AutoCAD Design Center Inside and Out

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Course Outline: AutoCAD's Design Center is one of the most innovative tools that has been added to your arsenal in recent releases. Drag and drop Layer Standards, Dim Styles, and Blocks... learn the in's and out's of ADC that can help you share information from project to project and drawing to drawing.

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With AutoCAD DesignCenter, you can...

- Browse the current drawing file content in a familiar tree structure.
- View tables such as blocks and layers, in any drawing file and insert, attach, or copy and paste the definitions into the current drawing.
- Create shortcuts to drawings, folders, and Internet locations that you access frequently.
- Find drawing content on your computer and on networked drives.
- Control the display of palette contents by switching between large and small icons, lists, and details.

Opening AutoCAD Design Center

- Type ADCENTER or ADC at the command line or hit ctrl-2.
- Select the DesignCenter icon on the standard toolbar.
You can control the size, location, and appearance of AutoCAD DesignCenter.

- Resize AutoCAD DesignCenter by dragging the edge of the dialog box.

- Dock AutoCAD DesignCenter by dragging it over the right or left docking regions of the AutoCAD window until it snaps into the docked position. You can also dock the DesignCenter window by double-clicking its title bar.

- Undock AutoCAD DesignCenter by dragging the double lines at the top area away from the docking region. You can move DesignCenter anywhere on the screen and change its width and height with the pointing device. You can undock by double clicking the double lines at the top.

### Getting Around in Design Center

#### The Toolbar

The DesignCenter toolbar controls navigation and display of information in the tree view and the palette.

![DesignCenter toolbar diagram]

- **Close**
- **Load**
- **Up**
- **Tree View Toggle**
- **Description**
- **Views**
- **Favorites**
- **Search**
- **Back/Forward**
- **Load**
- **Up**
- **Description**
- **Views**
- **Favorites**
- **Search**
- **Back/Forward**

#### Content Area (Right Pane)

**Load**

Displays the Load DesignCenter Palette dialog box. Use Load to navigate to files on local and network drives or on the Web, and then to select content to load in the palette. You must use Load to load content from the Web into DesignCenter.

**Back**

Returns to the previous location in the history list.

**Forward**

Goes forward in the list of recent locations.
Up
Displays the contents of the folder one level above the current folder.

Search
Displays the Search dialog box, where you can specify search criteria to locate drawings, blocks, and non-graphical objects within drawings.

Stop (DC Online tab)
Stops the current transfer.

Reload (DC Online tab)
Reloads the current page.

Favorites
Displays the contents of the Favorites folder in the palette. The Favorites folder contains shortcuts to items you access often.

You can add items to Favorites by right-clicking an item in either the tree view or palette and choosing Add to Favorites.

To delete an item from Favorites, use the Organize Favorites option when you right click on a favorite folder.

Note: AutoCAD automatically adds the DesignCenter folder to Favorites. This folder contains drawings with discipline-specific symbols that you can insert in drawings.

Tree View Toggle
Displays and hides the tree view. Hide the tree view if you need more space in your drawing area. The Tree View Toggle button is not available while you’re using the History list in the tree view.

Preview
This Toggles the display of a preview of the selected item. If there is no preview image saved with the selected item, the Preview area is empty.
Description

This Toggles the display of a text description of the selected item. If a preview image is also displayed, the description is displayed below it.

Views

Provides different display formats for the content loaded in the palette. You can select a view from the Views list. The default view varies for the type of content currently loaded in the palette.

- **Large Icon**
  Displays the names of the loaded content in large icon format.

- **Small Icon**
  Displays the names of the loaded content in small icon format.

- **List View**
  Displays the names of the loaded content in a list.

- **Detail View**
  Displays additional information about the loaded content. You can sort the items by name, size, type, and other properties, depending on the type of content loaded in the palette.

The same navigation and display options are available on a shortcut menu. Right-click in the DesignCenter palette anywhere that is not on top of a graphic.
Tree View (Left Pane)

Folders Tab

The Folders tab displays a hierarchy of navigational icons, including:
- Local Networks and computers
- Web locations (URLs)
- Servers
- Folders
- Drawings and related support files
- Xrefs, layouts, hatch styles, and named objects, including blocks, layers, linetypes, text styles, dimension styles, and plot styles within a drawing

Click an item in the tree view to display its contents in the content area. Click the plus (+) or minus (-) signs to display and hide additional levels in the hierarchy. You can also double-click an item to display deeper levels. Right-clicking in the tree view displays a shortcut menu with several related options.

