Originally posted to the ADT customer files newsgroup 09/21/03, here it is Parts 1 and 3-6 are from the original post,

Contents:

I – Preface
II - a note on 2005 (read this)
III – Introduction to Content Browser
IV – Create Office Standard Catalogs in 5 easy steps
V –The Long Winded Explanation and Footnotes to those 5 steps.
VI – A Note to Building System users
VII– Miscellany and Addenda

Catalogs for CAD Connoisseurs

Part 1 Preface: disclaimer, thanks and rights…

How to use this document

If you are an end user, and are not in control of your office standards, and don't care, don't go any further, just pass this on to your CAD manager.
If you are an end user and are curious what your CAD manager has to deal with or are just curious, feel free to read on.
If you are the CAD manager do read on
If you are an instructor / trainer / application engineer, feel free to use and distribute this as you wish, but leave all credits in place. As a work in progress the eventual goal is to publish this work I appreciate your consideration– thanks, David

Warning

This is definitely a work in process, and as such I will not apologize for the effort it takes a bit to wade through the whole thing.

Purpose

The intent of this brain noise (not quite but almost entirely unlike a brain dump, and not particularly like a FAQ) is to give users (CAD managers in particular) a reference source when they go about creating an office standard catalog. The source of these ramblings are experience and the many posts to the Architectural Desktop newsgroup regarding catalogs and palettes.

Acknowledgements – I would like to thank…

Chris Yanchar, Mark Web of Autodesk for the many explanations provided on the newsgroup
David Koch for the summaries provided on the newsgroup.
I would also like to thank all of those participants in the newsgroup who hacked through this before me and posted those questions I used to create this

Part 2 – ADT 2005 notes

ADT 2005 note:
While this document is still more or less correct, 2005 adds two new pieces of functionality that makes the necessity of much of this information irrelevant. This functionality is;
1) With the install, you can point the content (including the catalogs) to a network server location.
2) The new content browser has the ability to export catalogs, so catalogs that are created on your local machine can be exported to the server. This function copies all the source drawings to the server location and repaths all the XML files as well – Sweet!

I give this out still in 2005 as it has some useful background info regarding file locations and such. If I ever stop traveling I will update it with the new functionality. Until then…

With 2005 – I would put it like this

-        On install, point all the catalog and AEC content out to the server location (exception is laptops that will be off line more than on – point these to local C: Drive

CAD Manager creates Office standard catalog(s) locally from either local content or server content (one or the other – to mix the two would make the export function not work efficiently) – I would suggest that there are palettes here as well as a category or two for individual tools.

CAD Manager exports the catalog to the server and…

Copies source files if they were local

Does not copy source files if they were from the server

Each station, add that Office Standard catalog to their content browser – perhaps even deleting the provided catalogs depending on the evolution of the office and it's content.

I would also be inclined to delete the existing palettes to be replaced with the office standard palettes.

Personal opinions..

Local stations get scratch palette for themselves – anyone in the office should have the basic knowledge on how to create a palette and some tools. I find that I will create palettes for repetitive tasks within the same job. – once the job is mostly done, the palette gets deleted.

I would also suggest that somewhere on the server nearby where the office catalog and it's subdirs are kept there is a "catalog Quarantine" folder. Anyone in the office can make a tool (say an assembly style), put it in a catalog and export it to this location. Periodically the CAD Leads group sorts through these tools for incorporation into the office standard. This may mean transferring a style into the "officeDoorWindowAssemblyStyles.DWG" and then creating a new tool with it, but there needs to be someway the office content can evolve. Tools are very powerful and I think it will be a while yet before people really get the hang of them…

Everything from this point on was written for 2004….

Part 3 – Background Introduction to the content browser

The content browser system is a stand alone application that gives ADT/ABS users the ability to store, organize (and distribute to some extent) the palettes and tools used by AutoCAD 2004 based products.

