/Rel40/mult.v
  04/15/2003 12:45  ...  file:///home/karen/Projects/Rel40/streamfile
                    ...  file:///home/karen/Projects/Rel40/top.v
  04/10/2003 10:16  ...  file:///home/karen/Projects/Rel40/x.v
```

Example Showing a Variety of ls Commands To Display Object Vault

```
List versions of an object vault.  For vault objects, the fetched
state (shown with the "Type" header) is blank:

  stcl> scd [url vault what_is_dss.htm]
  stcl> spwd
        sync://host:2647/Projects/DS/what_is_dss.htm;
  stcl> ls

        Directory of: sync://host:2647/Projects/DS/what_is_dss.htm;1

        Time Stamp       WS Status  Version  Type  Name
        ----------       ---------  -------  ----  ----
        12/04/2000 16:06            1.1            what_is_dss.htm;1.1
        12/26/2000 16:27            1.2            what_is_dss.htm;1.2
        01/02/2001 17:18            1.3            what_is_dss.htm;1.3
        08/10/2001 11:19            1.4            what_is_dss.htm;1.4
        02/10/2003 13:12            1.5            what_is_dss.htm;1.5

You can instead specify a server-side URL of a vault object to list
its contents:

  stcl> ls sync://host:2647/Projects/DS/what_is_dss.htm\;

Or you can use the 'url vault' command to specify the vault object:

  stcl> ls [url vault what_is_dss.htm]

You can also provide an explicit version number for the vault:

  stcl> ls [url vault what_is_dss.htm]1.3

You can specify a tag for the vault, as well:

  stcl> ls [url vault what_is_dss.htm]Latest

(To determine the existing tags for an object, use '-report T'.)
```

Examples Showing Writing to an Output File or TCL stream

```
Write the list to an output file or Tcl stream.

  This example writes to an output file:

  stcl> ls -output ~/ls_Output
```

```
  stcl> cat ~/ls_Output

  Directory of: file:///home/karen/Projects/DesSync/HTMLHelp

  Time Stamp           Version  Type  Name
  ----------           -------  ----  ----
  03/27/2003 15:06     1.12     Copy  About_DesignSync_Log_Files.htm
  03/27/2003 15:06     1.7      Copy  About_Vault_Types.htm
  ...
  ...
```

The output can be in a list format instead:

```
  stcl> ls -format list -output ~/ls_Output
  stcl> cat ~/ls_Output

  {
       {
          name HTMLHelp
          type folder
          objects {
              {
                  name http_proxy.htm
                  type file
                  props {
                      fetchedstate Copy
                      mtime {03/27/2003 15:04}
                      version 1.8
                  }
              }
   ...
   ...

   This example writes the output to a Tcl stream:

   stcl> set channelid [open streamfile w]
   file8
   stcl> ls -stream $channelid
   stcl> close $channelid
   stcl> cat streamfile

   Directory of: file:///home/karen/Projects/Rel40

   Time Stamp       WS Status  Version         Type       Name
   ----------       ---------  -------         ----       ----
   04/11/2003 10:13                                       AddBlock
                               Refers to: 1.1  Reference  SubMod
   04/14/2003 13:56            Unmanaged                  mult.v
   ...
   ...
```

Example Showing Locked References

```
List locked references.
```

```
You might need to regenerate managed objects, in which
case you can check them out as 'locked references'
rather than actual locked copies of the objects.  The
example below creates a locked reference, top.v. The
top.v fetched state displays as 'Lock' and the
Version displays as 'Refers to:' followed by the
version:

stcl> co -reference -lock -nocomment top.v

Beginning Check out operation...

Checking out: top.v : Locked Reference made to 1.1.

Checkout operation finished.

{Objects succeeded (1)} {}

stcl> ls

Directory of: file:///home/karen/Projects/Rel40

Time Stamp       WS Status  Version         Type    Name
----------       ---------  -------         ----    ----
03/27/2003 11:12                                    AddBlock
04/03/2003 10:46            1.3             Copy    test.v
                            Refers to: 1.1  Lock    top.v
```

Example Showing Collection List

```
For each member of a collection, list the object type and the
owner (the collection to which the member belongs). This example
  uses a Custom Type Package (CTP) collection.

  stcl> ls -report OX

  Directory of: file:///home/karen/sf242data/jul16/coltest

  Object Type         Name
  -----------         ----
  File                README
  a Test Member       a.html
  Owner: /home/karen/sf242data/jul16/coltest/a.sgc.tst

  File                a.prop
  a Test collection   a.sgc.tst
  a Test Member       a.txt
  Owner: /home/karen/sf242data/jul16/coltest/a.sgc.tst

  File                b.prop
  File                b.txt
  File                c.html
  d Test Member       d.html
  Owner: /home/karen/sf242data/jul16/coltest/d.sgc.tst
```

```
File                d.prop
d Test collection   d.sgc.tst
d Test Member       d.txt
Owner: /home/karen/sf242data/jul16/coltest/d.sgc.tst

f Test Member       f.html
Owner: /home/karen/sf242data/jul16/coltest/f.sgc.tst

File                f.notamember
File                f.prop
f Test collection   f.sgc.tst
f Test Member       f.txt
Owner: /home/karen/sf242data/jul16/coltest/f.sgc.tst

g Test Member       g.html
Owner: /home/karen/sf242data/jul16/coltest/g.sgc.tst

File                g.prop
g Test collection   g.sgc.tst
g Test Member       g.txt
Owner: /home/karen/sf242data/jul16/coltest/g.sgc.tst

File                partnerFile
```

ls-foreach

ls-foreach Command

NAME

```
ls-foreach          - Function to process the results of an ls
                      command
```

DESCRIPTION

```
This routine loops over the items in an "ls" results list, and
processes each item in turn.

Note: The object type, identified by reporting on the O key in the ls
command, is identified by the otype property name.  This
distinguishes it from the type property reported automatically.  The
type property reports whether the object is a folder, file, or
module.
```

SYNOPSIS

```
ls-foreach var result_list tcl_script [-nofolder] [-path]
```

ARGUMENTS

Loop Variable

var	This is the loop variable. It is treated as a Tcl array, and on each loop around contains the set of properties for the next object in the result_list. In addition to the properties in the "props" value for each object, the array will contain a "name" property and a "type" property, which are the name and type properties for the object.

List of Objects to be Processed

result_list	This is the list of objects to be processed. It must be the result value of a call to the "ls" command with the "-format list" option.

TCL script

tcl_script	This is the piece of Tcl code that is executed on each loop.

OPTIONS

-nofolder

-nofolder	If specified, then the tcl_script will not be called for Folder type objects in the result_list.

-path

-path	The "name" property on each loop is usually just the "name" property for the object. However, if this

```
                option is specified, and a recursive "ls" was
                performed, then the "name" property is the relative
                path to each object. Normally, you would run "ls"
                with the -path or -fullpath option, in which case the
                "name" property contains an appropriate relative or
                full path. If you did not do that, then passing the
                "-path" option to ls-foreach will mean that the
                "name" property contains the relative path for each
                item, thus allowing you to differentiate between
                items with the same name in different folders.

The set of properties available for each object is dependant on the
"-report" option passed to the "ls" command.
```

SEE ALSO

```
ls
```

EXAMPLE

```
This shows a sample script that creates an array to run ls-foreach
against and extracts the object name and otype.  The output shown
after the query are the results of running the query against a folder
containing Cadence data collections.

set result_list [ls -rec -format list -report normal+O]

ls-foreach obj $result_list {
 if {[info exists obj(otype)]} {
 puts "OBJ: $obj(name), OTYPE: $obj(otype)"
}
}

 OBJ: cdsinfo.tag, OTYPE: Cadence Info File
 OBJ: rec, OTYPE: Cadence Cell
 OBJ: schematic.sync.cds, OTYPE: Cadence View
 OBJ: schematic, OTYPE: Cadence View Folder
 OBJ: mux2, OTYPE: Cadence Cell
 OBJ: schematic.sync.cds, OTYPE: Cadence View
 OBJ: schematic, OTYPE: Cadence View Folder
 OBJ: celdom, OTYPE: Cadence Cell
 OBJ: symbol.sync.cds, OTYPE: Cadence View
 OBJ: symbol, OTYPE: Cadence View Folder
 OBJ: custinv, OTYPE: Cadence Cell
 OBJ: symbol.sync.cds, OTYPE: Cadence View
 OBJ: symbol, OTYPE: Cadence View Folder
 OBJ: .oalib, OTYPE: File
 OBJ: risk.TopCat, OTYPE: Cadence Lib Category
 ...
 OBJ: schematic_v1#2e1, OTYPE: Cadence NonView Folder
```

showlocks

showlocks Command

NAME

```
showlocks           - Shows all locked items in the vault
```

DESCRIPTION


```
This command provides a list of all items locked on the server.

Note: To show locked items in the workspace, use the ls command with
the '-locked -workspace' options.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

This command supports the command defaults system.
```

Understanding the Output

```
By default the command reports the branch and version information of
the folder being queried, and a table or Tcl list, containing a list
of items locked on the server. The information is presented in order
of objects searched and entries for each object are sorted by
relative path.

The showlocks command returns the following information:

Column       Property
Titles       Names          Description
-------------------------------------------------------------------
User         user           Displays the username of the user who
                            owns the object lock.
Branch       branch         For DesignSync objects and legacy module
                            objects, the branch information is
                            included in the table.
Tags         tags           Displays the tag information for
                            DesignSync objects and legacy module
                            objects.
Date         date           Displays the date and time the object was
                            locked.
Name         name           Displays the name of the locked object.
Where        where          Displays the full path location of the
                            workspace where the object is locked,
```

```
                    including the machine name where the
                    workspace is located.
          log       Displays the lock comment.  Note: Only
                    module branches contain lock comments.
          uid       Displays the unique identifier for the
                    object.
```

SYNOPSIS

```
showlocks [-alloverriden] [-format text|list] [-[no]overridden]
          [-[no]recursive] <argument>
```

ARGUMENTS

- Server URL
- Workspace

Server URL

```
<serverURL>    Specifying the server URL provides a list of locked
               objects on the server. If you specify a branch, only
               objects locked on that branch are displayed. Specify
               the server URL in the format:
                    sync://<machine>:<port>/<path>[.branchid][;<selector>].
```

Workspace

```
<workspace folder>  Specifying the workspace argument provides a list
                    of locked objects at the corresponding server
                    location.
                    For a list of all the locked items in a
                    workspace, use the ls command with the -locked
                    option.
```

OPTIONS

- -alloverridden
- -format
- -[no]overriden
- -[no]recursive

-alloverridden

```
-alloverridden
```

-format

```
-format text|       Determines the format of the output.  For
 list               information about the information displayed
                    see the "Understanding the Output" section.
                    Valid values are:
                    o text - Display a text table with headers and
                             columns. (Default) Objects are shown in
                             alphabetical order.
                    o list - Displays a list with the following
                             format:
                              {
                                name <name>
                              }
```

-[no]overriden

```
-[no]overriden
```

-[no]recursive

```
-[no]recursive      Indicates whether the command should return
                    the status for the specified argument, or the
                    specified argument and all subfolders.

                    -norecursive displays the status for the
                    specified argument only. (Default)

                    -recursive displays the status for the specified
                    argument and all subfolders.
                    Note: -recursive does not traverse module
                    hierarchies.
```

SEE ALSO

```
command defaults, ci, co, populate, url locktime
```

EXAMPLES

- Example Showing the Locks on the Server from a Workspace Argument

Example Showing the Locks on the Server from a Workspace Argument

```
This example shows the showlocks command running on a workspace folder.

dss>  showlocks .
  sync://srv2.ABCo.com:2647/mbom
  User  Branch  Tags    Date                Name     Where
  ----  ------  ----    ----                ----     -----
  janh  1       Trunk   09/11/2006 15:18    abc.c    srv2.ABCo.com:/mbom
  janh  1       Trunk   09/11/2006 15:18    abc.txt  srv2.ABCo.com:/mbom

This example shows the showlocks command running on a workspace
folder with the -format list option.

dss> showlocks -format list .
  {name abc.c user janh branch 1 tags Trunk date {09/11/2006
  15:56} where srv2.ABCo.com:/mbom} {name abc.txt user janh branch 1
  tags Trunk date {09/11/2006 15:56} where srv2.ABCo.com:/mbom}
```

syncinfo

syncinfo Command

NAME

```
syncinfo            - Returns Synchronicity environment information
```

DESCRIPTION

```
This command returns information about the Synchronicity
software environment, such as version number, location of
registry files, and default editor and HTML browser. The command
can be run from the client to return client information, or from
the server to return server information.

By default (with no arguments specified), all available information
is returned. You can request specific information by specifying
one or more command arguments.

If a given value has not been set or is not available, then
'syncinfo' returns an empty string. For example, if you ask for
portRegistryFile from the client, the return value is empty because
portRegistryFile is only available from the server.
```

SYNOPSIS

```
syncinfo [<arg> [<arg>...]]
```

ARGUMENTS

General Information

isServer

```
isServer            Returns a Tcl boolean value (0 or 1) indicating
                    whether the software executing the syncinfo
                    command is acting as a server (1) or client (0).
```

syncDir

```
syncDir             Returns the root directory of the Synchronicity
                    software installation. On UNIX, this value
                    corresponds to the SYNC_DIR environment
                    variable (on Windows, SYNC_DIR is not required).
```

version

```
version             Returns the version of the Synchronicity software
                    as a string.
```

Registry Information

clientRegistryFiles

```
clientRegistryFiles    Returns a comma-separated list of registry
                       files used by the Synchronicity clients
                       (DesSync, stcl, dss, stclc, dssc).
```

enterpriseRegistryFile

```
enterpriseRegistryFile Returns the enterprise-wide registry file.
```

portRegistryFile

```
portRegistryFile       Returns the port-specific registry file.
```

projectRegistryFile

```
projectRegistryFile    Returns the project-specific registry file.
```

serverRegistryFiles

```
serverRegistryFiles     Returns a comma-separated list of registry
                        files used by a Synchronicity server.
```

siteRegistryFile

```
siteRegistryFile        Returns the site-wide registry file.
```

syncRegistryFile

```
syncRegistryFile        Returns the Synchronicity-supplied standard
                        registry file.
```

userRegistryFile

```
userRegistryFile        Returns the user-specific registry file.
```

usingSyncRegistry

```
usingSyncRegistry       Returns a Tcl boolean value (0 or 1)
                        indicating whether the Synchronicity
                        software is using the text-based registry (1)
                        or the native Windows registry (0).
```

Customization Information

customDir

```
customDir           Returns the root directory of the 'custom' branch
                    of the Synchronicity installation hierarchy,
                    which contains all site- and server-specific
                    customization files. The default value,
                    <SYNC_DIR>/custom, can be overridden by the
                    SYNC_CUSTOM_DIR environment variable.
```

customSiteDir

```
customSiteDir       Returns the directory that contains site-specific
                    customization files. The default value,
                    <SYNC_CUSTOM_DIR>/site (which defaults to
                    <SYNC_DIR>/custom/site), can be overridden by
                    the SYNC_SITE_CUSTOM environment variable.
```

customEntDir

customEntDir	Returns the directory that contains enterprise-specific configuration files. The default value, <SYNC_ENT_CUSTOM> (which defaults to <SYNC_CUSTOM_DIR>/enterprise), can be overridden by the SYNC_ENT_CUSTOM environment variable.

siteConfigDir

siteConfigDir	Returns the directory that contains site-specific configuration files. The default value, <SYNC_SITE_CUSTOM>/config (which defaults to <SYNC_CUSTOM_DIR>/site/config, which defaults to <SYNC_DIR>/custom/site/config), can be overridden by the SYNC_SITE_CNFG_DIR environment variable.

usrConfigDir

userConfigDir	Returns the directory that contains user configuration files. The default value, <HOME>/.synchronicity, can be overridden by the SYNC_USER_CFGDIR environment variable.

userConfigFile

userConfigFile	Returns the user configuration file. The default value, <HOME>/.synchronicity/user.cfg, can be overridden by the SYNC_USER_CONFIG environment variable.

Client Information

connectTimeout

connectTimeout	Returns the number of seconds the client will wait per communication attempt with the server.

commAttempts

commAttempts	Returns the number of times client/server

communication is attempted before failing. Using multiple attempts protects against transient network problems. 'Connect Failure' failures do not trigger multiple connection attempts, because transient network problems rarely cause this error.

Note: When the number of communication attempts is the default value of 3, 'syncinfo commAttempts' returns no value instead of returning 3.

defaultCache

defaultCache	Returns the default cache directory for the client as specified during installation or using SyncAdmin.

fileEditor

fileEditor	Returns the default file editor as specified during installation or using SyncAdmin.

htmlBrowser

htmlBrowser	(UNIX only) Returns the default HTML browser as specified during installation or using SyncAdmin.

proxyNamePort

proxyNamePort	Returns the <name>:<port> of a proxy, if one is defined in a client registry file or using the ProxyNamePort environment variable.

somTimeout

somTimeout	Returns the number of milliseconds after an unsuccessful server connection attempt during which the client does not try to connect again. This timeout protects against an operation on many objects (such as 'ls' on a large directory) taking an excessively long time to complete when there is a connection failure (such as when the server is down). Instead of waiting the connectTimeout period for each

```
                    object, the operation fails for all objects
                    after the first connection failure.
```

Server Information

berkdbIsShmEnabled

```
 berkdbIsShmEnabled  For Synchronicity internal use only.
```

berkdbShmKey

```
 berkdbShmKey        For Synchronicity internal use only.
```

isTestMode

```
 isTestMode          For Synchronicity internal use only.
                     Returns a Tcl boolean value (0 or 1) indicating
                     whether the software executing the syncinfo
                     command is running in test mode (1) or not (0).
                     This feature is useful for regression
                     testing of servers.
```

serverMetadataDir

```
 serverMetadataDir   Returns the directory that contains the
                     server metadata (such as relational
                     database) files.
```

serverDataDir

```
 serverDataDir       Returns the directory that contains vault
                     (repository) data that is stored by a server.
```

serverMachine

```
 serverMachine       Returns the name of the server as returned by
                     gethostname(). This value is returned only
                     when 'syncinfo' is run from a server-side script.
```

serverName

```
serverName          Returns the name of the server as it was
                    specified in the URL used to contact the
                    server. This value is returned only when
                    'syncinfo' is run from a server-side script.
```

serverPort

```
serverPort          Returns the port number used by the server to
                    respond to the syncinfo request. This value is
                    returned only when 'syncinfo' is run from a
                    server-side script.
```

User Information

home

```
home                Returns the home directory of the user
                    running syncinfo (HOME on UNIX, or as
                    defined in your user profile on Windows platforms).
```

userName

```
userName            Returns the account name of the user
                    running syncinfo.
```

RETURN VALUE

```
In dss/dssc mode, you cannot operate on return values, so the return
value is irrelevant.

In stcl/stclc mode:
  - If no argument is specified, the return value is a
    name/value list (Tcl 'array get' format) containing
    all available information.
  - If a single argument is specified, the return value is
    the requested value (not a list).
  - If more than one argument is specified, the return value
    is a name/value list containing the requested information.
  - If any argument is not known, an exception is thrown.
```

SEE ALSO

```
server-side
```

EXAMPLES

Example Showing the SyncInfo Version on Client Startup

```
When you start any Synchronicity client, 'syncinfo version'
executes, which displays (and writes to your log file
if logging is enabled) the Synchronicity version. In this
example, the software is version 3.0.
  % stclc
  Logging to c:\goss\dss_01192000_092559.log
  V3.0

  stcl>
```

Example of Extracting SyncInfo Information to an Array

```
The following stcl script fragment shows how to get all known
information as a Tcl array variable. The 'version' string is
then printed.
  array set info [syncinfo]
  puts "Version: $info(version)"
```

Example Showing Extracting the Information from an Array

```
This example uses the single-argument form of syncinfo to print the
same version information provided by the previous example:

  puts "Version: [syncinfo version]"
```

Example of extracting Name/Value Pairs for Specific Arguments

```
The following example uses command arguments to return a list
of the 'syncDir' and 'userName' values. This example
also shows how to enumerate the name/value list returned by
syncinfo without storing it in an array variable.
  foreach {name value} [syncinfo syncDir userName] {
      puts "$name: $value"
  }
```

version

hcm version Command

NAME

```
hcm version          - Displays the DesignSync installation version
```

DESCRIPTION

```
This command displays the version of the DesignSync product
installation.
```

SYNOPSIS

```
hcm version
```

OPTIONS

RETURN VALUE

```
This command does not return Tcl values.
```

SEE ALSO

```
syncinfo
'
```

EXAMPLES

```
The following example displays the DesignSync version information.

dss> hcm version
 V6R2012
```

vhistory

vhistory Command

NAME

```
vhistory            - Displays an object's version history
```

DESCRIPTION


```
The vhistory command reports version history for managed objects. If
the command is run from a workspace, local status is also reported.

This command supports the command defaults system.
```

Report options

```
The -report option lets you specify what information vhistory
reports. You can specify:

o One of the predefined modes (silent, brief, normal, verbose).

o One or more data keys, to define exactly the information you want.

o A combination of data keys to add to, or remove from, a
  predefined report.

The predefined report modes, and how to modify them for a single
vhistory invocation, are described in the "-report" option
description.

The following table lists the -report data keys, including the
corresponding property names used in "-format list" output. Note
that all data keys must be uppercase.

Text       Data Property
Label      Key  Name           Description
-----      ---- --------       -----------
Object:     N   name           The workspace path to the object, or
                               to the vault URL.

=====       H   N/A            Show horizontal separators between
-----                          items and versions.

Vault URL   S   url            Show the vault URL (server address)
                               associated with a workspace object.

Current     W  version         Show the version currently in the
```

version			workspace.
Current	L	state	Show the fetched state in the workspace. This is not reported for module data.
	B	N/A	Show entries for the branch objects. Note: When used with the B option, on a V6R2010 or higher SyncServer, also reports the username and timestamp for retired branches.
	R	N/A	Show entries for the version objects.
	I	N/A	Do not show (ignore) entries that have no tags.
Branch tags/Version tags	T	tags	Show the branch and version tags. Immutable tags are shown with "(immutable)" appended only if Y is specified as well..
Version	V	version, bud	Show the version numbers for versions, and the branch number for branches. Also, for branches, the property "bud" will be included. A branch is a "bud" branch if it does not yet have any versions. A value of "1" indicates the branch is a bud branch, else "0".
Date	D	date	Show the creation date for a version.
Derived from	F	derived_from	Show the numerical parent version. This maintains the continuity between versions for merge operations. Note: If a merge, or overlay operation occurs to create this version, the referenced version is shown as "Merged from" version.
Author	A	author	Show the author of a version.
Size	K	size	Show the size of the object version in KB. Note: Collections which contain more than one object, display with a size of zero.
Merged from	E	merged_from	Show the version used to create the current version when the current version was created as the result of a merge, skip, or overlay operation requiring an alternate parent version.
Comment	C	comment	Show the checkin comments for a version, and any checkout comments. For

			DesignSync objects, checkout comments are only visible from the workspace in which the checkout occurred.
This branch is retired	X	retired	Show whether a branch is retired. A "retired" value of "1" indicates the branch is retired, else "0". Note: When used with the B option, on a V6R2010 or higher SyncServer, also reports the username and timestamp for retired branches.
Locked by	U	locker, upcoming	Show the lock owner of a locked branch. For DesignSync objects, also show the "version -> upcoming version" information.
Version graph	G	N/A	Show a graphical representation of the version history, as a text graph.
Reverse order	Z	N/A	Show the versions/branches in reverse numeric order.
N/A		objects	In "-format list" output, the property value is a list of the branch and version items reported for that object. Each entry in the objects value is itself a property list.
N/A		retired_ properties	In "-format list" output, the property value is an array including date and user properties containing the date and time the retire was performed and the username of the person who performed the retire.
N/A		type	In "-format list" output, the property value is either "branch" (for branch entries) or "version" (for version entries). The value is used in the "objects" property value lists.
N/A	+	N/A	Add codes to a predefined report.
N/A	-	N/A	Remove codes from a predefined report.

Understanding the output

The vhistory output is divided into sections. The first section provides the information about the selected object or module. The second section contains branch information for the currently selected branch, followed by the version information of all versions on that branch. If you have requested information about more than one

branch, the branch section, ordered by branch number, is displayed, followed by the versions on that branch; followed by the next branch sequentially, etc. until all specified branches and versions have been enumerated. The sequence is based on depth of the branch and version numbers, for example the branch number 1.2.4.1 appears after branch 1.2.3, but before 1.3. The final section is the history graph.

Notes: The sections and fields that appear in your report depend on the report formats you select. For more information on any of the displayed fields, see the Report options section.

Object information can include the following fields:

- Object - Workspace path to the object..
- Vault URL - Vault URL associated with the object.
- Current Version - Version number of the workspace version.
- Current State - Fetched state in the workspace.

Branch information includes the following fields:

Note: You must include report option B to get information on branches. Additional options determine what branch information you display.

- Branch - Branch number.
- Branch tags - Branch tag names.
- Locked by - username of the branch locker.
- Comment - Comment applied to the branch during creation. For the Trunk branch, this is the comment entered when the module or DesignSync object was created.
- This Branch is Retired. - Object branch has been retired, (Non-module data only)
- Retired by - Username, date, and time associated with the retire.

Version information includes the following fields:

Note: You must include the report option R to get information on versions. Additional options determine what version information you display.

- Version - Version number.
- Version tags - Version tag names.
- Derived From - numeric parent version.
- Merged From - version used to create the current version.
- Date - version creation date.
- Author - version author.
- Comment - version comment.

History graph information includes the following:
A graphical representation of the object's history.

SYNOPSIS

```
vhistory [-branch <branchname> -descendants <n> |
```

```
 -lastversions <n> -lastbranches <n> | -all]
[-exclude <string>] [-format list | text] [-maxtags <n>]
[-modulecontext <context>]
[-output <filename> | -stream <port>] [-report <mode>]
[-[no]recursive] [-[no]selected] [--]
<argument> [<argument>...]
```

ARGUMENTS


```
Specify one or more of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object.
```

Workspace Folder

```
<Workspace folder>  Specifies the history of the contents of the
                    specified folder, and, when used with the
                    recursive option, all subfolders.
```

Server Folder

```
<server folder>     Specifies the history of the contents of the
                    specified folder on the server, and when used
                    with the -recursive option, all
                    subfolders. Specify the object with the sync URL
                    in the format:
                    sync://<host>:<port>/<path>/<folder>

If no arguments are given, and the -selected option is not specified,
then the vhistory command will operate on the current directory. This
is equivalent to specifying a single argument of "."
```

OPTIONS

-all

```
-all            Report branch "1" and all descendants, thereby
                reporting the entire history of an object.

                The "-all" option is mutually exclusive with the
                "-descendants" option, the "-lastversions" option, the
                "-lastbranches" option, and with the "-branch" option.
```

-branch

```
-branch <branchname>
                Start the report at the specified branch name. The
                <branchname> may be a branch tag or a branch numeric.

                By default, the current branch for workspace objects
                is the starting branch. For vault objects, branch 1 is
                the default starting branch.

                To override a default value that was saved with the
                command default system, specify a value of "". That
                will use the aforementioned default behavior.
```

-descendants

```
-descendants <n>
                The number of levels of descendant branches to report,
                from the starting branch. By default, the report is
                limited to the starting branch (an <n> value of 0).

                You may specify any positive number as the <n> value.

                For example, if branch 1.2.1 is being reported on,
                and the descendants value is 1, then branch 1.2.1.3.1
                will be reported, but branch 1.2.1.3.1.4.1 will not be.
```

```
                Specifying a value of "all" will report all levels.

                The -descendants option is mutually exclusive with the
                -lastversions option and with the -lastbranches option.
```

-exclude

```
 -exclude <string>
                Specifies a glob-style expression to exclude matching
                object names from the report. The string you specify
                must match the name of the object as it would have
                appeared in the listing.

                By default, the vhistory command does not exclude the
                objects in the global exclude lists (set using
                Tools->Options->General->Exclude Lists or using
                SyncAdmin's General->Exclude Lists). To exclude these
                objects from a vhistory report, apply the -exclude
                option with a null string:
                        dss> vhistory -exclude ""
                The objects in the global exclude lists are appended
                to the vhistory exclude list if you exclude other
                values:
                        dss> vhistory -exclude "README.txt"
```

-format

```
 -format
                Specifies whether the "vhistory" command generates a
                formatted report, or returns a Tcl property list.

                list   Returns a list, with each result entry
                       containing the properties reported for each
                       object, and an "objects" property. The objects
                       property contains a sublist of property lists,
                       with one entry for each branch and version
                       object that is reported for the parent object.

                       For example, consider the following command:

                       stcl> vhistory -report LNRVT file1.txt \
                             file2.txt -lastversions 2 -format list

                       The above command requests a report of the
                       last two versions on the current branch of the
                       two specified objects. The report will contain
                       the object name, the state of the objects in
                       the workspace, and the versions of the object.
                       For each version, the version number and any
                       tags are reported.
```

```
                        The result might be:

                        {
                          name file:///home/tbarbg10/Test/file1.txt
                          state Copy
                          objects {
                            {type version version 1.4 tags {t1 t2}}
                            {type version version 1.5 tags {t3 Latest}}
                          }
                        }

                        {
                          name file:///home/tbarbg10/Test/file2.txt
                          state Lock
                          objects {
                            {type version version 1.3.1.5 tags {}}
                            {type version version 1.3.1.6 tags Latest}
                          }
                        }

                        As shown above, the result is a list containing
                        one entry for each object for which the history
                        was requested.

                        To process the results, use the
                        vhistory-foreach and vhistory-foreach-obj
                        functions.

                        If the history was requested for a single
                        object, you must start processing the result
                        list by taking the "head" of the list, with a
                        call such as "[index $result 0]".

                        The property lists will always contain a
                        property even if the value is "", for easier
                        processing of the results.

                        For a list of properties, see the Report Options
                        table above.

                text    Display a textual result. (Default)
```

-lastbranches

```
 -lastbranches <n>
                How many branches back to report. By default, only
                versions on the specified branch are reported (an
                <n> value of 0).

                You may specify any positive number as the <n> value.
                <n> parent branches back will be reported on. This
                option is used to show more of an object's history.

                For example, let's say the branch to be reported on is
```

```
                1.4.1.3.1, with a Latest version of 1.4.1.3.1.2. By
                default, the vhistory command would only report on
                versions 1.4.1.3.1.1 and 1.4.1.3.1.2. If "1" was
                specified as the -lastbranches value, then the
                vhistory command would also run on one parent branch
                back, reporting versions 1.4.1.3, 1.4.1.2 and 1.4.1.1.

                An <n> value of "all" will run the report on all
                parent branches, back to branch 1.

                The -lastbranches option is mutually exclusive with
                the -descendants option. That is because specifying a
                -lastbranches value implies a -descendants value of 0.

                The -lastbranches and -lastversions options can be
                used together. The report will start at the Latest
                version on the initial branch, and work backwards.
```

-lastversions

```
 -lastversions <n>
                How many versions back to report. By default, all
                versions on the requested branch are reported (an
                <n> value of "all").

                You may specify any positive number as the <n> value.

                The -lastversions option is mutually exclusive with
                the -descendants option. That is because specifying a
                -lastversions value implies a -descendants value of 0.

                If a specific version object URL is specified as the
                argument (or -modulecontext), instead of a -branch,
                then the report will start at the version specified.
                (Instead of starting at the Latest version on the
                branch.) This allows the report to be run on a range
                of versions.

                The -lastversions and -lastbranches options can be
                used together. The report will start at the Latest
                version on the initial branch, and work backwards.
```

-maxtags

```
 -maxtags <n>
                The maximum number of tags shown for any object. By
                default, all tags are shown (an <n> value of "all").
```

-output

```
-output <filename>
              Prints results to the specified file. The named file is
              created or overwritten, but not appended to. To append,
              use the "-stream" option.

              The -output and -stream options are mutually exclusive.
```

-[no]recursive

```
-[no]recursive
               For a local folder or server folder, whether to
              descend through sub-folders of the starting folder, or
              only report on the objects in the specified  folder.

               The default behavior is "-norecursive".
```

-report

```
-report <mode>
              Specifies what information about each object should
              be reported. Available report modes are:

              brief    Report tagged versions/branches with their
                       tags and numerics. This is equivalent to
                       "-report NBRIVT".

              normal   Report all available information, except for
                       the module manifest. This is equivalent to
                       "-report" with all codes listed in the
                       Report Options table above, except for GZQI.

                       This behavior is the default when "-report"
                       is not specified.

              verbose  Report all available information. This is
                       equivalent to "-report" with all codes listed
                       in the Report Options table above, except for
                       GZI.

              K[K...]  Display the fields corresponding to the data
                       keys, where K is a data key listed in the
                       Report Options table above.

              You may also use "+" and "-" operators to add and
              remove codes from the standard reports.

              For example, to report the "normal" output, but only
              for version objects and not branch objects:

              stcl> vhistory -report normal-B
```

```
The data keys and predefined report modes may be
combined in any order. However, the predefined report
mode names may not be immediately preceded or followed
by another data key or predefined report name.

For example, the following is valid:

stcl> vhistory -report Z+normal-B

The above command will report the "normal" output, but
without branches, and with the versions in reverse
order.

The following syntax is not valid:

stcl> vhistory -report Znormal-B

If the "-report" value begins with a "+" or "-", the
default "normal" predefined report is automatically
prepended.

For example:

stcl> vhistory -report -B

is equivalent to:

stcl> vhistory -report normal-B
```

-[no]selected

```
-[no]selected
              Whether to operate on the items in the select list in
              addition to any arguments on the command line. If no
              arguments are given on the command line, then the
              select list is automatically used.
```

-stream

```
-stream <port>
             Prints results to the specified named Tcl port.
             Depending on whether you open the stream using the Tcl
             "open" command in write (w) or append (a) mode, you can
             overwrite or append to an existing file.

             Note: The -stream option is only applicable in the stcl
                   and stclc shells, not in the dss and dssc shells.

             The -stream and -output options are mutually exclusive.
```

--

```
--            Indicates that the command should stop looking for
              command options. Use this option when arguments
              to the command begin with a hyphen (-).
```

RETURN VALUE

```
If "-format list" was specified, and neither the "-output" option nor
the "-stream" option were specified, then the result list is returned.
Otherwise, a value of "" is returned.
```

SEE ALSO

```
command defaults, datasheet, ls, select, vhistory-foreach,
vhistory-foreach-obj
```

EXAMPLES

- Example of Vhistory Showing a Retired Branch

Example of Vhistory Showing a Retired Branch

```
This example shows a retired branch. The report mode used is normal,
which includes the report options: B and X.  Both options are
required to see the time, date and username associated with the
retire.  The first command output shows the default format, text.
The second shows the -format list output.

dss> vhistory c.doc
 Object:           file:///home/rsmith/workspaces/M1/doc/c.doc
 Vault URL:        sync://srv2.ABCo.com:2647/Projects/M1/doc/c.doc;
 Current state:    NotFetched (Locally Modified)
 ---------------------------
 Branch:           1
 Branch tags:      Trunk
 This branch is retired.
 Retired by bjones on Tue Dec 30 01:48:48 PM EST 2008

 ---------------------------
 Version:          1.1
 Version tags:     Latest
 Date:             Tue Dec 30 01:39:16 PM EST 2008
 Author:           rsmith
 Comment:          Updates to documentation

 ============================================================================
```

```
dss> vhistory -format list c.doc
 {name file:///home/rsmith/workspaces/M1/doc/c.doc url
 {sync://srv2.ABCo.com:2647/Projects/M1/doc/c.doc;} state {NotFetched
 (Locally Modified)} objects {{type branch version 1 bud 0 tags Trunk
 tag_properties {{Trunk 0 {} {} {}}} locker {} upcoming {} retired 1
 retired_properties {date 1230662928 user bjones} comment {}} {type
 version version 1.1 tags Latest tag_properties {{Latest 0 {} {} {}}}
 derived_from {} merged_from {} date 1230662356 author rsmith comment
 {Updates to documentation}}}}
```

vhistory-foreach

vhistory-foreach Command

NAME

```
vhistory-foreach    - Function to process the results of a vhistory
                      command
```

DESCRIPTION

```
This function is called on the result list returned from
"vhistory -format list". Use the vhistory-foreach function in
conjunction with the vhistory-foreach-obj function, to process the
list result from vhistory.
```

SYNOPSIS

```
vhistory-foreach obj result_list <tcl_script>
```

ARGUMENTS

- Object Loop Variable
- Results List
- Tcl Script

Object Loop Variable

```
obj                 This is the loop variable. It is treated as a Tcl
                    array. The "obj" Tcl array is set to each object
                    in the result list, in turn.
```

The Tcl array contains the properties for the object, and an "objects" property containing the version and branch entries that were reported for the object.

The set of properties is determined by the "-report" option that was specified to the "vhistory" command. If a "-report" value is not specified, the default "normal" report keys are used.

Results List

result_list — The result list to be processed. This is the result value from a call to the "vhistory" command with the "-format list" option.

Tcl Script

tcl_script — The Tcl code to execute on each element in the "obj" Tcl array.

SEE ALSO

vhistory, vhistory-foreach-obj

EXAMPLE

As an example, let's use the vhistory report from the "-format list" option description in the "vhistory" command documentation:

```
stcl> vhistory -report LNRVT file1.txt file2.txt -last 2 -format list
```

We'll capture the result in a variable, then use the vhistory-foreach functions to process the result:

```
set result [vhistory file1.txt file2.txt -lastversions 2 -format list]

vhistory-foreach obj $result {
    puts "Object name: $obj(name)"

    vhistory-foreach-obj vb obj {
        if { $vb(type) == "version" } {
                puts "Version: $vb(version)"
        } else {
```

```
                puts "Branch: $vb(version)"
            }
        }
}
```

```
The above code would report:

Object name: file1.txt
Version: 1.4
Version 1.5
Object name: file2.txt
Version: 1.3.1.5
Version 1.3.1.6
```

vhistory-foreach-obj

vhistory-foreach-obj Command

NAME

```
vhistory-foreach-obj- Function to process the results of a vhistory
                      command
```

DESCRIPTION

```
This function is called with the property array that was set by the
vhistory-foreach function. The two vhistory "foreach" functions are
used to process the list result from vhistory.
```

SYNOPSIS

```
vhistory-foreach-obj vb obj <tcl_script>
```

ARGUMENTS

- Version/Branch Loop Variable
- Object Tcl Array
- Tcl Code

Version/Branch Loop Variable

```
vb                  The version/branch entry. This is the loop
                    variable. The "vb" Tcl array is set to each
```

version or branch entry for the object, in turn.

Object Tcl Array

obj	This is the "obj" Tcl array that was set by the "vhistory-foreach" function.

Tcl Code

tcl_script	The Tcl code to execute on each element in the "vb" Tcl array.

SEE ALSO

vhistory, vhistory-foreach

EXAMPLE

As an example, let's use the vhistory report from the "-format list" option description in the "vhistory" command documentation:

```
stcl> vhistory -report LNRVT file1.txt file2.txt -last 2 -format list
```

We'll capture the result in a variable, then use the vhistory-foreach functions to process the result:

```
set result [vhistory file1.txt file2.txt -lastversions 2 -format list]

vhistory-foreach obj $result {
    puts "Object name: $obj(name)"

    vhistory-foreach-obj vb obj {
        if { $vb(type) == "version" } {
                puts "Version: $vb(version)"
        } else {
                puts "Branch: $vb(version)"
        }
    }
}
```

The above code would report:

```
Object name: file1.txt
Version: 1.4
Version 1.5
Object name: file2.txt
```

Version: 1.3.1.5
Version 1.3.1.6

webhelp

webhelp Command

NAME

webhelp - Launches Graphical Web Browser to view help

DESCRIPTION

This command provides a variety of help related functions, displaying the information in the default web browser. The default web browser is set during DesignSync client installation. You can change or set the web browser at any time using SyncAdmin. For more information on setting the web browser, see the ENOVIA Synchronicity DesignSync Data Manager Administrator's Guide.

Help is available for:
- All DesignSync command-line commands
- DesignSync topics such as using wildcards or running server-side scripts
- ProjectSync command-line commands

For compound commands such as the 'url' and 'note' commands, surround the command with double quotes and put exactly one space between the two keywords of the command (see Example section).

The web browser opens the specified help topic within the ENOVIA Synchronicity Command Reference for the selected help mode you are working in. For information about setting a help mode, see the ENOVIA Synchronicity DesignSync Data Manager Administrator's Guide. By default, the help mode is "all," which includes the DesignSync documentation for all working modes, including modules, files-based, and legacy modules modes. You can also specify a help mode using the -mode option.

From the ENOVIA Synchronicity Command Reference, you can navigate to the documentation index to access any other DesignSync documentation.

SYNOPSIS

webhelp [-mode module|file|all] [<topic> [...]]

ARGUMENT

- Topic

Topic

<topic>[...]	DesignSync command name(s) or topic(s). If the topic or command specified doesn't exist, the webhelp command launches the web browser and displays the overview topic. If you specify more than one topic, each topic will open in a separate tab in the web browser. Note: When looking up a two word topic, such as "defaults show" enclose the command in quotes, otherwise it will be processed as two separate topics. In this example, entering the command "webhelp defaults show" would result in two tabs being opened, one to the "defaults" topic and one to the overview page, since there is no corresponding "show" command.

OPTIONS

- -mode

-mode

-mode module| file | all	Determines which version of the help to open. If you specify the -mode option, the setting you choose overrides the default mode. If no mode is specified, DesignSync uses the default mode defined with the registry key or SyncAdmin. For more information on defining the help mode, see the ENOVIA Synchronicity DesignSync Data Manager Administrator's Guide. If no mode is set, the help page displays in the "all" mode. Note: Once the book is open, you can navigate to the documentation index and from there open a different version of the ENOVIA Synchronicity Command Reference.

RETURN VALUE

If the command succeeds, it returns an empty string (""). If the command fails, it returns an appropriate error to explain the cause

of failure.

EXAMPLES

Example of Opening a Single Tab in the Default Mode

The following example opens one tab to the "default show" command.

```
dss> webhelp "defaults show"
```

Note: The quotes are required because the command is more than a single word.

Example of Opening Multiple Tab Help for a Specified Mode

The following example opens two tabs in the specified user mode "file." Using a help mode ensure that all the information provided is specific to the data management methodology you are using.

```
dss> webhelp -mode file ls ci
```

URL Sync Object Model

url Commands

NAME

```
url                    - URL navigation commands
```

DESCRIPTION

```
These commands return a value, enabling the user to access the
Synchronicity Object Model (SOM) of information. This includes
going from folders to files, from files to their vaults, from
vaults to the versions inside them, and so on. All commands are
proceeded by the super command "url".

Note: url commands provide information about files and folders
      in your DesignSync work areas. Do not use these commands
      to obtain information about local mirror directories.
      You can use these commands to obtain information about all
      standard mirror directories.

Most url commands accept either relative or absolute URL paths.
For example, both of the following are valid:

   stcl> url vault .           # relative
   stcl> url vault [spwd]      # absolute

The following commands require an absolute path:
   url projects, url users

Note: The url commands are available from all DesignSync client
      shells. The stclc/tcl shells allow you to operate on the
      values returned by the url commands but the dss/dssc shells
      do not. Thus these commands are more useful in stcl/tcl
      than in dss/dssc.
```

SYNOPSIS

```
url <url_command> [<url_command_options>] <object>

Usage: url  [branchid|configs|container|contents|exist|fetchedstate|
            fetchtime|getprop|inconflict|leaf|locktime|members|
            mirror|modified|notes|owner|path|projects|
            properties|registered|relations|resolveancestor|
            resolvetag|retired|selector|servers|setprop|syslock|
```

```
            tags|users|vault|versionid|versions]
```

OPTIONS

```
Varies by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
stcl
```

EXAMPLES

```
See specific url commands.
```

url

url Commands

NAME

```
url                  - URL navigation commands
```

DESCRIPTION

```
These commands return a value, enabling the user to access the
Synchronicity Object Model (SOM) of information. This includes
going from folders to files, from files to their vaults, from
vaults to the versions inside them, and so on. All commands are
proceeded by the super command "url".

Note: url commands provide information about files and folders
      in your DesignSync work areas. Do not use these commands
      to obtain information about local mirror directories.
      You can use these commands to obtain information about all
      standard mirror directories.
```

```
Most url commands accept either relative or absolute URL paths.
For example, both of the following are valid:

   stcl> url vault .           # relative
   stcl> url vault [spwd]      # absolute

The following commands require an absolute path:
   url projects, url users

Note: The url commands are available from all DesignSync client
      shells. The stclc/tcl shells allow you to operate on the
      values returned by the url commands but the dss/dssc shells
      do not. Thus these commands are more useful in stcl/tcl
      than in dss/dssc.
```

SYNOPSIS

```
url <url_command> [<url_command_options>] <object>

Usage: url  [branchid|configs|container|contents|exist|fetchedstate|
            fetchtime|getprop|inconflict|leaf|locktime|members|
            mirror|modified|notes|owner|path|projects|
            properties|registered|relations|resolveancestor|
            resolvetag|retired|selector|servers|setprop|syslock|
            tags|users|vault|versionid|versions]
```

OPTIONS

```
Varies by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
stcl
```

EXAMPLES

```
See specific url commands.
```

url branchid

url branchid Command

NAME

```
url branchid        - Returns the branch number of an object.
```

DESCRIPTION

```
This command returns the branch number of the specified object.

o  For managed objects, the url branchid command returns the current
   branch number (as stored in the local metadata).
o  For branch and version objects, the url branch id command returns
   the branch number.
o  For vaults and for versionable objects that are not under revision
   control, the url branch id command returns "1", (because 1 is the
   default branch number).
o  For all other object types, or if the specified object does not
   exist, an exception is thrown.
```

SYNOPSIS

```
url branchid [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you
                    want the current branch number as stored in the
                    metadata.
```

OPTIONS

- --

--

```
--                  Indicates that the command should stop looking
                    for command options. Use this option when the
                    argument to the command begins with a hyphen
                    (-).
```

RETURN VALUE

```
For valid objects, returns the branch number of the specified
object. For objects not under revision control, returns 1 (which is
identifer for the default branch, "Trunk:".

For invalid or non-existant objects, returns an error.
```

SEE ALSO

```
url versionid
```

EXAMPLES

- Examples of Displaying the Branch ID

```
The following examples show the different return values for
the url branchid command.

For unmanaged objects and vaults, returns "1":
  stcl> url branchid test.s19
  1
  stcl> url branchid [url vault samp.asm]
  1

For invalid arguments or if the object does not exist,
returns the following error messages.
  stcl> url branchid .
  SomAPI-E-101: The specified object is not associated with a branch
  or version.
  stcl> url branchid [url vault .]
  SomAPI-E-101: The specified object is not associated with a branch
  or version.
  stcl> url branchid nosuchobject
  SomAPI-E-101: Object does not exist at specified URL.
```

Examples of Displaying the Branch ID

```
  stcl> ls -report RH samp.asm samp.lst test.mem test.s19
  Version          Branch Tags  Name
  -------          -----------  ----
  1.2                    Trunk  samp.asm
  1.1 -> 1.2             Trunk  samp.lst
  1.2.1.2               rel1.2  test.mem
  Unmanaged                     test.s19

For local managed objects, returns the current branch number:
  stcl> url branchid samp.asm
  1
  stcl> url branchid samp.lst
  1
  stcl> url branchid test.mem
  1.2.1

For versions and branches, returns the branch number:
  stcl> url branchid [url vault test.mem]1.2.1
  1.2.1
  stcl> url branchid [url vault test.mem]1.2.1.2
  1.2.1
```

url configs

url configs Command

NAME

```
url configs         - Returns the configurations of a ProjectSync project
```

DESCRIPTION

```
This command returns the list of configurations for a
ProjectSync-defined project. The project and associated
configurations must be defined from ProjectSync -- see the
ProjectSync User's Guide for more information. You can use this
command in conjunction with 'url contents' to see the
DesignSync-tagged versions that are associated with a
ProjectSync-defined configuration.

The specified object can be a project's vault folder or a
corresponding local working folder. Any other object type
results in an empty list.
```

SYNOPSIS

```
url configs [--] <argument>
```

ARGUMENTS


```
Specifies one or more of the following arguments:
```

Workspace Folder

```
<DesignSync folder> Specifies the workspace folder of a project for
                    which you want a list of configurations.
```

Server Folder

```
<server folder>     Specifies the vault folder of a project for
                    which you want a list of configurations.
```

OPTIONS

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when the argument
                to the command begins with a hyphen (-).
```

RETURN VALUE

```
For valid objects, returns list of configurations.

For other objects: Returns an empty list.
```

SEE ALSO

```
url contents
```

EXAMPLES

```
This example returns the ProjectSync-defined configurations for the
Sportster project, first by specifying the project folder on the
SyncServer, then the corresponding local folder. Sportster has two
configurations: Alpha and Gold.

  dss> url configs sync://holzt:2647/Projects/Sportster
  sync://holzt:2647/Projects/Sportster@Alpha
  sync://holzt:2647/Projects/Sportster@Gold
  dss> url configs /home/goss/Projects/Sportster
  sync://holzt:2647/Projects/Sportster@Alpha
  sync://holzt:2647/Projects/Sportster@Gold

You can then use 'url contents' to see what DesignSync-tagged
versions correspond to a project configuration. Note that 'url
contents' is not recursive -- see the help for 'url contents' for
details. In this example, the Alpha configuration has one subfolder
(code) associated with the configuration, which contains two versions
that were tagged with the DesignSync tag associated with the
ProjectSync Alpha configuration.

  dss> url contents sync://holzt:2647/Projects/Sportster@Alpha
  sync://holzt:2647/Projects/Sportster/code@Alpha
  dss> url contents sync://holzt:2647/Projects/Sportster/code@Alpha
  sync://holzt:2647/Projects/Sportster/code/samp.lst;1.1
  sync://holzt:2647/Projects/Sportster/code/samp.mem;1.1
```

url container

url container Command

NAME

```
url container       - Returns the object containing a specified
                      object
```

DESCRIPTION

```
This command returns the URL of the object (such as a folder)
containing the specified object (such as a file).

Note: In stcl/stclc mode, when specifying a URL that contains a
semicolon (;), surround the URL with double quotes.
```

SYNOPSIS

```
url container [--] <object>
```

OPTIONS

- --

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when the argument
                to the command begins with a hyphen (-).
```

RETURN VALUE

```
For a client-side versionable objects, returns client-side
folder. For server-side objects, returns the vault folder. For
projects, returns the vault folder containing the project. For
server-side note types, returns parent URL. For server-side notes,
returns the note type URL.

For other objects: Returns parent folder, or if no parent folder,
returns an empty list.  Note: 'url container' does not verify that
the object exists.
```

SEE ALSO

```
url contents
```

EXAMPLES

- Example Returning the Local Folder that Contains the Object
- Example Returning the Server Folder that Contains the Object

Example Returning the Local Folder that Contains the Object

```
This example returns the folder that contains top.v.
  dss> url container top.v
  file:///home/Projects/Sportster/synth
```

Example Returning the Server Folder that Contains the Object

```
This example returns the server folder that contains the top.v
```

```
vault.
  stcl> url container [url vault top.v]
  sync://server.company.com:port/Projects/Sportster/synth
```

url contents

url contents Command

NAME

```
url contents        - Returns the objects in a container object
```

DESCRIPTION

```
This command returns a list of URLs of the objects contained in the
specified container object, such as a folder or configuration.  If
the object is not appropriate for the requested operation, an empty
list is returned.

The 'url contents' command is not recursive. For example, 'url
contents' on a ProjectSync configuration always returns folders
as part of the configuration. You can then invoke 'url contents'
on each subfolder in the project.

Note: In stcl/stclc mode, when specifying a URL that contains a
semicolon (;), surround the URL with double quotes.
```

SYNOPSIS

```
url contents [-all | -ifpopulated [-incremental]] [-prefetch]
             [-version <selector>[,<selector>...]] [--] <argument>
```

ARGUMENTS

- DesignSync Folder
- DesignSync Vault

```
Specify one or more of the following arguments:
```

DesignSync Folder

```
<DesignSync folder>  Returns a list of URLs of files and folders
                     contained in the specified folder in the
```

```
                    workspace.
```

DesignSync Vault

```
 <DesignSync vault>   Returns a list of the URLs of the different
                      vault versions checked into the specified vault.
```

OPTIONS

-all

```
 -all                 Reports the objects in the local folder as well
                      as those objects that would be there if it were
                     fully populated with the contents of the
                     associated vault. If the object is a vault-side
                     object (a vault, version, or branch), this
                     option is ignored.

                      This option is mutually exclusive with
                      -ifpopulate.
```

-ifpopulated

```
 -ifpopulated         Report the contents of the local folder if it
                      were fully populated with the contents of its
                      associated vault.

                      You can also specify -incremental to limit the
                      result to return only those objects that would
                      return in an incremental populate as opposed to
                      a full populate.  The list is empty if the
                      object is not a local folder.

                      This option is mutually exclusive with -all.
```

-incremental

```
 -incremental         Modifies -ifpopulated to limit the result to
```

return the URLs of only those objects that would return in an -incremental populate.

Note: You must have at some time performed a full populate on the folder for the -incremental option to work properly.

-prefetch

-prefetch	Used for advanced programming; exposes an optimization to the caller. If used, the call to contents is slower, but the subsequent enumeration of the returned list has extra information cached. If the caller needs to enumerate the contents and for each object call commands such as 'url tags' or 'url properties', overall performance is better if this option is used. If the caller needs to retrieve only the names of the objects, this option makes the operation slower.

-version

-version <selector>	Use with -ifpopulate or -all. Specifies the selector list (typically branch or version tag) to use for the hypothetical populate. The default (-version not specified) is to inherit the selector from the parent folder. Note: To use -version to specify a branch, specify both the branch and version as follows: '<branchtag>:<versiontag>', for example, 'Rel2:Latest'. You can also use the shortcut, '<branchtag>:', for example "Rel2:". If you don't explicitly specify the branch selector in this way, DesignSync does not resolve the selector as a branch selector.

--

--	Indicates that the command should stop looking for command options. Use this option when the argument to the command begins with a hyphen (-).

RETURN VALUE

```
For a client-side folder (Asic): Returns list of client-side folders
and files (file://home/karen/Asic/Sub file://home/karen/Asic/x.v).

For a vault ("sync://holzt:2647/Projects/Asic/x.v;"): Returns vault
versions: ({sync://holtz:2647/Projects/Asic/x.v;1.1}
{sync://holtz:2647/Projects/Asic/x.v;1.2}
{sync://holtz:2647/Projects/Asic/x.v;1.3}).

For a version ("sync://holzt:2647/Projects/Asic/x.v;1.1",
"sync://holzt:2647/Projects/Asic/x.v;yellow"): Not a
container object; returns an empty list.

For branch ("sync://holzt:2647/Projects/Asic/x.v;1.5.1",
"sync://holzt:2647/Projects/Asic/x.v;Golden:Latest"): Not a
container object; returns an empty list.

For a project (sync://holzt:2647/Projects/Asic): Returns vault
folder containing project: (sync://holzt:2647/Projects).

For a configuration (sync://holzt:2647/Projects/Asic/Sub@Rel1):
Returns vault folder: (sync://holzt:2647/Projects/Asic).

For a server-side note system URL (sync:///Note)
Returns the list of note systems on the server (currently the
only note system is SyncNotes)

For a server-side SyncNotes URL (sync:///Note/SyncNotes):
Returns the list of URLs for all note types defined on the server.

For a server-side note-type URL (sync:///Note/SyncNotes/HW-Defect-1):
Returns a list of URLs of all notes of type HW-Defect-1.

For a server-side Users URL (sync:///Users)
Returns a list of URLs for all user profiles on the server.

For a module folder, returns a list of members in that folder.

For other objects: Returns an empty list.
```

SEE ALSO

```
note systems, notetype enumerate, populate, selectors, url container,
url notes, url users, url versions
```

EXAMPLES

- Sample File Structure for Examples
- Example of Local Folder Contents
- Example of Vault Folder Contents
- Example of Returning the Contents of a Branch
- Example Showing the Contents Resulting from Full Populate

- Example Showing the Contents Resulting From Incremental Populate
- Example Showing Contents Resulting From Populate with Selector
- Example Showing Contents Resulting from Populate with Configuration

Sample File Structure for Examples

```
In the following examples, the local work area
/Projects/ASIC contains the following:
  ASIC
    FileA          # Three versions exist in the vault
    FileB          # There is a new version in the vault
    FileC          # Not under revision control
    FileD          # In the vault, but not in local working directory
    Decoder
      FileE        # There is a new version in the vault
      FileF        # Only file to have tag 'Gold' (version 1.2)
```

Example of Local Folder Contents

```
Return contents of local folder ASIC

  dss> url contents /Projects/ASIC
  file:///Projects/ASIC/Decoder
  file:///Projects/ASIC/FileA
  file:///Projects/ASIC/FileB
  file:///Projects/ASIC/FileC
```

Example of Vault Folder Contents

```
Return contents of vault folder ASIC

  dss> url contents sync://holzt:2647/Projects/ASIC
  sync://holzt:2647/Projects/ASIC/Decoder
  sync://holzt:2647/Projects/ASIC/FileA;
  sync://holzt:2647/Projects/ASIC/FileB;
  sync://holzt:2647/Projects/ASIC/FileD;
```

Example of Returning the Contents of a Branch

```
Return contents of FileA main branch

  dss> url contents "sync://holzt:2647/Projects/ASIC/FileA;1"
  sync://holzt:2647/Projects/ASIC/FileA;1.1
  sync://holzt:2647/Projects/ASIC/FileA;1.2
  sync://holzt:2647/Projects/ASIC/FileA;1.3
```

Example Showing the Contents Resulting from Full Populate

```
Return contents of /Project/ASIC resulting from full populate

  dss> url contents -ifpopulated /Projects/ASIC
  file:///Projects/ASIC/Decoder
  file:///Projects/ASIC/FileA
  file:///Projects/ASIC/FileB
  file:///Projects/ASIC/FileD
```

Example Showing the Contents Resulting From Incremental Populate

```
 Return updated objects of /Project/ASIC after incremental populate

  dss> url contents -ifpopulated -incremental /Projects/ASIC
  file:///Projects/ASIC/Decoder
  file:///Projects/ASIC/FileB
  file:///Projects/ASIC/FileD
```

Example Showing Contents Resulting From Populate with Selector

```
Return what is populated when the selector is "Gold", which can be a
version or branch tag

  dss> url contents -ifpopulated -version Gold /Projects/ASIC
  file:///Projects/ASIC/Decoder
```

Example Showing Contents Resulting from Populate with Configuration

```
Return the contents of the ASIC project's "Gold" configuration

  dss> url contents sync://holzt:2647/Projects/ASIC@Gold
  sync://holzt:2647/Projects/ASIC/Decoder@Gold

  dss> url contents sync://holzt:2647/Projects/ASIC/Decoder@Gold
  sync://holzt:2647/Projects/ASIC/Decoder/FileF;1.2
```

url exists

url exists Command

NAME

```
url exists          - Reports whether an object exists
```

DESCRIPTION

```
This command determines whether an object physically exists either in
the workspace or in the vault. If it exists, returns 1, if not
returns 0.
```

SYNOPSIS

```
url exists [--]  <argument>
```

ARGUMENTS

- DesignSync Object

```
Specify one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object whose existence
                    you want to verify.
                    Returns 1 if it physically exists.  Else returns
                    0. Returns the same value for vault, branch,
                    version, folder, note, project and unmanaged objects.

                    Note: A DesignSync reference to a checked-in file
                    returns the value 1 to distinguish it from a file
                    that was never brought into the user's work area.
```

OPTIONS

- --

--

```
--                Indicates that the command should stop looking for
                  command options. Use this option when the argument
                  to the command begins with a hyphen (-).
```

RETURN VALUE

```
For all existing objects: Returns 1 (Tcl TRUE).
For nonexistent objects: Returns 0 (Tcl FALSE).
```

SEE ALSO

```
url modified, url registered, url retired
```

EXAMPLES

- Example of Verifying the Existence of File-Based Objects

Example of Verifying the Existence of File-Based Objects

```
This example uses 'url exists' to verify the existence of several
files.

  stcl> ls -report OR top*
  Object Type      Version          Name
  -----------      -------          ----
  File             1.2              top.gv
  File             1.2 -> 1.3       top.v
  File             Unmanaged        top.log
  Referenced File  Refers to: 1.1   top.f

  stcl> url exists top.gv
  1
  stcl> url exists top.f
  1
  stcl> url exists top.log
  1
  stcl> url exists top.txt
  0
```

url fetchedstate

url fetchedstate Command

NAME

```
url fetchedstate    - Returns the fetched state of an object
```

DESCRIPTION

```
This command returns the fetched state of the specified
object. The fetch state answers the question: "How was this object
checked out into my local work area?" Possible states are:
```

```
Lock       - Object was checked out with a lock. Note that the
             object is not necessarily still locked; another
             user could have unlocked it.
Copy       - Object was checked out unlocked (replica).
Mirror     - Object was checked out as a link to an object in
             the mirror directory.
Cache      - Object was checked out as a link to an object in
             the cache.
Reference  - Object was checked out as a reference.
             Note: For locked references, the fetched state
             returned is 'Lock'.
NotFetched - Object was not fetched using DesignSync. The
             object is one of the following:
               o Not versionable (folder, version, and so on)
               o Not under revision control
               o Under revision control, but not fetched into
                 the work area by DesignSync (for example,
                 could be a tool's output, or could have been copied
                 at the operating-system level)

Note: If the object is not under revision control and is a link, a
      return value of "Mirror" instead of "NotFetched" can result.
```

SYNOPSIS

```
url fetchedstate [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you want
                    the fetched state.
```

OPTIONS

- --

--

```
--                  Indicates that the command should stop looking for
```

```
                    command options. Use this option when the argument
                    to the command begins with a hyphen (-).
```

RETURN VALUE

```
Returns one of the following strings "Lock", "Copy", "Mirror",
"Cache", "Reference", "NotFetched" as indicated below:

For a managed object (specify as client-side object: (Asic/x.v or
file://.../Asic/x.v): Returns "Lock", "Copy", "Mirror", "Cache",
or "Reference" depending on the command used to fetch the object.

For an object not under revision control: Returns "NotFetched".

For a link not under revision control: Returns "Mirror".

For a nonversionable object (not a folder, collection,  nor file):
Returns "NotFetched".

For an object under revision control, but not fetched into the
work area by DesignSync: Returns "NotFetched".
```

SEE ALSO

```
ls, url registered
```

EXAMPLES

- Example Showing Fetch State of File-Based Objects

Example Showing Fetch State of File-Based Objects

```
This example uses 'url fetchedstate' to return the fetched states
for several objects:

  dss> ls -report OR top*
  Object Type      Version          Name
  -----------      -------          ----
  File             1.2              top.gv
  File             1.2 -> 1.3       top.v
  File             Unmanaged        top.log
  Referenced File  Refers to: 1.1   top.f

  dss> url fetchedstate top.gv
  Copy
  dss> url fetchedstate top.v
  Lock
  dss> url fetchedstate top.log
```

```
NotFetched
dss> url fetchedstate top.f
Reference
```

url fetchtime

url fetchtime Command

NAME

```
url fetchtime       - Returns the time when an object was fetched
```

DESCRIPTION

```
This command returns when the specified object was checked out
into your work area. The 'url fetchtime' command actually returns the
timestamp of the object when the object was fetched, not the
time of the fetch itself. Therefore, the value returned by
'url fetchtime' depends on whether or not you specified the -retain
option when you fetched the object.

Note: If you used 'populate -mirror' to fetch the object to your work
area, then a 'url fetchtime' operation for the object always returns 0.

The fetch time is unaffected by making local modifications to the
object. In fact, the fetch time and modification time being
different is an indicator that the file has been locally modified.

Specify an object in your work area as the argument to 'url
fetchtime'.
```

SYNOPSIS

```
url fetchtime [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specify one of the following arguments:
```

DesignSync Object

```
<DesignSync object>  Specifies the DesignSync object for which you want
                     the time when it was fetched into your
                     work area.
```

OPTIONS

- --

--

```
--                   Indicates that the command should stop looking for
                     command options. Use this option when the object
                     you specify begins with a hyphen (-).
```

RETURN VALUE

```
For a managed object specified as a client-side object
(Asic/x.v or file://.../Asic/x.v): Returns the fetched time in
time_t format, which is the number of seconds since the birth
of UNIX -- January 1, 00:00:00, 1970 (GMT).

For an object reference (or other objects that
lack fetch time metadata): Returns 0.

For an object not under revision control: Returns 0.

For a nonversionable object (not a folder, collection, nor file):
Returns 0.

Note: You can use the Tcl 'clock format' command to convert the
time_t format to a date string.
```

SEE ALSO

```
url fetchedstate, url locktime, url properties
```

EXAMPLES

- Example Showing Last Fetchtime of a DesignSync File-Based Object

Example Showing Last Fetchtime of a DesignSync File-Based Object

```
This example displays how long, in seconds, top.v has been in your
work area:
```

```
set now [clock seconds]
set objfetchtime [url fetchtime top.v]
if { $objfetchtime == 0 } {
    puts "top.v is a reference."
} else {
    set duration [expr $now - $objfetchtime]
    puts "top.v fetched to this directory $duration seconds ago."
}
```

url getprop

url getprop Command

NAME

```
url getprop         - Retrieves a property of an object
```

DESCRIPTION

```
This command retrieves properties that were previously set with 'url
setprop'. You can use 'url getprop' to access the "type" and "locked"
properties of revision control objects; however, you cannot use
'url getprop' to access all of the special, built-in properties as
returned by the 'url properties' command for objects other than
notes, notetypes, users, and project configurations. For example,
you cannot determine when an object was locked by using 'url getprop'
of the property "locktime".

Both the object and property must exist. For a note system URL, this
command always throws NO_SUCH_PROP. For a note type URL, this
command returns the default value for that property on the note type.

You can use 'url getprop' with any object type. However,
depending on the type, the command may only work in server-side
scripts, such as when accessing notes.

DesignSync automatically determines the data type of an object.
You can get the datatype assigned by DesignSync using the
'url getprop' command. You can also use the 'url setprop' command to
change the datatype of an existing object. See 'url setprop' and 'ci'
commands for more information.

Note: If the URL provided for the argument has a non-numeric
      extension, the url getprop command identifies the object as
      a branch and not a version.
```

SYNOPSIS

```
url getprop [--] <argument> <propertyName>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you
                    want the properties previously set by the 'url
                    setprop' command.
```

OPTIONS

- --

--

```
--                  Indicates that the command should stop looking for
                    command options. Use this option when arguments
                    to the command begin with a hyphen (-).
```

OPERANDS

- Object
- Property Name

Object

```
<object>            A valid object URL.
```

Property Name

```
<propertyName>      The name of a property to retrieve from the
                    object.
```

RETURN VALUE

```
For all valid arguments, returns the value set for the specified
user-defined property as a string.  also returns the values for the
built-in 'type' and 'locked properties.

For other objects: Raises error.
```

SEE ALSO

```
note getprop, url setprop, url properties, note setprops
```

EXAMPLES

- Example of Getting a User Defined Property for Use in a Script

Example of Getting a User Defined Property for Use in a Script

```
This example server-side script sets and displays a CcList
user-defined property on a vault.

 url setprop "sync:///Projects/myproj/foo.v;" CcList {sal mark}
 puts [url getprop "sync:///Projects/myproj/foo.v;" CcList]
```

url inconflict

url inconflict Command

NAME

```
url inconflict      - Checks if a file merge had conflicts
```

DESCRIPTION

```
This command checks whether a merge (see the -merge option for the
populate and co commands) resulted in conflicts (returns 1) or not
(returns 0). You must resolve merge conflicts before you can check
in the file. The conflicts are considered resolved when the
file no longer contains any of the conflict delimiters (exactly 7
less-than, greater-than, or equal signs starting in column 1).
```

SYNOPSIS

```
url inconflict [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you want
                    to know the conflict status.
```

OPTIONS

- --

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when the argument
                to the command begins with a hyphen (-).
```

RETURN VALUE

```
For a client-side versionable object (Asic/x.v): Returns 1 (Tcl TRUE)
if there is a conflict after a merge; returns 0 (Tcl FALSE)
otherwise.

For any invalid arguments or objects that do not exist, the command
returns 0.
```

SEE ALSO

```
url modified
```

EXAMPLES

- Example Showing the Merge Status of a File-Based Object

Example Showing the Merge Status of a File-Based Object

```
This example demonstrates how 'url inconflict' identifies a file
with conflicts.

dss> url inconflict top.v
0
dss> ci -nocomment -keep top.v

Beginning Check in operation...

Checking out: top.v     : Failed:som: Error 105: Newer version
exists in the vault.  Use '-skip' to skip the newer version, or
'co -merge' to merge with it.

dss> co -merge -nocomment top.v

Beginning Check out operation...

Success - Checked Out with conflicts version: 1.2
dss> url inconflict top.v
1
```

url leaf

url leaf Command

NAME

```
url leaf            - Returns the leaf of the URL
```

DESCRIPTION

```
Returns the leaf of the URL. The leaf is the text that
follows the last separator.

Note: In stcl/stclc mode, when specifying a URL that contains a
semicolon (;), surround the URL with double quotes.
```

SYNOPSIS

```
url leaf [--] <argument>
```

ARGUMENTS

Specifies one of the following arguments:

OPTIONS

- --

--

--	Indicates that the command should stop looking for command options. Use this option when the argument to the command begins with a hyphen (-).

RETURN VALUE

For a client-side versionable object (Asic/x.v): Returns a string containing the leaf of its path (x.v).

For a client-side folder (Asic): Returns the leaf of its path (Asic).

For a vault ("sync://holzt:2647/Projects/Asic/x.v;"): Returns the vault name (x.v;).

For a version ("sync://holzt:2647/Projects/Asic/x.v;1.1", "sync://holzt:2647/Projects/Asic/x.v;yellow"): Returns object and version (x.v;1.1).