Open Drawings, History, and DC Online Tabs

The History, Open Drawings, and DC Online tabs provide alternate methods of locating content.

- **Open Drawings** displays a list of the drawings that are currently open. Click a drawing file and then click one of the definition tables from the list to load the content into the content area.

- **History** displays a list of files opened previously with DesignCenter. Double-click a drawing file from the list to navigate to the drawing file in the tree view of the Folders tab and to load the content into the content area.

- **DC Online** provides content from the DesignCenter Online web page including blocks, symbol libraries, manufacturer's content, and online catalogs. We will discuss this tab in depth later.
Design Center works with...

- Blocks
- Dimstyles
- Layers
- Layouts
- Linetypes
- Textstyles
- Xrefs

Drag and Drop

You can drag Object from Design Center directly into your drawing file.

With a left click and drag, you insert the BLOCK directly.

If the block contains attribute – you will be prompted to complete the values.
When you Right Click – You can create a Tool Palette

You can add more blocks by just dragging the symbol in...

You can drag multiple blocks at one time.

You can **Double-Click** a single block to open the Insert Dialog Box.
When you **right click** you can even redefine an existing block and Insert it – or just redefine it.

<table>
<thead>
<tr>
<th>Insert Block…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insert and Redefine</td>
</tr>
<tr>
<td>Redefine only</td>
</tr>
<tr>
<td>Copy</td>
</tr>
<tr>
<td>Create Tool Palette</td>
</tr>
</tbody>
</table>

If you right click and select Copy – then you have many options...

<table>
<thead>
<tr>
<th>Repeat Paste as Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cut</td>
</tr>
<tr>
<td>Copy</td>
</tr>
<tr>
<td>Copy with Base Point</td>
</tr>
<tr>
<td>Paste</td>
</tr>
<tr>
<td>Paste as Block</td>
</tr>
<tr>
<td>Paste to Original Coordinates</td>
</tr>
<tr>
<td>Undo</td>
</tr>
<tr>
<td>Redo</td>
</tr>
<tr>
<td>Pan</td>
</tr>
<tr>
<td>Zoom</td>
</tr>
<tr>
<td>Quick Select…</td>
</tr>
<tr>
<td>Find…</td>
</tr>
<tr>
<td>Options…</td>
</tr>
</tbody>
</table>

**More Right Click Magic…**

In fact depending on what you drag and how you drag it you get differing dialogs

Drag a **Dwg** file… Insert as Block or Attach as Xref.

<table>
<thead>
<tr>
<th>Insert as Block…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attach as Xref…</td>
</tr>
<tr>
<td>Cancel</td>
</tr>
</tbody>
</table>

Drag a **layer** … Add the layers or Add the layers and open the Layer Dialog Box.

<table>
<thead>
<tr>
<th>Add Layer(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add and Edit Layer(s)…</td>
</tr>
<tr>
<td>Cancel</td>
</tr>
</tbody>
</table>
Drag an Xref – You can Place Xref (attach and drag- no dialog box) or Attach Xref (dialog box)

Making Blocks that work with Design Center

The Block Creation Dialog Box has some additions.

**Preview Icon**

Determines whether to save a preview icon with the block definition and specifies the source of the icon.

- **Do Not Include an Icon**
  - Specifies that no icon is created.

- **Create Icon from Block Geometry**
  - Creates a preview icon to be saved with the block definition from the geometry of the objects in the block.

**Insert Units**
Specifies the units to which the block is scaled when dragged from AutoCAD DesignCenter. When you drag it in it adjusts to the scale of your file.

**Description**

Specifies the text description associated with the block.

If you open a file that does not have preview images for the blocks. They will be automatically generated for you.

