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# **Contents**

<u>1</u>	
Introduction to Library Manager	1
Opening the Library Manager	
Files and File Extensions	
C-level Database Access (CDBA) File Extensions	
OpenAccess File Extensions	
data.dm File	
pc.db File	
master.tag File	
Controlling the Display of Library Information	
Viewing Categories and Files in List Mode	
Viewing Categories and Files in Tree Mode	
Library Manager Toolbar	
Thumbnail Images of Cellviews	
Selecting and Moving Data in the Library Manager	
Selecting Items in Library Manager	
Deselecting Items in Library Manager List Boxes	
Moving Data in List Boxes	
Viewing and Changing File Permissions	5
Opening a UNIX Window from the Library Manager1	
Exiting the Library Manager	
<u>2</u>	
Library Management	_
•	
Opening the Library Path Editor	
Opening a Cellview	
Creating a New Cellview	
Filter and Search Options	
Using the Filter Combo Box	
Using the Search Option	
Refreshing the View and Data	2

Viewing the Current Cellview Status 3	33
Renaming a Library 3	34
Renaming a Cell	36
Renaming a View 3	38
Renaming Files	40
Renaming a Reference Library	43
Changing Library Reference	45
Deleting a Library	48
Deleting a Cell 5	
<u>Deleting a View</u> 5	
<u>Deleting Cells Using Filters</u>	
<u>Deleting Library or Cell Files</u>	57
<u>Hiding Cells and Showing Hidden Cells</u>	
Showing Hidden Cells	
<u>Text Cellviews</u>	
Editing Library Properties6	
Editing Cell Properties	
Editing View Properties	36
Adding Properties to a Library, Cell, or View	38
Modifying Properties of a Library, Cell, or View	73
<u>Updating a Managed File</u>	
<u>Library Display Settings</u>	
Setting Display Options for Libraries	
Selecting an Icon for a Library Display Attribute	
Creating New Library Attributes	32
Setting Attributes on a Library 8	34
Overriding Customized Library Display Settings 8	
Creating and Displaying a Combined Library 8	
Creating Combined Libraries 8	
Display Combined Libraries	38
<u>3</u>	
<u>Library Browsing</u>	
Opening the Library Browser Form	92
Setting the Library Browser Form To Open Automatically	94

Selecting a View Using the Library Browser
<u>4</u>
Data Copying97
Copy Function in the Library Manager 98
Pre-Copy Checks in the Library Manager
Copying a Library in the Library Manager
Copying to a New Library
Resolving Copy Problems
Copying a Cell in the Library Manager
Copying a Cell Hierarchy in the Library Manager
Updating Cell Instances
Adding a Copied Cell to a Category11
Skip Libraries Together with Update Instances
Copying a View in the Library Manager
Copying a View to Another Name or Cell in the Same Library 114
Copying a View to Another Library114
Copying a View Hierarchy in the Library Manager
Updating View Instances117
Copying a Library File
Copying a Library File to Another Name in the Same Library
Copying a Library File to Another Library120
Copying a Cell File in the Library Manager
Selecting Text in the Copy Wizard 124
Selecting Items for Editing in the Copy Wizard
Deselecting Items in the Copy Wizard124
Selecting Items for Copying in the Copy Wizard
Editing Text in the Copy Wizard
Editing a Single Item
Editing All Items in a Selected Set127
Editing All Items in a column128
Performing a Simple Copy Using the Copy Wizard
Copying a Hierarchy Using the Copy Wizard
Copying an Exact Hierarchy Using the Copy Wizard
Copying Specific View Using the Copy Wizard

Copying Specific Cells in a Configuration Using the Copy Wizard  Setting Copy and Rename Preferences	
<u>5</u>	
Design Management	145
Setting the Checkin and Checkout Properties	
Canceling Checkout for Properties	
Checking In and Checking Out Categories	
Canceling the Checkout of a Category	
Checking In Files and Properties Automatically	
Controlling Automatic Checkin Behavior	
Always Ask Me	
Never Ask Me	
Auto Checkin Environment Variable Settings	155
CDS_PROMPT_CKIN	
CDS AUTO CKIN	155
Checking Out Files and Properties Automatically	157
Controlling Automatic Checkout Behavior	158
Always Ask Me	158
Never Ask Me	158
Auto Checkout Environment Variable Settings	160
Submitting Changes to the Design Management System	162
Updating an Item Using Design Manager	
Updating Workarea Using Design Manager	
Cellview and File Versions	
Copying a Version of a Cellview or File	
Cellview Version Rules	
Design Management File Status	
Design Management Status Settings	
Displaying the Update Needed Icon	
Check In, Check Out, and Cancel Check Out Using the DM Status Form	173
<u>6</u>	
Library Creation	177
Creating a New Library in the Library Manager	178

Database Compression Using the oazip Utility	181
Compressing a Library Using Library Manager	
Compiling an ASCII Technology File	
Referencing Existing Technology Libraries	190
Attaching a New Library to an Existing Technology Library	191
Creating a New Library Without Specifying a Technology File	
<u>7</u>	
Files in Read-Only Mode	193
•	
Getting a List of Locked Cellviews  Making Cellviews Read-Only	
<u>a.a.ig Gontione rioda Grily</u>	.00
<u>8</u>	
Category Management	197
Creating a Category Using Library Manager	198
Editing a Category Using Library Manager	200
Deleting a Category Using Library Manager	202
Renaming a Category Using Library Manager	
Creating a New Category That Includes Subcategories	
Creating a Subcategory in an Existing Category	205
Modifying a Category to Include a Subcategory	207
<u>9</u>	
Library Manager Customization	209
Library Manager Customizations Using SKILL Functions	
About cdsLibMgr.il File	
Customization of Menus Using the cdsLibMgr.il File	
Callback Function Triggers	
Library Manager Customizations in Standalone Mode and with Other Processes	216
Library Manager Customizations in Standalone Mode	216
Library Manager Customization with Other Processes	216
Restrictions on the Library Manager Customization File	217
Actions in the Library Manager Customization File	
GUI Objects Supported in the Customization File	219

Issues with Virtuoso Studio Design Environment SKILL
Caution with Pre-Map Callbacks
Library Manager Customization Using the .cdsenv File
.cdsenv File Search Path Order
Using UNIX to Add Settings to a .cdsenv File
Saving Settings to a .cdsenv File
Loading Settings from a .cdsenv file
Using the .libsel File to Customize the Library Manager
Settings in the .Xdefaults file
Settings in the .libmgr file
10
<del></del>
<u>Library Manager Environment Variables</u> 23-
copyValuesFrom
useOptionText
<u>useOptionsOn</u>
selectMatches
useOptionText
<u>useOptionsOn</u>
useOptionText
<u>useOptionsOn</u>
addToCategoryName
addToCategoryOn
addToCellsPattern
allViewsOn
exactHierOn
existenceCheck
extraViews
<u>hierOn</u>
rerefCustomVias
skipLibsOn
<u>updateChoice</u>
viewsText
addPropFiles
overwriteAll

addCellPropFiles
addLibPropFiles
expandRadio
<u>mpsRadio</u>
<u>useMonitor</u>
warnRenameDM 260
<u>openView</u>
<u>toLibrary</u>
<u>toView</u>
<u>useOptionText</u>
<u>useOptionsOn</u>
addToCategoryName
addToCategoryOn
addToCellsPattern
existenceCheck
<u>extraViews</u>
rerefCustomVias
updateChoice
<u>updateOn</u>
<u>mapTimeout</u>
showDFIIWarning
startupFile
<u>ddDb</u>
<u>server</u>
fileRadio
saveAllOn
<u>saveAsText</u>
libCheckOn
localRadio
<u>regExpOn</u>
overrideRadio
localRadio
<u>viewFilterList</u>
enableDmQuery
showExtendedStates
autoModuleNameUpdate

useOptionsOn	. 328
useNameOn	
useOptionsOn	
compressionOn	
 display	
generate	
verbose	
<u>11</u>	
Library Manager Forms	. 337
Access Permission Form	. 340
Add Property Form	. 341
Attach Library to Technology Library Form	. 342
Cancel Check Out Form	
Cell Property Editor Form	. 345
Change Library References Form	. 347
Check In Form	
Check Out Form	. 352
Choose Environment File To Load Form	. 354
Copy Cell File Form	. 355
Copy Cell Form	. 356
Copy Cellview Version Form	. 358
Copy Library File Form	. 359
Copy Library Form	. 360
Copy Preferences Form	. 361
Copy View Form	. 363
Copy Wizard Form (Simple Copy)	. 365
Copy Wizard Form (Hierarchical)	. 367
Copy Wizard Form (Exact Hierarchy)	. 369
Copy Wizard Form (By View)	. 371
Copy Wizard Form (By Configuration)	
Delete By View Form	
Delete Cells Form	. 376
Delete Cell Views Form	. 377

Delete Libraries Form
Delete Library Views Form
Display Options Form
Display Settings Form
DM File Status Form
New Category Form
<u>Library Browser Form</u>
<u>Library Manager Form</u>
Library Property Editor Form
Load Technology File Form
Modify 'propertyName' Form
New Category Form
<u>New File Form</u>
New Library Form
Reference Existing Technology Libraries Form
Rename Cell Form
Rename File Form
Rename Library Form
Rename Reference Library Form 400
Rename View Form 401
Save Library Manager Defaults Form
Select an icon Form
<u>Submit Form</u> 405
Technology File for New Library Form
Version Information Form 407
View Property Editor Form 408

# **Introduction to Library Manager**

You can use the Library Manager to create, add, copy, delete, and organize libraries and views in a design project. More specifically, you can

- Import and access design data in libraries under design management control (check out, check in, and version control)
- Define the path to the libraries you want your Cadence design software to access in the cds.lib file.

For more information, see the *Cadence Library Path Editor Help*.

# Caution

Virtuoso stops working while launching the Library Manager, if there is an inaccessible path in the cds.lib. Virtuoso process would be unresponsive to mpsImport requests initiated by the Library Manager. You need to remove or modify the cds.lib entry to proceed.

- Create new libraries in your directories
- Copy data into libraries
- Delete libraries
- Rename libraries, cells, views, files, or reference libraries
- Edit library, cell, and view properties
- Organize cells into categories to help you quickly locate them
- Change permissions for files and views
- Open a UNIX window to locate files and hierarchies
- Customize the colors of the Library Manager user interface using commands in the .Xdefaults file
- Navigate libraries, cells, views, files, and categories

Introduction to Library Manager

A record of the commands used during your Library Manager session is stored in the libManager.log file in your current working directory.

**Note:** The Library Manager only lets you edit and manage OpenAccess libraries. You need to convert a CDB library to OpenAccess before you can use it with the Library Manager. Contact Cadence Customer Support to discuss how to migrate CDB data to OpenAccess. A CDB library has a library-level prop.xx file. Such libraries are grayed-out in the Library Manager and their contents are not displayed. None of the Library Manager commands can be used on the library. For example, you cannot copy the library or delete it. Cell-level prop.xx files are also grayed out. Library Manager commands cannot be used on these files. When you copy libraries or cells, the prop.xx file is not copied. Copy commands can also fail if you have prop.xx files.

If an OpenAccess library erroneously contains a prop.xx file, you need to delete the file.

#### Related Topics

Opening the Library Manager

Controlling the Display of Library Information

Library Manager Toolbar

Selecting and Moving Data in the Library Manager

Viewing and Changing File Permissions

Opening a UNIX Window from the Library Manager

Viewing the cds.lib Updates

### **Opening the Library Manager**

You can open the Library Manager form in standalone mode from an xterm or command tool window or in integrated mode from the Command Interpreter Window (CIW).

To open the Library Manager from an xterm or command tool window:

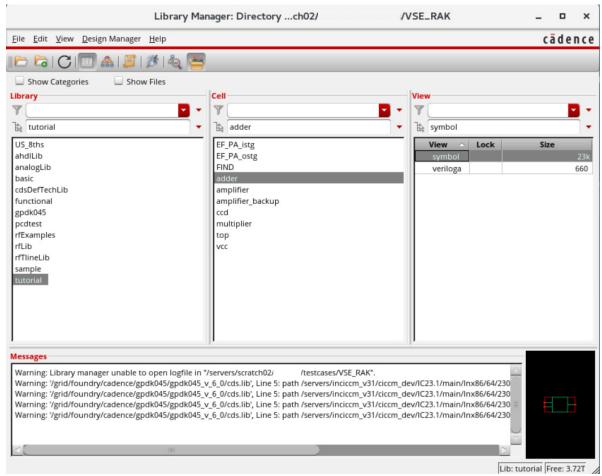
→ Type the command:

libManager &

The Library Manager appears as a standalone application. In standalone mode, you cannot open cellviews.

To open the Library Manager from the CIW:

**1.** Choose *Tools – Library Manager*.



Introduction to Library Manager

The applications, such as Library Manager, Library Selector, and Library Path Editor, starts with the same font as Virtuoso. Once you choose the font using the Set Fonts dialog box, the font of these applications starts changing accordingly.

### Related Topics

Library Manager Form

Introduction to Library Manager

# **Files and File Extensions**



Do not modify the . cd% and . cd+ files.

This topic contains information about the various files and file extensions used in Library Manager.

For information about .TopCat and .Cat files, see Category Management.

### C-level Database Access (CDBA) File Extensions

A C-level Database Access (CDBA) file has five possible extensions as follows:

Extension	Description
.cdb	Contains design data, such as schematic, layout, behavioral, or user-customized. For example, Cadence software reads the sch.cdb file when you open a schematic for editing. To open this file using SKILL, use the dbOpenCellViewByType function.
.cd%	Contains cellview information between saves.
	It is a backup CDBA file.
.cd+	The system maintains this file.
	It is a temporary auto-save CDBA file.
.cd-	Panic CDBA file
	Contains panic information in the case of a program crash. You can access this file using the <code>dbOpenPanicCellView</code> SKILL function.
	It is a panic CDBA file.
.cd?	It is a corrupted CDBA file.

The library directory might also contain a techfile.cds file, which is the technology database if the library is a technology library.

Introduction to Library Manager

### **OpenAccess File Extensions**

An OpenAccess file has a .oa extension. This file contains design data, whether it is schematic, layout, behavioral, or user-customized. For example, Cadence software reads the sch.oa file when you open a schematic for editing. To open this file using SKILL, you can use the dbOpenCellViewByType function.

The library directory might also contain a tech. db file, which is the technology database if the library is a technology library.

#### data.dm File

The *property bag* file contains object properties. For OpenAccess 2.2, the file is called data.dm.

The contents of this file depend on its location as follows:

Location	Contents
Library directory	Properties that affect the entire library, such as the technology binding
Cell directory	Cell properties, such as CDF descriptions
View directory	Cellview properties

You can use the SKILL functions described under in <u>Virtuoso Studio Design Environment SKILL Reference</u> to access property bag data.

### pc.db File



Do not modify this file.

The pc.db file contains on-disk parent/child relationship information for a cellview, that is, information as of the last dbSave, as opposed to what might be in virtual memory.

The following tasks and applications use the pc.db file:

- Hierarchical copy
- Hierarchy Editor
- Schematic editor hierarchy traversal function, which many applications use

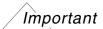
Introduction to Library Manager

If pc. db file exists, hierarchical copy reads the pc. db file to get the parent-child information. Otherwise, hierarchical copy extracts the parent-child information directly from OpenAccess database.

The pc. db file allows the traverser to navigate through other non-CDBA data descriptions such as VHDL and Verilog while avoiding the differences in VM CDBA.

Only the super master (<library>.<default\_subcell>) is physically saved on disk. Therefore, when the copy command is executed using Library Manager, only that subcell is copied to the destination library.

### master.tag File



Do not modify this file.

The master.tag file contains master information for a cellview. The master information determines what tool to use when you edit a cellview.

The master.tag file might contain any of the following:

- sch.oa
- layout.oa
- text.txt
- verilog.v

### Related Topics

Viewing and Changing File Permissions

# **Controlling the Display of Library Information**

You can choose to display library information from the following options:

- To display information in list boxes, choose *View Lists* or click the *View Lists* icon from the Library Manager toolbar.
- To display information in tree mode, choose *View Tree* or click the View Tree icon from the Library Manager toolbar.
- To customize the information displayed in the tree table, right click over the table header of the *Libraries* section. The following menu is displayed:



### **Viewing Categories and Files in List Mode**

To view categories and files in List mode:

- **1.** Select the *Show Categories* check box.
  - The Category list box appears between the Library and Cell list boxes.
- 2. Select the *Show Files* check box. The *Files in* list box is displayed under *View* box.
  - This section shows the *Library* and *Cell* tabs, each of these tabs show the list of files under library and cells respectively.

Introduction to Library Manager

### **Viewing Categories and Files in Tree Mode**

Tree mode shows you libraries, cells, views, categories, and files in a hierarchical tree structure:

```
| b | categoryName | categoryName | b | subcategoryName | cellName | cell | fileInView | cellName | cellName
```

To view categories and files in Tree mode:

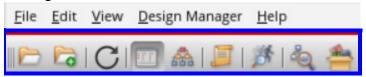
- 1. Click the arrow to the left of each level to expand that branch of the tree.
  - The contents of the expanded branch appear.
- **2.** Categories and subcategories, if there are any, appear at the top levels of the library branch. Files appear at the top of the expanded branches for libraries and cells:
  - □ Files in libraries appear beneath either categories, if there are any, or cells if there are no categories.
  - □ Files in cells appear beneath views.

#### **Related Topics**

Category Management

# **Library Manager Toolbar**

Selecting *View – Toolbar* displays a *Library Manager Toolbar* below the menu bar that provides quick access to a number of useful commands that are also found in the Library Manager menus.



The *Library Manager Toolbar* contains the following short-cut tools:

Fields	Description
Open For Edit	Opens a selected <i>View</i> in the appropriate application for edit.
Open With	Displays the Open File form where you can select what particular application that you want to open a selected view with.
Refresh	Refreshes the Library Manager, design data, and the CDF data.
View Lists	Displays library, cell and view content in a list format.
View Tree	Displays library, cell, and view content in a hierarchical tree format.
Show Categories	Toggles on and off the display of the <i>Categories</i> column list or tree information.
Reanalyze States	Retrieves and displays the latest file states when selecting a new cell in the <i>List</i> view, or an <i>Open/Close</i> of a cell in the tree view. This command works similarly to the <i>View – Refresh</i> menu option but has lower overhead as it does not regenerate the library file contents.
	File states are not tracked if this option is selected.
Show open cellviews in use	Reloads the lists in the window with icons next to names to indicate if a library, cell, or view is opened in read mode or edit mode.
Show non-Virtuoso view types	Displays the non-Virtuoso view types for the selected cell.

Introduction to Library Manager

### **Thumbnail Images of Cellviews**

Cellview previews are provided in the lower right area of the Library Manager window, in both the tree and list views.

These thumbnail images are an approximate representation of a cellview, with some details that cannot be appropriately displayed removed. Thumbnail cellview previews can however aid selection before opening a view.

You can update displayed thumbnail images by selecting *Edit – Update Thumbnails* or right-clicking in the Library Manager and selecting *Update Thumbnails* from the context-menu presented.

Thumbnail images that represent Pcells can be identified with a Pcell watermark in the lower left corner of the image.

For more information, see <u>hiGenerateThumbnails</u> in the *Cadence User Interface SKILL Reference*.

11

### Related Topics

enable

display

generate

verbose

Viewing the cds.lib Updates

Introduction to Library Manager

# **Selecting and Moving Data in the Library Manager**

The following tasks cover ways you can use the Library Manager forms and list boxes to manipulate data.

### **Selecting Items in Library Manager**

To select items in Library Manager:

1. Click the item name to select a library, category, cell, view, or file on the Library Manager form whether in List mode or in Tree mode.

**Note:** You cannot select multiple items of the same kind.

- 2. Right-click the item name to select a library, category, cell, view, or file and display a pop-up menu.
- **3.** If you are in View Lists mode, you can select a specific item not visible in the list box by typing the name in the active field at the top of the list box.

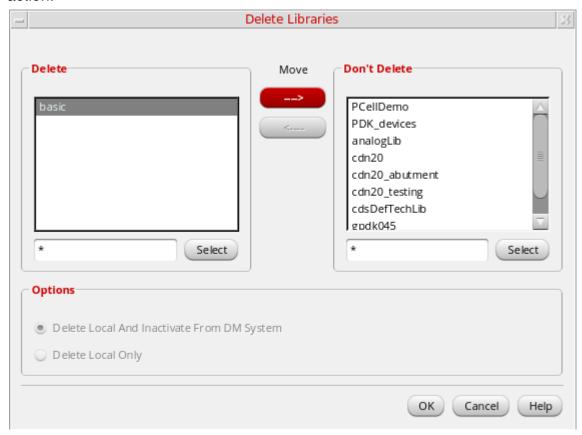
### **Deselecting Items in Library Manager List Boxes**

To deselect an item, click the item name.

- If you deselect a cell, any selected view is also deselected.
- If you deselect a category, any selected cell and view are also deselected.
- If you deselect a library, any selected item in that library is also deselected.

### **Moving Data in List Boxes**

Some forms, such as Delete forms and Category forms, use "Do" and "Don't Do" list boxes. You can move data from one list box to the other to specify a group of items affected by the action.



To move items from one list box to the other:

- **1.** Select the item or items you want to move.
  - You can select multiple items by Shift-clicking, Control-clicking, clicking and dragging, or using filters.
- **2.** Click the arrow that points in the direction you want to move the items.

The items move from one list box to the other.

#### **Related Topics**

Controlling the Display of Library Information

Rename Reference Library Form

# Cadence Library Manager User Guide Introduction to Library Manager

**Delete Libraries Form** 

### Viewing and Changing File Permissions

If you or your group own a library, cell, view, or file, you can change the permissions to control access. These are the same read, write, execute (rwx) permissions you can change from a UNIX command line.

If the software cannot find the item, it generates an error message telling you that the permissions could not be changed. As the owner of an item, you can change the permissions, but you cannot change the ownership.

To view or change the access permissions for an item:

- 1. On the Library Manager form, select the item from the tree or appropriate list box.
- 2. Choose Edit Access Permissions.

The Access Permission form appears.



The item you chose appears at the top of the form. The specified owner and group for the selected item appear in the corresponding fields.

If the item you select is under design management and is either checked in or checked out to someone other than you, you cannot select the *Access Permissions* command.

- **3.** Select check boxes for the permission values you want to set.
  - □ By default, the owner has read, write, and execute permissions.

Introduction to Library Manager

- By default, the owner must have write permission before group or others can have write permission.
- By default, if group or others have write or execute permission, they must also have read permission.

### 4. Click Apply.

The Library Manager changes the permissions for the selected item.

### Related Topics

**Access Permission Form** 

Introduction to Library Manager

# **Opening a UNIX Window from the Library Manager**

If you want to create or edit a cds.lib file, display a directory structure, display information in man pages, or use other UNIX functions, you can open an xterm (UNIX shell) window from the Library Manager.

To open an xterm window:

→ Choose File – Open Shell Window.

An xterm window appears. The working directory is the one from which you started either the Library Manager or your design environment application.

#### **Related Topics**

**Library Manager Form** 

Viewing the cds.lib Updates

**Creating Library Definitions File** 

Introduction to Library Manager

# **Exiting the Library Manager**

To exit the Library Manager:

→ Choose File – Exit.

The Library Manager closes. Your design environment application does not close.

**Note:** Clicking the *Close* button does not close the Library Manager window, instead it minimizes the window. If needed, you can restore this window from the Status bar.

#### **Related Topics**

**Library Manager Form** 

# **Library Management**

This section discusses various features of Library Manager.

# /Important

The Library Manager only lets you edit and manage OpenAccess libraries. You need to convert a CDB library to OpenAccess before you can use it with the Library Manager. Contact Cadence Customer Support to discuss how to migrate CDB data to OpenAccess.

A CDB library has a library-level prop.xx file. Such libraries are grayed-out in the Library Manager and their contents are not displayed. None of the Library Manager commands can be used on the library. For example, you cannot copy the library or delete it. Cell-level prop.xx files are also grayed out. Library Manager commands cannot be used on these files. When you copy libraries or cells, the prop.xx file is not copied. Copy commands can also fail if you have prop.xx files.

**Note:** If an OpenAccess library erroneously contains a prop.xx file, you need to delete the file.

#### Related Topics

Opening the Library Path Editor

Opening a Cellview

Filter and Search Options

Renaming a Library

Renaming a Reference Library

Renaming a Reference Library

Adding Properties to a Library, Cell, or View

Library Management

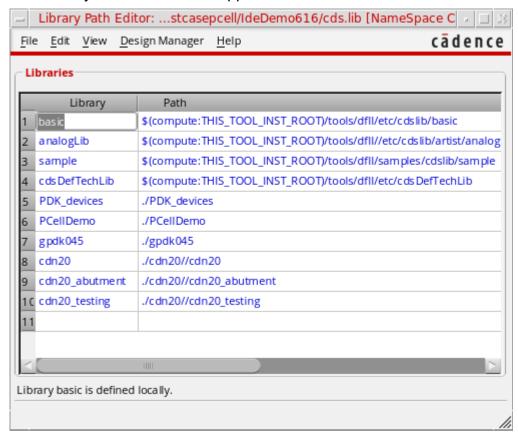
Modifying Properties of a Library, Cell, or View

### **Opening the Library Path Editor**

To open the Library Path Editor:

- 1. Open the Library Manager.
- **2.** Choose *Edit Library Path*.

The Library Path Editor form appears.



The Library Path Editor lets you view and edit the information in your cds.lib file, which defines the location of the reference and design libraries you want to use in your design.

#### Related Topics

Opening the Library Manager

Library Management

## **Opening a Cellview**

To open a cellview:

**1.** In the CIW, choose *Tools – Library Manager*.

Libraries defined in your cds.lib file and the default technology library cdsDefTechLib appear on the Library Manager form.

When you open the Library Manager in standalone mode, you cannot open cellviews, so the *Open* and *Open* (*Read-Only*) commands are not selectable.

2. In the *Library* list box, choose a library name.

The cells in the selected library appear in the *Cell* list box.

To deselect a highlighted library, click the library name.

**3.** Select *Show Categories*.

The Category list box appears between the Library and Cell list boxes.

The *Category* list box displays the default categories (*Everything* and *Uncategorized*) plus any categories you have added to this library. By default, the *Everything* category is selected.

**4.** Highlight the category name.

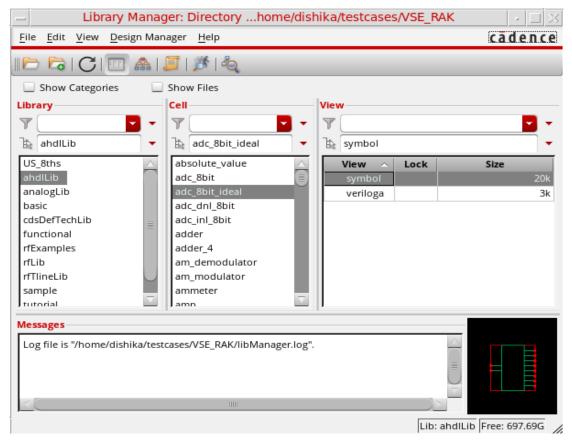
The category name is highlighted. The cells included in that category appear in the *Cell* list box. Hidden cells do not appear in the list.

To deselect a highlighted category, click the category name.

5. Choose a cell name.

Library Management

The cell name is highlighted. The views associated with the cell appear in the *View* list box.



**Note:** To deselect a highlighted cell, click the cell name.

**6.** Choose the view name of the cellview you want to open.

The view name is highlighted.

**Note:** To deselect a highlighted view, click the view name.

**7.** Choose File – Open or File – Open (Read-Only).

The Library Manager opens the selected cellview.

**Note:** When launched from the Virtuoso environment, the *File* menu shows a list of recently opened cellviews. When launched in standalone mode, it does not shows the recently opened cellviews.

#### Related Topics

Hiding Cells and Showing Hidden Cells

### **Creating a New Cellview**

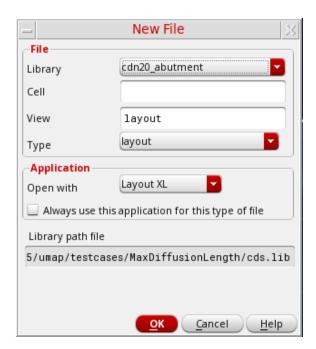
To create a new cellview:

1. Open the Library Manager.

**Note:** You can also create a new cellview from the CIW by following the same instructions.

2. Choose File – New – Cell View. Alternatively, you can click inside the Cell or View list box and press Ctrl+N on the keyboard.

The New File form is displayed.



You can also type the name of the cell in the Cell field and press Ctrl+N to open the New File form. In this case, the Cell field in the New File form is automatically populated with the name that you have entered in the Cell field of the Library Manager form.

- **3.** In the *Library* drop-down list, choose the name of the library in which you want to create a new cellview.
- **4.** In the *Cell* field, type a cell name for the new cellview.

You can set the maximum cell name length allowed by using the CDS\_MAX\_CELL\_NAME\_LENGTH environment variable.

**5.** In the *View* field, type a view name for the new cellview.

Library Management

- **6.** In the *Type* drop-down list, choose the type of view to be opened.
- **7.** In the *Application* section, select the application that should be invoked to display this type of selected cellview.
- 8. Click OK.

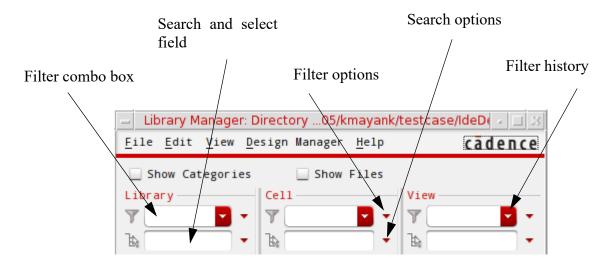
The new cellview appears in a window of the specified product.

#### **Related Topics**

New File Form

# **Filter and Search Options**

In the Library Manager window, the *Filter* combo box and the *Select and search* field are provided at the top of the *Library*, *Cell*, and *View* list boxes. Use the *Filter* combo box to specify a filter pattern and accordingly display only a subset of libraries, cells, or views. The *Search and select* field lets you search and select a particular library, cell, or view by specifying a search string.



### **Using the Filter Combo Box**

The Filter combo box supports use of patterns containing wildcard characters or regular expressions in the specified input. Use of wildcard characters is the preferred and recommended mode of specifying filter patterns. It provides to you advantages that are similar to filtering a list of files from a directory. For example, if you specify \*Lib\*, the corresponding items, such as Lib1, Lib2, and Mylib, gets displayed.

You can use the <code>lmgrSetLCVFilter</code> SKILL function to filter the library, cell, and view list.

To apply filters, specify a filter pattern in the *Filter* combo box and press the *Enter* or *Tab* key. However, if the *Wildcard* option is selected, there is no need to press the *Enter* or *Tab* key. In this case, when you pause, the filter pattern is applied and the *Library*, *Cell*, or *View* list box is updated dynamically.

**Note:** If the *Regular Expression* option is selected, you need to press the *Enter* or *Tab* key to apply filters.

Library Management

Pressing the *Enter* or *Tab* key applies the filter pattern and saves it to the *Filter history* list. If you press the *Tab* key, the cursor moves to the *Search and select* field below the *Filter* combo box.

You can set the filter criteria by selecting the required options from the filter options menu, as shown below.

Field	Description	
Filter With	Lets you filter the instances based on one or more specified patterns.	
All Of The Words	Sets the filters to display the items that contain all the specified words. For example, if you specify Ana* *cell (separated by space), the corresponding item such as Analog_res_cell gets displayed in the list box.	
Any Of The Words	Sets the filters to display all items that have at least one of the specified words. For example, if you specify the filter pattern *mos*, all the corresponding items, such as nmos, pmos_hiVT, and DMOS, is displayed in the list box.	
	This is the default option.	
None Of The Words	Sets the filter by specifying the filter pattern that you want to exclude from the list box. For example, if you specify $mos$ , it excludes all the items, such as $mos$ , $Mos$ , and $Mos$ ; whereas, $pmos$ does not get excluded.	
Using Case	Lets you determine whether the filter results must be case sensitive, <i>Sensitive Match</i> , or any text case is acceptable, <i>Insensitive Match</i> .	
Insensitive Match	Sets the filter to display a subset of items, irrespective of casing. For example, if you specify the text string *mos, all the corresponding items, such as Nmos and CMOS, gets displayed in the list box.	
Sensitive Match	Sets the filter to display a subset of items with the exact casing. For example, if you specify the text string $*mos$ , only the lowercase items such as, $Nmos$ and $Cmos$ , gets displayed in the list box.	
	This is the default option.	
Match Syntax	The options under <i>Match Syntax</i> let you choose the syntax that is used to interpret a pattern filter.	

# Cadence Library Manager User Guide Library Management

Field	Description
Wildcard	Sets the filter by specifying an item using the following wildcard characters:
	* : Matches zero or more characters. For example, if you specify mos*, all the corresponding items starting with mos such as, mos_t and Mos_hiVT, gets displayed in the list box.
	?: Matches any single character. For example, if you specify mos?, only the items followed by a single character such as, mos1 and Mos2, gets displayed.
	[]: Represents a set of characters enclosed within the square brackets. For example, if you want to filter the items starting with a or A and containing the substring nalog, specify [aA]nalog as a search string. It displays the matching items, such as analog and Analog.
	\: Escapes any wildcard character. For example, if you want to filter out the results containing "*" (asterisk), you need to add "\" (backslash) before the "*" symbol. For example, if you specify my\*cell*, all corresponding items, such as my*cell and my*cellA, gets displayed in the list box.

This is the default option.

# Cadence Library Manager User Guide Library Management

Field	Descrip	otion	
Regular Expressions	Sets the filter to use regular expressions to interpret the meaning of a pattern.		
		.: If you specify $sa.ple$ , it matches a single character and the corresponding item such as $sample$ gets displayed in the list box.	
		. *: If you specify $mos.*$ , all the corresponding items, such as $mos\_t, mosA$ , and $Mos\_hiVT$ , gets displayed in the list box.	
		\ : If you want to filter out the results containing "*" (asterisk), add "\" (backslash) before the "*" symbol. For example, if you specify my\*cell*, all corresponding items, such as my*cell and my*cellA, gets displayed in the list box.	
		^: If you want to filter the items starting with cds, specify ^cds. It displays all the items, such as cdsDefTechLib, cdsDefLibTechview, and cdslibtechView.	
		\$: If you want to filter the items ending with Lib, specify .*Lib\$. It displays all the items, such as analogLib and cdsLib, in the list box.	
		[]: If you specify $\texttt{Lib}[1-3]$ , it displays all the corresponding items, such as $\texttt{Lib1}$ , $\texttt{Lib2}$ , and $\texttt{Lib3}$ , in the list box.	
		: If you want to filter all the items starting with $\mathtt{Lib}$ or $\mathtt{cds}$ , $\mathtt{specify}$ $\mathtt{Lib}$ .*   $\mathtt{cds}$ .*. It displays all the items, $\mathtt{such}$ as $\mathtt{Lib1}$ , $\mathtt{Lib2}$ , and $\mathtt{cdsLib}$ .	
	starting specify	ret in square brackets): If you want to filter all the items with Lib and want to exclude the items containing 3, ^Lib[^3]*. It displays all the items, such as Lib1, and Libmgr, except Lib3.	

Library Management

Field	Description  Some important points to remember:		
	To record the history of previously applied filter patterns, press the <i>Enter</i> or <i>Tab</i> key after specifying the text in the <i>Filter</i> combo box. The history of previously filtered items is saved at the following location:		
	\$CWD/.cadence/ <userid>/libManager</userid>		
	■ To view the history of previously applied filter patterns, click the drop-down button of the <i>Library</i> , <i>Cell</i> , or <i>View</i> combo box. It displays the list of filter pattern history from where you can reapply any of the filters.		
	The drop-down list maintains a list of the last 50 filtered patterns. The history is valid for all subsequent Virtuoso sessions.		
By View Names	This section is included only in the Views filter options menu.		
Filter Cells by View Names	Sets the filter to display only those cells that match the filtered views. It is not selected by default.		

### **Using the Search Option**

To search for a specific library, cell, or view, specify a text string in the respective *Search and select* field. To select the instance, press the *Enter* or *Tab* key.

**Note:** If you have already applied a filter, you can only search for the instances from the available subset of library, cell, or view. You can set the search criteria by selecting the required options from the *Search options* menu, as shown below.

Field	Description
Match Name	Allows you to search for an instance either by specifying a substring or a prefix.
Substring	Searches the first instance in the list box that contains the specified text string. For example, if you specify $mos$ , the $nmos$ instance is selected in the list box.

Library Management

Field	Description		
Prefix	Searches the first instance in the list box that starts with the specified text string. For example, if you specify mos, the mosView instance is selected in the list box.		
	This is the default option.		
Using Case	The options under <i>Using Case</i> let you determine whether search results must be case sensitive ( <i>Sensitive Match</i> ) or any text case is acceptable ( <i>Insensitive Match</i> ).		
Insensitive Match	Searches the first instance in the list box irrespective of casing. For example, if you specify the text string $mos$ , the $Mos$ instance gets selected in the list box.		
Sensitive Match	Searches the first instance with the exact casing. For example, if you specify the text string $mos$ , only the lowercase items, such as $Nmos$ or $Cmos$ , gets selected in the list box and items like $CMOS$ does not get matched.		
	This is the default option.		
	Once you set the filter in the <i>List</i> mode, the <i>Tree</i> mode only displays the items matching the filter criteria.		
	To view the results in the $Tree$ mode, select $View-Tree$ . In this mode:		
	When you choose a library, only the libraries matching your filter string appear in the expanded branch.		
	When you choose a cell, only the cells matching your filter string appear in the expanded branch.		
	When you choose a view, only the views matching your filter string appear in the expanded branch.		

### Related Topics

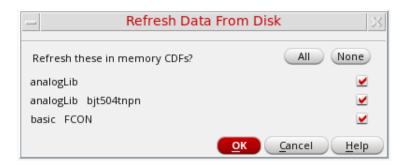
**Library Manager Form** 

 $\underline{\mathsf{ImgrSetLCVFilter}}$ 

# **Refreshing the View and Data**

To refresh the view:

**1.** Choose *View – Refresh* in the Library Manager window.



By default, all modified libraries appear selected. If a cellview is opened in edit mode, the corresponding entry does not get listed.

2. Deselect any libraries that you do not want to update in the view and click *OK*.

The selected libraries are reloaded from the library definitions.

To refresh design data, technology files, and CDF data in the current session:

■ Select *File – Refresh* in the Virtuoso Command Interpreter Window (CIW).

If there is no new data to refresh, an appropriate message appears.

### Related Topics

**Library Manager Form** 

Viewing the cds.lib Updates

Library Management

# **Viewing the Current Cellview Status**

To view the current cellview status:

➤ Click the Show open cellviews in use 🥘 button on the Library Manager toolbar.

The lists in the window are reloaded with icons next to names. The icons indicate whether a library, cell, or view is opened in read mode (green icon  $\mathbb{Z}_{\bullet}$ ) or edit mode (red icon  $\mathbb{Z}_{\bullet}$ ).

You can click the toggle button *Show open cellviews in use* to hide the status icon indicators.

#### Related Topics

**Library Manager Form** 

# Renaming a Library

To rename a library:

- 1. Open the Library Manager.
- 2. Select the library you want to rename.

Make sure no cell name or view name is selected. To deselect all cells and views, right-click in the *Library* list box.

To set preferences for *Edit – Copy* and *Edit – Rename*, see <u>Setting Copy and Rename</u>. Preferences.

3. Choose Edit – Rename.

The Rename Library form appears.



The name of the selected library appears in the *From Library* field. The *Update Instances* check box is selected by default.

□ When *Update Instances* is selected, the Library Manager replaces all instances by the name in the *From Library* field with the name in the *To Library* field.

For example, with *Update Instances* selected, an instance of .../projectLib/iopin/symbol is renamed to .../myLib/iopin/symbol. (All instances of projectLib are changed to myLib.)

□ When *Update Instances* is unselected, the software leaves references to the *From Library* name unchanged.

If you rename projectLib to myLib with *Update Instances* unselected, instances of .../projectLib/iopin/symbol (for example) remain the same such that they become unbound instances unless you replace the projectLib library.

Library Management

**4.** In the *To Library* field, type a new name for the library.

**Note:** The library name cannot duplicate another library name. If the name you type in the *To Library* field already exists (such as analogLib), an error message appears.

