



# ENOVIA DesignSync

## DFII User's Guide

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# Overview

## DesignSync DFII Design Management Overview

ENOVIA Synchronicity DesignSync® DFII(TM) is the integration of many DesignSync® design-management (DM) capabilities into the Cadence Design Systems DFII environment.

Your design data (libraries, cells, cell views) are stored in a DesignSync vault (project data repository), which can be shared with other users. To work on a design, you check out files from the vault into your workspace. When you have completed your changes, you check the files back into the vault. Additional capabilities let you tag specific versions of design data to create a configuration, create new cell views, and delete unneeded versions of design data in the vault.

## ENOVIA Synchronicity DesignSync® DFII Capabilities

DS DFII provides the major revision control functionality available in DesignSync, including:

- Check in design files
- Check out design files
- Show which design files are checked out
- Cancel a checkout
- Tag design files
- Delete design data

## Using ENOVIA Synchronicity DesignSync DFII User's Guide Documentation

This guide is single-sourced in HTML and generated to multiple locations.

- Integrated help - When you select Help within the application or click on the Help button on DesignSync dialog boxes, the DesignSync DFII User's Guide help opens in your default Web browser.
- DesignSync Documentation - available from the **Dassault Systems** product group in the Windows **Start** menu or on UNIX, by pointing your web browser to `$SYNC_DIR/share/content/doc/index.html`

**Note:** References from the *ENOVIA Synchronicity DesignSync DFII User's Guide* to the *ENOVIA Synchronicity Command Reference* guide always link to the ALL version of the guide, which contain information about all working methodologies for DesignSync. For more information about the available working methodologies, see ENOVIA Synchronicity Command Reference.

## Before Reading this Guide

You might need to refer to the following guides if you are learning to use the ENOVIA Synchronicity DesignSync DFII product.

<i>ENOVIA Synchronicity DesignSync Data Manager User's Guide</i>	Describes the concepts and workflow for DesignSync in detail.
<i>ENOVIA Synchronicity DesignSync Administrator's Guide</i>	Describes the customizations available to optimize performance and usability and allows you to enable DFII.

## Getting Started with DesignSync DFII

With DesignSync DFII, you select DM operations from the Synchronicity menu from the Command Interface Window (CIW) or your cell view (also known as design editor, or DE) window. From a cell view window, such as the Composer(TM) symbol editor, information about what version of the cell view you are reading or editing appears in the title banner and is updated automatically as you perform DM operations.

Automatic checkins/checkouts and Library Manager DM operations are managed by the Cadence Generic Design Management (GDM) facility, which calls DesignSync DFII to execute the operation. See [Support for GDM](#) and [Support for Library Manager](#) for details. You can also configure Library Manager to call Synchronicity forms and functions directly instead of going through the GDM layer. See [Configuring Library Manager To Call Synchronicity Forms](#) for details.

DesignSync DFII manages cell views as single revision-controllable objects called collection objects, which ensure data integrity. When you operate on cell views, DesignSync DFII outputs status messages using a cell-view naming convention instead of listing all the files that make up the cell view. This naming convention is **<name>.sync.cds**, where **<name>** is the name of the cell view folder on your file system. For example, if a NAND2 cell has two cell views, schematic and symbol, then DesignSync DFII represents the cell views as **schematic.sync.cds** and **symbol.sync.cds**.

To use DesignSync DFII:

1. Set up your environment.
2. Customize DesignSync DFII as needed.
3. Configure your local workspaces for DesignSync DFII, if needed. If you are using modules, Create a Module Workspace or Add Objects to the Module. If you are using DesignSync objects, Configure your library (if you are checking in a library for the first time), or join a library if you want to access an existing library.
4. Perform DM operations as needed, such as:
  - Check in design files



- Check out design files
- Show which design files are checked out
- Cancel a checkout
- Tag design files
- Delete design data

### Notes:

- For details on how DesignSync recognizes Cadence data, see DesignSync Data Manager User's Guide: How DesignSync Recognizes Cadence Data.
- DesignSync DM operations can be access controlled. A Synchronicity DM operation initiated from DFII will fail if you have been denied access to that operation. See the Synchronicity Access Control Guide for more information.
- The *DesignSync Data Manager DFII User's Guide* assumes that DesignSync DFII has not been customized. You may observe differences in your environment from what is described here if you or your project leader have enabled any customizations. For example, cell view windows have a limited Synchronicity menu by default. You can choose to display the full Synchronicity menu or suppress the menu entirely (see Controlling the Synchronicity Menu on Cell View Windows). Procedures in this documentation assume that cell view windows have the short Synchronicity menu.
- The *DesignSync Data Manager DFII User's Guide* describes capabilities that are specific to DesignSync DFII. Some general DM concepts and DesignSync capabilities are not documented here. See DesignSync Data Manager User's Guide for more information. Also, use Cadence's documentation library (OpenBook or cdsdoc, depending on the version of Cadence software you are using) for information about the DFII environment and other Cadence tools such as Library Manager.
- DesignSync DFII has a SKILL(TM) application programming interface (API). The API provides programmatic access to DesignSync DFII operations, and also lets you customize the Synchronicity menus. See the DesignSync DFII SKILL Programming Interface Guide

## Support for GDM

In addition to the Synchronicity menu, you can access DesignSync DFII design management (DM) operations through applications that use the Cadence Generic Design Management (GDM) facility. GDM is the interface through which Cadence applications, such as Library Manager, interact with a DM system.

GDM supports the DM operations that are commonly used by designers, such as check in, check out, cancel, and delete. These DM operations are available in several ways:

- Through GDM-enabled interfaces such as Library Manager and the Hierarchy Editor.
- Through other GDM-based operations, such as Auto Checkin and Auto Checkout

- As GDM shell commands

The underlying DM system, such as DesignSync DFII, supports the GDM operations either as shell commands or as part of a file information server. The Synchronicity file information server is `syncfisrvpp`. For more information about GDM, see the "Cadence Application Infrastructure User Guide" from Cadence's documentation library. For more information on `syncfisrvpp`, see DesignSync DFII Processes.

DFII users who are familiar with Library Manager may want to continue using Library Manager in conjunction with the Synchronicity menu. See Support for Library Manager for details.

Both Library Manager and GDM shell commands accept DesignSync DFII-specific options. From Library Manager forms, use the **Use Options** field. For GDM shell commands, use the `-extra` option. The Using Library Manager Without Synchronicity Customizations topic lists the DesignSync DFII-specific options that you can specify from Library Manager and GDM shell commands. One tagging-related option is not listed because Library Manager does not support tag operations: the `-modified` option, which corresponds to the **Tag Modified Objects** option from DesignSync DFII Tag forms. The `gdmsetname` shell command does accept `-modified` as a `-extra` value.

## Related Topics

DesignSync DFII Processes  
Support for Library Manager

## Support for Library Manager

You can use Cadence's Library Manager to perform design management (DM) operations. If you are familiar with Library Manager, you may want to continue using Library Manager in conjunction with using the Synchronicity menus.

By default, Library Manager has its own forms and functions that then communicate with DesignSync DFII through the GDM layer (see Support for GDM). You can optionally configure Library Manager to call Synchronicity forms and functions directly. See Configuring Library Manager To Call Synchronicity Forms for details.

Which DM operations are available from Library Manager and how Library Manager behaves depends on whether the Synchronicity customizations have been enabled or not. See the following topics as appropriate:

- Using Library Manager Without Synchronicity Customizations
- Using Library Manager With Synchronicity Customizations

When using Library Manager with DesignSync, the Library Manager includes four DesignSync specific information fields for View and File information:

- **WS Status** - Workspace status. For a full description of available workspace status values, see *ENOVIA Synchronicity Command Reference: ls command: Report Options*.
- **Server Status** - Server Status. For a full description of available server status values, see *ENOVIA Synchronicity Command Reference: ls command: Report Options*.
- **Tags** - Lists version tags of a managed object. The column lists tags in the order of Most-Recent to Oldest (the reverse order of when the tags were added).
- **Member Of** - Displays the instance name for module members. If an object does not belong to a module, this field is blank.

When the display option for these columns is enabled, you can hide or show or resize the columns. You can also re-order the columns, however, they will always appear after the standard Library Manager columns. If you want these columns to never appear in Library Manager, you can disable their display using a DesignSync registry key. For information on enabling or disabling the display of these informational columns, see, *The ENOVIA Synchronicity DesignSync Data Manager Administrator's Guide: Library Manager Display Additional Columns (ExtendCadenceLMColumns)*.

### Related Topics

- Support for GDM
- Configuring Library Manager To Call Synchronicity Forms
- Using Library Manager Without Synchronicity Customizations
- Using Library Manager With Synchronicity Customizations

## Support for Hierarchy Editor

You can use Cadence's Hierarchy Editor to perform basic design management (DM) operations. If you are familiar with the Hierarchy Editor, you may want to continue using it in conjunction with using the Synchronicity menus.

When you use the Hierarchy Editor with the DesignSync DFII integration, the integration places a Synchronicity menu in the menu bar.

The following DM operations are available from the Synchronicity menu:

- Checking In a Design Hierarchy

- Checking Out a Design Hierarchy

- Canceling a Design Hierarchy Check Out

- Tagging a Design Hierarchy

**Note:** Not all of these commands are available at all user levels. For more information, see *Selecting a User Level*.

## DesignSync DFII Processes

Several DesignSync processes may run when you use DesignSync DFII.

**stcl** -- A DesignSync client process that communicates with the SyncServer (the server that manages the vault) when you perform design management (DM) operations using Synchronicity menu commands. One stcl process runs per DesignSync DFII session. The process starts when you invoke DesignSync DFII and ends when you exit DesignSync DFII.

**stcl** -- A DesignSync client process that communicates with the Designsyntax daemon (syncd), which in turn communicates with the SyncServer. An stcl process starts each time you execute a DM operation from Library Manager or any Generic Design Management (GDM) facility and ends when the operation completes.

### Note:

- The stcl process inherits its environment, such as environment variable definitions, from syncd. Therefore, if you make changes to your environment, such as modifying your `PATH` environment variable, and syncd is already running, you must stop and restart syncd for the changes to affect your DesignSync DFII session. Use `syncdadmin stop` from your OS shell to stop syncd.
- You can eliminate the use of stcl and syncd to perform DM operations from GDM-based applications and instead use the Synchronicity file information server (syncfsvpp process and libgdmsync shared library). Using the Synchronicity file information server can improve performance and reliability. The `fsvDoesOp` optimization is enabled when you configure the installation for DesignSync DFII. You can also enable or disable this optimization from SyncAdmin; see *SyncAdmin: Third Party Integration Options*.

**syncd** -- The Synchronicity daemon (syncd) handles communication between an stcl Synchronicity client process and a SyncServer. If the syncd process is not already running, it is started the first time you execute a DM operation using Library Manager or any GDM facility and continues running after exiting DesignSync DFII. The syncd process ends after 180 minutes without communication with an stcl process (unless a lock has been placed on syncd, or someone has changed the time-out period with the `SYNC_DAEMON_TIMEOUT` environment variable). One syncd process runs per user per machine. For more details on syncd, type the following from your UNIX shell:

```
stcl -e "help syncdadmin"
```

**syncfisirvpp** -- A process that, in conjunction with a shared library provided by Synchronicity, forms the file information server that provides information to Library Manager (or any GDM-enabled application) about the state of objects in a workspace. GDM asks syncfisirvpp for information about a file, then syncfisirvpp requests information from the SyncServer. The syncfisirvpp process gets the requested information and responds to the application. One syncfisirvpp runs for each Cadence application that communicates with a syncfisirvpp process (for example, icfb and the Library Manager would both have a syncfisirvpp process). These processes stop when you exit your DFII session.

### Note:

GDM-based applications can execute DM operations such as checkins and checkouts directly through the Synchronicity file information server rather than spawning a separate stcl process. Executing operations in this way can improve performance and reliability. This fisrvDoesOp optimization is enabled when you configure the installation for DesignSync DFII. You can also enable or disable this optimization from SyncAdmin; see SyncAdmin: Third Party Integration Options.

## DesignSync DFII Object States

Design files that are managed by DesignSync DFII can exist in your workspace in one of five states: locked copy, unlocked copy, link to the cache, link to the mirror, or locked reference. You can have any mix of states in the same workspace.

### Note:

The DesignSync **reference** state is not supported by DesignSync DFII unless it is a locked reference (used when regenerating design data).

When you perform check-in, check-out, and cancel operations, use the **Mode** field to select what state you want your design objects left in after the operation. The default state is an unlocked copy, although you or your project leader may define a different default fetch mode (see Selecting a Default Fetch Mode). Your project leader can also restrict what modes are available from the **Mode** field (see Controlling the Display of Check-In or Check-Out Modes).

You check out an object with a **lock** when you want to edit or regenerate the object. Only one person can have a given branch of an object locked at a time. Once you are done with your changes, you can check in the object, which creates a new version in the vault.

### Note:

Some design management systems define a checkout to be with a lock. DesignSync DFII defines a checkout as any operation that gets a version of an object from the vault and places it in your workspace, regardless of the check-out mode.

If you are not editing an object, then the object should be in one of the three read-only (fetch) states. DesignSync DFII defines a **fetch** to be a checkout in a read-only (not locked) mode. If your team is not using the cache or mirror sharing methodologies, then you will have unlocked copies of objects in your workspace. Otherwise, you will have symbolic links in your workspace to objects in a shared cache or mirror directory. See Caches and Mirrors for details.

## Related Topics

- Caches and Mirrors
- Controlling the Display of Check-In or Check-Out Modes
- Selecting a Default Fetch Mode
- Checking In Design Files
- Checking Out Design Files

## Using modules with Cadence library data

Cadence library data ( files or *\*.sync.cds* collection objects) can be managed as part of a module, checked in, populated, etc. in the same way as any other files or collection objects.

## Supported module structure

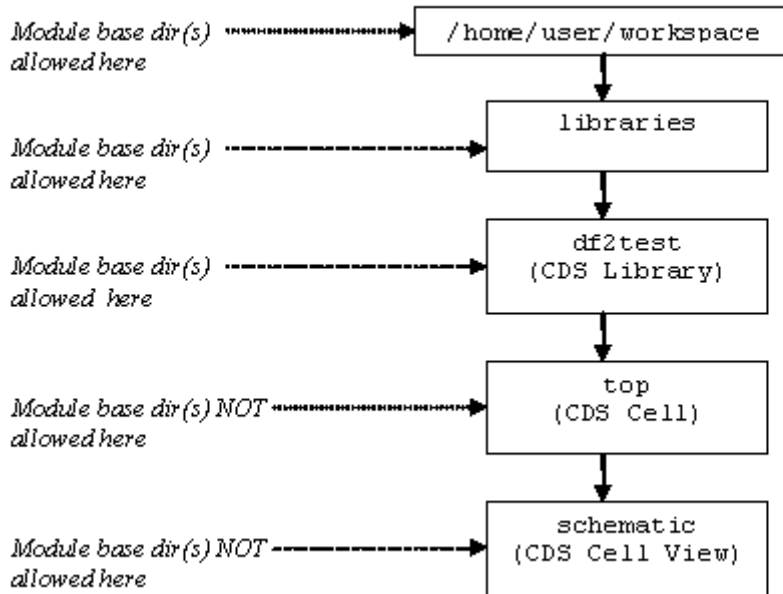
Cadence library data may be managed as part of a module. A single Cadence library may contain data from more than one module, for example, some cells from one module and some from another.

The base directory of the modules must be at or above the library directory. That is, the module base directory may not be at the cell directory level or below. In addition, a single library may not contain both module data and managed non-module data (stored in a simple DesignSync vault).

When using Cadence with modules, Cadence view recognition should be enabled for all clients that check in Cadence module data within a data hierarchy. Cadence view recognition is set for a client during the client installation procedure. If you did not enable Cadence view recognition during client installation, you can set it post-installation by using the **SyncAdmin | Site Options | Third Party Integration** panel to enable Cadence Design System Collections.

These restrictions provide the ability to efficiently identify and manage library data contained in a module.

The following diagram illustrates the allowed structure of the Cadence library in DesignSync.



## Identifying modules

To improve performance, the DSDFII interface maintains a list of known modules. This reduces time spent scanning the DesignSync workspaces for managed Cadence data.

DSDFII uses the following information to build a list of known modules:

- the list of library directories from the cds.lib file at startup.
- the current working directory of the DFII process.
- the paths defined by the user as a workspace root path.

## Using a library containing data from different modules

DSDFII supports using a single library to centralize managed data from different modules, providing shared functionality to all of the referenced modules. Generally cells from different modules are incorporated into the central library module by one of the following styles:

- Split by cell - The entire cell belongs to a module. For example, those cells used by the “clock” section of the design are in the Clock module. Those used for “buffering” are in the Buffer module.
- Split by view - An entire view belongs to a module. For example, the layout/abstract views in one module and the schematic/symbol views in another.

**Important:** When working in a "split by view" scenario, cell-level files, such as the cell level property bag, must either be assigned to the module containing the view, or to a central module referenced by the view's module.

The central library module hierarchy can contain hierarchical references to the other modules. That way, for example, a user only interested in the schematic could populate the central module recursively, but filter out the href for the layouts module.

## Related Topics

Adding Objects to Modules

DesignSync Data Manager DFII SKILL Programming Interface Guide: `dssAddFileP`

Running DesignSync Commands with the Exec Stcl Interface

DesignSync Data Manager DFII SKILL Programming Interface Guide: `dssExecuteTclP`

## Caches and Mirrors

DesignSync DFII supports cache and mirror sharing methodologies for designers on the same local area network (LAN). Both methodologies let users share read-only copies of files instead of each user needing local copies. This sharing of data is accomplished through UNIX symbolic links. By using links, the amount of file duplication among users on the LAN is reduced, thereby lessening disk-space usage.

There are several differences between caches and mirrors.

### Caches

- The cache directory can contain any number of versions of a design object.
- The cache is updated with new versions of objects only when users specify the cache option (**Read (cache link)**) to the check-in or check-out operations and the specified version does not already exist in the cache.
- The links to cached files are static. Your link to a particular version in the cache remains unchanged until you check out a different version. Versions in a cache that are no longer linked to by a user are automatically purged from the cache.
- Because multiple versions of an object can exist in the cache, disk usage is potentially larger than for mirrors.
- A cache directory exists by default because DesignSync DFII also uses the cache as its scratch area for temporary files. When using the cache sharing methodology, users do not need to specify what cache directory they will be accessing. Project leaders can also specify project-specific caches using SyncAdmin.



### Mirrors

Mirrors have the following characteristics:

- The links to mirrored files are dynamic. Because a mirror's contents are automatically updated when the configuration changes, links in your workspace to mirrored files are automatically refreshed if the version of the object in the mirror directory changes.
- Because only one version of an object is available in the mirror, disk usage is minimized.
- To set up a mirror, see [DesignSync System Administration Help: Administering Mirrors](#). Users must then specify the **mirror directory** associated with their workspaces, either when configuring the library, or when accessing the library for the first time.

**Note:** Mirrors cannot be used with modules.

Your choice of using a cache or mirror is driven by your team's work model. For example, layout designers work with very large files and typically work with the latest versions of files related to the layout. Therefore, the mirror methodology is appropriate. Designers who work with Verilog or VHDL files are more likely to use the cache methodology, because they do not want changes to files that others are making to automatically affect them.

Based on your team's chosen methodology, your project leader may define links to the cache or links to the mirror as your default fetch state. Your project leader can also restrict what object states are available from the **Mode** field during check-in, check-out, and cancel operations.

See [DesignSync System Administration Help: Mirroring Overview](#) for more information on mirrors.

### Related Topics

- DesignSync DFII Object States
- Controlling the Display of Check-In or Check-Out Modes
- Selecting a Default Fetch Mode
- Configuring a Library
- Accessing a Library for the First Time
- Checking In Design Files
- Checking Out Design Files



# Status Browser

## Status Browser Overview

The Status Browser provides a browseable view of your Cadence data and all of your module and DesignSync workspace data. This allows you to see at a glance what libraries are in DSDFII, what cells, cell views, and files are contained within the libraries, and the current status of your files and views. From the Status Browser, you can select objects and perform appropriate operations on them, such as checkouts, checkins, etc.

DSDFII features two different styles of presenting the information:

Status Browser Tree View

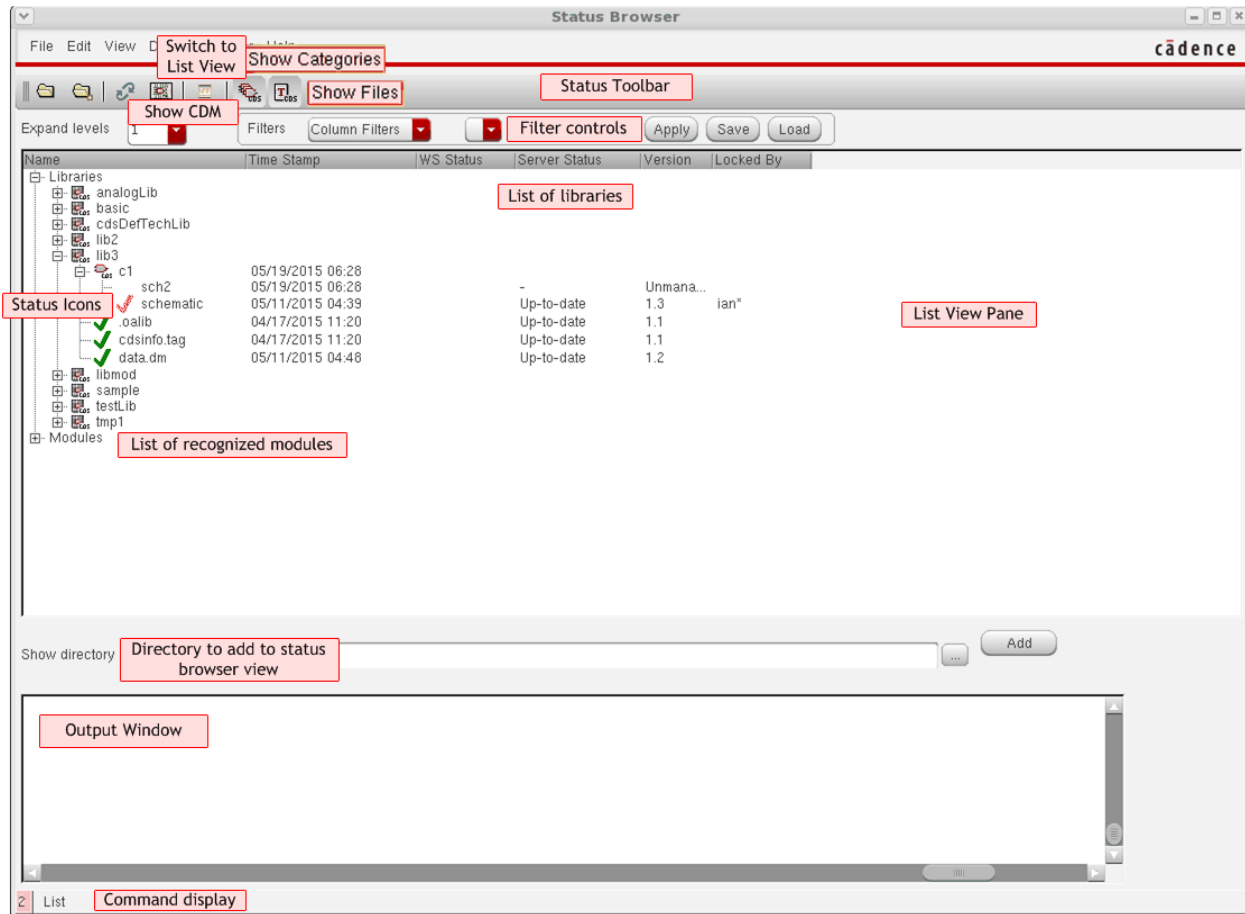
Status Browser List View

The column widths for each column in the Status Browser display are defined in Status Browser Options.

## Status Browser Tree View

The Status Browser provides a browseable view of your Cadence data. This allows you to see at a glance what libraries are in DSDFII, what cells, cell views, and files are contained within the libraries, and the current status of your files and views. From the Status Browser, you can select objects and perform appropriate operations on them, such as checkouts, checkins, etc.

## The Status Browser Tree View Window



## Toolbar

The toolbar provides quick access to commonly used functions:

Action	Result
<b>Open</b>	Launches the Open file dialog with the selected objects.
<b>Open with</b>	Launches the Open file dialog with the selected objects.
<b>Refresh</b>	Refreshes the view so you have the most current, up-to-date, information.
<b>Show Cadence Library Manager</b>	Open the Cadence Library Manager.
<b>Switch to List Mode</b>	Switch from the Tree View to the List View. The switch maintains focus on any selected objects.
<b>Show Categories</b>	Shows categories within libraries which can be expanded to show cells. When categories are shown, the cells are not listed directly under the library; when categories are NOT shown, the

	cells are shown directly under the library.
<b>Show Files</b>	Shows all files within libraries and cells, including category files.

## View Pane

The view pane shows the objects in a tree view (expandable) form starting at the library or module level.

From the Tree View, you can perform the following actions:

- To expand a collapsed item, left click the plus sign (+) or double click on the item.
- To collapse an expanded item, left click the minus sign (-) or double click on the item.
- To operate on an item, right click on the item and choose an operation from the context menu.

By default, expanding a collapsed item shows the next level down (1). To expand more levels, you can select the **Expand level** option and select the option to expand a fixed number between 1 and 5 or expand all levels at the same time.

**Note:** Setting to expanding **All** levels can have performance implications.

From this display, you can hide/show any columns defined as shown in the Status Browser Options, or rearrange the order of the options, but any changes will persist only in this window. When the status browser is opened again, the setting will revert to view and order defined in the Status Browser Options.

## Show directory

You can add a directory to the status browser watch list for the current status by

- typing the directory location in this field
- browsing the local file system for the directory

After you've selected the directory, press the **Add** button to add the directory to the status browser.

To remove a directory from the status browser, select the directory and select Remove Directory from the context menu or the **View** menu.

Note: To add a directory to the status browser permanently, enter it in the Status Browser Options.

## Filter Controls

You can create filters to filter out information you are not interested in.

### To create a filter:

1. The first pull-down contains a list of Column Filters. Use the pulldown to select the column to filter by.
2. Select the desired column filter.
3. The second pull-down contains a list of values contained in the columns. Select the value of the column to filter by. If you do not see an option, it may be because it is not applicable or because no objects containing the desired choice have been expanded; for example, if you want to filter by a **WS Status** of Modified, you must have expanded an object containing a modified object.
4. After you select the value in the second column, the column again displays <Select>.
5. Each filter applied is indicated by a + suffix, so to view the filters applied, open the first pull-down to see which columns are filtered and then select the second column to see the filter value.

### To save a filter:

You can save a filter set in order to use it again the next time a filter is needed.

1. Apply the desired filters.
2. Press the **Save** button.

### To load the last filter:

You can load the last filter set saved by pressing the **Load** button.

**Note:** The **Default Field Values** panel, which can be opened by selecting **File | Show Defaults** always shows you the last Status Browser filter saved in the Status Browser Filters form.

### To remove filters:









When filters are set, you can clear filters by selecting the filter value again, or select **<ALL>** in the second pull-down list.

## List of Libraries

The list of libraries includes libraries. It does not display combined libraries. To view and work with combined libraries, switch to the Status Browser List View.

## Status Icons

DesignSync features informational symbols that represent the revision control status of the associated views or files. These symbols provide a quick view of the object status.

Status Icon	Description
	Object is unlocked, unmodified and up-to-date
	Object is unlocked, locally modified and up-to-date (Needs checkin)
	Object is unlocked, locally modified, and out-of-date (Needs merge)
	Object is unlocked, unmodified and out-of-date (Needs populate)
	Object is locked, unmodified and up-to-date
	Object is locked, modified and up-to-date (Needs checkin)
	Object is locked, modified and not up-to-date (Needs merge)
	Object is locked, not modified and not up-to-date (Needs populate)
<NoIcon>	Object is unmanaged, or DesignSync is unable to determine the status of the object.

## Output Window

The **Output Window**, located below the Show Directory window, displays any output produced by operations performed within the Status Browser or outside the Status Browser while the Status Browser is open. When the Status Browser is closed, the buffer is cleared. The buffer for the Status Browser output is not maintained from session to session. If DSDFII debugging is turned on then the debug output will also be duplicated to this field. If DSDFII issues SKILL warnings or errors, then those will also be duplicated to this log field.

**Note:** Errors from scripts running while the Status Browser is open are not displayed in the window.

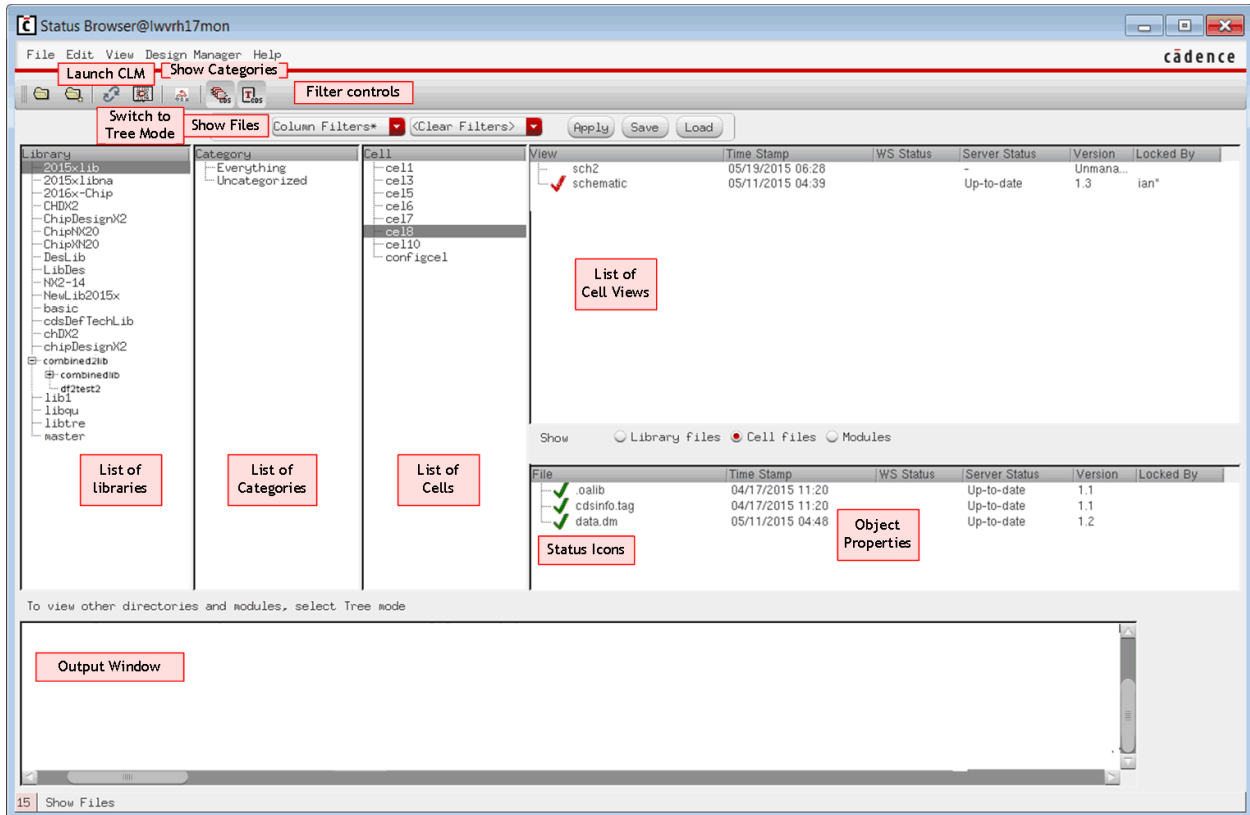
You can copy and paste from the Output Window. Use the scroll bars to move around within the window to locate the desired command history. By default, the window buffers the last 1000 lines. For information on adjusting the buffer size, see [Setting the Output Window Buffer Size for Status Browser](#).

You cannot manually clear the buffer. If you want to clear the output buffer, you can close and reopen the Status Browser.

## Status Browser List View

The Status Browser provides a browseable view of your Cadence data. This allows you to see at a glance what libraries are in DSDFII, what cells, cell views, and files are contained within the libraries, and the current status of your files and views. From the Status Browser, you can select objects and perform appropriate operations on them, such as checkouts, checkins, etc. The column widths for each column in the Status Browser display are defined in Status Browser Options.

## The Status Browser List View Window



## Toolbar

The toolbar provides quick access to commonly used functions:

Action	Result
<b>Open</b>	Launches the Open file dialog with the selected objects.
<b>Open with</b>	Launches the Open file dialog with the selected objects.
<b>Refresh</b>	Refreshes the view so you have the most current, up-to-date, information.
<b>Show Cadence Library Manager</b>	Open the Cadence Library Manager.
<b>Switch to Tree Mode</b>	Switch from the List View to the Tree View. The switch maintains focus on any selected objects.
<b>Show Categories</b>	Shows/hides categories column.



<b>Show Files</b>	Shows all files within libraries and cells, including category files.
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## List of Libraries

The list of libraries includes libraries and combined libraries. The libraries and combined libraries can be expanded by clicking the + next to the combined library name.

**Note:** Not all Revision Control operations can be performed on combined libraries. If you select a combined library, you cannot use the context menu perform the following options:

- Checkin
- Checkout
- Tag
- Cancel
- Show checkouts
- Add to module.

## List of Categories

The list of categories including categories that shared by combined libraries. Categories that are part of combined libraries can be expanded by clicking the + next to the category name.

## List of Cells

The list of cells in a libraries. When a combined library is selected, the cell column contains all the cells at that level of the combined libraries. When a cell name exists in more than one library in the combined library, the View column displays the views from the combined libraries and, where appropriate to aid identification, the library name appears in [square brackets] after the View name.

## View Pane

The view pane shows the objects in a List view (expandable) form starting at the library. When a combined library is selected, the View column displays the views from the selected cells that appear in the combined libraries. If the View appears in multiple libraries, the library name is displayed in [square brackets] after the View name.

From the List View, you can perform the following actions:

- To expand an item, click on the item which will then expand to the next window to the right. If multiple categories are selected, objects from all the selected

categories are shown in the subsequent windows; however if multiple objects of any other type are selected, nothing is shown in the expanded fields.

- To operate on an item, right click on the item and choose an operation from the context menu. You can operate on multiple objects within the same operation.

## Show

Determines what type of objects to show in the View Pane.

- **Library files** - shows files in the currently selected library.
- **Cell Files** - shows files in the currently selected cell.
- **Modules** - shows the set of known modules, and their status, just as the modules are shown below the Modules node in the Tree mode.  
**Note:** At this time, the workspace and server status are not displayed for module objects.

## Filter Controls

You can create filters to filter out information you are not interested in.

### To create a filter:

1. The first pull-down contains a list of Column Filters. Use the pulldown to select the column to filter by.
2. Select the desired column filter.
3. The second pull-down contains a list of values contained in the selected column. Select the value of the column to filter by. If you do not see an option, it may be because it is not applicable or because no objects containing the desired choice have been expanded; for example, if you want to filter by a **WS Status** of Modified, you must have expanded an object containing a modified object.
4. After you select the value in the second column, the column again displays <Select>.
5. Each filter applied is indicated by a + suffix, so to view the filters applied, open the first pull-down to see which columns are filtered and then select the second column to see the filter value.

### To save a filter:

You can save a filter set in order to use it again the next time a filter is needed.

1. Apply the desired filters.
2. Press the **Save** button.

### To load the last filter:

You can load the last filter set saved by pressing the **Load** button.









**Note:** The **Default Field Values** panel, which can be opened by selecting **File | Show Defaults** always shows you the last Status Browser filter saved in the Status Browser Filters form.

**To remove filters:**

When filters are set, you can clear filters by selecting the filter value again, or select **<ALL>** in the second pull-down list.

**Status Icons**

DesignSync features informational symbols that represent the revision control status of the associated displayed views or files. These symbols provide a quick view of the object status.

Status Icon	Description
	Object is unlocked, unmodified and up-to-date
	Object is unlocked, locally modified and up-to-date (Needs checkin)
	Object is unlocked, locally modified, and out-of-date (Needs merge)
	Object is unlocked, unmodified and out-of-date (Needs populate)
	Object is locked, unmodified and up-to-date
	Object is locked, modified and up-to-date (Needs checkin)
	Object is locked, modified and not up-to-date (Needs merge)
	Object is locked, not modified and not up-to-date (Needs populate)
<NoIcon>	Object is unmanaged, or DesignSync is unable to determine the status of the object.

**Output Window**

The **Output Window** displays any output produced by operations performed within the Status Browser or outside the Status Browser while the Status Browser is open. When the Status Browser is closed, the buffer is cleared. The buffer for the Status Browser output is not maintained from session to session. If DSDFII debugging is turned on then the debug output will also be duplicated to this field. If DSDFII issues SKILL warnings or errors, then those will also be duplicated to this log field.

**Note:** Errors from scripts running while the Status Browser is open are not displayed in the window.

You can copy and paste from the Output Window. Use the scroll bars to move around within the window to locate the desired command history. By default, the window buffers the last 1000 lines. For information on adjusting the buffer size, see [Setting the Output Window Buffer Size for Status Browser](#).

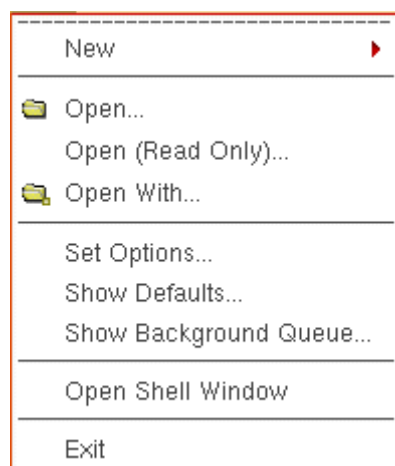
You cannot manually clear the buffer. If you want to clear the output buffer, you can close and reopen the Status Browser.

## Preview

Shows a preview of the selected cell view using the thumbnail of the cell view, if the thumbnail exists and only one cell view is selected.

## File Menu

The File menu contains the commands that are most relevant to library and view management as well as the preferences for status browser.



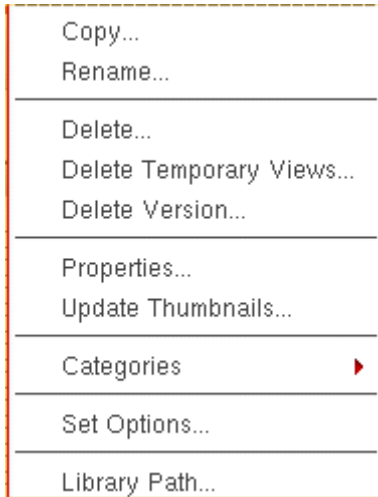
The following actions can be selected from the File menu:

Action	Result
<b>New</b>	Opens the Library Manager Create or Open dialog box, allowing you to select a library, cell, or view.
<b>Open</b>	
<b>Open (Read only)</b>	
<b>Open With</b>	
<b>Set Options</b>	Opens the Set Options dialog with the focus set to Status Browser Options.
<b>Show Defaults</b>	Shows the defined default values.
<b>Show Background Queue</b>	Opens the background queue, allowing you to watch underlying command processing.
<b>Open Shell Window</b>	Opens a shell window in the user's default shell.

<b>Exit</b>	Closes the Status Browser.
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## Edit Menu

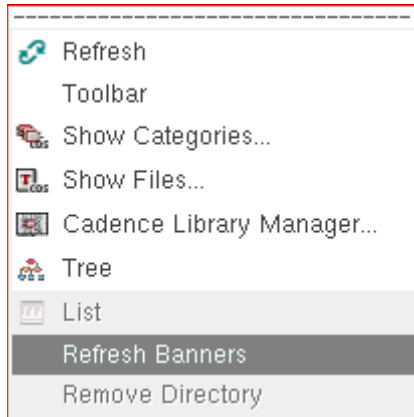
The Edit menu choices allow you to copy, rename, delete various objects, and other options.



Action	Result
<b>Copy</b>	This command not implemented in the Status Browser. Use the Cadence Library Manager for this feature.
<b>Rename</b>	This command not implemented in the Status Browser. Use the Cadence Library Manager for this feature.
<b>Delete</b>	Launches the Deleting Objects dialog box.
<b>Delete Temporary Views</b>	Launches the Delete Temporary Cell Views dialog box.
<b>Delete Version</b>	Launches the Delete Version dialog box.
<b>Properties</b>	Invokes the Cadence Library Property Viewer for the selected object.
<b>Update Thumbnails</b>	Updates the thumbnail icon for the selected object.
<b>Categories</b>	Launches the create, modify, and delete dialog boxes for categories and sub-categories.
<b>Set Options</b>	Opens the Set Options dialog with the focus set to Status Browser Options.
<b>Library Path</b>	Launches the Cadence Library Path Editor.

## View Menu

The View menu contains the commands that control what objects are displayed in the List View.



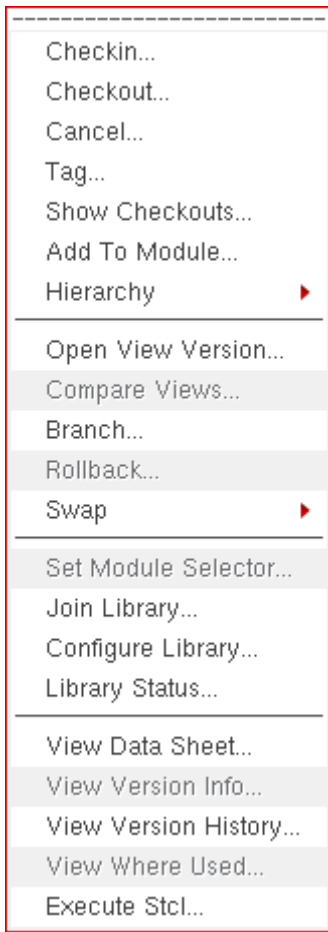
The following actions or options can be selected from the View Menu:

Action/Option	Result
<b>Refresh</b>	<p>Verifies the selected object's current properties and updates the DesignSync display.</p> <p>In the case of container objects (libraries, cells, categories, etc.), the child objects are also refreshed.</p> <p>Some DesignSync operations do not update the display automatically because of performance constraints. To ensure that your display is up-to-date, you should refresh an object before operating on it, particularly if the object is shared with other users as they may have changed the state of an object.</p>
<b>Toolbar</b>	When checked, the Toolbar displays. When not checked, the Toolbar is hidden.
<b>Show Categories</b>	When checked, the Categories are displayed within libraries. When not checked, the Categories are hidden.
<b>Show Files</b>	When checked, files within libraries and cells are displayed. When not checked, files within libraries and cells are hidden.
<b>Cadence Library Manager...</b>	Open the Cadence Library Manager.
<b>Tree</b>	Switch from the list view to the Tree view. The switch maintains focus on any selected objects. This is inactive if you are in list view mode.

<b>List</b>	Switch from the tree view to the list view. The switch maintains focus on any selected objects. This is inactive if you are in tree view mode.
<b>Refresh Banners</b>	Refresh of all banners in open windows
<b>Remove Directory</b>	Removes the specified directory node from the status browser. The directory will then be hidden from view in the browser.  If you want to re-add a hidden directory to the status browser, enter the location in the <b>Show Directory</b> field and select <b>Add</b> . <b>Note:</b> This option is not applicable to List Mode.

## Design Manager Menu

The Design Manager menu contains the commands that are most relevant to revision control operations. Some of the actions available from the Design Manager menu are also available by selecting a file or a folder and right-clicking to display the context menu.



Action/Option	Result
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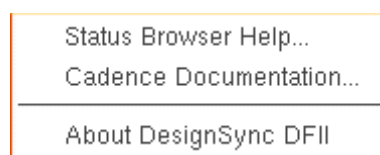
<b>Checkin</b>	Invokes the Check in Dialog box. See Checking In Design Files for more information.
<b>Checkout</b>	Invokes the Check Out Dialog box. See Checking Out Design Files for more information.
<b>Cancel</b>	Invokes the Cancel Checkout dialog box. See Canceling a Checkout for more information.
<b>Tag</b>	Invokes the Tag dialog box. See Tagging Design Files for more information.
<b>Show Checkouts</b>	Displaying a check-out status lists the objects, in one or more design libraries or a specified directory, that are locked (checked out for editing). See Displaying Check-out Status for more information
<b>Add to Module</b>	Invokes the Add to Module dialog box. See Adding Objects to a Module for more information.
<b>Hierarchy</b>	Invokes the designated Design Management operation in hierarchical mode. <ul style="list-style-type: none"> <li>• Checking In a Design Hierarchy,</li> <li>• Checking Out a Design Hierarchy,</li> <li>• Canceling a Design Hierarchy</li> <li>• Check Out, Tagging a Design Hierarchy.</li> </ul>
<b>Open View Version</b>	Invokes the Open Version dialog box to display cell view versions other than the version in your workspace. For more information, see Opening Cell View Versions.
<b>Compare Views</b>	Invokes the Compare Cell Views dialog box. See Compare Cell Views for more information.
<b>Branch</b>	Invokes the Make Branch dialog box. See Branching, Merging, and Overlaying for more information.
<b>Rollback</b>	Invokes the Rollback dialog box. See Rollback Cell Views for more information.
<b>Swap</b>	Brings up a submenu allowing you to launch the swap commands. For more information on understanding swap, see Understanding Module Edit-in-Place Methodology. <p>The individual swap commands:</p> <ul style="list-style-type: none"> <li>• Show "swapped" Modules (Swap Show)</li> <li>• Restore to Expected Module Versions (Module Swap Restore)</li> <li>• Replace a Module Version in a Hierarchy (Module Swap Replace)</li> </ul>



<b>Set Module Selector</b>	Invokes the Setting the Module Selector dialog box.
<b>Join Library</b>	Invokes the Join Library wizard. See Accessing a Library for the First Time for more information.
<b>Configure Library</b>	Invokes the Configure Library wizard. See Configuring a Library for more information.
<b>Library Status</b>	Displays the Library Status. See Displaying Library Status for more information.
<b>View Data Sheet</b>	Displays the Data Sheet. See Displaying Data Sheets for more information.
<b>View Version Info</b>	Displays the View Version Info dialog. See Displaying Version Info for more information.
<b>View Version History</b>	Displays the Version History dialog box. See Displaying Version History for more information.
<b>View Where Used</b>	Displays the Where Used dialog box. See View Where Used for more information.
<b>Execute Stcl</b>	Launches Execute Stcl, which allows you to execute stcl commands. See Running DesignSync Commands with the Exec Stcl Interface for more information.

## Help Menu

The Help menu gives you access to the help for the application as well as important information such as summary of new features and contact information.



The following actions or options can be selected from the Help Menu:

<b>Action/Option</b>	<b>Result</b>
<b>Status Browser Help</b>	Invokes the Status Browser Window help.
<b>Cadence Documentation</b>	Invokes the DesignSync Data Manager DFII User's Guide

<b>About DesignSync DFII</b>	Displays the DesignSync DFII version and ENOVIA contact information.
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## Status Browser Options

This topic explains all of the fields on the Status Browser Options page.

To open the Status Browser Options page:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Status Browser** tab, enter a value for the **Workspace root path** field.
3. Specify the workspace root paths in quotations separated by a comma, for example ("workspace\_path"), ("workspace\_path").

Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.

4. Click **OK**.

### Command to open a shell window

Specifies the executable to run when opening a shell window.

The default value is xterm.

### Show categories in libraries

Specifies whether the categories are shown in the status browser.

By default, this is enabled, meaning that categories are shown.

### Show library and cell files

Specifies whether the libraries and cell files are shown in the status browser.

By default, this is enabled, meaning that libraries and cell files are shown.

### Columns to display

For information on the Columns to display field, see Choosing Status Browser Columns to Display.

## Show status icons

Specifies whether to display status icons on the Status Browser. In addition to the option to display status icons, the icons themselves can also be customized. For more information on customizing the icons, see Customizing the Status Browser Icons.

Note: The **Show Status Icons** option has a corresponding SKILL variable: `syncStatusBrowserShowStatusIcons`. A project leader can set this variable in a site `.cdsinit` file to define the status browser start-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

## View Mode

Select whether to start in Status Browser Tree View or Status Browser List View by default.

## List Mode Column Browser Widths

Select the default width, in pixels, for columns in the status browser mode. These widths persist as the opening value of the columns.

You can set the width for the following columns:

- Library (default width: 75 pixels)
- Category (default width: 75 pixels)
- Cell (default width: 150 pixels)

**Note:** If the status browser is open when these changes are made, you need to close and reopen the Status Browser for the new column widths to take effect.

## Show view folders

Specifies whether the view folders are shown in the status browser.

By default, this is disabled, meaning that view folders are not shown.

## Show non-view folders

Specifies whether the non-view folders are shown in the status browser.

By default, this is disabled, meaning that non-view folders are not shown.

## Show unmanaged objects under modules

Specifies whether unmanaged objects are shown when a module is expanded.

By default, this is disabled, meaning that unmanaged objects are not shown.

**Note:** Objects that have been added to a module are considered part of module and are shown.

## List of the directories to show

Specifies the list of directories to show in the status browser in the format:

```
("dir1" "dir2"...) 
```

By default, the only directory shown is the current working directory.

**Note:** The **List of the directories to show** option has a corresponding SKILL variable: `syncStatusbrowserInitialDirectories`. A project leader can set this variable in a site `.cdsinit` file to define the status browser start-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See **Using SKILL Variables** for details.

## List of directories used to filter displayed modules

Specifies the list of directory paths which will not display in the Status Browser in the format:

```
("dir1" "dir2"...) 
```

Any module with a base directory at or below any of the paths specified will be filtered from display on the Status Browser window. This option takes effect immediately after being set. You do not need to restart the client or manually refresh the Status Browser.

**Note:** This option has a corresponding SKILL variable: `syncStatusBrowserModuleFilterPaths`. A project leader can set this variable in a site `.cdsinit` file to define the status browser start-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See **Using SKILL Variables** for details.

## Sort items on the browser by

Specifies the sort order for items within each level displayed by the browser. Options are:

- type then name - sorts items by type, for example "library" or "view" first, then sorts by name. This keeps like objects together.
- name then type - sorts items by name first.

By default, the sort order is "type then name."

## Creating and Modifying Categories in the Status Browser

Cadence categories are used to organize cells within libraries. A Cadence category contains either cells or subcategories. Cadence categories should not be confused with Module categories which are used to group modules into like groups.

Categories can be managed either from the Cadence Library Manager or through the DSDFII Status Browser.

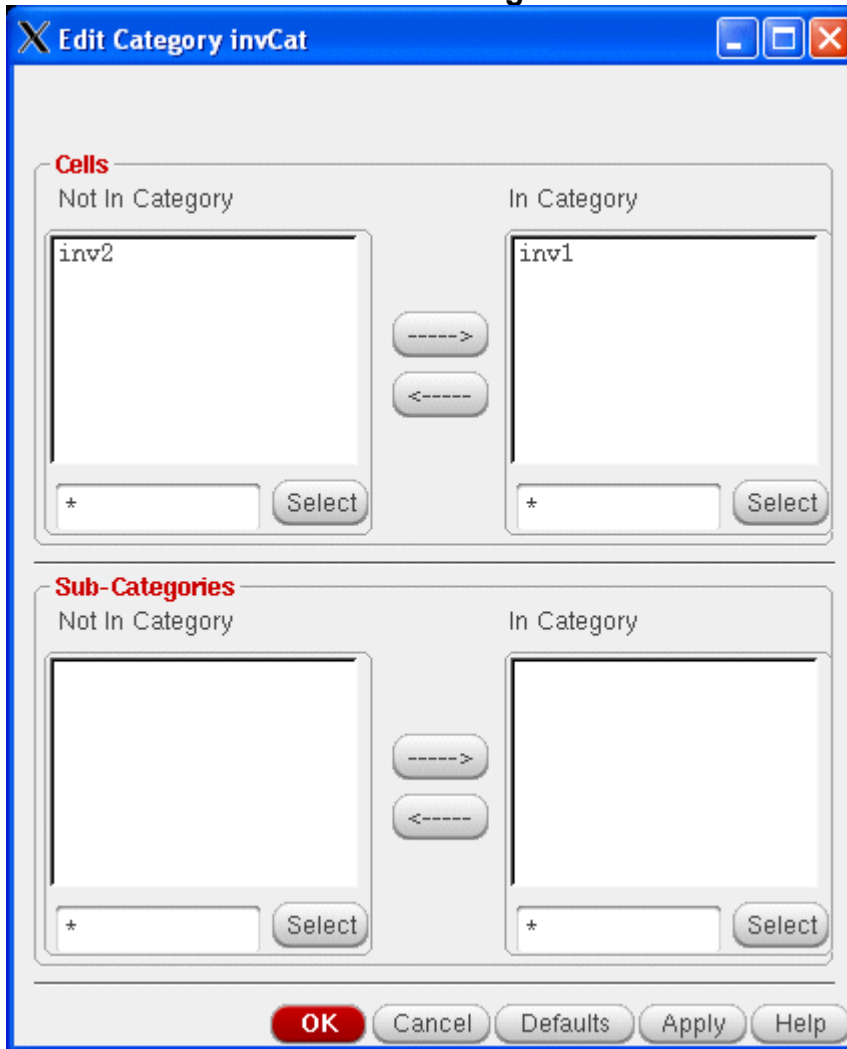
### Modifying categories in the Status Browser

In order to modify a category, you must select the category being modified in the status browser.

To modify a category:

1. From the status browser, select the library that will contain the category and select **Edit | Category | Modify Category**.
2. Modify the fields of the Edit Category form as needed.

Click on the fields in the following illustration for information.

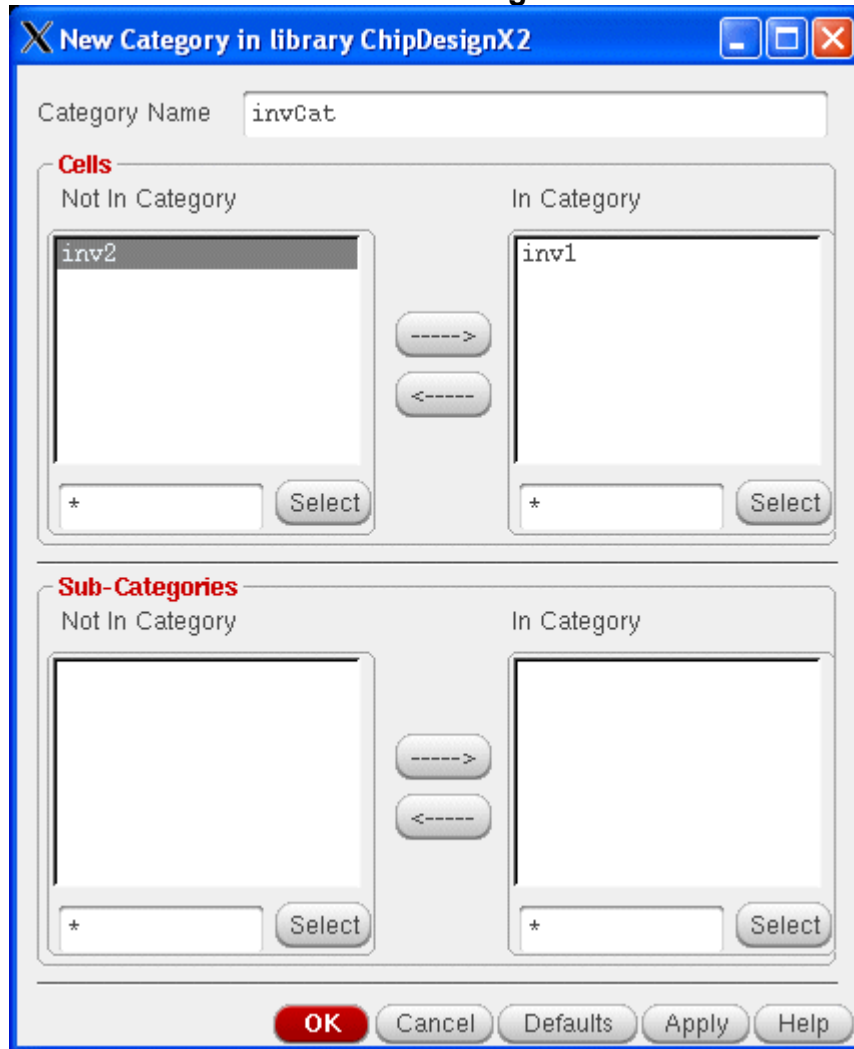


3. Click **OK**.  
You may be prompted to checkout the category file and check it back in with the modifications.

## Creating a New Category

1. In order to create a new category, you must select the library to contain the Category in the status browser.
2. To create a new category:
  1. From the status browser, select the category and select **Edit | Category | New Category**.
  2. Modify the fields of the New Category form as needed.

Click on the fields in the following illustration for information.



3. Click **OK**.  
You may be prompted to auto-checkin the newly created category file(s).

## Creating a New Sub-Category

In order to create a new sub-category, you must select the parent category.

To create a sub-category:

1. From the status browser, select the category that will contain the category and select **Edit | Category | New Sub-Category**.
2. Modify the fields of the New Sub-Category form as needed.

Click on the fields in the following illustration for information.

- Click **OK**.  
You may be prompted to checkout the category file and check it back in with the modifications.

## Edit Category and New Category Field Descriptions

### Category Name

Name of the new sub-category being created. By default this is newCat.

### Cells

**Not in Category** shows a list of cells in the library that are not in the category. **In Category** shows the list of cells that are in the category. Use the arrow buttons to add or remove cells from the category.

### Sub-Categories



**Not in Category** shows a list of categories (sub-categories) in the library that are not in the category. **In Category** shows the list of sub-categories that are in the category. Use the arrow buttons to add or remove sub-categories from the category.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

#### Related Topics:

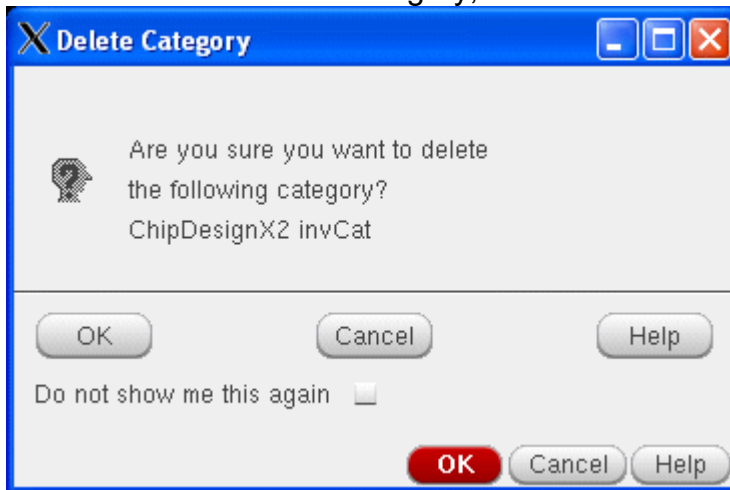
Deleting a Category

## Deleting a Category

In order to modify a category, you must select the category being modified in the status browser.

To modify a category:

1. From the status browser, select the library that will contain the category and select **Edit | Category | Delete**.
2. Select **OK** to delete the category, or **Cancel** to cancel the operation.



**Note:** If you select **Do not show me this again**, you will not see a confirmation page again; the category will be deleted immediately when you make your selection.

# Configuring

## Setting Up Your Environment

Before you can use DesignSync DFII, you must properly set up your environment.

1. You must have a working installation of Cadence tools.

DesignSync DFII relies on Cadence software to properly recognize and handle Cadence data. You must have the Cadence executables directory in your `PATH` environment variable (so that DesignSync DFII can locate the `cds_root` executable). For example, you might have the following lines in your `.cshrc` file:

```
# Cadence installation directory is /usr/cds
setenv PATH
/usr/cds/tools/bin:/usr/cds/tools/dfII/bin:${PATH}
```

2. You must have a working installation of Synchronicity tools.

You must define a `SYNC_DIR` environment variable that points to your Synchronicity installation directory. The Synchronicity executables directory (`$SYNC_DIR/bin`) must also be in your `PATH` environment variable. For example, you might have the following lines in your `.cshrc` file:

```
setenv SYNC_DIR /usr/syncmgr/syncinc
setenv PATH ${SYNC_DIR}/bin:${PATH}
```

3. Specify that Synchronicity is your DM by properly setting the `DMTYPE` variable in your default or library `cdsinfo.tag` file.
4. Load the Synchronicity SKILL code file from your `.cdsinit` file to enable the DesignSync DFII commands.
5. Optionally, configure Library Manager to call Synchronicity forms and functions directly instead of going through the GDM layer.
6. Optionally, create a tag list to define a set tags to choose from for operations such as checking out based on a tag.
7. Optionally, set up SyncServer list files (user or site) to list the SyncServers and vaults you will be accessing from DesignSync DFII. Using SyncServer list files (`sync_servers.txt`) simplifies the selection of a vault from the Configure Library and Join Library wizards.

You can now invoke DFII.

### Related Topics

[DesignSync DFII Design Management Overview](#)

## Specifying DesignSync DFII as Your Design Management System

Cadence `cdsinfo.tag` files contain entries for various properties, including what design-management (DM) system is used to manage your libraries. The `DMTYPE` property, when defined in a `cdsinfo.tag` file, specifies the DM system. An entry of `DMTYPE none` means that you are not using DM. No `DMTYPE` entry means another `cdsinfo.tag` file will determine the DM system.

In a Cadence installation, there is an installation-wide `cdsinfo.tag`. Entries in this file can be overridden by any other `cdsinfo.tag` file found using a search mechanism. For example, there may be a site `cdsinfo.tag` file, a `cdsinfo.tag` file in your home directory, or a library-specific `cdsinfo.tag` file. For details on the `cdsinfo.tag` file and this search mechanism, see the "Cadence Application Infrastructure User Guide", which is available from Cadence's documentation library.

You or your project leader should add the following line to the appropriate `cdsinfo.tag` file:

```
DMTYPE sync
```

Doing so makes "SYNC" available as a DM option when you create a new library. However, DesignSync DFII functions properly even if you have not set `DMTYPE sync`. When you operate on a library that has a `cdsinfo.tag` without `DMTYPE sync`, DesignSync DFII modifies the file by appending `DMTYPE sync`.

When you configure a library that does not have a `cdsinfo.tag` file, DesignSync DFII creates one containing the following lines:

```
DMTYPE sync
CDSLIBRARY
```

**Note:** The `CDSLIBRARY` property is only valid within a library-level `cdsinfo.tag` file and is not inherited from any other `cdsinfo.tag`.

**Important:** If there is no `cdsinfo.tag` file and DesignSync Custom Designer support has been enabled, DesignSync attempts to check in your data in DS Custom Designer format. To avoid this, verify that the `cdsinfo.tag` file has been created before you check in the DesignSync DFII data or that the library being checked in has been properly configured for DesignSync DFII.

### Related Topics

Cadence DFII Design Management Overview  
Setting Up Your Environment  
Configuring a Library

## Configuring Library Manager To Call Synchronicity Forms

You can use Cadence's Library Manager to perform design management (DM) operations. By default, Library Manager supplies its own forms and functions that communicate with DesignSync DFII through GDM (see Support for GDM). However, you can configure Library Manager to call Synchronicity forms and functions directly. Doing so provides users a single, consistent set of forms with which to perform DM operations. Users who like Library Manager's browsing capabilities have immediate access to DesignSync DFII forms without having to use the Synchronicity menu from the CIW or cell view windows.

Configuring Library Manager to call Synchronicity forms is typically done site-wide by an administrator or project leader, but may also be controlled by individual users so that they can selectively enable or disable the Synchronicity customizations.

To configure Library Manager to call Synchronicity forms:

1. Place the Synchronicity-provided `cdsLibMgr.il` SKILL customization file, which is located in the `$SYNC_DIR/cds/examples` directory, somewhere in the Cadence search path.

Cadence software requires that customization files be placed in a directory within the Cadence search path, which is a user-definable set of paths. The first instance of a `cdsLibMgr.il` customization file found in the search path is used to customize Library Manager. You must therefore ensure that the Synchronicity-provided `cdsLibMgr.il` is located first, or that the contents of this file are integrated into an existing `cdsLibMgr.il`. See the "Cadence Application Infrastructure User Guide", which is part of the Cadence documentation library, for details on the Cadence search path.

For example, as a site administrator, you might copy `$SYNC_DIR/cds/examples/cdsLibMgr.il` to `$CDS_SITE`. `$CDS_SITE` is part of the standard Cadence search path and is where site-wide customization files should be placed.

2. Ensure that the `SYNC_DIR` environment variable is defined. The Synchronicity-provided `cdsLibMgr.il` file requires that `SYNC_DIR` be set for the Library Manager customizations to take effect. This variable should already be defined as part of the installation requirements of Synchronicity software.

3. Define the `SYNC_MODIFY_LM` environment variable. Use this variable to selectively enable or disable the Synchronicity Library Manager customizations. The value is not important, but the variable must be defined for Library Manager customizations to take effect. For example:

```
setenv SYNC_MODIFY_LM t
```

You, as site administrator, can set this variable site-wide, then instruct individual users to unset the variable if they do not want the Library Manager customizations. Or, you can choose not to set this variable site-wide and instruct users to set the variable if they want to enable the Library Manager customizations.

**Note:** You can also edit the Synchronicity-provided `cdsLibMgr.il` to change the programming logic. For example, you can remove the dependence on the `SYNC_MODIFY_LM` variable altogether, or add logic that enables the customizations only for particular projects or users.

4. Optionally, customize the Synchronicity-provided `cdsLibMgr.il` file. For example, you can change menu names, or remove access to certain Synchronicity operations. See the comments within the `cdsLibMgr.il` file for additional information.

Full details on customizing Library Manager can be found in the "Cadence Library Manager User Guide", which is part of the Cadence documentation library.

5. Optionally, change access to Synchronicity operations from the Library Manager based on user levels (see [Selecting a User Level](#)) by defining the values of the following SKILL variables:
  - o `syncDisableLMMenusNovice`
  - o `syncDisableLMMenusAdvanced`
  - o `syncDisableLMMenusExpert`

The variable values are lists of menu item names that should be disabled at each user level. These variables are initialized with the Synchronicity-recommended defaults, which are consistent with the user-level definitions of Synchronicity menu operations. Examine the variables from your DFII session to see the default settings.

## Related Topics

Support for Library Manager  
 Using Library Manager Without Synchronicity Customizations  
 Using Library Manager With Synchronicity Customizations

## Creating a Tag List

DesignSync DFII supports the definition of a list of tags that is available throughout the DesignSync DFII interface. The tag list encourages use of a standard tag set, avoids requiring users to remember tag names, and reduces typos when entering tag names on forms.

### Note:

The tag list only simplifies tag specification and does not provide any enforcement mechanism. Users are still able to specify any tag they wish in the various tag and selector type-in fields. Tag methodology enforcement, such as limiting who can apply a certain tag to a set of files, is done through the standard DesignSync access-control system. See the Synchronicity Access Control Guide for details.

The tag list is built from several sources:

- Tags defined from the SyncAdmin Tags panel (see SyncAdmin: Tag Options). Tags defined from SyncAdmin are available to both DesignSync and DesignSync DFII.
- Tags associated with ProjectSync configurations (as stored in `sync_project.txt` files on the SyncServer) that have been defined for a library. These tags are found using the `url configs` command (see Synchronicity Command Reference: `url configs` Command) on the vault path of the library:

```
url configs [url vault <libPath>]
```

Note that only configurations defined exactly at that vault path are returned. For example, if you have a library vault path of `sync://host:port/Projects/myproj/mylib`, configurations defined at the `mylib` level are returned, but any configurations at the `myproj` level are not.

For more details on defining configurations from ProjectSync, see ProjectSync User's Guide: Integrating Configurations with DesignSync.

- Tags defined using the `syncUserTagList` SKILL variable. A project leader may use this variable to define a set of project tags, or users may use the variable for user-specific tags. Note that a user's `syncUserTagList` definition takes precedence over a site definition. See Using SKILL Variables for details.
- Tags defined using the DesignSync DFII Options form. This form has a **User-defined tag list** field that lets users specify the tag list. See Modifying the Tag List for details.

The list consisting of these configurations and tags is then presented to the user from many DesignSync DFII forms.

As an administrator or project leader, you should consider whether to create a tag list for your users. If you choose to implement a tag list, you can use the ProjectSync interface to define configurations (see ProjectSync Help: Integrating Configurations with DesignSync), use SyncAdmin, use the `syncUserTagList` variable, or any combination.

## Related Topics

- Tagging Design Files
- Modifying the Tag List
- Using SKILL Variables
- ProjectSync User's Guide: Integrating Configurations with DesignSync

## Using SyncServer List Files

SyncServer list files (`sync_servers.txt`) simplify the specification of a SyncServer or full vault path when configuring a library or joining a library. Your project leader can set up a site SyncServer list file, you can create your own, or there might be an enterprise-wide file. When any of these files exists and contains SyncServer or vault definitions, you can use the DesignSync DFII Server Browser to select a SyncServer or vault.

### Note:

Defining a vault in a server-list file does not restrict a user from browsing above the specified vault directory. You can restrict browsing by setting up appropriate access controls.

See DesignSync System Administration Help: SyncServer Lists for details on the location and syntax of SyncServer list files.

## Related Topics

- Configuring a Library
- Accessing a Library for the First Time
- Using the Server Browser

## Loading the DesignSync Integration into DFII

Before you can use DesignSync DFII, you must load the DesignSync DFII SKILL code file. Add the following line to your `.cdsinit` file:

```
load(strcat(getShellEnvVar("SYNC_DIR") "/cds/skill/dssInit.il"))
```



## DesignSync Data Manager DFII User's Guide

When you invoke DFII, stcl, the concurrent DesignSync client process, is started. When the initialization is complete, the Synchronicity menu appears in the CIW and any cell view windows. The Synchronicity menu provides access to revision-control commands.

### **Related Topics**

- DesignSync DFII Design Management Overview
- Setting Up Your Environment



# Using

## Setting Up a Workspace (Modules)

### Creating a Module Workspace

Modules are not created within the DSDFII interface. To create a module you must have permissions to create a module in DesignSync and use a DesignSync client. For more information on creating modules, see DesignSync Data Manager User's Guide: Creating a Module.

If the module has already been created, but you do not have a local module workspace, you should populate the module into a local workspace with a DesignSync client before using in DSDFII. For more information on populating a workspace, see DesignSync Data Manager User's Guide: Populating Your Work Area.

#### Related Topics

Creating a Library

Adding Objects to Modules

### Creating a Library

Creating a library creates a library directory in your workspace.

When you select **Synchronicity => Create => Library**, DesignSync DFII invokes Cadence's **New Library** form. The ability to invoke this operation from the Synchronicity menu is provided as a convenience.

To create a library:

1. Select **Synchronicity => Create => Library** from the CIW.

The Cadence New Library form appears.

2. In the New Library form, specify the workspace for your library and select **SYNC** from the Design Manager cyclic field. For more information about this form, such as information on technology files, see Cadence's OpenBook documentation (click **Help** in the New Library form).

**Click on the fields in the following illustrations for information.**

**Note:** If **SYNC** does not appear in the Design Manager cyclic field on the New Library form, select **No DM**. The Synchronicity system will correctly set the value for your design manager to **SYNC**.

1. Click **OK**.

You will see informational messages in the CIW confirming that the library has been created.

If your library is contained in a module, after you create the library, you can add it to the module, or if there is only one module in the workspace the library could belong to, simply check in the library with the New option.

If your library is not contained in a module, after you create the library, you can configure the library for use by DesignSync DFII, and then check in the library.

#### Related Topics

Creating Design Files

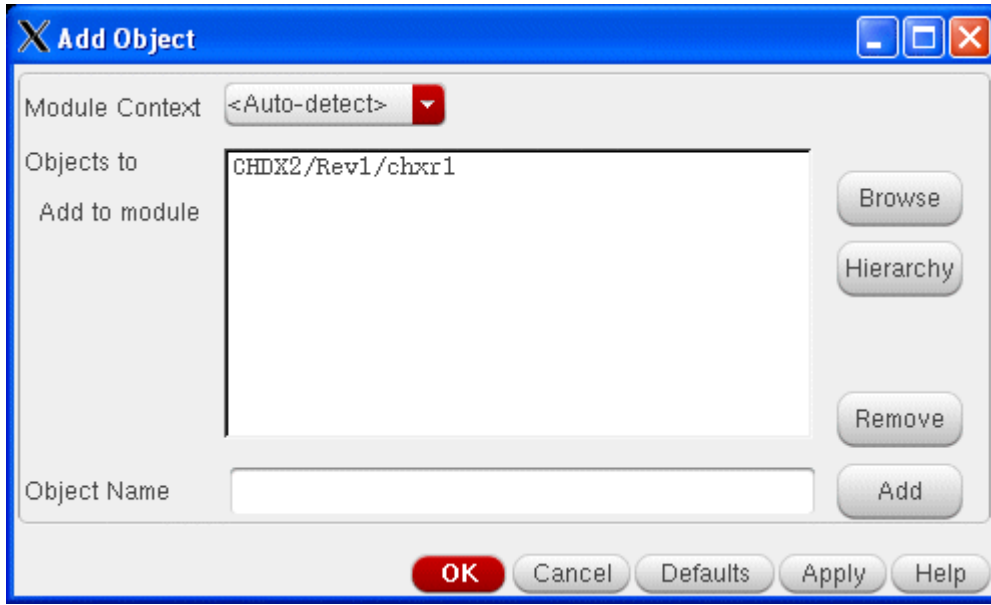
## Adding Objects to Modules

When you add a new object or library to a module, you can either perform a check in operation with the New option, or, use the Add To Module command to add the object to the module in a separate operation. The locally added objects are checked into the module version created by your next checkin operation.

#### To add objects to a module:

1. Select objects to add to the module.
2. Select **Synchronicity => Add To Module** from the CIW.
3. Modify the fields of the Add Object form as needed.

**Click on the fields in the following illustration for information.**



### Module Context

Module to which you are adding the objects. The module context only displays modules to which you can add the specified objects. The module context is displayed as an instance name. By default, the <Auto-detect> value is selected, which calculates the target module using smart module detection when the command runs. For more information on smart module detection, see the *ENOVIA Synchronicity DesignSync Data Manager User's Guide: Understanding Smart Module Detection*.

If the module doesn't appear on the drop-down list, select \*Refresh\* from the drop-down list to refresh the internal list of known candidate modules, and reevaluate the set of candidate modules. If the module doesn't appear in the list after a refresh, see *Unable to Locate a Module*.

### Objects to Add

Lists the objects to add to the specified module.

If you specified objects with wildcards, the individual matching objects are not listed individually. When you click **OK** or **Apply**, the list is passed to the underlying add routine, which then expands the wildcards.

To add objects to the **Objects to Add** list:

1. Enter the object name in the **Object Name** field.
2. Click **Add**.

- or -

1. Click **Browse** to invoke the DesignSync DFII Browser.
2. Select one or more objects in the browser.
3. Click **OK** or **Apply** from the browser.

To remove objects from the **Objects to Add** list:

1. Select one or more objects from the list.
2. Click **Remove**.

Note that when you select an object from the **Objects to Add** list and the **Object Name** field is either empty or contains a name that already appears in the list, then the selected object's name appears in **Object Name**. This behavior lets you easily add new objects to **Objects to Add** based on the name of a previously entered object.

### **Browse**

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You can browse your file system (directories and files) or library objects (libraries, categories, cells, and views). You select one or more objects as appropriate for the operation you are performing, then click **OK** or **Apply** to pass your selections to the calling form.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser.

### **Hierarchy**

Invokes the Select Cell View Hierarchy form, which helps you select the cell views that comprise a hierarchy. You provide the hierarchy parameters, then click **OK** or **Apply** to seed the calling form with the cell views that match your parameters.

See *Selecting Cell View Hierarchy* for a full description.

### **Object Name**

Specify the name of an object (file, directory, library, cell, or cell view) that you want to add to the module, then click **Add** to add the object to the **Objects to Add** list. Any object that is entered in the **Object Name** field but not added to the **Objects to Add** list will not be added.

The **Object Name** field is cleared when you click **Add**. If you want to specify an object based on a previously entered object name, select the object from **Objects to Add**. If **Object Name** was empty or contained an object name that already appears in the **Objects to Add** list, then the selected object name appears in the **Object Name** field. You can then edit that name and click **Add**.

When you specify a directory, library, or cell name, the operation is run recursively on that object. For example, if you specify a directory, the full contents of the directory are

added. The directory itself is not explicitly added to the module, meaning that if the directory becomes empty, it will automatically be removed from the module.

Duplicate values entered from **Object Name** appear in the **Objects to Add** field only once. However, the same objects specified using different paths (for example, `./cdsinfo.tag` and `cdsinfo.tag`) are not filtered and may result in the object being operated on multiple times.

### Using Wildcards

You may use glob-style (not regexp-style) wildcards in the **Object Name** field. Wildcards are useful when you want to operate on a large number of objects without specifying the name of each object. You can use the following special characters:

<code>?</code>	Matches any single character.
<code>*</code>	Matches zero or more characters.
<code>[chars]</code>	Matches any one of the characters in <code>chars</code> . <code>chars</code> may include a range of characters, such as <code>a-z</code> , which matches any character from "a" to "z".
<code>\x</code>	Matches "x". For example, <code>a\?b</code> matches only "a?b"; the backslash (\) overrides the special meaning of "?" in glob patterns.
<code>{str1,str2,...}</code>	Matches any of the strings <code>str1</code> , <code>str2</code> , and so on. For example, <code>*.{dss,exe}</code> matches any file with an extension of "dll" or "exe".

These wildcards are expanded within the workspace and libraries before the operation is performed. For example, you can specify `smallLib/*/symbol` to operate on the symbol views of all cells within the "smallLib" library.

Wildcard expressions may not work within the library part of a relative library name. The wildcard expression is expanded first against the current working directory, and then library matching is performed. For example, you have libraries "libA" and "libB" and specify the wildcard expression "lib\*". But your current directory has a file called "libNotes.txt". The wildcard expression will match "libNotes.txt", not the "libA" and "libB" libraries.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.

Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.
------	--

An equivalent SKILL API function is available. For more information see DesignSync DFII SKILL Programming Interface Guide: `dssAddFileP`

### Related Topics

Working with Modules

## Setting the Module Selector

When you initially populate your workspace, the branch and version specified for the populate determines your persistent selector; the selector that is automatically used by the workspace when performing operations, such as check in, checkout, tag, etc.

Subsequent populates, even those using a different selector than the persistent selector, do not change the persistent selector.

To change the persistent selector, use the Set Module Selector command.

1. Select **Synchronicity => Set Module Selector** from the CIW.
2. Modify the fields of the Set Module Selector form as needed.

**Click on the fields in the following illustration for information.**

The screenshot shows a dialog box titled "Set Module Selector@qelwsun14". It features a "Dialog mode" section with radio buttons for "basic" (selected) and "advanced". Below this is a "Module" dropdown menu. The "Persistent Selector" field is currently set to "<Select Module>". There are two list boxes: "Member Tags Included" on the left and "Other Member Tags Available" on the right. Between these list boxes are "Add" and "Remove" buttons. At the bottom of the dialog are buttons for "OK", "Cancel", "Defaults", "Apply", "Save Defaults", and "Help".





3. Click **OK**.

You will see informational messages in the CIW as the workspace selector is updated.

## Set Module Selector Field Definitions

### Dialog Mode

Select basic or advanced mode. Both modes allow you to view the current persistent selector and any module member tags applied to it. The basic mode provides a simple interface to add or remove module member tags or change the order in which those tags are applied. The advanced mode allows you to manually enter the selector information directly. If you Save Defaults, the current displayed dialog mode is saved as the default.

### Module

Select the module from the pull-down list.

### Persistent Selector

Displays the persistent selector set for the module workspace.

### Selector with Member Tags

Displays the persistent selector along with the module member tags. For more information on added module member tag versions, see the *DesignSync User's Guide: Module Member Tags*.

#### **Member Tags Included/Other Member Tags Available**

Using this pair of selector boxes, you can add or remove tag from the persistent selector on the workspace.

The **Member Tags included** shows the module member tags in the order in which they are applied to workspace.

The **Other Member Tags available** field shows module member tags for the module that are not currently in use.

#### **Set Selector**

Specify the selector to use as the persistent workspace selector.

You can use the Predefined tag, Module Tag, or Module Member Tag fields to show you what tags exist for the object. . If you select Module Member Tag, you also have the option to select whether to populate a selector in addition to the persistent selector or populate with the tagged version instead of the persistent selector. For more information on added versions, see Module Member Tags.

#### **Predefined Tags**

The Predefined Tags field shows Tag lists.

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.

#### **Module Tags**

The Module tags field shows all tags associated with a module version. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.

#### **Module Member Tags**

The Module Member Tags field shows all tags associated with a module member version. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form. Select the checkbox to apply the module member tag as a blend selector, in the form Blend(selector). For more information on blending with module member tags, see the *DesignSync User's Guide: Module Member Tags*.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

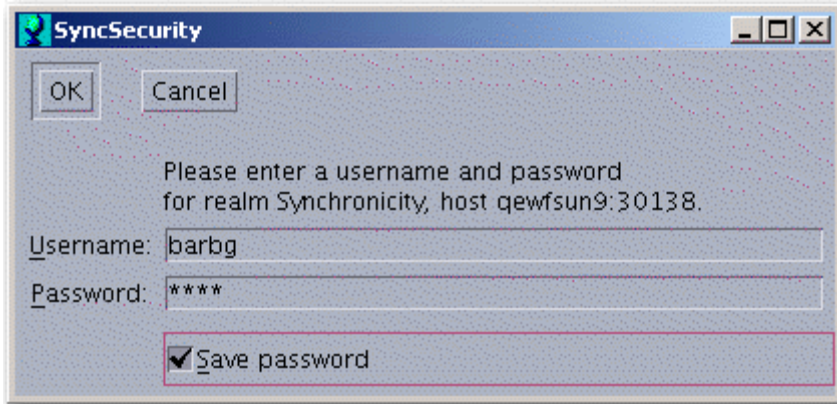
### See Also

Configuring a Library

Creating a Module Workspace

## Accessing a SyncServer: User Authentication

When accessing vault data, you may be required to provide username and password authentication depending on how the SyncServer administrator configured the SyncServer. The first time you access the SyncServer, DesignSync DFII displays a dialog box where you must supply your username and password.



The username and password must correspond to your ProjectSync user profile, or if the SyncServer is configured to use LDAP (Lightweight Directory Access Protocol), your ProjectSync-compatible LDAP profile. See ProjectSync User's Guide: What Are User Profiles? for more details. If you do not know your username or password, contact your project leader.

If you select **Save password**, DesignSync DFII stores your username and password so that subsequent access to the SyncServer will not require authentication.

User authentication takes place each time you start a new DesignSync DFII session or access a different SyncServer that requires authentication. In addition, you may be prompted several times during the same DesignSync DFII session depending on the operations you perform. For example, GDM-based operations such as auto-checkout and operations invoked from the Synchronicity menu use different methods to communicate with the SyncServer and therefore require separate authentications.

## Setting Up a Workspace (Non-Modules)

### Configuring a Library

Before you or anyone on your design team can perform design-management (DM) operations on a library, the library must be configured for use with DesignSync DFII. Configuring a library consists of specifying the vault (data repository) and optionally mirror directories for the library.

A library is typically configured by a team leader. Once configured, the team leader checks the library into the vault. Team members can then set up a workspace for that library (see Accessing a Library for the First Time) and use DesignSync DFII to manage the library.

The Configure Library wizard simplifies the task of configuring a library. When you have answered all the questions, the wizard prepares your library for use with DesignSync DFII, and you can then check in the library. In addition to setting up a library for the first

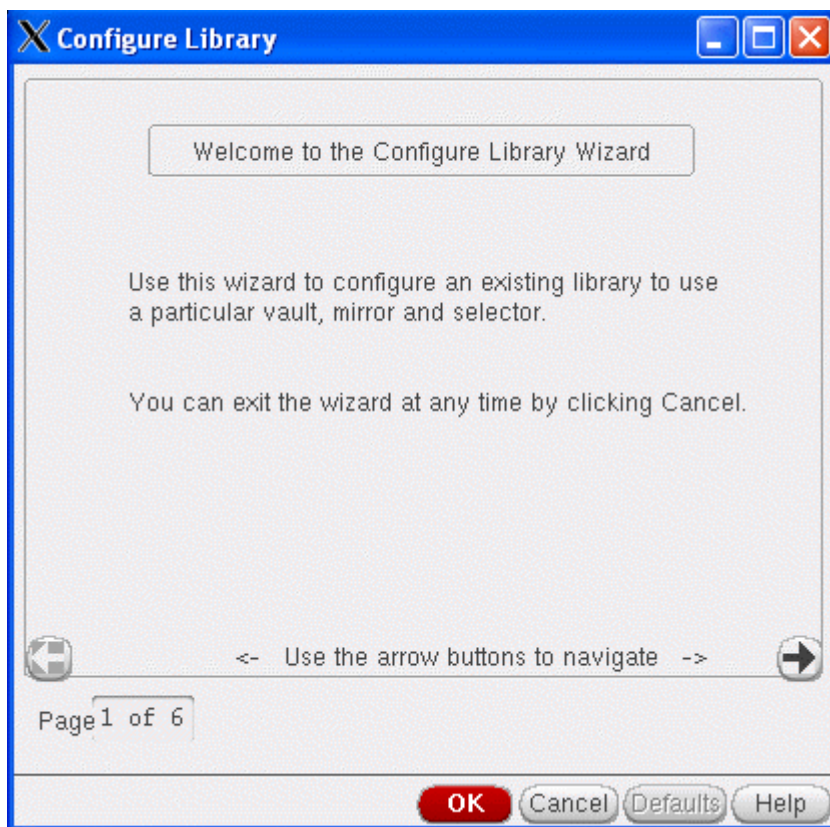
time, you can use the Configure Library wizard to change information for a library that is already configured. For example, you can change the vault location, change mirror information, or disassociate a workspace from a vault.

**Note:** If your library is going to be in a module, do not run the Configure Library Wizard, instead follow the procedure for Adding Objects to Modules. If you have not already created either the module or loaded the module into a local workspace, see Creating a Module Workspace.

To configure a library, or change the configuration of an already configured library:

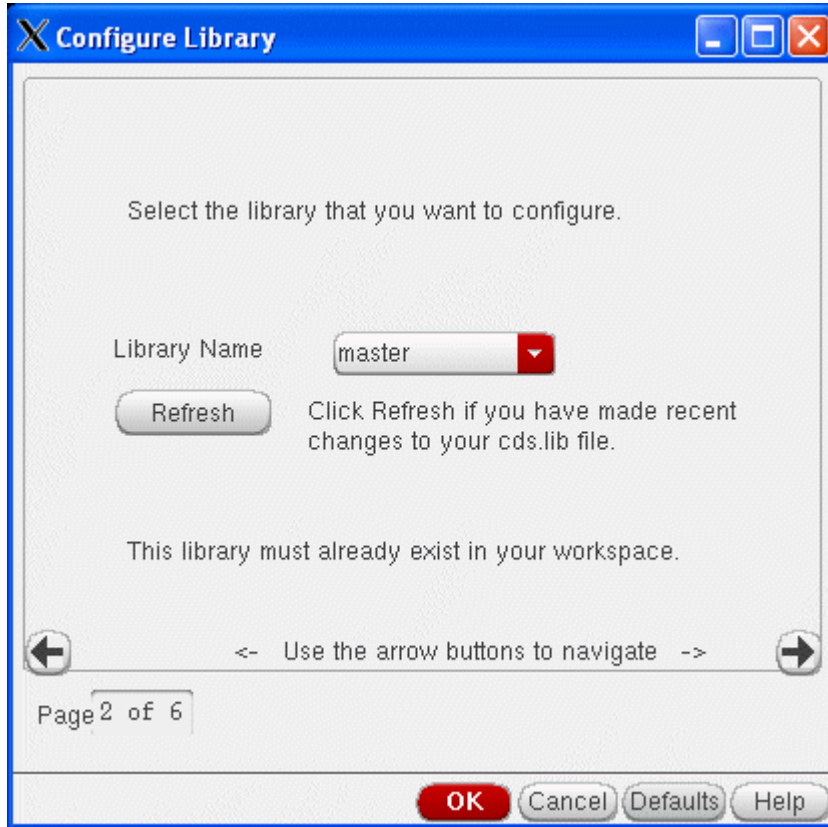
1. Set your user level to **expert** (see Selecting a User Level). The Configure Library wizard is available only in **expert** mode.
2. Select **Synchronicity => Configure Library** from the CIW (or from a cell view window if full Synchronicity menus are enabled).