For a branch ("sync://holzt:2647/Projects/Asic/x.v;1.5.1", "sync://holzt:2647/Projects/Asic/x.v;Golden:Latest"): Returns object and branch name (x.v;1).

For a project (sync://holzt:2647/Projects/Asic): Returns the project name: (Asic).

For a configuration (sync://holzt:2647/Projects/Asic/Sub@Rel1): Returns the configuration name: (sub@Rel1).

For a server-side note type URL (sync:///Note/SyncNotes/HW-Defect-1): Returns note type (HW-Defect-1).

For a server-side note URL (sync:///Note/SyncNotes/HW-Defect-1/1): Returns note ID (1).

For other objects: Returns argument provided.

Note: 'url leaf' does not verify that the object exists.

SEE ALSO

```
url path
```

EXAMPLES

```
This example extracts the leaf "ASIC" from a URL.
  dss> url leaf sync://dvorak:2647/Projects/ASIC
  ASIC
```

url locktime

url locktime Command

NAME

```
url locktime        - Returns when a branch was locked
```

DESCRIPTION

```
This commands returns when the branch associated with the specified
object was locked. Specify a local object or a branch as the
argument.  If you specify a local object, 'url locktime' determines
the current branch for the object.

One application for this command is to determine if any
branches have been locked too long based on a project team's
design management policies. You might trigger email reminders
or perform unlock operations on objects that have been locked
too long.
```

SYNOPSIS

```
url locktime [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the  DesignSync object for which you
                    want the associated branch or version
                    locktime.
```

OPTIONS

- --

--

```
  --                Indicates that the command should stop looking
                    for command options. Use this option when the
                    object you specify begins with a hyphen (-).
```

RETURN VALUE

```
For all valid objects, returns the lock time, in time_t format; or,
if the object is not locked, returns 0. For any invalid arguments,
returns 0.

For any non-existant objects, returns error.

Note: The time_t format is the number of seconds since the birth
of UNIX -- January 1, 00:00:00, 1970 (GMT). You can use the Tcl
'clock format' command to convert the time_t format to a date
string.
```

SEE ALSO

```
url fetchtime, url properties
```

EXAMPLES

- Example of Viewing the Locktime of a File

Example of Viewing the Locktime of a File

```
This example notifies the locker of top.v if top.v has been locked
for more than a week:

  # Compute the number of seconds in a week
```

```
  set week [expr 60 * 60 * 24 * 7]
  # Find out who the locker is
  url properties top.v props
  set locker $props(locked)
  # Is the file locked?
  # Could also check whether the file is locked by using
  #   'url locktime' itself -- it returns '0' if the file is not
  #   locked.
  if { $locker != 0 } {
      # Figure out how long the file has been locked
      set now [clock seconds]
      set objlocktime [url locktime top.v]
      # If more than a week, send email
      if { $now - $objlocktime > $week } {
          #
          # Provide command to send mail here
          #
          puts "Sent mail to $locker."
      } else {puts "top.v hasn't been locked too long."}
  } else {puts "top.v is not locked."}
```

```
Note that if the branch is not locked, then objlocktime is 0, so
'now - objlocktime' is very large and does not convey the right
information. This example therefore uses 'url properties' to first
determine if the branch is locked before calling 'url locktime'.
```

url members

url members Command

NAME

```
url members         - Returns the members of the specified collection
```

DESCRIPTION

```
This command returns the list of members for the specified
collection object. Specify the collection as a URL or path.
DesignSync currently supports the following collection object type:
  - Cadence cell views
    The members of a Cadence cell view collection object are
    determined by the Cadence software.
  - Synopsys cell view collections.
  - Custom generic collections (CTP collections).

This command can return the list of members with full (absolute)
paths or paths relative to the collection

When in stcl/stclc mode only, you can optionally specify Tcl variable and
code arguments. When specified, the command iterates through the
```

```
returned list of member objects (see Examples).

This command supports the command defaults system.
```

SYNOPSIS

```
url members -[no]relative [--] <collection> [<varname> <code>]
```

OPTIONS

-[no]relative

```
-[no]relative   Indicates whether members are displayed using a
                relative or absolute path.

               -norelative displays the members using an absolute
                path (Default).

                -relative displays the output of the command as the
                 relative path.  This output is useful for
                 identifying the collection cell view version of a
                 member for comparing against a different member
                 version.
```

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when an argument
                to the command begins with a hyphen (-).
```

RETURN VALUE

```
For a collection specified as a URL or path
(file:///home/projLeader/ttlLib/and2/symbol.sync.cds,
/home/projLeader/ttlLib/and2/symbol.sync.cds):
Returns a list of URLs of view members
(file:///home/projleader/ttlLib/and2/symbol/symbol.cdb
file:///home/projleader/ttlLib/and2/symbol/pc.db
file:///home/projleader/ttlLib/and2/symbol/master.tag)

For other objects: Returns an empty list.
```

EXAMPLES

```
This example returns the members of the symbol.sync.cds Cadence
cell view:
  stcl> url members symbol.sync.cds
  file:///home/goss/Projects/Cadence/smallLib/and2/symbol/symbol.cdb
  file:///home/goss/Projects/Cadence/smallLib/and2/symbol/master.tag
  file:///home/goss/projects/Cadence/smallLib/and2/symbol/pc.db
  ...
```

url mirror

url mirror Command

NAME

```
url mirror          - Returns the URL of a local directory's mirror
```

DESCRIPTION

```
This command returns the URL of the mirror directory that was
associated with a local directory with the setmirror command. If no
mirror is set, an empty string is returned.

Note: Because of the way mirrors is configured for modules, this
command does not return any useful information in a modules
environment. For information on using mirrors in a module
environment, see the DesignSync Data Manager Administrator's Guide.
```

SYNOPSIS

```
url mirror [--] <directory>
```

OPTIONS

- --

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when the argument
                to the command begins with a hyphen (-).
```

RETURN VALUE

```
For a folder with a mirror association: Returns URL of the mirror
folder.

For other objects: Returns an empty list.
```

SEE ALSO

```
setmirror
```

EXAMPLES

```
This example sets the mirror for a directory, then uses
'url mirror' to display the directory's mirror.
   dss> setmirror /home/goss/mirror /home/goss/Projects/Sportster
   Sportster   Success Set Mirror
   dss> url mirror /home/goss/Projects/Sportster
   file:///home/goss/mirror
```

url modified

url modified Command

NAME

```
url modified        - Checks if an object has been modified
```

DESCRIPTION

```
This command determines whether an object has been modified since
it was fetched (returns 1) or not (returns 0).

Objects not under revision control are always flagged as
modified. Because of this behavior, 'url modified' provides a way
to determine what objects need to be checked in to preserve the
folder's current contents. Only by checking in both
revision-controlled objects that are modified and objects that
are not revision controlled will the vault contain all of the
folder's current contents. Use 'url registered' to determine whether
objects flagged as modified are under revision control.
```

SYNOPSIS

```
url modified [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one or more of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you want
                    to find modified status. Returns 1 if the object has
                    been modified since it was fetched from the
                    vault. Else returns 0.
```

OPTIONS

- --

--

```
--                  Indicates that the command should stop looking for
                    command options. Use this option when the argument
                    to the command begins with a hyphen (-).
```

RETURN VALUE

```
For any valid object, returns 1 (Tcl TRUE)) if the object has been
modified or is not under revision control.  If the object has not
been modified, it returns 0 (tcl FALSE).

For any non-applicable or non-existant object, returns 0.
```

SEE ALSO

```
url exists, url registered, url inconflict
```

EXAMPLES

Example Showing If the Files in the Workspace are Modified

```
This example shows various results using 'url modified' and 'url
registered':

  dss> ls -report ORS top*
  Object Type      Version                    Status  Name
  -----------      -------                    ------  ----
  File             1.2              Locally Modified  top.gv
  File             1.2 -> 1.3             Up-to-date  top.v
  File             Unmanaged                       -  top.log
  Referenced File  Refers to: 1.1         Up-to-date  top.f
  dss> url modified top.gv
  1
  dss> url modified top.v
  0
  dss> url modified top.log
  1
  dss> url registered top.v
  1
  dss> url registered top.log
  0
```

url notes

url notes Command

NAME

```
url notes           - Returns the notes attached to the specified
                      object
```

DESCRIPTION

```
This command gathers a list of notes attached to a DesignSync object
or a server module (branch or version). Because notes are objects
addressed by URLs, this command returns a list of URLs. The list may
be filtered by note type and by a specific set of query criteria on
the note type. When applied to RevisionControl notes, the url notes
command searches the Objects field.

This command is a wrapper for: note query [-type <notetype>
-attached <ObjectUrl> -dbquery <Query>. In most cases, the note
query command provides superior capabilities.

The url notes command' is server-side only. For more information,
see the "server-side" and "rstcl" help topics.
```

SYNOPSIS

```
url notes [-type <type> [-dbquery <query>]] [--]
          <argument>
```

ARGUMENTS

- DesignSync File

Specifies one of the following arguments:

DesignSync File

<DesignSync object>	Specifies the DesignSync object to which the notes are attached. If no notes are attached, returns an empty list.

OPTIONS

- -type
- -dbquery
- --

-type

-type <type>	The name of a note type, which must exist, to query against.

-dbquery

-dbquery <query>	A valid dBase query string, used to further constrain the set of notes returned.

--

--	Indicates that the command should stop looking for command options. Use this option when the argument to the command begins with a hyphen (-).

OPERANDS

Object

```
<object>          A valid object URL.
```

RETURN VALUE

```
For any valid object, returns a list of note URLs; or, if there are
no notes attached, an empty list.

For any invalid object, returns an error.

For any non-existent object, returns an empty list.
```

SEE ALSO

```
note links, note query, url contents
```

EXAMPLES

Example Showing the List of Specific Note Types in a Specific State

```
The following example returns the list of SyncDefect notes in the
open state attached to the Munich project:

set notes [url notes
  sync:///Projects/Munich -type SyncDefect -dbquery "State='open'"]
```

Example of a Script Fragment that Extracts Attached Note Information

```
The following excerpt of a server-side script extracts all of the
notes in all of the projects on a SyncServer and prints their
titles.  The excerpt uses the 'url notes' command to extract
the notes of a project.

foreach project [url projects sync:///] {
  foreach note [url notes $project] {
```

```
      puts <pre>
      puts "Project: $project"
      puts "NoteURL: $note"
      puts "Notetype: [url leaf [url container $note]]"
      puts "Note Id: [url leaf [url path $note]]"
      puts "Note Title: [note getprop $note Title]"
      puts </pre>
   }
}
```

url owner

url owner Command

NAME

```
url owner           - Returns the owner of an object
```

DESCRIPTION

```
This command returns the owner of the specified object. The object
can be a project, project configuration, branch, or vault.

The owner of a branch is the creator of the initial version of the
branch unless a different owner has been specified with the
setowner command. For example, the default owner of the Trunk branch
(branch 1) is the creator of version 1.1  The owner of a design
object's vault is defined as the owner of the object's Trunk branch.

The 'url properties' command also returns an object's owner. Use
'url properties' when you need more property information than just
the object owner.
```

SYNOPSIS

```
url owner [--]  <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you
                    want the owner.
```

OPTIONS

- --

--

```
--                  Indicates that the command should stop looking for
                    command options. Use this option when the argument
                    to the command begins with a hyphen (-).
```

RETURN VALUE

```
For all valid objects, returns the username of the object owner.

For all invalid or non-existent objects, returns an applicable error.
```

SEE ALSO

```
setowner, url properties
```

EXAMPLES

- Example Changing the Owner of a File-Based Object
- Example of Returning the Owner of the File-based Project

Example Changing the Owner of a File-Based Object

```
This example returns the owner (barbg) of the main branch of
reg5.v. The owner is then changed to 'goss' and the change is
verified. Note that the second 'url owner' command passes the
vault as the argument, which shows that the vault owner is always
the owner of the main branch.
  stcl> url owner "sync://holzt:2647/Projects/Sportster/decoder/
        reg5.v;1"
  barbg
  stcl> setowner "sync://holzt:2647/Projects/Sportster/decoder/
        reg5.v;1"  goss
  Success:   setowner
  stcl> url owner [url vault reg5.v]
  goss
```

Example of Returning the Owner of the File-based Project

```
This example returns the owner of a ProjectSync project called
ASIC, and the owner of the Alpha configuration.

  stcl> url owner  "sync://vonnegut:2647/Projects/ASIC"
  mmf
  stcl> url owner  "sync://vonnegut:2647/Projects/ASIC@Alpha"
  wayne
```

url path

url path Command

NAME

```
url path            - Extracts the path section of a URL
```

DESCRIPTION

```
This command extracts the path section of a URL, stripping
off the protocol and machine name. This command also returns the
absolute path of an object when a relative path is specified.

Note: In stcl/stclc mode, when specifying a URL that contains a
semicolon (;), surround the URL with double quotes.

On Windows, this command returns a localized path using
"\" characters, instead of "/" characters. Use the following
Tcl example to reverse the "\" characters:

  stcl> url path .
  e:\build\main\src\doc\
  stcl> join [split [url path .] \\] /
  e:/build/main/src/doc
```

SYNOPSIS

```
url path [--] <object>
```

OPTIONS

- --

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when the argument
                to the command begins with a hyphen (-).
```

RETURN VALUE

```
For all valid objects, returns the absolute path without URL protocol
or host information, (for example, /home/karen/Asic/x.v).

For other objects, including non-existent objects: Returns absolute
path of the current directory with the object concatenated; for
example, 'url path' applied to a nonexistent file named 'junk'
returns /home/karen/junk. The 'url path' command does not verify that
the object exists.
```

SEE ALSO

```
url leaf, url getprop
```

EXAMPLES

- Example Showing How to Get Path and Reverse the Separator
- Example Showing the URL Path of a File-based Server Object
- Example Showing the URL Path of a File-based Workspace Object

Example Showing How to Get Path and Reverse the Separator

```
This example shows how to reverse the "\" characters on Windows:
  stcl> url path .
  e:\build\main\src\doc\
  stcl> join [split [url path .] \\] /
  e:/build/main/src/doc
```

Example Showing the URL Path of a File-based Server Object

```
This example extracts the path "/Projects/ASIC/" from a URL.
  dss> url path sync://dvorak:2647/Projects/ASIC
  /Projects/ASIC
```

Example Showing the URL Path of a File-based Workspace Object

```
This example returns the full path of top.v, which is in the
current working directory:
  dss> url path top.v
  /home/Projects/Sportster/synth
```

url projects

url projects Command

NAME

```
url projects        - Returns a SyncServer's ProjectSync projects
```

DESCRIPTION

```
This command returns the list of all ProjectSync projects defined
on the specified SyncServer. See ProjectSync User's Guide for details
on creating projects. Note that:
o ProjectSync projects may or may not have an associated
  DesignSync vault. You specify whether the project has an
  associated vault when you create the project.
o Creating a DesignSync project vault, even when located in a
  SyncServer's Projects directory, does not automatically create a
  ProjectSync project. You must independently create the
  ProjectSync project and associate it with the DesignSync vault.

The 'url projects' command accepts one argument, a sync: URL. When
run from a server-side script, the projects defined on the
SyncServer running the script are returned (the specified argument
is always mapped to sync:///Projects). When run from a client, the
projects defined on the SyncServer specified by the URL are
returned (the specified argument is always mapped to
sync://<host>:<port>/Projects). When run from the client or
server, 'url projects' returns an empty string if you specify a
file: URL.
```

SYNOPSIS

```
url projects <object>
```

OPTIONS

```
none
```

RETURN VALUE

```
For all valid objects, returns the projects defined for
the specified server. In server-side scripts, 'url projects'
returns the projects defined on the server on which the script
is running.

For non-applicable or non-existent objects, returns empty list.
```

SEE ALSO

```
url configs, url users
```

EXAMPLES

```
This example shows two methods for returning the ProjectSync
projects on the holzt:2647 SyncServer.
 stcl> url projects sync://holzt:2647
 sync://holzt:2647/Projects/Sportster sync://holzt:2647/Projects/Test
 stcl> url projects [url vault top.v]
 sync://holzt:2647/Projects/Sportster sync://holzt:2647/Projects/Test
```

url properties

url properties Command

NAME

```
url properties      - Returns properties for the specified object
```

DESCRIPTION

- Properties of File Objects

```
This command retrieves all the properties of the specified object
and returns the values in a Tcl array passed by name. The Tcl array
need not exist prior to the call. If the array does exist, its
contents are first emptied and then filled in with the property
data for the object. If <varname> was previously set as a scalar
```

```
variable, it is changed to an array by this command. If the command
encounters an error, <varname> is left unset, regardless of its
prior state. The Tcl array is indexed by property name.

The properties defined for an object depend on the object's type:

note        - The current property values on the note.
note type   - The default property values of the note type.
note system - An empty set.
user        - The fixed set of properties of the user profile:
              EmailAddr, Key, Name, PageNumber, PhoneNumbr, UserList
              and Username. For backward compatibility, the shadow
              properties email, name, pager, phone, and userName
              are also returned.
```

Properties of File Objects

```
The properties on an object can be:

name        - The name of the specified object.
description - The generic description for the object, or an empty
              string if none exists.
type        - The type of the specified object. Examples are
              File, Folder, Vault, Version, Branch, Project,
              and Project Configuration.
              Note: There may be other types present as a result
                    of using the CustomType System, DesignSync DFII
                    or DesignSync Custom Compiler.
owner       - The owner of the object. The following object types
              have owners: projects, project configurations,
              vaults, and branches. If owner is the only
              property you are interested in, use 'url owner'.
locked      - The name of the user who has the object locked, or '0'
              if it is unlocked. A non-zero value can be expected only
              for files, vaults, branches, and versions. If a vault
              is specified, the default branch is examined.
              Specifying a file has the same effect as specifying
              the file's current branch to the command.
locktime    - The time, in time_t format, that the object was
              locked (if the object is locked -- value of 'locked'
              property is nonzero), otherwise '0'. If locktime is the
              only property you are interested in, use 'url
              locktime'. Note that you can convert the time_t
              format to a date string using the Tcl 'clock format'
              command.
citime      - The time, in time_t format, that a version was created
              in the vault. This time is not influenced by the
              "-retain" option to ci/co/populate; citime is always
              the actual time the version was created. Note that you
              can convert the time_t format to a date string using
              the Tcl 'clock format' command.
log         - The log information for the specified object. If the
              object is a version, its checkin log is returned,
              unless it is a placeholder (upcoming) version, in
```

```
              which case its checkout log is returned. If the
              object is a file, its ongoing log is returned.
selector    - The selector list (tag) associated with a ProjectSync
              project configuration that identifies the versions of
              DesignSync data that are part of the configuration.
exposure    - The list of team members (usernames) associated with a
              project configuration. The configuration owner is
              always included in the exposure list. Note that if the
              member list is the default of all users defined
              on the SyncServer, then the exposure list is empty.
parents     - The parent workspace(s) of the object.

Note that you use 'url properties' to access predefined (built-in)
properties. To access user-defined properties, as created
by 'url setprop', use 'url getprop'. You cannot use 'url setprop'
to modify these built-in properties.
```

SYNOPSIS

```
url properties [--] <argument> <array_name>
```

ARGUMENTS

- DesignSync Object
- Array Name

```
Specify the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you want
                    the predefined properties. The  properties are
                    returned in a Tcl array passed by name.
```

Array Name

```
<array_name>        The name of a Tcl variable in which to store the
                    property values returned.
```

OPTIONS

- --

--

```
 --                  Indicates that the command should stop looking for
                     command options. Use this option when the argument
                     to the command begins with a hyphen (-)._
```

RETURN VALUE

```
 Returns the property values indicated in the supplied array variable:

 For a client-side versionable object (Asic/x.v): Returns these property
 values in the supplied array variable: name, type, locked, locktime,
 citime, and log.

 For a client-side folder (Asic/Sub): Returns these property values:
 name and type.

For a server-side note type URL (sync:///Note/SyncNotes/HW-Defect-1):
 Returns the properties of the note type.  Values are only listed for
 those properties that have default values specified in the note type
 definition.

 For a server-side note URL (sync:///Note/SyncNotes/HW-Defect-1/1):
 Returns the properties of the note type, as well as the values set
 for those properties.

 For a user URL (sync:///Users/chris): Returns the property values
 set for that user.

 For a version ("sync://holzt:2647/Projects/Asic/x.v;1.1",
 "sync://holzt:2647/Projects/Asic/x.v;yellow"): Returns
 these property values: name, type, locked, locktime, citime,
 and log.

 For a branch ("sync://holzt:2647/Projects/Asic/x.v;1.5.1",
 "sync://holzt:2647/Projects/Asic/x.v;Golden:Latest"):
 Returns these property values: name, type, owner, locked, locktime,
 citime, and log.

 For a vault ("sync://holzt:2647/Projects/Asic/x.v;"): Returns these
 property values: name, type, owner, locked, locktime, citime, and
 log.

 For a project (sync://holzt:2647/Projects/Asic): Returns these
 property values: name, description, type, and owner.

 For a configuration ("sync://holzt:2647/Projects/Asic/Sub@Rel1"):
 Returns these property values: name, description, type, owner,
 selector, and exposure.

 For any invalid object, returns an appropriate error.
```

SEE ALSO

```
note getprop, note setprops, url getprop, url setprop, url locktime,
url owner, server-side
```

EXAMPLES

Example Scripts Showing a Specific Property

```
In this example (server-side script), each property for user
Joe Brown is displayed:

  url properties "sync:///Users/jbrown" userProps
  foreach prop [array names userProps] {
    puts "Prop $prop=$userProps($prop)<BR>"
  }

The properties that are displayed by this script are for User web
object type.

In this example (server-side script), the field and field values of
note number 3 of the BugReport notetype are returned:

  url properties "sync:///Note/SyncNotes/BugReport/3" noteProps
  foreach prop [array names noteProps] {
    puts "Prop $prop=$noteProps($prop)<BR>"
 }

The HTML page resulting from this script is:

  Prop KeyWords=Release Notes
  Prop State=new
  Prop Resp=goss
  Prop CCList=
  Prop Customer=Other
  Prop DateCreate=2003-05-29 12:34:56
  Prop Author=goss
  Prop Severity=STOPPER
  <and so on>

In this example, the properties for the user 'jbrown' are returned:

   url properties "sync:///Users/jbrown" userProps
   foreach prop [array names userProps] {
     puts "Prop $prop=$userProps($prop)<BR>"
   }

The HTML page resulting from this script is:

  Prop Key=gdyb21LQTcIANtvYMT7QVQ==
  Prop UserList=
```

```
  Prop PhoneNumbr=555-5555
  Prop InitVector=
  Prop Username=jbrown
  Prop userName=jbrown
  Prop email=jbrown@synchronicity.com
  Prop Name=Joe Brown
  Prop name=Joe Brown
  Prop phone=555-5555
  Prop EmailAddr=jbrown@synchronicity.com
  Prop PageNumber=555-6666
  Prop pager=555-6666

Notes:
  - The Key property is the user's encrypted password.
  - The InitVector property records the expiration time of a user
    profile that was created from an LDAP database.
```

Example Script Showing All Properties of a Project

```
This server-side stcl script outputs all the properties of the Asic
project, each on its own line:

  url properties "sync:///Projects/Asic" Props
  foreach prop [array names Props] {
    puts "Prop $prop=$Props($prop)<BR>"
  }

For use on the client side, you must specify the <host>:<port>
in the URL of the project. Also, the HTML <BR> tag to control the
output formatting does not apply:

  url properties "sync://holzt:2647/Projects/Asic" Props
  foreach prop [array names Props] {
    puts "Prop $prop=$Props($prop)"
  }

For the server-side script, the results are displayed as an HTML
page in your browser. For the client-side script, the results are
output to stdout.
```

url registered

url registered Command

NAME

```
url registered      - Checks whether an object is under revision
                      control
```

DESCRIPTION

This command checks whether an object has been put under revision control (returns 1) or not (returns 0). Objects that cannot be put under revision control always return 0.

The url registered command looks up an object on the server to verify that the object is under revision control. By contrast, the -managed option to ls command checks the workspace metadata to see if the object is managed.

SYNOPSIS

```
url registered [--] <argument>
```

ARGUMENTS

- DesignSync Object

Specifies one of the following arguments:

DesignSync Object

<DesignSync object> Specifies the DesignSync object for which you want to know the revision control status.

OPTIONS

- --

--

-- Indicates that the command should stop looking for command options. Use this option when the argument to the command begins with a hyphen (-).

RETURN VALUE

If the object is under revision control, returns 1 (Tcl TRUE). If the object is not under revision control, returns 0 (Tcl FALSE).

If the object does not exist or cannot be versioned, returns 0.

SEE ALSO

```
url exists, url fetchedstate
```

EXAMPLES

Example Showing Whether a File Under Revision Control

```
This example checks whether files are under revision control:

  dss> ls -report ORS top*
  Object Type      Version                   Status  Name
  -----------      -------                   ------  ----
  File             1.2             Locally Modified  top.gv
  File             1.2 -> 1.3            Up-to-date  top.v
  File             Unmanaged                      -  top.log
  Referenced File  Refers to: 1.1        Up-to-date  top.f

  dss> url registered top.gv
  1
  dss> url registered top.v
  1
  dss> url registered top.f
  1
  dss> url registered top.log
  0
```

Example Showing a File Deleted From the Server

```
This example shows a file that has been removed on the server.
Note that ls -managed shows the file as managed, while url registered
does not.

Note:  This example shows a file removed with rmvault.  Files that
are removed from a module or retired from DesignSync are still
DesignSync objects and show as registered.

stcl> rmvault sync://tallis:30132/Projects/example/file1.txt;
 file1.txt;: Success deleted

stcl> ls -managed ./file1.txt
 Time Stamp             WS Status  Version   Type        Name
 ----------             ---------  -------   ----        ----
 09/19/2007 10:14                  1.1       Copy        file1.txt
```

```
stcl> url registered file1.txt
 0
```

url relations

url relations Command

NAME

```
url relations       - Determine collection object dependencies
```

DESCRIPTION

```
This command returns the objects on which a given collection object
depends. Specify the collection as a URL or path. The relationship
specification (relation_name argument) supported by DesignSync for
Cadence cell view collections is "dependencies". For custom generic
(CTP) collections, DesignSync supports any relation name set up for
the collection.

This command is useful for determining the entire set of files
associated with a design object. For example, you might create
an stcl script that returns all of the dependencies of a collection
object, then checks out the collection object and its dependencies.

When in stcl/stclc mode only, you can optionally specify Tcl
variable and code arguments. When specified, the command iterates
through the returned list of member objects (see Examples).

The url relations command supports the following collection objects:
 - Cadence cell views
     The 'url relations' command determines dependencies
     from the pc.db file, which is located in the cell view folder.
     Use the 'addcdslib' command to resolve dependency paths.
 - Custom generic (CTP) collections
   For these collections, DesignSync supports any relation name set
   up for the collection.
```

SYNOPSIS

```
url relations [--] <collection> <relation_name> [<varname> <code>]
```

OPTIONS

- --

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when an argument
                to the command begins with a hyphen (-).
```

RETURN VALUE

```
For a collection specified as a URL or path
(file:///home/projLeader/ttlLib/and2/symbol.sync.cds,
/home/projLeader/ttlLib/and2/symbol.sync.cds):
Returns a list of URLs of objects on which this collection is
dependent as a list of lists, each sublist containing two
values: a collection URL and a string of the format "alias:name"
(file:///home/projlead/Projects/ttlLib/and2/symbol
 ttlLib:and2/symbol.sync.cds
 file:///home/projlead/Projects/ttlLib/nor2/symbol
 ttlLib:nor2/symbol.sync.cds)

If the alias is unknown, the URL is replaced by the string
"<unrecognized alias>". For Cadence cell views, use the
'addcdslib' command to resolve library paths.

If there are internal dependencies -- dependencies that point to
components within the object itself, the URL is the collection
object itself.

For an object that is not a collection: Returns an empty list.
```

SEE ALSO

```
addcdslib, url members
```

EXAMPLES

```
This command shows the dependencies of a collection object on one
or more other collection objects. Note: For Cadence cell view
collections, use the 'addcdslib' command to resolve dependency
paths. In this example, the cds.lib file in /home/Libraries
contains the library definition for "basic", but not for "sample".

 stcl> url relations cmos_sch.sync.cds dependencies
   {<unrecognized alias>} basic:vdd/symbol.sync.cds
   {<unrecognized alias>} basic:gnd/symbol.sync.cds
   {<unrecognized alias>} sample:nmos/symbol.sync.cds
```

```
stcl> addcdslib /home/Libraries
stcl> url relations cmos_sch.sync.cds dependencies
  file:///home/tgoss/Projects/Cadence/basic/opin/symbol.sync.cds
  basic:opin/symbol.sync.cds
  file:///home/tgoss/Projects/Cadence/basic/gnd/symbol.sync.cds
  basic:gnd/symbol.sync.cds
  {<unrecognized alias>} sample:nmos/symbol.sync.cds
```

url resolveancestor

url resolveancestor Command

NAME

```
url resolveancestor - Returns the closest common ancestor of two
                      versions
```

DESCRIPTION

```
This command returns the closest common ancestor of two versions of
the same object (file, module or collection object). DesignSync uses
the closest common ancestor when merging two versions. DesignSync
compares the versions to the ancestor to determine how each version
has changed, then performs the merge. The two versions being merged
are called the "merge sides".

For the "url resolveancestor" command, one of the merge sides is
specified by the "-version <selectorList>" option. DesignSync
determines the other merge side from the object argument:
  o If the object is a local object, then DesignSync uses the
    current (last-retrieved) version, as stored in the object's
    local metadata.
  o If the object is a version, then DesignSync uses that version.
  o If the object is a branch, then DesignSync uses the Latest
    version of the object on that branch.
  o Any other object type causes DesignSync to throw an exception.

DesignSync records "merge edges" -- information about what versions
participated in the merge -- with the new version resulting from a
merge. DesignSync uses merge edges in future calculations of closest
common ancestors instead of always going back to the original
ancestor (by considering only branch points and not merge
edges). This capability relieves you from having to resolve the same
merge conflicts during future merges. Specify the -noedges option if
you want "url resolveancestor" to return the common ancestor without
considering merge edges.

Note: DesignSync does not currently record merge edges from
-overlay (without -merge) and -skip operations.
```

SYNOPSIS

```
url resolveancestor [-noedges] -version <selector>[,<selector>...]
                    [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you want
                    the closest common ancestor of two different
                    versions.
```

OPTIONS

- -noedges
- -version
- --

-noedges

```
-noedges            Specifies not to consider merge edges
                    when determining the closest common ancestor.

                    Note: The -noedges option applies only to merge
                          edges created across-branches. Merge edges
                          within a branch ("skip" edges) are still
                          considered when computing the closest common
                          ancestor.
```

-version

```
-version <selector> Specifies one of the versions (merge sides)
                    to compare. See the "selectors" help topic for
                    more information on selectors. DesignSync
                    determines the other merge side from the
                    command argument.

                    Notes:
                    o If you specify Latest or Date(<date>),
```

DesignSync uses branch 1
(1:Latest,1:Date(<date>).
o To use -version to specify a branch,
specify both the branch and version as
follows:
'<branchtag>:<versiontag>', for example,
'Rel2:Latest'. You can also use the shortcut,
'<branchtag>:', for example "Rel2:". If
you don't explicitly specify the branch
selector in this way, DesignSync does not
resolve the selector as a branch selector.

--

--	Indicates that the command should stop looking for command options. Use this option when the argument to the command begins with a hyphen (-).

RETURN VALUE

For all valid objects, returns the version number of the closest common ancestor of the current version of this object and the version specified with the -version option.

For all non-valid objects, or non-existent objects, returns an error.

Note: If two valid versions are specified, there is always a return value, because all versions have a common ancestor of version 1.1. If two valid versions are not specified, an error is raised.

SEE ALSO

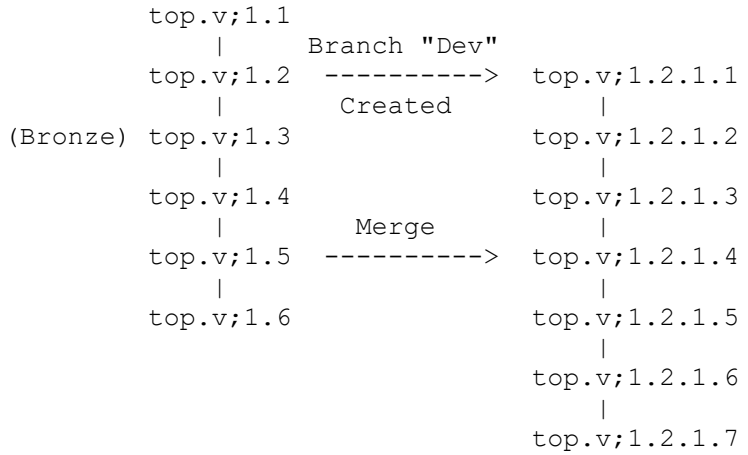
co, selectors

EXAMPLES

- Example Showing Common Ancestor from Versions on the Same Branch
- Example Showing Common Ancestor from Versions on Different Branches
- Example Showing Common Ancestor Using Branch and Version Arguments

Assume the following version history for a file called "top.v":

Trunk (branch 1) Dev (branch 1.2.1)



Example Showing Common Ancestor from Versions on the Same Branch

Assume that version 1.3 of "top.v" is tagged "Bronze", and version 1.6, which is the Latest version on the same branch (Trunk), is the current version:

```
stcl> url resolveancestor -version Bronze top.v
1.3
```

DesignSync compares the version tagged "Bronze" (1.3) and the current version (1.6) and returns 1.3 as the closest common ancestor. Whenever both versions are on the same branch, the lower version number is, by definition, the closest common ancestor.

Example Showing Common Ancestor from Versions on Different Branches

Assume that your current version is 1.2.1.7. You want to know the common ancestor of your current version and the Latest version on the Trunk branch.

```
stcl> url resolveancestor -version Trunk top.v
1.5
```

DesignSync compares the Latest version on Trunk (1.6) and the current version (1.2.1.7) and returns 1.5 as the closest common ancestor. When versions 1.5 and 1.2.1.3 were merged to create version 1.2.1.4, DesignSync recorded the merge edge. Version 1.2.1.4 includes the resolution of any conflicts between 1.2.1.3 and 1.5. Subsequent merges between Trunk and Dev leverage this information so that you do not need to resolve the same conflicts.

If you want DesignSync to ignore merge edges, specify -noedge:

```
stcl> url resolveancestor -noedge -version Trunk top.v
1.2
```

```
Version 1.2 is the branch point where Dev was branched from
Trunk. This version is the closest common ancestor if you do not
consider the merge of 1.5 and 1.2.1.3.
```

Example Showing Common Ancestor Using Branch and Version Arguments

```
In the previous examples, the argument to "url resolveancestor" was
a local file. You can also specify a version object:

  stcl> url resolveancestor -version Trunk [url vault top.v]1.2.1.7
  1.5

or a branch object:

  stcl> url resolveancestor -version Trunk [url vault top.v]Dev
  1.5

In the case of a branch, DesignSync uses the Latest version on
the specified branch.
```

url resolvetag

url resolvetag Command

NAME

```
url resolvetag      - Returns the version number associated with a
                      selector
```

DESCRIPTION

```
This command returns the version number to which a specified
selector (typically a version or branch tag) or selector list
resolves.
- If you specify a version selector (for example, a version tag),
  the corresponding version number is returned.
- If you specify a branch selector (for example, a branch tag),
  the version number of the Latest version on that branch is
  returned.
- If you do not specify a selector (no -version option), the version
  number of the Latest version on the current branch is returned.
- If the selector list does not resolve to a version, an exception is
  thrown.

Specify a versionable object as the argument to this command. If you
specify any other object type, an empty string is returned.
```

SYNOPSIS

```
url resolvetag [-version <selector>[,<selector>...]] [--]
    <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you want
                    the version number of the current version.
```

OPTIONS

- -version
- --

-version

```
-version <selector>  Specifies the selector list (typically a
                     branch or version tag) for which you want the
                     corresponding version number returned. The
                     default behavior (if -version is not specified)
                     is to return the version number of the Latest
                     version on the current branch.

                     Note: To use -version to specify a branch,
                     specify both the branch and version as follows:
                     '<branchtag>:<versiontag>', for example,
                     'Rel2:Latest'. You can also use the shortcut,
                     '<branchtag>:', for example "Rel2:".  If
                     you don't explicitly specify the branch
                     selector in this way, DesignSync does not
                     resolve the selector as a branch selector.
```

--

```
--                   Indicates that the command should stop looking
                     for command options. Use this option when the
                     argument to the command begins with a hyphen
                     (-).
```

RETURN VALUE

```
For all valid versionable objects, returns the version
number of the current version of this object or the version number
corresponding to the selector specified with the -version option.

For any non-valid objects, returns an empty list.

For nonexistent object: raises an error.

Note: Use the -version argument to specify the selector of the
object.  If the version specified by -version does not exist, 'url
resolvetag' raises an error.
```

SEE ALSO

```
url tags
```

EXAMPLES

Example Showing a Resolved Version Tag

```
This example returns the version of "top.v" that is tagged "gold":
  stcl> url resolvetag -version gold top.v
  1.2.2.3
```

Example Showing the Latest Version of an Object

```
This example returns the version number of the Latest "top.v" on the
current branch, which in this case is different than the version
in the work area:
  stcl> url resolvetag top.v
  1.4
  stcl> url versionid top.v
  1.2
```

Example Showing the Latest Version on a Specified Branch

```
This example returns the Latest version of "top.v" on the branch
tagged "Rel2.1". Because "top.v" is not in the work area, you
must specify the vault.
  stcl> url resolvetag -version Rel2.1:Latest [url vault top.v]
  1.5.1.4
```

Example of Using a Selector List

```
This example specifies a selector list. The file "samp.asm" does
not have a version tagged "beta", so the version corresponding to
the tag "alpha" is returned. The file "top.v" does not have a
version corresponding to "alpha" or "beta" version tags, so an
exception is thrown.
  stcl> url resolvetag -version beta,alpha samp.asm
  1.3
  stcl> url resolvetag -version beta,alpha top.v
  som-E-152: No Such Version.
```

url retired

url retired Command

NAME

```
url retired         - Returns whether a branch is retired
```

DESCRIPTION

```
This command checks whether an object's branch is retired
(returns 1) or not (returns 0).

The object can be:
  o A versionable object (file or collection), in which case the
    retired status of the current branch is returned.
  o A branch, in which case the retired status of that branch is
    returned.
  o A vault, in which case the retired status of branch 1 is
    returned.

The command returns "0" for all other object types.
```

SYNOPSIS

```
url retired [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the branch of a DesignSync object
                    that you want to know is retired or not.
                    Returns 1 if the specified branch is retired,
                    otherwise 0.
```

OPTIONS

- --

--

```
--                  Indicates that the command should stop looking for
                    command options. Use this option when the argument
                    to the command begins with a hyphen (-).
```

RETURN VALUE

```
For any valid object, returns 1 (Tcl TRUE) if it is retired,
otherwise returns 0 (Tcl FALSE).

For invalid or non-existent objects, returns 0.
```

SEE ALSO

```
retire, vhistory, url exists, url registered
```

EXAMPLES

- Example Showing the Status of a File Before/After Retirement
- Example Showing the Status of a Retired Branch

Example Showing the Status of a File Before/After Retirement

```
This example checks the retired status of a file's current branch
before and after retiring the branch.
  dss> url retired top.gv
  0
  dss> retire -keep top.gv
  Beginning Retire operation...

  top.gv: Branch 1 Retired in the vault.

  Retire operation finished.
  dss> url retired top.gv
  1
  dss> retire -unretire top.gv
  Beginning Retire operation...

  top.gv: Branch 1 in Vault is now active.

  Retire operation finished.
  dss> url retired top.gv
  0
```

Example Showing the Status of a Retired Branch

```
This example checks the retired status of the "Rel2.1" branch of
"top.v" by specifying the branch object itself:

  dss> url retired "sync://host:3002/Projects/Mod1/top/top.gv;Rel2.1"
  1

or from stcl/stclc, you can use "url vault" to simplify the
specification of the branch URL:

  stcl> url retired [url vault top.gv]Rel2.1
  1
```

url selector

url selector Command

NAME

```
url selector        - Returns an object's persistent selector list
```

DESCRIPTION

```
This command returns the persistent selector list (comma-separated
list of selectors stored in an object's local metadata) associated
with a specified object. You can specify a versionable object (file
or collection object) or a local folder. If you specify any other
object type, or a nonexistent object, an exception is thrown.

The selector list returned by 'url selector' is determined as
follows:
  1. If the object has its own persistent selector list,
     return that selector list.
  2. Otherwise, return the persistent selector list of the first
     folder from the parent folder to the file-system root (/)
     that has a persistent selector list. In other words, the object
     inherits its parent folder's selector list.
  3. Otherwise, return "Trunk", which is the default persistent
     selector list.

Some revision-control commands use the persistent selector list to
determine which branch or version to operate on, unless overridden
by an explicit -version or -branch option. See the "selectors" help
topic for more information on selectors and selector lists.

Note that the "P" data key for the 'ls' command and the Selector
column of the List View (in the DesignSync graphical user
interface) also report an object's persistent selector list.
```

SYNOPSIS

```
url selector [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specify one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you
                    want the associated persistent selector list.
```

OPTIONS

- --

--

```
--                  Indicates that the command should stop looking
                    for command options. Use this option when the
                    object you specify begins with a hyphen (-).
```

RETURN VALUE

```
For all valid objects, returns the persistent selector list set for
the object; if no persistent selector list is set, returns the first
persistent selector list found from the parent folder upward to the
file system root (/). If no persistent selector list is inherited,
returns the default persistent selector list, Trunk.

For any invalid or non-existant objects, returns an applicable
error.
```

SEE ALSO

```
setselector, selectors, ls
```

EXAMPLES

Example Showing the Persistent Selector List for a File

```
In the following example, a local work area folder called folder1
contains a file called top.v. The recursive 'setselector' command
sets the persistent selector list for the folder and its contents.
   dss> setselector -recursive Gold,Silver,Bronze folder1
   dss> cd folder1
   dss> url selector .
   Gold,Silver,Bronze
   dss> url selector top.v
   Gold,Silver,Bronze
```

Example Showing a Single Persistent Selector

```
In the following example, you want to populate an empty work area
called projectA with the latest versions of objects that have a
"Gold" branch or specific versions tagged "Gold".
   dss> cd projectA
   dss> setselector Gold .
   dss> populate
```

```
   <Files are fetched into the work area, including one called gc7.v>
   dss> url selector gc7.v
   Gold

You now fetch a different version of gc7.v. The selector list for
gc7.v is updated while the selector list for the folder remains "Gold".

   dss> co -version rel2.1 gc7.v

   Beginning Check out operation...

   Checking out: gc7.v          : Success - Fetched  version: 1.6

   Checkout operation finished.

   dss> url selector gc7.v
   rel2.1
   dss> url selector .
   Gold
```

url servers

url servers Command

NAME

```
url servers         - Returns server-list definitions
```

DESCRIPTION

```
This command returns the SyncServers or vaults specified
in the server-list (sync_servers.txt) files.

Using server-list files simplifies the selection of SyncServers or
vaults from DesignSync (from the Workspace Wizard) and DesignSync
DFII (from the Vault Browser). When setting up a work area,
users can select a SyncServer or vault
using a friendly name instead of specifying the URL.

The user server-list file is:

  <SYNC_USER_CFGDIR>/sync_servers.txt

where SYNC_USER_CFGDIR is the environment variable that specifies
your directory for user-specific customization files.
If you have not defined the SYNC_USER_CFGDIR environment variable,
then DesignSync looks for:

  <home>/.synchronicity/sync_servers.txt
```

where <home> is your home directory as defined by $HOME on UNIX
or your user profile, which is managed by the User Manager tool,
on Windows platforms.

The site server-list file is:

  <SYNC_SITE_CNFG_DIR>/sync_servers.txt

where SYNC_SITE_CNFG_DIR is the environment variable that specifies
the directory for site-specific customization files. If
you have not defined the SYNC_SITE_CNFG_DIR environment variable,
then DesignSync looks for:

  <SYNC_DIR>/custom/site/config/sync_servers.txt

The user and site sync_servers.txt files are not provided as part
of the Synchronicity installation, so you need to create them if
they do not already exist.

The enterprise server-list file is:

  <SYNC_ENT_CUSTOM>/config/sync_servers.txt

where SYNC_ENT_CUSTOM is the environment variable that specifies
the directory for enterprise-specific customization files. If
you have not defined the SYNC_ENT_CUSTOM environment variable,
then DesignSync looks for:

  <SYNC_DIR>/custom/enterprise/config/sync_servers.txt

The user, site, and enterprise sync_servers.txt files are not
provided as part of the Synchronicity installation, so you need to
create them if they do not already exist.

The syntax for the server-list file is:

  NAME <name>   Friendly name for the SyncServer or vault
  REFERENCE <url>   The complete URL to the SyncServer or vault
  DESCRIPTION <text> Brief description of the SyncServer or vault

The following rules apply to the sync_servers.txt files:
  o The NAME keyword begins a new SyncServer or vault definition. It
    must appear before the REFERENCE and DESCRIPTION keywords.
  o The REFERENCE and DESCRIPTION keywords can appear in any order.
  o The keywords are case insensitive.
  o Keywords must be the first non-whitespace characters on a line.
  o The DESCRIPTION field is optional.
  o The DESCRIPTION text can span multiple lines and is terminated
    by a blank line or a keyword as the first non-whitespace
    characters on a line. A comment itself can therefore not
    include a blank line; otherwise, the remaining comment will
    be ignored.
  o Each NAME value must be unique; duplicates are ignored.
  o If the same NAME value appears in both the user and site
    files, the user definition takes precedence.
    The order of precedence is:
   1) user

```
    2) site
    3) enterprise
   o Comments are indicated by a pound sign (#) as the first
     non-whitespace character on a line.
       Note: Text that does not follow a keyword is ignored and
       therefore behaves like a comment. However, because the
       supported keywords may change in future releases, precede all
       comments with #.
```

SYNOPSIS

```
url servers [-all | -enterprise | -site | -urls* | -user]
```

OPTIONS

- -all
- -enterprise
- -site
- -urls
- -user

-all

```
-all        Returns both site and user server lists, with
            duplicates removed (user definitions have
            precedence over site definitions).
```

-enterprise

```
-enterprise Returns only the enterprise server list.
```

-site

```
-site       Returns only the site server list.
```

-urls

```
-urls       Preserves the previous behavior of returning only the
            REFERENCE URL for each SyncServer or vault with a
            unique NAME from both the site and user
            sync_servers.txt files.
```

```
            *Note: This option is the default behavior in order to
            maintain backward compatibility. The -urls option
            will be removed in a future DesignSync release, and the
            default behavior (no options specified) will
            change. Therefore, it is recommended that you use the
            -enterprise, -site, -user, or -all option.
```

-user

```
 -user       Returns only the user server list.
```

RETURN VALUE

```
 If -url or no option is specified, a list of REFERENCE URLs:
   url url ...

 Otherwise, a list of lists, with each sublist containing the NAME,
 REFERENCE, and DESCRIPTION values:
   {{name} {url} {description}} {{name} {url} {description}} ...
```

EXAMPLES

```
 A site sync_servers.txt file contains the following:

   # This sync_servers.txt file is used by the entire
   # Marlboro site.
   NAME Doc Vault
   REFERENCE sync://docserver:2647/Projects/docs
   DESCRIPTION Server for documentation source files.
   Only the documentation group can lock files.

   NAME Source
   REFERENCE sync://src:3001

 and a user sync_servers.txt file contains the following:

   NAME My Server
   REFERENCE sync://localhost:2647

   NAME Source
   REFERENCE sync://src.myco.com:3001
   DESCRIPTION The company-wide source repository

 The following are the results of 'url servers'. Note that in the
 combined list (with -all specified), 'url servers' returns the
 user's "Source" definition, because the user's sync_servers.txt
 file takes precedence over the site file.

 stcl> url servers -user
```

```
{{My Server} {sync://localhost:2647} {}}
{{Source} {sync://src.myco.com:3001} {The company-wide source
          repository.}}
stcl> url servers -site
{{Doc Vault} {sync://docserver:2647/Projects/docs}
{Server for documentation source files. Only the documentation group
can lock files.}} {{Source} {sync://src:3001} {}}
stcl> url servers -all {{My Server} {sync://localhost:2647} {}}
{{Source} {sync://src.myco.com:3001} {The company-wide source
          repository.}}
{{Doc Vault} {sync://docserver:2647/Projects/docs}
{Server for documentation source files. Only the documentation group
can lock files.}}
```

url setprop

url setprop Command

NAME

```
url setprop         - Sets a property on an object
```

DESCRIPTION

```
This command lets you set the value of a property on most objects
(on notes you can change existing properties, but not add new ones).
Properties are specified as a name (typically a short identifier)
and a value, which can be a string of any length. Such properties
are stored with the metadata representing the object.

IMPORTANT: The property prefix "Sync" is reserved for DesignSync
properties.  You should not create any properties that begin with
this reserved prefix. While this prefix is case sensitive, DesignSync
recommends, to minimize confusion, that you avoid using "sync" with
any casing variant as a prefix to any custom properties.

For note URLs, both the object and property must exist and the
property value supplied must be legal for its property type.
The new property value specified in this command is checked against
the current value of the property. If they are the same, no change
is made to the object.

Note that the "special" properties that are supported by the
url properties command are not available to url setprop. For example,
if url properties reports that an object is locked by someone, you
cannot unlock it with url setprop by passing in "locked 0".

You can use url setprop with most object types. However,
depending on the type, the command may only work in server-side
scripts, such as when accessing notes. User-defined properties
are not supported for configurations.
```

Because DesignSync automatically determines the datatype of the vault, it may assign a datatype that you do not want. For example, it may assign the binary datatype to an ASCII file. In such cases, you can use the 'url setprop' command to change the vault datatype.

The successful execution of this command on a note object causes an atomic note modify event and fires the corresponding triggers in response. If the property value equals the current value of the property, no event is generated.

Note: If you need to set more than one property on the same note, it is preferable to use the note setprops command, because it is more efficient and reduces trigger activity.

You can use the "url setprop" command to change the checkin comments of objects checked into a vault.

Note: This command does not change the comments associated with tags. To change tag comments remove the tag and add it back again.

The "url setprop" command is subject to access controls on the server. For more information, see the ENOVIA Synchronicity Access Control Guide.

SYNOPSIS

```
url setprop [--] <Object_url> <prop_name> <prop_value>
```

OPTIONS

- --

--

```
--          Indicates that the command should stop looking for
            command options. Use this option when property
            names or values begin with a hyphen (-).
```

OPERANDS

- Object URL
- Property Name
- Property Value

Object URL

```
<Object_url>  A valid object URL.
```

Property Name

```
<prop_name>   The name of the property to set on the object.

              You can specify the special property name DataType to
              assign the data type of the vault.
```

Property Value

```
<prop_value>  The value of the property to set on the object.

              When you use the special DataType property for a vault,
              it can take one of the following values:

               o ascii or text - changes the vault data type ASCII.
               o binary        - changes the vault data type to
                                 binary.
               o undefined     - lets DesignSync determine the vault
                                 data type at the next check in,
                                 based on the file's contents.
```

RETURN VALUE

```
For all valid objects, returns the value set for the new property.

For all invalid or non-existent objects, returns an error.
```

SEE ALSO

```
note getprop, note setprops, url getprop, url properties
```

EXAMPLES

- Example of Setting a User-Defined Property on a Server Vault
- Example of Changing the DataType value for an Object
- Example of Changing a Comment

Example of Setting a User-Defined Property on a Server Vault

```
This server-side example sets and displays a CcList user-defined
property on a vault.
```

```
  stcl> url setprop "sync:///Projects/myproj/foo.v;" CcList {sal jason mark}
  stcl> puts [url getprop "sync:///Projects/myproj/foo.v;" CcList]
```

Example of Changing the DataType value for an Object

```
This example changes the vault data type to ascii. "url vault" is
used to identify the vault file associated with the workspace file.
  stcl> url setprop [url vault samp.asm] DataType ascii
```

Example of Changing a Comment

```
This example changes the comment stored with the object version.
stcl> url setpop "[url vault samp.asm];1.3" log "SD 1550 - changed
comment to include SD number for correction."

Note: If the log property value is not specified on the command,
DesignSync prompts for an interactive comment specified either on the
command line or by spawning the defined file editor. When the file
editor is launched to edit the comments, it is initiallized with the
current value of the log property. For more information on defining a
file editor, see the DesignSync Data Manager Administrator's Guide,
"General Options."
```

url syslock

url syslock Command

NAME

```
url syslock         - Sets a system lock on a lock name or file path
```

DESCRIPTION

```
This command lets you manipulate arbitrary system locks by
name. The name may be a logical lock name or a path to an actual
file. Note that the locks are advisory locks. This means that
there is nothing from preventing a user from performing an action
for which another user has obtained a lock. It is up to each user
to check for the existence of the lock before performing the
operation. This process is cooperative.

There are two types of locks and three basic locking operations.
Locks may be shared or exclusive. A shared lock (also called a
read lock) may be held by several processes at one time. An
exclusive lock (also called a write lock) may be held by only one
```

process at a time. Furthermore, an exclusive lock will not be granted if any shared lock is in place.

The three locking operations are acquire, yield, and release. Acquire and release simply obtain and give up the named lock. The yield call allows the holder of a lock to release that lock temporarily and then re-obtain it. In this way processes that expect to hold a lock for a long period of time may choose to release the lock temporarily to allow other processes to obtain the lock, perform some relatively fast operation, and then release the lock again. At this point the original process may again acquire the lock. Normally, acquire requests are counted and the lock released only when the reference count drops to zero. The -all option overrides this behavior and forces a release. The original reference count is then restored when the lock is re-acquired. This option is only recognized by the yield call.

A timeout may be specified when calling to acquire or yield a lock. By default the call blocks until the specified lock becomes available. If the timeout value is supplied, however, this will be taken as the maximum number of seconds to wait for the specified lock to become available. Should the timeout period expire, an error is returned.

The canonization flag specifies that the string supplied should be interpreted as a file path name and, further, that the name should be resolved into a canonical path. The canonization process will take file system mount points into consideration. For example, if your home directory is mounted to /u/home/user on system_X and to /home1/user on system_Y, and your home directory actually resides at /users/home on system_A, then the canonization process results in the path system_A:/users/home regardless of the system from which you invoke the lock request.

The realmount and realpath calls canonize the supplied paths. For realmount, the path is resolved down to the mount point. For realpath, the path is only resolved down to the root of the local file system; no mount point resolution is taken into account.

The showlocks call displays the locks that the current process holds. The output format includes the lock name, its index within the master lock file (the file used to acquire operating system level locks), the number of read locks pending, and the number of write locks pending.

SYNOPSIS

```
url syslock -acquire       <name_or_path> [-canonize] [-shared]
                           [-timeout secs]
url syslock -yield         <name_or_path> [-canonize] [-shared]
                           [-timeout secs] [-all]
url syslock -release       <name_or_path> [-canonize]
url syslock -realmount     <name_or_path>
```

```
url syslock -realpath      <name_or_path>
url syslock -showlocks

Note: The <name_or_path> argument must follow the
      -acquire/-yield/-release/-realmount/-realpath option.
```

OPTIONS

-all

```
-all            Only available with -yield. The default behavior
                is that a lock is released only when the
                reference count drops to zero. The -all option
                overrides this behavior and forces a release. The
                original reference count is then restored when
                the lock is re-acquired.
```

-acquire

```
-acquire        Obtains the specified lock.
```

-canonize

```
-canonize       Specifies that the string supplied should be
                interpreted as a file path name and that the name
                should be resolved into a canonical path. The
                canonization process takes file system mount
                points into consideration. For example,
                if your home directory is mounted to /u/home/user
                on system_X and to /home1/user on system_Y, and
                your home directory actually resides at
                /users/home on system_A, then the canonization
                process results in the path system_A:/users/home
                regardless of the system from which you invoke
```

the lock request.

-realmount

-realmount	Canonizes the specified path, resolved down to the mount point.

-realpath

-realpath	Canonizes the specified path, resolved down to the root of the local file system; no mount point resolution is taken into account.

-release

-release	Gives up the specified lock.

-shared

-shared	Specifies that the lock to be acquired or yielded is a shared (read) lock. When -share is not specified, the lock is an exclusive (write) lock.

-showlocks

-showlocks	Displays the locks that the current process holds.

-timeout

-timeout <secs>	Available with -acquire and -yield. By default, the call blocks until the specified lock becomes available. If a timeout value is supplied, you specify the maximum number of seconds to wait for the specified lock to become available. Should the timeout period expire, an error is returned.

-yield

-yield	Allows the holder of a lock to release that lock

```
                temporarily and then re-obtain it.
```

--

```
--              Indicates that the command should stop looking for
                command options. Use this option when the argument
                to the command begins with a hyphen (-).
```

RETURN VALUE

```
For a logical lock name (Asic/x.v:lnx:16738,rd:0,wr:1): Performs the
action specified by the options, but provides no return value.

Note: The logical lock name format includes the lock name, its index
within the master lock file (the file used to acquire operating
system level locks), the number of read locks pending, and the number
of write locks pending.

For other client-side objects: Performs the action specified by the
options, but provides no return value; 'url syslock' does not verify
that the object exists.

For server-side objects: Raises error.
```

EXAMPLES

```
Tihs example shows acquiring a lock, viewing the lock, and then
releasing the lock.

stcl> url syslock -acquire /home/users/dave/sample.txt -canonize
Acquired: /home/users/dave/sample.txt
stcl> url syslock -showlocks
Current Locks: /home/users/dave/sample.txt:lnx:16738,rd:0,wr:1
stcl> url syslock -release sample.txt -canonize
Released: /home/users/dave/sample.txt
```

url tags

url tags Command

NAME

```
url tags            - Returns the version tags associated with
                      a specified object
```

DESCRIPTION

```
This command returns the list of version tags associated with the
specified object. Tags are listed with "Latest" first, if
applicable, then in order from oldest to newest. If the object has
no associated version tags, a null string is returned.

By default the command returns the  version tags associated with
the currently fetched version of the object. Use the -version
option to fetch the tags associated with a particular version
of the object.

Note: You can use the -btags argument with the url tags command to
specify the branch tags, rather than the version tags.
```

SYNOPSIS

```
url tags [-btags] [-version <selector>] [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one of the following arguments:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you
                    you want the associated version tag.
```

OPTIONS

- -btags
- -version
- --

-btags

```
-btags              Specifies displaying branch tags instead of the
                    version tags for the specified argument.
```

-version

```
-version <selector>  Specifies the version of the local object
                     (file or collection) for which you want the
                     associated tags.
                     The  -version option is ignored if you specify
                     a version or branch as the argument to
                     "url tags". See the "selectors" help topic for
                     details on selectors.

                     Note: To use -version to specify a branch,
                     specify both the branch and version as follows:
                     '<branchtag>:<versiontag>', for example,
                     'Rel2:Latest'. You can also use the shortcut,
                     '<branchtag>:', for example "Rel2:".  If
                     you don't explicitly specify the branch
                     selector in this way, DesignSync does not
                     resolve the selector as a branch selector.
```

--

```
--                   Indicates that the command should stop looking
                     for command options. Use this option when the
                     argument to the command begins with a hyphen
                     (-).
```

RETURN VALUE

```
For all valid objects, returns the specified list of tags associated
with the specified object, with "Latest" first, if applicable, then
in order from oldest to newest.  If no tags exit, it returns an empty
list.

For other invalid or non-existent objects, returns appropriate error.
```

SEE ALSO

```
url resolvetag, url versionid, tag
```

EXAMPLES

- Example Showing the Tags Associated with a File
- Example Showing the Tags Associated with a Specified File Version

Example Showing the Tags Associated with a File

```
This example returns the version tags associated with the
current version of "top.v". Because the current version is also the
latest version on that branch, DesignSync automatically associates
"Latest" with that version.

  dss> url tags top.v
  Latest Gold
```

Example Showing the Tags Associated with a Specified File Version

```
This example returns the tags associated with version 1.2 of "top.v":
  dss> url tags -version 1.2 top.v
  Bronze

You can also specify the version object itself. You might do this
if you do not have the object in your work area or if you are using
"url tags" in a server-side script. Specifying the -version option
would have no effect in this case because you have specified a
version as the command argument:

  stcl> url tags [url vault top.v]1.2
  Bronze
```

url users

url users Command

NAME

```
url users           - Returns all users defined for an object's
                      server
```

DESCRIPTION

```
This command returns the list of all users defined for a server.
If no users exist, an empty string is returned.

The <object> parameter is optional and is always ignored. This
parameter is retained for backward compatibility. If you supply
an object URL, the URL must be valid.

Note that the object can be the server root itself, such as:
  url users sync:///

Note: 'url users' is a server-side only command. For more
information, type 'help server-side'.
```

SYNOPSIS

```
url users <path>
```

OPTIONS

```
none
```

OPERANDS

- Path to the Server

Path to the Server

```
<path>            The path to the server. Optional.
```

RETURN VALUE

```
For a server or server-side object, returns a list of
the users defined for the server.

For any invalid objects or non-existent objects, returns an error.
```

SEE ALSO

```
url contents, url projects, server-side, rstcl
```

EXAMPLES

```
This example returns the users currently defined for the Sportster
project. Because users are defined on a per-server basis, all users
defined for the holzt:2647 server are returned.

1. In <SYNC_DIR>/custom/site/share/tcl, create 'users.tcl' that
   contains the following lines:
     puts [url users sync:///Projects/Sportster]

2. From your browser, issue the following URL:
      http://holzt:2647/scripts/isynch.dll?panel=TclScript&
      file=users.tcl

   The browser displays the users currently defined for the
```

```
    Sportster project:
        sync:///Users/goss
        sync:///Users/barbg

    You could also execute this script from a DesignSync client
    using the rstcl command.
```

url vault

url vault Command

NAME

```
url vault           - Returns the URL of an object's vault
```

DESCRIPTION

```
This command returns the URL of the vault object associated with
the specified object. If the object is a directory, the
vault-side directory that it is associated with is returned.

The general syntax for the url commands is described under
"help url".
```

SYNOPSIS

```
url vault <argument>
```

ARGUMENTS

- Designsync Object

```
Specify one or more of the following arguments:
```

Designsync Object

```
<DesignSync object> Specifies the DesignSync object for which you
                    want the URL of the vault.
```

OPTIONS

RETURN VALUE

```
For all valid objects, returns the URL of the vault associated with
the specified object.

For any non-valid objects or non-existent objects, returns an empty
list.
```

SEE ALSO

```
url, setvault
```

EXAMPLES

Example of Getting Vault for the Current Working Directory

```
This example returns the vault folder for the current directory using
relative and absolute paths:
  dss> url vault .
  sync://holzt:2647/Projects/Sportster

  dss> url vault /home/goss/Projects/Sportster
  sync://holzt:2647/Projects/Sportster
```

Example of Getting the Vault for a Specified File

```
This example returns the vault for top.v:
  dss> url vault top.v
  sync://holzt:2647/Projects/Sportster/top/top.v;
```

Example of Using the url vault command within a Command

```
This example uses 'url vault' to change directory into a vault
folder:
  stcl> scd [url vault top.v]
  stcl> spwd
  sync://holzt:2647/Projects/Sportster/top/top.v;
```

url versionid

url versionid Command

NAME

```
url versionid       - Returns the version number of the specified
                      object
```

DESCRIPTION

```
This command returns the version number of the specified object.

- For managed objects, the current version number (as stored in the
  local metadata) is returned.
- If the object is a reference, the version number is preceded by
  "Refers to:".
- If the object is locked, the current version number and upcoming
  version number are returned.
- For version objects specified with a version number, that
  version number is returned.

Notes:
o  To get the version number of a selector list or a tag, use url
   resolvetag command.

o The return value of 'url versionid' is the same as the version
  returned by the 'ls -report R' command and the Version column of
  the List View (from the DesignSync graphical user interface).
```

SYNOPSIS

```
url versionid [--] <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one or more of the following arguments:
```

DesignSync Object

```
<DesignSync objects>Specifies the DesignSync object for which you
                    want the current version number.
```

OPTIONS

- --

--

```
--          Indicates that the command should stop looking for
            command options. Use this option when the argument to the
            command begins with a hyphen (-).
```

RETURN VALUE

```
For all valid objects, returns the version number of the object
(1.3). If the object is a reference, the version number is preceded
by "Refers to:". If the object is locked, the current version number
and upcoming version number are returned (1.3 -> 1.4).

For invalid revision controlled objects, returns an empty list.

For any objects not under revision control, returns "unmanaged."

For any objects that do not exist, returns an appropriate error.
```

SEE ALSO

```
url versions, url branchid, url resolvetag, ls
```

EXAMPLES

- Example Showing a Variety of Different Return Values for File Objects

Example Showing a Variety of Different Return Values for File Objects

```
The following examples show the different return values for
the 'url versionid' command.

  stcl> ls -report R samp.asm samp.lst test.mem test.asm test.s19
  Version          Name
  -------          ----
  1.2              samp.asm
  1.1 -> 1.2       samp.lst
  1.2.1.2          test.mem
  Refers to: 1.1   test.asm
  Unmanaged        test.s19

For local managed objects, returns the current version number:
```

```
  stcl> url versionid samp.asm
  1.2
  stcl> url versionid test.mem
  1.2.1.2

For references, precedes the version number with "Refers to:":
  stcl> url versionid test.asm
  Refers to: 1.1

For locked objects, returns the current and next  version number:
  stcl> url versionid samp.lst
  1.1 -> 1.2

For unmanaged objects, returns "Unmanaged":
  stcl> url versionid test.s19
  Unmanaged

For version objects, returns the version number:
  stcl> url versionid [url vault samp.asm]1.1
  1.1

For folders, vaults, and other objects that do not have versions,
returns an empty string:
  stcl> url versionid .
  stcl> url versionid sync://myhost:2647
  stcl> url versionid [url vault samp.asm]

If the object does not exist, an exception is thrown:
  stcl> url versionid nosuchobject
  somapi-E: Unable to locate: nosuchobject
```

url versions

url versions Command

NAME

```
url versions        - Returns the URLs of an object's versions
```

DESCRIPTION

```
This command returns a list of URLs of the version objects
associated with the specified object. If the object is
a vault, the versions on the main branch (branch 1) are returned.
If the object is a branch, the versions on that branch are
returned. If the object is a local managed object, the versions
for that object's current branch are returned. If the object is
not a vault, branch, or managed object, then an empty list is
returned.

Note: In stcl/stclc mode, when specifying a URL that contains a
```

```
semicolon (;), surround the URL with double quotes.
```

SYNOPSIS

```
url versions <argument>
```

ARGUMENTS

- DesignSync Object

```
Specifies one or more of the following:
```

DesignSync Object

```
<DesignSync object> Specifies the DesignSync object for which you
                    want the URLs of the associated versions.
```

OPTIONS

```
none
```

RETURN VALUE

```
For valid objects, returns a list of the version URLs associated
with the object; either on the specified branch or all branches.

For any invalid object, returns empty list.

For nonexistent objects, raises error.
```

SEE ALSO

```
url contents
```

EXAMPLES

- Example Showing Versions on the Trunk Branch
- Example Showing Versions on File Vault Object

Example Showing Versions on the Trunk Branch

```
This example shows the versions on the Trunk branch of top.v
(top.v;1.3 is in the local work area, so version information
for the Trunk branch is returned).
  dss> url versions top.v
  sync://holzt:2647/Projects/Sportster/top/top.v;1.1
  sync://holzt:2647/Projects/Sportster/top/top.v;1.2
  sync://holzt:2647/Projects/Sportster/top/top.v;1.3
```

Example Showing Versions on File Vault Object

```
This example shows the versions of samp.asm on the "rel20"
branch:
  stcl> url versions [url vault samp.asm]rel20:Latest
 {sync://localhost/Projects/Sportster/code/samp.asm;1.2.1.1}
 {sync://localhost/Projects/Sportster/code/samp.asm;1.2.1.2}
```

TCL Interface

auto_mkindex

auto_mkindex Command

NAME

```
auto_mkindex        - Indexes stcl procedures
```

DESCRIPTION

```
By placing your stcl procedures in designated site-wide or
project-level tcl directories, DesignSync indexes them so that
users at your site can autoload the procedures only when they need
them. In some cases, you might want to generate the indexes
manually using the auto_mkindex command. The indexes you create are
not accessible to currently running DesignSync clients, but you can
issue the auto_reset command in a DesignSync client to make the
procedures in the indexes accessible.  Thus, using auto_mkindex and
auto_reset helps you efficiently debug your stcl procedures.

The auto_mkindex command creates the array of stcl procedures used
by the current Tcl interpreter.  These procedures are stored in the
auto_index array and are loaded by the Tcl autoloader when users at
your site invoke them. These autoloaded stcl procedures are only
accessible in the stcl mode of DesignSync.  If the auto_index
generates successfully, a file named tclIndex is created in the
site or custom tcl directory.

For your stcl procedures to be autoloaded, you must store the
procedure files in the site-wide or project-level tcl directory.
Thus, the <directory_name> argument must be the absolute path to
the site or project tcl directory:

* For site-wide stcl files: <SYNC_SITE_CUSTOM>/share/client/tcl

* For project-level stcl files: <SYNC_PROJECT_CFGDIR>/tcl

SYNC_PROJECT_CFGDIR has no default; no project information is
loaded if this environment variable is not set. SYNC_SITE_CUSTOM
resolves to <SYNC_CUSTOM_DIR>/site.

Note: SYNC_SITE_CUSTOM is equivalent to <SYNC_CUSTOM_DIR>/site;
if SYNC_SITE_CUSTOM is not set, but SYNC_CUSTOM_DIR is set,
DesignSync will still access the site-wide stcl files.
You must have write access to the site or client tcl directory
for the auto_index to be generated.

If you specify a file with the <file> argument, you must specify
```

```
the entire name of the file, including the .tcl extension.  If you
do not specify a file, auto_mkindex adds procedures in all files
with .tcl extensions in the specified directory to the auto_index
array.
```