In this article there are two types of locations the palettes are used and stored. Because the Content browser (CB) is a stand alone application, it can and does store its parts and pieces in different locations than the Workspace Palettes. Workspace palettes are an integral part of an open ACAD session. In the remaining text, I will use the abbreviation WS or CB to differentiate between workspace palettes and Content Browser Palettes. To create your office standard catalog you will need to work with both palette types.

Based on several newsgroup entries, the intent of the content browser is to provide the ability for offices to place their standard content tools and palettes in a central location and make them available for anyone to use at their local workstation. However, the process of making this a reality is not so clear cut.

Thou shall not cut and paste with windows explorer…
The Content browser uses a system is based on xml files with an .atc extension (Autodesk Tool Catalog (assumption). Both palettes and Catalogs are stored in this format. Each catalog… or .atc file has a GUID (Globally Unique Identifier such as 94C9D2FA-C019-4357-A7D7-D538944A3016).
This means you cannot simply copy with windows explorer the palettes and catalogs around on your hard drive or network…which is the main reason I am writing this.

Part 4 – Create Office Standard Catalogs in 4 easy steps <g>

I will start with an overview or simplification and then cover the rational and gotcha's for each step in part 5

Note for ABS users. ADT and ABS tools are set up differently – most of the ABS tools such as duct, pipe and wire are custom commands that launch the appropriate add dialog box. You cannot drag items to the toolbar in the same way you can with ADT objects. That said, read on because there are some items that are ADT based such as tags, and schedules ABS users will want on their office standard palettes.

I – Centralize Standard Content and Catalogs:

1. A) Move your office standard content MyOfficeStyles.dwg to a server location – let's say (S:) \ADT2004\OfficeStyles\ **MyOfficeStyles.dwg**

2. B) Using the Content browser, Create a new catalog on the server. (S:) \ADT2004\Catalogs**MyOfficeCatalog.atc**

II – Create Temporary Local Standards Based Palette

- In a local session of ADT/ABS: Create a new workstation palette and rename to LocalOfficeStndPalette

3. Open (S:) \ADT2004\OfficeStyles\ MyOfficeStyles.dwg

4. Launch the style manager

5. Left drag and drop office standard styles from the style manager to LocalOfficeStndPalette.

6. Example drag MyOfficeSchedule style from style manager to local palette to create schedule tool.

III – Create the Office Standard Palette in Office Catalog

- Drag the LocalOfficeStndPalette into MyOfficeCatalog in the content browser and rename in the content browser to OfficeStndPalette

7.

8. Drag the OfficeStndPalette back into the local session an notice that now, the properties of this palette allow it to be refreshed from the central location.

IV – Add Office Catalog to All Users Machines

- Go to machine2 launch ADT/ABS

9. Launch Content browser, delete extraneous catalogs

10. In Content browser, pick add/create catalog button, add existing catalog or website and browse to (S:) \ADT2004\Catalogs\MyOfficeCatalog.atc

11. Drag OfficeStndPalette from MyOfficeCatalog into local machine

12. Verify in local palette properties Refresh From is not grayed out.

13. Image this machine for network distribution or repeat step 4 a bunch of times

OK that is the short version – now for the expanded version…

Part 5 – The long winded explanation and footnotes to those 4 steps of Part 4.

Uncut version EZ step 1 – Centralize Standard Content and Catalogs:

1 Move your office standard content MyOfficeStyles.dwg to a server location – let's say (S:) \ADT2004\OfficeStyles\ MyOfficeStyles.dwg

Move your office standard content to a server location.
This is essential to the process. Each tool has the location of the style or block or whatever stored in the tool itself.
Example: The tool "MyOfficeSchedule", you create in step 2-D has by default stored in the tool, the path S:\ADT2004\OfficeStyles\ MyOfficeStyles.dwg
You want all of your office standard tools to look to the server for their source

2 Using the Content browser, Create a new catalog on the server. (S:) \ADT2004\Catalogs\MyOfficeCatalog.atc

You must create this catalog. You cannot copy an existing catalog with windows explorer. There are many reasons not to copy the existing catalogs and rename them.