5. Click OK.

The system changes the name of the selected library (*From Library*) to the new name (*To Library*).

**Note:** If the destination library already contains the tech.db file, the source library's tech.db is not copied. Otherwise, while copying a source library to an existing library, the tech.db file associated with the source library also get copied to the destination library.

# Renaming a Cell

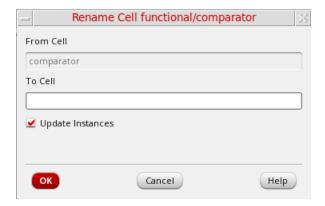
To rename a cell:

1. Select the cell you want to rename.

Make sure no view name is selected. (If you are in *View – Lists* mode, you can deselect all views by right-clicking in the *Cell* list box.)

**2.** Choose *Edit – Rename*.

The Rename Cell form appears.



The name of the selected cell appears in the *From Cell* field.

**Note:** If the selected cell is a combined cell, the *Edit – Rename* command is not available. See <u>Creating and Displaying a Combined Library</u> for more information.

**3.** In the *To Cell* field, type the new name for the cell.

The cell name cannot duplicate an existing cell name in the library.

You can set the maximum cell name length allowed by using the CDS\_MAX\_CELL\_NAME\_LENGTH environment variable.

- **4.** Deselect *Update Instances*.
  - □ When *Update Instances* is selected (the default), the Library Manager replaces all instances having the *From Cell* name with the *To Cell* name.
  - When *Update Instances* is unselected, the Library Manager keeps references to the *From Cell* name such that all placed instances of the *From Cell* continue to reference that name: Instances using the old (*From Cell*) name are unbound instances unless you replace them with the new (*To Cell*) cell.
- 5. Click OK.

Library Management

The Library Manager changes the name of the selected cell (*From Cell*) to the new name (*To Cell*).

### **Related Topics**

Opening the Library Manager

Rename Library Form

Rename View Form

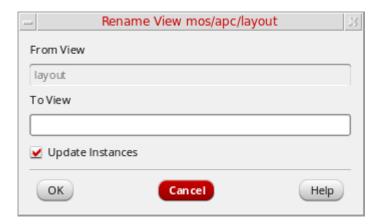
Renaming a Reference Library

# Renaming a View

To rename a view:

- 1. Select the view you want to rename.
- **2.** Choose *Edit Rename*.

The Rename View form appears.



The name of the view you selected appears in the *From View* field. The entire cellview path appears in the title banner of the form.

3. In the *To View* field, type the new name for the view.

The new view name cannot duplicate an existing view name for the cell.

- 4. Deselct *Update Instances*.
  - □ When *Update Instances* is selected, the Library Manager overwrites any occurrences of the *From View* name with the *To View* name.

```
If you rename symbol to symbol (for example), all instances of .../projectLib/buff/symbol are changed to .../projectLib/buff/symbolA.
```

□ When Update Instances is unselected, the Library Manager keeps references to the From View name.

If you rename symbol to symbolA with *Update Instances* unselected, instances of .../projectLib/buff/symbol (for example) remain the same such that they become unbound instances unless you replace the symbol view.

5. Click OK.

Library Management

The Library Manager changes the name of the selected view (*From View*) to the new name (*To View*).

If you are working with a design-managed library, the Rename Library dialog box shows an additional section.

### **Related Topics**

Opening the Library Manager

Rename Library Form

Rename Cell Form

Rename View Form

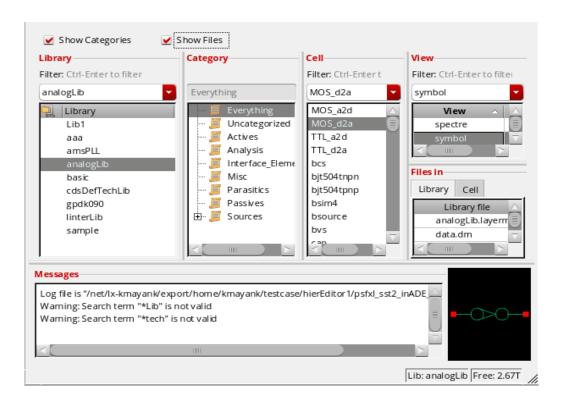
Renaming a Reference Library

# **Renaming Files**

To rename a file:

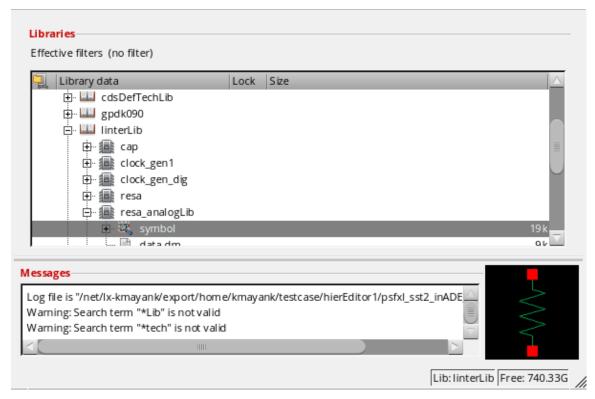
- 1. Depending on your viewing mode:
  - ☐ If you are in *View Lists* mode, select the *Show Files* check box.

The Files In Library and Files In Cell list boxes appear on the Library Manager form.

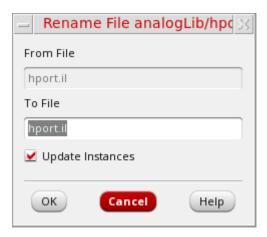


- ☐ If you are in *View Tree* mode, expand the branches of the tree until you can see the file you want to rename.
- 2. Select the file you want to rename.
- **3.** Choose *Edit Rename*.

Library Management



The Rename File form appears. The name of the file you selected appears in the *From File* field.



4. In the To File field, type the new name for the file.

The new file name cannot duplicate an existing file name in the library.

5. Click OK.

Library Management

The Library Manager changes the name of the selected file (*From File*) to the new name (*To File*).

If you are working with a design-managed file, the Rename Cell File dialog box shows an additional section.

### **Related Topics**

Controlling the Display of Library Information

Rename File Form

Renaming a Reference Library

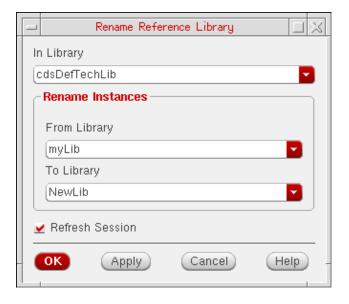
# Renaming a Reference Library

You can change the reference library for instances in your design library. For example, if your design library, newLib, contains via cells from the reference library basic, you can change the reference library from the basic library to the analogLib library so that the via cells, and any other cells in your design library that reference the basic library, now reference the analogLib library. This assumes that the analogLib library contains a via cell.

To change a reference library for a design library:

- 1. Select the library that contains references you want to rename.
- **2.** Choose *Edit Rename Reference Library*.

The Rename Reference Library form appears.



- **3.** In the *In Library* drop-down list, select or type the name of the design library that uses a reference library whose name you want to change. In the *From Library* drop-down list, select or type the name of the current reference library.
- **4.** In the *To Library* drop-down list, select or type the name of the new reference library.
- **5.** Click *OK* to save the changes and close the Rename Reference Library form.

**Note:** To apply changes and keep the form open, click *Apply*.

Library Management

The system changes the name of the current reference library to the name of the new reference library for all instances in the specified design library.

If you cannot rename the reference library, it might be for one of the following reasons:

- An input parameter is invalid.
- The system cannot automatically open the design library for writing.
- You cannot get access permission to the design library.

#### **Related Topics**

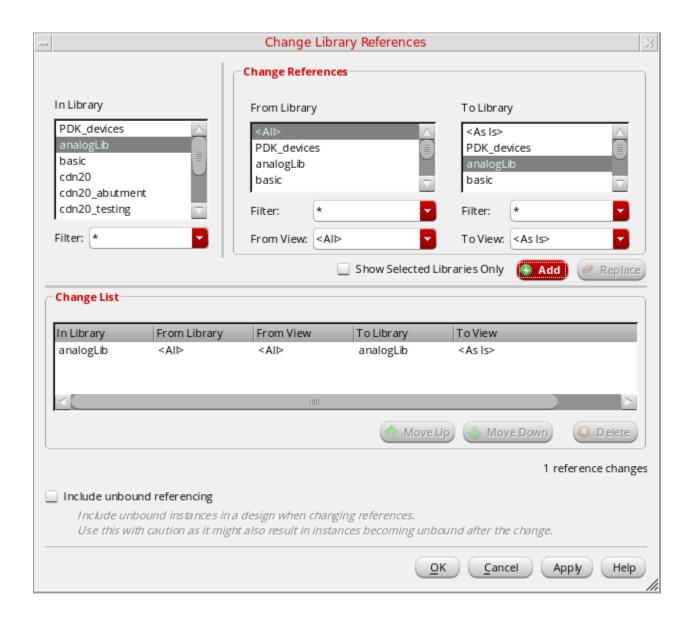
Rename Reference Library Form

Viewing and Changing File Permissions

# **Changing Library Reference**

There might be instances where you need to map all the instance from multiple libraries to a specified destination library. In such cases, you can use the *Change Library References* feature that enables you to map multiple libraries to the specified destination library at once.

For example, in design library, test, you can change the references of libraries, cdsDefTechLib and pc to the pc destination library, as shown below:

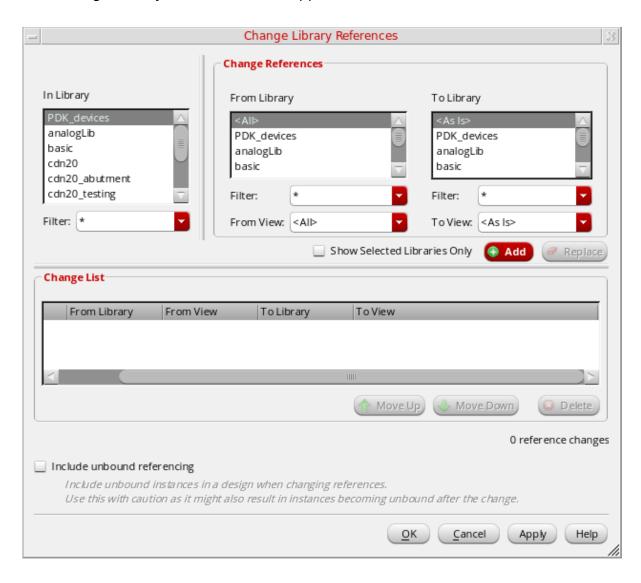


Library Management

To change a reference library for a design library:

- 1. Select the library that contains references you want to change.
- **2.** Choose *Edit Change Library Reference*.

The Change Library References form appears.



- **3.** In the *In Library* list box, select the name of the design library that uses a reference library whose name you want to change.
- **4.** In the From Library list box, select the name(s) of the current design libraries.
- **5.** In the From Library list box, select the name of the new reference library.

Library Management

- **6.** Click *Add*. The change list gets added in the *Change List* area.
- **7.** Click *OK*.

The system changes the references of the current libraries to the name of the new reference library for all instances in the specified design library.

### **Related Topics**

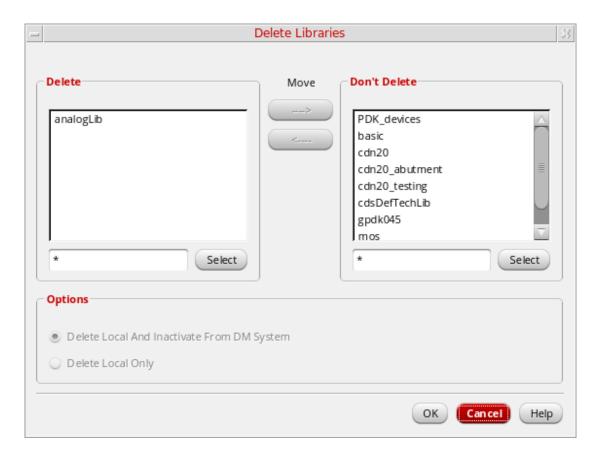
Rename View Form

# **Deleting a Library**

To delete a library from the Library Manager:

- 1. Select the library you want to delete.
- **2.** Choose *Edit Delete*.

The Delete Libraries form appears. The selected library appears in the *Delete* list box.



- 3. To delete additional libraries:
  - **a.** Select a library from the *Don't Delete* list box.
  - **b.** Click the left-facing *Move* arrow to move the selected libraries to the *Delete* list box.



You can double-click a single item in the *Don't Delete* list box to move it over to the *Delete* list box. You can select multiple items by Shift-clicking, Ctrl-clicking, clicking and dragging, or using the *Select* filter.

Library Management

- **4.** Select one of the following *Options*:
  - □ Delete Local And Inactivate From DM System: Deletes a local copy of a library and the copy in the design management repository.
  - □ Delete Local Only: Deletes only your local copy of a library (not the checked in copy in the design management repository).
- **5.** Click *OK* and then *Yes* in the confirmation dialog to perform the delete operation.

#### **Related Topics**

**Delete Libraries Form** 

**Deleting a Cell** 

**Deleting a View** 

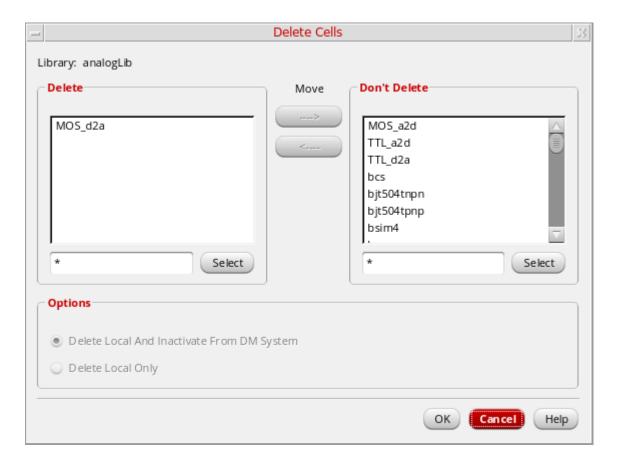
# **Deleting a Cell**

To delete a cell from the Library Manager:

- 1. Select the cell you want to delete.
- **2.** Choose *Edit Delete*.

The Delete Cells form appears.

The selected cell appears in the *Delete* list box.



**Note:** If the cell is selected from a combined library, then it does not appear by default in the *Delete* list. The cell appears in the *Don't Delete* list and the cell name indicates the physical library that it belongs to. If you want to delete the cell, move it to the *Delete* list. Also, the cell gets deleted from the physical library to which it belongs.

**Note:** If the cell appears in multiple libraries under the combined library, the *Don't Delete* list displays an entry for each library, the library name is displayed with the cell name to identify the library, so that you can select the ones you want to delete. However,

Library Management

if the cell is physically in the top-level combined library, then it does appear in the *Delete* list and all the other cells that are in that library are displayed in the *Don't Delete* list.

- **3.** To delete additional cells, you need to select a cell from the *Don't Delete* list box and click the left-facing *Move* arrow to move the selected cells to the *Delete* list box.
- **4.** Select one of the following *Options*:
  - □ Delete Local And Inactivate From DM System: Deletes a local copy of a cell and the copy in the design management repository.
  - □ Delete Local Only: Deletes only your local copy of a cell (not the checked in copy in the design management repository).
- **5.** Click *OK* and then click *Yes* to perform the specified delete operation.

#### Related Topics

Creating and Displaying a Combined Library

**Delete Cells Form** 

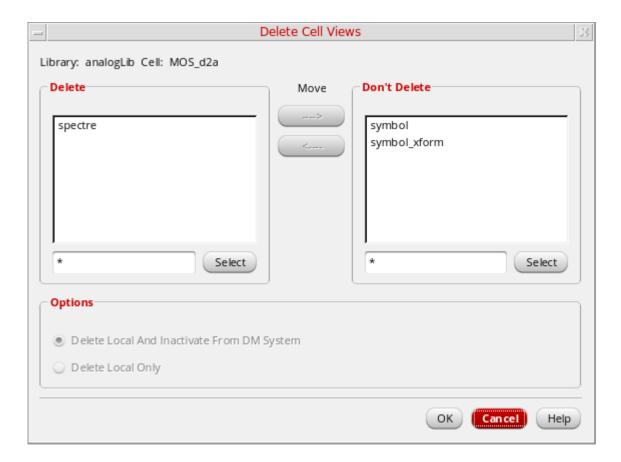
### **Deleting a View**

To delete a view from the Library Manager:

- 1. Select the view you want to delete.
- **2.** Choose *Edit Delete*.

The Delete Cell Views form appears.

The selected view appears in the *Delete* list box.



**Note:** If the view is selected from a combined library, then it does not appear by default in the *Delete* list. It appears in the *Don't Delete* list and its name indicates the physical library that it belongs to. If you want to delete the view, move it to the *Delete* list. In addition, the view gets deleted from the physical library to which it belongs.

**Note:** If the view is part of a combined cell, that is, a cell that is found in more than one library in the combined library, the *Don't Delete* list displays an entry for each library, so that you can select the ones you want to delete. However, if the cell is a part of the

Library Management

top-level combined library, then the view does appear in the *Delete* list and all the other views of that cell are displayed in the *Don't Delete* list.

- **3.** To delete additional views, you need to select a view from the *Don't Delete* list box and click the left-facing *Move* arrow to move the selected views to the *Delete* list box.
- **4.** Select one of the following *Options*:
  - Delete Local And Inactivate From DM System: Deletes a local copy of a view and the copy in the design management repository.
  - □ Delete Local Only: Deletes only your local copy of a view (not the checked in copy in the design management repository).
- **5.** Click *OK* and then *Yes* in the confirmation dialog to perform the delete operation.

#### Related Topics

**Delete Cell Views Form** 

**Deleting Cells Using Filters** 

**Deleting Library or Cell Files** 

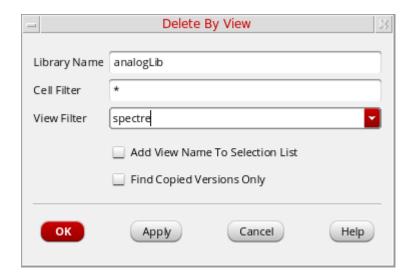
# **Deleting Cells Using Filters**

You can delete cellviews or group of cells from your local directory or from both the local directory and the current design management repository. You can delete all views for a cell or only those views for versions you have copied.

To delete views for a given cell:

- 1. Select the view you want to delete.
- **2.** Choose *Edit Delete By View*.

The Delete By View form appears . The name of the selected library appears in the *Library Name* field.



3. In the *Cell Filter* field, type a filter string for the cells you want to delete.

For example, type \* to indicate all cells or p\* to indicate all cells beginning with a lowercase p.

**4.** In the *View Filter* drop-down list, type a filter string for the views of these cells you want to delete, or select a view name from the drop-down list.



To add a new view name to the View Filter drop-down list selection list:

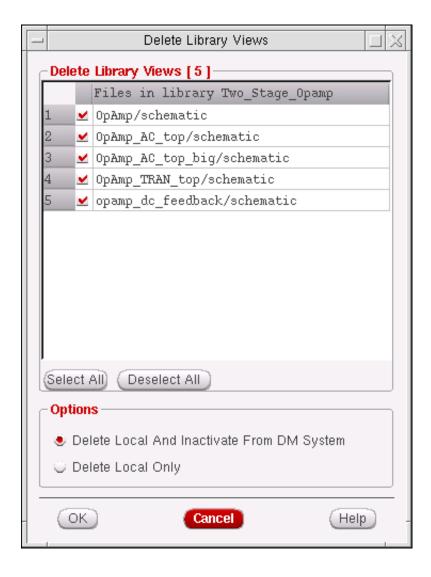
- a. Select the Add View Name To Selection List check box.
- b. Click Apply.

Library Management

The new name is added to the bottom of the *View Filter* drop-down list.

- **5.** If you want to delete only cells and views that you copied previously, select the *Find Copied Versions Only* check box.
- 6. Click OK.

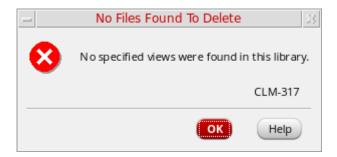
The Delete Library Views form appears. The cellviews that match the criteria you specified on the Delete By View form.



**Note:** If no cellviews that match the criteria are found, the No Files Found To Delete form appears. Click *OK* to close this form and return to the Delete By View form to specify new

Library Management

#### criteria.



- **7.** On the Delete Library Views form, select one of the following *Options*:
  - □ Delete Local Only: Deletes the local copy of a cellview only.
  - □ Delete Local And Inactivate From DM System: Deletes the local copy of a cellview and the copy in the current design management repository.
- 8. Click OK.

The selected cellviews are deleted.

The following are some possible circumstances that might generate error messages when you try to delete a cellview from a library:

- If you try to delete a read-only library, an error message appears, indicating that the process of deleting by view failed.
- In rare instances, the MPS (Message Passing Subsystem) server (used by the Virtuoso Studio design environment) that stores the directory for the library you specified might be down. In this case, an error message appears, indicating that the library from which you want to delete a view is not found.
- If you do not specify a cell or view in the *Cell Filter* or *View Filter* fields, an error message appears, indicating that a cell or view name is missing.
- If you specify a name for a library, cell, or view that does not exist, an error message appears, indicating that no files were found.

#### Related Topics

<u>Delete By View Form</u>

**Delete Library Views Form** 

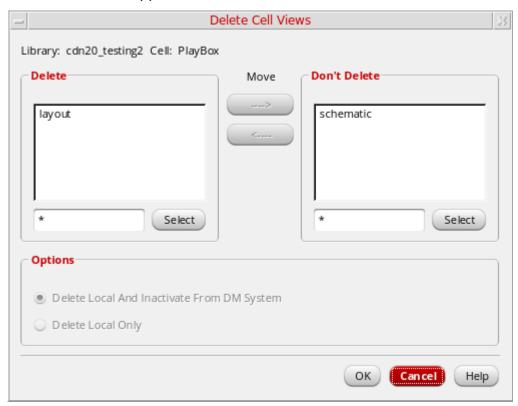
# **Deleting Library or Cell Files**

To delete library-level or cell-level files from the Library Manager:

- 1. Select the file you want to delete in the Files in Library or Files in Cell list box.
- **2.** Choose *Edit Delete*.

The Delete Library Files or Delete Cell Files form appears.

The selected file appears in the *Delete* list box.



If the file is selected from a combined library, then it does not appear by default in the *Delete* list. It appears in the *Don't Delete* list and its name indicates the physical library that it belongs to.

To delete a file, move it to the *Delete* list, the file gets deleted from the physical library to which it belongs. If the file is found in multiple libraries, the *Don't Delete* list displays an entry for each library, you can select the ones you want to delete. However, if the file is part of the top-level combined library, then it does appear in the *Delete* list and all the other files in the library (or cell) are displayed in the *Don't Delete* list.

For more information about combined libraries, see <u>Creating and Displaying a Combined Library</u>.

Library Management

- 3. To delete additional files:
  - a. Select a file from the Don't Delete list box.
  - **b.** Click the left-facing *Move* arrow to move the selected files to the *Delete* list box.

You can double-click a single item in the *Don't Delete* list box to move it over to the *Delete* list box. You can select multiple items by Shift-clicking, Ctrl-clicking, clicking and dragging, or using the *Select* filter.

- **4.** Select the desired option from the *Options* field.
- **5.** Click *OK* and then click *Yes* to perform the specified delete operation.

### Related Topics

**Delete Cell Views Form** 

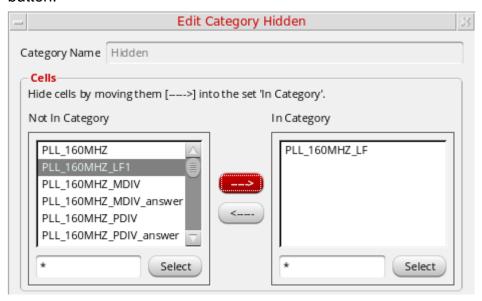
## **Hiding Cells and Showing Hidden Cells**

You can hide a cell from the *Cell* list box of the Library Manager window. To do this, you need to perform the following steps:

**1.** Right-click the cell and select the *Hide Cell* option from the context-sensitive menu. Alternatively, you can select *Edit – Hide Cell*.

The *Hide Cell* command is disabled if the library is in read-only mode.

The Edit Category Hidden window is displayed. In the *Cells* section of this window, move the cell from *Not in Category* list box to *In Category* list box using the right arrow button.



#### 2. Click OK.

The new *Hidden* category is created in the *Category* list box of the Library Manager window.

Alternatively, use the SKILL function <a href="mailto:ddRegHiddenCellsFunc">ddRegHiddenCellsFunc</a> to hide cells.

In case you hide the cells that are already placed in a design, you still can:

- Edit the existing instances
- Descend the existing instances
- View the existing instances in the netlist
- View the existing instances in LVS

Library Management

### **Showing Hidden Cells**

If you have the required permissions, you can show the hidden cells by performing the following steps:

- **1.** Right-click the *Hidden* category and select *Modify* from the context-sensitive menu. The Edit Category Hidden window is displayed.
- **2.** In the *Cells* section, move the cell from *In Category* list box to *Not In Category* list box using the left arrow button.
- 3. Click OK.

#### **Related Topics**

Opening a Cellview

Library Management

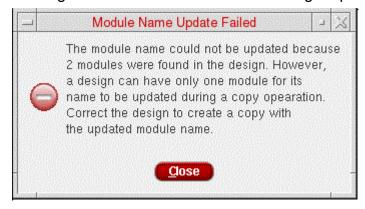
## **Text Cellviews**

While copying or renaming a text cellview, the corresponding module name in the HDL file can be updated automatically using the autoModuleNameUpdate cdsenv variables.

For example, if you rename functional text cellview myVerilogCell, with the module by the same name, to myNewVerilogCell, the module name updates in the Verilog file automatically.

While copying or renaming a text cellview, the match is done only till the first uncommented module name is found instead of matching till " (; ".

The module name does not get updated automatically if there are HDL file parsing errors or multiple modules are existing in the HDL file of the associated cell. In case the HDL file has multiple modules, copying or renaming the associated cell displays the following error message and the module name does not get updated.



The feature to update the module name in the HDL file automatically is available for Verilog, SystemVerilog, Verilog-A, or Verilog-AMS views.

For Verilog-A views, matching of cell names and module names is not done by default. However, you can reconfigure this behavior by setting the matchModuleNameCellName cdsenv variable.

## Related Topics

**Library Manager Environment Variables** 

Opening a Cellview

Creating a New Cellview

# **Editing Library Properties**

To edit the properties associated with a library:

**1.** In the CIW, choose *Tools – Library Manager*.

The Library Manager form appears.

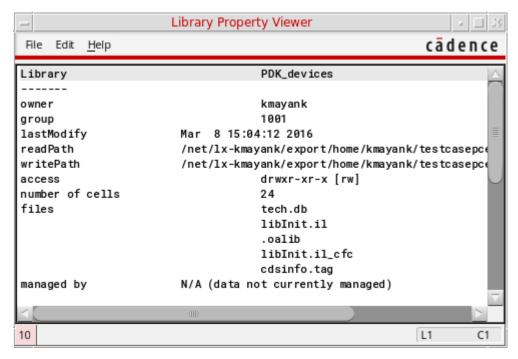
- 2. Select the library whose properties you want to edit.
- **3.** Choose *Edit Properties*.

The Library Property Editor form appears. The properties of the selected library appear at the bottom of the form.



Library Management

If you do not have write permission for the selected library, you can view but not edit the properties. The Library Property Viewer appears instead of the Library Property Editor.



- 4. In the Library Property Editor form, you can add, delete, and modify library properties:
  - □ To add a property, click *Add*.
  - □ To delete a property, select the property and click *Delete*.

The selected property is removed from the form.

- □ To modify a property, select the property and click *Modify*.
- 5. Click Apply.

## Related Topics

<u>Library Manager Form</u>

<u>Library Property Editor Form</u>

Adding Properties to a Library, Cell, or View

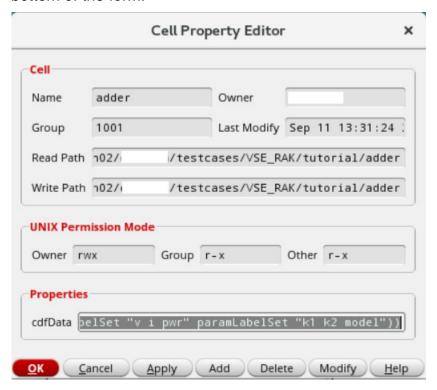
Modifying Properties of a Library, Cell, or View

## **Editing Cell Properties**

To edit the properties associated with a cell:

- 1. On the Library Manager form, select the cell whose properties you want to edit.
- **2.** Choose *Edit Properties*.

The Cell Property Editor form appears. The properties of the selected cell appear at the bottom of the form.



If you do not have write permission for the selected cell, you can display but not edit the properties. The Cell Property Viewer appears instead of the Cell Property Editor.

- **3.** In the Cell Property Editor form, you can add, delete, and modify cell properties:
  - □ To add a property, click *Add*.
  - □ To delete a property, select the property and click *Delete*.

The selected property is removed from the form.

- □ To modify a property, select the property and click *Modify*.
- 4. Click Apply.

Library Management

## Related Topics

Cell Property Editor Form

Adding Properties to a Library, Cell, or View

Modifying Properties of a Library, Cell, or View

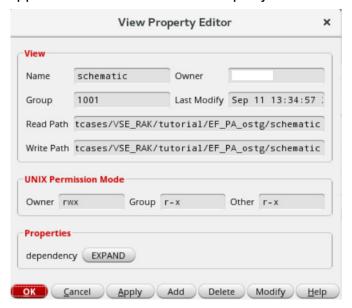
## **Editing View Properties**

To edit the properties associated with a view:

- 1. On the Library Manager form, select the view whose properties you want to edit.
- **2.** Choose *Edit Properties*.

The View Property Editor form appears.

If you do not have write permission for the selected cell, the View Property Viewer appears instead of the View Property Editor. You can display but not edit the properties.



The properties of the selected view appear at the bottom of the form.

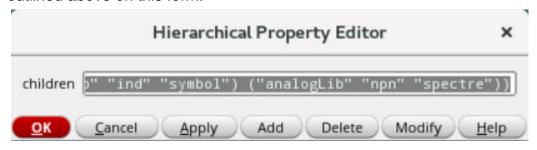
- **3.** In the View Property Editor form, you can add, delete, and modify view properties:
  - □ To add a property, click Add.
  - □ To delete a property, select the property and click *Delete*.

The selected property is removed from the form.

Library Management

□ To modify a property, select the property and click *Modify*.

The dependency property shown above has an *Expand* button. If you click *Expand*, the Hierarchy Property Editor form appears. You can perform similar operations to those outlined above on this form.



4. Click Apply.

### Related Topics

View Property Editor Form

Adding Properties to a Library, Cell, or View

Modifying Properties of a Library, Cell, or View

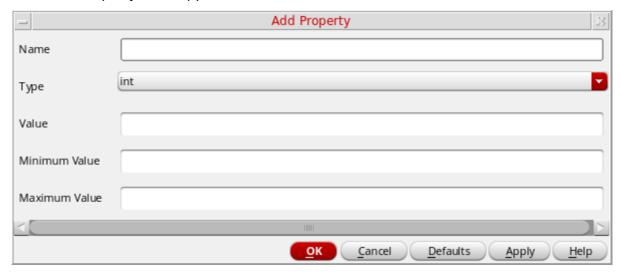
# Adding Properties to a Library, Cell, or View

You can add properties to a library, cell, or view from the Library/Cell/View Property Editor form that appears when you choose *Edit – Properties*.

#### To add properties:

1. On the Library/Cell/View Property Editor form, click *Add*.

The Add Property form appears.



- **2.** In the *Name* field, type a name for the property.
- 3. In the *Type* drop-down list, select from the set of available property types.

The type you select determines the fields that appear on the Add Property form:

- ☐ If you select *int*, *float*, or *time* from the *Type* field, the subsequent fields are *Value*, *Minimum Value*, and *Maximum Value*.
- ☐ If you select *string* from the *Type* field, the subsequent fields are *Value* and *Possible Choices*.
- If you select *boolean*, *ILExpr*, *ILList*, *NLPExpr*, *netSet*, *fileName*, or *hierProp* from the *Type* field, the subsequent field is *Value*.

Library Management

**4.** Type appropriate values in the remaining field or fields that appear based on the *Type* you selected in the previous step.

Туре	Field	Valid Values
int	Value Minimum Value Maximum Value.	Any integer value
		The values specified in the <i>Minimum Value</i> and <i>Maximum Value</i> fields define an inclusive range for a property value. The <i>Value</i> is the default value and must be in the specified range. You can specify infinity (no limit over 0), -infinity (no limit under 0), or leave the field blank to reflect no limit on the value.
float	Value Minimum Value Maximum Value	Any floating-point value
time	Value Minimum Value Maximum Value	Time and date values

# Cadence Library Manager User Guide Library Management

Туре	Field	Valid Values
string	Value Possible Choices	Any string (no quotation marks) or no string
	T OSSIBIC OTTOTOCS	Additional comma-separated list of strings (no quotation marks) or no strings
		<b>Note:</b> You can force a double quotation mark to appear as part of a choice by typing a backslash in front of each quotation mark. For example:
		\"string\"
		If you leave the Value field blank, you must also leave the Possible Choices field blank; the result is that any string can be specified as a valid value for this property
		You may specify Value without specifying Possible Choices; the result is that Value is the default string and any other string can be specified as a valid value for this property
		■ If you specify strings in both the Value and the Possible Choices fields, the result is a a drop-down list containing the only valid values for the property with Value as the default selection
		You cannot leave the Value field blank and type a string in the Possible Choices field.
boolean	Value	TRUE, true, t, yes, FALSE, false, nil, <b>Or</b> no
ILExpr	Value	SKILL expression
ILList	Value	SKILL list
NLPExpr	Value	Expression evaluated by the netlister substitution language

Library Management

Туре	Field	Valid Values
netSet	Value	
fileName	Value	Any valid file name string
hierProp	Value	A valid list of properties

## **5.** Click *OK*.

The added property name and its value or values appear at the bottom of the Library/Cell/View Property Editor form as follows:

Value Set	Appearance		
Value Minimum Value Maximum Value	The value you specified in the <i>Value</i> field appears in an editable field to the right of the property name at the bottom of the Property Editor form; the value range defined by <i>Minimum Value</i> and <i>Maximum Value</i> appear between the property name and the field like this:		
	<pre>propertyName (minVal:maxVal) [_value]</pre>		
	<b>Note:</b> Value must fall within the range defined by Minimum Value and Maximum Value, inclusive.		
<i>Value</i> and <i>Possible Choices</i>	The appearance depends on what you typed in the fields as follows:		
	If you left the Value field blank, a blank field appears to the right of the property name at the bottom of the Property Editor form		
	If you specified a Value and left the Possible Choices field blank, the value appears in a field tothe right of the property name at the bottom of the Property Editor form		
	■ If you specified both a <i>Value</i> and <i>Possible Choices</i> , these values appear in a drop-down list to the right of the property name at the bottom of the Property Editor form with <i>Value</i> as the default selection		
Value alone	The value appears in an editable field to the right of the property name at the bottom of the Library/Cell/View Property Editor form		

Library Management

## Related Topics

Add Property Form

**Editing Library Properties** 

**Editing Cell Properties** 

**Editing View Properties** 

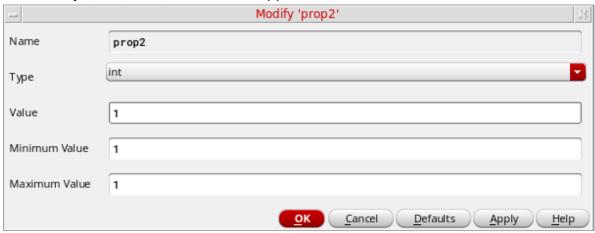
# Modifying Properties of a Library, Cell, or View

You can modify properties of a library, cell, or view from the Library/Cell/View Property Editor form that appears when you choose *Edit – Properties*.

To modify properties:

**1.** On the Library/Cell/View Property Editor form, click *Modify*.

The Modify 'propertyName' form appears.



The name of the selected property appears in the title of the form.

- 2. Make your desired changes on the form.
- 3. Click OK.

## Related Topics

Modify 'propertyName' Form

Adding Properties to a Library, Cell, or View

**Editing Library Properties** 

**Editing Cell Properties** 

**Editing View Properties** 

Library Management

## **Updating a Managed File**

Changes made to a design or component are not visible to members of the design team in a managed design until the design or component is checked in. If you need to use the latest version of an item (for example, a view or the base level CDF properties of a view) checked out to another designer:

- 1. On the Library Manager form, select an item (library, cell, or view).
- 2. Choose Design Manager Update.

The Update Library, Update Cell, or Update View form appears.

This form runs the gdmupdate command.

- **3.** To pass a string to the -name argument of the gdmupdate command:
  - a. Select the *Update From* check box.
  - **b.** In the *Update From* field, type a valid tag specification or TDM release name.
- **4.** To pass a string to the -xtra argument of the gdmupdate command:
  - **a.** Select the *Use Options* check box.
  - **b.** In the *Use Options* field, type a valid string for the -xtra argument.

The software checks the cds.lib file to ensure it has the latest information and then reads the latest edits made to a view or the base level CDF properties of a view into virtual memory, even if the item is checked out to another user. Status messages appear in the *Messages* scrolling area at the bottom of the form.

This command also redraws opened designs affected by edits to a view or its properties.

#### Related Topics

**Library Manager Form** 

Generic Design Management (GDM) Commands

Library Management

## **Library Display Settings**

You can customize the display of libraries in the Library Manager. For example, you can specify that certain libraries be hidden or displayed in a different color or with a particular icon. You do this by setting attributes on libraries.

Cadence provides a set of predefined attributes. You can also add custom attributes.

Attributes are saved in <code>displayPrefs</code> files. The Library Manager displays all attributes defined in any <code>displayPrefs</code> file found by the Cadence Search File mechanism (CSF). All directories listed in your <code>setup.loc</code> file are searched for a

.cadence/libManager/displayPrefs file. The directories are read in the reverse order in which they are listed in the setup.loc file. If an attribute is defined multiple times, the value from the last definition read is used.

The Library Manager's Display Settings form enables you to view the list of existing attributes (predefined as well as custom), modify the display settings of these attributes, and define new attributes. To define an attribute, you specify an attribute name and choose the display settings, such as a specific color or icon, that applies to all libraries tagged with that attribute. Any changes you make are always saved to the

current working dir/.cadence/libManager/displayPrefs file.

You can then set any of these attributes on libraries. To set an attribute on a library, you need to edit your library definition file and add an ASSIGN statement for the library.

#### Related Topics

Creating New Library Attributes

# **Setting Display Options for Libraries**

Cadence recommends that you never edit the displayPrefs file manually.

To set display options for libraries:

1. Select Edit - Display Settings.

The Display Settings form appears.

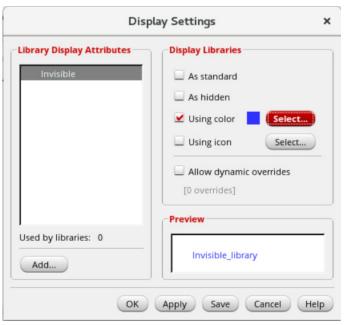


The *Library Display Attributes* list box displays all predefined and custom attributes. It also displays any attributes that have been set on libraries in your cds.lib file but that have not yet been defined in a displayPrefs file.

To create a new attribute, see Creating New Library Attributes.

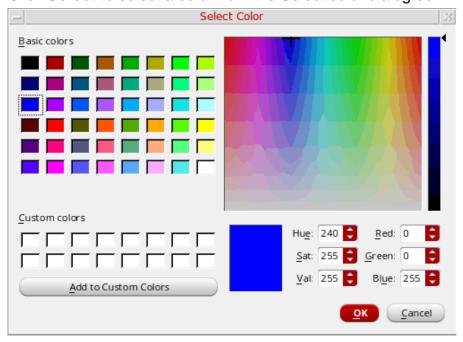
Library Management

2. Select an attribute.



The *Matching libraries* field under the *Library Display Attributes* listbox displays the number of libraries on which the selected attribute is currently set.

- **3.** Select the new display settings for the attribute.
- **4.** Click *Select* to select a color from the Select color dialog box.