SYNOPSIS

```
auto_mkindex <directory_name> [<file>...]

Note: This command is supported only in stcl mode.
```

RETURN VALUE

```
none
```

SEE ALSO

```
parray auto_index, auto_reset
```

EXAMPLES

```
This example adds the procedures in the site tcl directory to the
Tcl index.  In this example, the procedure, popasic, is included in
a file, revcmds.tcl in the site tcl directory,
<SYNC_DIR>/custom/site/share/client/tcl. The example also shows how
to use auto_reset to make the newly added procedure accessible in
the current session.

stcl>  auto_mkindex "c:\\Program Files\\Synchronicity\\DesignSync\\
       custom\\site\\share\\client\\tcl"
stcl> auto_reset
       0
stcl> popasic
       ...
```

auto_reset

auto_reset Command

NAME

```
auto_reset          - Resets the Tcl autoload index
```

DESCRIPTION

```
This command lets you use newly indexed stcl procedures without
restarting your DesignSync client.  Use the auto_mkindex command to
index new stcl procedures.  Then issue the auto_reset command to
make the new procedures accessible in your current DesignSync
session.

You must have write access to the site-wide and project-level tcl
directories, as well as the tclIndex files in those directories,
for the indexes to be reloaded.  The site and project tcl
directories are located as follows:

* For site-wide stcl files: <SYNC_SITE_CUSTOM>/share/client/tcl

* For project-level stcl files: <SYNC_PROJECT_CFGDIR>/tcl
```

SYNOPSIS

```
auto_reset

Note: This command is supported only in stcl mode.
```

RETURN VALUE

```
0 if the indexes are loaded successfully; 1 otherwise.
```

SEE ALSO

```
auto_mkindex, parray auto_index
```

EXAMPLES

```
This example shows how to use auto_reset to make a newly added
procedure accessible in the current session.

stcl> auto_mkindex "c:\\Program Files\\Synchronicity\\DesignSync\\
      custom\\site\\share\\client\\tcl"
stcl> auto_reset
      0
stcl> popasic
      ...
```

gets

gets Command

NAME

```
gets                - Reads a string from a file
```

DESCRIPTION

```
This command is the Tcl gets command with Synchronicity
extensions. Refer to a Tcl language reference manual for
a full description of the standard gets command.

Synchronicity has extended the gets command to  a -prompt
option that you use to specify a prompt string.
```

SYNOPSIS

```
See a Tcl language reference manual.
```

EXAMPLES

```
The following example demonstrates the -prompt option, which
pops up a simple dialog box (when run from the graphical
interface) and prompts the user for input:

  set name [gets stdin -prompt "Enter your name:"]
```

parray auto_index

parray auto_index Command

NAME

```
parray auto_index   - Lists the autoloaded stcl procedures
```

DESCRIPTION

```
This command returns the array of stcl procedures in the current
Tcl interpreter.  These procedures are stored in the auto_index
```

```
array and are loaded by the Tcl autoloader when you invoke them.
You can add procedures to the Tcl interpreter by storing them in a
designated tcl directory and then invoking a DesignSync client or
by indexing them manually using the auto_mkindex command.

If you use auto_mkindex to manually index the new procedures, issue
the auto_reset command to make the auto_index accessible in the
current session.  The autoloaded stcl procedures are only
accessible in the stcl mode of DesignSync.
```

SYNOPSIS

```
parray auto_index

Note: This command is supported only in stcl mode.
```

RETURN VALUE

```
An array of stcl procedures and their source files.
```

SEE ALSO

```
auto_mkindex, auto_reset
```

EXAMPLES

```
This example lists the stcl procedures currently indexed as part
of the Tcl interpreter:

  stcl> parray auto_index

  # auto_index(::safe::interpAddToAccessPath)= source {c:/
              Program Files/Synchronicity/DesignSync/share/tcl/
              library/safe.tcl}
  # auto_index(::safe::interpConfigure) = source {c:/Program Files/
              Synchronicity/DesignSync/share/tcl/library/safe.tcl}
  ...
  ...
  ...
  # auto_index(parray)                  = source {c:/Program Files/
              Synchronicity/DesignSync/share/tcl/library/parray.tcl}
  # auto_index(pkg_mkIndex)             = source {c:/Program Files/
              Synchronicity/DesignSync/share/tcl/library/init.tcl}
  # auto_index(pop)                     = source {c:/Program Files/
              Synchronicity/DesignSync/custom/site/share/client/tcl/
              autoload.tcl}
```

```
...
...
```

puts

puts Command

NAME

```
puts                - Writes a string to a file
```

DESCRIPTION

```
This command is the Tcl 'puts' command. Refer to a Tcl
language reference manual for a full description of the
standard 'puts' command.

IMPORTANT:
  In previous software versions, the 'puts' command was
  extended to support two special file identifiers, 'log'
  and 'trace'.  These file identifiers are no longer
  supported.  The Synchronicity 'puts' command is now the
  standard Tcl 'puts' command.  You can use 'puts stderr'
  in client scripts to display output on the screen.  You
  can use 'puts stderr' in server scripts to channel the
  output to the server's error log,
  $SYNC_CUSTOM_DIR/servers/<host>/<port>/logs/error_log.
  Migrate existing scripts by removing instances of the
  'log' and 'trace' identifiers.
```

SYNOPSIS

```
See a Tcl language reference manual.
```

SEE ALSO

```
log
```

rstcl

rstcl Command

NAME

```
rstcl               - Runs server-side stcl scripts
```

DESCRIPTION

```
This command runs server-side stcl scripts from DesignSync
clients. You can also execute server-side scripts by passing a URL
to the SyncServer from your browser. See the 'server-side' topic or
the ProjectSync User's Guide for details.

You run client-side scripts using the DesignSync run command or the
Tcl source command. The choice of whether to implement a script as
client-side or server-side depends on what you are trying to
accomplish. You can use client scripts to automate user tasks or
implement enhancements to the built-in user command set. You create
server-side scripts for any of the following reasons:
  - To set server-wide policies (such as triggers or access controls)
  - To create server customizations (such as customized ProjectSync
    panels or data sheets)
  - To reduce the amount of client/server traffic that a
    client-side script accessing vault data would require
  - To execute commands that are only available as server-side
    commands (such as 'access reset' and most ProjectSync commands)

When you execute a script with rstcl, the SyncServer looks for the
specified script in the following locations (in the order listed):

  1. Server-specific Tcl scripts (UNIX only):
     <SYNC_CUSTOM_DIR>/servers/<host>/<port>/share/tcl

  2. Site-wide Tcl scripts:
     <SYNC_CUSTOM_DIR>/site/share/tcl

  3. Enterprise-wide Tcl scripts:
     <SYNC_CUSTOM_DIR>/enterprise/share/tcl

  4. Synchronicity-provided Tcl scripts:
     <SYNC_DIR>/share/tcl

     Do not put scripts in <SYNC_DIR>/share/tcl because this
     directory is reserved for Synchronicity scripts, and your
     scripts may be overwritten when you upgrade your
     Synchronicity software.

rstcl requests mutually exclude each other. I.e. They all acquire the
same exclusive lock, named smdSrvrMetaDataLock. If you analyze your
script and know it to be safe to run in parallel with other scripts,
you may release the exclusive lock from within your script by using
'url syslock -release smdSrvrMetaDataLock'. If your script reads or
writes an external file, it is probably not parallelizable. rstcl
requests and panel= requests (invoked via ProjectSync) never mutually
exclude each other; panel requests are entirely independent of rstcl's
lock.
```

```
Notes:
- If you make modifications to your script, use the ProjectSync
  Reset Server menu option to force the SyncServer to reread your
  script.
- When specifying 'sync:' URLs within scripts that are run on the
  server, do not specify the host and port. For example, specify:
    sync:///Projects/Asic
  not
    sync://holzt:2647/Projects/Asic
  Because the script is run on the server itself, host:port
  information is unnecessary and is stripped out by the
  server, which may lead to incorrect behavior during object-name
  comparisons.
- The SYNC_ClientInfo variable is not defined when running
  server-side scripts with rstcl -- you must use the browser-based
  invocation. All other SYNC_* variables (SYNC_Host, SYNC_Port,
  SYNC_Domain, SYNC_User, and SYNC_Parm if parameters are passed
  into the script) are available when using rstcl.
```

SYNOPSIS

```
rstcl [-output <file>] -server <serverURL> -script <script>
      [-urlparams <name>=<value>[&<name>=value[...]]]
```

OPTIONS

-output

```
 -output <file>     Specifies the file to which script output is
                    written. If omitted, the output is displayed.
```

-server

```
-server <serverURL> Specifies the URL of the SyncServer that will
                    execute the script. Specify the URL as follows:
                      sync://<host>[:<port>]
                    where 'sync://' is required, <host> is
                    the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (if omitted, defaults to 2647/2679). For
                    example, you might specify the following:
                      -server sync://serv1.abco.com:1024
```

-script

```
-script <script>    Specifies the name of the script to be
                    executed. This script must be in one of the Tcl
                    script directories on the SyncServer specified
                    by the -server option. The Tcl directories are
                    (in the order in which they are searched):

                    1. Server-specific Tcl scripts (UNIX only):
                    <SYNC_DIR>/custom/servers/<host>/<port>/share/tcl

                    2. Site-wide Tcl scripts:
                    <SYNC_DIR>/custom/site/share/tcl

                    3. Enterprise-wide Tcl scripts:
                    <SYNC_DIR>/custom/enterprise/share/tcl

                    4. Synchronicity-provided Tcl scripts:
                    <SYNC_DIR>/share/tcl

                    The script can contain Tcl constructs and
                    Synchronicity commands, including server-side only
                    commands.
```

-urlparams

```
-urlparams <params> Specifies the parameters that are passed into
                    the script. Specify each parameter as a
                    name/value pair separated by an equal sign (=),
                    and separate multiple parameters with an
                    ampersand (&):
                      <param1>=<value1>&<param2>=<value2>...
                    For example:
                      -urlparams Name=Joe&IDNum=1234

                    Parameters are passed into the script using the
                    global variable SYNC_Parm, which is a Tcl
                    array. The array keys are the names of the
                    parameters. To access the value of a parameter
                    from within the script, use the following syntax:

                      $SYNC_Parm(<param_name>)

                    For example, the following Tcl line would
                    display the value of the 'name' parameter:

                      puts "The name is: $SYNC_Parm(name)"

                    Note: If any parameter name or value
                    contains whitespace, surround the entire
                    parameter list with double quotes. For example:
```

```
                    -urlparams "name=Joe Black&IDNum=1234"
```

RETURN VALUE

```
o If -output is not specified, returns (and displays) the script
  output.
o If -output is specified, output is written to the specified file
  and the return value is an empty string.

If the script has an error, a Tcl exception is thrown from the
client side and the Tcl stack trace is output. Proper usage
for handling exceptions would be to provide an exception handler
when you use the rstcl command:
  if [catch {rstcl -server ...} result] {
      # Something bad happened.
      # 'result' contains the output generated by the script
      #   prior to the error and the Tcl stack trace.
  } else {      # All is fine.
      # 'result' contains whatever output is generated
      # by the script.
  }

If the -output option to the rstcl command was specified, then
the exception is still thrown, but the script output and Tcl stack
trace are written to the specified output file.
```

SEE ALSO

```
server-side, run, url syslock
```

EXAMPLES

```
A common use of rstcl is to run the 'access reset' command, which
restarts the SyncServer. See the 'access reset' command for details.

Most ProjectSync-related scripts must be run on the server and
could therefore use rstcl. This example creates a ProjectSync note
using the 'note create' command, which is a server-side only
command, and displays the URL of the new note. This output is then
returned to the rstcl command in callNoteCreate.tcl.

 1.In the <SYNC_CUSTOM_DIR>/site/share/tcl directory on the
 holzt:2647 server is the noteCreate.tcl script, which contains
 the following:

   set noteUrl [note create -type Note \
     [list Title $SYNC_Parm(title)] [list Body $SYNC_Parm(body)] \
     [list Author $SYNC_Parm(author)] ]
   puts "$noteUrl"
```

```
2. On the client side, the callNoteCreate.tcl script provides an
exception catcher in case the noteCreate.tcl script fails.

  if [catch {rstcl -server sync://holzt:2647 -script noteCreate.tcl \
       -urlparams "author=Goss&title=This is a note.&body=New note."} \
       result] {
      puts "Couldn't create the note!"
  } else {
      puts "Created note: $result"
  }

3. From stcl, run the client script:

     stcl> source callNoteCreate.tcl
     Created note: sync:///Note/SyncNotes/Note/3

   You could also run the rstcl command directly from the command
   line (no exception catcher). Doing so creates a second note:

     stcl> rstcl -server sync://holzt:2647 -script noteCreate.tcl \
           -urlparams "author=Goss&title=Another note.&body=New note."
     sync:///Note/SyncNotes/Note/4
```

run

run Command

NAME

```
run                 - Executes a DesignSync command file or stcl script
```

DESCRIPTION

```
This command will execute the DesignSync or Tcl commands contained
in the specified file. Specify the file with a relative or absolute
path, not as a URL. If the extension of the file is ".tcl", the
script is run in stcl mode, irrespective of the current mode (dss
or stcl). Otherwise, the script is run in dss/dssc mode
irrespective of your current mode. From stcl/stclc, using the run
command is the same as using the Tcl source command except that the
run command does not return the script's return value.

If you do not specify a path to the command file, the run command
looks in the default log directory. By default, the default log
directory is your home directory (as defined by $HOME on UNIX or
your user profile, which is managed by the User Manager tool, on
Windows platforms).  You can change the default using the
-defaultdir option to either the log or the run command.

The batch file may be created in a text editor or captured with
```

```
the log command. The '#' character in column 1 treats the
remainder of the line as a comment.

Note: Use the rstcl command to execute server-side stcl scripts.
```

SYNOPSIS

```
run [-defaultdir <dir>] [-dryrun] [-ignoreerrs] [-verbose]
    [--] [<filename>]
```

OPTIONS

- -defaultdir
- -dryrun
- -ignoreerrs
- -verbose
- --

-defaultdir

```
-defaultdir <dir>  Set the location of the default log directory,
                   which is also where DesignSync looks for
                   scripts. This value is saved between sessions.

                   Note: Specifying the defaultdir is mutually
                   exclusive with specifying a filename to run.
```

-dryrun

```
-dryrun            Like verbose, but do not execute. This option
                   is useful to verify the behavior of a command file
                   before executing it.
```

-ignoreerrs

```
-ignoreerrs        Continue executing the DesignSync command file even
                   if an error is encountered.

                   This option is not allowed when running stcl
                   (*.tcl) scripts. You must provide your own Tcl
                   exception handler to catch errors in your stcl
                   script. Use the Tcl 'catch' command.
```

-verbose

```
 -verbose           Print commands as they are executed.
```

--

```
 --                 Indicates that the command should stop looking for
                    command options. Use this option when arguments
                    to the command begin with a hyphen (-).
```

RETURN VALUE

```
 none
```

SEE ALSO

```
 log, rstcl
```

EXAMPLES

```
 This example sets the default log directory, which is also where
 DesignSync looks for scripts, to /home/goss/Projects, then executes
 myscript.dss.

  dss> run -defaultdir /home/goss/Projects
  dss> run myscript.dss
```

Third-Party Integrations

DSDFII

addcdslib

addcdslib Command

NAME

```
addcdslib           - Specifies a cds.lib file
```

DESCRIPTION

```
This command adds a path to the search path that DesignSync
uses to locate Cadence cds.lib files. The cds.lib files map Cadence
libraries to their locations. For example, a cds.lib file might
contain the following:
  DEFINE TTL1  /home/TTLLibraries/TTL1
  DEFINE basic /usr1/CoreLibraries/basic

DesignSync uses these mappings to resolve dependencies that a
design object, in this case a Cadence cell view, has on other design
objects. Using the 'url relations' command, you could, for example,
write an stcl script that checks out a cell view and all of its
dependencies.

Specify the path argument to the addcdslib command as the absolute
path to the directory containing the cds.lib file (do not include
"cds.lib" as part of the specification).
```

SYNOPSIS

```
addcdslib <path>
```

OPTIONS

- --

--

```
--            Indicates that the command should stop looking for
              command options. Use this option when the path
              you specify begins with a hyphen (-).
```

SEE ALSO

```
url relations
```

EXAMPLES

```
This command shows how to resolve dependencies by using the
addcdslib command. The cds.lib file in /home/Libraries contains
the library definition for "basic", but not for "sample".

 stcl> url relations cmos_sch.sync.cds dependencies
   {<unrecognized alias>} basic:vdd/symbol.sync.cds
   {<unrecognized alias>} basic:gnd/symbol.sync.cds
   {<unrecognized alias>} sample:nmos/symbol.sync.cds
 stcl> addcdslib /home/Libraries
 stcl> url relations cmos_sch.sync.cds dependencies
   file:///home/tgoss/Projects/Cadence/basic/opin/symbol.sync.cds\
   basic:opin/symbol.sync.cds
   file:///home/tgoss/Projects/Cadence/basic/gnd/symbol.sync.cds\
   basic:gnd/symbol.sync.cds
   {<unrecognized alias>} sample:nmos/symbol.sync.cds
```

Administration

Access Control

access Commands

NAME

```
access              - Access-control commands
```

DESCRIPTION

```
These commands provide access to the access control system used by
DesignSync tools. Note that some access control commands (access
allow, access define, access deny, access filter,
access global, access init) are available ONLY within an
AccessControl file. See the ENOVIA Synchronicity Access Control Guide
for more information.
```

SYNOPSIS

```
access <access_command> [<access_command_options>]

Usage: access [allow|db_filter|define|deny|filter|global|init|list|
               reset|verify]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
stcl, server-side, rstcl, access reset, access verify
```

EXAMPLES

```
See specific "access" commands.
```

ACAdmin Commands

acadmin

acadmin Command

NAME

```
acadmin              - Access Administrator Commands
```

DESCRIPTION

```
The Access Administrator tool (ACAdmin) provides a graphical web
interface to create, remove, maintain, and manage access controls.
Using the ACAdmin interface provides a simpler, more intuitive
interface to customizing the access controls for DesignSync. In
addition to the graphical web interface, DesignSync provides a set of
acadmin commands, prefixed by "acadmin" to use for scripting or other
acadmin maintenance. For more information on the functionality,
organization and usage of ACAdmin, see the ENOVIA Synchronicity
Access Control Guide.

In order to use any of the acadmin commands, the Access Control
Administrator must be enabled on the server. When any of these
commands are used to modify the ACAdmin configuration, the changes
made are not applied to the server until the acadmin reset command is
run.
```

SYNOPSIS

```
acadmin <acadmin_command> [acadmin_command_options>]

Usage: acadmin
[addgroup|addgroupusers|addobj|addusers|listcats|listcmds|listgroups|
listobjs|listperms|listusers|reset|rmgroup|rmgroupusers|rmobj|
rmusers|setcatperm]
```

EXAMPLES

```
See specific acadmin commands.
```

acadmin addgroup

acadmin addgroup Command

NAME

```
acadmin addgroup    - Create a new user group.
```

DESCRIPTION

```
This command creates user groups. These user groups are then
available to be assigned to command categories. Grouping users into
groups allows you to define and assign roles and maintain the roles
and functions easily even when individual group members change.

Notes:
 o Usually only the DesignSync administrators should have permission
   to create or modify user group definitions.

 o There are three dynamic (or virtual) user groups that should never
   be manipulated manually. They are All-Module-Owners,
   All-Project-Owners, and All-Server-Users. These groups are
   automatically generated when ACAdmin is reset. If you have made
   changes that affect these groups, you should perform an ACAdmin
   Reset.

This command is subject to ACAdmin access controls as defined in
AccessControl.aca. See the ENOVIA Synchronicity Access Control Guide
for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.

To apply the changes created by this command to the server, you must
reset the server using the acadmin reset command or ACAdmin Reset
from the DesignSync Web UI.
```

SYNOPSIS

```
acadmin addgroup -group <groupName> [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
```

```
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

- -group

-group

```
-group <groupName>  Name of the user group. This name should
                    correspond to DesignSync naming conventions. For
                    a list of reserved characters that should not be
                    used in the user group name, see the ENOVIA
                    Synchronicity DesignSync Data Manager User's
                    Guide: URL Syntax.

                    Tip: To allow you to easily differentiate between
                    user groups and individual users, you should
                    implement a naming convention such as prefixing
                    the user group with a standard prefix like Group-
                    or by creating group names in all capital
                    letters. For example:
                    DEVELOPERS
                    or
                    GROUP-Developers
```

RETURN VALUE

```
This command doesn't return any TCL values. If the command succeeds,
you'll receive a success message.  If the command fails, you'll
receive an error message explaining the failure.
```

SEE ALSO

```
acadmin addgroupusers, acadmin listgroups, acadmin rmgroup
```

EXAMPLES

Example of Creating a Group in ACAdmin

```
This example creates a documentation group in ACAdmin.

dss> acadmin addgroup -group GROUP-Doc -server \
sync://serv1.ABCo.com:2647

 Created 1 User Group(s)
```

acadmin addgroupusers

acadmin addgroupusers Command

NAME

```
acadmin addgroupusers - Add users to group
```

DESCRIPTION

```
This command adds defined users to an existing group. Both usernames
and group names are case sensitive. You can only add users to one
group at a time.

The group  being added to must already exist.  To create new groups,
use the acadmin addgroup command.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.

To apply the changes created by this command to the server, you must
reset the server using the acadmin reset command or ACAdmin Reset
from the DesignSync Web UI.
```

SYNOPSIS

```
acadmin addgroupusers -group <groupName> -users <userlist>
                      [-server <SyncURL>]
```

ARGUMENTS

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

- -group
- -user

-group

```
-group <groupName>  Name of the group to which the users are being
                    added. This group must already exist.  Group
                    names are case sensitive.

                    If you are not sure what groups exist, use the
                    acadmin listgroup command to get a list of
                    existing groups.

                    Note: If the group is associated with an object,
                    you need to specify the fully extended group
                    name.  Fully extended group name is specified as:

                    <GroupName>@sync:///<ServerObjectPath>
                   Where <GroupName> is the case sensitive name of
                    the group.
                   <ServerObjectPath> is the path to the object on
                    which the group was created for example:
                   Projects/[<ProjectFolder>/...]ProjectName
                   Modules/[<Category>/...]ModuleName
```

-user

```
-user <userlist>    A comma separated list of users to associate with
                    the group.  The users must already exist.  You
                   may also use the special user definitions
                   provided by DesignSync.  For more information on
                   the special users, see the Access Administration
                   Guide.
```

RETURN VALUE

```
This command does not return any TCL values.  When successful, this
command returns a success message.  If the command fails, it displays
an error message explaining the failure.
```

SEE ALSO

```
acadmin addgroup, acadmin addusers, acadmin listusers,
acadmin listgroups, acadmin rmgroup, acadmin rmgroupusers
```

EXAMPLES

Example of a User defined for a Usergroup

```
This example shows adding a user to a usergroup.

dss> stcl> acadmin addgroupusers -group DocWriters -users rsmith \
     -server sync://serv1.ABCo.com:30126

Updated 1 User Group(s)
```

Example of Adding a User to a Usergroup defined for an Object

```
This example shows adding a user to a usergroup when the usergroup is
defined for a specific object, in this example, it is the module
XLP-12Pro in the ChipDesign category.

dss> acadmin addgroupusers -group \
  chipDevelopers@sync:///Modules/ChipDesign/XLP-12Pro  -users \
  thopkins -server sync://serv1.ABCo.com:30126

Updated 1 User Group(s)
```

acadmin addobj

acadmin addobj Command

NAME

```
acadmin addobj      - Manage the given object with ACAdmin
```

DESCRIPTION

```
This command adds permissions for all the existing categories for
specified object to the acadmin configuration files. Using the
setcatperm command, you can then modify the permissions for each
category as needed, granting finer control for the specified object.

The object does not need to exist in order to be added. For example,
if you have a list of modules be created, you can define the access
permissions first and then create the modules as needed.

Note: When this command is run, it assigns the permission(s) selected
to all categories that exist.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.

To apply the changes created by this command to the server, you must
reset the server using the acadmin reset command or ACAdmin Reset
from the DesignSync Web UI.
```

SYNOPSIS

```
acadmin addobj -object <objectURL> [-permission <permission>]
               [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024
```

```
                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

-object

```
 -object <objectURL> Enter the Sync URL of the object on which to set
                     the permissions. You can set the permissions for
                     any object on the server. You may specify objects
                     as follows:

                     sync:///
                     Controls the default permissions for all
                    object-independent actions on the server.  For
                    example, user creation and removal actions do not
                    depend on specific server objects. (Default)

                     sync:///*
                     Controls the default permissions for all
                     object-dependent actions on the server. For
                     example, browsing objects on the server, creating
                     or modifying modules, etc. depend on having
                     access to related server objects.

                     sync:///Projects[/ProjectName]/[pathtoObject]
                     Controls the permission for the specified project
                     or the entire project area on the server.

                     sync:///Modules[/Category [...]][/ModName]
                     Controls the permission for the specified module,
                     category, or entire module area on the server.

                     Notes:
                     You can use wildcards, such as * to specify all
                     matching objects within the specified path, for
                     example: sync:///Modules/Chip/*.c controls access
                     to all .c files within the module Chip. If Chip
                     was a category and you wanted to specify all
                     modules within the category, you could specify
                     the URL either of the following ways:
                     sync:///Modules/Chip/*
```

```
sync:///Modules/Chip

The sync:/// and sync:///* URLs are generic Sync
URLs that can be used to provide default access
for the server.
```

-permission

```
-permission          Enter a comma separated list of defined
 <permission>        permissions to associate with the object.

                     ALL, LIST, EXCLLIST, NONE, SERVDEF

                     When LIST or EXCLLIST are used, you can specify a
                     user or userlist for whom to set the permissions.
```

RETURN VALUE

```
This command doesn't return any TCL values. If the command succeeds,
you'll receive a success message for each category associated with
the object. If the command fails, you'll receive an error message
explaining the failure.
```

SEE ALSO

```
acadmin addgroup, acadmin addgroupusers, acadmin rmobj
```

EXAMPLES

- Example of Adding the Permissions Categories to A Server Object

Example of Adding the Permissions Categories to A Server Object

```
This example shows how to create categories for a server object. The
command creates all the categories that exist on the server in the
acadmin configuration file.

dss> acadmin addobj -object sync:///Modules/Chip/ALU -permission ALL \
     -server sync://serv1.ABCo.com:30126

 Category ACAProjectDefs created
 Category ADMIN-MODULE created
 Category BROWSE created
 Category DS-PROJADMIN created
 Category DS-READ created
 Category DS-WRITE created
```

```
  Object sync:///Modules/Chip/ALU has been added
```

acadmin addusers

acadmin addusers Command

NAME

```
acadmin addusers     - Add a user(s) to specified Object and Category
```

DESCRIPTION

```
This command adds one or more users to a specified category of
permissions assigned to an object. This allows you to modify the list
of users assigned to a permissions category as needed.

 Note: The specified user does not need to exist when this
 command is run; it can be created later. For more information on
 creating users in DesignSync see the DesignSync Administrator's
 Guide.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.

To apply the changes created by this command to the server, you must
reset the server using the acadmin reset command or ACAdmin Reset
from the DesignSync Web UI.
```

SYNOPSIS

```
acadmin addusers -category <categoryName> -object <objectURL>
                 -users <userlist> [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
```

```
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

- -category
- -option
- -user

-category

```
 -category           Name of the command category associated with the
 <categoryName>      user. The command category must exist already.
```

-option

```
 -object <objectURL> Sync URL of the object associated with the user.
                     The object or object special URL (for example,
                     sync:///) must already exist.
```

-user

```
 -user <userlist>    A comma separated list of users to associate with
                     the category and object.
```

RETURN VALUE

```
This command does not return a TCL value. The commands displays a
success message when successful or an appropriate error if the
command fails.
```

SEE ALSO

```
acadmin addgroup, acadmin addgroupusers, acadmin addobj,
acadmin rmusers
```

EXAMPLES

- example_adduser_multiple

```
This example shows adding three users to a category for an object.

dss> acadmin addusers -category ADMIN-MODULE -object \
sync:///Modules/Chip/ALU -users rsmith,thopkins,chipAdmin  \
-server sync://lwvrh17mon:30126

Category ADMIN-MODULE updated
```

acadmin listcats

acadmin listcats Command

NAME

```
listcats            - Lists all categories defined on a server
```

DESCRIPTION

```
The listcats command lists all the categories defined on the
specified server.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.
```

SYNOPSIS

```
acadmin listcats [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

RETURN VALUE

```
This command does not return a TCL value. When successful, this
command lists the categories available on the server. If the command
fails, it displays an error message explaining the failure.
```

SEE ALSO

```
acadmin addusers, acadmin listcmds, acadmin listperms,
acadmin setcatperm
```

EXAMPLES

- Example of Listing the Categories for a Server

Example of Listing the Categories for a Server

```
This example shows listing the categories for a server. This server
has no custom categories, so the listing shows only the default
categories that come with ACAdmin.
dss> acadmin listcats -server sync://serv1.ABCo.com:2647

 ACAProjectDefs
 ADMIN-MODULE
 BROWSE
 DS-PROJADMIN
 DS-READ
 DS-WRITE
 Mirrors
 PS-Read
```

```
PS-Write
SRV-ADMIN
```

acadmin listcmds

acadmin listcmds Command

NAME

```
acadmin listcmds    - Lists all commands by category
```

DESCRIPTION

```
The listcmds command lists all the commands associated with the
defined categories. If you are interested in the commands associated
with a specific category, you can use the -category option to limit
the results to a single category.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.
```

SYNOPSIS

```
acadmin listcmds [-category <categoryName>] [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
```

```
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

- -category

-category

```
-category           Name of the command category associated with the
<categoryName>      user. The command category must exist already.

                    Note: You can only specify a single category.
```

RETURN VALUE

```
Does not return a TCL value.  Displays an alphabetized list of
categories and the commands within each category.
```

SEE ALSO

```
acadmin addusers, acadmin listcats, acadmin listperms,
acadmin setcatperm
```

EXAMPLES

- Example Showing Listing Commands for All Categories on the Server

Example Showing Listing Commands for All Categories on the Server

```
This example shows the list of command associated with the categories
for a server. This server has no custom categories, so the listing
shows only the default categories that come with ACAdmin.

dss> acadmin listcmds -server sync://serv1.ABCo.com:2647

 ACAProjectDefs {AcaProjCatPrmDef AcaProjUserGroupDef}
 ADMIN-MODULE {ChangeCommentAll DeleteFolder DeleteVault
 DeleteVersion ExportModule FreezeModule ImportModule MemberUnlockAll
 Mkmod Move MoveModule Rmalias Rmconf Rmedge Rmmod Rollback SetOwner
 SwitchLocker TagRelease UnfreezeModule UnlockAll}
 BROWSE BrowseServerObj
 DS-PROJADMIN {ChangeCommentAll DeleteFolder DeleteVault
 DeleteVersion MakeBranch Move SetOwner SwitchLocker TagRelease
```

```
UnlockAll}
DS-READ CheckoutNoLock
DS-WRITE {Addhref ChangeComment Checkin CheckoutLock HcmUpgrade Lock
MakeBranch MakeBranchTrunk MakeFolder MemberUnlock Mkedge Retire
Rmhref Tag Unlock Unretire}
Mirrors Mirrors
PS-Read {AcaViewDef BrowseServer EditUser EmailSubscribe ViewNote}
PS-Write {AddNote AddPSReport CreateConfig DeleteNote DeletePSReport
EditNote EditNoteAttachments EditUser ModifyConfig
ModifyNoteProperty ReviseNoteHistory SetNoteProperty UnlockNote
ViewNote}
SRV-ADMIN {ACAActions AddDevelopmentInstance Addlogin AddMirror
AddProject AddTrigger AddUser AdministrateNoteTypes
AdministrateServer DeleteConfig DeleteDevelopmentInstance
DeleteMirror DeleteProject DeletePSReportAll DeleteTrigger
DeleteUser EditAllUser EditMirror EditTrigger EmailAllSubscribe
EmailMgrAdmin ExportProject ImportProject ModifyDevelopmentInstance
ModifyMirror ModifyProject PrimaryMirrorFetch ResetAccessControls
Rmlogin Showlogins Suspend TransferFile ViewMirror}
```

acadmin listgroups

acadmin listgroups Command

NAME

```
acadmin listgroups  - lists the defined groups and their users
```

DESCRIPTION

```
The acadmin listgroups command lists all defined groups. All groups
are available server-wide. Groups can be specified as associated with
an object, however this association is non-binding and purely
intended as a guide to the user to indicate how the group should be
used.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.
```

SYNOPSIS

```
acadmin listgroups [-group <groupName>] [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

- -group

-group

```
-group <groupName>  Name of the group you want to view the users
                    associated with.

                   Note: If the group was associated with an object,
                    you need to specify the fully extended group
                    name.  Fully extended group name is specified as:

                    <GroupName>@sync:///<ServerObjectPath>
                   Where <GroupName> is the case sensitive name of
                    the group.
                   <ServerObjectPath> is the path to the object on
                    which the group was created for example:
                   Projects/[<ProjectFolder>/...]ProjectName
                   Modules/[<Category>/...]ModuleName
```

RETURN VALUE

```
This command does not return any TCL values. If the command is
successful it will display a list of groups, alphabetically, followed
by a list of users.
```

SEE ALSO

```
acadmin addgroup, acadmin addgroupusers, acadmin rmgroup,
acadmin rmgroupusers
```

EXAMPLES

Example Showing a List of All Groups

```
This example shows the list of all groups on the server.  Groups
associated with a specific object are shown with the object path.

dss> acadmin listgroups -server sync://serv1.ABCo.com:30126

 DocWriters mhopkins
 chipDevelopers@sync:///Modules/ChipDev/XLP-12Pro {rsmith thopkins}
```

Example Showing the Users for a Specified Group

```
This example shows the list for the chipDevelopers group on the
Module object XLP-12Pro.  Note  that when you specify a group that is
on an object, you must specify the full group path as
<group>@<relativeObjectPath>, as shown.

dss> acadmin listgroups -group \
chipDevelopers@sync:///Modules/ChipDev/XLP-12Pro -server \
sync://serv1.ABCo.com:30126

 chipDevelopers@sync:///Modules/ChipDev/XLP-12Pro {rsmith thopkins}
```

acadmin listobjs

acadmin listobjs Command

NAME

```
acadmin listobjs    - lists all acadmin managed objects on the server
```

DESCRIPTION

```
This command lists all the objects that are managed in the acadmin
configuration files. The objects can be added with the acadmin
addobjs command and modified with the setcatperm command.
```

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled on the server being updated.

SYNOPSIS

```
acadmin listobjs [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

RETURN VALUE

This command does not return any TCL values. When successful, this command returns a list, in alphabetical order, of all the objects managed by acadmin. If the command fails, it returns an error message explaining the failure.

SEE ALSO

acadmin addobj, acadmin rmobj

EXAMPLES

- Example of Listing Objects Managed by ACAdmin

Example of Listing Objects Managed by ACAdmin

```
This example shows a list of all the objects managed by ACAdmin.

dss> acadmin listobjs -server sync://serv1.ABCo.com:30127

 sync:///
 sync:///Modules/ChipDev/ALU
 sync:///Modules/ChipDev/XLP-12Pro
```

acadmin listperms

acadmin listperms Command

NAME

```
acadmin listperms   - list all permissions for the object or category
```

DESCRIPTION

```
This command shows the permissions for all the objects that are
managed with ACAdmin.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.
```

SYNOPSIS

```
acadmin listperms [-category <categoryName>] -object <ObjectURL>
[-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
```

```
sync://<host>[:<port>] or
syncs://<host>[:<port>]
where 'sync://' or 'syncs://' are required,
<host> is the machine on which the SyncServer is
installed, and <port> is the SyncServer port
number (defaults to 2647/2679).  For example:
sync://apollo.spaceco.com:1024

If this argument is not specified, DesignSync
users the environment variable SYNC_SERVER_URL.

If there is no SYNC_SERVER_URL variable defined,
DesignSync uses the vault association set on the
current working directory. If there is no vault
or there are multiple vaults associated with the
directory, for example, when you have overlapping
modules, the command fails.
```

OPTIONS

-category

```
-category            Name of the command category associated with the
<categoryName>       user. The command category must exist already.

                     Note: You can only specify a single category.
```

-object

```
-object <objectURL> Enter the Sync URL of the object for which you
                     are viewing the permissions. You can view the
                    permissions for any object on the server. You may
                    specify objects as follows:

                     sync:///
                     Controls the default permissions for all
                    object-independent actions on the server.  For
                    example, user creation and removal actions do not
                    depend on specific server objects. (Default)

                     sync:///*
                     Controls the default permissions for all
                     object-dependent actions on the server. For
                     example, browsing objects on the server, creating
                     or modifying modules, etc.  depend on having
                     access to related server objects.

                     sync:///Projects[/ProjectName]/[pathtoObject]
```

```
Controls the permission for the specified project
or the entire project area on the server.

sync:///Modules[/Category [...]][/ModName]
Controls the permission for the specified module,
category, or entire module area on the server.

Notes:
You can use wildcards, such as * to specify all
matching objects within the specified path, for
example: sync:///Modules/Chip/*.c controls access
to all .c files within the module Chip. If Chip
was a category and you wanted to specify all
modules within the category, you could specify
the URL either of the following ways:
sync:///Modules/Chip/*
sync:///Modules/Chip

The sync:/// and sync:///* URLs are generic Sync
URLs that can be used to provide default access
for the server.
```

RETURN VALUE

```
Does not return a TCL value. When successful, this command lists the
categories and permissions for the object, alphabetically by
category. If there is an error, DesignSync return an appropriate
error message explaining the failure.
```

SEE ALSO

```
acadmin addobj, acadmin rmobj, acadmin setcatperm
```

EXAMPLES

- Example Showing the List of Permissions for an Object in ACAdmin

Example Showing the List of Permissions for an Object in ACAdmin

```
This example shows the list of permissions for a specified object in
ACAdmin.
dss> acadmin listperms -object sync:///Modules/ChipDev/ALU -server \
sync://serv1.ABCo.com:2746

 DS-READ {ALL {}}
 DS-PROJADMIN {ALL {}}
 ADMIN-MODULE {ALL {anewman rsmith}}
 BROWSE {ALL {}}
 ACAProjectDefs {ALL {}}
```

```
DS-WRITE {ALL {}}
```

acadmin listusers

acadmin listusers Command

NAME

```
acadmin listusers   - lists users for the server or specified object
```

DESCRIPTION

```
The acadmin listusers command lists users associated with acadmin
objects or groups. As shown in the example below, user-defined groups
are expanded in the output, so you will not see the user-defined
group name.  Virtual groups, such as All-Module-Owners, are not
expanded and you may see them referenced in the command output. For
more information on virtual groups and how to use them, see the
ENOVIA Synchronicity Access Control Guide.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.
```

SYNOPSIS

```
acadmin listusers [-object <ObjectURL>] [-server <SyncURL>]
```

ARGUMENTS

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
```

```
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

- -object

-object

```
 -object <objectURL> Enter the Sync URL of the object on which to view
                     the users. You can view the users for any object
                     on the server. You may specify objects as
                     follows:

                     sync:///
                     Controls the default permissions for all
                    object-independent actions on the server.  For
                    example, user creation and removal actions do not
                    depend on specific server objects. (Default)

                     sync:///*
                     Controls the default permissions for all
                     object-dependent actions on the server. For
                     example, browsing objects on the server, creating
                     or modifying modules, etc.  depend on having
                     access to related server objects.

                     sync:///Projects[/ProjectName]/[pathtoObject]
                     Controls the permission for the specified project
                     or the entire project area on the server.

                     sync:///Modules[/Category [...]][/ModName]
                     Controls the permission for the specified module,
                     category, or entire module area on the server.

                     Notes:
                     You can use wildcards, such as * to specify all
                     matching objects within the specified path, for
                     example: sync:///Modules/Chip/*.c controls access
                     to all .c files within the module Chip. If Chip
                     was a category and you wanted to specify all
                     modules within the category, you could specify
                     the URL either of the following ways:
                     sync:///Modules/Chip/*
                     sync:///Modules/Chip

                     The sync:/// and sync:///* URLs are generic Sync
                    URLs that can be used to provide default access
                    for the server.
```

RETURN VALUE

```
This command doesn't return any TCL values. If the command is
successful, you will see a list of users who have been assigned to
acadmin categories. If the command fails, it will return an
appropriate error message explaining the failure.
```

SEE ALSO

```
acadmin addusers, acadmin rmusers, acadmin listgroups
```

EXAMPLES

- Example of Listing Users Associated with Categories on the Server

Example of Listing Users Associated with Categories on the Server

```
This example shows the users associated with acadmin categories on
the server. This is a very simple example which has very open
permissions except for one category assigned to the user group
DocWriters. The user rsmith is the only user in the group
DocWriters, therefore, his is the only username that appears
separately.

dss> acadmin listusers -server sync://serv1.ABCo.com:2476

 everyone rsmith
```

acadmin reset

acadmin reset Command

NAME

```
acadmin reset       - Regenerates the AccessControl file and runs an
                      Access Reset.
```

DESCRIPTION

```
The acadmin reset command regenerates the AccessControl to collect
all the changes made to the system since the last reset.  Then the
command runs the Access Reset to load the changes onto the server.
```

SYNOPSIS

```
acadmin reset [-server <SyncURL>]
```

ARGUMENTS

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

RETURN VALUE

```
This command does not return a TCL value.  When successful, the
command displays a success result.  When it fails, the command
displays an error explaining the failure.
```

SEE ALSO

```
acadmin addgroup, acadmin addgroupusers, acadmin addobj,
acadmin addusers, acadmin rmgroup, acadmin rmgroupusers,
acadmin rmobj, acadmin rmusers, acadmin setcatperm
```

EXAMPLES

- ACAdmin Reset Example

ACAdmin Reset Example

```
This example shows the response you see when an ACAdmin Reset is
successful.

dss> acadmin reset -server sync://serv1.ABCo.com:2647

 Updated AccessControl file
```

```
Reset Access Control
```

acadmin rmgroup

acadmin rmgroup Command

NAME

```
acadmin rmgroup     - Remove a user group.
```

DESCRIPTION

```
This command removes user groups. These user groups, when removed, are
removed from all the command categories they were associated with.

Notes:
 o Usually only the DesignSync administrators should have permission
   to remove or modify user group definitions.

 o There are three dynamic (or virtual) user groups that can never be
   removed. They are All-Module-Owners, All-Project-Owners, and
   All-Server-Users. These groups are automatically generated when
   ACAdmin is reset.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.
```

SYNOPSIS

```
acadmin rmgroup -group <groupName> [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024
```

```
                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

```
-group <groupName>  Name of the user group. This name should
                    match exactly the name used when the group was
                   added, including case. If you are not sure how to
                   correctly specify the name of the group being
                   removed, you can list the available groups using
                   the acadmin listgroup command.
```

RETURN VALUE

```
This command doesn't return any TCL values. If the command succeeds,
you'll receive a success message.  If the command fails, you'll
receive an error message explaining the failure.
```

SEE ALSO

```
acadmin addgroup, acadmin listgroups, acadmin rmgroupusers
```

EXAMPLES

- Example of Removing a Group

Example of Removing a Group

```
This example shows removing a group from the server.

dss> acadmin rmgroup -group DocWriters -server \
sync://serv1.ABCo.com:2647

 Deleted 1 User Group(s)
 Updated Permissions file
```

acadmin rmgroupusers

acadmin rmgroupusers Command

NAME

```
acadmin rmgroupusers- Remove users from group.
```

DESCRIPTION

```
This command removes defined users from an existing group.  Both
usernames and groupsnames are case sensitive. You can only remove
users from one group at a time.

This does not remove users or groups from the system. In order to
delete users or groups, you must use the acadmin rmusers or acadmin
rmgroups command respectfully.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.

To apply the changes created by this command to the server, you must
reset the server using the acadmin reset command or ACAdmin Reset
from the DesignSync Web UI.
```

SYNOPSIS

```
acadmin rmgroupusers -group <groupName> -users <userlist>
                     [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.
```

If there is no SYNC_SERVER_URL variable defined, DesignSync uses the vault association set on the current working directory. If there is no vault or there are multiple vaults associated with the directory, for example, when you have overlapping modules, the command fails.

OPTIONS

-group

-group <groupName> Name of the group to which the users are being removed. Group names are case sensitive.

If you are not sure what groups exist, use the acadmin listgroups command to get a list of existing groups.

Note: If the group is associated with an object, you need to specify the fully extended group name. Fully extended group name is specified as:

<GroupName>@sync:///<ServerObjectPath>
Where <GroupName> is the case sensitive name of the group.
<ServerObjectPath> is the path to the object on which the group was created for example:
Projects/[<ProjectFolder>/...]ProjectName
Modules/[<Category>/...]ModuleName

-user

-user <userlist> A comma separated list of users to associate with the group. User names are case sensitive. If you are not sure what usernames to specify, user the acadmin listusers command to get a list of existing users. You may also use the special user definitions provided by DesignSync. For more information on the special users, see the Access Administration Guide.

RETURN VALUE

This command does not return any TCL values. When successful, the command indicates that the usergroup was removed. If the command fails, DesignSync returns an appropriate error message explaining the

```
failure.
```

SEE ALSO

```
acadmin addgroup, acadmin addusers, acadmin addgroupusers,
acadmin listusers, acadmin listgroups, acadmin rmgroup
```

EXAMPLES

- Example of Removing a User from a Group

Example of Removing a User from a Group

```
This example shows removing a user from an acadmin group.

dss> acadmin rmgroupusers -user rsmith -group DocWriters -server \
sync://serv1.ABCo.com:2647

Updated 1 User Group(s)
```

acadmin rmobj

acadmin rmobj Command

NAME

```
acadmin rmobj       - Remove the object from ACAdmin management
```

DESCRIPTION

```
This command removes all the categories defined for the specified
object from the acadmin configuration files. The object must have
been added to acadmin to manage, but, the object does not need to
exist on the server.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.

To apply the changes created by this command to the server, you must
reset the server using the acadmin reset command or ACAdmin Reset
from the DesignSync Web UI.
```

SYNOPSIS

```
acadmin rmobj -object <objectURL> [-server <SyncURL>]
```

ARGUMENTS

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

```
-object <objectURL> Enter the Sync URL of the object to remove from
                     ACAdmin control. You may specify objects as
                    follows:

                     sync:///Projects[/ProjectName]/[pathtoObject]
                     Controls the permission for the specified project
                     or the entire project area on the server.

                     sync:///Modules[/Category [...]][/ModName]
                     Controls the permission for the specified module,
                     category, or entire module area on the server.

                     Note:
                     The sync:/// and sync:///* URLs are generic Sync
                    URLs that can be used to provide default access
                    for the server.
```

RETURN VALUE

```
This command does not return any TCL values. When successful, the
command returns a message indicating that the object was
removed. If the command fails, it returns an error message explaining
the failure.
```

SEE ALSO

```
acadmin addobj, acadmin rmgroup, acadmin rmgroupusers
```

EXAMPLES

- Example of Removing an Object from ACAdmin Management

Example of Removing an Object from ACAdmin Management

```
This example shows removing an object from ACAdmin management.

dss> acadmin rmobj -object sync:///Modules/ChipDev/ALU -server \
sync://server1.ABCo.com:2647

 Object sync:///Modules/ChipDev/ALU has been deleted from AC
 definitions.
```

acadmin rmusers

acadmin rmusers Command

NAME

```
acadmin rmusers     - Removes a user(s) from the specified Object and
                      Category.
```

DESCRIPTION

```
This command removes one or more users from a specified category of
permissions assigned to an object. This allows you to modify the list
of users assigned to a permissions category as needed.

users are assigned to a permissions category as your needs change.

 Note: The user does not need to exist when the command is run, as
 long as it is present in the acadmin configurations files. For more
 information on creating users in DesignSync see the DesignSync
 Administrator's Guide.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled
on the server being updated.

To apply the changes created by this command to the server, you must
```

```
reset the server using the acadmin reset command or ACAdmin Reset
from the DesignSync Web UI.
```

SYNOPSIS

```
acadmin rmusers -category <categoryName> -object <objectURL>
                -users <userlist> [-server <SyncURL>]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

- -category
- -object
- -user

-category

```
-category           Name of the command category associated with the
<categoryName>      user.
```

-object

```
-object <objectURL> Sync URL of the object associated with the user.
```

-user

```
-user <userlist>    A comma separated list of users to remove from
                    the category and object.
```

RETURN VALUE

```
This command does not return a TCL value. The command displays a
success message when successful or an appropriate error message if the
command fails.
```

SEE ALSO

```
acadmin addobj, acadmin addgroup, acadmin addgroupusers
```

EXAMPLES

- Example of Removing a User from a Category on an Object

Example of Removing a User from a Category on an Object

```
This example shows the removal of a user from a category defined for
an object.

dss> acadmin rmusers -object sync:///Modules/Chip/ALU -category \
     ADMIN-MODULE -user rsmith -server sync://serv1.ABCo.com:2647

 Category ADMIN-MODULE updated
```

acadmin setcatperm

acadmin setcatperm Command

NAME

```
acadmin setcatperm  - Set permission for users, objects, & categories
```

DESCRIPTION

This command allows you to adjust the permissions associated with categories, and optionally users, associated with objects managed by ACAdmin.

Before you can adjust the permissions, you need to associate the objects with ACAdmin using the acadmin addobj command. This also makes the defined categories available for the object with the permissions specified by the command.

Once those have been created, the permissions for the category can be adjusted for all users or individual users or user groups assigned to the category.

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

To use this command, the Access Control Administrator must be enabled on the server being updated.

To apply the changes created by this command to the server, you must reset the server using the acadmin reset command or ACAdmin Reset from the DesignSync Web UI.

SYNOPSIS

```
acadmin setcatperm -category <categoryName> -object <objectURL>
                   -permission <permission> [-users <userlist>]
                   [-server sync(s)://host:port]
```

ARGUMENTS

- Sync URL

Sync URL

```
-server <SyncURL>   Specifies the option Sync URL as follows:
                    sync://<host>[:<port>] or
                    syncs://<host>[:<port>]
                    where 'sync://' or 'syncs://' are required,
                    <host> is the machine on which the SyncServer is
                    installed, and <port> is the SyncServer port
                    number (defaults to 2647/2679).  For example:
                    sync://apollo.spaceco.com:1024

                    If this argument is not specified, DesignSync
                    users the environment variable SYNC_SERVER_URL.

                    If there is no SYNC_SERVER_URL variable defined,
                    DesignSync uses the vault association set on the
                    current working directory. If there is no vault
                    or there are multiple vaults associated with the
```

```
                    directory, for example, when you have overlapping
                    modules, the command fails.
```

OPTIONS

- -category
- -object
- -permission
- -user

-category

```
 -category           Name of the command category being modified.
 <categoryName>      The command category must exist already.
```

-object

```
 -object <objectURL> Enter the Sync URL of the object on which to set
                     the permissions. You can set the permissions for
                     any object on the server. You may specify objects
                     as follows:

                     sync:///
                     Controls the default permissions for all
                    object-independent actions on the server. For
                    example, user creation and removal actions do not
                    depend on specific server objects. (Default)

                     sync:///*
                     Controls the default permissions for all
                     object-dependent actions on the server.  For
                     example, browsing objects on the server, creating
                     or modifying modules, etc.  depend on having
                     access to related server objects.

                     sync:///Projects[/ProjectName]/[pathtoObject]
                     Controls the permission for the specified project
                     or the entire project area on the server.

                     sync:///Modules[/Category [...]][/ModName]
                     Controls the permission for the specified module,
                     category, or entire module area on the server.

                     Note:
                     The sync:/// and sync:///* URLs are generic Sync
                    URLs that can be used to provide default access
                    for the server.
```

-permission

```
 -permission          Enter a comma separated list of defined
  <permission>        permissions to associate with the object.

                      ALL, LIST, EXCLLIST, NONE, SERVDEF

                      When LIST or EXCLLIST are used, you can specify a
                      user or userlist for whom to set the permissions.
```

-user

```
 -user <userlist>     A comma separated list of users whose permissions
                      are being modified for the specified category.

                      If no users are specified, the permissions for
                     all users in the category are modified.
```

RETURN VALUE

```
 This command does not return any TCL values. When successful, lists
 the categories that have been modified, or returns an appropriate error
message if the command fails.
```

SEE ALSO

```
 acadmin addgroup, acadmin addobj, acadmin addusers,
 acadmin listcats, acadmin listobjs, acadmin listperms, acadmin reset
```

EXAMPLES

- Example of Setting Permissions for a Category
- Example of Setting Permissions for a User

Example of Setting Permissions for a Category

```
 This example shows how to set permissions for a category defined for
 a module object. The acadmin listperms command following shows
 the permissions for the category.

 dss> acadmin setcatperm -object sync:///Modules/Chip/ALU -category \
 ADMIN-MODULE -permission ALL -server sync://serv1.ABCo.com:2647

  Category ADMIN-MODULE updated
```

```
dss> acadmin listperms -object sync:///Modules/Chip/ALU -category \
ADMIN-MODULE -server sync://serv1.ABCo.com:2647

 ALL rsmith
```

Example of Setting Permissions for a User

```
This example shows how to set permissions for a user associated with
a category defined for a module object.
dss> acadmin setcatperm -object sync:///Modules/Chip/ALU -category \
 ADMIN-MODULE -permission LIST -user rsmith -server \
 sync://lwvrh17mon:30126

  Category ADMIN-MODULE updated

dss> acadmin listperms -object sync:///Modules/Chip/ALU -category \
ADMIN-MODULE -server sync://lwvrh17mon:30126

 LIST rsmith
```

access

access Commands

NAME

```
access              - Access-control commands
```

DESCRIPTION

```
These commands provide access to the access control system used by
DesignSync tools. Note that some access control commands (access
allow, access define, access deny, access filter,
access global, access init) are available ONLY within an
AccessControl file. See the ENOVIA Synchronicity Access Control Guide
for more information.
```

SYNOPSIS

```
access <access_command> [<access_command_options>]

Usage: access [allow|db_filter|define|deny|filter|global|init|list|
               reset|verify]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
stcl, server-side, rstcl, access reset, access verify
```

EXAMPLES

```
See specific "access" commands.
```

access allow

access allow Command

NAME

```
access allow        - Allows access to the specified actions
```

DESCRIPTION

```
The 'access allow' and related 'access deny' commands allow or deny
access to a specified list of actions. You can allow or deny access
for particular users and under circumstances you specify.

See the ENOVIA Synchronicity Access Control Guide for details on
setting up and using access controls.
```

SYNOPSIS

```
access {allow | deny} <actionList> {everyone | [only] users <userList>}
       [when <parm> <globExpr> [when ...]]
       [-because "<message_string>"]
```

OPTIONS

- actionList
- everyone
- users
- userList
- when
- -because

```
Note: For list parameters, (<actionList> and <userList>) surround
multiple values with braces, for example, {Checkin Checkout}.
The braces are optional when you specify a single value; for example,
both {Checkout} and Checkout are valid.
```

actionList

```
actionList      The name of the actions to be controlled. The default
                actions are defined in the default Synchronicity
                access control file by 'access define' statements
                and have names such as Checkin, Checkout,
                and Delete. Note: Actions are case sensitive.
```

everyone

```
everyone        Specifies that the access control applies to all users.
```

users

```
users           Specifies the group of users to which the access control
                applies. The 'only' modifier to the users argument
                indicates that users not on the list are assigned
                opposite access permissions. For example,
                'access allow Checkin users Joe' means Joe is allowed to
                check in files, but 'access allow Checkin only users Joe'
                means that nobody other than Joe is allowed to check in
                files. One use of 'only' is to define restrictive access
                rights (deny access to everyone) and then specifically
                grant rights to certain users using the 'only' modifier.
                Users can be named more than once by multiple allow and
                deny commands. Access by users listed as both allowed
                and denied is determined by the last list in which they
                appear.
```

userList

```
userList        The list of users to which 'access allow' or
                'access deny' applies. Surround a multiple list of
```

users with braces; the braces are optional for a single user. Note: User names are case sensitive.

when

when	Use optional 'when' clauses to indicate that the <userList> is only allowed or denied access when the named parameter <parm> (corresponding to the <parameterList> argument of the 'access define' command) matches the glob-style expression given by <globExpr>. If multiple 'when' clauses are used, all of them must match in order for the access rights to be affected; in other words, 'when' clauses are joined with an implicit AND operator.

-because

-because	Use optional -because clauses with 'access allow' and 'access deny' statements to provide a message string to users indicating why an action failed. In 'access allow' statements, use the -because clause with the 'only' modifier to explain under which circumstances the 'only' modifier is restricting access. If an AccessControl file contains multiple 'access allow', 'access deny', or 'access filter' statements for an action, the -because clause of the last 'access allow|deny' statement (or the return message string in the case of an 'access filter' statement) is returned if the action fails. If a -because or return message string is not included in the last 'access allow', 'access deny', or 'access filter' statement, only the default "Permission denied by the AccessControl system" message is returned.

RETURN VALUE

none

SEE ALSO

access filter, access reset, access verify
,

EXAMPLES

The following skeleton example uses the wildcard character passed

```
to access verify to ensure that notes for which users have only
partial view access are not entirely suppressed from the GUI:

access allow ViewNote everyone when id \\*

You also can use constructs of this type for EditNote and
DeleteNote actions.

For additional examples of using 'access allow' and 'access deny,'
see the ENOVIA Synchronicity Access Control Guide.
```

access db_filter

access db_filter Command

NAME

```
access db_filter    - Specify criteria for allowing or denying access
                      for ViewNote or EditNote
```

DESCRIPTION

```
This command lets you specify criteria for allowing or denying
access to users attempting to view or edit notes. The access
db_filter command can be used only for ViewNote and EditNote
filters. For any ViewNote or EditNote action that requires
verifying more than one note, access db_filter performs better
than access filter.

The access db_filter command is used only in scripts in conjunction
with the note query -filter command.

The access db_filter rule always gets a parameter query. When this
rule is invoked by the note query -filter command, this parameter
contains an unfiltered query string. The filter script can use this
unfiltered query in any way. Usually the filter script constructs a
complex query based on the unfiltered query. This complex query then
expresses access control constraints. In this way, access control
verification is done at once for all the notes resulting from the
initial query.

An access db_filter script must use the directives ALLOW, DENY,
ALLOW_ALL, or DENY_ALL. It must not return any value.

Most access rules (access allow, access deny, access filter)
operate on one note at a time and can return only a single value
(ALLOW, DENY or UNKNOWN).

However, an access db_filter rule returns results in a different way
from other rules because it can operate on multiple notes gathered
from the note query command. Instead of returning a tri-state value,
it modifies a tri-state value (0 (denied), 1 (allowed), ? (unknown))
```

```
in a Tcl array.  The access commands use this Tcl array to determine
which notes are passed back to the user through the note query
-filter command.

Before entering an access db_filter block, all notes for which access
is to be determined are stored in the ACCESS array.  Each array value
is initially set to "?", indicating that access has not been
determined.

When an unfiltered query is passed to access db_filter, it is allowed
to modify the array ACCESS as appropriate by the supplied API. When
access is granted, the array element changes to 1; when access is
denied, the element changes to 0. At the end of the rule evaluation,
the array ACCESS is checked for the presence of unknown elements.
If all elements are in a known state, the loop over the rules is
aborted. If, for instance, the last rule in a ViewNote action
list is:

access allow NoteActions masteradmin

this rule is the only one processed for the masteradmin user.

An access db_filter rule never adds entries to the array ACCESS; it
can only modify existing unknown entries (containing "?") and can
never set a value to ?.

When access db_filter is called, the unfiltered query has already
been executed, extracting only ID's. The access db_filter can:

  -Rerun the query, tacking on a filter expression, using
   FILTERED_IDS.

  -Run a related query, and then do its own "join".

When writing custom access db_filter scripts, do not directly access
the ACCESS array. Instead, use the functions provided by the API,
listed in the API FUNCTIONS section.

The access db_filter rule can coexist with other rules, such as access
allow or access deny. All combinations of the note query -filter and
access verify commands with access allow, access deny, access filter,
and access db_filter rules are valid. Different rules for the same
action are applied in the same order as in the current system, with the
last rule providing a definite answer.

You add 'access db_filter' commands to the site or server
AccessControl file within the <SYNC_CUSTOM_DIR> hierarchy (defaults
to <SYNC_DIR>/custom):

Site-wide:
    <SYNC_SITE_CUSTOM>/share/AccessControl
    (where <SYNC_SITE_CUSTOM> defaults to <SYNC_CUSTOM_DIR>/site)
Server-specific (UNIX only):
    <SYNC_CUSTOM_DIR>/servers/<host>/<port>/share/AccessControl

Note: Do not edit any of the access control files in the
$SYNC_DIR/share area; you should edit the site or server AccessControl
```

file. See the ENOVIA Synchronicity Access Control Guide for details on setting up and using access controls.

SYNOPSIS

```
access db_filter <actionList> [when <parm> <globExpr> [when ...]]
                 <script>
```

OPTIONS

- actionList
- when
- script

Note: For the list parameter <actionList>, surround multiple values with braces, for example, {ViewNote EditNote}. The braces are optional when you specify a single value; for example, both {ViewNote} and EditNote are valid.

actionList

actionList	The name of the actions to be controlled - ViewNote and/or EditNote. These actions are defined in the default Synchronicity access control file by 'access define' statements

when

when	Use optional 'when' clauses to indicate that the user is only allowed or denied access when the named parameter <parm> (corresponding to the <parameterList> argument of the 'access define' command) matches the glob-style expression given by <globExpr>. If multiple 'when' clauses are used, all of them must match for the access rights to be affected. In other words, 'when' clauses are ANDed.

script

script	A Tcl script or Tcl statements supplied directly to the 'access db_filter' command and evaluated to determine whether a given user should be allowed or

denied access to the named action for each note returned by the query. When invoked, <script> is passed a parameter named $user that holds the name of the user whose access is in question, in addition to the parameters listed in the access define statement that defined the action.

Another parameter available to the script is $action, which always has either the value EditNote or ViewNote, depending on what action is being verified. Using the $action parameter, you can invoke different commands depending on which action has triggered the filter statement.

An access db_filter script must use the directives ALLOW, DENY, ALLOW_ALL, or DENY_ALL.

API FUNCTIONS

The access db_filter contains the following API functions for accessing the ACCESS array:

ALLOW

ALLOW - This function grants access to a single note and sets the ACCESS array element for that note to "1". For example:

ALLOW $id

ALLOW_ALL

ALLOW_ALL - This function sets all notes as allowed--that is, access is granted. All ACCESS array elements are set to "1". For example:

ALLOW_ALL

CHECK_STAR

CHECK_STAR - This function is used when access is always granted because an asterisk is passed to the access verify command. In this case, the CHECK_STAR function grants access and immediately returns to the calling application code. You therefore do not need to return after calling CHECK_STAR. This function should appear at the top of every access db_filter call unless the asterisk case is handled differently.

See the EXAMPLES section for an example of using this function.

DENY

DENY - This function denies access to a single note and sets the ACCESS array element for that note to "0". For example:

```
DENY $id
```

DENY_ALL

DENY_ALL - This function sets all notes as denied--that is, access is denied. All ACCESS array elements are set to "0". For example:

```
DENY_ALL
```

FILTERED_IDS

FILTERED_IDS - This function returns a filtered list of note IDs based on a set of specified criteria. The variables listed below are available to every access db_filter script. For example:

```
# Other users can access their own notes.
set AC_squery "[sq $user] = f_Author"

set AC_notes [FILTERED_IDS $type $sqlquery $dbquery
$attached $AC_squery <$selectList>]
```

where:

- $type is the note type passed into the filter.
- $sqlquery is the original SQL query passed in to the filter, if any.

```
- $dbquery is the original database query passed in
  to the filter, if any.
- $attached is the URL for note query -attached
  calls passed in to the filter, if any.
- $AC_squery is an additional SQL query describing
  the additional criteria needed to determine access
  on the set of notes.
- $selectList is an optional parameter that allows
  you to specify extra properties from the note type
  that the filter needs to determine access. If you
  specify $selectList, it returns a list of lists in
  the form:  {id prop prop ...} {id prop prop ...}.
```

FOREACH_NOTE

```
FOREACH_NOTE -   This function iterates over the ACCESS array and
                 returns one note at a time, regardless of whether
                 the note has been allowed or denied by a previous
                 ALLOW, DENY, ALLOW_ALL or DENY_ALL command. For
                 example:

                 FOREACH_NOTE <varName> {
                   # Process the note, whose ID is stored in <varName>
                   ALLOW $<varName>
                 }
```

FOREACH_UNKNOWN

```
FOREACH_UNKNOWN -This function iterates over the ACCESS array and
                 returns one note at a time.  Only notes marked as
                 unknown ("?") are returned. For example:

                 FOREACH_UNKNOWN <varName> {
                   # Process the note, whose ID is stored in <varName>
                   DENY $<varName>
                 }
```

SINGLE_NOTE

```
SINGLE_NOTE -    This function checks whether a single note is being
                 access controlled, and returns the note ID for a
                 single note or a null string if there are multiple
                 notes.

                 It is not necessary for access db_filter to know
                 whether a single note or multiple notes are being
                 checked; the filter must be able to handle 0, 1, or
                 multiple notes. However, in some instances, an
                 optimization is possible if you know that a single
                 note is being checked.
```

```
For example:

set noteId [SINGLE_NOTE]
if {$noteId == ""} {
  # Multiple notes are being access controlled
} else {
  # Only one note, $noteId contains the note id
}
```

RETURN VALUE

```
none
```

SEE ALSO

```
access filter, access global, access init, access reset, access verify
```

EXAMPLES

- Set Different Access Rights for a Note
- Create a Filter to View Notes Authored By User

Set Different Access Rights for a Note

```
In this example, the script passed to 'access db_filter' ensures that
SecretIngredient notes can be viewed by anyone if their secrecy level
is low; otherwise, only their Inventor can view these notes. But
SecretIngredient notes can be edited only by their Inventor,
regardless of the secrecy level.

The script sets up a query, filter_squery, an SQL query that gathers
up all the notes whose Inventor is the current user if the action is
EditNote.  The query gathers up both the notes whose Inventor is the
current user and the notes with Secrecy level set to 'low' if the
action is ViewNote. Note that in SQL queries, you must prepend 'f_'
to the property name, for example, 'f_Inventor' and 'f_Secrecy'.
The query is passed to the FILTERED_IDS function which actually
gathers the notes.  Finally, for all the notes that match the query,
the EditNote or ViewNote action is set to ALLOW.

access db_filter {ViewNote EditNote}  when type SecretIngredient {
   CHECK_STAR
   # CHECK_STAR checks if first note Id == '*' and
   # allows action if so; this is used so that the
   # note type shows up in the Quick View panel.

   if {$action == "ViewNote"} {
      set filter_squery "f_Inventor = [sq $user] OR f_Secrecy = 'low'"
```

```
    } else {
       set filter_squery "f_Inventor = [sq $user]"
    }
    set filtered_notes [FILTERED_IDS $type $sqlquery $dbquery \
                        $attached $filter_squery]
    # The FILTERED_IDS function runs a subquery, which
    # is the original query with the filter_squery tacked
    # onto it.



    # filtered_notes now holds a list of notes that matches the
    # original query,
    # AND passed the access checks. Now update the ACCESS map
    # by setting the flag for each note that passed muster and
    # denying those that didn't

    foreach AC_note $filtered_notes {
      ALLOW $AC_note
    }

    FOREACH_UNKNOWN AC_note {
      DENY $AC_note
    }
}
```

Create a Filter to View Notes Authored By User

```
This example creates a filter to display notes authored by the user
who runs the query.

access db_filter ViewNote when type "SyncDefect" {

    # ---------------------------------------------------------------
    # The following variables are available to this filter:
    #
    #     $type . . . . .  The note type
    #     $sqlquery . . .  The original SQL query, passed in from
    #                      the note query command, if any.
    #     $dbquery  . . .  The original DB query, passed in from the
    #                      the note query command, if any.
    #     $attached . . .  A note attachment, passed in from the note
    #                      query -attached command, if any.
    #     $user . . . . .  The user ID of the user requesting access.
    # ---------------------------------------------------------------

    # Check for the "*" operator, which could be sent in from a
    # note panel.  If a "*" is found, the filter will return
    # immediately after granting access.

    CHECK_STAR

    # For purposes of this example filter, allow users to view
    # only the SyncDefect notes that they authored.  Therefore,
```

```
    # build a new SQL query to gather only those notes where the
    # user is the author.

    Set AC_squery "[sq $user] = f_Author "

    # Gather the filtered list of note IDs where the criteria
    # matches the original query and our criteria.

    set AC_ids [FILTERED_IDS \
        $type $sqlquery $dbquery $attached $AC_squery]

    # The variable AC_ids now holds the list of note IDs that
    # pass the original query (say, we queried for all "open" defects)
    # AND match our criteria of the user being the author.  These are
    # the notes the user has access to view. Therefore, we
    # iterate through the ID list and allow each note returned from
    # FILTERED_IDS.

    foreach noteId $AC_ids {
        ALLOW $noteId
    }

    # Now DENY all the notes that did NOT match our criteria.
    # Iterate through all the notes that are still in an UNKNOWN
    # state and DENY them.

    FOREACH_UNKNOWN noteId {
        DENY $noteId
    }
}
```

access define

access define Command

NAME

```
access define       - Define additional actions to be access controlled
```

DESCRIPTION

```
Use the 'access define' command within to specify new actions to be
access controlled.

The pre-defined access control files included with DesignSync define
the actions for which you can control access. See the ENOVIA
Synchronicity Access Control Guide for descriptions of the
pre-defined action definitions and details on setting up and using
access controls.