When you create MyOfficeCatalog, it the software does several things.

New Catalog 1 – atc file that holds the xml code for the catalog is created

At this point, there are no palettes so the xml code in the .atc file is very simple and looks like this:

```
<Catalog><ItemID idValue="{CC3AB656-9BA8-401D-9CD0-36A76EAD7339}"/>
        <Properties>
                <ItemName>OfficeStndCatalog</ItemName>
                <Images/>
                <Time createdUniversalDateTime="2003-09-21T17:57:03"
                modifiedUniversalDateTime="2003-09-21T17:57:03"/>
        </Properties>
        <Tools/>
        <Palettes/>
        <Packages/>
        <Categories/>
        <StockTools/>
        <Catalogs/>
</Catalog>
```

Notice that creating the catalog in the Content browser gives it the GUID {CC3AB656-9BA8-401D-9CD0-36A76EAD7339}. Each catalog must have its own GUID – the reason you simply cannot go cutting and pasting catalogs around.

New Catalog 2 - Also at this point, an entry is made to the file ContentBrowser.cbl file

```
<Catalog>
<Image href="C:\Program Files\Autodesk Building Systems 2004\Html\DefaultCatalog.png"/>
<ItemID idValue="{CC3AB656-9BA8-401D-9CD0-36A76EAD7339}"/>
<Url displayName="OfficeStndCatalog"
href="F:\TempHold\ADT2004\Catalogs\OfficeStndCatalog\OfficeStndCatalog.atc"/>
<Description></Description>
<Time createdUniversalDateTime="2003-09-21T17:57:03" modifiedUniversalDateTime="2003-
09-21T17:57:03" accessedUniversalDateTime="1969-12-31T17:00:00"/>
<Type>2</Type>
</Catalog>
</Catalogs>
```

```
<Browsers><Browser><Url displayName="" href="home"/><Screen x="129" y="136" cx="1009"
cy="755" onTop="0" maximized="0"/>
<LastElementSelected index="0"/>
<Time createdUniversalDateTime="2003-08-22T08:45:47" modifiedUniversalDateTime="2003-
09-19T00:46:11" accessedUniversalDateTime="2003-09-
19T00:46:11"/></Browser></Browsers></Library>
```

not exactly sure if I got all of the code for this one catalog, but you get the point – the CBL file is just another xml file that holds pointers for the catalogs available (or "installed") for the local machine. This file is held in:
..Documents and Settings\<currentUser>\My Documents\My Autodesk Content Browser Library

The catalogs supplied with a standard install are installed at several different locations and have some peculiar behaviors due to:

> Microsoft's requirements for where things are installed
> Autodesk's use of a shortcut in some of the xml .atc files.

The following was posted April 8 to the ADT newsgroup by Chris Yanchar :

I will answer your question regarding the various types of catalogs that show up in the Content Browser library. Please note that this info is intended for CAD Managers and not regular users. <g>. Also, there are few difference for user related files and VIZ Render; and I don't have all the answers right now so the info below pertains to the main ADT app and Content Browser.

Architectural Desktop Stock Tool Catalog:
This is intended to be a program specific catalog that contains an original tool for all the various basic tools that are provided with the program.
Lives in: \Program Files\Autodesk Architectural Desktop 2004\Catalogs\StockToolCatalog\
Why?: Because XP logo states that any application program files are located here. For limited users anything under Program Files are read-only; for Power Users, Admins, etc. they would have read-write access.

Architectural Desktop Sample Tool Catalogs (Imperial/Metric/DACH):
These are tool catalogs that mirror the sample out-of-the-box tool palettes.
Lives in: \Program Files\Autodesk Architectural Desktop 2004\Sample\
Why?: Samples were viewed as examples of what can be done, not as files that are meant to be modified. Of course if a user did want to modify these samples, they could copy them first into a read-write location, such as My Documents. One option was under the user's profile: Not such a good option because these samples would end up being copied as each user logs into the machine. In the end we opted to place them in the Sample folder with other AutoCAD samples.
Architectural Desktop Tutorial Tool Catalogs (Imperial/Metric):

Same reasons as above sample catalogs.
Autodesk Sample Render Material Catalog: Contains a sampling of render tools.
Lives in: \Program Files\Autodesk Architectural Desktop 2004\Samples\
Why?: This one was a toss up between being content and samples.