Library Management

- **5.** Choose a color from the *Basic colors* or *Custom colors* table, or create a custom color by moving the cross in the color spectrum to the color you want and then clicking *Add to Custom Colors*.
- **6.** The color you select is displayed next to the *Using color* option.

The icon you select is displayed next to the *Using icon* option.

- **7.** The *Preview* field shows a sample library name with the display settings that you have selected.
- 8. Click OK/Apply/Save.

Save applies your changes and also saves them to the displayPrefs file immediately.

Libraries tagged with the attributes you changed are now displayed in the new settings.

The new or modified attribute definitions are saved in the

current\_working\_dir/.cadence/libManager/displayPrefs file. If this file does not exist, it is created. If you clicked *Save*, your changes are saved to this file immediately; if you clicked *OK* or *Apply*, the file is updated when you exit the Library Manager.

#### Related Topics

**Display Settings Form** 

Selecting an Icon for a Library Display Attribute

Setting Attributes on a Library

Library Management

## Selecting an Icon for a Library Display Attribute

You can select icons for library display attributes. The Library Manager uses the Cadence Search File mechanism (CSF) to find icons—both Cadence application icons as well as any custom icons that you or your site have added.

Specifically, the Library Manager looks for the following two directories:

```
icons/library/16x16
icons/16x16
```

For every location in the setup.loc file, the following subdirectories are searched:

.cadence
. (the exact location)
cdssetup

Also, from every location, the first subdirectory that contains an icons directory is used. For example, if an icons directory is found in locationA/.cadence, then locationA and locationA/cdssetup are not searched.

If multiple definitions are found for an icon, that is, a file of the same base name is found in multiple locations, the definition from the location that has higher precedence in the setup.loc file is used, as per CSF rules.

If you create custom icons, place them in the following sub-directory of any directory that is listed in your setup.loc file, such as \$HOME:

```
icons/library/16x16
```

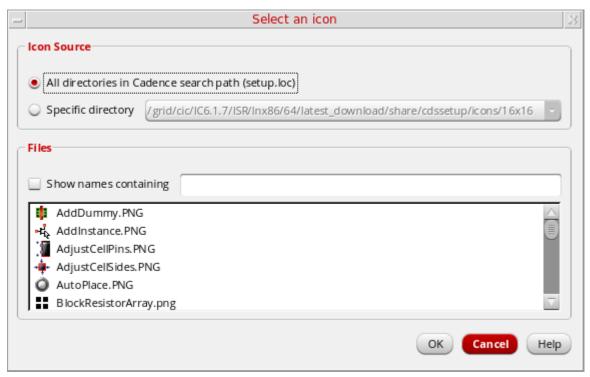
If an icon is defined in both an icons/16x16 directory and an icons/library/16x16 directory, the definition in the icons/library/16x16 directory is used.

To select an icon for a library display attribute,

- 1. In the Display Attribute form, select an attribute.
- 2. In the *Display Libraries* section, select *Using Icon*, then click *Select*.

Library Management

The Select an icon form appears.



**3.** In the form's *Icon Source* field, select the directories from which you want to display icons in the *Files* list.

Until you add custom icons to other locations in your setup.loc file, the only directories listed in this field are those containing Cadence application icons, such as the  $your\_install\_dir/share/cdssetup/icons/16x16$  icon directory.

**4.** Select *Show names containing* and specify a pattern to filter icon file names.

Only the file names containing the pattern are displayed. For example, ibr displays only those file names that contain ibr, such as NewLibrary.png.

**5.** From the *Files* list, select the icon that you want to use for the attribute.

You can place your cursor over an icon file name to view the directory from which it is obtained.

6. Click OK.

The icon you selected is displayed next to the *Using Icon* field in the Display Settings form. The *Preview* field also displays the icon next to the sample library name.

# Cadence Library Manager User Guide Library Management

## Related Topics

Select an icon Form

# **Creating New Library Attributes**

You can create new library display attributes and define the display settings for them. Attributes that you add are saved in the

current\_working\_dir/.cadence/libManager/displayPrefs file. You can add any number of attributes. Cadence recommends that you never edit the displayPrefs file manually.

To create new library display attributes,

- 1. Select Edit Display Settings.
- 2. In the Display Settings form, in the *Library Display Attributes* section, click *Add*.

The Add Library Display Attribute form appears.



- **3.** In the *Name* field, specify a name for the attribute. Names cannot include spaces.
- **4.** To copy display settings from another attribute, select *Copy values from existing library attribute*, then select the attribute from the available list.
- 5. Click OK/Apply.

The new attributes are listed in the *Library Display Attributes* listbox in the Display Settings form.

- **6.** If you did not copy display settings from another attribute, select them in the *Display Libraries* section of the Display Settings form.
- 7. Click OK/Apply/Save.

Library Management

#### The new attributes are saved in the

current\_working\_dir/.cadence/libManager/displayPrefs file. If the file does not exist, it is created. If you clicked *Save*, your changes are saved to this file immediately; if you clicked *OK* or *Apply*, the file is updated when you exit the Library Manager.

To customize attributes on a per-site or per-project basis, copy the <code>displayPrefs</code> file to the appropriate directories. The Library Manager uses CSF search to find attributes.

For more information, see <u>Library Display Settings</u>.

#### Related Topics

**Setting Display Options for Libraries** 

**Library Display Settings** 

Setting Attributes on a Library

Library Management

## **Setting Attributes on a Library**

To set an attribute on a library, in your cds.lib file:

ASSIGN libName DISPLAY attributeName

where <code>libName</code> is the library on which you want to set the attribute and <code>attributeName</code> is the name of the attribute.

The library must be already defined with the DEFINE statement earlier in the file, otherwise the ASSIGN statement is ignored.

The next time you start the Library Manager, the library appears in the display settings specified for the attribute (for example, in a specific color).

In the cds.lib file, you can also set a new attribute that is as yet undefined in a displayPrefs file. The next time you start the Library Manager, this new attribute appears in the *Library Attributes* list in the Display Settings form. You can then define the display options for the attribute.

### **Related Topics**

Setting Display Options for Libraries

Viewing the cds.lib Updates

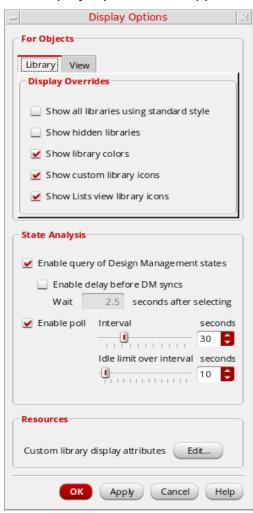
## **Overriding Customized Library Display Settings**

The Display Options form lets you override any of the custom display settings that you have set on libraries. Overrides apply to the current session only.

To override custom library display settings,

**1.** Select *View – Display Options*.

The Display Options form appears.

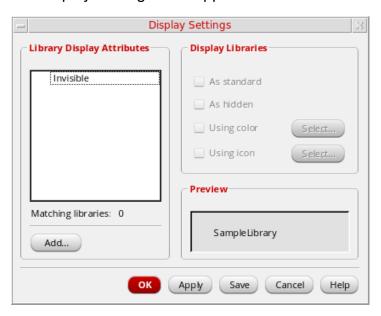


- **2.** In the *Library* tab *Display Overrides* section, select or deselect any of the available options.
- **3.** In the *View* tab, the only option in the *For Objects* section is *Show extended states*. This option allows DM tables to be shown in any viewing mode.

Library Management

It should be used along with the *Enable query of Design Management states* option in the Library page.

- 4. In the State Analysis section, select or deselect any of the available options.
- **5.** To edit library display settings, in the *Custom library display attributes* field, click *Edit*. The Display Settings form appears.



#### **Related Topics**

**Display Options Form** 

**Display Settings Form** 

**Library Display Settings** 

## **Creating and Displaying a Combined Library**

The Library Manager allows you to group a set of libraries and display them as a *combined* library.

A combined library is a virtual library made up of other libraries. The data is not physically moved or copied; it is just displayed in consolidated form under the combined library.

This feature helps you manage the display of libraries for your needs by letting you group together libraries for a specific purpose or to reduce the number of libraries displayed in the *Library* list box. For example, if you use a base set of libraries with some additional libraries for one process and with another set of libraries for another process, you could group the relevant libraries together for each process.

## **Creating Combined Libraries**

Combined libraries are created by setting an ASSIGN statement with a COMBINE attribute in your cds.lib file.

To create a combined library

1. Create a new directory for the combined library.

The combined library must be valid and defined before the ASSIGN statement for it to work properly.

2. In your cds.lib, add the following statement:

```
ASSIGN combinedLibName COMBINE libA libB ...
```

where combinedLibName is the name of the top-level library and libA and libB are the libraries that comprise the combined library.

The combined library must be valid and have a physical representation, even if it is an empty directory. Any invalid libraries are ignored in libManager. Invalid libraries present in the ASSIGN statement generates a warning message.

3. Ensure that a DEFINE statement for the new combined library and for all the libraries that are combined appears before the ASSIGN statement in cds.lib.

All the libraries specified in the statement must already be defined with the DEFINE statement earlier in the file, otherwise the invalid libraries are ignored by Library Manager.

A library can be placed in more than one combined library.

Library Management

With the ASSIGN statements, you can build up a hierarchy of libraries.

### For example:

```
DEFINE analogLib /home/libs/analogLib
DEFINE sbaLib /home/libs/sbaLib
DEFINE demoLib /home/libs/demoLib
DEFINE newLib /home/libs/newlib
DEFINE testLib /home/libs/testLib

ASSIGN newLib COMBINE analogLib sbaLib
ASSIGN testLib COMBINE newLib demoLib
```

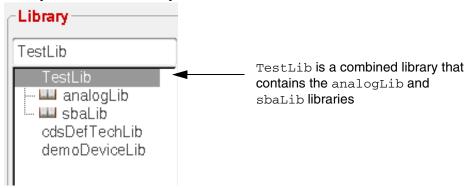
## **Display Combined Libraries**

In the Library Manager, combined libraries are displayed in the *Library* list just like any other library.

Combined libraries are displayed in a tree form.

A + icon next to a library name indicates that it is a combined library and has a hierarchy under it. Double-clicking on the library or clicking the + icon displays the libraries it contains. The individual libraries that comprise a combined library are not displayed at the top-level, they are only displayed under the combined library.

Tooltips for combined libraries also indicate that they are combined: the tooltip displays the library name followed by [COMBINED].



When a combined library is selected in the *Library* list, the other list boxes display composite data from all the libraries that comprise the combined library.

The *Cell* list box displays all the cells from all the libraries under the combined library. The tooltip for each cell shows the same library to which it belongs.

Library Management

Similarly, the *Files in Library* list box displays library-level files from all the libraries in the combined library. Files that are found in more than one library are listed with the library name displayed in brackets after the file name to differentiate them. Tooltips display the origin of the other files.

When you select a cell in the *Cells in Library* list box, its views and files are displayed as usual. Tooltips indicate the library and cell information for the view or file.

However, if a cell of the same name is found in two libraries, consolidated data for both cells is displayed when you select the cell. The *Views in Cell* list box displays the views found in both cells, with the library name in brackets to differentiate them. Similarly, the *Files in Cell* list box displays cell-level files for both cells, with the library name in brackets. Also, the tooltip for the cell indicates that the cell is combined, for example: TestLib/n2port[COMBINED].

For combined libraries, categories are also merged—the *Category* list box displays all categories for all libraries in the combined library. Selecting a category that is common to two libraries displays data from both libraries that belongs to that category.

**Note:** Libraries are combined for display purposes only. Any edit commands, such as modifying categories, copying, or renaming libraries or cells apply to the physical library only, not to the combined library. For example, if you copy a combined libraryA that contains its own data as well as libraryB and libraryC, only the contents of libraryA are copied to the new library. The forms for these commands also display information about the physical library only. The only exception to this is the *Delete* command, which displays information about the combined data and gives you the option of deleting from multiple locations, if applicable. See the descriptions of the *Delete* commands earlier in this chapter for more information.

You cannot copy or rename a combined cell (a cell that is found in multiple libraries in a combined library) unless you select a specific view or select the cell from the library to which it belongs.

#### Related Topics

**Library Manager Form** 

Viewing the cds.lib Updates

# Cadence Library Manager User Guide Library Management

3

# **Library Browsing**

The Library Browser form is similar to the Library Manager form, but it does not have menus and is used for displaying and selecting cellviews only. Some applications use the Library Browser form; others use the Library Manager. The Library Browser form appears when you click the *Browser* button in a Virtuoso form.

You can use the Library Browser form to perform the following tasks:

- Display and select libraries, categories, cells, and views specified in your cds.lib file.
- Filter libraries, categories, cells, and views to narrow your selection

### Related Topics

Opening the Library Browser Form

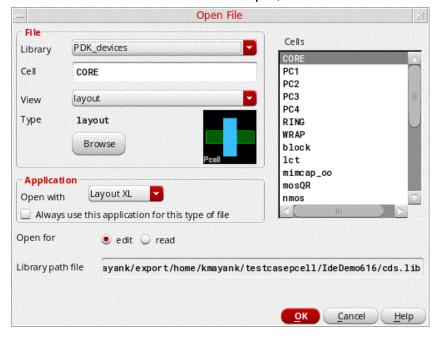
Selecting a View Using the Library Browser

libSelectCellViewCombineMode

# **Opening the Library Browser Form**

To open the Library Browser form manually:

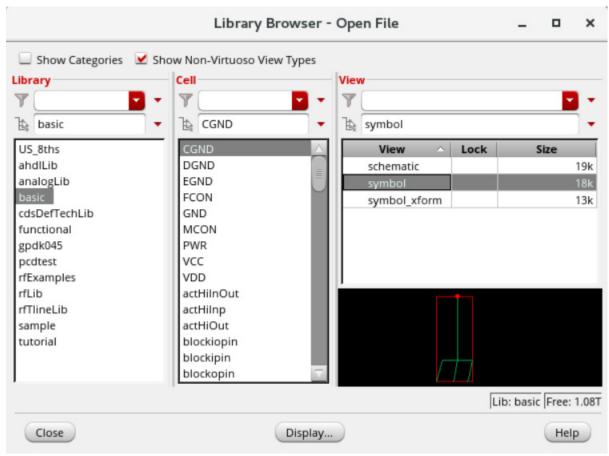
1. Click *Browse* on a form. For example, click *Browse* on the Open File form.



- 2. The cells in the *Cells* list box of the Open File form are displayed in alphanumeric order.
- 3. To use the same sort order as used in Library Manager, set designEditor.fileSpec.

Library Browsing

**4.** The Library Browser form appears.



#### **Related Topics**

**Library Browser Form** 

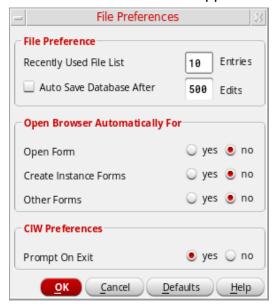
showNonVirtuosoViewtypes

# **Setting the Library Browser Form To Open Automatically**

To set the Library Browser form to open automatically from specific forms, follow these steps:

**1.** From the CIW, choose *Options – File Preferences*.

The File Preferences form appears.



2. In the *Open Browser Automatically For* group box, select *yes* for the forms from which you want the Library Browser form to open automatically.

You can select any or all form types.

3. Click OK.

The next time you open any of the selected types of forms, the Library Browser form appears automatically. You do not have to restart the software for your preferences to take effect.

## Related Topics

**Library Browser Form** 

Library Browsing

# **Selecting a View Using the Library Browser**

To select a cellview using the Library Browser form, follow these steps:

**1.** In the *Library* list box, select a library.

The cells contained in that library appear in the *Cell* list box.

2. To display the views associated with a cell, select the cell name.

The names of the views for that cell appear in the *View* list box.

**3.** In the *View* list box, double-click a view name.

The Library Browser form closes. The selected library, cell, and view names appear in the appropriate fields on the parent form, from where you opened the Library Browser form.

#### Related Topics

**Library Browser Form** 

# Cadence Library Manager User Guide Library Browsing

# **Data Copying**

Use Library Manager copy functions to assemble design and reference libraries by copying cells or views from libraries, that are specified in your cds.lib file, into other libraries.

Function	Description	
Сору	Lets you copy a library, cell, view, or file.	
	Opens the Copy Library, Copy Cell, Copy View, or Copy Library File form.	
Copy Wizard	Lets you copy a library, cell, or view; copy hierarchically; copy by view; or copy by configuration.	
	Opens a dynamic form that lets you choose how you want to copy.	

The Library Manager only lets you edit and manage OpenAccess libraries, any library that has a library-level prop.xx file is grayed-out and cannot be copied. Cell-level prop.xx files are not copied when you copy the cell. Copy commands can also fail if you have prop.xx files.

### Related Topics

Copy Function in the Library Manager

Selecting Text in the Copy Wizard

Editing Text in the Copy Wizard

Setting Copy and Rename Preferences

**Data Copying** 

# **Copy Function in the Library Manager**

The Copy function opens the Copy Library, Copy Cell, Copy View, Copy Library File, or Copy Cell File form depending on what you have selected on the Library Manager form.

- Copy Library lets you copy a single library to a new library name Copy Cell lets you copy a cell to a new cell name or into another library. You also have the option to copy cells hierarchically.
- Copy View lets you copy a view to a new view name or into another cell or library. You also have the option to copy views hierarchically.
- Copy Library File lets you copy a single library file to a new name or a new library.
- Copy Cell File lets you copy a single cell file to a new name, a new cell, or a new library.

#### Related Topics

Copying a Library in the Library Manager

Copying a Cell in the Library Manager

Copying a Cell Hierarchy in the Library Manager

Copying a View in the Library Manager

Copying a View Hierarchy in the Library Manager

Copying a Library File

Copying a Cell File in the Library Manager

98

**Data Copying** 

# **Pre-Copy Checks in the Library Manager**

Certain checks are performed prior to copying data. The Library Manager invokes any pre-copy checks defined by applications.

To ensure technology database compatibility between source and destination libraries, the following checks are performed:

- Ensure that the names of files to be copied do not have a space in them. Files with names that have spaces does not get copied.
- If the source library contains a local technology database file (tech.db file), then check if the destination library associates with a technology database, either through attachment or by containing a tech.db file in the library. If the destination library associates with a technology database, then the copy command is aborted.

If the above check succeeds, then the following additional checks are performed for compatibility of design data:

- 1. Compatibility Check: Check for compatibility between the technology databases of the source and destination library and do the following:
  - ☐ If the source and destination technology databases are equal, then proceed to the existence check.
  - ☐ If the source technology database is a subset of the technology database of the destination library, then proceed to the existence check.
  - If there are any conflicts with a severity level of error between the technology databases, then abort the copy command. The following table lists the checking criteria:

Technology objects	Checking criteria for compatibility		
oaLayers (oaPhysicalLayers / oaDerivedLayers)	Same name then same number, same number then same name		
oaPurposes	Same name then same number, same number then same name		
oaStdViaDefs	Same viaDef name, two compatible layers and a cutLayer in the viaParameter		
oaCustomViaDefs	Same viaDef name and two compatible layers		
oaScalarSiteDefs	Same name, same width, and same height		

**Data Copying** 

Technology objects	Checking criteria for compatibility		
oaArraySiteDefs	No compatibility checking; check that there is no siteDef of the same name but a different type		
dbuPerUU (technology attribute)	Same value		
For view types of dbcMaskLayout, dbcSchematic, dbcSchematicSymbol, and dbcNetlist			
userUnits (technology attribute)	Same unit name		
For view types of dbcMaskLayout, dbcSchematic, dbcSchematicSymbol, and dbcNetlist			

2. Existence Check: If the source technology database and the destination technology database are compatible, then check for the existence of technology objects in the destination technology database. If there are any missing technology objects for a cellview, that cellview is still copied and warning messages are issued.

Information about errors is displayed in the CIW. Modify your source data accordingly and then try to copy it again.

### Related Topics

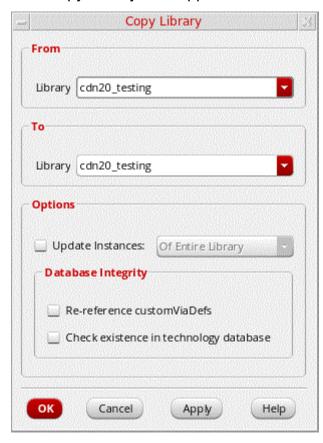
Copy Function in the Library Manager

# Copying a Library in the Library Manager

To copy a library to another name, follow these steps:

- **1.** In the *Library* list box, select a library.
- **2.** Choose *Edit Copy*.

The Copy Library form appears.



- **3.** In the *To Library* field, type a destination library name or select a library name from the drop-down list. You can type a new name or select an existing library.
- **4.** Select the *Update Instances* check box to update the cells and views in the destination library with the new library name.

When the *Update Instances* check box is not selected, the software leaves references to the *From Library* name unchanged.

For example, all instances of .../oldLib/NAND/symbol continue to reference the original library and remain .../oldLib/NAND/symbol.

**Data Copying** 

- **5.** Select the options in the *Database Integrity* field if you want to update and validate technology data in the destination library after the copy command is completed.
- 6. Click OK.

If the destination library already contains the tech.db file, the source library's tech.db is not copied. Otherwise, while copying a source library to an existing library, the tech.db file associated with the source library also gets copied to the destination library.

In case you selected an existing library, the Copy Problems form appears.

When you copy a source library to a destination library using Library Manager, the entire library is copied (including data.dm), irrespective of how the variables of addPropFiles, addLibPropFiles, and addCellPropFiles are set.

# Copying to a New Library

When you are copying to a new library and you click *OK* on the Copy Library form, the New Library form appears. To complete the copy operation to a new library, do the following:

**Data Copying** 

**1.** On the New Library form, use the *Directory* navigation tools (list box and toolbar buttons) to specify the destination directory into which you want to copy the new library. You can also type a directory path in the *Directory* field.



2. In the *Design Manager* group box, specify a design management option.

If there is a design management system available to you and you choose *Use No DM* now, you can still decide to check it in later on.

3. Click OK.

#### Related Topics

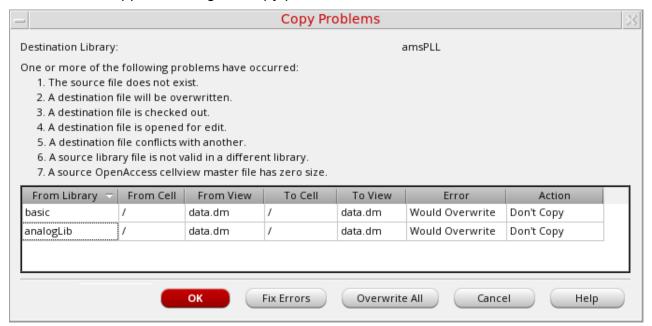
Copy Library Form

New Library Form

Resolving Copy Problems

# **Resolving Copy Problems**

When copying to an existing library, you click *OK* on the Copy Library form, the Copy Problems form appears listing the copy problems in a sortable table.



To resolve copy problems, do the following:

- **1.** In the *Error* column for each item, view the error.
- **2.** In the *Action* column for each item, select an action.

For example, the following actions are available for the *Would Overwrite* error:

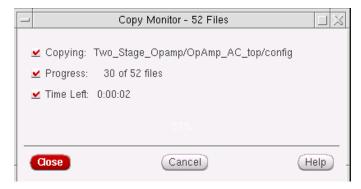
- Don't Copy: Does not copy the item to the Destination Library.
- Overwrite: Writes the item to the Destination Library, overwriting the item of the same name.
- Auto Rename: Appends the From Cell name (if different) and the From Library name (if different), to the final cell name by adding an underscore prefix. If a destination cell with the same name already exists, an underscore and a number (for example, \_01) is automatically added to the name.
- **3.** Select one of the following options as an action for all items:
  - ☐ Fix Errors selects the software's choice for fixing the problem for all items (for example, using Auto Rename to fix the Would Overwrite error).
  - □ Overwrite All selects Overwrite for all items.

**Data Copying** 

You can click *Fix Errors* or *Overwrite All* first and then select a different action for some individual items.

#### 4. Click OK.

The Copy Monitor status window is displayed.



The copy operation completes using the specified actions.

### **Related Topics**

Copying a Library in the Library Manager

#### **Data Copying**

# Copying a Cell in the Library Manager

To copy a cell to another name or into another library, follow these steps:

- 1. Select a cell.
- **2.** Choose *Edit Copy*.

The Copy Cell form appears.



The selected library and cell appear in the *Library* and *Cell* fields in the *From* group box. They also appear in the *Library* and *Cell* fields in the *To* group box. You can change any or all of these values.

You can set the maximum cell name length allowed by using the CDS\_MAX\_CELL\_NAME\_LENGTH environment variable.

- **3.** To complete the copy cell operation, follow the steps for one of the following tasks:
  - Copying a cell to another name in the same library

**Data Copying** 

To copy a cell to another name in the same library,

- **a.** Follow the steps mentioned above.
- **b.** In the *To* group box in the *Cell* field, type a destination cell name.
- c. Click OK.

The *From* cell name is copied to the *To* cell name in the same library.

- □ Copying a cell to another library
  - To copy a cell to another library,
  - **a.** Follow the steps mentioned above.
  - **b.** In the *To* group box in the *Library* field, type or select a destination library name.
  - **c.** You can type a new library name or select an existing library from the drop-down list.
  - **d.** In the *To* group box in the *Cell* field, type a destination cell name.
  - **e.** If you do not change the cell name in the *To* group box, the copied cell displays the same name as the original cell.
  - f. Click OK.

The *From Cell* is copied to the *To Cell* in the *To Library*. If the destination library does not already exist, the New Library form appears, where you can specify a location and design management option for the new library.

#### Related Topics

Copy Cell Form

Copying to a New Library

Copying a Cell Hierarchy in the Library Manager

<u>Updating Cell Instances</u>

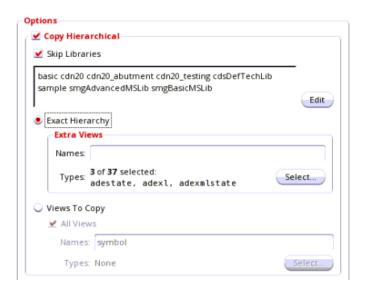
Adding a Copied Cell to a Category

Skip Libraries Together with Update Instances

# Copying a Cell Hierarchy in the Library Manager

To traverse the design hierarchy and copy all referenced cells in your design to the destination library, follow these steps:

**1.** In the *Options* group box, select the *Copy Hierarchical* check box.

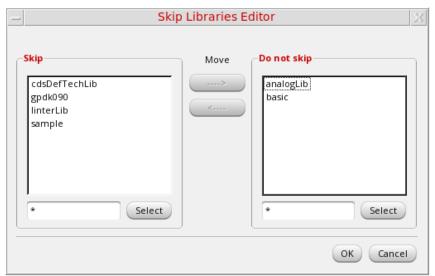


**2.** By default, the *Skip Libraries* check box is also selected. When this check box is selected, cells in the named libraries are not copied and continue to reference their original library. You might want to skip libraries such as reference libraries of contacts, vias, and so on.

You can type the names or click the *Edit* button to open the Skip Libraries Editor dialog box as follows:

**a.** Click library names in the *Skip* list and click the move button in the center to move them to the *Do not skip* list.

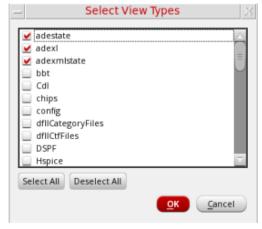
#### **b.** Click *OK*.



**3.** To limit the search to your design's exact hierarchy when collecting the cellview list for copying, select the *Exact Hierarchy* check box. When this check box is selected, only those cellviews found in the design hierarchy are included in the copy operation.

The *Extra Views* box becomes active. If you include additional view names or view types, the operation includes matching views found in your design hierarchy in the copy operation. If any of these matching views have their own hierarchies, those additional hierarchies are also included.

In the *Names* field, type the names of one or more space-separated views to copy. You can also type a valid filter string (for example, s\*). Additionally, or optionally, use the *Select* button to select specific view types.



**4.** By default, the *All Views* check box is selected and the *Views To Copy* option appears deselected. If you leave this check box selected, the copy operation copies all views of

**Data Copying** 

the specified cell. Further, if you copy the cell hierarchically, the copy operation also copies all views of cells instantiated in the specified cell.

To copy a particular set of views, follow these steps:

a. Deselect the All Views check box.

The *Views To Copy* field becomes active.

**b.** In the *Names* field, type the names of one or more space-separated views to copy. You can also type a valid filter string (for example, s\*).

Additionally, or optionally, use the *Select* button to select specific view types.

**5.** Click *OK*.



For an overview on how to reset the changes done on the Copy Cell form, see the How to make the Library Manager reset changes done on Copy form during the Virtuoso session video.

# **Updating Cell Instances**

You can use the *Update Instances* check box in the *Options* group box on the Copy Cell form to update the instances in the destination library to use only the copied cells instead of referencing the entire original library and cell names. If you leave the *Update Instances* check box unselected, references to the *From Cell* name are unchanged. For example, all instances of .../lib/oldCell/symbol continue to reference the original library and remain .../lib/oldCell/symbol.

To update instances in the destination cell to use only the copied cellviews, do the following:

**1.** In the *Options* group box on the Copy Cell form, select the *Update Instances* check box.

The drop-down list becomes active.

- **2.** From the drop-down list, select one of the following choices:
  - Of Entire Library
  - □ Of New Copies Only
- 3. Click OK.

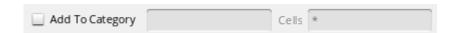
The Library Manager performs the specified copy operation.

**Data Copying** 

# Adding a Copied Cell to a Category

To add a copied cell to a category, do the following:

1. Select the Add To Category check box.



The Add To Category and Cells fields become active.

- **2.** In the *Add To Category* field, type a new or existing category name.
- **3.** In the *Cells* field, type a valid filter string against which to match the cell name that you want to add to the specified category.

By default, \* appears in the *Cells* field, thus matching any copied cell name.

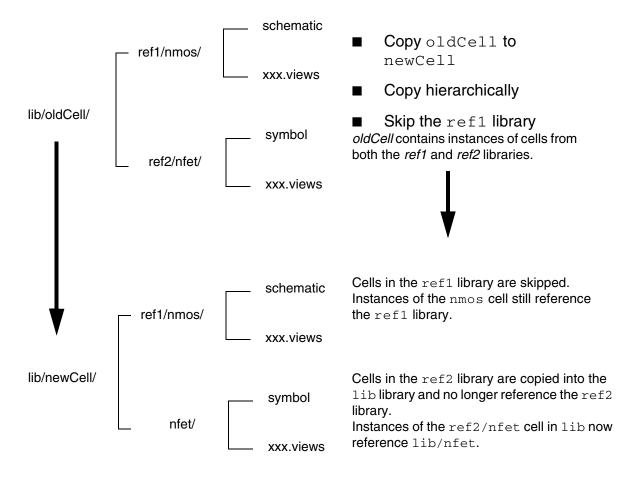
4. Click OK.

The copied cell is added to the specified category. If the category does not already exist, it is created.

# **Skip Libraries Together with Update Instances**

**Data Copying** 

The following example shows what happens when you specify a reference library to be skipped in a hierarchical cell copy with the *Update Instances* option enabled.



#### Related Topics

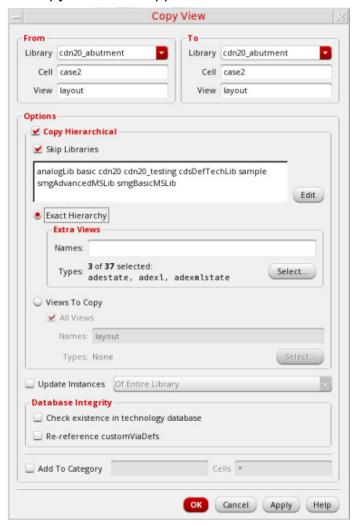
**Category Management** 

# Copying a View in the Library Manager

To copy a view to another name or location, follow these steps:

- 1. Select a view.
- **2.** Choose *Edit Copy*.

The Copy View form appears.



The selected library, cell, and view appear in the *Library*, *Cell* and *View* fields in the *From* group box. They also appear in the *Library*, *Cell* and *View* fields in the *To* group box. You can change any or all of these values.

- **3.** In the *To* group box, type the destination library, cell, and view names.
- **4.** To complete the copy view operation, follow the steps for one of the following tasks:

**Data Copying** 

The copy operation does not stop with an error if the zero-sized views are not copied.

### Copying a View to Another Name or Cell in the Same Library

Within the same library, you can:

Copy a view to another name for the same cell in the same library:

- **1.** Open the Copy View form.
- **2.** In the *To* group box in the *View* field, type a destination view name.
- **3.** Click *OK*. The *From* view name is copied to the *To* view name for the same cell in the same library.

Copy a view to the same name for a different cell in the same library:

- 1. Open the Copy View form.
- 2. In the To group box in the Cell field, type a destination cell name.
- **3.** Click OK. The view is copied to the specified *To* cell name in the same library.

Copy a view to another name for a different cell in the same library:

- **1.** Open the Copy View form.
- **2.** In the *To* group box in the *Cell* field, type a destination cell name.
- 3. In the *To* group box in the *View* field, type a destination view name.
- **4.** Click *OK*. The *From* view name is copied to the specified *To* cell and view name in the same library.

# Copying a View to Another Library

To copy a view to another library, do the following:

- **1.** Open the Copy View form.
- **2.** In the *To* group box in the *Library* field, type or select a destination library name.

You can type a new library name or select an existing library from the drop-down list.

**3.** In the *To* group box in the *Cell* field, type a destination cell name.

**Data Copying** 

If you do not change the cell name in the *To* group box, the copied cellview displays the same cell name as the original cell.

**4.** In the *To* group box in the *View* field, type a destination view name.

If you do not change the view name in the *To* group box, the copied view displays the same name as the original view.

5. Click OK.

The *From* cellview is copied to the *To* cellview in the *To Library*. If the destination library does not already exist, the New Library form appears, where you can specify a location and design management option for the new library.

#### **Related Topics**

Copy View Form

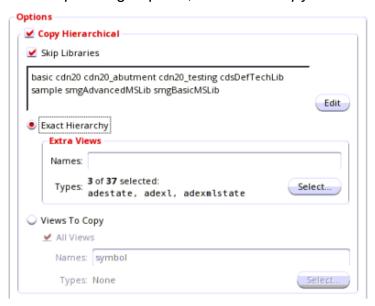
Copying to a New Library

#### **Data Copying**

# Copying a View Hierarchy in the Library Manager

To traverse the design hierarchy and copy all views referenced in your design to the destination library, follow these steps:

1. In the *Options* group box, select the *Copy Hierarchical* check box.



- 2. By default, the *Skip Libraries* check box is also selected. When this check box is selected, cells in the named libraries are not copied and continue to reference their original library. You might want to skip libraries such as reference libraries of contacts, vias, and so on. You can add their names in the text box or click the *Edit* button to open the Skip Libraries Editor dialog box and select the libraries to skip.
- **3.** To limit the search to the exact hierarchy of your design when collecting the cellview list for copying, select the *Exact Hierarchy* check box. When this check box is selected, only those cellviews found in the design hierarchy are included in the copy operation.

The *Extra Views* box becomes active. If you include additional view names or view types in this box, the search is expanded to include any matching views found in your design hierarchy in the copy operation. If any of these matching views have their own hierarchies, those additional hierarchies are also included.

In the *Names* field, type the names of one or more space-separated views to copy. You can also type a valid filter string (for example, s\*).

Additionally, or optionally, use the *Select* button to select specific view types.

**4.** The *Views To Copy – All Views* check box appears selected by default. The *Views To Copy* option appears deselected until you deselect the *All Views* check box. If you leave

**Data Copying** 

the check box selected, the copy operation copies all views of the specified cell. Further, if you copy the cell hierarchically, the copy operation also copies all instantiated views.

To copy a particular set of views instead of all views, follow these steps:

a. Deselect the All Views check box.

The *Views To Copy* option becomes active.

**b.** In the *Names* field, type the names of one or more space-separated views to copy. You can also type a valid filter string (for example, s\*).

Additionally, or optionally, use the *Select* button to select specific view types.

All referenced views that match a specified view name or selected view type are copied to the destination.

# **Updating View Instances**

You can use the *Update Instances* check box in the *Options* group box on the Copy View form to update the instances in the destination library to use only the copied views (instead of referencing the entire original library, cell, and view names). If you leave the *Update Instances* check box unselected, references to the *From View* name are unchanged. For example, all instances of .../oldLib/oldCell/symbol continue to reference the original library and remain .../oldLib/oldCell/symbol.

To update instances in the destination cell to use only the copied cellviews, do the following:

**1.** In the *Options* group box on the Copy Cell form, select the *Update Instances* check box.

The drop-down list becomes active.

- 2. From the drop-down list, select one of the following choices:
  - □ Of Entire Library
  - □ Of New Copies Only
- 3. Click OK.

The Library Manager performs the specified copy operation.

#### Related Topics

Copying a View in the Library Manager

# Cadence Library Manager User Guide Data Copying

Copying a Library File

# Copying a Library File

To copy a library file, follow these steps:

1. Select a library file.

If you are viewing library information in *View – Lists* mode, make sure the *Show Files* check box is selected.

**2.** Choose *Edit – Copy*.

The Copy Library form appears.



The selected library file appears in the *Library* and *File* fields in the *From* group box. It also appears in the *Library* and *File* fields in the *To* group box. You can change any or all of these values.

**3.** To complete the copy library file operation, follow the steps for one of the following tasks:

# Copying a Library File to Another Name in the Same Library

To copy a library file to another name in the same library, do the following:

- 1. Open the Copy Library form.
- **2.** In the *To* group box in the *File* field, type a destination file name.

**Data Copying** 

#### 3. Click OK.

The *From* file name is copied to the *To* file name in the same library.

### **Copying a Library File to Another Library**

To copy a library file to another library, do the following:

- 1. Open the Copy Library form.
- 2. In the *To* group box in the *Library* field, type or select a destination library name.

You can type a new library name or select an existing library from the drop-down list.

- **3.** (Optional) In the *To* group box in the *File* field, type a destination file name.
  - If you do not change the file name in the *To* group box, the copied file displays the same name as the original file.
- 4. Click OK.

The *From File* is copied to the *To File* in the *To Library*. If the destination library does not already exist, the New Library form appears where you can specify a location and design management option for the new library.

#### Related Topics

Copy Library Form

Controlling the Display of Library Information

# Copying a Cell File in the Library Manager

To copy a cell file, follow these steps:

1. Select a cell file.

If you are viewing library information in *View – Lists* mode, make sure the *Show Files* check box is selected.

**2.** Choose *Edit – Copy*.

The Copy Cell File form appears.



The selected cell file appears in the *Library*, *Cell*, and *File* fields in the *From* group box. It also appears in the *Library*, *Cell*, and *File* fields in the *To* group box. You can change any or all of these values.

- **3.** To complete the copy cell file operation, follow the steps for one of the following tasks:
  - □ Copying a cell file to another name for the same cell in the same library

To copy a cell file to another name for the same cell in the same library,

- a. Open the Copy Cell File form.
- **b.** In the *To* group box in the *File* field, type a destination cell file name.
- **c.** Click *OK*. The *From* file name is copied to the *To* file name for the same cell in the same library.
- □ Copy a cell file to the same name for a different cell in the same library

To copy a cell file to the same name for a different cell in the same library,

a. Open the Copy Cell File form.

**Data Copying** 

- **b.** In the *To* group box in the *Cell* field, type a destination cell name.
- **c.** Click *OK*. The cell file is copied to the specified *To* cell name in the same library.
- Copying a cell file to another name for a different cell in the same library

To copy a cell file to another name for a different cell in the same library

- **a.** Follow the steps from Copying a Cell File in the Library Manager.
- **b.** In the *To* group box in the *Cell* field, type a destination cell name.
- **c.** In the *To* group box in the *File* field, type a destination cell file name.
- **d.** Click *OK*. The *From* file name is copied to the specified *To* cell and file name in the same library.
- Copying a Cell File to Another Library

To copy a cell file to another library, do the following:

- a. Open the Copy Cell File form.
- **b.** In the *To* group box in the *Library* field, type or select a destination library name.
- **c.** You can type a new library name or select an existing library from the drop-down list.
- **d.** In the *To* group box in the *Cell* field, type a destination cell name.
- **e.** If you do not change the cell name in the *To* group box, the copied cellview displays the same cell name as the original cell.
- **f.** In the *To* group box in the *File* field, type a destination cell file name.
- **g.** If you do not change the cell file name in the *To* group box, the copied file displays the same name as the original file.
- **h.** Click OK.