You use the 'access define' command only to define additional actions
when performing advanced access rights checking.
```

SYNOPSIS

```
access define <action> [<parameterList>]
```

OPTIONS

- action Option
- parameterList Option

```
Note: For list parameters, such as <parameterList>, surround
multiple values with braces, for example, {DRCCheck ERCCheck}.
The braces are optional when you specify a single value; for example,
both {DRCCheck} and DRCCheck are valid.
```

action Option

action	The name of a new action to be defined. The default actions are defined in the default Synchronicity access control file by 'access define' statements. and have names such as Checkin, Checkout, and Delete. Note: Actions are case sensitive.

parameterList Option

parameterList	A list of the arguments required by any access filter scripts or when clauses in 'access allow' or 'access deny' commands.

RETURN VALUE

```
none
```

SEE ALSO

```
access allow, access filter, access reset, access verify
```

EXAMPLES

```
See the ENOVIA Synchronicity Access Control Guide for an example of a
custom action definition.
```

access deny

access deny Command

NAME

```
access deny         - Denies access to the specified actions
```

DESCRIPTION

```
See the "access allow" command.
```

SYNOPSIS

```
access {allow | deny} <actionList> {everyone | [only] users <userList>}
[when <parm> <globExpr> [when ...]] [-because "<message_string>"]
```

access filter

access filter Command

NAME

```
access filter       - Specify criteria for allowing or denying access
```

DESCRIPTION

```
Use 'access filter' in situations where you need to allow, deny or
decline access based on criteria other than simple pattern matching of
the parameters.

To create filters where multiple notes are evaluated for ViewNote or
EditNote actions, you should use the access db_filter command to
improve performance.

See the ENOVIA Synchronicity Access Control Guide for details on
setting up and using access controls.
```

SYNOPSIS

```
access filter <actionList> [when <parm> <globExpr> [when ...]]
              <script>
```

OPTIONS

- actionList
- script
- when

Note: For list parameter <actionList>, surround multiple values with braces, for example, {Checkin Checkout}. The braces are optional when you specify a single value; for example, both {Checkout} and Checkout are valid.

actionList

actionList	The name of the actions to be controlled. The actions are defined in the default Synchronicity access control files by 'access define' statements and have names such as Checkin, Checkout, and Delete. Note: Actions are case sensitive.

script

script	A Tcl script or Tcl statements supplied directly to the 'access filter' command evaluated in order to determine if a given user should be allowed or denied access to the named action. When invoked, <script> is passed a parameter named <user> which holds the name of the user whose access is in question, in addition to the parameters listed in the access define statement that defined the action. You can also pass the parameter <action> which lets you differentiate between actions, such as Checkin or Checkout. Using the <action> parameter, you can invoke different commands depending on which action has triggered the filter statement. For example, if the action is a Checkin, you might want to check the <CommentLen> parameter is a specific length. If the action is a Checkout, you might want to allow only administrators to lock the objects. The order in which a filter is declared relative to the 'access deny' and 'access allow' commands is important. Details are in the "Access Control Search

Order" section of the topic "Setting Up Access Controls", in the ENOVIA Synchronicity Access Control Guide.

The filter script must return a value of ALLOW, DENY, DECLINE, UNKNOWN, or a message string indicating that an action is denied and explaining why. If a message string was not specified, when an action is denied, only the default "Permission denied by the AccessControl system" message is returned.

The return value of ALLOW allows the action, overriding DENY values already processed for the same operation. Likewise, the return value of DENY prevents the action, overriding ALLOW values already processed for the action. Unlike ALLOW and DENY, the return value of UNKNOWN causes the access control system to continue as if the filter had never been invoked.

The return value of DECLINE causes the appropriate Member access control to be called. The effective return value is then the result of that Member access control. Or, if there is no Member access rule, then DENY is returned.

In general, set the overall access controls you want to enforce. Then use an access filter to return ALLOW or DENY if you want to explicitly override those default rules. Otherwise, return UNKNOWN.

Note: Any value other than ALLOW, DENY, DECLINE or UNKNOWN is treated as DENY. Any uncaught exceptions are treated as DENY. For example, if you return a message string rather than DENY, the action is denied and users receive the string as an error message in addition to the default "Permission denied by the AccessControl system" message.

when

when

Use optional 'when' clauses to indicate that the user is only allowed or denied access when the named parameter <parm> (corresponding to the <parameterList> argument of the 'access define' command) matches the glob-style expression given by <globExpr>.

If multiple 'when' clauses are used, all of them must match in order for the access rights to be affected; in other words, 'when' clauses are joined with an implicit AND operator.

RETURN VALUE

```
none
```

SEE ALSO

```
access allow, access deny, access db_filter, access global,
access init, access reset, access verify
```

EXAMPLES

```
The following skeleton example uses the wildcard character passed
to access verify to ensure that notes for which users have only
partial delete access are not entirely suppressed from the GUI:

access filter DeleteNote when type ... {
  if {$id == "*"} {
   return ALLOW
  }
  ...
}

For other examples of using "access filter", see the Access Control
Guide.
```

access global

access global Command

NAME

```
access global       - Defines global variables and procs for
                      access filters
```

DESCRIPTION

```
Access filters let you allow or deny access based on criteria
beyond simple pattern matching of the parameters. You define static
variables and procs within 'access global' commands. (See 'access
init' for defining dynamic data.) To use a global variable in an
access filter, it must be declared as a global within the filter.

Unlike a normal Tcl script, the AccessControl files (both system
and custom) are sourced only once, at startup. When an 'access verify'
command is executed, only those commands given as part of access filter
scripts are evaluated. Therefore, any variables or procs defined
outside of the access commands are unknown by the Tcl interpreter. Do
not define any code or data outside either an 'access global' or
```

'access init' block.

For variables and procs to be available to the access filter scripts, they must be defined within the <script> parameter passed to either 'access global' or 'access init'. Each 'access global' block is sourced once when the access control system initializes and at every "access reset" command. The 'access global' scripts are evaluated in the order in which they appear in the custom AccessControl file.

You cannot specify a list of actions for the 'access global' command (unlike 'access init'). The 'access global' scripts are executed for all actions.

See the ENOVIA Synchronicity Access Control Guide for details on setting up and using access controls.

Important: The 'access global' code block runs inside a Tcl namespace called '::SyncAC'. Any variables that the global code block sets or procs that it defines reside in that namespace. When you use these variables or procs in other access filters, qualify them using the '::SyncAC' namespace qualifier, rather than the Tcl global qualifier '::'. Note that access filters let you qualify a variable or proc with the Tcl global namespace '::'. However, in this case, the variable or proc resides in the global namespace which is reset upon every request. Thus, these variables and procs are not visible to subsequent access filters. Note that 'access init' blocks reside in the global namespace, thus they do not need the '::SyncAC' namespace qualifier. See the EXAMPLES section for an example of the '::SyncAC' namespace qualifier.

SYNOPSIS

```
access global <script>
```

OPTIONS

- script

script

script	A Tcl script or Tcl statements that initialize the variables and procs used in the 'access filter' command for the specified actions.

RETURN VALUE

none

SEE ALSO

```
access filter, access init, access allow,, access reset,
access verify
,
```

EXAMPLES

```
This example shows how to use 'access global' and demonstrates how
the 'access global' command differs from 'access init.' The example
sets up two lists of administrators, globalAdmins and filterAdmins.
The globalAdmins list is set up in an 'access global' block; the
filterAdmins list is set up in an 'access init' block. The AddNote
access filter demonstrates the use of the two lists. If a user is
contained in either of the lists, the filter allows permission.
Otherwise, the filter denies permission.

To use the globalAdmins list in an access filter, it must be first be
declared as a global variable in the filter. Anything declared inside
an access global block resides in the ::SyncAC namespace rather
than the global namespace (::) and needs to be referenced inside
access filters using the ::SyncAC namespace qualifier.

The filterAdmins variable does not need to be declared in the access
filter because it is set up in an 'access init' block, which is sourced
at the time the filter is run and is in the global scope of the filter.

 access global {
       set globalAdmins "norm barb mitch betty"
 }

 access init {
        set filterAdmins "mark deb sal"
 }

 access filter AddNote {
        global globalAdmins

        if {[lsearch -exact $::SyncAC::globalAdmins $user] == -1} {
                if {[lsearch -exact $filterAdmins $user] == -1} {
                        return DENY
                } else {
                        return UNKNOWN
                }
        } else {
                return UNKNOWN
        }
 }

In the example, the return value UNKNOWN defers to any other access
controls that might be set. If no other access control denies access,
the user is allowed to add a note.

For other examples of using "access global", see the Access Control
```

Guide.

access init

access init Command

NAME

access init - Defines variables and procs

DESCRIPTION

You use access init to create variables for both access filters and for use within simple access allow/access deny rules. You also can use access init to create procs for use in access filters.

Access filters let you allow or deny access based on criteria beyond simple pattern matching of the parameters. You define dynamic variables and procs for access filters within 'access init' commands. (See 'access global' for defining static data.) When possible, you should use access global to avoid performance penalties. Because an access init statement is sourced each time a filter is run, operations such as viewing a note can become unacceptably slow. The access global command, which is used inside filter scripts, is sourced only once, when the access control system is initialized.

Unlike a normal Tcl script, the AccessControl files (both system and custom) are sourced only once, at startup. When an 'access verify' command is executed, only those commands given as part of access filter scripts are evaluated; any variables or procs defined outside of the access commands are unknown by the Tcl interpreter. Do not define any code or data outside either an 'access init' or 'access global' block.

In order for variables and procs to be available to access filter scripts, they must be defined within the <script> parameter passed to 'access init' or 'access global'. The 'access init' scripts are evaluated in the order in which they appear in the custom AccessControl files. By default, all 'access init' scripts are evaluated before any 'access filter' script is evaluated. However, you can specify that an 'access init' script be evaluated only before access filters verifying a particular type of action. To do this, include the type of action within the <actionList> parameter of the 'access init' statement. See the example of an <actionList> within the 'access init' example below.

Although code in 'access init' statements is executed when filters are run, it also is available immediately for use by access allow/access deny rules that follow the 'access init' definition.

See the ENOVIA Synchronicity Access Control Guide for details on setting up and using access controls.

SYNOPSIS

```
access init [<actionList>] <script>
```

OPTIONS

- actionList
- script

```
Note: For list parameter <actionList>, surround multiple values with
braces, for example, {Checkin Checkout}. The braces are optional when
you specify a single value; for example, both {Checkout} and Checkout
are valid.
```

actionList

```
actionList      The name of the access filter actions for which the
                access init <script> will be sourced.  If no
                actionList is provided, the 'access init' script
                is evaluated before any access filter is executed
                and the script is executed for all actions.
```

script

```
script          A Tcl script or Tcl statements that initialize
                the variables and procs used in the 'access filter'
                command for the specified actions.
```

RETURN VALUE

```
none
```

SEE ALSO

```
access filter, access global, access allow, access reset,
access verify
```

EXAMPLES

```
This example shows an 'access init' statement that includes an
<actionList> argument.  The 'access init' statement is defined
for the Checkin action; thus, this 'access init' is evaluated
only before Checkin access filters.  If the <actionList> argument
(Checkin) were not included, the 'access init' would be evaluated
before any access filters are evaluated.

# Set up a variable that defines the project leader
access init Checkin {
   set projectLeader karen
}

# Only the project leader can check in
access filter Checkin {
   if {$user == $projectLeader} {
      return ALLOW
   }
   return "You must be projectleader to check in."
}

For other examples of using "access init", see the Access Control
Guide.
```

access list

access list Command

NAME

```
access list         - Returns a list of defined access controls
```

DESCRIPTION

```
The access list command returns a list of defined access actions.
```

SYNOPSIS

```
access list -actions
```

OPTIONS

- -actions

-actions

```
-actions              The list of defined access action types.
```

RETURN VALUE

```
A space delimited list of the defined access controls appropriate to
the options selected.
```

SEE ALSO

```
access allow, access deny, access define
```

EXAMPLES

```
access list -actions
returns "Mkmod DeleteMirror EditMirror SwitchLocker ..."
```

access reset

access reset Command

NAME

```
access reset        - Updates a SyncServer's access controls
```

DESCRIPTION

```
This server-side command causes the SyncServer to reread the
AccessControl files, which causes any changes in access controls
to take effect. All processes of a multi-process server are
affected by 'access reset', not just the process that receives the
request.

A SyncServer reads the AccessControl files upon startup, so
stopping and restarting the SyncServer also updates access
controls. Using 'access reset' avoids having to stop and restart
the SyncServer, thereby not interrupting users' access to the
SyncServer.

To update a SyncServer's access controls:

1. Modify the access control files as needed.

   See the ENOVIA Synchronicity Access Control Guide for details on
   setting up and using access controls.
```

```
2. Create a file with a .tcl extension containing the
   'access reset' command in one of the Synchronicity Tcl script
   directories:

   Site-wide:
      <SYNC_SITE_CUSTOM>/share/tcl
      (where <SYNC_SITE_CUSTOM> defaults to <SYNC_CUSTOM_DIR>/site)
   Server-specific (UNIX only):
      <SYNC_CUSTOM_DIR>/servers/<host>/<port>/share/tcl
      (where <SYNC_CUSTOM_DIR> defaults to <SYNC_DIR>/custom)

3. Execute the script on the server using one of the following methods:

   o From your browser, specify the following URL:
     http://<host>:<port>/scripts/isynch.dll?panel=TclScript&file=<filename>

   o From a DesignSync client, specify the following command:
     rstcl -server sync://<host>:<port> -script <filename>

   where <filename> is the name of your script containing the
   'access reset' command.

See the "server-side" and "rstcl" help topics for additional
information on executing server-side scripts.

Note:

- ProjectSync provides an Access Reset option on the ProjectSync
  menu. Use this method for resetting access controls if you are a
  ProjectSync user and have privileges to use the Access Reset
  option (the Access Reset option from ProjectSync can be access
  controlled).

- When you execute the script containing the access reset command,
  the access reset command checks the AccessControl file for
  syntactic errors before changing the server state. If the file
  contains such errors, the command aborts, leaving the server
  state (and access controls) unchanged.

- Errors in an AccessControl file can cause your server to become
  unresponsive if the errors are not corrected quickly. To avoid this
  problem, correct access control errors immediately and reset the
  server.
```

SYNOPSIS

```
access reset
```

OPTIONS

```
none
```

RETURN VALUE

```
none
```

SEE ALSO

```
stcl, rstcl, server-side, access verify
```

EXAMPLES

```
This example updates the holzt:2647 server with a site-wide
access control that stops users from unlocking files they do
not own.

1. Add the following line to <SYNC_SITE_CUSTOM>/share/AccessControl:
     access deny Unlock everyone when IsLockOwner "no"

   Note: <SYNC_SITE_CUSTOM> defaults to <SYNC_CUSTOM_DIR>/site which
   defaults to <SYNC_DIR>/custom/site.

2. In <SYNC_SITE_CUSTOM>/share/tcl, create 'reset.tcl' that
   contains the following line:
     access reset

3. Execute the script using one of the following methods:
   o From your browser, issue the following URL:
     http://holzt:2647/scripts/isynch.dll?panel=TclScript&file=reset.tcl

   o From a DesignSync client (dssc in this example), execute the
     following command:
     dss> rstcl -server sync://holzt:2647 -script reset.tcl
```

access verify

access verify Command

NAME

```
access verify       - Determines whether a user is allowed to
                      perform an action
```

DESCRIPTION

This server-side command checks whether the given user is allowed to perform the named action. Use 'access verify' to check access controls explicitly in server-side scripts; server-side scripts do not automatically perform the named action.

For ViewNote, EditNote, and DeleteNote filters, you can use a special application of access verify to determine whether a user can access any notes of that type. You can pass in an asterisk as a wildcard for the value of a note ID. Any ViewNote, EditNote, or DeleteNote allow/deny/filter rule treats this wildcard specially and answers whether the specified user can access notes of that type. If the answer is DENY, then the user does not see the note type name in certain contexts (e.g., it disappears from QuickView because the user does not have the right to access any notes of that type). See the entries for access allow, access deny, and access filter for examples of how to use the wildcard in scripts with these commands.

SYNOPSIS

```
access verify <action> <user> [<arg> [...]] [-why <var>]

access verify <note_action> <note_system> <note_type> *
```

ARGUMENTS

- action
- args
- note_action
- note_system
- note_type
- user
- -why

action

action	The name of the action to be checked. The actions are defined in the access control file by "access define" statements and have names such as Checkin, Checkout, and Delete.

args

args	The definition of the action in the access control file includes a list of parameters that give additional information about the action. These parameters are used in 'when' clauses and filter scripts in the access control file to determine if access will be allowed or denied. You must pass a value for each of these

parameters to the access verify command to make this information available to the commands in the access control file.

note_action

<note_action> The ViewNote, EditNote, or DeleteNote action, when you want to pass as asterisk as a wildcard for the note ID number.

note_system

<note_system> The name of the note system, which is always SyncNotes.

note_type

<note_type> The name of the note type to be checked for access.

* A wildcard character that stands for any note ID number.

user

user The user name of the user whose access to the given action is being determined.

-why

-why The definitions of access allow, deny, and filter statements in the access control file can include message strings describing why access has been denied. Use the -why option to retrieve this message from an action's access allow, deny, or filter statement and store it in the named variable. You can also set the variable to an appropriate message string directly. If the access statement provides no message string, the named variable is set to "access denied". If the named variable already exists and the access statement provides no message string, the variable's value remains unchanged.

See the ENOVIA Synchronicity Access Control Guide for information on the pre-defined access control files.

RETURN VALUE

```
0 (Tcl FALSE) - user is not allowed access to the named action.
1 (Tcl TRUE)  - user is allowed access to the named action.
2 - additional rules need to be invoked, to determine whether the user
    has access to the named action.
```

SEE ALSO

```
access allow, access deny, access filter, stcl, rstcl, server-side
```

EXAMPLES

Verifying Access Rights for a User

```
This example determines whether user 'joe' has access rights to
add the version tag "Release" to top.v. Note that you do not specify a
host:port in the Object (top.v) URL (see the "server-side" help topic
for more information).

 if {[access verify Tag $SYNC_User {sync:///Projects/ASIC/top.v} \
     Release ADD VERSION]} {
   puts "$SYNC_User is allowed to tag top.v Release"
 } else {
   puts "Nice try, $SYNC_User"
 }
```

Using the Default "why" Message

```
This example shows the default message issued because the variable,
message, is not set. If a message is included in the -because or return
clause of the access allow, deny, or filter statement for the
action, the named variable is set to that message.

# Just use the default message.
# output -> "access denied"
  unset message
  if {![access verify CustomTag $SYNC_User -why message]} {
      puts $message
  }
```

Using a Custom "why" Message

```
This example shows how to use the variable, message, to issue a
descriptive message explaining why access is denied. If a message is
included in the -because or return clause of the access allow, deny,
or filter statement for the action, the named variable is set to that
message.

# Use a descriptive default message.
# output -> "Sorry, only project leader can perform CustomTag."
  set message "Sorry, only project leader can perform CustomTag."
  if {![access verify CustomTag $SYNC_User -why message]} {
      puts $message
  }
```

Using a Wildcard for note ID

```
This example passes a wildcard as the value of the note ID and
returns if access is not granted.

if {![access verify ViewNote $SYNC_User SyncNotes $noteType *]} {
    return
}
```

Authentication

password

password Command

NAME

```
password            - Stores a user's name and password
```

DESCRIPTION

```
This command allows you to save a userID and password for a DesignSync
 server or a 3DPassport Central Authentication Server, eliminating the
 need to manually authenticate.  This allows the user to run
 background jobs without requiring user input.

 The username, password, and server information is saved in the user's
 registry, the UserRegistry.reg file.  Whenever the user accesses the
 specified server from any system, the saved password is used.

 Note: The saved login information is sent to the server for all
 queries, even if authentication isn't required.  If authentication is
 not required, this command succeeds regardless of the supplied values.
```

To use the command, enter the server on the command line with the -save option, then enter the username and password when prompted.

When using the password command with the 3DPassport server, the login is persistent for the command-line and graphical clients. This provides the ability to use the 3DPassport single-signon functionality. For information on using 3DPassport, see the DesignSync Data Manager Administrator's Guide: Enabling 3DPassport.

Note: The password command does not save the password for Web authentication. If you are using a web-based application, you may need to log in again through that interface.

SYNOPSIS

```
password -save <ServerURL>
```

OPTIONS

- save_option

```
-save          Specify the DesignSync URL for the server connection
 <serverURL>   appropriate for the username/password you are saving
               in the form:
               sync[s]://<host>[:<port>]
               where <host> is the hostname of the SyncServer and
              <port> is the SyncServer port number.
```

RETURN VALUE

This command does not return any TCL values. If the server cannot be reached, or the account does not exist on the server, the password is saved but not authenticated.

SEE ALSO

dssc, stclc, dss, stcl

EXAMPLES

This example shows how to save the username and password for the specified server.

```
dss> password -save sync://srv2.ABCo.com:2647
```

```
Please enter account information for Synchronicity, host srv2.ABCo.com:2647.
Username: rsmith
Password: ***********
Password confirmed and saved.
```

Command Defaults

defaults Command

NAME

```
defaults            - Commands for the command defaults system
```

DESCRIPTION

```
The "defaults" commands are used to set default values for command
options, for commands run from the command line. For general
information about the command line defaults system, in a DesignSync
command shell, enter: help "command defaults"

To display a list of available "defaults" commands, in a DesignSync
command shell, enter: defaults <Tab>
```

SYNOPSIS

```
defaults <defaults_command> [<defaults_command_options>]

Usage: defaults [commands|off|on|refresh|set|show|state]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
defaults commands, defaults off, defaults on, defaults refresh,
defaults set, defaults show, defaults state, command defaults
```

EXAMPLES

```
See specific "defaults" commands.
```

defaults

defaults Command

NAME

```
defaults            - Commands for the command defaults system
```

DESCRIPTION

```
The "defaults" commands are used to set default values for command
options, for commands run from the command line. For general
information about the command line defaults system, in a DesignSync
command shell, enter: help "command defaults"

To display a list of available "defaults" commands, in a DesignSync
command shell, enter: defaults <Tab>
```

SYNOPSIS

```
defaults <defaults_command> [<defaults_command_options>]

Usage: defaults [commands|off|on|refresh|set|show|state]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
defaults commands, defaults off, defaults on, defaults refresh,
defaults set, defaults show, defaults state, command defaults
```

EXAMPLES

```
See specific "defaults" commands.
```

defaults commands

defaults commands Command

NAME

```
defaults commands   - Lists the commands that support the defaults system
```

DESCRIPTION

```
Lists the commands that support the defaults system. Those commands can
have default values set for them, by using the "defaults set" command.
```

SYNOPSIS

```
defaults commands
```

RETURN VALUE

```
A list of the commands that accept default values. The order of the
entries in the list is non-deterministic. For a family of commands, its
sub-commands are listed.

For example:
    {replicate {addroot data showroots showdata rmroot rmdata disable
    reset enable setoptions scrub masrename}}
```

SEE ALSO

```
defaults on, defaults refresh, defaults set, defaults show,
defaults state, command defaults
```

EXAMPLES

```
To list all commands that support the command defaults system:

stcl> defaults commands
 vhistory rmlogin showmcache {view {check get list put remove}} tag
 mkmod {replicate {addroot data showroots showdata rmroot rmdata
 disable reset enable setoptions scrub masrename}} mvfile unfreezemod
 showstatus contents mkbranch compare hcm lock {mcache {scan touch
 scrub show}} annotate rmfolder remove addbackref upgrade add
 reconnectmod switchlocker mvmod showmods migratetag edithrefs rmmod
 exportmod ci showlogins addhref cancel setview freezemod co populate
 rmfile mvfolder showhrefs unremove importmod purge showlocks
 rmversion addlogin {sitr {env integrate lookup mkbranch mkmod
 populate release select status submit update}} rmvault mvmember
 {swap {replace restore show}} retire unlock rmhref whereused version
 ls

stcl>
```

defaults off

defaults off Command

NAME

```
defaults off        - Disables the command defaults system
```

DESCRIPTION

```
Disables the command default system. If you do not specify an <expr>,
the command default system is disabled until a subsequent "defaults on"
command is run within the current client session. When a DesignSync
client is started, the command defaults system is enabled.

If you do specify an <expr>, the command defaults system is disabled for
the duration of the execution of the supplied Tcl expression.

The "defaults off" and "defaults on" commands do not "nest". The caller
of those commands must ensure that the command defaults system is in
the correct state at any time.

Use the "defaults state" command to show whether the command defaults
system is current enabled or disabled.

To disable the command defaults system when running an individual
command, specify the "-nodefaults" option to the command. Use "defaults
off" if you are calling a user-defined procedure or alias that itself
calls one or more DesignSync commands.
```

SYNOPSIS

```
defaults off [<expr>]
```

RETURN VALUE

```
If you do not specify an <expr>, the state value "off" is returned. If
you do specify an <expr>, the result of that <expr> is returned. If the
<expr> throws an error, "defaults off" will throw an error.

When an <expr> is specified, the state of the command defaults system is
always returned to what it was originally, even if the <expr> threw an
error.
```

SEE ALSO

```
defaults commands, defaults on, defaults refresh, defaults set,
defaults show, defaults state, command defaults
```

EXAMPLES

```
This example shows what happens when you set a default on a command,
run the command. The example sets the default "-report verbose" for
the ls command and then shows running the command with the default
mode disabled.

stcl> defaults set -- ls -report verbose

The "defaults show" command confirms the default setting for "ls":

stcl> defaults show ls
{ls {-report verbose}}
stcl>

"ls" of an object, without specifying a "-report" option, uses the saved
default mode of "-report verbose" (instead of the out-of-the-box default
mode of "-report normal"):

stcl> ls samp.asm
Object Type  Time Stamp             Status  Version  Locked By  Name
-----------  ----------             ------  -------  ---------  ----
File         05/25/1997 22:04   Up-to-date  1.1                samp.asm
Original Log: --> Created by tbarbg10 @05/26/2006 09:40:10
               --> Old DAC demo files
Version Tags: Latest
 Branch Tags: Trunk
stcl>
```

```
To ignore saved default values while a command is run, preface the
command invocation with "defaults off". For example, if the command
defaults system is disabled while an "ls" is run, that "ls" will use
the out-of-the-box default mode of "-report normal":

stcl> defaults off ls samp.asm
Time Stamp             WS Status  Version   Type        Name
----------             ---------  -------   ----        ----
05/25/1997 22:04                  1.1       Copy        samp.asm
stcl>
```

defaults on

defaults on Command

NAME

```
defaults on          - Enables the command defaults system
```

DESCRIPTION

```
Re-enables the command default system. The command defaults system is
enabled by default. The command defaults system remains enabled within
a client session until the "defaults off" command is run.

The "defaults off" and "defaults on" commands do not "nest". The caller
of those commands must ensure that the command defaults system is in
the correct state at any time.
```

SYNOPSIS

```
defaults on
```

RETURN VALUE

```
The state value "on".
```

SEE ALSO

```
defaults commands, defaults off, defaults refresh, defaults set,
defaults show, defaults state, command defaults
```

EXAMPLES

```
The example shows enabling and disabling the command defaults system,
and using the "default state" command to show whether defaults is
enabled.

stcl> defaults off
off
stcl> defaults state
off
stcl> defaults on
on
stcl> defaults state
on
stcl>
```

defaults refresh

defaults refresh Command

NAME

```
defaults refresh    - Refreshes the command defaults system
```

DESCRIPTION

```
Refreshes the command defaults system, by re-reading the registry files
sourced by the DesignSync client on startup. Default values set via the
command defaults system are used by the DesignSync client from which the
default values were set. If you saved default values in concurrent
DesignSync client sessions, run the "defaults refresh" command to read
all saved default values.

Similarly, if default values were saved by a project lead or site
administrator, run "defaults refresh" to read default values from all
client registry files. See the DesignSync Data Manager User's Guide
topic "Registry Files" for further information. New DesignSync client
sessions read all saved default values (from registry files) on
startup.
```

SYNOPSIS

```
defaults refresh
```

RETURN VALUE

```
Not defined.
```

SEE ALSO

```
defaults commands, defaults off, defaults on, defaults set,
defaults show, defaults state, command defaults, sregistry scope
```

EXAMPLES

```
This example shows what happens when a default on a command
in a different client than the one you're using, and you want to
refresh your client to read in the new default value.

stcl> defaults set -- ls -report verbose
stcl>

"defaults show" shows that the only saved default value for "ls" is
the report mode:

stcl> defaults show ls
{ls {-report verbose}}
stcl>

In another stclc session, you save another default value for "ls":
stcl> defaults set -- ls -report verbose -recursive
stcl>

Back in the stclc session from which you set the "-report verbose"
default value, "-report verbose" is still the only default value saved
for "ls":

stcl> defaults show ls
{ls {-report verbose}}
stcl>

Still in the stclc session from which you set the "-report verbose"
default value, you run "defaults refresh", to re-read the client
registry files:

stcl> defaults refresh
stcl>

Now, that initial stclc recognizes the default values that were saved
in the other stclc session:

stcl> defaults show ls
{ls {-recursive -report verbose}}
stcl>
```

defaults set

defaults set Command

NAME

```
defaults set        - Defines the default values for a command
```

DESCRIPTION

```
Defines the default values for a command or sub-command. For a default
value to apply to all commands that support the specified option, specify
a <command> value of "*". For a default value to apply to a family of
commands, specify the parent command as the <command> value. For example,
a <command> value of "access" applies the specified default values to all
"access" sub-commands that support the specified option.

Note: The values set as the new command default REPLACE the
previously set command defaults. All previously set defaults
specified for the same command level are removed.  For example, if
you have changed the report mode for the replicate command set, it
will not remove the defaults set on the specific replicate commands.
For more clarification, see the examples section.

"defaults set" saves defaults for the user. To set default values for a
project team, or for all users at a site, use the "sregistry scope"
command. See the "sregistry scope" command documentation for details.

To set a command line default value for the fetch state, specify the
exact option name used by a command. To specify local copies as the
default fetch state value, set the "-keep" option for the "cancel" and
"ci" commands. And set the "-get" option for the "co" and "populate"
commands.

To remove the saved default values for a command, specify empty double
quotes ("") as the option value. See the Examples section for syntax.
```

SYNOPSIS

```
defaults set [-temporary | -nooverrule] -- <command> <option>
             [<option> ...]
```

OPTIONS

- -nooverrule
- -temporary
- --

-nooverrule

```
-nooverrule    The saved default value cannot be overridden. This option
               is intended for project leaders or site administrators.
```

When using the "sregistry scope" command to set a default value for a project, specifying "-nooverrule" prevents a user's saved default value from overriding the project's default value.

Similarly, when using the "sregistry scope" command to set a site-wide default value, specifying "-nooverrule" prevents project and user saved default values from overriding the site's default value.

Command options specified by the user will be used, taking precedence over a "-nooverrule" setting.

-temporary

-temporary — The saved default value applies only to the DesignSync client session from which the "defaults set" command was run.

--

-- — Indicates that the command should stop looking for command options. Use this option when an argument to the command begins with a hyphen (-).

RETURN VALUE

Not defined.

SEE ALSO

defaults commands, defaults off, defaults on, defaults refresh, defaults show, defaults state, command defaults, sregistry scope

EXAMPLES

- Example of Setting the Default Options for a Specific Command
- Example of Resolving Default Conflicts
- Example of Clearing the Defaults
- Example of Setting Defaults for All Commands

Example of Setting the Default Options for a Specific Command

```
This example sets the following options for the ls command:
 * Sets the -report mode to "status"
 * Sets the -[no]path option to path

stcl> defaults set -- ls -report status -path

To see the saved defaults for the "ls" command
stcl> defaults show ls
{ls {-report status -path}}
```

Example of Resolving Default Conflicts

```
This example shows how DesignSync resolves set default conflicts.
Locally, you have set the default defined in Example 1.  Your project
team leader uses the "sregistry scope" command to save "-fullpath" as
a default option to "ls".

Adding the "-source" option to "defaults show" shows the two different
(mutually exclusive) options that were saved at the user level ("-path")
and at the project level ("-fullpath"):

stcl> defaults show -source ls
{ls temporary {} project -fullpath project_nooverrule {}
user {-report status -path} user_nooverrule {} site {}
site_nooverrule {} enterprise {} enterprise_nooverrule {}}

The default value saved by the user ("-path") takes precedence, because
the project leader did not specify "-nooverrule". (The project_nooverrule
value in the "defaults show" output above is empty.) That is why
"defaults show" (without "-source") still shows the default "-path"
value that you saved:

stcl> defaults show ls
{ls {-report status -path}}
```

Example of Clearing the Defaults

```
This example shows how to remove your saved default values for the
"ls" command:
stcl> defaults set ls ""

Using the settings from example 2, the default "-fullpath" value is
still valid because it was set at the project level:

stcl> defaults show ls
{ls -fullpath}
stcl> defaults show -source ls
{ls temporary {} project -fullpath project_nooverrule {} user {}
user_nooverrule {} site {} site_nooverrule {} enterprise {}
enterprise_nooverrule {}}
```

Example of Setting Defaults for All Commands

```
This example shows setting the "-recursive" option as the default
behavior for all commands that support the command defaults system
(and have a "-recursive" option):

Note: This does not remove any previously set defaults on specific
commands or command sets.  If you look at the ls command in the
"defaults show" results displayed in this example, you will see that
the command defaults set in the Example 1, for ls, are still set.

stcl> defaults set -- * -recursive

To see which commands now have "-recursive" saved as their default
behavior:

stcl> defaults show
{vhistory -recursive} {rmlogin {}} {showmcache {}} {view {}} {{view
check} {}} {{view get} {}} {{view list} {}} {{view put} {}} {{view
remove} {}} {tag {-recursive -report normal}} {mkmod {}} {replicate
{}} {{replicate addroot} {}} {{replicate data} {}} {{replicate
showroots} {}} {{replicate showdata} {}} {{replicate rmroot} {}}
{{replicate rmdata} {}} {{replicate disable} {}} {{replicate reset}
{}} {{replicate enable} {}} {{replicate setoptions} {}} {{replicate
scrub} {}} {{replicate masrename} {}} {mvfile {}} {showstatus
-recursive} {contents -recursive} {mkbranch -recursive} {compare
-recursive} {hcm -recursive} {lock {}} {mcache {}} {{mcache scan} {}}
{{mcache touch} {}} {{mcache scrub} {}} {{mcache show} {}} {annotate
{}} {rmfolder -recursive} {remove -recursive} {addbackref -recursive}
{upgrade {}} {add {-recursive -report normal}} {switchlocker {}}
{showmods {}} {migratetag {}} {rmmod -recursive} {ci {-recursive
-report normal}} {showlogins {}} {addhref {}} {cancel -recursive}
{setview -recursive} {co -recursive} {populate {-recursive -report
normal}} {mvfolder {}} {rmfile {}} {showhrefs -recursive} {unremove
{}} {purge -recursive} {rmversion {}} {showlocks -recursive}
{addlogin {}} {sitr {}} {{sitr env} {}} {{sitr integrate} {}} {{sitr
lookup} {}} {{sitr mkbranch} {}} {{sitr mkmod} {}} {{sitr populate}
{}} {{sitr release} {}} {{sitr select} {}} {{sitr status} {}} {{sitr
submit} {}} {{sitr update} {}} {mvmember {}} {swap {}} {{swap
replace} {}} {{swap restore} {}} {{swap show} {}} {retire -recursive}
{rmvault {}} {unlock -recursive} {rmhref {}} {whereused -recursive}
{version {}} {ls {-recursive -report status -path}} {* -recursive}

If you want an option, as in this example, -recursive, to be the
default for the majority of command that support it, but have
specific commands for which you would prefer a different mode, you
can set the different mode as a specific default on the command.

Note: The show output is truncated for clarify.

stcl> defaults set -- populate -norecursive

stcl> defaults show

{vhistory -recursive} {rmlogin {}} {showmcache {}} {view {}}
...
```

```
{setview -recursive} {co -recursive} {populate -norecursive}
...
{ls {-recursive -report status -path}} {* -recursive}
```

defaults show

defaults show Command

NAME

```
defaults show       - Shows the current default values for a command
```

DESCRIPTION

```
Shows the current default values for a command or sub-command. If no
<command> is specified, then the current default values for all commands
and sub-commands are reported.

A <command> value of "*" will show the current default values saved
against "*". Those default values will be applied to all commands that
take those options.

If a sub-command is specified as the <command> value, such as
"replicate disable", default values for the specific sub-command
("replicate disable" in this case), its parent command ("replicate"
in this example) and any global default values will be
shown. Similarly, the results for a command combine the default
values for the specific command, with any global default values.

If a sub-command is specified as the <command> value and the -source
option is selected, the default command returns ONLY the default
values for the specific command.  The reply does not include any
global defaults or any parent command defaults.
```

SYNOPSIS

```
defaults show [-source] [<command>]
```

OPTIONS

- -source

-source

```
-source         When specified, the output indicates where the default
```

value is saved. By default, command default values are stored for the user who ran the "defaults set" command. Default values can also be stored for a project, or site-wide. See the "sregistry scope" command for details.

When you specify both a command and the -source option, the command output displays ONLY the command default values associated with that command. Any values set on a parent command or globally do not display.

RETURN VALUE

A list, where each entry in the list is the current setting of defaults for a command or subcommand. The order of the entries in the list is non-deterministic.

SEE ALSO

defaults commands, defaults off, defaults on, defaults refresh, defaults set, defaults state, command defaults, sregistry scope

EXAMPLES

An example in the "defaults set" command documentation sets "-recursive" as the default behavior, for every command that supports the command defaults system (and has a "-recursive" option).

After having saved the global "-recursive" default, "defaults show" shows the default "-recursive" value for the "tag" command:

```
stcl> defaults show tag
{tag -recursive}
```

Next, let's save "-modified" as default behavior for the "tag" command:

```
stcl> defaults set -- tag -modified
```

Now, "defaults show" shows both the global "-recursive" option, and the "-modified" default value that was explicitly saved for the "tag" command.

```
stcl> defaults show tag
{tag {-recursive -modified}}
```

The above output from "defaults show" shows the combined defaults for the "tag" command. This represents exactly what options will be applied when the "tag" command is run.

```
Adding the "-source" option to the "defaults show" command shows where
the default values for the "tag" command were saved.

stcl> defaults show -source tag
{tag temporary {} project {} project_nooverrule {} user -modified
user_nooverrule {} site {} site_nooverrule {} enterprise {}
enterprise_nooverrule {}}

The above output shows that the "-modified" option to "tag" was saved at
the user level. The "-recursive" option is not shown, because that option
was saved globally.

For global default values, specify "*" as the command:

stcl> defaults show -source *
{* temporary {} project {} project_nooverrule {} user -recursive
user_nooverrule {} site {} site_nooverrule {} enterprise {}
enterprise_nooverrule {}}

The above output shows that the "-recursive" option was set globally, at
the user level.
```

defaults state

defaults state Command

NAME

```
defaults state      - Returns the state of the command defaults system
```

DESCRIPTION

```
Returns whether the command defaults system is currently enabled ("on")
or disabled ("off").
```

SYNOPSIS

```
defaults state
```

RETURN VALUE

```
The state value "on" or the state value "off".
```

SEE ALSO

```
defaults commands, defaults off, defaults on, defaults refresh,
defaults set, defaults show, command defaults
```

EXAMPLES

```
This example shows the default state with the command defaults system
enabled and disabled.

stcl> defaults state
on
stcl> defaults off
off
stcl> defaults state
off
stcl>
```

Custom Type System

Custom Type Packages

ctp

ctp Commands

NAME

```
ctp                 - Commands to list and verify Custom Type Packages
```

DESCRIPTION

```
The 'ctp' commands help you to manage the installed Custom Type
Packages (CTPs).  You can list the CTPs using 'ctp list' and
debug your CTPs using the 'ctp verify' command.

A CTP is a Tcl file containing procedures that recognize and traverse
your custom data hierarchy, grouping the data into collections. You
install the CTP in one of the following Synchronicity custom hierarchy
directories:

o Project-level CTP:
  <SYNC_PROJECT_CFGDIR>/ctp/<ctp_file>.ctp

o Site-level CTP:
  <SYNC_SITE_CUSTOM>/share/client/ctp/<ctp_file>.ctp

When next you invoke a DesignSync client, the DesignSync Custom Type
System registers the CTP so that each revision control operation can
```

now recognize and manage the collection types defined in your CTP.

To develop a CTP for your custom data, see the DesignSync Custom Type System Programmer's Guide.

SYNOPSIS

```
ctp <ctp_command> [<ctp_command_options>]

Usage: ctp [list|verify]
```

OPTIONS

Vary by command.

RETURN VALUE

Varies by command.

SEE ALSO

ctp list, ctp verify, localversion, localversion delete, localversion list, localversion restore, localversion save

EXAMPLES

See specific 'ctp' commands.

ctp list

ctp list Command

NAME

ctp list - Lists installed Custom Type Packages

DESCRIPTION

This command lists the names of all currently installed Custom Type Packages (CTPs). You run the 'ctp list' command from any directory, with no arguments.

A CTP is a Tcl file containing procedures that recognize and traverse your custom data hierarchy, grouping the data into collections. You install the CTP in one of the following Synchronicity custom hierarchy directories:

o Project-level CTP:
  <SYNC_PROJECT_CFGDIR>/ctp/<ctp_file>.ctp

o Site-level CTP:
  <SYNC_SITE_CUSTOM>/share/client/ctp/<ctp_file>.ctp

When next you invoke a DesignSync client, the DesignSync Custom Type System registers the CTP so that each revision control operation can now recognize and manage the collection types defined in your CTP.

To develop a CTP for your custom data, see the DesignSync Custom Type System Programmer's Guide.

SYNOPSIS

```
ctp list
```

ARGUMENTS

None.

OPTIONS

None.

RETURN VALUE

In dss/dssc mode, you cannot operate on return values, so the return value is irrelevant.

In stcl/stclc mode, the command returns a list of the installed CTPs and an empty list if there are no installed CTPs.

SEE ALSO

ctp, ctp verify, localversion, localversion delete, localversion list, localversion save, localversion restore

EXAMPLES

```
The following example lists all of the Custom Type Packages (CTPs)
currently installed.

stcl> ctp list
collectionCTP localCTP kmlocalCTP dsmwCTP
```

ctp verify

ctp verify Command

NAME

```
ctp verify          - Validates installed Custom Type Package files
```

DESCRIPTION

```
This command verifies all installed Custom Type Packages (CTPs).
A CTP is a Tcl file containing procedures that recognize and traverse
your custom data hierarchy, grouping the data into collections. You
install the CTP in one of the following Synchronicity custom hierarchy
directories:

o Project-level CTP:
  <SYNC_PROJECT_CFGDIR>/ctp/<ctp_file>.ctp

o Site-level CTP:
  <SYNC_SITE_CUSTOM>/share/client/ctp/<ctp_file>.ctp

When next you invoke a DesignSync client, the DesignSync Custom Type
System registers the CTP so that each revision control operation can
now recognize and manage the collection types defined in your CTP.

To develop a CTP for your custom data, see the DesignSync Custom
Type System Programmer's Guide.

The 'ctp verify' command tests for inconsistencies in the behavior
of related procedures in the CTPs. There are several places where a
CTP is required to return the same information in multiple places,
and these must be consistent for the CTP to work correctly. For
example, if mapViews assigns an objtype to a particular object, but
updateObject does not, then the CTP will not behave correctly. 'ctp
verify' flags this type of inconsistency.  Among the ways a CTP can
be internally inconsistent are:

o The mapViews and determineFolderType procedures return different
  values for a given folder.

o The mapViews procedure identifies an object as a member, but it is
  not returned by any collection's members procedure.
```

```
o The mapViews procedure fails to identify an object as a member when
  it is returned by a collection's members procedure.

o A collection member has an owner property identifying a collection,
  but that collection does not identify it as a member.

o More than one collection identifies a file as a member.

The 'ctp verify' command validates all of the installed CPTs against
the data in the specified path. The command lists:

o The installed and active CTPs

o The folder and subfolders being validated

o A status of the collection members in the folder and its subfolder

  The command lists the objects that are not members of any of the
  installed CTPs.  It also lists the collections that have no members.
  These occurrences might flag an error in a CTP.

It is important that you use the 'ctp verify' command to validate
your CTPs before making them available for use with production
design data. The Custom Type System checks for exceptions thrown
by particular CTP procedures, but it does not check for inconsistent
CTPs during revision control operations. These checks would
greatly diminish the efficiency of DesignSync's data traversal.

In order to fully validate your CTPs, it is important that you
develop test data that exercises all aspects of the CTPs.  See
the DesignSync Custom Type System Programmer's Guide to help
you design your test data to ensure that 'ctp verify' detects
specific error conditions.

In addition to applying 'ctp verify' to your CTPs, use the
'ls -report OX' command to list objects and their collection
owners.  Use the 'url members' command to list a collection's
members.  These commands will help ensure that your CTP
manages your data as intended.
```

SYNOPSIS

```
ctp verify [<path>]
```

ARGUMENT

- path

path

```
path          The path to the directory/folder containing the
```

```
data used to validate the installed CTPs. You can
specify an absolute or relative path. If no path is
specified, 'ctp verify' validates the installed CTPs
against the current directory.
```

OPTIONS

```
None.
```

RETURN VALUE

```
In dss/dssc mode, you cannot operate on return values, so the
return value is irrelevant.

In stcl/stclc mode, the command returns the number of errors
found.
```

SEE ALSO

```
ctp, ctp list, localversion, localversion delete,
localversion list, localversion save, localversion restore
```

EXAMPLES

Example of a Clean ctp verify

```
The following example shows verification of a clean CTP;
the 'ctp verify' command returns an error count of 0.

stcl> ctp verify
============== Verifying CTPs  ======================
The following CTPs are installed: collectionCTP dsmwCTP
Verifying at root /home/karen/sf242data/jul16/coltest

---- Verifying /home/karen/sf242data/jul16/coltest

---- Verify collection member information
0
```

Example of a cpt verify Showing Errors

```
This next example verifies a single CTP, collection.ctp:

stcl> ctp list
collectionCTP
stcl> ctp verify
============== Verifying CTPs  ======================
The following CTP's are installed: collectionCTP
Verifying at root /home/karen/sf242data/sep2/ctp_tests/coltest

---- Verifying /home/karen/sf242data/sep2/ctp_tests/coltest
ctp collectionCTP: For object 'g.sgc.tst', the property 'objtype' is
not the same:
   'Test orange' is set in the updateObject proc and
   'Test collection' is set in the mapViews proc.
ctp collectionCTP: For object 'f.sgc.tst', the property 'objtype' is
not the same:
   'Test orange' is set in the updateObject proc and
   'Test collection' is set in the mapViews proc.
ctp collectionCTP: For object 'a.sgc.tst', the property 'objtype' is
not the same:
   'Test orange' is set in the updateObject proc and
   'Test collection' is set in the mapViews proc.
ctp collectionCTP: For object 'd.sgc.tst', the property 'objtype' is
not the same:
   'Test orange' is set in the updateObject proc and
   'Test collection' is set in the mapViews proc.

---- Verify collection member information
4
```

Managing Local Versions of Collections

localversion

localversion Commands

NAME

```
localversion        - Commands to manage local versions of collections
```

DESCRIPTION

```
Some design tools implement their own basic version management
by making local copies of design objects. A local copy of a design
object is referred to as a 'local version', to distinguish it
from the DesignSync version, which is created in the DesignSync
vault upon checkin (a vault version).

Where DesignSync manages such data either through a predefined
recognition package or through a developer's
Custom Type Package (CTP), DesignSync incorporates the local version
number into a tag name it applies upon checkin of the object.
```

For example, if an object's local version is 6, DesignSync applies the tag <collection_type>_6 upon checkin.

Depending upon the options you choose, the DesignSync 'co' and 'populate' commands can remove local versions of an object, replacing them with the requested version from the DesignSync vault. You can save the local versions using the -savelocal option to the 'co' or 'populate' commands. You can also save the local versions using the 'localversion save' command and later retrieve them using the 'localversion restore' command. The 'localversion list' command lets you view the saved local versions.

You can change the local version default behavior so that DesignSync automatically saves all local versions before fetching. To change this setting, a Synchronicity administrator can use the Local Versions field on the Command Defaults pane of the SyncAdmin tool. For information, see SyncAdmin help.

SYNOPSIS

```
localversion <localversion_command> [<localversion_command_options>]

Usage: localversion [delete|list|restore|save]
```

OPTIONS

Vary by command.

RETURN VALUE

Varies by command.

SEE ALSO

localversion delete, localversion list, localversion restore, localversion save, ctp

EXAMPLES

See specific 'localversion' commands.

localversion delete

localversion delete Command

NAME

```
localversion delete - Deletes a saved version of the given collection
```

DESCRIPTION

```
Use the 'localversion delete' command to delete a local version that
was previously saved for the specified collection. Use the
'localversion list' command to list the local versions to be deleted.

Some design tools implement their own basic version management
by making local copies of design objects. A local copy of a design
object is referred to as a 'local version', to distinguish it
from the DesignSync version, which is created in the DesignSync
vault upon checkin (a vault version).

Where DesignSync manages such data either through a predefined
recognition package or through a developer's Custom Type Package
(CTP), DesignSync incorporates the local version number into a tag
name it applies upon checkin of the object. For example, if an
object's local version is 6, DesignSync applies the tag
<collection_type>_6 upon check-in.

Note: This command only affects objects of a collection defined by
the Custom Type Package (CTP). This command does not affect objects
that are not part of a collection or collections that do not have
local versions.
```

SYNOPSIS

```
localversion delete <sync collection>|<sgc collection> <locint>
```

OPTIONS

- Synchronicity Collection
- Custom Generic Collection
- Local Version Integer

Synchronicity Collection

```
sync collection   - Specify a Synchronicity predefined collection
                    in the format <object>.sync.<collectiontype>
                    where

                    <object> is the base name of the object, for
                    example, a cell or view name.

                    sync indicates a Synchronicity predefined
```

```
                    collection.

                    <collectiontype> is the collection name.
                    Predefined collection names include cds
                    and mw.

                    Examples of Synchronicity predefined collection
                    objects include NAND.sync.mw and cell1.sync.mw.

                    You can specify the object as a local URL
                    (starts with the file:/// protocol) or as an
                    absolute or relative path.
```

Custom Generic Collection

```
sgc collection    - Specify a custom generic collection (defined
                    in a Custom Type Package) using the format
                    <object>.sgc.<collectiontype> where

                    <object> is the base name of the object, for
                    example, a cell or view name.

                    sgc indicates a custom collection defined
                    in a Custom Type Package.

                    <collectiontype> is the collection name
                    defined in a Custom Type Package (CTP).
                    See the DesignSync Custom Type System
                    Programmer's Guide for more information.
                    An example of a custom generic collection
                    object is symbol.sgc.mytool.

                    You can specify the object as a local URL
                    (starts with the file:/// protocol) or as an
                    absolute or relative path.
```

Local Version Integer

```
locint            - Specify the integer assigned to the saved
                    local version of the collection.  If you
                    do not know the integer, use the
                    'localversion list' command to view the
                    saved local version numbers.
```

RETURN VALUE

```
In dss/dssc mode, you cannot operate on return values, so the
return value is irrelevant.
```

In stcl/stclc mode, the command returns the integer corresponding to the deleted local version. If a collection has no saved local versions or if the value specified for the saved local version number is not an integer, the command throws an error.

SEE ALSO

localversion, localversion list, localversion save, localversion restore

EXAMPLES

The following example deletes the saved local version of the local.sgc.loc collection. The example first lists the saved local versions of the local.sgc.loc collection.

```
stcl> localversion list .
local.sgc.loc {1 2 3}
stcl> localversion delete local.sgc.loc 1
1
stcl> localversion list .
local.sgc.loc {2 3}
```

localversion list

localversion list Command

NAME

localversion list - Lists saved versions of collection objects

DESCRIPTION

Use the 'localversion list' command to list the local versions that were previously saved for the specified collection. You can instead specify a directory name to list all of the collections with previously saved local versions in that directory. In this case, each collection is listed, followed by a list of its local version numbers. If a collection has no saved local versions or if a directory contains no collections with saved local versions, the 'localversion list' command returns an empty list.

Some design tools implement their own basic version management by making local copies of design objects. A local copy of a design object is referred to as a 'local version', to distinguish it from the DesignSync version, which is created in the DesignSync vault upon checkin (a vault version).

```
Where DesignSync manages such data either through a predefined
recognition packageor through a developer's
Custom Type Package (CTP), DesignSync incorporates the local version
number into a tag name it applies upon checkin of the object.
For example, if an object's local version is 6, DesignSync applies
the tag <collection_type>_6 upon checkin.

Note:
 This command only affects objects of a collection defined by the
 Custom Type Package (CTP). This command does not affect objects that
 are not part of a collection or collections that do not have local
 versions.
```

SYNOPSIS

```
localversion list <sync collection>|<sgc collection>|<directory>
```

OPTIONS

- Synchronicity Predefined Collection
- Custom Generic Collection
- Collection Directory

Synchronicity Predefined Collection

```
sync collection   - Specify a Synchronicity predefined collection
                    in the format <object>.sync.<collectiontype>
                    where

                    <object> is the base name of the object, for
                    example, a cell or view name.

                    sync indicates a Synchronicity predefined
                    collection.

                    <collectiontype> is the collection name.
                    Predefined collection names include cds
                    and mw.

                    Examples of Synchronicity predefined collection
                    objects include NAND.sync.mw and cell1.sync.mw.

                    You can specify the object as a local URL
                    (starts with the file:/// protocol) or as an
                    absolute or relative path.
```

Custom Generic Collection

```
sgc collection    - Specify a custom generic collection (defined
                    in a Custom Type Package) using the format
                    <object>.sgc.<collectiontype> where

                    <object> is the base name of the object, for
                    example, a cell or view name.

                    sgc indicates a custom collection defined
                    in a Custom Type Package.

                    <collectiontype> is the collection name
                    defined in a Custom Type Package (CTP).
                    See the DesignSync Custom Type System
                    Programmer's Guide for more information.
                    An example of a custom generic collection
                    object is symbol.sgc.mytool.

                    You can specify the object as a local URL
                    (starts with the file:/// protocol) or as an
                    absolute or relative path.
```

Collection Directory

```
directory         - Specify a directory containing a collection.
                    You can specify the directory as a local URL
                    (starts with the file:/// protocol) or as an
                    absolute or relative path.
```

RETURN VALUE

In dss/dssc mode, you cannot operate on return values, so the return value is irrelevant.

In stcl/stclc mode, the command returns a list of integers representing the saved local version numbers if you specify a collection. If you specify a directory, the command returns each collection in the directory with a corresponding list of saved local version numbers for the collection.

If a specified collection does not exists, the command throws an error.

SEE ALSO

localversion delete, localversion restore, localversion save

EXAMPLES

```
The following example lists the saved local versions
of the local.sgc.loc collection.

stcl> localversion list local.sgc.loc
1 2 3

You can list all of the collections containing local versions
in a particular directory by specifying a directory instead
of a collection.

stcl> localversion list .
local.sgc.loc {1 2 3} kmlocal.sgc.loc2 3
```

localversion restore

localversion restore Command

NAME

```
localversion restore- Restores a saved version of the given collection
```

DESCRIPTION

```
Use the 'localversion restore' command to retrieve a local version that
was previously saved for the specified collection.

Some design tools implement their own basic version management
by making local copies of design objects. A local copy of a design
object is referred to as a 'local version', to distinguish it
from the DesignSync version, which is created in the DesignSync
vault upon checkin (a vault version).

Where DesignSync manages such data either through a predefined
recognition package or through a developer's Custom Type Package
(CTP), DesignSync incorporates the local version number into a tag
name it applies upon checkin of the object. For example, if an
object's local version is 6, DesignSync applies the tag
<collection_type>_6 upon check-in.

You might want to save the local version using the 'localversion
save' command before you check out or populate a collection. Then,
you can use the 'localversion restore' command to retrieve your
local version if you later decide to use it.

Notes:
o This command only affects objects of a collection defined by the
  Custom Type Package (CTP). This command does not affect objects
  that are not part of a collection or collections that do not have
  local versions.

o DesignSync stores the saved local versions within the workspace
  directory.  If you delete the workspace directory, you cannot
```

```
  recover the local versions.

o If you apply 'localversion restore' to an unmanaged object, the
  command fails.
```

SYNOPSIS

```
localversion restore <sync collection>|<sgc collection> <locint>
```

OPTIONS

- Synchronicity Predefined Collection
- Custom Generic Collection
- Local Version Integer

Synchronicity Predefined Collection

```
sync collection    - Specify a Synchronicity predefined collection
                     in the format <object>.sync.<collectiontype>
                     where

                     <object> is the base name of the object, for
                     example, a cell or view name.

                     sync indicates a Synchronicity predefined
                     collection.

                     <collectiontype> is the collection name.
                     Predefined collection names include cds
                     and mw.

                     Examples of Synchronicity predefined collection
                     objects include NAND.sync.mw and cell1.sync.mw.

                     You can specify the object as a local URL
                     (starts with the file:/// protocol) or as an
                     absolute or relative path.
```

Custom Generic Collection

```
sgc collection     - Specify a custom generic collection (defined
                     in a Custom Type Package) using the format
                     <object>.sgc.<collectiontype> where

                     <object> is the base name of the object, for
                     example, a cell or view name.

                     sgc indicates a custom collection defined
```

in a Custom Type Package.

<collectiontype> is the collection name defined in a Custom Type Package (CTP). See the DesignSync Custom Type System Programmer's Guide for more information. An example of a custom generic collection object is symbol.sgc.mytool.

You can specify the object as a local URL (starts with the file:/// protocol) or as an absolute or relative path.

Local Version Integer

locint - Specify the integer assigned to the saved local version of the collection. If you do not know the integer, use the 'localversion list' command to view the saved local version numbers.

RETURN VALUE

In dss/dssc mode, you cannot operate on return values, so the return value is irrelevant.

In stcl/stclc mode, the command returns the integer corresponding to the restored local version. If a collection has no saved local versions or if the value specified for the saved local version number is not an integer, the command throws an error.

SEE ALSO

ctp, localversion, localversion delete, localversion list, localversion save

EXAMPLES

The following example restores the saved local version of the local.sgc.loc collection. The example first lists the saved local versions of the local.sgc.loc collection.

```
stcl> localversion list .
local.sgc.loc {1 2 3}
dss> localversion restore local.sgc.loc 3
3
```

localversion save

localversion save Command

NAME

```
localversion save   - Saves local version of the given collection
```

DESCRIPTION

```
Use the 'localversion save' command to save the current local
version of a collection in preparation for fetching an
alternate local version from the vault. This command does not
remove the local version from your workspace. If you need a
saved local version in the future, you use the 'localversion
restore' command to retrieve it.

Some design tools implement their own basic version management
by making local copies of design objects. A local copy of a design
object is referred to as a 'local version', to distinguish it
from the DesignSync version, which is created in the DesignSync
vault upon checkin (a vault version).

Where DesignSync manages such data either through a predefined
recognition package or through a developer's Custom Type Package
(CTP), DesignSync incorporates the local version number into a tag
name it applies upon checkin of the object. For example, if an
object's local version is 6, DesignSync applies the tag
<CollectionType>_6 upon checkin.

Depending upon the options you choose, the DesignSync 'co' and
'populate' commands can remove local versions of an object,
replacing them with the requested version from the DesignSync
vault. You can save the local versions using the -savelocal
option to the 'co' or 'populate' commands.  You can also save the
local versions using the 'localversion save' command and later
retrieve them using the 'localversion restore' command. The
'localversion list' command lets you view the saved local versions.

By default, check-out and populate operations on collections
fail if your workspace contains a local version with a higher
number than the local version being fetched. You can change the
local version default behavior so that DesignSync automatically
saves or removes the local versions before fetching. To change
this setting, a Synchronicity administrator can use the Local
Versions field on the Command Defaults pane of the SyncAdmin tool.
For information, see SyncAdmin help.

Notes:

o This command only affects objects of a collection defined by the
  Custom Type Package (CTP). This command does not affect objects
  that are not part of a collection or collections that do not have
```

```
   local versions.

 o DesignSync stores the saved local versions within the workspace
   directory.  If you delete the workspace directory, you cannot
   recover the local versions.
```

SYNOPSIS

```
localversion save <sync collection>|<sgc collection>
```

OPTIONS

- Synchronicity Predefined Collection
- Custom Generic Collection

Synchronicity Predefined Collection

```
sync collection    - Specify a Synchronicity predefined collection
                     in the format <object>.sync.<collectiontype>
                     where

                     <object> is the base name of the object, for
                     example, a cell or view name.

                     sync indicates a Synchronicity predefined
                     collection.

                     <collectiontype> is the collection name.
                     Predefined collection names include cds
                     and mw.

                     Examples of Synchronicity predefined collection
                     objects include NAND.sync.mw and cell1.sync.mw.

                     You can specify the object as a local URL
                     (starts with the file:/// protocol) or as an
                     absolute or relative path.
```

Custom Generic Collection

```
sgc collection     - Specify a custom generic collection (defined
                     in a Custom Type Package) using the format
                     <object>.sgc.<collectiontype> where

                     <object> is the base name of the object, for
                     example, a cell or view name.

                     sgc indicates a custom collection defined
```

```
in a Custom Type Package.

<collectiontype> is the collection name
defined in a Custom Type Package (CTP).
See the DesignSync Custom Type System
Programmer's Guide for more information.
An example of a custom generic collection
object is symbol.sgc.mytool.

You can specify the object as a local URL
(starts with the file:/// protocol) or as an
absolute or relative path.
```

RETURN VALUE

```
In dss/dssc mode, you cannot operate on return values, so the
return value is irrelevant.

In stcl/stclc mode, the command returns an integer representing
the saved local version.

If a specified collection does not exists, the command throws
an error.
```

SEE ALSO

```
ctp, localversion, localversion delete, localversion list,
localversion restore
```

EXAMPLES

Example of Saving the Current Local Version

```
The following example saves the current local version of the
local.sgc.loc collection.  The example lists the saved local
versions of the local.sgc.loc collection.

stcl> localversion save local.sgc.loc
3
stcl> localversion list local.sgc.loc
1 2 3
```

Example of Saving Local Version of Milkyway Data

```
This example shows how localversion commands might be used for
Milkyway data.

Note: The DesignSync Milkway integration has been deprecated. This
example is meant to be used only as a reference.

In this scenario, Fadi checks out the Milkyway collection object
top_design.sync.mw to fix a defect assigned against the object,
thus fetching local version number 2 to his workspace.  He edits
the object, creating local version 3. However, he finds out
Jocelyn has already made a fix for the defect when she checked
in her local version 3. Before he checks out her local version,
he saves his local versions:

stcl> cd /home/tfadi/top_design_library
stcl> localversion save top_design.sync.mw
3

Later the team decides that Jocelyn's fix was not efficient, so
Fadi decides to retrieve his local version.

stcl> localversion list top_design.sync.mw
3
stcl> localversion restore top_design.sync.mw 3
3
```

Data Replication

Data Replication System

replicate Command

NAME

```
replicate           - Data replication commands
```

DESCRIPTION

```
These commands control the data replication system. The data
replication system provides a configurable environment to
automatically setup and manage mirrors, caches, and module caches
associated with a server URL.

The replicate command and sub-commands support the command default
system.
```

SYNOPSIS

```
replicate <replicate_command> [<replicate_command_options>]

Usage: replicate [addroot, data, disable, enable, reset, rmdata,
       rmroot, showdata, showroots, setoptions ]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
mirror
```

EXAMPLES

```
See specific "replicate" commands.
```

replicate addroot

replicate addroot Command

NAME

```
replicate addroot   -  Associates a Data Replication Root with a MAS
```

DESCRIPTION

```
This command associates a Data Replication Root (DRR) with a
particular Mirror Administration Server (MAS). There are no limits
to the number of DRRs that can be associated with a MAS.

The DRR is associated with the MAS using a name that must be unique
across the MAS.  This name is a shortcut to identify the DRR when
enabling, disabling, or checking the status of the DRR.  The name is
also used for any auto-generated mirrors that registered to
handle updates to the data replicated within the DRR.

In addition to registering the name with the MAS, the addroot
```

```
command:

o  creates the DRR path (specified by the -path option), if it does
   not already exist. If the path given to the command isn't an
   absolute path, DesignSync uses the current working directory with
   the path value appended.

o  verifies that the path is suitable for storing a replication
   root. In order to store a replication root, the specified
   directory cannot contain a module cache or dynamic folder. It can
   contain an existing file cache.

o  sets the appropriate permissions on the folder.

o  creates the sub-folders needed to support data replication. The
   data replication system uses three folders: dynamic, for dynamic
   content; module_cache, for static module content; and file_cache,
   for static file and module member versions.

This command is subject to access controls on the server.

This command supports the command defaults system.
```

SYNOPSIS

```
replicate addroot -name <name> -path <rootpath> [-readmode {all|group}]
                  <serverURL>
```

ARGUMENTS

- Server URL

Server URL

```
<serverURL>      Specifies the URL of the MAS on which to store the
                 data replication root. Specify the URL as follows:
                 sync://<host>[:<port>] or
                 syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                 are required, <host> is the machine on which the
                 SyncServer is installed, and <port> is the SyncServer
                 port number (defaults to 2647/2679).
                 For example: sync://serv1.abco.com:1024
```

OPTIONS

- -name
- -path
- -readmode

-name

```
-name <name>    Logical name of the DRR. This name must be unique
                with respect to all other DRRs defined on the
               MAS. This name is also used as the name of the
               mirror that handles updates to the replications
               registered in the DRR.
```

-path

```
-path <rootpath> Specifies the path to the DRR being added.
                 If the path does not exist, and is creatable, the
                command creates it.

                 Note: The path cannot contain a module cache or
                 dynamic folder. It can contain an existing file
                 cache.
```

-readmode

```
-readmode       The read permissions set on the DRR directory. This
 [all|group]    option is valid only when SUID mode is enabled.

                -readmode all sets the read permission be readable by
               all users, the primary group of the MAS owner, and
               the MAS owner.

                -readmode group sets the read permission to be
                 readable by the primary group of the MAS owner, and
                 the MAS owner.

               Note: If SUID is not enabled for the MAS
               installation, and the "enforce SUID" option is not
               enabled on the mirror, the system will enable read
               and write modes for all. If the "enforce SUID" option
               is enabled, the command will fail. The "enforce SUID"
               option is set on the Mirrors| General Settings page
               of the DesignSync Web Interface. For information on
               setting the "enforce SUID" option for the MAS, see
               the ENOVIA Synchronicity DesignSync Administrator's
               Guide.
```

RETURN VALUE

```
Returns an empty string on success.
```

SEE ALSO

```
mirror setoptions, replicate data, replicate rmroot
```

EXAMPLES

```
This example shows the replicate addroot command and then the
replicate showroots command showing that the DRR has been created.
dss> replicate addroot -path /RepHome/repdata -name MainDRR -readmode
     all sync://data.ABCo.com
dss> replicate showroots sync://data.ABCo.com
Name         Read Mode    Path
----         ---------    ----
MainDRR      all          /RepHome/repdata
```

replicate data

replicate data Command

NAME

```
replicate data      - Replicates data on the replication root
```

DESCRIPTION

- Working with File-Based Vaults

```
This command adds the desired data to the specified data replication root
(DRR).

This command is subject to access controls on the server.

This command supports the command defaults system.
```

Working with File-Based Vaults

```
For files-based vault data, the replicate data command calls the
mirror create command in order to create the data replication
mirror.

The base directory of the replicated data is computed from the file
path and selector information of the data, like this:
<DRR/dynamic/<ServerHost>/<port>/<leafname>/<selector>/<basedir>
```

SYNOPSIS

```
replicate data [-name <name>] -root <drr>
               [-selector <selector>[,<selector>...]] -vaulturl <URL>
                <ServerURL>
```

ARGUMENTS

- Server URL

Server URL

```
<ServerURL>      Specifies the URL of the MAS on hosting the
                 data replication root. Specify the URL as follows:
                 sync://<host>[:<port>] or
                 syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                 are required, <host> is the machine on which the
                 SyncServer is installed, and <port> is the SyncServer
                 port number (defaults to 2647/2679).
                 For example: sync://serv1.abco.com:1024
```

OPTIONS

- -name
- -root
- -selector
- -vaulturl

-name

```
-name <name>     A user friendly name for a file-based project. The
                 name is used by the mirror create command,
```

-root

```
-root <drr>      Logical name of the DRR. This name is case
                 sensitive. If you cannot remember the name of the
                DRR, you can use the replicate showroots command to
                see a list of defined DRRs on a MAS.

                 Note: The DRR must exist on the MAS specified by the
                 ServerURL argument.
```

-selector

```
-selector <list> Specifies the selector, or selector list. If no
```

```
                selector is specified, the command will use the
               default selector, 'Trunk'.
```

-vaulturl

```
 -vaulturl <URL>  Specifies the URL of the data location on the
                  server. Specify the URL as follows:
                  sync://<host>[:<port>] or
                  syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                  are required, <host> is the machine on which the
                  SyncServer is installed, and <port> is the SyncServer
                  port number (defaults to 2647/2679).
                  For example: sync://serv1.abco.com:1024
```

RETURN VALUE

```
  Returns an empty string on success.
```

SEE ALSO

```
 mirror create, replicate enable, replicate disable, replicate rmdata
```

EXAMPLES

- Example of Adding File-Based Data to the DRR

Example of Adding File-Based Data to the DRR

```
 This example shows adding a file-based vault URL to the DRR and the
 subsequent replicate showdata command showing the file-based vault
 URL in the DRR. .

 dss> replicate data -vaulturl sync://data.ABCo.com:2647/Projects/CPU
      -root MainDRR -name CPU sync://mirror.ABCo.com:2647

 dss> replicate showdata -root MainDRR sync://mirror.ABCo.com:2647
 Name          Enabled  Status   Vault URL
 Selector       Base Dir
 ----          -------  ------   ---------
 --------     --------
 EclipseProj     yes       1
sync://data.ABCo.com:2647/Projects/EclipseProj
 Trunk:Latest   9d/71/9d711cc172956426eb333ae18fb131ba/Test1/Trunk/basedir
```

replicate disable

replicate disable Command

NAME

```
replicate disable   - Disables a replicated data instance
```

DESCRIPTION

```
This command turns off updates for the specified data instance or all
replicated instances on the MAS.