The initial page of the Configure Library wizard appears.



While using the wizard, you can cancel anytime by clicking **Cancel**. You move to the next page of the wizard by clicking the right arrow or **OK**, or by pressing the Return key. You can return to previous pages to review or change the information you provided by clicking the left arrow.

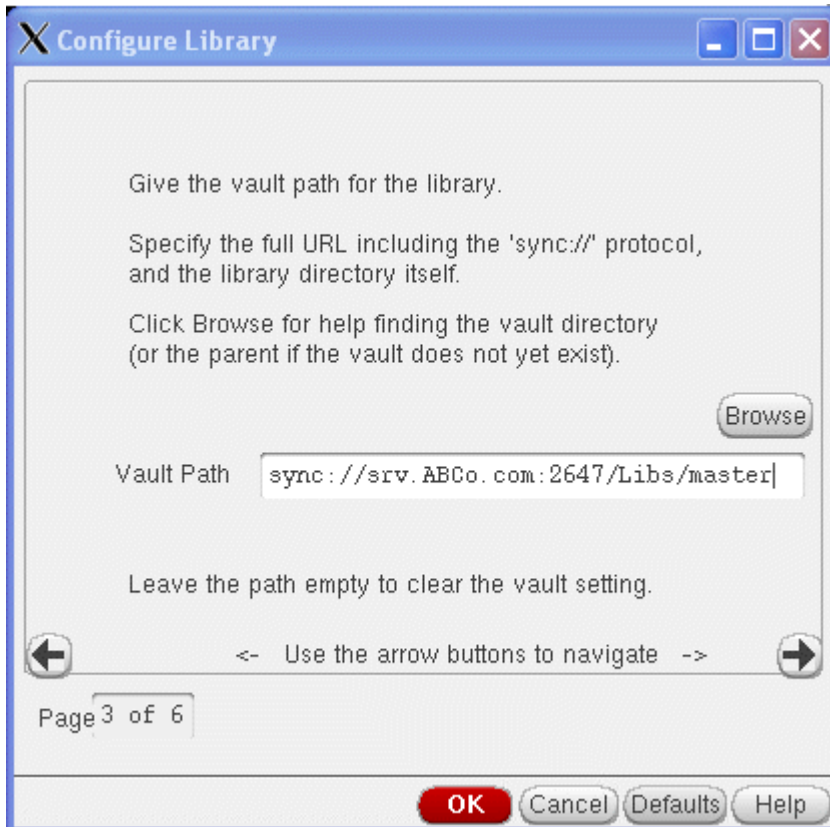
3. Click the right arrow to go to page 2 of the wizard.



4. Select the library that you want to configure from the **Library Name** field.

The library must already exist in your workspace. If the library you want is not listed, add the library to your `cds.lib` file (using **Tools => Library Path Editor** from the CIW) and then click **Refresh** to re-read `cds.lib`.

5. Click the right arrow to go to page 3 of the wizard.



6. If you are configuring a library for the first time, **Vault Path** is empty and you must specify a vault URL. If the library is already configured but you want to change the vault location, specify a different URL. If the library is already configured but you want to disassociate the library from the vault, leave **Vault Path** empty (see Unsetting a Vault for details).

The URL must be a full Synchronicity specification for a vault using the `sync://` protocol for server vaults or the `file:///` protocol for client vaults, using the following formats:

```
sync://<host>:<port>/Projects/<vaultpath>/<libraryName>[@<selector>]
```

or

```
file:///<clientvaultpath>
```

where

**sync://** is the Synchronicity protocol for communicating with a SyncServer. You can also specify **syncs://** to communicate with a secure (SSL) SyncServer. However, requests made to the cleartext port of a secure SyncServer are

automatically redirected to the secure port in most cases. See DesignSync Data Manager User's Guide for details on secure (SSL) communications.

**<host>** is the machine on which the SyncServer is running. Specify a full domain name, such as **bach.myco.com**. You can specify just the machine name (**bach** in this example) if you are on the same LAN as the SyncServer host.

**<port>** is the SyncServer port number. You can omit the port specification if you are using the `sync://` protocol to communicate with a cleartext port that has the default cleartext port number of 2647, or you are using the `syncs://` protocol to communicate with a secure port that has the default secure port number of 2679.

**Projects** is the recommended (but not required) top-level directory for all DesignSync vaults. Using `Projects` facilitates interaction with ProjectSync.

**<vaultpath>** is the path to the top level of the vault you want to create. In this example, the library is placed directly under the `Projects` directory, so no additional path is specified.

**<libraryName>** is the name of the library. It is recommended (and possibly required; see Requiring Library Names in Paths) that you use the library name in the vault specification. When you complete the wizard and are asked to confirm your settings, a warning will appear if all vault and mirror paths do not end with the library name.

**<selector>** is an optional selector (or comma-separated selector list) that specifies the branch you are working in a multi-branch environment. Precede the selector with an at sign (`@`). The selector you specify here, if any, will be used as the initial value on page 6 of the wizard.

Optionally click **Browse** to bring up the Server Browser window, which can help you specify the vault path. The library name is automatically appended to the vault path you selected from Server Browser when:

- The last directory of the specified vault path does not already match the library name.

-and-

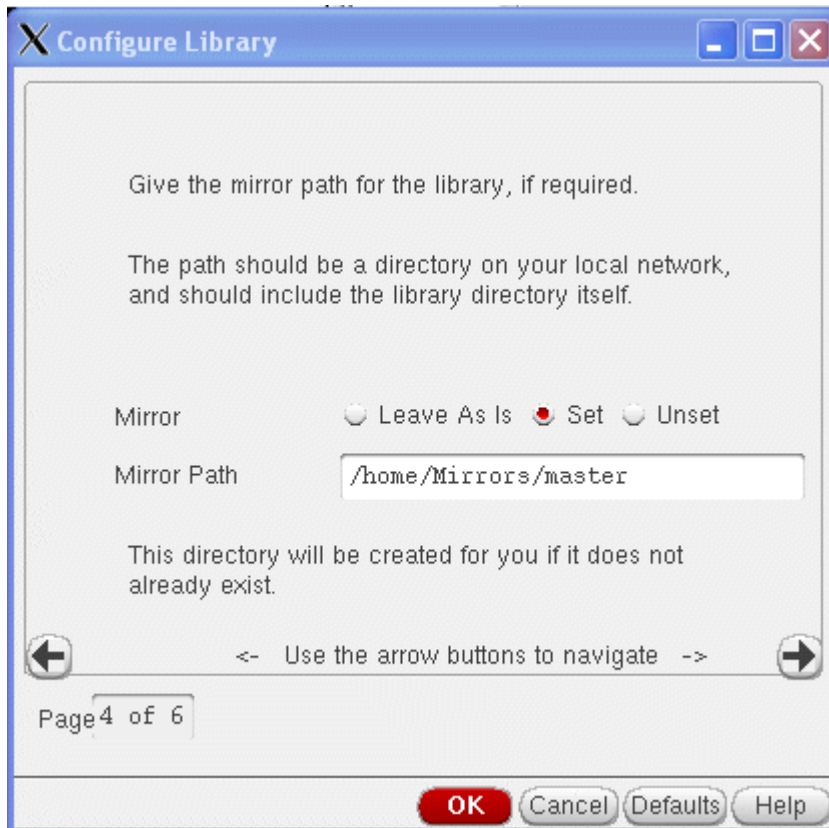
- The specified vault folder does not contain a `cdsinfo.tag` file. Therefore, if you browse to a library directory, the library name is not added to the vault path.

**file:///** is the protocol for specifying a file URL.

**<clientvaultpath>** is the path to the client vault.



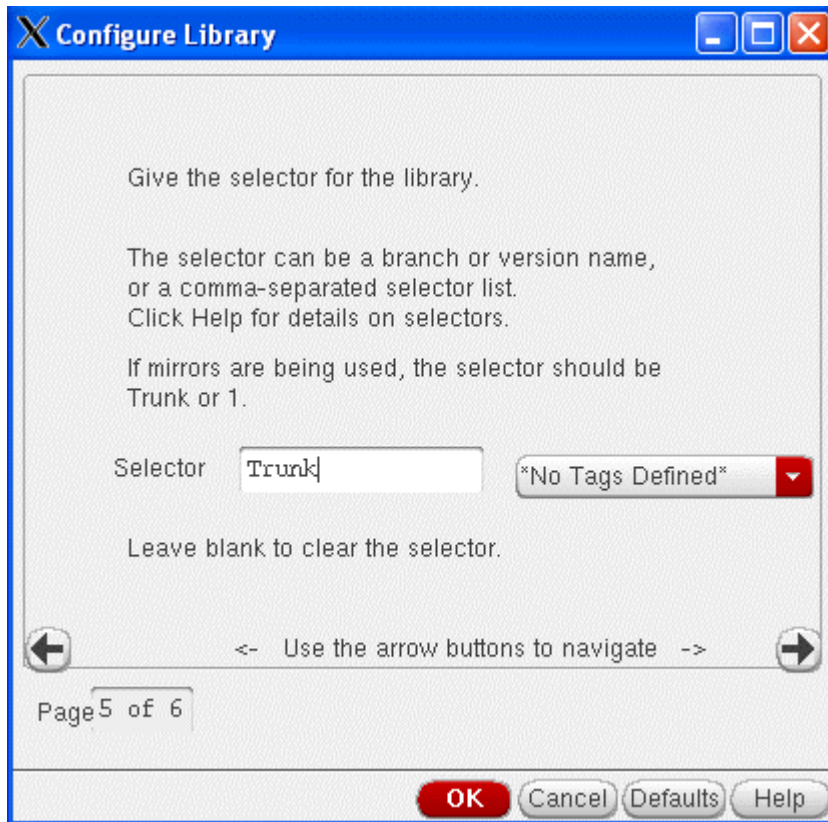
7. Click the right arrow to go to page 4 of the wizard. If you are unsetting the vault, you go directly to page 6 (confirmation page) of the wizard and are not asked mirror setup questions.



8. Optionally specify a mirror directory for the library. The mirror directory is associated with a given workspace. Specify a directory that you can access from your workspace (on your LAN). Typically, you would specify the path to a mirror directory that has been set up for this library. If the directory does not exist, DesignSync DFII will try to create it for you when you finish the wizard. See Caches and Mirrors for more information on mirrors.

Select **Unset** if there is an existing mirror association but you no longer want to access a mirror directory from your workspace.

9. Click the right arrow to go to page 5 of the wizard.



10. Optionally specify a selector for your workspace. The selector specifies the branch onto which you will check in this library. For non-branching environments, use the default of "Trunk". If you specified a selector when you specified the library's vault (page 3 of the wizard), the **Selector** field defaults to that value instead of Trunk. For details on multi-branch environments, see Branch, Merging, and Overlaying.

If you specified a mirror directory on the previous page of the wizard, then your selector must be appropriate for that mirror directory.

You may be able to use the choice list to the right of the **Selector** field to specify a selector. See Creating a Tag List for details. The choice list may contain the following items:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you leave accept the values on this form,

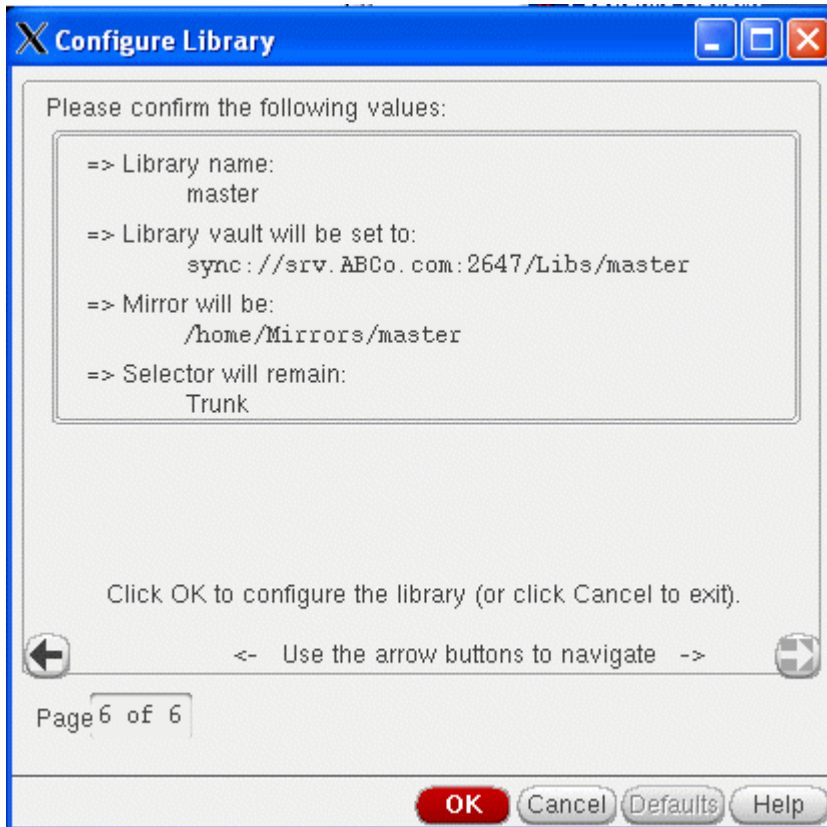
- either by advancing to the next form, moving back to the previous form, or clicking **OK**.
- A list of ProjectSync-defined configurations for the vault path (as specified on page 3 of the wizard). Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the library associated with the specified vault path has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.

**Note:** Generating the list of configurations can take a few moments. Therefore, the list is not generated automatically. You must select **\*Refresh\*** from the tag list to fetch the configurations (if any).

- A hyphen separator (-----) when there are both tags and configurations listed. Tags appear above the separator, and configurations appear below.
- **\*Refresh\***, which updates the configuration list. Generating the list of configurations requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.

To clear the selector, leave the **Selector** field empty. Clearing the selector restores the default behavior of having the directory inherit its persistent selector list from the parent folder. If no parent folder has had a selector set, then the default selector is Trunk.

Click the right arrow to go to page 6 of the wizard.



11. Review your wizard settings and click **OK** to configure your library, or click **Cancel** to exit the wizard without configuring your library. If your vault and mirror paths do not end in the library name, an alert box appears; it is recommended (and possibly required; see Requiring Library Names in Paths) that all paths end with the library name.
12. You will see informational messages in the CIW as your library is configured.

Your library is now configured, but the vault does not contain the library. You must check in the library before users can access (using the Join Library Wizard) the library. See Checking In Design Files for details.

Note that if the library did not already have a `cdsinfo.tag` file, DesignSync DFII created one containing the following lines:

```
DMTYPE sync
CDSLIBRARY
```

## Related Topics

DesignSync DFII Design Management Overview  
 Checking In Design Files  
 Accessing a Library for the First Time

Browsing a SyncServer  
Display Library Status

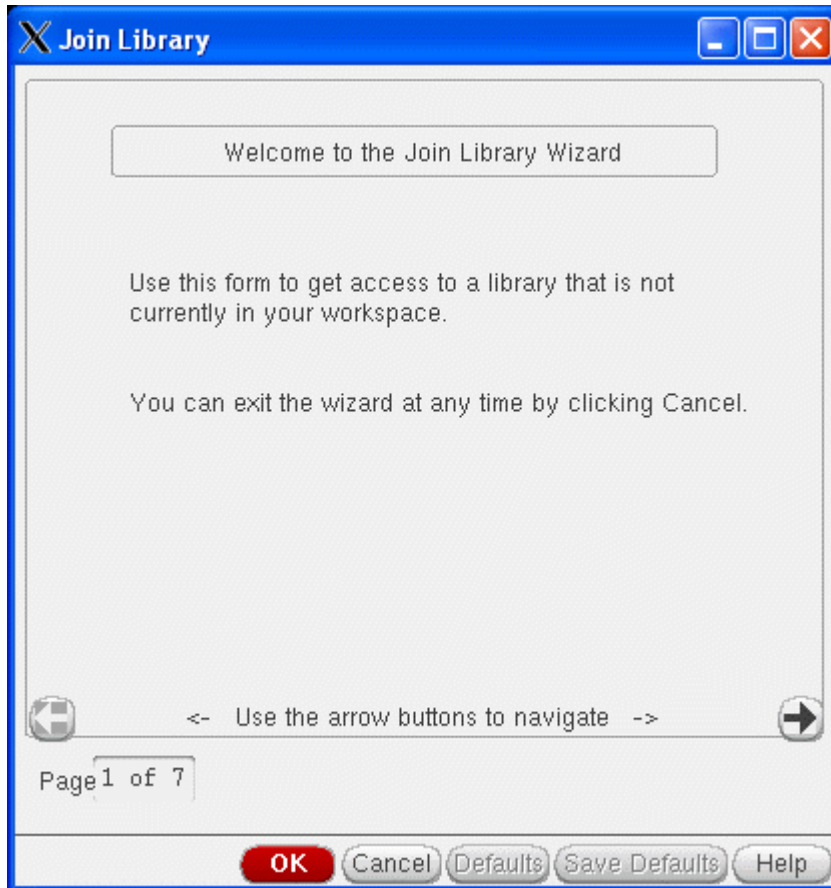
## Accessing a Library for the First Time

Once a library is configured (see *Configuring a Library*) and has been checked in (typically by a project leader), you and other team members can set up work areas for that library. Once your work area is set up, you can perform revision-control operations on the library.

To access a library for the first time:

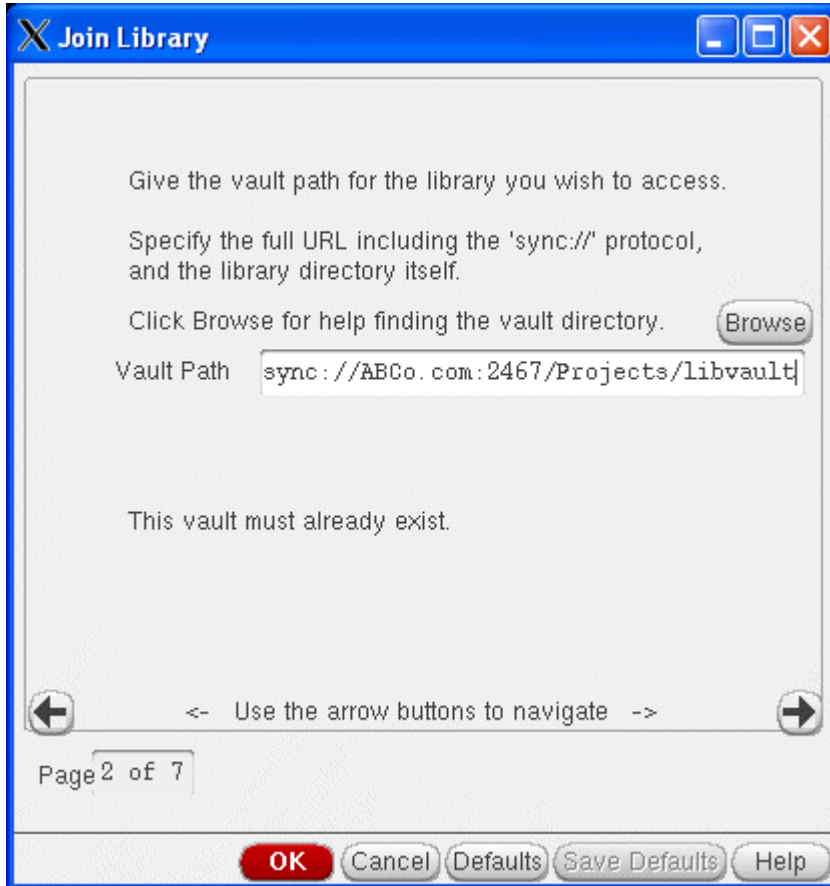
1. Select **Synchronicity => Join Library** from the CIW (or from a cell view window if full Synchronicity menus are enabled).

The initial page of the Join Library wizard appears.



While using the wizard, you can cancel anytime by clicking **Cancel**. You move to the next page of the wizard by clicking the right arrow or **OK**, or by pressing the Return key. You can return to previous pages to review or change the information you provided by clicking the left arrow.

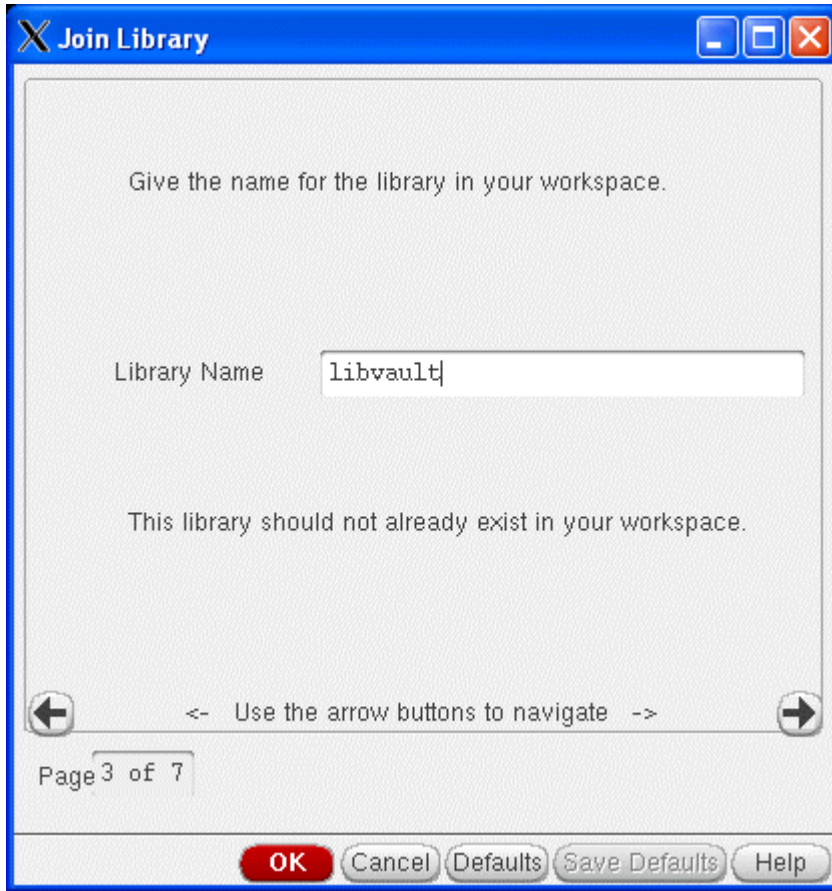
2. Click the right arrow to go to page 2 of the wizard.



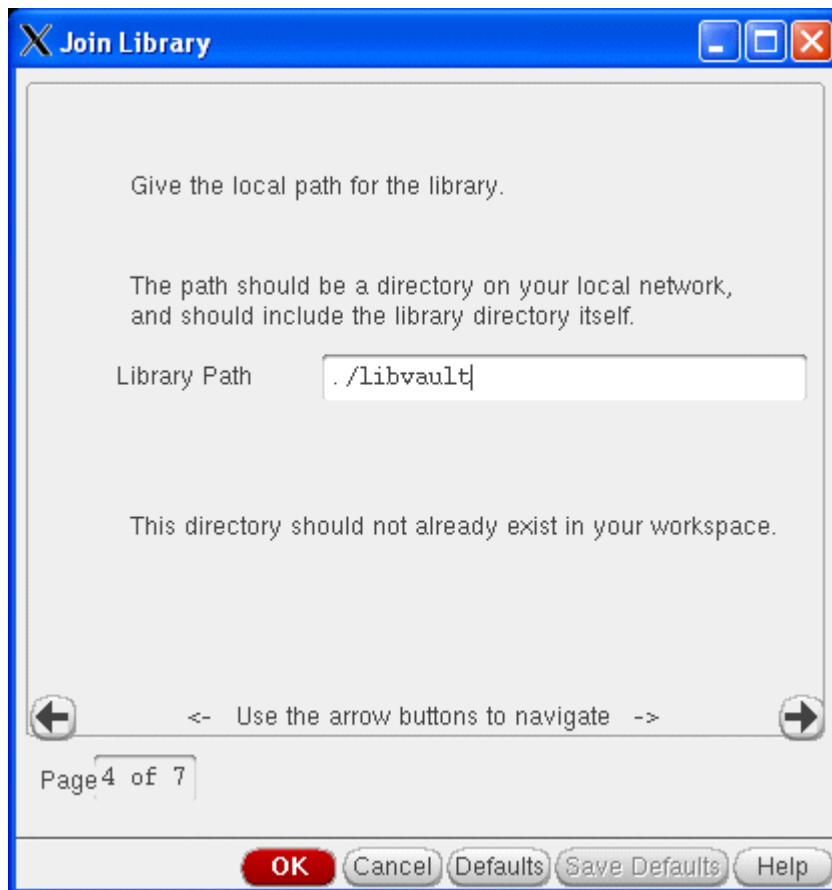
3. Specify the vault path for the library you want to join.

Specify the vault path as a full URL specification using the `sync://` protocol for server vaults or the `file:///` protocol for client vaults. A **vault** is the data repository where versions of design data are stored. Your project leader may have provided you with the library's vault URL, or click **Browse** to display the Server Browser window, which can help you select the vault.

4. Click the right arrow to go to the third page of the wizard.



5. Specify the name of the library as it should exist in your `cds.lib` file. The **Library Name** field defaults to the library's vault folder name. The library name you specify cannot already exist in your `cds.lib` file. Once the wizard completes, DesignSync DFII adds an entry to your `cds.lib` for you.
6. Click the right arrow to go to page 4 of the wizard.

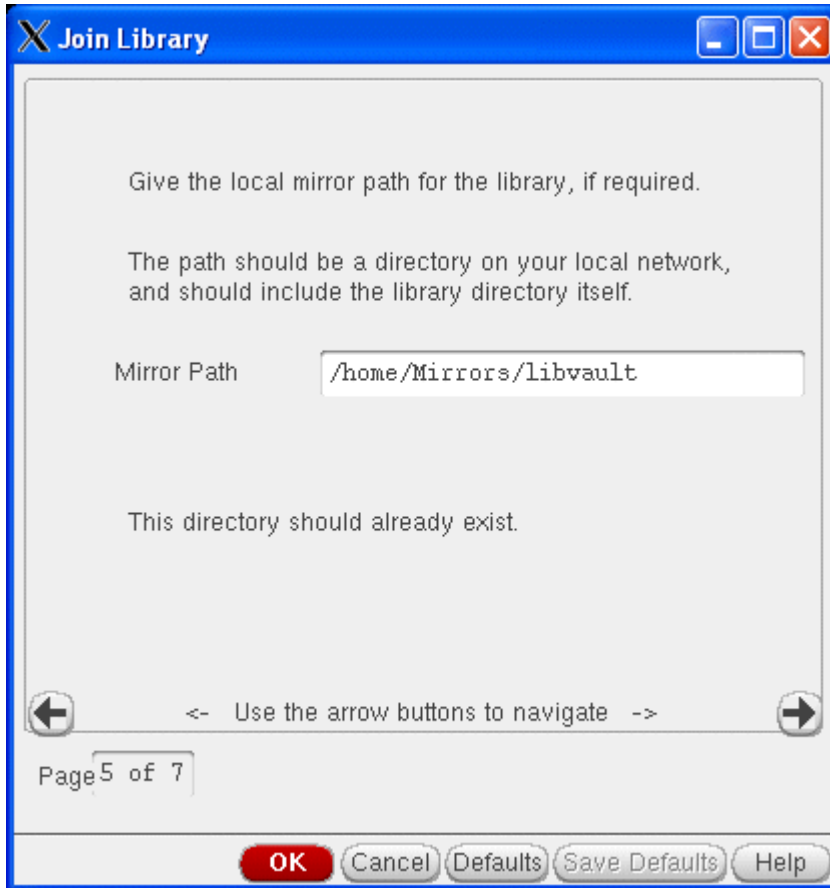


7. Specify the local work area path where you want to check out the library. The **Library Path** field defaults to `./<lib_name>`, where `./` is the DFII current working directory and `<lib_name>` is the library name as specified on page 3 of the wizard. You or your project leader can change this default work area path (see Setting Options). The library path directory cannot already exist and will be created for you when you complete the wizard.

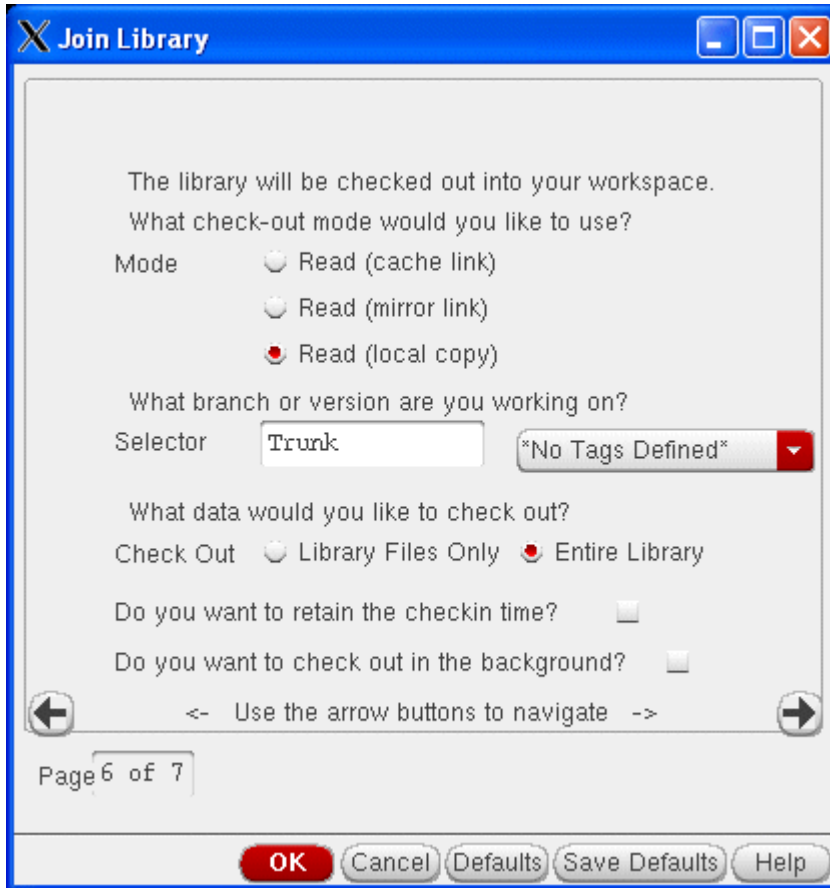
It is recommended (but not required) that the library path end with the library name. When you complete the wizard and are asked to confirm your settings, a warning will appear if all vault, local, and mirror paths do not end with the library name.

8. Click the right arrow to go to page 5 of the wizard.





9. Specify a local mirror directory for the library if your team is using the mirror sharing methodology (see Caches and Mirrors for more information). The local mirror is the mirror directory associated with a given work area. Your project leader must have already created this mirror directory as part of the library configuration. The directory must be on your LAN. It is recommended (but not required) that the mirror path end with the library name. When you complete the wizard and are asked to confirm your settings, a warning will appear if all vault and mirror paths do not end with the library name.
10. Click the right arrow to go to page 6 of the wizard.



11. Specify how you want the library checked out into your work area. Also, specify whether you want to check out the entire library, or just the library-level files (such as `cdsinfo.tag`).

The modes available are:

- **Read Only (share)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read Only Latest (mirror)**

Links to files in the mirror directory. The mirror directory contains the latest versions of the design files. You cannot edit the files in the mirror directory.

- **Read Only Local (get)**

Unlocked, read-only copies of the files.

You cannot check out the library in **Edit (lock)** mode from the Join Library wizard. If you want to lock a portion or the entire library, do another check out after you complete the Join Library wizard (see Checking Out Design Files). See DesignSync DFII Object States for more information on object states.

The **Selector** field specifies the branch or version of the library you want to access. The default branch name is **Trunk**, which is the default branch tag DesignSync gives to branch 1. If your team is not using a branching methodology, then specify Trunk. If there are multiple branches, you can specify a different branch name. If you specify a different branch name, the latest versions of the library files on that branch are checked out. You can also specify a version tag if you want to access a tagged configuration, such as the versions of library files that are tagged "gold" or "rel2.1", for example. See Branching, Merging, and Overlaying for details on multi-branch environments.

If you **retain the checkin time**, local file copies will have the "last modified" timestamp of the checked-out objects as recorded when the object was checked into the vault. When deselected, the timestamp of the local object is the check-out time (when your local copy was created). The option to retain the checkin time is only meaningful when the fetch **mode** is **Read (local copy)**.

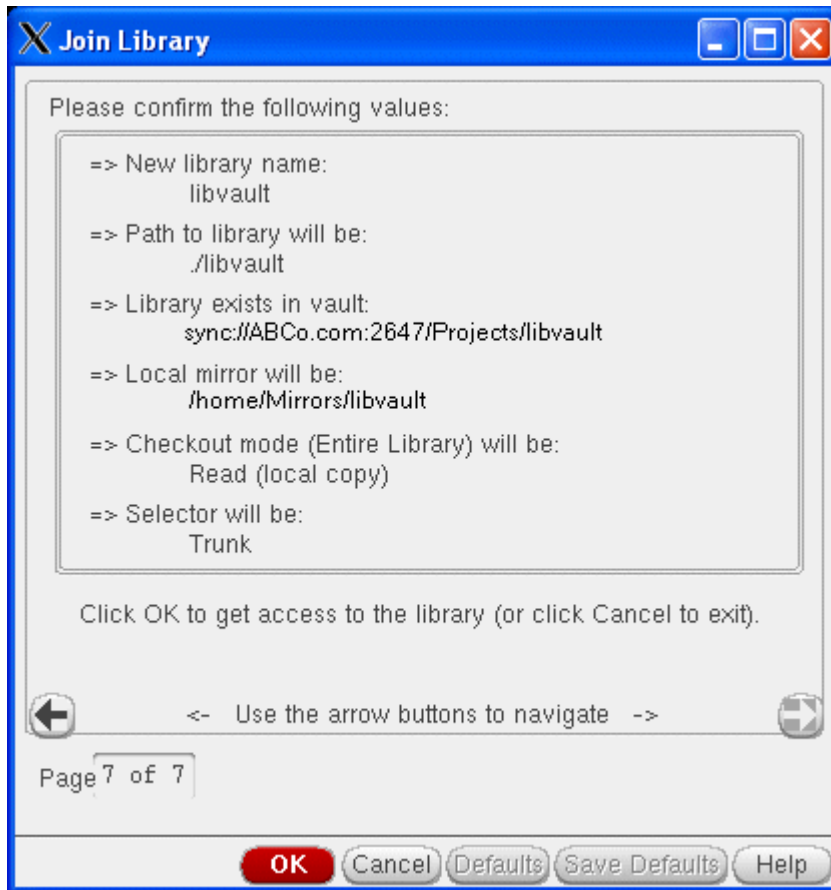
Select **checkout in the background** to check out objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### **Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

1. Click the right arrow to go to page 7 of the wizard.



2. Review your wizard settings and click **OK** to join the library, or click **Cancel** to exit the wizard without joining the library. If the vault, work area, and mirror paths do not end in the library name, an alert box appears; it is recommended that all paths end with the library name.

You will see informational messages in the CIW as your work area is set up and the library is checked out into the library directory.

The library is now available to you and is managed by DesignSync DFII. You can begin working with design files and perform revision-control operations as needed.

## Related Topics

- Configuring a Library
- Browsing a SyncServer
- Checking Out Design Files

## Unsetting a Vault

One of the operations you can perform from the Configure Library wizard is to disassociate a library from its vault. Unsetting a vault is an uncommon operation, one

you would only do if you no longer need to update your local library with other users' changes or check in your own changes. To unset a vault, clear the **Vault Path** field on page 3 of the Configure Library wizard.

Neither DesignSync nor DesignSync DFII actually allows you to unset a vault. Instead, this "unset" operation changes the library's vault based on the parent directory's vault. There are three cases to consider, in order from most to least likely:

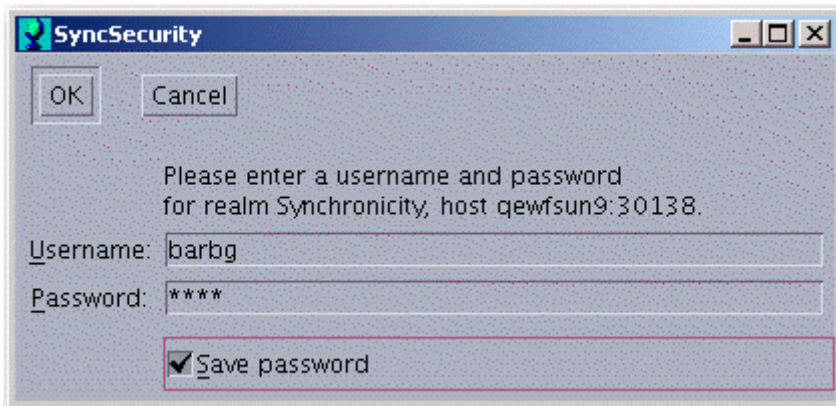
1. You have not explicitly set a vault on the parent directory. In this case, DesignSync DFII resets the library directory's vault to the default client vault, effectively unsetting the vault.
2. The parent directory's vault is the parent of the library's vault. Updating the library's vault based on the parent directory's vault would have no effect (the vault before and after the operation would be the same), so DesignSync DFII issues a warning and aborts the operation.
3. The parent directory's vault has been explicitly set but is not the parent of the library's vault. In this case, the library's vault is changed to correspond to that of the parent directory. This associates the library with a different vault as opposed to unsetting the vault.

### Related Topics

Configuring a Library

### Accessing a SyncServer: User Authentication

When accessing vault data, you may be required to provide username and password authentication depending on how the SyncServer administrator configured the SyncServer. The first time you access the SyncServer, DesignSync DFII displays a dialog box where you must supply your username and password.



The username and password must correspond to your ProjectSync user profile, or if the SyncServer is configured to use LDAP (Lightweight Directory Access Protocol), your ProjectSync-compatible LDAP profile. See ProjectSync User's Guide: What Are User

Profiles? for more details. If you do not know your username or password, contact your project leader.

If you select **Save password**, DesignSync DFII stores your username and password so that subsequent access to the SyncServer will not require authentication.

User authentication takes place each time you start a new DesignSync DFII session or access a different SyncServer that requires authentication. In addition, you may be prompted several times during the same DesignSync DFII session depending on the operations you perform. For example, GDM-based operations such as auto-checkout and operations invoked from the Synchronicity menu use different methods to communicate with the SyncServer and therefore require separate authentications.

## Checking In

### Checking In Design Files

You check in design files when you want to create a new version of an existing design object in the vault or when you want to add new design objects to the vault. You can check in the following design objects:

- Library
- Cell
- Cell view
- Category
- Design hierarchy
- Modules and individual DesignSync objects

DesignSync DFII also provides a general-purpose checkin interface so that you can check in files that are not part of a cell view definition. This interface lets you specify files and directories, and supports the use of wildcards. This interface also lets you specify library objects (libraries, cells, and views), although using the form that is specific to that object type, such as Checkin Cell, is generally simpler.

### General Checkin Notes

- If you have associated a mirror with the vault, the mirror directory is populated when you first check files into the vault and each time thereafter that you check in a new version.
- If you have not made changes to your design (your files are not locally modified), a new version is not created during a check-in operation (unless you have selected the **Force** option). The behavior of a checkin of unmodified objects depends on their check-out state:

- For locked objects (checked out for edit), the check-in operation unlocks the objects and puts them into the state specified by the **Mode** field, such as links to the cache or mirror.
- For read-only objects, the check-in operation leaves the objects unchanged unless you specify **Unify State**, in which case the check-in operation puts the objects into the state you requested.
- If you have unsaved modifications to design data that you are checking in, a confirmation box appears. You can have DesignSync DFII save your changes then continue with the check-in operation, or you can abort the operation. You can also choose to have DesignSync DFII save modified cell views automatically instead of being prompted; see Controlling Confirmation of Saving Modified Views at Checkin.
- If you have **automatic checkins** enabled (see the "Design Framework II Help System" in the Cadence documentation library), you will be asked if you want to check in files when you close a file that you have edited.
- You also can check in design files from the Show Checkouts form.
- You must set up your workspace before you can perform any revision-control operations on that library, including checkins. For more information on setting up module workspaces, see Creating a Module Workspace. For more information on setting up a non-module workspace, see Configuring a Library.
- DesignSync DFII does not directly support the Cadence **rollback** operation. To accomplish the equivalent operation, use **Synchronicity => Checkout** with the **Selector** option to fetch a local copy (**Read (local copy)** mode) of the design version you want to rollback to, then use **Synchronicity => Checkin** with the **Skip** and **Force** options to promote to the latest version. Note that you must be at **expert** user level to access the **Skip** and **Force** options.
- You must select the **New** option to check in previously unmanaged objects. You can customize DesignSync DFII to always perform a pre-check for new objects before any objects are checked in. See Checking for New Objects Before Checkin.

### Related Topics

Cadence DFII Design Management Overview

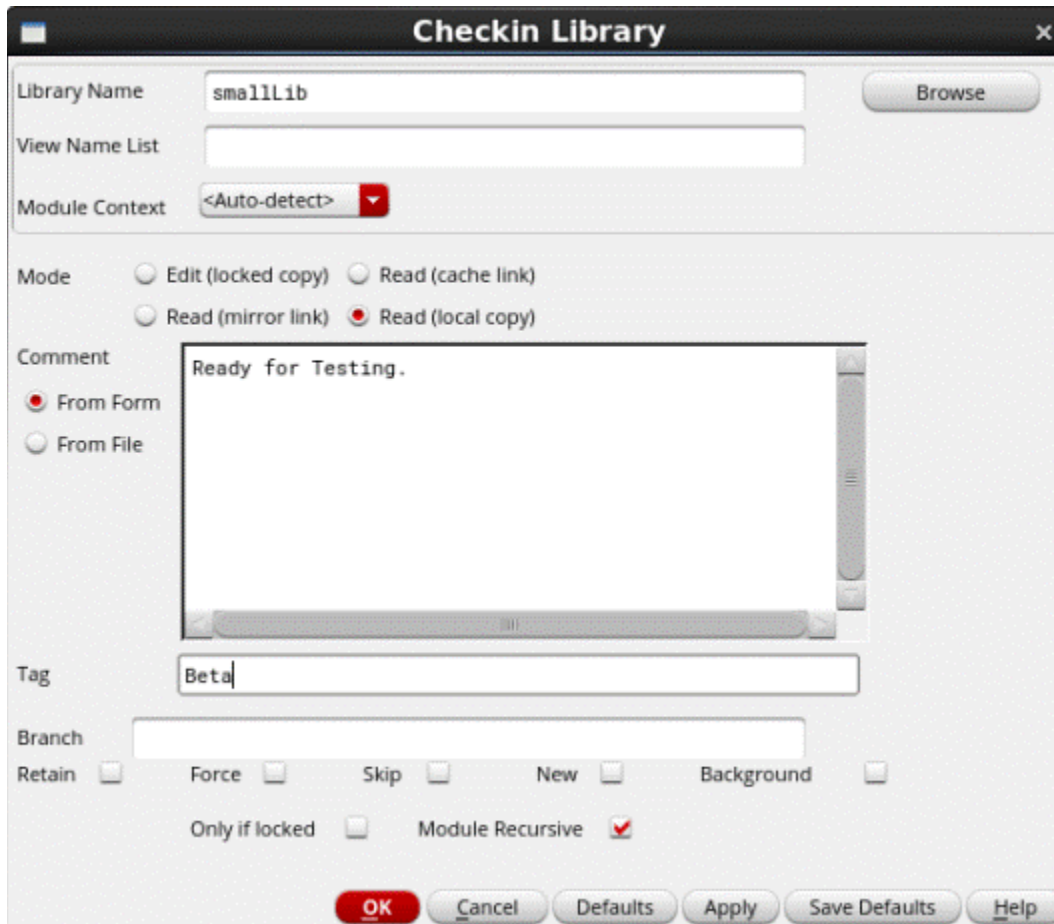
### Checking In a Library

You can check in all library data in one operation. You can optionally select specific views you want to check in.

To check in a library:

1. Select **Synchronicity => Checkin => Library** from the CIW.
2. Modify the fields of the Checkin Library form as needed.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

You will see informational messages in the CIW as the design files are checked into the vault.

### Note:

When you check in a library, all objects in the library are checked in (and fetched) in the specified mode. This mode is used for library files, cell files, and cell views.

## Checkin Library Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't



listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### **Browse**

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You can browse your file system (directories) or library objects (libraries, categories, cells, and views). You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### **View Name List**

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### **Module Context**

Select the appropriate module context from the drop-down list. The module must have its base directory at, or above, the level of the library being checked in. All available workspace module instances are listed alphabetically in the pull-down after the default selection, <Auto-detect>, which uses the DesignSync smart module detection functionality. For more information on the auto-detect functionality, see the *ENOVIA DesignSync Data Manager User's Guide: Understanding Smart Module Detection*.

**Note:** You can only specify one module. If you are checking in objects to two different modules in the same workspace, and smart module detection is unable to determine which is the appropriate target module, you must use two separate checkin operations.

This option is ignored for non-module objects. If the module doesn't appear on the drop-down list, select *\*Refresh\** from the drop-down list to refresh the internal list of known candidate modules, and reevaluate the set of candidate modules. If the module doesn't appear in the list after a refresh, see *Unable to Locate a Module*.

### **Mode**

Select what you want left in your workspace after checking in your design files:

- **Edit (locked copy)**

Locked files. You can continue to make changes; other users cannot check out the files for editing.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Local, read-only copies of the files.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

#### **Comment from Form**

With the Comment From Form radio button selected (default), enter a checkin comment in the comment field.

Depending on the design methodology your team adopts, your project leader may require that every checkin have a comment of a given length. If such a requirement is in place, your checkin will fail unless you specify an appropriate check-in comment.

#### **Notes:**

- If you also specify a tag, the comment is used as both the checkin and the tag comment.
- DSDFII GUI only accepts ASCII text comments. You can specify UTF-8 compliant multibyte characters using the Comment From File option.
- If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes

#### **Comment from File**

Specifies a file containing a comment to use as the description of the new version. The file must be specified as an absolute file path. DesignSync accepts a comment of any length up to 1MB. Long comments may be truncated in the output of commands that show comments. Comments in the file can be multibyte characters (UTF-8 compliant).

This option respects the minimum comment length, however it should be noted that each byte in a multibyte character counts individually towards the comment length .

### Notes:

- Revision control notes may not properly display UTF-8 characters. Additionally, If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes
- If you also specify a tag, the comment is used as both the checkin and the tag comment.

### Tag

Tags the object version or module version on the server with the specified tag name.

For module objects, all objects are evaluated before the checkin begins. If the module cannot be tagged, for example if the user does not have access to add a tag or because the tag exists and is immutable, the entire module checkin fails.

**Note:** Individual module objects cannot have tags. Only the module itself can be tagged.

For other DesignSync objects, if the user does not have access to add a tag, the object is checked in without a tag.

**Note:** The -tag option will not work on modules stored on DesignSync server versions prior to 5.1.

### Branch

Checks the object into the specified branch. The branch tag can be any valid branch selector, including auto(branchname).

**Note:** This option is not applicable to modules. If you select a module or module member for the checkin operation, the branch option automatically disappears from the form.

### Retain

When selected, retains the "last modified" timestamps of objects left in your workspace after checking in. When deselected, the timestamps of the local objects are set to the check-in time.

The **Retain** option is only meaningful when leaving physical copies (**Edit (locked copy)** and **Read (local copy)** modes) of objects in your workspace. **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use retain behavior; objects in the

mirror or cache directory retain their "last modified" timestamps. However, links in your workspace to the cache/mirror have timestamps corresponding to when the links were created.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

### Force

Select **Force** to create a new version in the vault, even if the file is identical to the old version. For example, suppose you have checked out version 1.3 of a cell view and have not modified it. If you check the cell view back in with the **Force** option selected, the version number is incremented to 1.4. This feature is useful when you want to synchronize versions in the vault.

### Note:

This option is available only at a user level of expert.

### Skip

Use this option if you want to check in:

- A version that is not derived from the Latest version that is currently in the vault, known as a **rollback** operation.

For example, you have version 1.4 of a view in your workspace. You realize that unwanted changes were introduced in versions 1.3 and 1.4 and you want version 1.2 to become the latest version. You can check out version 1.2 using **Read (local copy)** mode, then check it back in using **Skip** (and probably **Force**), creating version 1.5, which is the same design data as version 1.2.

### Note:

- You must have local copies (checked out with **Read (local copy)** mode) of the cell view versions that you want to check in with **Skip**. You cannot have links to a cache or mirror directory.
- Use **Skip** with caution, because changes in the skipped versions (versions 1.3 and 1.4 in this example) will be lost.
- If there are no local modifications to the version you are checking in with **Skip** (version 1.2 in this example), then you must also use the **Force** option.
- A file that you either overwrote or deleted and replaced after checking it out with a lock.

For example, suppose you checked out a symbol view with a lock, deleted it, and then replaced it with a new view. DesignSync DFII no longer recognizes the version of the symbol view and gives you an error when you try to check it in: "Cannot skip versions on the branch." To check in the symbol view and increment the version number in the vault, you need to enable the **Skip** option when you check it in using the Show Checkouts form.

**Note:** You cannot check in objects that were checked out for read-only and then made editable.

### Note:

- This option is only available at a user level of expert.
- You can only check out for editing the latest version on a branch. You must check out a non-latest version as read-only, then change the UNIX permissions to edit the file.

### New

Select this option if the library has files that have never been checked in or, for module objects, have not been added to the module. For more information about adding objects to modules, see Adding Objects to Modules.

If you try to check in new files, including module members that have not been added to a module, without specifying the new option, you get an error message.

### Note:

- If the current branch of a file is retired, the **New** option unretires the branch.
- You can customize DesignSync DFII to always perform a pre-check for new objects before any objects are checked in. See Checking for New Objects Before Checkin.
- The **New** option is mutually incompatible with the **Only if locked** option.

### Background

Select this option to check in objects as a background process. For open views to be checked in, DesignSync DFII changes their mode to read-only before adding them to the background queue. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. DesignSync DFII changes open views you are checking in to read-only mode when it adds the Checkin command to the queue, but

users can change the mode of the views and override this protection. See *Running Commands in the Background* for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See *Selecting a User Level for Background Operations*.

#### Only if locked

Specifies whether to check in all modified objects in the workspace or only targeted files. Changes that are targeted (or locked) are:

- Locked DesignSync vault files or module members.
- Objects that have been added to a module.
- Module members that have been renamed or removed since the last module checkin.

Only if locked is mutually exclusive with the New option.

#### Module Recursive

Follow any hierarchical references and recursively operate on their contents. By default, this option is selected whenever a module is selected.

For a module folder, module recursive is not selected by default. If selected, the operation performs a file-centric, not a module centric recursion, beginning at the folder level.

This option is silently ignored for file-based libraries.

#### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See <i>Setting Form Default Values</i> for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See <i>Setting Form Default Values</i> for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.

Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.
------	--

## Related Topics

Checking In Design Files

## Checking In a Cell

You can check in all the cell views or only the specified cell views of a cell.

To check in a cell:

1. Select **Synchronicity => Checkin => Cell** from the CIW.
2. Modify the fields of the Checkin Cell form as needed.

**Click on the fields in the following illustration for information.**

Library Name: risk

Cell Name List: celdom

View Name List:

Mode:  Edit (locked copy)  Read (cache link)  Read (mirror link)  Read (local copy)

Comment: Fixed defect 3390

From Form:  From File:

Tag: Alpha

Branch: v3

Retain:  Force:  Skip:  New:  Background:  Only if locked:

Buttons: OK, Cancel, Defaults, Apply, Save Defaults, Help

3. Click **OK**.

You will see informational messages in the CIW as the design files are checked into the vault.

## Checkin Cell Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want is not listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name List

Specify the names of one or more cells, separated by spaces, on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select cells for this field.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Mode

Select what you want left in your workspace after checking in your design files:

- **Edit (locked copy)**

Locked files. You can continue to make changes; other users cannot check out the files for editing.



- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Local, read-only copies of the files.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### **Comment from Form**

With the Comment From Form radio button selected (default), enter a checkin comment in the comment field.

Depending on the design methodology your team adopts, your project leader may require that every checkin have a comment of a given length. If such a requirement is in place, your checkin will fail unless you specify an appropriate check-in comment.

### **Notes:**

- If you also specify a tag, the comment is used as both the checkin and the tag comment.
- DSDFII GUI only accepts ASCII text comments. You can specify UTF-8 compliant multibyte characters using the Comment From File option.
- If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes

### **Comment from File**

Specifies a file containing a comment to use as the description of the new version. The file must be specified as an absolute file path. DesignSync accepts a comment of any length up to 1MB. Long comments may be truncated in the output of commands that show comments. Comments in the file can be multibyte characters (UTF-8 compliant).

This option respects the minimum comment length, however it should be noted that each byte in a multibyte character counts individually towards the comment length .

### **Notes:**

- Revision control notes may not properly display UTF-8 characters. Additionally, if the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes
- If you also specify a tag, the comment is used as both the checkin and the tag comment.

## Tag

Tags the object version or module version on the server with the specified tag name.

For module objects, all objects are evaluated before the checkin begins. If the module cannot be tagged, for example if the user does not have access to add a tag or because the tag exists and is immutable, the entire module checkin fails.

**Note:** Individual module objects cannot have tags. Only the module itself can be tagged.

For other DesignSync objects, if the user does not have access to add a tag, the object is checked in without a tag.

**Note:** The -tag option will not work on modules stored on DesignSync server versions prior to 5.1.

## Branch

Checks the object into the specified branch. The branch tag can be any valid branch selector, including auto(branchname).

**Note:** This option is not applicable to modules. If you select a module or module member for the checkin operation, the branch option automatically disappears from the form.

## Retain

When selected, retains the "last modified" timestamps of objects left in your workspace after checking in. When deselected, the timestamps of the local objects are set to the check-in time.

The **Retain** option is only meaningful when leaving physical copies (**Edit (locked copy)** and **Read (local copy)** modes) of objects in your workspace. **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use retain behavior; objects in the mirror or cache directory retain their "last modified" timestamps. However, links in your workspace to the cache/mirror have timestamps corresponding to when the links were created.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

### Force

Select **Force** to create a new version in the vault, even if the file is identical to the old version. For example, suppose you have checked out version 1.3 of a cell view and have not modified it. If you check the cell view back in with the **Force** option selected, the version number is incremented to 1.4. This feature is useful when you want to synchronize versions in the vault.

### Note:

This option is available only at a user level of expert.

### Skip

Use this option if you want to check in:

- A version that is not derived from the Latest version that is currently in the vault, known as a **rollback** operation.

For example, you have version 1.4 of a view in your workspace. You realize that unwanted changes were introduced in versions 1.3 and 1.4 and you want version 1.2 to become the latest version. You can check out version 1.2 using **Read (local copy)** mode, then check it back in using **Skip** (and probably **Force**), creating version 1.5, which is the same design data as version 1.2.

### Note:

- You must have local copies (checked out with **Read (local copy)** mode) of the cell view versions that you want to check in with **Skip**. You cannot have links to a cache or mirror directory.
- Use **Skip** with caution, because changes in the skipped versions (versions 1.3 and 1.4 in this example) will be lost.
- If there are no local modifications to the version you are checking in with **Skip** (version 1.2 in this example), then you must also use the **Force** option.
- A file that you either overwrote or deleted and replaced after checking it out with a lock.

For example, suppose you checked out a symbol view with a lock, deleted it, and then replaced it with a new view. DesignSync DFII no longer recognizes the version of the symbol view and gives you an error when you try to check it in: "Cannot skip versions on the branch." To check in the symbol view and

increment the version number in the vault, you need to enable the **Skip** option when you check it in using the Show Checkouts form.

**Note:** You cannot check in objects that were checked out for read-only and then made editable.

**Note:**

- This option is only available at a user level of expert.
- You can only check out for editing the latest version on a branch. You must check out a non-latest version as read-only, then change the UNIX permissions to edit the file.

**New**

Select this option if the library has files that have never been checked in or, for module objects, have not been added to the module. For more information about adding objects to modules, see Adding Objects to Modules.

If you try to check in new files, including module members that have not been added to a module, you get an error message.

**Note:**

- If the current branch of a file is retired, the **New** option unretires the branch.
- You can customize DesignSync DFII to always perform a pre-check for new objects before any objects are checked in. See Checking for New Objects Before Checkin.
- The **New** option is mutually incompatible with the **Only if locked** option.

**Background**

Select this option to check in objects as a background process. For open views to be checked in, DesignSync DFII changes their mode to read-only before adding them to the background queue. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

**Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. DesignSync DFII changes open views you are checking in to read-only mode when it adds the Checkin command to the queue, but users can change the mode of the views and override this protection. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See [Selecting a User Level for Background Operations](#).

### Only if locked

Specifies whether to check in all modified objects in the workspace or only targeted files. Changes that are targeted (or locked) are:

- Locked DesignSync vault files or module members.
- Objects that have been added to a module.
- Module members that have been renamed or removed since the last module checkin.

Only if locked is mutually exclusive with the New option.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See <a href="#">Setting Form Default Values</a> for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See <a href="#">Setting Form Default Values</a> for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

[Checking In Design Files](#)

## Checking In a Cell View

To check in a cell view:

1. Select **Synchronicity => Checkin => Cell View** from the CIW or **Synchronicity => Checkin** from a cell view window.
2. Modify the fields of the Checkin Cell View form as needed.

Click on the fields in the following illustration for information.

The screenshot shows a dialog box titled "Checkin Cell View@lwvrh17mon". It has a standard Windows-style title bar with a close button. The dialog is organized into several sections:

- Input Fields:**
  - Library Name: risk
  - Cell Name: celdom
  - View Name: symbol
  - Tag: (empty)
  - Branch: v3
- Mode Selection:**
  - Read (local copy) is selected with a red radio button.
  - Other options: Edit (locked copy), Read (cache link), Read (mirror link).
- Comment:**
  - Text: Fixed defect 2665
  - Source: From Form (selected with a red radio button).
  - Other option: From File.
- Checkboxes:**
  - Force, Skip, New, Background, Only if locked (all are unchecked).
- Buttons:**
  - OK (highlighted in red)
  - Cancel
  - Defaults
  - Apply
  - Save Defaults
  - Help

3. Click **OK**.

You will see informational messages in the CIW as the specified design files are checked into the vault.

You also can use the Show Checkouts form to check in cell views. See Displaying Check-Out Status for details.

### Checkin Cell View Field Descriptions

#### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't

listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Name

Specify the name of the view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Mode

Select what you want left in your workspace after checking in your design files:

- **Edit (locked copy)**

Locked files. You can continue to make changes; other users cannot check out the files for editing.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Local, read-only copies of the files.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### **Comment from Form**

With the Comment From Form radio button selected (default), enter a checkin comment in the comment field.

Depending on the design methodology your team adopts, your project leader may require that every checkin have a comment of a given length. If such a requirement is in place, your checkin will fail unless you specify an appropriate check-in comment.

### **Notes:**

- If you also specify a tag, the comment is used as both the checkin and the tag comment.
- DSDFII GUI only accepts ASCII text comments. You can specify UTF-8 compliant multibyte characters using the Comment From File option.
- If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes

### **Comment from File**

Specifies a file containing a comment to use as the description of the new version. The file must be specified as an absolute file path. DesignSync accepts a comment of any length up to 1MB. Long comments may be truncated in the output of commands that show comments. Comments in the file can be multibyte characters (UTF-8 compliant).

This option respects the minimum comment length, however it should be noted that each byte in a multibyte character counts individually towards the comment length .

### **Notes:**

- Revision control notes may not properly display UTF-8 characters. Additionally, If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes
- If you also specify a tag, the comment is used as both the checkin and the tag comment.

### **Tag**

Tags the object version or module version on the server with the specified tag name.

For module objects, all objects are evaluated before the checkin begins. If the module cannot be tagged, for example if the user does not have access to add a tag or because the tag exists and is immutable, the entire module checkin fails.



**Note:** Individual module objects cannot have tags. Only the module itself can be tagged. For other DesignSync objects, if the user does not have access to add a tag, the object is checked in without a tag.

**Note:** The -tag option will not work on modules stored on DesignSync server versions prior to 5.1.

### Branch

Checks the object into the specified branch. The branch tag can be any valid branch selector, including auto(branchname).

**Note:** This option is not applicable to modules. If you select a module or module member for the checkin operation, the branch option automatically disappears from the form.

### Force

Select **Force** to create a new version in the vault, even if the file is identical to the old version. For example, suppose you have checked out version 1.3 of a cell view and have not modified it. If you check the cell view back in with the **Force** option selected, the version number is incremented to 1.4. This feature is useful when you want to synchronize versions in the vault.

### Note:

This option is available only at a user level of expert.

### Skip

Use this option if you want to check in:

- A version that is not derived from the Latest version that is currently in the vault, known as a **rollback** operation.

For example, you have version 1.4 of a view in your workspace. You realize that unwanted changes were introduced in versions 1.3 and 1.4 and you want version 1.2 to become the latest version. You can check out version 1.2 using **Read (local copy)** mode, then check it back in using **Skip** (and probably **Force**), creating version 1.5, which is the same design data as version 1.2.

### Note:

- You must have local copies (checked out with **Read (local copy)** mode) of the cell view versions that you want to check in with **Skip**. You cannot have links to a cache or mirror directory.

- Use **Skip** with caution, because changes in the skipped versions (versions 1.3 and 1.4 in this example) will be lost.
  - If there are no local modifications to the version you are checking in with **Skip** (version 1.2 in this example), then you must also use the **Force** option.
- A file that you either overwrote or deleted and replaced after checking it out with a lock.

For example, suppose you checked out a symbol view with a lock, deleted it, and then replaced it with a new view. DesignSync DFII no longer recognizes the version of the symbol view and gives you an error when you try to check it in: "Cannot skip versions on the branch." To check in the symbol view and increment the version number in the vault, you need to enable the **Skip** option when you check it in using the Show Checkouts form.

**Note:** You cannot check in objects that were checked out for read-only and then made editable.

**Note:**

- This option is only available at a user level of expert.
- You can only check out for editing the latest version on a branch. You must check out a non-latest version as read-only, then change the UNIX permissions to edit the file.

**New**

Select this option if the library has files that have never been checked in or, for module objects, have not been added to the module. For more information about adding objects to modules, see Adding Objects to Modules.

If you try to check in new files, including module members that have not been added to a module, you get an error message.

**Notes:**

- If you save this option as your default checkin mode, the change is not automatically applied to other checkin forms.
- If the current branch of the cell view is retired, the **New** option unretires the branch.
- The **New** option is mutually incompatible with the **Only if locked** option.

**Background**

Select this option to check in objects as a background process. For open views to be checked in, DesignSync DFII changes their mode to read-only before adding them to

the background queue. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

**Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. DesignSync DFII changes open views you are checking in to read-only mode when it adds the Checkin command to the queue, but users can change the mode of the views and override this protection. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

**Only if locked**

Specifies whether to check in all modified objects in the workspace or only targeted files. Changes that are targeted (or locked) are:

- Locked DesignSync vault files or module members.
- Objects that have been added to a module.
- Module members that have been renamed or removed since the last module checkin.

Only if locked is mutually exclusive with the New option.

**Command Buttons**

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

Checking In Design Files  
 Displaying Check-Out Status

## Checking In a Category

You can check in all the cells in a category at one time or select specific views to check in.

To check in the cells in a category:

1. Select **Synchronicity => Checkin => Category** from the CIW.
2. Modify the fields of the Checkin Category form as needed.

**Click on the fields in the following illustration for information.**

Checkin Category@lwvrh17mon

Library Name: risk Browse

Category List: midcells Nested

View Name List: symbol List Cells

Mode:  Edit (locked copy)  Read (cache link)  
 Read (mirror link)  Read (local copy)

Comment: new implementation  
 From Form  From File

Tag:

Branch: v3

Retain  Force  Skip  New  Background   
 Only if locked

OK Cancel Defaults Apply Save Defaults Help

3. Click **OK**.

You will see informational messages in the CIW as the design files are checked into the vault.

### Note:

If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed unless the cells are part of other categories that are being processed.

## Checkin Category Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Category List

Specify one or more category names, separated by spaces, on which to operate. The categories must exist in the local library. The **Nested** checkbox determines whether the operation applies to subcategories.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### Nested

Specifies whether the operation applies only to the cells in the specified categories or also to cells in subcategories.

### Note:

When processing all the cells of a category, including nested categories, DesignSync DFII prompts you to fetch any nested category (`.Cat`) files that are missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed as part of your Checkout Category operation unless the

cells are part of other categories that are being processed. Category files are fetched using:

- The default fetch mode, not the **Mode** value specified on the Checkout Category form.
- The selector from the **Selector** field, if specified. Otherwise, the library's persistent selector is used.

### List Cells

Displays the list of cells that will be processed by the operation, as defined by the **Category List** and **Nested** settings. The display window also lists the cell views, if any, that you have selected. See Listing Selected Cells for Category Operations for more information.

### Note:

If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not listed as part of the List Cells output unless the cells are part of other categories that are being processed.

### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Mode

Select what you want left in your workspace after checking in your design files:

- **Edit (locked copy)**

Locked files. You can continue to make changes; other users cannot check out the files for editing.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Local, read-only copies of the files.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### **Comment from Form**

With the Comment From Form radio button selected (default), enter a checkin comment in the comment field.

Depending on the design methodology your team adopts, your project leader may require that every checkin have a comment of a given length. If such a requirement is in place, your checkin will fail unless you specify an appropriate check-in comment.

### **Notes:**

- If you also specify a tag, the comment is used as both the checkin and the tag comment.
- DSDFII GUI only accepts ASCII text comments. You can specify UTF-8 compliant multibyte characters using the Comment From File option.
- If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes

### **Comment from File**

Specifies a file containing a comment to use as the description of the new version. The file must be specified as an absolute file path. DesignSync accepts a comment of any length up to 1MB. Long comments may be truncated in the output of commands that show comments. Comments in the file can be multibyte characters (UTF-8 compliant).

This option respects the minimum comment length, however it should be noted that each byte in a multibyte character counts individually towards the comment length .

### **Notes:**

- Revision control notes may not properly display UTF-8 characters. Additionally, If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes
- If you also specify a tag, the comment is used as both the checkin and the tag comment.

### **Tag**

Tags the object version or module version on the server with the specified tag name.

For module objects, all objects are evaluated before the checkin begins. If the module cannot be tagged, for example if the user does not have access to add a tag or because the tag exists and is immutable, the entire module checkin fails.

**Note:** Individual module objects cannot have tags. Only the module itself can be tagged.

For other DesignSync objects, if the user does not have access to add a tag, the object is checked in without a tag.

**Note:** The -tag option will not work on modules stored on DesignSync server versions prior to 5.1.

### Branch

Checks the object into the specified branch. The branch tag can be any valid branch selector, including auto(branchname).

**Note:** This option is not applicable to modules. If you select a module or module member for the checkin operation, the branch option automatically disappears from the form.

### Retain

When selected, retains the "last modified" timestamps of objects left in your workspace after checking in. When deselected, the timestamps of the local objects are set to the check-in time.

The **Retain** option is only meaningful when leaving physical copies (**Edit (locked copy)** and **Read (local copy)** modes) of objects in your workspace. **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use retain behavior; objects in the mirror or cache directory retain their "last modified" timestamps. However, links in your workspace to the cache/mirror have timestamps corresponding to when the links were created.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

### Force

Select **Force** to create a new version in the vault, even if the file is identical to the old version. For example, suppose you have checked out version 1.3 of a cell view and have not modified it. If you check the cell view back in with the **Force** option selected, the version number is incremented to 1.4. This feature is useful when you want to synchronize versions in the vault.



**Note:**

This option is available only at a user level of expert.

**Skip**

Use this option if you want to check in:

- A version that is not derived from the Latest version that is currently in the vault, known as a **rollback** operation.

For example, you have version 1.4 of a view in your workspace. You realize that unwanted changes were introduced in versions 1.3 and 1.4 and you want version 1.2 to become the latest version. You can check out version 1.2 using **Read (local copy)** mode, then check it back in using **Skip** (and probably **Force**), creating version 1.5, which is the same design data as version 1.2.

**Note:**

- You must have local copies (checked out with **Read (local copy)** mode) of the cell view versions that you want to check in with **Skip**. You cannot have links to a cache or mirror directory.
  - Use **Skip** with caution, because changes in the skipped versions (versions 1.3 and 1.4 in this example) will be lost.
  - If there are no local modifications to the version you are checking in with **Skip** (version 1.2 in this example), then you must also use the **Force** option.
- A file that you either overwrote or deleted and replaced after checking it out with a lock.

For example, suppose you checked out a symbol view with a lock, deleted it, and then replaced it with a new view. DesignSync DFII no longer recognizes the version of the symbol view and gives you an error when you try to check it in: "Cannot skip versions on the branch." To check in the symbol view and increment the version number in the vault, you need to enable the **Skip** option when you check it in using the Show Checkouts form.

**Note:** You cannot check in objects that were checked out for read-only and then made editable.

**Note:**

- This option is only available at a user level of expert.

- You can only check out for editing the latest version on a branch. You must check out a non-latest version as read-only, then change the UNIX permissions to edit the file.

### **New**

Select this option if the library has files that have never been checked in or, for module objects, have not been added to the module. For more information about adding objects to modules, see [Adding Objects to Modules](#).

If you try to check in new files, including module members that have not been added to a module, you get an error message.

### **Note:**

- If the current branch of a file is retired, the **New** option unretires the branch.
- You can customize DesignSync DFII to always perform a pre-check for new objects before any objects are checked in. See [Checking for New Objects Before Checkin](#).
- The **New** option is mutually incompatible with the **Only if locked** option.

### **Background**

Select this option to check in objects as a background process. For open views to be checked in, DesignSync DFII changes their mode to read-only before adding them to the background queue. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### **Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. DesignSync DesignSync DFII changes open views you are checking in to read-only mode when it adds the Checkin command to the queue, but users can change the mode of the views and override this protection. See [Running Commands in the Background](#) for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See [Selecting a User Level for Background Operations](#).

### **Only if locked**

Specifies whether to check in all modified objects in the workspace or only targeted files. Changes that are targeted (or locked) are:

## DesignSync Data Manager DFII User's Guide

- Locked DesignSync vault files or module members.
- Objects that have been added to a module.
- Module members that have been renamed or removed since the last module checkin.

Only if locked is mutually exclusive with the New option.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

Checking In Design Files  
Listing Selected Cells for Category Operations

## Checking In a Design Hierarchy

You can check in all the cells in a design hierarchy at once or you can select specific views to check in.

To check in the cells in a hierarchy:

1. Select **Synchronicity => Checkin => Hierarchy** from the CIW.
2. Modify the fields of the Checkin Cell View Hierarchy form as needed.

**Click on the fields in the following illustration for information**

**Checkin Cell View Hierarchy@lwvrh17mon**

Top Level Cell Views

Library Name:

Cell Name:

View Names:

Mode

Edit (locked copy)  Read (cache link)

Read (mirror link)  Read (local copy)

Comment

From Form  From File

Tag:

Branch:

Retain  Force  Skip  New  Background

Only if locked

Hierarchy Specification

Switch Using

First In Switch List  All In Switch List

Instantiated View  All Views

Switch List:

Stop List:

Switch Libraries

All  Only Into  Not Into

Names:

Process Views

Switch View  All Switch List

All Views  Other

Names:

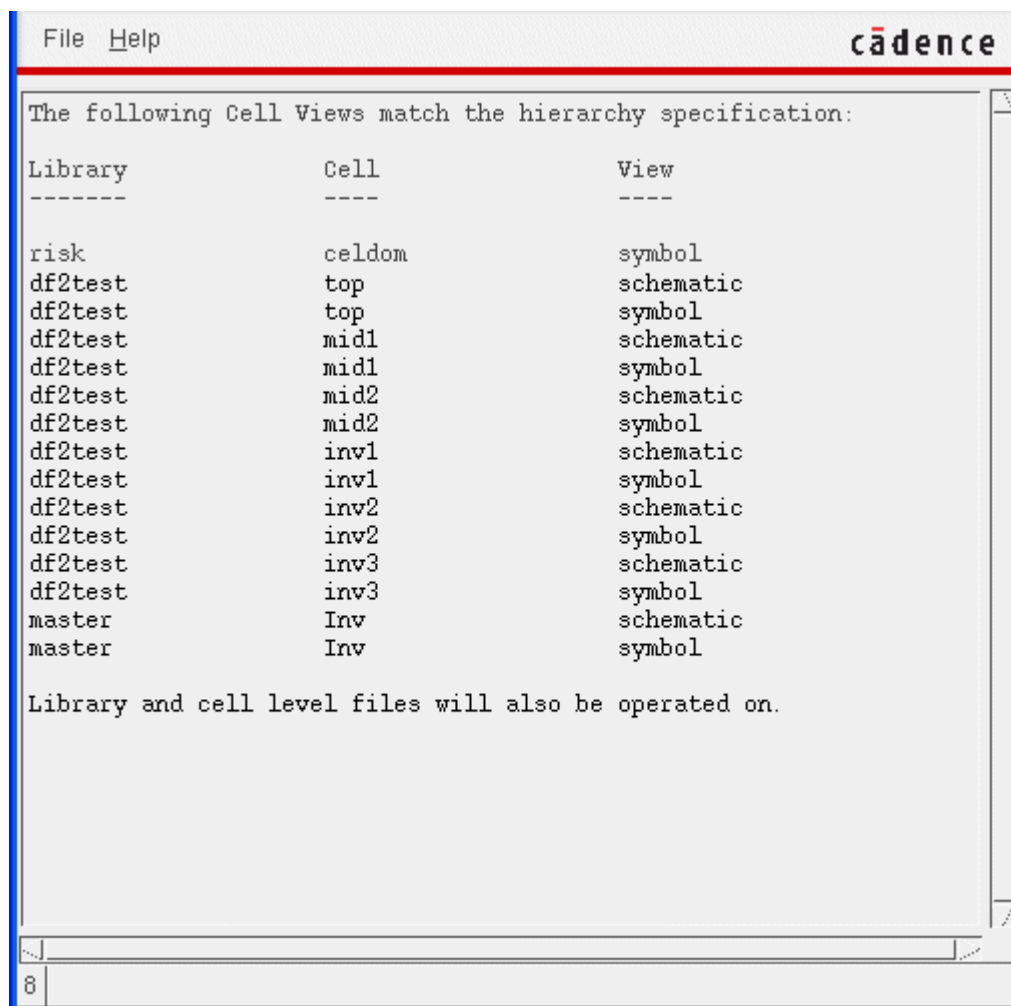
Process Files

None  Cell Only  Cell And Library

To identify the cells in a design hierarchy, DesignSync DFII can use one of two process: either DesignSync DFII scans the hierarchy according to your specifications in the **Hierarchy Specification** fields beginning with the top-level cell views specified using the **View Names** field; or by making use of the hierarchy that has been described in a Hierarchical Configuration (config) view.

3. To verify your hierarchy options, select the **List Cell Views** button.

DesignSync DFII traverses the hierarchy according to the current hierarchy options and displays the potential views for processing.



4. Click **OK** in the Checkin Cell View Hierarchy form to process the specified hierarchy.

You will see informational messages in the CIW as the design files are checked into the vault.

DesignSync DFII scans the hierarchy, opening the cell views and gathering information on each cell referenced in a cell view. For each cell gathered, DesignSync DFII records the library name and the cell name and then identifies which views to scan next, according to the **Switch Using** field and, if necessary, the **Switch List** field. If the next cell view is not in the **Stop List**, DesignSync DFII opens the cell view and descends that hierarchy.

The CIW window lists which design files have been checked in. When the operation is complete, the CIW shows you the number of objects that were checked in and the number of objects for which the operation failed.

### Notes:

- DesignSync provides support for operating both on design views and config views, but you cannot specify both types of views within the same operation.
- For DesignSync DFII to scan the hierarchy, the cells must be in your local workspace.
- DesignSync DFII does not scan through libraries that have been filtered out in the **Switch Libraries** field. For example, suppose a cell in **library\_1** references a cell in **library\_2**, which references a cell in **library\_3**. If **library\_2** is filtered out by the **Switch Libraries** field, the cell in **library\_3** is not found.

### Checkin Cell View Hierarchy Field Descriptions

#### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for

the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Names

You can operate on one or more of the cell's views. Specify the names of the views on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

It is useful to specify more than one view name if you need to traverse multiple hierarchies in one scan. To do this, specify the views using the **View Names** field and select the **All in Switch List** option in the **Switch Using** field. For example, to step through a design's schematic and layout hierarchies at the same time, you might specify "schematic layout" as the top-level cell views in the **View Names** field, "schematic layout symbol" in the **Switch List** field, and "All In Switch List" in the **Switch Using** field.

**Note:** The **Switch Using**, **Switch List**, and **Stop List** fields are not applicable to "config" views.

DesignSync provides support for operating both on design views and config views, but you cannot specify both types of views within the same operation.

### Mode

Select what you want left in your workspace after checking in your design files:

- **Edit (locked copy)**

Locked files. You can continue to make changes; other users cannot check out the files for editing.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.



- **Read (local copy)**

Local, read-only copies of the files.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### **Comment from Form**

With the Comment From Form radio button selected (default), enter a checkin comment in the comment field.

Depending on the design methodology your team adopts, your project leader may require that every checkin have a comment of a given length. If such a requirement is in place, your checkin will fail unless you specify an appropriate check-in comment.

### **Notes:**

- If you also specify a tag, the comment is used as both the checkin and the tag comment.
- DSDFII GUI only accepts ASCII text comments. You can specify UTF-8 compliant multibyte characters using the Comment From File option.
- If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes

### **Comment from File**

Specifies a file containing a comment to use as the description of the new version. The file must be specified as an absolute file path. DesignSync accepts a comment of any length up to 1MB. Long comments may be truncated in the output of commands that show comments. Comments in the file can be multibyte characters (UTF-8 compliant).

This option respects the minimum comment length, however it should be noted that each byte in a multibyte character counts individually towards the comment length .

### **Notes:**

- Revision control notes may not properly display UTF-8 characters. Additionally, If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes
- If you also specify a tag, the comment is used as both the checkin and the tag comment.

### **Tag**

Tags the object version or module version on the server with the specified tag name.

For module objects, all objects are evaluated before the checkin begins. If the module cannot be tagged, for example if the user does not have access to add a tag or because the tag exists and is immutable, the entire module checkin fails.

If the user does not have access to add a tag, the object is checked in without a tag.

**Note:** The -tag option will not work on modules stored on DesignSync server versions prior to 5.1.

### Branch

Checks the object into the specified branch. The branch tag can be any valid branch selector, including auto(branchname).

**Note:** This option is not applicable to modules. If you select a module or module member for the checkin operation, the branch option automatically disappears from the form.

### Retain

When selected, retains the "last modified" timestamps of objects left in your workspace after checking in. When deselected, the timestamps of the local objects are set to the check-in time.

The **Retain** option is only meaningful when leaving physical copies (**Edit (locked copy)** and **Read (local copy)** modes) of objects in your workspace. **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use retain behavior; objects in the mirror or cache directory retain their "last modified" timestamps. However, links in your workspace to the cache/mirror have timestamps corresponding to when the links were created.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

### Force

Select **Force** to create a new version in the vault, even if the file is identical to the old version. For example, suppose you have checked out version 1.3 of a cell view and have not modified it. If you check the cell view back in with the **Force** option selected, the version number is incremented to 1.4. This feature is useful when you want to synchronize versions in the vault.

### Note:

This option is available only at a user level of expert.

### Skip

Use this option if you want to check in:

- A version that is not derived from the Latest version that is currently in the vault, known as a **rollback** operation.

For example, you have version 1.4 of a view in your workspace. You realize that unwanted changes were introduced in versions 1.3 and 1.4 and you want version 1.2 to become the latest version. You can check out version 1.2 using **Read (local copy)** mode, then check it back in using **Skip** (and probably **Force**), creating version 1.5, which is the same design data as version 1.2.

#### Note:

- You must have local copies (checked out with **Read (local copy)** mode) of the cell view versions that you want to check in with **Skip**. You cannot have links to a cache or mirror directory.
  - Use **Skip** with caution, because changes in the skipped versions (versions 1.3 and 1.4 in this example) will be lost.
  - If there are no local modifications to the version you are checking in with **Skip** (version 1.2 in this example), then you must also use the **Force** option.
- A file that you either overwrote or deleted and replaced after checking it out with a lock.

For example, suppose you checked out a symbol view with a lock, deleted it, and then replaced it with a new view. DesignSync DFII no longer recognizes the version of the symbol view and gives you an error when you try to check it in: "Cannot skip versions on the branch." To check in the symbol view and increment the version number in the vault, you need to enable the **Skip** option when you check it in using the Show Checkouts form.

**Note:** You cannot check in objects that were checked out for read-only and then made editable.

#### Note:

- This option is only available at a user level of expert.
- You can only check out for editing the latest version on a branch. You must check out a non-latest version as read-only, then change the UNIX permissions to edit the file.

### New

Select this option if the library has files that have never been checked in or, for module objects, have not been added to the module. For more information about adding objects to modules, see [Adding Objects to Modules](#).

If you try to check in new files, including module members that have not been added to a module, you get an error message.

**Note:**

- If the current branch of a file is retired, the **New** option unretires the branch.
- You can customize DesignSync DFII to always perform a pre-check for new objects before any objects are checked in. See [Checking for New Objects Before Checkin](#).
- The **New** option is mutually incompatible with the **Only if locked** option.

**Background**

Select this option to check in objects as a background process. For open views to be checked in, DesignSync DFII changes their mode to read-only before adding them to the background queue. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

**Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. DesignSync DFII changes open views you are checking in to read-only mode when it adds the Checkin command to the queue, but users can change the mode of the views and override this protection. See [Running Commands in the Background](#) for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See [Selecting a User Level for Background Operations](#).

**Only if locked**

Specifies whether to check in all modified objects in the workspace or only targeted files. Changes that are targeted (or locked) are:

- Locked DesignSync vault files or module members.
- Objects that have been added to a module.
- Module members that have been renamed or removed since the last module checkin.

Only if locked is mutually exclusive with the New option.

### Switch Using

The **Switch Using** field lets you specify how the design hierarchy is to be traversed.

This field is not applicable when specifying a config view because the hierarchy expansion definition within the config view is used instead.

You can choose one of the following:

- **First in Switch List** -- As the design is traversed, DesignSync DFII descends into the first view specified in the switch list that exists for a cell. Specify the switch list using the **Switch List** field.
- **Instantiated View** -- As the design is traversed, DesignSync DFII descends into each instantiated view. The **Switch List** field is greyed-out and ignored in this case. Descending into all instantiated views is useful for traversing a hierarchy with layout-type views in cases where the design team has used multiple view names to indicate the layout views.
- **All in Switch List** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that matches a view in the switch list. Specify the switch list using the **Switch List** field.

Descending into all views in the switch list is useful when you have a well-defined set of views and you need to process multiple hierarchies. For example, you might have a layout hierarchy and a schematic hierarchy that are not the same, and you want to process both. If you do not select the **All in Switch List** field, this scan requires multiple passes through the command.

- **All Views** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that exists for each cell. The **Switch List** field is greyed-out and ignored in this case.

Descending into all views is useful when the command must traverse all paths through the hierarchy. In this case, DesignSync DFII might scan some unnecessary cells instantiated by obsolete views.

### Switch List

Specify the names of the views to be scanned to identify the design hierarchy. Separate view names by spaces.

The Switch List field is required if you specify the **First in Switch List** or **All in Switch List** options in the **Switch Using** field. If the **Switch Using** field is set to **Instantiated View** or **All Views**, the **Switch List** field is ignored.

This field is not applicable when specifying a config view because DesignSync uses the switch list from within the config view.

### Stop List

Specify the names of views at which the hierarchy scanning should stop. View names should be separated by spaces. As the design is traversed, if the **Switch List** view that is opened for a cell is also in this list, then scanning stops at that point.

This field is optional.

This field is not applicable when specifying a config view because DesignSync uses the stop list from within the config view.

### Switch Libraries

The options in this field control which libraries may be entered as the hierarchy is scanned. You can choose one of the following:

- **All** -- All libraries may be entered.
- **Only Into** -- Only the libraries specified in the following **Names** field may be entered.
- **Not Into** -- All libraries except those specified in the **Names** field may be entered.

### Switch Libraries Names

Specify a list of library names, separated by spaces, for use by the **Switch Libraries** field. This field is not active if **All** is selected in the **Switch Libraries** field.

### Process Views

Once you have identified the hierarchy, the **Process Views** options control which views of the identified cells are processed. You can choose one of the following:

- **Switch View** -- Each view that was switched into is processed.
- **All Switch List** -- All the views specified in the **Switch List** that exist for the cell are processed. If the selected view is a "config" view, the All Switch List option uses the switch view and the switch list defined within the config view. If there are sub-configs, then the switch list of the sub-configs is used within those sub-configs

**Note:** Switch lists are not used if hierarchy traversal descends into instantiated views. Thus, if **All Switch List** is selected and the **Switch Using** field is set to **Instantiated View**, an error occurs.

- **All Views** -- All views that exist for the cell are processed.
- **Other** -- All the views specified in the following **Names** field that exist for the cell are processed. For config views, the switch view is always included.

### Process Views Names

Specify a list of views, separated by spaces, for use by the **Process Views** field. This field is active only when the **Other** option is selected in the **Process Views** field.

#### Process Files

This option controls whether cell- and library-level files are processed in addition to the specified cell views. You can choose one of the following:

- **None** -- No cell- or library-level files are processed.
- **Cell Only** -- Cell-level files are processed, but library-level files are not. This option selects only cell-level files for those cells on which you are operating.
- **Cell And Library** -- Cell- and library-level files are processed.

#### Include Config Cells

This option controls whether the config view cells are included in the operation. If you want to operate on the design cells and the hierarchy definition (config) cells, enable this option. (Default) If you want to operate ONLY on the design cells and not on the hierarchy definition cells, you can disable this option.

#### List Cell Views

Displays the list of views that can be processed by the operation, as defined by the **Top Level Cell View** and **Hierarchy Specification** settings that you specified on the form.

By default, only the single view that was switched into is processed, not all views. You can change this behavior by changing the setting of the **Process Views** field.

See Listing Selected Cell Views for Hierarchy Operations for more information.

#### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.

Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.
------	--

## Related Topics

Checking In Design Files  
Listing Selected Cell Views for Hierarchy Operations

## Checking In a File

The Checkin Object form is a general-purpose checkin interface. You can specify modules, files and directories, library objects (libraries, cells, views), or a combination of both. You can use glob-style wildcards.