The *From* cell file is copied to the *To* cell file in the *To* Library. If the destination library does not already exist, the New Library form appears where you can specify a location and design management option for the new library.

#### **Related Topics**

Copy Cell File Form

Controlling the Display of Library Information

# Cadence Library Manager User Guide Data Copying

Copying to a New Library

# Selecting Text in the Copy Wizard

You can use the Copy Wizard feature to select or deselect items for editing and to select items for copying.

### Selecting Items for Editing in the Copy Wizard

The Copy Wizard table automatically selects multiple cell items that need to be updated whenever a *To Cell* (destination) entry is selected for editing. It selects all the rows that specify the views and files of the associated *From Cell* (source) and changes their *To Cell* values together.

The mandatory cell selection behavior is performed by Library Manager and cannot be disabled.

You can select items for editing in the following ways:

- ➤ To select a single library, cell, or view, click the item name.
- To select more than one contiguous item in a row, click and drag the cursor across all the items.
- > To select more than one item in a column, do one of the following:
  - Click and drag the cursor across all the items.
  - □ Right-click in the column and choose *Select column* from the pop-up menu.
- ➤ To select more than one item not in the same row or column, hold the Ctrl key and click each item. Any item not already selected is added to the selection set.

# **Deselecting Items in the Copy Wizard**

To deselect a selected library, cell, or view, click the item.

To deselect a single item in a group of selected items,

**1.** Right-click the item.

A pop-up menu appears.

**2.** Choose *Deselect*.

**Note:** Clicking one of the selected items deselects all except the item you clicked.

**Data Copying** 

To deselect an entire selected column, do the following:

1. Right-click in the column.

A pop-up menu appears.

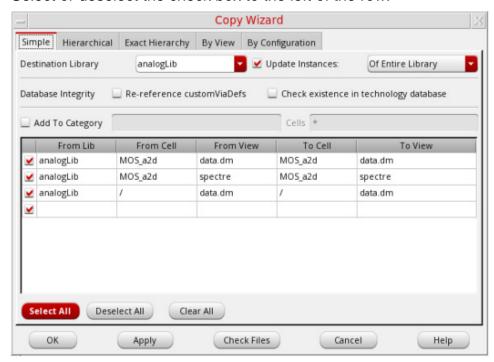
2. Choose Deselect column.

## Selecting Items for Copying in the Copy Wizard

Each row in the Copy Wizard represents a cellview or a cell file. A selected check box indicates a selected row.

To select or deselect a cellview for copying, do the following:

Select or deselect the check box to the left of the row.



To select all items for copying, do the following:

Click Select All.

To remove all items from the selection set, do the following:

Click Deselect All.

Items are selected or deselected for copying, not for editing.

Data Copying

# Related Topics

Selecting Text in the Copy Wizard

**Data Copying** 

# **Editing Text in the Copy Wizard**

**Note:** You cannot undo changes in the Copy Wizard. If you make a mistake, click *Cancel* to discard changes, then open the Copy Wizard form anew.

You can edit text on the Copy Wizard form in the following ways:

- Editing a Single Item
- Editing All Items in a Selected Set
- Editing All Items in a column

# **Editing a Single Item**

To change a library, cell, or view name, do the following:

1. Click the item name.

The item is highlighted.

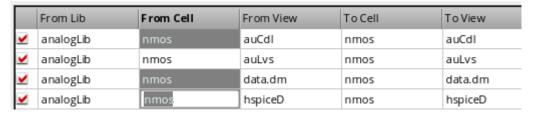
	From Lib	From Cell	From View	To Cell	To View
V	analogLib	nmos	auCdl	nmos	auCdl
V	analogLib	nmos	auLvs	nmos	auLvs

- 2. Place the cursor where you want to add or delete text, or drag the cursor across the text to highlight it.
- 3. Type your changes.
- 4. Press Enter.

# **Editing All Items in a Selected Set**

To change all items a selected set, do the following:

1. Select all the items you want to change.



**Data Copying** 

2. Type your changes.

Only the last item added to the selection set reflects your changes.

3. Press Enter.

Alternatively, right-click and choose *Apply Changes* from the pop-up menu.

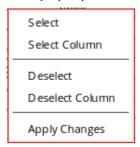
Your edits appear for all selected items.

# **Editing All Items in a column**

To copy text from one item to all items in the same column, do the following:

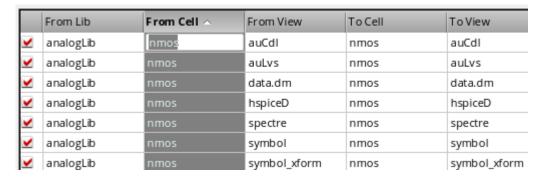
**1.** Right-click the item you want to copy.

The pop-up menu appears.



2. Choose Select column.

All items in the column are selected.



- 3. Type your changes.
- **4.** Right-click in the column to display the pop-up menu.
- **5.** Choose Apply Changes.

Your changes are applied to all items in the selected column.

**Data Copying** 

**Note:** While you can make global changes across rows or columns, you are more likely to make global changes across columns.

### **Related Topics**

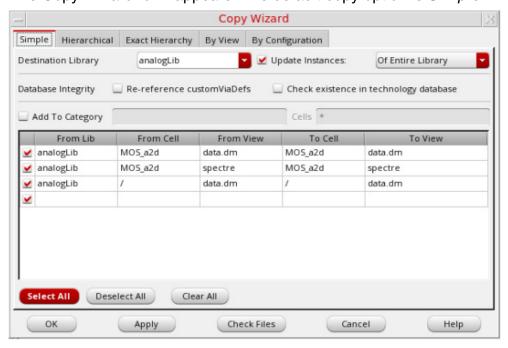
Selecting Items for Editing in the Copy Wizard

# Performing a Simple Copy Using the Copy Wizard

To perform a simple copy operation, follow these steps:

- 1. In the Library Manager window, select a library, cell, or view.
- **2.** Choose *Edit Copy Wizard*.

The Copy Wizard form appears. The default copy option is *Simple*.



- ☐ If you selected only a library, all cells and views associated with this library appear in the Copy Wizard window.
- If you selected a library and a cell, all views associated with this library and cell appear in the Copy Wizard window.
- If you selected a library, cell, and view, information for the selected cellview only appears in the Copy Wizard window.
- 3. Deselect the check box to the left of any item you do not want to include in the copy list.

You can click *Select All* to select all check boxes or *Deselect All* to deselect all check boxes.

**Data Copying** 

- **4.** Change one or more of the following to specify your copy operation:
  - **a.** In the *Destination Library* field, type or select a new destination library name to copy the selected cellviews to a different library.
    - If the destination library does not already exist, Library Manager creates it in your working directory during the copy procedure.
  - **b.** In the *To Cell* list box, edit the contents to copy the selected cellviews to another name.
  - **c.** In the *To View* list box, edit the contents to copy the selected views to another name.
- **5.** Select the *Update Instances* check box and select the required option from the drop-down list.
- **6.** Select the options in the *Database Integrity* field if you want to update technology data in the destination library after the copy command is completed.
- 7. Click *Check Files* to preview any copy problems.
  - □ Any problems appear on the Copy Problems form.
  - □ When there are no problems, the Check is OK prompt appears. Click *OK* to dismiss the prompt and return to the Copy Wizard window.
- 8. Click OK.

The Library Manager performs the specified copy operation.

#### Related Topics

Copy Wizard Form (Simple Copy)

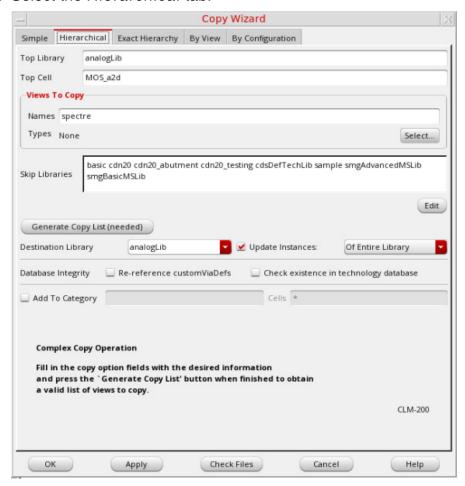
Adding a Copied Cell to a Category

Editing Text in the Copy Wizard

# Copying a Hierarchy Using the Copy Wizard

To copy a hierarchy of libraries, cells, and views into another library, follow these steps:

- 1. Select a library, cell, or view.
- Choose Edit Copy Wizard.The Copy Wizard form appears.
- 3. Select the Hierarchical tab.



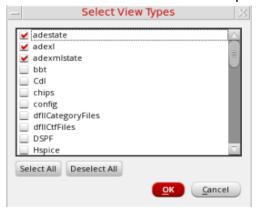
- ☐ The selected library name appears in the *Top Library* field.
- ☐ If you selected a cell, the cell name appears in the *Top Cell* field.
- ☐ If you selected a view, the view name appears in the *Views To Copy Names* field.

You can change any or all of these values.

If the Top Cell field is empty, type a valid cell name.

**Data Copying** 

□ If the *Views To Copy – Names* field is empty, type one or more (space-separated) names of views to copy. You can also type a valid filter string. For example, s\* (to indicate all view names beginning with s) or \* (to indicate all views). Alternatively, use the *Select* button to select specific view types.



**4.** In the *Skip Libraries* field, add or remove names of any libraries whose cellviews you want to skip or to copy into the destination library. Alternatively, click the *Edit* button to open the Skip Libraries Editor dialog box and select the libraries to skip.

Cellviews in the libraries named in the *Skip Libraries* field are not copied and continue to reference their original library. (You probably want to skip libraries such as reference libraries of contacts, vias, and so forth.) Use the <code>skipLibsText</code> environment variable to include the list of libraries in the *Skip Libraries* field.

5. Click Generate Copy List.

The cellviews to copy appear in the copy list. By default, all cellviews are selected for copying.

If the Library Manager finds referenced items whose view names are not specified in the *Views To Copy* field or whose libraries are called out in the *Skip Libraries* field, the View File Summary window appears.

6. In the View File Summary window, click Yes.

The list of cellviews not included in the copy list appear on the Referenced Files form.

- **7.** If you want to move one or more of the referenced files to the copy list, do one of the following:
  - □ In the *Copy* list box, click *No* to change the entry to *Yes* for each referenced file you want to move to the copy list, then click *OK*.
  - □ Click *Copy All Files* to move all referenced files to the copy list.

The specified cellviews appear in the copy list on the Copy Wizard form.

**Data Copying** 

- **8.** In the *Destination Library* field, type or select a new destination library name to copy the selected cellviews to a different library.
- **9.** Select the *Update Instances* check box and select one the required option from the drop-down list.
- **10.** Select the options in the *Database Integrity* field if you want to update and validate technology data in the destination library after the copy command is completed.

#### 11. Click OK.

Library Manager copies the cells in the copy list to the destination library. If the destination library is the same as the top library, Library Manager copies the cells or views to the new names you specified.

If the destination library does not already exist, the New Library form appears, where you can specify a location and design management option for the new library.

#### Related Topics

Copy Wizard Form (Hierarchical)

Adding a Copied Cell to a Category

Copying to a New Library

Selecting Text in the Copy Wizard

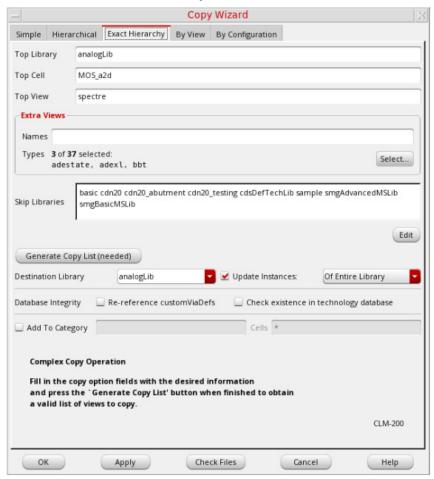
# Copying an Exact Hierarchy Using the Copy Wizard

To copy an exact hierarchy of libraries, cells, and views into another library (such that only those cellviews found in the design hierarchy are included in the copy operation), follow these steps:

- **1.** Select a library, cell, or view.
- **2.** Choose *Edit Copy Wizard*.

The Copy Wizard form appears.

3. Select the Exact Hierarchy tab.



- ☐ The selected library name appears in the *Top Library* field.
- ☐ If you selected a cell, the cell name appears in the *Top Cell* field.
- ☐ If you selected a view, the view name appears in the *Top View* field.

**Data Copying** 

You can change any or all of these values.

- **4.** If the *Top Cell* field is empty, type a valid cell name.
- **5.** If the *Top View* field is empty, type a valid view name or a list of names separated by spaces.
- **6.** In the *Extra Views Names*, specify additional space-separated view names or expressions to expand the search to include any matching views found in your design hierarchy in the copy operation. You can also type a valid filter string (for example, s\*).

Additionally, or optionally, use the *Select* button to select specific view types.

If any of these matching views have their own hierarchies, those additional hierarchies are also included.

7. In the *Skip Libraries* field, add or remove names of any libraries whose cellviews you want to skip or to copy into the destination library. Alternatively, click the *Edit* button to open the Skip Libraries Editor dialog box and select the libraries to skip.

Cellviews in the libraries named in the *Skip Libraries* field are not copied and continue to reference their original library. You might want to skip libraries such as reference libraries of contacts, vias, and so forth. Use the <code>skipLibsText</code> environment variable to include the list of libraries in the *Skip Libraries* field.

8. Click Generate Copy List.

The cellviews to copy appear in the copy list. By default, all cellviews are selected for copying.

If the Library Manager finds referenced items whose view names are not specified in the *Views To Copy* field or whose libraries are called out in the *Skip Libraries* field, the View File Summary window appears.

**9.** In the View File Summary window, click *Yes*.

The list of cellviews not included in the copy list appear on the Referenced Files form.

- **10.** On the Referenced Files form, do one of the following if you want to move one or more of the referenced files to the copy list:
  - □ In the *Copy* list box, click *No* to change the entry to *Yes* for each referenced file you want to move to the copy list, then click *OK*.
  - ☐ Click *Copy All Files* to move all referenced files to the copy list.

The specified cellviews appear in the copy list on the Copy Wizard form.

**Data Copying** 

- **11.** In the *Destination Library* field, type or select a new destination library name to copy the selected cellviews to a different library.
- **12.** Select the *Update Instances* check box and select one the required option from the drop-down list.
- **13.** Select the options in the *Database Integrity* field if you want to update and validate technology data in the destination library after the copy command is completed.
- 14. Click OK.

Library Manager copies the cells in the copy list to the destination library. If the destination library is the same as the top library, Library Manager copies the cells or views to the new names you specified.

If the destination library does not already exist, the New Library form appears, where you can specify a location and design management option for the new library.

#### Related Topics

Copy Wizard Form (Exact Hierarchy)

Adding a Copied Cell to a Category

Copying to a New Library

Selecting Items for Copying in the Copy Wizard

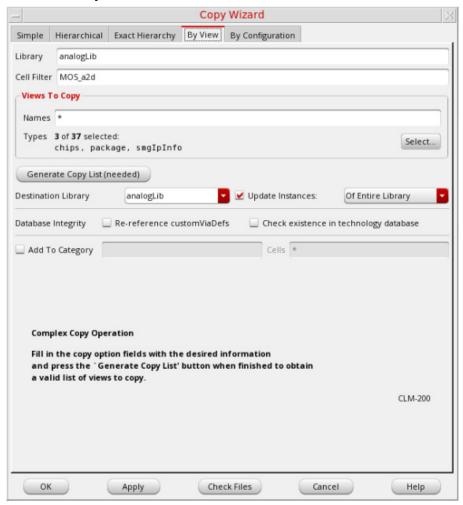
# Copying Specific View Using the Copy Wizard

To copy only specific views to a different library, follow these steps:

- 1. Select a library.
- 2. Choose Edit Copy Wizard.

The Copy Wizard appears.

3. Select the By View tab.



- ☐ The selected library name appears in the *Library* field.
- ☐ If you selected a cell, the cell name appears in the *Cell Filter* field.
- □ An asterisk appears in the *Names* field in *Views To Copy*.

You can change any or all of these values.

**Data Copying** 

**4.** In the *Cell Filter* field, type the name of the cell you want to copy.

You can type a specific cell name or a character string to filter patterns in cell names, such as cc\* or \*a2d.

**5.** In the *Views To Copy – Names* field, specify the names of the views you want to copy. You can type a specific view name or a character string to filter patterns in view names, such as s \*.

Alternatively, or optionally, use the *Select* button to select specific view types.

6. Click Generate Copy List.

The cellviews that match the cell and view filter strings appear in the copy list. Cell files are not affected by the *Views To Copy* filter, so all cell files are included in the copy list. By default, all items are selected for copying. In the *Destination Library* field, type or select a new destination library name to copy the selected cellviews to a different library.

- **7.** Select the *Update Instances* check box and select one the required option from the drop-down list.
- **8.** Select the options in the *Database Integrity* field if you want to update technology data in the copied library after the copy command is completed.
- 9. Click OK.

Library Manager copies the cells in the copy list to the destination library. If the destination library is the same as the top library, Library Manager copies the cells or views to the new names you specified.

If the destination library does not already exist, the New Library form appears, where you can specify a location and design management option for the new library.

#### Related Topics

Copy Wizard Form (By View)

Adding a Copied Cell to a Category

Copying to a New Library

Selecting Items for Copying in the Copy Wizard

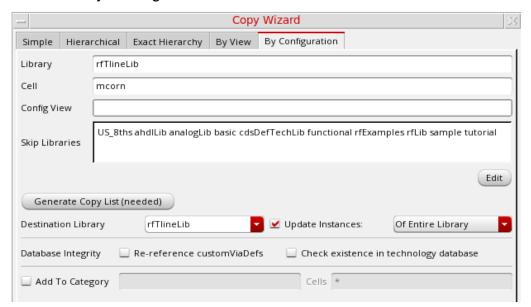
# Copying Specific Cells in a Configuration Using the Copy Wizard

To copy cells in a configuration file to another library:

- 1. Select the item you want to copy.
- 2. Choose Edit Copy Wizard.

The Copy Wizard form appears.

3. Select the By Configuration tab.



- ☐ The selected library name appears in the *Library* field.
- ☐ If you selected a cell, the cell name appears in the *Cell* field.
- ☐ If you selected a configuration view, the view name appears on the *Config View* field.

You can change any or all of these values.

- **4.** If the *Cell* field is empty, type a valid cell name.
- **5.** If the *Config View* field is empty, type a valid configuration view name.

In the *Skip Libraries* field, add or remove names of any libraries whose configuration you want to skip or to copy into the destination library. Alternatively, click the *Edit* button to open the Skip Libraries Editor dialog box and select the libraries to skip.

**Data Copying** 

Configuration views in the libraries named in the *Skip Libraries* field are not copied and continue to reference their original library. You might want to skip libraries such as reference libraries of contacts, vias, and so on. Use the <code>skipLibsText</code> environment variable to include the list of libraries in the *Skip Libraries* field.

6. Click Generate Copy List.

The configuration views to copy appear in the copy list. By default, all items are selected for copying.

- **7.** In the *Destination Library* field, type or select a new destination library name to copy the selected configuration views to a different library.
- **8.** Select the *Update Instances* check box and select one the required option from the drop-down list.
- **9.** Select the options in the *Database Integrity* field if you want to update technology data in the destination library after the copy command is completed.

#### 10. Click OK.

Library Manager copies the cells in the copy list to the destination library. If the destination library is the same as the top library, Library Manager copies the cells or views to the new names you specified.

If the destination library does not already exist, the New Library form appears, where you can specify a location and design management option for the new library.

If the Library Manager cannot open or read the configuration file, check the file permissions on the files making up the configuration or check the configuration using the Hierarchy Editor.

#### Related Topics

Copy Wizard Form (By Configuration)

Adding a Copied Cell to a Category

Copying to a New Library

Selecting Items for Copying in the Copy Wizard

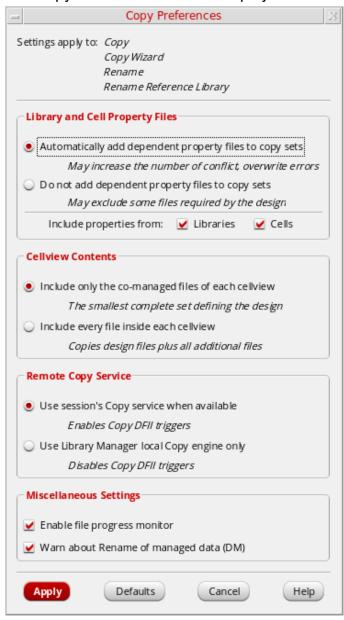
Viewing and Changing File Permissions

# **Setting Copy and Rename Preferences**

To set preferences for copy and rename operations, do the following:

**1.** Choose *Edit – Copy Preferences*.

The Copy Preferences form is displayed.

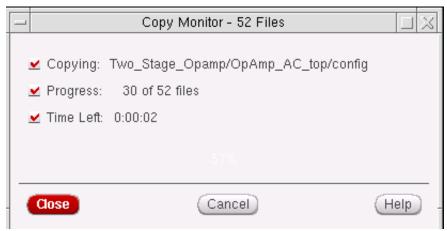


# Cadence Library Manager User Guide Data Copying

2.		Choose one of the following <i>Library and Cell Property Files</i> settings, which apply to copy operations only:		
		Aut	omatically add dependent property files to copy sets	
		ou choose this setting, you can also select or deselect one or both of the following Iude properties from check boxes, which are both selected by default:		
		O	Libraries, when selected, indicates that you want to add dependent library property files to a copy set	
		О	${\it Cells}$ , when selected, indicates that you want to add dependent cell property files to a copy set	
		Do	not add dependent property files to copy sets	
3.	Choose one of the following <i>Cellview Contents</i> settings, which apply to copy operation only:			
		Inc	lude only the co-managed files of each cellview	
		Inc	lude every file inside each cellview	
4.	Choose one of the following Remote Copy Service settings, which apply to both co and rename operations:			
		Use	e session's Copy service when available	
		Use	E Library Manager local Copy engine only	
	<b>Note:</b> For more information about remote copy services, see the description of cdsLibManager.copyGlobals mpsRadio toggle in <u>Using UNIX to Add Settin to a .cdsenv File</u> .			
5.	Cho	ose	Miscellaneous Settings:	

**Data Copying** 

□ Enable file progress monitor causes the Copy Monitor form to appear during the copy operation.



If you click Cancel, the Confirm Cancellation form appears.

□ Warn about Rename of manage data (DM) causes the Warning: Renaming Managed Data form to appear whenever any part or all of the library you are renaming is under design management (DM).

### Related Topics

Copy Preferences Form

5

# **Design Management**

Generic Design Management (GDM) is the design management layer that interfaces with the particular design management system you are using. The GDM layer allows applications to interface with different design management systems using a set of basic commands.

When using any design management system that interfaces with GDM, you can optimize the performance of check-in and check-out operations by setting the DD\_GDM\_OPTIMIZE environment variable to yes before you start Virtuoso.

#### Related Topics

Setting the Checkin and Checkout Properties

Canceling Checkout for Properties

Checking In and Checking Out Categories

Canceling the Checkout of a Category

Checking In Files and Properties Automatically

Auto Checkin Environment Variable Settings

Submitting Changes to the Design Management System

**Design Management File Status** 

Design Management

# **Setting the Checkin and Checkout Properties**

A property file is treated the same way as any other design file, and the procedure for checking it in is the same as for any other design file.

There are two methods of property and auto check in and check out, each with its own associated forms.

- From the Library Manager, select Design Manager Properties Check In.
- A second version of property and auto check in and check out, can also however be accessed from within Virtuoso itself, as a result of when object properties are being edited.

Library Manager auto checkin and checkout forms gets displayed for category editing and copy operations.

To check in a property file, follow these steps:

- 1. Select the item whose property file you want to check in.
- **2.** Choose Design Manager Properties Check In.

The property file associated with the selected item appears on the Check In form.

3. Click OK.

To check out a property file, follow these steps:

- 1. Select the item whose property file you want to check out.
- **2.** Choose Design Manager Properties Check Out.

The property file for the selected item appears on the Check Out form.

3. Click OK.

Design Management

The following table summarizes the shell environment variable settings you type in the .cdsenv file to control automatic check-in behavior.

	CDS_PR	OMPT_CKIN			S_PROMPT_CKIN				
		all	views	file (default)	none				
,	all	Prompt displayed after you close properties, files, or views.	Prompt displayed after you close a view.	Prompt displayed after you close files or properties.	Prompt not displayed.				
		Auto check in files, properties, and views.	Auto check in files, properties, and views.	Auto check in files, properties, and views.	Auto check in files, properties, and views.				
CDS_AUTO_CKIN	views	Prompt displayed after you close properties, files, or views.	Prompt displayed after you close a view.	Prompt displayed after you close files or properties.	Prompt not displayed.				
בחט ב		Auto check in views only.	Auto check in views only.	Auto check in views only.	Auto check in views only.				
	files (default)	Prompt displayed after you close properties, files, or views	Prompt displayed after you close a view.	Prompt displayed after you close files or properties.	Prompt not displayed.				
		Auto check in files and properties only.	Auto check in files and properties only.	Auto check in files and properties only.	Auto check in files and properties only.				
	none	Prompt displayed after you close properties, files, or views.	Prompt displayed after you close a view.	Prompt displayed after you close properties or files.	Prompt not displayed.				
CDS_AUTO_CKIN		Never auto check in properties, files, or views.	Never auto check in properties, files, or views.	Never auto check in properties, files, or views.	Never auto check in properties, files, or views.				

Design Management

### Related Topics

Check In Form

**Check Out Form** 

**Canceling Checkout for Properties** 

**Design Management** 

# **Canceling Checkout for Properties**

When you cancel a check-out operation, the software restores your workarea and the project design management repository to the states they were in prior to the check-out. You can cancel a check-out operation if you have not made any changes to a checked-out file or do not want to save any changes you made to a checked-out file.

To cancel a check-out operation, follow these steps:

- 1. Select the item whose property file check-out operation you want to cancel.
- 2. Choose Design Manager Properties Cancel Checkout.

The property file associated with the selected item appears on the Cancel Check Out form.

3. Click OK.

The software cancels the check-out operation for each selected file.

#### Related Topics

Cancel Check Out Form

**Design Management** 

# **Checking In and Checking Out Categories**

To check in or check out a category, follow these steps:

- 1. Make sure you can see the category names.
- 2. Right-click a category name.

A pop-up menu appears.

3. Choose Check In to check in a category, or Check Out to check out a category.

The files associated with the selected category appear on the form.

4. Click OK.

#### Related Topics

**Check In Form** 

**Check Out Form** 

Controlling the Display of Library Information

**Category Management** 

**Design Management** 

# **Canceling the Checkout of a Category**

You can cancel the check-out of categories to prevent saving the changes to your files.

To cancel a check-out, follow these steps:

1. Right-click a category name.

A pop-up menu appears.

2. Choose Cancel Check Out.

The files associated with the selected category appear on the Cancel Check Out form.

3. Click OK.

#### **Related Topics**

Cancel Check Out Form

Checking In and Checking Out Categories

Design Management

# **Checking In Files and Properties Automatically**

By default, when you close properties or files that were automatically checked out, or try to exit a session without closing properties or files that were automatically checked out, the Auto Check In form appears.

To complete the automatic check-in process, do the following:

- **1.** In the drop-down list to the left of the item name, select *yes*.
- 2. Add the text in the *Comment* text box to specify relevant information about the check-in.

When you add the information, such as version information, about a library or cell check-in, the software attaches a copy of the comment to every cellview in the library.

3. Click OK.

To stop the automatic check-in process, do the following:

- **1.** In the drop-down list to the left of the item name, select *no*.
- **2.** Click *OK*.

Alternatively, you can click *Cancel* to stop the automatic check-in process.

To cancel a check-out, do the following:

- 1. In the drop-down list to the left of the item name, select *cancel checkout*.
- 2. Click OK.

#### Related Topics

Controlling Automatic Checkin Behavior

Auto Checkin Environment Variable Settings

### **Controlling Automatic Checkin Behavior**

To control automatic check-in behavior, perform the following steps:

- 1. On the Auto Checkin form, click Show Auto Checkin Preferences.
- 2. Automatic check-in preferences appear at the bottom of the Auto Checkin form.
- **3.** You can set automatic check-in options separately for cellviews and for properties and files.

To display these preferences from the CIW, do the following:

- **1.** Choose *Options Checkin Preferences*.
- 2. The Auto Checkin Preferences form appears.

### **Always Ask Me**

To force the software to prompt you whenever the automatic check-in process is triggered, do the following:

- **1.** In the drop-down list, select always ask me.
- 2. Click OK.

The tool always prompts for automatic check-in. Your changes take effect immediately.

#### **Never Ask Me**

To set the automatic check-in behavior so that you are never prompted, do the following:

- **1.** In the drop-down list, select *never ask me*.
  - A new drop-down list appears to the right of the original drop-down list.
  - Whenever you select *never ask me* in either of the *When auto checking in* drop-down lists, you must also select an automatic check-in option.
- **2.** In the drop-down list to the right of *never ask me*, select one of the following choices:

Choice	Behavior
always auto checkin	Always check in the item automatically when closing it
never auto checkin	Do not perform automatic check-in when closing the item

**Design Management** 

#### 3. Click OK.

Your changes take effect immediately.

The cellviews are not automatically checked in by default. If you need all the cellviews to be checked-in to the batch mode, then in the *When auto checking in cellViews* section of the Auto Checkin Preferences form, you need to choose the *never ask me* option from the first drop-down list and then choose the *always auto checkin* option from the second drop-down list. Auto checkin of cellview in the batch mode is also possible using the ddAuto\* SKILL API irrespective of the GUI setting.

#### Related Topics

Auto Checkin Environment Variable Settings

# **Auto Checkin Environment Variable Settings**

Set the CDS\_PROMPT\_CKIN and CDS\_AUTO\_CKIN shell environment variables to control the prompting and automatic check-in behavior.

#### CDS PROMPT CKIN

CDS\_PROMPT\_CKIN controls whether the Auto Checkin form appears when you close properties or files that were automatically checked out, or if you try to exit a session without closing properties or files that were automatically checked out, while using a Virtuoso Studio design environment product that has both a graphical user interface and automatic check-in capability.

This variable works with CDS\_AUTO\_CKIN.

Valid values are as follows:

all specifies that the form appears when either cellview or noncellview data is still checked out.

none specifies that the form never appears automatically.

views specifies that the form appears only when cellview data is still checked out.

files specifies that the form appears only when noncellview data is still checked out. This is default.

### CDS\_AUTO\_CKIN

CDS\_AUTO\_CKIN controls whether the software automatically checks in data files when you close properties or files that were automatically checked out or when you exit a Virtuoso session without closing properties or files that were automatically checked out.

- If an application has a graphical user interface, this variable works with CDS\_PROMPT\_CKIN. When CDS\_PROMPT\_CKIN is set to display the Auto Checkin form, the software seeds the form to reflect the value of CDS\_AUTO\_CKIN. When CDS\_PROMPT\_CKIN is not set to display the Auto Checkin form, the software performs the check-in action specified by the value of CDS\_AUTO\_CKIN.
- If the application does not have a graphical user interface, the software ignores CDS\_PROMPT\_CKIN and performs the specified automatic check-in action.

Value values are as follows:

Design Management

all specifies automatic check-in for both cellview and noncellview data.

none specifies no automatic check-in operations.

views specifies an automatic check-in for cellview data only.

files specifies an automatic check-in for noncellview data only. This is default.

#### **Related Topics**

**Checking Out Files and Properties Automatically** 

Design Management

# **Checking Out Files and Properties Automatically**

By default, when you try to open properties, files, or cellviews that you have not checked out, the Auto Checkout form appears.

To complete the auto check-out process, do the following:

- **1.** In the drop-down list to the left of the item name, select *yes*.
- 2. Click OK.

To stop the automatic check-out process, do the following:

- **1.** In the drop-down list to the left of the item name, select *no*.
- 2. Click OK.

Alternatively, you can click *Cancel* to stop the automatic check-out process.

#### Related Topics

Controlling Automatic Checkout Behavior

Auto Checkout Environment Variable Settings

## **Controlling Automatic Checkout Behavior**

To control automatic check-out behavior, do the following:

- 1. On the Auto Checkout form, click Show Auto Checkout Preferences.
- 2. Automatic check-out preferences appear at the bottom of the Auto Checkout form.

To display these preferences from the CIW, do the following:

- **1.** Choose *Options Checkout Preferences*.
- 2. The Auto Checkout Preferences form appears.

### **Always Ask Me**

To force the software to prompt you whenever the automatic check-out process is triggered, do the following:

- **1.** In the drop-down list, select *always ask me*.
- 2. Click OK.

The tool always prompts for automatic check-out. Your changes take effect immediately.

#### **Never Ask Me**

To set the automatic check-out behavior so that you are never prompted, do the following:

- **1.** In the drop-down list, select *never ask me*.
  - A new drop-down list appears to the right of the original drop-down list.
  - Whenever you select *never ask me* in either of the *When auto checking out* drop-down lists, you must also select an automatic check-out option.
- 2. In the drop-down list to the right of *never ask me*, select one of the following choices:

Choice	Behavior
always auto checkout	Always check out the item automatically when opening it
never auto checkout	Do not perform automatic check-out when opening the item

3. Click OK.

Design Management

Your changes take effect immediately.

### Related Topics

Auto Checkout Environment Variable Settings

# **Auto Checkout Environment Variable Settings**

To change the default behavior of the Auto Checkout form, reset the CDS\_PROMPT\_CKOUT and CDS\_AUTO\_CKOUT shell environment variables.

#### CDS PROMPT CKOUT

CDS\_PROMPT\_CKOUT controls whether the Auto Checkout form automatically appears when you open data files using a Virtuoso Studio design environment product that has a graphical user interface and automatic check-out capability.

This variable works with CDS\_AUTO\_CKOUT.

Valid values for CDS\_PROMPT\_CKOUT are as follows:

Value	Description
all	(Default) The form appears when you open either cellview or noncellview data
none	The form never appears automatically
views	The form appears only when you open cellview data
files	The form appears only when you open noncellview data

#### CDS\_AUTO\_CKOUT

CDS\_AUTO\_CKOUT controls whether the software automatically checks out a file when you open it using Virtuoso.

- If an application has a graphical user interface, this variable works with CDS\_PROMPT\_CKOUT. When CDS\_PROMPT\_CKOUT is set to display the Auto Checkout form, the software seeds the form to reflect the value of CDS\_AUTO\_CKOUT. When CDS\_PROMPT\_CKOUT is not set to display the Auto Checkout form, the software performs the check-out action specified by the value of CDS\_AUTO\_CKOUT.
- If the application does not have a graphical user interface, the software ignores CDS\_PROMPT\_CKOUT and performs the check-out action specified by the value of CDS\_AUTO\_CKOUT.

Design Management

Valid values for CDS\_AUTO\_CKOUT are as follows:

Value	Description
all	(Default) Automatic check-out for cellview and noncellview data
none	No automatic check-out operations
views	Automatic check-out for cellview data only
files	Automatic check-out for noncellview data only

### Related Topics

Controlling Automatic Checkin Behavior

## **Submitting Changes to the Design Management System**

If you are using a design management system that supports the submit operation, then you can use the *Submit* command to submit items to your project design management repository when you are ready to integrate your design changes into a release as follows:

- 1. Select a library, cell, view, or file.
- 2. Choose Design Manager Submit.

If the design management system determines that a submit is needed, the Submit form appears.

**3.** To remove a file from the selection set for the submit operation, deselect the check box to the left of the file name.

You can remove all files from the selection set by clicking *Deselect All*. You can select all files by clicking *Select All*. For more information about selecting and deselecting items on this form.

- **4.** In the *Comment* field, type text (maximum 100 characters) to describe the design changes associated with this submit operation.
- **5.** In the *Submit Options* group box, select the *Request Name* check box and type a name you want to assign as the Integration Request (IR) name.
  - If you do not select this box and type a name, the design manager generates a name based on its DM integration behavior, comparable to the gdmsubmit Unix command.
- **6.** In the *Submit Options* group box, select the *Use Options* check box and type any submit options specific to your particular design management system you want to use.
- 7. If you want to use specific options for the IR, turn on *Use Options* and type your options.
- 8. Click OK.

The system submits an IR for your files and notifies you by e-mail (certain DM systems only).

**Note:** This form runs the gdmsubmit command.

#### Related Topics

Submit Form

Selecting Items for Copying in the Copy Wizard

Generic Design Management (GDM) Commands

Design Management

# **Updating an Item Using Design Manager**

You can update libraries, cells, views, or files with the latest design data checked in by team members. The *Update* command is active if the selected item can be updated. If an item is checked out, it cannot be updated. The procedure is the same for libraries, cells, views, and files.

To update an item, follow these steps:

- **1.** Select the item you want to update.
- 2. Choose Design Manager Update.

The appropriate Update form appears.

- **3.** (Optional) In the *Update Options* group box, select the *Update From* check box and type the name of a configuration in the field to update your workarea relative to the specified design management configuration.
  - For information about the types of configurations you can specify, see the documentation for your design management system.
- **4.** (Optional) In the *Update Options* group box, select the *Use Options* check box and type any update options specific to your particular design management system you want to use.
- 5. Click OK.

The workarea is updated with the latest design data for the selected item.

#### Related Topics

Updating Workarea Using Design Manager

## **Updating Workarea Using Design Manager**

You can update your entire workarea with the latest design data checked in by other users.

**Note:** The *Update Workarea* option can always be run, even when no DM system has been setup, however it has limits.

To update your workarea with the latest design changes, follow these steps:

1. Choose Design Manager – Update Workarea.

The Update Workarea form appears.



2. In the *Update Options* group box, select the *Update From* check box and type the name of a configuration in the field to update your workarea relative to the specified design management configuration.

For information about the types of configurations you can specify, see the documentation for your design management system.

- **3.** In the *Update Options* group box, select the *Use Options* check box and type any update options specific to your particular design management system you want to use.
- 4. Click OK.

The software updates all the files in your workarea.

The length of time required to update your workarea depends on the number of cellviews you are updating. Because an update could take a long time, you should choose an appropriate time to run the procedure.

When checking in a library for the first time, add the library to the project.lib file (or cds.lib) before sharing the data.

Design Management

### Related Topics

Updating an Item Using Design Manager

### **Cellview and File Versions**

To access the version information for a cellview or file, follow these steps:

- 1. In the Library Manager, select the cellview or file for which you want to access the version information.
- **2.** Choose *Design Manager Version Info.*

The Version Information form is displayed where the version information is indicated as follows:

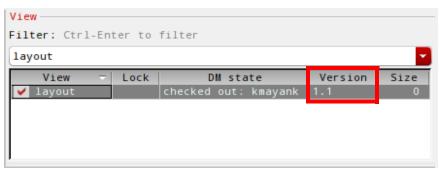
- □ *Version*: The version of the cellview or file.
- □ Author: The ID of the user who checked in the version.
- □ Date: The date when the version was checked in.
- Notes: Any details about the version. The term Default Version indicates the most recent version checked in by the user. If the user rolls back the cellview or file to a lower version, it is indicated as Default Version.

Alternatively, right-click the title bar of the *View* list box in the Library Manager form and choose *Version* from the pop-up menu.



Design Management

The *Version* column is added to the *View* list box of the Library Manager form.



### Copying a Version of a Cellview or File

The Copy Cellview Version form is used to copy or export a specific cellview version in the library database, primarily so that it can be viewed side-by-side with another (latest) version of the cellview that is currently being edited in Virtuoso.

You can also access this form directly by selecting *Design Manager – Copy Version*.

To copy a version of a cellview or file:

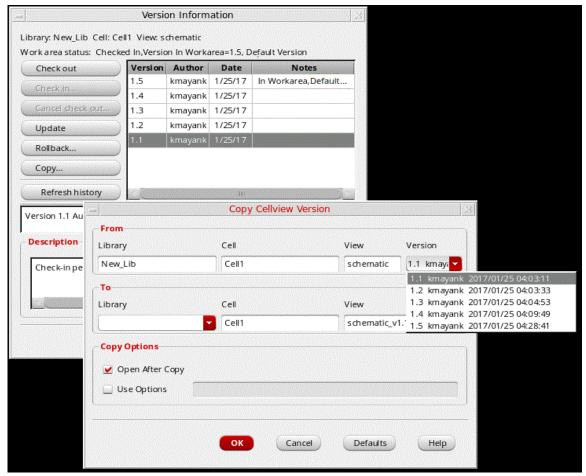
- 1. Select a cellview that has been checked in.
- 2. Choose Design Manager Version Info.