This command is subject to access controls on the server.

This command supports the command defaults system.
```

SYNOPSIS

```
replicate disable -all | -name <name> -root <drr> <ServerURL>
```

ARGUMENTS

- Server URL

Server URL

```
<ServerURL>       Specifies the URL of the MAS hosting the data
                  replication root. Specify the URL as follows:
                  sync://<host>[:<port>] or
                  syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                  are required, <host> is the machine on which the
                  SyncServer is installed, and <port> is the SyncServer
                  port number (defaults to 2647).
                  For example: sync://serv1.abco.com:1024
```

OPTIONS

- -all
- -name
- -root

-all

```
-all              Disables all active replication instances on the
                  DRR. This option is mutually exclusive with the
```

-name option.

-name

-name <name> The name of the data replication to disable. When the -name option is specified, only the named data replication is disabled. Any referenced sub-modules continue to be updated. This option is mutually exclusive with the -all option.

-root

-root <drr> Logical name of the DRR. This name is case sensitive. If you cannot remember the name of the DRR, you can use the replicate showroots command to see a list of defined DRRs on a MAS.

RETURN VALUE

If the command succeeds, it returns an empty string (""). If the command fails, it returns an appropriate error to explain the cause of failure.

SEE ALSO

replicate enable, mirror disable

EXAMPLES

This example shows disabling all data replications on a DRR. This DRR consists of one file-based project, and one module hierarchy.

Note: The reply from the server shows all the stopped data replications. In the example below, the CPU%0 and ROM%0 module instances are referenced submodules of Chip%0.

```
dss> replicate disable -root MainDRR -all sync://mirror.ABCo.com
 disabling mirror 'CPU%0'
 disabling mirror 'Chip%0'
 disabling mirror 'ROM%0'
 Disabling files based mirror 'EclipseProj'
```

replicate enable

replicate enable Command

NAME

```
replicate enable    - Enables replication for a data replication
```

DESCRIPTION

```
 This command turns on updates for the specified data replication.
 If the data instance has file-based references, those are enabled by
 the replicate enable command running the mirror enable command on
 the mirror that controls the file-based updates.

This command is subject to access controls on the server.

This command supports the command defaults system.
```

SYNOPSIS

```
replicate enable -all | -name <name> -root <drr> <ServerURL>
```

ARGUMENTS

- Server URL

Server URL

```
<ServerURL>       Specifies the URL of the MAS hosting the data
                  replication root. Specify the URL as follows:
                  sync://<host>[:<port>] or
                  syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                  are required, <host> is the machine on which the
                  SyncServer is installed, and <port> is the SyncServer
                  port number (defaults to 2647).
                  For example: sync://serv1.abco.com:1024
```

OPTIONS

- -all
- -name
- -root

-all

```
-all              Enables all inactive data replications on the
```

DRR. This option is mutually exclusive with the -name option.

-name

-name <name> The name of the data replication to enable. This option is mutually exclusive with the -all option.

-root

-root <drr> Logical name of the DRR. This name is case sensitive. If you cannot remember the name of the DRR, you can use the replicate showroots command to see a list of defined DRRs on a MAS.

RETURN VALUE

If the command succeeds, it returns an empty string (""). If the command fails, it returns an appropriate error to explain the cause of failure.

SEE ALSO

replicate disable, mirror enable

EXAMPLES

This example shows enabling all data replications on the DRR. This example includes a modules-based and a files based DRR.

Note: The response from the server does not display hierarchically referenced submodules. In the example below, the Chip%0 module has submodules CPU%0 and ROM%0 module which are enabled along with their parent module, Chip%0, but not listed separately.

```
dss> replicate enable -root MainDRR -all sync://mirror.ABCo.com
 enabling mirror 'Chip%0'
 Enabling files based mirror 'EclipseProj'
```

replicate reset

replicate reset Command

NAME

```
replicate reset     - Manually updates a data replication
```

DESCRIPTION

```
This command performs a manual update on a data replication.

If the specified data replication is file-based or contains
references to a file-based sub-instance, the replicate reset
command calls the mirror reset command to update the files on the
DRR.

This command is subject to access controls on the server.

This command supports the command defaults system.
```

SYNOPSIS

```
replicate reset -name <name> -root <drr> <ServerURL>
```

ARGUMENTS

Server URL

```
<ServerURL>       Specifies the URL of the MAS hosting the data
                  replication root. Specify the URL as follows:
                  sync://<host>[:<port>] or
                  syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                  are required, <host> is the machine on which the
                  SyncServer is installed, and <port> is the SyncServer
                  port number (defaults to 2647).
                  For example: sync://serv1.abco.com:1024
```

OPTIONS

-name

```
-name <name>      The name of the data replication to reset. The
                  reset operates recursively on the named data
                 replication.
```

-root

```
-root <drr>       Logical name of the DRR. This name is case
                  sensitive. If you cannot remember the name of the
                 DRR, you can use the replicate showroots command to
                 see a list of defined DRRs on a MAS.
```

RETURN VALUE

```
 If the command succeeds, it returns an empty string ("").  If the
command fails, it returns an appropriate error to explain the cause
of failure.
```

SEE ALSO

```
mirror reset, replicate data, replicate showdata
```

EXAMPLES

```
This example shows the reset command.
dss> replicate reset -root MainDRR -name Chip%0 sync://qelwsun14:30125
dss>
```

replicate rmdata

replicate rmdata Command

NAME

```
replicate rmdata     - Removes the data replication from the dynamic
                       folder.
```

DESCRIPTION

- Notes for Files-Based Objects

```
This command removes the data replication from the 'dynamic'
folder within the DRR. The deletion cannot be undone.

Note: Although the deletion is permanent, you can recreate the
data replication using the same name using the replicate data
command.

This command is subject to access controls on the server.
```

```
This command supports the command defaults system.
```

Notes for Files-Based Objects

```
When replicate rmdata is run on a file-based replication or if a
sub-module contains links to file-based data, the replicate rmdata
command runs the mirror delete command to remove the data.
```

SYNOPSIS

```
replicate rmdata -name <name> -root <drr> <Server-URL>
```

ARGUMENTS

- Server URL

Server URL

```
<ServerURL>       Specifies the URL of the MAS hosting the
                  DRR. Specify the URL as follows:
                  sync://<host>[:<port>] or
                  syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                  are required, <host> is the machine on which the
                  SyncServer is installed, and <port> is the SyncServer
                  port number (defaults to 2647).
                  For example: sync://serv1.abco.com:1024
```

OPTIONS

- -name
- -root

-name

```
-name <name>      The name of the data replication to remove.
```

-root

```
-root <drr>       Logical name of the DRR. This name is case
                  sensitive. If you cannot remember the name of the
                 DRR, you can use the replicate showroots command to
                 see a list of defined DRRs on a MAS.
```

RETURN VALUE

```
 If the command succeeds, it returns an empty string ("").  If the
command fails, it returns an appropriate error to explain the cause
of failure.
```

SEE ALSO

```
replicate data, replicate showdata, replicate rmroot, mirror delete,
```

EXAMPLES

- Example Showing Removing a File-Based Data Replication

Example Showing Removing a File-Based Data Replication

```
This example shows removing a file-based vault data replication. This
shows the passed through output of the underlying mirror delete command.

dss> replicate rmdata -root MainDRR -name EclipseProj
     sync://mirror.ABCo.com:2147
Deleted empty directory '/RepHome/repdata/dynamic/9d/71/
     9d711cc172956426eb333ae18fb131ba/EclipseProj/Trunk'
Deleted empty directory '/RepHome/repdata/dynamic/9d/71/
     9d711cc172956426eb333ae18fb131ba/EclipseProj'
Deleted empty directory '/RepHome/repdata/dynamic/9d/71/
     9d711cc172956426eb333ae18fb131ba'
Deleted empty directory '/RepHome/repdata/dynamic/9d/71'
Deleted empty directory '/RepHome/repdata/dynamic/9d'
```

replicate rmroot

replicate rmroot Command

NAME

```
replicate rmroot    - removes the specified data replication root
```

DESCRIPTION

```
This command removes the specified data replication root (DRR) from the
list of registered replication roots. All the data and metadata
within the DRR are deleted along with the DRR. The deletion cannot be
undone.
```

```
Note: Although the deletion is permanent, you can recreate the DRR
using the same name.

The command does not remove any symbolic links to items in the DRR. If
users have created symbolic links, for example, workspaces still
pointing to the file cache contained within a data replication,
these need to be manually removed.

This command is subject to access controls on the server.

This command supports the command defaults system.
```

SYNOPSIS

```
replicate rmroot -root <drr> <ServerURL>
```

ARGUMENTS

- Server URL

Server URL

```
<ServerURL>       Specifies the URL of the MAS hosting the
                   DRR. Specify the URL as follows:
                  sync://<host>[:<port>] or
                  syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                  are required, <host> is the machine on which the
                  SyncServer is installed, and <port> is the SyncServer
                  port number (defaults to 2647).
                  For example: sync://serv1.abco.com:1024
```

OPTIONS

- -root

-root

```
-root <drr>       Logical name of the DRR. This name is case
                   sensitive. If you cannot remember the name of the
                 DRR, you can use the replicate showroots command to
                 see a list of defined DRRs on a MAS.
```

RETURN VALUE

```
If the command succeeds, it returns an empty string ("").  If the
command fails, it returns an appropriate error to explain the cause
of failure.
```

SEE ALSO

```
replicate rmdata, replicate addroot, replicate data
```

EXAMPLES

```
This example shows removing the DRR on a MAS that has both replicated
modules and files-based data.

dss> replicate rmroot -root MainDRR sync://mirror.ABCo.com:2647
 Removing files based mirror 'EclipseProj'
 Removing the data from '/RepHome/repdata'
 Removing the dynamic scripted (autogen) mirror
 Removing the static scripted (autogen) mirror
 Removing the metadata entry for replication root 'MainDRR'
```

replicate setoptions

replicate setoptions Command

NAME

```
replicate setoptions - Sets replicate options
```

DESCRIPTION

```
This command sets the options for data replication. The available
options are described in the Options section.

This command is subject to access controls on the server.

This command supports the command defaults system.
```

SYNOPSIS

```
replicate setoptions [-defaultuser <user>] [-[no]refcount]
                     <ServerURL>
```

ARGUMENTS

- Server URL

Server URL

```
<ServerURL>       Specifies the URL of the MAS hosting the data
                  replication root. Specify the URL as follows:
```

```
sync://<host>[:<port>] or
syncs://<host>[:<port>] where 'sync://' or 'syncs://'
are required, <host> is the machine on which the
SyncServer is installed, and <port> is the SyncServer
port number (defaults to 2647).
For example: sync://serv1.abco.com:1024
```

OPTIONS

-defaultuser

```
-defaultuser <user>    Species the default user for the data replication
                       system. You must specify the user name with the
                       -defaultuser option. If this parameter is
                       specified, you are prompted for the default user's
                       password. Specifying this parameter makes
                       'replicate setoptions' an interactive command.

                       Note: You may also use the mirror setoptions
                       command to set the defaultuser.  There is only one
                       default user stored for each MAS, regardless of
                       whether you store the username/password with the
                       mirror or replicate setoptions command.
```

-refcount

```
-[no]refcount          Specifies whether reference counting in the file
                       cache is enabled or disabled for the system.

                       -[no]refcount specifies that references should not
                       be counted. It is used if the site policy is
                       not to use reference counting and the corresponding
                       site-wide setting, set in SyncAdmin as "Enable Cache
                       optimizations" is also disabled.

                       -refcount specifies that reference should be
                       counted (Default). This allows DesignSync to
                       maintain optimal performance by automatically
                       removing files versions that are no longer linked
                       to.

                       Note: This option is not retroactive.  Any existing
                       data continues to have the refcount setting that
                       was in use when the data was fetched.  Any
                       subsequently fetched data uses the newly set mode.

                       For more information on enabling or disabling
                       reference counting, see the ENOVIA Synchronicity
```

DesignSync Data Manager Administrator's Guide.

RETURN VALUE

If the command succeeds, it returns an empty string (""). If the command fail, it returns an appropriate error to explain the cause of failure.

SEE ALSO

mirror setoptions, replicate addroot

EXAMPLES

This example shows a single replicate setoptions command that sets the default user and disables reference counting.

```
dss> replicate setoptions -defaultuser admin -norefcount
sync://mirror.ABCo.com:2647
 Enter the password for the default user (admin): *****
 Processing BackupDRR
 Processing MainDRR
    Registering mirror for 'sync://mirror.ABCo.com:2647
    Done registering mirror for 'sync://mirror.ABCo.com:2647'
```

replicate showdata

replicate showdata Command

NAME

replicate showdata - Lists the data replications in the DRR

DESCRIPTION

- Notes for File-Based Objects
- Understanding the Output

This command lists all the replication instances in the 'dynamic' folder along with the important properties for the instance.

This command is subject to access controls on the server.

This command supports the command defaults system.

Notes for File-Based Objects

For files-based vaults, the replicate showdata command calls the mirror status command.

Understanding the Output

The output of the replicate showdata command can be formatted for easy viewing (-format text) or optimized for TCL processing (-format list). Both viewing formats show the same information, but may have different names. In the table below, the Column Titles column shows the text output column header and the Property Names column shows list output key value.

The replicate showdata command, by default, displays the following information:

Column Titles	Property Names	Description
Name	name	The name of the data replication.
Base Dir	basedir	Base directory of the data replication.
Status	status	Status of the DRR indicating whether the replication is functioning normally, or there are errors. o 1 (one) indicates that there are no failures in applying any updates. o 0 (zero) indicates there were failures in applying updates and the replication administrator should examine the replication log available from the DesignSync web interface.
Vault URL	vaulturl	URL of the source vault for the data replication.
Selector	selector	The selector for the data replication as supplied to the replicate data command. This varies depending on the type of href.
Enabled	enabled	Activity status of the data replication. o Yes or 1 (one) indicates the data replication is active. o No or 0 (zero) indicates the data replication is inactive.

SYNOPSIS

```
replicate showdata [-format {text|list}] [-name dataname]
                   [-report {brief|normal|verbose}] -root <drr>
```

ARGUMENTS

- -root

-root

```
-root <ddr>       The name of the registered DRR to examine. You can
                  use the replicate showroots command to view the
                 list of the DRRs.
```

OPTIONS

- -format
- -name
- -report

-format

```
-format text|list Determines the format of the output.

                  -format text displays a text table with headers and
                  columns. (Default) Objects are shown in
                  alphabetical order

                  -format list displays a TCL list containing
                  name/value pairs.

                  For a list of properties displayed, see the
                  "Understanding the Output" section above.
```

-name

```
-name <dataname>  The name of a data replication. If you specify
                  a name, the command returns only the results for
                 that data replication.  If no name is specified,
                 the command returns information for all the
                 data replications on the DRR.
```

-report

```
-report brief|    Determines what information is returned in the
```

```
 normal |verbose  output of the command.

                    Valid values are:
                    o brief - outputs the name of the data
                      replication and any failures. The -format
                      option is ignored for this report mode.

                    o normal - the properties list in the format
                      specified with the -format option. (Default),

                    o verbose - the properties list in the format
                      specified with the -format option. There is no
                      difference between the verbose and normal
                      reports.
```

RETURN VALUE

```
If you run the command with the '-format list' option, it returns a
TCL list. If the command fails, it returns a TCL error. For all other
options, it returns an empty string ("").
```

SEE ALSO

```
replicate showroots, replicate data, replicate rmdata
```

EXAMPLES

Example of Replicate Showdata in Text Format in Report Normal Mode

```
This example shows running replicate showdata in normal, text mode on
a DRR containing both modules and file-based vaults.  The
module is a module hierarchy consisting of top-level module Chip and
dynamically referenced submodules CPU and ROM.

dss>  replicate showdata -root MainDRR sync://mirror.ABCo.com:2647

Name          Enabled  Status
 Vault URL                                        Selector
  Base Dir
----          -------  ------
---------                                        --------
--------
CPU%0           yes       1
```

```
  sync://data.ABCo.com:2647/Modules/Components/CPU  Trunk:
  9b/1e/9b1e794175a7c24bd5a329b3a5bd8d7a/CPU/Trunk/basedir
Chip%0          yes       1
 sync://data.ABCo.com:2647/Modules/ChipDesign/Chip Trunk:
  ef/ea/efea1173a39a7df9e42e3e8d821fd580/Chip/Trunk/basedir
ROM%0           yes       1
 sync://data.ABCo.com:2647/Modules/Components/ROM  Trunk:
  ee/f5/eef5d1b4b3eab3c9ec3f95b82b1b90dc/ROM/Trunk/basedir
EclipseProj     yes       1
 sync://data.ABCo.com:2647/Projects/Test1
  Trunk:Latest   9d/71/9d711cc172956426eb333ae18fb131ba/Test1/Trunk/basedir
```

Example of Replicate Showdata in Text Format in Report Brief Mode

```
This example shows running replicate showdata in text mode with
report -brief selected using the same data set as Example 1.

dss> replicate showdata -report brief -root MainDRR
sync://mirror.ABCo.com:30125

CPU%0
Chip%0
ROM%0
EclipseProj
```

Example of Replicate Showdata in List Format in Report Normal Mode

```
This example shows running replicate showdata in -format list TCL and
-report normal mode using the same data set as Example 1.
Note: Because some of these strings exceed the line length for this
documentation, the \ character is used to show that the string does
not contain spaces.

dss> replicate showdata -format list -root MainDRR
sync://mirror.ABCo.com:2647

{name CPU%0 target sync://data.ABCo.com:2647/Modules/Components/CPU
basedir /home/RepHome/repdata/dynamic/9b/1e/\
9b1e794175a7c24bd5a329b3a5bd8d7a/CPU/Trunk/basedir selector Trunk:
version 1.3 enabled 1 reset 0 top 0 itags {} error {} seenlist \
{{sync://data.ABCo.com:2647/Modules/Components/ROM;Trunk:}} touchtime
1344447297 efile {} status 1 dynamic 1 ismodule 1} {name Chip%0 target
sync://data.ABCo.com:2647/Modules/ChipDesign/Chip  basedir
/home/RepHome/repdata/dynamic/ef/ea/efea1173a39a7df9e42e3e8d821fd580/Chip/\
Trunk/basedir selector Trunk: version 1.14 enabled 1 reset 0 top 1
itags {} error {} seenlist
{{sync://data.ABCo.com:2647/Modules/Components/CPU;Trunk:}} touchtime
1344447292 efile {} status 1 dynamic 1 ismodule 1} {name ROM%0 target
sync://data.ABCo.com:2647/Modules/Components/ROM basedir
/home/RepHome/repdata/dynamic/ee/f5/eef5d1b4b3eab3c9ec3f95b82b1b90dc/\
ROM/Trunk/basedir selector Trunk: version 1.2 enabled 1 reset 0 top 0
```

```
itags {} error {} seenlist {} touchtime 1344447301 efile {} status 1
dynamic 1 ismodule 1} {name EclipseProj target
sync://data.ABCo.com:2647/Projects/Test1 basedir
/home/RepHome/repdata/dynamic/9d/71/9d711cc172956426eb333ae18fb131ba/\
Test1/Trunk/basedir selector Trunk:Latest enabled 1 reset 0 top 0
itags {} error {} seenlist {} touchtime 0 dynamic 1 efile {} status 1
ismodule 0}
```

Example of Replicate Showdata in List Format in Report Brief Mode

```
This example shows running replicate showdata in with report -brief
selected using the same data set as Example 1.

dss> replicate showdata -report brief -root MainDRR
sync://mirror.ABCo.com:2647

CPU%0 Chip%0 ROM%0 EclipseProj
```

replicate showroots

replicate showroots Command

NAME

```
replicate showroots - Lists the registered data replication roots
```

DESCRIPTION

- Understanding the Output

```
This command lists the data replication roots (DRRs) and their
properties registered on the MAS.

This command is subject to access controls on the server.

This command supports the command defaults system.
```

Understanding the Output

```
The output of the replicate showroots command can be formatted for
easy viewing (-format text) or optimized for TCL processing (-format
list).  Both viewing formats show the same information, but may have
different names. In the table below, the Column Titles column shows
the text output column header and the Property Names column shows
list output key value.
```

```
The replicate showroots command, by default, displays the following
information:

Column       Property
Titles       Names          Description
------       -----          ------------
Name         name           The name of the DRR.

Path         path           The root path to the DRR.

File cache   file_cache     The name of the file cache subdirectory.

Module cache module_cache   The name of the module cache
                            subdirectory.

Read Mode    readmode       The readmode specified when the DRR was
                            created.  The possible values are 'all'
                            and 'group.'

Dynamic      dynamic        The name of the subdirectory where the
                            dynamic data is mirrored.
```

SYNOPSIS

```
replicate showroots [-format {text|list}] [-name <rootname>]
                    [-report {brief|normal|verbose}] <ServerURL>
```

ARGUMENTS

- Server URL

Server URL

```
<ServerURL>       Specifies the URL of the MAS hosting the data
                  replication root. Specify the URL as follows:
                  sync://<host>[:<port>] or
                  syncs://<host>[:<port>] where 'sync://' or
                  'syncs://' are required, <host> is the machine on
                  which the SyncServer is installed, and <port> is
                  the SyncServer port number (defaults to 2647).
                  For example:  sync://serv1.abco.com:1024
```

OPTIONS

- -format
- -name
- -report

-format

```
-format text|list Determines the format of the output.

                  -format text displays a text table with headers and
                  columns. (Default) Objects are shown in
                  alphabetical order

                  -format list displays a TCL list containing
                  name/value pairs.

                  For a list of properties displayed, see the
                  "Understanding the Output" section above.
```

-name

```
-name <rootname>  Logical name of the DRR. This name must be unique
                  with respect to all other DRRs defined on the
                 MAS.
```

-report

```
-report brief|    Determines what information is returned in the
 normal |verbose  output of the command.

                     Valid values are:
                     o brief - outputs the name of the DRRs. The
                     -format option is ignored for this report mode.

                     o normal - the properties list, in the format
                       specified with the -format option. (Default)

                     o verbose - the properties list, in the format
                       specified with the -format option. This is
                       identical to -report normal.
```

RETURN VALUE

```
If you run the command with the '-format list' option, it returns a
TCL list. If the command fails, it returns a TCL error. For all other
options, it returns an empty string ("").
```

SEE ALSO

```
replicate addroot, replicate enable, replicate disable,
replicate rmroot
```

EXAMPLES

Example of Replicate Showroots in Text Format in Report Normal Mode

```
This example shows running replicate showroots in normal, text mode.

dss>  replicate showroots -root MainDRR sync://mirror.ABCo.com:2647

Name         Read Mode    Path
----         ---------    ----
BackupDRR    all          /home/RepBk/repdata
MainDRR      all          /home/RepHome/repdata
```

Example of Replicate Showroots in Text Format in Report Brief Mode

```
This example shows running replicate showroots in text mode with
report -brief specified using the same data set as Example 1.

dss> replicate showroots -report brief sync://mirror.ABCo.com:30125

BackupDRR
MainDRR
```

Example of Replicate Showroots in List Format in Report Normal Mode

```
This example shows running replicate showroots in -format list and
-report normal (default) mode using the same data set as Example 1.
Note: Because some of these strings exceed the line length for this
documentation, the \ character is used to show that the string does
not contain spaces.

dss> replicate showroots -format list sync://mirror.ABCo.com:2647

{name BackupDRR path /home/RepBk/repdata readmode all dynamic dynamic
module_cache module_cache file_cache file_cache} {name MainDRR path
/home/RepHome/repdata readmode all dynamic dynamic module_cache
module_cache file_cache file_cache}
```

File Cache Maintenance

Caching Objects

caching

caching Command

NAME

```
caching             - Caching behavior commands
```

DESCRIPTION

```
These commands provide a way to view and control the caching behavior
of DesignSync objects; excepting or including intellectual property
from the default caching.
```

SYNOPSIS

```
caching <caching_command>

Usage: caching disable|caching enable|caching list|caching status
```

ARGUMENTS

```
Server URL
```

RETURN VALUE

```
Various by command.
```

SEE ALSO

```
caching disable, caching enable, caching list, caching status
'
```

EXAMPLES

```
See specific command.
```

caching disable

caching disable Command

NAME

```
caching disable     - Disables object caching for server URLs
```

DESCRIPTION

```
This command disables caching for specific objects specified by
server URLs.

When object caching is disabled, the caching property of the object
URL is set to zero (0). The value of this property may be viewed with
the caching status command.

Note: Clients with this feature can disable the local caching
functionality for objects on an older (pre-3DEXPERIENCE 2016x) server
version, but older clients cannot use this feature on newer
clients. Servers accepting commands from older clients can be set up
to refuse enable/disable caching requests from older clients.  For
more information, see the DesignSync Data Manager Administrator's
Guide.

If the object for which caching is being disabled were already loaded
into a cache, those caches are not automatically removed, however
attempts to update the cache, for example with cancel, ci, populate,
or co, will fail.

This command is subject to access controls on the server.
```

SYNOPSIS

```
caching disable <SyncURL>[ <SyncURL>...]
```

ARGUMENTS

- URL

URL

```
<syncURL>  Specifies the option Sync URL as follows:
           sync://<host>[:<port>]/[<path>] or
           syncs://<host>[:<port>]/[<path>]
           where 'sync://' or 'syncs://' are required, <host> is the
           machine on which the SyncServer is installed, and <port>
           is the SyncServer port number (defaults to 2647/2679).
           And the path is the server path to the desired object.
           For example, all of these are valid syncURLs:
```

```
sync://apollo.spaceco.com:2647
sync://apollo.spaceco.com:2647/Modules
sync://apollo.spaceco.com:2647/Modules/Blueprints/FuelCell2
sync://apollo.spaceco.com:2647/Projects/SpaceShuttle
```

RETURN VALUE

```
In stcl/stclc mode, two lists are returned, where the first list
is non-empty if at least one object was successfully processed,
and the second list is non-empty if at least one object failed.
If the command failed to run, DesignSync returns an appropriate error
explaining the failure.
```

SEE ALSO

```
caching enable, caching list, caching status, url getprop, url setprop
```

EXAMPLES

- Example Showing Disabling cachability for an object

Example Showing Disabling cachability for an object

```
This example shows disabling the caching for a specific object and
verifying that the cachability was disabled using the status command,
which returns a status of zero (0).

dss> caching disable sync://srv1.ABCo.com:2647/Modules/ChipDesign/Chip
{Objects succeeded (1)} {}

dss> caching status sync://srv1.ABCo.com:2647/Modules/ChipDesign/Chip
0
```

caching enable

caching enable Command

NAME

```
caching enable      - Enables object caching for server URLs
```

DESCRIPTION

```
This command enables caching for specific objects specified by
server URLs.

When object caching is enabled, the caching property of the object
URL is set to one (1). The value of this property may be viewed with
the caching status command.

Note: Clients with this feature can enable the local caching
functionality for objects on an older (pre-3DEXPERIENCE 2016x) server
version, but older clients cannot use this feature on newer
clients. Servers accepting commands from older clients can be set up
to refuse enable/disable caching requests from older clients.  For
more information, see the DesignSync Data Manager Administrator's
Guide.

This command is subject to access controls on the server.
```

SYNOPSIS

```
caching enable <SyncURL>[ <SyncURL>...]
```

ARGUMENTS

- URL

URL

```
<syncURL>  Specifies the option Sync URL as follows:
           sync://<host>[:<port>]/[<path>] or
           syncs://<host>[:<port>]/[<path>]
           where 'sync://' or 'syncs://' are required, <host> is the
           machine on which the SyncServer is installed, and <port>
           is the SyncServer port number (defaults to 2647/2679).
           And the path is the server path to the desired object.
           For example, all of these are valid syncURLs:
           sync://apollo.spaceco.com:2647
           sync://apollo.spaceco.com:2647/Modules
           sync://apollo.spaceco.com:2647/Modules/Blueprints/FuelCell2
           sync://apollo.spaceco.com:2647/Projects/SpaceShuttle
```

RETURN VALUE

```
In stcl/stclc mode, two lists are returned, where the first list
is non-empty if at least one object was successfully processed,
and the second list is non-empty if at least one object failed.
If the command failed to run, DesignSync returns an appropriate error
```

```
explaining the failure.
```

SEE ALSO

```
caching disable, caching list, caching status
```

EXAMPLES

- Example Showing enabling cachability for an object

Example Showing enabling cachability for an object

```
This example shows enabling the caching for a specific object and
verifying that the cachability is enabled using the status command
which returns a status of one (1).

dss> caching enable sync://srv1.ABCo.com:2647/Modules/ChipDesign/Chip
{Objects succeeded (1)} {}

dss> caching status sync://srv1.ABCo.com:2647/Modules/ChipDesign/Chip
1
```

caching list

caching list Command

NAME

```
caching list        - Displays the cache status for folders
```

DESCRIPTION

- Understanding the Output

```
Displays a list of subfolders and/or parent folders for a specified vault
that have an explicitly set cache status. An explicitly set cache status
indicates
that caching is either enabled (on) or disabled (off) for the
folder. Folders that inherit their state from their parents are not
displayed.

This command is subject to access controls on the server.
This command respects the command defaults setting.
```

Understanding the Output

The output of the caching list command can be formatted for easy viewing (-format text) or optimized for TCL processing (-format list). Both viewing formats show the same information, but may have different names. In the table below, the Column Titles column shows the text output column header and the Property Names column shows list output key value.

The caching list command, by default, displays the following information:

Column Titles	Property Names	Description
Caching Status	status	Caching status for the folder. o Enabled - In text mode, if caching is active for folder, it displays Enabled. In list mode, it displays 1. o Disabled - In text mode, if caching is inactive for the folder, it displays Disabled. In list mode, it displays 0.
Path	path	The server path to the folder.

SYNOPSIS

```
caching list [-disabled]  [-down] [-enabled]  [-format list | text]
                  [-up] <argument>
```

ARGUMENTS

- {} URL

{} URL

<SyncURL>	Specifies the DesignSync vault URL. The command examines either backwards (up) or forwards (down) to determine whether the folder has an explicitly set cache status. The vault is specified as: sync://<host>[:<port>]/[<path>] or syncs://<host>[:<port>]/[<path>] where 'sync://' or 'syncs://' are required,

<host> is the

```
                              machine on which the SyncServer is installed, and
<port>
                              is the SyncServer port number (defaults to
2647/2679).
                              And the path is the server path to the desired
object.
                              For example, all of these are valid syncURLs:
                              sync://serv1.abco.com:2647
                              sync://serv1.abco.com:2647/Modules
                              sync://serv1.abco.com:2647/Modules/ChipDesigns

sync://serv1.abco.com:2647/Projects/SharedLibraries
```

OPTIONS

{}

```
 -disabled              Show all of the folders that have caching
                         explicitly disabled.
                        If this option is specified with -enabled,
                         the command shows folders that have either
                         enabled or disabled status specified,
                         which is the same as specifying neither option.
```

-down

```
 -down                  Show all of the folders below the selected
                         Sync URL argument.
                        If this option is specified with -up, the
                        command shows folders up and down from the
                        specified Sync URL, which is the same as
                        specifying neither option.
```

-enabled

```
 -enabled             Show all of the folders that have caching
                         explicitly enabled.
                        If this option is specified with -disabled,
                         the command shows folders that have either
                         enabled or disabled status specified,
                         which is the same as specifying neither option.
```

-format

```
-format text|list Determines the format of the output.

                  -format text displays a text table with headers and
                  columns. (Default) Objects are shown in
                  alphabetical order

                  -format list displays a TCL list containing
                  name/value pairs.

                  For a list of properties displayed, see the
                  "Understanding the Output" section above.
```

-up

```
-up                    Show all of the folders below the selected
                          Sync URL argument.
                       If this option is specified with -up, the
                       command shows folders up and down from the
                       specified Sync URL, which is the same as
                       specifying neither option.
```

RETURN VALUE

```
Returns an empty string when -format text is used. Returns a TCL list
as described in the Understanding the Output section when -format list
is used.
```

SEE ALSO

```
caching disable, caching enable, caching status
```

EXAMPLES

- Example of Listing the Cache Status using Text Formatting
- Example of Listing the Cache Status using List Formatting

Example of Listing the Cache Status using Text Formatting

```
This example shows listing the status of caching for all folders above
 and below the specified vault folder.
 Note that in this example, the specified module is not displayed
```

```
  because it inherits it's state from the parent category,
"/Modules/ChipDesigns"

 stcl> caching list sync://serv1.ABCo.com:2647/Modules/ChipDesigns/NXZ-45
  Caching Status    Path
  --------------          ----
  Enabled              /Modules
  Disabled             /Modules/TradeSecrets
  Enabled              /Modules/ChipDesigns
  Disabled             /Modules/ChipDesigns/NXZ-45/Proprietary
  Enabled             /Modules/ChipDesigns/NXZ-45/Propertary/ReadyForRelease
```

Example of Listing the Cache Status using List Formatting

```
 This example shows listing the status of caching for all folders below
 the specified vault folder.
Stcl> caching list -down â€"format list
sync://serv1.ABCo.com:2647/Modules/ChipDesigns/NXZ-45

{
   {path /Modules/ChipDesigns/NXZ-45/Proprietary status 0}
   {path /Modules/ChipDesigns/NXZ-45/Proprietary/ReadyForRelease status 0}
```

caching status

caching status Command

NAME

```
 caching status      - Displays caching status of server URLs
```

DESCRIPTION

```
 Displays the caching status (on or off) of the object URL.  URLs can
 be explicitly excluded from the cache to protect access to the file
 and comply with intellectual property protection needs.
```

SYNOPSIS

```
 caching status <SyncURL>
```

ARGUMENTS

- URL

URL

```
<syncURL>  Specifies the option Sync URL as follows:
           sync://<host>[:<port>]/[<path>] or
           syncs://<host>[:<port>]/[<path>]
           where 'sync://' or 'syncs://' are required, <host> is the
           machine on which the SyncServer is installed, and <port>
           is the SyncServer port number (defaults to 2647/2679).
           And the path is the server path to the desired object.
           For example, all of these are valid syncURLs:
           sync://serv1.abco.com:2647
           sync://serv1.abco.com:2647/Modules
           sync://serv1.abco.com:2647/Modules/Blueprints/FuelCell2
           sync://serv1.abco.com:2647/Projects/SpaceShuttle
```

RETURN VALUE

```
Returns a value of zero (0) if the object can not be cached, or one
(1) if the object is able to be cached.
```

SEE ALSO

```
caching disable, caching enable, caching list
```

EXAMPLES

- Example Showing the cachability status for an object

Example Showing the cachability status for an object

```
This example shows enabling/disabling the caching for a specific
object and verifying that the cachability is enabled using the status
command, which returns a zero (0) if cachability is disabled or one
(1) if cachability is enabled.

dss> caching enable sync://srv1.ABCo.com:2647/Modules/ChipDesign/Chip
{Objects succeeded (1)} {}

dss> caching status sync://srv1.ABCo.com:2647/Modules/ChipDesign/Chip
1
dss> caching disable sync://srv1.ABCo.com:2647/Modules/ChipDesign/Chip
{Objects succeeded (1)} {}

dss> caching status sync://srv1.ABCo.com:2647/Modules/ChipDesign/Chip
0
```

cachescrubber

cachescrubber Command

NAME

```
cachescrubber       - Cleans the cache of outdated or unused files
```

DESCRIPTION

```
This command, sometimes used in conjunction with the cachetouchlinks
command, cleans your cache by deleting old or unused files.
See cachetouchlinks for more information.

The 'cachescrubber' command must be run from a Unix shell.

Note: All users have access to the cachescrubber command, although
it should only be run by the owner of the cache directory. It is
possible for users to run it on a cache directory and remove files
that should not be removed. To prevent users from inadvertently
removing files from the cache, enable SUID for caches as described in
the ENOVIA Synchronicity DesignSync Data Manager Administrator's Guide.
```

SYNOPSIS

```
cachescrubber <cache directory> [<age in days>] [-dryrun] [-noref]
              [-preds32] [-report <mode>]
```

OPTIONS

- cache directory
- age in days
- -dryrun
- -noref
- -preds32
- -report

cache directory

```
<cache directory> The directory to be scrubbed.
                  This can be an absolute or relative path.
```

age in days

<age in days> Versions this age and older will be scrubbed. When specified, this must follow the <cache directory> argument. You must supply an integer value. This is optional when the -noref or -preds32 options are supplied, since when using those options the files in the cache are not removed based on age. If the <age in days> argument is specified in addition to the -noref and/or -preds32 options, then files that don't meet the no reference or pre-DS3.2 criteria will be removed if they meet the <age in days> criteria.

-dryrun

-dryrun Do not remove any files but report what will be removed when run without this option. This option can be run with any of the report modes.

-noref

-noref Remove versions in the cache that have no references. If the <age in days> argument is also specified, the versions with no references will be removed regardless of the age criteria.

-preds32

-preds32 Remove versions put into the cache from pre-version 3.2 DesignSync clients. If the <age in days> argument is also specified, the pre-3.2 versions will be removed regardless of the age criteria.

-report

-report Where <mode> is brief, normal, or verbose. The 'normal' mode will only report warnings and errors. The 'brief' mode displays the same information as 'normal' mode. The 'verbose' mode will report all objects being removed. The default mode is 'normal'.

RETURN VALUE

The cachescrubber Unix command line script will return a 0 for success and a 1 for failure.

SEE ALSO

cachetouchlinks

EXAMPLES

The following example shows how to run cachetouchlinks and cachescrubber from a shell script. If cachetouchlinks fails, cachescrubber will not run.

```
#!/bin/csh -f
#
# Touch all cache files in all workspaces listed in "workspace_files"
cachetouchlinks -file /home/syncmgr/workspace_files
if ($status != 0) then
       echo "### cachetouchlinks failed when running with"
       echo "        /home/syncmgr/workspace_files ###"
       exit 1
endif
echo "### successfully touched all cache files from workspaces listed in"
echo "       /home/syncmgr/workspace_files ###"
# If cachetouchlinks was successful, run it on all cache directories
cachescrubber /home/syncmgr/caches/sync_cache 1
if ($status != 0) then
       echo "### cachescrubber failed while cleaning sync_cache ###"
       exit 1
else
       echo "### successfully cleaned sync_cache ###"
endif
#
cachescrubber /home/syncmgr/caches/ASIC_cache 1
if ($status != 0) then
       echo "### cachescrubber failed while cleaning ASIC_cache ###"
       exit 1
else
       echo "### successfully cleaned ASIC_cache ###"
endif
cachescrubber /home/syncmgr/caches/CPU_cache 1
if ($status != 0) then
       echo "### cachescrubber failed while cleaning CPU_cache ###"
       exit 1
else
       echo "### successfully cleaned CPU_cache ###"
endif
exit 0
```

Note: If this shell script is run once a week, then the 'age in days' argument could be an integer greater than 1. If the cachetouchlinks script ran for more than 1 day, then this integer must be greater than 1. If 5 days were used and this script was run once a week, this would cover the situation where the cachetouchlinks script ran for more than 1 day (and less than 5 days). Since cachetouchlinks was run 7 days earlier, then the 'age

```
in days' should be less than 7. You should record the time that
cachetouchlinks ran so that the cachescrubber could be run with an
'age in days' argument that is greater than the number of days used
with cachetouchlinks.
```

cachetouchlinks

cachetouchlinks Command

NAME

```
cachetouchlinks     - Determines which files to be cleaned by the
                      cachescrubber command
```

DESCRIPTION

```
Before cleaning the cache with the cachescrubber command,
you can run cachetouchlinks on your workspace to identify which
files should be deleted. Cachetouchlinks recurses
through all specified workspaces and when it finds a local object
that is a cache type, it reads the value of the symbolic link and
"touches" the cached file that is referenced. For a collection object,
it "touches" each cached member file.

Notes:

 * The cachetouchlinks script does not consider hard links during
   processing.

 * If you unintentionally remove a cache file that is still being
   referenced, you can use the refreshcache command to recreate the
   links.

 * The cachetouchlinks command is both a UNIX command line script and
    Tcl command. Both commands have the same argument list, but
    return different values. See the Return Values section for more
    information.
```

SYNOPSIS

```
cachetouchlinks  [-checkerrors] [-dryrun] [-ignoreerrs]
 [-file <workspace-path-list>| -path <path-to-workspace-dir>]
 [-norecursive]  [-report <mode>]
```

OPTIONS

- -checkerrors
- -dryrun

- -file
- -ignoreerrs
- -path
- -norecursive
- -report

-checkerrors

```
-checkerrors      Uses the workspace metadata to verify that objects in
                  the cache state are linked to a cache.  This option
                  has a performance implication and should only be
                  used when necessary.
```

-dryrun

```
-dryrun           Only report what will be done, do not touch any
                  links. This can be run with any of the '-report'
                  modes.
```

-file

```
-file             Valid path to a file containing the list of
                  workspaces referring to caches that will be
                  cleaned. The 'list file' can be specified as an
                  absolute or relative path. The workspaces in the
                 'list file' can be absolute or relative paths.
                 (Entries in the file that are relative paths are
                  relative to the current working directory, rather
                  than relative to the file itself.)  When using the
                  directory list file, directories with spaces must
                  not be escaped. Leading and trailing spaces are
                  removed.

                  Workspace list file syntax:
                  one line for every workspace
                  comments have line beginning with #

                  Example workspace path list file:

                  # workspace ASIC for user larry
                  /home/larry/Projects/ASIC
                  # workspace CPU for user larry
                  /home/larry/Projects/CPU
                  # all workspaces for user frank
                  /home/frank/Projects
                  # workspace ASIC for user rizzo
                  /home/rizzo/Projects/ASIC
                  # workspace CPU for user rizzo
                  /home/rizzo/Projects/CPU
```

Note: Paths listed in the workspace path list file could be absolute or relative paths. If spaces exist in a path, the path should not be escaped or enclosed in quotes.

-ignoreerrs

-ignoreerrs — Continue executing even if an error is encountered. The default is to stop at the first error.

-path

-path — Valid path to a workspace whose corresponding cache is to be cleaned. Absolute or relative paths are accepted. A path containing spaces must be escaped. If run from the Unix command line, escaping can be either using a backslash '\' preceding a space or enclosing the path in double quotes. When run from an stcl shell, escaping could be using a backslash preceding a space or enclosing the path in double quotes or braces '{}'. When run from a dss shell, the only escaping allowed is enclosing the path in double quotes. A valid directory must be specified following this option. If this option is not specified, cachetouchlinks will default to the current working directory

-norecursive

-norecursive — Do not recursively process the workspace(s). The default is to recursively process each workspace.

-report

-report <mode> — Where mode is brief, normal, or verbose. The 'normal' mode will report only warnings and errors. The 'brief' mode displays the same information as 'normal' mode. The 'verbose' mode will report all objects that are being touched. The default is 'normal'.

RETURN VALUE

```
- On failure, an exception occurs (the return value is
  thrown, not returned).
- If -ignoreerrs is specified, The cachetouchlinks Tcl procedure will
  return a TCL_ERROR (1) on failure.
- On success, a TCL_OK (0) will be returned.

The cachetouchlinks Unix command line script will return a 0 for success and
a 1 for failure.
```

SEE ALSO

```
cachescrubber, refreshcache
```

EXAMPLES

```
The following example shows how you can run cachetouchlinks and
cachescrubber from a shell script. If cachetouchlinks fails,
cachescrubber will not run.

#!/bin/csh -f
#
# Touch all cache files in all workspaces listed in "workspace_files"
cachetouchlinks -file /home/syncmgr/workspace_files
if ($status != 0) then
       echo "### cachetouchlinks failed when running with"
       echo "        /home/syncmgr/workspace_files ###"
       exit 1
endif
echo "### successfully touched all cache files from workspaces listed in"
echo "       /home/syncmgr/workspace_files ###"
# If cachetouchlinks was successful, run the cachescrubber
# on all cache directories
cachescrubber /home/syncmgr/caches/sync_cache 1
if ($status != 0) then
       echo "### cachescrubber failed while cleaning sync_cache ###"
       exit 1
else
       echo "### successfully cleaned sync_cache ###"
endif
#
cachescrubber /home/syncmgr/caches/ASIC_cache 1
if ($status != 0) then
       echo "### cachescrubber failed while cleaning ASIC_cache ###"
       exit 1
else
       echo "### successfully cleaned ASIC_cache ###"
endif
cachescrubber /home/syncmgr/caches/CPU_cache 1
if ($status != 0) then
       echo "### cachescrubber failed while cleaning CPU_cache ###"
       exit 1
else
```

```
       echo "### successfully cleaned CPU_cache ###"
endif
exit 0

Note: If this shell script is run once a week, then the 'age in
days' argument could be an integer greater than 1. If the
cachetouchlinks script ran for more than 1 day, then this integer
must be greater than 1.  If 5 days were used and this script was
run once a week, this would cover the situation where the
cachetouchlinks script ran for more than 1 day (and less than 5
days). Since cachetouchlinks was run 7 days earlier, then the 'age
in days' should be less than 7. You should record the time that
cachetouchlinks ran so that the cachescrubber could be run with an
'age in days' argument that is greater than the number of days used
with cachetouchlinks.
```

refreshcache

refreshcache Command

NAME

```
refreshcache        - Refreshes a workspace, re-establishing cache links
                      to point to either a new cache location or to new
                      cache names
```

DESCRIPTION

```
This command traverses the workspace directory hierarchy in search of
objects that exist in the shared cache mode and recreates the link to the
cache.

This command can be used when moving a cache to re-establish links to
the new cache directory.  The cache file naming mechanism changed in
DesignSync version 3.2 to address consistency and reliability issues.
If pre-version 3.2 cache links still exist, the refreshcache command can be
used to re-establish links to cache files using the new cache file name
format. It is beneficial to re-establish links to cache files using the
new cache name file format since there have been consistency and reliability
issues addressed with the new cache naming. Links to the old cache file
names
will still work.

If you only have the latest version of any branch populated, first
'populate -recursive -reference -unifystate' to replace any cache links
with DesignSync references. Then 'populate -recursive -share -unifystate'
to recreate the cache links, which will now lead to cached files in the
new cache location.  This will also replace pre- DS 3.2 style cache links
with the newer cache link format.

Note that the DesignSync reference state is only intended to be temporary.
DesignSync references do not exist on disk, so tools requiring actual data
will not work properly with DesignSync references.
```

```
The refreshcache command is useful when non-latest versions exist in the
workspace since it recreates a new link to the current version in the
workspace.
```

SYNOPSIS

```
refreshcache [-continue_on_error] [-dryrun]
             [ -file <path> | -workspace <path>] [-norecursive]
             [-preds32] [-verbose]
```

OPTIONS

-continue_on_error

```
-continue_on_error  If an error is encountered, do not exit, but
                    continue processing workspace(s). By default, the
                    refreshcache command will exit on encountering an
                    error.
```

-dryrun

```
-dryrun             Only report what will be done, do not refresh any
                    links.
```

-file

```
-file               A full or relative path to a file containing a
                    list of workspaces to be refreshed.  Either this
                    option or the '-workspace' option must be
                    supplied, but not both. The format of this file
                    is one line for every workspace. A line beginning
                    with a '#' is a comment.
```

-norecursive

-norecursive	Do not recursively process the workspace(s).

-preds32

-preds32	The cache file naming mechanism changed in DesignSync Version 3.2 to address consistency and reliability issues. It is beneficial to re-establish links to the new cache file names. Using this option will only select links that are currently pointing to the old cache file name format and re-establish them so that they are linking to files using the new cache file name format. This can be useful if a user already has a workspace with a mix of links pointing to cache files with the old naming convention and the new naming convention. This way it would not waste time refreshing the links to files in the new name format.

-workspace

-workspace	The full path or relative path to workspace to be refreshed. Either this option or the '-file' option must be supplied, but not both.

-verbose

-verbose	Extra report processing - reports object being processed, version id, object type and old cache file links. The old cache file links are reported with -preds32 option.

RETURN VALUE

If the refresh is successful, returns an empty string. If the refresh fails, returns an appropriate error.

SEE ALSO

cachescrubber, cachetouchlinks, populate

EXAMPLES

Example Showing a Dry Run

```
Reports all cache links in the asic hierarchy that will be refreshed,
but doesn't refresh any:

  stcl> refreshcache -workspace /home/larry/Projects/asic -dryrun
```

Example Showing Updating Pre-3.2 Cache Files

```
Add the -preds32 option and it will report all links that point to
cache files using the old naming convention, which will be
refreshed if the -dryrun option is not specified.

Re-establishes cache links in workspace /home/larry/Projects/asic:

  stcl> refreshcache -workspace /home/larry/Projects/asic

Can use the -preds32 option to only refresh cache links that were
linked to files before version 3.2. These links are pointing to cache
files that used the old naming convention.

First report what will be refreshed.

  stcl> refreshcache -workspace /home/larry/Projects/asic -preds32 -dryrun

Re-establishes cache links:

  stcl> refreshcache -workspace /home/larry/Projects/asic -preds32
```

Example Showing Updating Workspaces From a File

```
Reports all cache links in all workspaces listed in file
'/home/larry/workspace_list', which will be refreshed, but doesn't
refresh any.

The workspace list file might look like follows:

    # comment - ASIC project
    /home/larry/Projects/asic
    # CPU project
    /home/larry/Projects/cpu

  stcl> refreshcache -file /home/larry/workspace_list -dryrun

Re-establishes cache links:
```

```
stcl> refreshcache -file /home/larry/workspace_list
```

Mirror System

mirror Commands

NAME

```
mirror              - Mirror management commands
```

DESCRIPTION

```
The mirror commands allow you to create, view, edit, and
check the status of mirrors. You also can administer mirrors
using the DesignSync WebUI.
```

SYNOPSIS

```
mirror <mirror_command> [<mirror_command_options>]

Usage: mirror [create|delete|disable|edit|enable|get|getoptions|
               isenabled|ismirror|list|rename|requeue|reset|setoptions|
              status|wheremirrored]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror requeue,
mirror reset, mirror setoptions, mirror status,
mirrorsetdefaultuser, mirror wheremirrored
```

mirror

mirror Commands

NAME

```
mirror              - Mirror management commands
```

DESCRIPTION

```
The mirror commands allow you to create, view, edit, and
check the status of mirrors. You also can administer mirrors
using the DesignSync WebUI.
```

SYNOPSIS

```
mirror <mirror_command> [<mirror_command_options>]

Usage: mirror [create|delete|disable|edit|enable|get|getoptions|
               isenabled|ismirror|list|rename|requeue|reset|setoptions|
              status|wheremirrored]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror requeue,
mirror reset, mirror setoptions, mirror status,
mirrorsetdefaultuser, mirror wheremirrored
```

mirror create

mirror create Command

NAME

```
mirror create       - Creates a mirror
```

DESCRIPTION

```
This command creates a mirror. When a password is required, you are
prompted and the command becomes interactive.

Note: When you create a mirror, submirrors for referenced data are
created automatically.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror create [-cachedir <path>] [-cachelinktype hard|soft]
              [-category <category>] [-description <description>]
              [-[no]enable] [-fetchstate get|share]
              [-MASuser <user>] -mirrordir <mirrorDir>
              -name <name> [-notify<email_list>]
              [-parentname <parent_mirror>] [-PMASuser <user>]
              [-primaryserver <serverURL>] [-RSuser <user>]
              [-script <TCL_script>]
              [-selector <list>] [-type normal|primary|secondary]
              -vaultURL <vaultURL> <serverURL>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror will be
                created. Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                For example:  sync://serv1.abco.com:1024
```

OPTIONS

- -cachedir
- -cachelinktype
- -category

-cachedir

```
-cachedir       The -cache option allows you specify the path to the
 <path>         mirror specific file cache. If you update mirrors
                with the share state and no file cache is specified,
               the default cache or project caches are used. The
               default cache is determined by the MUP's registry
               files which include the server's registry files and
               the MirrorRegistry.reg file.
```

-cachelinktype

```
-cachelinktype  The -cachelinktype option indicates whether creating
 hard|soft      a mirror with cache links uses hard or soft
                (symbolic) links in the mirror. This option is
              ignored if the -fetchstate get option is used.

                "-cachelinktype hard" populates the mirror with hard
                links to the cache.  Hard links require that mirror
                and the cache be on the same disk partition. If the
                system cannot create hard links to the cache, it
                will switch automatically to creating soft links to
                the cache.

                "-cachelinktype soft" populates the mirror with
                symbolic links to the cache. (Default)

                Note: This option does not use the registry settings
                that determine whether a hard link or soft link
                should be used. The default setting for this option
                is to use soft links.
```

-category

-category	An optional parameter to assign a category (arbitrary string) to a mirror. All mirrors belonging to a category can be selected by using the -category parameter of 'mirror list'. When mirror definitions are automatically generated as the result of encountering references, they will inherit the category of their parent mirror. A category must be composed of the following set [A-Za-z0-9_/-.] or a space.

-description

-description	An optional description of the mirror. A description must be composed of the following set [A-Za-z0-9_/-.] or a space.

-[no]enable

-[no]enable	Determine if the mirror should be enabled when it is created. The default is enable.

-fetchstate

-fetchstate get|share	An optional mode to indicate whether the mirror should be populated with local copies, or populated with file cache links. "-fetchstate get" populates the mirror with local copies. (Default) "-fetchstate share" populates the mirror with links the cache. You can use the -cachelinktype to specify whether the links should be soft links (symbolic links) or hard links.

-MASuser

-MASuser	The name of the user to establish communication from the repository server (RS) to the mirror administration server (MAS). When this parameter is omitted, the default user (mirror setoptions -defaultuser) is used for this connection. If the

default user is not set, an error will be thrown.
If the 'mirror setoptions -enforcedefaultuser' option
is set on the MAS and this parameter is specified, an
error will be thrown. If this parameter is specified,
the user will be prompted for the corresponding
password. Therefore, specifying this parameter makes
the 'mirror create' command an interactive command.

-mirrordir

-mirrordir The pathname of the mirror directory.
Note: This parameter is required.

The pathname must be unique with respect to
all other mirrors defined on the mirror administration
server (MAS).

If this pathname contains a relative path with
respect to the stcl's cwd, it is converted to an
absolute pathname before the name is passed to the
mirror administration server.

If the mirror directory pathname contains a symbolic
link (UNIX only), the user controls whether the
symbolic link is resolved or used as is, with the
EnableRealMirrorPaths registry key.

The '~' home directory character is allowed (UNIX
only).

The directory pathname must be relevant on the same
LAN as the mirror administration server.

The directory name can be prefixed with 'file://' if
an absolute pathname is specified.

The mirror directory path and the relative path of
the mirror must be unique. You cannot use a directory
that is already in use by another mirror.

-name

-name Logical name of the mirror. This name must be unique
with respect to all other mirrors defined on the mirror
administration server (MAS). When mirror definitions
are automatically generated as the result of
encountering references, the new mirror names should
reflect the point in the mirror hierarchy where the
reference was encountered. The hierarchical delimiter
used must be a slash, '/'.
EXAMPLE: If the mirror 'liba' uses mirror directory

/home/libs/liba and during the initial populate a reference is encountered at the /home/libs/liba/iocells/scancells directory, a new mirror called 'liba/iocells/scancells' will be created. Names must be composed of the following set [A-Za-z0-9_/-.]. Mirror names cannot begin with a dash (-).

When -name is used without the -parentname argument, the name parameter cannot be the name of an existing mirror. However, when used in combination with the -parentname argument, the name parameter can refer to an existing mirror. In this case, the mirror directory, vault URL, and selector are validated and if any of these parameters is incorrect, an error is thrown. When -name and -parentname are used in combination, all other parameters for the mirror create command are used only for validation.

The -name value is required.

-notify

-notify — A comma-separated or space-separated list of email addresses and/or user names to send email to whenever the mirror generates notifications. The defaultnotifylist (see 'mirror setoptions') will be internally appended to this list. If the defaultnotifylist has not been set then this list will default to the email address in the user's profile for the user executing this command on the MAS. If user names are specified, the users must have user profiles on the MAS servers.

-parentname

-parentname — When you are creating a submirror, the logical name of the parent mirror. The parent mirror must already exist. See the -name argument description, above, for information on how the -name and -parentname arguments interact.

-PMASuser

-PMASuser — The name of the user to establish communication from the mirror administration server (MAS) to the primary mirror server (PMAS). If the -type parameter is not set to "secondary", this parameter is silently ignored. When the -type is set to "secondary" then if this

parameter is omitted, the default user (mirror setoptions -defaultuser) is used for this connection. If the default user is not set, an error will be thrown. If the 'mirror setoptions -enforcedefaultuser' option is set on the MAS and this parameter is specified, an error will be thrown. If this parameter is specified, the user will be prompted for the corresponding password. Therefore, specifying this parameter makes the 'mirror create' command an interactive command.

-primaryserver

-primaryserver	Specifies the URL of the SyncServer hosting the primary mirror (PMAS). If the -type parameter is not set to "secondary", this parameter is silently ignored. Specify the URL as follows: sync://<host>[:<port>] or syncs://<host>[:<port>] where 'sync://' or 'syncs://' are required, <host> is the machine on which the PMAS is installed, and <port> is the PMAS port number (defaults to 2647) For example" -primaryserver sync://serv1.abco.com:1024

-RSuser

-RSuser	The name of the user to establish communication from the mirror administration server (MAS) to the repository server (RS). This User must have a user profile on the RS. When this parameter is omitted, the default user (mirror setoptions -defaultuser) is used for this connection. If the default user is not set, an error will be thrown. If the 'mirror setoptions -enforcedefaultuser' option is set on the MAS and this parameter is specified, an error will be thrown. No companion password parameter is available for -RSuser. If this parameter is specified, the user will be prompted for the corresponding password. Therefore, specifying this parameter makes the 'mirror create' command an interactive command.

-script

-script <TCL_script>	The -script option allows you to specify the TCL script that defines the scripted mirror. The script must be in the syncinc/share/tcl, or custom/site/share/tcl directory. For information about how to create the TCL script, see the ENOVIA

Synchroncity DesignSync Administrator's Guide.

The -script option is mutually exclusive with the -type option.

-selector

-selector <list>	The -selector option is used to choose which versions of the files in the vault to place in the mirror directory. This value's syntax is checked to make sure the selector is valid. The default is 'Trunk:Latest'.

-type

-type	The type of the mirror. This must be 'normal', 'primary', or 'secondary'. Secondary mirrors require the -primaryserver parameter and may specify the -PMASuser parameter. The default is 'normal'. This option is mutually exclusive with the -script option.

-vaultURL

-vaultURL	Specifies the URL of the vault directory whose contents will be mirrored out. This parameter is required. Specify the URL as follows: sync://<host>[:<port>]/path_to_vault or syncs://<host>[:<port>]/path_to_vault where 'sync://' or 'syncs://' are required, <host> is the remote server, <port> is the remote server's port number (defaults to 2647) and the path_to_vault is the path from the remote servers root to the vault directory being mirrored.

RETURN VALUE

Returns an empty string on success.

SEE ALSO

```
mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

```
This example creates a primary mirror on the MAS sync://faure:30138.
The default user, as specified in the 'mirror setoptions' example, is
used for mirror communications. The mirror is not initially enabled.

stcl> mirror create -recursive -type primary -description "FCS builds" \
stcl> -noenable sync://faure:30138 -name releases -mirrordir \
stcl> /home/tbarbg2/Mirrors/releases -vaultURL \
stcl> sync://srv2.ABCo.com:2647/releases
stcl>
```

mirror delete

mirror delete Command

NAME

```
mirror delete       - Deletes a mirror
```

DESCRIPTION

```
This command deletes the mirror definition from both the MAS and the
RS. It does not stop any updates that are in progress on the mirror's
behalf or remove the mirror directory. If the MAS can be contacted
but the mirror cannot be removed because the RS cannot be contacted,
the mirror will be placed in a disabled state.

Generated mirrors cannot be removed. Scripted mirrors, which are used
to generate and modify the generated mirrors can be deleted.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror delete [-force] -name <name> <serverURL>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror will be
                deleted. Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                For example: sync://serv1.abco.com:1024
```

OPTIONS

- -force
- -name

-force

```
-force          Specifying this option deletes the mirror definition
                from the MAS (to clean up the status output and stop
                unwanted email) when the RS is not available.

                Note: Use this option only when the RS is not available
                and is not likely to become available.

                When the -force option is used and the RS is not
                accessible, the user gets the following message:
                "Connect failure. Server '<host>:<port>' may have
                reset the connection."  But the mirror definition is
                removed from the MAS.
```

-name

```
-name           Name of the mirror to delete.

                Note: Generated mirrors cannot be removed.  Generated
                mirrors use the <TCL_script>@<script_assigned_name>.
                Any mirror containing a "@" is a generated mirror.

                The -name option is required.
```

RETURN VALUE

```
Returns an empty string on success.
```

SEE ALSO

```
mirror create, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

Example Showing Deleting a Mirror

```
This example deletes the 'Releases' mirror from the MAS
sync://giovannelli:30138.

  stcl> mirror delete sync://giovannelli:30138 -name Releases
  stcl>
```

Example Showing That the Mirror Cannot Be Deleted

```
This example cannot delete the 'NML8B0' mirror from the MAS
sync://qechrhl02:30046 as the RS is disabled.

  stclc> mirror delete sync://qechrhl02:30046 -name NML8B0
  Connect failure. Server 'sting:30046' may have reset the connection.

  Could not remove the mirror's definition from the repository server.
  The mirror is disabled: NML8B0
  - Attempting to contact repository server...
  - som-E-11: Communication Connect Failure.
```

Example Using The Force Option to Delete a Mirror

```
 This example deletes the 'NML8B0' mirror from the MAS
 sync://qechrhl02:30046 even though the RS is disabled using the
 -force option.

  stclc> mirror delete sync://qechrhl02:30046 -force -name NML8B0
  Connect failure. Server 'sting:30046' may have reset the connection.

  stcl> mirror ismirror sync://qechrhl02:30046 -name NML8B0
  0
```

mirror disable

mirror disable Command

NAME

```
mirror disable      - Disables a mirror
```

DESCRIPTION

```
The mirror disable command disables a single mirror or all mirrors
depending on the parameter specified. When a mirror is disabled, it
is marked disabled on the MAS and an attempt is made to remove the
mirror definition from the mirror's repository server. Failing to
remove the definition from the repository server does not cause an
error. The RS mirror definition is replaced when the mirror is
enabled or removed when the mirror is deleted.

If an error occurs while processing one mirror in a list (during -all
switch) all remaining mirrors are processed. An error is thrown if
all mirrors being processed fail. If only one mirror is being
processed, an empty string is returned on success. If multiple
mirrors are processed, an error status message is printed for each
mirror that fails and the return value shows success and failure
status in the form { succeeded 3 failed 2 }.

Note: When a parent scripted mirror is disabled, the mirrors
generated by that script are also disabled. Additionally, the script
can disable a generated mirror by returning a status value of 2,
followed by a list of the generated mirrors to disable in the Mirrors
list.

Generated mirrors use the format <MirrorName>@<script_assigned_name>.
Any mirror containing a "@" is a generated mirror.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror disable <serverURL> -all | -name <name>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror will be
                disabled. Specify the URL as follows:
```

```
sync://<host>[:<port>] or
syncs://<host>[:<port>] where 'sync://' or 'syncs://'
are required, <host> is the machine on which the
SyncServer is installed, and <port> is the SyncServer
port number (defaults to 2647/2679).
For example: sync://serv1.abco.com:1024
```

OPTIONS

-all

```
-all            Evaluates all mirrors on the server.
```

-name

```
-name           Name of the mirror to disable.
```

RETURN VALUE

```
If only one mirror is being processed, an empty string is returned on
success. If multiple mirrors are being processed, an error status
message is printed for each mirror that fails and the return
value shows success and failure status in the form
{ succeeded 3 failed 2 }.
An error is thrown if all of the mirrors being processed fail.
```

SEE ALSO

```
mirror create, mirror delete, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

```
This example disables the "Releases" mirror on the MAS
sync://giovannelli:30138.

stcl> mirror disable sync://giovannelli:30138 -name Releases
stcl>
```

mirror edit

mirror edit Command

NAME

```
mirror edit         - Modifies mirror parameters
```

DESCRIPTION

- Notes for File-Based and Legacy Module Objects

```
The mirror edit command modifies specified mirror parameters
Passwords are never specified on the command line for this command.
When passwords are needed, you are prompted and the command
becomes interactive.

Note: You cannot change the name of the mirror using mirror edit.  To
change the mirror name, use the 'mirror rename' command.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

Notes for File-Based and Legacy Module Objects

```
Vaults containing DesignSync references always recursively mirrors
the contents of their reference vaults.
```

SYNOPSIS

```
mirror edit [-cachedir <path>] [-cachelinktype hard|soft]
            [-category <category>] [-description <description>]
            [-fetchstate get|share] [-MASuser <user>]
            -name <name> [-notify <email_list>] [-PMASuser <user>]
            [-primaryserver <serverURL>] [-[no]recursive]
            [-RSuser <user>] [-vaultURL <vaultURL>]
            [-selector <selector_list>] [-script <TCL_script>]
            [-type normal|primary|secondary] <serverURL>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror will be
                edited. Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

-cachedir

```
-cachedir       The -cache option allows you specify the path to the
 <path>         mirror specific file cache. If you update mirrors
                with the share state and no file cache is specified,
                the default cache or project caches are used. The
                default cache is determined by the MUP's registry
                files which include the server's registry files and
                the MirrorRegistry.reg file.
```

-cachelinktype

```
-cachelinktype  The -cachelinktype option indicates whether creating
 hard|soft      a mirror with cache links uses hard or soft
                (symbolic) links in the mirror. This option is
                ignored if the -fetchstate get option is used.

                "-cachelinktype hard" populates the mirror with hard
                links to the cache.  Hard links require that mirror
```

and the cache be on the same disk partition. If the system cannot create hard links to the cache, it will switch automatically to creating soft links to the cache.

"-cachelinktype soft" populates the mirror with symbolic links to the cache. (Default)

Note: This option does not use the registry settings that determine whether a hard link or soft link should be used. The default setting for this option is to use hard links.

-category

-category	A parameter to assign a category (arbitrary string) to a mirror. All mirrors belonging to a category can be selected by using the -category parameter of 'mirror list'. A category must be composed of the following set [A-Za-z0-9_/-.] or a space.

-description

-description	An optional description of the mirror. A description must be composed of the following set [A-Za-z0-9_/-.] or a space.

-fetchstate

-fetchstate get|share	An optional mode to indicate whether the mirror should be populated with local copies, or populated with file cache links. "-fetchstate get" populates the mirror with local copies. (Default) "-fetchstate share" populates the mirror with links the cache. You can use the -cachelinktype to specify whether the links should be soft links (symbolic links) or hard links.

-MASuser

-MASuser	The name of the user to establish communication from the repository server (RS) to the mirror administration server (MAS). If the 'mirror setoptions

-enforcedefaultuser' option is set on the MAS and this parameter is specified, an error will be thrown. If this parameter is specified, the user will be prompted for the corresponding password. Therefore, specifying this parameter makes the 'mirror edit' command an interactive command.

-mirrordir

-mirrordir — Pathname of the mirror directory. This pathname must be unique with respect to all other mirrors defined on the mirror administration server (MAS).

If this pathname contains a relative path with respect to the stcl's cwd, it will be converted to an absolute pathname BEFORE the name is passed to the mirror administration server.

If the mirror directory pathname contains a symbolic link (UNIX only), the user controls whether the symbolic link is resolved or used as is, with the EnableRealMirrorPaths registry key.

The '~' home directory character is allowed (UNIX only). The directory pathname must be relevant on the same LAN as the mirror administration server. The directory name can be prefixed with 'file://' if an absolute pathname is specified.

The mirror directory path and the relative path of the legacy module must be unique. You cannot use a directory for a legacy module that is already in use by another mirror.

-name

-name — Name of the mirror to edit. This parameter is required.

-notify

-notify — A comma-separated or space-separated list of email addresses and/or user names to send email to whenever the mirror generates notifications. The defaultnotifylist (see 'mirror setoptions') will be appended to this list. If user names are specified, the users must have user profiles on the MAS servers.

-PMASuser

```
-PMASuser       The name of the user to establish communication from
                the mirror administration server (MAS) to the primary
                mirror administration server (PMAS). If the mirror's
                type is not set to "secondary", this parameter is
                silently ignored. If the 'mirror setoptions
                -enforcedefaultuser' option is set on the MAS and
                this parameter is specified, an error will be thrown.
                If this parameter is specified, the user will be
                prompted for the corresponding password. Therefore,
                specifying this parameter makes the 'mirror edit'
                command an interactive command.
```

-primaryserver

```
-primaryserver   Specifies the URL of the SyncServer hosting the
                 primary mirror (PMAS).  If the mirror's type is not
                 set to "secondary", this parameter is silently
                 ignored.  Specify the URL as follows:
                 sync://<host>[:<port>] or syncs://<host>[:<port>]
                 where 'sync://' or 'syncs://' are required, <host>
                 is the machine on which the PMAS is installed, and
                 <port> is the PMAS port number (defaults to 2647.
                 Example: -primaryserver
                 sync://serv1.abco.com:1024
```

-RSuser

```
-RSuser         The name of the user to establish communication from
                the mirror administration server (MAS) to the
                repository server (RS). This User must have a user
                profile on the RS. If the 'mirror setoptions
                -enforcedefaultuser' option is set on the MAS and this
                parameter is specified, an error will be thrown. No
                companion password parameter is available for -RSuser.
                If this parameter is specified, the user is prompted
               for the corresponding password. Therefore, specifying
               this parameter makes the 'mirror edit' command
               interactive.
```

-script

```
-script         The -script option allows you to specify the TCL
 <TCL_script>   script that defines the scripted mirror.  The script
                must be in the syncinc/share/tcl, or
               custom/site/share/tcl directory. For information
```

about how to create the TCL script, see the ENOVIA Synchroncity DesignSync Administrator's Guide.

IMPORTANT: You cannot use the -script option to change the mirror type. You can only use it to change which script controls the scripted mirror. The -script option is mutually exclusive with the -type option.