Architectural Desktop Design Tool Catalog (Imperial/Metric)
and **Architectural Desktop Documentation Tool Catalog:**
These are content files. They refer to the same AEC Content that is accessed "raw" from DesignCenter, 'Custom' tab, but are "toolized."
Lives in: \Documents and Settings\All Users\Application Data\Autodesk\Autodesk Architectural Desktop 2004\R16.0\enu\Tool Catalogs\
Why?: Because XP logo specifies that any non-user specific and non-roaming application data should be installed to All Users, including any data that will be shared by all users.

My Tool Catalog:
This is a blank user tool catalog ready for a user to add their own stuff into.
Lives in: \My Documents\My Autodesk Content Browser Library\
Why?: Because XP logo specifies that any user-created data that is not application state or temporary data should be saved here.

Also saved in the above folder is the xml file that tracks the catalogs that a user adds to their Content Browser library; the file is ContentBrowser.cbl. In ADT2004 Content Browser -requires- that this file exist in this folder.

Workspace Data Files:

Then there are the data files that store the tools/tool palettes that are actually displayed in the ADT workspace.
These live in: \Documents and Settings\<username>\Application Data\Autodesk\Autodesk Architectural Desktop 2004\R16.0\enu\Support\WorkspaceCatalog (Imperial/Metric or DACH)\
Why?: XP logo specifies that any user-specific application preferences or data that affects the user's environment or impact AutoCAD drawing files should be installed here. These files roam.

Where from here?
The content files installed under All Users undoubtedly would be move to a network server. This is the part that Rick mentioned we are aware of that is not so smooth and needs to be improved. In the meantime, here are the parts that are not so obvious for setting up a network environment:

1) The path on the AEC Content tab for "Content Path." This has nothing to do with tools or tool catalogs. This path is used in the same way as in previous releases and merely controls what root folder is accessed when the Custom tab in DesignCenter is displayed.
2) Tools can reference an external drawing to pull in a style. In the tool definition (xml file) you would see something like:

<Style ref="%AECCONTENT_DIR%\Styles\Imperial\Door Styles (Imperial).dwg">Hinged – Single</Style>

The key %AECCONTENT_DIR% represents the root content node and is looked up in the Registry by ADT and Content Browser to resolve the full path. By default it equals "\Documents and Settings\All Users\Application Data\Autodesk\Autodesk Architectural Desktop 2004\R16.0\enu\"

The two Registry keys that ADT and Content Browser look for are located in:

HKLM\Software\Autodesk\AutoCAD\R16.0\ACAD-204:409\AEC\4.0\General\Tools. "ContentRoot"
and
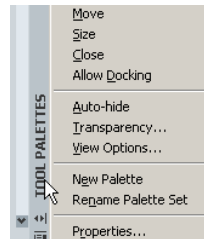HKLM\Software\Autodesk\Autodesk Content Browser "ContentRoot"

Hope this helps.
--
chris yanchar, product design, building solutions division, autodesk, inc.

Uncut version EZ step 2 – Create Temporary Local Standards Based Palette

1   In a local session of ADT/ABS: Create a new workstation palette and rename to
                    LocalOfficeStndPalette

Create a new local workstation palette by:

Open the tool palettes in ADT/ABS

Right click on the border (where the vertical title Tool Palettes is) of the palettes toolbar

 and select New Palette.