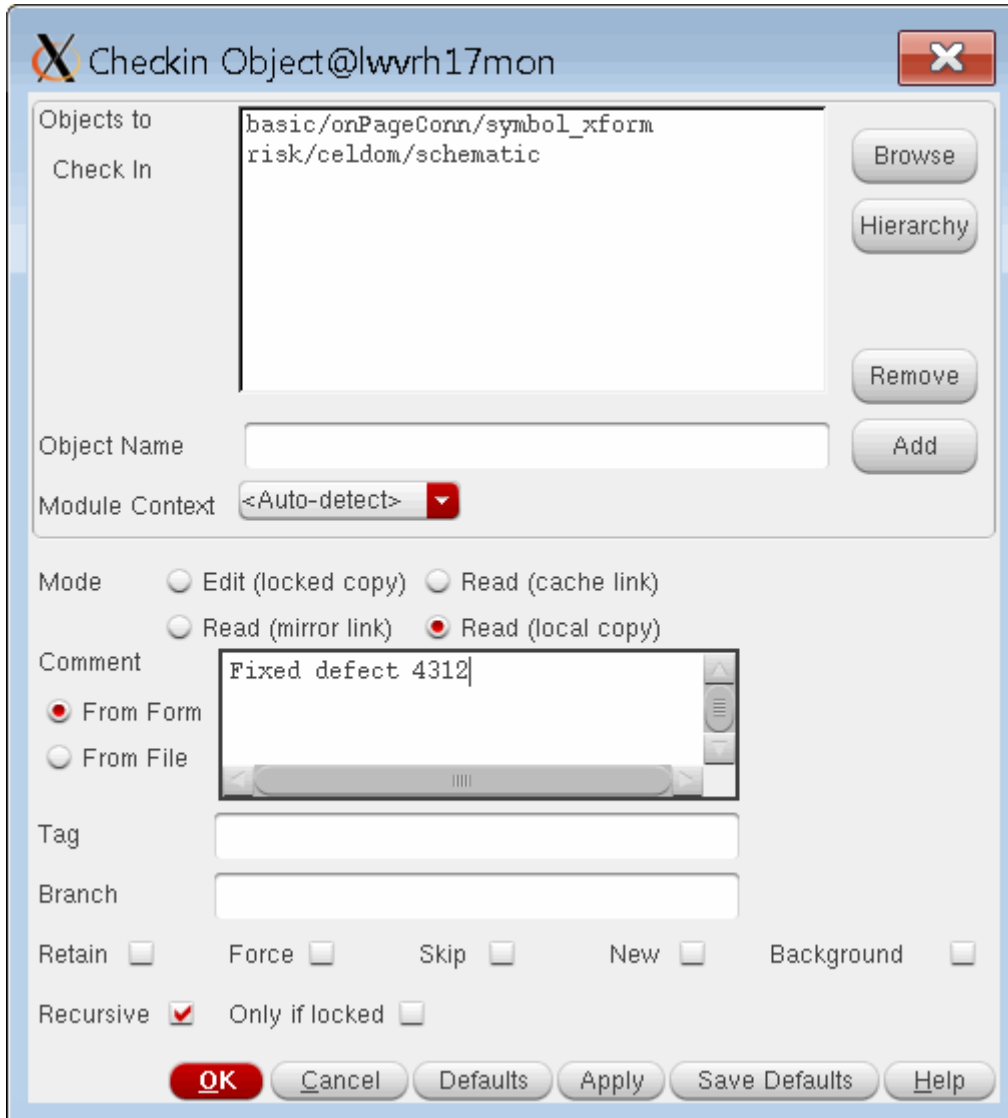
Use the Checkin Object form to check in files that are not part of a cell view co-managed set, such as property files, category files, and documentation files, as well as files that are totally unrelated to the design library. Also, use the Checkin Object form to perform check-in operations on library objects that you cannot perform from the object-specific interface (such as Checkin Cell). For example, you can check in multiple cells across several libraries in one operation.

To check in one or more objects:

1. Select **Synchronicity => Checkin => File** from the CIW.
2. Modify the fields of the Checkin Object form as needed.

**Click on the fields in the following illustration for information.**





3. Click **OK**.

You will see informational messages in the CIW as the objects are checked into the vault.

## Checkin Object Field Descriptions

### Objects To Check In

Lists the objects that you want to check in.

If you specified objects with wildcards, the individual matching objects are not themselves listed. When you click **OK** or **Apply**, the list is passed to the underlying check-in routine, which then expands the wildcards.

To add objects to the Objects to Check In list:

1. Enter the object name in the Object Name field.
2. Click **Add**.

- or -

1. Click **Browse** to invoke the DesignSync DFII Browser.
2. Select one or more objects in the browser.
3. Click **OK** or **Apply** from the browser.

To remove objects from the Objects to Check In list:

1. Select one or more objects from the list.
2. Click **Remove**.

Note that when you select an object from the Objects to Check In list and the Object Name field is either empty or contains a name that already appears in the list, then the selected object's name appears in Object Name. This behavior lets you easily add new objects to Objects to Check In based on the name of a previously entered object.

### **Browse**

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You can browse your file system (directories and files), module instances, or library objects (libraries, categories, cells, and views). You select one or more objects as appropriate for the operation you are performing, then click **OK** or **Apply** to pass your selections to the calling form.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser.

### **Hierarchy**

Invokes the Select Cell View Hierarchy form, which helps you select the cell views that comprise a hierarchy. You provide the hierarchy parameters, then click **OK** or **Apply** to seed the calling form with the cell views that match your parameters.

See *Selecting Cell View Hierarchy* for a full description.

### **Object Name**

Specify the name of an object (file, directory, module, library, cell, or cell view) that you want to check in, then click **Add** to add the object to the **Objects to Check In** list. Any object that is entered in the **Object Name** field but not added to the **Objects to Check In** list will not be checked in.

The **Object Name** field is cleared when you click **Add**. If you want to specify an object based on a previously entered object name, select the object from **Objects to Check In**. If **Object Name** was empty or contained an object name that already appears in the **Objects to Check In** list, then the selected object name appears in the **Object Name** field. You can then edit that name and click **Add**.

You can specify absolute or relative paths. Relative paths are relative to the current working directory or to the library on your library path. For example, if library "testdf2" is on your library path, then you can specify the `cdsinfo.tag` file for that library as `testdf2/cdsinfo.tag`, even though the "testdf2" library directory may be anywhere on your disk. If there is also a directory within the current working directory with the same name ("testdf2") so that `testdf2/cdsinfo.tag` is ambiguous -- or even when a specified object exists only in the "testdf2" directory and not the "testdf2" library -- then the library is used for the operation and the directory is ignored.

Duplicate values entered from **Object Name** appear in the **Objects to Check In** field only once. However, the same objects specified using different paths (for example, `./cdsinfo.tag` and `cdsinfo.tag`) are not filtered and may result in the object being operated on multiple times.

You can use the Recursive option to check in a module, directory, library, or cell name recursively.

**Note:** If you specify a directory, you must specify Recursive.

### Using Wildcards

You may use glob-style (not regexp-style) wildcards in the **Object Name** field. Wildcards are useful when you want to operate on a large number of objects without specifying the name of each object. You can use the following special characters:

?	Matches any single character.
*	Matches zero or more characters.
[chars]	Matches any one of the characters in <code>chars</code> . <code>chars</code> may include a range of characters, such as <code>a-z</code> , which matches any character from "a" to "z".
\x	Matches "x". For example, <code>a\?b</code> matches only <code>a?b</code> ; the backslash (\) overrides the special meaning of "?" in glob patterns.
{str1,str2,...}	Matches any of the strings <code>str1</code> , <code>str2</code> , and so on. For example, <code>*.{dss,exe}</code> matches any file with an extension of <code>"dll"</code> or <code>"exe"</code> .

These wildcards are expanded within the workspace and libraries before the operation is performed. For example, you can specify `smallLib/*/symbol` to operate on the symbol views of all cells within the "smallLib" library.

Wildcard expressions may not work within the library part of a relative library name. The wildcard expression is expanded first against the current working directory, and then library matching is performed. For example, you have libraries "libA" and "libB" and specify the wildcard expression "lib\*". But your current directory has a file called "libNotes.txt". The wildcard expression will match "libNotes.txt", not the "libA" and "libB" libraries.

### Module Context

Select the appropriate module context from the drop-down list. The target module(s) must have its base directories at, or above, the level of the object being checked in. All available workspace module instances are listed alphabetically in the pull-down after the calculated default selection, <Auto-detect>, which uses the DesignSync smart module detection functionality. For more information on the auto-detect functionality, see the *ENOVIA DesignSync Data Manager User's Guide: Understanding Smart Module Detection*.

### Note: You

can only specify one module. If you are checking in objects to two different modules in the same workspace, and smart module detection is unable to determine which is the appropriate target module, you must use two separate checkin operations.

If the module doesn't appear on the drop-down list, select \*Refresh\* from the drop-down list to refresh the internal list of known candidate modules, and reevaluate the set candidate modules. If the module doesn't appear in the list after a refresh, see *Unable to Locate a Module*.

### Mode

Select what you want left in your workspace after checking in your files:

- **Edit (locked copy)**

Locked files. You can continue to make changes; other users cannot check out the files for editing.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Local, read-only copies of the files.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### **Comment from Form**

With the Comment From Form radio button selected (default), enter a checkin comment in the comment field.

Depending on the design methodology your team adopts, your project leader may require that every checkin have a comment of a given length. If such a requirement is in place, your checkin will fail unless you specify an appropriate check-in comment.

### **Notes:**

- If you also specify a tag, the comment is used as both the checkin and the tag comment.
- DSDFII GUI only accepts ASCII text comments. You can specify UTF-8 compliant multibyte characters using the Comment From File option.
- If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes

### **Comment from File**

Specifies a file containing a comment to use as the description of the new version. The file must be specified as an absolute file path. DesignSync accepts a comment of any length up to 1MB. Long comments may be truncated in the output of commands that show comments. Comments in the file can be multibyte characters (UTF-8 compliant).

This option respects the minimum comment length, however it should be noted that each byte in a multibyte character counts individually towards the comment length .

### **Notes:**

- Revision control notes may not properly display UTF-8 characters. Additionally, if the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes
- If you also specify a tag, the comment is used as both the checkin and the tag comment.

## Tag

Tags the object version or module version on the server with the specified tag name.

For module objects, all objects are evaluated before the checkin begins. If the module cannot be tagged, for example if the user does not have access to add a tag or because the tag exists and is immutable, the entire module checkin fails.

**Note:** Individual module objects cannot have tags. Only the module itself can be tagged.

For other DesignSync objects, if the user does not have access to add a tag, the object is checked in without a tag.

**Note:** The -tag option will not work on modules stored on DesignSync server versions prior to 5.1.

## Branch

Checks the object into the specified branch. The branch tag can be any valid branch selector, including auto(branchname).

**Note:** This option is not applicable to modules. If you select a module or module member for the checkin operation, the branch option automatically disappears from the form.

## Retain

When selected, retains the "last modified" timestamps of objects left in your workspace after checking in. When deselected, the timestamps of the local objects are set to the check-in time.

The **Retain** option is only meaningful when leaving physical copies (**Edit (locked copy)** and **Read (local copy)** modes) of objects in your workspace. **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use retain behavior; objects in the mirror or cache directory retain their "last modified" timestamps. However, links in your workspace to the cache/mirror have timestamps corresponding to when the links were created.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

### Force

Select **Force** to create a new version in the vault, even if the file is identical to the old version. For example, suppose you have checked out version 1.3 of a file and have not modified it. If you check the file back in with the **Force** option selected, the version number is incremented to 1.4. This feature is useful when you want to synchronize versions in the vault.

### Note:

This option is available only at a user level of expert.

### Skip

Use this option if you want to check in:

- A version that is not derived from the Latest version that is currently in the vault, known as a **rollback** operation.

For example, you have version 1.4 of a file in your workspace. You realize that unwanted changes were introduced in versions 1.3 and 1.4 and you want version 1.2 to become the latest version. You can check out version 1.2 using **Read (local copy)** mode, then check it back in using **Skip** (and probably **Force**), creating version 1.5, which is identical to version 1.2.

### Note:

- You must have local copies (checked out with **Read (local copy)** mode) of the file versions that you want to check in with **Skip**. You cannot have links to a cache or mirror directory.
- Use **Skip** with caution, because changes in the skipped versions (versions 1.3 and 1.4 in this example) will be lost.
- If there are no local modifications to the version you are checking in with **Skip** (version 1.2 in this example), then you must also use the **Force** option.
- A file that you either overwrote or deleted and replaced after checking it out with a lock.

For example, suppose you checked out a file with a lock, deleted it, and then replaced it with a new file. DesignSync DFII no longer recognizes the version of the file and gives you an error when you try to check it in: "Cannot skip versions

on the branch." To check in the file and increment the version number in the vault, you need to enable the **Skip** option when you check it in.

**Note:** You cannot check in objects that were checked out for read-only and then made editable.

**Note:**

- This option is only available at a user level of expert.
- You can only check out for editing the latest version on a branch. You must check out a non-latest version as read-only, then change the UNIX permissions to edit the file.

**New**

Select this option if the library has files that have never been checked in or, for module objects, have not been added to the module. For more information about adding objects to modules, see [Adding Objects to Modules](#).

If you try to check in new files, including module members that have not been added to a module, without specifying the **New** option, you get an error message.

**Note:**

- If there are multiple candidate modules for a module checkin, you must use Add to identify what module the objects should be checked into.
- If the current branch of a non-module object is retired, the **New** option unretires the branch.
- You can customize DesignSync DFII to always perform a pre-check for new objects before any objects are checked in. See [Checking for New Objects Before Checkin](#).
- The **New** option is mutually incompatible with the **Only if locked** option.

**Background**

Select this option to check in objects as a background process. For open views to be checked in, DesignSync DFII changes their mode to read-only before adding them to the background queue. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

**Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. DesignSync DFII changes open views you are checking in to read-only mode when it adds the Checkin command to the queue, but users can change the mode of the views and override this protection. See [Running](#)



Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See [Selecting a User Level for Background Operations](#).

### Recursive

For a module, directory, library, or cell name, recursively operate on its contents. For example, if you specify a directory, all objects in the entire directory hierarchy are checked in.

**Note:** If you specify a directory, you must specify **Recursive**.

### Only if locked

Specifies whether to check in all modified objects in the workspace or only targeted files. Changes that are targeted (or locked) are:

- Locked DesignSync vault files or module members.
- Objects that have been added to a module.
- Module members that have been renamed or removed since the last module checkin.

Only if locked is mutually exclusive with the New option.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See <a href="#">Setting Form Default Values</a> for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See <a href="#">Setting Form Default Values</a> for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

## Checking In Design Files

# Checking Out

## Checking Out Design Files

The check-out commands let you get the latest version of a design object from the vault for editing or viewing. You also can check out older versions for viewing.

You can check out the following design objects:

- Library
- Cell
- Cell view
- Category
- Design hierarchy
- Modules and individual DesignSync objects

DesignSync DFII also provides a general-purpose checkout interface so that you can check out files that are not part of a cell view definition. This interface lets you specify files and directories, and supports the use of wildcards. This interface also lets you specify library objects (libraries, cells, and views), although using the form that is specific to that object type, such as Checkout Cell, is generally simpler.

**Tip:** When working with module objects, check out the entire module before making your modifications, rather than updating only specific module members. While working on your design, periodically checkout the module to keep the design objects current with the state of the module. If you have the design checked out for a long period of time, checkout the entire module before checking in your design modifications. This guarantees that you are typically working on the latest version of the module. If you update only specific module members, you may miss structural or relevant module member updates to different members.

### General Checkout Notes

- Some design management systems define a checkout to be with a lock. DesignSync DFII defines a checkout as any operation that gets a version of an object from the vault and places it in your workspace, regardless of the check-out mode.
- You cannot check out design files that have never been checked in.
- If you have **automatic checkouts** enabled, the software can initiate checkouts for you (see the "Design Framework II Help" from Cadence's documentation library for details).
- Only the latest version on a given branch can be checked out with a lock.
- You must have the library in your workspace before you can perform any revision-control operations on that library, including checkouts. Use the Join

Library wizard to set up your workspace (see [Accessing a Library for the First Time](#)).

- You can only specify check-out comments when using the Checkout Cell View form or the Checkout Object form. (This limitation exists because some DesignSync DFII check-out operations call the DesignSync `co` command, which supports check-out comments, while others call the DesignSync `populate` command, which does not.)
- The **Incremental** option is available only from the Checkout Library and Checkout Object forms. This option provides a performance optimization for recursive checkouts (involving more than one level of directory hierarchy). See the description of **Incremental** from [Checking Out a Library](#) or [Checking Out a File](#) for details.

### Related Topics

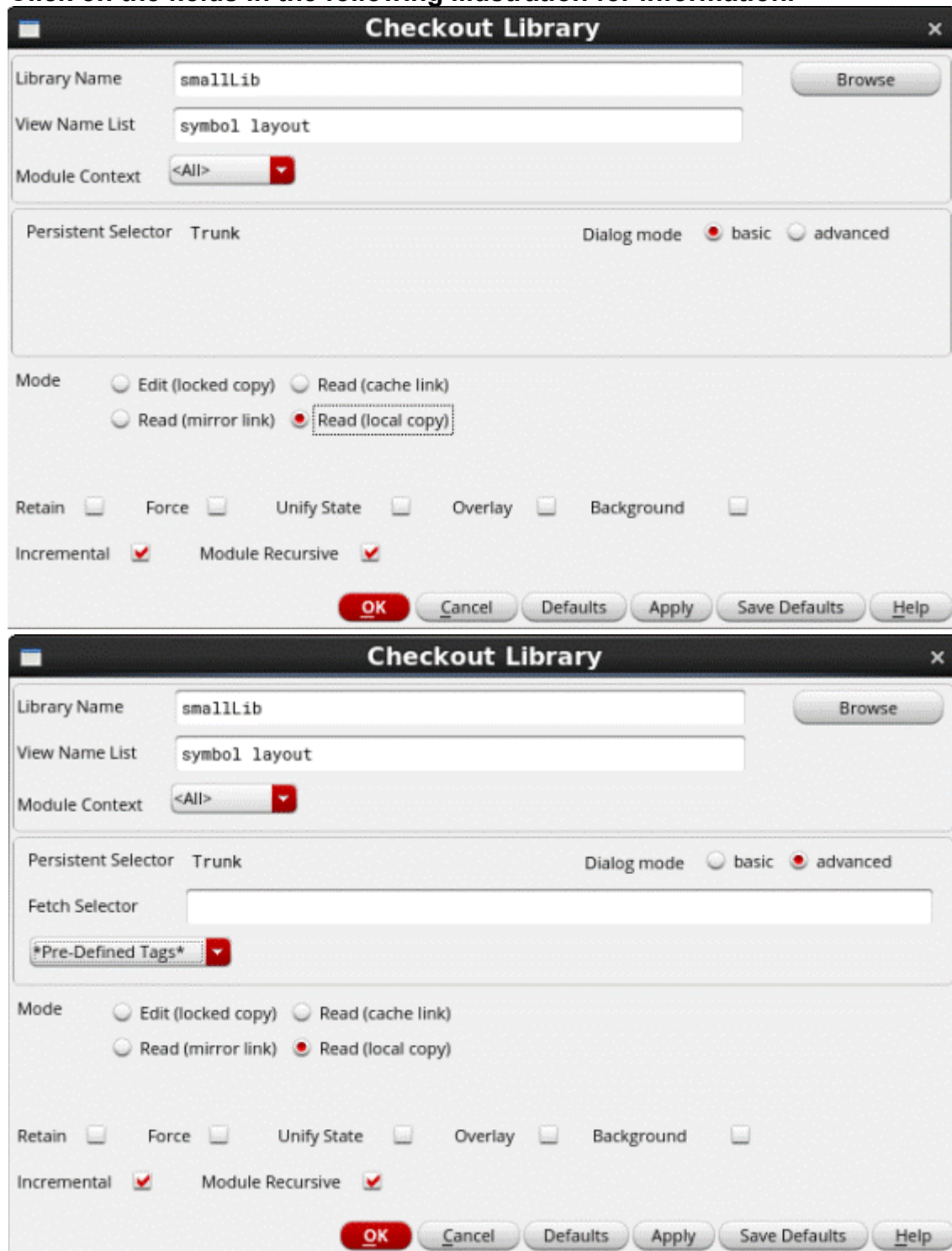
[Cadence DFII Design Management Overview](#)  
[Accessing a Library for the First Time](#)  
[Displaying Check-Out Status](#)  
[Canceling a Checkout](#)

## Checking Out a Library

To check out an entire library or only specified views from a library:

1. Select **Synchronicity => Checkout => Library** from the CIW.
2. Modify the fields of the Checkout Library form as needed.

Click on the fields in the following illustration for information.



3. Click **OK**.

You will see informational messages in the CIW as the design files are checked out from the vault and placed in your workspace.

**Tip:** When working with modules, DesignSync recommends checking out the entire module, or modules periodically as you work and before you checkin your updates to prevent your work from becoming out-of-sync with any other development being done on the module.

### Notes:

- You must have the library in your workspace before you can perform any revision-control operations on that library, including checkouts. Use the Join Library wizard to set up your workspace (see [Accessing a Library for the First Time](#)).
- By default, a library checkout only fetches the views corresponding to the cells currently in the workspace. If you want to be sure to fetch the specified views for each cell in the library and not just those in the workspace, enable the **Fetch views of missing cells on checkout library with view list** option in the DesignSync DFII Options form. See [Fetching Views of Missing Cells During Library Checkout](#) for details.

## Checkout Library Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

**Note:** You cannot browse through files or modules.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see [Selecting a Library Browser](#).

### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Module Context

If a library is contained in a single module, the appropriate module context is automatically selected from the list of modules. If the library is split across multiple modules, select <ALL> to checkout all library subsets from all the modules.

If the module doesn't appear on the drop-down list, select \*Refresh\* from the drop-down list to refresh the internal list of known candidate modules, and reevaluate the set candidate modules. If the module doesn't appear in the list after a refresh, see Unable to Locate a Module.

### Persistent Selector

Shows the persistent selector for the workspace.

### Dialog Mode

Sets the dialog mode for the form.

- Basic - Basic removes the Fetch Selector fields.
- Advanced - Advance shows the Fetch Selector fields.

### Fetch Selector

Specify the selector used to identify the cell view version. Use the pull-downs below the selector to view the tags available for the object.

**Note:** This field is not active when the check-out mode is Read (mirror link) because mirrors, by definition, contain the latest versions of Trunk (branch 1).

**IMPORTANT:** If a module or module member is selected and a numeric selector is entered in the Fetch Selector field, the numeric version always refers to the module version, not the member version.

You can use the Predefined tag, Module Tag, or Module Member Tag fields to show you what tags exist for the object. If you select Module Member Tag, you also have the option to select whether to add the tag to the selector. For more information on adding tags to versions in your workspace, see Module Member Tags.

The Predefined tag field shows Tag lists and configurations:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.
- A hyphen separator separates the list (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.

### Notes:

- **\*Refresh\*** updates the pull-down list the specified object. Regenerating the list of objects requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.
- If you do not enter a selector, the operation uses the default persistent selector for the workspace..
- Specify a version tag to check out the version with the specified tag.
- Specify a branch tag to check out the latest version from that branch.
- Module and Member tag selectors and the add option are only available when the library is part of a module.
- These fields are only displayed in Advanced Dialog Mode.

### Mode

Select what type of files you want in your workspace after the checkout:

- **Edit (locked copy)**

Locked files. You reserve the right to create the next version of the object when you check in your design files. You can continue to make changes; others cannot check out the files for editing. Note that you can check out with lock only the latest version of a design object on a given branch.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Unlocked, read-only copies of the files.

- **Regenerate (locked reference)**

Locks the vault, like **Edit (locked copy)**, but leaves you with DesignSync references instead of local copies. Use this mode when you will create a new version of design data by completely regenerating the data, such as generating output from a place & route tool, instead of editing a previous version. This mode is more efficient than **Edit (locked copy)** mode, particularly for large files, because files are not transferred unnecessarily from the vault.

Because **Regenerate** mode should only be used when you are regenerating data, it is not an appropriate mode for all object types. For example, **Regenerate** is likely not appropriate for library-level files such as `cdsinfo.tag` or category files. Therefore, DesignSync DFII displays a dialog box when you perform a check-out operation in **Regenerate** mode on library-level files. The dialog box describes the situation and requires that you confirm or cancel the operation. You can request that the dialog box not be displayed in the future by selecting the "Do not show me this again" check box. You can later clear this setting by selecting **Disabled Dialog Boxes** from the Default Field Values form. See Viewing and Resetting Form Defaults for details.

**Note:** When checking out in a read-only mode, the **Unify State** option controls whether objects that are already up-to-date in your workspace and therefore are not fetched from the vault are put in the state specified by **Mode**.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### Retain

When selected, retains the "last modified" timestamp of the checked-out objects as recorded when the object was checked into the vault. When deselected, the timestamp of the local object is the check-out time (when your local copy was created).



The **Retain** option is only meaningful when checking out physical copies (**Edit (locked copy)** and **Read (local copy)** modes). **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use Retain behavior; objects in the mirror or cache directory retain their original timestamps. However, links in your workspace to the cache/mirror have timestamps of when the links were created. **Regenerate** mode does not create any object in your workspace, so there is no timestamp information at all.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

### Force

Use this option with caution.

Select **Force** if you want to overwrite locally modified files in your workspace. By default, local changes are not overwritten when you check out files.

**Force** and **Selector** are mutually exclusive. Because a library checkout from DesignSync DFII calls the DesignSync `populate` command, allowing this combination of options would have the possibly undesirable effect of deleting all files in your workspace that do not have the specified tag attached to them. To check out using a selector when you have locally modified files that need to be overwritten, use the following two-step procedure:

1. Check out the library with the **Force** option selected but no **Selector** value specified. This step checks out files based on your workspace's persistent selector and overwrites any local modifications.
2. Check out the library without the **Force** option but with a **Selector** value specified. This step checks out files based on the specified selector, and there should be no locally modified files to disrupt the checkout.

### Unify State

When selected, any object participating in the check-out operation, even if your workspace already contains the requested version, is left in the state specified by the **Mode** field. When **Unify State** is not selected (the default), state changes only happen for objects that are fetched from the vault.

The default behavior of not unifying states during a checkout is a performance optimization that typically produces the desired results. However, if you want to change the state of objects in your workspace even when you already have the correct version, select **Unify State**. For example, if a cell view in your workspace is currently a link to the latest version in the cache but you want a local copy instead, you must check out the object with **Unify State** selected.

**Note:** The **Unify State** option is ignored when you are locking design objects. **Edit (locked copy)** and **Regenerate (locked reference)** modes always leave all processed objects in the requested state.

### Overlay

#### Note:

This option is available only at a user level of **expert** and when your check-out mode is **Read (local copy)**.

The **Overlay** option lets you fetch a version of a design object from another branch and overlay it on the version you have checked out in your workspace. The current-version information as recognized by DesignSync DFII does not change, but the current version is considered locally modified. Use the **Overlay** option to bring development done on a side branch back to the main development branch.

For example, you have version 1.4 of a view checked out with a lock in your workspace. There has been work done on this view on another branch called "dev". You want the latest version on "dev" to replace your current view so that you can check in that new version. You check out the latest version from "dev" specifying **Read (local copy)**, "dev" as the **Selector**, and **Overlay**. After the checkout, you have a locally modified version of 1.4, whose content is the latest version from "dev". You can now check in to create version 1.5.

The **Overlay** option is available only when your check-out mode is **Read (local copy)**:

- DesignSync does not support simultaneous locking and overlaying, so you cannot select **Edit (locked copy)** or **Regenerate (locked reference)**.
- Overlay does not make sense when your workspace links to shared data as with the **Read (cache link)** and **Read (mirror link)** modes.

### Background

Select this option to check out objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

#### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See [Selecting a User Level for Background Operations](#).

### **Incremental**

When selected, performs an incremental update (populate) of the library, which updates only those local folders whose corresponding vault folders have changed. An incremental update is generally faster than a full update.

The default setting for **Incremental** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the **Incremental** option and clicking **Save Defaults**.

An incremental update is appropriate for most updates to a workspace, but there are several cases where incremental mode is not appropriate. DesignSync DFII automatically performs a full update (ignores the **Incremental** setting) in the following cases:

- When checking out a different version of design data (as specified from the **Selector** field)
- When unifying the states of objects in your workspace (**Unify State** option is selected)

In addition, you may need to force a full update (by deselecting **Incremental**) in the following situations:

- You or your project lead has made changes to any exclude filters, which dictate objects that are skipped when performing revision-control operations.
- Operations that have occurred outside of the DesignSync DFII (or DesignSync) environment affect the state of your design data. For example, some files were accidentally removed using UNIX `rm`.

### **Module Recursive**

Follow any hierarchical references and recursively operate on their contents. By default, this option is selected whenever a module is selected.

For a module folder, module recursive is not selected by default. If selected, the operation performs a file-centric, not a module centric recursion, beginning at the folder level.

This option is silently ignored for file-based libraries.

### **Command Buttons**

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

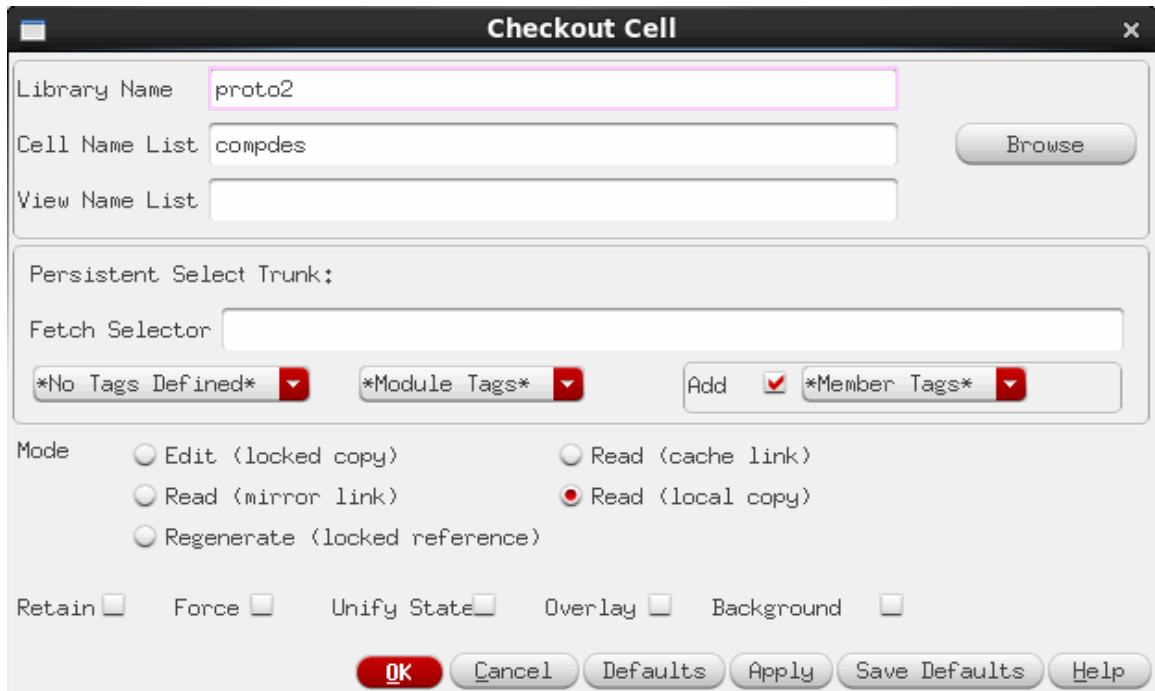
[Checking Out Design Files](#)  
[Accessing a Library for the First Time](#)  
[Selecting a User Level](#)

## Checking Out a Cell

To check out all the cell views or a subset of cell views of a cell:

1. Select **Synchronicity => Checkout => Cell** from the CIW.
2. Modify the fields of the Checkout Cell form as needed.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

You will see informational messages in the CIW as the design files are checked out from the vault and placed in your workspace.

**Tip:** When working with modules, DesignSync recommends checking out the entire module periodically as you work and before you checkin your updates to prevent your work from becoming out-of-sync with any other development being done on the module.

**Note:** You must have the library in your workspace before you can perform any revision-control operations on that library, including checkouts. Use the Join Library wizard to set up your workspace (see Accessing a Library for the First Time). The cell or view being checked out need not be present.

### Checkout Cell Field Descriptions

#### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

**Note:** You cannot browse through files or modules.

#### Cell Name List

Specify the names of one or more cells, separated by spaces, on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a single cell for this field.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. You can also browse the vault associated with the library so that you can select and check out objects not currently in your workspace. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

#### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

#### Persistent Select

Shows the persistent selector for the workspace.

#### Fetch Selector

Specify the selector used to identify the cell view version. Use the pull-downs below the selector to view the tags available for the object.

**Note:** This field is not active when the check-out mode is Read (mirror link) because mirrors, by definition, contain the latest versions of Trunk (branch 1).

**IMPORTANT:** If a module or module member is selected and a numeric selector is entered in the Fetch Selector field, the numeric version always refers to the module version, not the member version.

You can use the Predefined tag, Module Tag, or Module Member Tag fields to show you what tags exist for the object. If you select Module Member Tag, you also have the option to select whether to populate the tagged objects in addition to the persistent selector or populate with the tagged version instead of the persistent selector. For more information on added versions, see *Module Member Tags*.

The Predefined tag field shows Tag lists and configurations:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.
- A hyphen separator separates the list (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.

### Notes:

- **\*Refresh\*** updates the pull-down list the specified object. Regenerating the list of objects requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.
- If you do not enter a selector, the operation uses the default persistent selector for the workspace..
- Specify a version tag to check out the version with the specified tag.
- Specify a branch tag to check out the latest version from that branch.
- Module and Member tag selectors and the Add option are only available when the library is part of a module.

### Mode

Select what type of files you want in your workspace after the checkout:

- **Edit (locked copy)**

Locked files. You reserve the right to create the next version of the object when you check in your design files. You can continue to make changes; others cannot check out the files for editing. Note that you can check out with lock only the latest version of a design object on a given branch.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Unlocked, read-only copies of the files.

- **Regenerate (locked reference)**

Locks the vault, like **Edit (locked copy)**, but leaves you with DesignSync references instead of local copies. Use this mode when you will create a new version of design data by completely regenerating the data, such as generating output from a place & route tool, instead of editing a previous version. This mode is more efficient than **Edit (locked copy)** mode, particularly for large files, because files are not transferred unnecessarily from the vault.

**Note:** When checking out in a read-only mode, the **Unify State** option controls whether objects that are already up-to-date in your workspace and therefore are not fetched from the vault are put in the state specified by **Mode**.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### **Retain**

When selected, retains the "last modified" timestamp of the checked-out objects as recorded when the object was checked into the vault. When deselected, the timestamp of the local object is the check-out time (when your local copy was created).

The **Retain** option is only meaningful when checking out physical copies (**Edit (locked copy)** and **Read (local copy)** modes). **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use Retain behavior; objects in the mirror or cache directory retain their original timestamps. However, links in your workspace to the cache/mirror have timestamps of when the links were created. **Regenerate** mode does not create any object in your workspace, so there is no timestamp information at all.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.



### Force

Use this option with caution.

Select **Force** if you want to overwrite locally modified files in your workspace. By default, local changes are not overwritten when you check out files.

**Force** and **Selector** are mutually exclusive. Because a cell checkout from DesignSync DFII calls the DesignSync `populate` command, allowing this combination of options would have the possibly undesirable effect of deleting all cell files in your workspace that do not have the specified tag attached to them. To check out using a selector when you have locally modified files that need to be overwritten, use the following two-step procedure:

1. Check out the cell with the **Force** option selected but no **Selector** value specified. This step checks out files based on your workspace's persistent selector and overwrites any local modifications.
2. Check out the cell without the **Force** option but with a **Selector** value specified. This step checks out files based on the specified selector, and there should be no locally modified files to disrupt the checkout.

### Unify State

When selected, any object participating in the check-out operation, even if your workspace already contains the requested version, is left in the state specified by the **Mode** field. When **Unify State** is not selected (the default), state changes only happen for objects that are fetched from the vault.

The default behavior of not unifying states during a checkout is a performance optimization that typically produces the desired results. However, if you want to change the state of objects in your workspace even when you already have the correct version, select **Unify State**. For example, if a cell view in your workspace is currently a link to the latest version in the cache but you want a local copy instead, you must check out the object with **Unify State** selected.

**Note:** The **Unify State** option is ignored when you are locking design objects. **Edit (locked copy)** and **Regenerate (locked reference)** modes always leave all processed objects in the requested state.

### Overlay

#### Note:

This option is available only at a user level of **expert** and when your check-out mode is **Read (local copy)**.

The **Overlay** option lets you fetch a version of a design object from another branch and overlay it on the version you have checked out in your workspace. The current-version information as recognized by DesignSync DFII does not change, but the current version is considered locally modified. Use the **Overlay** option to bring development done on a side branch back to the main development branch.

For example, you have version 1.4 of a view checked out with a lock in your workspace. There has been work done on this view on another branch called "dev". You want the latest version on "dev" to replace your current view so that you can check in that new version. You check out the latest version from "dev" specifying **Read (local copy)**, "dev" as the **Selector**, and **Overlay**. After the checkout, you have a locally modified version of 1.4, whose content is the latest version from "dev". You can now check in to create version 1.5.

The **Overlay** option is available only when your check-out mode is **Read (local copy)**:

- DesignSync does not support simultaneous locking and overlaying, so you cannot select **Edit (locked copy)** or **Regenerate (locked reference)**.
- Overlay does not make sense when your workspace links to shared data as with the **Read (cache link)** and **Read (mirror link)** modes.

### Background

Select this option to check out objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.

Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

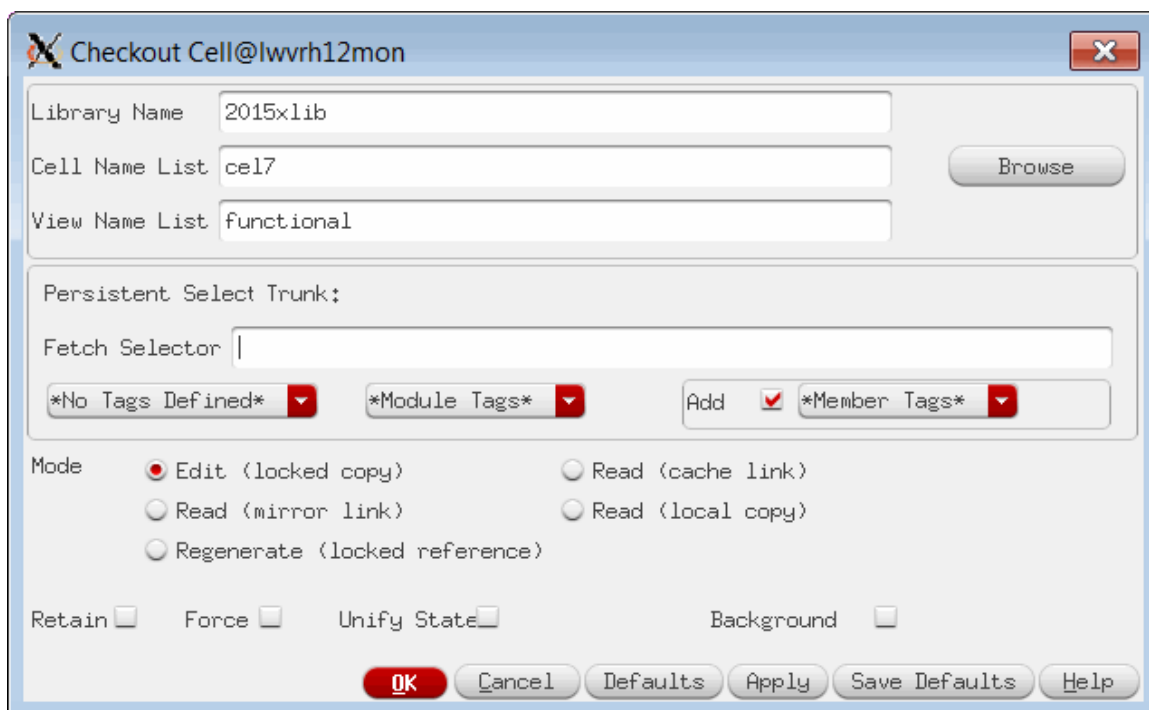
Checking Out Design Files  
Accessing a Library for the First Time  
Selecting a User Level

### Checking Out a Cell View

To check out a single cell view:

1. Select **Synchronicity => Checkout => Cell View** from the CIW or **Synchronicity => Checkout** from the cell view window.
2. Modify the fields of the Checkout Cell View form as needed.

**Click on the fields in the following illustration for information.**



### 3. Click **OK**.

You will see informational messages in the CIW as the design files are checked out from the vault and placed in your workspace.

**Tip:** When working with modules, DesignSync recommends checking out the entire module periodically as you work and before you checkin your updates to prevent your work from becoming out-of-sync with any other development being done on the module.

**Note:** You must have the library in your workspace before you can perform any revision-control operations on that library, including checkouts. Use the Join Library wizard to set up your workspace (see *Accessing a Library for the First Time*). The view being checked out need not be present.

## Checkout Cell View Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't

listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. You can also browse the vault associated with the library so that you can select and check out objects not currently in your workspace. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Name

Specify the name of the view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Select by

Allows you to specify whether you select by:

- version
- selector

After you select your choice, you can enter or choose the version name or selector for the operation.

### Version Name

Click **Get List** to populate the pull-down list with a list of applicable versions for the object. To filter the objects displayed in the field, use the Filter fields to control what is displayed in the list.

**Note:** Only the **Latest** version can be checked out with a lock.

If you have selected **Edit (locked copy)** or **Regenerate (locked reference)** as your check-out mode and then select a version other than **Latest** or a branch name, DesignSync DFII resets the mode to **Read (mirror link)**, or if that mode is not available

(see Controlling the Display of Check-in or Check-out Modes), **Read (local copy)**. You cannot check out with a lock a non-latest version from a branch.

### Filter versions

Select from a series of optional filters to restrict the versions shown.

- **Version Member/Module** - Determines whether to show the version numbers as module member versions for a selected module member or module versions.
- **Tagged only** - filter the results to show only tagged versions. By default this is selected.
- **Branch** -Filter the results to only show matching versions from a specific branch available from the pull-down list.

### Behavior when Multiple Branches Exist

When a cell view has more than one branch, the following additional items are available when you select **Get List**:

- **ALL** -- By default, only versions on the current branch are displayed. When you select **ALL**, the version list is updated with all versions from all branches, and the selected version is **Latest**. You can then click **Version Name** again to select a different version.
- **Current Branch** -- Refers to the branch of the cell view currently in your workspace.
- Branch tags -- All the branch tags for the cell view are listed. When you select a branch tag, the version list is updated to contain the versions for that branch. The **Version Name** value remains set as the selected branch tag, which means that the latest version on that branch will be checked out. You can then click **Version Name** again to select a different version.

### Notes:

- A branch tag called **Trunk** is typically present. **Trunk** is the default tag name for the main branch.
- Selecting **Latest** always means the latest version on the current branch, not the branch whose versions are currently displayed. To check out the latest version on a different branch, select the branch tag.

### Fetch Selector

These fields become visible when the Select by Selector is specified. Specify the selector used to identify the cell view version. Use the pull-downs below the selector to view the tags available for the object.

**Note:** This field is not active when the check-out mode is Read (mirror link) because mirrors, by definition, contain the latest versions of Trunk (branch 1).

**IMPORTANT:** If a module or module member is selected and a numeric selector is entered in the Fetch Selector field, the numeric version always refers to the module version, not the member version.

You can use the Predefined tag, Module Tag, or Module Member Tag fields to show you what tags exist for the object. . If you select Module Member Tag, you also have the option to select whether to populate the tagged objects in addition to the persistent selector or populate with the tagged version instead of the persistent selector. For more information on added versions, see Module Member Tags.

The Predefined tags field shows Tag lists and configurations:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.
- A hyphen separator separates the list (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.

### Notes:

- **\*Refresh\*** updates the pull-down list the specified object. Regenerating the list of objects requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.
- If you do not enter a selector or version, the operation uses the default persistent selector for the workspace..
- Specify a version tag to check out the version with the specified tag.
- Specify a branch tag to check out the latest version from that branch.
- Module and Member tag selectors and the Add option are only available when the library is part of a module.

### Version Comment

Shows the comment checked in with the version selected. This can help verify that the selected version is the desired version.

### Mode

Select what type of files you want in your workspace after the checkout:

- **Edit (locked copy)**

Locked files. You reserve the right to create the next version of the object when you check in your design files. You can continue to make changes; others cannot check out the files for editing. Note that you can check out with lock only the latest version of a design object on a given branch.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Unlocked, read-only copies of the files.

- **Regenerate (locked reference)**

Locks the vault, like **Edit (locked copy)**, but leaves you with DesignSync references instead of local copies. Use this mode when you will create a new version of design data by completely regenerating the data, such as generating output from a place & route tool, instead of editing a previous version. This mode is more efficient than **Edit (locked copy)** mode, particularly for large files, because files are not transferred unnecessarily from the vault.

**Note:** When checking out in a read-only mode, the **Unify State** option controls whether objects that are already up-to-date in your workspace and therefore are not fetched from the vault are put in the state specified by **Mode**.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### Retain



When selected, retains the "last modified" timestamp of the checked-out objects as recorded when the object was checked into the vault. When deselected, the timestamp of the local object is the check-out time (when your local copy was created).

The **Retain** option is only meaningful when checking out physical copies (**Edit (locked copy)** and **Read (local copy)** modes). **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use Retain behavior; objects in the mirror or cache directory retain their original timestamps. However, links in your workspace to the cache/mirror have timestamps of when the links were created. **Regenerate** mode does not create any object in your workspace, so there is no timestamp information at all.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

### Force

Use this option with caution.

Select **Force** if you want to overwrite locally modified files in your workspace. By default, local changes are not overwritten when you check out files.

### Unify State

When selected, any object participating in the check-out operation, even if your workspace already contains the requested version, is left in the state specified by the **Mode** field. When **Unify State** is not selected (the default), state changes only happen for objects that are fetched from the vault.

The default behavior of not unifying states during a checkout is a performance optimization that typically produces the desired results. However, if you want to change the state of objects in your workspace even when you already have the correct version, select **Unify State**. For example, if a cell view in your workspace is currently a link to the latest version in the cache but you want a local copy instead, you must check out the object with **Unify State** selected.

**Note:** The **Unify State** option is ignored when you are locking design objects. **Edit (locked copy)** and **Regenerate (locked reference)** modes always leave all processed objects in the requested state.

### Overlay

#### Note:

This option is available only at a user level of **expert** and when your check-out mode is **Read (local copy)**.

The **Overlay** option lets you fetch a version of a design object from another branch and overlay it on the version you have checked out in your workspace. The current-version information as recognized by DesignSync DFII does not change, but the current version is considered locally modified. Use the **Overlay** option to bring development done on a side branch back to the main development branch.

For example, you have version 1.4 of a view checked out with a lock in your workspace. There has been work done on this view on another branch called "dev". You want the latest version on "dev" to replace your current view so that you can check in that new version. You check out the latest version from "dev" specifying **Read (local copy)**, "dev" as the **Selector**, and **Overlay**. After the checkout, you have a locally modified version of 1.4, whose content is the latest version from "dev". You can now check in to create version 1.5.

The **Overlay** option is available only when your check-out mode is **Read (local copy)**:

- DesignSync does not support simultaneous locking and overlaying, so you cannot select **Edit (locked copy)** or **Regenerate (locked reference)**.
- Overlay does not make sense when your workspace links to shared data as with the **Read (cache link)** and **Read (mirror link)** modes.

### Background

Select this option to check out objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.

Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

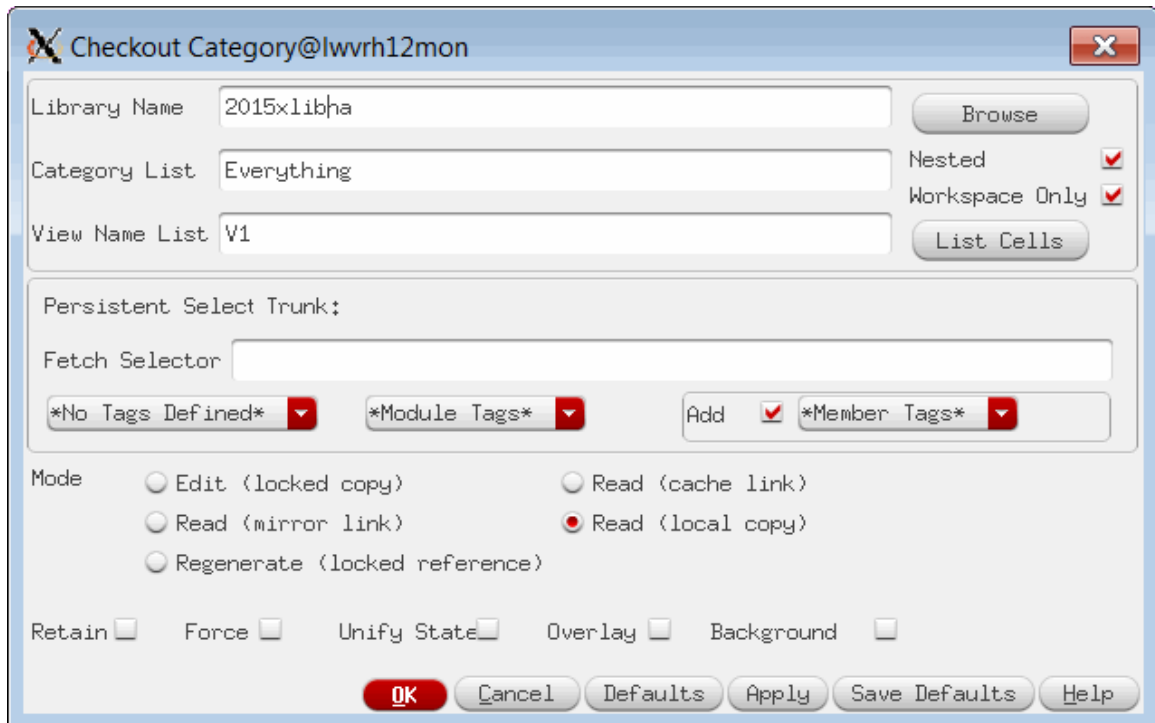
- Checking Out Design Files
- Accessing a Library for the First Time
- Selecting a User Level

## Checking Out a Category

To check out all or some of the views of all the cells in a category:

1. Select **Synchronicity => Checkout => Category** from the CIW.
2. Modify the fields of the Checkout Category form as needed.

**Click on the fields in the following illustration for information.**



### 3. Click **OK**.

You will see informational messages in the CIW as the design files are checked out from the vault and placed in your workspace.

**Note:** If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed unless the cells are part of other categories that are being processed.

**Tip:** When working with modules, DesignSync recommends checking out the entire module periodically as you work and before you checkin your updates to prevent your work from becoming out-of-sync with any other development being done on the module.

## Checkout Category Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Category List

Specify one or more category names, separated by spaces, on which to operate. The categories must exist in the local library. The **Nested** checkbox determines whether the operation applies to subcategories.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. You can also browse the vault associated with the library so that you can select and check out objects not currently in your workspace. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### Nested

Specifies whether the operation applies only to the cells in the specified categories or also to cells in subcategories.

### Note:

When processing all the cells of a category, including nested categories, DesignSync DFII prompts you to fetch any nested category (.Cat) files that are missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed as part of your Checkout Category operation unless the cells are part of other categories that are being processed. Category files are fetched using:

- The default fetch mode, not the **Mode** value specified on the Checkout Category form.
- The selector from the **Selector** field, if specified. Otherwise, the library's persistent selector is used.

### Workspace Only

Specifies whether all matching category cells or only those cells that are already in your local workspace are checked out. Use the **List Cells** button to verify which cells match your specification.

The **Nested** option is obeyed irrespective of your **Workspace Only** selection.

### List Cells

Displays the list of cells that will be processed by the operation, as defined by the **Category List**, **Nested**, and **Workspace Only** settings. The display window also lists the cell views, if any, that you have selected. See Listing Selected Cells for Category Operations for more information.

### Note:

If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not listed as part of the List Cells output unless the cells are part of other categories that are being processed.

### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Persistent Select

Shows the persistent selector for the workspace.

### Fetch Selector

Specify the selector used to identify the cell view version. Use the pull-downs below the selector to view the tags available for the object.

**Note:** This field is not active when the check-out mode is Read (mirror link) because mirrors, by definition, contain the latest versions of Trunk (branch 1).

**IMPORTANT:** If a module or module member is selected and a numeric selector is entered in the Fetch Selector field, the numeric version always refers to the module version, not the member version.

You can use the Predefined tag, Module Tag, or Module Member Tag fields to show you what tags exist for the object. If you select Module Member Tag, you also have the option to select whether to populate the tagged objects in addition to the persistent selector or populate with the tagged version instead of the persistent selector. For more information on added versions, see Module Member Tags.

The Predefined tag field shows Tag lists and configurations:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.
- A hyphen separator separates the list (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.

### Notes:

- **\*Refresh\*** updates the pull-down list the specified object. Regenerating the list of objects requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made

from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.

- If you do not enter a selector, the operation uses the default persistent selector for the workspace..
- Specify a version tag to check out the version with the specified tag.
- Specify a branch tag to check out the latest version from that branch.
- Module and Member tag selectors and the Add option are only available when the library is part of a module.

### Mode

Select what type of files you want in your workspace after the checkout:

- **Edit (locked copy)**

Locked files. You reserve the right to create the next version of the object when you check in your design files. You can continue to make changes; others cannot check out the files for editing. Note that you can check out with lock only the latest version of a design object on a given branch.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Unlocked, read-only copies of the files.

- **Regenerate (locked reference)**

Locks the vault, like **Edit (locked copy)**, but leaves you with DesignSync references instead of local copies. Use this mode when you will create a new version of design data by completely regenerating the data, such as generating output from a place & route tool, instead of editing a previous version. This mode is more efficient than **Edit (locked copy)** mode, particularly for large files, because files are not transferred unnecessarily from the vault.

**Note:** When checking out in a read-only mode, the **Unify State** option controls whether objects that are already up-to-date in your workspace and therefore are not fetched from the vault are put in the state specified by **Mode**.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### Retain

When selected, retains the "last modified" timestamp of the checked-out objects as recorded when the object was checked into the vault. When deselected, the timestamp of the local object is the check-out time (when your local copy was created).

The **Retain** option is only meaningful when checking out physical copies (**Edit (locked copy)** and **Read (local copy)** modes). **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use Retain behavior; objects in the mirror or cache directory retain their original timestamps. However, links in your workspace to the cache/mirror have timestamps of when the links were created. **Regenerate** mode does not create any object in your workspace, so there is no timestamp information at all.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

### Force

Use this option with caution.

Select **Force** if you want to overwrite locally modified files in your workspace. By default, local changes are not overwritten when you check out files.

**Force** and **Selector** are mutually exclusive. Because a category checkout from DesignSync DFII calls the DesignSync `populate` command, allowing this combination of options would have the possibly undesirable effect of deleting all cell files in your workspace that do not have the specified tag attached to them. To check out using a selector when you have locally modified files that need to be overwritten, use the following two-step procedure:

1. Check out the category with the **Force** option selected but no **Selector** value specified. This step checks out files based on your workspace's persistent selector and overwrites any local modifications.
2. Check out the category without the **Force** option but with a **Selector** value specified. This step checks out files based on the specified selector, and there should be no locally modified files to disrupt the checkout.

### Unify State



When selected, any object participating in the check-out operation, even if your workspace already contains the requested version, is left in the state specified by the **Mode** field. When **Unify State** is not selected (the default), state changes only happen for objects that are fetched from the vault.

The default behavior of not unifying states during a checkout is a performance optimization that typically produces the desired results. However, if you want to change the state of objects in your workspace even when you already have the correct version, select **Unify State**. For example, if a cell view in your workspace is currently a link to the latest version in the cache but you want a local copy instead, you must check out the object with **Unify State** selected.

**Note:** The **Unify State** option is ignored when you are locking design objects. **Edit (locked copy)** and **Regenerate (locked reference)** modes always leave all processed objects in the requested state.

### Overlay

#### Note:

This option is available only at a user level of **expert** and when your check-out mode is **Read (local copy)**.

The **Overlay** option lets you fetch a version of a design object from another branch and overlay it on the version you have checked out in your workspace. The current-version information as recognized by DesignSync DFII does not change, but the current version is considered locally modified. Use the **Overlay** option to bring development done on a side branch back to the main development branch.

For example, you have version 1.4 of a view checked out with a lock in your workspace. There has been work done on this view on another branch called "dev". You want the latest version on "dev" to replace your current view so that you can check in that new version. You check out the latest version from "dev" specifying **Read (local copy)**, "dev" as the **Selector**, and **Overlay**. After the checkout, you have a locally modified version of 1.4, whose content is the latest version from "dev". You can now check in to create version 1.5.

The **Overlay** option is available only when your check-out mode is **Read (local copy)**:

- DesignSync does not support simultaneous locking and overlaying, so you cannot select **Edit (locked copy)** or **Regenerate (locked reference)**.
- Overlay does not make sense when your workspace links to shared data as with the **Read (cache link)** and **Read (mirror link)** modes.

### Background

Select this option to check out objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

- Checking Out Design Files
- Accessing a Library for the First Time
- Listing Selected Cells for Category Operations
- Selecting a User Level

## Checking Out a Design Hierarchy

You can check out all the cells in a design hierarchy at once or you can select specific views to check out.

To check out the cells in a hierarchy:

1. Select **Synchronicity => Check Out => Hierarchy** from the CIW.
2. Modify the fields of the Checkout Cell View Hierarchy form as needed.

Click on the fields in the following illustration for information.

Checkout Cell View Hierarchy@lwwrh12mon

Top Level Cell Views

Library Name

Cell Name

View Names

Persistent Select Trunk:

Fetch Selector

\*No Tags Defined\*   
 \*Module Tags\*  Add  \*Member Tags\*

Mode  Edit (locked copy)  Read (cache link)  
 Read (mirror link)  Read (local copy)  
 Regenerate (locked reference)

Retain  Force  Unify State  Overlay  Background

Hierarchy Specification

Switch Using  First In Switch List  All In Switch List  
 Instantiated View  All Views

Switch List

Stop List

Switch Libraries  All  Only Into  Not Into

Names

Process Views  Switch View  All Switch List  
 All Views  Other

Names

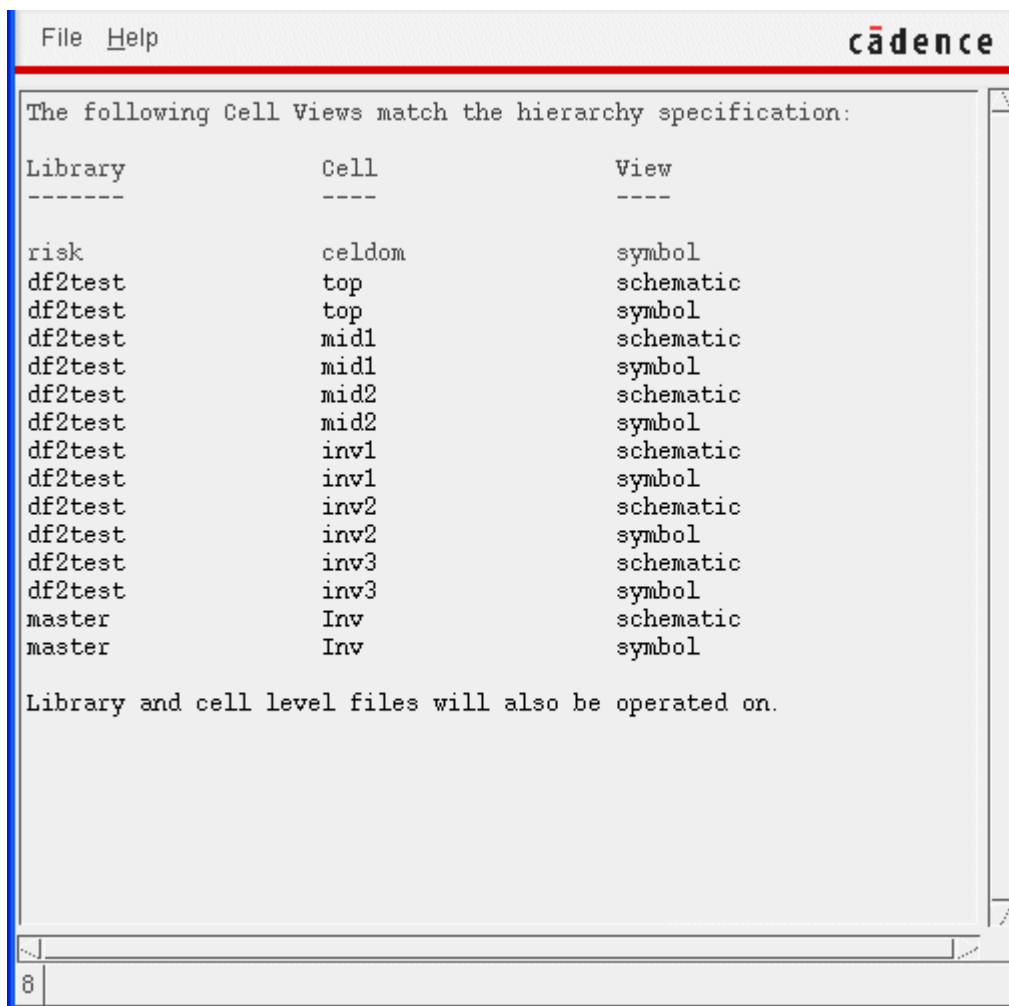
Process Files  None  Cell Only  Cell And Library

Fetch Missing Cel

To identify the cells in a design hierarchy, DesignSync DFII can use one of two process: either DesignSync DFII scans the hierarchy according to your specifications in the **Hierarchy Specification** fields beginning with the top-level cell views specified using the **View Names** field; or by making use of the hierarchy that has been described in a Hierarchical Configuration (config) view. If the **Fetch Missing Cells** button is selected, DesignSync DFII also descends through any newly fetched views that were not in the workspace before the command was invoked if those views match the hierarchy specification criteria.

3. To verify your hierarchy options, select the **List Cell Views** button.

DesignSync DFII traverses the hierarchy according to the current hierarchy options and displays the potential views for processing.



4. Click **OK** in the Checkout Cell View Hierarchy form to process the specified hierarchy.

DesignSync DFII scans the hierarchy, opening the cell views and gathering information on each cell referenced in a cell view. For each cell gathered, DesignSync DFII records the library name and the cell name and then identifies which views to scan next as it moves through the hierarchy.

The CIW window lists which design files have been checked out. When the operation is complete, the CIW shows you the number of objects that were checked out and the number of objects for which the operation failed.

**Tip:** When working with modules, DesignSync recommends checking out the entire module periodically as you work and before you checkin your updates to prevent your work from becoming out-of-sync with any other development being done on the module.

#### Notes:

- DesignSync provides support for operating both on design views and config views, but you cannot specify both types of views within the same operation.
- Use the **Fetch Missing Cells** option to control whether the check-out operation is limited to cells in your local workspace or whether missing cells are fetched from the vault to determine the complete hierarchy.
- DesignSync DFII does not scan through libraries that have been filtered out in the **Switch Libraries** field. For example, suppose a cell in **library\_1** references a cell in **library\_2**, which references a cell in **library\_3**. If **library\_2** is filtered out by the **Switch Libraries** field, the cell in **library\_3** is not found.
- When checking out the cells in a hierarchy, the libraries containing those cells must already exist. You cannot specify an alternative vault or working directory because a hierarchy operation may apply to views in multiple libraries.

### Checkout Cell View Hierarchy Field Descriptions

#### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Names

You can operate on one or more of the cell's views. Specify the names of the views on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

It is useful to specify more than one view name if you need to traverse multiple hierarchies in one scan. To do this, specify the views using the **View Names** field and select the **All in Switch List** option in the **Switch Using** field. For example, to step through a design's schematic and layout hierarchies at the same time, you might specify "schematic layout" as the top-level cell views in the **View Names** field, "schematic layout symbol" in the **Switch List** field, and "All In Switch List" in the **Switch Using** field.

**Note:** The **Switch Using**, **Switch List**, and **Stop List** fields are not applicable to "config" views.

DesignSync provides support for operating both on design views and config views, but you cannot specify both types of views within the same operation.

### Persistent Select

Shows the persistent selector for the workspace.

### Fetch Selector

Specify the selector used to identify the cell view version. Use the pull-downs below the selector to view the tags available for the object.

**Note:** This field is not active when the check-out mode is Read (mirror link) because mirrors, by definition, contain the latest versions of Trunk (branch 1).

**IMPORTANT:** If a module or module member is selected and a numeric selector is entered in the Fetch Selector field, the numeric version always refers to the module version, not the member version.

You can use the Predefined tag, Module Tag, or Module Member Tag fields to show you what tags exist for the object. If you select Module Member Tag, you also have the

option to select whether to populate the tagged objects in addition to the persistent selector or populate with the tagged version instead of the persistent selector. For more information on added versions, see Module Member Tags.

The Predefined tag field shows Tag lists and configurations:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.
- A hyphen separator separates the list (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.

#### Notes:

- **\*Refresh\*** updates the pull-down list the specified object. Regenerating the list of objects requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.
- If you do not enter a selector, the operation uses the default persistent selector for the workspace..
- Specify a version tag to check out the version with the specified tag.
- Specify a branch tag to check out the latest version from that branch.
- Module and Member tag selectors and the Add option are only available when the library is part of a module.

#### Mode

Select what type of files you want in your workspace after the checkout:

- **Edit (locked copy)**

Locked files. You reserve the right to create the next version of the object when you check in your design files. You can continue to make changes; others cannot



check out the files for editing. Note that you can check out with lock only the latest version of a design object on a given branch.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Unlocked, read-only copies of the files.

- **Regenerate (locked reference)**

Locks the vault, like **Edit (locked copy)**, but leaves you with DesignSync references instead of local copies. Use this mode when you will create a new version of design data by completely regenerating the data, such as generating output from a place & route tool, instead of editing a previous version. This mode is more efficient than **Edit (locked copy)** mode, particularly for large files, because files are not transferred unnecessarily from the vault.

Because **Regenerate** mode should only be used when you are regenerating data, it is not an appropriate mode for all object types. For example, **Regenerate** is likely not appropriate for library-level files such as `cdsinfo.tag` or category files. Therefore, DesignSync DFII displays a dialog box when you perform a check-out operation in **Regenerate** mode on library-level files. The dialog box describes the situation and requires that you confirm or cancel the operation. You can request that the dialog box not be displayed in the future by selecting the "Do not show me this again" check box. You can later clear this setting by selecting **Disabled Dialog Boxes** from the Default Field Values form. See Viewing and Resetting Form Defaults for details.

**Note:** When checking out in a read-only mode, the **Unify State** option controls whether objects that are already up-to-date in your workspace and therefore are not fetched from the vault are put in the state specified by **Mode**.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### Selector

Specify the selector that is used by DesignSync DFII to determine what version of design data to check out. You can specify any selector or selector list (see DesignSync Data Manager User's Guide for details on selectors), but typical choices are:

- Leave **Selector** blank to let the library's persistent selector list determine the version -- typically the latest version on the current branch.
- Specify a version tag to check out the versions with the specified tag.
- Specify a branch tag to check out the latest versions from that branch.

You may also be able to use the choice list to the right of the **Selector** field to specify a selector. See Creating a Tag List for details. The choice list may contain the following items:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.

**Note:** Generating the list of configurations for a library can take a few moments. Therefore, the list is not generated automatically when you specify a library in the **Library Name** field. Instead, you must select **\*Refresh\*** from the tag list to fetch the configurations (if any). Once the configuration list is generated, it will be displayed by any tag-list choice field when you specify that library. Clicking **\*Refresh\*** at a later time regenerates the configuration list, picking up any changes to the configuration definitions.

- A hyphen separator (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.
- **\*Refresh\***, which updates the configuration list for the specified library. Generating the list of configurations requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.

**Notes:**

- This field is not active when the check-out mode is **Read (mirror link)** because mirrors, by definition, contain the latest versions of Trunk (branch 1).
- Tag operations, including checking out files based on a tag, are only available at a user level of advanced or higher.

**Retain**

When selected, retains the "last modified" timestamp of the checked-out objects as recorded when the object was checked into the vault. When deselected, the timestamp of the local object is the check-out time (when your local copy was created).

The **Retain** option is only meaningful when checking out physical copies (**Edit (locked copy)** and **Read (local copy)** modes). **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use Retain behavior; objects in the mirror or cache directory retain their original timestamps. However, links in your workspace to the cache/mirror have timestamps of when the links were created. **Regenerate** mode does not create any object in your workspace, so there is no timestamp information at all.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

**Force**

Use this option with caution.

Select **Force** if you want to overwrite locally modified files in your workspace. By default, local changes are not overwritten when you check out files.

**Unify State**

When selected, any object participating in the check-out operation, even if your workspace already contains the requested version, is left in the state specified by the **Mode** field. When **Unify State** is not selected (the default), state changes only happen for objects that are fetched from the vault.

The default behavior of not unifying states during a checkout is a performance optimization that typically produces the desired results. However, if you want to change the state of objects in your workspace even when you already have the correct version, select **Unify State**. For example, if a cell view in your workspace is currently a link to the latest version in the cache but you want a local copy instead, you must check out the object with **Unify State** selected.

**Note:** The **Unify State** option is ignored when you are locking design objects. **Edit (locked copy)** and **Regenerate (locked reference)** modes always leave all processed objects in the requested state.

### Overlay

#### Note:

This option is available only at a user level of **expert** and when your check-out mode is **Read (local copy)**.

The **Overlay** option lets you fetch a version of a design object from another branch and overlay it on the version you have checked out in your workspace. The current-version information as recognized by DesignSync DFII does not change, but the current version is considered locally modified. Use the **Overlay** option to bring development done on a side branch back to the main development branch.

For example, you have version 1.4 of a view checked out with a lock in your workspace. There has been work done on this view on another branch called "dev". You want the latest version on "dev" to replace your current view so that you can check in that new version. You check out the latest version from "dev" specifying **Read (local copy)**, "dev" as the **Selector**, and **Overlay**. After the checkout, you have a locally modified version of 1.4, whose content is the latest version from "dev". You can now check in to create version 1.5.

The **Overlay** option is available only when your check-out mode is **Read (local copy)**:

- DesignSync does not support simultaneous locking and overlaying, so you cannot select **Edit (locked copy)** or **Regenerate (locked reference)**.
- Overlay does not make sense when your workspace links to shared data as with the **Read (cache link)** and **Read (mirror link)** modes.

### Background

Select this option to check out objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

#### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See [Selecting a User Level for Background Operations](#).

### Switch Using

The **Switch Using** field lets you specify how the design hierarchy is to be traversed.

This field is not applicable when specifying a config view because the hierarchy expansion definition within the config view is used instead.

You can choose one of the following:

- **First in Switch List** -- As the design is traversed, DesignSync DFII descends into the first view specified in the switch list that exists for a cell. Specify the switch list using the **Switch List** field.
- **Instantiated View** -- As the design is traversed, DesignSync DFII descends into each instantiated view. The **Switch List** field is greyed-out and ignored in this case. Descending into all instantiated views is useful for traversing a hierarchy with layout-type views in cases where the design team has used multiple view names to indicate the layout views.
- **All in Switch List** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that matches a view in the switch list. Specify the switch list using the **Switch List** field.

Descending into all views in the switch list is useful when you have a well-defined set of views and you need to process multiple hierarchies. For example, you might have a layout hierarchy and a schematic hierarchy that are not the same, and you want to process both. If you do not select the **All in Switch List** field, this scan requires multiple passes through the command.

- **All Views** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that exists for each cell. The **Switch List** field is greyed-out and ignored in this case.

Descending into all views is useful when the command must traverse all paths through the hierarchy. In this case, DesignSync DFII might scan some unnecessary cells instantiated by obsolete views.

### Switch List

Specify the names of the views to be scanned to identify the design hierarchy. Separate view names by spaces.

The Switch List field is required if you specify the **First in Switch List** or **All in Switch List** options in the **Switch Using** field. If the **Switch Using** field is set to **Instantiated View** or **All Views**, the **Switch List** field is ignored.

This field is not applicable when specifying a config view because DesignSync uses the switch list from within the config view.

### Stop List

Specify the names of views at which the hierarchy scanning should stop. View names should be separated by spaces. As the design is traversed, if the **Switch List** view that is opened for a cell is also in this list, then scanning stops at that point.

This field is optional.

This field is not applicable when specifying a config view because DesignSync uses the stop list from within the config view.

### Switch Libraries

The options in this field control which libraries may be entered as the hierarchy is scanned. You can choose one of the following:

- **All** -- All libraries may be entered.
- **Only Into** -- Only the libraries specified in the following **Names** field may be entered.
- **Not Into** -- All libraries except those specified in the **Names** field may be entered.

### Switch Libraries Names

Specify a list of library names, separated by spaces, for use by the **Switch Libraries** field. This field is not active if **All** is selected in the **Switch Libraries** field.

### Process Views

Once you have identified the hierarchy using the **Switch Using**, **Switch List**, and **Stop List** fields, the **Process Views** options control which views of the identified cells are processed. You can choose one of the following:

- **Switch View** -- Each view that was switched into is processed.
- **All Switch List** -- All the views specified in the **Switch List** that exist for the cell are processed. If the selected view is a "config" view, the All Switch List option uses the switch view and the switch list defined within the config view. If there are sub-configs, then the switch list of the sub-configs is used within those sub-configs

**Note:** Switch lists are not used if hierarchy traversal descends into instantiated views. Thus, if **All Switch List** is selected and the **Switch Using** field is set to **Instantiated View**, an error occurs.

- **All Views** -- All views that exist for the cell are processed.
- **Other** -- All the views specified in the following **Names** field that exist for the cell are processed. For config views, the switch view is always included.

**Note:** If your hierarchy includes cells that are not yet managed by DesignSync, and you choose the Fetch Missing Cells option, then you must select the "Switch View" option to operate on cells beneath the unmanaged cells. If the Process Views option is any other value, then the hierarchy processing stops at the unmanaged cells.

### Process Views Names

Specify a list of views, separated by spaces, for use by the **Process Views** field. This field is active only when the **Other** option is selected in the **Process Views** field.

### Process Files

This option controls whether cell- and library-level files are processed in addition to the specified cell views. You can choose one of the following:

- **None** -- No cell- or library-level files are processed.
- **Cell Only** -- Cell-level files are processed, but library-level files are not. This option selects only cell-level files for those cells on which you are operating.
- **Cell And Library** -- Cell- and library-level files are processed.

### Include Config Cells

This option controls whether the config view cells are included in the operation. If you want to operate on the design cells and the hierarchy definition (config) cells, enable this option. (Default) If you want to operate ONLY on the design cells and not on the hierarchy definition cells, you can disable this option.

### Fetch Missing Cells

This option controls whether the check-out operation fetches the cells that are not in the workspace. Selecting this option also fetches missing views corresponding to the cells in the workspace.

Deselect this option to check out only those cells in your workspace. Checking out based on the workspace is faster, but does not guarantee that the hierarchy is complete and up-to-date.

Select this option to check out the entire hierarchy, even if some cells are not currently in your workspace. The checkout can be significantly slower, but it ensures that the

entire hierarchy is checked out. The checkout is iterative -- if cells or views are missing, DesignSync DFII fetches those objects and then scans the hierarchy again in order to fetch objects referenced by the missing views and cells. This iterative scanning continues until all of the missing cells and views have been fetched.

#### Notes:

- If you check out a hierarchy in **Regenerate** mode with **Fetch Missing Cells** enabled, at most one missing layer of hierarchy can be fetched (unless the lower hierarchy is also referenced from elsewhere in the hierarchy). Missing cells and views are fetched in **Regenerate** mode, which means the files do not exist on disk. DesignSync DFII therefore cannot determine what additional hierarchy is referenced.
- If your hierarchy includes cells that are not yet managed by DesignSync, then the checkout operation does not operate on cells beneath the unmanaged cells unless the Process Views option is "Switch View". If the Process Views option is any other value, then the hierarchy processing stops at the unmanaged cells.

#### List Cell Views

Displays the list of views that can be processed by the operation, as defined by the **Top Level Cell View** and **Hierarchy Specification** settings that you specified on the form.

By default, only the single view that was switched into is processed, not all views. You can change this behavior by changing the setting of the **Process Views** field.

See Listing Selected Cell Views for Hierarchy Operations for more information.

#### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.



## Related Topics

Checking Out Design Files  
Accessing a Library for the First Time  
Listing Selected Cell Views for Hierarchy Operations

## Checking Out a File

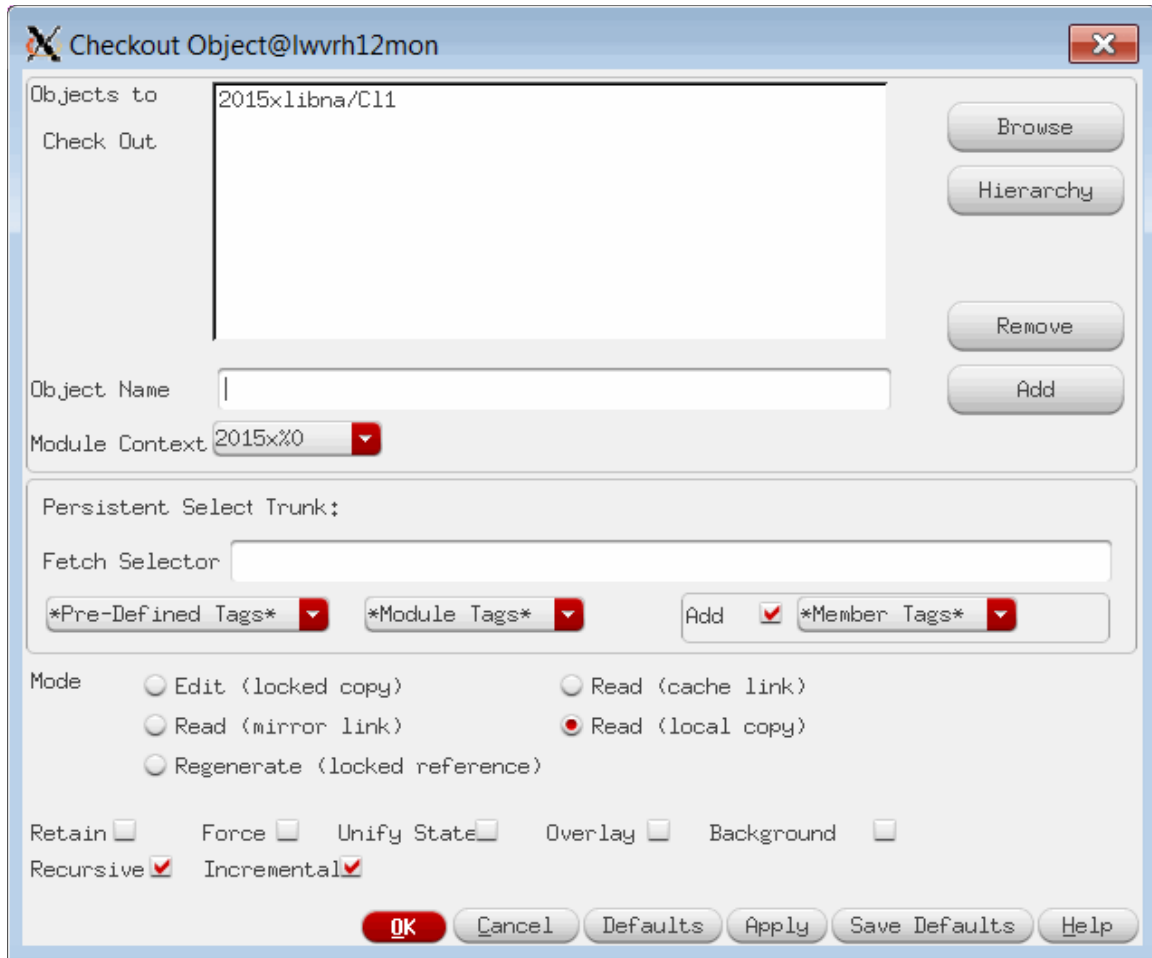
The Checkout Object form is a general-purpose checkout interface. You can specify files, modules, directories, library objects (libraries, cells, views), or any combination of objects. You can use glob-style wildcards.

Use the Checkout Object form to check out files that are not part of a cell view co-managed set, such as property files, category files, and documentation files, as well as files that are totally unrelated to the design library. Also, use the Checkout Object form to perform check-out operations on library objects that you cannot perform from the object-specific interface (such as Checkout Cell). For example, you can check out multiple cells across several libraries in one operation.

To check out one or more objects:

1. Select **Synchronicity => Checkout => File** from the CIW.
2. Modify the fields of the Checkout Object form as needed.

**Click on the fields in the following illustration for information.**



### 3. Click **OK**.

You will see informational messages in the CIW as the objects are checked out of the vault and placed in your workspace.

**Tip:** When working with modules, DesignSync recommends checking out the entire module periodically as you work and before you checkin your updates to prevent your work from becoming out-of-sync with any other development being done on the module.

**Note:** A check-out operation will fail if you specify a view whose name contains a period (.) and the view is not already in your workspace. Under these conditions, it is ambiguous whether the specified object name refers to a view or a file. DesignSync DFII assumes a file. To work around this limitation, either operate on the cell instead of the single view, or use the Checkout Cell View form instead of Checkout Object.

## Checkout Object Field Descriptions

### Objects To Check Out

Lists the objects that you want to check out.

If you specified objects with wildcards, the individual matching objects are not themselves listed. When you click **OK** or **Apply**, the list is passed to the underlying check-out routine, which then expands the wildcards.

To add objects to the **Objects to Check Out** list:

1. Enter the object name in the **Object Name** field.
2. Click **Add**.

- or -

1. Click **Browse** to invoke the DesignSync DFII Browser.
2. Select one or more objects in the browser.
3. Click **OK** or **Apply** from the browser.

To remove objects from the **Objects to Check Out** list:

1. Select one or more objects from the list.
2. Click **Remove**.

Note that when you select an object from the **Objects to Check Out** list and the **Object Name** field is either empty or contains a name that already appears in the list, then the selected object's name appears in **Object Name**. This behavior lets you easily add new objects to **Objects to Check Out** based on the name of a previously entered object.

### **Browse**

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You can browse your file system (directories and files) or library objects (libraries, categories, cells, and views). You can also browse the vault associated with the library or directory so that you can select and check out objects not currently in your workspace. You select one or more objects as appropriate for the operation you are performing, then click **OK** or **Apply** to pass your selections to the calling form.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser.

### **Hierarchy**

Invokes the Select Cell View Hierarchy form, which helps you select the cell views that comprise a hierarchy. You provide the hierarchy parameters, then click **OK** or **Apply** to seed the calling form with the cell views that match your parameters.

See [Selecting Cell View Hierarchy](#) for a full description.

## Object Name

Specify the name of an object (file, directory, library, cell, or cell view) that you want to check out, then click **Add** to add the object to the **Objects to Check Out** list. Any object that is entered in the **Object Name** field but not added to the **Objects to Check Out** list will not be checked out.

The **Object Name** field is cleared when you click **Add**. If you want to specify an object based on a previously entered object name, select the object from **Objects to Check Out**. If **Object Name** was empty or contained an object name that already appears in the **Objects to Check Out** list, then the selected object name appears in the **Object Name** field. You can then edit that name and click **Add**.

When you specify a directory, library, or cell name, the operation is run recursively on that object. For example, if you specify a directory, all objects in the entire directory hierarchy are checked out.

You can specify absolute or relative paths. Relative paths are relative to the current working directory or to the library on your library path. For example, if library "testdf2" is on your library path, then you can specify the `cdsinfo.tag` file for that library as `testdf2/cdsinfo.tag`, even though the "testdf2" library directory may be anywhere on your disk. If there is also a directory within the current working directory with the same name ("testdf2") so that `testdf2/cdsinfo.tag` is ambiguous -- or even when a specified object exists only in the "testdf2" directory and not the "testdf2" library -- then the library is used for the operation and the directory is ignored.

Duplicate values entered from **Object Name** appear in the **Objects to Check Out** field only once. However, the same objects specified using different paths (for example, `./cdsinfo.tag` and `cdsinfo.tag`) are not filtered and may result in the object being operated on multiple times.

## Using Wildcards

You may use glob-style (not regexp-style) wildcards in the **Object Name** field. Wildcards are useful when you want to operate on a large number of objects without specifying the name of each object. You can use the following special characters:

?	Matches any single character.
*	Matches zero or more characters.
[chars]	Matches any one of the characters in <code>chars</code> . <code>chars</code> may include a range of characters, such as <code>a-z</code> , which matches any character from "a" to "z".
\x	Matches "x". For example, <code>a\?b</code> matches only <code>a?b</code> ; the backslash (\) overrides the special meaning of "?" in glob patterns.

<code>{str1,str2,...}</code>	Matches any of the strings <code>str1</code> , <code>str2</code> , and so on. For example, <code>"*.{dss,exe}"</code> matches any file with an extension of <code>"dll"</code> or <code>"exe"</code> .
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These wildcards are expanded within the workspace and libraries before the operation is performed. For example, you can specify `smallLib/*/symbol` to operate on the symbol views of all cells within the "smallLib" library.

Wildcard expressions may not work within the library part of a relative library name. The wildcard expression is expanded first against the current working directory, and then library matching is performed. For example, you have libraries "libA" and "libB" and specify the wildcard expression "lib\*". But your current directory has a file called "libNotes.txt". The wildcard expression will match "libNotes.txt", not the "libA" and "libB" libraries.

### Module Context

Select the appropriate module context from the drop-down list. The module must have its base directories at, or above, the level of the objects being checked out.

**Note:** You can only specify one module. If you are checking out objects from two different modules in the same workspace, use two separate check out operations. If you select objects from more than one module or objects from both a module and a DesignSync vault, the module context field becomes inactive.

If the module doesn't appear on the drop-down list, select *\*Refresh\** from the drop-down list to refresh the internal list of known candidate modules, and reevaluate the set candidate modules. If the module doesn't appear in the list after a refresh, see [Unable to Locate a Module](#).

### Persistent Select

Shows the persistent selector for the workspace.

### Fetch Selector

Specify the selector used to identify the cell view version. Use the pull-downs below the selector to view the tags available for the object.

**Note:** This field is not active when the check-out mode is Read (mirror link) because mirrors, by definition, contain the latest versions of Trunk (branch 1).

**IMPORTANT:** If a module or module member is selected and a numeric selector is entered in the Fetch Selector field, the numeric version always refers to the module version, not the member version.

You can use the Predefined tag, Module Tag, or Module Member Tag fields to show you what tags exist for the object. If you select Module Member Tag, you also have the option to select whether to populate the tagged objects in addition to the persistent selector or populate with the tagged version instead of the persistent selector. For more information on added versions, see Module Member Tags.

The Predefined tag field shows Tag lists and configurations:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.
- A hyphen separator separates the list (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.

#### Notes:

- **\*Refresh\*** updates the pull-down list the specified object. Regenerating the list of objects requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.
- If you do not enter a selector, the operation uses the default persistent selector for the workspace..
- Specify a version tag to check out the version with the specified tag.
- Specify a branch tag to check out the latest version from that branch.
- Module and Member tag selectors and the Add option are only available when the library is part of a module.

#### Mode

Select what you want left in your workspace after the checkout:

- **Edit (locked copy)**

Locked files. You can continue to make changes; other users cannot check out the files for editing.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.

- **Read (local copy)**

Local, read-only copies of the files.

- **Regenerate (locked reference)**

Locks the vault, like **Edit (locked copy)**, but leaves you with DesignSync references instead of local copies. Use this mode when you will create a new version of design data by completely regenerating the data, such as generating output from a place & route tool, instead of editing a previous version. This mode is more efficient than **Edit (locked copy)** mode, particularly for large files, because files are not transferred unnecessarily from the vault.