-selector

-selector — The selector_list to use to choose which versions of the files in the vault to place in the mirror directory.
This value's syntax will be checked to make sure the selector is valid. With the exception of a scripted mirror, you cannot edit the selector when the mirror reflects a module.

-type

-type — Specify the type of the mirror as 'normal', 'primary', or 'secondary'. Secondary mirrors require the -primaryserver parameter and may specify the -PMASuser parameter.

-vaultURL

-vaultURL — Specifies the URL of the vault directory whose contents will be mirrored out. Specify the URL as follows: sync://<host>[:<port>]/path_to_vault or syncs://<host>[:<port>]/path_to_vault where 'sync://' or 'syncs://' are required, <host> is the remote server, <port> is the remote server's port number (defaults to 2647), and the path_to_vault is the path from the remote servers root to the vault directory to be mirrored out.

Note:
- You can edit the vault URL from a DS folder to a legacy module and vice versa.
- You can edit the vault URL from one module folder to another module folder.
- You cannot edit the vault URL when the mirror reflects a module.
- You cannot edit the vault URL from a legacy module or a DS vault to non-legacy module or vice versa. If a mirror is created to populate a legacy module, it cannot be modified to populate a

```
non-legacy module. Likewise, if a mirror is created
to populate a non-legacy module, it cannot be
modified to populate a legacy module. An error is
generated if such an attempt is made.
```

RETURN VALUE

```
Returns an empty string on success.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

```
This example changes the mirror directory for the "releases" mirror that
was created in the 'mirror create' example. The 'mirror rename' example
shows how to change the mirror name.

stcl> mirror edit sync://faure:30138 -name releases -mirrordir \
stcl> /home/tbarbg2/Mirrors/Releases
stcl>
```

mirror enable

mirror enable Command

NAME

```
mirror enable       - Enables a specified mirror
```

DESCRIPTION

```
This command enables a single mirror, all disabled mirrors, or all
mirrors depending on the parameter specified. When a mirror is enabled,
it is effectively re-registered. The repository server for each mirror
will be contacted and the mirrors definition on the repository server
replaced. If the mirror cannot re-register, the mirror will remain in
(or be moved to) the disabled state.

Note that enabling an already  enabled mirror could result in the
mirror becoming disabled if the RS  is unreachable. If an error occurs
while processing one mirror in a  list (-disabled or -all switches) all
```

```
remaining mirrors will be  processed. An error is thrown if all mirrors
fail.

Note: When a parent scripted mirror is enabled, the mirrors generated
by that script are also enabled. Additionally, if the script returns
a list of mirrors to generate, then those mirrors are automatically
enabled, if they were in the disabled state.
Generated mirrors use the format:
<MirrorName>@<script_assigned_name>.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror enable <serverURL> -all | -disabled | -name name
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror will be
                enabled. Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

- -all
- -disabled
- -name

-all

```
-all            Enables all the mirrors on the server.

                This option is mutually exclusive with -disabled and
                -name.
```

-disabled

```
-disabled       Enables all all mirrors on the server
                that are currently in the disabled state.

                This option is mutually exclusive with -all and
                -name.
```

-name

```
-name <name>    Name of the mirror to enable.
                Note: Generated mirrors cannot be enabled or
                disabled.  If the parent scripted mirror is enabled,
                that, in turn, enables any disabled generated mirrors
                generated by that scripted mirror. Generated mirrors
                use the name <MirrorName>@<script_assigned_name>. Any
                mirror containing a "@" is a generated mirror.

                This option is mutually exclusive with -all and
               -disabled.
```

RETURN VALUE

```
If only one mirror is being processed, an empty string is returned on
success. If multiple mirrors are being processed, an error status
message is printed for each mirror that fails and the return
value shows success and failure status in the form
{ succeeded 3 failed 2 }. An error is thrown if all of the mirrors
being processed fail.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

```
This example enables the "Releases" mirror.

stcl> mirror enable sync://faure:30138 -name Releases
stcl>
```

mirror get

mirror get Command

NAME

```
mirror get          - Returns all parameters for specified mirror
```

DESCRIPTION

```
The mirror get command returns all the parameters for a specified
mirror. The following parameters are set to an empty
string if they are not relevant or cannot be derived:

  'primaryserver'
  'usingdefPMASuser',
  'PMASuser'

The following parameters return 1 or 0 when the format is 'list'
and 'True' or 'False' when the format is 'text':

 'modulerecursion',
 'usingdefaultRSuser'
 'usingdefaultMASuser'
 'usingdefaultPMASuser'
 'enabled'

The defaultuser is the user specified with:

 'mirror setoptions -defaultuser'

Note: When a generated mirror is specified, the parameters returned
are for the scripted mirror definitions with only the following
parameters coming directly from the generated mirror:
'vault'
'selector'
'mirror directory'
'script' (empty)
'type' (normal)

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror get <serverURL> [-format text|list] -name <name>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS to get the mirror
```

```
                parameters from. Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the
                SyncServer port number (defaults to 2647/2679).
                Example:  sync://serv1.abco.com:1024
```

OPTIONS

-format

```
-format         Specifies the way the output is returned.
                The default is text. The format 'text' will return
                each mirror parameter on a new line in the format
                name=value. The format 'list' will list the values in
                a Tcl list in the form {name1 value1 name2 value2 ...}
```

-name

```
-name <name>    Name of the mirror.  This parameter is required.
```

RETURN VALUE

```
Returns the parameters for the mirror. The following parameters are
returned:
name
mirrordir
vaultURL
selector
script
category
description
notifylist
commonnotifylist
modulerecursion
hrefmode
type
enabled
primaryserver
defaultuser
RSuser
MASuser
PMASuser
usingdefaultRSuser
```

```
usingdefaultPMASuser
usingdefaultMASuser
fetchstate
cachelinktype
cachedir
mcachemode
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

Example Showing the Parameters for a Non-Scripted Mirror

```
This example returns the parameters for the "Releases" mirror
(non-scripted) on the MAS sync://faure:30138.

stcl> mirror get sync://faure:30138 -name Releases
name                 = Releases
mirrordir            = /home/barbg/Mirrors/Releases
vaultURL             = sync://srv2.ABCo.com:2647/releases
selector             = Trunk:Latest
script               =
category             =
description          = FCS builds
type                 = primary
enabled              = True
modulerecursion      = True
hrefmode             = Normal
primaryserver        =
notifylist           =
commonnotifylist     = barbg
defaultuser          = barbg
usingdefaultMASuser  = True
MASuser              = barbg
usingdefaultRSuser   = True
RSuser               = barbg
usingdefaultPMASuser = False
PMASuser             =
fetchstate           = get
cachelinktype        = soft
cachedir             =
mcachemode           = server
stcl>
```

Example Showing the Parameters for a Scripted Mirror

```
 This example returns the parameters for the "AUTO_RELEASES" scripted
 mirror on the MAS sync://qewflx10:30047.

stcl> mirror get sync://qewflx10:30047 -name SCR_1
 name                 = AUTO_RELEASES
 mirrordir            = /home/tlarry1/Modules/mirrors/DS_AUTO_RELEASES
 vaultURL             = sync://qewflx10:30047/Modules/Blocks
 selector             = REL_*
 script               = generate_mirror.tcl
 category             =
 description          =
 type                 = autogen
 enabled              = True
 modulerecursion      = True
 hrefmode             = normal
 primaryserver        =
 notifylist           =
 commonnotifylist     = masteradmin
 defaultuser          = masteradmin
 usingdefaultMASuser  = True
 MASuser              = masteradmin
 usingdefaultRSuser   = True
 RSuser               = masteradmin
 usingdefaultPMASuser = False
 PMASuser             =
 fetchstate           = share
 cachelinktype        = hard
 cachedir             = /home/tlarry1/Modules/sync_cache
 mcachemode           = link
 stcl>
```

mirror getoptions

mirror getoptions Command

NAME

```
 mirror getoptions   - Gets mirror options on a server
```

DESCRIPTION

```
 This command is used to get general mirror options for all mirrors on
 a MAS or RS. Options that have not been set will return an empty
 string. The following parameters will return 1 or 0 when the format is
 'list' and 'True' or 'False' when the format is 'text':

   isdefaultuserenforced
```

```
  isRSenabled
  isMASenabled

The parameter warnifstale will return 'No' if the value is 0 and the
format is text.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror getoptions <serverURL> [-format text|list]
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the SyncServer (RS or MAS).
                Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required,  <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

- -format

-format

```
-format         Specifies the way the output is returned. The
                default is text. The format 'text' will return each
                option on a new line in the format name=value.
                The format 'list' will list the options in a Tcl list
                in the form {name1 value1 name2 value2 ...}
```

RETURN VALUE

```
Returns the general options for the mirrors on a server.
The following parameters will be returned:
defaultuser
commonnotifylist
name
```

```
isdefaultuserenforced
isRSenabled
isMASenabled
warnifstale
isSUIDenforced
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

Example Showing the Mirror Options

```
This example gets the general mirror options for the SyncServer
sync://faure:30138.

stcl> mirror getoptions sync://faure:30138
isRSenabled           = False
isMASenabled          = True
name                  = faure
defaultuser           = barbg
isdefaultuserenforced = True
isSUIDenforced        = False
commonnotifylist      = barbg
warnifstale           = No
isSUIDenforced        = Yes

stcl>
```

Example Showing the Mirror Options in a Formatted List

```
This example shows the "-format list" output format:

stcl> mirror getoptions sync://faure:30138 -format list
isRSenabled 0 isMASenabled 1 name faure:30138 defaultuser barbg
isdefaultuserenforced 1 isSUIDenforced 0 commonnotifylist barbg
warnifstale 0 isSUIDenforced 1
stcl>
```

mirror isenabled

mirror isenabled Command

NAME

```
mirror isenabled    - Tests whether a mirror is enabled
```

DESCRIPTION

```
Test if a mirror is enabled. Used primarily for scripting.

Note: Generated mirrors cannot be disabled directly as an
argument to this command. The mirror status command can be
used to determine if a generated mirror is enabled or disabled.
Generated mirrors are created with the name:
<MirrorName>@<script_assigned_name>.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror isenabled <serverURL> -name <name>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror is
                defined. Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

- -name

-name

```
-name           Name of the mirror.  This parameter is required.
```

RETURN VALUE

```
Returns 1 if the mirror is enabled or 0 if the mirror is disabled.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

```
In this example, 'mirror isenabled' returns 1, because the "Releases"
mirror on the SyncServer sync://faure:30138 is enabled.

stcl> mirror isenabled sync://faure:30138 -name Releases
1
stcl>
```

mirror ismirror

mirror ismirror Command

NAME

```
mirror ismirror     - Tests whether a name is valid for a defined
                      mirror
```

DESCRIPTION

```
Test if a name is valid for an existing mirror. Used primarily for
scripting. Allows a name to be tested instead of one of the other
commands throwing an error if the mirror name was wrong.

Note: Generated mirrors cannot be validated using the mirror ismirror
command. Generated mirrors are created with the name
<MirrorName>@<script_assigned_name>.  Any mirror containing a "@" is
a generated mirror.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror ismirror <serverURL> -name <name>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror is
                defined. Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

- -name

-name

```
-name           Name of the mirror.
```

RETURN VALUE

```
Returns 1 if the mirror is defined on the server or 0 if the mirror
is not defined.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

```
In this example, 'mirror ismirror' returns 1, because there is a "Releases"
mirror on the SyncServer sync://faure:30138.

stcl> mirror ismirror sync://faure:30138 -name Releases
```

```
1
stcl>
```

mirror list

mirror list Command

NAME

```
mirror list         - Returns a list of all mirrors from a server
```

DESCRIPTION

```
The mirror list command returns a list of all mirrors from a server
that matches a specified search criterion. Used primarily for
scripting. The -enabled, -disabled, and -all switches can be combined
with patterns from the -category and -name parameters to reduce the
number of mirrors returned in the list.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror list <serverURL> [-category <category_pattern>]
            [-enabled|disabled|all] [-format text|list]
            [-name <name_pattern>]
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirrors are
                defined. Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

- -all

-all

```
-all            Request a list of all mirrors from the server. This is
                the default.
```

-category

```
-category       A category pattern used to further reduce the list of
                mirrors returned. Mirror categories that do not match
                the pattern will be removed from the result list. A
                pattern is defined using UNIX glob-style notation.
                '*' matches any number of characters, '?' matches
                exactly one character,  [chars] matches any characters
                in chars, and any other characters in the pattern are
                taken as literals that must match the input exactly.
```

-disabled

```
-disabled       Request a list of all disabled mirrors from the server.
```

-enabled

```
-enabled        Request a list of all enabled mirrors from the server.
```

-format

```
-format         Specifies the way the output is returned. The
                default is text.
                With the 'text' format, the matching mirrors are
                printed to the screen, one per line.
                With the 'list" format, the matching mirrors are
                returned as a Tcl list.
```

-name

```
-name           A name pattern used to further reduce the list of
                mirrors returned. Mirror names that do not match the
                pattern will be removed from the result list. A
                pattern is defined using UNIX glob-style notation.
                '*' matches any number of characters, '?' matches
                exactly one character,  [chars] matches any characters
                in chars, and any other characters in the pattern are
                taken as literals that must match the input exactly.
```

RETURN VALUE

```
Returns the names of all mirrors on the server that match the search
criteria. If no mirrors match, an empty string is returned.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror rename, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

Example Showing Enabled Mirrors in Text Format

```
This example returns all enabled mirrors on the SyncServer
sync://faure:30138. There are two mirrors M01 and M02 that
are enabled.

  stcl> mirror list sync://faure:30138 -enabled
  M01
  M02
```

Example Showing Enabled Mirrors in List Format

```
The output format is different if you use the -format list
option.

  stcl> mirror list sync://faure:30138 -enabled
       -format list
  M01 M02
```

mirror rename

mirror rename Command

NAME

```
mirror rename       - Changes the mirror name
```

DESCRIPTION

```
The mirror rename command changes the mirrors name from <name> to
<newname>. The repository server must be contacted for this command.

This command cannot be used to rename scripted or generated mirrors.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror rename <serverURL> -name <name> -newname <newname>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror is
                defined. Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required, <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

- -name
- -newname

-name

```
-name           Current name of the mirror.
```

-newname

```
-newname        New name for the mirror. Names must be composed of
                the following set [A-Za-z0-9_/-.]. Mirror names cannot
                begin with a dash (-).
```

RETURN VALUE

```
Returns an empty string on success.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror reset,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

```
This example changes the name of the "releases" mirror, created in the
'mirror create' example, to "Releases".

stcl> mirror rename sync://faure:30138 -name releases -newname Releases
stcl>
```

mirror requeue

mirror requeue Command

NAME

```
mirror requeue      - Requeue a transaction in the mirror
```

DESCRIPTION

```
This command provides a manual option to requeue mirror transactions
stored in the transaction record. When a mirror is generated, the
transactions that need to be processed are stored in a transaction
log and submitted in batches for processing.  If the mirror fails for
some reason, the transactions can be manually resubmitted for
processing either for a single mirror or for all the mirrors on the
```

```
MAS.

For more information on mirror requeuing, see the ENOVIA
Synchronicity DesignSync Data Manager Administratorâ€™s Guide.
```

SYNOPSIS

```
mirror requeue -name <mirror> <ServerURL>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror is
                defined. Specify the URL as follows:
                sync://<host>[:<port>] or syncs://<host>[:<port>]
                where 'sync://' or 'syncs://' are required,
                <host> is the machine on which the SyncServer is
                installed, and <port> is the SyncServer port number
                (if omitted, defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

- -name

-name

```
name <mirror>   Name of the mirror.
                To requeue transactions for all mirrors, specify
                "*".
```

RETURN VALUE

```
Returns an empty string on success. If there is a failure, DesignSync
reports an appropriate error message.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror enable
```

EXAMPLES

Example of Requeuing Transactions for a Single Mirror

```
This example shows transactions being requeued for a single mirror.

dss> mirror requeue -name chipMirror1
 sync://serv1.ABCo.com:2647/Modules/Chip/Chip-419
 dss>
```

Example of Requeuing Transactions for All Mirrors

```
This example shows transactions being requeued for all mirrors.

dss> mirror requeue -name *
 sync://serv1.ABCo.com:2647/Modules/Chip/Chip-419
 dss>
```

mirror reset

mirror reset Command

NAME

```
mirror reset        - Populates the mirror's directory, leaving it in
                      the same state as if the mirror had been removed
                      and then repopulated
```

DESCRIPTION

```
This command performs a full populate of the mirror and leaves
the mirror directory in the same state as if the mirror had been
removed and then repopulated. Resetting a mirror also resets its
submirrors. If the mirror's submirrors are disabled, they are
re-enabled by the reset operation.

Note: You cannot reset a generated or scripted mirror.  If a scripted
mirror is specified, it is silently ignored.  If a generated mirror is
specified, you will see an error stating that the mirror cannot be
reset.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror reset <serverURL> -name <name>
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the MAS where the mirror is
                defined. Specify the URL as follows:
                sync://<host>[:<port>] or syncs://<host>[:<port>]
                where 'sync://' or 'syncs://' are required,
                <host> is the machine on which the SyncServer is
                installed, and <port> is the SyncServer port number
                (if omitted, defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

- -name

-name

```
name            Name of the mirror.
```

RETURN VALUE

```
Returns an empty string on success.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename,
mirror setoptions, mirror status, mirrorsetdefaultuser
```

EXAMPLES

```
This example resets the "Releases" mirror on the MAS sync://faure:30138.

stcl> mirror reset sync://faure:30138 -name Releases
stcl>
```

mirror setoptions

mirror setoptions Command

NAME

```
mirror setoptions   - Sets general mirror options
```

DESCRIPTION

```
The mirror setoptions command sets general mirror options for all
mirrors on a MAS or RS. Passwords are never specified on the
command line for this command. For a UNIX command-line version of
the -defaultUser option, see the mirrorsetdefaultuser shell script
command.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirror setoptions <serverURL> [-commonnotifylist<email_list>]
                  [-defaultuser <user>] [-disableMAS | -enableMAS]
                  [-disableRS | -enableRS] [-[no]enforcedefaultuser]
                  [-[no]enforceSUID] [-name <name>]
                  [-warnifstale <time>]
```

ARGUMENTS

- Server URL

Server URL

```
serverURL       Specifies the URL of the SyncServer (RS or MAS).
                Specify the URL as follows:
                sync://<host>[:<port>] or
                syncs://<host>[:<port>] where 'sync://' or 'syncs://'
                are required,  <host> is the machine on which the
                SyncServer is installed, and <port> is the SyncServer
                port number (defaults to 2647/2679).
                Example: sync://serv1.abco.com:1024
```

OPTIONS

- -commonnotifylist
- -defaultuser

-commonnotifylist

```
-commonnotifylist A comma-separated or space-separated list of email
                  addresses and/or user names. This list is internally
                  appended to the notify list specified with the
                  'mirror create' command for each mirror. The combined
                  list is used to send email whenever a mirror
                  generates notifications. The default is a list
                  of all Users who have the AdministrateServer AC
                  right. This option is relevant only for an MAS.
                  Notify lists are not defined on the RS but passed
                  to it during the enabling of a mirror.
```

-defaultuser

```
-defaultuser    The default user to be used when one of the needed
                users is not specified for the 'mirror create' command.
                If this parameter is specified, you are prompted for
                the default user's password. Specifying this parameter
                makes 'mirror setoptions' an interactive command.
                This option is only relevant for an MAS.
```

-disableMAS

```
-disableMAS     Disables a server as mirror administration server
```

-disableRS

```
-disableRS      Do not declare a server a repository server.
```

-enableMAS

```
-enableMAS      Enables a server a mirror administration server
```

-enableRS

```
-enableRS       Declare a server a repository server.
```

-enforcedefaultuser

```
-enforcedefaultuser   Turn on the default user policy.
                      When -enforcedefaultuser is in effect, users
                      cannot be specified during the 'mirror create'
                      command. This allows a company to establish a
                      user as the mirror administration user (default
                      user) for all servers and enforce that policy.
                      This option is only relevant for a MAS.
```

-enforceSUID

```
-enforceSUID    Enable enforcement of SUID for creating or moving
                mirrors. This option sets the UNIX permissions on
                new mirror directories to the default setting of 755.
                This option is relevant only for an MAS.
```

-name

```
-name           Declare a user-friendly name for a MAS server.
                If this option is not set, all references to the MAS
                in status reports will use its hostname:port
                identifier. No attempt will be made to assure this
                name is unique across all MAS servers in a corporation.
                This is the user's responsibility.
```

-noenforcedefaultuser

```
-noenforcedefaultuser Turn off the default user policy.
                      When -enforcedefaultuser is in effect, users
                      cannot be specified during the 'mirror create'
                      command. This allows a company to establish a
                      user as the mirror administration user (default
                      user) for all servers and enforce that policy.
                      This option is only relevant for a MAS.
```

-noenforceSUID

```
-noenforceSUID  Disable enforcement of SUID for creating or moving
                mirrors. If  this option is selected, permissions
                on new mirror directories are set to 777 and are
                open to any user.
```

-warnifstale

```
-warnifstale    Change a mirror's status to "Warning" if the mirror
                has not been up-to-date in the specified number of
                minutes. This parameter allows the user to identify
                mirrors that have had update processes running for a
                long period of time. This condition may be normal for
                the customer's data set but also may indicate a
                problem. A value of zero (the default) means the
                server never enters the warning status for this reason.
                Only values of 0, 10, 20, 30, 60, 120, 180, 360, 720,
                and 1440 are allowed.
```

RETURN VALUE

```
Returns an empty string on success.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror status, mirrorsetdefaultuser
```

EXAMPLES

```
This example defines the general mirror settings for the MAS
sync://faure:30138.

stcl> mirror setoptions sync://faure:30138 -defaultuser barbg \
stcl> -enforcedefaultuser -noenforceSUID -enableMAS -name faure \
stcl> -commonnotifylist barbg

Enter the password for the default user (barbg): ****

stcl>
```

mirror status

mirror status Command

NAME

```
mirror status       - Returns the status for the mirror
```

DESCRIPTION


```
The mirror status command returns the status for the mirror
specified with <name> or all the mirrors on a server if the name is
not given. The <name> parameter is only valid when requesting status
of mirrors on a MAS. When status is requested from an RS, the RS will
make status calls to all the MASs that are registered with it. The
status of a mirror from the RS will be the same information as if the
status was requested directly from the MAS.
[This assumes the RS/MAS communication is working. If it is not,
status will only be shown for the mirrors where communication was
established with a message showing where it could not.]
The RS will include the MAS name where the mirror data came from in
the status.

Note: When you specify an RS as the -servertype, you cannot specify a
specific mirror name.
```

Understanding the Output

```
 The output of the mirror status command can be formatted for easy
viewing (-format text) or optimized for Tcl processing (-format
list).  Both viewing formats show the same information.

The mirror status command displays the following information for each
mirror:

Property
Names               Description
-----               ------------
name                Unique name for the mirror defined when the mirror
                    is created.  The generated mirror name is in the
                    format <MirrorName>@<Script_Assigned_Name>.

status               String indicating the health of the
                     mirror. Possible values include:
                     o good - There are no failures of any kind.
                     o warning - A mirror update has failed and has not
                       adequately been retried or the heartbeat is
                       late.
                     o failure - A mirror has repeatedly failed, the
                       heartbeat was not received, or in the case of a
```

	scripted mirror, there was an error creating a generated mirror. o unknown - A mirror status is unknown. o incomplete - The mirror status file is incomplete or cannot be read. o disabled - the mirror is currently disabled.
lastuptodatetime	Last time the mirror was up-to-date. If the mirror is operating normally (no failures) then if there are no updates currently in progress for the mirror, this is the time of the last successful update or the last heartbeat, which ever is later. If there are updates in progress, this is the start time of the first update process to start.
mirrordir	The path to the mirror directory.
vaultURL	The Sync URL of the module, DesignSync vault or configuration for a legacy module being mirrored.
selector	The selector or tag applied to the objects in the mirror. Note: Even when a wildcard match was used to generate the mirror, you see the selector that matched the wildcard, not the wildcard value defined for the mirror.
category	User-defined category used to organize mirrors.
type	Type of mirror: o Normal - The default DesignSync mirror, which fetches design objects directly from the RS. Generated mirrors, even though they are created from a scripted mirror are considered normal mirrors. o Scripted - A mirror that has an associated Tcl script. The script determines which mirrors are automatically generated at a MAS based on the revision control operations occurring on the associated URL at the RS. o Auto-generated (aka autogen) - Normal mirrors that get automatically generated by a scripted mirror. Autogen mirrors also go out of existence automatically when there's no revision control operations occurring on the associated URL at the RS. o Primary - The primary mirror fetches design objects directly from the RS and serves them to secondary mirrors. This option is not supported for modules. o Secondary - The secondary mirror fetches objects from a primary mirror instead of directly from

	the RS.
MASname	The name of the server hosting the mirror. This is the MAS's name as specified with 'mirror setoptions -name' or, if not set, the hostname:port for the MAS.
heartbeat	Time of last heartbeat received from the RS for the mirror.
lastupdatetime	The last time an update process successfully updated the mirror.
inprogress	A Boolean (0 or 1 for -format list and 'True' or 'False' for -format text) indicating if any update processes are running on the mirror's behalf.
firstfailuretime	(FFT)Time of first update process failure. This is 0 if there are no update failures. This time does not reflect heartbeat failures.
numberofretries	Number of update attempts to correct an update failure.
lastnotifytime	(LNT) The last time email was sent to all the recipients of the mirror's notify list.

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

SYNOPSIS

```
mirror status <serverURL> [-format text|list] [-name <name>]
              [-servertype RS|MAS]
```

ARGUMENTS

- Server URL

Server URL

serverURL	Specifies the URL of the MAS or RS to obtain mirror status from. Specify the URL as follows: sync://<host>[:<port>] or syncs://<host>[:<port>] where 'sync://' or 'syncs://' are required, <host> is the machine on which the SyncServer is installed, and <port> is the SyncServer port number (defaults to 2647/2679). Example: sync://serv1.abco.com:1024

OPTIONS

-format

```
-format          Specifies the way the output will be returned. The
 text|list       default is text. The format 'text' will output each
                 mirror status parameter on a new line in the format
                 name=value. When the status for more than one mirror
                 is output, a blank line separates one mirror's
                 status from another. The format 'list' will list the
                 status in a Tcl list. If the <name> parameter is not
                 specified, this command will return a list of lists
                 with each sub-list holding the status of one mirror.
                 The status for a mirror is in the form:
                 {name1 value1 name2 value2 ...}.
```

-name

```
-name            Name of the mirror. This parameter is not allowed if
                 the server type is 'RS' You can specified any mirror,
                including a generated or scripted mirror.
```

-servertype

```
-servertype      This parameter is set to either 'RS' for repository
 RS|MAS          server or 'MAS' for mirror administration server. The
                 default is 'MAS' if the server is acting as both a MAS
                 and RS. Otherwise, this parameter defaults to the
                 mode the server is configured for. This parameter
                 specifies which mirror status the user is requesting.

                 "mirror status" with "-servertype RS" may take some
                 time to run. For each mirror that is mirroring data
                 on the RS, the mirror's MAS must be contacted. For
                 faster results, use the "mirror wheremirrored" command
                 with the RS as the <vaultURL> argument. Use the
                 "-status" option to "mirror wheremirrored" to report
                 mirror status, and specify other "mirror
                 wheremirrored" options to decrease the number of
                 mirrors whose status is reported.
```

RETURN VALUE

```
Returns the status for a mirror or all the mirrors on a server. If
only one mirror is being processed, the status is output (not
returned) when the format is text or returned as a list when the
format is list.  If a mirror does not report its status, the command
reports that as a failure in the form { succeeded 3 failed 2 }.
An error is thrown if all mirrors being processed fail. If there are
no mirrors defined, an error is thrown. Requesting status for a
mirror server type that the server is not configured for is
considered an error. If the format is list, the mirrors' status is
returned in a list of lists as the last element in the return list.
Example: { succeeded 4 failed 0 {{name ...} {name...} ...}}.  The
status for each mirror consists of a set of name value pairs.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirrorsetdefaultuser, mirror wheremirrored
```

EXAMPLES

Example Showing Mirror Status for All Mirrors on an RS

```
This example shows the status of all mirrors that are mirroring data on
the RS sync://srv2.ABCo.com:2647.

stcl> mirror status sync://srv2.ABCo.com:2647 -servertype RS
name             = Releases
status           = good
lastuptodatetime = 2005-12-29 05:37:14
mirrordir        = /home/tbarbg2/Mirrors/Releases
vaultURL         = sync://srv2.ABCo.com:2647/releases
selector         = Trunk:Latest
category         =
type             = primary
MASname          = faure
heartbeat        = 2005-12-29 05:36:12
lastupdatetime   = 2005-12-29 05:37:14
inprogress       = False
firstfailuretime = N/A
numberofretries  = 0
lastnotifytime   = N/A

name             = Releases
status           = good
```

```
 lastuptodatetime = 2005-12-29 05:48:18
 mirrordir        = /home/tbarbg7/Mirrors/Releases
 vaultURL         = sync://srv2.ABCo.com:2647/releases
 selector         = Trunk:Latest
 category         =
 type             = secondary
 MASname          = giovannelli
 heartbeat        = 2005-12-29 05:47:12
 lastupdatetime   = 2005-12-29 05:48:18
 inprogress       = False
 firstfailuretime = N/A
 numberofretries  = 0
 lastnotifytime   = N/A


 succeeded 2 failed 0
 stcl>
```

Example Showing Mirror Status for All Mirrors on an MAS

```
 This example shows the status of all mirrors on the MAS sync://src:2647
 (2647 is the default cleartext port for DesignSync, so does not need to be
 specified.)

 stcl> mirror status sync://src -servertype MAS
 name             = Trunky
 status           = good
 lastuptodatetime = 2006-04-11 11:38:23
 mirrordir        = /home/syncmgr/mirrors/Trunky
 vaultURL         =
sync://src.matrixone.net:2647/Projects/SyncInc/build_tools
 selector         = Trunk:Latest
 category         = test
 type             = normal
 MASname          = devserver
 heartbeat        = 2006-04-11 11:38:23
 lastupdatetime   = 2006-04-11 06:58:27
 inprogress       = False
 firstfailuretime = N/A
 numberofretries  = 0
 lastnotifytime   = N/A

 name             = docs
 status           = good
 lastuptodatetime = 2006-04-11 11:38:23
 mirrordir        =
/home/syncmgr/sync_custom/servers/moniuszko/2647/htdocs/docs
 vaultURL         = sync://src.matrixone.net:2647/docs
 selector         = Trunk:Latest
 category         = devserver
 type             = normal
 MASname          = devserver
 heartbeat        = 2006-04-11 11:38:23
 lastupdatetime   = 2006-04-11 07:02:27
```

```
 inprogress       = False
 firstfailuretime = N/A
 numberofretries  = 0
 lastnotifytime   = N/A

 name             = testir
 status           = good
 lastuptodatetime = 2006-04-11 11:38:23
 mirrordir        =/home/syncmgr/sync_custom/servers/moniuszko
                   /2647/htdocs/testir
 vaultURL         = sync://src.matrixone.net:2647/Projects/testir
 selector         = Trunk:Latest
 category         = devserver
 type             = normal
 MASname          = devserver
 heartbeat        = 2006-04-11 11:38:23
 lastupdatetime   = 2006-04-11 06:54:06
 inprogress       = False
 firstfailuretime = N/A
 numberofretries  = 0
 lastnotifytime   = N/A


 succeeded 3 failed 0
 stcl>
```

Example Showing Mirror Status for the MAS in TCL List Format

```
 This example shows the "-format list" output format:

 stcl> mirror status sync://src -servertype MAS -format list
 succeeded 3 failed 0 {{name Trunky status good lastuptodatetime 1144769903
 mirrordir /home/syncmgr/mirrors/Trunky vaultURL
 sync://src.matrixone.net:2647/Projects/SyncInc/build_tools selector
Trunk:Latest
 category test type normal MASname devserver heartbeat 1144769903
lastupdatetime
 1144753107 inprogress 0 firstfailuretime 0 numberofretries 0 lastnotifytime
0}
 {name docs status good lastuptodatetime 1144769903 mirrordir
 /home/syncmgr/sync_custom/servers/moniuszko/2647/htdocs/docs vaultURL
 sync://src.matrixone.net:2647/docs selector Trunk:Latest category devserver
type
 normal MASname devserver heartbeat 1144769903 lastupdatetime 1144753347
 inprogress 0 firstfailuretime 0 numberofretries 0 lastnotifytime 0} {name
testir
 status good lastuptodatetime 1144769903 mirrordir
 /home/syncmgr/sync_custom/servers/moniuszko/2647/htdocs/testir vaultURL
 sync://src.matrixone.net:2647/Projects/testir selector Trunk:Latest category
 devserver type normal MASname devserver heartbeat 1144769903 lastupdatetime
 1144752846 inprogress 0 firstfailuretime 0 numberofretries 0 lastnotifytime
0}}
 stcl>
```

mirror wheremirrored

mirror wheremirrored Command

NAME

```
mirror wheremirrored - Shows where vault data is mirrored
```

DESCRIPTION


```
As an end user, use the "mirror wheremirrored" command to identify
a mirror directory at your site to "setmirror" to. As a mirror
administrator use the "mirror wheremirrored" command when defining a
secondary mirror, to identify available primary mirrors. The "mirror
wheremirrored" command can also be used to report the status of
mirrors, and is faster than "mirror status" with the "-servertype RS"
option. (When options to the "mirror wheremirrored" command are used
to decrease the number of mirrors whose status is reported.) Only
active (enabled) mirrors are reported by this command.
```

Pattern Matching

```
Some of the options described below accept a pattern. A pattern is
defined using UNIX glob-style notation (or the <pattern> described in
the Tcl "string match" command). "*" matches any number of characters,
"?" matches exactly one character, and [chars] matches any characters in
chars. Any other characters in the pattern are taken as literals that
must match the input exactly. Also, \x an be used to match the single
character x. This avoids the special interpretation of the characters
*?[]\ in the pattern.
```

Upgrading a Mirror with "wheremirrored" Information

```
The information shown by the "mirror wheremirrored" command is
for Repository Servers (RSs) that are running version V6R2008-9 of
the software or higher. RSs should be upgraded to a version that
supports "wheremirrored"  first,
so that the RS's are able to receive "wheremirrored" information sent
to them by the Mirror Administration Servers (MASs). If a
MAS is upgraded to a version with "wheremirrored" first, the
"wheremirrored" upgrade step must be performed after each associated
RS is upgraded.

If the information used by the "mirror wheremirrored" command is not
```

present, the value "needs-upgrade" will be shown for most of the mirror properties. (The EXAMPLES section below has an example of this.) Similarly, the "wheremirrored" information shown for MASs at versions prior to the implementation of "wheremirrored" will have "needs-upgrade" for many of their mirror properties.

Once both the MAS and an RS are at a version with "wheremirrored" support, the mirror properties used by the "mirror wheremirrored" command are set ("upgraded") for an existing mirror, when one of these occur:
- The MAS is restarted, thereby restarting the mad (mirror administration daemon)
- The resetmirrordaemons command is used to restart the mad
- ProjectSync's "Reset MAS Daemon" is used
- A disabled mirror is enabled

The "upgrade" stores current information on the RS about a mirror, which the "wheremirrored" command uses. The "upgrade" occurs only once for each RS that has a mirror on the MAS.

Creating a mirror sets the properties used by the "mirror wheremirrored" command on the RS, for the mirror that was created. The mirror's "wheremirrored" properties are also updated when a mirror definition is edited.

This command is subject to access controls on the server. See the ENOVIA Synchronicity Access Control Guide for details.

SYNOPSIS

```
mirror wheremirrored <vaultURL> [-category <category>]
                     [-format text|list] [-name <name>]
                     [-selector <selector_list>]
                     [-status good|warning|failure|unknown|none|any]
                     [-type normal|primary|secondary|all]
```

ARGUMENTS

- Vault URL

Vault URL

```
<vaultURL>      Specifies the URL of the vault directory whose
                contents are being mirrored. This parameter is
                required. Specify the URL as follows:
                    sync[s]://<host>[:<port>][/path_to_vault]
                where the <host> and <port> are that of the RS.
                If the <port> is omitted, the default ports are
                used (2647 for cleartext and 2679 for SSL)

                The path_to_vault is the path on the RS that is
```

being mirrored. The path_to_vault part of the <vaultURL> can be a pattern, defined using the UNIX glob-style notation described above. If a path_to_vault is not specified, all mirrors mirroring data anywhere on the RS will be reported. The options below can be used to filter the mirrors that are reported.

OPTIONS

-category

-category — The <category> pattern used to filter the list of mirrors returned. Mirrors whose category does not match the <category> pattern will be removed from the result list. A pattern is defined using the UNIX glob-style notation described above. If a literal value is specified for the <category>, it must be an exact match of the category stored with the mirror definition. (Mirrors whose categories are not an exact match will be removed from the result list.)

If a mirror definition has not been upgraded and this option is specified, the mirror will not be in the result list. That's because the mirror does not yet have a category set in the "wheremirrored" properties on the RS, for the "mirror wheremirrored" command to use as a "-category" filter.

-format

-format — Specifies the way the output will be returned. The default is text. The format 'text' will output each mirror parameter on a new line in the format name=value. When the properties for more than one mirror is output, a blank line separates one mirror's properties from another. The format 'list' will list the properties in a Tcl list. The command will return a list of 5 elements with the last element being a list of lists, with each sub-list holding the properties of one mirror. The properties for a mirror will be in the form {name1 value1 name2 value2 ...}. The first 4 elements will be "succeeded number-

succeeded failed number-failed". See the RETURN VALUE section below for more details.

-name

-name — The <name> pattern used to filter the list of mirrors returned. Mirror names that do not match the <name> pattern will be removed from the result list. A pattern is defined using the UNIX glob-style notation described above. If a literal value is specified for the <name>, it must be an exact match of the name stored with the mirror definition. (Mirrors whose names are not an exact match will be removed from the result list.)

-selector

-selector — The <selector_list> pattern used to filter the list of mirrors returned. Mirrors whose selector list does not match the <selector_list> pattern will be removed from the result list. The <selector_list> may be specified as a pattern, defined using the UNIX glob-style notation described above. If a literal value is specified for the <selector_list>, it must be an exact match of the selector stored with the mirror definition. (Mirrors whose selectors are not an exact match will be removed from the result list.)

However, branch selectors are normalized. I.e., a <selector_list> value of "bugfix:" will match mirrors whose selectors are "bugfix:" or "bugfix:Latest". Similarly, the special branch value "Trunk" will match mirrors whose selectors are "Trunk:Latest" and "Trunk:".

-status

-status — The status of the mirror, used to filter the list of mirrors returned. The status specified must be either "good", "warning", "failure", "unknown", "none" or "any". Mirrors that do not match the status value will be removed from the result list.

The default value is "none", which means that status will not be reported. This is the most efficient value for the status, because the RS does not need to contact each MAS for every mirror that is reported. Mirror status is not reported, for "-status none".

Specifying a status value other than "none" will cause the RS to contact each MAS for every mirror that is reported. The status is the last criterion that is matched for a mirror. So, the request for status from a MAS is only sent by the RS if all other criteria are matched.

A status value of "any" will cause the RS to contact each MAS to get the status of every mirror (that matches the other criteria specified), but will not filter on the status value. The status value will be shown for all mirrors (that match the other criteria specified).

-type

-type The type of the mirror, used to filter the list of mirrors returned. The type specified must be either "normal", "primary", "secondary" or "all". The default value is "all". Mirrors that do not match the type value will be removed from the result list.

If a mirror definition has not been upgraded and a type value other than "all" is specified, the mirror will not be in the result list. That's because the mirror does not yet have a type set in the "wheremirrored" properties on the RS, for the "mirror wheremirrored command to use as a "-type" filter.

RETURN VALUE

Returns properties and optionally status for each active (enabled) mirror meeting the specified criteria. When discussing the return value, the status of a mirror is considered to be a property.

When the default "-format text" is used, the properties are output and a succeeded/failed count is returned.

A specific mirror is only counted as a failure if there was a failure reporting the status of the mirror (when specifying a "-status" value other than "none"), and the mirror's status could not be retrieved from the MAS. If the mirror's status is "failure", then the "mirror wheremirrored" command has the mirror's "wheremirrored" return as succeeded, since the "mirror wheremirrored" command was successful in matching the mirror against the criteria specified with the command. Therefore, the "mirror wheremirrored" command counting a mirror as "succeeded" is independent of the status of the mirror. If a mirror is counted as "failed" due to not being able to get the status of a mirror, the "status" property for the mirror will have the value "unavailable".

When "-format list" is used, the properties and status for each mirror meeting the criteria is returned in a list of lists, as the last element in the return list. The first four elements of the returned list are name/value pairs with the number succeeded and number failed. This is similar to the return value of the "mirror status" command.

For example:
succeeded 4 failed 1 {{name val MASname val ...} {name val MASname val ...}}

An error will not be thrown if "-status" is used with a value other than "none", and no status could be retrieved for any of the matching mirrors (all mirrors reported as "failed" to get status).

An error is thrown if the command itself fails. Such as, if the server housing the vault is not enabled as an RS, if there are no active (enabled) mirrors registered with the RS, if the RS cannot be contacted, if multiple arguments are specified, or if the mirror name, category or selector contain illegal characters.

Mirrors created prior to their MAS being upgraded to a version that supports "where mirrored" do not have certain wheremirrored properties available at the RS. The value shown for those properties is "needs-upgrade". For details, see the "Upgrading a Mirror with wheremirrored Information" section above.

The following properties will be returned for each matching mirror:

name	The name of the mirror, which is only unique within a particular MAS.
MASname	The name of the server hosting the mirror, from the MAS's General Settings. This could have a value of "needs-upgrade".
MASurl	The URL of the MAS where the mirror is defined.
vaultURL	The URL of the vault that is being mirrored.
selector	The selector of the mirror.
mirrordir	The path to the mirror directory on the MAS's LAN. This could have a value of "needs-upgrade".
category	The category of the mirror on the MAS. This could have a value of "needs-upgrade".
type	The type of mirror: "normal", "primary", "secondary", or "needs-upgrade".
primaryServer	The MAS that is hosting the primary mirror. This could have a value of "needs-upgrade".

See the "mirror create" documentation for further details on the above properties.

If the "-status" option is specified with a value other than the default "none", then these additional properties are returned:

status	The mirror's status: "good", "warning", "failure", "unknown" or "unavailable". A status of "unavailable" is returned when the RS could not retrieve the status from the MAS. In which case, there may be a problem with the MAS, or the MAS may not be running.

```
                If a failure is encountered when trying to get the
                mirror status, the failure message will be reported
                when using the default "-format text" output. When
                "-format list" is used, the failure message will be
                returned in an additional "error" property.

error           The error message, if a failure is encountered when
                trying to get the mirror status. This property is
                only returned when "-format list" is used. If the
                default "-format text" is used, then this error
                message is output.
```

SEE ALSO

```
mirror create, mirror status, setmirror
```

EXAMPLES

Example Showing All Mirrors for a Server's Projects

```
To find all mirrors that are mirroring a server's projects:

stcl> mirror wheremirrored sync://qewflx10:30018/Projects/*
name              = Top
MASname           = North Carolina
MASurl            = sync://qewflx11.matrixone.net:30158
vaultURL          = sync://qewflx10:30018/Projects/Top
selector          = Trunk:Latest
mirrordir         = /home/tbarbg8/Mirrors/Secondary/Top/
category          = Test
type              = secondary
primaryserver     = sync://qewflx10:30148

name              = Test
MASname           = San Jose
MASurl            = sync://qewflx12.matrixone.net:30128
vaultURL          = sync://qewflx10:30018/Projects/Test
selector          = Trunk
mirrordir         = /home/tbarbg8/Mirrors/Normal/Test/
category          = Testing
type              = normal
primaryserver     =

...
```

Example Showing Failures in TCL List Format

```
The "-format list" return when a failure is encountered while getting
the status of a mirror:

stcl> mirror wheremirrored sync://qewflx10:30018 -name */ALU \
     -status any -format list
Connect failure. Server 'qewflx10.matrixone.net:30128' may have reset
                 the connection.

succeeded 2 failed 1 {{name Top/ALU MASname {San Jose} MASurl
sync://qewflx12.matrixone.net:30128 vaultURL
sync://qewflx10:30018/Projects/ALU selector Trunk:Latest mirrordir
/home/tbarbg8/Mirrors/Normal/Top/ALU/ category Production type normal
primaryserver {} status unavailable error {Failure getting status:
Attempting to contact mirror administration server...
- som-E-11: Communication Connect Failure.}} {name Top/ALU MASname
Cambridge MASurl sync://qewflx10.matrixone.net:30148 vaultURL
sync://qewflx10:30018/Projects/ALU selector Trunk:Latest mirrordir
/home/tbarbg8/Mirrors/Primary/Top/ALU/ category Development type
primary primaryserver {} status good} {name Top/ALU MASname
{North Carolina} MASurl sync://qewflx11.matrixone.net:30158 vaultURL
sync://qewflx10:30018/Projects/ALU selector Trunk:Latest mirrordir
/home/tbarbg8/Mirrors/Secondary/Top/ALU/ category Test type secondary
primaryserver sync://qewflx10:30148 status good}}
stcl>

In the above example, note that a pattern match was specified for the
mirror name. "ALU" by itself would not match, because it is a
submirror. And submirrors include the parent directory in their name.
```

Example Showing All Mirrors for a Specific Branch and Version

```
To find all mirrors that are mirroring the Latest version on any
branch, for the specified RS:

stcl> mirror wheremirrored sync://qewflx10:30018 -selector *:Latest
name             = Top
MASname          = North Carolina
MASurl           = sync://qewflx11.matrixone.net:30158
vaultURL         = sync://qewflx10:30018/Projects/Top
selector         = Trunk:Latest
mirrordir        = /home/tbarbg8/Mirrors/Secondary/Top/
category         = Test
type             = secondary
primaryserver    = sync://qewflx10:30148

name             = Test
MASname          = San Jose
MASurl           = sync://qewflx12.matrixone.net:30128
vaultURL         = sync://qewflx10:30018/Projects/Test
selector         = Trunk
mirrordir        = /home/tbarbg8/Mirrors/Normal/Test/
```

```
category         = Testing
type             = normal
primaryserver    =
...
```

Example Showing Finding the Primary Mirrors for a Project

```
To find primary mirrors that are mirroring a project's vault data:

stcl> mirror wheremirrored sync://qewflx10:30018/Projects/Top \
      -type primary
name             = Top
MASname          = Cambridge
MASurl           = sync://qewflx10.matrixone.net:30148
vaultURL         = sync://qewflx10:30018/Projects/Top
selector         = Trunk:Latest
mirrordir        = /home/tbarbg8/Mirrors/Primary/Top/
category         = Development
type             = primary
primaryserver    =

succeeded 1 failed 0
stcl>
```

mirrorsetdefaultuser

mirrorsetdefaultuser

NAME

```
mirrorsetdefaultuser - Sets the default user and password using a
                       UNIX shell script
```

DESCRIPTION

```
Use this command to set the default user and password using a UNIX
shell script.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirrorsetdefaultuser <serverURL> <defaultUser>
```

ARGUMENTS

Server URL

```
serverURL       Specifies the URL of the MAS SyncServer. Specify the
                URL as follows:
                sync://<host>[:<port>] where 'sync://' is required,
                <host> is the machine on which the SyncServer is
                installed, and <port> is the SyncServer port number
                (defaults to 2647).
                Example: sync://serv1.abco.com:1024
```

Default User

```
defaultUser     The default user to be used when one of the needed
                users is not specified for the 'mirror create' Tcl
                shell command. If a Tcl shell command can be run
                interactively, see 'mirror setoptions' for an
                alternate way to specify this user.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status
```

EXAMPLES

```
This example sets the default user to "barbg", for the MAS
SyncServer sync://srv2.ABCo.com:2647. The user is prompted for a password.

% mirrorsetdefaultuser sync://srv2.ABCo.com:2647 barbg
Enter the password for the default user (barbg): ****

%
```

Events and Triggers

Events

event

event Commands

NAME

```
event                - Event commands
```

DESCRIPTION

```
These commands are used to manipulate custom events, which may be
used to fire triggers.
```

SYNOPSIS

```
event <event_command> [<event_command_options>]

Usage: event [create]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
stcl, event create, event_prop, trigger, trigger fire, trigger list
```

event create

event create Command

NAME

```
event create         - Creates a custom event
```

DESCRIPTION

```
Creates an event which may be used in conjunction with the 'trigger
list' and 'trigger fire' commands to match and execute triggers.

Events are generally created by the system, and the matching triggers
```

automatically executed. This command is useful primarily to exercise triggers for testing and to extend the system by creating new kinds of events.

SYNOPSIS

```
event create <name_value_list>
```

OPTIONS

- Name/Valueist

Name/Valueist

```
name_value_list
    A Tcl list of the form {name1 value1 name2 value2 ...} giving
    the names and values of all properties that define the event.
    Use the 'event_prop list' command to see the list of valid
    property names. 'event_prop create' can be used to create new
    event properties.
```

RETURN VALUE

A new event object on success, an error if an invalid property was named.

EXAMPLES

Suppose you want to test your triggers for the 'tag' command when the tag is 'GOLDEN'.

```
    set event [event create {command tag tag GOLDEN}]
    foreach trigger [trigger list -event $event] {
       trigger fire $trigger $event
    }
```

Here's an example of creating your own event type. Suppose you want to automate some tasks whenever a piece of your design is ready for test. Further suppose that the way you know that something is ready for test is the application of the tag 'READY_FOR_TEST'.

You could create all of your triggers like this:

```
    trigger create task1 \
            -require type preObject \
            -require command tag \
            -require tag READY_FOR_TEST \
```

```
            -exec "task1 $objURL"

    ... repeat for each task ...
```

Unfortunately, if you change the way you indicate readiness for test, you will need to re-register all of your tasks. As an alternative, you could register a single trigger that generates 'readyForTest' events, like so:

```
   trigger create FireTestTriggers \
      -require type preObject \
      -require command tag \
      -require tag READY_FOR_TEST \
      -tcl_script {
          set event [event create {type readyForTest objUrl $objURL}]
          foreach t [trigger list -event $event] {
             trigger fire $t $event
          }
      }
```

Now you can register each task for the 'readyForTest' event:

```
   trigger create task1 -require type readyForTest -exec "task1 $objURL"
   trigger create task2 -require type readyForTest -exec "task1 $objURL"
   trigger create task3 -require type readyForTest -exec "task1 $objURL"
   ... etc. ...
```

When you change how you know you're ready for test, you simply update the 'FireTestTriggers' trigger, and the individual task triggers can remain unchanged.

SEE ALSO

stcl, event_prop, trigger, trigger fire, trigger list

event_prop

event_prop Commands

NAME

event_prop - Event_prop commands

DESCRIPTION

These commands are used to create, delete, and get information about the properties that can be associated with events.

SYNOPSIS

```
event_prop <event_prop_command> [<event_prop_command_options>]

Usage: event_prop [create|delete|get|list]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
stcl, event create, event_prop create, event_prop delete,
event_prop get, event_prop list, trigger
```

event_prop create

event_prop create Command

NAME

```
event_prop create   - Defines a new event property
```

DESCRIPTION

```
Defines a new property which may then be used to create events, which
may be used in turn to fire triggers. See 'event create'.
```

SYNOPSIS

```
event_prop create <name> [-prompt <prompt_string>] [-desc <description>]
                         [-type <value>]
```

OPTIONS

- -desc
- -name
- -prompt
- -type

-desc

```
-desc <description>
    A more verbose description of the property used to provide more
    extensive information than the prompt string. If not provided,
    the prompt string is used.
```

-name

```
name
    The name of the new event property. Must be unique among set of
    known event properties.
```

-prompt

```
-prompt <prompt_string>
    A concise description of the property used to prompt the user for
    values. If no prompt is provided, the property name is used
    instead.
```

-type

```
-type <value>
    Defines how the value of this property is passed between DesignSync
    and a trigger.
    Available -type values are:
    in    - the value of property is passed from DesignSync to the trigger
            (this is the default)
    out   - the value is passed out of trigger code to DesignSync
    inOut - the value is passed in and out.
```

SEE ALSO

```
stcl, event create, event_prop delete,
event_prop get, event_prop list, trigger
```

event_prop delete

event_prop delete Command

NAME

```
event_prop delete   - Deletes an event property definition
```

DESCRIPTION

```
Delete a previously-defined event property definition. Note that
system-defined event property definitions may not be deleted.
```

SYNOPSIS

```
event_prop delete <name>
```

OPTIONS

- name

name

```
name
    The name of the event property to be deleted.
```

SEE ALSO

```
stcl, event create, event_prop create, event_prop get,
event_prop list, trigger
```

event_prop get

event_prop get Command

NAME

```
event_prop get      - Gets information about an event property definition
```

DESCRIPTION

```
Gets the name, prompt, and description of an event property.
```

SYNOPSIS

```
event_prop get <name>
```

OPTIONS

- name

name

```
name
    The name of the event property definition being queried.
```

RETURN VALUE

```
A list of names and values suitable for array construction via the Tcl
array set command. The following attributes are defined:

name
    The name of the event property.

prompt
    The prompt string for the event property.

desc
    The verbose description of the event property.
```

SEE ALSO

```
stcl, event create, event_prop create, event_prop delete,
event_prop list, trigger
```

EXAMPLES

```
To list the attributes of all event properties:

  foreach prop [event_prop list] {
      puts "$prop:"
      array set attrArray [event_prop get $prop]
      foreach attr [array names attrArray] {
          puts "\t$attr = $attrArray($attr)"
      }
  }
```

event_prop list

event_prop list Command

NAME

```
event_prop list     - Lists known event property definitions
```

DESCRIPTION

```
Lists all event property definitions whose name match the given
expression(s). If no arguments are given, all event properties
are listed.
```

SYNOPSIS

```
event_prop list [<expr> ...]
```

OPTIONS

- expr_option

```
expr
    This argument is a regular expression used to limit the list of
    event properties returned. Multiple expressions may be
    given. If no expressions are given, all known event properties
    are returned.
```

RETURN VALUE

```
A list of the names of the matching event property definitions.
```

SEE ALSO

```
stcl, event create, event_prop create, event_prop delete,
event_prop get, trigger
```

EXAMPLES

```
To list all event properties:

    event_prop list

To list all properties with 'obj' in their names:

    event_prop list *obj*

To list all properties with 'obj' or 'URL' in their names:
```

```
event_prop list *obj* *URL*
```

Triggers

trigger

trigger Commands

NAME

```
trigger             - Trigger commands
```

DESCRIPTION

```
These commands are used to create, delete, enable, disable, fire, and
get information about triggers.
```

SYNOPSIS

```
trigger <trigger_command> [<trigger_command_options>]

Usage: trigger [block|create|delete|disable|enable|fire|get|
                isEnabled|list|status|unblock]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list, trigger status
```

EXAMPLES

```
See specific "trigger" commands.
```

trigger block

trigger block Command

NAME

```
trigger block       - Prevents recursive trigger script activation
```

DESCRIPTION

```
This command is used within a trigger script to indicate that the
script should not be invoked recursively when actions taken by the
script cause the invocation of triggers.

Triggers are automatically unblocked after the body of code has
been evaluated, regardless of how that code body terminates (e.g.,
error, return, or normal). You therefore do not need to use the
'trigger unblock' command with 'trigger block'.

Scripts that use the 'trigger block' and 'trigger unblock'
construct may cause instability. Any code written in the following
format:

trigger block
<perform some action>
trigger unblock

should be rewritten as:

trigger block {
<perform some action>
}
```

SYNOPSIS

```
trigger block
```

OPTIONS

```
none
```

RETURN VALUE

```
**
```

SEE ALSO

```
trigger unblock, server-side, rstcl
```

EXAMPLES

```
Suppose that foo.tcl is a trigger script that is executed by
the server whenever anyone edits a note. Within foo.tcl, a
call is made to the 'note setprops' command, which changes a
property of a note.

Normally this scenario would cause the script foo.tcl to be
immediately executed again because a note has changed.

To prevent this recursive script activation, use the trigger block
command to tell the server not to invoke the script recursively.

Following is an example of how the trigger block command might be used
within a  script (it is not a complete/functional script):
  trigger block
  note setprops $SYNC_NoteURL State closed
```

trigger create

trigger create Command

NAME

```
trigger create      - Creates or replaces a trigger
```

DESCRIPTION

```
Creates a new trigger, or replaces an existing one.

A trigger is a named action, generally a script or program, that is
run by the system when a specified event occurs in the system (like a
file is checked in, tagged, etc.).

Each event has several named properties associated with it that
describe what the system is doing. See the help for 'event'
for more information.

By specifying the values of event properties that are required for a
trigger to  execute (-require), or will prevent a trigger from firing
(-exclude), a trigger can be configured to execute only when desired.
```

SYNOPSIS

```
trigger create <name> [-exec <command_and_arguments> |
               -tcl_script <script_filename> | -tcl_file <file_name> |
               -tcl_store <file_name>] [-replace]
               [-require|exclude <name> <valueExprList> ...]
```

OPTIONS

-exclude

```
-exclude <name>  Specifies that the trigger may only fire if the
<valueExprList>  value of the named event property does not match one
                 of the regular expressions in the valueExprList. If
                the named property does not exist on the event, the
                event may still fire the trigger if all other
                criteria are satisfied.
```

-exec

```
-exec <command   The given command will be executed in a subprocess
<and_arguments>  and passed the provided arguments.

                 Notes:

                 o Before the command is executed, any variables in
                   the command line will be replaced by the named
                   event property value.

                 o To include event property names as arguments: If
                   you are using the dss or dssc command shell,
                   precede the event property name with a dollar sign
                   (using Tcl variable syntax). For example: dss>
                   -exec "xterm -e vi $objURL" If you are using the
                   stcl or stclc command shell, precede the event
                   property name with a backslash and a dollar sign
                   or put the entire argument inside curly
                   braces. For example:
                   stcl> -exec "xterm -e vi \$objURL"
```

```
stcl> -exec {xterm -e vi $objURL}
```

Name

```
<name>
    A unique name for the trigger.
```

-replace

```
-replace          Replace the existing trigger of the same name, if
                  any. If this option is not given, and the named
                 trigger already exists, an error is generated.
```

-require

```
-require <name>   Specifies that the trigger may only fire if the value
<valueExprList>   of the named event property matches one of the
                  regular expressions in the valueExprList. If the
                 named property does not exist on the event, the
                 trigger will not fire.

                  Note: You cannot specify populate as a value for the
                  command event property. Use co instead.
```

-tcl_file

```
-tcl_file         The named Tcl file is loaded and executed when the
<file_name>      trigger is fired. This enables users to edit the
                  trigger script and have their changes take effect
                immediately without calling trigger create again.
                DesignSync looks in the current directory for the
                specified file; if the file is in another directory,
                use a full pathname for the <file_name>.
```

-tcl_script

```
-tcl_script       The given script will be evaluated by the system
<script>          directly.
```

-tcl_store

```
-tcl_store <file_name>    The named Tcl file is loaded immediately and the
                          contents stored for later execution when the trigger
                          is fired. This option is essentially the same as the
                          -tcl_script option, except that the script is read
                          from the file instead of the command arguments. Note
                          that trigger create must be called again after any
                          changes to the trigger script, otherwise the stored
                          version of the script will not be updated.
```

RETURN VALUE

```
If the command is successful, DesignSync returns an empty string
("""). If the command cannot run, DesignSync throws an error message
explaining the failure.
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list, trigger status
```

EXAMPLES

Example of Registering a Tcl Script with a Trigger

```
Use -tcl_script to register a Tcl script that will keep a running
log file of all .v and .vlog files that have been checked in.

    stcl> trigger create LogCheckins \
            -require objPath "*.v *.vlog" \
            -require command "ci" \
            -require type postObject \
            -tcl_script {
                set fd [open [glob ~/checkin.log] a]
                puts $fd "$objURL"
                close $fd
            }
```

Examples of Running a Program on the Selected Files with a Trigger

```
Use -exec to run the program 'lint' on all .c files before checking
them in, except for when user 'zeus' is the one doing the checkin:
```

```
In stcl:
    stcl> trigger create LintCheck \
            -require objPath *.c \
            -require type preObject \
            -require command ci \
            -exclude user zeus \
            -exec "lint \$objPath"

Note: There are alternative formats for how you can specify command
using the -exec option.  In stcl you can also use:
         -exec {lint $objPath}

In dss mode, you can use:
         -exec "lint $objPath"
```

Example of Registering a Tcl File with a Trigger

```
Use -tcl_file to register a Tcl file to be executed after every 'tag'
command that uses the tag 'GOLDEN':

   stcl> trigger create GoldenTag \
            -require command tag \
            -require tag GOLDEN \
            -require type postCommand \
            -tcl_file goldenTag.tcl

 Note: Unlike when tcl_store is used, the tcl file is not processed
 until the trigger runs.
```

Example of Using Loading and Storing a TCL File with a Trigger

```
Use -tcl_store to immediately read and store the Tcl contained within
a file for later execution before each checkin command:

   stcl> trigger create beforeCheckin \
            -require command ci \
            -require type preCommand \
            -tcl_store preCheckin.tcl
```

trigger delete

trigger delete Command

NAME

```
trigger delete      - Deletes an existing trigger
```

DESCRIPTION

```
Deletes an existing trigger.
```

SYNOPSIS

```
trigger delete <name>
```

OPTIONS

- Name

Name

```
name     The name of the trigger to be deleted.
```

RETURN VALUE

```
1 on success, error if the trigger does not exist.
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list, trigger status
```

EXAMPLES

```
Create a trigger named 'foo', then delete it.

    trigger create foo -tcl_script { puts "foo" }
    trigger delete foo
```

trigger disable

trigger disable Command

NAME

```
trigger disable     - Prevents a trigger from firing
```

DESCRIPTION

```
The named trigger is marked as disabled, and will not be fired by the
system. It can be subsequently re-enabled by using the 'trigger
enable' command.

Use 'trigger status' or 'trigger isEnabled' to determine whether or
not a trigger is currently disabled.
```

SYNOPSIS

```
trigger disable <name>
```

OPTIONS

- Name

Name

```
name     The name of the trigger to be disabled.
```

RETURN VALUE

```
1 on success, error if the trigger does not exist.
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list, trigger status
```

EXAMPLES

```
Create a trigger named 'foo', then disable it.

    trigger create foo -tcl_script { puts "foo" }
    trigger disable foo

The stcl client returns:
```

trigger enable

trigger enable Command

NAME

```
trigger enable      - Makes a disabled trigger active again
```

DESCRIPTION

```
The named trigger is marked as enabled, and will be fired by the
system if an event matching its firing criteria is created.

Use 'trigger status' or 'trigger isEnabled' to determine whether or
not a trigger is currently enabled.
```

SYNOPSIS

```
trigger enable <name>
```

OPTIONS

- Name

Name

```
name     The name of the trigger to be enabled.
```

RETURN VALUE

```
1 on success, error if the trigger does not exist.
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list, trigger status
```

EXAMPLES

```
Create a trigger named 'foo', and disable it.

    trigger create foo -tcl_script { puts "foo" }
    trigger disable foo

The stcl client returns:
    1
```

```
Re-enable the trigger named foo.

    trigger enable foo

The stcl client returns:
    # 1
```

trigger fire

trigger fire Command

NAME

```
trigger fire        - Executes a trigger
```

DESCRIPTION

```
Execute the named trigger. Note that even disabled triggers may be
executed by the 'trigger fire' command; this is useful to test
triggers before enabling them.
```

SYNOPSIS

```
trigger fire <name> <event>
```

OPTIONS

- Event
- Name

Event

```
event
    An event returned by the 'event create' command.
```

Name

```
name     The name of the trigger to be executed.
```

RETURN VALUE

```
1 if the trigger succeeded, 0 if it returned an error.
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list, trigger status
```

EXAMPLES

```
Create a test trigger named 'echo' intended to output the names of all
non-filter events as they execute, then test it by creating a simple
event and calling trigger fire.

    trigger create echo \
            -exclude type *Filter \
            -tcl_script {
                puts "$trigger"
            }

    # create an event with the single property 'type' set to
    # 'testEvent'
    set event [event create {type testEvent}]

    # fire the trigger
    trigger fire echo $event
```

trigger get

trigger get Command

NAME

```
trigger get         - Gets information about a trigger
```

DESCRIPTION

```
Returns a Tcl list of the names and values of various attributes of
the named trigger. This command is primarily useful for use in Tcl
scripts that manage triggers. For a user-friendly display of trigger
information, use the 'trigger status' command.
```

SYNOPSIS

```
trigger get <name>
```

OPTIONS

- Name

Name

```
name     The name of the trigger to be queried.
```

RETURN VALUE

```
A Tcl list of name/value pairs of the form:
    {name1 value1 name2 value2 ...}
This list can be converted into an array using 'array set'.
The following attributes will be returned, as appropriate:

   name        - name of the trigger
   type        - exec, tcl_script, tcl_file, or tcl_store
   fileName    - name of file for tcl_file or tcl_store triggers
   commandLine - command line for exec triggers
   tclScript   - the script for tcl_script or tcl_store triggers
   reqProps    - required properties list
   exclProps   - exclude properties list
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list, trigger status
```

EXAMPLES

```
Print the name and type of all known triggers:

    foreach trigger [trigger list -all] {
      array set props [trigger get $trigger]
      puts "Trigger $props(name)"
      puts "  type = $props(type)"
    }
```

trigger isEnabled

trigger isEnabled Command

NAME

```
trigger isEnabled   - Determines whether or not a trigger is enabled
```

DESCRIPTION

```
Queries the status of the named trigger, returning a 1 if the trigger
is enabled.
```

SYNOPSIS

```
trigger isEnabled <name>
```

OPTIONS

- Name

Name

```
name     The name of the trigger to be queried.
```

RETURN VALUE

```
1 if enabled, 0 if disabled, error if the trigger does not exist.
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list, trigger status
```

EXAMPLES

```
See if the trigger 'LintCheck' is enabled:

    if [trigger isEnabled LintCheck] {
        puts "Enabled"
    } else {
        puts "Disabled"
    }
```

trigger list

trigger list Command

NAME

```
trigger list        - Gets a list of triggers
```

DESCRIPTION

```
Lists triggers that match the given criteria. If no arguments are
given, all triggers are listed.
```

SYNOPSIS

```
trigger list [-all | -disabled | -enabled] [-event event]
             [name_expr ...]
```

OPTIONS

- -all
- -disabled
- -enabled
- -event
- Name Expression

-all

```
-all             If given, lists all triggers whether they are
                 enabled or disabled.

                 This option is mutually exclusive with -disabled and
                 -enabled.
```

-disabled

```
-disabled        If given, lists only trigger that have been
                 disabled.

                 This option is mutually exclusive with -all and
                -enabled.
```

-enabled

```
-enabled         If given, lists only triggers that have not been
                 disabled (Default.)
```

```
                This option is mutually exclusive with -all and
                -disabled.
```

-event

```
-event event    The event given is an object returned by the 'event
                create' function. If given, only triggers which
               would be fired for the given event are listed. This
               parameter is typically used without any other flags
               to determine the set of triggers to fire for an
               event.
```

Name Expression

```
name_expr ...   Each name_expr gives a regular expression which is
                matched against the set of all known triggers. Only
                triggers with matching names are listed.
```

RETURN VALUE

```
A list of matching triggers.
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list, trigger status
```

EXAMPLES

Example of Listing All Active Triggers

```
To list all active (non-disabled) triggers:

    trigger list
```

Example of Listing All Disabled Triggers

```
To get a list of all triggers that are currently disabled:

    trigger list -disabled
```

Example of Listing All Triggers that Match a Wildcard List

```
List all enabled and disabled triggers that start with the letter
'a' or the letter 'c':

    trigger list -all a* c*
```

Example of Using Trigger List in a Script

```
Here's how this function could be used in conjunction with 'trigger
fire' to run all triggers that match an event, exiting the loop if
any error are encountered.

    # first create an event - pretend we are the ci command
    set event(type) preCommand
    set event(command) ci
    set event(objPath) foo.v
    set e [event create [array get event]]

    # use trigger list to loop all trigger that match our event
    foreach trigger [trigger list -event $e] {
        if ![trigger fire $trigger $e] {
            error "trigger $trigger failed"
        }
    }
```

trigger status

trigger status Command

NAME

```
trigger status      - Shows the status of triggers
```

DESCRIPTION

```
Prints a user-friendly list of triggers, whether or not they are
enabled, what type they are, and more information based on their type.
```

SYNOPSIS

```
trigger status [<name_expr> ...]
```

OPTIONS

- Name Expression

Name Expression

```
name_expr ...    Each name_expr gives a regular expression which is
                 matched against the set of all known triggers. Only
                 triggers with matching names are listed. If no
                 expressions are given, all known triggers are
                 listed.
```

SEE ALSO

```
stcl, event, event_prop, trigger create, trigger delete,
trigger disable, trigger enable, trigger fire, trigger get,
trigger isEnabled, trigger list
```

EXAMPLES

- Example of Listing Information about All Triggers
- Example of Listing Information for Triggers that Match a Wildcard List
- Example of Listing Trigger Information for a Specific Trigger

Example of Listing Information about All Triggers

```
To list information about all triggers:

    trigger status
```

Example of Listing Information for Triggers that Match a Wildcard List

```
List information about all triggers with names that start with the
letter 'a' or the letter 'c':

    trigger status a* c*
```

Example of Listing Trigger Information for a Specific Trigger

```
List information about a trigger named 'foo':

    trigger status foo
```

trigger unblock

trigger unblock Command

NAME

```
trigger unblock     - Deprecated command
```

DESCRIPTION

```
This command was used to allow a trigger script to be recursively
executed when it created events for which it was a registered
trigger. This command is deprecated because this behavior is
the default for trigger scripts.

This command was sometimes used to undo the effect of a
previously executed 'trigger block' command. Under the new
architecture, scripts that use the 'trigger block' and 'trigger
unblock' construct may cause instability. Any code written in
the following format:

trigger block
<perform some action>
trigger unblock

should be rewritten as:

trigger block {
<perform some action>
}
```

SYNOPSIS

```
trigger unblock
```

OPTIONS

```
none
```

RETURN VALUE

```
none
```

SEE ALSO

```
trigger block, server-side, rstcl
```

Registry File Management

SyncAdmin

SyncAdmin

NAME

```
SyncAdmin           - Synchronicity Administrator tool
```

DESCRIPTION

```
Synchronicity's SyncAdmin tool is a graphical user interface that
lets system administrators, project leaders, and users configure
DesignSync clients (command-line and graphical) for
site, project, or individual use.

You execute SyncAdmin from your operating system shell, not
from a Synchronicity client shell (dss/dssc/stcl/stclc).  On
Windows platforms, you invoke SyncAdmin from the Windows
Start menu, typically:
  Start->Programs->Dassault Systems <version>->SyncAdmin

See SyncAdmin help for details on SyncAdmin. From the GUI, click
the Help button on any SyncAdmin page.
```

SYNOPSIS

```
SyncAdmin [-file <filename> | -project | -site | -user]
```

OPTIONS

- -file
- -project
- -site
- -user

-file

```
-file <filename>  Edit the specified registry file, bypassing the initial
                  SyncAdmin window (where you select which registry
                  file to edit).
```

-project

```
-project          Edit the project registry file, bypassing the initial
                  SyncAdmin window (where you select which registry
                  file to edit).
```

-site

```
-site             Edit the site registry file, bypassing the initial
                  SyncAdmin window (where you select which registry
                  file to edit).
```

-user

```
-user             Edit the user registry file, bypassing the initial
                  SyncAdmin window (where you select which registry
                  file to edit).
```

RETURN VALUE

```
none
```

SEE ALSO

```
DesSync
```

EXAMPLES

```
This example invokes SyncAdmin:
  % SyncAdmin

This example invokes SyncAdmin, in background mode, to edit the
user registry:
  % SyncAdmin -user &
```

sregistry

sregistry Commands

NAME

```
sregistry           - SyncAdmin file registry commands
```

DESCRIPTION

```
The sregistry commands allow you to view and edit the Synchronicity
Administrator registries from the command line.
```

SYNOPSIS

```
sregistry <sregistry_command> [<sregistry_command_options>]

Usage: sregistry [delete|get|keys|reset|scope|set|source|values]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
sregistry delete, sregistry get, sregistry keys, sregistry reset,
sregistry set, sregistry scope, sregistry source, sregistry values
```

EXAMPLES

```
See specific "sregistry" commands.
```

sregistry delete

sregistry delete Command

NAME

```
sregistry delete    - Delete registry key or value
```

DESCRIPTION

```
This command deletes keys and values associated with selected
SyncAdmin registry files.  This command will not delete
read-only registry files.

After you run the "sregistry delete" command, be sure to run the
"sregistry reset" command to update the registry file. You can do this
from the client for client registry files, or in a server-side script
for the server's registry files. You can also do this by restarting
the client or server applications.
```

SYNOPSIS

```
Client-Side Invocation
sregistry delete [-currentuser | -localmachine | -synch ]
                 [-file <filename> | -project | -site | -user]
                 <keyPath> <value>

Server-Side Invocation
sregistry delete [-currentuser | -localmachine | -synch ]
                 [-file <filename> | -port | -site]
                  <keyPath> <value>
```

OPTIONS

- -currentuser
- -file
- keyPath
- -localmachine
- -port
- -project
- -site
- -synch
- -user
- value

-currentuser

```
-currentuser         Directs the command to HKEY_CURRENT_USER by adding
```

a prefix to the key 'KeyPath' with "HKEY_CURRENT_USER\Software\Synchronicity"

This option is mutually exclusive with -localmachine and -synch.