The Version Information form appears.

**3.** Select the version you want to copy.

#### 4. Click Copy.

The Copy Cellview Version form appears.



The name of the source *Library*, *Cell*, *View*, and *Version* number display in the fields of the *From* group box.

Some default information appears in the fields of the *To* group box. You can change any or all of the *To* values. The default destination view name is the original view name with the version number appended using the format <code>originalViewName\_v#</code>. For example, <code>schematic\_v1.1</code>.

- **5.** Select the Lib/Cell/View version to be copied from the *Version* pull-down.
- **6.** In the *Library* drop-down field, in the *To* group box, type or select a destination library.
- **7.** (Optional) In the *Copy Options* group box, select the *Open After Copy* check box to open the copied cellview after the copy operation.

Design Management

- **8.** (Optional) In the *Copy Options* group box, select the *Use Options* check box and type any copy options specific to your particular design management system you want to use.
- 9. Click OK.

The software copies the cellview dependent upon the detailed rules.

### **Related Topics**

**Version Information Form** 

Copy Cellview Version Form

Design Management

## **Cellview Version Rules**

The software copies the cellview to the specified destination according to the following guidelines:

- If you type a new library name in the Library field, the New Library form appears followed by the Technology File for New Library form.
- If you type an existing cellview name in the *View* field, the Confirm Overwrite form appears.
  - □ Click *Yes* to complete the copy operation by overwriting the existing cellview.
  - □ Click *No* to cancel the copy operation.
    - The Destination Already Exists message prompt appears.
    - Click *OK* and type a different destination on the Copy Cellview Version form.
- If you leave any of the fields blank in the To group box, the Missing Destination Name message prompt appears.
  - To resolve the error, click *OK* and type the missing destination library, cell, or view name.
- If the information you type in the fields of the *To* group box is that same as what appears in the fields of the *From* group box, the Illegal Destination message prompt appears.
  - To resolve the error, click OK and type a valid destination library, cell, and view name.
- If you type an invalid destination name (for example, one containing an illegal character), the Invalid Copy Version Destination Name message prompt appears.
  - Examples of illegal characters include space, backslash ( $\setminus$ ), slash (/), and punctuation marks such as period (.) and comma (,).
- If you try to copy a cellview version that is being edited by someone else, the message Is currently edit locked appears.
- If you try to copy a cellview version for which you do not have file permission, a message prompt to that effect appears.
- If you try to copy a read-only version of a cellview (or any other file), the Copy Cellview Version Failed message prompt appears.
  - You cannot overwrite a read-only version of a file. To make the file writable, you must change the access permissions.

Design Management

## Related Topics

Copying to a New Library

## **Design Management File Status**

Use the DM File Status form to view the design management status of all cells in a library, all views for a cell, and individual files. Additionally, in the DM File Status form, you can view the current status of a design managed library in the *View* list box of the Library Manager. The current DM state gets updated when a cellview is opened or checked out. For design managed libraries, the *View* column also displays applicable status icons as visual updates of the current library, cell, or view state. The tooltip may inform that the current status is that a view has been modified and requires to be checked in.

## **Design Management Status Settings**

Specify the following status settings for an item:

- Checked In specifies that a file is available for check-out to a workarea. The form also shows the project default version number and who created the version.
- Checked Out specifies that a file has been checked out to a workarea. The form displays who has checked out the file.
- Locked specifies that a file has been locked by you or someone who shares your workarea (sandbox model). The form shows who locked the file and the machine that person is working on. Do not check in a locked file.

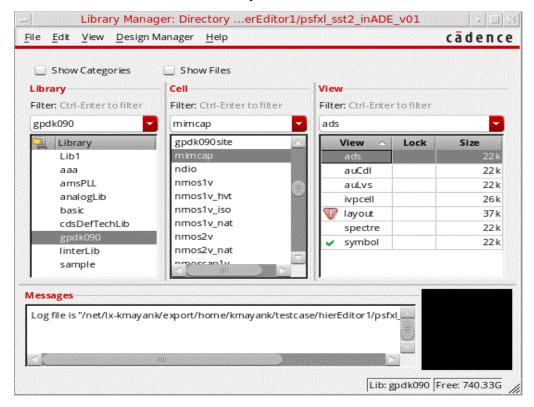
## **Displaying the Update Needed Icon**

The *update needed* wicon is displayed in the Library Manager window in the following scenarios:

- If the DM status of view files is checked in within your workarea, and an update needs to be applied in the cellview.
- If the DM status of view files is checked in within your workarea but is checked out by another user in another workarea, and an update needs to be applied in the cellview.

Design Management

In this case, a different icon is displayed if either the update is not needed, or the update needed feature is not available in your DM.



To update the content in the cellview, you need to select the *Design Manager – Update* option from the Library Manager window, or run the gdmupdate command from the shell terminal.

After the update is successful, the *updated needed* icon is replaced with either the *checked in* icon, or the *checked out by others* icon in the Library Manager window.

For more information on the related GDM command, see gdmstatus.

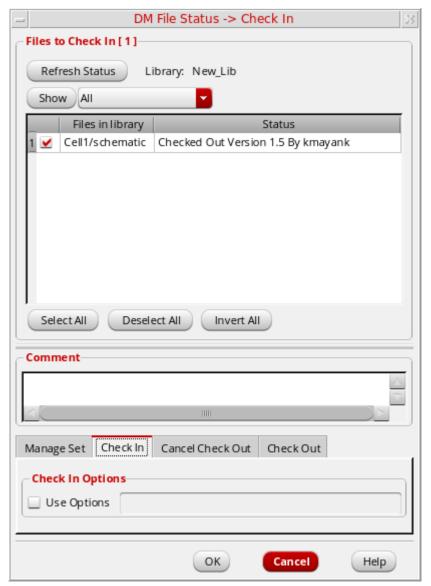
For more information on the related GDM SKILL function, see gdmstatus.

## Check In, Check Out, and Cancel Check Out Using the DM Status Form

To save you from having to run the separate *Check In, Check Out*, and *Cancel Checkout* options in the *Design Manager* menu, these actions can also be performed in the DM Status form.

Design Management

In the DM Status form, you have the ability to perform these actions for any files shown in the list, which are either from the full list, or from one of the applicable filtered lists.



These check in/out actions, along with the *Refresh Status* command, are also contained in a common tabbed structure in the Check In, Check Out and Cancel Checkout forms. However, when a specific check command is selected, the other command tabs becomes unavailable. For example, if you choose the *Check In* menu option to display the Check In form, then the *Check Out* and *Cancel Check In* tabs contained therein gets disabled. This does not however apply to the Status form which allows you to invoke all of these actions.

When you perform a check in, check out, or cancel check out from the DM File Status form, a *Substitute DM Command* message gets displayed requesting confirmation of that action.

Design Management

You can however to choose that you do not want this message to be re-displayed in future. In doing so, the .cdsenv file gets updated and your preference registered for future actions in this area.



## Related Topics

**DM File Status Form** 

# Cadence Library Manager User Guide Design Management

## **Library Creation**

Library Manager helps you in creating new libraries in a design project.

You can create a library using any of the following methods:

- Creating a New Library in the Library Manager
- <u>Database Compression Using the oazip Utility</u>
- Compressing a Library Using Library Manager
- Compiling an ASCII Technology File
- Referencing Existing Technology Libraries
- Attaching a New Library to an Existing Technology Library

## Creating a New Library in the Library Manager

To create a new library using the Library Manager, follow these steps:

1. In the Library Manager, choose File - New - Library. Alternatively, you can click inside the Library list box and press Ctrl+N on the keyboard.

You can also type the name of the library in the Library field of the Library Manager window and press Ctrl+N to open the New Library form. In this case, the Name field in the New Library form is automatically populated with the name that you have entered in the Library field of the Library Manager window.

The New Library Form is displayed.



Creating a new or temporary library within an existing library is not allowed. This is because any directories within a library are handled as cells.

2. In the *Name* field, type the name of the library you want to create.

The new library name cannot be the same as another library.

**Library Creation** 

**3.** Use the *Directory* navigation tools to specify the destination directory in which you want to create the new library. You can also type a directory path in the *Directory* field. You must have write permission in the directory where you want to create a library.

If you want the library to be under design management control, you must create it in a managed project area. In the *Design Manager* group box, specify whether you want to use a design management system.

☐ If you want to use your design management system, select *Use <design management system>* (the default).

When you have the Design Management setup for the new library, the default DM choice can be specified by a cdsenv variable, "ddserv.lib" "dmChoice". If that value matches one of the DM specifications given for the DMTYPE in the cdsinfo.tag file, then the cdsenv value is picked as the default in the New Library form.

The software suggests a design management system if it has been specified with the DMTYPE property in a cdsinfo.tag file that is not library-specific but included in the search path. While creating a new library, the design management (DM) information is stored in the cdsinfo.tag file by default when the DM tool is installed.

☐ If you do not want to use design management, select *Use No DM*.

These options gets disabled unless a design management system is available for selection.

- **4.** You can select the *Compression Enabled* check box to write OpenAccess data to this library in a compressed format.
- 5. Click OK.

The Technology File for New Library form is displayed.



- **6.** Choose one of the following technology file options to proceed:
  - □ Compile an ASCII technology file

**Library Creation** 

- □ Reference existing technology libraries
- □ Attach to an existing technology library
- □ Do not need process information

## **Related Topics**

**New Library Form** 

Virtuoso Software Licensing and Configuration Guide

The cdsinfo.tag File Location

Compressing a Library Using Library Manager

Technology File for New Library Form

Referencing or Attaching a Technology Library

**Library Creation** 

## **Database Compression Using the oazip Utility**

OpenAccess supports the ability to save the design databases in a library in a compressed form.

This utility provides the following functionality:

- Processes the OpenAccess databases in a library and compresses them. The compression control value of the library is updated.
- Processes the OpenAccess databases in a library and decompresses the ones that are in compressed form. The compression control value of the library is reset or updated.
- Provides the value of the compression control attribute of a library.
- Scans the OpenAccess databases in a library and reports the databases that do not match the compression control attribute of the library.
- Scans the OpenAccess databases in a library and updates any databases that did not match the compression control attribute of the library.

#### **Command Syntax**

To run oazip, enter the following:

oazip -lib library {-compress|-decompress|-check|-query|-update} [Optional
Arguments]

#### **Arguments**

You can use the <code>-help</code> or <code>-h</code> argument to display command line help. The command line arguments are described in the table below.

Required Argument		
-lib <name></name>	This required argument specifies the name of the library to process. If this argument is not specified, an error message gets displayed.	
One of the Following Arguments is Required		
-compress	If this option is specified, the utility processes the OpenAccess databases in a library, compress the ones in uncompressed form, and reset the compression control value of the library.	

# Cadence Library Manager User Guide Library Creation

-decompress	If this option is specified, the utility processes the OpenAccess databases in a library, decompress the ones in compressed form, and reset the compression control value of the library.
-query	If this option is specified, the utility reports whether the compression control is specified for the library and what level it is set to.
-check	If this option is specified, the utility reports the OpenAccess databases in the library that are inconsistent with the compression control setting of the library. If there is no compression control specified, the utility lists the databases that are in compressed form. If the compression control is specified, the utility lists those databases that are either in uncompressed form or were written using a compression level different than what the compression control is set to.
-update	If this option is specified, the utility processes the OpenAccess databases in a library and update the ones that are inconsistent with the compression control value of the library.
Optional Arguments	
1	
-h or -help	Display usage information.
-h or -help -compressLevel <level></level>	Display usage information.  This option specifies the compression level to use for the library. Compression levels refer to the amount of effort the compression algorithm uses to when compressing data. Higher values do not necessarily correspond to better compression efficiency. Compression levels are specified by an integer value between 1 and 9, inclusive. The default value of 1 is suitable for most applications.
-compressLevel	This option specifies the compression level to use for the library. Compression levels refer to the amount of effort the compression algorithm uses to when compressing data. Higher values do not necessarily correspond to better compression efficiency. Compression levels are specified by an integer value between 1 and 9, inclusive. The default value of 1 is suitable for

Library Creation

-noWarning <msgids></msgids>	Suppresses the specified WARNING messages. msgIds is a quoted, space separated list of numbers. Each number in the list represents the numerical portion of the ID for the message you want to suppress. None of the numbers in the list may be zero. Suppressed messages do not appear on the terminal or in the log file and are not included in the total of WARNING messages displayed in the summary.
-templateFile <file></file>	Specifies a file containing arguments to oazip. You can specify a template file instead of entering a string of arguments on the command line.
	If you specify a template file, arguments on the command line have precedence over arguments specified in the file. So, if the same argument exists in the template file and in the command line, the translator uses the argument on the command line.
	Specify arguments in a template file as follows:
	■ Enter arguments in the template file without a dash (-) before the argument.
	■ Enter each argument and value pair on a single line.
	Separate the argument from its value using a space or a tab.
	Designate comment lines with a # sign as the first character in the line.
	Sample Template File
	# oazip command line arguments:
	lib libName
	logFile myoazip.log
	compress
-v	Prints tool, format, and library version information.
-version	Prints tool and format version information.

## Related Topics

Compressing a Library Using Library Manager

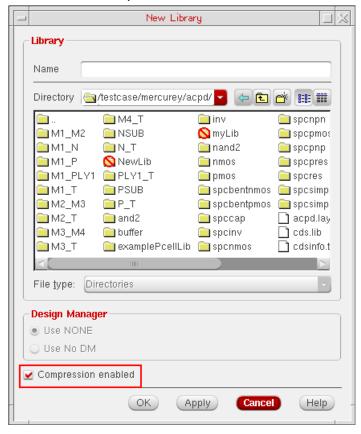
**Library Creation** 

## **Compressing a Library Using Library Manager**

This section describes the procedure of compressing a library.

To compress a library:

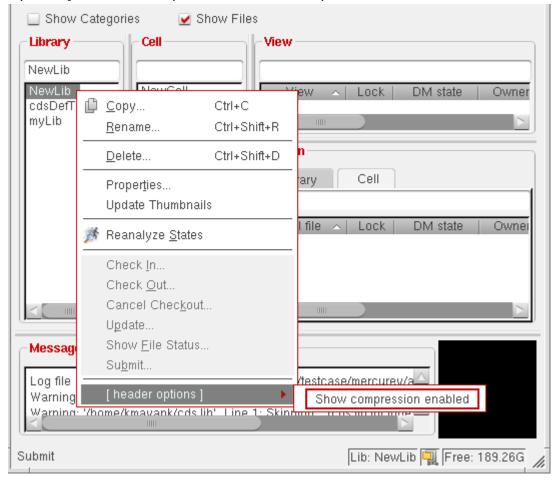
1. Select *Compression enabled* to compress the library while creating a library, which results in reducing the disk storage space, offers faster load, and saves transfer time. By default, the *Compression enabled* check box is not selected.



2. Once a new library is created with the *Compression enabled* check box selected, the Library Manager window shows a new compression a icon corresponding to the compressed libraries.

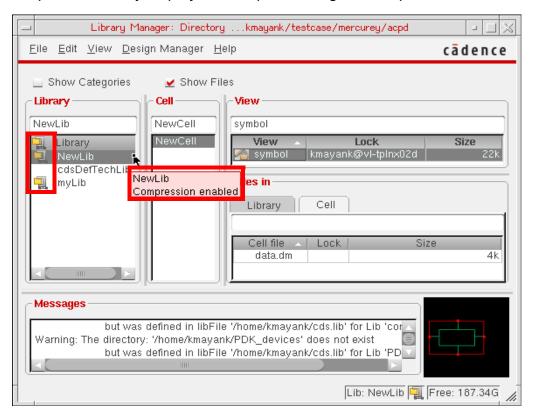
**Library Creation** 

**3.** To view this icon, right-click the first library in the *Library* list box and select the *[header options] – Show compression enabled* option.



Library Creation

**4.** The compression icon is displayed for compressed libraries. Placing the pointer on a compressed library displays a tooltip indicating the compression status as enabled.



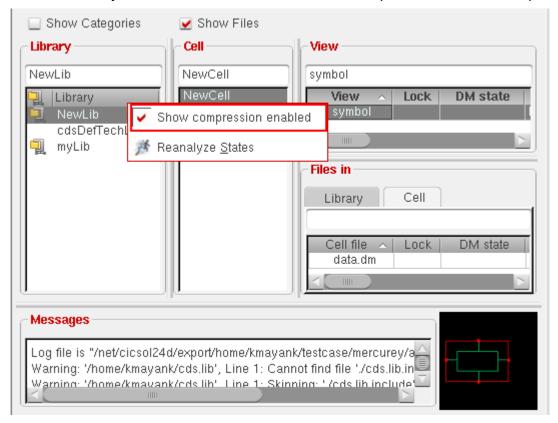
## **Important**

The showCompressionDefault value in .cdsenv sets the compression zip icon to be displayed as default if the \$HOME/.libmgr file is either missing or has no showCompression value. For example, cdsLibManager.showCompression:

1. Once the value in the \$HOME/.libmgr file is saved as either 0 or 1, then that value is considered instead of the .cdsenv value.

**Library Creation** 

**5.** To remove the compression icon from the Library Manager window, you need to right-click the Library header and deselect the *Show compression enabled* option.



Additionally, you can make these enhancements to the Library Manager window:

Status Bar Notification

Status bar displays a name of the currently selected library, whether compressed or not, and the approximate free disk space of the volume holding the library at the lower-right corner of the window. For example, values in Megabytes (MB), Gigabytes (GB), or Terabytes (TB) of the free space is displayed.

Resizable list boxes

You can also resize all the list boxes together by pressing and holding the Ctrl key and dragging the mouse pointer on one of the new list box divider. However, without using the Ctrl key pressed, only two adjacent list boxes would be sized at a time.

#### Related Topics

New Library Form

## Cadence Library Manager User Guide Library Creation

<u>Library Manager Form</u>

## Compiling an ASCII Technology File

To compile a new technology file and attach it to your new library, follow these steps:

- **1.** From the Technology File for New Library form, select *Compile an ASCII technology file*.
- 2. Click OK.

The Load Technology File form appears.



Your new library name appears in the *New Technology Library* field.

3. In the ASCII Technology File field, type the path to a technology file.

You can use your own technology file or one of the following templates from the sample technology files shipped with all Virtuoso applications:

```
install_dir/tools/dfII/samples/default.tf
install_dir/tools/dfII/samples/mpu.tf
```

where install\_dir is the directory in which you installed the Cadence software.

If you want to create a design library with a special technology file but do not know the path to the technology file, type the full hierarchical path to the default technology file default.tf. Later, you can use the *Load* command to modify the technology file information. The default.tf file acts as a placeholder for your technology file.

4. Click OK.

**Note:** If you click *Cancel* instead, the library is created but a technology file is not loaded.

The new design library is created in the specified directory.

#### Related Topic

Load Technology File

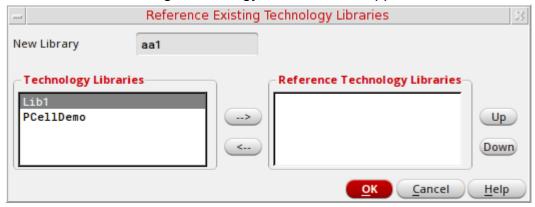
Library Creation

## Referencing Existing Technology Libraries

To create a new technology file and reference it to an existing technology library, follow these steps:

- **1.** From the Technology File for New Library form, select *Reference existing technology libraries*.
- 2. Click OK.

The Reference Existing Technology Libraries form appears.



- **3.** Using the arrow buttons (-->, <--), or by double clicking, move the technology libraries that you want your new library to reference from the *Technology Libraries* section to the *Reference Technology Libraries* section.
  - Only libraries with a local technology library gets listed. If cdsDefTechLib exists, it gets removed as this library is used as the basic, default technology library.
- **4.** You can change the technology library reference priority by selecting a library in the *Reference Technology Libraries* section and choosing to the *Up* or *Down* buttons to change its priority position.
  - The library at the top of the list has the highest priority when applying rules and constraints to a design.
- 5. Click OK.

Your new library gets created, referencing the selected technology libraries.

#### Related Topic

Attaching a New Library to an Existing Technology Library

**Library Creation** 

# Attaching a New Library to an Existing Technology Library

To attach your new library to a specific technology file, follow these steps:

- **1.** On the Technology File for New Library form, select *Attach to an existing technology library.*
- 2. Click OK.

The Attach Library to Technology Library form appears. The new library name appears in the *New Design Library* field. Technology libraries in your library path appear in the *Technology Library* list box.



- **3.** You can filter the technology library list by selecting the type from the *Types* drop-down.
- **4.** In the *Technology Library* list box, choose the technology library to which you want to attach your new library.

If the <u>defaultAttachTech</u> environment variable specifies a valid technology library, it appears selected by default in the list.

5. Click OK.

The new library is attached to the specified technology library.

### Related Topic

defaultAttachTech

**Library Creation** 

# Creating a New Library Without Specifying a Technology File

If you do not plan to design layouts, you do not need a technology file.

To create a new library without specifying a technology file, do the following:

- **1.** On the Technology File for New Library form, select *Do not need process information*.
- 2. Click OK.

Library Manager creates the specified new library.

**Note:** If you are not using a technology file, the system automatically attaches the default technology file default.tf when you open a library in Virtuoso.

#### **Related Topics**

Compiling an ASCII Technology File

Referencing Existing Technology Libraries

7

## Files in Read-Only Mode

When you open a cellview in edit mode or edit the properties of a cellview, the software locks the file to prevent another member of your design team from opening the same file for modification.

When you are working in a design-managed environment or when you have more than one copy of a cellview open, these protective locks sometimes prevent you or other team members from checking in your design or canceling a checkout, even though you have finished your editing and have closed or iconified the cellview.

If you try to check in a locked file then the Cannot Check In message prompt appears.

If you want to continue an ongoing process, such as checking in a library, do the following:

- 1. On the Cannot Check In message prompt.
- 2. Click OK.

If you want to stop the ongoing process at this point, do the following:

- 1. On the Cannot Check In message prompt.
- 2. Click Cancel.

Clicking *OK* or *Cancel* does not let you check in the file.

To make it possible for you to check in the locked file, the person who has the file locked must release the lock. To do this, that person can stop editing and close the file or change the file to read-only.

#### Related Topics

Getting a List of Locked Cellviews

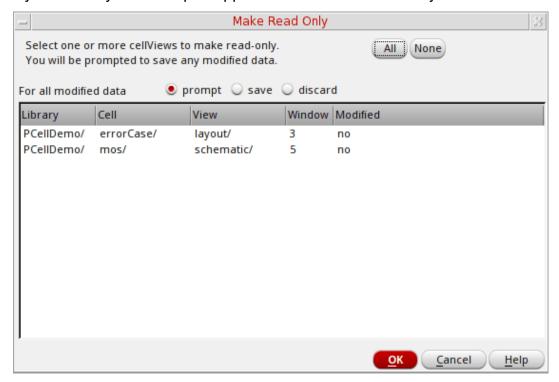
Making Cellviews Read-Only

## **Getting a List of Locked Cellviews**

To get a list of locked cellviews:

➤ In the CIW, choose File – Make Read Only.

Any cellviews you have open appear on the Make Read Only form.



#### **Related Topics**

Making Cellviews Read-Only

Files in Read-Only Mode

## **Making Cellviews Read-Only**

In order to check in a locked file or open a locked file for editing, the lock on the file must be released. To change files that are open in edit mode to read-only mode so the locks on them are released, follow these steps:

- **1.** Get a list of the cellviews you have locked.
- 2. On the Make Read Only form, select the cellviews you want to change to read-only.
  - □ To select all listed cellviews, click *All*.
  - □ To deselect all cellviews, click *None*.
  - □ To select a specific cellview, click the line displaying the cellview name.
  - To select more than one cellview from the list, hold down the Control key when you click the line displaying the second and subsequent cellview names.
  - To deselect cellview names, hold down the Control key when you click the selected cellview.
- 3. Click OK.

If you had unsaved changes in the cellview, the Save Cellview message prompt appears.

- Click Yes to save changes
- □ Click *No* to discard changes

The Make Read Only form closes and the software changes the selected cellview to be read-only.

This command works only on cellviews, not on property files.

#### Related Topics

Getting a List of Locked Cellviews

Make Read Only Form

## Cadence Library Manager User Guide Files in Read-Only Mode

8

## **Category Management**

To manage a large number of cells in a library, you can assign them to categories. You must have write permission for the library before you can create categories, assign cells to categories, or modify the categories to which the cells belong.

If you have any categories defined in a library, your library directory contains a libraryName. TopCat file. The libraryName. TopCat file contains a list of all the category files (categoryName.Cat) defined in that library. Each . Cat file contains a list of cells that are in that category.

#### Related Topics

Creating a Category Using Library Manager

Editing a Category Using Library Manager

Deleting a Category Using Library Manager

Creating a New Category That Includes Subcategories

Creating a Subcategory in an Existing Category

Modifying a Category to Include a Subcategory

## **Creating a Category Using Library Manager**

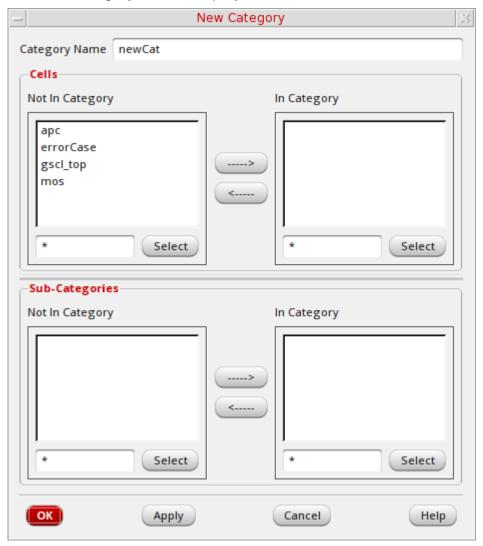
You can create a new category using the Library Manager and customize it according to your choice.

To create a new category:

**Note:** You must have write permission for the library to create a category.

- 1. Select a library.
- **2.** Choose File New Category.

The New Category form is displayed.



Category Management

**3.** In the *Category Name* field, type the name of the new category.

Category names must be unique and legal in the\_namespace where you are working.

**4.** In the *Cells* group box, in the *Not In Category* list box, select the cells you want to include in this category.

You can use Shift-click and Control-click to modify your selection set.

Use the field to the left of the *Select* button to type a filter string. For example, if you type buf\* and click *Select*, all cells that start with buf are selected.

**5.** Click the right arrow to move them to the *In Category* list box.

If an error message stating that the software cannot open or cannot write to the category appears, make sure you have write permission for the category files.

6. Click OK.

If your library is under design management, the Auto Check In form appears. You can click *OK* to check in the new category.

The New Category form closes and the new category appears in the Library Manager. If this is the first category you are creating in your library, the *Everything* and *Uncategorized* categories are also created.

#### Related Topics

New Category Form

Moving Data in List Boxes).

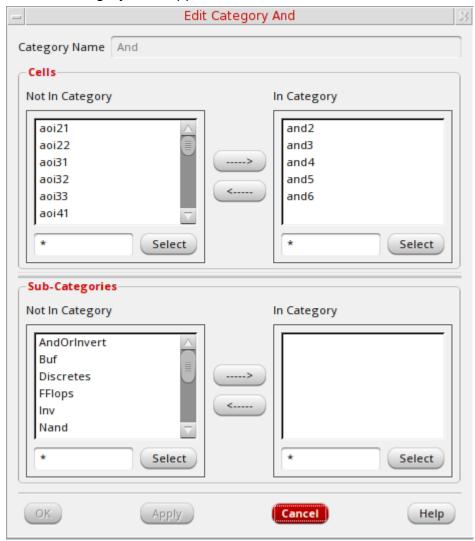
## **Editing a Category Using Library Manager**

To change the contents of a category:

- **1.** Select the *Category* you want to change.
- **2.** Choose *Edit Categories Modify*.

If your library is under design management, the Auto Check Out form appears. You can click OK to check out the category.

The Edit Category form appears.



The contents of the category you specified appear in the *In Category* list box.

Category Management

- **3.** In the *Cells* group box, do at least one of the following:
  - **a.** In the *Not In Category* list box, select additional cells you want to include in this category and click the right arrow to move them to the *In Category* list box.
  - **b.** In the *In Category* list box, select cells you want to remove from this category and click the left arrow to move them to the *Not In Category* list box.

If an error message stating that the software cannot open or cannot write to the category appears, make sure you have write permission for the category files.

4. Click OK.

If your library is under design management, the Auto Check In form appears. You can click *OK* to check in the category.

The Library Manager saves the modifications you made to the category.

#### Related Topics

**New Category Form** 

Moving Data in List Boxes

## **Deleting a Category Using Library Manager**

To delete a category, follow these steps:

- 1. Select the category you want to delete.
- **2.** Choose *Edit Categories Delete*.

The Delete Category message prompt appears.



3. Click Yes.

The Library Manager deletes the category.

### **Related Topics**

Editing a Category Using Library Manager

## **Renaming a Category Using Library Manager**

To rename a category, follow these steps:

- **1.** Select the category you want to rename.
- **2.** Choose *Edit Categories Rename*.

The Rename Category message prompt appears.



- **3.** Specify the new category name in the *To Category* text box.
- 4. Click OK.

The Library Manager renames the category.

### Related Topics

Creating a New Category That Includes Subcategories

Category Management

## **Creating a New Category That Includes Subcategories**

To create a new category that includes subcategories, follow these steps:

- 1. Select a library.
- 2. Create each of the categories (such as *inputs* and *outputs*) that you want to specify as subcategories by doing the following:
  - **a.** Choose *File New Category*.

The New Category form appears.

**b.** In the *Category Name* field, type the name of the new category.

You do not have to add any cells to the new categories at this time.

The new categories appear in the Library Manager.

- **3.** After you have created all the categories that are specified as subcategories, create the top-level category in the following way:
  - **a.** Choose File New Category.

The New Category form appears.

- **b.** In the *Category Name* field, type the name of the new category.
- **c.** In the *Sub-Categories* group box, move the categories you want to be subcategories (such as *Inputs* and *Outputs*) to the *In Category* list box.
- d. Click OK.

The New Category form closes. The new category has the specified subcategories.

#### Related Topics

**New Category Form** 

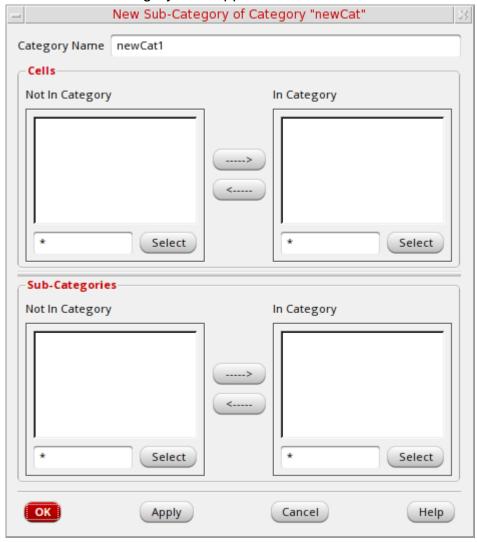
Controlling the Display of Library Information

### **Creating a Subcategory in an Existing Category**

To create a new subcategory in an existing category, follow these steps:

- 1. Select the category for which you want to create a subcategory.
- **2.** Choose *Edit Categories New Sub-Category*.

The New Sub-Category form appears.



- **3.** In the *Category Name* field, type the name of the new subcategory.
- **4.** In the *Cells* group box, in the *Not In Category* list box, select the cells you want to include in this subcategory.
- **5.** Click the right arrow to move them to the *In Category* list box.

Category Management

#### **6.** Click *OK*.

The New Sub-Category form closes. The Library Manager creates a subcategory in the selected category.

### Related Topics

Controlling the Display of Library Information

Category Management

## Modifying a Category to Include a Subcategory

To modify a category to include another category, follow these steps:

- 1. Select the category in which you want to include a subcategory.
- **2.** Choose *Edit Categories Modify*.

The Edit Category form appears.

- **3.** In the *Sub-Categories* group box, in the *Not In Category* list box, select the category you want included as a subcategory.
- **4.** Click the right arrow to move the selected subcategory to the *In Category* list box.
- 5. Click OK.

The Edit Category form closes. The category you moved is now a subcategory of the modified category.

#### Related Topics

Controlling the Display of Library Information

# Cadence Library Manager User Guide Category Management

# **Library Manager Customization**

This section describes the process to customize the menus on the Library Manager form.

- Library Manager Customizations Using SKILL Functions
- Customization of Menus Using the cdsLibMgr.il File
- Callback Function Triggers
- Library Manager Customizations in Standalone Mode and with Other Processes
- Restrictions on the Library Manager Customization File
- Actions in the Library Manager Customization File
- GUI Objects Supported in the Customization File

#### Library Manager Customization

### **Library Manager Customizations Using SKILL Functions**

To customize the Library Manager when you use the Cadence SKILL language, you need the following:

- The cdsLibMgr.il file, which contains the following:
  - Callback definition list
  - Callback options and return values
  - Current selection list
- Corresponding SKILL callback functions defined in the Virtuoso Studio design environment

#### About cdsLibMgr.il File

The extension definition file, cdsLibMgr.il, is the starting point for the Library Manager customization. This file defines SKILL extensions specific to the Library Manager and specifies the name of the startup customization file.

The Library Manager cdsLibMgr.il file contains the following:

- Callback definition list
- Callback options and return values
- Current selection list

The file is written using the SKILL language. You can use the core Cadence SKILL language as described in the <u>Cadence SKILL Language Reference</u> The file can alter existing menus and menu items including removal and change of appearance, as well as add new menus and menu items. You can add menu items to start a SKILL callback in Virtuoso.

A mechanism to start a SKILL callback within the internal Library Manager SKILL interface is not currently provided.

The file is loaded from the first location in the order defined in the Cadence setup search file (setup.loc). The typical order used to load this file is:

- the current working directory
- the home directory
- the install\_dir/share file

Library Manager Customization

When a file is found from one of these locations, the file is loaded and the search stops.

You can customize the name for the cdsLibMgr.il file using a default setting in your .cdsenv file.

#### **Callback Definition List**

The <code>lmgrDefineInits()</code>, <code>lmgrCreateMenu()</code>, and <code>lmgrCreateMenuItem()</code> functions in the <code>cdsLibMgr.il</code> file define callbacks that are started on the Virtuoso Studio design environment program. These functions all use the same syntax for describing the callbacks.

A callback is a list of strings. The first element in the list must be a valid SKILL procedure name in the Virtuoso session. The rest of the list consists of option strings. The following is an example of a callback:

```
'( "myDeleteObject" "refreshIf" )
```

This callback starts the SKILL procedure myDeleteObject in the associated Virtuoso session, which must accept the standard set of arguments described with a single option. The Library Manager redisplays its data if the return value is valid (t).

You can define only one list for every callback or map callback function.

The arguments to the callback SKILL procedure include the name of the menu object that this callback is registered with, followed by five arguments representing the current Library Manager selection. The five selection arguments are described in the next section. Init and Close callbacks defined by lmgrDefineInits() do not get passed any arguments.

#### **Callback Options and Return Values**

The option names for a callback function are

- noOpts Use this optional placeholder when you want to use no options. You can also use this option to reset preceding options.
- refresh Use this option to tell the Library Manager to always regenerate its data display after it runs the callback.
- refreshIf Use this option to tell the Library Manager to regenerate its data display after it runs the callback if the return value of the callback indicates success.
- updateUse this option to tell the Library Manager to always regenerate its own data display and that of Virtuoso after it runs the callback.

Library Manager Customization

updateIf Use this option to tell the Library Manager to regenerate its own data display and that of Virtuoso after executing the callback if the return value of the callback indicates success.

These options can each appear zero or more times. The rightmost options override any to the left, except where noted above. If a sequence ends with noOpts, then the entire sequence is interpreted as having no options.

The return value for a correctly run SKILL callback procedure is t for success and nil if an error occurred.

The Library Manager cannot continue processing if the Library Manager cannot understand the return value of the callback function, such as a database object, a design data (dd) object, or an IPC handle.

#### **Current Selection List**

SKILL callback procedures always receive the argument list selection currently specified on the Library Manager form. This list might correspond to a new data object you create, rather than an existing object. The Library Manager sends the data selection specification fully corresponding to the 5.X architecture as a list of five strings:

LIBNAME CELLNAME VIEWNAME FILENAME CATEGORY.

If any component of the selection is not specified, it is passed as a string value of "".

For example, if nothing at all is selected, then the selection list consists of five empty strings.

Names for a library, cell, and view are located within the designated namespace such as CDBA. A file name is always in the file system namespace.

In addition, the current 5.X category in use is sent as the fifth string in the list, which can be a zero length string if categories are disabled in the Library Manager. In general, only commands specific to library categories need to examine the CATEGORY parameter.

Examples of such commands are COPY CATEGORY, RENAME CATEGORY, or CREATE NEW CATEGORY.

#### Related Topics

Using UNIX to Add Settings to a .cdsenv File

**ImgrCreateMenu** 

**ImgrCreateMenuItem** 

Library Manager Customization

 $\underline{\text{ImgrAddMenuItems}}$ 

Customization of Menus Using the cdsLibMgr.il File

Restrictions on the Library Manager Customization File

Actions in the Library Manager Customization File

Library Manager Customization

### Customization of Menus Using the cdsLibMgr.il File

The Library Manager uses the cdsLibMgr.il extension file as follows:

- 1. The Library Manager loads the cdsLibMgr.il extensions file containing menu customization as well as any initialization and termination commands.
- 2. The modification of GUI menus take place to reflect the customization directives from the extension file.
- **3.** Library Manager then sends the defined initialization commands to the Message Passing Subsystem (MPS) client, which is Virtuoso.
- **4.** The Library Manager GUI interaction triggers MPS callbacks to SKILL routines run in Virtuoso, repeating this sequence as often as necessary.
  - Custom SKILL routines can modify GUI menu attributes via the MPS interface. These two steps are repeated as often as necessary.
- **5.** The user requests to terminate the Library Manager.
- **6.** The Library Manager sends the defined termination commands to the MPS client.
- 7. At the end, the Library Manager process terminates.

#### **Related Topics**

<u>Library Manager Customizations Using SKILL Functions</u>

Callback Function Triggers

Library Manager Customization

### **Callback Function Triggers**

You can trigger callbacks at either of two points in the customization process:

- While selecting a menu item
- Before mapping a menu

This feature allows dynamic customization of menus. It is important that you implement pre-map callbacks to be as fast as possible to avoid blocking the X Window System for too long.

#### **Related Topics**

Library Manager Customizations Using SKILL Functions

Customization of Menus Using the cdsLibMgr.il File

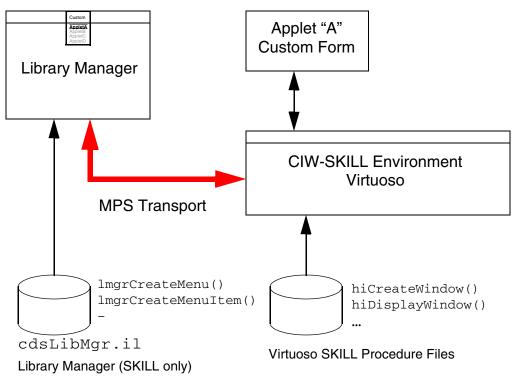
# Library Manager Customizations in Standalone Mode and with Other Processes

#### **Library Manager Customizations in Standalone Mode**

The customization system does not work when you run the Library Manager stand alone. You must run it with a companion Virtuoso Studio design environment process within the same Message Passing Subsystem session. If the customization code is loaded in the Library Manager session that is running in standalone mode, the Library Manager allows only attribute changes to objects such as deletion of unmanaged label attributes. The Library Manager disallows any new objects from becoming active and then issues a warning message.

#### **Library Manager Customization with Other Processes**

The diagram shows how customization is defined and shared among various cooperating processes.