Because **Regenerate** mode should only be used when you are regenerating data, it is not an appropriate mode for all object types. For example, **Regenerate** is likely not appropriate for library-level files such as `cdsinfo.tag` or category files. Therefore, DesignSync DFII displays a dialog box when you perform a check-out operation in **Regenerate** mode on library-level files. The dialog box describes the situation and requires that you confirm or cancel the operation. You can request that the dialog box not be displayed in the future by selecting the "Do not show me this again" check box. You can later clear this setting by selecting **Disabled Dialog Boxes** from the Default Field Values form. See Viewing and Resetting Form Defaults for details.

**Note:** When checking out in a read-only mode, the **Unify State** option controls whether objects that are already up-to-date in your workspace and therefore are not fetched from the vault are put in the state specified by **Mode**.

For details about object states, see DesignSync DFII Object States and Caches and Mirrors.

### Retain

When selected, retains the "last modified" timestamp of the checked-out objects as recorded when the object was checked into the vault. When deselected, the timestamp of the local object is the check-out time (when your local copy was created).

The **Retain** option is only meaningful when checking out physical copies (**Edit (locked copy)** and **Read (local copy)** modes). **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use Retain behavior; objects in the mirror or cache directory retain their original timestamps. However, links in your workspace to the cache/mirror have timestamps of when the links were created. **Regenerate** mode does not create any object in your workspace, so there is no timestamp information at all.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

### Force

Use this option with caution.

Select **Force** if you want to overwrite locally modified files in your workspace. By default, local changes are not overwritten when you check out files.

**Force** and **Selector** are mutually exclusive. Because the checkout operation from DesignSync DFII may call, depending on the objects you have selected, the DesignSync `populate` command, allowing this combination of options would have the possibly undesirable effect of deleting files in your workspace that do not have the specified tag attached to them. To check out using a selector when you have locally modified files that need to be overwritten, use the following two-step procedure:

1. Check out the objects with the **Force** option selected but no **Selector** value specified. This step checks out files based on your workspace's persistent selector and overwrites any local modifications.
2. Check out the objects without the **Force** option but with a **Selector** value specified. This step checks out files based on the specified selector, and there should be no locally modified files to disrupt the checkout.

### Unify State

When selected, any object participating in the check-out operation, even if your workspace already contains the requested version, is left in the state specified by the



**Mode** field. When **Unify State** is not selected (the default), state changes only happen for objects that are fetched from the vault.

The default behavior of not unifying states during a checkout is a performance optimization that typically produces the desired results. However, if you want to change the state of objects in your workspace even when you already have the correct version, select **Unify State**. For example, if a cell view in your workspace is currently a link to the latest version in the cache but you want a local copy instead, you must check out the object with **Unify State** selected.

**Note:** The **Unify State** option is ignored when you are locking design objects. **Edit (locked copy)** and **Regenerate (locked reference)** modes always leave all processed objects in the requested state.

### Overlay

#### Note:

This option is available only at a user level of **expert** and when your check-out mode is **Read (local copy)**.

The **Overlay** option lets you fetch a version of a design object from another branch and overlay it on the version you have checked out in your workspace. The current-version information as recognized by DesignSync DFII does not change, but the current version is considered locally modified. Use the **Overlay** option to bring development done on a side branch back to the main development branch.

For example, you have version 1.4 of a view checked out with a lock in your workspace. There has been work done on this view on another branch called "dev". You want the latest version on "dev" to replace your current view so that you can check in that new version. You check out the latest version from "dev" specifying **Read (local copy)**, "dev" as the **Selector**, and **Overlay**. After the checkout, you have a locally modified version of 1.4, whose content is the latest version from "dev". You can now check in to create version 1.5.

The **Overlay** option is available only when your check-out mode is **Read (local copy)**:

- DesignSync does not support simultaneous locking and overlaying, so you cannot select **Edit (locked copy)** or **Regenerate (locked reference)**.
- Overlay does not make sense when your workspace links to shared data as with the **Read (cache link)** and **Read (mirror link)** modes.

### Background

Select this option to check out objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in

the background. Use the Show Background Queue form to pause or remove commands from the queue.

### **Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### **Recursive**

Use this option to check out all objects in each specified directory, as well as its subdirectories.

### **Incremental**

When selected, performs an incremental update (populate), where appropriate, of the specified objects. An incremental populate updates only those local folders whose corresponding vault folders have changed. An incremental update is generally faster than a full update.

The default setting for **Incremental** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the **Incremental** option and clicking **Save Defaults**.

An incremental update is appropriate for most updates to a workspace, but there are several cases where incremental mode is not appropriate. DesignSync DFII automatically performs a full update (ignores the **Incremental** setting) in the following cases:

- When checking out a different version of design data (as specified from the **Selector** field)
- When unifying the states of objects in your workspace (**Unify State** option is selected)

In addition, you may need to force a full update (by deselecting **Incremental**) in the following situations:

- You or your project lead has made changes to any exclude filters, which dictate objects that are skipped when performing revision-control operations.
- Operations that have occurred outside of the DesignSync DFII (or DesignSync) environment affect the state of your design data. For example, some files were accidentally removed using UNIX `rm`.

**Command Buttons**

<b>Button</b>	<b>Description</b>
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

**Related Topics**

- Checking Out Design Files
- Accessing a Library for the First Time

## Canceling Checkouts

### Canceling a Check Out

Canceling a check out releases the locks that you have on design files, without checking in any changes you have made, and re-fetches the files into your workspace.

You can cancel the following objects from the CIW or cell view window:

- Library
- Cell
- Cell view
- Category
- Design hierarchy
- Modules and individual DesignSync objects

DesignSync DFII also provides a general-purpose cancel interface so that you can cancel files that are not part of a cell view definition. This interface lets you specify files and directories, and supports the use of wildcards. This interface also lets you specify library objects (libraries, cells, and views), although using the form that is specific to that object type, such as Cancel Cell, is generally simpler.

You also can cancel a check out using Cadence's Library Manager or **Auto Checkin** (see Cadence documentation for more information).

There may be cases where you need to remove a lock but cannot do so by canceling a checkout. See [Unlocking Design Objects](#) for details.

## Related Topics

- Checking Out Design Files
- Displaying Check-Out Status
- The Cancel Checkouts Results Form
- Unlocking Design Objects

## Canceling a Library Check Out

To cancel the check out of all design objects in a library or of specified views of a library:

1. Select **Synchronicity => Cancel => Library** from the CIW.
2. Modify the fields of the Cancel Library Checkouts form as needed.

**Click on the fields in the following illustration for information.**

3. Click **OK**.

The currently checked-out objects are displayed on the Cancel Checkouts result form. See [The Cancel Checkouts Results Form](#) for details on using this form.

**Note:** If the objects specified on the form have not been checked out, a warning is generated and the Cancel Checkouts Results form is not displayed.

## Cancel Library Checkouts Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### **Browse**

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### **View Name List**

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### **Module Context**

Select the appropriate module context from the drop-down list. The module must have its base directories at, or above, the level of the library being checked out.

This option is ignored for non-module objects.

If the module doesn't appear on the drop-down list, select *\*Refresh\** from the drop-down list to refresh the internal list of known candidate modules, and reevaluate the set candidate modules. If the module doesn't appear in the list after a refresh, see *Unable to Locate a Module*.

**Note:** You can only specify one module per operation.

### **Command Buttons**

<b>Button</b>	<b>Description</b>
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.

Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

[Checking Out Design Files](#)  
[Displaying Check-Out Status](#)  
[The Cancel Checkouts Result Form](#)

## Canceling a Cell Check Out

To cancel the check out of all objects in a cell or of specified views of a cell:

1. Select **Synchronicity => Cancel => Cell** from the CIW.
2. Modify the fields of the Cancel Cell Checkouts form as needed.

**Click on the fields in the following illustration for information.**

3. Click **OK**.

The currently checked-out objects are displayed on the Cancel Checkouts result form. See The Cancel Checkouts Results Form for details on using this form.

**Note:** If the objects specified on the form have not been checked out, a warning is generated and the Cancel Checkouts Results form is not displayed.

## Cancel Cell Checkouts Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser

displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name List

Specify the names of one or more cells, separated by spaces, on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a single cell for this field.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

- Checking Out Design Files
- Displaying Check-Out Status
- The Cancel Checkouts Result Form

## Canceling a Cell View Check Out

To cancel the check out of a cell view:

1. Select **Synchronicity => Cancel => Cell View** from the CIW or **Synchronicity => Cancel** from the cell view window.
2. Modify the fields of the Cancel Cell View Checkouts form as needed.

Click on the fields in the following illustration for information.

3. Click **OK**.

The currently checked-out object is displayed on the Cancel Checkouts result form. See The Cancel Checkouts Results Form for details on using this form.

**Note:** If the objects specified on the form have not been checked out, a warning is generated and the Cancel Checkouts Results form is not displayed.

### Cancel Cell View Checkout Field Descriptions

#### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

#### Browse



Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Name

Specify the name of the view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

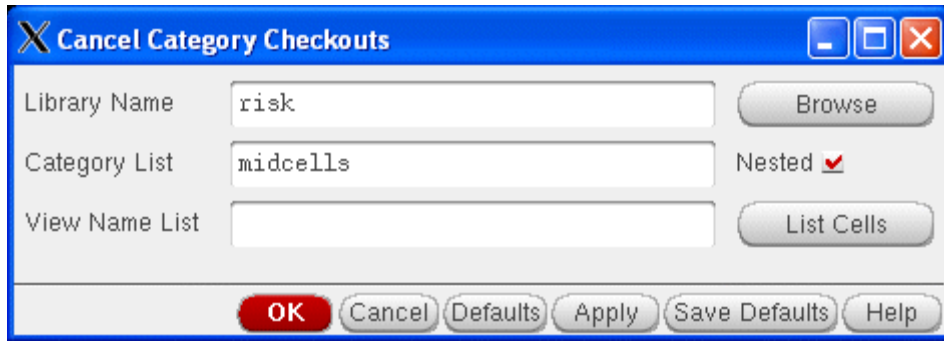
- Checking Out Design Files
- Displaying Check-Out Status
- The Cancel Checkouts Result Form

## Canceling a Category Check Out

To cancel the check out of all cells in a category or of specified views of those cells:

1. Select **Synchronicity => Cancel => Category** from the CIW.
2. Modify the fields of the Cancel Category Checkouts form as needed.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

The currently checked-out objects are displayed on the Cancel Checkouts result form. See The Cancel Checkouts Results Form for details on using this form.

#### Notes:

- If the objects specified on the form have not been checked out, a warning is generated and the Cancel Checkouts Results form is not displayed.
- If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed unless the cells are part of other categories that are being processed.

### Cancel Category Checkouts Field Descriptions

#### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### Category List

Specify one or more category names, separated by spaces, on which to operate. The categories must exist in the local library. The **Nested** checkbox determines whether the operation applies to subcategories.

### Nested

Specifies whether the operation applies only to the cells in the specified categories or also to cells in subcategories.

### Note:

When processing all the cells of a category, including nested categories, DesignSync DFII prompts you to fetch any nested category (.Cat) files that are missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed as part of your Checkout Category operation unless the cells are part of other categories that are being processed. Category files are fetched using:

- The default fetch mode, not the **Mode** value specified on the Checkout Category form.
- The selector from the **Selector** field, if specified. Otherwise, the library's persistent selector is used.

### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### List Cells

Displays the list of cells that will be processed by the operation, as defined by the **Category List** and **Nested** settings. The display window also lists the cell views, if any, that you have selected. See Listing Selected Cells for Category Operations for more information.

### Note:

If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not listed as part of the List Cells output unless the cells are part of other categories that are being processed.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

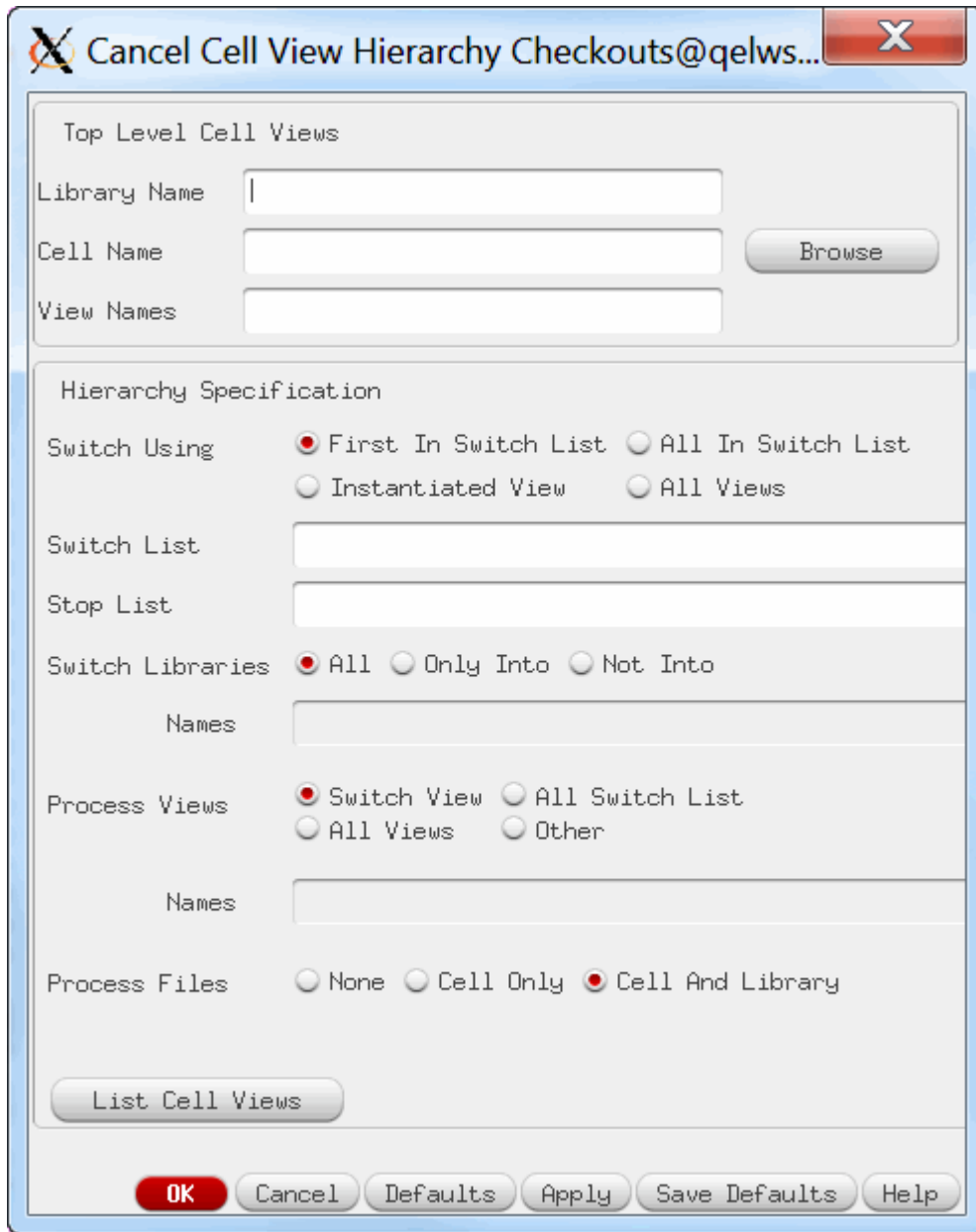
[Checking Out Design Files](#)  
[Displaying Check-Out Status](#)  
[Listing Selected Cells for Category Operations](#)  
[The Cancel Checkouts Result Form](#)

### Canceling a Design Hierarchy Check Out

To cancel the check out of all objects in a design hierarchy:

1. Select **Synchronicity => Cancel => Hierarchy** from the CIW.
2. Modify the fields of the Cancel Cell View Hierarchy Checkouts form as needed.

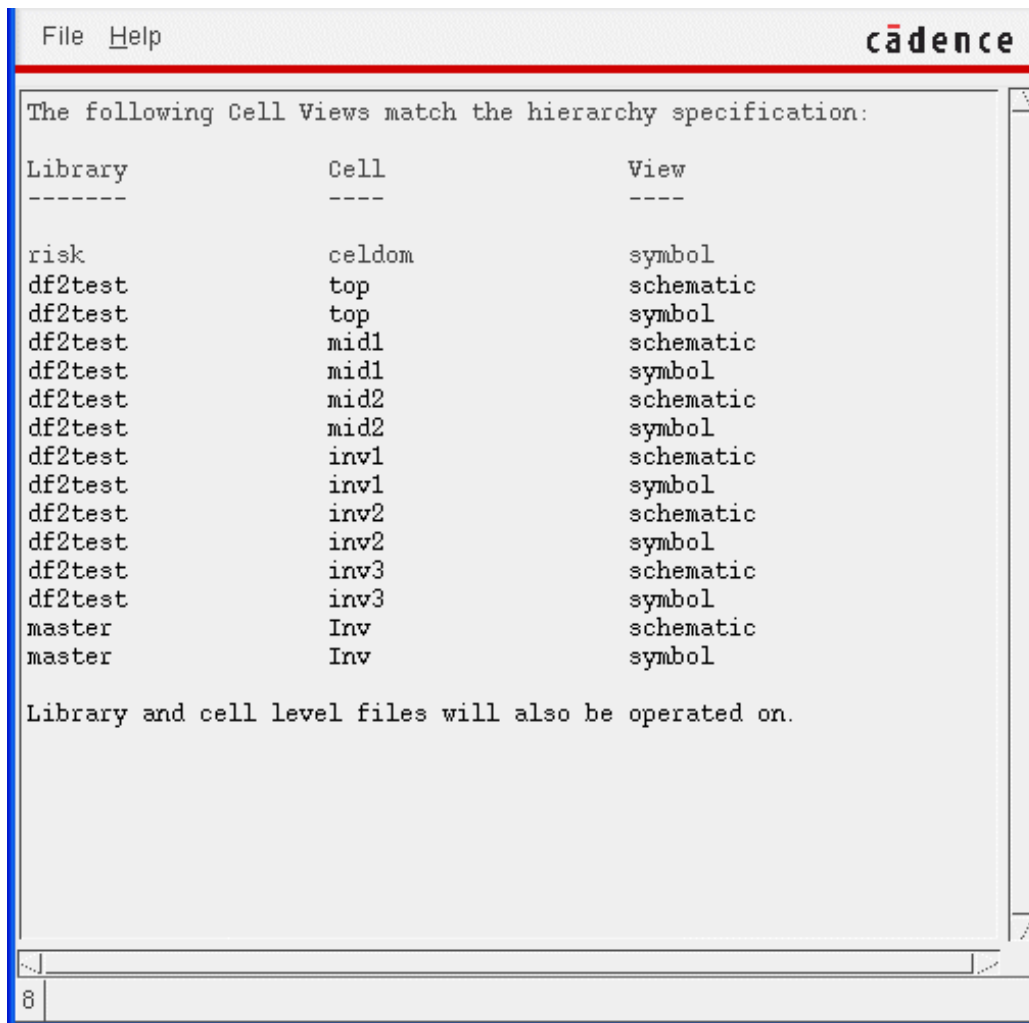
**Click on the fields in the following illustration for information.**



To identify the cells in a design hierarchy, DesignSync DFII can use one of two process: either DesignSync DFII scans the hierarchy according to your specifications in the **Hierarchy Specification** fields beginning with the top-level cell views specified using the **View Names** field; or by making use of the hierarchy that has been described in a Hierarchical Configuration (config) view.

3. To verify your hierarchy options, select the **List Cell Views** button.

DesignSync DFII traverses the hierarchy according to the current hierarchy options and displays the potential views for processing.



4. Click **OK** in the Cancel Cell View Hierarchy Checkouts form to process the specified hierarchy.

DesignSync DFII scans the hierarchy, opening the cell views and gathering information on each cell referenced in a cell view. For each cell gathered, DesignSync DFII records the library name and the cell name and then identifies which views to scan next as it moves through the hierarchy.

The currently checked-out objects display in the Cancel Checkouts result form. See The Cancel Checkouts Results Form for details on using this form.

#### Notes:

- For DesignSync DFII to scan the hierarchy, the cells must be in your local workspace.
- DesignSync provides support for operating both on design views and config views, but you cannot specify both types of views within the same operation.

- DesignSync DFII does not scan through libraries that have been filtered out in the **Switch Libraries** field. For example, suppose a cell in **library\_1** references a cell in **library\_2**, which references a cell in **library\_3**. If **library\_2** is filtered out by the **Switch Libraries** field, the cell in **library\_3** is not found.
- If the objects specified on the form have not been checked out, a warning is generated and the Cancel Checkouts Results form is not displayed.

### Cancel Cell View Hierarchy Checkouts Field Descriptions

#### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

#### View Names

You can operate on one or more of the cell's views. Specify the names of the views on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

It is useful to specify more than one view name if you need to traverse multiple hierarchies in one scan. To do this, specify the views using the **View Names** field and select the **All in Switch List** option in the **Switch Using** field. For example, to step through a design's schematic and layout hierarchies at the same time, you might specify "schematic layout" as the top-level cell views in the **View Names** field, "schematic

layout symbol" in the **Switch List** field, and "All In Switch List" in the **Switch Using** field.

**Note:** The **Switch Using**, **Switch List**, and **Stop List** fields are not applicable to "config" views.

DesignSync provides support for operating both on design views and config views, but you cannot specify both types of views within the same operation.

### Switch Using

The **Switch Using** field lets you specify how the design hierarchy is to be traversed.

This field is not applicable when specifying a config view because the hierarchy expansion definition within the config view is used instead.

You can choose one of the following:

- **First in Switch List** -- As the design is traversed, DesignSync DFII descends into the first view specified in the switch list that exists for a cell. Specify the switch list using the **Switch List** field.
- **Instantiated View** -- As the design is traversed, DesignSync DFII descends into each instantiated view. The **Switch List** field is greyed-out and ignored in this case. Descending into all instantiated views is useful for traversing a hierarchy with layout-type views in cases where the design team has used multiple view names to indicate the layout views.
- **All in Switch List** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that matches a view in the switch list. Specify the switch list using the **Switch List** field.

Descending into all views in the switch list is useful when you have a well-defined set of views and you need to process multiple hierarchies. For example, you might have a layout hierarchy and a schematic hierarchy that are not the same, and you want to process both. If you do not select the **All in Switch List** field, this scan requires multiple passes through the command.

- **All Views** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that exists for each cell. The **Switch List** field is greyed-out and ignored in this case.

Descending into all views is useful when the command must traverse all paths through the hierarchy. In this case, DesignSync DFII might scan some unnecessary cells instantiated by obsolete views.

### Switch List



Specify the names of the views to be scanned to identify the design hierarchy. Separate view names by spaces.

The Switch List field is required if you specify the **First in Switch List** or **All in Switch List** options in the **Switch Using** field. If the **Switch Using** field is set to **Instantiated View** or **All Views**, the **Switch List** field is ignored.

This field is not applicable when specifying a config view because DesignSync uses the switch list from within the config view.

### Stop List

Specify the names of views at which the hierarchy scanning should stop. View names should be separated by spaces. As the design is traversed, if the **Switch List** view that is opened for a cell is also in this list, then scanning stops at that point.

This field is optional.

This field is not applicable when specifying a config view because DesignSync uses the stop list from within the config view.

### Switch Libraries

The options in this field control which libraries may be entered as the hierarchy is scanned. You can choose one of the following:

- **All** -- All libraries may be entered.
- **Only Into** -- Only the libraries specified in the following **Names** field may be entered.
- **Not Into** -- All libraries except those specified in the **Names** field may be entered.

### Switch Libraries Names

Specify a list of library names, separated by spaces, for use by the **Switch Libraries** field. This field is not active if **All** is selected in the **Switch Libraries** field.

### Process Views

Once you have identified the hierarchy using the **Switch Using**, **Switch List**, and **Stop List** fields, the **Process Views** options control which views of the identified cells are processed. You can choose one of the following:

- **Switch View** -- Each view that was switched into is processed.
- **All Switch List** -- All the views specified in the **Switch List** that exist for the cell are processed. If the selected view is a "config" view, the All Switch List option uses the switch view and the switch list defined within the config view. If there

are sub-configs, then the switch list of the sub-configs is used within those sub-configs

**Note:** Switch lists are not used if hierarchy traversal descends into instantiated views. Thus, if **All Switch List** is selected and the **Switch Using** field is set to **Instantiated View**, an error occurs.

- **All Views** -- All views that exist for the cell are processed.
- **Other** -- All the views specified in the following **Names** field that exist for the cell are processed. For config views, the switch view is always included.

#### Process Views Names

Specify a list of views, separated by spaces, for use by the **Process Views** field. This field is active only when the **Other** option is selected in the **Process Views** field.

#### Process Files

This option controls whether cell- and library-level files are processed in addition to the specified cell views. You can choose one of the following:

- **None** -- No cell- or library-level files are processed.
- **Cell Only** -- Cell-level files are processed, but library-level files are not. This option selects only cell-level files for those cells on which you are operating.
- **Cell And Library** -- Cell- and library-level files are processed.

#### Include Config Cells

This option controls whether the config view cells are included in the operation. If you want to operate on the design cells and the hierarchy definition (config) cells, enable this option. (Default) If you want to operate ONLY on the design cells and not on the hierarchy definition cells, you can disable this option.

#### List Cell Views

Displays the list of views that can be processed by the operation, as defined by the **Top Level Cell View** and **Hierarchy Specification** settings that you specified on the form.

By default, only the single view that was switched into is processed, not all views. You can change this behavior by changing the setting of the **Process Views** field.

See Listing Selected Cell Views for Hierarchy Operations for more information.

#### Command Buttons

Button	Description
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OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

- Checking Out Design Files
- Displaying Check-Out Status
- The Cancel Checkouts Results Form
- Listing Selected Cell Views for Hierarchy Operations

## Canceling a File Check Out

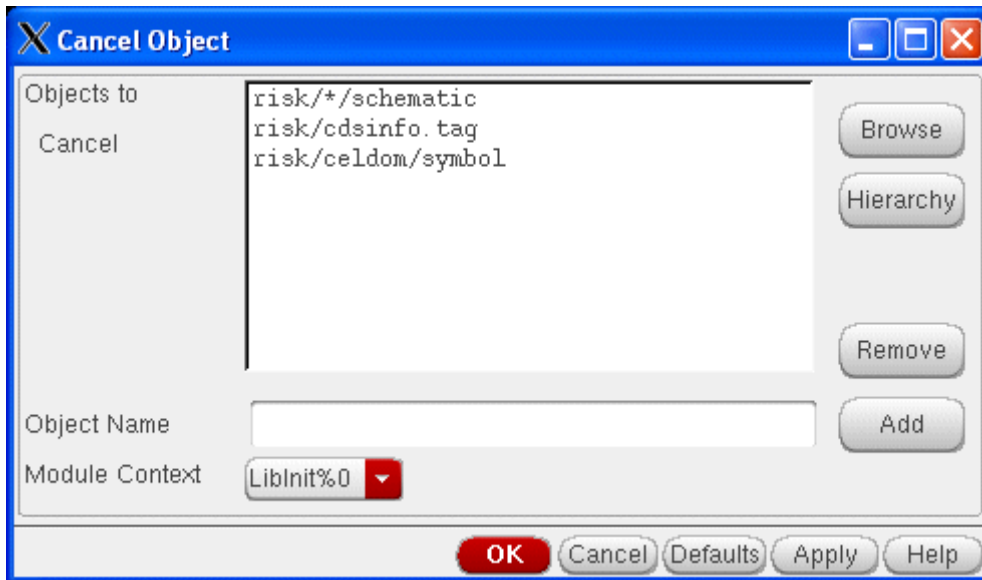
The Cancel Object form is a general-purpose cancel interface. You can specify files and directories, library objects (libraries, cells, views), or a combination of both. You can use glob-style wildcards.

Use the Cancel Object form to cancel files that are not part of a cell view co-managed set, such as property files, category files, and documentation files, as well as files that are totally unrelated to the design library. Also, use the Cancel Object form to perform cancel operations on library objects that you cannot perform from the object-specific interface (such as Cancel Cell). For example, you can cancel the checkouts of multiple cells across several libraries in one operation.

To cancel the checkouts of one or more objects:

1. Select **Synchronicity => Cancel => File** from the CIW.
2. Modify the fields of the Cancel Object form as needed.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

The currently checked-out objects are displayed on the Cancel Checkouts result form. See The Cancel Checkouts Results Form for details on using this form.

**Note:** If the objects specified on the form have not been checked out, a warning is generated and the Cancel Checkouts Results form is not displayed.

## Cancel Object Field Descriptions

### Objects to Cancel

Lists the objects whose checkouts you want to cancel.

If you specified objects with wildcards, the individual matching objects are not themselves listed. When you click **OK** or **Apply**, the list is passed to the underlying cancel routine, which then expands the wildcards.

To add objects to the **Objects to Cancel** list:

1. Enter the object name in the **Object Name** field.
2. Click **Add**.

- or -

1. Click **Browse** to invoke the DesignSync DFII Browser.
2. Select one or more objects in the browser.
3. Click **OK** or **Apply** from the browser.

To remove objects from the **Objects to Cancel** list:

1. Select one or more objects from the list.
2. Click **Remove**.

Note that when you select an object from the **Objects to Cancel** list and the **Object Name** field is either empty or contains a name that already appears in the list, then the selected object's name appears in **Object Name**. This behavior lets you easily add new objects to **Objects to Cancel** based on the name of a previously entered object.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You can browse your file system (directories and files) or library objects (libraries, categories, cells, and views). You select one or more objects as appropriate for the operation you are performing, then click **OK** or **Apply** to pass your selections to the calling form.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser.

### Hierarchy

Invokes the Select Cell View Hierarchy form, which helps you select the cell views that comprise a hierarchy. You provide the hierarchy parameters, then click **OK** or **Apply** to seed the calling form with the cell views that match your parameters.

See *Selecting Cell View Hierarchy* for a full description.

### Object Name

Specify the name of an object (file, directory, library, cell, or cell view) that you want to cancel, then click **Add** to add the object to the **Objects to Cancel** list. Any object that is entered in the **Object Name** field but not added to the **Objects to Cancel** list will not be canceled.

The **Object Name** field is cleared when you click **Add**. If you want to specify an object based on a previously entered object name, select the object from **Objects to Cancel**. If **Object Name** was empty or contained an object name that already appears in the **Objects to Cancel** list, then the selected object name appears in the **Object Name** field. You can then edit that name and click **Add**.

When you specify a directory, library, or cell name, the operation is run recursively on that object. For example, if you specify a directory, checkouts for all objects in the entire directory hierarchy are canceled.

You can specify absolute or relative paths. Relative paths are relative to the current working directory or to the library on your library path. For example, if library "df2test" is on your library path, then you can specify the `cdsinfo.tag` file for that library as `df2test/cdsinfo.tag`, even though the "df2test" library directory may be anywhere

on your disk. If there is also a directory within the current working directory with the same name ("df2test") so that `df2test/cdsinfo.tag` is ambiguous -- or even when a specified object exists only in the "df2test" directory and not the "df2test" library -- then the library is used for the operation and the directory is ignored.

Duplicate values entered from **Object Name** appear in the **Objects to Cancel** field only once. However, the same objects specified using different paths (for example, `./cdsinfo.tag` and `cdsinfo.tag`) are not filtered and may result in the object being operated on multiple times.

## Using Wildcards

You may use glob-style (not regexp-style) wildcards in the **Object Name** field. Wildcards are useful when you want to operate on a large number of objects without specifying the name of each object. You can use the following special characters:

<code>?</code>	Matches any single character.
<code>*</code>	Matches zero or more characters.
<code>[chars]</code>	Matches any one of the characters in <code>chars</code> . <code>chars</code> may include a range of characters, such as <code>a-z</code> , which matches any character from "a" to "z".
<code>\x</code>	Matches "x". For example, <code>a\?b</code> matches only <code>a?b</code> ; the backslash ( <code>\</code> ) overrides the special meaning of "?" in glob patterns.
<code>{str1,str2,...}</code>	Matches any of the strings <code>str1</code> , <code>str2</code> , and so on. For example, <code>*.{dss,exe}</code> matches any file with an extension of <code>"dll"</code> or <code>"exe"</code> .

These wildcards are expanded within the workspace and libraries before the operation is performed. For example, you can specify `smallLib/*/symbol` to operate on the symbol views of all cells within the "smallLib" library.

Wildcard expressions may not work within the library part of a relative library name. The wildcard expression is expanded first against the current working directory, and then library matching is performed. For example, you have libraries "libA" and "libB" and specify the wildcard expression "lib\*". But your current directory has a file called "libNotes.txt". The wildcard expression will match "libNotes.txt", not the "libA" and "libB" libraries.

## Module Context

Select the appropriate module context from the drop-down list. The module must have its base directories at, or above, the level of the objects being checked out.

This option is ignored for non-module objects.

If the module doesn't appear on the drop-down list, select \*Refresh\* from the drop-down list to refresh the internal list of known candidate modules, and reevaluate the set candidate modules. If the module doesn't appear in the list after a refresh, see Unable to Locate a Module.

**Note:** You can only specify one module. If you are selecting objects from two different modules in the same workspace, use two separate operations. If you select objects from more than one module or objects from both a module and a DesignSync vault, the module context field becomes inactive.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

Checking Out Design Files  
Displaying Check-Out Status  
The Cancel Checkouts Result Form

## The Cancel Checkouts Results Form

The Cancel Checkouts - Results form appears when you select **Synchronicity => Cancel** from the CIW or cell view window and then specify the type of object for which you want to cancel your checkout.

The Cancel Checkouts - Results form displays all the objects specified on the Cancel form that are checked out with a lock in your workspace. When the form appears, all of the objects that you checked out are selected for cancellation.

To complete the cancellation of some or all of the listed objects:

1. Optionally deselect any objects that you do not want to cancel and specify any cancel options.

**Click on the fields in the following illustration for information.**

Cancel

Page 1 of 2

Select All on Page

Select All on All Pages

Cancel Workspace Checkouts for Library: risk, Module Context: LibInIt%0  
Library Path: /home/tmarci2/cadencedata/mods/libinit/risk

	Cell/File	View	Lock Owner
<input checked="" type="checkbox"/>	.oalib		tmarci2
<input checked="" type="checkbox"/>	cdsinfo.tag		tmarci2
<input checked="" type="checkbox"/>	data.dm		tmarci2
<input checked="" type="checkbox"/>	midcells.Cat		tmarci2
<input checked="" type="checkbox"/>	risk.TopCat		tmarci2
<input checked="" type="checkbox"/>	celdom	symbol	tmarci2
<input checked="" type="checkbox"/>	custdes	symbol	tmarci2
<input checked="" type="checkbox"/>	custinv	symbol	tmarci2
<input checked="" type="checkbox"/>	inv	schematic	tmarci2
<input checked="" type="checkbox"/>	mod	schematic	tmarci2

Cancel Options

Mode  Read (cache link)  Read (mirror link)  Read (local copy)

Retain  Force  Background

OK Cancel Defaults Apply Save Defaults Help

**Note:** The form shown here is a multipage form resulting from setting the maximum number of items per page to 5. See Controlling the Number of Items on a Results Page for details.

2. Click **OK**.

If you have selected one or more objects to cancel, a confirmation box appears. When you click **Yes**, checkouts for the selected objects are canceled. For a multipage Cancel Checkouts - Results form, all selected objects on all pages are canceled.

## Cancel Checkouts Results Field Descriptions

### Page 1 of n: Multipage Navigation Controls



When there are more items than can be displayed on one page, the Cancel Checkouts results are displayed over multiple pages. The default maximum is 100 items, but you can customize this setting (see Controlling the Number of Items on a Results Page). The following navigation aids are provided for multipage forms:

- A label indicating the current page and the total number of pages, for example "Page 1 of 2"
- Browse buttons that let you switch between pages
- A **Goto** button and type-in field that let you quickly jump to the specified page

### Note:

When there are multiple pages, the **OK** and **Apply** buttons operate on all selected objects on all pages.

### Select All on Page(s)

The **Select All** buttons let you quickly select (checkmark buttons) or deselect (X buttons) all objects to check in or cancel. You can then select or deselect individual objects as needed.

When Cancel Checkouts - Results has multiple pages, these buttons are called **Select All on Page**, and they only select or deselect objects on the current page. In addition, **Select All on All Pages** buttons let you quickly select or deselect all object on all pages. You can then select or deselect individual objects across all pages as needed.

### Note:

When there are multiple pages, the **OK** and **Apply** buttons operate on all selected objects on all pages.

### Checked-Out Objects Display Region

This region displays the checked-out objects. Each object for which you are the lock owner has a **Cancel** checkbox that you can select if you want to cancel the checkout.

Use the **Select All** (or **Select All on Page** for multipage forms) buttons to quickly select or deselect all objects on the current page.

### Note:

For objects checked out in **Regenerate (locked reference)** mode, the Lock Owner column shows "Unknown". DesignSync DFII determines a lock owner by looking at the owner of the local files, but locked references have no local files.

### Mode

Specify what you want left in your workspace after canceling your checkouts:

- **Read (cache link)** -- Your workspace contains links to files in the cache directory, which is shared with other users on your LAN. You cannot edit the files in the cache directory.
- **Read (mirror link)** -- Your workspace contains links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.
- **Read (local copy)** -- Your workspace contains local, read-only copies of the files.

#### Notes:

- Your project leader can control which cancel modes are visible on the Show Checkouts form using the SyncAdmin tool. See Controlling the Display of Check-In or Check-Out Modes for details.
- Your project leader can select a default fetch mode, which is the default selection on the Show Checkouts form. See Selecting a Default Fetch Mode for details.

#### Retain

When selected, retains the "last modified" timestamps of objects left in your workspace after canceling. When deselected, the timestamps of the local objects are set to the cancel time.

The **Retain** option is only meaningful for **Read (local copy)** mode. **Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use retain behavior; objects in the mirror or cache directory retain their "last modified" timestamps. However, links in your workspace to the cache/mirror have timestamps corresponding to when the links were created.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

#### Force

Select this option to overwrite any modifications you have made to the object in your workspace.

#### Background

Select this option to cancel checkouts as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in

the background. Use the Show Background Queue form to pause or remove commands from the queue.

**Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

**Command Buttons**

Button	Description
OK	Closes the form and performs the cancel operations. For a multipage Cancel Checkouts - Results form, all selected objects on all pages are operated on.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. For a multipage Cancel Checkouts - Results form, default values are restored on all pages. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the cancel operations without closing the form. For a multipage Cancel Checkouts - Results form, all selected objects on all pages are operated on.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

**Related Topics**

- Canceling a Check Out
- Controlling the Number of Items on a Results Page

**Tagging**

**Tagging Design Files**

Tagging is the ability to label different versions of objects with a unifying identifier, creating what is known as a configuration. For example, tagging a layout and the schematic from which the layout originated with the same tag lets you later check out those particular versions of the design.

You can tag the following design objects:

- Library
- Cell
- Cell view
- Category
- Design hierarchy
- Modules, module members, and individual DesignSync objects

DesignSync DFII also provides a general-purpose tag interface so that you can tag files that are not part of a cell view definition. This interface lets you specify files and directories, and supports the use of wildcards. This interface also lets you specify library objects (libraries, cells, and views), although using the form that is specific to that object type, such as Tag Cell, is generally simpler. You can also use the general-purpose tag interface to tag multiple libraries. In that interface, enter the names of all the libraries to tag, or select them from the browser.

**Note:**

Operations involving tags are only available at a user level of "advanced" or higher.

## Related Topics

DesignSync DFII Design Management Overview  
Creating a Tag List  
Modifying the Tag List

## Tagging a Library

Tagging is the ability to label different versions of objects with a unifying identifier, creating what is known as a configuration.

To tag (or remove a tag from) an entire library:

1. Select **Synchronicity => Tag => Library** from the CIW. This command is only available at a user level of "advanced" or higher.
2. Modify the fields of the Tag Library form as needed.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

The CIW window lists which design files have been tagged or which have had tags removed. When the operation is complete, the CIW shows you the number of objects that were tagged and the number of objects for which the operation failed.

## Tag Library Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see [Selecting a Library Browser](#).

### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Module Context

Specifies the workspace module context to include in a module snapshot. This allows you to restrict the tag operation to a specified module.

This option is only applicable to module snapshots.

**Note:** For more information on tagging a module, see Tagging a File.

### Tag Name

Specify the tag name you want to assign. Tags should be easily understood, such as "Release1\_5" or "Golden". 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. In general, avoid using tag names starting with 'Sync' (case-insensitive), because Synchronicity may define new keywords in the future using that naming convention.
- Cannot end in `--R`. The `--R` tag is reserved for use by the Hierarchical Configuration Manager software.

You may also be able to use the choice list to the right of the **Tag Name** field to specify a tag. See Creating a Tag List for details. The choice list may contain the following items:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Tag Name** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Tag Name** field. Note that items in the tag list may have characters that are invalid for the **Tag Name** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the

"master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Tag Name** field.

**Note:** Generating the list of configurations for a library can take a few moments. Therefore, the list is not generated automatically when you specify a library in the **Library Name** field. Instead, you must select **\*Refresh\*** from the tag list to fetch the configurations information (if any). Once the configuration list is generated, it will be displayed by any tag-list choice field when you specify that library. Clicking **\*Refresh\*** at a later time regenerates the configuration list, picking up any changes to the configuration definitions.

- A hyphen separator (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.
- **\*Refresh\***, which updates the configuration list for the specified library. Generating the list of configurations requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.

### Move Existing Tag

Select this option if you want to move a tag that is already used on a version of an object to a new version. For example, at the end of every week you want to select the latest files that produce a good demo and tag them "current\_demo". To move the tag, you must select the Move Existing Tag option. The Remove Tag and Move Existing Tag options are mutually exclusive.

### Tag Modified Objects

When selected, specifies that the original versions (as checked out from the vault) of locally modified objects are tagged. When deselected, the tag operation fails if a local object is modified.

Because tags are applied to versions in the vault and **not** local objects themselves, tagging a locally modified object actually applies the tag to the original version that you checked out from the vault. You would need to check in your local modifications (create a new version) and then apply the tag in order for your changes to be included in the configuration. The default tag behavior is to fail on modified objects so that you do not inadvertently tag the wrong version of design data. Select the **Tag Modified Objects** option when you really do want to tag the original version (not including your local modifications).

If you do not select the **Tag Modified Objects** option, when you attempt to tag object versions whose local copies are modified but not saved, DesignSync DFII displays a Modifications Not Saved dialog box.

Tagging the wrong version is a potentially serious process error. Therefore, DesignSync DFII displays a dialog box when you perform a tag operation with **Tag Modified Objects** selected. The dialog box describes the tagging behavior that will result and requires that you confirm or cancel the operation. You can request that the dialog box not be displayed in the future by selecting the "Do not show me this again" check box. You can later clear this setting by selecting **Disabled Dialog Boxes** from the Default Field Values form. See Viewing and Resetting Form Defaults for details.

The **Tag Modified Objects** option is not relevant and therefore not available when **Remove Tag** is selected.

#### Module Recursive

Follow any hierarchical references and recursively operate on their contents.

If a module folder is selected, module recursive is silently ignored and the operation runs in a file-centric recursive manner beginning with the selected folder.

This option is silently ignored for file-based libraries.

#### Remove Tag

Select this option to delete tags that are already assigned to a version of a cell view.

The **Remove Tag** and **Move Existing Tag** options are mutually exclusive.

#### Background

Select this option to tag objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

#### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.



### Tag Module Members

Tagging individually module members creates a module snapshot, a collection of versionable module members identified as a collective (snapshot) view of the workspace at any given moment. The snapshot is stored on a special tagged branch, named SNAPSHOT\_Tag Name. The specific module member tag on that branch is Tag Name. For more information on tagged module members, see the *ENOVIA Synchronicity DesignSync User's Guide*, Module Member Tags.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

Tagging Design Files

### Tagging a Cell

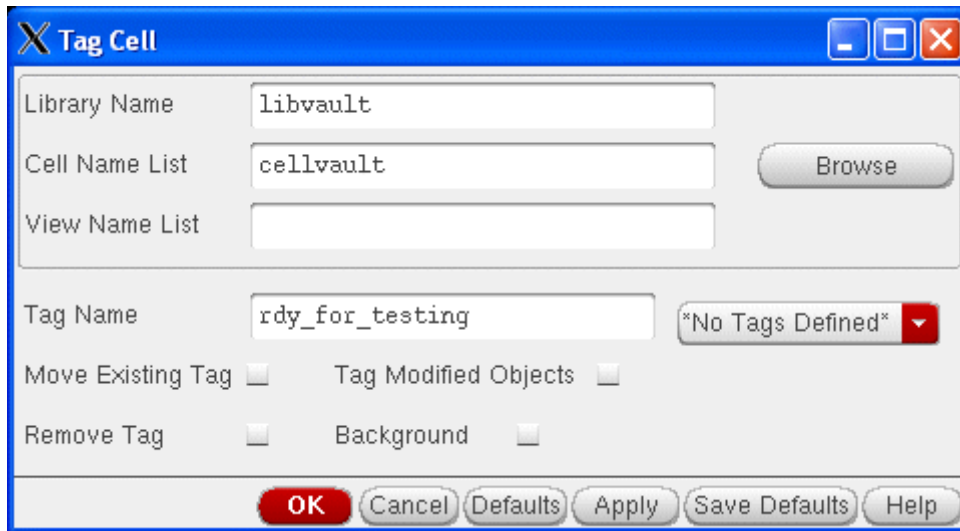
Tagging is the ability to label different versions of objects with a unifying identifier, creating what is known as a configuration.

**Note:** For information on tagging a module, see Tagging a File.

To tag (or remove a tag from) all the cell views or selected cell views of a cell:

1. Select **Synchronicity => Tag => Cell** from the CIW. This command is only available at a user level of "advanced" or higher.
2. Modify the fields of the Tag Cell form as needed.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

The CIW window lists which design files have been tagged or which have had tags removed. When the operation is complete, the CIW shows you the number of objects that were tagged and the number of objects for which the operation failed.

## Tag Cell Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want is not listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name List

Specify the names of one or more cells, separated by spaces, on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select cells for this field.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see [Selecting a Library Browser](#).

### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Tag Name

Specify the tag name you want to assign. Tags should be easily understood, such as "Release1\_5" or "Golden". 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. In general, avoid using tag names starting with 'Sync' (case-insensitive), because Synchronicity may define new keywords in the future using that naming convention.
- Cannot end in `--R`. The `--R` tag is reserved for use by the Hierarchical Configuration Manager software.

You may also be able to use the choice list to the right of the **Tag Name** field to specify a tag. See [Creating a Tag List](#) for details. The choice list may contain the following items:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Tag Name** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Tag Name** field. Note that items in the tag list may have characters that are invalid for the **Tag Name** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)".

When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Tag Name** field.

**Note:** Generating the list of configurations for a library can take a few moments. Therefore, the list is not generated automatically when you specify a library in the **Library Name** field. Instead, you must select **\*Refresh\*** from the tag list to fetch the configurations information (if any). Once the configuration list is generated, it will be displayed by any tag-list choice field when you specify that library. Clicking **\*Refresh\*** at a later time regenerates the configuration list, picking up any changes to the configuration definitions.

- A hyphen separator (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.
- **\*Refresh\***, which updates the configuration list for the specified library. Generating the list of configurations requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.

### Move Existing Tag

Select this option if you want to move a tag that is already used on a version of an object to a new version. For example, at the end of every week you want to select the latest files that produce a good demo and tag them "current\_demo". To move the tag, you must select the Move Existing Tag option. The Remove Tag and Move Existing Tag options are mutually exclusive.

### Tag Modified Objects

When selected, specifies that the original versions (as checked out from the vault) of locally modified objects are tagged. When deselected, the tag operation fails if a local object is modified.

Because tags are applied to versions in the vault and **not** local objects themselves, tagging a locally modified object actually applies the tag to the original version that you checked out from the vault. You would need to check in your local modifications (create a new version) and then apply the tag in order for your changes to be included in the configuration. The default tag behavior is to fail on modified objects so that you do not inadvertently tag the wrong version of design data. Select the **Tag Modified Objects** option when you really do want to tag the original version (not including your local modifications).

If you do not select the **Tag Modified Objects** option, when you attempt to tag object versions whose local copies are modified but not saved, DesignSync DFII displays a Modifications Not Saved dialog box.

Tagging the wrong version is a potentially serious process error. Therefore, DesignSync DFII displays a dialog box when you perform a tag operation with **Tag Modified Objects** selected. The dialog box describes the tagging behavior that will result and requires that you confirm or cancel the operation. You can request that the dialog box not be displayed in the future by selecting the "Do not show me this again" check box. You can later clear this setting by selecting **Disabled Dialog Boxes** from the Default Field Values form. See Viewing and Resetting Form Defaults for details.

The **Tag Modified Objects** option is not relevant and therefore not available when **Remove Tag** is selected.

### Remove Tag

Select this option to delete tags that are already assigned to a version of a cell view.

The **Remove Tag** and **Move Existing Tag** options are mutually exclusive.

### Background

Select this option to tag objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.

Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

Tagging Design Files

## Tagging a Cell View

Tagging is the ability to label different versions of objects with a unifying identifier, creating what is known as a configuration.

**Note:** For information on tagging a module, see Tagging a File. Module members can be tagged, creating module member versions, however, the only version that can be tagged is the version populated in the workspace. For more information on module member tags, see the *DesignSync User's Guide*: Module Member Tags.

To tag (or remove a tag from) a single cell view:

1. Select **Synchronicity => Tag => Cell View** from the CIW or **Synchronicity => Tag** from the cell view window. This command is only available at a user level of "advanced" or higher.
2. Modify the fields of the Tag Cell View form as needed.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

## Tag Cell View Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for

the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

#### **View Name**

Specify the name of the view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

#### **Version Name**

Click **Get List** to populate the pull-down list with a list of applicable versions for the object. To filter the objects displayed in the field, use the Filter fields to control what is displayed in the list.

#### **Note:**

Tag operations tag versions in the vault, not local objects. Therefore, if you want to tag locally modified objects, check in your changes to create a new version before tagging. See the **Tag Modified Objects** field description for additional details.

The **Version Name** field does not appear on the form if **Remove Tag** is selected.

#### **Behavior when Multiple Branches Exist**

You can use DesignSync DFII to tag a version on a branch other than the main (Trunk) branch. When a cell view has more than one branch, the following additional items are available when you select **Get List**:

- **ALL** -- By default, only versions on the current branch are displayed. When you select **ALL**, the version list is updated with all versions from all branches, and the selected version is **Current Version**. You can then click **Version Name** again to select a different version.
- **Current Branch** -- Refers to the branch of the cell view currently in your workspace.
- **Branch tags** -- All the branch tags for the cell view are listed. When you select a branch tag, the version list is updated to contain the versions for that branch. The **Version Name** value remains set as the selected branch tag, which means that the latest version on that branch will be tagged. You can then click **Version Name** again to select a different version.

**Note:** A branch tag called **Trunk** is typically present. **Trunk** is the default tag name for the main branch.



### Filter by

Select from a series of optional filters to restrict the views shown in the View Name pull-down.

- **Version Member/Module** - Determines whether to show the version numbers as module member versions for a selected module member or module versions.
- **Tagged only** - filter the results to show only tagged versions. By default this is selected.
- **Branch** - Filter the results to only show matching versions from a specific branch available from the pull-down list.

### Version Comment

Shows the comment checked in with the version selected. This can help verify that the selected version is the desired version to tag. If the selected version is the current version, the field does not contain a comment.

### Tag Name

Specify the tag name you want to assign. Tags should be easily understood, such as "Release1\_5" or "Golden". 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. In general, avoid using tag names starting with 'Sync' (case-insensitive), because Synchronicity may define new keywords in the future using that naming convention.
- Cannot end in `--R`. The `--R` tag is reserved for use by the Hierarchical Configuration Manager software.

You may also be able to use the choice list to the right of the **Tag Name** field to specify a tag. See Creating a Tag List for details. The choice list may contain the following items:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Tag Name** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Tag Name** field. Note that items in the tag list may have

characters that are invalid for the **Tag Name** field; valid-character checking is performed when you **Apply** or **OK** the form.

- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Tag Name** field.

**Note:** Generating the list of configurations for a library can take a few moments. Therefore, the list is not generated automatically when you specify a library in the **Library Name** field. Instead, you must select **\*Refresh\*** from the tag list to fetch the configurations information (if any). Once the configuration list is generated, it will be displayed by any tag-list choice field when you specify that library. Clicking **\*Refresh\*** at a later time regenerates the configuration list, picking up any changes to the configuration definitions.

- A hyphen separator (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.
- **\*Refresh\***, which updates the configuration list for the specified library. Generating the list of configurations requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.

### Move Existing Tag

Select this option if you want to move a tag that is already used on a version of an object to a new version. For example, at the end of every week you want to select the latest files that produce a good demo and tag them "current\_demo". To move the tag, you must select the Move Existing Tag option. The Remove Tag and Move Existing Tag options are mutually exclusive.

### Tag Modified Objects

When selected, specifies that the original versions (as checked out from the vault) of locally modified objects are tagged. When deselected, the tag operation fails if a local object is modified.

Because tags are applied to versions in the vault and **not** local objects themselves, tagging a locally modified object actually applies the tag to the original version that you checked out from the vault. You would need to check in your local modifications (create a new version) and then apply the tag in order for your changes to be included in the configuration. The default tag behavior is to fail on modified objects so that you do not

inadvertently tag the wrong version of design data. Select the **Tag Modified Objects** option when you really do want to tag the original version (not including your local modifications).

If you do not select the **Tag Modified Objects** option, when you attempt to tag object versions whose local copies are modified but not saved, DesignSync DFII displays a Modifications Not Saved dialog box.

Tagging the wrong version is a potentially serious process error. Therefore, DesignSync DFII displays a dialog box when you perform a tag operation with **Tag Modified Objects** selected. The dialog box describes the tagging behavior that will result and requires that you confirm or cancel the operation. You can request that the dialog box not be displayed in the future by selecting the "Do not show me this again" check box. You can later clear this setting by selecting **Disabled Dialog Boxes** from the Default Field Values form. See Viewing and Resetting Form Defaults for details.

The **Tag Modified Objects** option is not relevant and therefore not available when **Remove Tag** is selected.

### Remove Tag

Select this option to delete tags that are already assigned to a version of a cell view.

The **Remove Tag** and **Move Existing Tag** options are mutually exclusive.

**Note:** When **Remove Tag** is selected, the **Version Name** field disappears from the form.

### Background

Select this option to tag objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

Tagging Design Files

## Tagging a Category

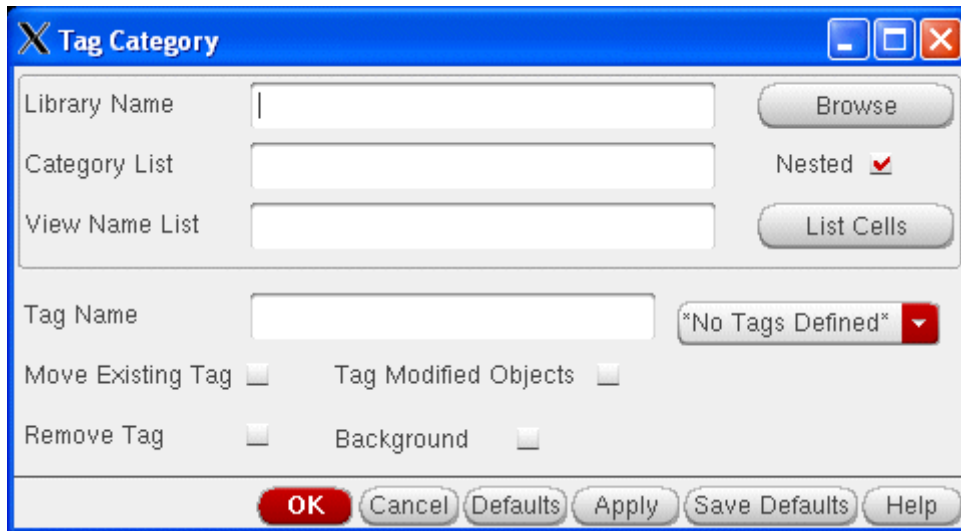
Tagging is the ability to label different versions of objects with a unifying identifier, creating what is known as a configuration.

**Note:** For information on tagging a module, see Tagging a File.

To tag (or remove a tag from) all the views or selected views of all the cells in a category:

1. Select **Synchronicity => Tag => Category** from the CIW. This command is only available at a user level of "advanced" or higher.
2. Modify the fields of the Tag Category form as needed.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

The CIW window lists which design files have been tagged or which have had tags removed. When the operation is complete, the CIW shows you the number of objects that were tagged and the number of objects for which the operation failed.

**Notes:**

- Only category cells in your local workspace are tagged.
- If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed unless the cells are part of other categories that are being processed.

**Tag Category Field Descriptions**

**Library Name**

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

**Browse**

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for

the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### Category List

Specify one or more category names, separated by spaces, on which to operate. The categories must exist in the local library. The **Nested** checkbox determines whether the operation applies to subcategories.

**Note:** Only category cells in your local workspace are tagged.

### Nested

Specifies whether the operation applies only to the cells in the specified categories or also to cells in subcategories.

### Note:

When processing all the cells of a category, including nested categories, DesignSync DFII prompts you to fetch any nested category (.Cat) files that are missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed as part of your Checkout Category operation unless the cells are part of other categories that are being processed. Category files are fetched using:

- The default fetch mode, not the **Mode** value specified on the Checkout Category form.
- The selector from the **Selector** field, if specified. Otherwise, the library's persistent selector is used.

### View Name List

Specify one or more views, separated by spaces, on which to operate. Leave the field blank to operate on all views. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### List Cells

Displays the list of cells that will be processed by the operation, as defined by the **Category List** and **Nested** settings. The display window also lists the cell views, if any, that you have selected. See *Listing Selected Cells for Category Operations* for more information.

**Note:**

If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not listed as part of the List Cells output unless the cells are part of other categories that are being processed.

**Tag Name**

Specify the tag name you want to assign. Tags should be easily understood, such as "Release1\_5" or "Golden". 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. In general, avoid using tag names starting with 'Sync' (case-insensitive), because Synchronicity may define new keywords in the future using that naming convention.
- Cannot end in `--R`. The `--R` tag is reserved for use by the Hierarchical Configuration Manager software.

You may also be able to use the choice list to the right of the **Tag Name** field to specify a tag. See Creating a Tag List for details. The choice list may contain the following items:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Tag Name** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Tag Name** field. Note that items in the tag list may have characters that are invalid for the **Tag Name** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Tag Name** field.

**Note:** Generating the list of configurations for a library can take a few moments. Therefore, the list is not generated automatically when you specify a library in the **Library Name** field. Instead, you must select **\*Refresh\*** from the tag list to fetch the configurations information (if any). Once the configuration list is generated, it will be displayed by any tag-list choice field when you specify that library. Clicking **\*Refresh\*** at a later time regenerates the configuration list, picking up any changes to the configuration definitions.

- A hyphen separator (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.
- **\*Refresh\***, which updates the configuration list for the specified library. Generating the list of configurations requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.

### Move Existing Tag

Select this option if you want to move a tag that is already used on a version of an object to a new version. For example, at the end of every week you want to select the latest files that produce a good demo and tag them "current\_demo". To move the tag, you must select the Move Existing Tag option. The Remove Tag and Move Existing Tag options are mutually exclusive.

### Tag Modified Objects

When selected, specifies that the original versions (as checked out from the vault) of locally modified objects are tagged. When deselected, the tag operation fails if a local object is modified.

Because tags are applied to versions in the vault and **not** local objects themselves, tagging a locally modified object actually applies the tag to the original version that you checked out from the vault. You would need to check in your local modifications (create a new version) and then apply the tag in order for your changes to be included in the configuration. The default tag behavior is to fail on modified objects so that you do not inadvertently tag the wrong version of design data. Select the **Tag Modified Objects** option when you really do want to tag the original version (not including your local modifications).

If you do not select the **Tag Modified Objects** option, when you attempt to tag object versions whose local copies are modified but not saved, DesignSync DFII displays a Modifications Not Saved dialog box.

Tagging the wrong version is a potentially serious process error. Therefore, DesignSync DFII displays a dialog box when you perform a tag operation with **Tag Modified**



**Objects** selected. The dialog box describes the tagging behavior that will result and requires that you confirm or cancel the operation. You can request that the dialog box not be displayed in the future by selecting the "Do not show me this again" check box. You can later clear this setting by selecting **Disabled Dialog Boxes** from the Default Field Values form. See Viewing and Resetting Form Defaults for details.

The **Tag Modified Objects** option is not relevant and therefore not available when **Remove Tag** is selected.

#### Remove Tag

Select this option to delete tags that are already assigned to a version of a cell view.

The **Remove Tag** and **Move Existing Tag** options are mutually exclusive.

#### Background

Select this option to tag objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

#### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

#### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-

	defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

Tagging Design Files  
Listing Selected Cells for Category Operations

## Tagging a Design Hierarchy

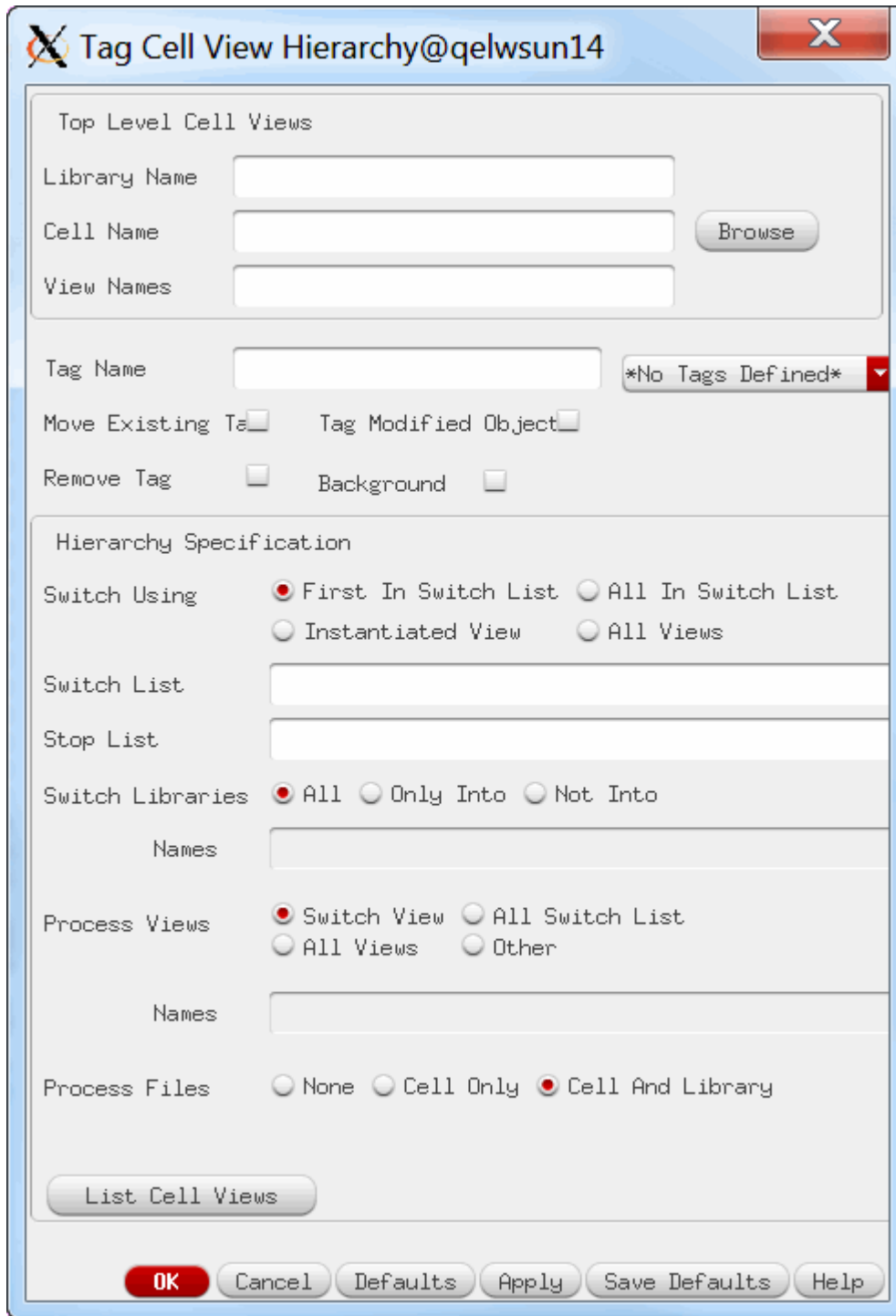
Tagging is the ability to label different versions of objects with a unifying identifier, creating what is known as a configuration.

**Note:** For information on tagging a module, see Tagging a File.

To tag (or remove a tag from) all the views or selected views of all the cells in a hierarchy:

1. Select **Synchronicity => Tag => Hierarchy** from the CIW. This command is only available at a user level of "advanced" or higher.
2. Modify the fields of the Tag Cell View Hierarchy form as needed.

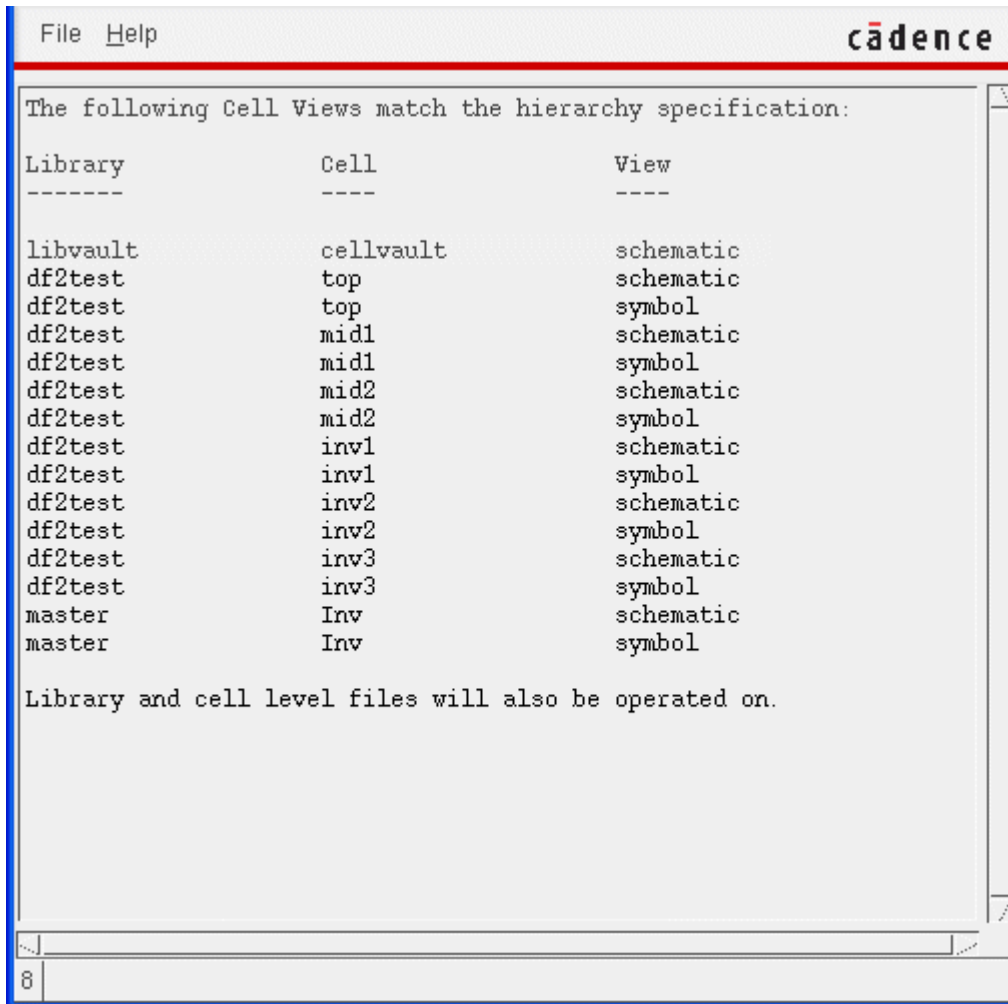
**Click on the fields in the following illustration for information.**



To identify the cells in a design hierarchy, DesignSync DFII can use one of two process: either DesignSync DFII scans the hierarchy according to your specifications in the **Hierarchy Specification** fields beginning with the top-level cell views specified using the **View Names** field; or by making use of the hierarchy that has been described in a Hierarchical Configuration (config) view.

- To verify your hierarchy options, select the **List Cell Views** button.

DesignSync DFII traverses the hierarchy according to the current hierarchy options and displays the potential views for processing.



- Click **OK** in the Tag Cell View Hierarchy form to process the specified hierarchy.

DesignSync DFII scans the hierarchy, opening the cell views and gathering information on each cell referenced in a cell view. For each cell gathered, DesignSync DFII records the library name and the cell name and then identifies which views to scan next, according to the **Switch Using** field and, if necessary, the **Switch List** field. If the next cell view is not in the **Stop List**, DesignSync DFII opens the cell view and descends that hierarchy.

The CIW window lists which design files have been tagged or which have had tags removed. When the operation is complete, the CIW shows you the number of objects that were tagged and the number of objects for which the operation failed.

### Notes:

- For DesignSync DFII to scan the hierarchy, the cells must be in your local workspace.
- DesignSync provides support for operating both on design views and config views, but you cannot specify both types of views within the same operation.
- DesignSync DFII does not scan through libraries that have been filtered out in the **Switch Libraries** field. For example, suppose a cell in **library\_1** references a cell in **library\_2**, which references a cell in **library\_3**. If **library\_2** is filtered out by the **Switch Libraries** field, the cell in **library\_3** is not found.

### Tag Cell View Hierarchy Field Descriptions

#### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

#### View Names

You can operate on one or more of the cell's views. Specify the names of the views on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

It is useful to specify more than one view name if you need to traverse multiple hierarchies in one scan. To do this, specify the views using the **View Names** field and

select the **All in Switch List** option in the **Switch Using** field. For example, to step through a design's schematic and layout hierarchies at the same time, you might specify "schematic layout" as the top-level cell views in the **View Names** field, "schematic layout symbol" in the **Switch List** field, and "All In Switch List" in the **Switch Using** field.

**Note:** The **Switch Using**, **Switch List**, and **Stop List** fields are not applicable to "config" views.

DesignSync provides support for operating both on design views and config views, but you cannot specify both types of views within the same operation.

### Tag Name

Specify the tag name you want to assign. Tags should be easily understood, such as "Release1\_5" or "Golden". 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. In general, avoid using tag names starting with 'Sync' (case-insensitive), because Synchronicity may define new keywords in the future using that naming convention.
- Cannot end in `--R`. The `--R` tag is reserved for use by the Hierarchical Configuration Manager software.

You may also be able to use the choice list to the right of the **Tag Name** field to specify a tag. See [Creating a Tag List](#) for details. The choice list may contain the following items:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Tag Name** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Tag Name** field. Note that items in the tag list may have characters that are invalid for the **Tag Name** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the

"master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Tag Name** field.

**Note:** Generating the list of configurations for a library can take a few moments. Therefore, the list is not generated automatically when you specify a library in the **Library Name** field. Instead, you must select **\*Refresh\*** from the tag list to fetch the configurations information (if any). Once the configuration list is generated, it will be displayed by any tag-list choice field when you specify that library. Clicking **\*Refresh\*** at a later time regenerates the configuration list, picking up any changes to the configuration definitions.

- A hyphen separator (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.
- **\*Refresh\***, which updates the configuration list for the specified library. Generating the list of configurations requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.

### Move Existing Tag

Select this option if you want to move a tag that is already used on a version of an object to a new version. For example, at the end of every week you want to select the latest files that produce a good demo and tag them "current\_demo". To move the tag, you must select the Move Existing Tag option. The Remove Tag and Move Existing Tag options are mutually exclusive.

### Tag Modified Objects

When selected, specifies that the original versions (as checked out from the vault) of locally modified objects are tagged. When deselected, the tag operation fails if a local object is modified.

Because tags are applied to versions in the vault and **not** local objects themselves, tagging a locally modified object actually applies the tag to the original version that you checked out from the vault. You would need to check in your local modifications (create a new version) and then apply the tag in order for your changes to be included in the configuration. The default tag behavior is to fail on modified objects so that you do not inadvertently tag the wrong version of design data. Select the **Tag Modified Objects** option when you really do want to tag the original version (not including your local modifications).

If you do not select the **Tag Modified Objects** option, when you attempt to tag object versions whose local copies are modified but not saved, DesignSync DFII displays a Modifications Not Saved dialog box.

Tagging the wrong version is a potentially serious process error. Therefore, DesignSync DFII displays a dialog box when you perform a tag operation with **Tag Modified Objects** selected. The dialog box describes the tagging behavior that will result and requires that you confirm or cancel the operation. You can request that the dialog box not be displayed in the future by selecting the "Do not show me this again" check box. You can later clear this setting by selecting **Disabled Dialog Boxes** from the Default Field Values form. See Viewing and Resetting Form Defaults for details.

The **Tag Modified Objects** option is not relevant and therefore not available when **Remove Tag** is selected.

#### **Remove Tag**

Select this option to delete tags that are already assigned to a version of a cell view.

The **Remove Tag** and **Move Existing Tag** options are mutually exclusive.

#### **Background**

Select this option to tag objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

#### **Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

#### **Switch Using**

The **Switch Using** field lets you specify how the design hierarchy is to be traversed.

This field is not applicable when specifying a config view because the hierarchy expansion definition within the config view is used instead.

You can choose one of the following:



- **First in Switch List** -- As the design is traversed, DesignSync DFII descends into the first view specified in the switch list that exists for a cell. Specify the switch list using the **Switch List** field.
- **Instantiated View** -- As the design is traversed, DesignSync DFII descends into each instantiated view. The **Switch List** field is greyed-out and ignored in this case. Descending into all instantiated views is useful for traversing a hierarchy with layout-type views in cases where the design team has used multiple view names to indicate the layout views.
- **All in Switch List** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that matches a view in the switch list. Specify the switch list using the **Switch List** field.

Descending into all views in the switch list is useful when you have a well-defined set of views and you need to process multiple hierarchies. For example, you might have a layout hierarchy and a schematic hierarchy that are not the same, and you want to process both. If you do not select the **All in Switch List** field, this scan requires multiple passes through the command.

- **All Views** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that exists for each cell. The **Switch List** field is greyed-out and ignored in this case.

Descending into all views is useful when the command must traverse all paths through the hierarchy. In this case, DesignSync DFII might scan some unnecessary cells instantiated by obsolete views.

### Switch List

Specify the names of the views to be scanned to identify the design hierarchy. Separate view names by spaces.

The Switch List field is required if you specify the **First in Switch List** or **All in Switch List** options in the **Switch Using** field. If the **Switch Using** field is set to **Instantiated View** or **All Views**, the **Switch List** field is ignored.

This field is not applicable when specifying a config view because DesignSync uses the switch list from within the config view.

### Stop List

Specify the names of views at which the hierarchy scanning should stop. View names should be separated by spaces. As the design is traversed, if the **Switch List** view that is opened for a cell is also in this list, then scanning stops at that point.

This field is optional.

This field is not applicable when specifying a config view because DesignSync uses the stop list from within the config view.

### Switch Libraries

The options in this field control which libraries may be entered as the hierarchy is scanned. You can choose one of the following:

- **All** -- All libraries may be entered.
- **Only Into** -- Only the libraries specified in the following **Names** field may be entered.
- **Not Into** -- All libraries except those specified in the **Names** field may be entered.

### Switch Libraries Names

Specify a list of library names, separated by spaces, for use by the **Switch Libraries** field. This field is not active if **All** is selected in the **Switch Libraries** field.

### Process Views

Once you have identified the hierarchy using the **Switch Using**, **Switch List**, and **Stop List** fields, the **Process Views** options control which views of the identified cells are processed. You can choose one of the following:

- **Switch View** -- Each view that was switched into is processed.
- **All Switch List** -- All the views specified in the **Switch List** that exist for the cell are processed. If the selected view is a "config" view, the All Switch List option uses the switch view and the switch list defined within the config view. If there are sub-configs, then the switch list of the sub-configs is used within those sub-configs

**Note:** Switch lists are not used if hierarchy traversal descends into instantiated views. Thus, if **All Switch List** is selected and the **Switch Using** field is set to **Instantiated View**, an error occurs.

- **All Views** -- All views that exist for the cell are processed.
- **Other** -- All the views specified in the following **Names** field that exist for the cell are processed. For config views, the switch view is always included.

### Process Views Names

Specify a list of views, separated by spaces, for use by the **Process Views** field. This field is active only when the **Other** option is selected in the **Process Views** field.

### Process Files

This option controls whether cell- and library-level files are processed in addition to the specified cell views. You can choose one of the following:

- **None** -- No cell- or library-level files are processed.
- **Cell Only** -- Cell-level files are processed, but library-level files are not. This option selects only cell-level files for those cells on which you are operating.
- **Cell And Library** -- Cell- and library-level files are processed.

### Include Config Cells

This option controls whether the config view cells are included in the operation. If you want to operate on the design cells and the hierarchy definition (config) cells, enable this option. (Default) If you want to operate ONLY on the design cells and not on the hierarchy definition cells, you can disable this option.

### List Cell Views

Displays the list of views that can be processed by the operation, as defined by the **Top Level Cell View** and **Hierarchy Specification** settings that you specified on the form.

By default, only the single view that was switched into is processed, not all views. You can change this behavior by changing the setting of the **Process Views** field.

See Listing Selected Cell Views for Hierarchy Operations for more information.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

## Tagging Design Files

### Listing Selected Cell Views for Hierarchy Operations

## Tagging a File

The Tag Object form is a general-purpose tag interface. You can specify files and directories, modules, library objects (libraries, cells, views), or a combination. You can use glob-style wildcards.

Use the Tag Object form to tag files that are not part of a cell view co-managed set, such as property files, category files, and documentation files, as well as files that are totally unrelated to the design library. Also, use the Tag Object form to perform tag operations on library objects that you cannot perform from the object-specific interface (such as Tag Cell). For example, you can tag both the contents (cells) of a category and the category file itself in one operation.

To tag one or more objects:

1. Select **Synchronicity => Tag => File** from the CIW.
2. Modify the fields of the Tag Object form as needed.

**Click on the fields in the following illustration for information.**

3. Click **OK**.

The CIW window lists which objects have been tagged or which have had tags removed. When the operation is complete, the CIW shows you the number of objects that were tagged and the number of objects for which the operation failed.

## Tag Object Field Descriptions

### Objects to Tag

Lists the objects that you want to tag.

If you specified objects with wildcards, the individual matching objects are not themselves listed. When you click **OK** or **Apply**, the list is passed to the underlying tag routine, which then expands the wildcards. You can specify modules, module members, and non-module objects.

To add objects to the **Objects to Tag** list:

1. Enter the object name in the **Object Name** field.
2. Click **Add**.

- or -

1. Click **Browse** to invoke the DesignSync DFII Browser.
2. Select one or more objects in the browser.
3. Click **OK** or **Apply** from the browser.

To remove objects from the **Objects to Tag** list:

1. Select one or more objects from the list.
2. Click **Remove**.

Note that when you select an object from the **Objects to Tag** list and the **Object Name** field is either empty or contains a name that already appears in the list, then the selected object's name appears in **Object Name**. This behavior lets you easily add new objects to **Objects to Tag** based on the name of a previously entered object.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You can browse your file system (directories and files) or library objects (libraries, categories, cells, and views). You select one or more objects as appropriate for the operation you are performing, then click **OK** or **Apply** to pass your selections to the calling form.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser.

## Hierarchy

Invokes the Select Cell View Hierarchy form, which helps you select the cell views that comprise a hierarchy. You provide the hierarchy parameters, then click **OK** or **Apply** to seed the calling form with the cell views that match your parameters.

See Selecting Cell View Hierarchy for a full description.

## Object Name

Specify the name of an object (file, directory, library, cell, or cell view) that you want to tag, then click **Add** to add the object to the **Objects to Tag** list. Any object that is entered in the **Object Name** field but not added to the **Objects to Tag** list will not be tagged.

The **Object Name** field is cleared when you click **Add**. If you want to specify an object based on a previously entered object name, select the object from **Objects to Tag**. If **Object Name** was empty or contained an object name that already appears in the **Objects to Tag** list, then the selected object name appears in the **Object Name** field. You can then edit that name and click **Add**.

When you specify a directory, library, or cell name, the operation is run recursively on that object. For example, if you specify a directory, all objects in the entire directory hierarchy are tagged.

You can specify absolute or relative paths. Relative paths are relative to the current working directory or to the library on your library path. For example, if library "testdf2" is on your library path, then you can specify the `cdsinfo.tag` file for that library as `testdf2/cdsinfo.tag`, even though the "testdf2" library directory may be anywhere on your disk. If there is also a directory within the current working directory with the same name ("testdf2") so that `testdf2/cdsinfo.tag` is ambiguous -- or even when a specified object exists only in the "testdf2" directory and not the "testdf2" library -- then the library is used for the operation and the directory is ignored.

Duplicate values entered from **Object Name** appear in the **Objects to Tag** field only once. However, the same objects specified using different paths (for example, `./cdsinfo.tag` and `cdsinfo.tag`) are not filtered and may result in the object being operated on multiple times.

## Using Wildcards

You may use glob-style (not regexp-style) wildcards in the **Object Name** field. Wildcards are useful when you want to operate on a large number of objects without specifying the name of each object. You can use the following special characters:

?	Matches any single character.
---	-------------------------------

*	Matches zero or more characters.
[chars]	Matches any one of the characters in <code>chars</code> . <code>chars</code> may include a range of characters, such as <code>a-z</code> , which matches any character from "a" to "z".
\x	Matches "x". For example, "a\b" matches only "a?b"; the backslash (\) overrides the special meaning of "?" in glob patterns.
{str1,str2,...}	Matches any of the strings <code>str1</code> , <code>str2</code> , and so on. For example, "*. {dss,exe}" matches any file with an extension of "dll" or "exe".

These wildcards are expanded within the workspace and libraries before the operation is performed. For example, you can specify `smallLib/*/symbol` to operate on the symbol views of all cells within the "smallLib" library.

Wildcard expressions may not work within the library part of a relative library name. The wildcard expression is expanded first against the current working directory, and then library matching is performed. For example, you have libraries "libA" and "libB" and specify the wildcard expression "lib\*". But your current directory has a file called "libNotes.txt". The wildcard expression will match "libNotes.txt", not the "libA" and "libB" libraries.

### Module Context

Specifies the workspace module context to include in a module snapshot. This allows you to restrict the tag operation to a specified module.

This option is only applicable to module snapshots.

### Tag Name

Specify the tag name you want to assign. Tags should be easily understood, such as "Release1\_5" or "Golden". 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. In general, avoid using tag names starting with 'Sync' (case-insensitive), because Synchronicity may define new keywords in the future using that naming convention.

- Cannot end in --R. The --R tag is reserved for use by the Hierarchical Configuration Manager software.

You may also be able to use the choice list to the right of the **Tag Name** field to specify a tag. See *Creating a Tag List* for details. The choice list may contain the following items:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Tag Name** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Tag Name** field. Note that items in the tag list may have characters that are invalid for the **Tag Name** field; valid-character checking is performed when you **Apply** or **OK** the form.
- **\*Refresh\***, which re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see *Modifying the Tag List*) are reflected in the tag list automatically and do not require a refresh. The **\*Refresh\*** item in most DesignSync DFII forms also updates the configuration list for the specified library. The Tag Object form does not have a single, specific library associated with the operation, so the tag list does not include configurations.

### Move Existing Tag

Select this option if you want to move a tag that is already used on a version of an object to a new version. For example, at the end of every week you want to select the latest files that produce a good demo and tag them "current\_demo". To move the tag, you must select the Move Existing Tag option. The Remove Tag and Move Existing Tag options are mutually exclusive.

### Tag Modified Objects

When selected, specifies that the original versions (as checked out from the vault) of locally modified objects are tagged. When deselected, the tag operation fails if a local object is modified.

Because tags are applied to versions in the vault and **not** local objects themselves, tagging a locally modified object actually applies the tag to the original version that you checked out from the vault. You would need to check in your local modifications (create a new version) and then apply the tag in order for your changes to be included in the configuration. The default tag behavior is to fail on modified objects so that you do not inadvertently tag the wrong version of design data. Select the **Tag Modified Objects** option when you really do want to tag the original version (not including your local modifications).



If you do not select the **Tag Modified Objects** option, when you attempt to tag object versions whose local copies are modified but not saved, DesignSync DFII displays a Modifications Not Saved dialog box.

Tagging the wrong version is a potentially serious process error. Therefore, DesignSync DFII displays a dialog box when you perform a tag operation with **Tag Modified Objects** selected. The dialog box describes the tagging behavior that will result and requires that you confirm or cancel the operation. You can request that the dialog box not be displayed in the future by selecting the "Do not show me this again" check box. You can later clear this setting by selecting **Disabled Dialog Boxes** from the Default Field Values form. See Viewing and Resetting Form Defaults for details.

The **Tag Modified Objects** option is not relevant and therefore not available when **Remove Tag** is selected.

### **Remove Tag**

Select this option to delete tags that are already assigned to a version of a cell view.

The **Remove Tag** and **Move Existing Tag** options are mutually exclusive.

### **Background**

Select this option to tag objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### **Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### **Recursive**

For a DesignSync folder, recursively operate on its contents. By default, only the contents of the selected folder are operated on. For module members, this option recurses into folders but does not traverse the module hierarchy.

For a DesignSync module instance, recursively operate on the module hierarchy.

**Note:** The module version being tagged is the server version. Any modifications in the workspace, for example, if an older version of the hierarchy is present in the workspace, are ignored. The hierarchical references that the tag command follows are the ones that are checked in as part of the module version on the server.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

Tagging Design Files

## Creating

### Creating Design Objects

DesignSync DFII provides menu commands for creating libraries and cell views.

When creating a library, DesignSync DFII invokes Cadence's New Library form. Access to this operation from the Synchronicity menu is provided as a convenience.

When creating a new view, DesignSync DFII invokes the Create Cell View form, which is similar to Cadence's Create New File form. The difference is that the Create Cell View form optionally reserves the name of the new cell view in the vault, ensuring that there are no name conflicts when there are multiple team members on the same project.

You can create the following design objects from the CIW:

- Library

- Cell view

### Related Topics

Cadence DFII Design Management Overview

## Creating a Library

Creating a library creates a library directory in your workspace.

When you select **Synchronicity => Create => Library**, DesignSync DFII invokes Cadence's **New Library** form. The ability to invoke this operation from the Synchronicity menu is provided as a convenience.

To create a library:

1. Select **Synchronicity => Create => Library** from the CIW.

The Cadence New Library form appears.

2. In the New Library form, specify the workspace for your library and select **SYNC** from the Design Manager cyclic field. For more information about this form, such as information on technology files, see Cadence's OpenBook documentation (click **Help** in the New Library form).

**Click on the fields in the following illustrations for information.**

**Note:** If **SYNC** does not appear in the Design Manager cyclic field on the New Library form, select **No DM**. The Synchronicity system will correctly set the value for your design manager to **SYNC**.

1. Click **OK**.

You will see informational messages in the CIW confirming that the library has been created.

If your library is contained in a module, after you create the library, you can add it to the module, or if there is only one module in the workspace the library could belong to, simply check in the library with the New option.

If your library is not contained in a module, after you create the library, you can configure the library for use by DesignSync DFII, and then check in the library.

### Related Topics

## Creating Design Files

### Creating a Cell View

Creating a cell view from DesignSync DFII is similar to creating a cell view from a Cadence tool such as Library Manager. The difference is that DesignSync DFII optionally reserves the name of the new cell view in the vault at the time you create the cell view. Reserving the name ensures that there are no name conflicts when there are multiple team members on the same project.

For example, you create a cell view locally but do not want to check in the cell view until you have completed its design. If you do not reserve the right to check the cell view into the vault, another user could check in a cell view with the same name prior to your check in.