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**Working with Hatch Patterns**

To drag hatch patterns into your drawing:
1. From the Tools menu, choose AutoCAD DesignCenter.
2. Click the Folder Tab.
3. In the folder tree view, select the AutoCAD Support folder. Then double-click acad.pat to open it and display the hatch patterns.
4. In the palette, select a hatch pattern.
5. Drag the selected pattern to a boundary object in your drawing.
6. The pickbox of the crosshairs shows the hatch pattern you are dragging.

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**Better Yet – Make a Palette**

You can also right click to get the BHATCH command
Working with Layouts

Using DesignCenter, you can drag a layout with its objects from any drawing into the current drawing.

When you use DesignCenter to insert a layout into a drawing, a new layout is created that includes all of the paper space objects, definition tables, and block definitions from the source layout. You can delete unneeded paper space objects. To eliminate any unnecessary definition table information from the new layout, use the PURGE command.

To insert a layout using AutoCAD DesignCenter

1. From the Tools menu, choose AutoCAD DesignCenter.
2. In the tree view, find the drawing that contains the layout you want to reuse.
3. Double-click the drawing name to expand the options beneath it.
4. Select the Layouts icon to display the individual layouts in the palette.
5. Use one of the following methods to insert the layout into the current drawing:
   - Drag the layout icon from the palette to the drawing area.
   - Select a layout in the palette, right-click, and choose Add Layout(s) from the shortcut menu.
   - Double-click the layout in the palette.

Opening a drawing file directly from Design Center

![Image of Design Center interface with options]

- Explore
- Add to Favorites
- Organize Favorites...
- Attach as Xref...
- Copy
- Open in Application Window
- Insert as Block...
- Create Tool Palette
- Set as Home
Bookmark and Retrieve Frequently-Used Content

AutoCAD DesignCenter provides a solution to finding content that you need to access quickly on a regular basis. Both the tree view and the palette include options that activate a folder called Favorites. The Favorites folder can contain shortcuts to content on local or network drives as well as in Internet locations.

When you select a drawing, folder, or another type of content and choose Add to Favorites, a shortcut to that item is added to the Favorites folder. The original file or folder doesn’t actually move; in fact, all the shortcuts you create are stored in the Favorites folder.

The shortcuts saved in the Favorites folder can be moved, copied, or deleted using Windows Explorer.

To set the default startup directory for Design Center:

1. Type “adcnavigate” on the command line and press ENTER.
2. Enter the default startup location.
3. Press ENTER.

Or

To change the folder of the Home button in DesignCenter

1. If DesignCenter is not already open, on the Tools menu, click DesignCenter.
2. In the DesignCenter tree view, navigate to the folder that you want to set as home.
3. Right-click on the folder and, from the shortcut menu, click “Set as Home”.

When you click the Home button, DesignCenter will automatically load this folder.

To create Library of Symbols to use via DesignCenter

1. Begin a new drawing.
2. Define a block.
3. Repeat step 2 for as many related block definitions as you want to make.
4. Save the drawing using a name appropriate for a library drawing.
5. Access the blocks and drag them when needed directly from Design Center.

To create a Layer Standard drawing

1. Begin a new drawing.
2. Define all the layers you need.
3. Save the drawing using a name appropriate for a layer standard drawing.
4. Access the layers and drag them when needed directly from Design Center.
DesignCenter Online provides access to pre-drawn content such as blocks, symbol libraries, manufacturers' content, and online catalogs. This content can be used in common design applications to assist you in creating your drawings.

To access DesignCenter Online, click the **DC Online tab** in DesignCenter. Once the DesignCenter Online window is open, you can browse, search, and download content to use in your drawing.

Note: This feature may not be turned on at your facility. You can turn DesignCenter Online on or off in the CAD Manager Control utility, which you can access on the Network Deployment tab of the AutoCAD 2004 CD Browser.
In the DesignCenter Online window, two panes are displayed—a right pane and a left pane. The right pane is called the content area. The content area displays the items or folders that you selected in the left pane. The left pane can display one of the following four views:

- **Category Listing.** Displays folders containing libraries of standard parts, manufacturer-specific content, and content aggregator websites.
- **Search.** Searches for online content. You can query items with Boolean and multiple-word search strings.
- **Settings.** Controls how many categories and items are displayed on each page in the content area as a result of a search or folder navigation.
- **Collections.** Specifies the discipline-specific content types that are displayed in DesignCenter Online.