-file

-file <filename> Executes the command using only the registry file 'Filename'. No other files, including SyncRegistry.reg, are read. You must have write permission for the specified file.

When invoked from the client-side, this option is mutually exclusive with -project, -site, and -user. When invoked from a server-side script, this option is mutually exclusive with -port, and -site.

keyPath

<keyPath> Specifies the key or partial key where the registry value lives. If more than one hierarchical level is specified in the path, the syntax is very important.

In an stclc shell, the KeyPath must be enclosed in double quotes and the path elements delimited with two backslashes:
"General\\Options"
or, the KeyPath must be enclosed in braces and the path elements delimited with one backslash:
{General\Options}.

In a dssc shell, the KeyPath must be enclosed in double quotes and the path elements delimited with one backslash:
"General\Options"

If the root is not specified in the KeyPath or with the -currentuser or -localmachine options, HKEY_CURRENT_USER is searched.

-localmachine

-localmachine Directs the command to HKEY_LOCAL_MACHINE by adding a prefix to the key 'KeyPath' with "HKEY_LOCAL_MACHINE\Software\Synchronicity"

This option is mutually exclusive with

-currentuser and -synch.

-port

-port	This is the default context and executes the command using the registry context: PortRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -port option is only valid when called from a server side script. This option is mutually exclusive with -file and -site.

-project

-project	Executes the command using the registry context: ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. If the project registry is not available because $SYNC_PROJECT_CFGDIR is not defined, an error will be generated. The -project option is not allowed from a server side script as the project registry is only valid from a client tool. Requires write permission to ProjectRegistry.reg. This option is mutually exclusive with -file, -site, -user.

-site

-site	Executes the command using the registry context: SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. Requires write permission to SiteRegistry.reg. When invoked from the client-side, this option is mutually exclusive with -file, -project, and -user. When invoked from a server-side script, this option is mutually exclusive with -file, and -port.

-synch

-synch	Directs the command to Software\Synchronicity by adding a prefix to the key 'KeyPath' with "Software\Synchronicity"

This option is mutually exclusive with -currentuser and -localmachine.

-user

-user — This is the default context and executes the command using the registry context: UserRegistry.reg, ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -user option is valid only when called from a client tool. Requires write permission to UserRegistry.reg.

This option is mutually exclusive with -file, -project, and -site.

value

<value> — The name of the registry value to retrieve the data from.

RETURN VALUE

Returns an empty string on success. Deleting a value that does not exist will return an empty string. Deleting a key where the leaf name does not exist will return an empty string.

If a Value is not specified, the key and all its values are removed. If the key contains sub-keys, neither the key nor it values are removed. You can not remove a key that contains subkeys.

The delete command can only delete keys and values that are in the registry file that is open for write (the first file listed in the registry context). If you try to delete a value that exists in one of the read-only registry files, an error will be generated. If you try to delete a key and the key and all its values exist in read-only registry files, an error will be generated. If some of the key's values are in the writable registry file, only those values will be deleted and the command will return OK. The key and the values in the read-only registry files will still remain.

SEE ALSO

sregistry get, sregistry set, sregistry keys, sregistry reset, sregistry source, sregistry values

EXAMPLES

```
 Continuing from the 'sregistry set' example, which showed a user setting
 their own default fetch state, overriding the site-wide "share" preference.

 stcl> sregistry set -currentuser -user "General\\Options" \
 stcl> DefaultFetchType get
 get
 stcl>

 The user can remove their default fetch state setting:

 stcl> sregistry delete -currentuser -user "General\\Options"
DefaultFetchType
 stcl>
```

sregistry get

sregistry get Command

NAME

```
 sregistry get       - Get a registry value
```

DESCRIPTION

```
 Retrives the value of a registry key from the specified registry. The
 complete list of available registry keys is contained in the ENOVIA
 Synchronicity DesignSync Administrator's Guide.
```

SYNOPSIS

```
 Client-side Invocation
 sregistry get [-base dec | hex]
               [-currentuser | -localmachine | -synch]
               [-default <dataPath>] [-format text | list]
               [-user | -project | -site | -file <filename>]
               <keyPath> <value>

 Server-side Invocation
 sregistry get [-base dec | hex]
               [-currentuser | -localmachine | -synch]
               [-default <dataPath>] [-format text | list]
               [-port | -site | -file <filename>] <keyPath> <value>
```

OPTIONS

-base

-base	Specifies how to represent numerical data. The default is dec (decimal). The -base option has no effect if the data is of type string. If the base is selected as dec, the data will be represented as a signed integer. If the base is selected as hex (hexadecimal), the data will be output in unsigned hexadecimal format starting with 0x and showing all four bytes. For example, the same registry value might output 0xffffffff in hex base and -1 in dec base.

-currentuser

-currentuser	Directs the command to HKEY_CURRENT_USER by adding a prefix to the key 'KeyPath' with "HKEY_CURRENT_USER\Software\Synchronicity" This option is mutually exclusive with -localmachine and -synch.

-default

-default <dataPath>	If a default value, <dataPath>, is specified, the command will return DefaultData if the value was not found in the registry. If a default is not specified and the value is not found in the registry, an error is returned.

-file

```
-file <filename>    Executes the command using only the registry file
                    <filename>. No other files, including
                    SyncRegistry.reg, are read. You must have write
                    permission for the specified file.

                    When invoked from the client-side, this option is
                    mutually exclusive with -project, -site, and
                    -user. When invoked from a server-side script,
                    this option is mutually exclusive with -port,
                    -site, and -user.
```

-format

```
-format             Specifies the way the output will be returned.
                    The default is text. The format text will return the
                    data from the registry as a string. If the registry
                    value is a dword, the return value is a string
                    representing the dword. The format list will return
                    a tcl list of name value pairs. The following named
                    values will display:

                    data: The data requested from the registry with the
                          get command.

                    type:   The type of the data that was returned
                            from the registry. The type will be
                            either number or string.
                            If the value was not found in the registry,
                            and the default data was returned, the type
                            will be set to string.
                    source: A string indicating which registry file the
                            value was found in. The string will be
                            one of the following: Current, Default,
                            Override, or None. See the sregistry
                            source command for more information.
                    root:   A string containing the name of the root
                            (hive) where the value was found. The
                            string will be either "HKEY_CURRENT_USER"
                            or "HKEY_LOCAL_MACHINE".
                            If the value was not found in the
                            registry, and the default data was
                            returned, this value will be set to
                            "HKEY_CURRENT_USER".
```

-localmachine

```
-localmachine       Directs the command to HKEY_LOCAL_MACHINE by adding
                    a prefix to the key 'KeyPath' with
                    "HKEY_LOCAL_MACHINE\Software\Synchronicity"

                    This option is mutually exclusive with
```

-currentuser and -sync.

-port

-port — This is the default context and executes the command using the registry context: PortRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -port option is only valid when called from a server side script.

This option is mutually exclusive with -file and -site.

-project

-project — Executes the command using the registry context: ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. If the project registry is not available because $SYNC_PROJECT_CFGDIR is not defined, an error will be generated. The -project option is not allowed from a server side script as the project registry is only valid from a client tool. Requires write permission to ProjectRegistry.reg.

This option is mutually exclusive with -file, -site, and -user.

-site

-site — Executes the command using the registry context: SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. Requires write permission to SiteRegistry.reg.

When invoked from the client-side, this option is mutually exclusive with -file, -project, and -user. When invoked from a server-side script, this option is mutually exclusive with -file, -port, and -user.

-synch

-synch — Directs the command to Software\Synchronicity by adding a prefix to the key 'KeyPath' with "Software\Synchronicity"

This option is mutually exclusive with -currentuser and -localmachine.

-user

-user	This is the default context and executes the command using the registry context: UserRegistry.reg, ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -user option is only valid when called from a client tool. Requires write permission to UserRegistry.reg. This option is mutually exclusive with -file, -project, and -site.

Key Path

<keyPath>	Specifies the key or partial key where the registry value lives. If more than one hierarchical level is specified in the path, the syntax is very important. In an stclc shell, the key path must be enclosed in double quotes and the path elements delimited with two backslashes: "General\\Options" or, the key path must be enclosed in braces and the path elements delimited with one backslash: {General\Options}. In a dssc shell, the key path must be enclosed in double quotes and the path elements delimited with one backslash: "General\Options" If the root is not specified in the key path or with the -currentuser or -localmachine options, HKEY_CURRENT_USER is searched first for the value, and if it is not found, HKEY_LOCAL_MACHINE is searched.

Value

<value>	The name of the registry value to retrieve the data from.

SEE ALSO

sregistry set, sregistry keys, sregistry values, sregistry delete, sregistry source, sregistry reset

EXAMPLES

```
Continuing from the 'sregistry values' example, which showed:

stcl> sregistry values -currentuser -site "General\\Options"
DefaultFetchType
stcl>

To find the site-wide default fetch state value:

stcl> sregistry get -currentuser -site "General\\Options" DefaultFetchType
share
stcl>

See the 'sregistry set' example for how a user would set their own default
fetch state, overriding the site default value.
```

sregistry keys

sregistry keys Command

NAME

```
sregistry keys      - Displays sub-keys in registry value
```

DESCRIPTION

```
This command displays a list of the sub-keys associated with a specified
KeyPath.
```

SYNOPSIS

```
Client-side invocation:
  sregistry keys [-currentuser | -localmachine | -synch ]
                 [-user | -project | -site | -file <filename>]
                 [-format text | list] <KeyPath>

Server-side invocation:
  sregistry keys [-currentuser | -localmachine | -synch ]
                 [-format text | list]
                 [-port | -site | -file <filename>] <KeyPath>
```

OPTIONS

-currentuser

-currentuser	Adds the following prefix to the key <KeyPath>: "HKEY_CURRENT_USER\Software\Synchronicity" This option is mutually exclusive with -localmachine, and -synch.

-file

-file <filename>	Executes the command using only the registry file <filename>. No other files are read, including SyncRegistry.reg. You must have write permission for the specified file. When invoked from the client-side, this option is mutually exclusive with -project, -site, and -user. When invoked from a server-side script, this option is mutually exclusive with -port, and -site.

-format

-format	Specifies the way the output will be returned. The default is text. The format text will return each key on a new line. The format list will list the keys in a tcl list.

Key Path

<KeyPath>	Specifies the top-level key path or partial key path. If more than one hierarchical level is specified in the path, the syntax is very important. In an stclc shell, the KeyPath must be enclosed in double quotes and the path elements delimited with

two backslashes:
"General\\Options"
or, the KeyPath must be enclosed in braces and the path elements delimited with one backslash:
{General\Options}.

In a dssc shell, the KeyPath must be enclosed in double quotes and the path elements delimited with one backslash:
"General\Options"

If the root is not specified in the KeyPath or with the -currentuser or -localmachine options, HKEY_CURRENT_USER is searched.

-localmachine

-localmachine	Adds the following prefix to the key <KeyPath>: "HKEY_LOCAL_MACHINE\Software\Synchronicity" This option is mutually exclusive with -currentuser and -synch.

-port

-port	Executes the command using this registry hierarchy: PortRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -port option is the default. This option is only valid when called from a server-side script. This operation is mutually exclusive with -file, and -site.

-project

-project	Executes the command using this registry hierarchy: ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. If the project registry is not available because $SYNC_PROJECT_CFGDIR is not defined, an error will be generated. The -project option is not allowed from a server side script as the project registry is only valid from a client tool. This operation is mutually exclusive with -file, -site, and -user.

-site

-site	Executes the command using this registry hierarchy: SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. When invoked from the client-side, this option is mutually exclusive with -file, -project, and -user. When invoked from a server-side script, this option is mutually exclusive with -file, and -port.

-synch

-synch	Adds the following prefix to the key <KeyPath>: "Software\Synchronicity" This option is mutually exclusive with -currentuser and -localmachine.

-user

-user	Executes the command using this registry hierarchy: UserRegistry.reg, ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -user option is the default. This option is valid only when called from a client tool. This operation is mutually exclusive with -file, -project, and -site.

RETURN VALUE

A list of the sub-keys of KeyPath. If no subkeys exist, then an empty list is returned.

SEE ALSO

sregistry get, sregistry set, sregistry values, sregistry delete, sregistry source, sregistry reset

EXAMPLES

The example below finds the site-wide General registry keys. When an

```
empty string is returned, that means there are no sub-keys below the
specified KeyPath.

stcl> sregistry keys -currentuser -site General
ExtensionTypes
CmdTable
Options
stcl> sregistry keys -currentuser -site "General\\ExtensionTypes"
stcl> sregistry keys -currentuser -site "General\\Options"
stcl> sregistry keys -currentuser -site "General\\CmdTable"
DefaultLogDir
stcl>

The 'sregistry values' example shows how to use the above result.
```

sregistry reset

sregistry reset Command

NAME

```
sregistry reset     - Forces a refresh of all registry files
```

DESCRIPTION

```
This command forces the re-reading of all registry files,
including the read-only files. It returns an empty string upon
successful completion. It is important to note that reloading all the
registry files may not be sufficient to cause Synchronicity tools
(client and server) to immediately see the new settings. This is
because some values are cached by the programs. To assure all new
values are being read by an application, the application should be
restarted.
```

SYNOPSIS

```
sregistry reset
```

OPTIONS

```
None.
```

SEE ALSO

```
sregistry get, sregistry set, sregistry keys, sregistry values
sregistry source, sregistry delete
```

sregistry scope

sregistry scope Command

NAME

```
sregistry scope     - Temporarily changes which registry files are active
```

DESCRIPTION

```
Used only with the command defaults system, to temporarily change which
registry files are active. By default, "defaults set" stores default
values in the user's registry file. Use "sregistry scope" to store
default values in other registry files that are sourced by the DesignSync
client on startup, such as the installation's site registry file.

Within a DesignSync client session, run "defaults refresh" to read all
default values from the client registry files. See the DesignSync
Data Manager User's Guide topic "Registry Files" for further information.

To prevent users' saved default values from overriding site or project
default values, specify the "-nooverrule" option to the "defaults set"
command. See the "defaults set" command documentation for details.
```

SYNOPSIS

```
sregistry scope [-project | -site]
                {defaults set -- <command> <option> [<option> ...]}
```

OPTIONS

- -project
- -site

-project

```
-project        If <SYNC_PROJECT_CFGDIR> is defined, store default values
                in the <SYNC_PROJECT_CFGDIR>/ProjectRegistry.reg file.
                Requires write permission to the ProjectRegistry.reg file.
```

-site

```
-site          Store default values in the site-wide registry file,
               <SYNC_SITE_CNFG_DIR>/SiteRegistry.reg. If not defined,
               <SYNC_SITE_CNFG_DIR> resolves to <SYNC_SITE_CUSTOM>/config
               which, in turn, resolves to <SYNC_CUSTOM_DIR>/site/config.
               Requires write permission to the SiteRegistry.reg file.
```

RETURN VALUE

```
The result of the expression given to the "sregistry scope" command.
```

SEE ALSO

```
defaults refresh, defaults set, defaults show, command defaults
```

EXAMPLES

```
As the installation owner, to set a default report mode for the "ls"
command, for all users at your site:

stcl> sregistry scope -site {defaults set -- ls -report verbose}

The "defaults show" command confirms that the "-report verbose" default
value for the "ls" command is set in the site registry file.

stcl> defaults show -source ls
{ls temporary {} project {} project_nooverrule {} user {} user_nooverrule
{} site {-report verbose} site_nooverrule {} enterprise {}
enterprise_nooverrule {}}
stcl>
```

sregistry set

sregistry set Command

NAME

```
sregistry set       - Sets a registry value
```

DESCRIPTION

```
The 'sregistry set' and related 'sregistry' commands allow you to edit
the Synchronicity Administrator registries from the command
line. When you enter the command, you choose the client registry
```

```
or the server registry. You also need to specify the key or
where the registry value lives (HKEY_CURRENT_USER or
HKEY_LOCAL_MACHINE). The last part of the command identifies the
KeyPath (SyncAdmin settings tree) and the key name you want to retrieve.

After you run the "sregistry delete" command, be sure to run the
"sregistry reset" command to update the registry file. You can do this
from the client for client registry files, or in a server-side script
for the server's registry files. You can also do this by restarting
the client or server applications.
```

SYNOPSIS

```
Client-Side Invocation
sregistry set [-currentuser | -localmachine | -synch ]
              [-file <filename> | -project | -site | -user]
              <keyPath> [-type number|string] <value> [--] Data

Server-Side Invocation
sregistry set [-currentuser | -localmachine | -synch ]
              [-file <filename> | -site | -port]
              <keyPath> [-type number|string] <value> [--] Data
```

ARGUMENTS

- Data

Data

Data	Specifies the data to write into the registry. Data must match the type specified with -type. A number can be an integer (signed or unsigned) or a hexadecimal value. Hexadecimal numbers must be prefixed with '0x' or '0X' For Example: 0xFF2A.

OPTIONS

- -currentuser
- -file
- keypath
- -localmachine
- -port
- -project
- -site
- -synch
- -type
- -user

- Value
- --

-currentuser

-currentuser	Directs the command to HKEY_CURRENT_USER by adding a prefix to the key 'KeyPath' with "HKEY_CURRENT_USER\Software\Synchronicity" This option is mutually exclusive with -localmachine and -synch.

-file

-file <filename>	Executes the command using only the registry file 'Filename'. No other files, including SyncRegistry.reg, are read. You must have write permission for the specified file. When invoked from the client-side, this option is mutually exclusive with -project, -site, and -user. When invoked from a server-side script, this option is mutually exclusive with -port, and -site.

keypath

<keyPath>	Specifies the key or partial key where the registry value lives. If more than one hierarchical level is specified in the path, the syntax is very important. In an stclc shell, the key path must be enclosed in double quotes and the path elements delimited with two backslashes: "General\\Options" or, the key path must be enclosed in braces and the path elements delimited with one backslash: {General\Options}. In a dssc shell, the key path must be enclosed in double quotes and the path elements delimited with one backslash: "General\Options" If the root is not specified in the key path or with the -currentuser or -localmachine options, HKEY_CURRENT_USER is used.

-localmachine

-localmachine	Directs the command to HKEY_LOCAL_MACHINE by adding a prefix to the key 'KeyPath' with "HKEY_LOCAL_MACHINE\Software\Synchronicity" This option is mutually exclusive with -currentuser and -synch.

-port

-port	This is the default context and executes the command using the registry context: PortRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -port option is only valid when called from a server-side script. This option is mutually exclusive with -file and -site.

-project

-project	Executes the command using the registry context: ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. If the project registry is not available because $SYNC_PROJECT_CFGDIR is not defined, an error will be generated. The -project option is not allowed from a server side script as the project registry is only valid from a client tool. Requires write permission to ProjectRegistry.reg. This option is mutually exclusive with -file, -site, and -user.

-site

-site	Executes the command using the registry context: SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. Requires write permission to configuration directory for the site ($SYNC_SITE_CNFG_DIR) and the SiteRegistry.reg file. When invoked from the client-side, this option is mutually exclusive with -file, -project, and -user. When invoked from a server-side script, this option is mutually exclusive with -file, and -port.

-synch

-synch	Directs the command to Software\Synchronicity by adding a prefix to the key 'KeyPath' with "Software\Synchronicity" This option is mutually exclusive with -currentuser and -localmachine.

-type

-type	Specifies the type of data to store in the registry. Can be either string or number with string being the default.

-user

-user	This is the default context and executes the command using the registry context: UserRegistry.reg, ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -user option is only valid when called from a client tool. Requires write permission to UserRegistry.reg. This option is musually exclusive with -file, -project, and -site.

Value

<value>	The name of the registry value to retrieve the data from.

--

--	Specifies that there are no more switches to follow on the command line.

RETURN VALUE

The value of Data is returned.

SEE ALSO

sregistry get, sregistry keys, sregistry values, sregistry delete, sregistry source, sregistry reset

EXAMPLES

```
Continuing from the 'sregistry get' example, which showed the site-wide
default fetch state:

stcl> sregistry get -currentuser -site "General\\Options" DefaultFetchType
share
stcl>

A user can set their own default fetch state, overriding the site-wide
preference.

stcl> sregistry set -currentuser -user "General\\Options" \
stcl> DefaultFetchType get
get
stcl>

See the 'sregistry source' example for how to determine which registry
file's default fetch state value is being used.
```

sregistry source

sregistry source Command

NAME

```
sregistry source    - Displays the source of a registry value
```

DESCRIPTION

```
This command displays the source (registry file) of a SyncAdmin
registry value.
```

SYNOPSIS

```
Client-Side Invocation
sregistry source [-currentuser | -localmachine | -synch]
                 [-file <filename> | -project | -site | -user]
                  <keyPath> <value>

Server-Side Invocation
sregistry source [-currentuser | -localmachine | -synch]
                 [-file <filename> | -port | -site]
                 <keyPath> <value>
```

OPTIONS

-currentuser

-currentuser	Directs the command to HKEY_CURRENT_USER by adding a prefix to the key 'KeyPath' with "HKEY_CURRENT_USER\Software\Synchronicity" This option is mutually exclusive with -localmachine and -synch.

-file

-file <filename>	Executes the command using only the registry file 'Filename'. No other files, including SyncRegistry.reg, are read. You must have write permission for the specified file. When invoked from the client-side, this option is mutually exclusive with -project, -site, and -user. When invoked from a server-side script, this option is mutually exclusive with -port, and -site.

KeyPath

<keyPath>	Specifies the key or partial key where the registry value lives. If more than one hierarchical level is specified in the path, the syntax is very important. In an stclc shell, the key path must be enclosed in double quotes and the path elements delimited with two backslashes: "General\\Options" or, the key path must be enclosed in braces and the path elements delimited with one backslash: {General\Options}.

In a dssc shell, the key path must be enclosed in double quotes and the path elements delimited with one backslash:
"General\Options"

If the root is not specified in the key path or with the -currentuser or -localmachine options, HKEY_CURRENT_USER is searched.

-localmachine

-localmachine — Directs the command to HKEY_LOCAL_MACHINE by adding a prefix to the key 'KeyPath' with "HKEY_LOCAL_MACHINE\Software\Synchronicity"

This option is mutually exclusive with -currentuser and -synch.

-port

-port — This is the default context and executes the command using the registry context: PortRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -port option is only valid when called from a server-side script.

This option is mutually exclusive with -file and -site.

-project

-project — Executes the command using the registry context: ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. If the project registry is not available because $SYNC_PROJECT_CFGDIR is not defined, an error will be generated. The -project option is not allowed from a server side script as the project registry is only valid from a client tool. Requires write permission to ProjectRegistry.reg.

This option is mutually exclusive with -file, -site, and -user.

-site

-site — Executes the command using the registry context: SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. Requires write permission to SiteRegistry.reg.

When invoked from the client-side, this option is mutually exclusive with -file, -project, and -user. When invoked from a server-side script, this option is mutually exclusive with -file, and -port.

-synch

-synch	Directs the command to Software\Synchronicity by adding a prefix to the key 'KeyPath' with "Software\Synchronicity" This option is mutually exclusive with -currentuser and -synch.

-user

-user	This is the default context and executes the command using the registry context: UserRegistry.reg, ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -user option is only valid when called from a client tool. Requires write permission to UserRegistry.reg. This option is mutually exclusive with -file, -project, and -site.

value

<value>	The name of the registry value to retrieve the data from.

RETURN VALUE

Current|Default|Override|None
Returns 'Current' if the value comes from the registry file currently open for write.
Returns 'Default' if the value comes from a registry with lower precedence than the registry file currently open for write.
Returns 'Override' if the value comes from a registry with higher precedence than the registry file currently open for write.
Returns 'None' if the value is not found in the registry.

SEE ALSO

```
 sregistry get, sregistry set, sregistry keys, sregistry reset
 sregistry delete, sregistry values
```

EXAMPLES

```
 Continuing from the 'sregistry set' example, which showed a user setting
 their own default fetch state, overriding the site-wide "share" preference.

 stcl> sregistry set -currentuser -user "General\\Options" \
 stcl> DefaultFetchType get
 get
 stcl>

 To determine which registry file (the site-wide registry file or the user's
 registry file) is being sourced for the default fetch state value:

 stcl> sregistry source -currentuser -user "General\\Options"
DefaultFetchType
 Current
 stcl>

 This shows that the default fetch state value in the user's registry file
 (the registry file currently open for writing by the DesignSync client) is
 in use.
```

sregistry values

sregistry values Command

NAME

```
 sregistry values    - Displays the available registry values
```

DESCRIPTION

```
 This command displays a list of Values available under the <keyPath> key.
```

SYNOPSIS

```
 Client-Side Invocation
 sregistry values [-currentuser | -localmachine | -synch ]
                  [-user | -project | -site | -file <filename>]
                  [-port | -site | -file <filename>]
                  [-format text | list] <keyPath>

 Server-Side Invocation
 sregistry values [-currentuser | -localmachine | -synch ]
```

```
[-user | -project | -site | -file <filename>]
[-port | -site | -file <filename>]
[-format text | list] <keyPath>
```

OPTIONS

-currentuser

-currentuser	Directs the command to HKEY_CURRENT_USER by adding a prefix to the key 'KeyPath' with "HKEY_CURRENT_USER\Software\Synchronicity" This option is mutually exclusive with -localmachine and -synch.

-file

-file <filename>	Executes the command using only the registry file 'Filename'. Only the file ('Filename') will be read or written. No other files, including the SyncRegistry.reg file are read. When invoked from the client-side, this option is mutually exclusive with -project, -site, and -user. When invoked from a server-side script, this option is mutually exclusive with -port, and -site.

-format

-format	Specifies the way the output will be returned. The default is text. The format text will return each value on a new line. The format list will list the values in a tcl list.

KeyPath

<keyPath>	Specifies the key or partial key where the registry value lives. If more than one hierarchical level is specified in the path, the syntax is very important. In an stclc shell, the key path must be enclosed in double quotes and the path elements delimited with two backslashes: "General\\Options" or, the key path must be enclosed in braces and the path elements delimited with one backslash: General\Options}. In a dssc shell, the key path must be enclosed in double quotes and the path elements delimited with one backslash: "General\Options" If the root is not specified in the key path or with the -currentuser or -localmachine options, HKEY_CURRENT_USER is searched.

-localmachine

-localmachine	Directs the command to HKEY_LOCAL_MACHINE by adding a prefix to the key 'KeyPath' with "HKEY_LOCAL_MACHINE\Software\Synchronicity" This option is mutually exclusive with -currentuser and -synch.

-port

-port	This is the default context and executes the command using the registry context: PortRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -port option is only valid when called from a server-side script. This option is mutually exclusive with -file and -site.

-project

-project	Executes the command using the registry context: ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. If the project registry is not available because $SYNC_PROJECT_CFGDIR is not defined, an error will be generated. The -project option is not allowed from a server side script as the project

registry is only valid from a client tool. Requires write permission to ProjectRegistry.reg.

This option is mutually exclusive with -file, -site, and -user.

-site

-site	Executes the command using the registry context: SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. Requires write permission to SiteRegistry.reg. When invoked from the client-side, this option is mutually exclusive with -file, -project, and -user. When invoked from a server-side script, this option is mutually exclusive with -file and -port.

-synch

-synch	Directs the command to Software\Synchronicity by adding a prefix to the key 'KeyPath' with "Software\Synchronicity" This option is mutually exclusive with -currentuser and -localmachine.

-user

-user	This is the default context and executes the command using the registry context: UserRegistry.reg, ProjectRegistry.reg, SiteRegistry.reg, EntRegistry.reg, SyncRegistry.reg. The -user option is only valid when called from a client tool. Requires write permission to UserRegistry.reg. This option is mutually exclusive with -file, -project, and -site.

RETURN VALUE

A list of the Values available under the <keyPath> key.
If no Values exist, then an empty list is returned.

SEE ALSO

```
sregistry get, sregistry set, sregistry keys, sregistry delete,
sregistry source, sregistry reset
```

EXAMPLES

```
Continuing from the 'sregistry keys' example, which showed:

stcl> sregistry keys -currentuser -site General\\Options
stcl>

To find the registry values available below General\\Options:

stcl> sregistry values -currentuser -site "General\\Options"
DefaultFetchType
stcl>

This means that a default fetch state has been set site-wide.

The 'sregistry get' example shows how to retrieve that default value.
```

Server Backup

backup

backup Command

NAME

```
backup              - Backs up a SyncServer
```

DESCRIPTION

```
The backup command lets you back up a SyncServer, including its vault,
metadata, and notes. You can use this command to run both full and
incremental backups. Use the backup command in conjunction with
your standard system back-up procedures. To create a back-up that
lets you safely restore your server, you take two steps:

1. Use the backup command to generate back-up data in the
   server_vault/Backup.sync area.
2. Perform a standard system back-up of your server_vault area and
   your $SYNC_CUSTOM_DIR.

The data stored in the Backup.sync directory creates a server
snapshot that, in conjunction with a standard system back-up, lets
you safely restore your server and vault.
```

The backup command is server-side only and must be run using the rstcl command or by passing a script in a URL from your browser. See the 'server-side' topic or the ENOVIA Synchronicity stcl Programmer's Guide for details.

The back-up operation includes the server vault, metadata, attachments, and all of the notes, note types, and property types. The back-up preserves the following directories:

- The entire server_metadata hierarchy
- The entire server_vault hierarchy
- Parts of the $SYNC_CUSTOM_DIR/servers/<host>/<port>/share/data hierarchy.

Only attachments are copied from the $SYNC_CUSTOM_DIR areas. Note customizations stored in the custom areas are not backed up.

The backup command does not compress the backed-up data.

The data is backed up to the directory:

```
$SYNC_DIR/../syncdata/<host>/<port>/server_vault/Backup.sync
```

This directory contains a subdirectory for each back-up operation. The back-up subdirectory name has the following format:

```
<year><month><day>_<hour><minute><second>
```

The time is in 24-hour format according to the local time zone of the server.

Within the dated subdirectory, the backed-up data is stored in the following directories:

- Attachments - Hard links to the note attachment and definition files in the server's $SYNC_CUSTOM_DIR/servers/<host>/<port>/share/data area.
- server_metadata/ and all directories below it - Copies of the metadata.
- server_vault/ and all directories below it - Copies of the tags database are stored in the server_vault/Partitions subdirectories. Hard links to the server vault are stored in the server_vault directory.

For example, data in:

```
$SYNC_DIR/../syncdata/<host>/<port>/server_vault/Projects/P1/file1.rca
```

might be backed up to:

```
$SYNC_DIR/../syncdata/<host>/<port>/server_vault/Backup.sync/
20010710_145601/Projects/P1/file1.rca
```

The Backup.sync, Import.sync, and Export.sync directories under server_vault are not backed up.

Note: The backup creates symbolic links to vault data if your Backup.sync area is on a different partition from your server or if your system does not support hardlinks. If the vault data is removed (for example, by an rmfolder command) the backed-up symbolic links cannot be used to restore your data. To avoid this problem, archive your Backup.sync area using a switch to de-reference the symbolic links.

The back-up operation does not make the server completely inaccessible. The server is suspended for a short time at the beginning of the back-up but after that it is accessible for all ProjectSync operations. DesignSync users have read access to operations after the initial suspension. For example, after the initial suspension, DesignSync users can populate from a vault during a back-up.

For each dated back-up subdirectory, a .cleanup executable file is generated in the Backup.sync directory. You can run this executable to remove the corresponding backed-up data. For example, if your back-up directory is:

```
$SYNC_DIR/../syncdata/<host>/<port>/server_vault/Backup.sync/
20010710_145601
```

You would enter "20010710_145601.cleanup" to remove the data in the 20010710_145601 directory.

If the clean-up operation fails, you get an error message.

During the backup, .inprogress is appended to the dated subdirectory of Backup.sync. This extension is removed when the back-up completes. You can use this feature to check the status of your back-up. If .inprogress is appended to the subdirectory name and you cannot write to the server, the back-up is still underway. If .inprogress is appended to the subdirectory name and you can write to the server, the server crashed and restarted while the back-up was underway.

See the ProjectSync User's Guide: "Backing Up Your Server" help topic for information on recovering from server crashes, restoring your backed-up files, and enabling and scheduling automated backups.

Note: If you choose to back up without using the backup command, you must stop your server, perform the backup, and then restart the server. When you use the backup command, all access to the metadata is refused while the metadata is copied; all write access to the vault is refused while the vault is copied. The metadata and the vault are backed up into a single archive. Most of the $SYNC_CUSTOM_DIR is not included in the back-up operation.

SYNOPSIS

```
backup [-from <date>]
```

OPTIONS

- -from

-from

```
-from <date>          When the -from argument is specified, an
                      incremental backup is performed based on
                      the backup that occurred on <date>. The
                      <date> value must match the timestamp of
                      a previous full or incremental backup
                      directory. For example, if you have a
                      backup directory called "20031027_085512"
                      then you can specify:

                      backup -from "20031027 085512"

                      You also can specify the special value
                      "last" to incrementally back up from
                      the most recent back up.
```

RETURN VALUE

```
Name of the back-up directory
```

SEE ALSO

```
rstcl, access verify
```

EXAMPLES

```
The following example illustrates how to use the backup command in
a Tcl script. The script first calls access verify to ensure that
the user has permission to perform a back-up. If not, the script
returns "Permission denied." If the user has permission, the back-
up operation performs an incremental backup based on the previous
backup. If the operation fails, the script issues an error.

  if {[access verify AdministrateServer $SYNC_User]} {
       if {[catch { backup -from last } result]} {
           puts ""
           puts "** Backup Server Error **"
           puts "Stack Trace: $errorInfo"
           puts ""
       }
  } else {
           puts "Permission denied."
  }
```

When using backup in a script, invoke the access verify command to ensure that only authorized users can back up the server. See the ENOVIA Synchronicity Access Control Guide for information on using the AdministrateServer access control to restrict access to server operations.

restoreserver

restoreserver

NAME

restoreserver - Restores the data from a backed-up server

DESCRIPTION

The restoreserver script restores an entire server from your backed-up server data. This script lets you restore not only vault folders but also metadata, notes, and attachments. When you restore a Cadence view, all the objects in the view are restored. (Note: When you restore a collection object other than a Cadence view object, you must restore both the main collection object and all of its member file objects.)

Your SyncServer is shut down during the restoration and restarted again when the operation is complete. You must be the server owner to run the restoreserver script.

Before running the restoreserver script, you need to restore the server_vault and $SYNC_CUSTOM_DIR data from your system backup and then transfer the data in the Backup.sync area to the correct place within the server.

Run the restoreserver script from the command line on the system where you run your SyncServer(s). To invoke the script, enter the following on the command line:

```
restoreserver
```

The script starts and opens a log file, restoreserver.log, in your home directory.

If your SyncServer has more than one port, the script prompts you to choose the port you want to restore. Enter the number for the port.

If you have more than one set of backup data, the script prompts you to choose the backup data that you want to restore from. The script displays a numbered list showing each dated incremental and full backup. Enter the number for the date you want to restore from.

If you choose an incremental backup date, the script first restores the last full backup and then restores each subsequent incremental backup.

See "Restoring All Server Backup Data" in the ENOVIA Synchronicity DesignSync Data Manager Administrator's Guide for complete details on restoring your server data.

SYNOPSIS

restoreserver

RETURN VALUE

The restoreserver command logs its activity to the restoreserver.log file in your home directory. If the command fails, DesignSync returns an error explaining the failure.

SEE ALSO

Backup

restorevault

restorevault Command

NAME

restorevault - Restores specified server vault or directory data

DESCRIPTION

This command lets you specify backed-up vault data to restore. You can restore vault folders, directories, or individual vault objects. When you restore a Cadence Cell View collection object, all vault objects within the equivalent view folder are also restored. However, to restore vault data of other types of collection objects, you must restore both the collection object and each member file object.

This command does not restore:

- Backed-up metadata, notes, or attachments. For a full restoration of these objects, you must use the restoreserver script. See Restoring All Server Backup Data in the ProjectSync

```
    User's Guide for details.
 o  Data for the Hierarchical Configuration Manager.
 o  Vaults backed up from pre-4.0 versions of Developer Suite.

The restorevault command is server-side only and must be run
using the rstcl command or by passing a script in a URL from
your browser. See the 'server-side' topic or the ENOVIA Synchronicity
stcl Programmer's Guide for details.

If you incorporate the restorevault command into an rstcl script,
the access controls that govern who can restore a vault are
not applied.

Error messages are written to error_log in:
$SYNC_DIR/custom/servers/<server>/<port>/logs
```

SYNOPSIS

```
restorevault -from <backup_area> [-overwrite] [--] <path>
```

OPTIONS

- -from
- -overwrite
- --

-from

```
-from <backup_area>  The name of the directory inside Backup.sync
                     that you want to restore from. For example,
                     20030813_095027.
```

-overwrite

```
-overwrite           Specifies that items that exist in the vault
                     are overwritten during the restoration. (See
                     Restoring Your Server Vault Data in the
                     ProjectSync User's Guide for examples of using
                    this option.)
```

--

```
--                   Indicates that the command should stop
                     looking for command options. Use this
                     option when the object you specify begins
                     with a hyphen (-).
```

OPERANDS

- Vault Directory Path

Vault Directory Path

```
<path>              The path of the vault directory or vault
                    object to be restored. If you specify a
                    directory, the restoration is recursive.
```

RETURN VALUE

```
None
```

SEE ALSO

```
backup
```

EXAMPLES

```
This example tcl script uses the restorevault command to restore
the vault data from the and4 directory. Any existing files in the
directory are overwritten:

restorevault -overwrite -from 20030707_150817 /Projects/smallLib/and4

This example restores vault data of the Cadence view object called
layout and all of its member objects.

restorevault -from /Projects/smallLib/mid2/layout.sync.cds
```

suspend

suspend Command

NAME

```
suspend             - Sets the server to a semi-active state
```

DESCRIPTION

The suspend command sets the server to a semi-active state. This command should only be used inside a server-side TCL script. The script should be invoked through rstcl. It will execute the suspend command, run the code specified in the tcl-code argument and terminate the suspend, restoring the server to normal operation.

While the server is in a semi-active state, DesignSync rejects operations such as checkin, with a message explaining that the server is in a suspended state and returning the optional -because message. The administrator can define registry settings that determine whether the operation will retry, how many retry attempts will be attempted before the command fails, and how long to wait between retries. For more information, see the ENOVIA DesignSync Data Manager Administrator's Guide.

Note: The backup functionality in DesignSync uses the suspend command to put the server in a restricted access state.

SYNOPSIS

```
suspend [-because <why>] -maintenance | -readonly [-mode]
        {tcl-code}
```

ARGUMENTS

- tcl Code

tcl Code

```
<tcl-code>      The code to execute while the server is in suspend
                mode.
```

OPTIONS

- -because
- -maintenance
- -mode
- -readonly

-because

```
-because <why>  Specifies the reason the server is in semi-active
                state. Any operations that fail to run while the
               server is in this state will return this as a reason
               to the user.
```

-maintenance

-maintenance Sets the server to deny all read or write operations.

This option is mutually exclusive with -readonly. You must specify either -readonly or -maintenance.

-mode

-mode Sets a return string indicating whether the server is in 'normal,' 'readonly,' or 'maintenance,' mode. This can be used by scripts wishing to check the server status.

-readonly

-readonly Sets the server to allow read-only vault operations, such as populate -get/-share, or compare, contents, ls, and other read-only commands. It does not allow operations that modify the vault such as populate -lock, ci, mkmod, etc.

This option is mutually exclusive with -maintenance. You must specify either -readonly or -maintenance.

RETURN VALUE

Not applicable.

SEE ALSO

backup, rstcl

EXAMPLES

This example shows a procedure that releases the global server lock, suspends the server for 100 seconds in both maintenance and readonly mode.

Releasing the global server lock is recommended to allow other commands past the locking gate to receive the 'in maintenance mode' failure. Otherwise, the lock prevents other server-side tcl scripts from being processed by the server.

```
# first release the global lock
# To avoid any output from the 'url syslock' command,
# the record command places the output in the variable "msg"

record {url syslock -release smdSrvrMetaDataLock} msg

proc FullMaintenanceCode {} {
    # here the code that requires the server to reject
    # all requests, will be done
    after 100000
}

proc ReadOnlyMaintenanceCode {} {
    # here the maintenance which allows read ops
    # such as (populate -get/-share, ls, compare...)
    # but denies write ops,
    # such as (ci, populate -lock, tag, rmversion....)
    after 100000
}

suspend -maintenance \
-because "Server Is Undergoing Required Maintenance" \
{FullMaintenanceCode}

suspend -readonly \
-because "Server Is Undergoing Required Maintenance. \
Read Operations are allowed" \
{ReadOnlyMaintenanceCode}
```

Troubleshooting

syncinfo

syncinfo Command

NAME

```
syncinfo            - Returns Synchronicity environment information
```

DESCRIPTION

```
This command returns information about the Synchronicity
software environment, such as version number, location of
registry files, and default editor and HTML browser. The command
can be run from the client to return client information, or from
the server to return server information.

By default (with no arguments specified), all available information
is returned. You can request specific information by specifying
one or more command arguments.
```

```
If a given value has not been set or is not available, then
'syncinfo' returns an empty string. For example, if you ask for
portRegistryFile from the client, the return value is empty because
portRegistryFile is only available from the server.
```

SYNOPSIS

```
syncinfo [<arg> [<arg>...]]
```

ARGUMENTS

General Information

isServer

```
isServer            Returns a Tcl boolean value (0 or 1) indicating
                    whether the software executing the syncinfo
                    command is acting as a server (1) or client (0).
```

syncDir

```
syncDir             Returns the root directory of the Synchronicity
                    software installation. On UNIX, this value
                    corresponds to the SYNC_DIR environment
                    variable (on Windows, SYNC_DIR is not required).
```

version

```
version             Returns the version of the Synchronicity software
                    as a string.
```

Registry Information

clientRegistryFiles

```
clientRegistryFiles    Returns a comma-separated list of registry
                       files used by the Synchronicity clients
                       (DesSync, stcl, dss, stclc, dssc).
```

enterpriseRegistryFile

```
enterpriseRegistryFile Returns the enterprise-wide registry file.
```

portRegistryFile

```
portRegistryFile       Returns the port-specific registry file.
```

projectRegistryFile

projectRegistryFile	Returns the project-specific registry file.

serverRegistryFiles

serverRegistryFiles	Returns a comma-separated list of registry files used by a Synchronicity server.

siteRegistryFile

siteRegistryFile	Returns the site-wide registry file.

syncRegistryFile

syncRegistryFile	Returns the Synchronicity-supplied standard registry file.

userRegistryFile

userRegistryFile	Returns the user-specific registry file.

usingSyncRegistry

usingSyncRegistry	Returns a Tcl boolean value (0 or 1) indicating whether the Synchronicity software is using the text-based registry (1) or the native Windows registry (0).

Customization Information

customDir

customDir	Returns the root directory of the 'custom' branch of the Synchronicity installation hierarchy, which contains all site- and server-specific customization files. The default value, <SYNC_DIR>/custom, can be overridden by the SYNC_CUSTOM_DIR environment variable.

customSiteDir

customSiteDir	Returns the directory that contains site-specific customization files. The default value, <SYNC_CUSTOM_DIR>/site (which defaults to <SYNC_DIR>/custom/site), can be overridden by the SYNC_SITE_CUSTOM environment variable.

customEntDir

customEntDir	Returns the directory that contains enterprise-specific configuration files. The default value, <SYNC_ENT_CUSTOM> (which defaults to <SYNC_CUSTOM_DIR>/enterprise), can be overridden by the SYNC_ENT_CUSTOM environment variable.

siteConfigDir

siteConfigDir	Returns the directory that contains site-specific configuration files. The default value, <SYNC_SITE_CUSTOM>/config (which defaults to <SYNC_CUSTOM_DIR>/site/config, which defaults to <SYNC_DIR>/custom/site/config), can be overridden by the SYNC_SITE_CNFG_DIR environment variable.

usrConfigDir

userConfigDir	Returns the directory that contains user configuration files. The default value, <HOME>/.synchronicity, can be overridden by the SYNC_USER_CFGDIR environment variable.

userConfigFile

userConfigFile	Returns the user configuration file. The default value, <HOME>/.synchronicity/user.cfg, can be overridden by the SYNC_USER_CONFIG environment variable.

Client Information

connectTimeout

connectTimeout	Returns the number of seconds the client will wait per communication attempt with the server.

commAttempts

commAttempts	Returns the number of times client/server communication is attempted before failing. Using multiple attempts protects against transient network problems. 'Connect Failure' failures do not trigger multiple connection attempts, because transient network problems rarely cause this error. Note: When the number of communication attempts is the default value of 3, 'syncinfo commAttempts' returns no value instead of returning 3.

defaultCache

defaultCache	Returns the default cache directory for the client as specified during installation or using SyncAdmin.

fileEditor

fileEditor	Returns the default file editor as specified during installation or using SyncAdmin.

htmlBrowser

htmlBrowser	(UNIX only) Returns the default HTML browser as specified during installation or using SyncAdmin.

proxyNamePort

proxyNamePort	Returns the <name>:<port> of a proxy, if one is defined in a client registry file or using the ProxyNamePort environment variable.

somTimeout

somTimeout	Returns the number of milliseconds after an unsuccessful server connection attempt during

```
                    which the client does not try to connect again.
                    This timeout protects against an operation
                    on many objects (such as 'ls' on a large
                    directory) taking an excessively long time
                    to complete when there is a connection failure
                    (such as when the server is down). Instead of
                    waiting the connectTimeout period for each
                    object, the operation fails for all objects
                    after the first connection failure.
```

Server Information

berkdbIsShmEnabled

```
 berkdbIsShmEnabled  For Synchronicity internal use only.
```

berkdbShmKey

```
 berkdbShmKey        For Synchronicity internal use only.
```

isTestMode

```
 isTestMode          For Synchronicity internal use only.
                     Returns a Tcl boolean value (0 or 1) indicating
                     whether the software executing the syncinfo
                     command is running in test mode (1) or not (0).
                     This feature is useful for regression
                     testing of servers.
```

serverMetadataDir

```
 serverMetadataDir   Returns the directory that contains the
                     server metadata (such as relational
                     database) files.
```

serverDataDir

```
 serverDataDir       Returns the directory that contains vault
                     (repository) data that is stored by a server.
```

serverMachine

```
 serverMachine       Returns the name of the server as returned by
```

```
                    gethostname(). This value is returned only
                    when 'syncinfo' is run from a server-side script.
```

serverName

```
 serverName         Returns the name of the server as it was
                    specified in the URL used to contact the
                    server. This value is returned only when
                    'syncinfo' is run from a server-side script.
```

serverPort

```
 serverPort         Returns the port number used by the server to
                    respond to the syncinfo request. This value is
                    returned only when 'syncinfo' is run from a
                    server-side script.
```

User Information

home

```
 home               Returns the home directory of the user
                    running syncinfo (HOME on UNIX, or as
                    defined in your user profile on Windows platforms).
```

userName

```
 userName           Returns the account name of the user
                    running syncinfo.
```

RETURN VALUE

```
In dss/dssc mode, you cannot operate on return values, so the return
value is irrelevant.

In stcl/stclc mode:
  - If no argument is specified, the return value is a
    name/value list (Tcl 'array get' format) containing
    all available information.
  - If a single argument is specified, the return value is
    the requested value (not a list).
  - If more than one argument is specified, the return value
    is a name/value list containing the requested information.
  - If any argument is not known, an exception is thrown.
```

SEE ALSO

server-side

EXAMPLES

Example Showing the SyncInfo Version on Client Startup

```
When you start any Synchronicity client, 'syncinfo version'
executes, which displays (and writes to your log file
if logging is enabled) the Synchronicity version. In this
example, the software is version 3.0.
  % stclc
  Logging to c:\goss\dss_01192000_092559.log
  V3.0

  stcl>
```

Example of Extracting SyncInfo Information to an Array

```
The following stcl script fragment shows how to get all known
information as a Tcl array variable. The 'version' string is
then printed.
  array set info [syncinfo]
  puts "Version: $info(version)"
```

Example Showing Extracting the Information from an Array

```
This example uses the single-argument form of syncinfo to print the
same version information provided by the previous example:

  puts "Version: [syncinfo version]"
```

Example of extracting Name/Value Pairs for Specific Arguments

```
The following example uses command arguments to return a list
of the 'syncDir' and 'userName' values. This example
also shows how to enumerate the name/value list returned by
syncinfo without storing it in an array variable.
  foreach {name value} [syncinfo syncDir userName] {
```

```
        puts "$name: $value"
    }
```

synctrace

synctrace Commands

NAME

```
synctrace            - Commands to help diagnose software problems
```

DESCRIPTION

```
The 'synctrace' commands help Synchronicity diagnose software
problems and performance issues by enabling or disabling software
tracing.

See the "synctrace set" command for details. Also see "Running a
DesignSync Client in Debug Mode" in DesignSync Data Manager User's
Guide.
```

SYNOPSIS

```
synctrace [un]set [-server <serverURL>] 0
```

SEE ALSO

```
synctrace set, synctrace unset
```

EXAMPLES

```
See the "synctrace set" command.
```

synctrace set

synctrace set Command

NAME

```
synctrace set        - Turns on software tracing
```

DESCRIPTION

```
Helps Synchronicity diagnose software problems and performance
issues by enabling software tracing. Synchronicity may ask you to
enable tracing to help with problem diagnosis.

When you use the synctrace command to set the trace level for a
client or server, the trace is only in effect for the current
client or server session. The trace terminates when you shut down
the client or the server and does not start again when you restart
the client or server, unless you reinvoke the command. If you have
already set (or unset) synctrace, and you inadvertently set (or
unset) the trace again, the second setting has no effect.

The trace output is stored in the
<SYNC_USER_CFGDIR>/logs/sync_client_trace_<date>_<time>.log file.
In addition, the output is stored in the dss_<date>_<time>.log
file. The trace output for a server is stored in
<SYNC_CUSTOM_DIR>/servers/<host>/<port>/logs/error_log.

If you want to have tracing on when you start the client or server,
you should set the SYNC_TRACE environment variable to 0.
See "Running a DesignSync Client in Debug Mode" in DesignSync Data
Manager User's Guide
for more details.
```

SYNOPSIS

```
synctrace set [-server <serverURL>] 0
```

OPTIONS

- -server

-server

```
-server <serverURL>    Turns on the trace for the server you specify.
                       If you omit the -server switch, the trace is
                       turned on for the client session from which
                       you invoked the command. Specify the URL
                       as follows:
                            sync://<host>[:<port>]
                       Where 'sync://' is required, <host> is the
                       machine on which the SyncServer is
                       installed, and <port> is the SyncServer port
                       number (if omitted, defaults to 2647/2679). For
                       example, you might specify the following:
                       -server sync://serv1.abco.com:30138

                       Note: DesignSync also supports a syncs
```

protocol for communicating with secure (SSL) SyncServer ports. In most cases, DesignSync automatically redirects requests to a cleartext (non-secure) port using the sync protocol to the secure port, if one is defined. The default Synchronicity secure port number is 2679. Your Synchronicity administrator defines what SyncServer ports are available and whether secure communications are required. See the "Overview of Secure Communications section" in DesignSync Data Manager User's Guide for more information.

Enables tracing on all software components. While it is possible to selectively turn on tracing for specific software libraries, it is typically most useful to turn on all tracing.

RETURN VALUE

none

EXAMPLES

- Example of Turning Tracing on for all Libraries
- Example of Turning Trace off for All Libraries
- Example of Turning Trace On for a Specific Server
- Example of Turning Trace Off for a Specific Server

Example of Turning Tracing on for all Libraries

The following example turns on tracing for all libraries.

```
stcl> synctrace set 0
```

Example of Turning Trace off for All Libraries

The following example turns off tracing for all libraries.

```
stcl> synctrace unset 0
```

Example of Turning Trace On for a Specific Server

The following example turns on tracing for the specified server:

```
stcl> synctrace set -server sync://serv1.abco.com:30138 0
```

Example of Turning Trace Off for a Specific Server

```
The following example turns off tracing for the specified server:
  stcl> synctrace unset -server sync://serv1.abco.com:30138 0
```

synctrace unset

synctrace unset Command

NAME

```
synctrace unset     - Turns off software tracing
```

DESCRIPTION

```
See the "synctrace set" command.
```

SYNOPSIS

```
synctrace unset [-server <serverURL>] 0
```

Utilities

convertdata

convertdata

NAME

```
convertdata         - Converts CVS/RCS vault files to DesignSync format
```

DESCRIPTION

```
The convertdata utility converts vault files from Concurrent Version
System (CVS) or Revision Control System (RCS) data formats to the
DesignSync format. See the DesignSync Data Manager Administrator's
Guide: "Converting a Vault Repository from CVS/RCS Format to
DesignSync Format".
```

convertutil

convertutil

NAME

```
convertutil          - Converts between supported vault file formats
```

DESCRIPTION

```
The convertutil utility lets you recursively convert a vault folder from
one format to another. The convertvault utility, another
utility for converting vaults, provides more flexibility than the
convertutil utility; however, for most conversion tasks, convertutil is
sufficient. See the DesignSync Data Manager Administrator's Guide:
"Converting Vault Data".
```

convertvault

convertvault

NAME

```
convertvault         - Converts specified vault files to supported formats
```

DESCRIPTION

```
The convertvault utility lets you convert a single vault file type to
another supported type or you can convert multiple vault files at one
time.  The convertutil utility, another utility for converting vaults,
provides less flexibility than the convertvault utility; however, for
most conversion tasks, convertutil is sufficient. See the DesignSync
Data Manager Administrator's Guide: "Converting Vault Data".
```

exportVaults

exportVaults

NAME

```
exportVaults         - Exports DesignSync vault folders
```

DESCRIPTION

```
Use the exportVaults utility to export data from client vault folders.
See DesignSync Data Manager User's Guide: "Using the Vault
Utilities." For other export scenarios, use the ProjectSync Export
Projects feature. See ProjectSync User's Guide:"Exporting Projects."
```

importVaults

importVaults

NAME

```
importVaults        - Imports DesignSync vault folders
```

DESCRIPTION

```
Use the importVaults utility to import data converted using the
convertdata utility or data exported from a client vault. See
DesignSync Data Manager User's Guide: "Using the Vault Utilities."
For other import scenarios, use the ProjectSync Import Projects
feature. See ProjectSync User's Guide: "Importing Projects."
```

mirrorsetdefaultuser

mirrorsetdefaultuser

NAME

```
mirrorsetdefaultuser - Sets the default user and password using a
                       UNIX shell script
```

DESCRIPTION

```
Use this command to set the default user and password using a UNIX
shell script.

This command is subject to access controls on the server. See the
ENOVIA Synchronicity Access Control Guide for details.
```

SYNOPSIS

```
mirrorsetdefaultuser <serverURL> <defaultUser>
```

ARGUMENTS

Server URL

```
serverURL       Specifies the URL of the MAS SyncServer. Specify the
                URL as follows:
                sync://<host>[:<port>] where 'sync://' is required,
                <host> is the machine on which the SyncServer is
                installed, and <port> is the SyncServer port number
                (defaults to 2647).
                Example: sync://serv1.abco.com:1024
```

Default User

```
defaultUser     The default user to be used when one of the needed
                users is not specified for the 'mirror create' Tcl
                shell command. If a Tcl shell command can be run
                interactively, see 'mirror setoptions' for an
                alternate way to specify this user.
```

SEE ALSO

```
mirror create, mirror delete, mirror disable, mirror edit,
mirror enable, mirror get, mirror getoptions, mirror isenabled,
mirror ismirror, mirror list, mirror rename, mirror reset,
mirror setoptions, mirror status
```

EXAMPLES

```
This example sets the default user to "barbg", for the MAS
SyncServer sync://srv2.ABCo.com:2647. The user is prompted for a password.

% mirrorsetdefaultuser sync://srv2.ABCo.com:2647 barbg
Enter the password for the default user (barbg): ****

%
```

SyncAdmin

SyncAdmin

NAME

```
SyncAdmin           - Synchronicity Administrator tool
```

DESCRIPTION

```
Synchronicity's SyncAdmin tool is a graphical user interface that
lets system administrators, project leaders, and users configure
DesignSync clients (command-line and graphical) for
site, project, or individual use.

You execute SyncAdmin from your operating system shell, not
from a Synchronicity client shell (dss/dssc/stcl/stclc).  On
Windows platforms, you invoke SyncAdmin from the Windows
Start menu, typically:
  Start->Programs->Dassault Systems <version>->SyncAdmin

See SyncAdmin help for details on SyncAdmin. From the GUI, click
the Help button on any SyncAdmin page.
```

SYNOPSIS

```
SyncAdmin [-file <filename> | -project | -site | -user]
```

OPTIONS

-file

```
-file <filename>  Edit the specified registry file, bypassing the initial
                  SyncAdmin window (where you select which registry
                  file to edit).
```

-project

```
-project          Edit the project registry file, bypassing the initial
                  SyncAdmin window (where you select which registry
                  file to edit).
```

-site

```
-site             Edit the site registry file, bypassing the initial
                  SyncAdmin window (where you select which registry
```

file to edit).

-user

-user Edit the user registry file, bypassing the initial SyncAdmin window (where you select which registry file to edit).

RETURN VALUE

none

SEE ALSO

DesSync

EXAMPLES

This example invokes SyncAdmin:
```
% SyncAdmin
```

This example invokes SyncAdmin, in background mode, to edit the user registry:
```
% SyncAdmin -user &
```

syncdadmin

syncdadmin Command

NAME

syncdadmin - Manages syncd processes

DESCRIPTION

This command manages Synchronicity daemon (syncd) processes on a per-user basis. 'syncdadmin' is not a DesignSync shell command, but is instead a standalone utility that you invoke from a standard shell or a shell script.

The syncd process manages communication between dss/stcl sessions and SyncServers. The syncd process can manage multiple

```
dss/stcl requests per user, allowing one user to run parallel
dss/stcl sessions. Note that dssc and stclc do not use syncd;
they communicate directly with a SyncServer.

When you invoke dss or stcl, they connect to your syncd process if
one is already running. Otherwise, they attempt to start
syncd. There is at most one syncd process running per user per
machine at any time.

On Unix systems, the syncd process times out after 180 minutes of
inactivity (after the last dss/stcl session communicating with the
syncd process exits). The syncd process will not time out if there
is an active dss or stcl session, or if there is a lock on the
syncd process. You can define the SYNC_DAEMON_TIMEOUT environment
variable to change the default time-out period of 180 minutes:

          setenv SYNC_DAEMON_TIMEOUT <n>

where <n> is the number of minutes syncd waits before timing out.

On Windows platforms, syncd never times out. However, you can
stop syncd from the Windows Start menu, typically:
  Start->Programs->Dassault Systems <version>->Stop SyncDaemon

Note: When using dss/stcl, many environment changes (including setting
SYNC_DAEMON_TIMEOUT) do not take effect until syncd is stopped and
restarted.
```

SYNOPSIS

```
syncdadmin [begin | close [-force] | lock | start |
            status [-verbose] | stop [-force] | unlock |]
```

ARGUMENTS

- begin
- close
- lock
- start
- status
- stop
- unlock

begin

```
begin       Same as 'start'. The 'begin' argument may be removed in a
            future release.
```

close

```
close       Same as 'stop'. The 'close' argument may be removed in a
            future release.
```

lock

```
lock        Locks the syncd process so that 'syncdadmin stop'
            will not terminate syncd (unless you use the -force
            option). 'syncdadmin lock' also starts syncd if it
            is not already running.

            You typically lock syncd at the beginning of a shell
            script that calls dss/stcl several times. The lock
            prevents syncd from being terminated inadvertently.
            For example:

                #!/bin/csh
                syncdadmin lock
                dss ci *.cpp
                <some shell (non dss/stcl) commands>
                dss ci *.h
                syncdadmin unlock
```

start

```
start       Starts the syncd process if one is not already running.
            The 'syncdadmin start' command is typically used in a
            shell script to invoke syncd (if necessary) before
            invoking Synchronicity commands. For example:

              #!/bin/csh
              syncdadmin start
              dss ci ...

            In this script fragment, 'syncdadmin start':
              - Starts syncd only if syncd is not already running
              - Does not allow the next line of the script to
                execute until syncd is running

            Note: There is a short start-up time associated with syncd,
                  during which it does not accept commands. To prevent
                  a race condition, avoid starting syncd as follows:

                  % syncd &
                  % dss ci ...    << Likely to fail because syncd is
                                     still starting up
```

status

```
status      Indicates whether the syncd process is currently
```

```
            running and on which machine. Use the -verbose
            option to output additional information, such as
            whether syncd is locked.
```

stop

```
 stop       Attempts to terminate the syncd process. The syncd process
            will not terminate if there is an active dss/stcl session
            running or if a lock has been set on the syncd process.
            Use the -force option to override these constraints.
```

unlock

```
 unlock     Removes the lock from a syncd process. You typically
            lock syncd from a script that calls dss/stcl multiple
            times. You would then unlock syncd at the completion
            of the script.
```

RETURN VALUE

```
 none
```

EXAMPLES

```
 This example displays the syncd status before and after starting
 syncd:
   % syncdadmin status
   SYNC: syncd is not running.
   % syncdadmin start
   SYNC: Attempting to spawn daemon.
   SYNC: Syncd ready.
   % syncdadmin status
   SYNC: syncd is running on linus.
   %
```

sync_setup

sync_setup Command

NAME

```
 sync_setup           - Installing and configuring the DesignSync server
```

DESCRIPTION

This script installs or updates the configuration of the DesignSync server. You can run this script interactively, to set up a single server, or call it from a script to perform a non-interactive DesignSync server setup on a single service or multiple servers at once.

Note: Passwords should ideally not be passed through the the script, but specified as a key/value pair on the command line, particularly with respect the postgres database password. The ENOVIA 3DPassport password can be encrypted and passed, encrypted to the script, but the postgres must be in cleartext. Therefore it is not necessarily desirable to include it in any scripts or in the XML configuration file.

Tip: If you want to automatically start any servers that have been installed/configured by the sync_install script, do any of the following:

- Set the StartDesignSyncServer setting to true in the SiteSettings section of the configuration file, to start all the servers installed/configure during the command operation.
- Set the StartDesignSyncServer setting to true in the ServerSettings section of the configuration file for all servers you want to start.
- Use the return value of the command, 0, indicating success, to start all the servers configured by the command.

DesignSync recommends using the StartDesignSyncServer setting rather than the command return value.

SYNOPSIS

```
sync_setup [-config=<UserConfig.xml>] [-[no]debug] [-dryrun]
           [-log=<filename>]
           [-report={normal|verbose}] [<key>=<value> [...]]
```

ARGUMENTS

- key/value pair

key/value pair

<key>=<value>	Optional arguments to specify to the sync_setup script. Any options specified to the script allow become the default option for any settings that hat use that information, or ovrride any settings set in the file specified by the -config switch, any environment variables, or the defined system defaults.

OPTIONS

-config

-config= <UserConfig.xml>	The name of the XML file containing the the list of defined settings for the sync_setup script to use. All the settings can be defined within a single script, even if you are configuring multiple servers. For information on defining the user script and a sample script, see the ENOVIA Synchronicity DesignSync Administrator's Guide. Tip: If you want to use multiple configuration files within a batch operation, you can create a script that runs sync_setup more than once, each time specifying the desired configuration file. When -config is specified, the server does not allow any input from the user. If any options are missing, the command fails with an appropriate error message.

-[no]debug

-[no]debug	This option indicates whether debugging is enabled. This helps the Dassault Systems support team diagnose server installation problems by enabling tracing during the server installation and configuration process. Use this option only if you are experiencing problems with software installation. -debug turns on tracing for the sync_setup script. This should be used only when sync_setup is failing and you need help understanding why. -nodebug indicates that debug information should not be output by the command. (Default) Tip: When you use this option, you should specify a log file for the output so it can be reviewed by the support team.

-[no]dryrun

```
-[no]dryrun       Specifies whether to treat the operation as a
                  trial run or perform the server configuration.

                  -dryrun does not perform server
                   configuration. Using the -dryrun option helps
                   detect problems that might prevent the server
                   installation/configuration operation from
                   succeeding.  The dryrun can show you which
                   settings are specified incorrectly, or need to be
                   specified, but are not in the configuration
                   file.
                   Errors such as permissions or inaccessible
                   servers are not reported by a dry run. Note that
                   a dry run setup is faster than a normal
                   server installation/configuration. If -dryrun is
                   specified, no servers are are actually
                   configured.

                   -nodryrun perform the server
                    configuration/installation as
                    specified. (Default)
```

-log

```
-log <filename>   Specify the name of the log file. If the filename
                  doesn't exist, DesignSync creates it.  If the
                  file does exist, DesignSync appends the new
                  information to the end of the log file.

                  The filename can be specified with an absolute
                  or relative path.  If you specify a path for the
                  log file, the directory you specify must already
                  exist and you must have write permissions to the
                  directory in order for the log to be placed into
                  it, DesignSync does not create the path.
```

-report

```
-report [error|   Controls the verbosity of the output to the screen or
 brief|normal        to the log file.
 verbose]
                   -report error reports only the errors.
                  -report brief reports only the errors.
                  -report normal reports the typical messages seen when
                    sync_setup is run interactively.
                   -report verbose reports all of the generated output.
```

RETURN VALUE

Returns a value of 0 is the command runs successfully. If the command is unsuccessful, you receive a message explaining the failure.