To create a new cell view:

1. Select **Synchronicity => Create => Cell View** from the CIW.
2. Modify the fields of the Create Cell View form as needed.

**Click on the fields in the following illustration for information.**

3. Click **OK**.

The tool that you selected is invoked so that you can edit the new cell view. After creating the cell view, you can check it into the vault.

### Create Cell View Field Descriptions

**Library Name**

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects as appropriate for the operation you are performing. You can also browse the vault associated with the library so that you can select a cell that is not currently in your workspace. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Name

Specify the name of the cell view that you want to create.

### Module Context

Select the appropriate module context from the drop-down list. The module must have its base directories at, or above, the level of the objects being checked out.

This option is ignored for non-module objects.

If the module doesn't appear on the drop-down list, select *\*Refresh\** from the drop-down list to refresh the internal list of known candidate modules, and reevaluate the set candidate modules. If the module doesn't appear in the list after a refresh, see *Unable to Locate a Module*.

**Note:** You can only specify one module. If you are selecting objects from two different modules in the same workspace, use two separate operations. If you select objects

from more than one module or objects from both a module and a DesignSync vault, the module context field becomes inactive.

### Tool Name

Choose the tool to create the new cell view from the Tool Name cyclic field. For example, you would choose **Composer-Symbol** to create a new symbol view.

### Reserve View in Vault

Select this option if you want to reserve the name of your new cell view in the vault. Doing so ensures that there are no name conflicts when there are multiple team members on the same project.

For example, you create a cell view locally but do not want to check in the cell view until you have completed its design. If you do not reserve the right to check the cell view into the vault, another user could check in a cell view with the same name prior to your check in.

If the new view does not already exist in the vault, and are you not able to reserve the view name in the vault (due to access rights), then the new view will still be created locally. A warning will be output to the CIW, stating that the new view is not locked in the vault (i.e. its name is not reserved).

Deselect this option if you are creating a scratch cell view -- one that you have no intention of checking into the vault.

### Force

Select **Force** to create a new view in your workspace, even if the view already exists in the vault.

If you use this option it may not be possible to check the new view into the vault, depending on whether the view has been checked in (the name may have been reserved).

This option is available only at a user level of expert.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.

Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

Creating Design Files

## Deleting

### Deleting Design Objects

You can delete the following design objects:

- Libraries
- Cells
- Cell views
- Categories

DesignSync DFII also provides a general-purpose delete interface so that you can delete files that are not part of a cell view definition. This interface lets you specify files and supports the use of wildcards. This interface also lets you specify library objects (libraries, cells, and views), although using the form that is specific to that object type, such as Delete Cell, is generally simpler.

Your user level determines where you can delete design objects. If your user level is novice or advanced, you can delete objects from your workspace. If your user level is expert, you also can retire or delete objects in the repository. You can override these defaults; see the Controlling the Delete Options section for details.

You can also delete:

- Objects, including files, library objects, and directories
- Versions of cell views from the vault
- Temporary cell views from your workspace

### General Delete Notes

- DesignSync DFII displays a confirmation box when deleting design objects. If you are deleting local views and you have one or more of the views open, DesignSync DFII warns you that it will close and then delete the views. Any local modifications will be lost. You have the option of aborting the delete operation.
- DesignSync DFII will not delete a view that you have checked out with a lock. You must release the lock first.
- DesignSync revision-control operations can be access controlled. By default, Synchronicity disallows deleting vaults (that is, the removal of entire design objects such as cell views from a data repository). Your project leader or system administrator can change the default access controls to further restrict access to certain operations or to relax the restriction of disallowing vault deletion. For example, your project leader may add the following line to the site `AccessControl` file to allow vault deletion by the vault owner:

```
access allow Delete everyone when Type VAULT when IsOwner
yes
```

See [Access Control Guide](#) for more information on defining access controls.

## Related Topics

Controlling the Delete Options  
 Cadence DFII Design Management Overview

## Deleting Libraries

Depending on your user level, you can delete a library as follows:

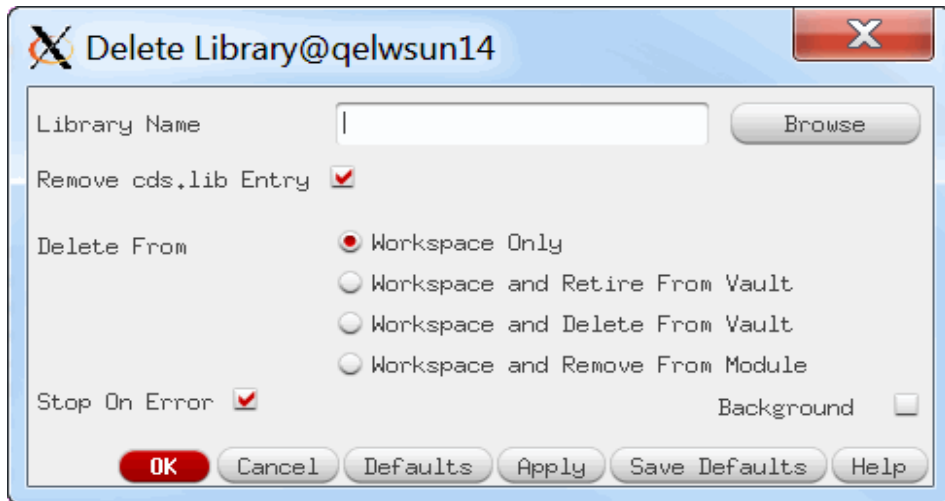
- If your user level is novice or advanced, you can delete a library from your workspace and the **Delete From** options are hidden.
- If your user level is expert, you can select whether to delete a library from your workspace, retire it from the vault and delete it from your workspace, or delete it from the vault and your workspace.

To delete a library:

1. Select **Synchronicity => Delete => Library** from the CIW.
2. Modify the fields of the Delete Library form.

**Click on the fields in the following illustration for information.**





3. Click **OK**.

A confirmation box appears and prompts you to verify your selections. If any of the views to be deleted are open, DesignSync DFII warns you that it will close and then delete the views. Any local modifications will be lost. You have the option of aborting the delete operation. Note that DesignSync DFII will not delete a view that you have checked out with a lock; you must release the lock first.

## Delete Library Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see [Selecting a Library Browser](#).

### Remove cds.lib Entry

Specifies whether you want the library you are deleting removed from your `cds.lib` file. When this option is selected, an `UNDEFINE <libraryName>` statement is added to your `cds.lib` when the delete operation succeeds. When this option is deselected, the entry for the deleted library remains in your `cds.lib`, which can cause the Cadence software to display "invalid path" errors.

### Delete From

Choose one of the following delete options:

**Note:** Some of these options apply to both DesignSync modules and vaults, while others apply only to modules, or vaults.

- **Workspace Only** -- Delete the object from your workspace without affecting the server module or vault. (Module and vault)
- **Workspace and Retire From Vault** -- Delete the object from your workspace and retire the current branch in the vault. (Vault only)

If the **Workspace and Retire From Vault** option is selected and the **Stop On Error** option is turned off, you might expect that DesignSync DFII will continue to delete the object from your workspace even if the retire from vault operation fails (for example, in the case where an access control is set). However, in some cases, if the retire operation fails, the object might remain in the workspace.

- **Workspace and Delete From Vault** -- Delete the object from your workspace and delete the vault. (Vault only)

If the **Workspace and Delete From Vault** option is selected and the **Stop On Error** option is turned off, DesignSync DFII continues to delete the workspace object even if the vault object delete fails (for example, in the case where an access control is set).

- **Workspace and Remove from Module** - Delete the object from your workspace and remove the object from the module during the next checkin operation. (Module only)

By default, these options appear only at a user level of **expert**. At other user levels, **Workspace Only** is the only allowed behavior. You can change these defaults; see Controlling the Delete Options for details.

### Stop On Error

Select the **Stop On Error** button if you want DesignSync DFII to cancel the delete operation if a delete operation fails for one of the objects.

Turn off the **Stop On Error** button if you want DesignSync DFII to continue with delete operations even if one of the delete operations fails. The command output details any errors that might have occurred during the delete operations.

**Note:** This is automatically disabled when using the **Workspace and Remove from Module Delete From** option to minimize the number of module versions created by removing objects from the module.

### Force

Select **Force** to delete objects that are tagged or locked.

The **Force** button appears only when you select **Workspace and Retire From Vault** or **Workspace and Delete From Vault** as the **Delete From** option.

This option is available only at a user level of expert.

### Keep VID

Select **Keep VID** to retain information about the version ID of the Latest version in the vault. This information is important if a vault of the same name is later created.

For example, assume you delete the vault for an object which has 1.1 as the Latest version, and you or another user later creates an object of the same name. If you deleted the vault with the **Keep VID** option, the first version in the newly created vault is 1.2. If you deleted the vault and turned off the **Keep VID** option, the first version is 1.1.

Not retaining the version ID information can cause problems if there are versions of the original vault in mirrors, or users' work areas. For example, if a user's work area contains the old 1.1 version, DesignSync does not fetch the new 1.1 version when the user performs a populate. This is true anytime the latest version number of the new vault is the same as the version number in the workspace of the old vault. Had the vault been deleted with the **Keep VID** option, the populate would succeed, fetching version 1.2 (the first version in the newly created vault). Therefore, you should use the **Keep VID** option 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, turn off the **Keep VID** option.

The **Keep VID** option appears only if the **Delete From Workspace and Delete From Vault** option is selected. By default, this option appears only at a user level of **expert**.

### Background

Select this option to delete objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

**Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See [Running Commands in the Background](#) for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See [Selecting a User Level for Background Operations](#).

**Command Buttons**

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See <a href="#">Setting Form Default Values</a> for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See <a href="#">Setting Form Default Values</a> for details. <b>Save Defaults</b> is only available if at least one field on a form can have user-defined defaults.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

**Related Topics**

Deleting Design Objects  
 Selecting a User Level

**Deleting Cells**

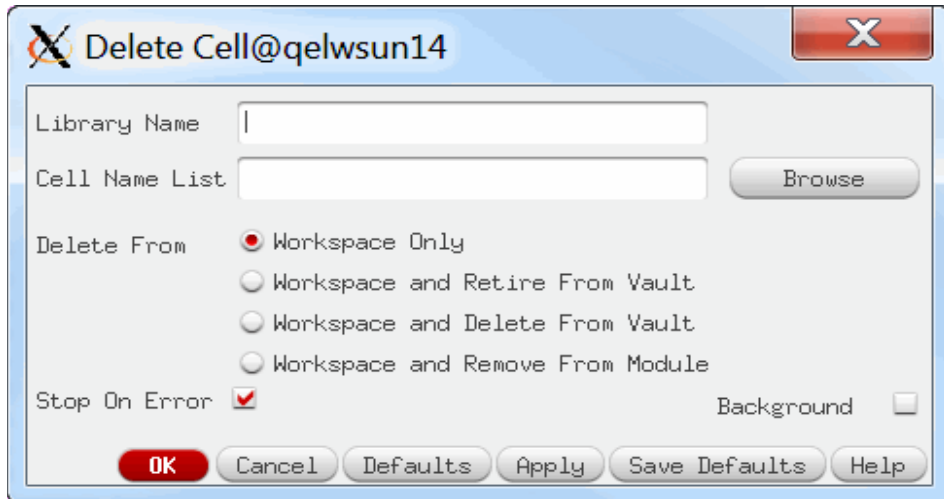
Depending on your user level, you can delete a cell as follows:

- If your user level is novice or advanced, you can delete a cell from your workspace and the **Delete From** options are hidden.
- If your user level is expert, you can select whether to delete a cell from your workspace, retire it from the vault and delete it from your workspace, or delete it from the vault and your workspace.

To delete a cell:

1. Select **Synchronicity => Delete => Cell** from the CIW.
2. Modify the fields of the Delete Cell form.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

A confirmation box appears and prompts you to verify your selections. If any of the views to be deleted are open, DesignSync DFII warns you that it will close and then delete the views. Any local modifications will be lost. You have the option of aborting the delete operation. Note that DesignSync DFII will not delete a view that you have checked out with a lock; you must release the lock first.

## Delete Cell Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name List

Specify the names of one or more cells, separated by spaces, on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a one or more cells for this field.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### Delete From

Choose one of the following delete options:

**Note:** Some of these options apply to both DesignSync modules and vaults, while others apply only to modules, or vaults.

- **Workspace Only** -- Delete the object from your workspace without affecting the vault. (Module and vault)
- **Workspace and Retire From Vault** -- Delete the object from your workspace and retire the current branch in the vault. (Vault only)

If the **Workspace and Retire From Vault** option is selected and the **Stop On Error** option is turned off, you might expect that DesignSync DFII will continue to delete the object from your workspace even if the retire from vault operation fails (for example, in the case where an access control is set). However, in some cases, if the retire operation fails, the object might remain in the workspace.

- **Workspace and Delete From Vault** -- Delete the object from your workspace and delete the vault. (Vault only)

If the **Workspace and Delete From Vault** option is selected and the **Stop On Error** option is turned off, DesignSync DFII continues to delete the workspace object even if the vault object delete fails (for example, in the case where an access control is set).

- **Workspace and Remove from Module** - Delete the object from your workspace and remove the object from the module during the next checkin operation. (Module only) **Note:** This option doesn't remove unmanaged objects from the workspace.

By default, these options appear only at a user level of **expert**. At other user levels, **Workspace Only** is the only allowed behavior. You can change these defaults; see *Controlling the Delete Options* for details.

### Stop On Error

Select the **Stop On Error** button if you want DesignSync DFII to cancel the delete operation if a delete operation fails for one of the objects. If you specify multiple objects, DesignSync DFII processes the objects in the order you list them in the **Cell Name List** field.

Turn off the **Stop On Error** button if you want DesignSync DFII to continue with delete operations even if one of the delete operations fails. The command output details any errors that might have occurred during the delete operations.

**Note:** This is automatically disabled when using the **Workspace and Remove from Module Delete From** option to minimize the number of module versions created by removing objects from the module.

### Force

Select **Force** to delete objects that are tagged or locked.

The **Force** checkbox appears only when you select **Workspace and Retire From Vault** or **Workspace and Delete From Vault** as the **Delete From** option.

This option is available only at a user level of expert.

### Keep VID

Select **Keep VID** to retain information about the version ID of the Latest version in the vault. This information is important if a vault of the same name is later created.

For example, assume you delete the vault for an object which has 1.1 as the Latest version, and you or another user later creates an object of the same name. If you deleted the vault with the **Keep VID** option, the first version in the newly created vault is 1.2. If you deleted the vault and turned off the **Keep VID** option, the first version is 1.1.

Not retaining the version ID information can cause problems if there are versions of the original vault in mirrors, or users' work areas. For example, if a user's work area contains the old 1.1 version, DesignSync does not fetch the new 1.1 version when the user performs a populate. This is true anytime the latest version number of the new vault is the same as the version number in the workspace of the old vault. Had the vault been deleted with the **Keep VID** option, the populate would succeed, fetching version 1.2 (the first version in the newly created vault). Therefore, you should use the **Keep VID** option 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, turn off the **Keep VID** option.

The **Keep VID** option appears only if the **Delete From Workspace and Delete From Vault** option is selected. By default, this option appears only at a user level of **expert**.

### Background

Select this option to delete objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have user-defined defaults.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

Deleting Design Objects  
 Selecting a User Level

### Deleting Cell Views

Depending on your user level, you can delete cell views as follows:

- If your user level is novice or advanced, you can delete a cell view from your workspace and the **Delete From** options are hidden.

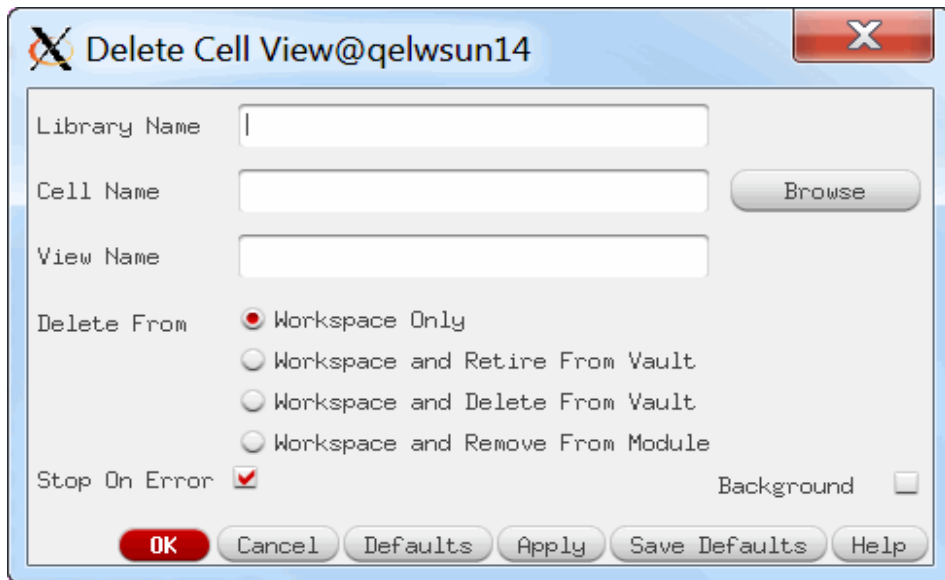


- If your user level is expert, you can select whether to delete a cell view from your workspace, retire it from the vault and delete it from your workspace, or delete it from the vault and your workspace.

To delete a cell view:

1. Select **Synchronicity => Delete => Cell View** from the CIW or **Synchronicity => Delete** from the cell view window.
2. Modify the fields of the Delete Cell View form.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

A confirmation box appears and prompts you to verify your selections. If the view to be deleted is open, DesignSync DFII warns you that it will close and then delete the view. Any local modifications will be lost. You have the option of aborting the delete operation. Note that DesignSync DFII will not delete a view that you have checked out with a lock; you must release the lock first.

**Note:**

To delete temporary cell views, use **Synchronicity => Delete => Temporary Views**.

**Delete Cell View Field Descriptions**

**Library Name**

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

#### View Name

Specify the name of the view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

#### Delete From

Choose one of the following delete options:

**Note:** Some of these options apply to both DesignSync modules and vaults, while others apply only to modules, or vaults.

- **Workspace Only** -- Delete the object from your workspace without affecting the vault. (Module and vault)
- **Workspace and Retire From Vault** -- Delete the object from your workspace and retire the current branch in the vault. (Vault only)

If the **Workspace and Retire From Vault** option is selected and the **Stop On Error** option is turned off, you might expect that DesignSync DFII will continue to delete the object from your workspace even if the retire from vault operation fails (for example, in the case where an access control is set). However, in some cases, if the retire operation fails, the object might remain in the workspace.

- **Workspace and Delete From Vault** -- Delete the object from your workspace and delete the vault. (Vault only)

If the **Workspace and Delete From Vault** option is selected and the **Stop On Error** option is turned off, DesignSync DFII continues to delete the workspace object even if the vault object delete fails (for example, in the case where an access control is set).

- **Workspace and Remove from Module** - Delete the object from your workspace and remove the object from the module during the next checkin operation. (Module only)

By default, these options appear only at a user level of **expert**. At other user levels, **Workspace Only** is the only allowed behavior. You can change these defaults; see Controlling the Delete Options for details.

### Stop On Error

Select the **Stop On Error** button if you want DesignSync DFII to cancel a delete operation if part of the delete operation fails.

Turn off the **Stop On Error** button if you want DesignSync DFII to continue with a delete operation even if part of the delete operation fails. For example, if the **Delete From Workspace and Delete From Vault** option is selected and DesignSync DFII fails to delete the vault version of a cellview, you might still want DesignSync DFII to continue and delete the workspace version of the cellview.

Note that if the **Delete From Workspace and Retire From Vault** option is selected and DesignSync DFII fails to retire the object, there are cases where the object remains in the workspace.

The command output details any errors that might have occurred during the delete operations.

**Note:** This is automatically disabled when using the **Workspace and Remove from Module Delete From** option to minimize the number of module versions created by removing objects from the module.

### Force

Select **Force** to delete objects that are tagged or locked.

The **Force** button appears only when you select **Workspace and Retire From Vault** or **Workspace and Delete From Vault** as the **Delete From** option.

This option is available only at a user level of expert.

### Keep VID

Select **Keep VID** to retain information about the version ID of the Latest version in the vault. This information is important if a vault of the same name is later created.

For example, assume you delete the vault for an object which has 1.1 as the Latest version, and you or another user later creates an object of the same name. If you deleted the vault with the **Keep VID** option, the first version in the newly created vault is 1.2. If you deleted the vault and turned off the **Keep VID** option, the first version is 1.1.

Not retaining the version ID information can cause problems if there are versions of the original vault in mirrors, or users' work areas. For example, if a user's work area contains the old 1.1 version, DesignSync does not fetch the new 1.1 version when the user performs a populate. This is true anytime the latest version number of the new vault is the same as the version number in the workspace of the old vault. Had the vault been deleted with the **Keep VID** option, the populate would succeed, fetching version 1.2 (the first version in the newly created vault). Therefore, you should use the **Keep VID** option 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, turn off the **Keep VID** option.

The **Keep VID** option appears only if the **Delete From Workspace and Delete From Vault** option is selected. By default, this option appears only at a user level of **expert**.

### Background

Select this option to delete objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.

Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

Deleting Design Objects

Selecting a User Level

### Deleting Categories

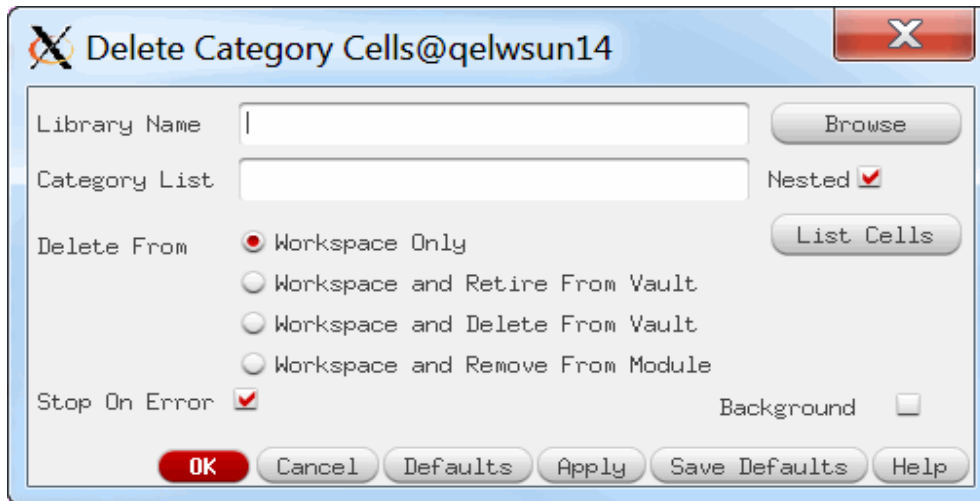
Depending on your user level, you can delete the cells in a category as follows:

- If your user level is novice or advanced, you can delete the cells in a category from your workspace and the **Delete From** options are hidden.
- If your user level is expert, you can select whether to delete the cells in a category from your workspace, retire them from the vault and delete them from your workspace, or delete them from the vault and your workspace.

To delete the cells in a category:

1. Select **Synchronicity => Delete => Category** from the CIW.
2. Modify the fields of the Delete Category form.

**Click on the fields in the following illustration for information.**



### 3. Click **OK**.

A confirmation box appears and prompts you to verify your selections. If any of the views to be deleted are open, DesignSync DFII warns you that it will close and then delete the views. Any local modifications will be lost. You have the option of aborting the delete operation. Note that DesignSync DFII will not delete a view that you have checked out with a lock; you must release the lock first.

#### Notes:

- Deleting a category from Library Manager is not the same as deleting the cells in that category.
- If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed unless the cells are part of other categories that are being processed.

## Delete Category Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### Category List

Specify one or more category names, separated by spaces, on which to operate. The categories must exist in the local library. The **Nested** checkbox determines whether the operation applies to subcategories.

### Nested

Specifies whether the operation applies only to the cells in the specified categories or also to cells in subcategories.

### Note:

When processing all the cells of a category, including nested categories, DesignSync DFII prompts you to fetch any nested category (.Cat) files that are missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not processed as part of your Checkout Category operation unless the cells are part of other categories that are being processed. Category files are fetched using:

- The default fetch mode, not the **Mode** value specified on the Checkout Category form.
- The selector from the **Selector** field, if specified. Otherwise, the library's persistent selector is used.

### Delete From

Choose one of the following delete options:

**Note:** Some of these options apply to both DesignSync modules and vaults, while others apply only to modules, or vaults.

- **Workspace Only** -- Delete the object from your workspace without affecting the vault. (Module and vault)
- **Workspace and Retire From Vault** -- Delete the object from your workspace and retire the current branch in the vault. (Vault only)

If the **Workspace and Retire From Vault** option is selected and the **Stop On Error** option is turned off, you might expect that DesignSync DFII will continue to delete the object from your workspace even if the retire from vault operation fails (for example, in the case where an access control is set). However, in some cases, if the retire operation fails, the object might remain in the workspace.

- **Workspace and Delete From Vault** -- Delete the object from your workspace and delete the vault. (Vault only)

If the **Workspace and Delete From Vault** option is selected and the **Stop On Error** option is turned off, DesignSync DFII continues to delete the workspace object even if the vault object delete fails (for example, in the case where an access control is set).

- **Workspace and Remove from Module** - Delete the object from your workspace and remove the object from the module during the next checkin operation. (Module only)

By default, these options appear only at a user level of **expert**. At other user levels, **Workspace Only** is the only allowed behavior. You can change these defaults; see Controlling the Delete Options for details.

#### List Cells

Displays the list of cells that will be processed by the operation, as defined by the **Category List** and **Nested** settings. The display window also lists the cell views, if any, that you have selected. See Listing Selected Cells for Category Operations for more information.

#### Note:

If **Nested** is selected, DesignSync DFII prompts you to fetch the category file for each nested category that is missing from your workspace. If you choose not to fetch missing category files, then cells in those categories are not listed as part of the List Cells output unless the cells are part of other categories that are being processed.

#### Stop On Error

Select the **Stop On Error** button if you want DesignSync DFII to cancel the delete operation if a delete operation fails for one of the objects. If you specify multiple objects, DesignSync DFII processes the objects in the order you list them in the **Category List** field.

Turn off the **Stop On Error** button if you want DesignSync DFII to continue with delete operations even if one of the delete operations fails. The command output details any errors that might have occurred during the delete operations.



**Note:** This is automatically disabled when using the **Workspace and Remove from Module Delete From** option to minimize the number of module versions created by removing objects from the module.

### Force

Select **Force** to delete objects that are tagged or locked.

The **Force** button appears only when you select **Workspace and Retire From Vault** or **Workspace and Delete From Vault** as the **Delete From** option.

This option is available only at a user level of expert.

### Keep VID

Select **Keep VID** to retain information about the version ID of the Latest version in the vault. This information is important if a vault of the same name is later created.

For example, assume you delete the vault for an object which has 1.1 as the Latest version, and you or another user later creates an object of the same name. If you deleted the vault with the **Keep VID** option, the first version in the newly created vault is 1.2. If you deleted the vault and turned off the **Keep VID** option, the first version is 1.1.

Not retaining the version ID information can cause problems if there are versions of the original vault in mirrors, or users' work areas. For example, if a user's work area contains the old 1.1 version, DesignSync does not fetch the new 1.1 version when the user performs a populate. This is true anytime the latest version number of the new vault is the same as the version number in the workspace of the old vault. Had the vault been deleted with the **Keep VID** option, the populate would succeed, fetching version 1.2 (the first version in the newly created vault). Therefore, you should use the **Keep VID** option 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, turn off the **Keep VID** option.

The **Keep VID** option appears only if the **Delete From Workspace and Delete From Vault** option is selected. By default, this option appears only at a user level of **expert**.

### Background

Select this option to delete objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See [Running Commands in the Background](#) for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See [Selecting a User Level for Background Operations](#).

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See <a href="#">Setting Form Default Values</a> for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See <a href="#">Setting Form Default Values</a> for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

- [Deleting Design Objects](#)
- [Listing Selected Cells for Category Operations](#)
- [Selecting a User Level](#)

## Deleting Object

The Delete Object form is a general-purpose delete interface. You can specify files, library objects (modules, libraries, cells, views), directories, or a combination of both. You can use glob-style wildcards.

You can use the Delete Object form to delete directories; however, to prevent accidental deletion of entire directory hierarchies, DesignSync DFII displays a pop-up warning indicating that you are recursively deleting a directory. You can turn off subsequent notifications.

Use the Delete Object form to delete files that are not part of a cell view co-managed set, such as property files, category files, and documentation files, as well as files that

are totally unrelated to the design library. Also, use the Delete Object form to perform delete operations on library objects that you cannot perform from the object-specific interface (such as Delete Cell). For example, you can delete multiple cells across several libraries in one operation.

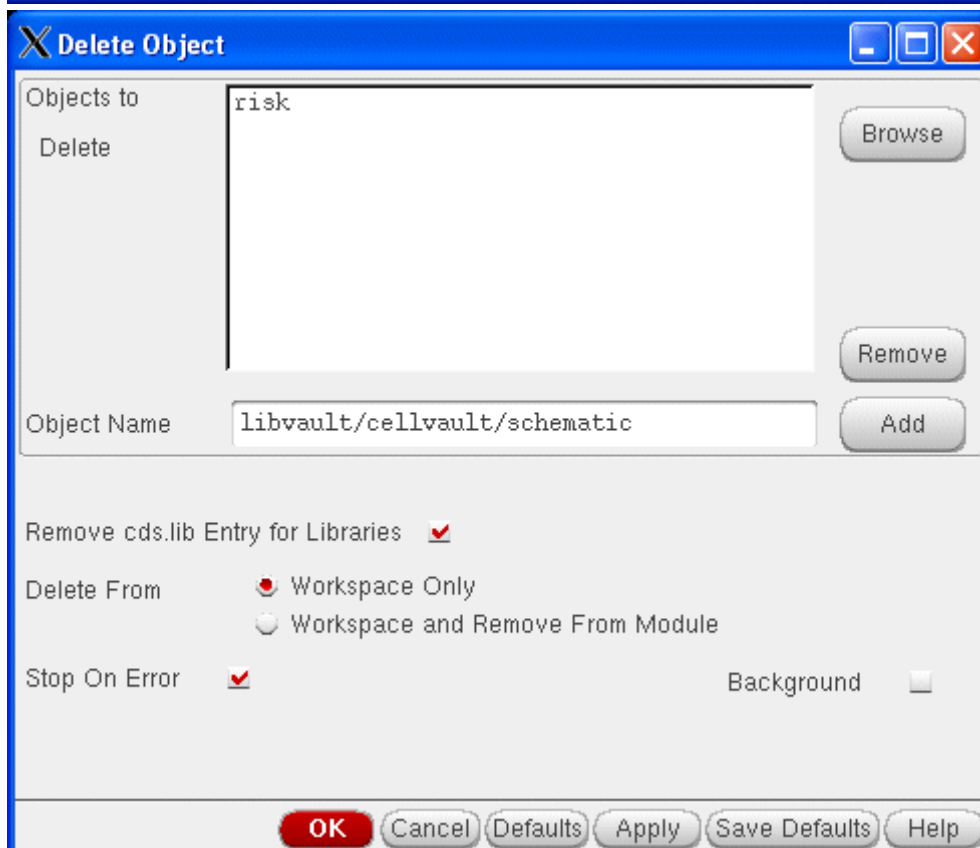
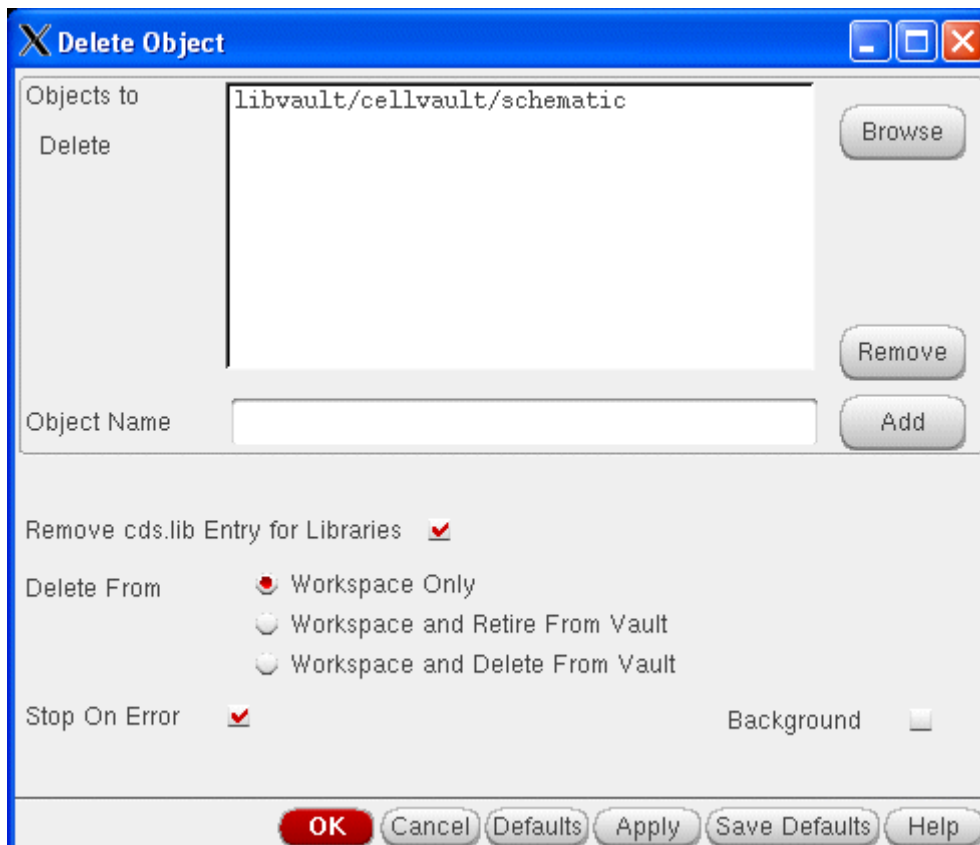
Depending on your user level, you can delete objects as follows:

- If your user level is novice or advanced, you can delete an object from your workspace and the **Delete From** options are hidden.
- If your user level is expert, you can select whether to delete an object from your workspace, retire it from the vault and delete it from your workspace, or delete it from the vault and your workspace.

To delete one or more objects:

1. Select **Synchronicity => Delete => File** from the CIW.  
OR  
From the Status Browser, select the objects to delete and then select **File | Delete**.
2. Modify the fields of the Delete Object form as needed.

**Click on the fields in the following illustrations for information. The second illustration shows deleting an object from a module.**



3. Click **OK**.

A confirmation box appears and prompts you to verify your selections. Any local modifications will be lost. You have the option of aborting the delete operation. Note that DesignSync DFII will not delete any object that you have checked out with a lock; you must release the lock first.

## Delete Object Field Descriptions

### Objects To Delete

Lists the objects that you want to delete.

If you specified objects with wildcards, the individual matching objects are not themselves listed. When you click **OK** or **Apply**, the list is passed to the underlying delete routine, which then expands the wildcards.

To add objects to the **Objects to Delete** list:

1. Enter the object name in the **Object Name** field.
2. Click **Add**.

OR

1. Click **Browse** to invoke the DesignSync DFII Browser.
2. Select one or more objects in the browser.
3. Click **OK** or **Apply** from the browser.

To remove objects from the **Objects to Delete** list:

1. Select one or more objects from the list.
2. Click **Remove**.

Note that when you select an object from the **Objects to Delete** list and the **Object Name** field is either empty or contains a name that already appears in the list, then the selected object's name appears in **Object Name**. This behavior lets you easily add new objects to **Objects to Delete** based on the name of a previously entered object.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You can browse your file system (directories and files) or library objects (libraries, categories, cells, and views). You select one or more objects as appropriate for the operation you are performing, then click **OK** or **Apply** to pass your selections to the calling form.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser.

### Object Name

Specify the name of an object (file, directory, library, cell, or cell view) that you want to delete, then click **Add** to add the object to the **Objects to Delete** list. Any object that is entered in the **Object Name** field but not added to the **Objects to Delete** list will not be deleted.

The **Object Name** field is cleared when you click **Add**. If you want to specify an object based on a previously entered object name, select the object from **Objects to Delete**. If **Object Name** was empty or contained an object name that already appears in the **Objects to Delete** list, then the selected object name appears in the **Object Name** field. You can then edit that name and click **Add**.

When you specify a library or cell name, the operation is run recursively on that object. For example, if you specify a library, all cell views in the library are deleted. Likewise, when you specify a directory, DesignSync DFII deletes objects within the directory recursively. To prevent accidental deletion of entire directory hierarchies, DesignSync DFII displays a pop-up warning indicating that you are recursively deleting a directory. You can turn off subsequent notifications.

You can specify absolute or relative paths. Relative paths are relative to the current working directory or to the library on your library path. For example, if library "testdf2" is on your library path, then you can specify the `cdsinfo.tag` file for that library as `testdf2/cdsinfo.tag`, even though the "testdf2" library directory may be anywhere on your disk. If there is also a directory within the current working directory with the same name ("testdf2") so that `testdf2/cdsinfo.tag` is ambiguous -- or even when a specified object exists only in the "testdf2" directory and not the "testdf2" library -- then the library is used for the operation and the directory is ignored.

Duplicate values entered from **Object Name** appear in the **Objects to Delete** field only once. However, the same objects specified using different paths (for example, `./cdsinfo.tag` and `cdsinfo.tag`) are not filtered and may result in the object being operated on multiple times.

### Using Wildcards

You may use glob-style (not regexp-style) wildcards in the **Object Name** field. Wildcards are useful when you want to operate on a large number of objects without specifying the name of each object. You can use the following special characters:

?	Matches any single character.
*	Matches zero or more characters.
[chars]	Matches any one of the characters in <code>chars</code> . <code>chars</code> may include a range of characters, such as <code>a-z</code> , which matches

	any character from "a" to "z".
<code>\x</code>	Matches "x". For example, "a\?b" matches only "a?b"; the backslash (\) overrides the special meaning of "?" in glob patterns.
<code>{str1,str2,...}</code>	Matches any of the strings <code>str1</code> , <code>str2</code> , and so on. For example, <code>*.{dss,exe}</code> matches any file with an extension of "dll" or "exe".

These wildcards are expanded within the workspace and libraries before the operation is performed. For example, you can specify `smallLib/*/symbol` to operate on the symbol views of all cells within the "smallLib" library.

Wildcard expressions may not work within the library part of a relative library name. The wildcard expression is expanded first against the current working directory, and then library matching is performed. For example, you have libraries "libA" and "libB" and specify the wildcard expression "lib\*". But your current directory has a file called "libNotes.txt". The wildcard expression will match "libNotes.txt", not the "libA" and "libB" libraries.

#### Remove cds.lib Entry

Specifies whether you want the library you are deleting removed from your `cds.lib` file. When this option is selected, an `UNDEFINE <libraryName>` statement is added to your `cds.lib` when the delete operation succeeds. When this option is deselected, the entry for the deleted library remains in your `cds.lib`, which can cause the Cadence software to display "invalid path" errors.

#### Delete From

Choose one of the following delete options:

**Note:** Some of these options apply to both DesignSync modules and vaults, while others apply only to modules, or vaults.

- **Workspace Only** -- Delete the object from your workspace without affecting the vault. (Module and vault)

If you select both module and non-module objects within the same delete operation, you can only delete them from the workspace. .

- **Workspace and Retire From Vault** -- Delete the object from your workspace and retire the current branch in the vault. (Vault only)

If the **Workspace and Retire From Vault** option is selected and the **Stop On Error** option is turned off, you might expect that DesignSync DFII will continue to delete the object from your workspace even if the retire from vault operation fails

(for example, in the case where an access control is set). However, in some cases, if the retire operation fails, the object might remain in the workspace.

- **Workspace and Delete From Vault** -- Delete the object from your workspace and delete the vault. (Vault only)

If the **Workspace and Delete From Vault** option is selected and the **Stop On Error** option is turned off, DesignSync DFII continues to delete the workspace object even if the vault object delete fails (for example, in the case where an access control is set).

- **Workspace and Remove from Module** - Delete the object from your workspace and remove the object from the module during the next checkin operation. (Module only)

By default, these options appear only at a user level of **expert**. At other user levels, **Workspace Only** is the only allowed behavior. You can change these defaults; see Controlling the Delete Options for details.

#### Stop On Error

Select the **Stop On Error** button if you want DesignSync DFII to cancel the delete operation if a delete operation fails for one of the objects. If you specify multiple objects, DesignSync DFII processes the objects in the order you list them in the **Object Name** field.

Turn off the **Stop On Error** button if you want DesignSync DFII to continue with delete operations even if one of the delete operations fails. The command output details any errors that might have occurred during the delete operations.

**Note:** This is automatically disabled when using the Workspace and Remove from Module Delete From options to minimize the number of module versions created by removing objects from the module.

#### Force

Select **Force** to delete objects that are tagged or locked.

The **Force** button appears only when you select **Workspace and Retire From Vault** or **Workspace and Delete From Vault** as the **Delete From** option.

This option is available only at a user level of expert.

#### Keep VID

Select **Keep VID** to retain information about the version ID of the Latest version in the vault. This information is important if a vault of the same name is later created.



For example, assume you delete the vault for an object which has 1.1 as the Latest version, and you or another user later creates an object of the same name. If you deleted the vault with the **Keep VID** option, the first version in the newly created vault is 1.2. If you deleted the vault and turned off the **Keep VID** option, the first version is 1.1.

Not retaining the version ID information can cause problems if there are versions of the original vault in mirrors, or users' work areas. For example, if a user's work area contains the old 1.1 version, DesignSync does not fetch the new 1.1 version when the user performs a populate. This is true anytime the latest version number of the new vault is the same as the version number in the workspace of the old vault. Had the vault been deleted with the **Keep VID** option, the populate would succeed, fetching version 1.2 (the first version in the newly created vault). Therefore, you should use the **Keep VID** option 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, turn off the **Keep VID** option.

The **Keep VID** option appears only if the **Delete From Workspace and Delete From Vault** option is selected. By default, this option appears only at a user level of **expert**.

### Background

Select this option to delete objects as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.

Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

Deleting Design Objects  
Selecting a User Level

## Deleting Versions from the Vault

You may want to delete versions of design data from the vault in order to free up disk space, a process known as pruning.

You cannot delete:

- Version 1.1, or the first version of any branch (for example, 1.1.1.1 or 1.3.2.1)
- Branch-point versions (for example, if 1.2.1 is a branch, you cannot delete version 1.2)
- Tagged versions (unless your user level is advanced or higher and you use the **Force** option)
- The Latest version on a locked branch
- Module member versions

To delete a version:

1. Select **Synchronicity => Delete => Version** from the CIW.
2. Modify the fields of the Delete Version form as needed and select the version or versions that you want to delete.

**Click on the fields in the following illustration for information.**

3. Click **OK**.

You will see a message in the CIW confirming that the version has been deleted.

**Note:** The **Force** option is available only at a user level of advanced or higher.

## Delete Version Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Name

Specify the name of the cell view for which you want to delete a version. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

To display the list of available versions, press the Tab key or move the cursor out of the **View Name** field after entering the view name.

### Version Name

Lists version numbers and corresponding version tags for the specified cell view. Select the version or versions that you want to delete. You can select more than one version by using the Control or Shift keys when you click on version numbers.

Not all versions are displayed. You cannot delete:

- Version 1.1, or the first version of any branch (for example, 1.1.1.1 or 1.3.2.1)
- Branch-point versions (for example, if 1.2.1 is a branch, you cannot delete version 1.2)
- Tagged versions (unless your user level is advanced or higher and you use the **Force** option)

- The Latest version on a locked branch
- Module member versions

### Force

Lets you delete a tagged version. By default, you cannot delete a version that is part of a configuration (a set of design files with the same tag).

### Note:

This option is only available at a user level of "advanced" or higher.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

Deleting Design Files  
 Selecting a User Level

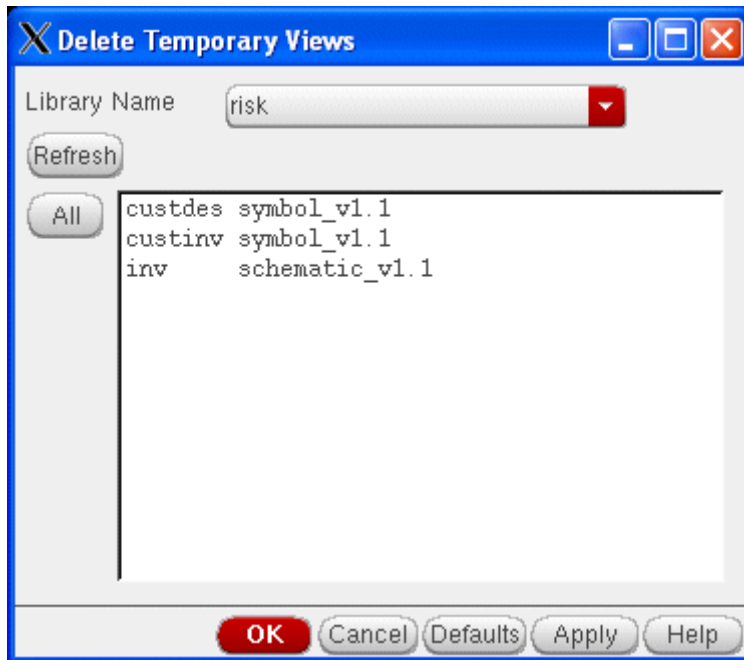
## Deleting Temporary Cell Views

Temporary cell views are copies of managed cell views that are created when you use DesignSync DFII's **Open View Version** command (or any Cadence operation that creates temporary cell views, such as Library Managers' Copy Cellview Version form). A cell view is recognized as being temporary by having a `gdmexport.tmp` file in its view directory.

To delete a temporary cell view:

1. Select **Synchronicity => Delete => Temporary Views** from the CIW or cell view window.
2. Modify the fields of the Delete Temporary Views form.

Click on the fields in the following illustration for information.



3. Click **OK**.

The selected cell views are removed from your workspace.

## Delete Temporary Views Field Descriptions

### Library Name

Select the library containing temporary cell views you want to delete. The library must already exist in your workspace. If the library you want is not listed, add the library to your `cds.lib` file (using **Tools => Library Path Editor** from the CIW) and then click **Refresh** to re-read `cds.lib`.

### Refresh

Refreshes the display of:

- Libraries in the **Library Name** field, as defined in your `cds.lib` file. Use the Library Path Editor (**Tools => Library Path Editor** from the CIW) to modify your `cds.lib` file and then click **Refresh** to re-read `cds.lib`.

- Temporary views of the selected library. Click **Refresh** if the available temporary views for the selected library have changed since the form was displayed.

## All

Click **All** to select all of the temporary cell views in the selected library. You can then deselect cell views by clicking the cell view while pressing the Control key.

## Temporary View List

Lists the temporary cell views for the selected library. If the library has no temporary cell views, <none> is displayed.

Select one or more cell views to delete. You can select more than one cell view by using the Control or Shift keys. You can also click the **All** button to select all the listed cell views.

If the available temporary views for the selected library have changed since the list was first displayed, click **Refresh** to rescan the library for temporary views.

## Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

Deleting Design Objects  
Opening Cell View Versions

## Branching

### Branching, Merging, and Overlaying

DesignSync DFII supports parallel development through the use of multiple branches. Branches can be used in support of a number of development methodologies, such as feature branches and release branches. See DesignSync Data Manager User's Guide's Parallel (Multi-Branch) Development book for details.

Branches can be created with the intention of never having the work done on that branch rejoin the main development branch. However, it is more common for branches to have a finite life span, after which the development work is brought back to the main branch. For ASCII data, a "branch and merge" approach is typically used, where the development work from the side branch is merged into the main branch. For binary data, typical for back-end data such as layout, merging is not possible. Therefore, DesignSync DFII supports a "branch and replace" approach -- the branched design data is completely overlaid onto the main branch.

**Important:** Branching for modules is always done at the module level. Because module branching is considered an administrative function, it is not exposed in the DSDFII interface. For more information on branching modules, see the DesignSync Help: Creating Branches.

DesignSync DFII provides the following branch-related capabilities:

- The Configure Library and Join Library wizards let you specify a persistent selector list to indicate what branch or version of design data you want to access from your workspace. See the following topics in DesignSync Data Manager User's Guide for details:
  - What Are Selectors?
  - What Are Selector Lists?
  - What Are Persistent Selector Lists?
- Branching a cell view (**expert** mode only). The Branch Cell View form lets you create a new branch for a cell view.
- Branching a cell (**expert** mode only). The Branch Cell form lets you create a new branch for a cell.
- Branching a library (**expert** mode only). The Branch Library form lets you create a new branch for an entire library.
- Overlaying versions of design data from another branch into your workspace. Each Checkout form has an **Overlay** option (**expert** mode only).
- Checking out and tagging versions from other branches. The **Version Name** field of the Checkout Cell View and Tag Cell View forms lets you select a version from another branch.

You can use DesignSync for additional branch-related capabilities not directly supported by DesignSync DFII, such as tagging branches or branching modules.

### Related Topics

Branching Scenarios

## Branching Scenarios

This topic presents examples of how your group can make use of the branching capabilities provided with DesignSync DFII.

## Overview

At engineering company BigChip, development of library **asic\_chip** has progressed to a point where the basic functionality is clean, but now the chip design needs to be specifically tailored for two different customers. The development team can branch the library to create two separate development streams. Those engineers working on the customizations for customer A (Team A) will work on the **Trunk** branch as usual. Those engineers working on the customizations for customer B (Team B) will work on the newly created branch called **CustB**.

## Branching the Library

Creating library branches for use by the separate development teams is done by an expert user or project leader. Branch creation should be done only after verifying that all cell views are checked in and that the workspace is populated with the set of cell view versions that will serve as the branch points. The project leader may also want to run **Synchronicity => Show Checkouts** with **Show Checkouts in Vault** selected before branching the library to be sure the workspace contents are exactly what need to be branched.

### Note:

Branching a library creates a branch for each library file and cell view version in the current workspace. Even if a cell view is checked out and locally modified or a later version exists in the vault, it is the version in the current workspace that becomes the branch-point version.

To branch the **asic\_chip** library:

1. Set your user level to **expert**. The Branch Library interface is only available at the **expert** user level.
2. Select **Synchronicity => Branch Library** from the CIW.
3. Specify the Branch Library field values:
  - Library Name: **asic\_chip**
  - Branch Name: **CustB**
  - Check for New or Locked Objects: **Selected**, to ensure that nothing is currently checked out in the workspace.
  - Set Workspace To Use New Branch: **Selected** if you want to work on the new branch in this workspace, **deselected** if you will continue to work on the **Trunk** branch in this workspace. Therefore, if the person doing the branching is on Team B, select this option; if this person is on Team A, **deselect** this option.
4. Click **OK** to branch the library.

In addition to branching an entire library, you can also branch individual cells and cell views. See [Branching a Cell View](#) and [Branching a Cell](#) for details.



## Setting Up a Workspace for the New Branch

Each member of Team B must create a new workspace containing the newly branched library data.

To create a new workspace for the CustB branch of the asic\_chip library:

1. Create and `cd` to a new projects directory, in which you will create the new library workspace, and start DFII from this new projects directory.
2. Select **Synchronicity => Join Library** from the CIW. Use the Join Library wizard to set up your workspace for the asic\_chip library.
  - o Specify **CustB** as the selector on page 6 of the wizard.

### Note:

Use DesignSync DFII's Configure Library wizard and not Library Manager when changing an existing workspace to work on a different branch. See Support for Library Manager for an important note about the behavior of Library Manager's **Update** and **Check Out** commands when used with the `-force` and `-version` options.

## Overlaying Data from One Branch to Another

The following scenarios use the DesignSync DFII overlay capability to introduce data from one branch to another branch. This data might be new cell views, or new versions of existing cell views.

### Introducing New Cell Views

Assume a user from Team A has created a new cell view (ascn1/schematic) on the Trunk branch. Team B decides that they also want this cell view in their design.

To introduce the cell view from Trunk to branch CustB, the new cell view must be checked into the Trunk branch. Then, one user from team B must perform an overlay operation. Assuming you are that user:

1. Set your user level to **expert**. The overlay capability is only available at the **expert** user level.
2. Select **Synchronicity => Checkout => Cell** from the CIW. Note that you cannot use the Library Browser to help you select the cell view.
3. Specify the Checkout Cell Views field values:
  - o Library Name: asic\_chip
  - o Cell Name: ascn1
  - o View Name List: schematic (In the case of the entire cell being new, leave this field blank.)
  - o Mode: Read (local copy)

- Selector: Trunk
  - Overlay: Selected
4. Click **OK**.

The new cell view is fetched into your workspace.

5. You must now check in this view onto the CustB branch so that the rest of the team can access it. Select **Synchronicity => Checkin => Cell** (or **Synchronicity => Checkin => Cell View** if you are checking in a single view).

### Replacing Views

Assume a user from Team B has modified an existing cell view (block1/symbol). Team A decides they also want to use this copy of the cell view on their branch (Trunk).

To replace the cell view on Trunk with the version from branch CustB, the modified cell view must be first checked into the CustB branch. Then, one user from Team A must perform an overlay operation. Assuming that you are that user:

1. Set your user level to **expert**. The overlay capability is only available at the **expert** user level.
2. Select **Synchronicity => Checkout => Cell View** from the CIW.
3. Set the field values as follows:
  - Library Name: asic\_chip
  - Cell Name: block1
  - View Name List: symbol
  - Version Name: Select **Get List**, then select the branch name "CustB". The latest version on the CustB branch will be fetched.
  - Mode: Read (local copy)
  - Overlay: Selected
4. Click **OK**.

The new cell view is fetched into your workspace.

5. You must now check in this view onto the Trunk branch so that the rest of the team can access it. Select **Synchronicity => Checkin => View** and perform the check in.

The rest of the team can now check out the cell view.

### Merging Views

Assume a user from Team A has modified an existing cell view (top/layout). Team B decides that some of these changes are needed in their design as well, but they already have a different version of that cell view containing other required changes.

DesignSync does not merge binary data automatically. In this case, one team or the other will have to add in manually the required design changes.

## Multiple Library Projects

In this scenario, another project team is working on a much more complex chip, made up of data divided across multiple libraries. The branching scenario for this group would be similar to the scenario previously described. The only difference is that the project leader may want to branch the full project (all libraries) at once. The project leader would perform a `mkbranch` operation from DesignSync at the project directory level. Each user on Team B might then set up their project directory and populate it using DesignSync.

### Note:

The `cds.lib` file must either define all libraries using relative path names and be checked in as a DesignSync-managed file, or must be managed by hand.

Assume that you are a member of Team B and have created a new library (libX5) to hold some special function data. You now need to check in the library:

1. Set your user level to **expert**. The Configure Library wizard is only available at the **expert** user level.
2. Select **Synchronicity => Configure Library** from the CIW. Configure the library as you typically would, specifying CustB as the selector.
3. Select **Synchronicity => Checkin => Library** from the CIW to check in the library.
4. Specify the Checkin Library field values as follows:
  - o Library Name: libX5
  - o Mode: Read (local copy)
  - o New: Selected
5. Click **OK**.

The new library will be created on branch CustB. Each of the members of Team B must now use the Join Library wizard to fetch a copy of this library into their workspaces. Be sure that the selector field on page 6 of the Wizard is set to "CustB".

Assume that now Team A has decided they want this new library (libX5) for their project branch as well. One member of Team B must branch the library. Assuming you are that team member:

1. Set your user level to **expert**. The Branch Library capability is only available at the **expert** user level.
2. Select **Synchronicity => Branch Library** from the CIW.
3. Specify the Branch Library field values as follows:

- Library Name: libX5
  - Branch Name:Trunk
  - Set Workspace To Use New Branch: Deselected (You want to remain working on branch CustB after the branch is made.)
4. Click **OK**.

The branch is created. Now all the users on Team A can use the Join Library wizard to create workspaces of this library.

## Related Topics

Branching, Merging, and Overlaying  
Branching a Library  
Configuring a Library  
Accessing a Library for the First Time

## Branching a Library

DesignSync DFII lets you branch entire libraries.

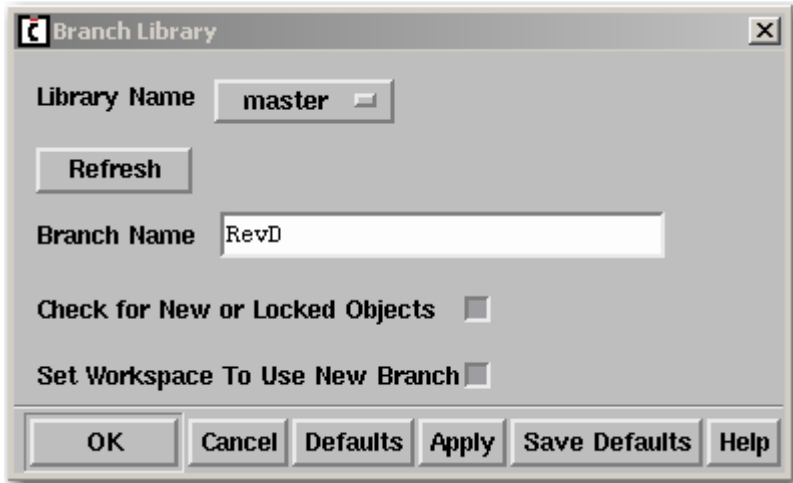
The branch-point version of an object -- the version off which the branch is created -- is the last-retrieved (current) version in your workspace. If DesignSync DFII cannot determine the current version (for example, the object is not under revision control), the branch operation fails for that object. If the local object is locked (for example, you have version 1.4 -> 1.5), the branch is created off the current version (1.4), because the upcoming version (1.5) does not yet exist in the vault.

**Note:** Modules must be branched at the module level using a DesignSync client. Libraries that are part of a module cannot be branched individually.

To branch a library:

1. Select **Synchronicity => Branch Library** from the CIW. This command is only available at a user level of **expert**.
2. Modify the fields of the Branch Library form.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

You will see informational messages in the CIW as the design objects are branched. If you selected **Set Workspace To Use New Branch**, there will also be messages about setting and clearing selectors so that future revision-control operations take place on the new branch.

## Branch Library Field Descriptions

### Library Name

Select the library that you want to branch from the **Library Name** field.

The library must be managed and already exist in your workspace. If the library you want is not listed, use the Configure Library or Join Library wizard to set up your workspace. You will then need to click **Refresh** from the Branch Library form to rescan for managed libraries.

### Branch Name

Specify the tag name of the branch you are creating.

**Note:** Cell views contained in module library cannot be branched individually.

Tag names, whether branch or version tags:

- 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 this prefix is reserved for future development.

Note that branch tags and version tags share the same name space. For example, the same cell view cannot have both a version tagged "Gold" and a branch tagged "Gold". Consider adopting a consistent naming convention for branch and version tags to reduce confusion. For example, your project team might have a policy that branch tags always begin with an initial capital letter ("Rel2.1", for example) whereas version tags do not ("gold", for example).

#### Check for New or Locked Objects

Specifies whether DesignSync DFII checks for items in the library workspace that are new (unmanaged) or locked.

When selected, DesignSync DFII scans the workspace for new or locked objects and, if any exist, produces an error and does not branch the library. This check ensures that all objects in your workspace are branched as expected, because:

- Unmanaged objects cannot be branched.
- For locked objects, the branch-point version is the current version and not the upcoming version. For example, if you have 1.3 -> 1.4, then the branch is created off version 1.3.

If the branch operation fails, use **Synchronicity => Show Checkouts** to see what objects are new or locked.

If you do not select the **Check for New or Locked Objects** option, the branch operation proceeds even if new or locked objects exist in the workspace.

#### Set Workspace To Use New Branch

Specifies whether future revision-control operations performed from your current workspace will take place on the new branch.

When selected, the persistent selector list for the library workspace is updated to the new branch, so revision-control operations take place on the new branch. When not selected, the persistent selector list is not updated, so revision-control operations continue on the branch associated with the workspace prior to creating the new branch.

#### Command Buttons

Button	Description
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OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have user-defined defaults.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

Branching, Merging, and Overlaying  
 Branching Scenarios  
 Selecting a User Level

### Branching a Cell

DesignSync DFII lets you branch cells.

The branch-point version of an object -- the version off which the branch is created -- is the last-retrieved (current) version in your workspace. If DesignSync DFII cannot determine the current version (for example, the object is not under revision control), the branch operation fails for that object. If the local object is locked (for example, you have version 1.4 -> 1.5), the branch is created off the current version (1.4), because the upcoming version (1.5) does not yet exist in the vault.

**Note:** Modules must be branched at the module level using a DesignSync client. Cells that are part of a module cannot be branched individually.

To branch a cell:

1. Select **Synchronicity => Branch Cell** from the CIW. This command is only available at a user level of **expert**.
2. Modify the fields of the Branch Cell form.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

You will see informational messages in the CIW as DesignSync DFII branches the cell.

## Branch Cell Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.



### Branch Name

Specify the tag name of the branch you are creating.

**Note:** Cells contained in a module library cannot be branched individually.

Tag names, whether branch or version tags:

- 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 this prefix is reserved for future development.

Note that branch tags and version tags share the same name space. For example, the same cell view cannot have both a version tagged "Gold" and a branch tagged "Gold". Consider adopting a consistent naming convention for branch and version tags to reduce confusion. For example, your project team might have a policy that branch tags always begin with an initial capital letter ("Rel2.1", for example) whereas version tags do not ("gold", for example).

### Check for New or Locked Objects

Enable this option to have DesignSync DFII check whether the specified items are new (unmanaged) or locked. If DesignSync DFII detects new or locked objects, it produces an error and does not branch the objects. This check ensures that all specified objects are branched as expected, because:

- Unmanaged objects cannot be branched.
- For locked objects, the branch-point version is the current version and not the upcoming version. For example, if you have 1.3 -> 1.4, then the branch is created off version 1.3.

If the branch operation fails, use **Synchronicity => Show Checkouts** to see what objects are new or locked.

If you do not select the **Check for New or Locked Objects** option, the branch operation proceeds even if new or locked objects exist in the workspace.

### Set Workspace To Use New Branch

Specifies whether future revision-control operations will take place on the new branch.

When selected, the persistent selector list for the specified cell is updated to the new branch, so revision-control operations take place on the new branch. When not selected, the persistent selector list is not updated, so revision-control operations continue on the branch associated with the cell prior to creating the new branch.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have user-defined defaults.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

- Branching, Merging, and Overlaying
- Branching Scenarios
- Selecting a User Level

## Branching a Cell View

DesignSync DFII lets you branch cell views.

The branch-point version of an object -- the version off which the branch is created -- is the last-retrieved (current) version in your workspace. If DesignSync DFII cannot determine the current version (for example, the object is not under revision control), the branch operation fails for that object. If the local object is locked (for example, you have version 1.4 -> 1.5), the branch is created off the current version (1.4), because the upcoming version (1.5) does not yet exist in the vault.

**Note:** Modules must be branched at the module level using a DesignSync client. Cell views that are part of a module cannot be branched individually.

To branch a cell view:

1. Select **Synchronicity => Branch Cell View** from the CIW. This command is only available at a user level of **expert**.
2. Modify the fields of the Branch Cell View form.

Click on the fields in the following illustration for information.



3. Click **OK**.

You will see informational messages in the CIW as DesignSync DFII branches the cell view.

## Branch Cell View Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for

the operation you are performing. The calling form is automatically updated with your selections.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see [Selecting a Library Browser](#).

### View Name

Specify the name of the view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Branch Name

Specify the tag name of the branch you are creating.

**Note:** Cell views contained in module library cannot be branched individually.

Tag names, whether branch or version tags:

- 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 this prefix is reserved for future development. .

Note that branch tags and version tags share the same name space. For example, the same cell view cannot have both a version tagged "Gold" and a branch tagged "Gold". Consider adopting a consistent naming convention for branch and version tags to reduce confusion. For example, your project team might have a policy that branch tags always begin with an initial capital letter ("Rel2.1", for example) whereas version tags do not ("gold", for example).

### Check for New or Locked Objects

Enable this option to have DesignSync DFII check whether the specified items are new (unmanaged) or locked. If DesignSync DFII detects new or locked objects, it produces an error and does not branch the objects. This check ensures that all specified objects are branched as expected, because:

- Unmanaged objects cannot be branched.

- For locked objects, the branch-point version is the current version and not the upcoming version. For example, if you have 1.3 -> 1.4, then the branch is created off version 1.3.

If the branch operation fails, use **Synchronicity => Show Checkouts** to see what objects are new or locked.

If you do not select the **Check for New or Locked Objects** option, the branch operation proceeds even if new or locked objects exist in the workspace.

#### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have user-defined defaults.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

#### Related Topics

Branching, Merging, and Overlaying  
Branching Scenarios  
Selecting a User Level

## Module Edit-in-Place Functionality (Swap)

### Understanding Module Edit-in-Place Methodology

A module version that has been populated by an href can be manually replaced by another module version, using the swap commands. This is analogous to allowing a brick to be removed from a wall and replaced (in the same location) with a different version of the same brick. A primary use of this edit-in-place methodology is to replace a statically fetched sub-module within a baseline (i.e. static) module hierarchy with the

latest version on a branch so that the sub-module can be developed within a baseline framework.

The swap capabilities:

- Change the selector of a sub-module already present in the workspace and re-populate it using the new selector.
- Preserve the swapped directory hierarchy when doing a recursive populate to update parent module.
- Allow you to revert any swapped sub-modules to the persistent selector for a parent module.

This results in a workspace in which a sub-module can be replaced with a different version of the same module and developed/tested within the surrounding framework of other modules that define a released hierarchy.

Replace replaces the version of a module in the workspace with a different version of the same module. The replace operation updates the selector and href mode, and checks out the design files recursively to replace one version of a workspace module with another version of the same module. The checkout operation uses all persistent populate controls (such as filters).

Show shows the currently swapped module versions in the workspace. This information is useful when an end user needs to know what modules have been updated for development and test.

Restore restores a previously swapped module to the version defined by a parent module in the workspace. The restore operation checks out the design files recursively using all persistent populate controls (such as filters).

For more information on understanding this functionality, see the *DesignSync Data Manager User's Guide: Edit-in-Place Methodology*.

## Show "Swapped" Modules (Swap Show)

Displays a list of all the modules in a workspace that have had their versions replaced with different module versions. This information is useful to an end user who needs to know what modules have been updated for development and test.

To view the modules that have been swapped:

1. Select **Synchronicity =>Swap => Show** from the CIW. The list of swapped modules displays.

Click on the fields in the following illustration for information.

```

Swap Show@lwvrh17mon
File Swap Help
cadence

** To restore a module, select the line and run the Swap->Restore command above.**

=====
Swap Show results for root directory: /home/tmarci2/cadencedata
Beginning swap show operation ...
No swapped modules found.

=====
Swap Show results for root directory: /home/tmarci2/workspaces
Beginning swap show operation ...

Name Instance Base Directory Ur1 Selector
-----
ALU ALU%0 /home/tmarci2/workspaces/chip-R419/ALU sync://lwvrh17mon:30126/Modules/Chip/ALU Gold;Latest

Finished swap show operation.

```

- From the Swap menu, you can perform other swap operations on the modules shown in the list. For example, to restore a module shown in the output back to its expected version, you can select that module (by clicking on that line in the output) and chose the **Swap | Restore Selected Item...** menu item.

## Related Topics

Understanding Edit-in-Place Methodology

Restore to Expected Module Versions (Module Swap Restore)

Replace a Module Version in a Hierarchy (Module Swap Replace)

## Restore to Expected Module Version (Swap Restore)

This command restores a previously swapped sub-module version to the version identified by a parent module in the workspace. The restore operation calls populate recursively using all persistent populate controls (such as filters).

The swap restore command fails if the module hierarchy being restored contains any local modifications (locally modified, added, moved or removed objects) and the Force option is not specified. The command also cancels locks on locally locked, unmodified objects, failing if it could not successfully remove all locks.

To restore your module hierarchy from the CIW:

1. Select **Synchronicity =>Swap => Restore**.

Click on the fields in the following illustration for information.



2. After selecting the desired options, press Ok to start the restore. Results display in the output window.

## Swap Restore Field Descriptions

### Module

Select the sub-module from the pull-down list.

**Note:** Only swapped modules appear in the pull-down list.

### Parent Module

Specifies the instance name of the parent module from which to determine the version of the module to restore. By default, this is set to none. This option is only needed if all parents do not have the same selector for the specified sub-module among their hierarchical references.

### Force

Over-write any modifications in the workspace sub-module with the files from the restored version.

### Mcache Mode

DesignSync can update an mcache link in the hierarchy with mcache links or replace the module in the hierarchy with mcache links. You can replace a module with mcache links when the module is being fetched statically and the base directory of the existing module is not shared with a different overlapping module and the base directory could be removed with rmmmod.

**Important:** When using the link or server option to replace a module that is not already populated with mcache links, you must specify the Force option.



- **none**- For each module it finds in the module cache, the command copies the objects into the workspace. (Default)
- **link** - For each module it finds in the module cache, the command creates a symbolic link from your work area to the base directory of the module in the module cache.  
Note: You cannot create mcache links to dynamically fetched modules.
- **server** - Causes the populate command to fetch modules as physical copies from the server, not the module cache.

**Command Buttons**

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

**See Also**

Understanding Edit-in-Place Methodology

Show "swapped" Modules (Swap Show)

Replace a Module Version in a Hierarchy (Module Swap Replace)

**Replace a Module Version in a Hierarchy (Module Swap Replace)**

Swap Replace replaces the version of a module in the workspace with a different version of the same module.

The replace operation:

- Updates the selector - The persistent selector of a module instance is changed to the selector specified on the command line.  
**Note:** This overrides any previous swap or overriding hierarchical reference.

- Runs the populate command on the module instance. The populate replaces one version of workspace module with another version of the same module.

**Note:** Swap Replace always populates recursively. Replacing the entire hierarchy of a module that is being swapped ensures that all portions of the new module version are present in the workspace. Persistent filters set on the original module version are applied to the swapped module version. This is so the same module content is populated when replacing one module version with another.

The default fetch state is always used to fetch the replacement module so it will be in the same state that the rest of the workspace likely is in.

The user can re-populate any portion of the replaced module hierarchy as necessary to change the fetch state for individual objects.

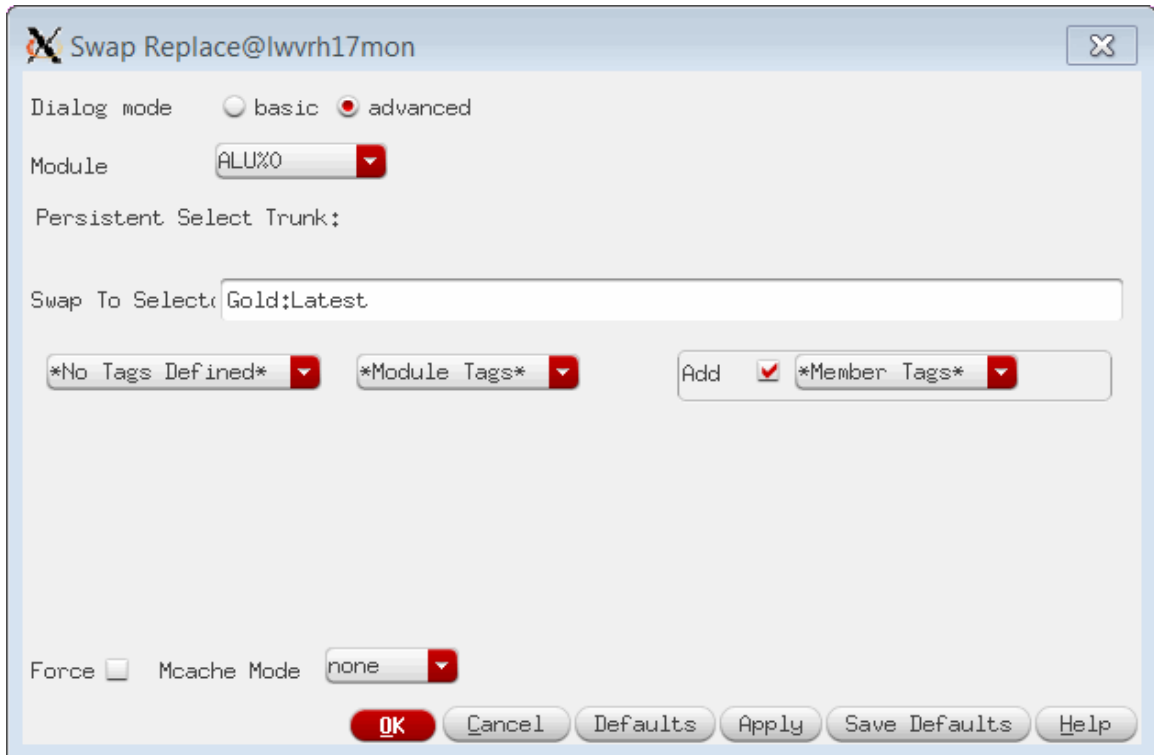
The swap replace command fails if the module hierarchy being replaced contains any local modifications (locally modified, added, moved, or removed objects), unless the Force option is used. The command also cancels locks on locally locked, unmodified objects, failing if it could not successfully remove all locks.

Running the swap replace command on a module that has already been replaced will replace the module again using the specified selector.

To replace a module in your module hierarchy from the CIW:

1. Select **Synchronicity =>Swap => Replace**.

**Click on the fields in the following illustration for information.**



2. After selecting the desired options, press Ok to start the replace. Results display in the output window.

### Swap Replace Field Descriptions

### Dialog Mode

Select basic or advanced mode. Both modes allow you to view the current persistent selector and any module member tags applied to it. The basic mode provides a simple interface to add or remove module member tags or change the order in which those tags are applied. The advanced mode allows you to manually enter the selector information directly. If you Save Defaults, the current displayed dialog mode is saved as the default.

### Module

Select the module from the pull-down list.

### Persistent Selector

Displays the persistent selector set for the module workspace.

### Swap to Selector

Shows or allows you to enter the sub-module selector to swap in to replace the desired sub-module.

### Member Tags Included/Other Member Tags Available

Using this pair of selector boxes, you can add or remove tags from the swap replace selector.

The **Member Tags included** shows the module member tags in the order in which they are applied to workspace.

The **Other Member Tags available** field shows module member tags for the module that are not currently in use.

### Predefined Tags

The Predefined Tags field shows Tag lists.

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Swap to Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Swap to Selector** field. Note that items in the tag list may have characters that are invalid for the **Swap to Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.

### Module Tags

The Module tags field shows all tags associated with a module version. When you select a tag from the choice list, it appears in the **Swap to Selector** field. Note that items in the tag list may have characters that are invalid for the **Swap to Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.

### Module Member Tags

The Module Member Tags field shows all tags associated with a module member version. When you select a tag from the choice list, it appears in the **Swap to Selector** field. Note that items in the tag list may have characters that are invalid for the **Swap to Selector** field; valid-character checking is performed when you **Apply** or **OK** the form. Select the checkbox to apply the module member tag in addition to the primary selector. For more information on adding module member tags, see the *DesignSync User's Guide*: Module Member Tags.

### Force

Over-write any modifications in the workspace sub-module with the files from the replace version.

### Mcache Mode

DesignSync can update an mcache link in the hierarchy with mcache links or replace the module in the hierarchy with mcache links. You can replace a module with mcache links when the module is being fetched statically and the base directory of the existing module is not shared with a different overlapping module and the base directory could be removed with rmmmod.

**Important:** When using the link or server option to replace a module that is not already populated with mcache links, you must specify the -force option.

- **none**- For each module it finds in the module cache, the command copies the objects into the workspace. (Default)
- **link** - For each module it finds in the module cache, the command creates a symbolic link from your work area to the base directory of the module in the module cache.  
Note: You cannot create mcache links to dynamically fetched modules.
- **server** - Causes the populate command to fetch modules as physical copies from the server, not the module cache.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.

Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### See Also

Understanding Edit-in-Place Methodology

Show "swapped" Modules (Swap Show)

Restore to Expected Module Versions (Module Swap Restore)

## Browsing

### Browsing Your Workspace

The DesignSync DFII Browser is available from many DesignSync DFII forms by clicking the **Browse** button. The DesignSync DFII Browser helps you select objects to operate on.

The DesignSync DFII Browser adapts itself based on the form that calls it. For example, when called from forms that operate on libraries, cells, or views, the DesignSync DFII Browser is similar in appearance to the Cadence Library Browser and lets you easily navigate through your libraries. When called from forms that operates on files, you can choose to browse directories and files like a typical file-system browser. When called from forms that can operate on objects that are not in your workspace, the browser lets you browse the vault associated with a managed workspace.

To use the DesignSync DFII Browser:

1. Click **Browse**, which is available from most DesignSync DFII forms.

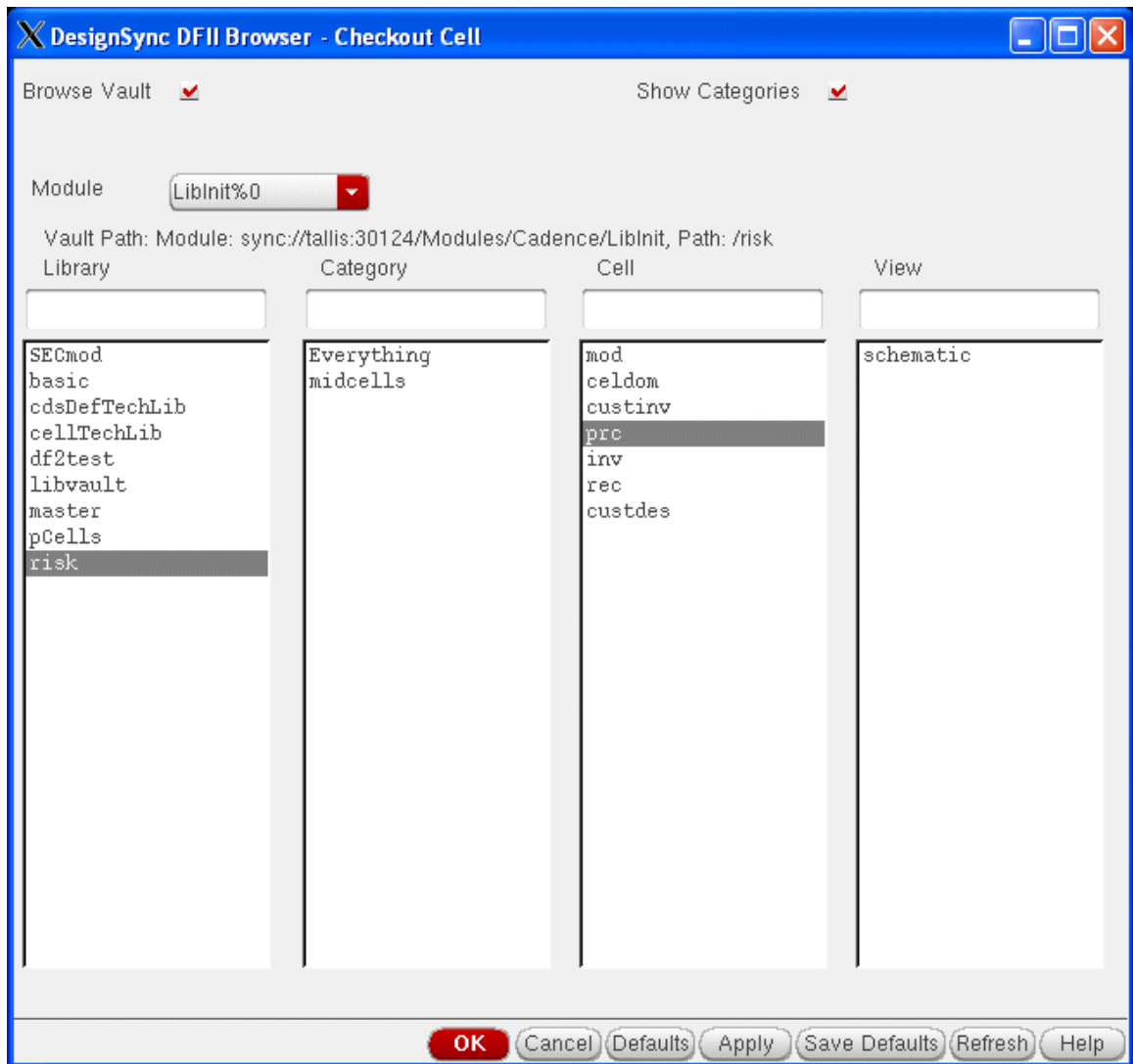
The DesignSync DFII Browser appears. The title bar of the browser contains the name of the form from which it was called.

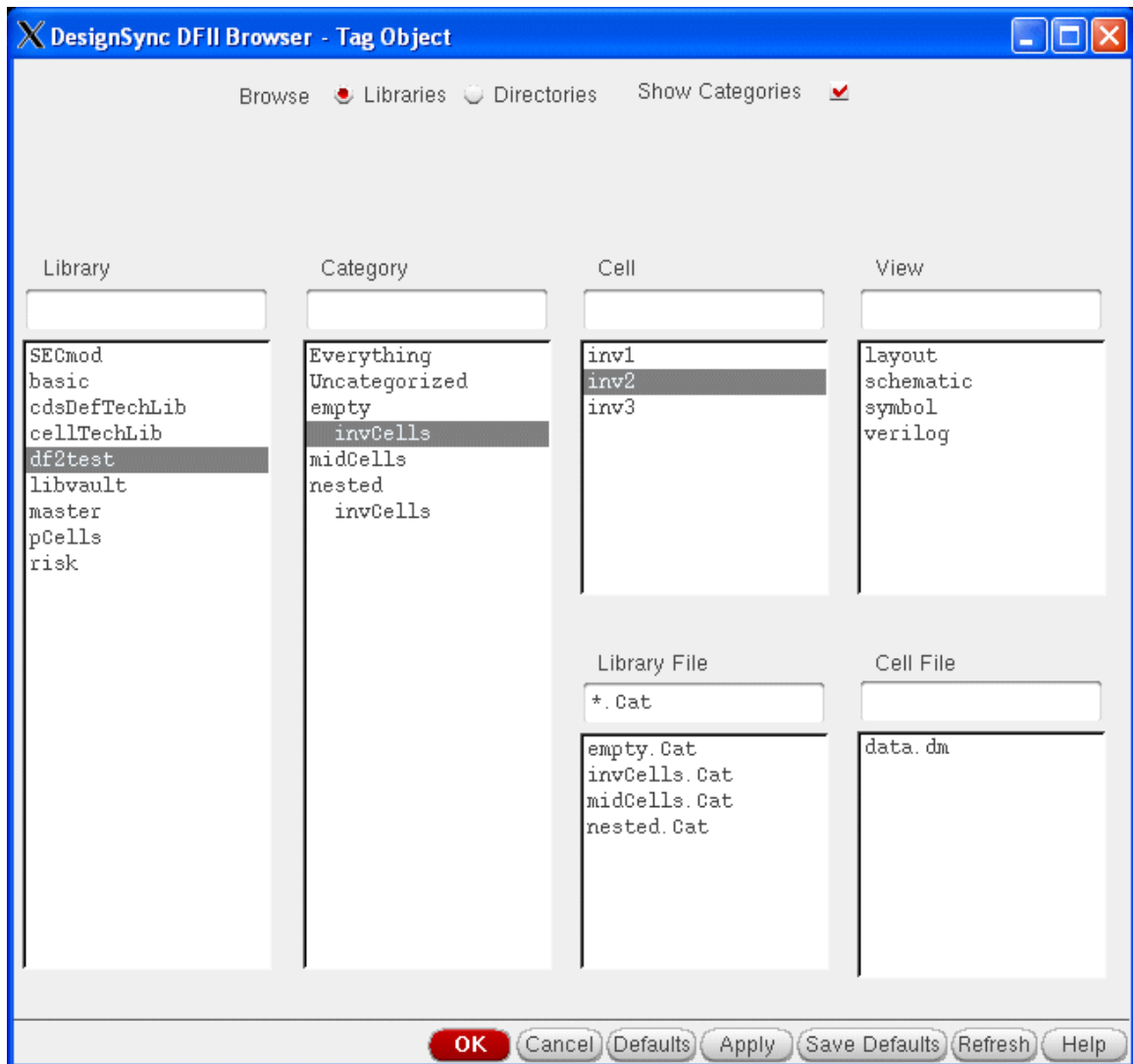
2. Select one or more objects as appropriate for the calling form.

For all forms except for the File/Object forms, such as Checkout Object, calling-form fields are automatically updated as you select objects appropriate for the form.

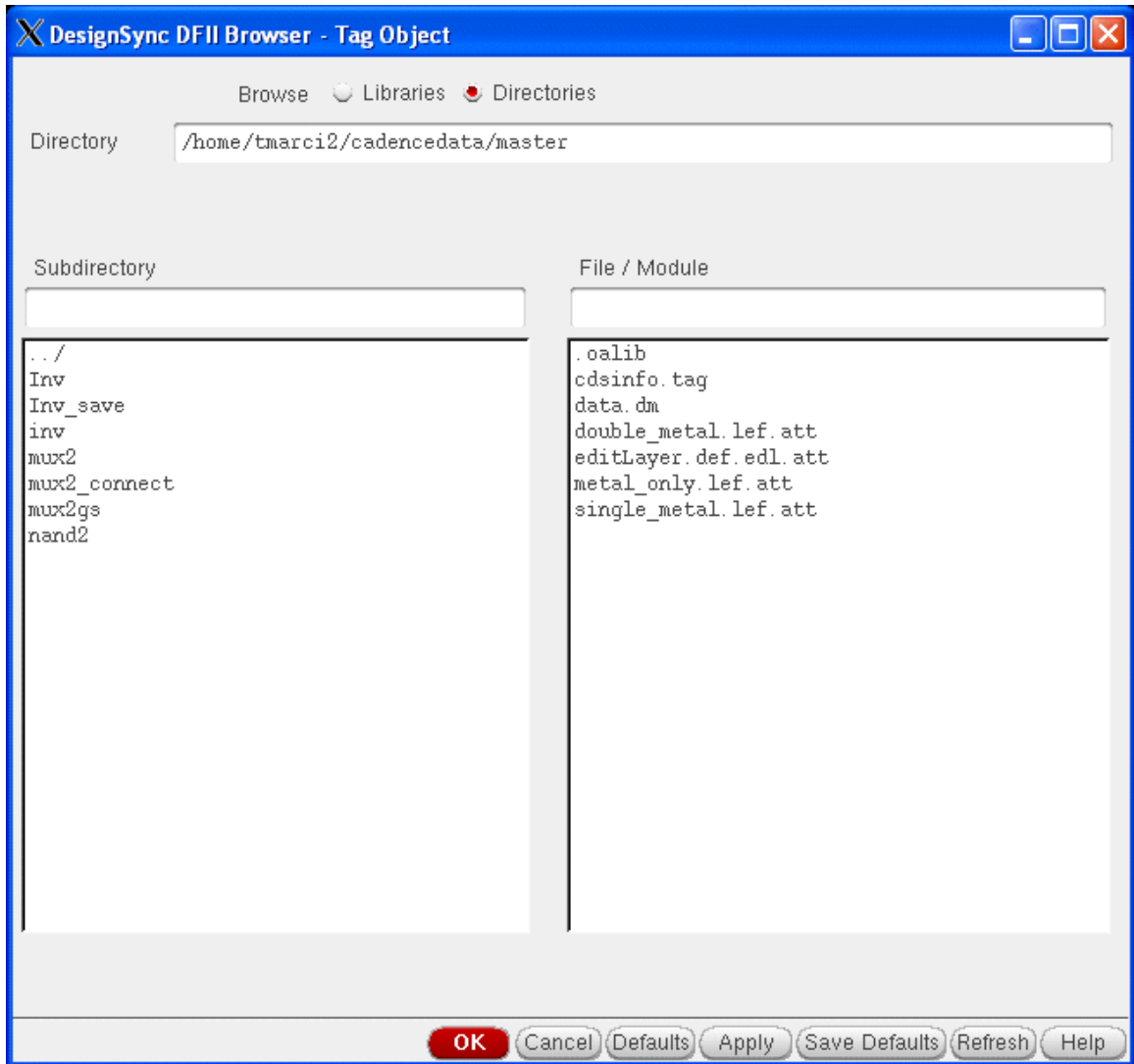
The following illustrations show examples of the DesignSync DFII Browser.