#### Related Topics

Library Manager Customization

### **Restrictions on the Library Manager Customization File**

The following are the restrictions on the Library Manager customization file, cdsLibMgr.il:

- The cdsLibMgr.il file contains static descriptions of menu customization and is read once at initialization only. Therefore, all possible menus and menu items that you might need during the life of the Library Manager session you must define at startup. Although you cannot define the menus and menu items dynamically at some later time, you can define and leave them unmanaged at startup, so that they can be made visible or invisible dynamically.
- Make sure to Define all objects with string names, which are case sensitive. There are two reserved names with special meaning: menuBar and popup.
  - menuBar refers to the Library Manager top menu bar object, from which all pull-down menus descend.
  - popup refers to the pop-up menu selected when you click the middle mouse button over one of the list boxes.
- Define menus as strictly bottom-up, with a strict tree structure. You must define all menu items in a menu before adding them to a menu. To insert menu items into only one pull-down menu. However, a menu item can appear in both a single pull-down and selected pop-up menus. A pull-down menu can appear only once in either the menu bar or in another pull-down menu.
- Use the SKILL API to customize only menus from the menu bar and list pop-ups. No forms are affected by these customizations, although you can partially customize the forms through the .cdsenv facilities.
- Pop-up menus cannot contain any submenus. They must have a flat structure.
- You can define only a single callback on pre-map on each menu including the predefined menus, and for all pop-ups. The callback process must be fast.

#### Related Topics

Library Manager Customization

## **Actions in the Library Manager Customization File**

The cdsLibMgr.il customization file lets you perform the following operations:

- Delete existing predefined menus and menu items from the top menu bar and the pop-up menus.
- Add custom menus to the menu bar or add menu items to predefined menus.



Changing predefined menus or predefined menu items causes unpredictable behavior.

- Determine which menu items appear in the pop-up menus for each list box on the Library Manager form (including existing menu items).
- Alter the visual attributes of existing menus and menu items (managed, sensitized, fonts, labels).
- Display anything printed to standard output, such as printf() on the Library Manager output pane.

#### **Related Topics**

Library Manager Customization

### **GUI Objects Supported in the Customization File**

The cdsLibMgr.il customization file supports the following objects in the graphical user interface:

- Menus, which can contain menu items, toggle items, radio buttons, or separators.
- Menu items as simple buttons. A menu item activates an action callback.
- Toggle buttons. You select a toggle button as a single on/off setting.
- Radio buttons. Radio buttons are mutually exclusive. You select one of several radio buttons displayed.

#### Issues with Virtuoso Studio Design Environment SKILL

In order to perform useful custom tasks, any related task functions must be available from SKILL code executed within the Virtuoso process. In some cases, you might need to start an external UNIX process using SKILL IPC (interprocess communication) functions.

When you use a GUI to customize tasks, you must decide whether you want the Library Manager to block the input from the GUI and wait for the task to finish before proceeding. You implement this decision by using the SKILL function hiCreateAppForm() with or without the dontBlock field set, together with hiDisplayForm().

When you write callback functions, take into account that the Library Manager effectively waits for the return value from the callback in Virtuoso to become available.

### **Caution with Pre-Map Callbacks**

The Library Manager calls any pre-map callbacks when a menu is to be displayed, whether or not an item is selected, provided there is a map callback function defined for the menu. The Library Manager can stop waiting for this callback to finish after a time-out period has been reached, since the screen becomes locked from all access during the execution of the map callback, where X windows are blocked as well as the Virtuoso session.

The map callback function must be as fast as possible to avoid time-out, which makes your workstation unusable in the interim. You can specify the time-out value in the environment customization file, .cdsenv, as a given number of seconds. In the following example, the default value is 5.0 seconds. However, this is much longer than a reasonable response time.

cdsLibManager.customize mapTimeout float 5.0

Library Manager Customization

### Related Topics

Cadence User Interface SKILL Reference

#### Library Manager Customization

### Library Manager Customization Using the .cdsenv File

You can use the .cdsenv file in the Library Manager as well as in Virtuoso to customize the values and settings on various forms and fields. In addition, some of the settings previously stored in the .libmgr file are now saved in the .cdsenv file instead.

Library manager obtains form settings from the .cdsenv file only and not from the .cdsinit file.

The Library Manager saves only the settings that it reads from the .libmgr file: the screen location and size of the Library Manager.

You can choose File - Save Defaults to save settings in the .cdsenv file.

#### .cdsenv File Search Path Order

The Library Manager searches for the .cdsenv file in the following locations, in the specified order:

- install\_dir/tools/dfII/etc/tools/cdsLibManager (This file contains the default settings.)
- install dir/tools/dfII/local
- \$HOME
- \$CWD

Virtuoso does not look for the .cdsenv file in the current directory by default, although the Library Manager does.

#### Related Topics

Using UNIX to Add Settings to a .cdsenv File

Library Manager Customization

### Using UNIX to Add Settings to a .cdsenv File

To add settings to your .cdsenv file, follow the below mentioned steps:

- 1. Use a text editor to open your .cdsenv file.
- 2. Make the changes you want.
- 3. Save the file and exit the editor.

You can add Library Manager settings to your .cdsenv file using the following format:

cdsLibManager.partition varName varType defaultSetting

See also install\_dir/tools/dfII/samples/.cdsenv.

#### Related Topics

Library Manager Customization Using the .cdsenv File

### Saving Settings to a .cdsenv File

To save settings to your . cdsenv file using the Save Library Manager Defaults form:

**1.** On the Library Manager form, choose *File – Save Defaults*.

The Save Library Manager Defaults form appears.



**2.** Use the *Directory* navigation tools to specify the destination directory into which you want to copy the settings file.

You can also type a directory path in the Save Defaults File As field.

If you do not specify a directory path, your home directory is used.

- **3.** (Optional) Specify save options:
  - Select the All possible values check box to save all possible settings

Library Manager Customization

Select an	appropriate	option	from the	File	Status	section f	or the	values:

- O Overwrite Merge values
- Retain values
- □ Click *OK*.

Your settings are saved to the file you specified.

The Save Library Manager Defaults form currently updates only settings that already exist in the .cdsenv file.

#### **Related Topics**

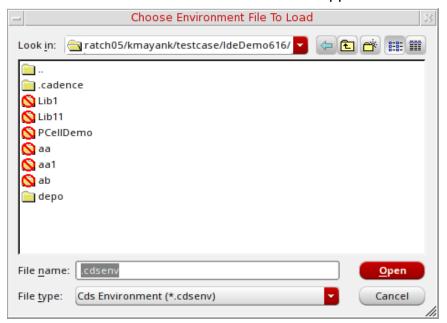
Save Library Manager Defaults Form

### Loading Settings from a .cdsenv file

To load settings from an environment file (.cdsenv), follow these steps:

**1.** On the Library Manager form, choose *File – Load Defaults*.

The Choose Environment File To Load form appears.



2. (Optional) Use the navigation tools (list box and toolbar buttons) to specify the source directory from which you want to load the settings file.

You can also type a directory path in the *Look in* field.

If you do not specify a directory path, your home directory is used.

- **3.** In the *File type* field, select one of the following file name filters:
  - Cds Environment (\*.cdsenv)
  - □ All Files (\*)
- **4.** In the *File name* field, type the name of the environment settings file you want to load. Alternatively, you can select the file from the list box above this field.
- **5.** Click *OK*.

The Library Manager loads environment settings from the .cdsenv file you specified.

Library Manager Customization

### Related Topics

Choose Environment File To Load Form

Library Manager Customization

### Using the .libsel File to Customize the Library Manager

The .libsel file is created by the Library Selector (the libSelect application), also known as the Library Browser. This browser appears when you click the *Browser* button in a Virtuoso form.

The .libsel file is created to store the libSelect values so that next time it is invoked it retains settings such as size, screen location, and whether the *Show Categories* check box was selected during the previous session of the Library Manager.

#### Related Topics

Settings in the .libmgr file

#### Library Manager Customization

### Settings in the .Xdefaults file

You can specify the initial location for the Library Manager by specifying the following resource in your .Xdefaults file:

cdsLibManager.geometry: widthxheight+x0ffset+y0ffset

#### For example:

cdsLibManager.geometry: 590x580+0+25

where width is the desired width of the window in pixels, height is the desired height of the window in pixels, and xOffset and yOffset specify the distance of the window from the edges of the screen. You can specify xOffset and yOffset as follows:

+x0ffset	The left edge of the window is to be placed $xOffset$ pixels from the left edge of the screen.
-xOffset	The right edge of the window is to be placed $xOffset$ pixels from the right edge of the screen.
+yOffset	The top edge of the window is to be placed $yOffset$ pixels below the top edge of the screen.
-yOffset	The bottom edge of the window is to be placed $yOffset$ pixels above the bottom edge of the screen.

Offsets must be provided as pairs, that is, if you want to specify either xOffset or yOffset, you must specify both.

To place the window in the corners of the screen, specify the offsets as follows:

+0+0	Places it in the upper left corner
-0+0	Places it in the upper right corner
-0-0	Places it in the lower right corner
+0-0	Places it in the lower left corner



To get the position and size information, you can do the following:

a. Place the Library Manager window in the location that you want to set as the default.

Library Manager Customization

- **b.** In a terminal window, type xwininfo.
- c. Click the Library Manager window.

The terminal window displays information about the Library Manager window, including its position and size. You can use these settings in the .Xdefaults file.

#### Related Topics

Settings in the .libmgr file

Library Manager Customization

### Settings in the .libmgr file

You can also specify a default location and size for the Library Manager in the .libmgr file. This file is automatically saved to your home directory each time you exit the Library Manager. The settings in the .libmgr file override the settings in the .Xdefaults file.

Specify the following settings in the .libmgr file:

cdsLibManager.x: 0	Specifies the x-coordinate.
cdsLibManager.y: 82	Specifies the y-coordinate.
cdsLibManager.width: 608	Specifies the width of the window.
cdsLibManager.height: 469	Specifies the height of the window.
cdsLibManager*msgTextWidget.height: 106	Specifies the height of the <i>Messages</i> window.
cdsLibManager.libFilePercent: 34	Specifies the percentage of total list box height used by the <i>Files in Library</i> pane.
cdsLibManager.cellFilePercent: 34	Specifies the percentage of total list box height used by the <i>Files in Cell</i> pane.

#### Related Topics

Settings in the .Xdefaults file

10

# **Library Manager Environment Variables**

This topic provides information on the names, descriptions, and graphical user interface equivalents for the Library Manager environment variables.

Only the environment variables documented in this chapter are supported for public use. All other Library Manager environment variables, regardless of their name or prefix, and undocumented aspects of the environment variables described below, are private and are subject to change at any time.

Library Manager Environment Variables

# copyValuesFrom

cdsLibManager.addDisplayAttribute copyValuesFrom boolean { t | nil }

#### **Description**

Specifies whether the *Copy values from existing library display attribute* option is selected in the Add Library Display Attribute form.

The default is nil.

#### **GUI Equivalent**

Command Display Settings – Library Display Attributes

Form Field Copy values from existing library display attribute

#### **Examples**

```
envGetVal("cdsLibManager.addDisplayAttribute" "copyValuesFrom")
envSetVal("cdsLibManager.addDisplayAttribute" "copyValuesFrom" 'boolean t)
```

#### **Related Topics**

**Creating New Library Attributes** 

Library Manager Environment Variables

# useOptionText

cdsLibManager.ckCancel useOptionText string "optionsFile"

#### **Description**

Specifies cancel check out options.

The default is "".

#### **GUI Equivalent**

Command Design Manager – Cancel Check Out

Form Field Use Options

#### **Examples**

```
envGetVal("cdsLibManager.ckCancel" "useOptionText")
envSetVal("cdsLibManager.ckCancel" "useOptionText" 'string "myOptionsFile.txt")
```

#### **Related Topics**

Cancel Check Out Form

#### Library Manager Environment Variables

# useOptionsOn

cdsLibManager.ckCancel useOptionsOn boolean { t | nil }

#### **Description**

Specifies whether checkout cancellation options are enabled.

The default is nil.

#### **GUI Equivalent**

Command Design Manager – Cancel Check Out

Form Field Use Options

#### **Examples**

```
envGetVal("cdsLibManager.ckCancel" "useOptionsOn")
envSetVal("cdsLibManager.ckCancel" "useOptionsOn" 'boolean t)
```

#### **Related Topics**

Cancel Check Out Form

Library Manager Environment Variables

### selectMatches

cdsLibManager.ckIn selectMatches toggle (all checkedOut unmanaged checkedIn)

#### **Description**

Specifies what items are selected when checking in an item. The choices are:

- all means that all items are selected for check-in (the default)
- ckOut means that only checked out items are selected for check-in
- noDM means that only managed items are selected for check-in
- ckIn means that only checked in and writable items are selected for check-in

#### **GUI Equivalent**

Command: Design Manager – Check In

Field: Show

#### **Examples**

The following example returns the current value for the environment variable. The return value of  $(t \ nil \ nil \ nil)$  indicates that the all option is enabled and the other three options are disabled:

```
envGetVal("cdsLibManager.ckIn" "selectMatches")
(t nil nil nil)
```

The example below enables ckOut and noDM and disables all and ckInWritable:

```
envSetVal("cdsLibManager.ckIn" "selectMatches" 'toggle '(nil t t nil))
```

#### Related Topics

#### Check In Form

Library Manager Environment Variables

# useOptionText

cdsLibManager.ckIn useOptionText string "optionsFile"

#### **Description**

Specifies check in options. The default is "".

#### **GUI Equivalent**

Command Design Manager – Show File Status

Form Field Check In – Use Options

#### **Examples**

```
envGetVal("cdsLibManager.ckIn" "useOptionText")
envSetVal("cdsLibManager.ckIn" "useOptionText" 'string "myOptionsFile.txt")
```

#### **Related Topics**

Check In Form

#### Library Manager Environment Variables

# useOptionsOn

cdsLibManager.ckIn useOptionsOn boolean { t | nil }

#### **Description**

Specifies whether check in options are enabled. The default is nil.

#### **GUI Equivalent**

Command Design Manager – Show File Status

Form Field Check In – Use Options

#### **Examples**

```
envGetVal("cdsLibManager.ckIn" "useOptionsOn")
envSetVal("cdsLibManager.ckIn" "useOptionsOn" 'boolean t)
```

#### **Related Topics**

Check In Form

Library Manager Environment Variables

# useOptionText

cdsLibManager.ckOut useOptionText string "optionsFile"

#### **Description**

Specifies check out options. The default is "".

#### **GUI Equivalent**

Command Design Manager – Show File Status

Form Field Check Out – Use Options

#### **Examples**

```
envGetVal("cdsLibManager.ckOut" "useOptionText")
envSetVal("cdsLibManager.ckOut" "useOptionText" 'string "myOptionsFile.txt")
```

#### **Related Topics**

**Check Out Form** 

#### Library Manager Environment Variables

# useOptionsOn

cdsLibManager.ckOut useOptionsOn boolean { t | nil }

#### **Description**

Specifies whether check in options are enabled.

The default is nil.

#### **GUI Equivalent**

Command Design Manager – Show File Status

Form Field Check Out – Use Options

#### **Examples**

```
envGetVal("cdsLibManager.ckOut" "useOptionsOn")
envSetVal("cdsLibManager.ckOut" "useOptionsOn" 'boolean t)
```

#### **Related Topics**

**Check Out Form** 

Library Manager Environment Variables

# addToCategoryName

cdsLibManager.copy addToCategoryName string "category\_name"

#### **Description**

Specifies a category name.

The default is "".

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copy" "addToCategoryName")
envSetVal("cdsLibManager.copy" "addToCategoryName" 'string "TitleBlocks")
```

#### **Related Topics**

Using UNIX to Add Settings to a .cdsenv File

Library Manager Environment Variables

# addToCategoryOn

```
cdsLibManager.copy addToCategoryOn boolean { t | nil }
```

## **Description**

Specifies whether the add to category option is enabled.

The default is nil.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copy" "addToCategoryOn")
envSetVal("cdsLibManager.copy" "addToCategoryOn" 'boolean t)
```

#### **Related Topics**

Library Manager Environment Variables

## addToCellsPattern

cdsLibManager.copy addToCellsPattern string "filterString"

## **Description**

Specifies a filter string for matching a set of copied cells to add to a category.

The default is \*.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copy" "addToCellsPattern")
envSetVal("cdsLibManager.copy" "addToCellsPattern" 'string "sheetSymbol")
```

#### **Related Topics**

Library Manager Environment Variables

## allViewsOn

```
cdsLibManager.copy allViewsOn boolean { t | nil }
```

## **Description**

Specifies whether to copy all views during a hierarchical copy.

The default is t.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copy" "allViewsOn")
envSetVal("cdsLibManager.copy" "allViewsOn" 'boolean nil)
```

#### **Related Topics**

Library Manager Environment Variables

## exactHierOn

```
cdsLibManager.copy exactHierOn boolean { t | nil }
```

## **Description**

Specifies whether to copy the exact hierarchy.

The default is nil.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copy" "exactHierOn")
envSetVal("cdsLibManager.copy" "exactHierOn" 'boolean t)
```

### **Related Topics**

Library Manager Environment Variables

## existenceCheck

```
cdsLibManager.copy existenceCheck boolean { t | nil }
```

## **Description**

Specifies whether to select the Check existence in technology database check box in various Copy forms by default.

Default value is nil.

## **GUI Equivalent**

None

## **Examples**

```
envGetVal("cdsLibManager.copy" "existenceCheck")
envSetVal("cdsLibManager.copy" "existenceCheck" 'boolean t)
```

#### Related Topics

Library Manager Environment Variables

## extraViews

cdsLibManager.copy extraViews string "view\_names"

## **Description**

Specifies extra view names to copy.

The default is "".

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copy" "extraViews")
envSetVal("cdsLibManager.copy" "extraViews" 'string "symbol")
```

## **Related Topics**

Library Manager Environment Variables

## hierOn

```
cdsLibManager.copy hierOn boolean { t | nil }
```

## **Description**

Specifies whether to copy hierarchically.

The default is nil.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copy" "hierOn")
envSetVal("cdsLibManager.copy" "hierOn" 'boolean t)
```

## **Related Topics**

Library Manager Environment Variables

## rerefCustomVias

```
cdsLibManager.copy rerefCustomVias boolean { t | nil }
```

## **Description**

Specifies whether to select the Re-reference custom Via Defs check box in various Copy forms by default.

Default value is nil.

## **GUI Equivalent**

None

## **Examples**

```
envGetVal("cdsLibManager.copy" "rerefCustomVias")
envSetVal("cdsLibManager.copy" "rerefCustomVias" 'boolean t)
```

#### Related Topics

Library Manager Environment Variables

# skipLibsOn

```
cdsLibManager.copy skipLibsOn boolean { t | nil }
```

## **Description**

Specifies whether to skip libraries during a hierarchical copy.

The default is t.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copy" "skipLibsOn")
envSetVal("cdsLibManager.copy" "skipLibsOn" 'boolean t)
```

#### **Related Topics**

Library Manager Environment Variables

# updateChoice

cdsLibManager.copy updateChoice toggle (entireLib copiesOnly)

#### **Description**

Specifies what part of the library needs to be updated when updating instances.

- entireLib means to update the entire library when updating instances (the default)
- copiesOnly means to update the new copies only when updating instances

#### **GUI Equivalent**

Command: Edit - Copy

Field: Update Instances

#### **Examples**

The following example returns the current value for the environment variable. The return value of (t nil) indicates that the entireLib option is enabled and copiesOnly is disabled:

```
envGetVal("cdsLibManager.copy" "updateChoice")
(t nil)
```

The example below enables copiesOnly and disables entireLib:

```
envSetVal("cdsLibManager.copy" "updateChoice" 'toggle '(nil t))
```

#### Related Topics

Copy Library Form

Copy View Form

Library Manager Environment Variables

## viewsText

```
cdsLibManager.copy viewsText string "view_names"
```

## **Description**

Specifies a string of space-separated view names to copy or a valid filter string.

The default is "".

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copy" "viewsText")
envSetVal("cdsLibManager.copy" "viewsText" 'string "")
```

#### **Related Topics**

Library Manager Environment Variables

# addPropFiles

cdsLibManager.copy addPropFiles boolean { t | nil }

## **Description**

Specifies whether to add dependent property files to a copy set.

The default is t.

#### **GUI Equivalent**

Command Edit – Copy Preferences

Form Field Library and Cell Property Files – Automatically add

dependent property files to copy sets

#### **Examples**

```
envGetVal("cdsLibManager.copy" "addPropFiles")
envSetVal("cdsLibManager.copy" "addPropFiles" 'boolean nil)
```

#### **Related Topics**

Library Manager Environment Variables

## overwriteAll

```
cdsLibManager.copyError overwriteAll boolean { t | nil }
```

## **Description**

Specifies whether overwrite is the selected action for all copy problems.

The default is nil.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.copyError" "overwriteAll")
envSetVal("cdsLibManager.copyError" "overwriteAll" 'boolean t)
```

#### **Related Topics**

Library Manager Environment Variables

# addCellPropFiles

cdsLibManager.copyGlobals addCellPropFiles boolean { t | nil }

#### **Description**

Specifies whether to add dependent cell property files to a copy set.

The default is t.

## **GUI Equivalent**

Command Edit – Copy Preferences

Form Field Library and Cell Property Files – Include properties from

- Cells

#### **Examples**

```
envGetVal("cdsLibManager.copyGlobals" "addCellPropFiles")
envSetVal("cdsLibManager.copyGlobals" "addCellPropFiles" 'boolean t)
```

#### **Related Topics**

## Library Manager Environment Variables

# addLibPropFiles

cdsLibManager.copyGlobals addLibPropFiles boolean { t | nil }

## **Description**

Specifies whether to add dependent library property files to a copy set.

The default is t.

## **GUI Equivalent**

Command Edit – Copy Preferences

Form Field Library and Cell Property Files – Libraries

#### **Examples**

```
envGetVal("cdsLibManager.copyGlobals" "addLibPropFiles")
envSetVal("cdsLibManager.copyGlobals" "addLibPropFiles" 'boolean nil)
```

### **Related Topics**

Library Manager Environment Variables

## expandRadio

cdsLibManager.copyGlobals expandRadio toggle (comanaged all)

#### **Description**

Specifies what files are included of each cellview when performing copy operation. The choices are:

- comanaged means that include the comanaged files only of each cellview (the default)
- all means that include all the files of each cellview

#### **GUI Equivalent**

Command Edit – Copy Preferences

Form Field Cellview Contents

#### **Examples**

The following example returns the current value for the environment variable. The return value of (t nil) indicates that the comanaged option is enabled and all is disabled:

```
envGetVal("cdsLibManager.copyGlobals" "expandRadio")
(t nil)
```

The example below enables comanaged and disables all:

```
envSetVal("cdsLibManager.copyGlobals" "expandRadio" 'toggle '(nil t))
```

#### Related Topics

Copy Preferences Form

Library Manager Environment Variables

## mpsRadio

```
cdsLibManager.copyGlobals mpsRadio toggle (remote local)
```

#### **Description**

Specifies whether the copy operation uses the session's copy service (when available) or the Library Manager local copy engine only.

Specifies the copy service to be used for the copy operation.

- remote means that the copy service of the session is used for the copy operation (the default)
- local means that the copy service of the Library Manager local copy engine only is used for the copy operation

A special note about using the ccpRegTrigger SKILL function with reference to the mpsRadio environment variable setting:

- You can use the *Remote Copy Service* options on the Copy Preferences form to enable and disable user copy trigger execution.
- More advanced users can use the <u>ccpRegTrigger</u> SKILL function in the .cdsinit file to register a customized post-copy trigger function as follows:

```
procedure((copyTriggerPrint copyPhaseStr checkOffList supplementList
otherFromSpecs otherToSpecs updateList retHint ctxList reserved "stggggggx")
  let((retOK)
      retOK = t
      printf("Copy phase is \"%s\"\n" copyPhaseStr)
      printf("Calling options were %L\n", ctxList)
      printf("Pre-copy set is %L\n", checkOffList)
      printf("Post-copy is from %L\n", otherFromSpecs)
      printf(" to %L\n", otherToSpecs)
      retOK
  )
)
ccpRegTrigger("ccpPostCopyTrigger" 'copyTriggerPrint t)
```

You can remove this trigger using the <a href="mailto:ccpRemoveTrigger">ccpRemoveTrigger</a> SKILL function as follows:

```
ccpRemoveTrigger("ccpPostCopyTrigger" 'copyTriggerPrint)
```

Library Manager Environment Variables

#### **GUI Equivalent**

Command Edit – Copy Preferences

Form Field Remote Copy Service

#### **Examples**

The following example returns the current value for the environment variable. The return value of  $(t \ nil)$  indicates that the remote option is enabled and local is disabled:

```
envGetVal("cdsLibManager.copyGlobals" "mpsRadio")
(t nil)
```

The example below enables local and disables remote:

```
envSetVal("cdsLibManager.copyGlobals" "mpsRadio" 'toggle '(nil t))
```

#### **Related Topics**

Copy Preferences Form

Library Manager Environment Variables

## useMonitor

```
cdsLibManager.copyGlobals useMonitor boolean { t | nil }
```

## **Description**

Specifies whether the progress monitor appears during a copy operation.

The default is t.

### **GUI Equivalent**

Command Edit – Copy Preferences

Form Field Miscellaneous Settings – Enable file progress monitor

#### **Examples**

```
envGetVal("cdsLibManager.copyGlobals" "useMonitor")
envSetVal("cdsLibManager.copyGlobals" "useMonitor" 'boolean nil)
```

### **Related Topics**

Using UNIX to Add Settings to a .cdsenv File

Copy Preferences Form

Library Manager Environment Variables

# warnRenameDM

cdsLibManager.copyGlobals warnRenameDM boolean { t | nil }

## **Description**

Specifies whether a design management warning appears when matching items are renamed during a copy operation.

The default is t.

## **GUI Equivalent**

Command Edit – Copy Preferences

Form Field Miscellaneous Settings – Warn about Rename of manage

data (DM)

#### **Examples**

```
envGetVal("cdsLibManager.copyGlobals" "warnRenameDM")
envSetVal("cdsLibManager.copyGlobals" "warnRenameDM" 'boolean nil)
```

### Related Topics

Using UNIX to Add Settings to a .cdsenv File

Copy Preferences Form

Library Manager Environment Variables

# openView

cdsLibManager.copyVersion openView boolean { t | nil }

## **Description**

Specifies whether to open a cellview version after copying.

The default is t.

### **GUI Equivalent**

Command Design Manager – Version Info

Form Field Copy Cellview Version – Open After Copy

#### **Examples**

```
envGetVal("cdsLibManager.copyVersion" "openView")
envSetVal("cdsLibManager.copyVersion" "openView" 'boolean nil)
```

#### **Related Topics**

Library Manager Environment Variables

# toLibrary

cdsLibManager.copyVersion toLibrary string "destination\_library\_name"

## **Description**

Specifies the default destination library name. The default is "".

#### **GUI Equivalent**

Command Design Manager – Version Info

Form Field Copy Cellview Version – To – Library

#### **Examples**

```
envGetVal("cdsLibManager.copyVersion" "toLibrary")
envSetVal("cdsLibManager.copyVersion" "toLibrary" 'string "ahdLib")
```

### **Related Topics**

Library Manager Environment Variables

## toView

cdsLibManager.copyVersion toView string "destination\_view\_name"

## **Description**

Specifies the default destination view name.

The default is "".

### **GUI Equivalent**

Command Design Manager – Version Info

Form Field Copy Cellview Version – To – View

#### **Examples**

```
envGetVal("cdsLibManager.copyVersion" "toLibrary")
envSetVal("cdsLibManager.copyVersion" "toLibrary" 'string "adder")
```

### **Related Topics**

## Library Manager Environment Variables

# useOptionText

cdsLibManager.copyVersion useOptionText string "copy\_options"

## **Description**

Specifies default copy options when copying a cellview version.

The default is "".

## **GUI Equivalent**

Command Design Manager – Version Info

Form Field Copy Cellview Version – Use Options

#### **Examples**

```
envGetVal("cdsLibManager.copyVersion" "useOptionText")
envSetVal("cdsLibManager.copyVersion" "useOptionText" 'string
"myOptionsFile.txt")
```

#### Related Topics

Library Manager Environment Variables

# useOptionsOn

cdsLibManager.copyVersion useOptionsOn boolean { t | nil }

## **Description**

Specifies whether copy options are enabled when copying a cellview version.

The default is nil.

## **GUI Equivalent**

Command Design Manager – Version Info

Form Field Copy Cellview Version – Use Options

#### **Examples**

```
envGetVal("cdsLibManager.copyVersion" "useOptionsOn")
envSetVal("cdsLibManager.copyVersion" "useOptionsOn" 'boolean t)
```

#### **Related Topics**

Library Manager Environment Variables

# addToCategoryName

cdsLibManager.copyWizard addToCategoryName string "category\_name"

## **Description**

Specifies a default category name.

The default is "".

### **GUI Equivalent**

Command Edit – Copy Wizard

Form Field Add To Category

#### **Examples**

```
envGetVal("cdsLibManager.copyWizard" "addToCategoryName")
envSetVal("cdsLibManager.copyWizard" "addToCategoryName" 'string "Transistors")
```

### **Related Topics**

Using UNIX to Add Settings to a .cdsenv File

# Library Manager Environment Variables

# addToCategoryOn

cdsLibManager.copyWizard addToCategoryOn boolean { t | nil }

## **Description**

Specifies whether the add-to-category option is enabled.

The default is nil.

### **GUI Equivalent**

Command Edit – Copy Wizard

Form Field Add To Category

#### **Examples**

```
envGetVal("cdsLibManager.copyWizard" "addToCategoryOn")
envSetVal("cdsLibManager.copyWizard" "addToCategoryOn" 'boolean t)
```

### **Related Topics**

Using UNIX to Add Settings to a .cdsenv File

Library Manager Environment Variables

## addToCellsPattern

cdsLibManager.copyWizard addToCellsPattern string "t\_filterString"

#### **Description**

Specifies a filter string for matching a set of copied cells to add to a category.

The default is \*, indicates all copied cells.

## **GUI Equivalent**

Command Edit – Copy Wizard

Form Field Cells

#### **Examples**

```
envGetVal("cdsLibManager.copyWizard" "addToCellsPattern")
envSetVal("cdsLibManager.copyWizard" "addToCellsPattern" 'string "scurve")
```

### **Related Topics**

Using UNIX to Add Settings to a .cdsenv File

Library Manager Environment Variables

## existenceCheck

cdsLibManager.copyWizard existenceCheck boolean { t | nil }

#### **Description**

Specifies whether to select the Check existence in technology database check box in the Copy Wizard form by default.

The default is nil.

## **GUI Equivalent**

Command Edit – Copy Wizard

Form Field Check existence in technology database

#### **Examples**

```
envGetVal("cdsLibManager.copyWizard" "existenceCheck")
envSetVal("cdsLibManager.copyWizard" "existenceCheck" 'boolean t)
```

#### **Related Topics**

Using UNIX to Add Settings to a .cdsenv File

Library Manager Environment Variables

## extraViews

cdsLibManager.copyWizard extraViews string "extra\_view\_names"

## **Description**

Specifies extra view names to copy.

The default is "".

### **GUI Equivalent**

Command Edit – Copy Wizard

Form Field Exact Hierarchy – Extra Views

#### **Examples**

```
envGetVal("cdsLibManager.copyWizard" "extraViews")
envSetVal("cdsLibManager.copyWizard" "extraViews" 'string "*")
```

## **Related Topics**

Using UNIX to Add Settings to a .cdsenv File

Library Manager Environment Variables

## rerefCustomVias

cdsLibManager.copyWizard rerefCustomVias boolean { t | nil }

#### **Description**

Specifies whether to select the Re-reference Custom Via Defs check box in the Copy Wizard form by default.

The default is nil.

## **GUI Equivalent**

Command Edit – Copy Wizard

Form Field Exact Hierarchy – Re-reference customViaDefs

#### **Examples**

```
envGetVal("cdsLibManager.copyWizard" "rerefCustomVias")
envSetVal("cdsLibManager.copyWizard" "rerefCustomVias" 'boolean t)
```

#### **Related Topics**

Using UNIX to Add Settings to a .cdsenv File

Library Manager Environment Variables

# updateChoice

cdsLibManager.copyWizard updateChoice toggle (entireLib copiesOnly)

## Description

Specifies what part of the library needs to be updated when updating instances.

- entireLib means to update the entire library when updating instances (the default)
- copiesOnly means to update the new copies only when updating instances

#### **GUI Equivalent**

Command: Edit - Copy Wizard

Field: Update Instances

#### **Examples**

The following example returns the current value for the environment variable. The return value of (t nil) indicates that the entireLib option is enabled and copiesOnly is disabled:

```
envGetVal("cdsLibManager.copyWizard" "updateChoice")
(t nil)
```

The example below enables copiesOnly and disables entireLib:

```
envSetVal("cdsLibManager.copyWizard" "updateChoice" 'toggle '(nil t))
```

#### Related Topics

Using UNIX to Add Settings to a .cdsenv File

Library Manager Environment Variables

# updateOn

cdsLibManager.copyWizard updateOn boolean { t | nil }

## **Description**

Specifies whether to update instances during the copy operation.

The default is t.

### **GUI Equivalent**

Command Edit – Copy Wizard

Form Field Update Instances

#### **Examples**

```
envGetVal("cdsLibManager.copyWizard" "updateOn")
envSetVal("cdsLibManager.copyWizard" "updateOn" 'boolean nil)
```

### **Related Topics**

Using UNIX to Add Settings to a .cdsenv File

Library Manager Environment Variables

# mapTimeout

cdsLibManager.customize mapTimeout float timeout\_seconds

## **Description**

Specifies the timeout for mapCallbacks.

The default is 5.0.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.customize" "mapTimeout")
envSetVal("cdsLibManager.customize" "mapTimeout" 'float 1.0)
```

### **Related Topics**

Library Manager Environment Variables

# showDFIIWarning

cdsLibManager.customize showDFIIWarning boolean { t | nil }

## **Description**

Specifies whether a warning appears if a customization file is present but was not started from Virtuoso.

The default is t.

## **GUI Equivalent**

None

## **Examples**

```
envGetVal("cdsLibManager.customize" "showDFIIWarning")
envSetVal("cdsLibManager.customize" "showDFIIWarning" 'boolean nil)
```

#### Related Topics

Library Manager Environment Variables

# startupFile

cdsLibManager.customize startupFile string "startup\_extension\_file"

## **Description**

Specifies the name of the startup extension file.

The default is cdsLibMgr.il.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.customize" "startupFile")
envSetVal("cdsLibManager.customize" "startupFile" 'string "myextensionfile.il")
```

#### **Related Topics**

Library Manager Environment Variables

# ddDb

cdsLibManager.database ddDb string "database"

# **Description**

Specifies the design database.

The default is com.cadence.interfaces.libAccess.cddLib5xDatabase.

## **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.database" "ddDb")
envSetVal("cdsLibManager.database" "ddDb" 'string "cddDatabase")
```

### **Related Topics**

Library Manager Environment Variables

#### server

cdsLibManager.database server string "server"

# **Description**

Specifies the database server.

The default is "com.cadence.interfaces.libAccess.ladLibraryServer".

## **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.database" "server")
envSetVal("cdsLibManager.database" "server" 'string "LibraryServer")
```

## **Related Topics**

Library Manager Environment Variables

# fileRadio

cdsLibManager.defaults fileRadio toggle (Overwrite Merge values Retain values)

## **Description**

Specifies the default file save action of Library Manager. The choices are:

- Overwrite saves the values you type by overwriting your .cdsenv file
- Merge values saves the values you modify into your .cdsenv file (the default)
- Retain values saves the values you specify by creating another file

The default is (nil t nil).

### **GUI Equivalent**

Command File – Save Defaults

Form Field File Status

### **Examples**

The following example returns the current value for the environment variable. The return value of  $(nil\ t\ nil)$  indicates that the Merge values option is enabled and the other two options are disabled:

```
envGetVal("cdsLibManager.defaults" "fileRadio")
(nil t nil)
```

The example below enables Overwrite and Retain values, and disables the Merge values option:

```
envSetVal("cdsLibManager.defaults" "fileRadio" 'toggle '(t nil t))
```

## Related Topics

Using UNIX to Add Settings to a .cdsenv File

Save Library Manager Defaults Form

Library Manager Environment Variables

# saveAllOn

```
cdsLibManager.defaults saveAllOn boolean { t | nil }
```

# **Description**

Specifies whether to save all possible values to the Library Manager defaults file.

The default is nil.

## **GUI Equivalent**

Command File – Save Defaults

Form Field Options – All possible values

## **Examples**

```
envGetVal("cdsLibManager.defaults" "saveAllOn")
envSetVal("cdsLibManager.defaults" "saveAllOn" 'boolean t)
```

# **Related Topics**

Library Manager Environment Variables

# saveAsText

cdsLibManager.defaults saveAsText string "save\_as\_name"

# **Description**

Specifies the default Save As name for the settings file. The default is .cdsenv.

### **GUI Equivalent**

Command File – Save Defaults
Form Field Save Defaults File As

### **Examples**

```
envGetVal("cdsLibManager.defaults" "saveAsText")
envSetVal("cdsLibManager.defaults" "saveAsText" 'string "defaults")
```

## **Related Topics**

Library Manager Environment Variables

# **libCheckOn**

```
cdsLibManager.delete libCheckOn boolean { t | nil }
```

# **Description**

Specifies whether to verify that a library is valid using its cdsinfo.tag file, prior to performing a delete operation to prevent deleting data or directories that are not in a valid library.

The default is t.

# **GUI Equivalent**

None

# **Examples**

```
envGetVal("cdsLibManager.delete" "libCheckOn")
envSetVal("cdsLibManager.delete" "libCheckOn" 'boolean nil)
```

## Related Topics

Library Manager Environment Variables

# **localRadio**

cdsLibManager.delete localRadio toggle (both local)

### **Description**

Specifies what items are deleted.

- both means both local and inactive items are deleted from the Design Management system (the default)
- local means only the local items are deleted

### **GUI Equivalent**

Command Edit – Delete

Form Field Options

#### **Examples**

The following example returns the current value for the environment variable. The return value of  $(t \ nil)$  indicates that both option is enabled and local is disabled:

```
envGetVal("cdsLibManager.delete" "localRadio")
(t nil)
```

The example below enables local and disables both:

```
envSetVal("cdsLibManager.delete" "localRadio" 'toggle '(nil t))
```

### Related Topics

**Delete Cells Form** 

**Delete Libraries Form** 

Library Manager Environment Variables

# regExpOn

```
cdsLibManager.delete regExpOn boolean { t | nil }
```

# **Description**

Specifies whether regular expressions are enabled for delete selection.

The default is nil.

## **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.delete" "regExpOn")
envSetVal("cdsLibManager.delete" "regExpOn" 'boolean t)
```

### **Related Topics**

Library Manager Environment Variables

# overrideRadio

cdsLibManager.deleteTag overrideRadio toggle (no yes yesAll cancel)

#### **Description**

Specifies the delete action when a library does not have the required cdsinfo.tag file and cdsLibManager.delete libCheckOn is set to t. The choices are:

- no means skip the specified library (the default)
- yes means delete the specified library
- yesAll means delete all the libraries
- cancel means cancel the delete operation

#### **GUI Equivalent**

None

#### **Examples**

The following example returns the current value for the environment variable. The return value of  $(t \ nil \ nil \ nil)$  indicates that the no option is enabled and the other three options are disabled:

```
envGetVal("cdsLibManager.deleteTag" "overrideRadio")
(t nil nil nil)
```

The example below enables yes and yesAll and disables no and cancel:

```
envSetVal("cdsLibManager.deleteTag" "overrideRadio" 'toggle '(nil t t nil))
```

### Related Topics

Library Manager Environment Variables

# **localRadio**

cdsLibManager.deleteView localRadio toggle (both local)

### **Description**

Specifies what items are deleted.

- both means both local and inactive items are deleted from the Design Management system (the default)
- local means only the local items are deleted

### **GUI Equivalent**

Command Edit – Delete Cell Views

Form Field Options

### **Examples**

The following example returns the current value for the environment variable. The return value of  $(t \ nil)$  indicates that both option is enabled and local is disabled:

```
envGetVal("cdsLibManager.deleteView" "localRadio")
(t nil)
```

The example below enables local and disables both:

```
envSetVal("cdsLibManager.deleteView" "localRadio" 'toggle '(nil t))
```

### Related Topics

**Delete Cell Views Form** 

Library Manager Environment Variables

# viewFilterList

cdsLibManager.deleteView viewFilterList string "t\_viewFilterList"

#### **Description**

Specifies view names to delete.