SEE ALSO

synctrace

EXAMPLES

DesignSync Web Interface

Note Manipulation

note

note Commands

NAME

```
note                - Server-side commands for accessing notes
```

DESCRIPTION

```
Users create notes and manage note links using the ProjectSync
graphical interface. The 'note' commands are for advanced users who
need programmatic access to note capabilities.

The 'note' family of commands provide access to the note web
object type. URLs for notes have the following form:

   sync:///Note/SyncNotes/<notetype>/<noteid>

For example, the following URL specifies the 5th note of the
BugReport notetype:

   sync:///Note/SyncNotes/BugReport/5

Notes can only be accessed from server-side scripts, so always use
the sync:/// syntax (no <host>:<port> specification).

Note: The "notetype schema" command provides access to the database
structure of notetypes.
```

SYNOPSIS

```
note <note_command> [<note_command_options>]

Usage: note [attach|counts|create|delete|detach|getprop|links|query|
             relink|setprops|systems|]
```

EXAMPLES

```
See specific "note" commands.
```

note attach

note attach Command

NAME

```
note attach          - Creates a link between a note and an object
```

DESCRIPTION

```
This command attaches a note to the specified object, creating
a notelink -- a link between an object and a note.

The <noteURL> argument must be a reference to an existing note.
The <objURL> argument can be a reference to any valid object,
including another note. If <objURL> is a local note URL, then
the note that it refers to also must exist. However, for any
other <objURL> type, including notes on remote servers, the
existence of the object is not checked. Only the structure of
the URL is checked.

It is not possible to create a duplicate notelink. However, the
attempt does not cause an error; attempts to create duplicate
 notelinks are silently ignored.

The successful execution of this command generates an atomic
note attach event and fires the corresponding triggers
in response.

This command is available only from server-side scripts.
```

SYNOPSIS

```
note attach <noteURL> <objURL>
```

OPTIONS

```
none
```

RETURN VALUE

```
none
```

SEE ALSO

```
note detach, note links, server-side, rstcl
```

EXAMPLES

Example of Attaching a Note to a Project

```
This example attaches a bug report to the Asic project:

  note attach sync:///Note/SyncNotes/BugReport/2 sync:///Projects/Asic
```

Example of Attaching a Note to a Tagged Configuration

```
This example attaches the bug report to the Rel1 configuration
of the Asic project:

  note attach sync:///Note/SyncNotes/BugReport/2 \
              sync:///Projects/Asic@Rel1
```

note counts

note counts Command

NAME

```
note counts         - Computes statistics about notes and
                      the frequency of values
```

DESCRIPTION

```
This command runs a query against a note type and breaks
down the results according to the values it finds in selected
properties of the notes matched by the query. The breakdown can
be zero, one-dimensional, or multi-dimensional. Dimensions of
breakdown are note properties selected in the query, with the
results of the query grouped by value in the selected properties
(dimensions).

The results of the query (that is, the counts of how many notes
fit the search criteria and had the same values in the selected
properties) is stored in an output variable whose name is given
```

to the command. The command treats the variable as an array into which to store the results. The array has indices of all combinations of values that were found for the selected properties in notes matching the query criteria. The mapped values at those indices are the number of notes that had that particular combination of values.

For one-dimensional breakdowns (that is, breakdowns by a single property), the indices in the output array variable are the same as values found for that property in notes that matched the query. For two- or three-dimensional queries, the indices are a concatenation of values for each of the selected properties, separated by commas. If any of the values contain comma characters, then the comma characters are replaced with periods, so that the comma characters retain their separator semantics. The output array contains only non-zero entries.

The note counts command can operate on (break down by) properties of any type. However, the command is practical only for operations on enumerable property types, such as state machines, choice types, user fields, and perhaps integers. Results of breakdowns by floating-point properties and wide strings are generally not useful, but such use is not disallowed. Imprudent use of this command can copy very large amounts of data from the database into memory (for example, if you were doing a breakdown by the Body property of a note type).

You can generate simple time-based statistics by doing a breakdown on any Date or Timestamp property of a note type. In the resulting array, the indices will be dates and the values will be how many notes had that date value in that field. The resolution of the buckets for time-based statistics is controlled with the -dateresolution option. This option allows for specifying a unit of time (years, months, days, etc.) used to indicate the granularity of the statistical buckets.

This command is available only from server-side scripts.

SYNOPSIS

```
note counts <NotetypeName>
             [-countlinks] [-dateresolution <Resolution>]
             [ [-dbquery  <dbase_expr>] | [-sqlquery <sql_expr>] ]
             [<OutVarName> [Dimension0 [Dimension1 [Dimension2]]]]
```

OPTIONS

- -countlinks
- -dateresolution
- -dbquery
- -sqlquery

-countlinks

-countlinks	This option is used only for RevisionControl notes. Use this option to count the number of objects in each RevisionControl note instead of counting only the individual notes. When using this option, you must specify <OutVarName>.

-dateresolution

-dateresolution <Resolution>	If one or more of the Dimension arguments references a property of type Date or Timestamp, specifies a resolution of the bucketing of notes in the output array. The resolution is specified in terms of date granularity. The set of valid values are: years, months, weeks, and days. The value of the resolution affects the values used to form the indices in the returned array. The format for the index values for a given resolution are: years yyyy months yyyy-mm weeks yyyy-Www days yyyy-mm-dd If -dateresolution is not given as an option, the command defaults to a resolution of days.

-dbquery

-dbquery <dbase_expr>	A valid dBase query, which is converted to an equivalent SQL expression, and used to query the database. Analogous to the -dbquery option to note query.

-sqlquery

-sqlquery <sql_expr>	Filters the set of notes that are counted by the note counts command. Analogous to the -sqlquery option to note query. -sqlquery and -dbquery are mutually exclusive.

OPERANDS

- Notetype Name
- Out Var Name
- Dimensions

Notetype Name

<NotetypeName>	The name of an existing note type.

Out Var Name

<OutVarName>	The name of a Tcl array variable in which to place specific notes that match the query criteria. The indices of the returned array are comma-separated concatenations of the Dimension0...2 property values. The array values are the number of notes that match the array index.

Dimensions

Dimension0 Dimension1 Dimension2	Up to three arguments that specify the bucketing criteria for the results. The values must be the name of an existing property name on the note type.

RETURN VALUE

The total number of notes that match the query criteria.

SEE ALSO

note query

EXAMPLES

- Example Showing Reporting Against Fields in the Notetype
- Example Showing Time-Based Reporting on NoteTypes

Example Showing Reporting Against Fields in the Notetype

Suppose you have a note type called BugReport, with a State field (type SyncState), a Priority field (type SyncPriority) field, and a Resp field (type SyncUserList), plus all the standard note fields. This note type is populated with notes as follows:

Id	Author	Resp	State	Priority
1	caroline	cara	closed	high
2	jack	cara	closed	high
3	bert	ron	fixed	high
4	bert	mark	fixed	medium
5	lindsey	mark	fixed	high
6	bert	mark	analyzed	high
7	lindsey	jason	analyzed	low
8	bert	jason	closed	high
9	bert	mark	open	medium
10	caroline	mark	open	stopper

To find out how many BugReport notes are currently in-process (in any state except "closed"), you would specify:

```
note counts BugReport -dbquery "State#'closed'"
```

which would return the answer: 7

To get a breakdown of whom the notes are assigned to, give two extra parameters: 1. The name of a Tcl variable into which the note counts command will store its results. 2. The name of the note property that you wish to do a breakdown of - in this case, Resp:

```
note counts BugReport -dbquery "State#'closed'" MyMap Resp
```

This command also returns the number 7 but stores the following data in the array variable MyMap:

```
MyMap(ron)   1
MyMap(mark)  5
MyMap(jason) 1
```

Use array names or array get to extract the data from the MyMap array. For example:

```
array names MyMap
```

would return

"ron mark jason"

and

```
array get MyMap
```

would return

"ron 1 mark 5 jason 1"

To find the BugReports assigned to each engineer and get a breakdown by priority, you pass one additional parameter: the name of the additional property to break down by - in this case, Priority:

```
note counts BugReport -dbquery "State#'closed'" MyMap Resp Priority
```

You do not need to specify any additional output parameters when you add additional dimensions to the report; the results all go into the single output array parameter (MyMap), which in this example would be filled as follows:

```
MyMap(ron,high)     1
MyMap(mark,medium)  2
MyMap(mark,high)    2
MyMap(mark,stopper) 1
MyMap(jason,low)    1
```

The array contains only non-zero entries. For instance, user jason is not assigned any high-priority BugReports, so the report does not include the entry:

```
MyMap(jason,high) 0
```

Thus MyMap could be termed a sparse matrix.

It is also possible to further break down data by a third dimension.

In most cases, you would not use this command to generate this type of report. Like all the other note commands, the note counts command is best used as a building block.

Example Showing Time-Based Reporting on NoteTypes

This example illustrates time-based reporting.

To chart the incoming rate for BugReports, with a breakdown by month, you would use the following command:

```
note counts BugReport MyMap DateCreate -dateresolution months
```

The resulting map might look like this:

```
MyMap(2002-01) 2

MyMap(2002-02) 3

MyMap(2002-04) 5
```

This result indicates that two BugReports were filed in January 2002, three in February, and five in April. Empty buckets are not included: no BugReports were filed in March so there is no MyMap(2002-03) entry. Getting resolution by week would be difficult. You would have to use %W formatting (Week-of-year, 0-52) and convert the resulting data to get back to human-readable dates.

```
EXAMPLE 3
The following command itemized the objects in RevisionControl notes
for each command and and for each user.

note counts RevisionControl -countlinks MyMap Command Author
parray MyMap

The output of the MyMap variable is:

MyMap(ci,)                  = 0
MyMap(ci,Administrator)     = 1
MyMap(ci,Debra)             = 4
MyMap(ci,George)            = 0
MyMap(ci,Loren)             = 6
MyMap(co lock,George)       = 2
MyMap(co lock,Harry)        = 0
MyMap(co lock,Debra)        = 7
MyMap(co lock,Loren)        = 0
```

note create

note create Command

NAME

```
note create         - Creates a new note
```

DESCRIPTION

```
This command creates a new note of a specified note type.

Certain default behaviors apply when a note is created:

   * Notes are assigned a unique ID number that is 1 greater
     than the largest note ID number created in the database for
     a note of this type. However, two note create calls
     in a row would not necessarily return ID numbers that were
     incremented by 1. Another call in a different process could
     have created a note of the same note type.

   * The default creation date of a note (i.e., its DateCreate
     property) is set to the current server time.

   * The Author field defaults to the user ID (user name) of the
     person executing the command.

All of these default behaviors can be overridden with the note create
command.

You can set any number of properties when a note is created. If an
invalid value is supplied for any property, the entire note creation
```

process fails. If a property is not assigned an explicit value in the command, the default value for the note type is used. It is not an error to omit values for properties that are required by the note type.

If a property name is specified multiple times with different values, the last value is stored.

The successful execution of this command causes an atomic note create event and fires the corresponding triggers in response.

This command is available only from server-side scripts.

SYNOPSIS

```
note create [-date <date>] [-id <id>] -type <type_name>
            [{<name> <value>} [...]]
```

ARGUMENTS

- Name/Value for Note Properties

Name/Value for Note Properties

{<name> <value>}	Additional properties of the note, expressed as a list of name/value pairs. The first element of the pair is a valid property name of the note type and the second is the property value, which must be legal for the property type. If a value for the Id property is specified, use it as if the -id option had been used. An AMBIGUOUS_ID error is thrown if -id is used as well as an Id property value. Similarly, if both the -date argument and the DateCreate property are specified, an AMBIGUOUS_DATE error is thrown. Note that the curly braces specify the Tcl list syntax; they do not indicate a required argument as is true in most syntax descriptions. The note create command currently accepts multiple name/value pair lists for backward compatibility; however, this form is deprecated and Synchronicity strongly recommends avoiding this form.

OPTIONS

-date

```
 -date <date>        A date value representing the creation date of
                     the note. The <date> value should be an ISO-8601
                     formatted date in UTC - for example:

                     2003-05-29 12:34:56

                     If the -date option is omitted, the note
                     creation time is the current time, stored in UTC.

                     Although the creation time is stored in UTC,
                     the GUI displays the creation time in the
                     client's local time.
```

-id

```
 -id <id>            The unique ID number for the note. If this
                     number is not unique, the note is not
                     created and you get the DUPLICATE_ID error code.
                     If the -id option is omitted, the next
                     available ID number is used.

                     Each note type maintains its own internal ID
                     generator. If the explicit ID number is higher
                     than the currently existing internal ID of the
                     generator, then the generator is adjusted to
                     this new maximum ID number. That is, the next
                     calls to note create with the -id option omitted
                     will generate a number that is higher than the
                     explicitly given ID number in this call. This
                     behavior prevents collisions between the
                     automatically generated IDs and explicitly
                     created ones.

                     If two processes are creating notes of the same
                     note type and one is using the -id option while
                     the other is using the default assigned ID, one
                     of the processes is likely to fail because of
                     conflicting ID numbers.

                     If the delta number that the generator has to
                     skip over is very high (e.g., above 10,000),
                     then the command execution time may be much
                     higher than normal, as the process has to skip
                     over this delta. This case also increases the
                     likelihood of failing with conflicting ID
                     numbers.
```

-type

```
-type <type_name>  The name of a note type (for example, Note or
                   "BugReport") for which a new note is created.

                   A note type name is limited to 24 characters and
                   can contain only letters, numbers, hyphens, and
                   underscores. Note type names cannot begin with
                   hyphens or numbers and cannot contain spaces or
                   special characters.
```

RETURN VALUE

```
The URL of the new note.
```

SEE ALSO

```
note delete, note attach, note detach, note links, server-side, rstcl
```

EXAMPLES

- Example Showing Creating of a New Note with a Specific ID.
- Example Showing Creating a Note Using the Default ID

Example Showing Creating of a New Note with a Specific ID.

```
This example creates a new note of the Note notetype.

  note create -type Note \
    -id 6674 \
    -date 2002-05-29 \
    {Title "Hello, World!"} {Body "Main portion of a note."} \
    {Author goss}
```

Example Showing Creating a Note Using the Default ID

```
This example creates a new BugReport using the next available ID
number and sets the creation time as the current time:

  note create -type "BugReport" {Title "Broken!"} \
    {Body "It broke."} {Author norm}
```

note delete

note delete Command

NAME

```
note delete          - Deletes a note and associated notelinks
```

DESCRIPTION

```
This command deletes a note and any associated notelinks --
the links between the note and any objects to which it is
attached. The note delete command also deletes any files
attached to the note in fileattach fields. The note to be
deleted must exist.

The successful execution of this command causes an atomic note
delete event and fires the corresponding triggers in response.

This command is available only from server-side scripts.
```

SYNOPSIS

```
note delete <NoteURL>
```

OPTIONS

```
none
```

OPERANDS

- Note URL

Note URL

```
<NoteURL>            A valid URL for the note to be deleted.
```

RETURN VALUE

```
none
```

SEE ALSO

```
note detach, note links, note create, server-side, rstcl
```

EXAMPLES

```
This example deletes BugReport note 2:

  note delete sync:///Note/SyncNotes/BugReport/2
```

note detach

note detach Command

NAME

```
note detach         - Deletes the link between a note and an object
```

DESCRIPTION

```
This command detaches a note from the specified object, deleting
the notelink -- the link between the object and the note.

The <NoteURL> argument must be to a note object. The <ObjURL>
argument can be to any legal URL, including another note.

It is not an error to attempt to remove a notelink that does not
exist. However, <NoteURL> and <ObjURL> both must exist if the object
is a note. It is not an error to remove a non-note object that does
not exist. (Although, as with all note commands, the URLs must be
well-formed.)

The successful execution of this command causes an atomic note
detach event and fires the corresponding triggers in response.

This command is available only from server-side scripts.
```

SYNOPSIS

```
note detach <NoteURL> <ObjURL>
```

OPTIONS

```
none
```

OPERANDS

Note URL

```
<NoteURL>            A valid note URL.
```

Object URL

```
<ObjURL>             A valid URL to an object to detach
                     from the note.
```

RETURN VALUE

```
none
```

SEE ALSO

```
note attach, note delete, note links, server-side, rstcl
```

EXAMPLES

Example of Detaching a Bug Report from a Project

```
This example detaches the bug report from the Asic project:

  note detach sync:///Note/SyncNotes/BugReport/2 sync:///Projects/Asic
```

Example of Detaching a Bug Report from a Tagged Configuration

```
This example detaches the bug report from the Rel1 configuration
of the Asic project:

  note detach sync:///Note/SyncNotes/BugReport/2 \
              sync:///Projects/Asic@Rel1
```

note getprop

note getprop Command

NAME

```
note getprop        - Retrieves a property of a note
```

DESCRIPTION

```
This command retrieves the value of a single property on a note,
such as might have been stored with note setprops, url setprop,
or note create. The note must exist and the property name must be
one of the property names contained in the note type of the note.

This command only works in server-side scripts.
```

SYNOPSIS

```
note getprop <NoteURL> <PropertyName>
```

OPTIONS

```
None
```

OPERANDS

- Note URL
- Property Name

Note URL

```
<NoteURL>           The URL of a note, which must exist.
```

Property Name

```
<PropertyName>      The name of a property on the note.
```

RETURN VALUE

```
Returns the property value, as a string.
```

SEE ALSO

```
note setprops, url properties
```

EXAMPLES

```
This example extracts and prints the Title property of $noteURL,
where the $noteURL stands for a URL such as
sync:///Note/SyncNotes/BugReport/42:

   puts "Note Title: [note getprop $noteURL Title]"
```

note links

note links Command

NAME

```
note links          - Returns the set of links for a note
```

DESCRIPTION

```
This command returns information about notelinks. A notelink is a
relationship between a particular note and another object. The note
links command queries the database for notelinks that match certain
constraints or, if no constraints are given, all notelinks. The
constraints can be that the notelink be from a particular note, or
to a particular object, or both. Additionally, wildcarding is
supported to allow broadening the query to match groups of notes
or objects rather than specific notes and objects.

The 'note links' command with no arguments returns a list of
lists, where each sublist has two elements: the first is the object
URL, the second is the note URL.

With the -object option, only the URLs of notes linked to a given
object are returned.

With the -note option, URLs for all objects that are linked to
the specified note are returned.

This command is available only from server-side scripts.
```

SYNOPSIS

```
note links [-norec] [-note <noteURL> | -object <objURL>] [-pairs]
```

OPTIONS

-norec

```
-norec              This option must be used in conjunction with -object
                    and with wildcarding in <objURL>. It modifies the
                    meaning of the wildcard to prevent it from matching the
                    forward slash character (/), thus limiting the wildcard
                    to matching object URLs at the same hierarchical level as
                    the wildcard and not below.
```

-note

```
-note <noteURL>     Returns all of the objects that have
                    the specified note attached.

                    The <noteURL> argument is the note URL pattern
                    to match against in the query. In this URL, an
                    asterisk (*) may be used as a wildcard in place
                    of a note ID, to match any note of a particular
                    type, or an asterisk may be used instead of the
                    note type, the note ID, and the slash that would
                    separate them, to match any note of any type.
                    Valid URLs are of the form:

                    sync:///Note/SyncNotes/<notetypeName>/<id>
                    sync:///Note/SyncNotes/<notetypeName>/*
                    sync:///Note/SyncNotes/*

                    No other form of wildcarding is allowed; in
                    particular, a wildcard may not be used to match
                    part of a note ID, or part of a note type name,
                    or the word SyncNotes, or anything to the left
                    of SyncNotes.
```

-object

```
-object <objURL>    Returns all of the notes that are attached to
```

the specified object.

The <objURL> argument is the object URL pattern to match against in the query. In this URL, a trailing asterisk may be used as a wildcard to match attached objects whose URL begins with the specified pattern.

If the object URL pattern to be matched is a note, then the same wildcarding restrictions apply as for <noteURL>. Additionally, if the object URL to be matched is a user URL, only the trailing component (the user ID) may be wildcarded, and only in its entirety.

If the object URL pattern to be matched is not a note or user URL, slightly more flexible rules apply. The wildcard may still appear only as the end (last character), but unlike for <noteURL> it is allowed to match partial path elements. The pattern matching is strictly a substring search; the wildcard will match trailing @configname and ;versioned components and any number of embedded forward slashes (except when -norec is used).

This option must be used in conjunction with -object and with wildcarding in <ObjUrlPat>. It modifies the meaning of the wildcard to prevent it from matching the forward slash character (/), thus limiting the wildcard to matching object URLs at the same hierarchical level as the wildcard and not below.

This option forces the note links command to return a list of lists, even if -note, -object, or both, are specified. See the RETURN VALUE section for more detail.

-pairs

-pairs	This option forces the note links command to return a list of lists, even if -note, -object, or both, are specified. See the Return Value section for more detail.

RETURN VALUE

This command returns results in a variety of forms, depending on the command options you specify. In general, the output is whatever was not specified as an input:

1. If neither -object nor -note are used, then return all notelinks as a list of lists, with each sublist having an

```
   object URL and a note URL, in that order.

2. If -object <objURL> is used, then return a list of just the
   corresponding note URLs.

3. If -note <noteURL> is used, then return a list of just the
   corresponding object URLs.

4. If both -note and -object are used, then return no URLs,
   only the number of matching notelinks.

5. If -pairs is specified, the output is in the form described
   in rule 1, taking precedence over rules 2, 3, and 4.

The behavior ensures that if you passed in a note URL or an
object URL, you get back its counterpart directly and do not
have to extract it from a sublist. However, when either <objURL>
or <noteURL> or both include wildcards, it is usually desirable
to get back entire notelinks, with both the constituent URLs for
each link. The use of -pairs forces this complete form of return
value.

Note: URLs for notetype snapshots contain the note type name
appended by _OLD.
```

SEE ALSO

```
note attach, note detach, server-side, rstcl
```

EXAMPLES

- Example Showing All the Notes Attached to a Project
- Example Showing The Objects to which a Specific Note is Attached

Example Showing All the Notes Attached to a Project

```
This example displays the notes that are attached to the Asic
project before and after attaching a new note.

  foreach note [note links -object sync:///Projects/Asic] {
      puts "$note<BR>"
  }
  puts "<BR>"
  note attach sync:///Note/SyncNotes/BugReport/2 sync:///Projects/Asic
  foreach note [note links -object sync:///Projects/Asic] {
      puts "$note<BR>"
  }
```

Example Showing The Objects to which a Specific Note is Attached

```
This example displays the objects to which BugReport #2 is
attached (the Asic project, and the Beta configuration of Asic):

  set objects [note links -note sync:///Note/SyncNotes/BugReport/1]
  foreach note $objects {
      puts "$obj<BR>"
  }

Running this script outputs the following:

  sync:///Projects/Asic
  sync:///Projects/Asic@Beta
```

note query

note query Command

NAME

```
note query          - Queries the note system and returns note URLs
                      and values
```

DESCRIPTION

```
This command allows general queries against the notes database and
returns note URLs and values

This command is available only from server-side scripts.
```

SYNOPSIS

```
note query [[-attached <ObjUrl> [-norec]]
           [[-dbquery  <dbase_expr>] | [-sqlquery <sql_expr>]]
           [-filter ViewNote | EditNote] [-select <PropertyList>]
           [-type <notetype>]
```

OPTIONS

- -attached
- -dbquery
- -filter
- -norec
- -select
- -sqlquery
- -type

-attached

-attached <ObjUrl>	Limits results to notes that are attached to objects whose URLs match <ObjUrl>. <ObjUrl> may contain a trailing wildcard (*) as specified for -object <ObjUrl> in the note links command. When used with RevisionControl notes, the -attached option applies to the Objects field.

-dbquery

-dbquery <dbase_expr>	Returns only notes that match this query string. Must be a valid dBase query. This query is converted to an equivalent SQL expression and used to query the database. Only a subset of dBase syntax is supported and dBase queries may be retired in a future release.

-filter

-filter	For access controls, accepts either the ViewNote or EditNote action and returns a list of the notes allowed for the specified action.

-norec

-norec	Affects the way <ObjUrl> wildcards work, as specified for the note links command. This option must be used in conjunction with the -attached option and with wildcards.

-select

-select <PropertyList>	Returns both the URLs of notes matching the query and, for each matching note, the value for each property named in <PropertyList>. When -select is specified, the return value is a list of lists. Within each sublist, the first element is

the URL of a note matching the criteria; the others are values in that note for each of the properties specified in <PropertyList>.

You can include the keyword @LINKS as a property in <PropertyList> to return the note's attachments as a list within the return value.

-sqlquery

-sqlquery <sql_expr>

Returns only notes that match this query string. Must be a valid SQL expression. The expression is used verbatim in the WHERE clause of an SQL SELECT statement. No error checking is performed on this expression; it is passed directly to the database.

To avoid conflicts with property names and SQL keywords, the column names in the database are formed by prefixing the string f_ to the note property name. Thus a query for notes whose ID number is less than 10 and whose Author is 'joe' must be written in a -sqlquery clause as:

f_Id<10 AND f_Author='joe'

This prefixing is not necessary for -dbquery syntax.

-type

-type <notetype>

Returns only notes of this type, which must exist. If not specified, then the query is applied to all note types.

RETURN VALUE

If -select is not specified, a list of URLs matching the query criteria.

If -select is specified, the return value is a list of lists.
If no notes match the query criteria, an empty list is returned.

SEE ALSO

```
url notes, server-side, rstcl
```

EXAMPLES

Example Showing a list of URLS for all Note Types

```
This example displays a list of URLs of all notes of all types:
  puts [note query]

The resulting HTML page for a server with two notetypes (BugReport
and Note) with two notes of each notetype is:
  {sync:///Note/SyncNotes/BugReport/1} {sync:///Note/SyncNotes/
   BugReport/2} sync:///Note/SyncNotes/Note/1
   sync:///Note/SyncNotes/Note/2
```

Example Displaying a Specific Note Type Attached to a Project

```
The following example displays only notes of type Note that are
attached to the Asic project:
  puts [note query -type Note -attached sync:///Projects/Asic]

The resulting HTML page displays the URL of the only note to match
the query:
  sync:///Note/SyncNotes/Note/1
```

Example Returning Notes Created by a Specific User

```
This example returns a list of every note of any type that was
entered by sal, and then displays an pHTML page with the NoteID and
Title of each note:

  set noteList [note query -dbquery Author='sal']
  foreach noteUrl $noteList {
     url properties $noteUrl noteProps
     puts "NoteID $noteProps(Id) => $noteProps(Title)<BR>"
  }
```

Example Returning Notes Attached to a Specific Project

```
This example returns a list of every note that is attached to
```

```
objects under MyProj (including MyProj itself):
  set urls [note query -attached sync:///Projects/MyProj*]
whereas this example excludes MyProj:
  set urls [note query -attached sync:///Projects/MyProj/*]

With the 2.5 release, ProjectSync introduced a client-server
database (PostgreSQL). Consequently, some pre-2.5 constructs
using the note query command or combinations of commands may suffer
from degraded performance. Note query constructs like the following
may perform more slowly than they did under the pre-2.5 database:

foreach note [note query ....] {
url getprop $note prop1
}

Such constructs should be changed to the following form:

note query -select {prop1} ....
```

note relink

note relink Command

NAME

```
note relink         - Moves note attachments from one object
                      to another
```

DESCRIPTION

```
This command moves all note attachments from one object to another,
including links saved for a snapshot. The command also can move
attachments to objects below the original source object to
corresponding objects below the destination object; the effect is
to maintain the same relative tree structure before and after the
operation by re-rooting the tree at the destination object.
If the destination object does not have a tree of objects below it
to match the origin object tree, the attachments are moved but
are broken.

This command typically is used when a ProjectSync/DesignSync project
is relocated (renamed). <FromObjURL> and <ToObjURL> cannot be note
or user URLs, which cannot be renamed. However, the objects can
refer to a note type when a note type is renamed.
```

SYNOPSIS

```
note relink <FromObjURL> <ToObjURL> [-norec]
```

OPTIONS

- -norec

-norec

-norec	Causes the command to operate on (re-link) only notes attached directly to the <FromObjURL> object, and not any notes attached to objects below it.

OPERANDS

- From Object URL
- To Object URL

From Object URL

<FromObjURL>	The object to rename. Must be a valid URL, but may not reference a note or user object.

To Object URL

<ToObjURL>	The object to change the references to. Must be a valid URL, but may not be a note or user object.

RETURN VALUE

The number of links that were updated.

SEE ALSO

note attach, note detach, note links, notetype rename

EXAMPLES

Move all the attachments from the Maine project to the Indiana project:

```
note relink sync:///Projects/Maine sync:///Projects/Indiana
```

note schema

note schema Command

NAME

```
note schema          - Extracts information about a note type's
                       structure
```

DESCRIPTION

```
This command provides programmatic (stcl) access to the schema
that defines a note type.

This command is a wrapper to the notetype schema command and is
available for backward compatibility only. We discourage the use
of this command, as it may be dropped in future releases.

This command is available only from server-side scripts.
```

note setprops

note setprops Command

NAME

```
note setprops        - Sets property values on a note
```

DESCRIPTION

```
This command sets one or more property values (database fields)
on a note. This command gives you programmatic (stcl) access to the
note-editing capabilities of the ProjectSync graphical interface.

The first argument must be the URL for an existing note. Remaining
arguments can be either:
   o One or more pairs of database field name / new value, or
   o A single list containing pairs of field name / new value pairs
The latter form is useful when you do not know ahead of time
what properties you will be setting; build a list of the same
form that would be used for the Tcl "array set" command and then
pass the list to note setprops. This list can be empty.

The property values you supply must be legal for the corresponding
property type. The new property values specified in this command
are checked against the current values of the property. If they are
the same, the new value is discarded. Therefore, if all the values
```

specified in the command match their current values, the entire command is ignored. The command always attempts to set the complete set of property values on the object. If one or more attempts fail because of invalid values, no change is committed and the entire set of invalid property values is returned in the resultant error.

If a property name is specified multiple times with different values, the last value is stored.

It is not possible to change a note's ID number after the note is created.

The successful execution of this command causes an atomic note modify event and fires the corresponding triggers in response. If no property value is changed by the execution of the command, no event is generated.

When setting multiple properties on the same note, it is better to set them all in a single call to "note setprops" so that trigger activity is reduced.

The related "url setprop" command is limited to one name/value pair, but can operate on any object type, not just notes.

This command is available only from server-side scripts.

SYNOPSIS

```
note setprops [--] <note_url> <propname> <propvalue>
              [<propname> <propvalue>]...
note setprops [--] <note_url> <proplist>
```

OPTIONS

- --

--

```
--            Indicates that the command should stop looking for
              command options. Use this option when property
              names or values begin with a hyphen (-).
```

OPERANDS

- Note URL
- Property Name
- Property Value
- Property List Name/Value Pairs

Note URL

```
<note_url>    The URL of a note, which must exist, for which to
              set property values.
```

Property Name

```
<propname>    The name of a property on the note, which must exist
              on the note's note type.
```

Property Value

```
<propvalue>   A value to set the property of the note to, which
              must be a valid value for the property type.
```

Property List Name/Value Pairs

```
<proplist>    A list of property name and value pairs, in the style
              of Tcl's array set command - for example: {name1 val1
              name2 val2 ...}. The names must all be valid property
              names on the note type and the values must all be
              legal values for the property type.
```

RETURN VALUE

```
none
```

SEE ALSO

```
note getprop, url setprop, url getprop, url properties, server-side,
rstcl
```

EXAMPLES

- Example of Setting the Title on a Specific Note
- Example of Setting the Title and History for a Specific Note
- Example of Setting Various Properties on Specific Note

Example of Setting the Title on a Specific Note

```
This example sets the title on SyncDefect 42:
```

```
note setprops sync:///Note/SyncNotes/SyncDefect/42
    Title "A test"
```

Example of Setting the Title and History for a Specific Note

```
This example sets the title and entire history on SyncDefect 42:

note setprops sync:///Note/SyncNotes/SyncDefect/42 \
      Title "A test" Body "This is a test"
```

Example of Setting Various Properties on Specific Note

```
This example sets several properties on SyncDefect 42, using a
property list:

set newvalues(Resp) sal
set newvalues(State) closed
set newvalues(Priority) low

note setprops sync:///Note/SyncNotes/SyncDefect/42 [array
       get newvalues]
```

note systems

note systems Command

NAME

```
note systems        - Gets a list of note systems
```

DESCRIPTION

```
A list of all note systems on the server. If no note systems exist,
an empty list is returned.

Currently, only a single note system is defined, SyncNotes. This
note system always exists.
```

SYNOPSIS

```
note systems
```

RETURN VALUE

```
A list of all note systems on the server. Currently, this command
always returns a single item, SyncNotes.
```

EXAMPLES

```
Returns the list of note systems on the server:

note systems
```

note types

note types Command

NAME

```
note types          - Gets a list of defined note types for all
                      note systems
```

DESCRIPTION

```
Returns a list of note type URLs for all note types of all note
systems on the server. If no note types exist, an empty list is
returned.

This command is a wrapper to the notetype enumerate command and is
available for backward compatibility only. Synchronicity discourages
the use of this command, which may be dropped in future releases.
```

Note Type Manipulation

note types

note types Command

NAME

```
note types          - Gets a list of defined note types for all
                      note systems
```

DESCRIPTION

```
Returns a list of note type URLs for all note types of all note
systems on the server. If no note types exist, an empty list is
returned.

This command is a wrapper to the notetype enumerate command and is
available for backward compatibility only. Synchronicity discourages
the use of this command, which may be dropped in future releases.
```

notetype

notetype Commands

NAME

```
notetype            - Server-side commands to manipulate note types
```

DESCRIPTION

```
The 'notetype' family of commands provides access to the notetype web
object type. URLs for notetypes have the following form:

   sync:///Note/SyncNotes/<notetype>

 For example, the following URL specifies the BugReport notetype:

   sync:///Note/SyncNotes/BugReport

Notes can only be accessed from server-side scripts, so always use
the sync:/// syntax (no <host>:<port> specification).
```

SYNOPSIS

```
notetype <notetype_command> [<notetype_command_options>]

Usage: notetype [create|delete|enumerate|getdescription|rename|
                 schema]
```

EXAMPLES

```
See specific "notetype" commands.
```

notetype create

notetype create Command

NAME

```
notetype create     - Creates a new note type
```

DESCRIPTION

```
This command creates a new note type with the name you
specify. The properties Id, Title, Body, DateCreate, and Author
are automatically defined for all new note types.

You also can specify additional properties as a list of lists.
Each sublist within the property list defines an individual
property. A property definition consists of the following five
pieces of information, all of which must be specified: property
name, prompt string, IsRequired, property type, default value.

If you define other properties for the note type, you must specify
order-dependent values for each property. If you do not specify
additional properties, you must supply an empty Tcl list {}
following the NoteTypeName option.

This command is server-side only.
```

SYNOPSIS

```
notetype create [-description <DescStr>] [--]
<NotetypeName> {
               [{<PropertyName> <PromptName> <IsRequired>
               <PropertyTypeName> <DefaultValue>}...]
                }
```

OPTIONS

- -description
- --

-description

```
-description      Specifies a description for the note type; if
   <DescStr>      not specified, the description defaults to the
                  name of the note type. Enter the description in
                  quotation marks or curly braces following the
                  -description option. The description is limited
                  to 256 characters.
```

--

--	Indicates that the command should stop looking for command options. Use this option when an argument begins with a hyphen (-).

OPERANDS

Note Type Name

<NoteTypeName>	A valid name that you assign to the note type. A note type name is limited to 24 characters. Spaces are not allowed in note type names, and the legal character set for note type names consists of alphanumerics, hyphens, and underscores. The first character in a note type name cannot be a hyphen or a number.

Property Name

<PropertyName>	A unique name that you assign to the property. A property name is limited to 24 characters. Spaces are not allowed in property names, and the legal character set for property names consists of alphanumerics and underscores.

Prompt Name

<PromptName>	The prompt displayed on the GUI for users. Use only alphanumeric characters, not special characters or punctuation marks.

Is Required

<IsRequired>	A Tcl Boolean indicating whether a value for the property is required or optional. This setting is enforced only at the application level.

Property Type Name

```
<PropertyTypeName>  The name of a predefined property type. You can
                    use either one of ProjectSync's predefined
                    property types (such as Boolean, String80, Date)
                    or a property type you have defined yourself
                    using the Note Type Manager on the ProjectSync
                    GUI.
```

Default Value

```
<DefaultValue>      The default value for this property. If there is
                    no default value, specify an empty string "" as
                    a placeholder; the default value will be supplied
                    by the system. If you specify a default value, it
                    must be one of the valid values for this
                    property type. For example, if you have
                    defined a Choice property type, the default
                    value must be in your choice list.

                    The default value for a property in a note type
                    may be given as an empty string, meaning no
                    default. In this case, and when a note is created
                    with the note create command without a value for
                    the corresponding property, the property in the
                    note will remain unset.
```

RETURN VALUE

```
none
```

SEE ALSO

```
notetype delete, notetype getdescription, notetype rename,
server-side, rstcl
```

EXAMPLES

```
The following example creates a note type named BugReport, used
for defect tracking. In addition to the standard built-in property
set, this note type defines four additional properties: a required
user list field, Resp; a required State field; a required Severity
field; and an optional CC list.

notetype create BugReport -description "Defect tracking" \
  {{Resp Responsible 1 SyncUserList ""} \
```

```
  {State State 1 BR_State new} \
  {Severity Severity 1 BR_Severity serious} \
  {cclist CCList 0 String240 ""}}
```

notetype delete

notetype delete Command

NAME

```
notetype delete     - Deletes the specified note type
```

DESCRIPTION

```
This command deletes the specified note type. You can specify only
one note type at a time. Any internal links to and from the
note type and any snapshots of the note type also are removed.
However, this command does not remove any triggers or customization
files associated with the note type.

Important: It is strongly recommended that you do not delete the
RevisionControl note type, which is a standard part of
ProjectSync. This note type is designed to work with DesignSync
for projects under revision control. Removing this note type
could cause problems if you later want to use ProjectSync notes
with DesignSync.

If the note type contains any notes, the -purgenotes option must
be specified to confirm your intent to delete the note type
(analogous to requiring rm -r for a nonempty directory).

This command is server-side only.
```

SYNOPSIS

```
notetype delete [-purgenotes] <NoteTypeName>
```

OPTIONS

- -purgenotes

-purgenotes

```
-purgenotes        Forces the deletion of all notes attached
                   to the specified note type. If you do not
                   specify this option and the note type you
```

```
                    want to delete contains notes, you get an
                    error and the note type is not deleted.
```

OPERANDS

- Note Type Name

Note Type Name

```
<NoteTypeName>      The name of the note type to delete, which
                    must exist.
```

RETURN VALUE

```
none
```

SEE ALSO

```
notetype create, notetype rename
```

EXAMPLES

```
The following example deletes the SyncDefect note type, including
all notelinks, even if some notes exist for the note type:

notetype delete SyncDefect -purgenotes
```

notetype enumerate

notetype enumerate Command

NAME

```
notetype enumerate  - Gets a list of defined note types for all
                      note systems
```

DESCRIPTION

```
Returns a list of note type names for all visible note types of
all note systems on the server. If no note types exist, an empty
list is returned.
```

SYNOPSIS

```
notetype enumerate [-dbtablenames <dbTablenameVar>] [-urls]
```

OPTIONS

- -dbtablenames
- -urls

-dbtablenames

```
-dbtablenames          Store a map of the SQL table names by note
  <dbTablenameVar>     type name in the Tcl array named
                       <dbTablenameVar>. The table name is the
                       note type name prefixed by t_, but this
                       convention may not be used in the future. If
                       a note type name contains a hyphen, the
                       hyphen is converted to an underscore in the
                       table name. The information from this option
                       can be used to construct SQL statements
                       dynamically.
```

-urls

```
-urls                  The return list is formatted as note type
                       URLs instead of the note type names. This
                       output format is compatible with the format
                       from the note types command.
```

RETURN VALUE

```
A list of all note type names for all note systems.
```

SEE ALSO

```
note systems, notetype create, notetype delete, notetype rename,
url contents
```

EXAMPLES

```
Returns the list of note types on the server:

puts [notetype enumerate]
SyncDefect SW-Defect-1
```

notetype getdescription

notetype getdescription Command

NAME

```
notetype getdescription - Returns a brief description of the
                          note type
```

DESCRIPTION

```
Returns a brief description of the note type. The description
was set when the note type was created.
```

SYNOPSIS

```
notetype getdescription <NotetypeName>
```

OPERANDS

- Note Type Name

Note Type Name

```
<NotetypeName>            The name of the note type, which must
                          exist. <NotetypeName> is case-sensitive.
```

RETURN VALUE

```
A string containing the value of the brief description recorded
when the note type was created.
```

SEE ALSO

```
notetype create, url setprop
```

EXAMPLES

Returns the description of the SyncDefect note type:

```
notetype getdescription SyncDefect
```

notetype rename

notetype rename Command

NAME

```
notetype rename     - Renames an existing note type
```

DESCRIPTION

Renames an existing note type from <CurrentName> to <NewName>. The note type specified by <NewName> must not already exist.

Any notelinks associated with the note type being renamed are also converted to be associated with the renamed note type name. This includes attachments both to and from the note type. Any snapshot of the note type also is renamed.

The note-type-specific files in $SYNC_CUSTOM_DIR/servers/<host>/<port>/share/data are not renamed as part of the operation. However, these files are renamed if you use the ProjectSync Note Type Manager to rename the note type.

This command is server-side only.

Important: It is strongly recommended that you do not rename the RevisionControl note type, which is a standard part of ProjectSync. This note type is designed to work with DesignSync for projects under revision control. Renaming this note type could cause problems if you later want to use ProjectSync notes with DesignSync.

SYNOPSIS

```
notetype rename <CurrentName> <NewName>
```

OPTIONS

none

OPERANDS

- Current Name
- New Name

Current Name

<CurrentName>	The existing note type name that you want to change.

New Name

<NewName>	The new, legal note type name that you want to use. A note type name is limited to 24 characters. Spaces are not allowed in note type names, and the legal character set for note type names consists of alphanumerics, hyphens, and underscores. The first character in a note type name cannot be a hyphen or a number.

RETURN VALUE

none

SEE ALSO

note relink, notetype create, notetype delete

EXAMPLES

The following example changes the name of the note type from AcmeBug to AjaxBug:

```
notetype rename AcmeBug AjaxBug
```

notetype schema

notetype schema Command

NAME

```
notetype schema     - Extracts information about a note type's
                      structure
```

DESCRIPTION

This command provides programmatic (stcl) access to the schema that defines a note type.

The base set of information provided by this command is the list of fields that make up the note type. This information is provided in the return value of the command. The various command-line options allow for retrieving additional attribute information about each property on the note type. The results for each type of property information are returned in Tcl arrays that are passed in by name. The Tcl arrays need not exist prior to the execution of the command. If the arrays do exist or are of a scalar variable type, they are first cleared of all information. The data returned in these Tcl arrays is indexed by property name.

SYNOPSIS

```
notetype schema <NotetypeName> [-dbcolumns <ColumnsVar>]
                [-defaults <DefaultsVar>] [-notesys <NoteSystemName>]
                [-prompts <PromptsVar>] [-ptypes <TypesVar>]
                [-required <ReqdVar>]
```

OPTIONS

- -dbcolumns
- -defaults
- -notesys
- -prompts
- -ptypes
- -required

-dbcolumns

```
-dbcolumns          Stores a map of column names by field name in
  <ColumnsVar>      the Tcl array named <ColumnsVar>. Currently, the
                    column name is always the field name prefixed by
                    f_, but this convention may not be used in the
                    future. This information from this option can be
                    used to construct SQL statements dynamically.
```

-defaults

```
-defaults           Stores a map of default values by field name in
 <DefaultsVar>      the Tcl array named by <DefaultsVar>
```

-notesys

```
-notesys            A valid note system name. Defaults to SyncNotes.
 <NoteSystemName>   (This name is an input parameter, not an output
                    array name.)
```

-prompts

```
-prompts            Stores a map of field prompt strings by field
 <PromptsVar>       name in the Tcl array named by <PromptsVar>
```

-ptypes

```
-ptypes             Stores a map of property type names by field
 <PtypesVar>        name in the Tcl array named by <PtypesVar>
```

-required

```
-required           Stores a map of required flags (1 or 0) by field
 <ReqdVar>          name in the Tcl array named by <ReqdVar>
```

RETURN VALUE

```
A list of all field names in the specified note type.
```

SEE ALSO

```
note getprop, notetype create, url getprop, url properties
```

EXAMPLES

- Example Returning all Fields in the Specified Note Type
- Example Displaying the Types for Each Field

Example Returning all Fields in the Specified Note Type

```
This example returns all the fields in the SyncDefect note type:

set field_names [notetype schema SyncDefect]
```

Example Displaying the Types for Each Field

```
This example displays the type of each field:

set field_names [notetype schema -ptypes types SyncDefect]
foreach field $field_names {
   puts "$field: $types($field)<BR>"
}

The above example generates output such as this:

KeyWords: String80
Browser: SD-Browser
Title: String80
Class: SD-Class
Platform: SD-Platform
Customer: SD-Customers
DateCreate: Timestamp

This example determines whether the FixDate field in a note type
called ECO is required:

notetype schema -required reqd ECO
if {$reqd(FixDate)} { puts "FixDate is required." }
```

Property Type Information Commands

ptype

ptype Commands

NAME

```
ptype               - Commands that get information about property types
```

DESCRIPTION

```
The ptype commands return information about property types.
Property types are the data types available for note type
properties (fields). When you create a note type field
such as  'SpecAuthor', you assign it a property type, such as
'String80'. Synchronicity provides a number of predefined
property types, or you can create your own. You create and
modify property types from the Property Type Manager
```

```
(accessed from the Note Type Manager in ProjectSync's graphical
user interface). See the ProjectSync User's Guide for
more information on property types.

The ptype commands are not server-side only, but are typically
used when accessing note and note-type objects, which are
only accessible from server-side scripts.
```

SYNOPSIS

```
ptype <ptype_command> [<ptype_command_options>]

Usage: ptype [choices|class|enumerate|is|strwidth|transitions]
```

OPTIONS

```
Vary by command.
```

RETURN VALUE

```
Varies by command.
```

SEE ALSO

```
ptype choices, ptype class, ptype enumerate, ptype is,
ptype strwidth, ptype transitions
```

EXAMPLES

```
See specific "ptype" commands.
```

ptype choices

ptype choices Command

NAME

```
ptype choices       - Returns the set of legal values for
                      an enumerated type
```

DESCRIPTION

```
This command returns the set of legal values for an existing choice
or state machine property type. For a state machine, the set of
choices returned is the entire list of possible state values. Only
choice and state machine property types may be specified. It is an
error to supply a property of any other type.
```

SYNOPSIS

```
ptype choices <ptype_name>
```

OPERANDS

- Custom Property Type Name

Custom Property Type Name

```
<ptype_name>      The name of an existing choice or state machine
                  custom property type.
```

RETURN VALUE

```
The list of legal values for the property type.
```

SEE ALSO

```
ptype is, ptype class, ptype transitions
```

EXAMPLES

```
This examples shows 'ptype choices' applied to several property
types:
  puts [ptype choices SyncPriority] # choice class
  => low medium high stopper
  puts [ptype choices SyncState]    # state-machine class
  => open analyzed fixed closed
```

ptype class

ptype class Command

NAME

```
ptype class         - Returns the class of a property type
```

DESCRIPTION

```
This command returns the class of a property type, where a class
is a general category of property types. For example, String10,
String80, and String are all property types of the 'string'
class. Note that state-machine property types belong to both the
'machine' and 'choice' classes; the dominant class is 'machine'
and is therefore returned by 'ptype class'.
```

SYNOPSIS

```
ptype class <ptype_name>
```

OPERANDS

- Custom Property Type Name

Custom Property Type Name

```
<ptype_name>        The name of an existing property type.
```

RETURN VALUE

```
Returns one of the following strings:
  boolean   - for boolean types
  choice    - for choice (enumeration) types
  date      - for Date types
  machine   - for state machine types
  number    - for integer, float and other numeric types
  string    - for string types (of any size)
  time      - for Time types
  timestamp - for Timestamp types
  userlist  - for user list types
```

SEE ALSO

```
ptype choices, ptype enumerate, ptype is
```

EXAMPLES

```
This example shows 'ptype class' applied to several property
types:
  puts [ptype class String80]
  => string
  puts [ptype class String]
  => string
  puts [ptype class SyncState]
  => machine
```

ptype enumerate

ptype enumerate Command

NAME

```
ptype enumerate     - Returns a list of all property types
```

DESCRIPTION

```
Generates a list of all property types on the server. The set of
property types returned consists of all custom choice and state
machine property types plus the built-in base property types:

String          Boolean       SyncClass
String10        Integer       SyncUserList
String20        Float         SyncPriority
String80        Date          SyncRevCtrlCmd
String240       Time          SyncState
String512       Timestamp
String4000b     "WebObject"

This list excludes the string-derived property types like cclist,
keywords, and fileattach. These are all defined, and their semantics
imposed, at the note panel level.
```

SYNOPSIS

```
ptype enumerate
```

OPTIONS

```
none
```

RETURN VALUE

```
List of property types.
```

EXAMPLES

```
This example lists all the property types known to the server:

  puts [ptype enumerate]
  => String80 String Boolean String240 Integer SyncClass String20
     Float String10 SyncRevCtrlCmd {WebObject } String512 SyncPriority
     Time Timestamp Date String4000b SyncUserList SyncState
```

ptype is

ptype is Command

NAME

```
ptype is            - Tests whether a property type is of a
                      certain class
```

DESCRIPTION

```
This command tests whether the specified property type is of the
specified class, where a class is a general category of property
types. For example, String10, String80, and String are all
property types of the 'string' class. Note that state-machine
property types belong to both the 'machine' and 'choice' classes.
```

SYNOPSIS

```
ptype is <[-boolean] | [-choice] | [-date]
       | [-machine] | [-number] | [-string]
       | [-time] | [-timestamp] [-userlist]>
        <PropertyTypeName>
```

OPTIONS

- -boolean
- -choice
- -date
- -machine
- -number
- -string

-boolean

```
 -boolean    Check if the property type is a boolean.
```

-choice

```
 -choice     Check if the property type is a choice (enumeration)
             type. Note that 'ptype is -choice' also returns 1
             (TRUE) if the property type is a state machine.
```

-date

```
 -date       Check if the property type is a date.
```

-machine

```
 -machine    Check if the property type is a state machine.
```

-number

```
 -number     Check if the property type is an integer, float, or
             other numeric type.
```

-string

```
 -string     Check if the property type is a string (of any size).
```

-time

```
 -time       Check if the property type is a time.
```

-timestamp

```
 -timestamp  Check if the property type is a timestamp.
```

-userlist

```
-userlist   Check if the property type is a user list.
```

OPERANDS

- Custom Property Type Name

Custom Property Type Name

```
<PropertyTypeName>  The name of an existing property type
```

RETURN VALUE

```
Returns 1 (TRUE) if the property type is of the specified class;
0 (FALSE) otherwise.
```

SEE ALSO

```
ptype class, ptype enumerate
```

EXAMPLES

```
This example verifies that the SyncPriority property type is of
the 'choice' class (and not of the 'string' class).

  puts [ptype is -choice SyncPriority]
  => 1
  puts [ptype is -string SyncPriority]
  => 0
```

ptype strwidth

ptype strwidth Command

NAME

```
ptype strwidth      - Returns the maximum width for strings of this type
```

DESCRIPTION

```
This command returns the maximum number of characters a string-based
property type can hold. The property type specified must be based on
a string class. This command deals with character width, not byte width.
```

SYNOPSIS

```
ptype strwidth <ptype_name>
```

OPERANDS

- Custom Property Type Name

Custom Property Type Name

```
<ptype_name>        The name of an existing property type.
```

RETURN VALUE

```
Returns the maximum number of characters allowed for the given property
type. For the String property type, -1 is returned, indicating no
maximum.
```

SEE ALSO

```
ptype is, ptype class
```

EXAMPLES

```
This example shows 'ptype strwidth' applied to several
property types.
  puts [ptype strwidth String80]
  => 80
  puts [ptype strwidth String10]
  => 10
  puts [ptype strwidth String]
  => -1
  puts [ptype strwidth Boolean]
  => Boolean: not a string type
```

ptype transitions

ptype transitions Command

NAME

```
ptype transitions   - For the value of a state machine, returns
                      the set of values that are legal for that
                      value to change to
```

DESCRIPTION

```
This command returns a list of the valid next states for any
specified state of a State Machine property type. The -from
option is required and indicates the state for which you want to
know all possible next states.
```

SYNOPSIS

```
ptype transitions <PropertyTypeName> <-from <PropertyValue>>
```

OPTIONS

- -from

-from

```
-from               Returns the list of states that are valid from
  <PropertyValue>   <PropertyValue>, which must be a legal value for
                    the state machine.
```

OPERANDS

- Custom Property Type Name

Custom Property Type Name

```
<PropertyTypeName> The name of an existing property type.
```

RETURN VALUE

```
A list of legal state values from the value specified.
```

SEE ALSO

```
ptype choices, ptype is
```

EXAMPLES

```
The following example returns a list of all the valid next states for the
state 'fixed' of the SyncState property type.

  puts [ptype choices SyncState]
  => open analyzed fixed closed
  puts [ptype transitions SyncState -from fixed]
  => open closed
```

Email Subscription Manipulation

subscription

subscription Commands

NAME

```
subscription        - Commands to manipulate email subscriptions
```

DESCRIPTION

```
These commands allow you to manage ProjectSync email subscriptions
which let you be notified when certain kinds of activity, such as
revision control operations, or defect tracking, take place in
DesignSync or ProjectSync.
```

SYNOPSIS

```
subscription <subscription_command> [<subscription_command_options>]

Usage: subscription [add|delete|edit|get|list]
```

OPTIONS

```
Vary by command.
```

subscription add

subscription add Command

NAME

```
subscription add    - Subscribes for email related to specified
                      objects
```

DESCRIPTION

```
This command has two basic forms. The first form of this command is
general. It allows you to subscribe for email notifications related
to any note type on the server managing the vaults for the specified
objects.

The second form of this command is specific to RevisionControl
notes.  It allows you to subscribe for email notifications related
to RevisionControl notes on the server managing the vaults for the
specified objects. This form also has convenient options for
limiting the subscription to certain RC operations.

Note that a single 'subscription add' command invocation can cause
multiple entries in the subscription database, as reported by
the 'subscription list' command. For example, this command
creates two entries:
    subscription add *.tcl *.html
and this one creates four entries:
    subscription add -ci -tag *.tcl *.html

Note:  If you specify a subscription for the tag command, but do not have a
subscription for the ci command, you will not get notifications for
any ci -tag operations that specify a tag.  In order to get all tag
activity, you must also subscribe to ci command notifications.
```

SYNOPSIS

```
subscription add [-ci] [-colock] [-conolock] [-filter Expr]
                 [-noteType noteType] [-server serverURL] [-tag]
                 [-tagname TagName] [-unlock] [-user user] object...
```

ARGUMENTS

- Object

Object

```
 object    An expression (possibly containing wildcards) that must
           match one of the objects associated with a note in order
```

```
            for you to receive email. If no objects are provided, the
            default is to subscribe for ALL objects.
```

OPTIONS

-ci

```
 -ci        Indicates that you wish to receive email when the objects
            listed are checked in. Implies the note type
            'RevisionControl'.
```

-colock

```
 -colock    Indicates that you wish to receive email when the objects
            listed are checked out with a lock.  Implies the note type
            'RevisionControl'.  The same assumptions are applied for
            'populate -lock' operations.
```

-conolock

```
 -conolock  Indicates that you wish to receive email when the
            objects listed are checked out without a lock.  For the
            'co -get' and 'populate -get' operations, the note type
            'RevisionControl' is assumed.
```

-filter

```
 -filter    Gives an expression describing which modifications to
            notes of the given type(s) will cause email to be
            sent. For a complete explanation of the filter
            expression syntax, see the ProjectSync
            User's Guide 'Advanced Email Subscriptions' topic. Note
            that if stcl is used the '$' operator needs to be
            escaped when used in a filter. For example, -filter
```

```
            Title\$Test.
```

-notetype

```
 -noteType  Specifies the name of the note type for which subscriptions
            are to be added.

            If -ci, -conolock, -colock, -unlock, or -tag are used, then
            the noteType is assumed to be 'RevisionControl'.

            If a note type is not provided and there are not any revision
            control operations listed, subscriptions for ALL note
            types will be modified.
```

-server

```
 -server     Gives the URL of the server to query for subscriptions.
            If no server URL is given, the server owning the vault for
            the current working directory is assumed.
```

-tag

```
 -tag       Indicates that you wish to receive email when the objects
            listed are tagged. Implies the note type
            'RevisionControl'.
```

-tagname

```
 -tagName   Limits your email subscriptions to those concerning
            revision control operations associated with the
            given tag.
```

-unlock

```
 -unlock    Indicates that you wish to receive email when the
            objects listed are unlocked.  Implies the note type
            'RevisionControl'. The same assumptions are applied for
            'cancel' operations.
```

-user

```
 -user      Allows you to add subscriptions for another user. By
            default, subscriptions are shown for the user running
```

```
            the client.
```

RETURN VALUE

```
none
```

SEE ALSO

```
subscription delete, subscription edit, subscription get,
subscription list
```

EXAMPLES

- Example of Subscribing to SyncDefect Notes
- Example of Subscribing to Specific Objects Tagged with a Specific Tag
- Example of Subscribing to Specified RC Notes
- Example of Subscribing to all Notes Attached to a Project

Example of Subscribing to SyncDefect Notes

```
This example shows subscribing to SyncDefect notes attached to any
object under project ASIC on the SyncServer.

dss> subscription add -noteType SyncDefect sync:///Projects/ASIC
```

Example of Subscribing to Specific Objects Tagged with a Specific Tag

```
This example shows two different ways to subscribe to RevisionControl
notes when objects representing the .tcl files under [url vault .]
are tagged as golden.

dss> subscription add -noteType RevisionControl -filter \
    "Command=tag;Tag=Golden" *.tcl

dss> subscription add -tag -tagname Golden *.tcl
```

Example of Subscribing to Specified RC Notes

```
Subscribe to RC notes for objects *.tcl and *.ini for operations:
checkin, checkout with lock.

dss> subscription add -ci -colock *.tcl *.ini
```

Example of Subscribing to all Notes Attached to a Project

```
This example subscribes to all notes attached to objects
sync:///Projects/ASIC on the SyncServer.

dss> subscription add ASIC
```

subscription delete

subscription delete Command

NAME

```
subscription delete - Deletes email subscriptions for specified objects
```

DESCRIPTION

```
This command allows you to delete email subscriptions for the specified
objects. For each object you specify, the server hosting the vault for
that object will be searched for subscriptions.

Use the 'subscription list' command to view your existing
subscriptions.

This command provides several different ways to delete subscriptions.
 * Delete all subscriptions for a specified user on the server.
 * Delete any subscriptions which were defined to refer to ALL
   (objects).
 * Deletes any subscriptions for a specified note type which were
   defined to refer to ALL (objects).
 * Delete subscriptions for a user on a specified object, optionally
   for a specified note type.

Examples of all of these methods are shown in the Examples section.
```

SYNOPSIS

```
subscription delete [-noteType noteType] [-server serverURL]
                    [-user user] [<object>[ ...]]
```

ARGUMENTS

- Object

Object

```
 object    The objects for which subscriptions are to be deleted.
           For each object you specify, the server hosting the vault
           for that object is searched for subscriptions. You may use
           wildcards in the object value.

           Note: The object specification must match exactly the
           specification in the subscription database. For instance,
           if you subscribed for Projects/MyProj/Foo/bar, you cannot
           unsubscribe projects/MyProj/Foo/*  because that is not an
           exact match.

           If an object is not specified, subscriptions to ALL
           objects (those subscriptions for which the user selected
           ALL objects instead of specifying a particular object) are
           deleted.  If a noteType value is provided without an
           object, subscriptions to ALL objects for that noteType are
           deleted.
```

OPTIONS

- -notetype
- -server
- -user

-notetype

```
 -noteType  Specifies the name of the note type for which subscriptions
            are to be deleted.
```

-server

```
 -server    Gives the URL of the server to query for subscriptions.
            If no server URL is given, the server owning the vault for
            the current working directory is assumed.
```

-user

```
 -user      Allows you to delete the subscriptions of a user other
            than the user you are logged in as. By default, the
            name of the user running the client is used.
```

RETURN VALUE

```
none.  After the command is run, it returns a single integer value
showing how many subscriptions were deleted during the operation.
```

SEE ALSO

```
subscription add, subscription edit, subscription get, subscription list
```

EXAMPLES

Example of Deleting all Subscriptions for a User

```
This example shows deleting all subscriptions created for a specified
user on the specified server.
Note: By using the wildcard (*) for the object, you specify deleting
all subscriptions for all objects for the user on the server.
dss> subscription delete -user rsmith -server
     sync://srv1.ABCo.com:2647 *
 30
```

Example of Deleting Subscriptions for all Objects

```
This example shows deleting the subscriptions created to match all
objects (either by not specifying an object when the subscription was
added or by choosing the ALL option).

Note: No value, not even wildcard, is specified for object.

dss> subscription delete -user rsmith -server sync://srv1.ABCo.com:2647
 15
```

Example of Deleting Subscriptions for a NoteType for all Objects

```
This examples shows deleting the subscriptions for the Defect note type.

Note: By not specifying a user, the subscriptions deleted are those
of the user running the command.

dss> subscription delete -notetype Defect -server sync://srv1.ABCo.com:2647
 10
```

Example of Deleting all Subscriptions on the Specified Object

```
This example shows deleting all subscriptions for the specified user
for the specified project.
Note: The /// construction shows that it is an object,not a reference
to the server.

dss> subscription delete -user rsmith sync:///Projects/ProjectSync/*
30
```

Example of Deleting all Specified Notetypes for an Object

```
This example shows deleting all Defect note types for all objects
within the panels project.

dss> subscription delete -noteType Defect panels/*
8
```

subscription edit

subscription edit Command

NAME

```
subscription edit   - Edits email subscriptions
```

DESCRIPTION

```
This command invokes a web browser to edit the email subscription of
the given user.

On Unix platforms, the default browser chosen by your system
administrator will be used. To change the default, use the 'SyncAdmin'
tool. On Windows platforms, the default browser defined in the system
registry will be used.
```

SYNOPSIS

```
subscription edit [-server serverURL] [-user user]
```

OPTIONS

- -server
- -user

-server

```
-server    Gives the URL of the server to query for subscriptions.
           If no server URL is given, the server owning the vault for
           the current working directory is assumed.
```

-user

```
-user      Allows you to edit the subscriptions of a user other than
           the user you are logged in as. By default, the name of
           the user running the client is used.
```

RETURN VALUE

```
1
```

SEE ALSO

```
subscription add, subscription delete, subscription get,
subscription list
```

EXAMPLES

Example of Editing a Subscription on the Server Associated with cwd

```
This example shows the command that launches your web browser to edit
subscriptions on the server associated with the current working
directory, pointed to by [url vault .]

dss> subscription edit
```

Example of Editing a Subscription on a Specified Server

```
Brings up your web browser to edit subscriptions on SyncServer:2647.

dss> subscription edit -server sync://SyncServer:2647
```

subscription get

subscription get Command

NAME

```
subscription get    - Gets subscription information as a Tcl list
```

DESCRIPTION

```
For a user-friendly view of the subscriptions, use the 'subscription
list' command. This command is intended for use by those who wish to
manipulate the subscription database using Tcl.

Each subscription entry is returned as a Tcl list with alternating
names and values ('array get' format). The following names are used:

  noteType  The name of the NoteType for which the use is subscribed.
  object    The object for which the user is subscribed.
  filter    The filter string for the subscription.
```

SYNOPSIS

```
subscription get [-noteType noteType] [-server serverURL] [-user user]
```

OPTIONS

- -noteType
- -server
- -user

-noteType

```
-noteType  Specifies the name of the note type for which subscriptions
           are to be queried. If no note type is given,
           subscriptions for all note types are listed.
```

-server

```
-server    Gives the URL of the server to query for subscriptions.
           If no server URL is given, the server owning the vault for
           the current working directory is assumed.
```

-user

```
-user      Allows you to get the subscriptions of a user other than
           the user you are logged in as. By default, the name of
           the user running the client is used.
```

RETURN VALUE

```
A Tcl list of subscriptions, where each subscription is represented
in Tcl 'array get' format, with the array indices being 'noteType',
'object', and 'filters'.
```

SEE ALSO

```
subscription add, subscription delete, subscription edit,
subscription list
,
```

EXAMPLES

```
foreach sub [subscription get -user JDoe] {
   array set info $sub
   puts "NoteType: $info(noteType)"
   puts "Object:   $info(object)"
   puts "Filter:   $info(filters)"
 }

The output would resemble the following:

 NoteType: RevisionControl
 Object:   *.tcl
 Filter:   Tag=Golden;Command=tag
```

subscription list

subscription list Command

NAME

```
subscription list   - Lists email subscriptions
```

DESCRIPTION

```
This command prints out a listing of your current subscriptions
on a particular server.
```

```
Note that a single 'subscription add' invocation can cause
multiple entries in the subscription database, as reported by
the 'subscription list' command. For example, this command
creates two entries:
    subscription add *.tcl *.html
and this one creates four entries:
    subscription add -ci -tag *.tcl *.htm
```

SYNOPSIS

```
subscription list [-noteType noteType] [-server serverURL] [-user user]
```

OPTIONS

- -noteType
- -server
- -user

-noteType

```
-noteType  Specifies the name of the note type for which subscriptions
           are to be displayed. If no note type is given,
           subscriptions for all note types are listed.
```

-server

```
-server    Gives the URL of the server to query for subscriptions.
           If no server URL is given, the server owning the vault for
           the current working directory is assumed.
```

-user

```
-user      Allows you to view the subscriptions of a user other than
           the user you are logged in as. By default, the name of
           the user running the client is used.
```

RETURN VALUE

```
none
```

SEE ALSO

```
subscription add, subscription delete, subscription edit,
subscription get
```

EXAMPLES

Example Showing Listing Subscriptions on the server

```
This example shows a list of all subscriptions for a specified
server.

dss> subscription list -server sync://SyncServer:2647

 SyncDefect  sync:///Projects/EmailPackage State->new;Class=enhancement
 SyncDefect  sync:///Projects/EmailPackage State->new;Class=sw-bug
 SyncDefect  sync:///Projects/ProjectSync  Class=sw-bug
 SyncDefect  sync:///Projects/ProjectSync  Severity->STOPPER
 HW-Defect-1 sync:///Projects/ProjectSync
 Note        sync:///Projects/ProjectSync
```

Example Showing Listing Subscriptions for Vault Associated with cwd

```
This example shows a list of all the subscriptions for the vault
associated with the current working directory.  You could also
specify current working directory as "[url vault .]".

dss> subscription list -noteType Note
```

User Profile Manipulation

user

user Commands

NAME

```
user                - Server-side commands to edit user profiles
```

DESCRIPTION

```
The 'user' family of commands lets you access SyncServer user
profiles. You can add and delete user IDs and profiles.
```

SYNOPSIS

```
user <user_command> [user_command_options>]

Usage: user [counts|create|delete]
```

EXAMPLES

```
See specific "user" commands.
```

user counts

user counts Command

NAME

```
user counts          - Counts the number of user records
```

DESCRIPTION

```
Counts the number of currently defined user records. This command
is equivalent to length [url users sync:///], but is faster.
```

SYNOPSIS

```
user counts
```

OPTIONS

```
none
```

RETURN VALUE

```
Returns the number of currently defined user records.
```

SEE ALSO

```
note counts, user create
```

EXAMPLES

```
This command outputs the number of users:

puts [user counts]

25
```

user create

user create Command

NAME

```
user create         - Creates a new user id with the specified profile
```

DESCRIPTION

```
This command creates a new user ID and profile with the name, email
address and password that you specify. The user ID cannot already
exist. This command is available only from server-side scripts.

A username should consist of alphanumeric characters. Do not include
spaces, single quotation marks ('), double quotation marks ("), leading
dashes (-), dollar signs ($), ampersands (&), or slashes (/) in user
names.

The user profile attributes are specified as a list of name/value
pairs. The user create command accepts the following attribute names:

Name               - The user's name.
EmailAddr          - The user's email address.
ClearKey           - The user's password, in cleartext. The value is
                     encrypted using MD5 encoding.
Key                - The user's password, assumed to be in MD5 format.
                     The value is used as is.
PhoneNumbr         - The user's phone number.
PageNumber         - The user's pager number.

Values for the name, email address, and password attributes must be
supplied.

For the password attribute, either ClearKey or Key may be used, but
not both. If ClearKey is used, the value is assumed to be
```

```
cleartext and is first encrypted using MD5 encoding. Use the
ClearKey argument when the password is not encoded.

If Key is used, the value is assumed to be encrypted and is used as
is.  Use the Key argument when the user's password is encrypted with
Unix style crypt() or when transferring user accounts, including
passwords, from the Unix NIS database into ProjectSync. You can set
the Key with url setprop and retrieve it with url getprop.  ClearKey
is write-only, so you can set it with url setprop but you cannot
retrieve it with url getprop. For more information, see the Tcl
Script for Importing Users and Changing User Passwords topics in the
ENOVIA Synchronicity DesignSync Data Manager Administrator's Guide.

If the same property is specified more than once with different
values, the last value is stored.

Note: If you use LDAP to store user information, you can use
ProjectSync's LDAP client to give users from an LDAP database access
to ProjectSync. For other user databases, you can create a trigger
that fires whenever a user tries to access an area of ProjectSync
that requires user authentication. See the topics Enabling LDAP and
Creating User Authentication Scripts in the ENOVIA Synchronicity
DesignSync Data Manager Administrator's Guide for more information.
```

SYNOPSIS

```
user create <userid> <{Name Value Name Value...}>
```

OPTIONS

```
none
```

OPERANDS

- User ID
- Name/Value Pairs for Attribute Values

User ID

```
<userid>            A unique user ID for new user profile.
```

Name/Value Pairs for Attribute Values

```
{Name Value         User profile attribute values, in array list
  Name Value...}    format. The names must match the existing
                    property names on the user profile and the
```

values must be legal for the property types.

RETURN VALUE

none

SEE ALSO

user delete, url properties, url getprop, url setprop

EXAMPLES

This example creates a user profile for the username jane. The user's full name is Jane Doe, her email address is jane@hb.com and her password is abcde.

```
user create jane {Name "Jane Doe" EmailAddr "jane@hb.com" ClearKey "abcde"}
```

user delete

user delete Command

NAME

user delete - Deletes the specified user ID and corresponding profile

DESCRIPTION

This command deletes a specified user ID and corresponding profile from the SyncServer. Additional user data associated with this profile, such as email subscriptions, are not modified by this command. The user interface performs these additional clean-up operations.

This command is available only from server-side scripts.

SYNOPSIS

```
user delete <username>
```

OPTIONS

```
none
```

OPERANDS

- User ID

User ID

```
<username>          The user ID of the user profile to be deleted,
                    which must exist.
```

RETURN VALUE

```
none
```

SEE ALSO

```
user create
```

EXAMPLES

```
In this example, you delete the username "jane" and corresponding
profile from the SyncServer.

 user delete jane
```

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