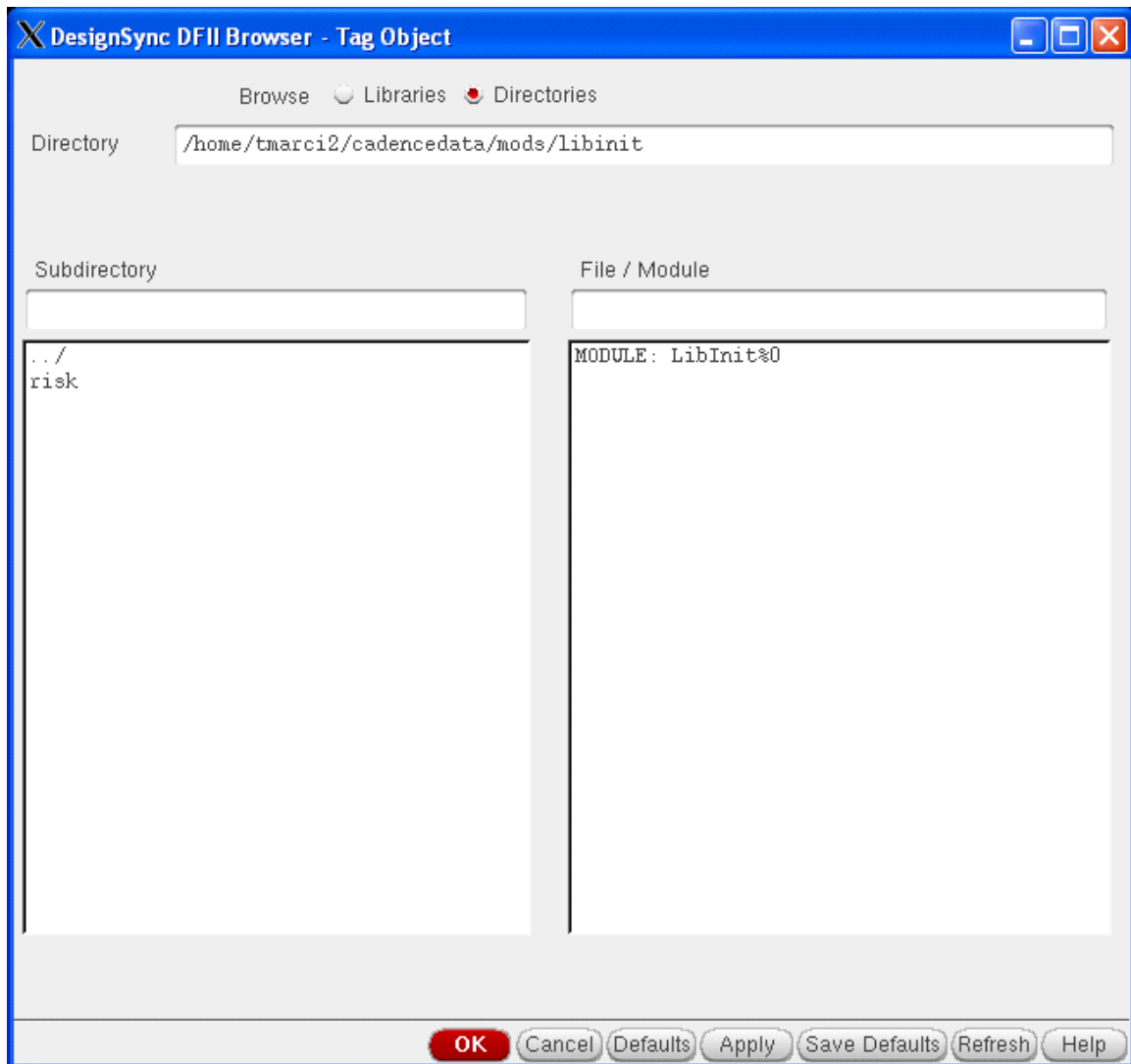
**Click on the fields in the following illustrations for information.**











3. For the File/Object forms, you must click **OK** or **Apply** to update the calling form with the selected objects. All other forms are updated automatically as you select objects.
4. Click **OK** or **Cancel** to dismiss the browser, or the browser is automatically dismissed when you dismiss the calling form.

**Notes:**

- Browser selections are retained from one invocation of the browser to the next. The previous selections are automatically applied to the calling form as appropriate, with one exception. The **View Name List** field, which is available from several forms such as Checkout Library, is not automatically seeded with previously selected views. You must make a view selection manually before **View Name List** is updated with the selection. This restriction helps you avoid operating on the wrong set of objects.

- You can choose to use the Cadence Library Browser instead of the DesignSync DFII Browser. See [Selecting a Library Browser](#) for details.

### DesignSync DFII Browser Field Descriptions

#### Browse Vault

This option is available if the form from which you invoked the DesignSync DFII Browser can operate on items that are not in your workspace, such as Checkout View. When you select this option, you browse the vault hierarchy associated with a managed library or directory.

When browsing a vault hierarchy, a label appears under the **Browse Vault** checkbox that shows the vault path for the selected library or directory. This vault path changes as you select different libraries or directories to browse. When browsing the vault hierarchy of a library, the library's vault path is always displayed, even when you have selected a cell or view.

The **Show Categories** checkbox is available when browsing the vault hierarchy of a library. You can select a category and use the Checkout Category form to check out the cells in that category even when the category file is not in your workspace. When you select a category other than **Everything**, the **Cell** list displays **<unknown>** because DesignSync DFII cannot determine the category contents while browsing the vault hierarchy. Selecting **<unknown>** has no effect. Also note that there is no **Uncategorized** item in the **Category** list when browsing the vault hierarchy.

Browsing a vault requires network communication with the SyncServer where the vault is located. For performance reasons:

- The DesignSync DFII Browser always defaults to browsing your workspace (**Browse Vault** is not selected) when you launch the browser. This behavior ensures that you are not subjected to the performance impact of browsing a vault unless specifically requested.
- When browsing the vault (**Browse Vault** is selected), the **Library** list contains both managed and unmanaged libraries. An unmanaged library does not have a vault associated with it so cannot be browsed. If you select an unmanaged library, the browser displays "The Vault is not set for this library" in the location where the vault path is usually displayed.

If you are browsing a workspace library or directory that is unmanaged (has no vault set) and you select **Browse Vault**, an error results.

#### Show Categories

This option lets you select whether the **Category** list is displayed or not. When selected, the **Category** list displays the categories defined for the selected library.

For category operations, such as Tag Category, you can select one or more categories to pass back to the calling form. For other operations, you can use the categories to assist you in browsing for and selecting cells or views.

### Notes:

- Due to the complexities of the DesignSync DFII Browser, you cannot save the state of the **Show Categories** option by clicking **Save Defaults**. Instead, the last state of the option is used the next time you invoke the browser. However, when you invoke the browser from a Category form (such as Tag Category), the **Show Categories** option is always selected when the browser opens on the assumption that you will want to select a category.
- You can perform the Checkout Category operation on a category file that is in the vault but not in your workspace. Enable **Browse Vault**, then select the category.

### Module

If the form from which you invoked the DesignSync DFII Browser operates on modules (such as Checkout Library or Delete Cell), then the browser displays the Module field to allow you to select module context from the drop-down list. If the module doesn't appear in the drop-down list, see Unable to Locate a Module.

### Browse Libraries or Directories

If the form from which you invoked the DesignSync DFII Browser operates on files (such as Checkout Object and Delete Object), then the browser displays a **Browse** field with 2 radio buttons:

- **Libraries:** The default is to browse libraries. When selected, the following list fields are visible, from which you can select objects: **Library**, **Category** (if **Show Categories** is selected), **Cell**, **View**, **Library File**, and **Cell File**.
- **Directories:** When selected, the browser form displays a **Directory** type-in field and **Subdirectory** and **File** list fields. When you specify a directory name, the **Subdirectory** and **File** fields display the contents of that directory. If you then select a subdirectory, it is appended to the **Directory** field and the browser descends into the subdirectory. The **Subdirectory** field typically contains a `.. /` item that lets you ascend the directory structure.

### Directory

The **Directory** field is displayed only when you have invoked the browser from a form that can operate on files (such as Checkout Object and Delete Object), and you have selected **Browse Directories**. When you enter a directory name, the **Subdirectory** and **File** fields display the contents of that directory. If you then select a subdirectory, it is appended to the **Directory** field and the browser descends into the subdirectory. The **Subdirectory** field typically contains a `.. /` item that lets you ascend the directory structure.

### Filter Fields

At the top of every list field in the DesignSync DFII Browser -- **Library**, **Category**, **Cell**, **View**, **Library File**, **Cell File**, **Subdirectory**, **File** -- is a type-in filter field that lets you control what items are listed. You enter glob-style wildcards that the browser then uses to filter the list of objects displayed in the corresponding list field.

You can use the following special characters:

?	Matches any single character.
*	Matches zero or more characters.
[chars]	Matches any one of the characters in <code>chars</code> . <code>chars</code> may include a range of characters, such as <code>a-z</code> , which matches any character from "a" to "z".
\x	Matches "x". For example, "a\?b" matches only "a?b"; the backslash (\) overrides the special meaning of "?" in glob patterns.

Note that `{str1, str2, ...}`, which is typically part of glob-style pattern matching, is not supported by the DesignSync DFII Browser.

After you have entered your filter expression, click **Apply** or press the **Tab** key to activate the filter.

The filter field for the **Category** list applies only to top-level categories, not subcategories (nested categories). Also, the **Everything** and **Uncategorized** categories do not obey the filter.

You can save the filter field values by clicking **Save Defaults** (see Setting Form Default Values).

### Browser Lists

There is a list field for each type of object being displayed:

- **Library** - Lists all libraries defined in your library path (through `cds.lib` files). Libraries are listed whether they are managed by DesignSync DFII or not, because filtering out unmanaged libraries would have performance impact.

The **Library** list field is not visible when you invoke the browser from a form that can operate on files, such as Tag Object, and you have selected **Browse Directories**.

- **Category** - Lists the categories defined for the selected library. The **Category** list field is displayed only when the **Show Categories** checkbox is selected. The **Category** list displays nested categories. For example, if you select "allCells",

which has a subcategory "invCells", then the **Category** list might show something like:

```
Everything
Uncategorized
allCells
    invCells
midCells
```

The **Category** list field is not visible when you invoke the browser from a form that can operate on files, such as Tag Object, and you have selected **Browse Directories**.

- **Cell** - Lists the cells defined for the selected library. The **Cell** list field is not displayed when you invoke the browser from a form that can operate on files, such as Tag Object, and you have selected **Browse Directories**.
- **View** - Lists the views defined for the selected cell. The **View** list field is not displayed when you invoke the browser from a form that can operate on files, such as Tag Object, and you have selected **Browse Directories**.
- **Library File** - Lists the library-level files for the selected library. The **Library File** list field is only visible when you invoke the browser from a form that can operate on files, such as Tag Object, and you have selected **Browse Libraries**.
- **Cell File** - Lists the cell-level files for the selected cell. The **Cell File** list field is only visible when you invoke the browser from a form that can operate on files, such as Tag Object, and you have selected **Browse Libraries**.
- **Subdirectory** - Lists the subdirectories of the directory specified in the **Directory** field. The **Subdirectory** list field is only visible when you invoke the browser from a form that can operate on files, such as Tag Object, and you have selected **Browse Libraries**. If you select a subdirectory, it is appended to the **Directory** field and the browser descends into the subdirectory. The **Subdirectory** field typically contains a `. . /` item that lets you ascend the directory structure.
- **File/Module** - Lists the files or modules in the directory specified in the **Directory** field. The **File/Module** list field is only visible when you invoke the browser from a form that can operate on files, such as Tag Object, and you have selected **Browse Directories**. When the object is a module, the module instance name is displayed,

**Note:** Some module operations, such as tagging, apply to the entire module, not to individual files within the module. You are allowed to select a file within an module in the browser, but the operation does not succeed.

If a field in the calling form can operate on multiple objects (for example, the Checkin Cell form's **Cell Name List** field accepts multiple cells), then you can select multiple objects of that type from the browser. Use the **Control** and **Shift** keys while left-clicking on objects to select multiple objects. If multiple objects are selected, subfield contents may or may not be displayed as appropriate to the operation.

Where possible and practical, selections remain intact when switching from one selection to another. For example, library "A", cell "C", and views "V1" and "V2" are selected. You now select library "B", which also has a "C" cell. Cell "C" remains selected. If the "C" cell in library "B" has either "V1" or "V2" views, then they also remain selected.

A type-in filter field at the top of each list box lets you control what items are listed. You enter glob-style expressions that the browser then uses to filter the list of objects displayed in the corresponding list field. For details on using filters, click on the type-in field above any of the list fields in the illustrations of the DesignSync DFII Browser.

### Command Buttons

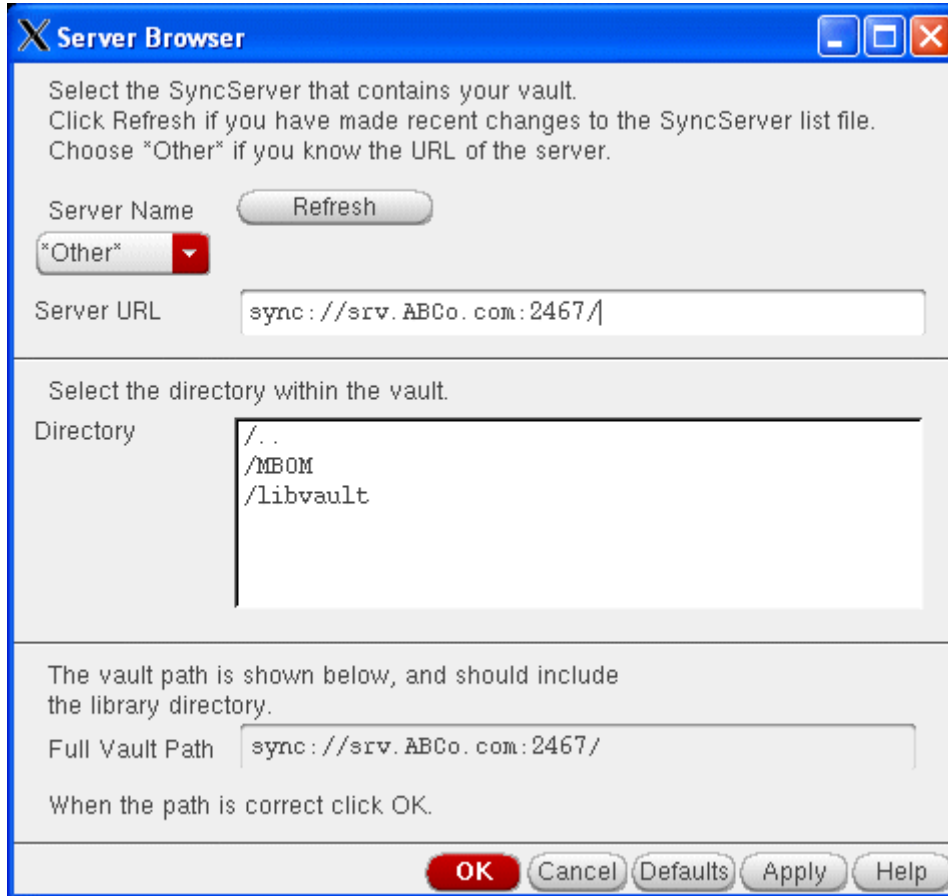
Button	Description
OK	If you have changed a filter value, applies the filter field and leaves the browser open. Otherwise, if the calling form is a File/Object form, such as Tag Object, updates the calling form with the selected objects, and in all cases, closes the browser.
Cancel	Closes the browser.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	If you have changed a filter value, applies the filter field. Otherwise, if the calling form is a File/Object form, such as Tag Object, updates the calling form with the selected objects. Otherwise, no effect.
Save Defaults	Saves the current filter field values as the defaults. See Setting Form Default Values for details.
Refresh	Refreshes the display by rescanning the workspace or vault to display any changes since the browser was invoked or last refreshed.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic that describes the browser.

## Browsing a SyncServer

The Server Browser is available from the Join Library and Configure Library wizards to help you select a vault URL.

**Note:** This interface does not display modules.

Click on the fields in the following illustration for information.



Use the Server Browser to construct the full vault path (as displayed in the **Full Vault Path** field) for the library you want to access. When the **Full Vault Path** field is correct, click **OK**.

## Server Browser Field Descriptions

### Server Name

If there are defined SyncServers in enterprise, site, or user `sync_servers.txt` files, the SyncServers are listed here.

By default, each listed SyncServer is shown as available (**up**) or not (**down**). You cannot specify a down SyncServer server when configuring a library. While this status information is useful, polling each SyncServer can be time consuming. You can choose to skip the polling step, which means the SyncServer up/down status is not displayed. See Controlling Server Browser Status for details.

When you select a SyncServer, **Server URL** is read-only and displays the selected server's URL. If the associated entry in the `sync_servers.txt` file contains a vault



specification (as opposed to just a SyncServer URL), then the contents of the vault path are displayed in the **Directory** field, and the full vault path is displayed in **Full Vault Path**. Otherwise, the SyncServer root is displayed in **Directory**.

In addition to any SyncServer entries, there is an **\*Other\*** choice. When you select **\*Other\***, **Server URL** is editable and you must specify a vault URL using the **sync://** or **syncs://** SyncServer protocol for server vaults or the **file:///** protocol for client vaults.

Click **Refresh** to re-read the `sync_servers.txt` files, which lists the available SyncServers. Any new additions to `sync_servers.txt` files will be added to the **Server Name** pull-down menu. You also can use this button to re-scan server status (up or down).

### Server URL

If you have selected a SyncServer or vault from the **Server Name** field, the **Server URL** field is read-only and contains the URL of the selected SyncServer. If you have selected **\*Other\***, the **Server URL** field is editable. Enter the URL using the **sync://** or **syncs://** protocol for the SyncServer that will manage your vault (for example, `sync://myhost.myco.com:2647`). For client vaults, use the **file:///** protocol (for example, `file://home/projadmin/Sample`). Press the Tab key to update the **Directory** field based on your specified server URL.

### Directory

This field initially displays the root of the SyncServer specified by **Server Name**, or if you selected a full vault path from the SyncServer list file, the contents of that vault directory is displayed. Click on directories to build the vault path as displayed by the **Full Vault Path** field. Click on `/..` to go up one level (to the parent directory).

**Tip:** Placing all vaults under a `Projects` directory. Doing so facilitates interaction between DesignSync tools.

For example, you have a library called `master` with a server URL of `sync://liszt:30014`. You specify `/Projects/cell_design` as the vault folder. The resulting full specification to the top of `master` vault is:

```
sync://liszt:30014/Projects/cell_design/master
```

### Full Vault Path

This read-only field displays the full vault path, which is the combination of **Server Name** and **Directory** fields. When you have built up the full vault path, click **OK** to return to the wizard.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

Controlling Server Browser Status  
 Configuring a Library  
 Accessing a Library for the First Time

## Getting Status

### Displaying Check-Out Status

Displaying a check-out status lists the objects, in one or more design libraries or a specified directory or module, that are locked (checked out for editing). You can display either the objects that are locked in your workspace or all the objects that have been locked in the vault. For objects locked in your workspace, you can use the Show Checkouts form to check in objects, cancel your checkouts, or view new or removed objects. You also can use the Show Checkouts form to find objects in your workspace that have never been checked into the vault.

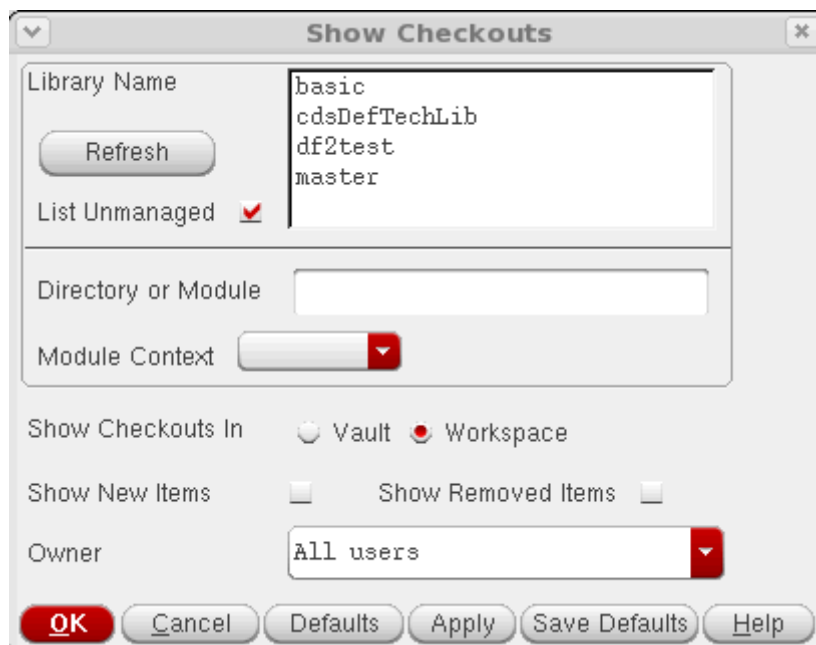
To display the check-out status:

1. Select **Synchronicity => Show Checkouts** from the CIW.

The initial Show Checkouts form appears. This form lets you select what checkout information you want to display.

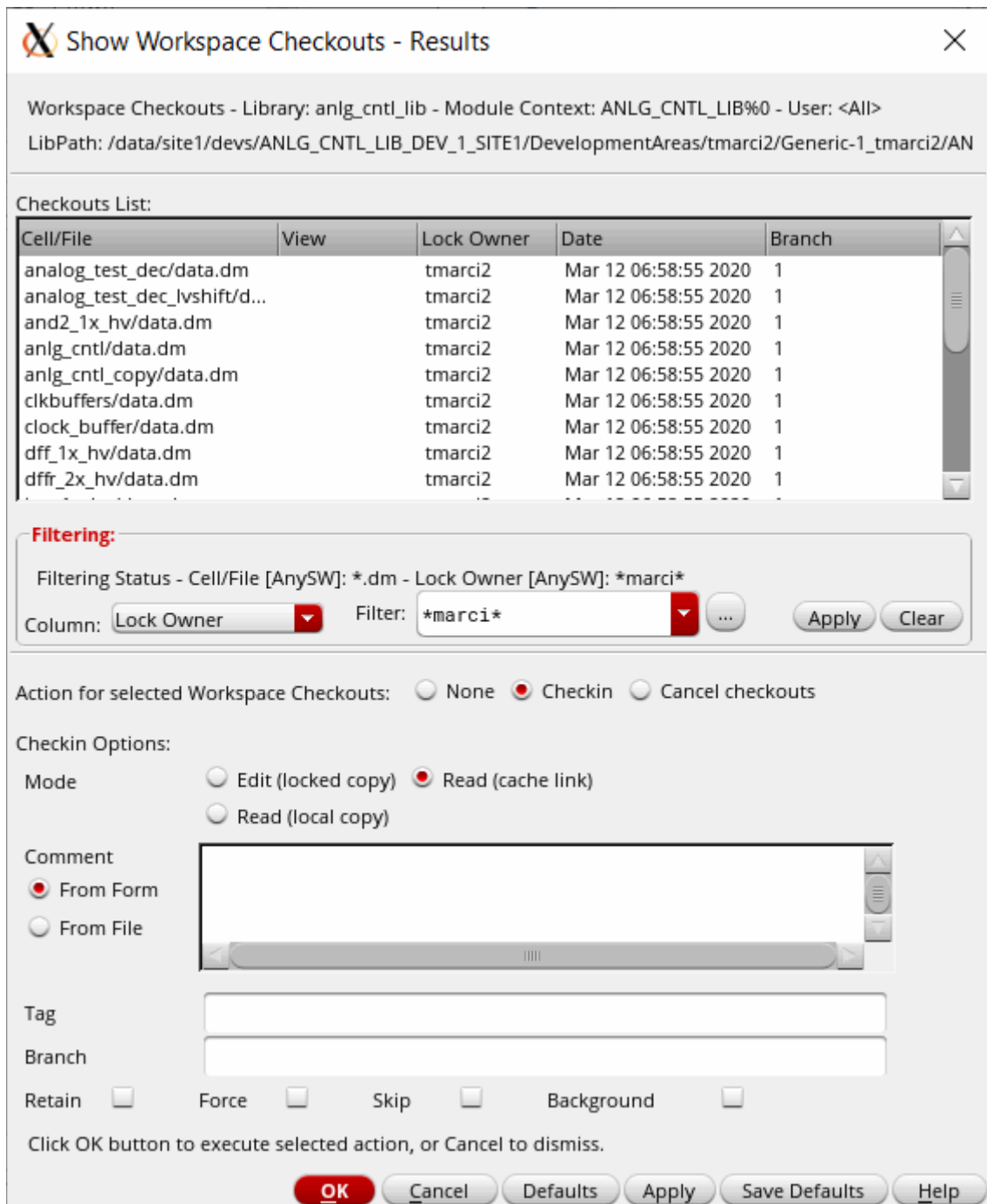
2. Modify the fields of the Show Checkouts form as needed. You must select at least one library from the **Library Name** list box, or specify a directory or module in the **Directory or Module** field, or both.
3. If a module was selected in the **Library Name** list box or specified in the **Directory or Module** field, and there are multiple instances of the module, select a **Module Context**.

**Click on the fields in the following illustration for information.**



4. Click **OK**.
5. The Show Checkout results page displays. From the Show Checkout Results, you can filter the search results, check-in files, and cancel workspace checkouts or remove server locks

**Click on the fields in the following illustration for information.**



**Note:** If you select multiple libraries for Show Checkouts, DesignSync presents a different show results form. For more information on the form displayed when multiple libraries are selected, see Show Checkout Results When Operating on Multiple Libraries.

6. Click **OK**.

If you check in an unmodified file or cell view, it is unlocked in your workspace and left in the state you specified as the check-in mode. The version number is not incremented in the vault unless you specify the **Force** option.

### Show Checkouts Field Descriptions

#### Library Name

Select (left click) a library whose checkouts you want to view. To select multiple libraries, use Control-left click, or to select a range of libraries, use Shift-left click. You must select at least one library, or specifying a directory or module in the **Directory or Module** field. You may specify both a library and a directory or a library and a module.

The **Library Name** list box shows the libraries defined in your `cds.lib` file. If you have changed the library definitions in your `cds.lib` file since invoking DesignSync DFII, you may need to re-read the definitions by clicking the **Refresh** button. Any new library information is then displayed in the **Library Name** list box.

#### List Unmanaged

The **List Unmanaged** option determines whether all libraries in your `cds.lib` file are displayed in the **Library Name** list box, or whether only managed libraries (libraries that are under revision control) are displayed. All libraries are displayed by default. When you deselect **List Unmanaged**, the **Library Name** list box updates to show only managed libraries. Any library that is at or below a module base directory is considered managed. Note that there may be a delay while DesignSync DFII determines which libraries are managed.

#### Directory or Module

A workspace directory path or module for which to display any checked-out files. You can specify only one directory or module. You must specify a directory or module in the **Directory or Module** field, or select at least one library from the **Library Name** list box, or both.

#### Module Context

If the library selected in the **Library Name** list box is a module, or a directory is specified in the **Directory or Module** field, the **Module Context** field automatically displays a cyclic list with candidate module instance names. This field always contains a blank value (which is the default) at the top of the list. If there is only one possible module instance, then that item will automatically be set as the current value, at the top of the list. At the bottom of the list is a **\*Refresh\*** option. Selecting it refreshes the complete list of candidate module instances. This is needed if new modules have been fetched to the workspace outside of the DS DFII interface. Module instance names in the cyclic are displayed in alpha-numeric order. The value of this field is not saved by the **Save Defaults** button.

### Show Checkouts In

Select whether to display only the objects checked out in your workspace (**Workspace**) or all the objects checked out from the vault (**Vault**).

If you select **Workspace**, the Show Checkouts form will display the objects that are locked in your workspace. You can use this form to check in or to cancel the checkouts (and thus release the lock) of any of the listed objects. Additionally when you select **Workspace**, the **Show New Items** and **Show Removed Items** checkboxes are displayed. If you select **Show New Items**, the Show Checkout form will also display:

- Any objects in your selected workspace libraries or specified directory or module that can be edited but have never been checked in. You have an option to select the objects for check in.
- Any objects in your selected workspace libraries or specified directory or module that can be edited but were not checked out with a lock. You cannot check in these objects.

If you select **Show Removed Items**, the Show Checkout form will also display any items that have been removed from the workspace but that local removal has not yet committed to the server with a check-in operation.

If you select **Vault**, the Show Checkouts form displays a list of all checked-out objects (locked by any user) from the selected libraries or specified directory.

### Show New Items

The **Show New Items** checkbox is only available when you have selected **Workspace** from the **Show Checkouts In** field. When you select **Show New Items**, the Show Checkouts form will display the following in addition to checked-out objects:

- Any objects in your selected workspace libraries or specified directory that have never been checked in (unmanaged objects), and are available for checkin. You have the option to check in these objects. It does not show excluded objects.
- Any objects in your selected workspace libraries or specified directory that can be edited but were not checked out with a lock. You cannot check in these objects.

**Note:** Any unmanaged objects that are excluded from checkin will not appear on the list. For more information on excluding files from checkin, see *Designsync Data Manager User's Guide: Working with Exclude Files*.

### Show Removed Items

The **Show Removed Items** checkbox adds removed items to the results display. An item is removed if it has been removed locally in the workspace, but that change was not yet committed to the server with a checkin operation. The **Show Removed Items**

checkbox is only available when you select **Workspace** from the **Show Checkouts In** field.

Show Removed Items includes the option to "check in" the removed files, which commits the remove to the server. It does not have the option to Cancel the checkout, because there is no check-out to cancel.

### Owner

Select a username from the pull-down list to restrict the results to checkouts owned only by that user. By default, this is set to **All Users**, which shows all checkouts regardless of the owner. You may also select **Current User** to show all checkouts by the current user.

## Show Checkouts - Results Field Descriptions

### Source Information

Provides background information on the results display. This includes:

- Show Checkouts in the Workspace or the server vault.
- Name of the library
- Module instance name, if applicable
- Vault path, if applicable
- Workspace library path, if applicable

### Checked-Out Objects Display Region

This region displays a list of checked-out objects from the libraries, directory, or module you selected. Each of the columns is adjustable. You can sort the objects by clicking on the column header. You can also reorder columns. To perform an action on items in the list, select the items.

### Filtering

Select filters to restrict the displayed list of checkouts. Any applied filters appear in the Filter status section above the filter controls.

### To create a filter:

1. The first pull-down contains a list of Column filters. Select the desired column filter.
2. The second pull-down contains a list of values contained in the columns.
3. The Browse button (...) provides a list filter parameters, including Boolean operations, such as:
  - All
  - Any
  - None

- Case Sensitive/Insensitive matching
- Wildcard/Regular Expression

When filter parameters are not specified, the default values are to match **Any**, (case) **sensitive**, (with) **wildcard** (support).

4. Click **Apply** to apply the filter.

### To remove filters:

When filters are set, you can clear filters by selecting the filter value again, and pressing **Clear**.

### Action For Selected Workspace Checkouts

Select the action to perform on items selected in the Display List.

- None
- Checkin (Workspace)
- Cancel checkouts (Workspace)
- Unlock (Vault)

When an action is selected, the options associated with the selection appear beneath this section.

### Mode

Select what you want left in your workspace after operating on your design files.

- **Edit (locked copy)**

Locked files. You can continue to make changes; other users cannot check out the files for editing. This mode is only valid for Checkin operations, not for cancel operations.

- **Read (mirror link)**

Links to files in the mirror directory. The mirror directory contains a specific design configuration, such as the latest versions of all design files, or all versions that have the same tag. You cannot edit the files in the mirror directory.

- **Read (cache link)**

Links to files in the cache directory. The cache directory is shared with other users on your LAN. You cannot edit the files in the cache directory.



- **Read (local copy)**

Local, read-only copies of the files.

**Notes:**

- Your project leader can control which check-in modes are visible on the Show Checkouts form using the SyncAdmin tool. See Controlling the Display of Check-In or Check-Out Modes for details.
- Your project leader can select a default fetch mode, which is the default selection on the Show Checkouts form. See Selecting a Default Fetch Mode for details.

**Comment from Form (Checkin)**

With the Comment From Form radio button selected (default), enter a checkin comment in the comment field.

Depending on the design methodology your team adopts, your project leader may require that every checkin have a comment of a given length. If such a requirement is in place, your checkin will fail unless you specify an appropriate check-in comment.

**Notes:**

- If you also specify a tag, the comment is used as both the checkin and the tag comment.
- DSDFII GUI only accepts ASCII text comments. You can specify UTF-8 compliant multibyte characters using the Comment From File option.
- If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes

**Comment from File (Checkin)**

Specifies a file containing a comment to use as the description of the new version. The file must be specified as an absolute file path. DesignSync accepts a comment of any length up to 1MB. Long comments may be truncated in the output of commands that show comments. Comments in the file can be multibyte characters (UTF-8 compliant). This option respects the minimum comment length, however it should be noted that each byte in a multibyte character counts individually towards the comment length .

**Notes:**

- Revision control notes may not properly display UTF-8 characters. Additionally, If the comment includes ampersand (&) or equal (=) characters, they are replaced by the underscore (\_) character in revision control notes
- If you also specify a tag, the comment is used as both the checkin and the tag comment.

**Tag (Checkin)**

Tags the object or module version on the server with the specified tag name.

For module objects, all objects are evaluated before the checkin begins. If the objects cannot be tagged, for example if the user does not have access to add a tag or because the tag exists and is immutable, the entire checkin fails.

For other DesignSync objects, if the user does not have access to add a tag, the object is checked in without a tag.

**Branch (Checkin)**

Checks the object into the specified branch. The branch tag can be any valid branch selector, including auto(branchname).

**Note:** This option is not applicable to modules. If you select a module or module member for the checkin operation, with the branch option, the operation will fail.

**Retain**

When selected, retains the "last modified" timestamps of objects left in your workspace after checking in. When deselected, the timestamps of the local objects are set to the check-in time.

The **Retain** option is only meaningful when using the modes:

- **Edit (locked copy)** for Checkin operations.
- **Read (local copy)** for either Checkin or Cancel operations.

**Read (mirror link)** and **Read (cache link)** modes create links to shared files, so the timestamps cannot be set on a per-user basis. These modes automatically use retain behavior; objects in the mirror or cache directory retain their "last modified" timestamps. However, links in your workspace to the cache/mirror have timestamps corresponding to when the links were created.

The default setting for **Retain** is determined by a SyncAdmin setting (see SyncAdmin Help). You can override this default by selecting or deselecting the option, and then clicking **Save Defaults**.

**Force (Checkin)**

Select **Force** to create a new version in the vault, even if the object is identical to the old version. For example, suppose you have checked out version 1.3 of a cell view and have not modified it. If you check the cell view back in with the **Force** option selected, the version number is incremented to 1.4. This feature is useful when you want to synchronize versions in the vault.

### Note:

This option is available only at a user level of expert.

### Force (Cancel)

Select this option to overwrite any modifications you have made to the object in your workspace.

### Skip (Checkin)

Use this option if you want to check in:

- A version that is not derived from the Latest version that is currently in the vault, known as a **rollback** operation.

For example, you have version 1.4 of a view in your workspace. You realize that unwanted changes were introduced in versions 1.3 and 1.4 and you want version 1.2 to become the latest version. You can check out version 1.2 using **Read (local copy)** mode, then check it back in using **Skip** (and probably **Force**), creating version 1.5, which is the same design data as version 1.2.

### Notes:

- You must have local copies (checked out with **Read (local copy)** mode) of the cell view versions that you want to check in with **Skip**. You cannot have links to a cache or mirror directory.
- Use **Skip** with caution, because changes in the skipped versions (versions 1.3 and 1.4 in this example) will not be present in the current version.
- If there are no local modifications to the version you are checking in with **Skip** (version 1.2 in this example), then you must also use the **Force** option.
- A file that you either overwrote or deleted and replaced after checking it out with a lock.

For example, suppose you checked out a symbol view with a lock, deleted it, and then replaced it with a new view. DesignSync DFII no longer recognizes the version of the symbol view and gives you an error when you try to check it in: "Cannot skip versions on the branch." To check in the symbol view and increment the version number in the vault, you need to enable the **Skip** option when you check it in using the Show Checkouts form.

**Note:** You cannot check in objects that were checked out for read-only and then made editable.

### Note:

- This option is only available at a user level of expert.
- You can only check out for editing the latest version on a branch. You must check out a non-latest version as read-only, then change the UNIX permissions to edit the file.

## Background

Select this option to operate on selected objects as a background process. This option is available for Checkin, Cancel, and Unlock operations.

**Note:** When performing a Checkin on open views, DesignSync DFII changes their mode to read-only before adding them to the background queue.

Select **Synchronicity => Options => Show Background Queue** to view the background commands. Use the Show Background Queue form to pause or remove commands from the queue.

**Important:** If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See Running Commands in the Background for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See Selecting a User Level for Background Operations.

## Command Buttons

Button	Description
OK	Closes the form and performs the check-in or cancel operations. For a multipage Show Checkouts - Results form, all selected objects on all pages are operated on.
Cancel	Closes the form without performing the operations.
Defaults	Restores the default field values. For a multipage Show Checkouts - Results form, default values are restored on all pages. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the check-in or cancel operations without closing the form. For a multipage Show Checkouts - Results form, all selected objects on all pages are operated on. After the checkin/cancel operations have been completed, the page refreshes showing the current list of checked-out objects.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only

	available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Show Checkout Results When Operating on Multiple Libraries

When you select multiple libraries, a different Show Checkout Results form is displayed.

This form does not have the ability to adjust column width, or filter and does not have scrollbars. Because there are no scrollbars, the number of entries per page is a fixed length and if the number of checkout files in the libraries exceed a single page, then the results are displayed on multiple pages, as described in Page 1 of n: Multipage Navigation Controls.

The pages for displaying checkout results for a vault are different than those displayed for checking out a workspace. If you selected **Show Checkouts In Vault**, a list of all checked-out objects (locked by any user) from the selected libraries is displayed in a text window. An object may have more than one branch of development, each of which can be locked independently. The results window shows the following properties of the locked items: name, branch information (the branch number and any branch tags), lock owner, and checkout date.

If you selected **Show Checkouts In Workspace**, the Show Checkouts form displays the design objects that are locked in your workspace (and possibly other objects if you selected **Show New Items** or **Show Removed Items**).

Using **Show Checkouts In Workspace**, you can optionally check in or cancel any of your checkouts by selecting the **Checkin** or **Cancel** checkboxes for individual objects, or use **Select All on Page** (**Select All on All Pages** for multipage forms). Use the **Checkin Options** and **Cancel Options** areas of the Show Checkouts form to specify check-in or cancel options. If you do not want to check in or cancel objects, click **Cancel** to dismiss the Show Checkouts form.

### Show Checkouts - Results Field Descriptions

This section lists differences between the standard Show Checkout Results and the multipage Show Checkout Results. For common fields, such as the operation options, see the descriptions in the previous section.

#### Page 1 of n: Multipage Navigation Controls

When there are more items than can be displayed on one page, the Show Checkouts results are displayed over multiple pages. The default maximum is 100 items, but you can customize this setting (see Controlling the Number of Items on a Results Page). The following navigation aids are provided for multipage forms:

- A label indicating the current page and the total number of pages, for example "Page 1 of 2"
- Browse buttons that let you switch between pages
- A **Goto** button and type-in field that let you quickly jump to the specified page

**Note:** When there are multiple pages, the OK and Apply buttons operate on all selected objects on all pages.

**Note:** The form shown here is a multipage form resulting from reducing the maximum number of items per page. See Controlling the Number of Items on a Results Page for details.

If you have selected one or more objects to check in or cancel, a confirmation box appears. When you click **Yes**, any objects that you have selected for check in or cancellation are operated on. For a multipage Show Checkouts - Results form, all selected objects on all pages are operated on.

#### Select All on Page(s)

The **Select All** buttons, two under Checkin and two under Cancel, let you quickly select (checkmark buttons) or deselect (X buttons) all objects to check in or cancel. You can then select or deselect individual objects as needed.

When Show Checkouts - Results has multiple pages, these buttons are called **Select All on Page**, and they only select or deselect objects on the current page. In addition, **Select All on All Pages** buttons let you quickly select or deselect all object on all pages. You can then select or deselect individual objects across all pages as needed.

**Note:** When there are multiple pages, the OK and Apply buttons operate on all selected objects on all pages.

#### Checked-Out Objects Display Region

This region displays any checked-out objects from the libraries, directory, or module you selected. Each object for which you are the lock owner has **Checkin** and **Cancel** checkboxes that you can select if you want to operate on the object.

Objects checked out in **Regenerate (locked reference)** mode are included in this list. Because locked references have no corresponding local files:

- You can cancel locked references, but you cannot check them in.
- The Lock Owner column shows "Unknown". DesignSync DFII determines a lock owner by looking at the owner of the local files, which do not exist for locked references.

If you selected **Show New Objects** from the initial Show Checkouts form, then objects that are unmanaged and editable are also displayed. If you selected **Show Removed**

**Objects** from the initial Show Checkouts form, then objects that have been removed from the workspace and are targeted for removal from the module during the next checkin, are also displayed.

Each object for which you are the owner has a **Checkin** checkbox that you can select to perform an initial check in. Managed objects that are not checked out but are editable are also displayed, but you cannot check in these objects.

Use the **Select All** (or **Select All on Page** for multipage forms) buttons to quickly select or deselect all objects on the current page.

## Related Topics

- Checking Out Design Files
- Canceling a Checkout
- Controlling the Number of Items on a Results Page
- Selecting a User Level

## Displaying Data Sheets

A DesignSync DFII data sheet displays general and revision-control information about a selected object in an HTML browser window. The data sheet lists the vault associated with the object, the version of the object, its location, whether it is locked, and so on.

To display the data sheet for a cell view that you have open:

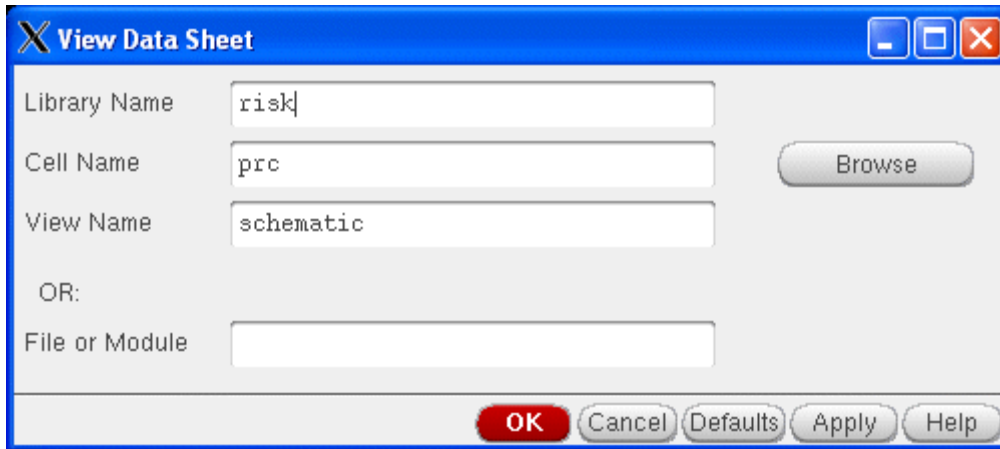
- Select **Synchronicity => View Data Sheet** from the cell view window.

The data sheet for the cell view appears.

To display the data sheet for any object:

1. Select **Synchronicity => View Data Sheet** from the CIW.
2. From the View Data Sheet form, specify a library, cell, view, file, or directory.

**Click on the fields in the following illustration for information.**



3. Click **OK**.

The data sheet for the specified object appears.

The data sheet is displayed in your default HTML browser as specified during installation of DesignSync DFII. You can change your default browser using the SyncAdmin tool.

## View Data Sheet Field Descriptions

### Library Name

Specify the name of the library containing the cell view or file whose data sheet you want to view. You can also view the data sheet for the library itself by specifying only the library name.

Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select the library. The DesignSync DFII Browser displays the libraries that are defined in your `cds.lib` file. If the library you want is not listed in the browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell containing the cell view or file whose data sheet you want to view. You can also view the data sheet for the cell itself by specifying only the library name and cell name.

Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select a cell.

### Browse



Invokes the DesignSync DFII Browser, which helps you select the object on which to operate. The calling form is automatically updated with your selection.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Name

Specify the name of the cell view whose data sheet you want to view. Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select a view.

### File or Module Name

Specify the name of the file or module whose data sheet you want to view. Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select an appropriate object.

You can specify an absolute path or a path relative to the current working directory. You can also use the **File or Module Name** field in conjunction with the **Library Name** and **Cell Name** fields to specify an object relative to the specified library or cell directory.

You can specify a directory in the **File or Module Name** field to view the data sheet for that directory.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

[Displaying Version History](#)

## Displaying Version History

A DesignSync DFII version history lists revision-control information about a cell view or file, including the workspace and vault paths, the current version in your workspace, and the current state (locked or not). For each version of the cell view or file, the history lists

the version number, creation date, author, and any comments and tags associated with the version.

Note: When the version history is requested for a module member within a module context, the command only fetches data for module version where the specified member is affected.

To display the version history for a cell view that you have open:

- Select **Synchronicity => View Version History** from the cell view window.

The version history for the cell view appears.

To display the version history for any cell view or file:

1. Select **Synchronicity => View Version History** from the CIW.
2. From the View Version History form, specify a cell view or file.

**Click on the fields in the following illustration for information.**

**View Version History**

Library Name: chipDesignX2

Cell Name: inv

View Name: schematic

OR:

File or Module:

All Branches:

Branch:

Last Versions: all

Last Branches: 0

Descendant Branches: 0

Max Tags: all

Report Mode: ABCDEFHLNQRSTUVWXY

3. Click **OK**.

The version history for the specified cell view or file appears.

The version history is displayed in a temporary view-file window. You can save the version history for future reference by selecting **File => Save As** from the Version History window. The following example shows the version-history format:

```
Version History For View: master mux2_connect layout
Local object:
/home/tmmf/Projects/cell_design/master/mux2_connect/layout.sync.
cds
Vault URL:
sync://may:2647/Projects/cell_design/master/mux2_connect/layout.
sync.cds;
Current version: 1.2 -> 1.3
Current state: Lock
Lock owner: tmmf
-----
Version: 1.2
Tags: Latest
Date: Tue May 4 13:31:38 1999; Author: tmmf
-----
Version: 1.1
Tags: dev
Date: Mon May 3 10:33:30 1999; Author: tmmf
=====
=====
```

### View Version History Field Descriptions

#### Library Name

Specify the name of the library containing the cell view or file whose version history you want to view.

Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select the cell view or file. The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want is not listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Cell Name

Specify the name of the cell containing the cell view or file whose version history you want to view. Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select a cell.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select the object on which to operate. The calling form is automatically updated with your selection.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

#### **View Name**

Specify the name of the view whose version history you want to view. Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select a view.

#### **File or Module**

Specify the name of the file or module whose version history you want to view. Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select the object.

You can specify an absolute path or a path relative to the current working directory. You can also use the **File or Module** field in conjunction with the **Library Name** and **Cell Name** fields to specify an object relative to the specified library or cell directory.

#### **All Branches**

When selected, displays version history for all branches for the selected object. When deselected, displays version history for the branch fetched into the local workspace or, for vault objects, branch 1 (Trunk:).

This is mutually exclusive with the Branch and Last Versions options.

#### **Branch**

Enter a branch tag or numeric. When selected, the command displays the version history for the specified branch only.

#### **Last Versions**

Select the number of versions, from the current version back, to report on. By default, this is set to **all**. You can select a value from the pull-down list, or type in a positive integer.

This option is mutually exclusive with the **All Branches** option.

**Note:** When this option is used with a module member within a module context, only module versions containing an affected version of the specified member are counted in the last version count. For example, if the member `alc.c` was last modified in 1.5, and

the current version is 1.8, using a Last Versions value of one would show history for module version 1.5, not module version 1.8.

### Last Branches

Select the number of branches, from the current branch back, to report on. By default, this is set to **all**. You can select a value from the pull-down list, or type in a positive integer.

This option is mutually exclusive with the **All Branches** option.

### Descendant Branches

The number of levels of descendant branches to report, from the starting branch. By default, the report is limited to the starting branch (a value of 0). You can select a value from the pull-down list, or type in a positive integer.

### Max Tags

The maximum number of tags shown for any object. You can select a value from the pull-down list, or type in a positive integer. By default, all tags are shown. This option is only available when Show tags is selected.

### Report Mode

The type of information that will be reported. The choices **Brief**, **Normal**, **Debug**, and **Verbose** represent defined reports. Typing one of these defined reports automatically enables all of the report options that comprise the selected mode. Report options not in the selected mode are automatically disabled. The **Normal** report mode is selected by default. Select the **Select** option report mode to specify your own combination of report options.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current value of <b>Member Vault/In Module context</b> as the default value for the field.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

## Displaying Data Sheets

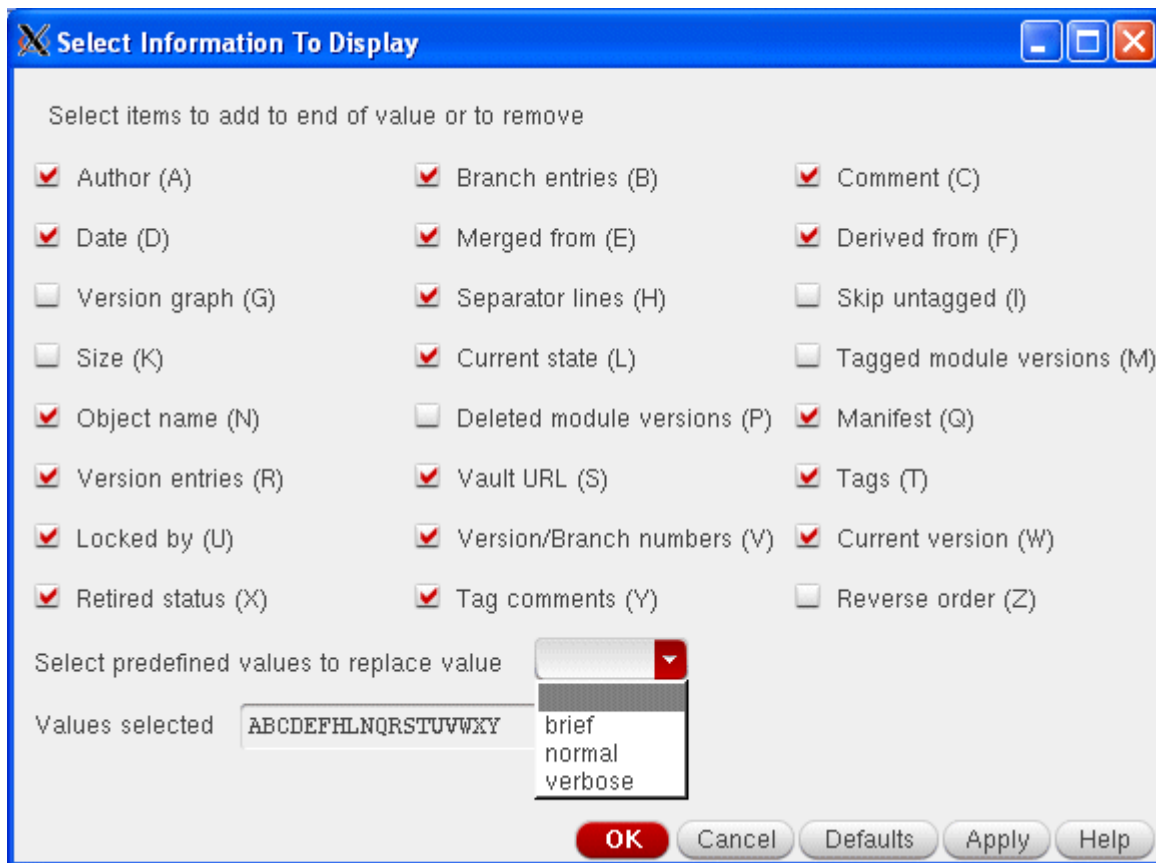
### Version History Report Options

A DesignSync DFII version history lists revision-control information about a cell view or file, including the workspace and vault paths, the current version in your workspace, and the current state (locked or not). You can choose the information to display about the selected object using the Select Information to Display panel.

To change the report options you can:

- type the report mode or report mode keys in the Report Mode box on the View Version History dialog box.
- press the Select button to launch the Select Information to Display dialog.

Click on the fields in the following illustration for information.



#### Author (A)

Show a version's author.

#### Dates (D)

Show a version's creation date.

**Version graph (G)**

Show a graphical representation of the version history, as a text graph.

**Size (K)**

Show the size of the object version in KB.

**Note:** Collections and module versions, both of which contain more than one object, display with a size of zero.

**Object name (N)**

Show the workspace path to the object, or to the vault URL.

**Version entries (R)**

Show information for version objects.

**Locked by (U)**

Show the lock owner of a locked branch. For DesignSync objects, also show the "version -> upcoming version" information.

**Retired status (X)**

Show whether a branch is retired, the username of the user who retired the file, and the date and time of the retire. This is not applicable to module data, so is not reported for module data.

**Note:** You must also select the Display Branch entries in order to view the retired information.

**Branch entries (B)**

Show information for branch objects.

**Merged from (E)**

Show the version used to create the from current version when the current version was created as the result of a rollback, merge, skip, or overlay operation requiring an alternate parent version.

**Separator lines (H)**

Show separators between items and versions.

**Current state (L)**

Show the fetched state in the workspace.

**Deleted module versions (P)**

Show module version that were purged or deleted.

**Vault URL (S)**

Show the vault URL associated with a workspace object.

**Version/Branch numbers (V)**

Show the version number for versions, and the branch number for branches. For branches, indicate whether any versions exist on the branch.

**Tag comments (Y)**

Show the comments associated with version and branch tags. Tag comments are only available for module data.

**Comment (C)**

Show a version's check in comments, and any checkout comments. For DesignSync objects, checkout comments are only visible from the workspace in which the checkout occurred. For module objects, the branch lock comment is visible to all users.

**Derived from (F)**

Show the numerical parent version. This maintains the continuity between versions for merge and rollback operations.

**Note:** If a merge, skip,rollback or overlay operation occurs to create this version, the referenced version is shown as "Merged from" version.

**Skip untagged (I)**

Do not show entries that have no tags.

**Tagged Module versions (M)**

Include Module version that have tags, even if a module member being queried has not been changed in that module version.

**Tip:** Include the Manifest (Q) report option to determine whether the specific module member being queried has changed.



**Manifest (Q)**

For a module, show the manifest of changes in each version. For a module member, show only the changes to that member.

**Tags (T)**

Show branch and version tags. Immutable tags are shown with "(immutable)" appended.

**Current version (W)**

Show the version currently in the workspace.

**Reverse order (Z)**

Show the versions/branches in reverse numeric order.

**Select predefined values to replace value**

DesignSync comes with predefined values that contain a set of commonly used keys.

- brief - Report tagged versions/branches with their tags and numerics. This displays the following key values: "NBRIVT".
- normal - Report all available information, except for the module manifest. This displays the following key values: "ABCDEFHLNRSTUVWXY."
- verbose - Report all available information. This displays the following key values: "ABCDEFHKL MNQRSTUVWXY."

**Values selected**

This field displays the key values of the selected options. It matches the display shown on the View Version History dialog box.

**Command Buttons**

<b>Button</b>	<b>Description</b>
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Displaying Library Status

Displaying library status shows information such as the library workspace path. If the library is managed by DesignSync DFII, the vault, selector, cache, and mirror information associated with the library is also displayed, as well as the availability of the SyncServer on which the vault resides.

To display library status:

1. Select **Synchronicity => Library Status** from the CIW.

The Library Status form appears.

2. Select a library from the **Library Name** field.

The status fields are updated for the selected library. It may take a few moments for the status to update. The fields displayed for libraries within modules are different than ones displayed for libraries within DesignSync vaults. The screen displayed below shows the fields available for libraries within DesignSync vaults.

For an explanation of module-specific fields, see Module-specific library status fields

**Click on the fields in the following illustration for information.**

The screenshot shows a dialog box titled "Library Status" with a blue header bar. At the top, there is a "Library Name" dropdown menu with "master" selected. Below it is a "Refresh" button. The main area of the dialog contains a list of fields and their values:

Path:	/home/rsmith/Cadence/master
DM Type:	sync
Vault:	sync://srv.ABCo.com:2647/Libs/master
Cache Directory:	/home/rsmith/Caches/Libraries/master
Selector:	Trunk
Mirror:	/home/Mirrors/master
Server Status:	Accessible

At the bottom right of the dialog, there are three buttons: "OK" (highlighted in red), "Cancel", and "Help".

3. Click **OK** or **Cancel** to dismiss the Library Status form.

## Library Status Field Descriptions

### Library Name

Select the library for which you want status information from the **Library Name** field.

The library must already exist in your workspace. If the library you want is not listed, add the library to your `cds.lib` file (using **Tools => Library Path Editor** from the CIW) and then click **Refresh** to re-read `cds.lib`. The **Refresh** button also refreshes the status fields for the currently selected library.

### Library Status Fields

The following status information is displayed for the selected library:

- **Path** -- The local workspace path.
- **DM Type** -- The library's associated design-management (DM) system, as defined by the Cadence `DMTYPE` variable. The value is **sync** if the library is managed by DesignSync DFII. See *Specifying DesignSync DFII as Your Design Management System* for details.
- **Vault** -- If the library is managed, the vault folder for the library's repository on the SyncServer. The vault was specified when the library was configured for use with DesignSync DFII. See *Configuring a Library*.

If the library is a module, this field displays "This library is managed as module data." The server module path is displayed along with the modules data.

If the library is unmanaged, this field displays "This library is not managed by DesignSync DFII", and all fields that follow are blank.

- **Cache Directory** --The path to the DesignSync DFII cache directory. The cache is used to share managed data. See *Caches and Mirrors* for details. This field displays "Not yet established" if the library has been configured (the vault is set) but has not yet been checked in.
- **Selector** -- The selector, which indicates what version or branch of the library you are working with. You specified the selector when you created the workspace for the library. See *Accessing a Library for the First Time*.
- **Mirror** -- The path to the mirror directory, if a mirror is being used with this library. Mirrors are used to share managed data. See *Caches and Mirrors* for details. You specified the mirror directory when you created the workspace for the library. See *Accessing a Library for the First Time*. (Vault only)
- **Server Status** -- The status of the SyncServer on which the library's vault resides. The status is "Accessible", "Not accessible", or "Client Vault". When the server is not accessible, DesignSync DFII cannot determine the library's vault or cache directory, so those fields show "Cannot determine (server not accessible)".

### Module-specific library status fields

- **Modules** -- A pull-down list of the module instance names of modules associated with the library.
- **Path** -- Workspace path including the module instance name.

#### Command Buttons

Button	Description
OK	Closes the form.
Cancel	Closes the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

#### Related Topics

Configuring a Library  
 Accessing a Library for the First Time

### Displaying Version Info

View Version Info displays the list of versions for the library files or views and perform revision control operations on a selected version in the list.

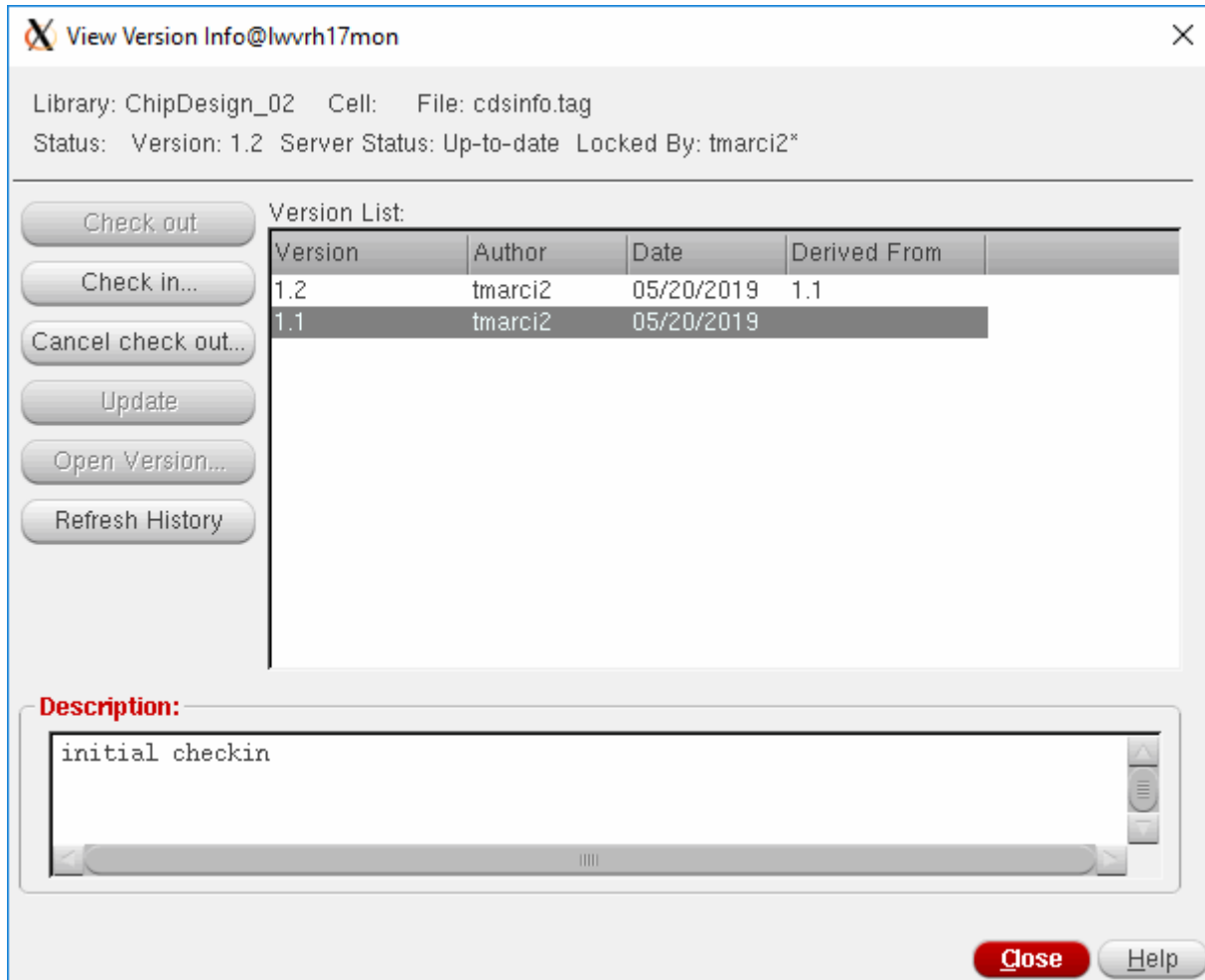
To display library status:

1. Select the desired object to view in the Status Browser, then select **Design Manager => View Version Info**.

The View Version Info form appears.

2. Click **Close** to dismiss the View Version Info form.

**Click on the fields in the following image:**



## View Version Info Field Descriptions

### Version Status Information

The following status information is displayed for the selected object:

- Library Name: Name of the library containing the selected object.
- Cell name: Name of the selected cell, if applicable.
- File name: Name of the select file, if applicable.
- Status: Selected version.
- Server Status: Status of the selected version on the server.
- Locked by: User who locked the object, if the object is checked out with a lock.

### Version List

Lists the versions available for the selected object with the version author, date the version was created, and the derived from version. The versions are always sorted oldest version to newest version.

You can move the columns to display them in a different order, but this change is not persistent across virtuoso instances.

You can select a single version on which to perform the possible operations.

### **Check out**

Launches the Check out or the appropriate Check out dialog box for the object. The object must be unlocked on the server and unmodified in the workspace. The check out operations assumes latest version and preselects Edit (locked copy).

- Checking Out a Cell View
- Checking Out a File

**Note:** For library and cell level objects, the Checkout is performed without launching the dialog.

For more information, see [Checking Out Design Files](#).

### **Check in...**

Launches the appropriate Check in dialog. The object must be checked out in the workspace with a lock. You do not need to select a version.

- Checking In a Library
- Checking In a Cell
- Checking In a Cell View
- Checking In a File

For more information on Check in, see [Checking In Design Files](#).

### **Cancel**

Launches the appropriate Cancel checkout dialog. The object must be checked out with a lock in the workspace. You do not need to select the object version.

- Canceling a Cell View Check Out
- Canceling a File Check Out

For more information, see [Canceling a Checkout](#).

### **Update**

Launches the appropriate Check out dialog for the selected object version. The object version must be unlocked in the workspace and unmodified.

- Checking Out a Cell View

- Checking Out a File

**Note:** For library and cell level objects, the Checkout is performed without launching the dialog.

For more information, see [Checking Out Design Files](#).

### **Open Version**

Launches the Open View Version dialog with the version information prefilled from your selection.

**Note:** This operation isn't applicable to library and cell level objects.

For more information, see [Opening Cell View Versions](#).

### **Refresh History**

Refreshes the version table and updates the status of the objects in the workspace.

### **Description**

Shows the Check in comment for the selected version.

## **Displaying the Background Queue**

The Background Queue displays the operations that are running or queued to run in the background. You use the Background Queue to view these background operations, as well as to pause or cancel them. The queue refreshes dynamically as queued commands complete and new commands are added to the queue.

You can run an operation in the background by selecting the **Background** option on the command's form. Most Checkin, Checkout, Tag, Delete, and Join Library commands support background processing.

If you queue up a series of commands which have dependencies, you might want the Background Queue to pause if an error occurs. Suppose you queue up a Checkin command and a subsequent Tag command on the same objects. Due to the failed Checkin command, you might want to cancel the Tag command. By default, the queue is unaffected by a failure, but you can set an option for the Background Queue to pause on error. See [Controlling When the Background Queue is Paused](#) for details.

### **Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. DesignSync DFII changes open views you are checking in to read-only mode when it adds the Checkin command to the queue, but users can change the mode of the views and override this protection. See *Running Commands in the Background* for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See *Selecting a User Level for Background Operations*.

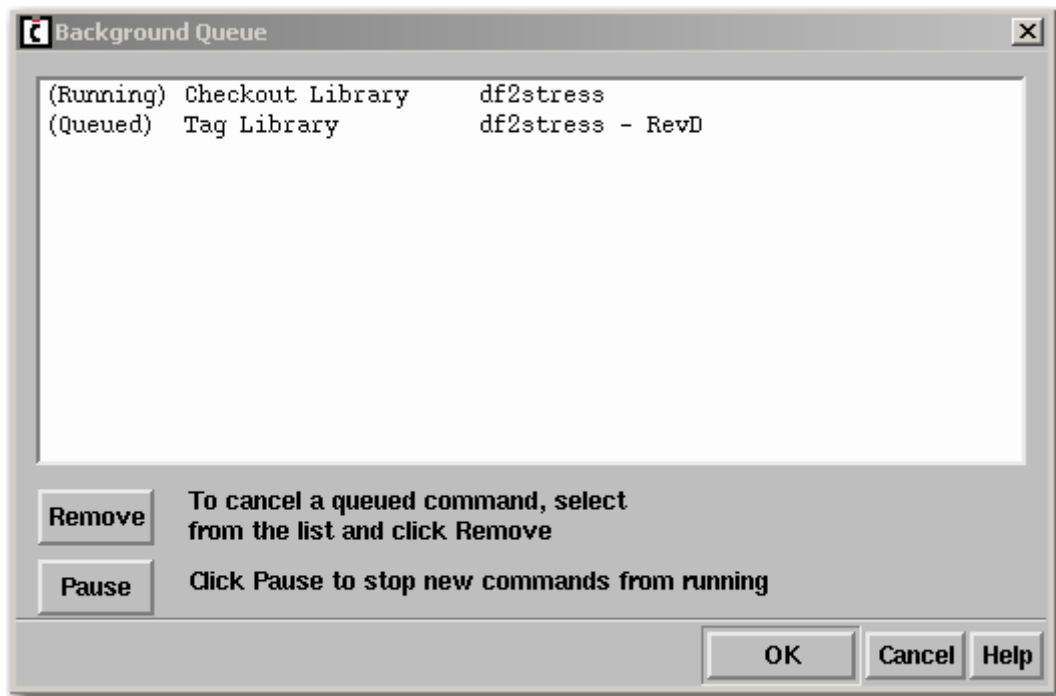
To use the Background Queue:

1. Select **Synchronicity => Options => Show Background Queue** from the CIW, or

Select **File => Show Background Queue** from the Status Browser.

The Background Queue form appears.

2. **Click on the fields in the following illustration for information.**



3. Select (left click) a command you want to pause or remove from the queue. To select multiple commands, use Control-left click, or to select a range of commands, use Shift-left click.
4. Select the **Remove** button to cancel the selected command or commands.



**Note:** You cannot remove the command that is currently running.

5. Select the **Pause** button to pause the queue.

Pausing the queue gives you an opportunity to cancel a command before it has a chance to begin. Once a command begins running, you cannot cancel it.

After you pause the queue, the **Pause** button changes to a button labeled **Continue**. To resume the queue, select the **Continue** button.

## Background Queue Field Descriptions

### Background Queue Display Region

This Background Queue Display Region displays the currently running operation denoted by the "(Running)" header. Following the current command, the Background Queue also shows each queued operation denoted by the "(Queued)" header. The Background Queue lists the command name for each operation, as well as the objects on which the command will operate. Background Queue Display Region refreshes dynamically as queued commands complete and new commands are added to the queue. In the Background Queue, DesignSync DFII SKILL commands are differentiated from graphical interface commands by the characters (API), which follow the command representation.

### Remove

Use the **Remove** button to cancel queued commands. Select the queued commands you want to remove, then select the **Remove** button to cancel them. You cannot remove the command that is currently running.

### Pause

Use the **Pause** button to pause the queue, thus preventing queued commands from starting. The **Pause** button affects only queued commands; the current command runs to completion.

The Pause button becomes the **Continue** button after you pause the queue. Select the **Continue** button to resume processing of the Background Queue.

### Command Buttons

Button	Description
OK	Closes the form.
Cancel	Closes the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current

form.

## Related Topics

Running Commands in the Background

Controlling When the Background Queue is Paused

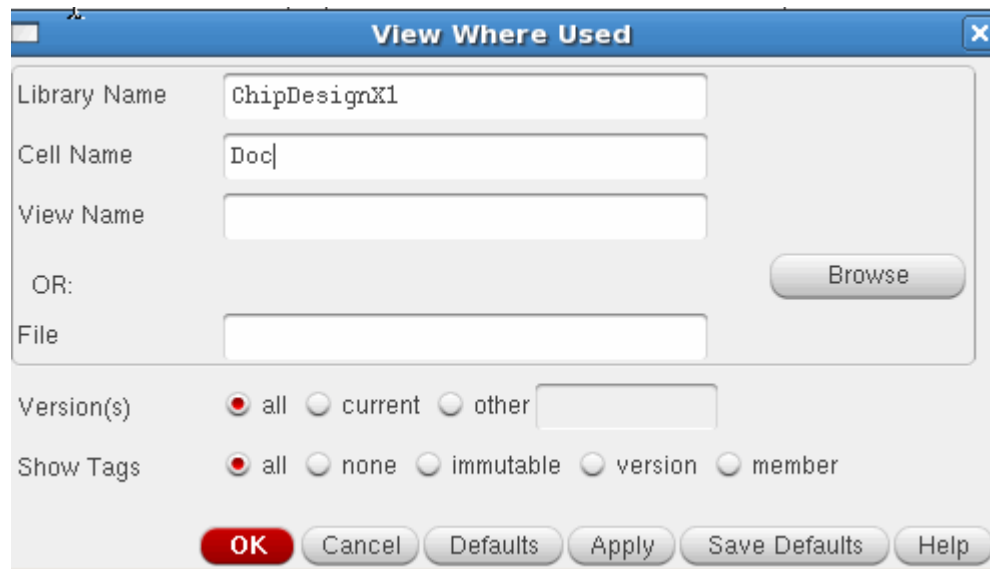
## View Where Used

The View Where Used report displays a list of modules versions containing the specified versions of a member. This allows you to easily identify which modules contain a particular referenced object version. This functionality is particularly useful when a defect is identified in a referenced object and you want to trace it and see what versions of the software contained that code.

### Running the Where Used command

**Synchronicity =>View Where Used...** opens the **Where Used** dialog box. Click **OK** to display the results.

Click on the fields in the following illustration for information.



### Library Name

Specify the name of the library containing the cell view or file being located..

Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select the cell view or file. The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want is not listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell containing the cell view or file being located. Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select a cell.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object on which to operate. The calling form is automatically updated with your selection.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### View Name

Specify the name of the view to use. Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select a view.

### File

Specify the name of the file to use. Use the **Browse** button, which invokes the DesignSync DFII Browser, to help you select the object.

You can specify an absolute path or a path relative to the current working directory. You can also use the **File** field in conjunction with the **Library Name** and **Cell Name** fields to specify an object relative to the specified library or cell directory.

### Version(s)

Specify which member versions to view:

- **all** - show whereused results for all member versions.
- **current** - show whereused results for the current member version populated in the workspace.
- **other** - a comma separated list of selected versions. This list is not validated prior to execution.

### Show tags

Specify a filter to control the information received using the radio buttons::

- **All** - Displays all module versions containing the member version and all tags associated with the module or member version. (Default)
- **None** - Displays all module versions containing the member version, but does not display tag information.
- **immutable** - Displays only module versions containing the member version that are tagged with an immutable tag and the name of the immutable tag.

**Note:** Using the **immutable** option may not display all versions in which an immutable tag is used. The where used command automatically filters the display from the starting point until it reaches the last immutable tag in a reference tree.

- **version** - Displays any tagged module version containing the member version and the name of the tag.
- **member** - Displays any module version containing the member version that has a member tag and the name of the tag.

#### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current value of <b>Member Vault/In Module context</b> as the default value for the field.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

#### Understanding the Where Used command output

The Where Used output is displayed in the results window..

From the results window, you can search the results or save the results to a file to review later.

When you're done reviewing the results, press **Close** to close the results window.

## Miscellaneous

### Adding Objects to Modules

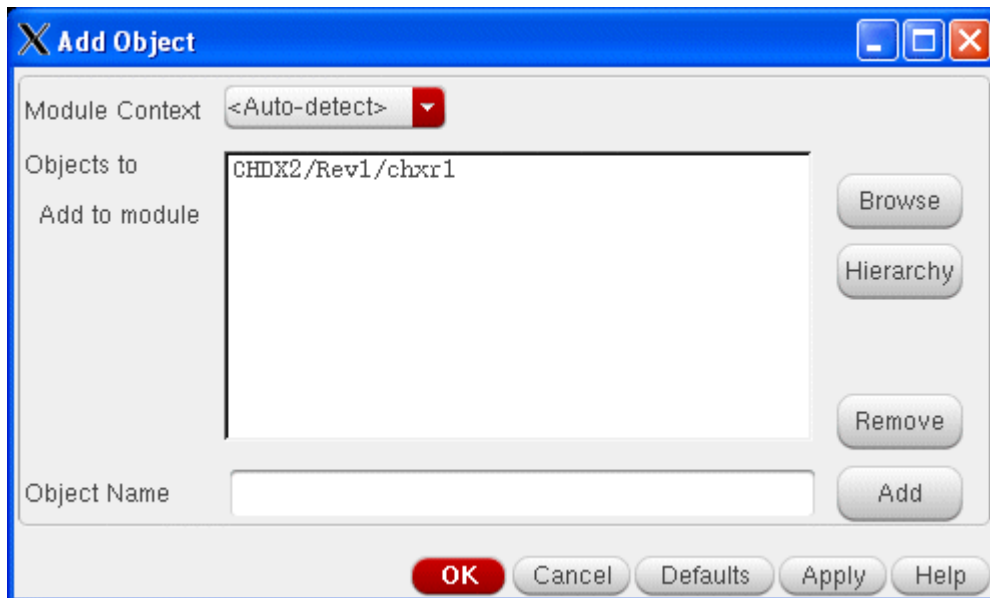
When you add a new object or library to a module, you can either perform a check in operation with the New option, or, use the Add To Module command to add the object to

the module in a separate operation. The locally added objects are checked into the module version created by your next checkin operation.

### To add objects to a module:

1. Select objects to add to the module.
2. Select **Synchronicity => Add To Module** from the CIW.
3. Modify the fields of the Add Object form as needed.

Click on the fields in the following illustration for information.



### Module Context

Module to which you are adding the objects. The module context only displays modules to which you can add the specified objects. The module context is displayed as an instance name. By default, the <Auto-detect> value is selected, which calculates the target module using smart module detection when the command runs. For more information on smart module detection, see the *ENOVIA Synchronicity DesignSync Data Manager User's Guide: Understanding Smart Module Detection*.

If the module doesn't appear on the drop-down list, select \*Refresh\* from the drop-down list to refresh the internal list of known candidate modules, and reevaluate the set of candidate modules. If the module doesn't appear in the list after a refresh, see Unable to Locate a Module.

### Objects to Add

Lists the objects to add to the specified module.

If you specified objects with wildcards, the individual matching objects are not listed individually. When you click **OK** or **Apply**, the list is passed to the underlying add routine, which then expands the wildcards.

To add objects to the **Objects to Add** list:

1. Enter the object name in the **Object Name** field.
2. Click **Add**.

- or -

1. Click **Browse** to invoke the DesignSync DFII Browser.
2. Select one or more objects in the browser.
3. Click **OK** or **Apply** from the browser.

To remove objects from the **Objects to Add** list:

1. Select one or more objects from the list.
2. Click **Remove**.

Note that when you select an object from the **Objects to Add** list and the **Object Name** field is either empty or contains a name that already appears in the list, then the selected object's name appears in **Object Name**. This behavior lets you easily add new objects to **Objects to Add** based on the name of a previously entered object.

### **Browse**

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You can browse your file system (directories and files) or library objects (libraries, categories, cells, and views). You select one or more objects as appropriate for the operation you are performing, then click **OK** or **Apply** to pass your selections to the calling form.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser.

### **Hierarchy**

Invokes the Select Cell View Hierarchy form, which helps you select the cell views that comprise a hierarchy. You provide the hierarchy parameters, then click **OK** or **Apply** to seed the calling form with the cell views that match your parameters.

See *Selecting Cell View Hierarchy* for a full description.

### **Object Name**

Specify the name of an object (file, directory, library, cell, or cell view) that you want to add to the module, then click **Add** to add the object to the **Objects to Add** list. Any

object that is entered in the **Object Name** field but not added to the **Objects to Add** list will not be added.

The **Object Name** field is cleared when you click **Add**. If you want to specify an object based on a previously entered object name, select the object from **Objects to Add**. If **Object Name** was empty or contained an object name that already appears in the **Objects to Add** list, then the selected object name appears in the **Object Name** field. You can then edit that name and click **Add**.

When you specify a directory, library, or cell name, the operation is run recursively on that object. For example, if you specify a directory, the full contents of the directory are added. The directory itself is not explicitly added to the module, meaning that if the directory becomes empty, it will automatically be removed from the module.

Duplicate values entered from **Object Name** appear in the **Objects to Add** field only once. However, the same objects specified using different paths (for example, `./cdsinfo.tag` and `cdsinfo.tag`) are not filtered and may result in the object being operated on multiple times.

### Using Wildcards

You may use glob-style (not regexp-style) wildcards in the **Object Name** field. Wildcards are useful when you want to operate on a large number of objects without specifying the name of each object. You can use the following special characters:

?	Matches any single character.
*	Matches zero or more characters.
[chars]	Matches any one of the characters in <code>chars</code> . <code>chars</code> may include a range of characters, such as <code>a-z</code> , which matches any character from "a" to "z".
\x	Matches "x". For example, <code>a\?b</code> matches only <code>a?b</code> ; the backslash (\) overrides the special meaning of "?" in glob patterns.
{str1,str2,...}	Matches any of the strings <code>str1</code> , <code>str2</code> , and so on. For example, <code>*.{dss,exe}</code> matches any file with an extension of <code>"dll"</code> or <code>"exe"</code> .

These wildcards are expanded within the workspace and libraries before the operation is performed. For example, you can specify `smallLib/*/symbol` to operate on the symbol views of all cells within the "smallLib" library.

Wildcard expressions may not work within the library part of a relative library name. The wildcard expression is expanded first against the current working directory, and then library matching is performed. For example, you have libraries "libA" and "libB" and specify the wildcard expression "lib\*". But your current directory has a file called

"libNotes.txt". The wildcard expression will match "libNotes.txt", not the "libA" and "libB" libraries.

#### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

An equivalent SKILL API function is available. For more information see DesignSync DFII SKILL Programming Interface Guide: `dssAddFileP`

#### Related Topics

Working with Modules

## Running DesignSync Commands with the Exec Stcl Interface

To provide complete access to the DesignSync command set, the Command Interface Window (CIW) features a Tcl command window. Using this command window, you can execute any DesignSync command from within the CIW.

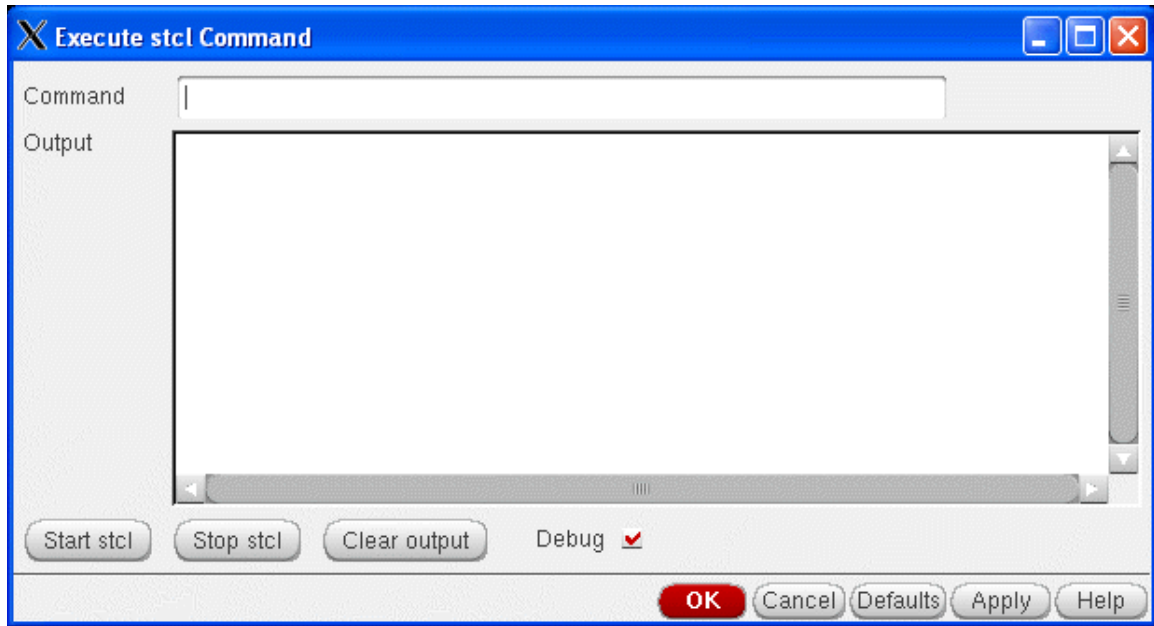
**Note:** Although this is functionally a concurrent stcl (stclc) interface, you must use the commands as they would appear in a script, since this dialog does not provide all the advantages of the stclc command-line interface.

To open the Stcl window:

1. Select **Synchronicity => Execute Stcl...** from the CIW.
2. Enter the command. The output is displayed in the window below the command.

**Click on the fields in the following illustration for information.**





3. Click **OK**, **Apply** or press the **RETURN** key to execute the command.
4. Click **Cancel** to close the window.

### Command

Enter the command to execute in the **Exec stcl** window. To run the command, press **OK**, **Apply**, or press the RETURN key.

### Output

Displays the command output. You cannot type in the output window.

### Start stcl

Starts the stcl process after it has been stopped with the Stop stcl button. The output window clears and displays the status of the stcl shell, "Started."

If you change the user environment, for example with SyncAdmin, you can reload the environment setting by using the **Stop stcl** button to stop the stcl process, and this button to restart it with the new settings.

### Stop stcl

Cancels the processing of the stcl command. This provides a debug option to allow you to stop the client process. When you stop the stcl process, the output window clears displays the status of the stcl shell, "Stopped."

If you change the user environment, for example with SyncAdmin, you can reload the environment settings by using this button to stop the stcl process and **Start stcl** to restart it with the new settings.

### Clear output

Clears the output window of all previous output.

### Debug

Controls the `dssEnableDebugP()` function that turns debug mode on or off. For more information see the DSDFII SKILL Programming Interface Guide: `dssEnableDebugP` function.

### Command Buttons

Button	Description
OK	Performs the operation without closing the form.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

DesignSync Data Manager DFII SKILL Programming Interface Guide: `dssExecuteTclP`

DSDFII SKILL Programming Interface Guide: `dssEnableDebugP`

## Unlocking Design Files

When you check out an object for editing, you lock the object in the vault. Only one person can lock an object (on a given branch) at a time. The lock is released when you check in your changes, or when you decide not to make changes and cancel your checkout. Only the lock owner can release the lock by checking in or canceling. There may be cases where you need to unlock an object but cannot do so by checking in or canceling:

- The lock is held by another person. For example, someone goes on vacation while still holding a lock on a cell view that you need to edit. Use caution when removing someone else's lock. Any edits made to the object in that user's workspace are not reflected in the vault. It is because of this risk that the unlock operation is commonly accessed controlled such that users can remove only their own locks.

- You hold the lock, but the object is no longer in your workspace. For example, you locked a file but then accidentally deleted it with UNIX `rm`.