```
The default is 'abstract', 'ahdl', 'autoLayout', 'behavior', 'cdsSpice', 'cmos_sch', 'cmos.sch', 'functional', 'hpmns', 'hspiceS', 'layout', 'libra', 'mharm', 'schematic', 'spice', 'spectreS', 'symbol', 'system', 'verilog', 'verilogNetlist'.
```

You can specify any number of additional views using the <code>viewFilterList</code> variable with sequential numeric suffixes:

```
cdsLibManager.deleteView viewFilterList1 string ""
cdsLibManager.deleteView viewFilterList2 string ""
```

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.deleteView" "viewFilterList")
envSetVal("cdsLibManager.deleteView" "viewFilterList" 'string "'symbol', 'system',
'verilog', 'verilogNetlist'")
```

### Related Topics

Library Manager Environment Variables

# enableDmQuery

cdsLibManager.displayOptions enableDmQuery boolean { t | nil }

### **Description**

Enables the querying and retrieval of DM data so that state information can be shown for DM libraries. This information includes any data for the DM system if the extra columns are available.

The default is t.

### **GUI Equivalent**

Command View – Display Options

Form Field State Analysis – Enable query of Design Management

states

### **Examples**

```
envGetVal("cdsLibManager.displayOptions" "enableDmQuery")
envSetVal("cdsLibManager.displayOptions" "enableDmQuery" 'boolean nil)
```

### Related Topics

Library Manager Environment Variables

# showExtendedStates

cdsLibManager.displayOptions showExtendedStates boolean { t | nil }

# **Description**

Allows DM tables to be shown in any viewing mode.

The default is t.

## **GUI Equivalent**

Command View – Display Options

Form Field For Objects – View – Show extended states

### **Examples**

```
envGetVal("cdsLibManager.displayOptions" "showExtendedStates")
envSetVal("cdsLibManager.displayOptions" "showExtendedStates" 'boolean nil)
```

# **Related Topics**

# Library Manager Environment Variables

# autoModuleNameUpdate

ahdl autoModuleNameUpdate boolean { t | nil }

#### **Description**

Updates the corresponding module name in the HDL file automatically while copying or renaming a text cellview.

The default is t. If this variable is set to nil, then after each copy or rename operation the application asks whether you want to update the module name automatically or not.

For example, if you rename functional text cellview myVerilogCell, with the module by the same name, to myNewVerilogCell, the module name updates in the Verilog file automatically.

### **GUI Equivalent**

None

## **Examples**

```
envGetVal("ahdl" "autoModuleNameUpdate")
envSetVal("ahdl" "autoModuleNameUpdate" 'boolean nil)
```

### Related Topics

#### **Text Cellviews**

# Library Manager Environment Variables

# matchModuleNameCellName

ahdl autoModuleNameUpdate string "status"

# **Description**

Specifies if there is a mismatch between the cell name and module name.

The default value is ignore.

# **GUI Equivalent**

None

### **Example**

```
envGetVal("ahdl" "matchModuleNameCellName")
envSetVal("ahdl" "matchModuleNameCellName" 'string "error")
```

# **Related Topics**

**Text Cellviews** 

Library Manager Environment Variables

# sortCellNameCompareFn

designEditor.fileSpec sortCellNameCompareFn string "alphanumeric\_order"

### **Description**

Displays the cells in the *Cell* list box of the Open File form using the same sort of alphanumeric order as used in Library Manager.

The default value is alphalessp.

# **GUI Equivalent**

None

### **Example**

```
envGetVal("designEditor.fileSpec" "sortCellNameCompareFn")
envSetVal("designEditor.fileSpec" "sortCellNameCompareFn" 'string
"naturalStrLessp")
```

### Related Topics

Opening the Library Browser Form

# Library Manager Environment Variables

# **libSelectCellViewCombineMode**

cdsLibManager.filter libSelectCellViewCombineMode cyclic { "never" | "always"}

#### **Description**

Controls the cell filter mode of Library Browser form.

The default is never.

You can choose to make the cell filtering faster by preventing the view filter from being applied to it or you can choose to make it more accurate but slightly slower by letting the view filter affect the list of cells displayed.

Note: If you access the Library Browser form from Virtuoso, place your .cdsenv in your \$HOME directory; unlike the Library Manager, Virtuoso does not look for the .cdsenv file in your current working directory.

### **Arguments**

never	Applies cell filter before the list of cells is displayed when a library in the Library Browser form is selected, and the view filter gets ignored, which means that even cells that do not contain any views matching the view filter are displayed. As a result, the list of cells is displayed much faster. "never" is the default setting.
always	Applies both the cell filter and view filter before the list of cells is displayed when a library in the Library Browser form is selected, only cells containing views that match the view filter are displayed. With this setting, the result takes longer to display the list of cells in the library.

#### **GUI Equivalent**

None

#### **Example**

```
envGetVal("cdsLibManager.filter" "libSelectCellViewCombineMode")
envSetVal("cdsLibManager.filter" "libSelectCellViewCombineMode" 'cyclic "always")
```

Library Manager Environment Variables

# Related Topics

**Library Browser Form** 

Library Manager Environment Variables

# skipLibsText

cdsLibManager.copyWizard skipLibsText string "lib1 lib2"

### **Description**

Specifies names of libraries to skip during the copy operation, when skipLibsOn is t. The default is to use the generated skip list, "\*". The generated skip list consists of all defined libraries in cds.lib except the one containing the source item.

If exceeding the .cdsenv file line length limit becomes a problem, you can specify additional skiplibsText variables with sequential numeric suffixes as follows:

```
cdsLibManager.copy skipLibsText1 string ""
cdsLibManager.copy skipLibsText2 string ""
```

### **GUI Equivalent**

None

#### **Example**

```
envGetVal("cdsLibManager.copyWizard" "skipLibsText")
envSetVal("cdsLibManager.copyWizard" "skipLibsText" 'string "cdsDefTechLib")
```

#### Related Topics

Library Manager Environment Variables

# dmSyncDelay

cdsLibManager.displayOptions dmSyncDelay float delay\_period\_seconds

# **Description**

Specifies the number of seconds to set for the delay period, when the feature is enabled.

The default is 2.5.

## **GUI Equivalent**

None

#### **Example**

```
envGetVal("cdsLibManager.displayOptions" "dmSyncDelay")
envSetVal("cdsLibManager.displayOptions" "dmSyncDelay" 'float 1.0)
```

## **Related Topics**

Library Manager Environment Variables

# enableDmSyncDelay

cdsLibManager.displayOptions enableDmSyncDelay boolean { t | nil }

# **Description**

Allows you to enable or disable the DM Sync feature.

The default is nil.

## **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.displayOptions" "enableDmSyncDelay")
envSetVal("cdsLibManager.displayOptions" "enableDmSyncDelay" 'boolean t)
```

### **Related Topics**

Library Manager Environment Variables

# showHiddenLibraries

cdsLibManager.displayOptions showHiddenLibraries boolean { t | nil }

# **Description**

Specifies whether libraries that are hidden because of a display attribute set on them should be hidden or displayed.

The default is nil.

# **GUI Equivalent**

Command View – Display Options
Form Field Show hidden libraries

### **Examples**

```
envGetVal("cdsLibManager.displayOptions" "showHiddenLibraries")
envSetVal("cdsLibManager.displayOptions" "showHiddenLibraries" 'boolean t)
```

### **Related Topics**

Library Manager Environment Variables

# showLibraryColors

cdsLibManager.displayOptions showLibraryColors boolean { t | nil }

# **Description**

Specifies whether libraries should be displayed in custom colors.

The default is t.

## **GUI Equivalent**

Command View – Display Options

Form Field Show library colors

### **Examples**

```
envGetVal("cdsLibManager.displayOptions" "showLibraryColors")
envSetVal("cdsLibManager.displayOptions" "showLibraryColors" 'boolean nil)
```

### **Related Topics**

# Library Manager Environment Variables

# showLibraryCustomIcons

cdsLibManager.displayOptions showLibraryCustomIcons boolean { t | nil }

# **Description**

Specifies whether custom library icons should be displayed next to libraries in both the Tree view and Lists view.

The default is t.

# **GUI Equivalent**

Command View – Display Options

Form Field Show custom library

### **Examples**

```
envGetVal("cdsLibManager.displayOptions" "showLibraryCustomIcons")
envSetVal("cdsLibManager.displayOptions" "showLibraryCustomIcons" 'boolean nil)
```

### **Related Topics**

Library Manager Environment Variables

# showListViewIcons

cdsLibManager.displayOptions showListViewIcons boolean { t | nil }

### **Description**

Specifies whether custom library icons should be displayed next to libraries in the Lists view.

The default is t.

### **GUI Equivalent**

Command View – Display Options

Form Field Show Lists view library icons

### **Examples**

```
envGetVal("cdsLibManager.displayOptions" "showListViewIcons")
envSetVal("cdsLibManager.displayOptions" "showListViewIcons" 'boolean nil)
```

### Related Topics

Library Manager Environment Variables

# cellFilter

cdsLibManager.filter cellFilter string "default\_string"

# **Description**

Specifies the default cell filter string. The default is " ".

# **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.filter" "cellFilter")
envSetVal("cdsLibManager.filter" "cellFilter" 'string "bsource")
```

### **Related Topics**

Library Manager Environment Variables

# viewFilter

cdsLibManager.filter viewFilter string "default\_string"

# **Description**

Specifies the default view filter string. The default is " ".

# **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.filter" "viewFilter")
envSetVal("cdsLibManager.filter" "viewFilter" 'string "symbol")
```

### **Related Topics**

Library Manager Environment Variables

# addHostID

```
cdsLibManager.log addHostID boolean { t | nil }
```

# **Description**

Specifies whether the host name is part of the log file name. The default is nil.

### The log file name format is

```
baseName[.userID][.hostName][.PID][.sequenceNumber].log.
```

# **GUI Equivalent**

None

# **Examples**

```
envGetVal("cdsLibManager.log" "addHostID")
envSetVal("cdsLibManager.log" "addHostID" 'boolean t)
```

## Related Topics

Library Manager Environment Variables

# addProcID

```
cdsLibManager.log addProcID boolean { t | nil }
```

# **Description**

Specifies whether the process ID is part of the log file name. The default is nil.

#### The log file name format is

```
baseName[.userID][.hostName][.PID][.sequenceNumber].log.
```

# **GUI Equivalent**

None

# **Examples**

```
envGetVal("cdsLibManager.log" "addProcID")
envSetVal("cdsLibManager.log" "addProcID" 'boolean t)
```

### Related Topics

Library Manager Environment Variables

# addSequence

```
cdsLibManager.log addSequence boolean { t | nil }
```

# **Description**

Specifies whether a sequence number is part of the log file name.

The default is nil.

### The log file name format is

```
baseName[.userID][.hostName][.PID][.sequenceNumber].log.
```

### **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.log" "addSequence")
envSetVal("cdsLibManager.log" "addSequence" 'boolean t)
```

### **Related Topics**

Library Manager Environment Variables

# addUserID

```
cdsLibManager.log addUserID boolean { t | nil }
```

# **Description**

Specifies whether the user ID is part of the log file name. The default is nil.

```
The log file name format is
```

```
baseName[.userID][.hostName][.PID][.sequenceNumber].log .
```

# **GUI Equivalent**

None

# **Examples**

```
envGetVal("cdsLibManager.log" "addUserID")
envSetVal("cdsLibManager.log" "addUserID" 'boolean t)
```

## Related Topics

Library Manager Environment Variables

# baseName

cdsLibManager.log baseName string "baseName"

# **Description**

Specifies the base name of the Library Manager log file. The program appends the location you specify to the CDS\_LOG\_PATH location.

The default is libManager.

# **GUI Equivalent**

None

# **Examples**

```
envGetVal("cdsLibManager.log" "baseName")
envSetVal("cdsLibManager.log" "baseName" 'string "/mylibs/libManager")
```

### Related Topics

Library Manager Environment Variables

# categoryText

cdsLibManager.main categoryText string "default\_category\_name"

# **Description**

Specifies a default category name for the main Library Manager window.

The default is " ".

# **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.main" "categoryText")
envSetVal("cdsLibManager.main" "categoryText" 'string "Pins")
```

### **Related Topics**

Library Manager Environment Variables

# cellLevelText

cdsLibManager.main cellLevelText string "default\_cell\_name"

# **Description**

Specifies a default cell name for the main Library Manager window.

The default is "".

## **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.main" "cellLevelText")
envSetVal("cdsLibManager.main" "cellLevelText" 'string "ccvs")
```

### **Related Topics**

Library Manager Environment Variables

# dblClickEditCellView

cdsLibManager.main dblClickEditCellView boolean { t | nil }

### **Description**

Specifies whether the double-click action on a view name in the main Library Manager window opens a cellview for editing. If set to nil, the double-click action on a view name in the main Library Manager window opens a cellview in the Read-only mode.

The default is t.

### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.main" "dblClickEditCellView")
envSetVal("cdsLibManager.main" "dblClickEditCellView" 'boolean nil)
```

### **Related Topics**

Library Manager Environment Variables

# **libraryText**

cdsLibManager.main libraryText string "default\_library\_name"

# **Description**

Specifies a default library name for the main Library Manager window.

The default is "".

## **GUI Equivalent**

None

### **Examples**

```
envGetVal("cdsLibManager.main" "libraryText")
envSetVal("cdsLibManager.main" "libraryText" 'string "tutorial")
```

## **Related Topics**

#### Library Manager Environment Variables

## showCategoriesOn

cdsLibManager.main showCategoriesOn boolean { t | nil }

#### **Description**

Specifies whether categories appear in Lists mode.

The default is nil.

#### **GUI Equivalent**

Command Library Manager

Form Field Show Categories

#### **Examples**

```
envGetVal("cdsLibManager.main" "showCategoriesOn")
envSetVal("cdsLibManager.main" "showCategoriesOn" 'boolean t)
```

#### **Related Topics**

Library Manager Form

Library Manager Environment Variables

## showFilesOn

cdsLibManager.main showFilesOn boolean { t | nil }

#### **Description**

Specifies whether files appear in Lists mode.

The default is nil.

#### **GUI Equivalent**

Command Library Manager

Form Field Show Files

#### **Examples**

```
envGetVal("cdsLibManager.main" "showFilesOn")
envSetVal("cdsLibManager.main" "showFilesOn" 'boolean t)
```

#### **Related Topics**

**Library Manager Form** 

#### Library Manager Environment Variables

## showNonVirtuosoViewtypes

cdsLibManager.main showNonVirtuosoViewtypes boolean { t | nil }

#### **Description**

Displays non-Virtuoso view types for the selected cell.

The default is t.

#### **GUI Equivalent**

Command File – Open – Browse – Library Browser

Form Field Show Non-Virtuoso View Types

#### **Examples**

```
envGetVal("cdsLibManager.main" "showNonVirtuosoViewtypes")
envSetVal("cdsLibManager.main" "showNonVirtuosoViewtypes" 'boolean nil)
```

#### **Related Topics**

**Library Browser Form** 

Opening the Library Browser Form

Library Manager Environment Variables

### viewLevelText

cdsLibManager.main viewLevelText string "view\_name"

#### **Description**

Specifies a default view name for the main Library Manager windows.

The default is "".

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.main" "viewLevelText")
envSetVal("cdsLibManager.main" "viewLevelText" 'string "tutorial")
```

#### **Related Topics**

**Library Manager Form** 

Library Manager Environment Variables

### dmRadio

cdsLibManager.newLib dmRadio toggle (default noDM)

#### **Description**

Specifies whether to use design management for a newly created library.

- default means use design management for the new library (the default)
- noDM means do not use design management for the new library

#### **GUI Equivalent**

Command File – New Library

Form Field Design Manager

#### **Examples**

The following example returns the current value for the environment variable. The return value of  $(t \ nil)$  indicates that the default option is enabled and noDM is disabled:

```
envGetVal("cdsLibManager.newLib" "dmRadio")
(t nil)
```

The example below enables noDM and disables default:

```
envSetVal("cdsLibManager.newLib" "dmRadio" 'toggle '(nil t))
```

#### Related Topics

**New Library Form** 

Library Manager Environment Variables

## pathText

cdsLibManager.newLib pathText string "path\_string"

#### **Description**

Specifies a default path string for creating a new library.

The default is "".

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.newLib" "pathText")
envSetVal("cdsLibManager.newLib" "pathText" 'string "mypath.txt")
```

#### **Related Topics**

New Library Form

Library Manager Environment Variables

### windowBehavior

```
cdsLibManager.open windowBehavior cyclic { "newWindow" | "raiseExisting" }
```

#### **Description**

Specifies whether an application always opens a cellview in a new window or brings up a window that already has the cellview open.

The default value is newWindow. In this case, the application opens the cellview in a new window.

When the value is raiseExisting, the application brings up the window that already has the cellview open, with the cellview tab as the active one.

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.open" "windowBehavior")
envSetVal("cdsLibManager.open" "windowBehavior" 'cyclic "raiseExisting")
```

#### Related Topics

Opening a Cellview

Library Manager Environment Variables

### forceEnv

```
cdsLibManager.option forceEnv boolean { t | nil }
```

#### **Description**

Specifies whether dialogs use .cdsenv settings instead of programmed default values.

The default is nil.

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.option" "forceEnv")
envSetVal("cdsLibManager.option" "forceEnv" 'boolean t)
```

#### **Related Topics**

Library Manager Environment Variables

#### useDMfilter

```
cdsLibManager.option useDMfilter boolean { t | nil }
```

#### **Description**

Specifies whether the Design Manager menu commands are sensitive to the current state of the selected items in the design management system.

The default is t.

If you set the design management state check to nil, the Design Manager menu commands are always active as long as the library is managed by a working design management system). Turning off the state check might help if your Design Manager menus and commands are slow to respond because your design management files are located across a slow network, or state queries are made using a slow network transport.

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.option" "useDMfilter")
envSetVal("cdsLibManager.option" "useDMfilter" 'boolean nil)
```

#### Related Topics

Library Manager Environment Variables

#### useFastDM

```
cdsLibManager.option useFastDM boolean { t | nil }
```

#### **Description**

Specifies whether to use fast design management querying. The default is t.

Fast design management (DM) querying involves checking a master.tag file instead of the master file. It is typically much faster to query the much smaller, master.tag file of a cellview.

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.option" "useFastDM")
envSetVal("cdsLibManager.option" "useFastDM" 'boolean nil)
```

#### Related Topics

Library Manager Environment Variables

## updateOn

```
cdsLibManager.rename updateOn boolean { t | nil }
```

#### **Description**

Specifies whether to update instances when renaming an item.

The default is t.

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.rename" "updateOn")
envSetVal("cdsLibManager.rename" "updateOn" 'boolean nil)
```

#### **Related Topics**

Library Manager Environment Variables

## refreshSessionOn

cdsLibManager.renameRefLib refreshSessionOn boolean { t | nil }

#### **Description**

Specifies whether to refresh the session after renaming a reference library.

The default is t.

#### **GUI Equivalent**

Command Edit – Rename Reference Library

Form Field Refresh Session

#### **Examples**

```
envGetVal("cdsLibManager.renameRefLib" "refreshSessionOn")
envSetVal("cdsLibManager.renameRefLib" "refreshSessionOn" 'boolean nil)
```

#### **Related Topics**

Rename Reference Library Form

Library Manager Environment Variables

### useNameOn

cdsLibManager.submit useNameOn boolean { t | nil }

#### **Description**

Specifies whether the submit request name is enabled.

The default is nil.

#### **GUI Equivalent**

Command Design Manager – Submit

Form Field Submit Options – Request Name

#### **Examples**

```
envGetVal("cdsLibManager.submit" "useNameOn")
envSetVal("cdsLibManager.submit" "useNameOn" 'boolean t)
```

#### **Related Topics**

Library Manager Environment Variables

### useNameText

cdsLibManager.submit useNameText string "default\_request\_name"

#### **Description**

Specifies a default submit request name. The default is " ".

#### **GUI Equivalent**

Command Design Manager – Submit

Form Field Submit Options – Request Name

#### **Examples**

```
envGetVal("cdsLibManager.submit" "useNameText")
envSetVal("cdsLibManager.submit" "useNameText" 'string "myfirstrequest")
```

#### **Related Topics**

Library Manager Environment Variables

## useOptionText

cdsLibManager.submit useOptionText string "submit\_options"

#### **Description**

Specifies submit options. The default is "".

#### **GUI Equivalent**

Command Design Manager – Submit

Form Field Submit Options – Use Options

#### **Examples**

```
envGetVal("cdsLibManager.submit" "useOptionText")
envSetVal("cdsLibManager.submit" "useOptionText" 'string "myOptionsFile.txt")
```

#### **Related Topics**

#### Library Manager Environment Variables

## useOptionsOn

cdsLibManager.submit useOptionsOn boolean { t | nil }

#### **Description**

Specifies whether submit options are enabled. The default is nil.

#### **GUI Equivalent**

Command Design Manager – Submit

Form Field Submit Options – Use Options

#### **Examples**

```
envGetVal("cdsLibManager.submit" "useOptionsOn")
envSetVal("cdsLibManager.submit" "useOptionsOn" 'boolean t)
```

#### **Related Topics**

Library Manager Environment Variables

### useNameOn

```
cdsLibManager.update useNameOn boolean { t | nil }
```

#### **Description**

Specifies whether the update from name is enabled.

The default is nil.

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.update" "useNameOn")
envSetVal("cdsLibManager.update" "useNameOn" 'boolean t)
```

#### **Related Topics**

Library Manager Environment Variables

## useOptionsOn

cdsLibManager.update useOptionsOn boolean { t | nil }

#### **Description**

Specifies whether update options are enabled.

The default is nil.

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("cdsLibManager.update" "useOptionsOn")
envSetVal("cdsLibManager.update" "useOptionsOn" 'boolean t)
```

#### **Related Topics**

Library Manager Environment Variables

## compressionOn

cdsLibManager.newLib compressionOn boolean { t | nil }

#### **Description**

Specifies whether the Compression enabled check box in the New Library form should remain selected or deselected by default.

The default is nil, which means that the check box is deselected by default.

#### **GUI Equivalent**

Command Library Manager – File

Form Field New Library – Compression enabled

#### **Examples**

```
envGetVal("cdsLibManager.newLib" "compressionOn")
envSetVal("cdsLibManager.newLib" "compressionOn" 'boolean t)
```

#### **Related Topics**

**New Library Form** 

Library Manager Environment Variables

#### enable

```
ui.thumbnails enable boolean { t | nil }
```

#### **Description**

Generates thumbnails. The default is t.

If enable is set to nil, thumbnails does not get displayed or generated. This variable also overrides the display and generate variable settings

#### **GUI Equivalent**

None

#### **Example**

```
envGetVal("ui.thumbnails" "enable")
envSetVal("ui.thumbnails" "enable" 'boolean nil)
```

#### Related Topics

Library Manager Environment Variables

## display

```
ui.thumbnails display boolean { t | nil }
```

#### **Description**

Disables thumbnail display in both the Library Manager and *Open* forms.

The default is t.

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("ui.thumbnails" "display")
envSetVal("ui.thumbnails" "display" 'boolean nil)
```

#### **Related Topics**

Library Manager Environment Variables

## generate

```
ui.thumbnails generate boolean { t | nil }
```

#### **Description**

Disables auto-generation of thumbnails. The default is t.

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("ui.thumbnails" "generate")
envSetVal("ui.thumbnails" "generate" 'boolean nil)
```

#### **Related Topics**

Library Manager Environment Variables

#### verbose

```
ui.thumbnails verbose boolean { t | nil }
```

#### **Description**

Turns on verbose mode which prints the location of a saved file when a thumbnail is saved. The default is  $\pm$ .

#### **GUI Equivalent**

None

#### **Examples**

```
envGetVal("ui.thumbnails" "verbose")
envSetVal("ui.thumbnails" "verbose" 'boolean nil)
```

#### **Related Topics**

# Cadence Library Manager User Guide Library Manager Environment Variables

## **Library Manager Forms**

- Access Permission Form
- Add Property Form
- Attach Library to Technology Library Form
- Cancel Check Out Form
- Cell Property Editor Form
- Change Library References Form
- Check In Form
- Check Out Form
- Choose Environment File To Load Form
- Copy Cell File Form
- Copy Cell Form
- Copy Cellview Version Form
- Copy Library File Form
- Copy Library Form
- Copy Preferences Form
- Copy View Form
- Copy Wizard Form (Simple Copy)
- Copy Wizard Form (Hierarchical)
- Copy Wizard Form (Exact Hierarchy)
- Copy Wizard Form (By View)
- Copy Wizard Form (By Configuration)

Library Manager Forms

- Delete By View Form
- Delete Cells Form
- Delete Cell Views Form
- Delete Libraries Form
- Delete Library Views Form
- Display Options Form
- Display Settings Form
- DM File Status Form
- New Category Form
- Library Browser Form
- Library Manager Form
- Library Property Editor Form
- Load Technology File Form
- Modify 'propertyName' Form
- New Category Form
- New File Form
- New Library Form
- Reference Existing Technology Libraries Form
- Rename Cell Form
- Rename File Form
- Rename Library Form
- Rename Reference Library Form
- Rename View Form
- Save Library Manager Defaults Form
- Select an icon Form
- Submit Form
- Technology File for New Library Form

Library Manager Forms

- Version Information Form
- View Property Editor Form
- View Property Editor Form

Library Manager Forms

## **Access Permission Form**

Use the Access Permission Form to check the permissions given to the owner, group, and others.

Field	Description
Library functional	This section displays the information of the file owner and the group.
Owner	Displays the user ID of the file owner.
Group	Displays the name of the working group to which the owner is assigned by the project leader or system administrator.
	This section displays the read, write, and execute permission given to the following categories:
Owner	Displays the access permissions given to the file owner.
	By default, the owner has all the access permissions, and the owner must have write permission before the other two categories can have write permission.
Group	Displays the access permissions given to the working group of the owner.
Others	Displays the access permissions given to anyone who has access to the files.
Apply	Sets the values you selected in the <i>Access Permission</i> group box.

**Note:** If the Group or Others category have the write or execute permission then by default they must also have read permission.

#### **Related Topics**

Library Display Settings

Viewing and Changing File Permissions

Library Manager Forms

## **Add Property Form**

Use the Add Property Form to modify the properties of the cellview.

Field	Description
Name	Lets you assign a name to the property.
Туре	Lets you choose a property type. Depending on the type you choose, the remaining fields change to prompt you for values for the property.
Value	Displays the default value for the property.
Minimum Value	Displays the minimum value for the property.
Maximum Value	Displays the maximum value for the property.
	Used for <i>int</i> , <i>float</i> , and time property types. The View Property Editor form or the Cell Property Editor form displays these minimum and maximum values next to the property name.
Defaults	Clears all values in the fields and sets <i>Type</i> to <i>int</i> .

#### Related Topics

Adding Properties to a Library, Cell, or View

Library Manager Forms

## **Attach Library to Technology Library Form**

Use this form to attach new library to the available technology libraries

Field	Description
New Library	Displays the name of the new library to be created
Technology Library	Lists the available technology libraries that can be chosen to be attached to the new library.

#### Related Topics

Attaching a New Library to an Existing Technology Library

Library Manager Forms

#### **Cancel Check Out Form**

Use this to cancel a check out operation for a library, cell, view, or file.

**Note:** If another user in your workarea has locked a file, you cannot cancel the check-out. As a result, the Cancel Checkout form does not get displayed.

If you locked a file, the software prompts you to confirm that you do not want to save any changes.

When you cancel a check-out operation, the software restores your workarea and the project design management repository to the states they were in prior to the check-out. You can cancel a check-out operation if you have not made any changes to the checked-out files or do not want to save any changes you made to checked-out files.

Cadence recommends that you do not cancel check-out for design data files that are locked. A locked design data file is one that someone else is currently editing. If you try to cancel check-out for a locked file, an error message gets displayed. To resolve the error, close design windows or change the files to read-only mode before you cancel check-out.

The software cancels the check-out operation for each selected file. Files that are not selected remain checked out.

Field	Description
Files to Cancel Check Out	This section selects the files in which you want to cancel the check out operation.
Refresh Status	Refreshes the current status of the items available in the form.
Show	Selects the library files need to be displayed.
Select All	Adds all files to the selection set.
Deselect All	Remove all files from the selection set.
	For individual files, deselect the check box to the left of the file name for each file you want to remove from the selection set for canceling check-out.
Invert All	Toggles each checked box to the opposite checked setting.
Cancel Check Out Options	This section displays the Cancel Checkout form format same as the Check In form and the Cancel Out form.

Library Manager Forms

-	
Field	Description
	However, the ability to switch command tabs, in the respective forms, is restricted to the command action that is currently applicable, as the legal file sets are mutually exclusive.
	The only exception is in relation to the <i>Cancel Checkout</i> and <i>Check In</i> tabs, when using the <i>Check Out</i> command, as either of these actions could be applied to checked out files.
Use Options	Enters any check-out cancellation options specific to the particular design management system you want to use.

#### Related Topics

Selecting Items for Copying in the Copy Wizard

Files in Read-Only Mode

## **Cell Property Editor Form**

Use this form to edit the properties of the selected cellview.

Fields	Description
Cell	This section displays the information of the selected cellview.
Name	Displays the cell name of the selected cellview.
Owner	Displays the user ID of the owner of the selected cellview.
Group	Displays the group of the owner of the selected cellview.
Last Modify	Displays the date and time of the last modification to the cellview.
Read Path	Displays the path to a read-only version of the cellview.
Write Path	Displays the path to a writable version of the cellview.
UNIX Permissions Mode	This section displays the read/write/execute permissions for various authorities. It is not allowed to change any of the values in the UNIX Permissions Mode group box.
Owner	Displays the read/write/execute permissions for the owner of the cellview.
Group	Displays the read/write/execute permissions for the group of the owner of the cellview.
Other	Displays the read/write/execute permissions for anyone who has access to the cellview.
Properties	Lists all the properties available in the specified cell at the bottom of the Cell Property Editor form and you can edit them on this form.
	If the specified cell has no properties then <i>No Property Attached</i> text is displayed.
Add	Opens the Add Property form.
Delete	Removes the selected property.
Modify	Opens the Modify propertyName form.

#### Related Topics

Modify 'propertyName' Form

**Library Property Editor Form** 

# Cadence Library Manager User Guide Library Manager Forms

View Property Editor Form

## **Change Library References Form**

Use this form to change the name of the reference library.

Fields	Description
In Library	Displays the name of the design library that uses a reference library whose name you want to change.
From Library	Displays the name of the current reference library/libraries.
To Library	Displays the name of the new reference library.
Show Selected Libraries Only	Shows only the selected libraries in <i>In Library</i> , <i>From Library</i> , and <i>To Library</i> list box.
Add	Displays all the selected libraries in the <i>In Library</i> , <i>From Library</i> , and <i>To Library</i> list box in the <i>Change List</i> section.
Move Up	Moves the entry up the order in the Change List section.
Move Down	Moves the entry down the order in the Change List section.
Delete	Deletes the entry from the Change List section.

#### Related Topics

**Changing Library Reference** 

Library Manager Forms

#### **Check In Form**

Use this form to check in a design.

Both the check-in and check-out processes control access to the design data files that design team members store in a project design management repository, so that:

- When you check out a file, the software copies the file from the project design management repository to your current workarea.
- When you check in a file, the software copies the file, as a completed version, from your workarea to the project design management repository and assigns the next version number.

**Note:** You can optimize the performance of check-in operations by setting the DD\_GDM\_OPTIMIZE environment variable to yes before you start Virtuoso.

Cadence recommends that you do not check in design data files that are locked. A locked design data file is one that someone else is currently editing. If you try to check in a locked file, an error message gets displayed. To resolve the error, close design windows or change the files to read-only mode before you check them in.

Field	Description
Files to Check In	This section selects the files you want to check in.
Refresh Status	Refreshes the current status of items (view, files, and so on) saving you from having to reload the form.
	<b>Note:</b> The use of the <i>Show</i> drop-down, to change filtering display, does not automatically refresh status states. The <i>Refresh Status</i> applies any updates without impacting the current filter setting, or check box status.

# Cadence Library Manager User Guide Library Manager Forms

Field	Description
Show	A filter pull-down which can change the selection set to display one of the following as current status:
	Checked Out changes the selection set to list all files that are currently checked out (and by who).
	<ul> <li>Unmanaged changes the selection set to list all files that are not in the design management workarea</li> </ul>
	Checked In Writable changes the selection set to list all files that have been checked in and are writable
	■ All restores the original selection set: all files
	The filters options that are enabled is restricted dependent upon the Check command that is current, mirroring the behavior described for the <i>Check In</i> tab below.
	<b>Note:</b> Click <i>Deselect All</i> to deselect all currently selected files.
Select	Adds files to the selection set.
Deselect All	Remove all files from the selection set.
Invert All	Toggles each checked box to the opposite checked setting.
Comment	This section lets you describe the check-in.
	When you add the details, such as version information, about a library or cell check-in, the software attaches a copy of the comment to every cellview in the library.
	You cannot edit or delete the comment after you close the Check In form.
Check In Options	This section displays various check-in options.

Library Manager Forms

Field	Description
	When the <i>Check In</i> command is directly invoked, the Check In form format that is displayed is the same as that for the Check Out form and the Cancel Checkout form. However, the ability to switch command tabs, in the respective forms, is restricted to the command action that is currently applicable, as the legal file sets are mutually exclusive.
	The only exception is in relation to the <i>Cancel Check Out</i> and <i>Check In</i> tabs, when using the <i>Check Out</i> command, as either of these actions could be applied to checked out files.
	The Check In command also handles new, or unmanaged files, but these file sets would be inappropriate in the context of, for example, a Cancel command.
Use Options	Lets you select the <i>Use Options</i> check box and type any check-in options specific to the particular design management system you are using.
Manage Set	This section reviews and manage the selected files.
Reinitialize	Retrieves the file set that was extracted from the origina library manager design management command. All rows being selected.
Refine	Removes any unchecked rows.
OK	Performs the check-in.
	For certain DM systems, an e-mail message is also sent to notify team members that a new file is checked in.
	Note: When you check in a library for the first time, you must add the library name to the project.lib (cds.lib may also be used) file before team members can share the data.

### Related Topics

Selecting Items for Copying in the Copy Wizard

Controlling Automatic Checkin Behavior

# Cadence Library Manager User Guide Library Manager Forms

Auto Checkin Environment Variable Settings

Files in Read-Only Mode

Library Manager Forms

## **Check Out Form**

Use this form to check out a design.

Field	Description
Files to Check In	This section selects the files you want to check in.
Refresh Status	Refreshes the current status of items (view, files, and so on), saving you from having to reload the form.
	<b>Note:</b> The use of the <i>Show</i> drop-down, disabled in the Check Out form, to change filtering display, does not automatically refresh status states. The <i>Refresh Status</i> applies any updates without impacting the current filter setting, or check box status.
Show	A filter pull-down, which is disabled in the Check Out form, as there are no other filter states which can be applied to re-filter and create a different, valid, set.
Select All	Adds all files to the selection set.
	For more information about selecting and deselecting items, see <u>Selecting Items for Copying in the Copy Wizard</u> .
Deselect All	Remove all files from the selection set.
	<b>Note:</b> To remove a single file from the selection set for check-out, deselect the check box to the left of the file name.
Invert All	Toggles each checked box to the opposite checked setting.
Check Out Options	This section displays all the check-out options.

Library Manager Forms

Field	Description
	When the <i>Check Out</i> command is directly invoked, the Check Out form format that is displayed, is the same as that for the Check In form and the Cancel Checkout form. However, the ability to switch command tabs, in the respective forms, is restricted to the command action that is currently applicable, as the legal file sets are mutually exclusive.
	The only exception is in relation to the <i>Cancel Checkout</i> and <i>Check In</i> tabs, when using the <i>Check Out</i> command, as either of these actions could be applied to checked out files.
	Although all DM systems must return the DM checkout lock, some can perform the checkout again. Additionally, most, if not all, DM systems returns the checked-in version to the workarea. Some DM systems may restore the exact version that you had previously, while others may only return the latest version. That is, some DM systems tracks the older version of workarea before the checkout in order to restore it.
Use Options	Optionally, select the <i>Use Options</i> check box and type any check out options specific to the particular design management system that you want to use.

#### Related Topics

Cancel Check Out Form

Controlling Automatic Checkout Behavior

Auto Checkout Environment Variable Settings

## **Choose Environment File To Load Form**

Use this form to load an environment file.

Field	Description
Look in	Shows the directory you are searching for an environment file.
File name	Displays the name of the environment file you want to load.
Files of type	Lets you choose one of the following file types to show in the list of files:
	■ Cds Environment (*.cdsenv)
	■ All Files (*)

### Related Topics

Library Manager Environment Variables

Library Manager Forms

# **Copy Cell File Form**

Use this form to copy a cell file from one library to another library.

Field	Description
From	This section displays the information of the cell file you want to copy.
Library	Displays the name of the library containing the cell file you want to copy. Defaults to the selected library.
Cell	Displays the name of the cell containing the file you want to copy.
File	Displays the name of the file you want to copy.
То	This section displays the information of the cell file to where it is copied.
Library	Displays the library to which the cell file is copied.
Cell	Displays the name of the copied cell.
File	Displays the name of the copied file.

#### **Related Topics**

Copying a Cell File in the Library Manager

# **Copy Cell Form**

Use this form to copy cellviews to a new cell name.

Field	Description
From	This section displays the information of the cellviews you want to copy.
Library	Displays the name of the library from which you want to copy. Defaults to the selected library.
Cell	Displays the name of the cell you want to copy. Defaults to the selected cell.
То	This section displays the information of the cellviews to where it is copied.
Library	Displays the library to which the library files are copied.
Cell	Displays the new cell name to which the specified cell is copied.
Options	This section lets you control the copy process by specifying limits.
Copy Hierarchical	Copies all referenced cells in your design to the destination library.
Skip Libraries	Prevents cells in the specified reference libraries from being copied.
Edit	Opens a list of libraries that you can select.
Exact hierarchy	Limits the search to the exact hierarchy of your design.
Views To Copy	Copies only the specified views of the selected cell. All Views copies all views of the specified cell. For a hierarchical copy, the Copy command also copies all views of cells instantiated in the specified cell. Select opens a list of view types that you can select from.
Update Instances	This section lets you update the views in the destination cell with the new cell name, when it is set to true.
Of Entire Library	Replaces the existing cell name with the new cell name.
Of New Copies Only	Overwrites only the cellview references you copied from the original library.
Database Integrity	This section updates and validates technology data after the cell is copied.
Re-reference customViaDefs	Re-references customViaDefs to cellviews in the destination library.

# Cadence Library Manager User Guide Library Manager Forms

Field	Description
Check existence in technology database	Validates the existence of layers, purposes, viaDefs, and siteDefs in the technology database of the destination library.
Add To Category	Specifies a new or existing category name to which to add the set of copied cells according to the filter string specified in the <i>Cell</i> field.
	By default, the symbol (*) indicates all the copied cells.

### Related Topics

Copying a Cell in the Library Manager

# **Copy Cellview Version Form**

Use this form to copy cellview versions to a new location.

Field	Description
From	This section displays the information of the cellview version you want to copy.
Library	Displays the library containing the cellview version to be copied.
Cell	Displays the cell containing the cellview version to be copied.
View	Displays the name of the cellview version to be copied.
Version	Displays the version number of the cellview to be copied.
То	This section displays the information of the cellview version to where it is copied.
Library	Displays the library in which to copy the cellview version.
Cell	Displays the cell in which to copy the cellview version.
View	Displays the name of the copied cellview version.
Copy Options	This section allows you to view and select various options for the copied cellview version.
Open After Copy	Opens the copied cellview version for viewing.
	For more information, see openView.
Use Options	Selects options specific to your particular design management system.
Defaults	Restores the default values displayed when you initially opened the form.

#### **Related Topics**

**toLibrary** 

Library Manager Forms

# **Copy Library File Form**

Use this form to copy a library file to a new location.

Field	Description
From	This section displays the information of the library file you want to copy.
Library	Displays the name of the library containing the file you want to copy. Defaults to the selected library.
File	Displays the name of the file you want to copy.
То	This section displays the information of the destination library file.
Library	Displays the library to which the library file is copied.
File	Displays the name of the copied file.

#### **Related Topics**

Copy Library Form

Library Manager Forms

# **Copy Library Form**

Use this form to copy a library to a new location.