**With DesignCenter Online, content is categorized in folders.**

In the DesignCenter Online folders, you can retrieve discipline-specific content. The content that you can retrieve includes the following:

- **Standard Parts.** Generic standard parts that are commonly used in design. These parts include blocks for architectural, mechanical, and GIS applications.
- **Manufacturers.** Blocks and 3D models that can be located and downloaded by clicking a link to a manufacturer's website.
- **Aggregators.** Lists of libraries from commercial catalog providers can be searched for parts and blocks.

**DesignCenter Online Privacy**

DesignCenter Online is an interactive feature that must be connected to the Internet to deliver content and information. Each time DesignCenter Online is connected, it sends information to Autodesk so that the correct information can be returned. All you privacy advocates – pay attention. All information is sent anonymously to maintain your privacy.

The following information is sent to Autodesk:

- Product Name. The name of the product in which you are using DesignCenter Online
- Product Release Number. The version of the product
- Product Language. The language version of your product
- Random Number Identifier. DesignCenter Online assigns a random number identifier to each person who uses the feature. This identifier is used to retain your Collections and your Settings views each time DesignCenter Online is used.

Autodesk compiles statistics using the information sent from DesignCenter Online to monitor how it is being used and how it can be improved.

If you believe all that then move ahead. Otherwise bail out and don’t use it.

**Refresh** (Shortcut Menu Only)
Refreshes the display in the content area to reflect any changes you have made. Right-click the content area background and click Refresh on the shortcut menu.

**Search**

Searches for content such as drawings, hatch patterns, and blocks.

**Look For**

Specifies the type of content to search for. The content type you specify determines which tabs are displayed in the Find dialog box and the search fields it provides. The Date Modified and Advanced tabs are displayed only when the Drawings option is selected in Look For.

**In**

Specifies a search path name. To enter multiple paths, separate them with semicolons. Use Browse to select a path from a tree view list.

**Browse**

Displays a tree view in the Browse for Folder dialog box, in which you can specify the drives and folders to search.

**Search Subfolders**

Includes subfolders in the search path.

**Find Now**

Starts the search based on criteria you specify.

**Stop**

Stops the search and displays the accumulated results in the Search Results panel.

**New Search**

Clears the Search For the Name box and places the cursor in the box.

**Search Results Panel**

Displays the results of the search in resizable columns. Double-click an item to load it into DesignCenter.

You may be able to use DesignCenter to drag drawing geometry from a corrupt drawing into a new drawing.
Watch Out!

Before using DesignCenter to copy information from one drawing to another, be sure that the style names and blocks you want to copy are unique. Duplicate objects and styles are not copied if the destination drawing contains objects or styles with the same name. The existing entity is used.

Variables to Know

**INSUNITS** - Specifies a drawing-units value for blocks or images inserted from DesignCenter. INSUNITS applies to blocks and images only, and does not affect other content, including drawings.

**BLOCKICON** - Use this command to generate icons for blocks created with an earlier release of AutoCAD. You can enter a series of comma-delimited block names or wild-card characters. For example, enter b1, ?2, to specify that block B1 and all two-character blocks ending with 2 should be updated.

After you enter the block names, AutoCAD displays a message describing the process as it proceeds. Press ESC at any time to stop.

**ADCENTER** – Opens Design Center

**ADCCLOSE** – Closes Design Center

**ADCNAVIGATE** - Controls the AutoCAD DesignCenter file name, folder, and network paths when DesignCenter is opened.

At the prompt, you can enter a path in any of the following formats:

- Directory paths: `c:\program files\AutoCAD 2002\sample`
- Directory paths and a file name: `c:\project files\electrical\circuit2.dwg`
- UNC network paths: `\\server1\campus_project`

**CDC files**

DesignCenter creates CDC files when you browse in a folder using the Large Icon view.

This file stores all the drawings in a folder as icons so that DesignCenter does not need to generate new icons each time the folder is accessed using Large Icon view. The other views (Small icons, List, and Details) in DesignCenter, do not create CDC files.

**Note:** Deleting the CDC file does not affect or damage drawing files. If you delete the CDC file, a new CDC file is created when a Large Icon view is requested.