To unlock design objects:

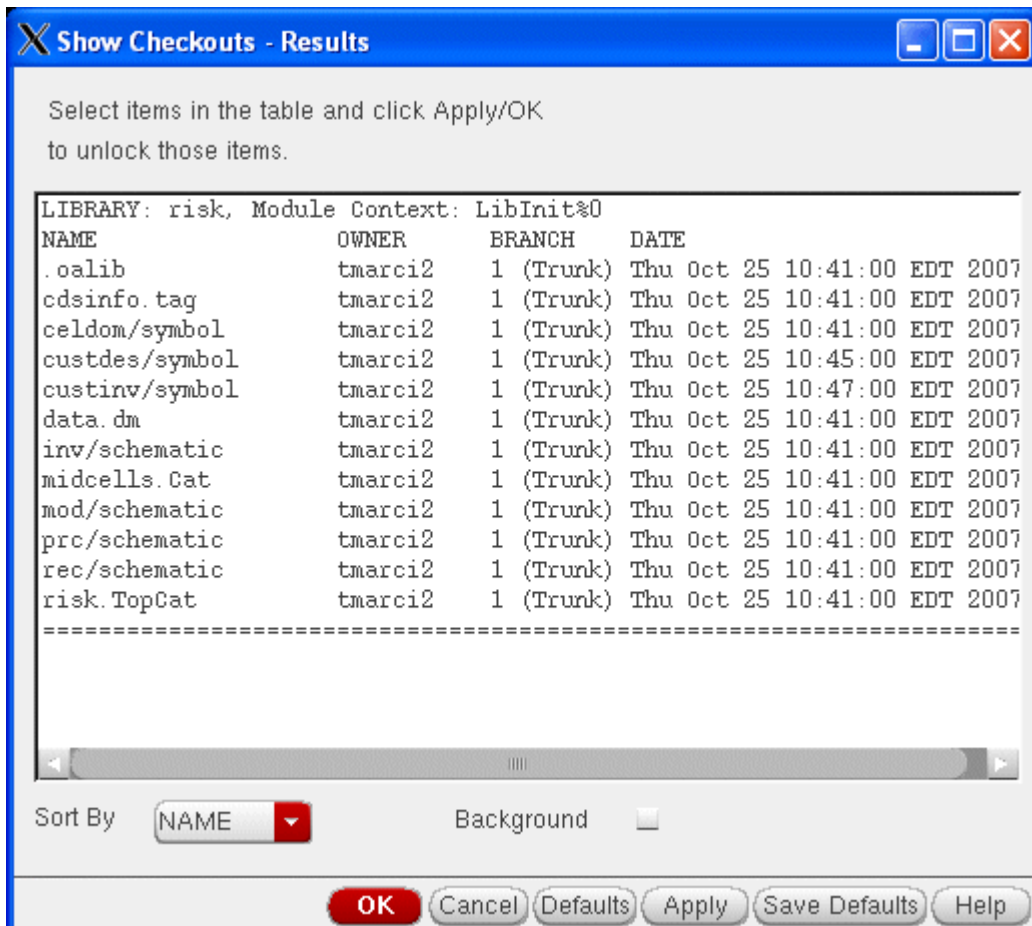
1. If necessary, enable the DesignSync DFII unlock interface and ensure that you are at an appropriate user level. See *Controlling When Unlock Is Available*.
2. Select **Synchronicity => Show Checkouts** from the CIW.

The initial Show Checkouts form appears.

3. Specify the library or directory for which you want to see locked objects, select **Show Checkouts In Vault**, and click **OK**.

The Show Checkouts - Results form appears if there is at least one locked object in the selected library or directory. The form lists all checked-out objects (locked by any user).

4. Select one or more objects to unlock.
5. **Click on the fields in the following illustration for information.**



6. Click **OK**.

If you have selected one or more objects to unlock, a confirmation box appears. When you click **Yes**, the selected objects are unlocked.

**Note:**

- If you have a locked object in your workspace, you should cancel your checkout instead of unlocking. However, if you do use unlock, the lock is removed and the local object remains unchanged: any local modifications are retained just as if you had canceled the checkout with **Read (local copy)** mode.
- When you have a locked object in your workspace and someone removes your lock, you should cancel your checkout (even though you no longer hold the lock) to update your local metadata.

## Show Checkouts - Results Field Descriptions

### Object List

The list of locked objects (cell views and files) in the library or directory you specified.

An object may have more than one branch of development, each of which can be locked independently. The list reports the branch that is locked (the branch number and any branch tags), the lock owner, and the date of the checkout.

Select (left click) the object you want to unlock. To select multiple objects, use Control-left click, or to select a range of libraries, use Shift-left click.

### Sort By

Specify how you want the list of locked objects sorted. Choices are:

- **NAME** -- The object name.
- **OWNER** -- The user who checked out the object (the lock owner).
- **BRANCH** -- The branch name. Note that a branch can have any number of names (tags).
- **DATE** -- The date and time when the object was checked out.

### Background

Select this option to unlock design files as a background process. Select **Synchronicity => Options => Show Background Queue** to view the commands currently running in the background. Use the Show Background Queue form to pause or remove commands from the queue.

### Important:

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. See [Running Commands in the Background](#) for a description of how foreground and background commands interact.

Due to the potential interactions between foreground and background operations, administrators can change the user level at which users can run commands in the background. See [Selecting a User Level for Background Operations](#).

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See <a href="#">Setting Form Default Values</a> for details.
Apply	Unlocks the selected objects and updates the list of locked objects.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See <a href="#">Setting Form Default Values</a> for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

[Canceling a Checkout](#)  
[Controlling When Unlock Is Available](#)

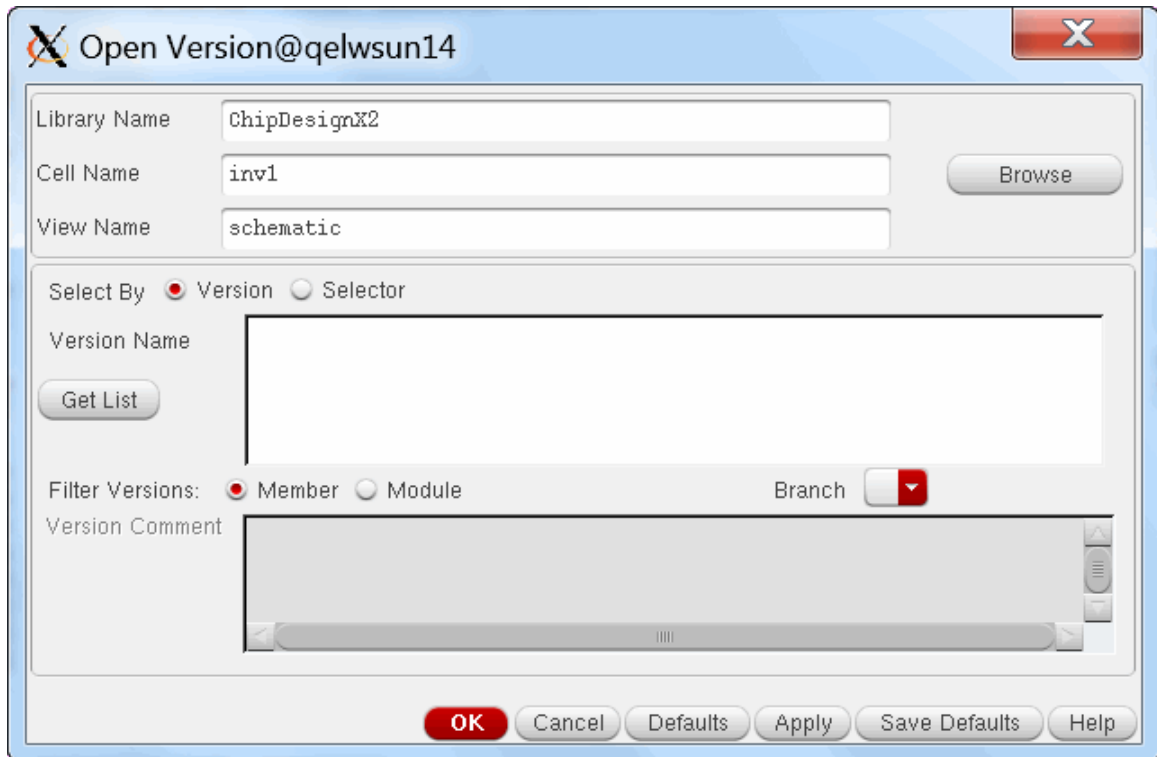
## Opening Cell View Versions

You can display cell view versions other than the version in your workspace. For example, you might want to compare two or more versions of the same cell view.

To open a cell view version:

1. Select **Synchronicity => Open View Version** from the CIW or a cell view window.
2. Modify the fields of the View Version form as needed.

**Click on the fields in the following illustration for information.**



3. After you have selected your **Open Version** options, Click **OK**.
4. You will see informational messages in the CIW as a local copy of the requested cell view version is created and opened.

DesignSync DFII creates a temporary, unmanaged copy of the specified version in your workspace. The name of the temporary cell view is <view>\_v<version>, where <view> is the name of the cell view, and <version> is the version number. For example, opening version 1.3 of cell view "layout" creates a temporary cell view called "layout\_v1.3". When you use the **Selector** field to specify a version, the version number corresponding to the specified selector is used in the name of the temporary cell view. For example, if you specify "gold", and version 1.2 of the cell view is tagged "gold", then the temporary cell view is called "layout\_v1.2".

#### Notes:

- If the temporary cell view has hierarchy, the contained instances within the cell view reference the version in your workspace, not necessarily the version of the temporary cell view.
- If your workspace contains an unedited temporary cell view and you attempt to open the same cell view version again, DesignSync DFII prompts you to either save a copy of the cell view version or to open the version already existing in your workspace. The prompt indicates the fetched state of the temporary version.

- Temporary cell views remain in your workspace after you close the cell view window. This caching of temporary cell views makes opening the cell views later a faster operation. To delete temporary cell views from your workspace, use **Synchronicity => Delete => Temporary Views**.
- The DesignSync DFII Open Version form is simpler than Library Manager's Copy Cellview Version form. If you need additional control over the copy operation, such as choosing the name of the temporary cell view, use Library Manager.
- When the cell being viewed is part of a module, the Version Name pick list lists all versions of the module. It is not restricted to only module versions containing the cell. If you select a module version that does not contain the specified cell, DesignSync returns an error stating the member version could not be found.

### Open Version Field Descriptions

#### Library Name

Specify the name of the library containing the cell view you want to open.

Use the Browse button, which invokes the Library Browser, to help you select the library, cell, and cell view. The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want is not listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Cell Name

Specify the name of the cell containing the cell view you want to open. Use the Browse button, which invokes the Library Browser, to help you select a cell.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select a cell view. You can also browse the vault associated with the library so that you can select a cell view not currently in your workspace.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see [Selecting a Library Browser](#).

#### View Name

Specify the name of the cell view you want to open. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

#### Select by

Allows you to specify whether you select by:

- version
- selector

After you select your choice, you can enter or choose the version name or selector for the operation.

### Version

The Version field opens with an option to "Get List." Clicking on this, browses the vault for a list of versions. By default, you receive a warning that fetching a version list may take some time. You will have the option to continue or cancel and manually enter the version number, enter the version number, tag, or other selector by switching to Selector and using the **Fetch Selector** field.



To always browse, and never prompt for confirmation, select **Do not show me this again**, before selecting OK to confirm your selection.

### Notes:

- When the cell view is contained in a module, the Version Name field lists all module versions. If the cell view does not appear in the selected module, DesignSync returns an appropriate error.
- Module version tags always resolve to the module version tagged. Individual module members cannot be tagged.

### Filter by



Select from a series of optional filters to restrict the views shown in the View Name list box.

- **Version Member/Module** - Determines whether to show the version numbers as module member versions for a selected module member or module versions.
- **Tagged only** - filter the results to show only tagged versions. By default this is selected.
- **Branch** -Filter the results to only show matching versions from a specific branch available from the pull-down list.

### Fetch Selector

Specify the selector or comma separated selectors, such as a version tag, that is used by DesignSync DFII to determine what cell-view version to display. For example, specify "gold" to view the cell view version that is tagged "gold". Use the pull-downs below the selector to view and filter the selectors.

**IMPORTANT:** If a module or module member is selected and a numeric selector is entered in the Fetch Selector field, the numeric version always refers to the module version, not the member version.

You can use the Predefined tag, Module Tag, or Module Member Tag fields to show you what tags exist for the object. If you select Module Member Tag, you also have the option to select whether to populate the tagged objects in addition to the persistent selector or populate with the tagged version instead of the persistent selector. For more information on added versions, see Module Member Tags.

The Predefined tags field shows Tag lists and configurations:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.
- A hyphen separator separates the list (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.

**Notes:**

- **\*Refresh\*** updates the pull-down list the specified object. Regenerating the list of objects requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.
- If you do not enter a selector or version, the operation uses the default persistent selector for the workspace..
- Specify a version tag to check out the version with the specified tag.
- Specify a branch tag to check out the latest version from that branch.
- Module and Member tag selectors and the Add option are only available when the library is part of a module.

**Version Comments**

Displays the check-in comment for the selected version.

**Command Buttons**

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

**Related Topics**

Deleting Temporary Cell Views  
Checking Out Design Files

**Selecting Cell View Hierarchy**

The DesignSync DFII hierarchy operations (for example, **Synchronicity => Checkout => Hierarchy**) provide simple interfaces for when you can exactly specify the cell view hierarchy and you want to ensure the entire hierarchy is operated on. However, if you

need the flexibility of the DesignSync DFII general-purpose file operations (for example, **Synchronicity => Checkout => File**), you can still easily specify hierarchies.

To specify a cell view hierarchy from a file operation:

1. Invoke one of the file operations from the CIW:

**Synchronicity => Checkin => File**  
**Synchronicity => Checkout => File**  
**Synchronicity => Cancel => File**  
**Synchronicity => Tag => File**

2. Click the **Hierarchy** button on the resulting form.

The Select Cell View Hierarchy form appears.

3. Modify the fields of the Select Cell View Hierarchy form as needed.

**Click on the fields in the following illustration for information.**

Cancel Cell View Hierarchy Checkouts@qelws...

Top Level Cell Views

Library Name

Cell Name  Browse

View Names

Hierarchy Specification

Switch Using  First In Switch List  All In Switch List  
 Instantiated View  All Views

Switch List

Stop List

Switch Libraries  All  Only Into  Not Into  
Names

Process Views  Switch View  All Switch List  
 All Views  Other  
Names

Process Files  None  Cell Only  Cell And Library

List Cell Views

OK Cancel Defaults Apply Save Defaults Help

4. Click **OK**.

The hierarchy of cell views that match your specification are listed in the calling form. If you are satisfied with the list, you can click **OK** to start the operation. Or, you can selectively add or remove objects from the list. Or, you can again click **Hierarchy** to change your hierarchy specification.

To identify the cells in a design hierarchy, DesignSync DFII scans the hierarchy, beginning with the top-level cell view you specify. The information you enter in the **Switch List** field and, optionally, the **Stop List** field determines how DesignSync DFII descends the hierarchy and where it stops scanning.

During the scan, DesignSync DFII opens the cell views and gathers information on each cell referenced in a cell view. For each cell gathered, DesignSync DFII records the library name and the cell name and then identifies the first view for that cell in the **Switch List** (unless the cell is in a library filtered by the **Switch Libraries** field). If that cell view is not in the **Stop List**, DesignSync DFII opens the cell view and descends that hierarchy.

### Notes:

- For DesignSync DFII to scan the hierarchy, the cells must be in your local workspace.
- DesignSync DFII does not scan through libraries that have been filtered out in the **Switch Libraries** field. For example, suppose a cell in **library\_1** references a cell in **library\_2**, which references a cell in **library\_3**. If **library\_2** is filtered out by the **Switch Libraries** field, the cell in **library\_3** is not found.

### Select Cell View Hierarchy Field Descriptions

#### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library, cell, and cell view. The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want is not listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

#### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see [Selecting a Library Browser](#).

#### View Name

Specify the name of the view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

## Switch Using

The **Switch Using** field lets you specify how the design hierarchy is to be traversed. You can choose one of the following:

- **First in Switch List** -- As the design is traversed, DesignSync DFII descends into the first view specified in the switch list that exists for a cell. Specify the switch list using the **Switch List** field.
- **Instantiated View** -- As the design is traversed, DesignSync DFII descends into each instantiated view. The **Switch List** field is greyed-out and ignored in this case. Descending into all instantiated views is useful for traversing a hierarchy with layout-type views in cases where the design team has used multiple view names to indicate the layout views.
- **All in Switch List** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that matches a view in the switch list. Specify the switch list using the **Switch List** field.

Descending into all views in the switch list is useful when you have a well-defined set of views and you need to process multiple hierarchies. For example, you might have a layout hierarchy and a schematic hierarchy that are not the same, and you want to process both. If you do not select the **All in Switch List** field, this scan requires multiple passes through the command.

- **All Views** -- As the design is traversed, DesignSync DFII descends into each view of the cell in the workspace that exists for each cell. The **Switch List** field is greyed-out and ignored in this case.

Descending into all views is useful when the command must traverse all paths through the hierarchy. In this case, DesignSync DFII might scan some unnecessary cells instantiated by obsolete views.

## Switch List

Specify the names of views that should be scanned to identify the design hierarchy. View names should be separated by spaces. As the design is traversed, the first view in this list that exists for a cell is opened to progress down the hierarchy.

This field is required.

## Stop List

Specify the names of views at which the hierarchy scanning should stop. View names should be separated by spaces. As the design is traversed, if the **Switch List** view that is opened for a cell is also in this list, then scanning stops at that point.

This field is optional.

### Switch Libraries

The options in this field control which libraries may be entered as the hierarchy is scanned. You can choose one of the following:

- **All** -- All libraries may be entered.
- **Only Into** -- Only the libraries specified in the following **Names** field may be entered.
- **Not Into** -- All libraries except those specified in the **Names** field may be entered.

### Switch Libraries Names

Specify a list of library names, separated by spaces, for use by the **Switch Libraries** field. This field is not active if **All** is selected in the **Switch Libraries** field.

### Process Views

Once you have identified the hierarchy using the **Switch List** and **Stop List** fields, these options control which views of the identified cells are processed. You can choose one of the following:

- **Switch View** -- Only the single view that was switched into is processed.
- **All Switch List** -- All the views specified in the **Switch List** that exist for the cell are processed.
- **All Views** -- All views that exist for the cell are processed.
- **Other** -- All the views specified in the following **Names** field that exist for the cell are processed.

### Process Views Names

Specify a list of views, separated by spaces, for use by the **Process Views** field. This field is active only when the **Other** option is selected in the **Process Views** field.

### Process Files

This option controls whether cell- and library-level files are processed in addition to the specified cell views. You can choose one of the following:

- **None** -- No cell- or library-level files are processed.
- **Cell Only** -- Cell-level files are processed, but library-level files are not. This option selects only cell-level files for those cells on which you are operating.
- **Cell And Library** -- Cell- and library-level files are processed.

### List Cell Views

Displays the list of views that can be processed by the operation, as defined by the **Top Level Cell View** and **Hierarchy Specification** settings that you specified on the form.

By default, only the single view that was switched into is processed, not all views. You can change this behavior by changing the setting of the **Process Views** field.

See Listing Selected Cell Views for Hierarchy Operations for more information.

### Command Buttons

Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Related Topics

- Checking In a File
- Checkout Out a File
- Canceling a File Check Out
- Tagging a File
- Listing Selected Cell Views for Hierarchy Operations

## Compare Cell Views

You can compare cell views to determine what the differences between the views are, and, if desired, merge differences into the second cell. For example, you might want to compare versions of the same cell view. Using the Compare Cell Views command, you can use the DFII hilite feature to show the differences in any open views or open the views being compared.

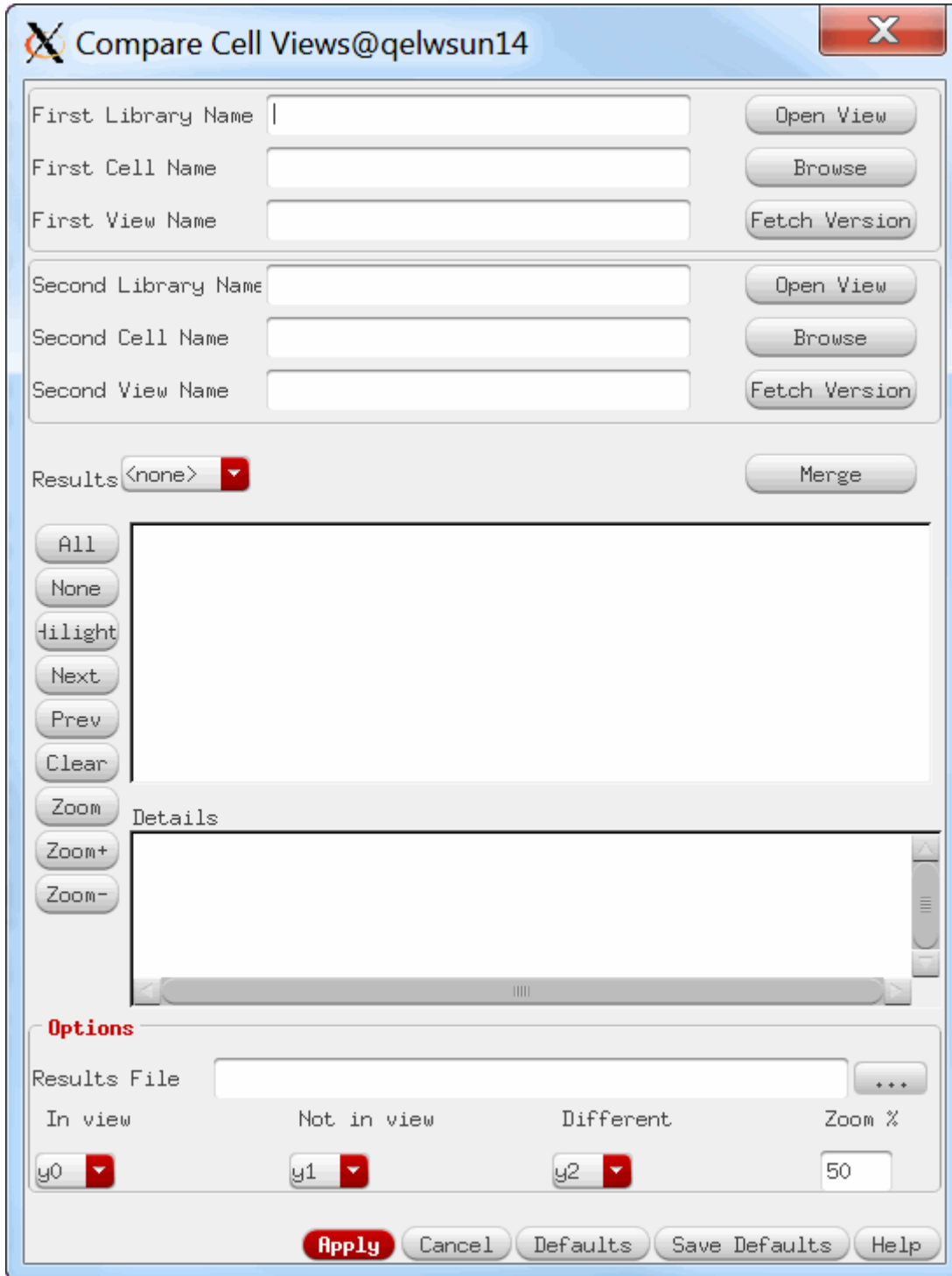
To compare cell views:

1. Select **Synchronicity => Compare Views** from the CIW or a cell view window.
2. Modify the fields of the Compare Views form as needed.



Note that highlighting cannot work with text views, because the database version of the view does not contain the instances.

Click on the fields in the following illustration for information.



**First Library Name**

Specify the library name of the first view on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the first library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### **First Cell Name**

Specify the cell name of the first view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell for the first view.

#### **First View Name**

Specify the view name of the first view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select the first view.

#### **Second Library Name**

Specify the library name of the second view on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the second library (and cells and cell views if applicable to the operation). The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want isn't listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

#### **Second Cell Name**

Specify the cell name of the second view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell for the second view.

#### **View Name**

Specify the view name of the second view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

#### **Open View**

Opens the view in read mode. The view always opens in a new window, even if the view is already open in an existing window.

#### **Browse**

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See *Browsing Your Workspace* for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see *Selecting a Library Browser*.

### **Fetch Version:**

Opens the Open View Version form and initializes it to the specified library, cell, and view field values. If the Open View Version form is applied, and it runs cleanly, then the view is fetched, if needed, and opened. The view information is displayed in the Compare form. This allows the user to compare difference versions of the view even if the view was not already in the workspace.

### **Merge**

Merges the selected difference in the results panel into the second view. The second view must be editable before the comparison operation is run in order to merge changes into the view. When the merge operation is run, all highlights are removed and Results box is updated.

Some changes cannot be merged. In order to see if a change should be able to be merged into the second view, select the change and press the Details button. If an unmergeable change is selected when the Merge button is pressed, the user receives an error explaining why the selected change can't be merged. Any other selected changes do merge.

For more information on merge changes, see *Understanding Merging*.

By default, this action requires a user confirmation to proceed, although the confirmation request can be disabled.

### **Results**

This drop-down list initially shows just <none>, since there are no results to display. After running the comparison by pressing the **Apply** button, the box displays the different ways in which the results can be seen in the string-list field immediately below it. The results can be seen as:

- **Summary Report** shows the summary output of the command, which indicates how many objects and shapes were found that were only present in one view or the other, and how many were present in both but were different. (Default)
- **Full Report** shows the full list of every shape and object present in either only one view or was different, and, if different, describes the differences.

- Logical items are only the logical object type; **Instances**, **Nets**, and **Terminals** by default, on which there were differences found. Selecting an object type shows the list of those objects present in either only one view or different between the two views, and, if different, describes the differences.
- - Layer/Purpose Pairs (LPPs) lists each LPP on which there were differences found. Selecting any LPP shows the list of shapes on that LPP that were either present in only one view or which were different and, if different, describes the differences.

**Details**

Specific details about the difference selected in the Results text box.

**All**

Selects all lines in the Results text box.

**None**

Deselects any selected lines in the Results text box.

**Hilight**

Highlights the selected differences from the Results text box in every open window displaying the view.

**Note:** When the view is displaying the Summary Report, this will highlight all the changes included in each line.

**Next**

Selects the next item in the Results text box. If there are any highlights displayed for open views, they are cleared and the appropriate highlights for the newly selected line in the Results text box are displayed.

**Previous**

Selects the previous item in the Results text box. If there are any highlights displayed for open views, they are cleared and the appropriate highlights for the newly selected line in the Results text box are displayed.

**Clear**

Removes any highlights that were displayed in any open views.

**Zoom**

Adjusts the focus of the open view windows to include all highlighted objects. This means the window might either zoom in or out depending on what objects are highlighted. After the view has been adjusted to focus on the highlighted objects, the window zooms to the percentage specified in Zoom % to show some context around the highlighted objects.

### **Zoom +**

Zooms in the defined Zoom % in the open view windows containing highlighted elements.

### **Zoom -**

Zooms out the defined Zoom % in the open view windows containing highlighted elements.

### **Results File**

Specify the name of a file in which to save the full details of every change found on all objects. If the results file name is specified after the compare is run, you will need to run the compare again in order to save the results into the newly specified file.

**Note:** All releases after Cadence 6.1 allow you to select the ... (browse) to select a directory or file to save the results into.

### **In view**

Select the layer to be used for highlighting the objects which are present in the active view but not in the other view. Each layer must have the drawing purpose defined, as that is needed by the highlighting system. By default, the layers y0 to y9 are listed, but the users can modify this list through the Controlling Number of Hilite Layers for the Compare Command option. This field initially shows the layer names when the form is first displayed, but when the **Apply** button is pressed the field is updated to show the LPP so that the user can see the color used for this hilight. This field will default to the first of the set of hilight layers defined.

### **Not in view**

Select the set of layers to be used for highlighting the objects which are not present in the view being looked at, but are present in the other view. Each layer must have a drawing purpose defined, as that is needed by the highlighting system. By default, the layers y0 to y9 are listed, but the users can modify this list through the Controlling Number of Hilite Layers for the Compare Command option. This field initially shows the layer names when the form is first displayed, but when the **Apply** button is pressed the field is updated to show the LPP so that the user can see the color used for this hilight. This field will default to the first of the set of hilight layers defined.

### Different

Select the set of layers to be used for highlighting the objects which are present in both views, but differ. Each layer must have a drawing purpose defined, as that is needed by the highlighting system. By default, the layers y0 to y9 are listed, but the users can modify this list through the Controlling Number of Hilite Layers for the Compare Command option. This field initially shows the layer names when the form is first displayed, but when the **Apply** button is pressed the field is updated to show the LPP so that the user can see the color used for this hilight. This field will default to the first of the set of hilight layers defined.

### Zoom %

Specify the percentage used when zooming. When first zooming to a set of highlighted objects, this is the amount of space around the objects that is shown. When using Zoom+/Zoom- this defines the percentage the window is zoomed.

### Command Buttons

Button	Description
Cancel	Closes the form and clears all hilights.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

### Understanding Merging

There are three basic types of merge conditions:

- Added - The selected change exists in the first view, but not the second and is ADDED to the second view during the merge.
- Removed - The selected change exists in the second view, but not in the first view and is REMOVED from the second view during the merge.
- Changed - The selected change exists in both places, but is not the same. The version in the second view is changed to match the first view.

When multiple changes are selected for merge, they are grouped by type of merge and performed in groups in the following order: removed, added, changed.

Within each group of changes the following operations are performed:

**Note:** During processing of the added objects, instance, net, and terminal objects are created first, in that order. This insures that objects with dependencies are created after the objects on which they depend. All other Add operations, and Remove and Change operations are performed in the order they appear in the results table.

Object Type	Add	Remove	Change
instance	Creates instance, copies properties including position.	Removes object and associated properties.	Updates any properties added, removed, or with different value on the object in the second view as appropriate. <b>Note:</b> The instance name is one of the properties that can be changed by merge.
net	Creates net, copies properties, and connects to terminals where possible. Any instTerms needed are created to attach to any existing, equivalent instances in the second cellview.	Deletes the net as well as associated pins, figures, instTerms and properties.	Updates any properties added, removed, or with different values on the object in the second view as appropriate.
terminal	Creates terminal, attaches to net, creates associated pins and figures, copies properties.	Removes terminal, associated pins, and properties.	Updates any properties added, removed, or with different values on the object in the second view as appropriate.

	<b>Note:</b> If there's no appropriate net to add the terminal to, the terminal is not created.		
path	Creates path on same LPP with same points and copies the properties to the new path object.	Removes object and associated properties.	Updates any properties added, removed, or with different values on the object in the second view as appropriate.
line	Creates line on same LPP with same points and copies the properties to the new path object.	Removes object and associated properties.	Updates any properties added, removed, or with different values on the object in the second view as appropriate.
label	Creates label on same LPP with same text and transform (position etc.) and copies the properties to the new path object.	Removes object and associated properties.	Updates any properties added, removed, or with different values on the object in the second view as appropriate.
rect, polygon, arc, ellipse, donut, dot, textDisplay, pathseg, and any other shapes.	Creates shape type on same LPP with same points and copies the properties to the new path object. If the shape in the first cellview is attached to a net, the merge will attempt to attach the	Removes object and associated properties.	Updates any properties added, removed, or with different values on the object in the second view as appropriate.



	shape to the same net in second cellview. <b>Note:</b> “textDisplay” and pathseg shapes cannot be added.		
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The merge handling can be customized in a number of different ways.

If you want to change the default order in which object types are processed to something other than the table above describes, you can change the processing order by customizing the `syncAddObjectTypes` SKILL variable. For more information on customizing the SKILL variables, see *Using SKILL Variables*.

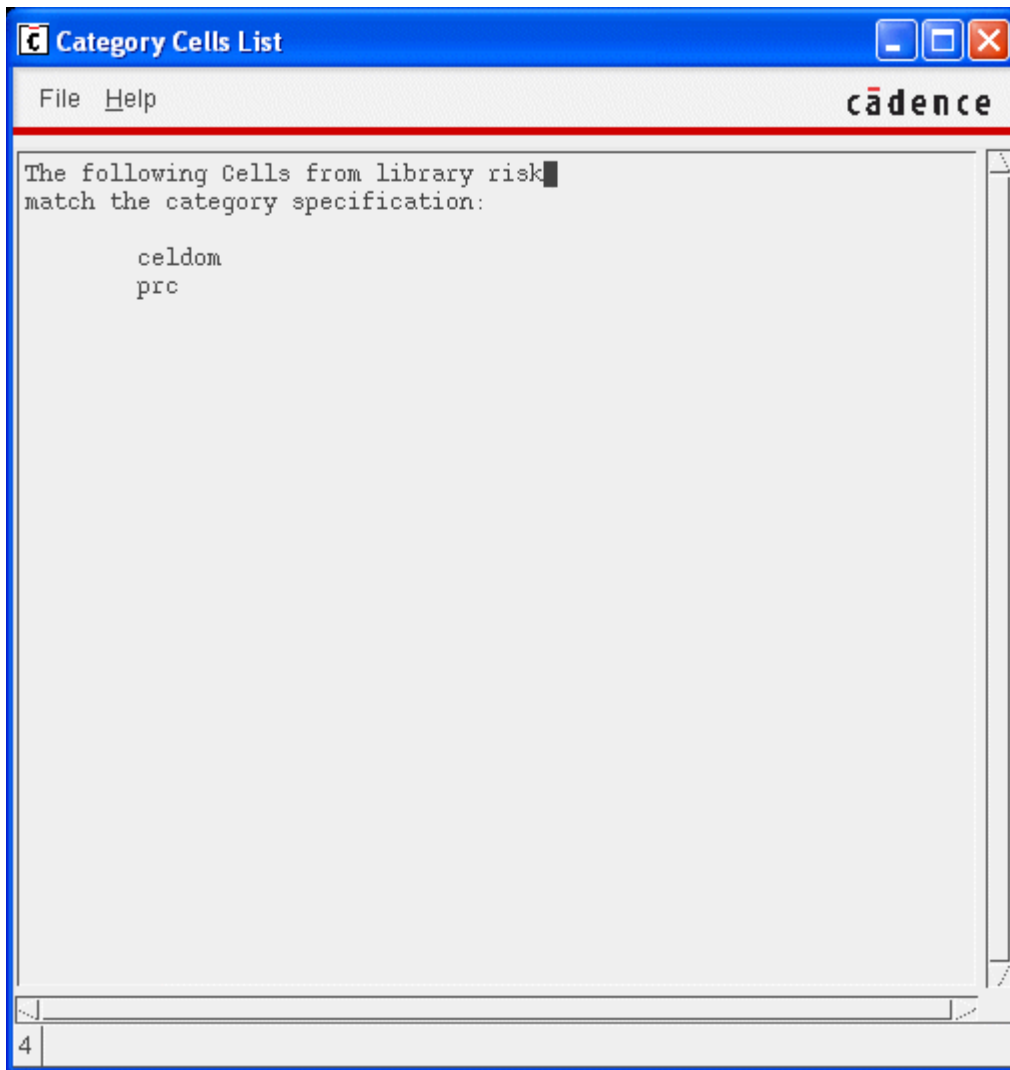
You can also customize what merge processing means on a per object type basis using the compare APIs to call your own merge processing routines. For more information, see *DesignSync Data Manager DFII SKILL Programming Interface Guide*: `dssCompareViewsListHandlersP`.

## Listing Selected Cells for Category Operations

When performing category operations using Synchronicity Category forms, you can specify multiple categories and optionally descend into nested categories. Your specification may match many cells. Before executing the operation, you can confirm which cells match your specification.

To list the cells that match your category specification, click **List Cells** in the Category form.

A text window displays all of the cells that match your selection. If you specified particular cell views, that information is listed in the display window as well. For example:



## Related Topics

- Canceling a Category Check Out
- Checking In a Category
- Checking Out a Category
- Deleting Categories
- Tagging a Category

## Rollback Cell Views

If changes are made and checked in that are not appropriate or correct, you can "rollback" the cell view to the last good version. All versions between the rollback versions are retained in the server vault. Rollback functions in one of two different ways, depending on your methodology. You can specify which methodology to use for all rollback operations in the Expert tab of the Options form.

### Notes:

- The DSDFII Rollback functionality is entirely independent of the DesignSync rollback of modules functionality and is not subject to the Rollback access control for Modules.
- You can rollback a cell view version to any previous cell view version, even a version from a different branch.

### Skip Methodology

The skip methodology checks in the rollback version by skipping the current version. This best preserves the history of the View Version. To use the skip method, you must have the Use skip mode to Rollback a Cell View version option selected on the Advanced Options page. (Default)

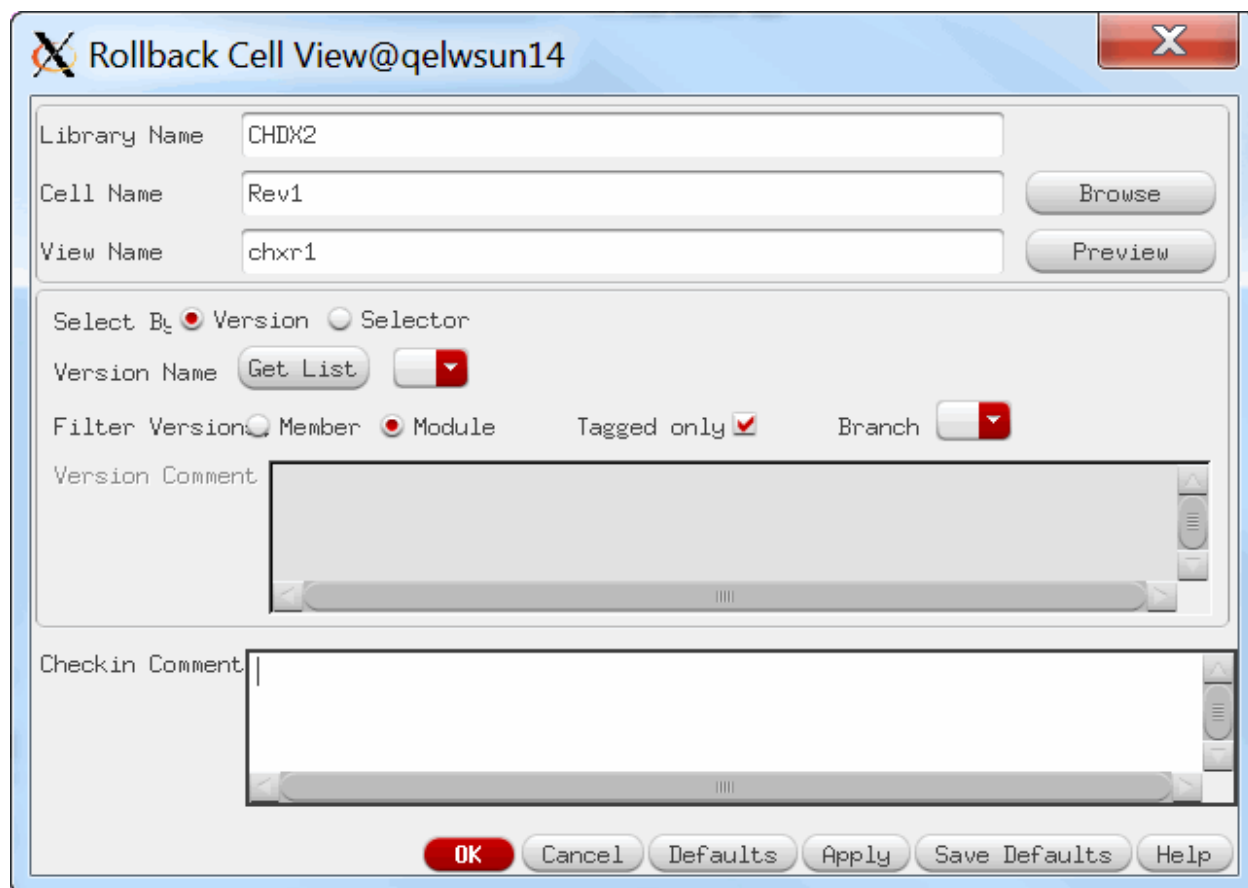
The skip method uses a sequence of commands that effectively functions as if you had populated the desired rollback version in get mode, and checked it into the system using the force and skip options to check that version as the latest version on the branch populated into the workspace.

### Lock Methodology

The lock methodology, locks the Cell View and overlays the rollback version on top of the existing workspace version, then performs the checkin as the latest version. This is appropriate for a working methodology where skip is restricted or the user base works exclusively with locked checkouts. The lock method does not allow for the same level of traceability as the skip method, however the rollback comment will be present on the new version, and it will be possible to recreate the history of the Cell View. To use the lock method, you must have the Use skip mode to Rollback a Cell View version option deselected on the Advanced Options page.

The lock method locks the Cell View, performs a populate in get mode to bring the desired version into the workspace replacing the view contents currently in the workspace, then checks in the workspace version as the latest version on the branch populated into the workspace.

**Click on the fields in the following illustration for information.**



## Rollback Field Descriptions

### Library Name

Specify the name of the library on which you want to operate.

Use the **Browse** button, which invokes the Library Browser, to help you select the library, cell, and cell view. The Library Browser displays the libraries that are defined in your `cds.lib` file. If the library you want is not listed in the Library Browser, you must add the library to your `cds.lib` file using the Cadence Library Path Editor tool.

### Cell Name

Specify the name of the cell on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a cell.

### Browse

Invokes the DesignSync DFII Browser, which helps you select the object or objects on which to operate. You select one or more objects from the browser as appropriate for the operation you are performing. The calling form is automatically updated with your selections.

See [Browsing Your Workspace](#) for a full description of the DesignSync DFII Browser. You can also choose to use the Cadence Library Browser instead of the DesignSync DFII Browser; see [Selecting a Library Browser](#).

### View Name

Specify the name of the view on which you want to operate. Use the **Browse** button, which invokes the Library Browser, to help you select a view.

### Preview

Fetch the requested version of the cell view as a temporary view. This allows the user to verify the correct rollback version.

This operation creates a temporary view that persists even after the rollback operation has completed. For information on cleaning up temporary views, see [Deleting Temporary Cell Views](#).

### Select by

Allows you to specify whether you select by:

- version
- selector

After you select your choice, you can enter or choose the version name or selector for the rollback operation.

### Version Name

Click Get List to populate the pull-down list with a list of applicable versions for the object. To filter the objects displayed in the field, use the Filter fields to control what is displayed in the list.

### Filter by

Select from a series of optional filters to restrict the views shown in the View Name pull-down.

- **Version Member/Module** - Determines whether to show the version numbers as module member versions for a selected module member or module versions.
- **Tagged only** - filter the results to show only tagged versions. By default this is selected.
- **Branch** -Filter the results to only show matching versions from a specific branch available from the pull-down list.

### Behavior when Multiple Branches Exist

When a cell view has more than one branch, the following additional items are available when you select **Get List**:

- **ALL** -- By default, only versions on the current branch are displayed. When you select **ALL**, the version list is updated with all versions from all branches, and the selected version is **Latest**. You can then click **Version Name** again to select a different version.
- **Current Branch** -- Refers to the branch of the cell view currently in your workspace.
- Branch tags -- All the branch tags for the cell view are listed in the Branch pulldown. When you select a branch tag, the version list is updated to contain the versions for that branch. The **Version Name** value remains set as the selected branch tag, which means that the latest version on that branch will be checked out. You can then click **Version Name** again to select a different version.

### Fetch Selector

Specify the selector used to identify the rollback version. Use the pull-downs below the selector to view the view the tags available for the object.

**IMPORTANT:** If a module or module member is selected and a numeric selector is entered in the Fetch Selector field, the numeric version always refers to the module version, not the member version.

You can use the Predefined tag, Module Tag, or Module Member Tag fields to show you what tags exist for the object. If you select Module Member Tag, you also have the option to select whether to populate the tagged objects in addition to the persistent selector or populate with the tagged version instead of the persistent selector. For more information on added versions, see Module Member Tags.

The Predefined tag field shows Tag lists and configurations:

- **\*Tag List\*** when the tag list contains one or more items that you can select to seed the **Selector** field, or **\*No Tags Defined\*** when the tag list is empty. These items serve as labels for the choice list and cannot themselves be selected.
- A list of tags from which to select. When you select a tag from the choice list, it appears in the **Selector** field. Note that items in the tag list may have characters that are invalid for the **Selector** field; valid-character checking is performed when you **Apply** or **OK** the form.
- A list of ProjectSync-defined configurations for the specified library. Items have the format `config (tag)`, where `config` is the configuration name and `tag` is the tag (or tag list) associated with that configuration. For example, if the "master" library has a "Rel1.2" configuration consisting of files tagged "rel12final", then the entry in the tag list for the "master" library will be "Rel1.2 (rel12final)". When you select a configuration, the associated tag ("rel12final" in this example) appears in the **Selector** field.

- A hyphen separator separates the list (-----) when there are both tags and configurations listed for a specified library. Tags appear above the separator, and configurations appear below.

**Notes:**

- **\*Refresh\*** updates the pull-down list the specified object. Regenerating the list of objects requires accessing the SyncServer so may take a few moments. **\*Refresh\*** also re-examines the `syncUserTagList` variable. Changes made from the DesignSync DFII Options form (see Modifying the Tag List) are reflected in the tag list automatically and do not require a refresh.
- If you do not enter a selector or version, the operation uses the default persistent selector for the workspace..
- Specify a version tag to check out the version with the specified tag.
- Specify a branch tag to check out the latest version from that branch.
- Module and Member tag selectors and the Add option are only available when the library is part of a module.

**Version Comment**

Shows the comment checked in with the version being rolled back to, that is going to become the new current version. This can help verify that the selected version is the desired new version.

**Checkin Comment**

Enter the comment that is checked in with the new rollback version. This comment should explain the reason for the rollback. The comment is pre-pended automatically with the rollback information in the following form:

```
Rollback checkin from <library> <cell> <view> version <version>
[RETURN]
<user entered comment>
```

**Command Buttons**

Button	Description
Cancel	Closes the form without launching a rollback.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-

	defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

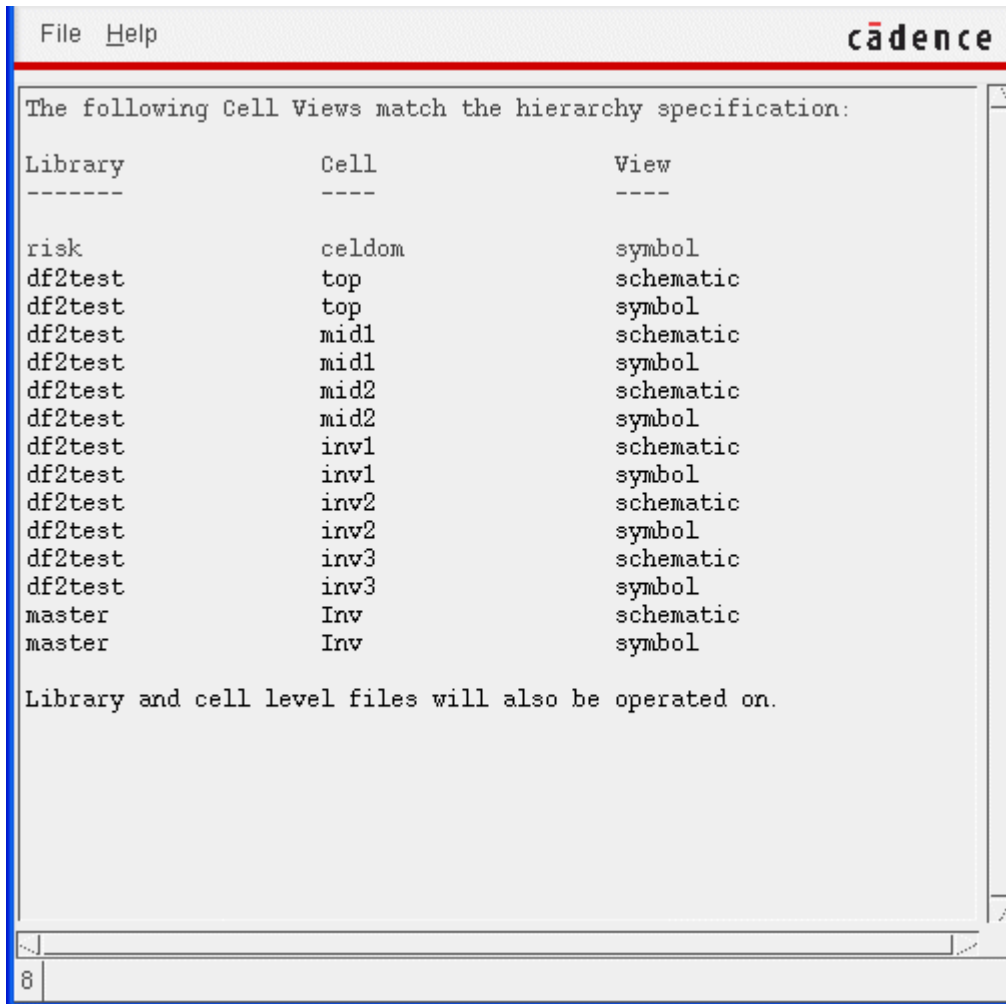
## Listing Selected Cell Views for Hierarchy Operations

When performing hierarchy operations using Synchronicity Hierarchy forms, you have a number of ways of controlling which cell views will be operated on. Before executing the operation, you can confirm which cell views match your specification.

To list the cell views that match your hierarchy specification, click **List Cell Views** in the Hierarchy form.

A text window displays all of the cell views that match your selection. For example:





There will also be an indication in the output if you selected **Cell Only** or **Cell And Library** from the **List Files** field.

## Related Topics

- Canceling a Design Hierarchy Check Out
- Checking In a Design Hierarchy
- Checking Out a Design Hierarchy
- Tagging a Design Hierarchy

## Running Commands in the Background

You can run DesignSync DFII commands in the background by applying the **Background** option during most Checkin, Checkout, Tag, Delete, and Join Library commands. You can then monitor the background commands by displaying the Background Queue (**Synchronicity => Options => Show Background Queue**). You can pause the Background Queue and cancel commands that are queued. See [Displaying the Background Queue](#) for details. If you set up several commands to be run

in the background, those commands run sequentially and in the order you invoked them.

Output from the currently running background command displays in the CIW. Additionally, you can configure DesignSync DFII to display a pop-up status window upon completion of background commands. See Controlling Background Operation-Complete Pop-up Windows for details. If you want an operation-complete pop-up to display for a single background command, set the option before you queue the command. After the command has queued, you can readjust the option.

DesignSync DFII notifies you if you have commands on the Background Queue and you attempt to run subsequent commands in the foreground. If you intend to send a group of commands in a particular order to the Background Queue, this notification prevents you from entering a command out of order in the foreground. For example, you might mistakenly run a command in the foreground before a prerequisite command completes in the background. You can choose to turn off subsequent instances of this warning. See Foreground for a description of this form.

If you attempt to exit DesignSync DFII with commands still queued, you can indicate that DesignSync DFII complete the queued commands before exiting. DesignSync DFII displays a form that lets you choose to complete the queued commands or exit immediately, thus canceling all the queued commands. See Background Processes Running for details. (If you want to cancel specific commands before exiting, use the Background Queue **Synchronicity => Options => Show Background Queue**).

Along with the DesignSync DFII graphical interface commands, you can execute DSDFII SKILL commands in the background. See DesignSync Data Manager DFII SKILL Programming Interface Guide: Return Values and Background Commands for details.

**Note:**

You cannot execute commands from the Cadence Generic Design Management (GDM) interface in the background. The GDM interface includes the auto-checkout and auto-checkin system, as well as the standard Library Manager.

**Important:**

If you run a command in the background, it is best to avoid operating on that object while it is on the Background Queue. DesignSync DFII changes open views you are checking in to read-only mode when it adds the Checkin command to the queue, but users can change the mode of the views and override this protection. See How Foreground and Background Commands Interact for more information.

Due to the potential interactions between foreground and background operations, administrators can prevent all commands from being run in the background or they can

decide which user level is appropriate for specific commands to be run in the background. For example, an administrator might decide that Checkout commands can be run in the background by novice users, but Checkin commands can be run in the background only by expert users. See *Selecting a User Level for Background Operations* to learn how to set these options.

### How Foreground and Background Commands Interact

In some situations you might operate on an object that is an operand of a command in the Background Queue. Try to avoid operating in the foreground on an object that will also be operated on in the background. The results of these interactions can be unpredictable, as the outcome depends on the exact timing of the two commands. The following table gives some examples of what might happen in these types of scenarios. The outcomes of other combinations are similar to these.

Background Command	Foreground Command	Outcome
Checkin  (Mode: Keep)	Checkout  (Mode: Lock)	<p>If the checkin of the object completes before the checkout, the object is checked out with a lock.</p> <p>If the checkin does not complete before the checkout begins, the checkout locks the object, then the checkin operation cancels the lock.</p>
Checkin	Show Checkouts	<p>If the checkin of the object occurs before Show Checkouts, the object does not appear during the workspace scan and therefore it does not display in the Show Checkouts - Results form.</p> <p>If the checkin of the object does not complete before Show Checkouts, the object displays in the Show Checkouts - Results form. If you then use the Show Checkouts - Results form to operate on the object, the object might already be checked in. In this case, unexpected results might occur. For example, a message might indicate that the object is not locked or not modified. Or, if you apply a Checkin command with the <b>Force</b> option, unintended versions might be</p>

		created.
Checkout (Mode: Lock)	Cancel	<p>If the checkout of the object completes before the cancel operation, the object displays in the Cancel Checkouts - Results form, from which you can select the object to cancel its checkout.</p> <p>If the checkout of the object does not complete before the cancel operation, the object does not appear during the workspace scan and therefore it does not display in the Cancel Checkouts - Results form.</p>
Tag	Checkin	<p>If the tag of the object completes before the checkin operation, the original version in the workspace is tagged.</p> <p>If the tag of the object does not complete before the checkin operation, the new version resulting from the checkin is tagged. The results can be unpredictable, depending on the exact timing.</p>
Delete	Tag	Combinations involving either tag or delete are particularly troublesome, since it is unpredictable exactly which objects will be operated on.
Join Library	Checkout	If the Join Library command does not complete before the checkout, the results are unpredictable. In this case, the checkout applies to only those objects that have been populated thus far by the Join Library command.

## Related Topics

Displaying the Background Queue

## Refreshing Cell View Banners

A cell view window banner typically contains DesignSync DFII data such as the cell view's version number and any associated tags. DesignSync DFII refreshes this data when you perform operations using Synchronicity menu commands. However, banner data may become outdated if you perform operations using Library Manager or from outside your DesignSync DFII session (such as using DesignSync).

To refresh a specific cell view banner:

- Select **Synchronicity => Refresh Banner** from the cell view window.

To refresh the banners for all cell view windows:

- Select **Synchronicity => Refresh Banners** from the CIW.

### Related Topics

Controlling Cell View Banner Information

## Displaying the Software Version Number

To display version numbers for DesignSync DFII and DesignSync:

- Select **Synchronicity => About DesignSync DFII** from the CIW or cell view window.

The About DesignSync DFII window appears and shows you:

- The version number of DesignSync
- The version number of DesignSync DFII
- Contact information for ENOVIA Synchronicity DesignSync Data Manager, including links for support email address and Web site

## Library Manager

### Using Library Manager Without Synchronicity Customizations

By default, Cadence's Library Manager has its own forms and functions that communicate with DesignSync DFII through the GDM layer (see Support for GDM). You can optionally configure Library Manager to call Synchronicity forms and functions directly. See *Configuring Library Manager To Call Synchronicity Forms* for details. This topic describes using Library Manager when the Synchronicity customizations are not enabled.

DesignSync DFII supports most Library Manager capabilities as documented in the "Cadence Library Manager User Guide", which is part of the Cadence documentation library. However, review the following restrictions and exceptions before performing DM operations from Library Manager:

- DesignSync DFII does not support **Submit**.
- DesignSync DFII does not support **Rollback**. To accomplish the equivalent operation, use **Synchronicity => Checkout** with the **Selector** option to fetch the design version you want to rollback to, then use **Synchronicity => Checkin** with the **Skip** and **Force** options to promote to the latest version. Note that you must be at **expert** user level to access the **Skip** and **Force** options.
- When using **Delete** with the **Delete Local And Inactivate From DM System** option, DesignSync DFII retires the current branch of the object's vault. You can recover the versioned data by unretiring the branch using DesignSync's `retire -unretire` command (DesignSync DFII does not provide direct support for unretiring objects). If you want to delete the versioned data permanently, you can use **Synchronicity => Delete** to delete the vault (see Deleting Design Objects). You can also use **Synchronicity => Delete** to retire the branch or to delete just the local object.
- **Delete** does not allow pass-through of the DesignSync delete options to the command. This means you cannot use the `-force` option with the **Delete** command.
- **Checkin** cannot be used to add new module data in a workspace containing more than one candidate module.
- **Update** and **Check Out** never delete design data. Therefore, using **Update** or **Check Out** with the `-force` and `-version` options from the **Use Options** field does not delete data that does not match your version or branch specification. This behavior differs from DesignSync's `populate` command, which is used by DesignSync DFII's Checkout Library and Checkout Cell operations, where data that does not match the requested version or branch specification is deleted when you specify `-force`.
- **Update** never overwrites local modifications, even if you specify `-force` in the **Use Options** field. To overwrite local modifications, use **Synchronicity => Checkout** and select **Force**.
- When using **Cancel Checkout**, DesignSync DFII releases the lock but leaves the current object, including local modifications, in your workspace. To retrieve a previous version of the object, overwriting your local modifications, use **Synchronicity => Checkout** and select **Force**. Note that Library Manager's **Cancel Checkout** also accepts `-force` in the **Use Options** field. However, `-force` from **Cancel Checkout** has no effect unless you also specify that you want to be left with a cached or mirrored object in your workspace by specifying `-share` or `-mirror`, respectively, or your default fetch mode is `cache` or `mirror`, in which case your local modifications are overwritten when you cancel the object.
- When using **Rename**, the renamed object is unmanaged.

**Note:** When performing a Rename on an object, regardless of whether Synchronicity Customization is enabled, you lose the version history for the object.

- When you copy a library using **Edit => Copy**, Library Manager outputs warning messages regarding `.SYNC` directories. You can ignore these messages. DesignSync DFII stores local revision-control information (metadata) in `.SYNC` directories. During Library Manager copy operations, DesignSync DFII converts `.SYNC` directories to zero-length `.SYNC` files so that metadata for the existing library is not copied to the new library.
- For modules, the **Version Info** display indicates uses the prefix V to indicate module version or MV to indicate module member version.

Library Manager supports the GDM `-extra` option through the **Use Options** field. The **Use Options** field provides a means of passing additional options -- options that are not a standard part of the Library Manager forms -- to the underlying design management system, in this case DesignSync DFII.

The following table lists the DesignSync DFII **Use Options** options and their Synchronicity form equivalents. You must include the hyphen (-) when specifying these options.

<b>"Use Options" Options</b>	<b>Synchronicity GUI Equivalent</b>
<b>Design Manager =&gt; Update</b>	<b>Synchronicity =&gt; Checkout</b>
-lock	Mode: Edit (locked copy)
-share	Mode: Read (cache link)
-mirror	Mode: Read (mirror link)
-get	Mode: Read (local copy)
-lock -reference	Mode: Regenerate (locked reference)
-force (see <b>Important</b> section)	Force
-version <selector>	Selector
-overlay <selector>	Overlay
-[no]retain	Retain
-[no]unifystate	Unify State
<b>Design Manager =&gt; Check Out</b>	<b>Synchronicity =&gt; Checkout</b>
-lock	Mode: Edit (locked copy)
-share	Mode: Read (cache link)
-mirror	Mode: Read (mirror link)
-get	Mode: Read (local copy)
-lock -reference	Mode: Regenerate (locked reference)
-force (see bullet regarding -force)	Force

-comment <comment>	Comment
-version <selector>	Selector
-overlay <selector>	Overlay
-[no]retain	Retain
-[no]unifystate	Unify State
<b>Design Manager =&gt; Check In</b>	<b>Synchronicity =&gt; Checkin</b>
-lock	Mode: Edit (locked copy)
-share	Mode: Read (cache link)
-mirror	Mode: Read (mirror link)
-keep	Mode: Read (local copy)
-force	Force
-skip	Skip
-comment <comment> (or use <b>Description</b> field)	Comment
-[no]retain	Retain
<b>Design Manager =&gt; Cancel Checkout</b>	<b>Synchronicity =&gt; Cancel</b>
-share	Mode: Read (cache link)
-mirror	Mode: Read (mirror link)
-get	Mode: Read (local copy)
-force (see bullet about -force)	Force
-[no]retain	Retain
<b>Edit =&gt; Delete</b>	<b>Synchronicity =&gt; Delete</b>
-force	Force

**Note:** Library Manager does not have a tagging interface. However, the `gdmsetname` shell command supports a `-modified` option as a `-extra` value, which corresponds to the **Tag Modified Objects** option from DesignSync DFII Tag forms (**Synchronicity => Tag**).

## Related Topics

- Support for Library Manager
- Configuring Library Manager To Call Synchronicity Forms
- Using Library Manager With Synchronicity Customizations

## Using Library Manager With Synchronicity Customizations

By default, Cadence's Library Manager has its own forms and functions that communicate with DesignSync DFII through the GDM layer (see Support for GDM). You can optionally configure Library Manager to call Synchronicity forms and functions directly. See Configuring Library Manager To Call Synchronicity Forms for details. This



topic describes using Library Manager when the Synchronicity customizations are enabled. Further, the Synchronicity-provided customization file can be modified once installed. This topic describes the default, unmodified Synchronicity customizations.

Library Manager menu items that have been modified or added by the Synchronicity customization file are preceded by an asterisk (\*). Selecting a menu item with an asterisk displays a Synchronicity form or invokes a DesignSync DFII function. For example: **Design Manager => \*Check Out** displays a Synchronicity Checkout form (which one depends on what object you have selected) instead of the default Library Manager Check Out form, and **File => \*Set Options** displays the DesignSync DFII Options form. Not all menu items are modified by the Synchronicity customization file. For example, **Edit => Copy** still displays the Library Manager Copy View form, not a Synchronicity form.

Some operations are context sensitive based on what object you have selected. For example, the **\*Check In** operation displays the Checkin Library form if you have a library selected, the Checkin Cell form if you have a cell selected, and so on.

Your user level (see Selecting a User Level) affects which Synchronicity operations are available from Library Manager. You have access to the same operations as you do when using the Synchronicity menus. For example, **Design Manager => \*Tag** is not available if your user level is **novice**. Note that with the Synchronicity Library Manager customizations enabled, you can access the DesignSync DFII Options form from Library Manager's **File => \*Set Options**.

Synchronicity Category operations, which operate on the cells within a category, have "Cells" in their menu names to differentiate them from the standard Cadence operations that operate on the category files themselves. For example, **Edit => Categories => Delete** is the Cadence operation to delete a category file, whereas **Edit => Categories => \*Delete Cells** is the Synchronicity operation to delete the cells in the category.

### Related Topics

- Support for Library Manager
- Configuring Library Manager To Call Synchronicity Forms
- Using Library Manager Without Synchronicity Customizations



# Customizing

## Customizing DesignSync DFII

DesignSync DFII provides for several types of customizations:

- Setting DesignSync DFII Options

Many options are available that let you modify the behavior of DesignSync DFII. How you set an option depends on what the option is and whether you are setting the option for yourself or site-wide.

- Using the DesignSync DFII Option form

Most DesignSync DFII customization options, such as selecting a user level, are available from the DesignSync DFII Options form. Use this form to set user-specific options.

- Using SKILL variables in `.cdsinit` files

Most of the options on the DesignSync DFII Options form have associated SKILL variables that can be put in `.cdsinit` files. The variables let project leaders make site-wide customizations.

- Using SyncAdmin

Some customizations modify Synchronicity registry files and must therefore be made from SyncAdmin, the Synchronicity administration tool. Also, customizations that affect multiple Synchronicity tools, such as selecting a default HTML browser, are made from SyncAdmin.

- Setting default field values for forms

You can redefine the default values for many of the fields in DesignSync DFII forms. Default values can be set for all users of a site's installation, for a project team, or for a user.

- Using the DesignSync DFII programming interface

The DesignSync DFII SKILL API provides programmatic access to DesignSync DFII operations, and also lets you customize the Synchronicity menus.

**Note:** DesignSync DFII does not use the command line defaults system. The command line defaults system only pertains to DesignSync command line shells.

## Setting Options

### Using the DesignSync DFII Options Form

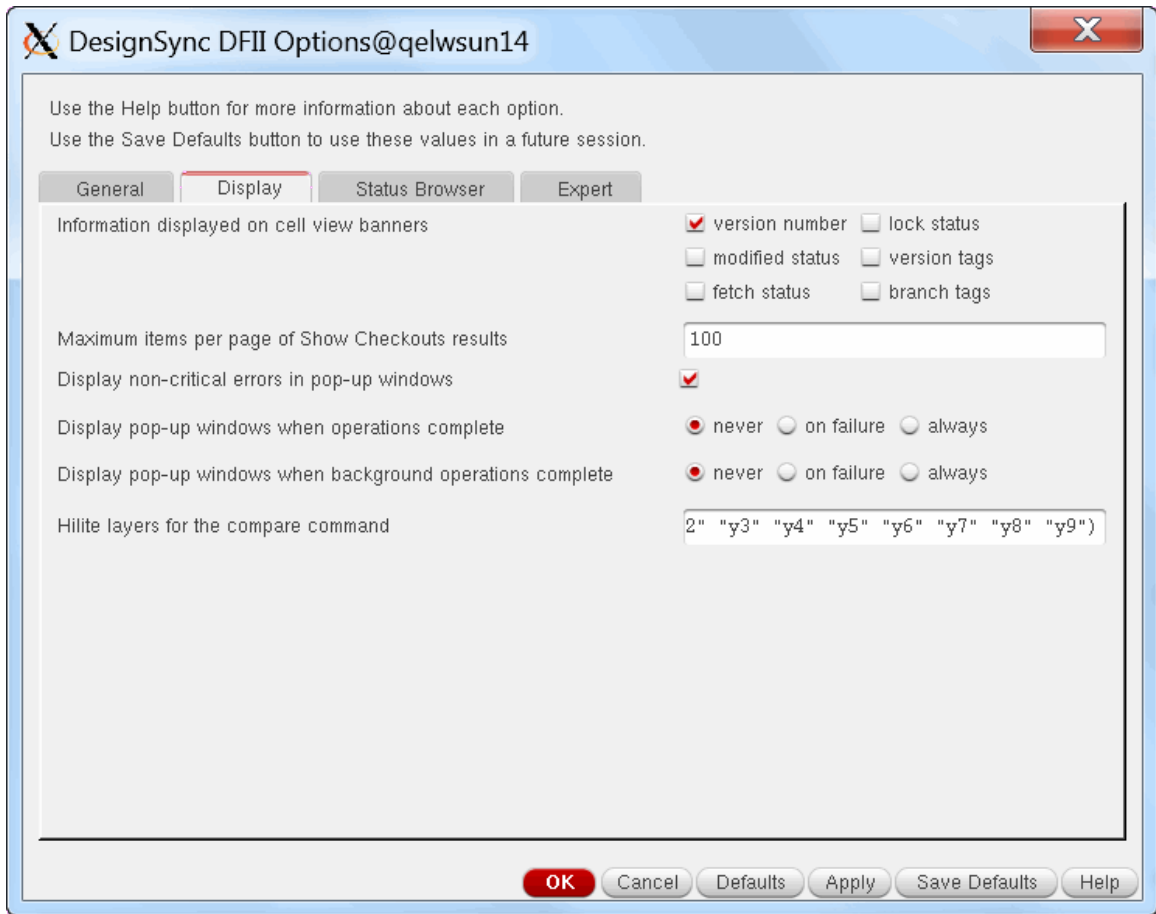
#### Setting Options

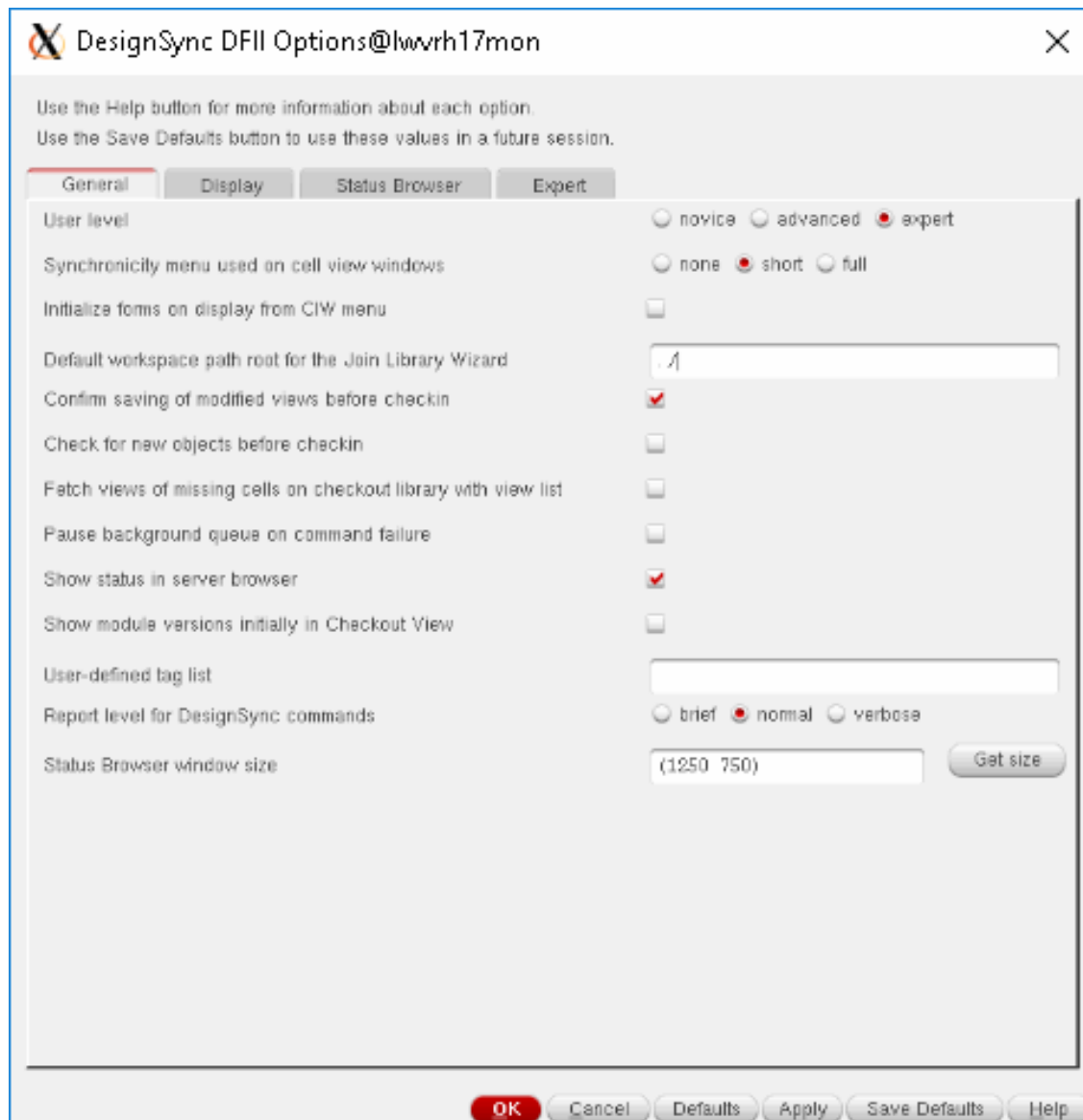
You can set a number of options that change the behavior of DesignSync DFII.

To set options:

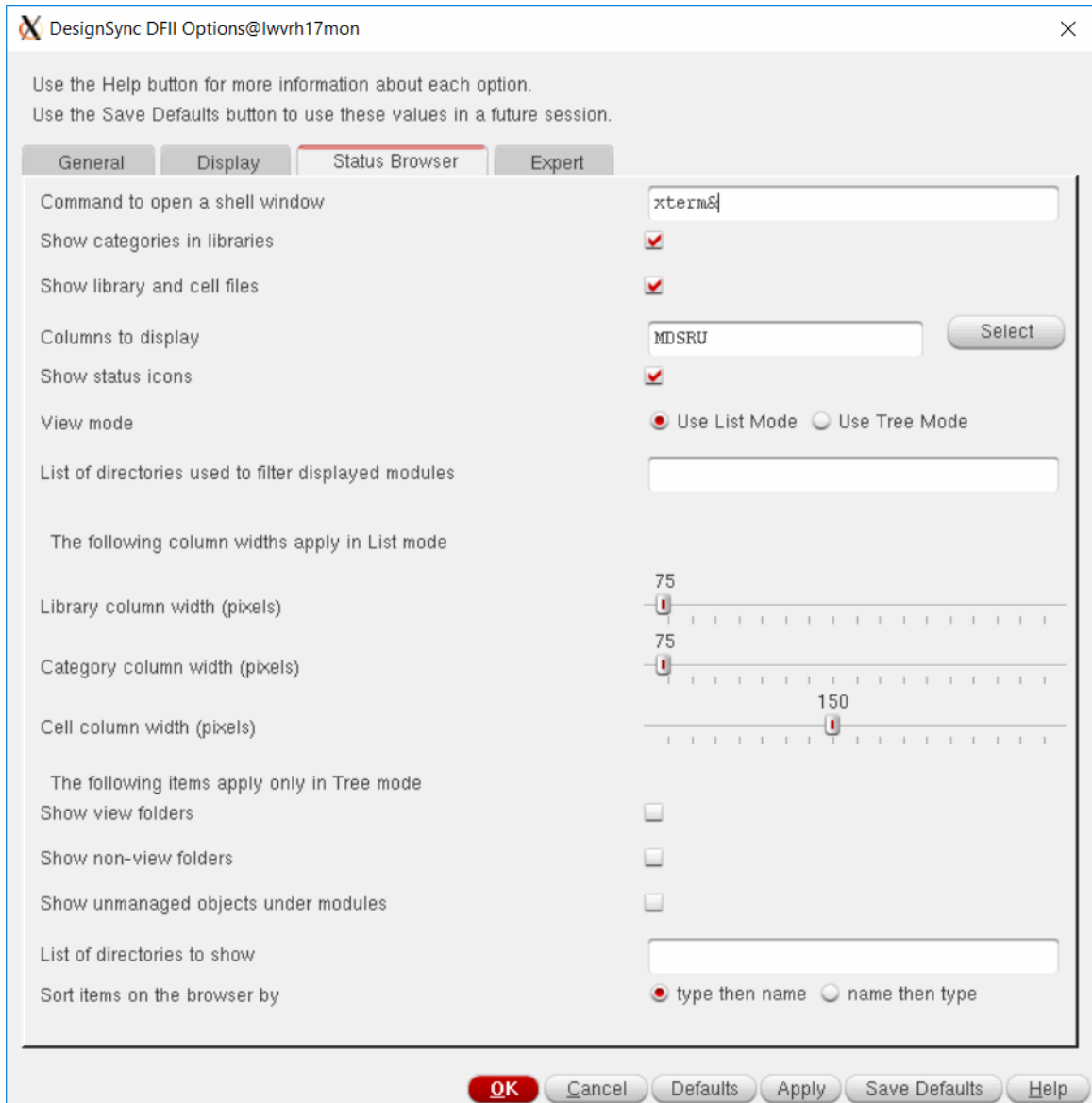
1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.
2. Modify the fields of the DesignSync DFII Options form as needed.

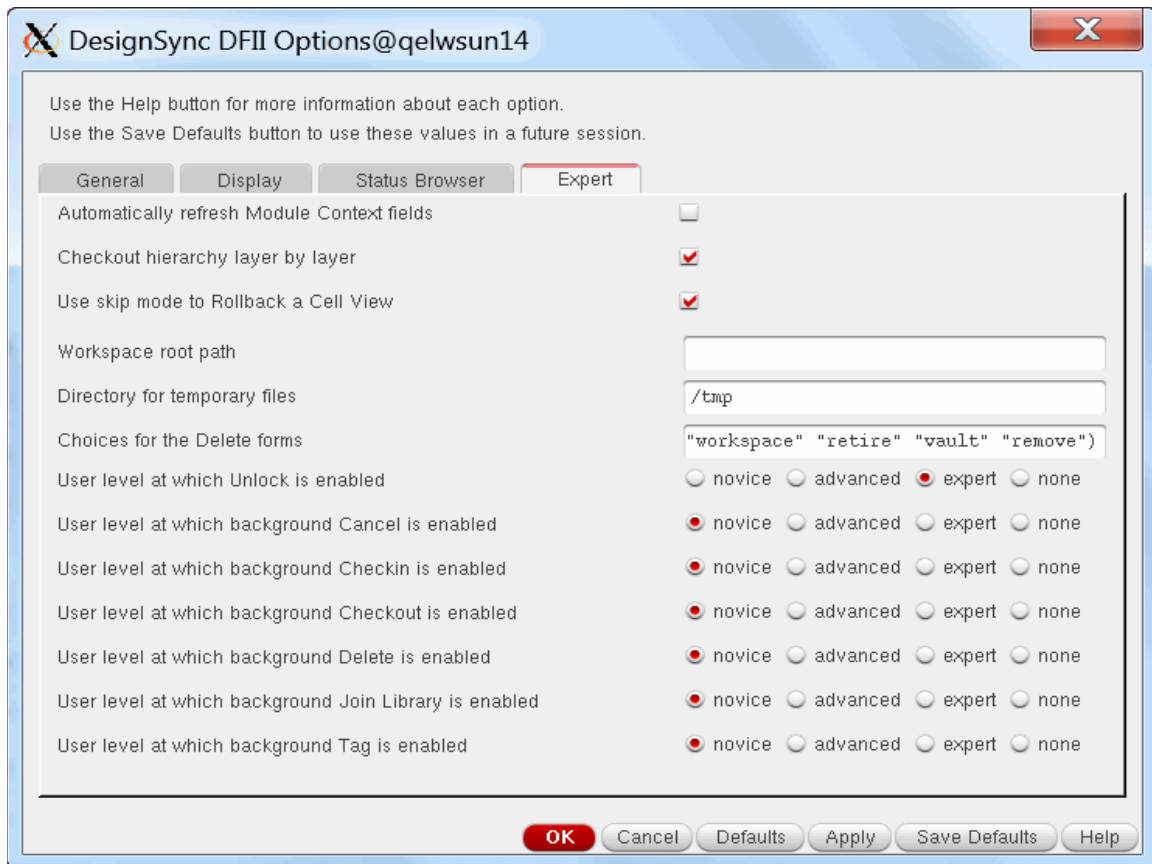
**Click on a field in the following illustration to go to the topic that describes the option.**





# DesignSync Data Manager DFII User's Guide





- Note:** The options available from the DesignSync DFII Options form depend on your user level. The preceding illustration shows the options available at **expert** user level.
- Click **Save Defaults** if you want your settings to be saved for future sessions. Otherwise, your settings affect your current session only.
- Click **OK**.

If you have changed any option settings, the message "Default values changed." appears in the CIW. Your settings generally take effect immediately.

### Note:

Most of the options on the DesignSync DFII Options form have corresponding SKILL variables. A project leader can set these variables in a site `.cdsinit` file to define options site-wide. Saved user settings from the DesignSync DFII Options form take precedence over the variable settings if the variables are defined prior to loading the DesignSync DFII `dssInit.il` SKILL file. If the variables are defined after `dssInit.il` is loaded, then the variables take precedence. See Using SKILL Variables for details.

### Command Buttons



Button	Description
OK	Closes the form and performs the operation.
Cancel	Closes the form without performing the operation.
Defaults	Restores the default field values. You can override the system defaults for some fields by clicking <b>Save Defaults</b> . See Setting Form Default Values for details.
Apply	Performs the operation without closing the form.
Save Defaults	Saves the current field values as the defaults. Not all fields can have user-defined defaults. See Setting Form Default Values for details. <b>Save Defaults</b> is only available if at least one field on a form can have a user-defined default.
Help	Invokes the DesignSync Data Manager DFII User's Guide and displays the topic associated with the current form.

## Related Topics

Customizing DesignSync DFII  
Using SKILL Variables

## Selecting a User Level

You can select from three user levels to tailor DesignSync DFII to your experience level:

- **novice** -- Gives you access to the basic design-management features. This user level is the default.
- **advanced** -- Gives you the same capabilities as **novice** plus access to tagging and additional delete-version functions.
- **expert** -- Gives you the same capabilities as **advanced** plus access to additional features such as version skipping, version overlaying, and the Configure Library wizard.

See the following sections for a complete description of the capabilities at each user level.

To set your user level:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears. This form consists of three tabs. The General tab contains the **User level** settings.

2. Select a level from the **User level** field.

3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **Apply** if you want the DesignSync DFII Options form to redisplay showing the options that are available at your selected user level.
5. Click **OK**.

When you change your user level, any open forms automatically change to show the options available at your new user level.

**Note:**

When the Synchronicity Library Manager customizations are enabled, the Synchronicity operations that are available at a given user level are controlled by three SKILL variables. By default, the operations available from Library Manager are the same as from the Synchronicity menus. See *Configuring Library Manager To Call Synchronicity Forms* for details.

**The Novice User Level**

Novice users have the following capabilities:

- Joining a library (Join Library wizard)
- Checking in any design object (without the **Skip** or **Force** options)
- Checking out any design object from an existing library into an existing workspace
- Showing checkouts and checking them in (without the **Skip** or **Force** options)
- Canceling the check out of any design object
- Creating a library
- Creating a view (without the **Force** option)
- Displaying library status, data sheets, and version histories
- Opening multiple view versions
- Deleting an untagged version
- Deleting any design object from their workspace
- Deleting temporary views
- Setting options (except controlling unlock availability and delete options)

**The Advanced User Level**

Advanced users have all the capabilities of novice users, plus the following:

- Tagging any design object
- Checking out any design object based on a tag
- Deleting a tagged version with the **Force** option

**The Expert User Level**

Expert users have all the capabilities of advanced users, plus the following:

- Defining workspace root paths
- Configuring a library (Configure Library wizard)
- Recreating a cell view that already exists on the server but has not been checked in
- Checking in any design object with the **Skip** or **Force** options
- Checkout out any design object with the **Overlay** option
- Showing checkouts and checking them in with the **Skip** or **Force** options
- Deleting any design object or vault, including retiring objects and removing them from the vault
- Branching a library
- Controlling unlock availability and delete options

### Related Topics

Setting Options

Configuring Library Manager To Call Synchronicity Forms

DesignSync DFII Design Management Overview

### Controlling the Synchronicity Menu on Cell View Windows

By default, a shortened form of the Synchronicity pull-down menu appears in the menu bar of any cell view window. The shortened menu provides only commands that operate on a single cell view, letting you easily operate on the cell view you have open. The full Synchronicity menu is available from the CIW.

Instead of the shortened Synchronicity menu, you can configure DesignSync DFII to display the full Synchronicity menu or suppress the menu entirely.

To change the type of Synchronicity menu that appears in cell view windows:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, select one of the following choices for the **Synchronicity menu used from cell view windows** option:
  - **none** -- Cell view windows have no Synchronicity menu.
  - **short** (default) -- Cell view windows have the shortened Synchronicity menu.
  - **full** -- Cell view windows have the full Synchronicity menu.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

**Note:**

- The procedures in DesignSync DFII Help assume that cell view windows have the shortened Synchronicity menu.
- The **Synchronicity menu used from cell view windows** option has two corresponding SKILL variables: `syncDisableEditWindowMenu` and `syncUseEditWindowShortMenu`. A project leader can set these variables in a site `.cdsinit` file to define the Synchronicity menu behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definitions. See Using SKILL Variables for details.

**Related Topics**

Setting Options  
Using SKILL Variables

**Controlling Synchronicity Form Initialization**

When you bring up a Synchronicity form from a cell view window, the library, cell, and cell view fields initialize to the values of the open cell view. All other fields initialize to the values from the last time you used the form (having clicked **OK** or **Apply**), or are empty if this is the first invocation of the form.

When you bring up a Synchronicity form from the CIW, all fields initialize to the values from the last time you used the form, or are empty if this is the first invocation of the form. You can modify this behavior so that library, cell, and cell view fields initialize to the values of the current cell view window (the cell view window with the most recent activity).

To change the form initialization behavior:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, select the **Initialize forms on display from CIW menu** option.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

**Note:**

The **Initialize forms on display from CIW menu** option has a corresponding SKILL variable: `syncInitFormsFromCIW`. A project leader can set this variable in a site `.cdsinit` file to define the Synchronicity form initialization behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

**Related Topics**

Setting Options  
Using SKILL Variables

**Setting the Default Workspace Path**

The Join Library wizard asks you where to create the workspace for the library you are accessing. You can specify a default path, under which the Wizard creates the library directories. By default, this path is `./`, which causes the library directories to be created under the DFII current working directory.

To specify the default workspace path:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, enter a value for the **Default workspace path root for the Join Library Wizard** field.
  - o The Join Library wizard appends the library name to the value you specify, so you probably want to include a trailing slash (`/`), for example:

```
/home/users/goss/libraries/
```

- o The path can be relative or absolute. Relative paths are relative to the DFII current working directory.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

Most changed option settings take effect immediately. However, changing **Default workspace path root for the Join Library Wizard** does not affect any active Join Library session where you have already specified the workspace path.

**Note:**

The **Default workspace path root for the Join Library Wizard** option has a corresponding SKILL variable: `syncJoinLibDefaultPath`. A project leader can set this variable in a site `.cdsinit` file to define the default workspace path root site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

## Related Topics

Setting Options  
Using SKILL Variables

## Controlling Confirmation of Saving Modified Views at Checkin

The Synchronicity check-in operations check for any views that have been edited but not saved before performing the checkin. By default, a confirmation box asks you to confirm that DesignSync DFII should save your changes before performing the checkin. From the confirmation box, you can click **Yes** to let DesignSync DFII save your changes and continue with the checkin, or you can click **No** to abort the operation without saving your changes. When you click **No**, you can then manually save the data or close the views and discard your changes, then check in the data.

### Note:

The behavior described here applies to the Synchronicity Checkin forms only. Library Manager check-in operations will not check in data that you are actively editing.

To request that saving of modified data take place automatically without a confirmation box:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, deselect the **Confirm saving of modified views before checkin** option.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

### Note:

The **Confirm saving of modified views before checkin** option has a corresponding SKILL variable: `syncConfirmSaveCellViews`. A project leader

can set this variable in a site `.cdsinit` file to define this behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

### Related Topics

Setting Options  
Using SKILL Variables

### Checking for New Objects Before Checkin

You must use the **New** check-in option to check in previously unmanaged objects. Without **New** selected, a check-in operation fails on unmanaged objects, possibly leaving you without all of your data checked in. After a failed checkin, you would then need to identify those objects that failed and check them in with **New** selected. If you prefer, DesignSync DFII can scan your workspace looking for new objects before initiating the checkin operation. This check adds time to the overall checkin operation, but it alerts you to new objects before any checkins occur.

To have check-in operations first check for new objects:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, select the **Check for new objects before checkin** option.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

### Note:

The **Check for new objects before checkin** option has a corresponding SKILL variable: `syncCheckNewBeforeCheckin`. A project leader can set this variable in a site `.cdsinit` file to define this behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

### Related Topics

Setting Options  
Using SKILL Variables

## Fetching Views of Missing Cells During Library Checkout

During a library checkout, you use the Checkout Library form to specify those views of each cell in the library that you want to check out. DesignSync DFII only fetches the views corresponding to the cells currently in the workspace. If you want to be sure to fetch the specified views for each cell in the library and not just those in the workspace, enable the **Fetch views of missing cells on checkout library with view list** option as follows:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, select the **Fetch views of missing cells on checkout library with view list** option.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

### Note:

The **Fetch views of missing cells on checkout library with view list** option has a corresponding SKILL variable:

`syncFetchMissingCellsOnLibViewsCheckout`. A project leader can set this variable in a site `.cdsinit` file to define this behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

### Related Topics

Checking Out a Library  
 Setting Options  
 Using SKILL Variables

### Controlling When the Background Queue is Paused

The Background Queue displays the commands you have selected to run in the background. If you queue up a series of commands which have dependencies, you might want the Background Queue to pause if an error occurs. Then, you can remove any subsequent commands that rely on the failed command and resume processing of the Background Queue. By default, the queue is unaffected by a failure, but you can set an option for the Background Queue to pause on error.



To pause the Background Queue when a command fails:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, select the **Pause background queue on command failure** option.

The Background Queue pauses if a background command returns a non-zero Failed count.

3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately, however this option is applied for a background command when the command completes. Thus, you can set the option after you queue up a particular command if you want to make sure the queue pauses if the command fails.

### Note:

The **Pause background queue on command failure** option has a corresponding SKILL variable: `syncPauseQueueOnFail`. A project leader can set this variable in a site `.cdsinit` file to define this behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

### Related Topics

- Setting Options
- Using SKILL Variables
- Browsing a SyncServer
- Displaying the Background Queue

### Controlling Server Browser Status

The Server Browser can help you specify a vault URL when configuring or joining a library. One feature of the Server Browser is that it can list all SyncServers defined in `sync_servers.txt` files. By default, each SyncServer is polled to determine if the SyncServer is available (up) or not (down). While useful information, polling each SyncServer can be time consuming. You can choose to skip the polling step, which means SyncServer status (up/down) is not displayed.