Field	Description
From	Displays the name of the library you want to copy. Defaults to the selected library.
То	Displays the library to which the library files are copied.
Options	This section lets you update the copied library.
Update Instances	Update the cells and views in the destination library with the new library name, when it is set to true.
Of Entire Library	Replaces the existing library name with the specified library name.
Of New Copies Only	Overwrites only the cellview references you copied from the original library.
Database Integrity	This section updates and validates technology data after the library is copied.
Re-reference customViaDefs	Re-references customViaDefs to cellviews in the destination library.
Check existence in technology database	Validates the existence of layers, purposes, viaDefs, and siteDefs in the technology database of the destination library.
Apply	Copies all the cellviews to the specified library and leaves the Copy Library form open.

#### Related Topics

Copying a Library File

# **Copy Preferences Form**

Use this form to set preferences for copy and rename operations.

Field	Description
Library and Cell Property Files	This section applies settings to <i>Copy</i> only. You can include properties from library, cell, or both.
	For more information, see addLibPropFiles.
Automatically add	Adds the dependent property files only to the copy sets.
dependent property files to copy sets	For more information, see <u>addPropFiles</u> and <u>addCellPropFiles</u> .
Do not add dependent property files to copy sets	Excludes the dependent property files to copy sets, which might required by the current design.
Cellview Contents	This section applies settings to Copy only.
Include only the co- managed files of each cellview	Copies only the co-managed files from each cellview.
Include every file inside each cellview	Copies all the available files from each cellview.
Remote Copy Service	This section applies setting to Copy and Rename.
Use session's Copy Service when available	Uses the copy service of the session when it is available.
Use Library Manager Local copy engine only	Uses only the Library Manager local copy engine.
Miscellaneous Settings	This section applies setting to <i>Copy</i> or <i>Rename</i> as indicated.
Enable file progress monitor	Causes the Copy Monitor form to appear during a copy operation.
Warn about Rename of managed data (DM)	Generates a warning whenever any part of the library is renamed, which falls under Design Management. It triggers the Rename Managed Data form to appear.

# Cadence Library Manager User Guide Library Manager Forms

## Related Topics

 $\underline{\text{expandRadio}}$ 

## **Copy View Form**

Use this form to copy an existing view to a new location.

Field	Description
From	This section displays the information of the source library
Library	Displays the name of the library from which you want to copy a view. Defaults to the selected library.
Cell	Displays the name of the cell from which you want to copy a view. Defaults to the selected cell.
View	Displays the name of the view you want to copy. Defaults to the selected view.
То	This section displays the information of the destination library
Library	Displays the library to which the specified files are copied.
Cell	Displays the cell to which the specified view is copied.
View	Displays the new view name to which the specified view is copied.
Options	This section lets you manage the copy mechanism in your design.
Copy Hierarchical	Copies all referenced views in your design to the destination cellview.
Skip Libraries	Prevents views in the specified reference libraries from being copied.
Edit	opens a list of libraries that you can select.
Exact hierarchy	Limits the search to the exact hierarchy of your design.
Views To Copy	Copies only the specified views of the selected cell.
All Views	Copies all views of the specified cell. For a hierarchical copy, the Copy command also copies all views of cells instantiated in the specified cell.
Select	Opens a list of view types that you can select from.
Update Instances	Lets you choose one of the following options from the list box.

# Cadence Library Manager User Guide Library Manager Forms

Field	Description
Of Entire Library	Overwrites instances of the old (library, cell, and view) name with the new name. For example, all instances of/oldLib/oldCell/oldView are renamed to/newLib/newCell/newView.
Of New Copies Only	Overwrites only the view references you copied from the original library. For example, only view instances of/oldCell/oldView are renamed to/newCell/newView.
Database Integrity	Updates and validates technology data after the view is copied.
Re-reference customViaDefs	Re-references customViaDefs to cellviews in the destination library.
Check existence in technology database	Validates the existence of layers, purposes, viaDefs, and siteDefs in the technology database of the destination library. Warnings, if any, are displayed in the CIW output.
Add To Category	Specifies a new or existing category name to which to add the set of copied cells according to the filter string you type in the <i>Cells</i> field (by default, * to indicate all copied cells).

#### **Related Topics**

Copying a View in the Library Manager

# **Copy Wizard Form (Simple Copy)**

Use this form to perform Simple copy operation using Copy Wizard.

Field	Description
Generate Copy List	Generates a list of source and destination files for the <i>Hierarchical</i> , <i>By View</i> , and <i>By Configuration</i> copy modes. You do not need to generate a copy list for a <i>Simple</i> copy operation.
Destination Library	Displays the library to which the files are copied.
Update Instances	This section lets you choose one of the following options from the list box:
Of Entire Library	Overwrites instances of the old (library, cell, and view) name with the new name. For example, all instances of/oldLib/oldCell/oldView are renamed to/newLib/newCell/newView.
Of New Copies Only	Overwrites only the view references you copied from the original library. For example, only view instances of/ oldCell/oldView are renamed to/newCell/newView.
Database Integrity	This section updates and validates technology data after the source files are copied.
Re-reference customViaDefs	Re-references customViaDefs to cellviews in the destination library.
Check existence in technology database	Validates the existence of layers, purposes, viaDefs, and siteDefs in the technology database of the destination library. Warnings, if any, are displayed in the CIW output.
Add To Category	This section specifies a new or existing category name to which to add the set of copied cells according to the filter string you type in the <i>Cells</i> field (by default, * to indicate all copied cells).
Select All	Selects all cellviews displayed on the Copy Wizard form.
Deselect All	Deselects all cellviews displayed on the Copy Wizard. The cell names are grayed out, and the check box to the left of the row is deselected. To select an individual row, select the check box.

Library Manager Forms

Field	Description
Clear All	Removes all information from the Copy Wizard. You can type new information in an empty row using one of two methods:
	Click in the table cell, click the down arrow, and choose from the pop-up menu.
	Click in the table cell and type your information.
Check Files	Verifies that all the files (cellviews) you specify to be copied are present and have the correct permissions.

### Related Topics

Performing a Simple Copy Using the Copy Wizard

# **Copy Wizard Form (Hierarchical)**

Use this form to perform *Hierarchical* copy using Copy Wizard.

Field	Description
Top Library	Displays the name of the library that contains the highest level of the hierarchical design to be copied.
Top Cell	Displays the name of the cell that contains the highest level of the hierarchical design to be copied.
Views To Copy	This section copies only the specified views of the selected cell.
Names	Specifies the names of the views you want to copy.
Types	Displays the number of types selected from the Select View Types list. The symbol (*) indicates all copied cells.
Select	Opens a list of view types that you can select from.
Skip Libraries	Lets you type the names of libraries that do not contain any elements of the hierarchy and to make the search process more efficient.
Edit	Opens the Skip Libraries Editor dialog box in which you can select the libraries to skip.
Generate Copy List	Changes the Copy List fields to show only the cells and cellviews that are included in the specified hierarchy. The Copy list is empty until you fill in the required information in the <i>Copy Hierarchically</i> group box. It changes the status from <i>not needed</i> to <i>needed</i> whenever you make a change to the Copy List.
	Regenerate the Copy List each time you change information on the Copy Wizard form.
Destination Library	Displays the library to which the files are copied.
Update Instances	This section lets you choose one of the following options from the list box:

# Cadence Library Manager User Guide Library Manager Forms

Field	Description
Of Entire Library	Overwrites instances of the old (library, cell, and view) name with the new name. For example, all instances of/oldLib/oldCell/oldView are renamed to/newLib/newCell/newView.
Of New Copies Only	Overwrites only the view references you copied from the original library. For example, only view instances of/oldCell/oldView are renamed to/newCell/newView.
Database Integrity	Updates and validates technology data after the source files are copied.
Re-reference customViaDefs	Re-references ${\tt customViaDefs}$ to cellviews in the destination library.
Check existence in technology database	Validates the existence of layers, purposes, viaDefs, and siteDefs in the technology database of the destination library. Warnings, if any, are displayed in the CIW output.
Add To Category	Lets you type a new or existing category name to which to add the set of copied cells according to the filter string you type in the <i>Cells</i> field. By default, the symbol (*) indicates all copied cells.
Select All	Selects all cellviews displayed on the Copy Wizard form.
Deselect All	Deselects all cellviews displayed on the Copy Wizard. The cell names are grayed out, and the check box to the left of the row is deselected. To select an individual row, select the check box.
Clear All	Removes all information from the Copy Wizard. You can type new information in an empty row using one of two methods:
	By selecting from the various options available in the drop- down list of each cell.
	■ By manually typing information in each cell.
Check Files	Verifies if all the cellviews in the Copy List are available and have the correct permissions.

### Related Topics

Copying a Hierarchy Using the Copy Wizard

# **Copy Wizard Form (Exact Hierarchy)**

Use this form to perform Exact Hierarchical copy using Copy Wizard.

Field	Description
Top Library	Displays the name of the library that contains the highest level of the hierarchical design to be copied.
Top Cell	Displays the name of the cell that contains the highest level of the hierarchical design to be copied.
Top View	Displays the name of the view at the highest level of the hierarchical design to be copied.
Extra Views- Names	Lets you type additional view names or expressions to expand the search to include any matching views found in your design hierarchy in the copy operation. If any of these matching views have their own hierarchies, those additional hierarchies are also included.
Select	Opens a list of view types that you can select from.
Skip Libraries	Lets you type the names of libraries that do not contain any elements of the hierarchy and to make the search process more efficient.
Edit	Opens the Skip Libraries Editor dialog box where you can select the libraries to skip.
Generate Copy List	Changes the <i>Copy List</i> fields to show only the cells and cellviews that are included in the specified hierarchy. The Copy List is empty until you fill in the required information in the <i>Copy Hierarchically</i> group box. It changes from <i>not needed</i> to <i>needed</i> whenever you make a change to the Copy List. You must regenerate the Copy List each time you change information on the Copy Wizard form.
Destination Library	Displays the library to which the files are copied.
Update Instances	Lets you choose one of the following options from the list box:
Of Entire Library	Overwrites instances of the old (library, cell, and view) name with the new name.
	For example, all instances of/oldLib/oldCell/oldView are renamed to/newLib/newCell/newView.

Library Manager Forms

Field	Description
Of New Copies Only	Overwrites only the view references you copied from the original library.
	For example, only view instances of/oldCell/oldView are renamed to/newCell/newView.
Database Integrity	This section updates and validates technology data after the hierarchy is copied.
Re-reference customViaDefs	Re-references customViaDefs to cellviews in the destination library.
Check existence in technology database	Validates the existence of layers, purposes, viaDefs, and siteDefs in the technology database of the destination library. Warnings, if any, are displayed in the CIW output.
Add To Category	Lets you type a new or existing category name to which to add the set of copied cells according to the filter string you type in the <i>Cells</i> field. By default, the symbol (*) indicates all copied cells.
Select All	Selects all cellviews displayed on the Copy Wizard form.
Deselect All	Deselects all cellviews displayed on the Copy Wizard. The cell names are grayed out, and the check box to the left of the row is deselected. To select an individual row, select the check box.
Clear All	Removes all information from the Copy Wizard.
	You can type new information in an empty row using one of two methods:
	<ul> <li>By selecting from the various options available in the drop-down list of each cell.</li> </ul>
	<ul> <li>By manually typing information in each cell.</li> </ul>
Check Files	Verifies that all the cellviews in the Copy List are present and have the correct permissions.

### Related Topics

Copying an Exact Hierarchy Using the Copy Wizard

# **Copy Wizard Form (By View)**

Use this form to perform By View copy using Copy Wizard.

Field	Description
Library	Lets you type the name of the library from which you want to copy views. You can use only one name.
Cell Filter	Lets you type the criteria for specifying the names of cells whose views you want to copy. You can use an asterisk (*) as a wildcard character. For example, cc* or *a2d. You can specify only one string.
Views To Copy	Specifies the views to copy or criteria for specifying the names of cells whose views you want to copy. You can use an asterisk (*) as a wildcard character.
	For example, to specify only one string, specify sym*.
Select	Opens a list of view types that you can select from.
Generate Copy List	Changes the copy list to show only the specified cells and cellviews. None are displayed until you fill in the required information in the <i>Copy By View</i> group box. It changes from <i>not needed</i> to <i>needed</i> whenever you make a change to the copy list. You must regenerate the copy list each time you change information on the Copy Wizard form.
Destination Library	Displays the library to which the files are copied.
Update Instances	This section lets you choose one of the following options from the list box:
Of Entire Library	Overwrites instances of the old (library, cell, and view) name with the new name.
	For example, all instances of/oldLib/oldCell/oldView are renamed to/newLib/newCell/newView.
Of New Copies Only	Overwrites only the view references you copied from the original library. For example, only view instances of/ oldCell/oldView are renamed to/newCell/newView.
Database Integrity	This section updates and validates technology data after the source files are copied.
Re-reference customViaDefs	Re-references customViaDefs to cellviews in the destination library.

# Cadence Library Manager User Guide Library Manager Forms

Field	Description
Check existence in technology database	Validates the existence of layers, purposes, viaDefs, and siteDefs in the technology database of the destination library. Warnings, if any, are displayed in the CIW output.
Add To Category	Lets you type a new or existing category name to which to add the set of copied cells according to the filter string you type in the <i>Cells</i> field. By default, the symbol (*) indicates all copied cells.
Select All	Selects all cellviews displayed on the Copy Wizard form.
Deselect All	Deselects all cellviews displayed on the Copy Wizard form. The cell names are grayed out, and the check box to the left of the row is deselected. To select an individual row, select the check box.
Clear All	Removes all information from the Copy Wizard form.
	You can type new information in an empty row using one of two methods:
	By selecting from the various options available in the drop- down list of each cell.
	■ By manually typing information in each cell.
Check Files	Verifies that all the cellviews in the copy list are present and have the correct permissions.

### Related Topics

Copying Specific View Using the Copy Wizard

## **Copy Wizard Form (By Configuration)**

Use this form to perform By Configuration copy using Copy Wizard.

Field	Description
Library	Lets you type the name of the library from which you want to copy the configuration view. You can use only one name.
Cell	Lets you type the cell name of the configuration to be copied.
Config View	Lets you specify the name of the configuration to copy.
Skip Libraries	Lets you type the names of libraries that do not contain any elements of the configuration (to make the search process more efficient).
Edit	Opens the Skip Libraries Editor dialog box in which you can select the libraries to skip.
Generate Copy List	Changes the list to show only the cells and cellviews that are included in the specified configuration. None are displayed until you fill in the required information in the fields above. It changes from <i>not needed</i> to <i>needed</i> whenever you make a change to the copy list. You must regenerate the copy list each time you change information on the Copy Wizard form.
Destination Library	Displays the library to which the files are copied.
Update Instances	This section lets you choose one of the following options from the list box:
Of Entire Library	Overwrites instances of the old (library, cell, and view) name with the new name.
	For example, all instances of/oldLib/oldCell/oldView are renamed to/newLib/newCell/newView.
Of New Copies Only	Overwrites only the view references you copied from the original library. For example, only view instances of/oldCell/oldView are renamed to/newCell/newView.
Database Integrity	This section updates and validates technology data after the configuration is copied.
Re-reference customViaDefs	Re-references ${\tt customViaDefs}$ to cellviews in the destination library.

Library Manager Forms

Field	Description
Check existence in technology database	Validates the existence of layers, purposes, viaDefs, and siteDefs in the technology database of the destination library. Warnings, if any, are displayed in the CIW output.
Add To Category	Lets you type a new or existing category name to which to add the set of copied cells according to the filter string you type in the <i>Cells</i> field. By default, the symbol (*) indicates all copied cells.
Select All	Selects all cellviews displayed on the Copy Wizard.
Deselect All	Deselects all cellviews displayed on the Copy Wizard. The cell names are grayed out and the check boxes to the left of the row are deselected. To select an individual row, select the check box.
Clear All	Removes all information from the Copy Wizard.
	You can type new information in an empty row using one of two methods:
	By selecting from the various options available in the drop- down list of each cell.
	■ By manually typing information in each cell.
Check Files	Verifies that all the cellviews in the copy list are present and have the correct permissions.

### Related Topics

Copying Specific Cells in a Configuration Using the Copy Wizard

Library Manager Forms

# **Delete By View Form**

Use this form to delete views from cells

Field	Description
Library Name	Displays the library of the selected view.
Cell Filter	Lets you type the criteria for specifying the names of cells whose views you want to delete. You can use an asterisk (*) as a wildcard character, such as $cc*$ or $*a2d$ . You can specify only one string.
View Filter	Lets you specify the view you want to delete from the specified cell or cells, in the selected library. Click the down arrow to display a list box from which you can select a view name.
Add View Name To Selection List	Lets you add a view name to the View Filter list box.
Find Copied Versions	Lets you delete only cellview versions you have previously copied.

#### Related Topics

**Deleting Cells Using Filters** 

Library Manager Forms

## **Delete Cells Form**

Use this form to delete cells from the design.

Field	Description
Delete	Lists all the cells in the design that you want to delete.
Don't Delete	Lists all the cells in the design that you do not want to delete.
Select	Lets you specify a filter string for selecting all matching cell names in a list box.
Options	This section lets you choose to delete items locally only or also from the design management repository.
Delete Local And Inactive From DM System	Deletes your local copy and the copy in the design management repository.
Delete Local Only	Deletes the specified items from your Library Manager but not from the design management repository.

#### **Related Topics**

**Deleting a Cell** 

Library Manager Forms

## **Delete Cell Views Form**

Use this form to delete cellviews from the design.

Field	Description
Delete	Lists all the cellviews in the design that you want to delete.
Don't Delete	Lists all the cellviews in the design that you do not want to delete.
Select	Lets you specify a filter string for selecting all matching cellview names in a list box.
Options	This section lets you choose to delete items locally only or also from the design management repository.
Delete Local And Inactive From DM System	Deletes your local copy and the copy in the design management repository.
Delete Local Only	Deletes the specified items from your Library Manager but not from the design management repository.

#### **Related Topics**

**Deleting a View** 

Library Manager Forms

## **Delete Libraries Form**

Use this form to delete libraries from the design.

Field	Description
Delete	Lists all the libraries in the design that you want to delete.
Don't Delete	Lists all the libraries in the design that you do not want to delete.
Select	Lets you specify a filter string for selecting all matching library names in a list box.
Options	This section lets you choose to delete items locally only or also from the design management repository.
Delete Local And Inactive From DM System	Deletes your local copy and the copy in the design management repository.
Delete Local Only	Deletes the specified items from your Library Manager but not from the design management repository.

### Related Topics

**Deleting a Library** 

Selecting and Moving Data in the Library Manager

Library Manager Forms

## **Delete Library Views Form**

The Delete Library Views form displays a list of the paths for views you chose to delete on the Delete By View form. The name of the library containing these views is displayed above the list.

- Views with a selected check box to the left of the row are selected for deletion.
- Views with a deselected check box does not get deleted.

You can select or deselect views by clicking the toggle button to the left of the row.

Field	Description
Select All	Selects all views and selects the check box to the left of each row.
Deselect All	Deselects all views and selects all check boxes.
Options	This section lets you choose to delete items locally only or also from the design management repository.
Delete Local And Inactive From DM System	Deletes your local copy and the copy in the design management repository.
Delete Local Only	Deletes the specified items from your Library Manager but not from the design management repository.

#### **Related Topics**

**Deleting Cells Using Filters** 

# **Display Options Form**

Use this form to modify the UI of a library.

Field	Description
For Objects	This section contains two tabs, one tab for <i>Library</i> specific settings (for example, overrides and icons) and another tab for <i>View</i> specific settings.
	The only option currently in the latter tab is for <i>Show extended states</i> , which turns on or off DM queries, and other information that is displayed in the tables of the Library Manager window - views and files.
	Switching this option off restores the display behavior.
Display Overrides	Lets you override custom display settings for libraries.
Show all libraries using standard style	Overrides any custom display settings and displays all libraries in the default style.
Show hidden libraries	Overrides any invisible settings on libraries and displays all libraries.
Show library colors	Displays libraries in the customized colors.
Show custom library icons	Displays custom icons for libraries. Icons are visible in both the Tree view and Lists view.
Show Lists view library icons	Displays custom icons only in the Lists view of libraries. Icons are not displayed in the Tree view.
State Analysis	This section allows you to set the Design Management states.

Library Manager Forms

Field	Description
Enable query of Design Management states	Deselects this option if your Design Management performance is slow and impacting library browsing speed. Consequently, Design Management icons does not get displayed and related Design Management state is shown as empty in the Library Manager extended tables.
	This option and <i>Show extended states</i> must both be set to on in order to see DM states in the main Library Manager window.
	The Enable delay before DM syncs option enables you in quicker browsing when slower DM integrations for GDM are in use and you do not want to turn off the DM display feature entirely. This option is enabled once you select the Enable query of data management check box.
	The DM gets queried on a selected item, such as a cell, including its views and any other files, are displayed $n$ seconds after the current cell is selected in the list. The select action loads the item's contents, which includes views and files of the specified cells into the list display.
	The value in the <i>Wait</i> field (in seconds) comes from the .cdsenv DB setting. By default, the value is 2.5 seconds. The accepted values are 0 through 999 seconds. Set the wait time value higher if you know that your DM system gets slow in responding to such queries. Once your selection/browsing has stopped, and the Wait delay time-out is reached, the DM system is then queried to update the DM status display in the window for the current library or cell contents.
Enable delay before DM syncs	Enables a delay in the time period between when a cell was selected and when the Design Management status requests gets called for it. A delay enables you to quickly select between several different cells in a library without the updated DM status being obtained for all of those cells. You can set the delay period by specifying the units in seconds in the <i>Wait</i> seconds after selecting field.
	By default, the <i>Enable delay before Design Management</i> syncs check box is not selected.
Enable poll	Reanalyzes states periodically, based on the two slider and spin-box value settings for the related options, as follows:

Library Manager Forms

Field	Description
Interval	Sets the number of seconds to determine the time setting between successive reanalyze state queries.
Idle limit over interval	Determines how long the polling should continue after the last UI interaction. The seconds value set here is added to the interval seconds set.
	The polling features enable state change detections without external notification channels, such as Design M check out from another system, workarea, and/or user. Some common edit operations in Virtuoso also notifies the Library Manager. In such cases however, the polling settings are not used to update values.
	Design Management systems that support large number of clients should advise users to select longer poll intervals in order to prevent overwhelming shared resources. The fastest interval value is 1 second, while the default is 30 seconds. These poll settings can be obtained by referring to the .cdsenv file. Virtuoso edit notifications occur independently of poll settings. Fast poll intervals are therefore not necessary here and may impact all user's DM operations.
Resources	This section includes an option to customize the display settings.
Custom library display attributes	Opens the Display Settings form, which lets you view, edit, or create library display settings.

## Related Topics

Overriding Customized Library Display Settings

**Display Settings Form** 

# **Display Settings Form**

Use this form to customize display settings for the libraries.

Field	Description
Library Display Attributes	This section lists the attributes, both predefined and custom, that you can set on libraries.
Used by libraries	Specifies the number of libraries on which the selected attribute is set.
Add	Opens the Add Display Attribute form, which lets you create new attributes.
Display Libraries	This section displays the currently-selected display options for the selected attribute and lets you modify them.
As standard	Displays libraries in the default style.
As hidden	Makes libraries invisible.
Using color	Displays libraries in the specified color. The <i>Select</i> button opens the Select color dialog box from which you can choose a color.
Using icon	Displays the specified icon next to libraries. The <i>Select</i> button opens the Select icon dialog box from which you can choose an icon.
Allow dynamic overrides	Applies overrides to libraries using the display attribute.
Preview	Displays a sample library name with the specified display options.

#### Related Topic

**Library Display Settings** 

Library Manager Forms

## **DM File Status Form**

Use this form to view the design management status of all cells in a library, all views for a cell, and individual files.

Field	Description
File Status	This section lets you select the files to view the DM status.
Refresh Status	Refreshes the current status of items and prevent saving the form.
	<b>Note:</b> The use of the <i>Show</i> drop-down, to change filtering display, does not automatically refresh status states. The <i>Refresh Status</i> applies any updates without impacting the current filter setting, or check box status.
Show	A filter pull-down, which is only enabled if the <i>Status</i> tab is current in the DM File Status form. Here, you can choose to filter and refine the content of the <i>Status Command</i> section.
	<b>Note:</b> This option is not enabled for other DM commands, such as <i>Check In</i> and <i>Check Out</i> , as their initial input sets are pre-defined by one or more specific states which only apply to that command.
Select All	Adds all files to the selection set.
Deselect All	Remove all files from the selection set.
Invert All	Toggles each checked box to the opposite checked setting.
Manage Set	This section lets you review and manage the selected files.
Reinitialize	Retrieves the file set that was extracted from the original library manager design management command. All rows being selected.
Refine	Removes any unchecked rows.

#### Related Topic

Design Management File Status

# Cadence Library Manager User Guide Library Manager Forms

Library Manager Forms

# **New Category Form**

Use this form to edit the categories.

Field	Description
Category Name	Displays the name of the category to be edited.
Cells	This section lists all the selected and unselected cells.
Not In Category	Lists all the cells in the design that are not in the selected category.
In Category	Lists all the cells in the design that are in the selected category.
Sub Categories	This section lists all the selected and unselected subcategories.
Not In Category	Lists all the subcategories in the library that are not in the category.
In Category	Lists all the subcategories that are in the category.

#### **Related Topics**

Editing a Category Using Library Manager

Library Manager Forms

### **Library Browser Form**

This form saves the information you type and restores it each time you reopen the form or the Virtuoso session.

Field	Description
Show Categories	Expands the form to display categories.
Show Non-Virtuoso View Types	Displays non-Virtuoso view types for the selected cell.
Library	Displays the names of the libraries specified in your ${\tt cds.lib}$ file.
Cell	Displays the names of the cells in the selected library.
View	Displays the names of the views in the selected cell.

#### **Related Topics**

Opening the Library Browser Form

showNonVirtuosoViewtypes

**Library Manager Customization** 

# **Library Manager Form**

Use this form to manage the libraries of a design.

Field	Description
File	Lets you open or create libraries, cellviews, or categories or open a UNIX shell window.
Edit	Edits libraries, cellviews, categories, or your cds.lib file.
View	Lets you specify filters for displaying cellviews.
Design Manager	Lets you access design management functions.
	<b>Note:</b> Commands on the <i>Design Manager</i> menu are active only if you are using a design management system.
Show Categories	Displays the Category list box.
Show Files	Displays the Files in list box.
Library	Displays the libraries defined in your cds.lib file.
Category	Displays the categories in the selected library.
Cell	Displays the cells in the selected library or selected category.
View	Displays the views in the selected cell.
Files in	Expands the form to list the available files.
	■ Library: Lists the files available in the selected library.
	Cell: Lists the files available in the selected cell.
Messages	Displays information about actions initiated from Library Manager.

### Related Topics

View Property Editor Form

# **Library Property Editor Form**

Use this form to edit the properties of a library.

Field	Description
Library	This section displays the information of the selected library.
Name	Displays the view name of the selected library.
Owner	Displays the user ID of the owner of the selected library.
Group	Displays the group of the owner of the selected library.
Last Modify	Displays the date/time stamp of the last modification to the library.
Read Path	Displays the path to a read-only version of the library.
Write Path	You cannot change any of the values for the library.
UNIX Permissions Mode	This section displays the read/write/execute permissions for the owner, group, and other.
	You cannot change any of these permissions.
Owner	Displays the read/write/execute permissions for the owner of the library.
Group	Displays the read/write/execute permissions for the group of the owner of the library.
Other	Displays the read/write/execute permissions for anyone who has access to the library.
Properties	Lists all the properties available in the specified library at the bottom of the Library Property Editor form and you can edit them on this form.
	If the specified library has no properties then <i>No Property Attached</i> text is displayed.
Add	Adds a property by opening the Add Property form.
Delete	Removes the selected property.
Modify	Opens the Modify 'propertyName' form.

Library Manager Forms

### Related Topics

**Editing Library Properties** 

Add Property Form

Modify 'propertyName' form

Library Manager Forms

# **Load Technology File Form**

Use this form to associate a new library with a technology file.

Field	Description
ASCII Technology File	Lets you type the path to a technology file to associate with a new library. Alternatively, click the Browse button to locate the technology file.
New Technology Library	Displays the name of the new library that gets associated with the technology file.

### Related Topics

Compiling an ASCII Technology File

# Modify 'propertyName' Form

Use this form to modify the property values.

Field	Description
Defaults	Clears all values in the fields and sets Type to int.
Name	Displays the name of the property.
Type	Lets you change the property type. Depending on the type you choose, the remaining fields change to prompt you for values for the property.
Value	Lets you change the default value for the property.
Minimum Value	Lets you change the minimum value for the property.
Maximum Value	Lets you change the maximum value for the property.
	Used for <i>int</i> , <i>float</i> , and <i>time</i> property types. The View Property Editor form or Cell Property Editor form displays these minimum and maximum values next to the property name.
Possible Choices	Lets you change the possible property values. Used for <i>string</i> property type only. The View Property Editor form or the Cell Property Editor form creates a list box of these choices.

#### **Related Topics**

**Library Property Editor Form** 

Modifying Properties of a Library, Cell, or View

Library Manager Forms

# **New Category Form**

Use this form to create a new category.

Field	Description
Category Name	Lets you type the name of the new category you want to create.
Cells	This section lists all the cells available in the design.
Not In Category	Lists all the cells in the design that are not in the new category.
In Category	Lists all the cells in the design that are in the new category.
Sub Categories	This section lists all the subcategories available in the design.
Not In Category	Lists all the subcategories in the library that are not in the new category.
In Category	Lists all the subcategories in the library that are in the new category.

#### **Related Topics**

Creating a Category Using Library Manager

Library Manager Forms

### **New File Form**

Use this form to create a new cellview.

Field	Description
Library	Lets you choose the library in which you create the new cellview.
Cell	Displays the name of the new cell.
View	Displays the name of the new view.
	For the <i>Cell</i> and <i>View</i> name fields, only legal identifiers in the CDBA name space can be used. For example, <i>white spaces</i> cannot be used in a field name.
Туре	Displays the type of cellview of the selected View.
Application	This section lets you choose the application you want to work using the specified type of cellview.
Open with	Lets you choose which application should be opened to work with a particular- <i>Type</i> of file.
Always use this application for this type of file	Sets the application currently selected in the <i>Open with</i> option to always be used when the current view <i>Type</i> is chosen.
Library path file	Displays the path to the ${\tt cds.lib}$ file you are using. You cannot edit this field.

#### **Related Topics**

Creating a New Cellview

Library Manager Forms

# **New Library Form**

Use this form to create a new library.

Field	Description
Library	This section lets you specify a new library name and path.
Name	Lets you specify a name for the new library.
Directory	Lists the directories in the path displayed below the list box. You can select a directory from this list or specify a path to a directory in the field below the list.
Design Manager	This section lets you choose your design management setup. A list box gets displayed with the options if more than one exists.
Use None	Indicates that there is no design management system currently available to use.
Use No DM	Indicates that you do not want the library to be placed under design management control, whether there is a design management system available there or not, now or later. If there is one available, you can still decide to check it in later on.
Compression enabled	Enables you write OpenAccess data to the library in a compressed format.

#### **Related Topics**

Creating a New Library in the Library Manager

### **Reference Existing Technology Libraries Form**

Use this form to set the reference technology libraries for the new library.

Field	Description
New Library	Displays the new library that is to use the reference technology libraries.
Technology Libraries	Lists the available libraries to be referenced.
Reference Technology Libraries	This section lists the existing libraries which is used as a reference by the new library for technology information.
Up	Moves the selected referenced technology library up the reference priority.
Down	Moves the selected referenced technology library down the reference priority.

#### Related Topics

Selecting and Moving Data in the Library Manager

Library Manager Forms

### **Rename Cell Form**

Use this form to change the name of a cell.

Field	Description
From Cell	Displays the original cell name.
To Cell	Displays the new cell name that you type.
Update Instances	Updates all instances that reference the old name with the new name.
Design Management Options	Appears only when a DM system is being used. The options appear enabled only when the DM system supports renaming. You can specify the following options:
	The process stops if errors are found in the precheck phase. You can specify whether it should stop after the first error is found or after all errors are found.
	In <i>Check In Options</i> , you may specify comments in the <i>Comment</i> box or specify an options file in the <i>Use Options</i> field.
	<b>Note:</b> If you are using a design management system that does not support GDM rename, the Library Manager renames design-managed objects with only the version available for its cellviews and files.

#### Related Topics

Selecting and Moving Data in the Library Manager

Renaming a Library

Library Manager Forms

### **Rename File Form**

Use this form to change the name of a file.

Field	Description
From File	Displays the original file name.
To File	Displays the new file name that you type.
Update Instances	Updates all instances that reference the old name with the new name.
Design Management Options	Appears only when a DM system is being used. The options appear enabled only when the DM system supports renaming. You can specify the following options:
	The process stops if errors are found in the precheck phase. You can specify whether it should stop after the first error is found or after all errors are found.
	In <i>Check In Options</i> , you may specify comments in the <i>Comment</i> box or specify an options file in the <i>Use Options</i> field.

### Related Topics

**Renaming Files** 

Library Manager Forms

# **Rename Library Form**

Use this form to change the name of a library.

Field	Description
From Library	Displays the original library name.
To Library	Displays the new library name that you type.
Update Instances	Updates all instances that reference the old name with the new name.
Design Management Options	Appears only when a DM system is being used. The options appear enabled only when the DM system supports renaming. You can specify the following options:
	The process stops if errors are found in the precheck phase. You can specify whether it should stop after the first error is found or after all errors are found.
	In Check In Options, you may specify comments in the Comment box or specify an options file in the Use Options field.

### Related Topics

Renaming a Library

Library Manager Forms

# **Rename Reference Library Form**

Use this form to change the name of a reference library.

Field	Description
In Library	Displays the name of the design library that uses a reference library whose name you want to change.
From Library	Displays the name of the current reference library.
To Library	Displays the name of the new reference library.
Refresh Session	Refreshes the session.

#### **Related Topics**

Selecting and Moving Data in the Library Manager

Library Manager Forms

### **Rename View Form**

Use this form to change the view name of a cell.

Field	Description
From View	Displays the original view name.
To View	Displays the new view name that you specified.
Update Instances	Updates all instances that reference the old name with the new name.
Design Management Options	Appears only when a Design Management system is being used. The options appear enabled only when the Design Management system supports renaming.
	You can specify the following options:
	The process stops if errors are found in the precheck phase. You can specify whether it should stop after the first error is found or after all errors are found.
	In Check In Options, you may specify comments in the Comment box or specify an options file in the Use Options field.

### Related Topics

Renaming a Library

# **Save Library Manager Defaults Form**

Use this form to save the default file.

Field	Description
Save Defaults File As	Displays the file name you type as the new file name.
Filter	This section displays the path and file name you type, including wildcard characters, to point to the original file from where you want to save.
Filter	Uses the path you typed in the <i>Filter</i> field as the filter for your directory search lists.
Directory	This section shows the directories available at the end of the path.
Files of type	Shows the files available at the end of the path.
Options	This section lets you specify save options.
Save	Saves all the possible values to your .cdsenv file in the directory you specified, if you select the <i>All possible values</i> check box from the <i>Save</i> option.
File Status	In this section, you need to specify the values to want to save.
Overwrite	Saves the values you type by overwriting your .cdsenv file.
Merge values	Saves the values you modify into your .cdsenv file. However, it does not delete the pre-existing unmodified values.
Retain values	Saves the values you specify by creating another file. You must type a different file name in the Save Defaults File As field.

#### **Related Topics**

Saving Settings to a .cdsenv File

### Select an icon Form

Use this form to add icons to the attribute.

Field	Description
Icon Source	This section lets you select the directories from which you want to display icon files in the <i>Files</i> list.
All directories in Cadence search path (setup.loc)	Displays icons from all icon directories found by CSF search in the <i>Files</i> list. Specifically, icons from the following subdirectories of every location specified in your setup.loc file are displayed:
	icons/library/16x16
	icons/16x16
	If an icon definition is found in multiple locations, the definition from the location that has higher precedence in the setup.loc file is used. If an icon is found in both an icons/library/16x16 and an icons/16x16 directory, the icon from the icons/library/16x16 directory is used.
	You can place the cursor over an icon file name in the <i>Files</i> list to see which directory it is obtained from.
Specific directory	Lets you select a specific directory from which to display icon files.
	All directories found by CSF search that contain an <code>icons/library/16x16</code> or an <code>icons/16x16</code> subdirectory are listed in the drop-down list. Until you create your custom icon directories, only the directories containing Cadence application icons gets listed in this field, such as the <code>your_install_dir/share/cdssetup/icons/16x16</code> icon directory.
Files	This section displays all icon files found in the directories specified in <i>Icon Source</i> .
Show names containing	Lets you specify a pattern to filter icon file names. Only the file names containing the pattern are displayed.

Library Manager Forms

### Related topics

Selecting an Icon for a Library Display Attribute

Library Manager Forms

### **Submit Form**

Use this form to submit files to the project design management repository.

Field	Description
Files to Submit	Lets you select files to submit to the project design management repository.
Select All	Selects all files in the list for submitting.
Deselect All	Deselects all files in the list so that no files are submitted.
Description (Optional)	Lets you type a description of your design changes.
Submit Options	This section lets you modify the submit operation.
Request Name	Lets you assign a name to the integration request.
Use Options	Lets you specify the options you want to use for the submit operation.

#### Related Topics

Submitting Changes to the Design Management System

### **Technology File for New Library Form**

Use this form to attach or create a technology file to a library.

Field	Description
Compile an ACII technology file	Attaches a specified technology file to the new library.
Reference existing technology libraries	Create a new technology file and reference it to an existing technology library.
Attach to an existing technology library	Opens a form that lets you select a technology file from the list for the new library.
Do not need process information	Lets you create a new library that does not need a technology file. By default, the system attaches the default.tf file the first time you access the library from a Virtuoso product.)

#### **Related Topics**

Creating a New Library in the Library Manager

Compiling an ASCII Technology File

Referencing Existing Technology Libraries

### **Version Information Form**

Use this form to update and check the version information of files.

Field	Description
Check Out	Checks out the project default version of a file or cellview, which is already checked in to your workarea. The Version Information form shows that the file is checked out.
	You need to select the version from the list box for a file that has been checked in and then the selected version is checked out.
Check In	Checks in a file or cellview. Select the version from the list box to be checked in and the selected version is checked in.
Cancel Check Out	Cancels the check out of a file or cellview. Select the version from the list box to have its checked out canceled.
	The selected version check out is canceled.
Update	Lets you specify which version, other than the project default, is read in to your workarea when you open a file in read-only mode.
	The software updates the workarea with the specified version.
Rollback	Lets you roll back a version so it becomes the project default version and updates the Version Information form to reflect the rollback
Сору	Lets you copy versions of a cellview that has been checked in.
	These commands are active only for checked-in files. You can use the Version Information form to display version information about checked-out files, but these commands are inactive.
Description	Displays the description associated with the action performed.
Refresh History	Performs another query of the DM system for the current history and status, and then updates the form displayed.
	<b>Note:</b> This is the same behavior as when a new cellview is selected in the Library Manager main window.

### Related Topics

#### Cellview and File Versions

# **View Property Editor Form**

Use this form to edit the properties of the selected views.

Field	Description
Add	Opens the Add Property form.
Delete	Removes the selected property.
Modify	Opens the Modify propertyName form.
View	This section displays the information of the selected cellview.
Name	Displays the view name of the selected cellview.
Owner	Displays the user ID of the owner of the selected cellview.
Group	Displays the group of the owner of the selected cellview.
Last Modify	Displays the date and time of the last modification to the cellview.
Read Path	Displays the path to a read-only version of the cellview.
Write Path	Displays the path to a writable version of the cellview.
UNIX Permissions Mode	This section displays the read/write/execute permissions for the owner, group, and other.
	You cannot change any of these permissions.
Owner	Displays the read/write/execute permissions for the owner of the cellview.
Group	Displays the read/write/execute permissions for the group of the owner of the cellview.
Other	Displays the read/write/execute permissions for anyone who has access to the cellview.
Properties	Lists all the properties available in the specified view at the bottom of the View Property Editor form and you can edit them on this form.
	If the specified view has no properties then <i>No Property Attached</i> text is displayed.

Library Manager Forms

### Related Topics

**Cellview and File Versions** 

**Editing View Properties**