To skip the polling of SyncServers:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, deselect the **Show status in server browser** option.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

#### Note:

The **Show status in server browser** option has a corresponding SKILL variable: `syncShowServerStatus`. A project leader can set this variable in a site `.cdsinit` file to define this behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

#### Related Topics

Setting Options  
Using SKILL Variables  
Browsing a SyncServer

#### Modifying the Tag List

DesignSync DFII supports the definition of a list of tags that are available throughout the DesignSync DFII interface. Selecting from a tag list simplifies the specification of the tag during operations that use a tag or selector. See Creating a Tag List for details on this feature.

Use SyncAdmin to define tag lists that are accessible by both DesignSync and DesignSync DFII. See SyncAdmin: Tag Options for details. Tags defined from the DesignSync DFII Options form augment those defined from SyncAdmin.

To modify the tag list from the DesignSync DFII Options form:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, enter a value for the **User-defined tag list** field.

If the `syncUserTagList` SKILL variable has been defined by you or your project leader, then the **User-defined tag list** field is initialized to that value. Otherwise, the field is empty.

Specify a space-separated list of tags. No error checking is performed to validate your tag names (with one exception, see below). Validation is performed by the forms where you specify selectors or tags. The lack of error checking when defining the tag list provides flexibility. For example, your project leader may define a tag **reviewed\_by\_<name>**, itself not a valid tag name due to the angle brackets, but the intention being that you substitute **<name>** with your name, such as **reviewed\_by\_ian**.

**Note:** You cannot specify a backslash (\) in your tag list. If you do, a warning is issued and the field is restored to its previous value. Backslashes cause errors from choice list fields, so are disallowed.

3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

**Note:**

The **User-defined tags list** option has a corresponding SKILL variable: `syncUserTagList`. A project leader can set this variable in a site `.cdsinit` file to define the tag list site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

## Related Topics

- Creating a Tag List
- Setting Options
- Using SKILL Variables

## Setting the Report Level for DesignSync Commands

You can select the level of reported detail you would like certain DesignSync functions to display. Using this option, you specify the report level for the following commands:

- Checkin
- Checkout
- Add to Module

Note: All the commands use the same reporting level.

To change the level of reporting for these commands:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **General** tab, select one of the following choices for the **Report level for DesignSync commands** option:
  - o **brief** includes the following types of messages:
    - o Warning messages
    - o Failure messages
    - o Condensed informational messages
    - o Success/Failure count
  - o **normal** (default) includes the following types of messages:
    - o Warning messages
    - o Failure messages
    - o Success messages for updated objects
    - o Informational messages, such as objects excluded by filter or explicit exclusions, command processing status as it traverses the hierarchical reference tree, if applicable, and fetched module objects, if applicable.
  - o **verbose** includes all the information displayed by **normal** mode and the following additional types of messages:
    - o Informational messages showing each object processed, even if the object was not updated.
    - o For module data, also includes informational messages about all filtered objects.
  - o **error** includes the following types of messages:
    - o Failure messages.
    - o Warning messages.
    - o Success/failure/skip status messages.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

## Controlling Cell View Banner Information

By default, the title banner of a cell view window displays the version of the current cell view. You optionally also can display other information associated with the open cell view. This information is updated automatically as you perform revision-control

operations. (Occasionally, you may need to manually refresh the cell view banner; see Refreshing Cell View Banners for details.)

Most users find having revision-control information displayed in cell view banners valuable, but there may be some performance overhead. You can suppress the display of revision-control information.

To change the revision-control information that appears in cell view banners:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Display** tab, select one or more of the following choices for the **Information displayed on cell view banners** option:
  - **version number** -- Cell view banners display the version number of the current cell view. For cell views in a module, this is the version number of the individual module member, not the module version.
  - **lock status** -- Cell view banners display the lock status of the view. If the cell view is locked, the character 'L' precedes the cell view identification in the cell view banner.
  - **modified status** -- Cell view banners display 'locally modified' if the cell view has been modified on disk. The 'locally modified' status does not indicate whether the cell view is modified in memory, only whether it has been modified on disk.
  - **version tags** -- Cell view banners display the version tags associated with the current cell view. For modules, this shows module members tags.
  - **fetch status** -- Cell view banners display the server status associated with the current cell view. The server status has several valid values including: Up-to-date, Needs Merge, Needs Update, Absent, and Unknown. For a complete list of values and definitions, see the *DesignSync User's Guide: Revision Control Status Values*.
  - **branch tags** -- Cell view banners display the branch tags associated with the current cell view. For modules, since individual module members are not tagged, this field does not display for module members.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

**Note:**

The selections for the **Information displayed on cell view banners** option correspond to the following SKILL variables: `syncVersionInBanner`,

`syncLockedInBanner`, `syncModifiedInBanner`, `syncTagsInBanner`, and `syncBTagsInBanner`. A project leader can set these variables in a site `.cdsinit` file to define the cell view banner information site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definitions. See Using SKILL Variables for details.

## Related Topics

Setting Options  
Using SKILL Variables  
Refreshing Cell View Banners

## Controlling the Number of Items on a Results Page

When you perform a show checkouts or cancel operation, there can be a large number of items displayed in the Show Checkouts results form or the Cancel Checkouts results form. By default, results with 100 items or fewer are displayed in a single scrollable page. When there are more than 100 items, one or more additional pages are created. The multipage forms have navigation aids to help you page through the results.

To change the maximum number of items that are displayed on a page:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Display** tab, enter a value in the **Maximum items per page of Show Checkouts results** field.

You must specify a value between 1 and 1500, inclusive. If you specify a value larger than 1500, DesignSync DFII defaults to 1500. If you specify any other invalid value, DesignSync DFII defaults to 100.

3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

### Note:

The **Maximum items per page of Show Checkouts results** option has a corresponding SKILL variable: `syncMaxItemsPerPage`. A project leader can set

this variable in a site `.cdsinit` file to define the maximum item value site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

### Related Topics

Setting Options  
Using SKILL Variables

### Controlling Informational Pop-up Windows

DesignSync DFII issues warnings or errors if it encounters anything unexpected during an operation. DesignSync DFII always writes these messages to the CIW, but may also display messages in pop-up windows (alert boxes). When a pop-up is displayed, the operation suspends until you have acknowledged the message (click **Close** on the pop-up window).

Pop-up windows for informational and other non-critical messages can be inconvenient. You can control whether non-critical messages appear in pop-up windows or only in the CIW. DesignSync DFII always displays severe errors in pop-up windows and uses pop-ups to ask questions during some operations. Also, DesignSync DFII displays operation-complete pop-ups (see Controlling Operation-Complete Pop-up Windows), if enabled, even if you have suppressed non-critical pop-ups.

To suppress non-critical pop-up windows:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Display** tab, deselect the **Display non-critical errors in pop-up windows** option.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

### Note:

The **Display non-critical errors in pop-up windows** option has a corresponding SKILL variable: `syncDisableErrorInfoPopup`. A project leader can set this variable in a site `.cdsinit` file to define the pop-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

## Related Topics

Setting Options  
Using SKILL Variables  
Pop-up Windows

## Controlling Operation-Complete Pop-up Windows

DesignSync DFII operations always output status information, including final success or failure messages, to the CIW. When operating on a large amount of data, such as entire library, a DesignSync DFII operation might take significant time to complete. You may therefore find it useful for DesignSync DFII to indicate when an operation completes. DesignSync DFII can issue a pop-up window and audible beep when an operation completes, for all operations or only when operations fail. By default, DesignSync DFII does not issue pop-up windows when operations complete.

To have DesignSync DFII display pop-up windows and beep when operations complete:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Display** tab, select one of the **Display pop-up windows when operations complete** choices:
  - o **never**: Do not display pop-ups when operations complete.
  - o **on failure**: Display pop-ups only when operations fail or have errors.
  - o **always**: Display pop-ups every time an operation completes. Note that this setting produces pop-ups even if you have suppressed informational pop-ups using the **Display non-critical errors in pop-up windows** option.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

### Note:

The **Display pop-up windows when operations complete** option has a corresponding SKILL variable: `syncDisplayCompletePopup`. A project leader can set this variable in a site `.cdsinit` file to define the pop-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

## Related Topics



Command Complete  
Setting Options  
Using SKILL Variables  
Pop-up Windows

## Controlling Background Operation-Complete Pop-up Windows

Background operations output status information, including final success or failure messages, to the CIW. However, you might want to be notified explicitly when a background operation completes. DesignSync DFII can issue a pop-up window and audible beep when a background operation completes, for all background operations or only when background operations fail. By default, DesignSync DFII does not issue pop-up windows when background operations complete.

You can choose to be notified when a particular command completes by turning on the **Display pop-up windows when background operations complete** option for the single command. You can then turn off the option after you have queued up the command. In this way, you'll be notified when this particular command completes, but you will not receive a pop-up window for completion of subsequent background commands.

To have DesignSync DFII display pop-up windows and beep when background operations complete:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Display** tab, select **operations complete** choices:
  - o **never**: Do not display pop-ups when background operations complete.
  - o **on failure**: Display pop-ups only when background operations fail or have errors.
  - o **always**: Display pop-ups every time a background operation completes. Note that this setting produces pop-ups even if you have suppressed informational pop-ups using the **Display non-critical errors in pop-up windows** option.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately. This option is applied for a background command at the point when it is added to the queue.

### Note:

The **Display pop-up windows when background operations complete** option has a corresponding SKILL variable: `syncDisplayBackgroundCompletePopup`. A project leader can set this variable in a site `.cdsinit` file to define the pop-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

## Related Topics

- Command Complete
- Setting Options
- Using SKILL Variables
- Pop-up Windows
- Running Commands in the Background

## Controlling Number of Hilite Layers for the Compare Command

When you compare two views, DSDFII provides a way to highlight the differences in the view layers. This option allows you to specify the view layers to display.

The default value is ("y0" "y1" "y2" "y3" "y4" "y5" "y6" "y7" "y8" "y9").

To change the specified Hilite layers:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Display** tab, modify the list in the **Hilite layers for the compare command** option.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

### Note:

The **Hilite layers for the compare command** option has a corresponding SKILL variable: `syncCompareHighlightLayers`. A project leader can set this variable in a site `.cdsinit` file to define the pop-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

## Status Browser Options

This topic explains all of the fields on the Status Browser Options page.

To open the Status Browser Options page:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Status Browser** tab, enter a value for the **Workspace root path** field.
3. Specify the workspace root paths in quotations separated by a comma, for example ("workspace\_path"), ("workspace\_path").

Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.

4. Click **OK**.

### **Command to open a shell window**

Specifies the executable to run when opening a shell window.

The default value is xterm.

### **Show categories in libraries**

Specifies whether the categories are shown in the status browser.

By default, this is enabled, meaning that categories are shown.

### **Show library and cell files**

Specifies whether the libraries and cell files are shown in the status browser.

By default, this is enabled, meaning that libraries and cell files are shown.

### **Columns to display**

For information on the Columns to display field, see [Choosing Status Browser Columns to Display](#).

### **Show status icons**

Specifies whether to display status icons on the Status Browser. In addition to the option to display status icons, the icons themselves can also be customized. For more information on customizing the icons, see [Customizing the Status Browser Icons](#).

**Note:** The **Show Status Icons** option has a corresponding SKILL variable: `syncStatusBrowserShowStatusIcons`. A project leader can set this variable in a site `.cdsinit` file to define the status browser start-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

### **View Mode**

Select whether to start in Status Browser Tree View or Status Browser List View by default.

### **List Mode Column Browser Widths**

Select the default width, in pixels, for columns in the status browser mode. These widths persist as the opening value of the columns.

You can set the width for the following columns:

- Library (default width: 75 pixels)
- Category (default width: 75 pixels)
- Cell (default width: 150 pixels)

**Note:** If the status browser is open when these changes are made, you need to close and reopen the Status Browser for the new column widths to take effect.

### **Show view folders**

Specifies whether the view folders are shown in the status browser.

By default, this is disabled, meaning that view folders are not shown.

### **Show non-view folders**

Specifies whether the non-view folders are shown in the status browser.

By default, this is disabled, meaning that non-view folders are not shown.

### **Show unmanaged objects under modules**

Specifies whether unmanaged objects are shown when a module is expanded.

By default, this is disabled, meaning that unmanaged objects are not shown.

**Note:** Objects that have been added to a module are considered part of module and are shown.

### **List of the directories to show**

Specifies the list of directories to show in the status browser in the format:

```
("dir1" "dir2"...)
```

By default, the only directory shown is the current working directory.

**Note:** The **List of the directories to show** option has a corresponding SKILL variable: `syncStatusbrowserInitialDirectories`. A project leader can set this variable in a site `.cdsinit` file to define the status browser start-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See **Using SKILL Variables** for details.

### List of directories used to filter displayed modules

Specifies the list of directory paths which will not display in the Status Browser in the format:

```
("dir1" "dir2"...)
```

Any module with a base directory at or below any of the paths specified will be filtered from display on the Status Browser window. This option takes effect immediately after being set. You do not need to restart the client or manually refresh the Status Browser.

**Note:** This option has a corresponding SKILL variable: `syncStatusBrowserModuleFilterPaths`. A project leader can set this variable in a site `.cdsinit` file to define the status browser start-up behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See **Using SKILL Variables** for details.

### Sort items on the browser by

Specifies the sort order for items within each level displayed by the browser. Options are:

- type then name - sorts items by type, for example "library" or "view" first, then sorts by name. This keeps like objects together.
- name then type - sorts items by name first.

By default, the sort order is "type then name."

## Choosing Status Browser Columns to Display

### Columns to display

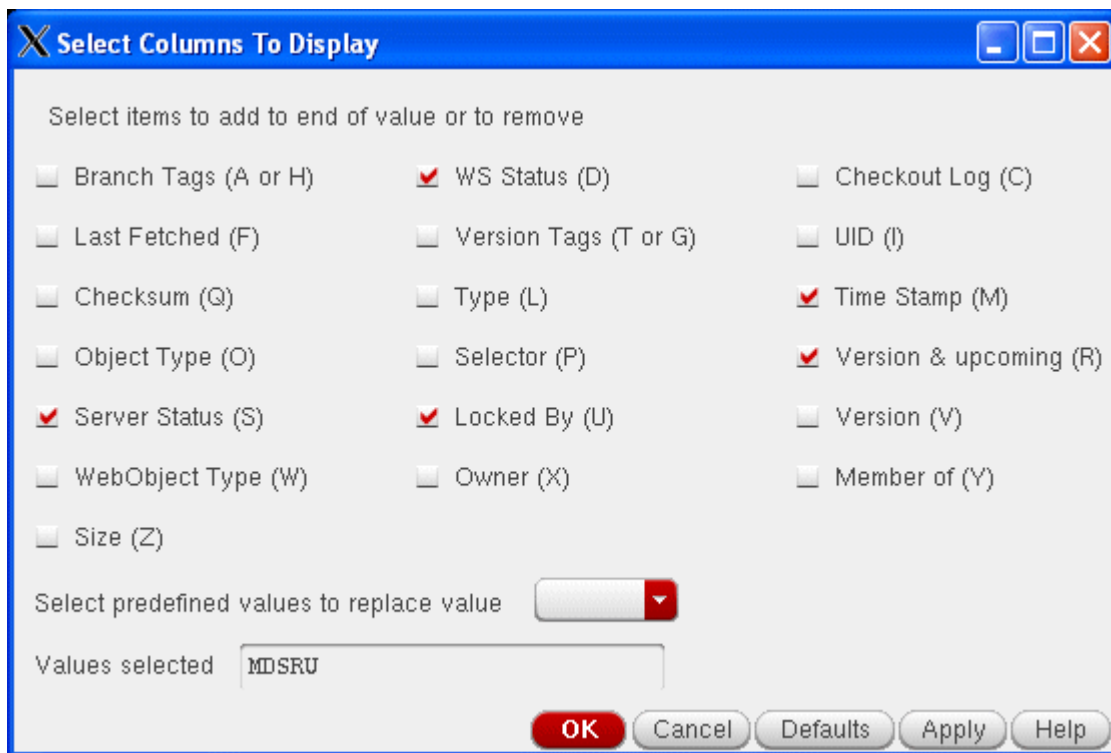
Lists the columns to display in the status browser. Each column provides information about the displayed objects, such as object name, revision control status, or version.

You may manually enter the column fields using the data key letter (in parenthesis in the descriptions below) or press the Select button brings up a screen where you can select the columns for display. Checked items appear in the status browser display. The "Name" (N) of the object is always displayed, and by default appears in the left-most column.

**Note:** The data key identifier for the column matches the identifier used with the DesignSync `ls` command.

The columns appear in the order specified in the field. To change the order, adjust the order of the data key identifier in the field.

**Note:** You can remove or reorder fields in the status browser window; however, those changes are not persistent. When you reopen the status browser, the fields will return to the definition set on the Status Browser options page.



#### Branch Tags (A or H)

Lists branch tags of a managed object's current branch, or the persistent selector list for a folder. For example, where an object has two branch tags, the column displays:

Trunk, RelA

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In the `ls` command, the A or H keys are used to differentiate between displaying a single tag per line or multiple tags per line. This differentiation is not relevant for the GUI. Either key can be used.

### Last Fetched (F)

Displays the time and date stamp when the objects were last fetched into the workspace.

### Checksum (Q)

Displays the checksum of the objects. If the object is not in source control, the checksum value is zero (0).

### Object Type (O)

Object type. For modules members and other DesignSync objects, the type options are:

- File
- Folder
- Project
- Absent File (a locked reference or deleted file)
- Referenced File
- Link to File
- Link to Folder
- Link to Mcache
- Cached File
- Mirrored File
- Vendor-specific object types such as Cadence or Synopsys libraries, cells, and cell views, or CTP collection object types.

For vault objects, types include:

- File
- Version
- Branch Point Version.

For non-versionable objects:

- Non-versionable.

### Server Status (S)

Server Status. For a full description of available server status values, see *ENOVIA Synchronicity Command Reference*: `ls` command: Report Options.

**Note:** There is some overlap between the Server Status information and the WS Status information, however both have distinct information, so you may need both values to see a proper representation of the object status.

#### Owner (X)

Displays the object owner. This object owner for:

- collections - collection to which a collection member belongs.
- modules - module to which a module member belongs.
- folder - all the modules that own the folder.

#### WS Status (D)

Workspace status. For a full description of available workspace status values, see *ENOVIA Synchronicity Command Reference: ls command: Report Options*.

**Note:** There is some overlap between the WS Status information and the Server Status information, however both have distinct information, so you may need both values to see a proper representation of the object status.

#### Version Tags (T or G)

Lists version tags of a managed object. The column lists tags in the order of Most-Recent to Oldest (the reverse order of when the tags were added).

In the `ls` command, the T or G keys are used to differentiate between displaying a single tag per line or multiple tags per line. This differentiation is not relevant for the GUI. Either key can be used.

#### Type (L)

Lists the fetched state or type of the object. Options include:

- Copy
- Lock
- Mirror
- Reference - for unlocked references
- Cache
- Null (" ") - for unmanaged or non-versionable objects

#### Selector (P)

Persistent selector list.

**Note:** If a folder is a member of more than one module, the selector displays as a Null (" ") value.



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### Locked By (U)

Displays username of the object locker. If the object is not locked, this field is empty. If the object is locked in this workspace, an asterisk displays after the username.

### Member of (Y)

Displays module instance name for module members. If an object does not belong to a module, this field is blank.

### Checkout log (C)

Shows original and checkout log comments including:

- author
- creation time of current version
- check-in comments
- check-out comments

### UID (I)

Displays the UID of the object(s).

### Time Stamp (M)

Displays the last modification time of the object(s). For references, this field is empty.

### Version and Upcoming (R)

Current version number of the object(s) and, for vault objects, if the object is locked or auto-branched, the upcoming version number.

### Version (V)

Fetches version. Display options include:

- Version number
- Unmanaged - for an object with no local metadata.
- Null (" ") - for non-versionable objects.

### WebObject Type (W)

Web objects type. Display options include:

- Folder
- File
- Project
- Link to Folder
- Link to Mcache

For vault web objects, object types include:

- File
- Version
- Branch point version

Size (Z)

The default value is MDSRU. The order of the values in the field determines the display order on the status browser.

**Note:** In the status browser, you can reorder or hide columns for the duration of the browser session. When the status browser is closed and reopened, the fields revert to the settings defined here.

Related Topics

*ENOVIA Synchronicity Command Reference: ls command: Report Options*

### Automatically Refresh Module Context Fields

This option allows the user to automatically refresh the in-memory information stored for workspace modules. When this option is selected, each time the set of modules displayed in the Module Context field changes (for example because the Library Name has changed), the system refreshes the in-memory information on the set of modules that are in the workspace, as if the \*Refresh\* item on the Module Context field had been selected.

When this is set, any new modules fetched into the workspace outside of the DSDFII interface are immediately available to the module context field.

To enable automatic refresh of module context fields:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Expert** tab, select **Automatically Refresh Module Context fields** field.

**Note:** This option is available only in **expert** mode.

3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

## Related Topics

Setting Options

### Use skip mode to Rollback a Cell View

This option allows the user to choose the methodology used for the Cell View rollback functionality. Below is a brief description of the methodologies available for rollback. For more information, see Rollback Cell Views.

#### Skip Methodology

The skip method checks in the rollback version by skipping the current version. This best preserves the history of the View Version.

#### Lock Methodology

The lock method, locks the Cell View and overlays the rollback version on top of the existing workspace version, then performs the checkin as the latest version. This is appropriate for a working methodology where skip is restricted or the user base works exclusively with locked checkouts. The lock method does not allow for the same level of traceability as the skip method, however the rollback comment will be present on the new version, and it will be possible to recreate the history of the Cell View.

#### To specify the rollback methodology type:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Expert** tab, select **Use skip mode to Rollback a Cell View** field.

**Note:** This option is available only in **expert** mode.

3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

## Related Topics

Setting Options

Rollback Cell Views

## Controlling the Checkout Hierarchy

When a Checkout Hierarchy operation is initially performed, it creates a hierarchy in the workspace. When subsequent hierarchical checkouts are performed, it updates the hierarchy in the workspace.

The operation can update the hierarchy in one of two ways. When the “checkout hierarchy layer by layer” option is selected, the operation processes one layer of the hierarchy at a time, starting at the top. As each layer is populated, the new data is read to identify the next layer. This gives very accurate results, ensuring the operation is performed exactly, and solely, on the data that forms the final version of the design hierarchy. This method, because of the complexity of the operation, has a small performance cost when performing the multiple operations needed.

When the “Checkout hierarchy layer by layer” option is de-selected, the operation processes the whole (existing) design hierarchy in one command. The operation subsequently re-scans the hierarchy and processes any new cells to ensure that the whole hierarchy is eventually processed, however the operation could have been carried out on objects that are not part of the final design hierarchy.

To set the Checkout hierarchy layer by layer option:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Expert** tab, select **Checkout hierarchy layer by layer** field.
3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

## Setting the Workspace Root Path

Set the workspace root path when there is module data needed that is outside the known workspace modules, for example, using the Checkin File form to operate on data outside of the known libraries.

To define workspace root paths:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Expert** tab, enter a value for the **Workspace root path** field.
3. Specify the workspace root paths in quotations separated by a comma, for example ("workspace\_path"), ("workspace\_path").

Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.

4. Click **OK**.

The changed option settings take effect immediately.

#### Related Topics

DesignSync DFII SKILL Programming Interface Guide: Workspace root path

### Choosing the Temporary Directory

Set the temporary directory path to the directory of your choice. By default, the /tmp directory is designated as the DSDFII temp path. For networked systems, where Cadence and the DesignSync server are not located on the same server, using /tmp, a system local directory, does not work. Specify a network accessible directory which can be read by both the Cadence and DesignSync servers.

To set the tmp directory:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Expert** tab, enter a value for the **Directory for temporary files** field.

**Note:** This option is available only in **expert** mode.

Enter the path to the temporary directory. The default, /tmp, should only be used when it is okay to use a local system directory.

3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

## Related Topics

Setting Options

### Controlling the Delete Options

**Note:** Your user level must be **expert** to control the delete options.

By default, your user level determines what delete options are available to you when deleting design objects (cell views, cells, libraries, or categories). If your user level is **novice** or **advanced**, you can delete objects only from your workspace. If your user level is **expert**, you can also retire, remove, or delete objects in the vault.

To control the delete options:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Expert** tab, enter a value for the **Choices for the Delete forms** field.

**Note:** This option is available only in **expert** mode.

Specify any combination of the following values: "workspace", "vault", "retire", "remove". Include the quotation marks, separate each value with a comma or space, and optionally surround your set of values with parentheses. The first item in the list specifies the delete behavior in **novice** and **advanced** user modes. This is the only delete behavior mode novice and advanced users can use. The first item in the list is also the default behavior in **expert** mode. For example,

```
("workspace" "vault")
```

specifies that design objects are deleted from the workspace only when in **novice** or **advanced** modes, whereas in **expert** mode you can select either **Workspace Only** (the default) or **Workspace and Delete From Vault**. In this example, the **Workspace and Retire From Vault** and **Workspace and Remove from Module** options are unavailable at all user levels.

3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

**Note:**

The **Choices for the Delete forms** option has a corresponding SKILL variable: `syncDeleteChoices`. A project leader can set this variable in a site `.cdsinit` file to define the delete options site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

**Related Topics**

- Setting Options
- Using SKILL Variables
- Deleting Design Objects

**Controlling When Unlock Is Available**

**Note:** Your user level must be **expert** to control the availability of the unlock operation.

Because the unlock operation is not needed frequently and can be potentially dangerous (see Unlocking Design Files), DesignSync DFII does not expose an interface to unlock objects by default. You can optionally enable the unlock interface, which is provided by the Show Checkouts form.

To enable the unlock interface:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the **Expert** tab, select a value from the **User level at which Unlock is available** option:
  - **novice**: Unlock is available at all user levels.
  - **advanced**: Unlock is available at advanced and expert user levels.
  - **expert**: Unlock is available at expert user level.
  - **none** (default): Unlock is not available at any user level.

**Note:** This option is available only in **expert** mode.

3. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
4. Click **OK**.

The changed option settings take effect immediately.

**Note:**

The **User level at which Unlock is available** option has a corresponding SKILL variable: `syncAllowUnlock`. A project leader can set this variable in a site `.cdsinit` file to define this behavior site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

## Related Topics

Setting Options  
Using SKILL Variables  
Unlocking Design Files

## Selecting a User Level for Background Operations

The ability to run commands in the background is available by default. Instead, you can prevent all commands from being run in the background or you can decide which user level is appropriate for specific commands to be run in the background. For example, you might decide that Checkout commands can be run in the background by novice users, but Checkin commands can be run in the background only by expert users.

Set a user level for background operations as follows:

1. Select **Synchronicity => Options => Set Options** from the CIW or **Synchronicity => Set Options** from a cell view window.

The DesignSync DFII Options form appears.

2. On the Expert tab, select one of the **User level at which background Cancel is enabled** choices.

Choose a user level of **novice**, **advanced**, or **expert**. See Selecting a User Level for a description of these levels. Choose **none** to prevent users from canceling checkouts in the background.

**Note:** This option is available only in **expert** mode.

3. Select a user level, as well, for the fields corresponding to the Checkin, Checkout, Delete, Join Library, and Tag commands.

Each type of command has its own user level setting because you might decide that some operations, such as Checkin or Tag, require more protection than others.

4. Click **Save Defaults** if you want this setting (and any other option settings that you have modified) to be saved for future sessions.
5. Click **OK**.



The changed option settings take effect immediately.

### Note:

The options for selecting a user level for background commands have corresponding SKILL variables:

User level at which background Cancel is enabled	<code>syncAllowBackgroundCancel</code>
User level at which background Checkin is enabled	<code>syncAllowBackgroundCheckin</code>
User level at which background Checkout is enabled	<code>syncAllowBackgroundCheckout</code>
User level at which background Delete is enabled	<code>syncAllowBackgroundDelete</code>
User level at which background Join Library is enabled	<code>syncAllowBackgroundJoinLibrary</code>
User level at which background Tag is enabled	<code>syncAllowBackgroundTag</code>

A project leader can set these variables in a site `.cdsinit` file to define the default workspace path root site-wide. Setting the option from the DesignSync DFII Options form takes precedence over the variable definition. See Using SKILL Variables for details.

### Related Topics

Setting Options  
Using SKILL Variables

## Using SKILL Variables

### Using SKILL Variables

You can set a number of options that change the behavior of DesignSync DFII using the DesignSync DFII Options form (see Setting Options). Most of the options available from the DesignSync DFII Options form have corresponding SKILL variables that can be placed in `.cdsinit` files.

Project leaders can use the SKILL variables to define site-wide customizations, eliminating the need for each user to set options individually. Variables defined in `.cdsinit` files set the default values that appear in the DesignSync DFII Options form.

### Note:

Saved user settings from the DesignSync DFII Options form take precedence over the variable settings if the variables are defined prior to loading the DesignSync DFII `dssInit.il` SKILL file. If the variables are defined after `dssInit.il` is loaded, then the variables take precedence.

The following table lists the available SKILL variables and the help topic that describes the customization.

<b>Variable</b>	<b>Help Topic</b>
<code>syncAddObjectTypes</code>	Allows users to adjust the object merge order. For more information, see <a href="#">Compare Cell Views</a> .
<code>syncAllowBackgroundCancel</code>	<a href="#">Selecting a User Level for Background Operations</a>
<code>syncAllowBackgroundCheckin</code>	<a href="#">Selecting a User Level for Background Operations</a>
<code>syncAllowBackgroundCheckout</code>	<a href="#">Selecting a User Level for Background Operations</a>
<code>syncAllowBackgroundDelete</code>	<a href="#">Selecting a User Level for Background Operations</a>
<code>syncAllowBackgroundJoinLibrary</code>	<a href="#">Selecting a User Level for Background Operations</a>
<code>syncAllowBackgroundTag</code>	<a href="#">Selecting a User Level for Background Operations</a>
<code>syncAllowRetainFields</code>	<a href="#">Controlling Whether the Retain Button Appears</a>
<code>syncAllowUnlock</code>	<a href="#">Controlling When Unlock Is Available</a>
<code>syncAutoRefreshModuleContext</code>	<a href="#">Automatically Refresh Module Context Fields</a>
<code>syncBTagsInBanner</code>	<a href="#">Controlling Cell View Banner Information</a>
<code>syncCheckNewBeforeCheckin</code>	<a href="#">Checking for New Objects Before Checkin</a>
<code>syncCompareHighlightLayers</code>	<a href="#">Controlling Number of Hilite Layers for the Compare Command</a>
<code>syncConfirmSaveCellViews</code>	<a href="#">Controlling Confirmation of Saving Modified Views at Checkin</a>
<code>syncDeleteChoices</code>	<a href="#">Controlling the Delete Options</a>
<code>syncDisableEditWindowMenu</code>	<a href="#">Controlling the Synchronicity Menu on Cell View Windows</a>
<code>syncDisableErrorInfoPopup</code>	<a href="#">Controlling Informational Pop-up Windows</a>
<code>syncDisplayBackgroundCompletePopup</code>	<a href="#">Controlling Background Operation-Complete Pop-up Windows</a>

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<code>syncDisplayCompletePopup</code>	Controlling Operation-Complete Pop-up Windows
<code>syncFetchMissingCellsOnLibViewsCheckout</code>	Fetching Views of Missing Cells During Library Checkout
<code>syncFetchStatusInBanner</code>	Controlling Cell View Banner Information
<code>SyncIconsDir</code>	Customizing the Status Browser Icons
<code>syncInitFormsFromCIW</code>	Controlling Synchronicity Form Initialization
<code>syncJoinLibDefaultPath</code>	Setting the Default Workspace Path
<code>syncLockedInBanner</code>	Controlling Cell View Banner Information
<code>syncMaxItemsPerPage</code>	Controlling the Number of Items on a Results Page
<code>syncModifiedInBanner</code>	Controlling Cell View Banner Information
<code>syncPauseQueueOnFail</code>	Controlling When the Background Queue is Paused
<code>syncRequireLibNameInPaths</code>	Requiring Library Names in Paths
<code>syncReportMode</code>	Setting the Report Level for DesignSync Commands
<code>syncRollbackDisallowSkip</code>	Use skip mode to Rollback a Cell View
<code>syncShowServerStatus</code>	Controlling Server Browser Status
<code>syncSkipViaHeaders</code>	Defaults to "f" (False). By default, DesignSync processes Cadence custom vias using the "viaHeaders" property and treating them as instances. To prevent these vias being processed as instances set 'syncSkipViaHeaders' to 't' (True) Cadence Custom vias can appear as cells in the design, and as instances in the

	<p>hierarchy; however, the vias appear in a 'viaHeaders' property for a cell. For more information on vias, see the Cadence documentation.</p>
syncStatusBrowserCategoryWidth	<p>The width of the Category column of the Status Browser when in List mode. Default value is 75. The specified value must be a positive integer. The recommended value is between 40 and 150. If illegal values, or values outside of that range are used, the Status Browser may not display correctly.</p> <p><b>Note:</b> This value must be specified in the dsslinit.il file before the status browser is opened. The columns can be adjusted in the status browser window, but the changes will not persist across status browser sessions.</p>
syncStatusBrowserCellWidth	<p>The width of the Cell column of the Status Browser in List mode. Default value is 75. The specified value must be a positive integer. The recommended value is between 40 and 150. If illegal values, or values outside of that range are used, the Status Browser may not display correctly.</p> <p><b>Note:</b> This value must be specified in the dsslinit.il file before the status browser is opened. The columns can be adjusted in the status browser window, but the changes will not persist across status browser</p>

	sessions.
syncStatusbrowserInitialDirectories	Status Browser Options.
syncStatusBrowserInitialWindowSize	<p>The width and height of the status browser window when it is opened, specified as a list of two pixel values in integers. The value must be specified in the dsslinit.il file before the file is loaded. Changes after the file has been loaded may or may not impact the opening size of the status browser window. . Default: (1250 750)</p> <p><b>IMPORTANT:</b> If the values are illegal or too small or too large, then the Status Browser cannot be started.</p> <p><b>Note:</b> This value must be specified in the dsslinit.il file before the file is loaded. After the file is loaded, any changes here will not affect the status browser..</p>
syncStatusBrowserLibraryWidth	<p>The width of the Library column of the Status Browser in List mode. Default value is 75. The specified value must be a positive integer. The recommended value is between 40 and 150. If illegal values, or values outside of that range are used, the Status Browser may not display correctly.</p> <p><b>Note:</b> This value must be specified in the dsslinit.il file before the status browser is opened. The columns can be adjusted in the status browser window, but the changes will not persist across status browser</p>

	sessions.
<code>syncStatusBrowserMaximumLogLines</code>	Setting the Output Window Buffer Size for Status Browser
<code>syncStatusBrowserModuleFilterPaths</code>	List of directories used to filter displayed modules
<code>syncStatusBrowserShowStatusIcons</code>	Show Status Icons.
<code>syncStatusBrowserViewMode</code>	Status Browser Options.
<code>syncTagsInBanner</code>	Controlling Cell View Banner Information
<code>syncUseCadenceLibraryBrowser</code>	Selecting a Library Browser
<code>syncUseEditWindowShortMenu</code>	Controlling the Synchronicity Menu on Cell View Windows
<code>syncUseQuickVersionLookup</code>	Defaults to (t). By default, the version shown in DE window banners is retrieved from the local workspace metadata. If an object is locked, "(L)" is displayed. If the quick version lookup is disabled by setting its value to (nil), the version shown is retrieved from the SyncServer associated with the workspace. For locked objects, the version shown will indicate the upcoming version. For example, if version 1.3 is checked out with a lock, "1.3->1.4" is displayed as the version. Upon checkin, version 1.4 will be created.
<code>syncUserTagList</code>	Modifying the Tag List
<code>syncVersionInBanner</code>	Controlling Cell View Banner Information

All the variables accept values of `t` and `nil` (for example, `syncTagsInBanner=t` or `syncTagsInBanner=nil`), with the following exceptions:

- `syncAllowUnlock` and all of the `syncAllowBackground<operation>` variables accept one of the following values:
  - "none" -- Unlock is not available at any user level.
  - "novice" -- Unlock is available at all user levels.
  - "advanced" -- Unlock is available at advanced and expert user levels.
  - "expert" -- Unlock is available only at expert user level.

For example:

```
syncAllowBackgroundTag="advanced"
```

- `syncDeleteChoices` accepts an option list containing one or more of the following values: "workspace", "vault", "retire". The first item in the list specifies the delete behavior in novice and advanced user modes and specifies the default behavior in expert mode. For example:

```
syncDeleteChoices=(' "vault" "workspace"')
```

specifies that design objects are deleted from the workspace and the vault when in **novice** or **advanced** modes, whereas in **expert** mode you can select either **Workspace and Delete From Vault** (the default) or **Workspace Only**. In this example, the **Workspace and Retire From Vault** option is unavailable in all user modes.

- `syncDisplayCompletePopup` and `syncDisplayBackgroundCompletePopup` accept one of the following values:
  - - "never" -- Do not display pop-ups when operations complete.
    - "on failure" -- Display pop-ups only when operations fail or have errors.
    - "always" -- Display pop-ups every time an operation completes

For example:

```
syncDisplayCompletePopup="on failure"
```

- `syncJoinLibDefaultPath` accepts a relative or absolute path. The Join Library wizard appends the library name to the value you specify, so you probably want to include a trailing slash (/), for example:

```
syncJoinLibDefaultPath="/home/users/goss/libraries/"
```

- `syncMaxItemsPerPage` accepts an integer between 1 and 1500, inclusive. If you specify a value larger than 1500, DesignSync DFII defaults to 1500. If you specify any other invalid value, DesignSync DFII defaults to 100. For example, to

specify 20 items per page, you would add the following line to your `.cdsinit` file:

```
syncMaxItemsPerPage=20
```

- `syncUserTagList` accepts a space-separated list of tags, for example:

```
syncUserTagList="green yellow red"
```

- `syncStatusBrowserInitialDirectories` - a SKILL list of directory names.
- `syncCompareHighlightLayers` - a list of highlight layer names.

## Related Topics

Setting Options

### Setting the Output Window Buffer Size for Status Browser

The status browser output window contains a configurable number of lines stored in the buffer. When the specified maximum number is reached, the older lines disappear from the top as new ones are added. The default number of lines is 1000. The minimum number of lines is 5. The absolute maximum number of lines is 5000.

You can change the maximum number of lines by editing the `syncStatusBrowserMaximumLogLines` setting in the `.cdsinit` file.

**Note:** If the value is set to an illegal value, for example, greater than 5000, less than 5, or not a number value, an error is displayed to the user and the value is reset to the DSDFII default of 1000.

## Related Topics

Using SKILL Variables

Status Browser Window

## Requiring Library Names in Paths



The Join Library and Configure Library wizards prompt the user for various paths (vault path, mirror path, local workspace path) and recommend that the library name be the last directory in each path. By default, a warning is displayed when a user completes the wizard and has ignored this recommendation, but the user can still choose to continue the operation.

You, as a project leader, can enforce the use of the library name in all paths by setting the variable `syncRequireLibNameInPaths` to `t` in your site `.cdsinit` file:

```
syncRequireLibNameInPaths=t
```

With this variable set, an error is displayed when the user completes the wizard if any of the specified paths do not end in the library name. The user must change the nonconforming paths before the wizard will perform the operation.

### Related Topics

- Setting Options
- Using SKILL Variables

### Selecting a Library Browser

Many Synchronicity forms have a **Browse** button that invokes the DesignSync DFII Browser, which helps you select objects to operate on. The DesignSync DFII Browser has capabilities beyond those of the Cadence Library Browser. For example, you can:

- Select a category and have it passed back to the calling form.
- Browse directories and files in addition to libraries, cells, and views.
- Select multiple objects.
- Browse a DesignSync DFII vault.

However, you can choose to use the Cadence Library Browser if you prefer.

To have the **Browse** buttons on DesignSync DFII forms invoke the Cadence Library Browser instead of the DesignSync DFII Browser, set the variable `syncUseCadenceLibraryBrowser` to `t` in your `.cdsinit` file:

```
syncUseCadenceLibraryBrowser=t
```

### Note:

The Checkin Object, Checkout Object, Cancel Object, Tag Object, and Delete Object forms are not affected by this setting. The **Browse** buttons on these forms always call the DesignSync DFII Browser. A key benefit of these forms is the ability to operate on directories and files, so their value would be reduced without the capabilities of the DesignSync DFII Browser.

## Related Topics

Setting Options  
Using SKILL Variables  
Browsing Your Workspace

## Controlling Whether the Retain Button Appears

Many Synchronicity forms have a **Retain** button that lets you retain the "last modified" timestamps of objects. As a user or project leader, you can choose to remove the **Retain** button from forms.

To remove the **Retain** buttons from all DesignSync DFII forms, set the variable `syncAllowRetainFields` to `nil` in each user's `.cdsinit` file:

```
syncAllowRetainFields=nil
```

When `syncAllowRetainFields` is `t` the **Retain** button appears on all forms.

The SyncAdmin Command Defaults option, "Retain last modification timestamps (-retain/-noretain)" controls the default behavior of command that use the Retain option.

### Notes:

- If the `syncAllowRetainFields` variable is set to `nil` and thus no **Retain** button displays, the retain timestamps default value is used. Set the default value by selecting SyncAdmin's **General => Command Defaults** tab and enabling or disabling the **Retain last-modification timestamp** button.
- You can set the `syncAllowRetainFields` variable in the `.cdsinit` file before or after loading the `dssInit.il` SKILL file.
- The value of `syncAllowRetainFields` is applied to each form the first time that form is displayed. If you change the value of the variable in SKILL, this will not affect forms that have already been displayed. Restart DesignSync DFII to make sure that the new setting applies to all forms.









## Related Topics

Setting Options  
Using SKILL Variables  
SyncAdmin Help: Command Defaults

## Customizing the Status Browser Icons

In both Status Browser views, you can display revision control icons for each object in the View Pane. These icons can be customized to display an icon of the user's choice. The icons must be gif files with a size of 16\*16. The icons must be placed together in a single directory and use the same names as the existing icons.

### Replacing Existing Status Brower Icons

Status Icon	File Name	Description
	Unlock.gif	Object is unlocked, unmodified and up-to-date
	Unlock_mod.gif	Object is unlocked, locally modified and up-to-date (Needs checkin)
	Unlock_mod_update.gif	Object is unlocked, locally modified, and out-of-date (Needs merge)
	Unlock_update.gif	Object is unlocked, unmodified and out-of-date (Needs populate)
	Lock.gif	Object is locked, unmodified and up-to-date
	Lock_mod.gif	Object is locked, modified and up-to-date (Needs checkin)
	Lock_mod_update.gif	Object is locked, modified and not up-to-date (Needs merge)
	Lock_update.gif	Object is locked, not modified and not up-to-date (Needs populate)
<NoIcon>	Blank.gif	Object is unmanaged, or DesignSync is unable to determine the status of the object.

### To replace the icons:

Modify the SKILL variable `syncIconDirs` in the `cdsinit` file to point to the directory containing your new files.

**Note:** If the file name exists, but is not a valid icon, no icon will be displayed. If the file name does not exist in the specified directory, the default icon will be used.

### Extending Status Browser Icons

You can further extend the Status Browser Icon functionality by tracking additional revision control values by using the `dssStatusBrowserStatusIconU` function. For more information on this function, see DesignSync Data Manager DFII SKILL Programming Interface Guide: `dssStatusBrowserStatusIconU`.

## Using SyncAdmin

### Using SyncAdmin

The SyncAdmin tool lets users and project leaders select options for DesignSync tools, including DesignSync DFII. SyncAdmin modifies the DesignSync registry files (user, project, or site).

Registry settings are read when you invoke DesignSync DFII, so you must restart the tool for new settings to take effect.

Your project leader (or anyone with write access to the site registry file) can make the following site-wide DesignSync DFII customizations using SyncAdmin:

- Selecting a Default Fetch Mode
- Controlling the Display of Check-In or Check-Out Modes

Users can redefine the default fetch mode (overriding the site setting) by using SyncAdmin to edit the user registry. Users can also redefine the available check-in and check-out modes from SyncAdmin if the project leader has not disallowed it.

Another common customization, available to both project leaders and individual users, is selecting the default HTML browser. See SyncAdmin Help for details.

## Related Topics

Customizing DesignSync DFII

### Selecting a Default Fetch Mode

DesignSync DFII forms select the mode -- **Edit (locked copy)**, **Read (mirror link)**, and so on -- that you selected the last time you used the form. For example, if you chose **Read (local copy)** the last time you checked out a cell view, the next time you check out, the form appears with **Read (local copy)** already selected.

By default, the default fetch mode is **Read (local copy)**. This setting is used the first time you invoke the form or when you click the **Defaults** button.

Your project leader can specify a different default fetch state site-wide, or you can define a default fetch state for yourself. The state must be one of the read-only states -- any state except **Edit (locked copy)** or **Regenerate (locked reference)**. The default state is then selected automatically when a form is first displayed or when you click **Defaults** on a form with a **Mode** field. This feature is useful when a project leader wants to enforce a team working methodology. Your project leader selects a default fetch state using the SyncAdmin tool.

If you use Library Manager's Design Manager menu to check in or cancel the check out of a design object, the object in your workspace also obeys the default fetch mode.

### Notes:

- The DesignSync **reference** functionality is not available in DesignSync DFII. If your project leader has defined the default fetch state as **reference**, DesignSync DFII issues a warning and the default fetch mode defaults to **Read (local copy)**.
- Your project leader can also limit the modes that are displayed on check-in, check-out, and cancel forms. See [Controlling the Display of Check-In or Check-Out Modes](#) for more information.

### Related Topics

Using SyncAdmin  
Controlling the Display of Check-In or Check-Out Modes  
Checking In Design Files  
Checking Out Design Files

### Controlling the Display of Check-In or Check-Out Modes

By default, DesignSync DFII forms offer users the following check-in modes:

Edit (locked copy), Read (mirror link), Read (cache link), Read (local copy)

and the following check-out modes:

Edit (locked copy), Read (mirror link), Read (cache link), Read (local copy),  
Regenerate (locked reference)

Your project leader or site administrator can limit the modes available to all users of these forms using the SyncAdmin tool. The project leader or administrator can optionally allow users to override the available check-in and check-out modes. See [SyncAdmin Help: States Options](#) for details.

#### Note:

- DesignSync DFII Cancel forms obey the allowed check-in modes.
- The SyncAdmin allowed states settings are obeyed by both the DesignSync GUI and DesignSync DFII.

### Related Topics

Using SyncAdmin  
Selecting a Default Fetch Mode  
Checking In Design Files  
Checking Out Design Files

## Controlling Form Default Values

### Setting Form Default Values

You can set the default values for many DesignSync DFII form fields. For example, you can set the stop and switch lists of the Hierarchy forms and have DesignSync DFII default to those values in future sessions. Not all fields have definable defaults.

To set field defaults:

1. Display the form for which you want to set default values.
2. Set field values to their soon-to-be default values.
3. Click **Save Defaults**.

A message in the CIW indicates the fields for which default values are saved. Future use of the **Defaults** button on this form or forms that share fields with this form will set field values to the new defaults.

**Note: Save Defaults** is only available if at least one field on a form can have a user-defined default.

4. Click **OK** (to execute an operation and dismiss the form) or **Cancel** (to dismiss the form without executing the operation).

**Note:** Pressing the **Cancel** button on the form restores the fields to the values they had when the form was displayed, or when the **Apply** button was pressed. This means that if you cancel the form after using Defaults / Save Defaults, and display the form again, the fields may not be showing their default values.

Some fields, such as stop and switch lists, are shared across several forms; defining the defaults on one Hierarchy form affects all the others.

The **New** option on the Checkin Cell View form is not shared with other checkin forms. If you set **New** as your default on the Checkin Cell View form, that setting is not used as the default for other checkin forms. Likewise, if you set **New** as the default on another checkin form, the Checkin Cell View form is not affected.

You can view the default values you have set in various forms, and remove any default values that you previously set. See Viewing and Resetting Form Defaults.

If you are a team leader you can set default values for your project team. Project default values may be overridden by individual users. If you are the software administrator, you can set default values for all users of the site's installation. See the `dssChangeDefaultsContextP` function in the DesignSync DFII SKILL Programming Interface Guide.

## Related Topics

Viewing and Resetting Form Defaults

## Customizing DesignSync DFII

Site-Wide Configuration in the DesignSync System Administration Help

Project-Specific Configuration in the DesignSync System Administration Help

dssChangeDefaultsContextP function in the DesignSync DFII SKILL Programming Interface Guide

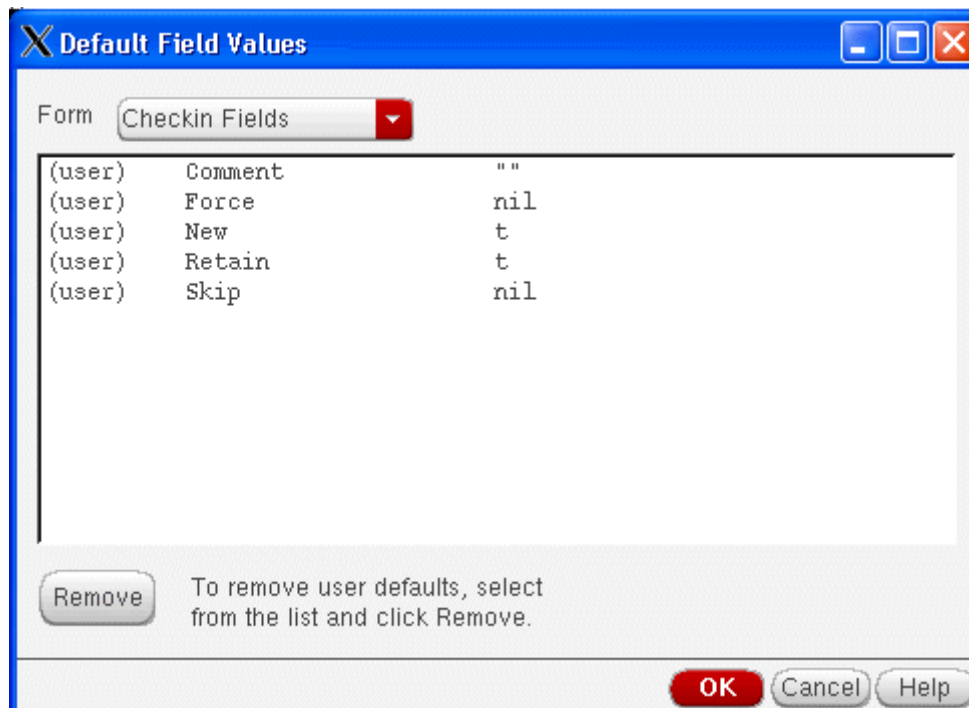
## Viewing and Resetting Form Defaults

You can set the default values for many DesignSync DFII form fields using the **Save Defaults** button; see Setting Form Default Values.

To view, and optionally reset, the default DesignSync DFII field values you have set:

1. Select **Synchronicity => Options => Show Defaults** from the CIW.

The Default Field Values form appears.



Any default values that you saved are designated as **(user)** values. If your project leader set default values for your team, those are designated as **(project)** values. If your software administrator set default values for all DS DFII users of the installation, those are designated as **(site)** values. If different default values are set for the same field, a **(user)** default value takes precedence over a **(project)** default value. And a **(project)** default value takes precedence over a **(site)** value.

2. From the **Form** field, select the form whose defaults you want to view or reset. Only forms for which you have saved defaults (used the **Save Defaults** button) are listed.

**Notes:**

- A **Disabled Dialog Boxes** choice appears in the **Form** field if you have selected the "Do not show me this again" check box from any confirmation dialog (such as **Tag Modified Objects**). Select **Disabled Dialog Boxes** if you want to enable a previously disabled dialog box.
- If previously turned off, you can re-enable the DesignSync DFII What's New window at startup from the **Disabled Dialog Boxes** choice. See Release Information for details on the What's New window.
- Many fields are shared across multiple forms. For example, the **Stop List** and **Switch List** fields are common to all Hierarchy forms. Removing the default value for a shared field affects all forms that share that field.

The field defaults values for the form you selected are displayed.

3. A user can only remove (**user**) default values. To remove a default value:
  2.
    - a. Select one or more of the listed (**user**) values. To select multiple values, use Control-left click, or to select a range of values, use Shift-left click.
    - b. Click **Remove**.

If you are a team leader, you can remove (**project**) values. If you are the software administrator, you can remove (**site**) values. See the `dssChangeDefaultsContextP` function in the DesignSync Data Manager DFII SKILL Programming Interface Guide.

3. To view or reset other form defaults, select another form from the **Form** field.
4. To dismiss the form, click **OK** or **Cancel**.

## Related Topics

Setting Form Default Values

Customizing DesignSync DFII

Site-Wide Configuration in the DesignSync System Administration Help

Project-Specific Configuration in the DesignSync System Administration Help

`dssChangeDefaultsContextP` function in the DesignSync DFII SKILL Programming Interface Guide



## Using the Programming Interface

### Using the DesignSync DFII SKILL Programming Interface

The DesignSync Data Manager DFII SKILL Programming Interface Guide describes the DesignSync DFII SKILL application programming interface (API). The API provides programmatic access to DesignSync DFII operations and also lets you customize the Synchronicity menus.

**Note:**

You should be familiar with SKILL programming to use the DesignSync DFII SKILL API. See Cadence documentation as needed.



# Troubleshooting and Pop-up Informational Windows

## Unable to Locate a Module

To improve performance, the DSDFII interface maintains a list of known modules. This reduces time spent scanning the DesignSync server for managed Cadence data.

DSDFII uses the following information to build a list of known modules:

- the list of library directories from the cds.lib file at IC startup.
- the current working directory of the DFII process.
- the paths defined by the user as a "workspace root path."

If you have a module that is not being seen, for example, if you want to check out a cell from a module that was added after the client was started, you can press Refresh on the checkout form to reload the modules list.

If after reloading the modules list, you still cannot see a module, the module may be in a workspace path that is not being examined by DSDFII. Add the workspace path using the Synchronicity Options form. The path is automatically reloaded, making the module available without restarting the client.

**Note:** The workspace path option is only available in Expert mode. For more information on option modes, see Selecting a User Level.

### Related Topics

Working with Modules

## Pop-up Windows

DesignSync DFII uses pop-up windows (alert boxes) to communicate errors, warnings, and informational messages, as well as to prompt you for input. Some pop-ups are common, while others are rarely encountered. Most pop-ups have **Help** buttons that, when clicked, provide a description of the situation and a suggestion on how to proceed.

### Note:

- You can optionally suppress the use of some pop-up windows; see Controlling Informational Pop-up Windows. When pop-ups are suppressed, DesignSync DFII still outputs information to the CIW.
- You can optionally have DesignSync DFII display pop-up windows when operations complete; see Controlling Operation-Complete Pop-up Windows.

## Automatic Check In of Library Files

### Description

DesignSync DFII has detected that important library-level files have not been checked in and prompts you to do so.

### Situation

Certain files (for example, `cdsinfo.tag`) are required to be checked in before you can check in library design data. Failure to check in these files can lead to later problems. DesignSync DFII checks for these files and tries to check them in if they are not already in the vault. In the case of `cdsinfo.tag`, if the file cannot be found, then your check-in operation aborts. If this file is not in the vault, then the Cadence collection objects will not be correctly recognized and handled.

### Solution

Allow DesignSync DFII to check in these files.

### Related Topics

Checking In Design Files  
Pop-up Windows

## Background

### Description

You have submitted a command using the **Background** option.

### Solution

Confirm that you want to run the command in the background or cancel the command. To view the Background Queue, select **Synchronicity => Options => Show Background Queue**.

### Related Topics

Displaying the Background Queue  
Pop-up Windows

## Background Processes Running

### Description

You attempted to exit DesignSync DFII with active or background processes still running.

### Solution

If you attempt to exit DesignSync DFII with commands still queued or actively running, you can indicate that DesignSync DFII complete the running commands and/or the queued before exiting. DesignSync DFII displays a form that lets you decide how to manage the commands containing the relevant options. Select the desired option and press **OK**, or to cancel the exit and continue the session, select **Cancel**.

- Wait for the running commands to complete, and then exit.
- Wait for running and queued commands to complete, and then exit.
- Wait only for the running commands to complete, and then exit.
- Wait for queued commands to complete, and then exit.
- Do not wait for any commands, exit immediately.

**Note:** The DSDFII interface shows only the relevant options. For example, if you do not have queued actions, you will only see the options for running options.

If you have only queued commands and no running commands, the queue may be paused. To resume processing the queue, return to the form used to pause the queue.

If you want to cancel specific commands before exiting, use the Background Queue (**Synchronicity => Options => Show Background Queue**).

### Related Topics

Displaying the Background Queue  
Pop-up Windows

## Branch Operation Needs a Single Object

### Description

You have selected the Branch operation, but have selected no objects or more than one object to branch.

### Situation

You have initiated a Branch operation with more than one object or no objects selected.

### Solution

Press **Close** to close the dialog box. Select a single, appropriate object to branch and relaunch the **Branch** command.

## Browser Not Started

### Description

The Web browser did not start for unknown reasons, possibly because you do not have a browser defined.

### Situation

You have requested an operation that requires use of a Web browser, for example viewing the data sheet of a cell view (**Synchronicity => View Data Sheet** from a cell view window). DesignSync DFII was unable to launch a browser. Further information may be found in the CIW, or in the UNIX shell from which the DFII session was started. The most common reason for failure is your browser executable directory is not in your `PATH` variable.

### Solution

View the error messages in the CIW or UNIX shell and correct the indicated problem. If your browser is undefined or improperly defined, use the SyncAdmin tool to define the browser that will be used by DesignSync DFII. If your browser is properly defined, ensure that your `PATH` environment variable includes the browser's executable directory.

### Related Topics

Displaying Data Sheets  
Pop-up Windows

## Cadence Collection Objects Not Recognized

### Description

The DesignSync process (`stcl` or `stclc`) is unable to correctly recognize Cadence view objects, specifically the set of files that make up a view.

This problem may occur if:

- Cadence object recognition has been switched off in the DesignSync registry files.
- The DesignSync process was started in an environment that did not allow it to find the Cadence installation.

### Solution

Have your DesignSync administrator run SyncAdmin and verify under the Third Party Integration tab that Cadence collection object recognition is enabled. Also, verify that you have performed all the steps necessary for setting up your environment to use DesignSync DFII.

### Related Topics

- Setting Up Your Environment
- Pop-up Windows

## Cannot Expand Path

### Situation

You have entered a path that cannot be resolved. For example, you entered a path containing `~<username>`, where the specified user name does not exist.

### Solution

Verify and correct the path.

### Related Topics

- Pop-up Windows

## Cell Views Could Not Be Canceled

### Description

The checkouts for the listed cell views could not be canceled.

### Situation

You have a checked out cell view open for edit, the cell view is modified, and have requested a cancel operation. DesignSync DFII will not let you cancel the checkout.

### Solution

Close the cell view in question, or use the Cancel form's **Force** option (user level of **expert**).

### Related Topics

- Canceling a Check Out
- Pop-up Windows

## Cell Views Not Found

### Description

A check-in operation was made for cell views that do not currently exist. The nonexistent cell views will be ignored.

### Solution

No action required. If valid cell views were specified, the operation will complete while ignoring the nonexistent cell views.

### Related Topics

Checking In Design Files  
Pop-up Windows

## Checkout Failed

### Description

The check-out operation failed for the indicated reason.

### Situation

While attempting to check out design objects, there was a failure.

### Solution

Correct the error indicated and rerun the check-out command to complete the operation.

### Related Topics

Checking Out Design Files  
Pop-up Windows

## Command Complete

### Description

DesignSync DFII informs you when a command completes.

### Solution



Output from the currently running background command displays in the CIW. Additionally, you can configure DesignSync DFII to display a pop-up status window upon completion of commands. You can have pop-up windows display upon completion of foreground or background commands.

See [Controlling Operation-Complete Pop-up Windows](#) to set this option for commands run in the foreground.

See [Controlling Background Operation-Complete Pop-up Windows](#) to set this option for commands run in the background. If you want an operation-complete pop-up to display for a single background command, set the option before you queue the command. After the command has queued, you can readjust the option.

## Related Topics

[Displaying the Background Queue Pop-up Windows](#)

# Command Not Yet Available

## Description

You see a pop-up message with the text, "This Command is not yet available. Please use the Cadence Library Manager."

## Situation

You have selected a command that has not yet been implemented in the DSDFII interface.

## Solution

Press **Close** to close the dialog box. Run the desired command from the Cadence Library Manager interface.

# Confirm Delete Operation

## Description

A delete operation that you have requested must be confirmed.

## Situation

Anytime DesignSync DFII is going to perform a delete operation, it prompts you for confirmation. The details of the operation are shown. For example, if you had selected

Stop On Error, the pop-up window informs you that the delete operations will stop if errors occur. If you had turned off the Stop On Error option, the pop-window informs you that the delete operations will continue if errors occur.

### **Solution**

If the details of the operation are what you intend, click **Yes** to continue. Otherwise, click **No** to abort the operation (no data is deleted).

### **Related Topics**

Deleting Design Objects  
Pop-up Windows

## **Confirm Compare of Mismatched Cell Views**

### **Description**

**You are comparing cell views and the two views you have selected for comparison are different types, for example a schematic and a layout.**

### **Solution**

If the details of the operation are what you intend, click **Yes** to continue. Otherwise, click **No** to abort the operation (no data is deleted).

### **Related Topics**

Compare Cell Views

## **Confirm Fetch Object Versions**

### **Description**

A fetch operation that you have requested must be confirmed.

### **Situation**

You are fetching the version list which make take a significant amount of time to load, depending on the sever speed and amount of data being fetched. If you know the version number, tag, or other selector to the version you are trying to view, you can cancel this operation and select the specific version.

### **Solution**

If the details of the operation are what you intend, click **Yes** to continue. Otherwise, click **No** to abort the operation.

## Related Topics

Opening Cell View Versions  
Pop-up Windows

## Confirm Merge

### Description

A merge operation that you have requested must be confirmed.

### Situation

After comparing views, you are merging changes from one cell view into another.

### Solution

If the details of the operation are what you intend, click **Yes** to continue. Otherwise, click **No** to abort the operation.

## Related Topics

Compare Cell Views

## Confirm Partial Merge

### Description

A merge operation that you requested cannot be completed as requested. Some of the merge candidates are able to be merged, however some of them are not.

### Situation

While you are merging changes from one cell view into another, DS DFII determined that not all of the selected merge candidates were able to be merged. The message lists all the merge candidates that cannot be merged into the cell view.

### Solution

If you would like to continue the merge with the objects that can be merged, click **Yes** to continue. Otherwise, click **No** to abort the operation.

## Related Topics

Compare Cell Views

# Confirm Regenerate Mode

## Description

You must confirm an operation that checks out library-level files in **Regenerate (locked reference)** mode.

## Situation

You have initiated a check-out operation that will check out library-level files in **Regenerate (locked reference)** mode. This check-out mode should only be used when you will be creating new versions of objects by regenerating the files (as opposed to editing the latest versions of the files). Regenerate mode locks the vault, but leaves you without local copies of the objects on the assumption that you are regenerating the data. Not having local copies of library-level files (such as `cdsinfo.tag`) can cause problems with library recognition and the identification of library technology information.

## Solution

If you want to continue the operation, click **Yes**. Otherwise, click **No** to abort the operation. You can then perform a different check-out operation, either specifying a different mode or specifying a different set of objects to check out.

Select the **Do not show me this again** check box to avoid this dialog box in the future. (You can undo this selection by selecting **Disabled Dialog Boxes** from the Default Field Values form; see Viewing and Resetting Form Defaults for details.)

## Related Topics

- Checking Out a Library
- Checking Out a Design Hierarchy
- Checking Out a File
- Pop-up Windows

# Confirm Save Before Checkin

## Description

You are attempting to check in one or more cell views that have unsaved modifications. A confirmation box asks you if DesignSync DFII should save your modifications and continue with the check-in operation.

## Solution

Click **Yes** to have DesignSync DFII save your changes and continue with the check-in operation. Click **No** to abort the operation. When you click **No**, you can manually save the data or close the views and discard your changes, then check in the data.

You can customize DesignSync DFII to save modifications automatically, without prompting you, before checking in data. See Controlling Confirmation of Saving Modified Views at Checkin.

## Related Topics

Controlling Confirmation of Saving Modified Views at Checkin  
Pop-up Windows

# Confirm Tag Modified Objects

## Description

You must confirm any tag operation when the **Tag Modified Objects** option is selected.

## Situation

You have initiated a tag operation with **Tag Modified Objects** selected. Because a tag is applied to versions in the vault and **not** local objects themselves, tagging a locally modified object actually applies the tag to the original version that you checked out from the vault. You would need to check in your local modifications (create a new version) and then apply the tag in order for your changes to be included in the configuration. The default tag behavior is to fail for modified objects so that you do not inadvertently tag the wrong version of data. **Tag Modified Objects** overrides this behavior and tags the original version (again, not including your local modifications).

## Solution

If you want to continue the operation, click **OK**. Otherwise, click **Cancel** to abort the operation.

Select the **Do not show me this again** check box to avoid this dialog box in the future. (You can undo this selection by selecting **Disabled Dialog Boxes** from the Default Field Values form; see Viewing and Resetting Form Defaults for details.)

## Related Topics

Tagging Design Files  
Pop-up Windows

## Could Not Create View

### Description

The specified cell view could not be created on the SyncServer.

### Situation

The most likely reason for this error is that a cell view with that name already exists in the vault, having been created by someone else.

### Solution

Specify a different name for your cell view, or if you want to use the original name, do one of the following:

- Select **expert** as your user level, select the **Force** option from the Synchronicity Create Cell View form.

-or-

- Use the Library Manager **Create => View** command.

Note that if you create a view locally, and it already exists in the vault, you may not be able to check in that view.

### Related Topics

Creating a Cell View  
Pop-up Windows

## Could Not Fetch Directory Contents

### Description

The contents of the specified directory could not be determined.

### Situation

You are using the DesignSync DFII Browser. You entered the name of a directory to browse in the **Directory** field, but got an error indicating that the browser could not fetch the contents of the directory. There are different causes for this error depending on whether you are browsing your workspace or the vault.

1. You are browsing your workspace (**Browse Vault** is not selected) and you have specified a directory that does not exist, or you do not have permission to browse that directory.
2. You are browsing the vault (**Browse Vault** is selected) and the vault folder corresponding to the specified directory is inaccessible because the SyncServer is down or because access controls are denying you access.

### Solution

The solution depends on which situation caused the problem:

1. Verify that the directory exists and that you have permission to view its contents.
2. Contact your project leader to determine the problem. The SyncServer may need to be restarted, or access controls may need to be modified to give you access to the vault.

### Related Topics

Browsing Your Workspace  
Pop-up Windows

## Could Not Fetch Version List

### Description

The list of versions for a managed cell view could not be determined.

### Situation

You are using a Synchronicity form that lets you operate on a specific version of a managed object. You have requested a list of versions for the specified cell view, but DesignSync DFII is unable to produce a list. Either there were problems with the library/cell/cell view names you specified, or the cell view does not exist, or there are no versions available in the vault for deletion. Note that the initial version, 1.1, cannot be deleted for any cell view.

### Solution

Verify that you have specified the cell view correctly.

### Related Topics

Checking Out a Cell View  
Deleting Versions from the Vault  
Tagging a Cell View  
Pop-up Windows

## Could Not Find Member Version in Module Version

### Description

The specified module member version does not exist within the specified module version.

### Situation

If you perform an **Open View Version** operation specifying a module version, and this module version does not contain the requested cell view.

### Solution

Select a different module version, or specify a member version instead.

### Related Topics

Opening Cell View Versions

Pop-up Windows

## Delete Directories

### Description

You must confirm that you want to recursively delete one or more directories.

### Situation

If you specify a directory to delete using the **Synchronicity => Delete => File** command, DesignSync DFII prompts you for confirmation. The details of the operation are shown.

### Solution

If the details of the operation are correct, click **Yes** to continue. Otherwise, click **No** to abort the operation (no data is deleted).

### Related Topics

Deleting Design Objects

Pop-up Windows

## Directory Creation Failure



## Description

An attempt to create the indicated directory has failed.

## Situation

This problem is due to a problem with UNIX permissions, or because you specified an existing file name instead of a directory name.

## Solution

Correct the permissions issue, or choose a different directory name, then rerun the operation.

## Related Topics

Pop-up Windows

# Fetch Category Files

## Description

You have selected the **Nested** option and attempted to operate on a category but a nested category (.Cat) file is missing from your workspace. This form displays for each missing nested category file.

## Solution

DesignSync DFII displays a form that lets you fetch the missing category file.

- To fetch the missing category file, select **Yes**.
- If you do not want to fetch the missing category file, select **No**.

DesignSync DFII performs the operation, skipping the cells in those categories unless the cells are part of other categories that are being processed.

## Related Topics

Displaying Check-Out Status  
Pop-up Windows

# Fetch Locked Objects Failed

## Description

You have specified a directory in the Show Checkouts form's **Directory** field that has a subdirectory whose name contains a space. The routine that searches for locked objects cannot handle directory names containing spaces.

### **Solution**

Avoid using spaces in directory names. For directory names containing spaces, there is no workaround; locked objects contained in the directory will not be displayed by the Show Checkouts form.

### **Related Topics**

Displaying Check-Out Status  
Pop-up Windows

## **Foreground**

### **Description**

You have run a command in the foreground while other commands are running in the background. DesignSync DFII warns you so that you can run the current command in the background, as well.

### **Solution**

Select the Background option to run the current command in the background. To view the Background Queue, select **Synchronicity => Options => Show Background Queue**.

### **Related Topics**

Running Commands in the Background  
Displaying the Background Queue

## **Hierarchy Listing Error**

### **Description**

A hierarchy listing could not be produced due to errors in the values specified, or because the values specified lead to an empty hierarchy.

### **Situation**

You are performing a DesignSync DFII hierarchy operation (**Synchronicity => Checkin/Checkout/Cancel/Tag => Hierarchy**) and have not specified field values that resolve to a valid hierarchy.

### Solution

Specify a valid library, cell, and cell view name, and suitable switch and stop lists.

### Related Topics

- Canceling a Design Hierarchy Check Out
- Checking In a Design Hierarchy
- Checking Out a Design Hierarchy
- Tagging a Design Hierarchy
- Pop-up Windows

## Invalid Check-In or Check-Out States

### Description

The **AllowCiObjectStates** or **AllowCoObjectStates** registry settings are incorrect. These setting must consist of any combination of the following values: lock, share, mirror, get.

### Situation

Your team leader, or someone with write permissions to the DesignSync site registry file (`$SYNC_DIR/syncinc/custom/site/config/SiteRegistry.reg`), must have hand-edited the file and introduced invalid registry values. Registry file modification should only be done using SyncAdmin.

### Solution

DesignSync DFII will default to displaying all check-in and check-out modes until the error is corrected. Someone with write permission to the site registry file should run SyncAdmin and reselect the allowed check-in and check-out modes.

### Related Topics

- Controlling the Display of Check-In or Check-Out Modes
- Pop-up Windows

## Invalid Delete Choices

### Description

The set of options specified for the Delete functions in the SKILL variable **syncDeleteChoices** is invalid. This variable should be set to a SKILL list containing any combination of the following values: "workspace", "retire", "vault".

### Situation

This problem occurs when you have specified an invalid value to **syncDeleteChoices**. Typically you define this variable in your `.cdsinit` file.

### Solution

DesignSync DFII will use the default value of ("workspace" "retire" "vault") until the error is corrected. Modify your `.cdsinit` file to properly define **syncDeleteChoices**.

### Related Topics

Controlling the Delete Options  
Pop-up Windows

## Illegal Filter

### Description

You have specified an illegal filter value from the DesignSync DFII Browser.

### Situation

The DesignSync DFII Browser supports specification of regular expressions to determine what values are displayed in the object lists. Each object list field has a type-in field at the top of the list where you specify a filter expression. You have entered an invalid value.

### Solution

When you click **Close** from the alert box, the filter value is returned to its previous value. You can then specify another valid regular expression.

### Related Topics

Browsing Your Workspace  
Pop-up Windows

## Library List Not Found

### Description

No libraries could be found.

### **Situation**

This problem occurs when either your `cds.lib` file is empty, or there were problems with accessing it. There will likely be additional messages in the CIW window describing the problem.

### **Solution**

Review the errors in the CIW and correct the problem before proceeding. If necessary, contact your DesignSync administrator.

### **Related Topics**

Pop-up Windows

## **Library Not Configured**

### **Description**

The given library has not been initialized for management by DesignSync DFII. In particular, the vault path has not been set.

### **Situation**

You have tried to perform a revision-control operation on the library without having set up the library first.

### **Solution**

Run the Configure Library wizard from the Synchronicity menu.

### **Related Topics**

Configuring a Library  
Pop-up Windows

## **Library Not Managed**

### **Description**

You attempted to branch a library that is not managed.

### **Solution**

You can only branch a managed library. Either select a managed library to branch, or configure the library you selected.

### Related Topics

- Branching a Library
- Configuring a Library
- Pop-up Windows

## Library Path Update Failed

### Description

An attempt to update your `cds.lib` file for the addition or removal of a library failed due to problems accessing the file.

### Situation

You are performing a DesignSync DFII operation that updates your `cds.lib` file, such as creating or deleting a library. DesignSync DFII is unable to update `cds.lib`. The DesignSync DFII operation completes even if unable to update `cds.lib`.

### Solution

Manually correct the entries for the library that has just been added or removed (use Library Path Editor from the CIW). Check the UNIX permission of your `cds.lib` to ensure you have write permission so that future operations can complete.

### Related Topics

- Creating a Library
- Deleting Libraries
- Pop-up Windows

## Mirror Cannot Be Set

### Description

The mirror directory could not be set for the library, or the mirror could not be populated.

### Situation

There are many possible causes. The message provided should indicate the circumstances.

## Solution

Correct the problem indicated by the error message, and contact your DesignSync administrator if necessary.

## Related Topics

Configuring a Library  
Pop-up Windows

## Module Selector

### Description

Informational message to alert the user that the operation may not perform as expected.

### Situation

You have entered a numeric version into the Fetch Selector field while you have a module member object selected on the dialog box. The operation will be performed on the module member contained in the module version corresponding to the entered numeric version. The operation **WILL NOT** be performed on the module member version corresponding to the numeric entered.

### Solution

If this is the desired behavior, select **OK**.

If this is not the desired behavior, select **Cancel** and enter the module numeric corresponding to the module member version, or select the appropriate module member version using Select by: Version.

Click the checkbox next to **Do not show me this again**, to suppress this popup in the future.

## Related Topics

Configuring a Library  
Pop-up Windows

## Mirror Not Set

### Description

There is no mirror set up for the given library.

### Situation

You requested the **Read (mirror link)** mode for a check-in, check-out, or cancel operation on a library that does not have an associated mirror directory.

### Solution

Use an alternative mode, or use the Configure Library wizard to associate a local mirror directory with the library.

### Related Topics

Configuring a Library  
Pop-up Windows

## Modifications Not Saved

### Description

Attempting to tag data pops-up a warning that the data is modified in memory.

### Situation

The local copy of the object's version you are attempting to tag was modified within the current DFII process. For example, within a DE window invoked from the CIW's **File => Open**. The modifications have not yet been saved to disk. You did not select the tag option to **Tag Modified Objects**.

### Solution

DS DFII detects the in memory modification. Because you have not opted to **Tag Modified Objects**, the pop-up instructs you to either save or discard your modifications before attempting to tag the object's version on which your local modifications are based. If you choose to save your modifications, for the object's version on which your local modifications are based to be tagged, you must select the **Tag Modified Objects** option.

Once you have saved or discarded your local modifications, the tag operation will complete regardless of whether the **Tag Modified Objects** option is selected. That option determines whether the tag attempt succeeds or fails for an object's version, when the workspace copy of that object's version has been locally modified. It is the object version in the vault that is tagged, not your local copy. For your modifications to be tagged, you must checkin your locally modified copy, creating a new version of the object in the vault that contains your modifications.



## Related Topics

Tagging Design Files  
Pop-up Windows

## New Files Found

### Description

A check-in operation has detected new objects, but the **New** option is not selected. The operation aborts.

### Situation

You are performing a check-in where your selection matches unmanaged objects but you have not selected the **New** option. The operation aborts because DesignSync DFII prevents the accidental check in of unwanted data. Note that this restriction does not apply to the Library Manager Checkin operation, or to the **Synchronicity => Checkin => Cell View** operation, both of which make the assumption that because you have selected individual views, you want them checked in even if they are currently unmanaged.

### Solution

Change your check-in selection so that no unmanaged objects are selected, or select **New** to check in the unmanaged objects.

## Related Topics

Checking In Design Files  
Pop-up Windows

## No Categories Selected for Deletion

### Description

You see a pop-up message with the text, "No categories selected for deletion."

### Situation

You have selected Delete category but you have not selected a category to delete.

### Solution

Press **Close** to close the dialog box. Select the category to delete and rerun the **Delete** operation from the Status Browser **Edit | Category** menu.

## No Matching Checkouts

### Description

The values specified on the form do not identify any objects that are currently locked in this workspace. Either there are no locked objects, or else the locked objects do not match the specification on the form.

### Solution

Verify that you have properly specified the objects. Also, use **Synchronicity => Show Checkouts** to view what objects are currently checked out.

### Related Topics

Checking Out Design Files  
Pop-up Windows

## No Such Selector

### Situation

You are trying to open a version of a cell view. You specify the version by entering a tag name in the **Selector** field. The operation fails, indicating that the selector could not be mapped to a version number. This error indicates that no version of the cell view is tagged with the tag you specified.

### Solution

Verify that you did not mistype the tag name, or try using a different tag. Alternatively, use the **Version Name** field to select a version number instead of specifying a tag.

### Related Topics

Opening Cell View Versions  
Pop-up Windows

## Problem with cdsinfo.tag File

### Description

Your `cdsinfo.tag` file is not properly set up for use with DesignSync DFII.

### Situation

Every library should have a file called `cdsinfo.tag` in the library directory. This file must contain (at least) the following lines:

```
CDSLIBRARY  
DMTYPE sync
```

The first line identifies the directory as containing a Cadence Library. The second line indicates that the library is to be managed by the DesignSync software. If the second line is missing, or is not the final `DMTYPE` statement in the file, then you will not be able to use the Library Manager Design Management operations, or the auto-checkout and auto-checkin features of DFII.

### Solution

Verify that your `cdsinfo.tag` has the correct `CDSLIBRARY` and `DMTYPE` lines and hand-edit the file if necessary. You may also want to talk with your DesignSync Administrator about whether the `DMTYPE` should be set in a site- or installation-wide `cdsinfo.tag` file.

### Related Topics

- Setting Up Your Environment
- Pop-up Windows

## Properties Needs Single Object

### Description

You have selected the Properties operation, but have selected more than one object to view.

### Situation

You have initiated a Properties operation with more than one object selected.

### Solution

Press **Close** to close the dialog box. Select a single object and relaunch the **Properties** command.

## Reload Data

### Description

DesignSync DFII does not reload in-memory data that is modified but not saved.

### Situation

You have a cell view open with unsaved changes. The cell view then changes on disk, possibly because you performed a DesignSync DFII operation such as checking out that cell view. Reloading the cell view into memory would cause your unsaved changes to be lost, so DesignSync does not reload the data.

### Solution

If the disk data is writable, you can save your changes. If the disk data is read-only, you must first check out the cell view for editing before you can save your in-memory changes.

### Related Topics

Pop-up Windows

## Removing Sub-Directories

### Description

You see an error stating that you cannot remove a subdirectory.

### Situation

You have selected a subdirectory and performed a **View | Remove** operation in the Status Browser.

### Solution

Press **Close** to close the dialog box. Select a top-level directory in the directory hierarchy and relaunch the **Remove** operation.

## Removing Directories from Status Browser

### Description

You are unable to remove a top-level directory from the Status Browser view

### Situation

You have added a directory to the Status Browser viewer with the DSDFII options, and are attempting to remove the directory with the **View | Remove** operation in the Status Browser.

### **Solution**

Press **Close** to close the dialog box. Launch the DSDFII Status Browser options page and remove the desired directory. Relaunch the Status Browser.

### **Related Topics**

Status Browser Options

## **Saving Cell Views**

### **Description**

Prior to performing a check-in operation, DesignSync DFII attempts to save any modified data, ensuring that design changes are not lost. If the save cannot be performed for any reason, the check in aborts.

### **Solution**

If the automatic save is unsuccessful, you can try to save the changes yourself and then reissue the check-in operation.

### **Related Topics**

Checking In Design Files  
Pop-up Windows

## **Server Could Not Be Accessed**

### **Description**

The specified SyncServer could not be accessed.

### **Situation**

This problem occurs if the SyncServer process is not running, or if an incorrect SyncServer name or port number has been specified.

### **Solution**

Verify that you have specified the correct SyncServer URL. If it is correct, then have your DesignSync administrator (or whoever is the owner of the SyncServer) start the SyncServer (run `start_sync_server` from the SyncServer's host).

### Related Topics

[Pop-up Windows](#)

## Select Browser

### Description

You are launching the Library Manager from the Tools menu. You have the option to launch the standard Cadence provided Library Manager or the enhanced DesignSync Status Browser.

### Solution

Select the desired interface from the popup:

- **Use the DesignSync Status Browser** - launches the Status Browser.
- **Use the Cadence Library Manager** - launches the Cadence Library Manager

Click the checkbox next to Remember this decision, do not ask again to save this selection and avoid seeing this popup during this session or subsequent sessions.

### Related Topics

[Status Browser Overview](#)

[Select Status Browser Mode](#)

[Pop-up Windows](#)

## Select Status Browser Mode

### Description

You are launching the Status Browser either from the Tools menu or the Synchronicity menu. You have the option to select List view or Tree view mode.

### Solution

Select the desired interface from the popup:

- **Use List Mode** - launches the Status Browser in List view mode.
- **Use Tree Mode** - launches the Status Browser in Tree view mode.

Click the checkbox next to Remember this decision, do not ask again to save this selection and avoid seeing this popup in the future.

### Related Topics

Status Browser Overview

Pop-up Windows

## Server URL Has Incorrect Format

### Description

The specified SyncServer URL is not valid.

### Situation

A SyncServer URL consist of three parts:

1. The protocol. For a SyncServer, the protocol is "sync://" (if accessing a cleartext port) or "syncs://" (if accessing an SSL port). Note that you can specify the "sync://" protocol and cleartext port even when communicating with a secure(SSL) SyncServer; communications are automatically redirected to the secure port. See DesignSync Help for details on SSL and secure communications.
2. The name of the host running the server. Must be a string consisting of alphanumeric, underscore (\_), and period (.) characters only.
3. The port number. Must be an integer specifying the port number of the SyncServer on the host machine. Separate the port number from the host name with a colon (:). If omitted, the port defaults to 2647 (if using sync:// protocol to access a cleartext port) or 2679 (if using syncs:// protocol to access an SSL port).

**Note:** You can instead specify a client vault using the **file:///** protocol (for example, `file:///home/projadmin/Sample`).

### Solution

Respecify the SyncServer URL using the correct syntax.

### Related Topics

Pop-up Windows

## Skipping Update Thumbnails

### Description

You have selected the Update Thumbnails operation, but have selected one or more objects that are not appropriate for this action.

### Situation

The Update Thumbnails operation is only appropriate for libraries, cells, and views. If you select other objects, along with valid objects, for example a module object, you will see this error message.

### Solution

Press **Close** to close the dialog box. Select appropriate objects and relaunch the **Update Thumbnails** command.

## Synchronicity Process Could Not Be Started

### Description

A DesignSync process (stcl or stclc) could not start.

### Situation

The reason for the process failing to start is unknown. Possible reasons for failing to start the DesignSync process include:

- Removal of `$SYNC_DIR/bin` from your `UNIX PATH` environment variable
- Lack of memory or process space on the machine
- A problem with the Cadence installation of the IPC system

### Solution

It is possible that additional messages have been output to the UNIX shell from which you started your DFII session. If these messages do not guide you to a solution, contact your DesignSync administrator.

### Related Topics

DesignSync DFII Processes  
 Setting Up Your Environment  
 Pop-up Windows



## Synchronicity Process Not Running

### Description

It was not possible to pass the indicated command to the DesignSync process because the process is not running.

### Situation

This problem may occur if the underlying DesignSync process (stcl or stclc) was killed for any reason, or if the SKILL routine `dssStop()` is called.

### Solution

To restart the process, either restart your DFII session, or enter the following SKILL call from the CIW:

```
dssStart()
```

### Related Topics

DesignSync DFII Processes  
Pop-up Windows

## Synchronicity Source File Not Found

### Description

The indicated source file is missing from the DesignSync installation.

### Situation

The file is required in order to initialize the DesignSync process. Possible reasons for the file not being found are:

- Your `SYNC_DIR` variable was improperly defined when you started DFII.
- Your DesignSync installation is corrupted.

### Solution

Verify that your `SYNC_DIR` variable is properly defined and restart DFII. If problems persist, contact your DesignSync administrator.

### Related Topics

Setting Up Your Environment  
Pop-up Windows

## Version Mismatch Failure

### Description

The version of `dssInit.il` that was loaded does not match the version of the rest of the DesignSync system.

### Situation

This problem typically occurs if the `dssInit.il` file that is loaded when DesignSync DFII starts is not the file from the `$SYNC_DIR/cds/skill` directory.

### Solution

To resolve the problem, verify that your `.cdsinit` file contains the following line:

```
load(strcat(getShellEnvVar("SYNC_DIR") "/cds/skill/dssInit.il"))
```

If the problem persists, it is possible that the DesignSync installation has been corrupted. Contact your DesignSync administrator.

### Related Topics

Loading the Synchronicity Integration into DFII  
Pop-up Windows

## View Data Sheet - View Not Selected

### Description

You requested to view a data sheet without first selecting a view.

### Solution

Select a view and then view the data sheet.

### Related Topics

Displaying Data Sheets  
Pop-up Windows

## View Version History - View Not Selected

## Description

You requested to view a version history without first selecting a view.

## Solution

Select a view and then view the version history.

## Related Topics

Displaying Version Histories  
Pop-up Windows

## Update Module

### Description

You ran the Set Module Selector operation to change the persistent selector of a module.

### Solution

Select whether to update the workspace with the data matching the new persistent selector information.

- **Yes** - launch the checkout object dialog. Select all the desired options and press **OK** to update the workspace.
- **No** - do not update the module in the workspace.

Click the checkbox next to **Remember the choice above and use for future operations**, to suppress this popup for the rest of this session and future sessions.

## Related Topics

Checking Out a File

Setting the Module Selector

Pop-up Windows

## Using Selector and Force Options Together

### Description

An attempt was made to perform a check-out operation with both a selector (such as a tag name) specified and the **Force** option selected.

### Situation

At **advanced** or **expert** user levels, Synchronicity check-out forms let you specify a tag name when checking out design objects in **Read (local copy)** and **Read (cache link)** modes. When you request a check out based on a selector and you specify the **Force** option, the operation will not execute. If this combination were allowed, the result would be that all managed objects that do not match the specified selector would be removed from the workspace.

### Solution

Deselect the **Force** option, or do not specify a selector. If your intent is to checkout the tagged version of all objects, overwriting any local modification, while keeping objects without the tag, then perform the operation in two steps:

1. Perform a checkout with the **Force** option and selector. This operation will fetch the latest version of all objects, overwriting any local modifications.
2. Perform the checkout with the tag specified without the **Force** option. This operation will fetch the tagged version of all objects that have that tag while retaining the existing version of all other objects.

### Related Topics

Checking Out Design Files  
Pop-up Windows

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