This palette will be stored in the local directories for active working catalogs

C:\Documents and Settings\<currentUser>\Application Data\Autodesk\Autodesk Building Systems 2004\R16.0\enu\Support\WorkspaceCatalog (Imperial)\Palettes

Or

C:\Documents and Settings\<currentUser>\Application Data\Autodesk\Autodesk Architectural Desktop 2004\R16.0\enu\Support\WorkspaceCatalog (Imperial)\Palettes

2   Open (S:) \ADT2004\OfficeStyles\ MyOfficeStyles.dwg

3   Launch the style manager

4   Left drag and drop office standard styles from the style manager to LocalOfficeStndPalette.

Example drag MyOfficeSchedule style from style manager to local palette to create schedule tool.

OK side note on creating tools…You can create a tool in several ways.

Some assumptions for this section:
- You are creating the tool in a non-linked active workspace palette – more on this later.
- We are talking about ADT tools and styles and content NOT ABS tools and styles

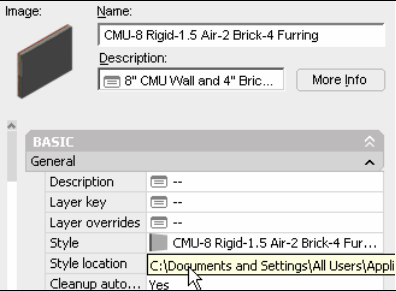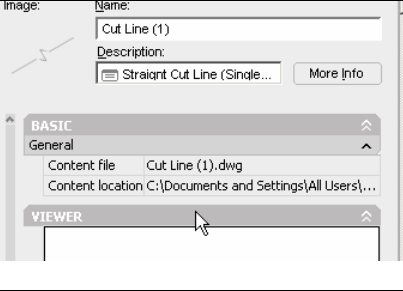You can left drag a style directly from style manager to the palette
You can left drag content from the DesignCenter to the palette
You can left drag anything from a drawing to the palette (but be careful in doing so).

***

In all cases there is a path stored in the properties of the tool. The success of your local tool palette and ultimately your Office Standard Catalog is dependent that you know the sources the tool is referring to.

***

In both cases the tool is created and pathed to the source drawing that is open in the style manager or DesignCenter.
right click **on** either type of these tools and select Properties.

The object tool will have a style location parameter pointing to the original location of the style.	The DesignCenter content will have a Content Location path to the source content

Preview Images:

Preview images of each tool is created on the fly as you create the tools. Each local palette you create will not only create an .atc file in the folder mentioned above, but as you add tools, images are created on the fly and stored in the Images subfolder of this location. The image files are .png files. You can create your own images if you want – the PNG file is Portable Network Graphics and can be opened with Paint in Windows XP – they are 64pixels x 64pixels.
Preview image of the tool depends on several factors:
  Is the tool an object or annotation?

Objects (doors-walls etc) previews:

When you drag an object to a palette it takes the current drawings rendering setting as applies them to the image. As most drawings will not have any lights, or default to the shademode light, the objects will appear black or backlit in the preview image. If you place a rendering light in the drawing, (Light at the command line and then New>Distant Light) the image will take on this light instead. You can select a black image on the toolbar and refresh it in the tools properties. The image will then use the distant light in the current drawing.

Annotation:

Annotation tools use the current layer key style active in the current drawing, and the color of the current viewport's background color.
If you are just looking at a black background of model space and you drag a Documentation>Break mark> Cut line (1) into the drawing it will generally be placed on layer <>-anno-symb with color 131 as set by the layer key style. If you drag this same content from the DesighCenter directly onto the palette instead of into the drawing, it will also use this default color which is so similar to the palette color that the break mark appears to disappear.
If you start a new drawing and set the layer key style to Current Layer and set the current layer to 0 and have a black background model space active - when you drag the break mark onto the palette, it will be white – which is almost visible. If the current viewport is a paperspace layout viewport with a white background the tool will show up black.

Uncut version EZ step 3 – Create the Office Standard Palette in Office Catalog

A) Drag the LocalOfficeStndPalette into MyOfficeCatalog in the content browser and rename in the content browser to OfficeStndPalette
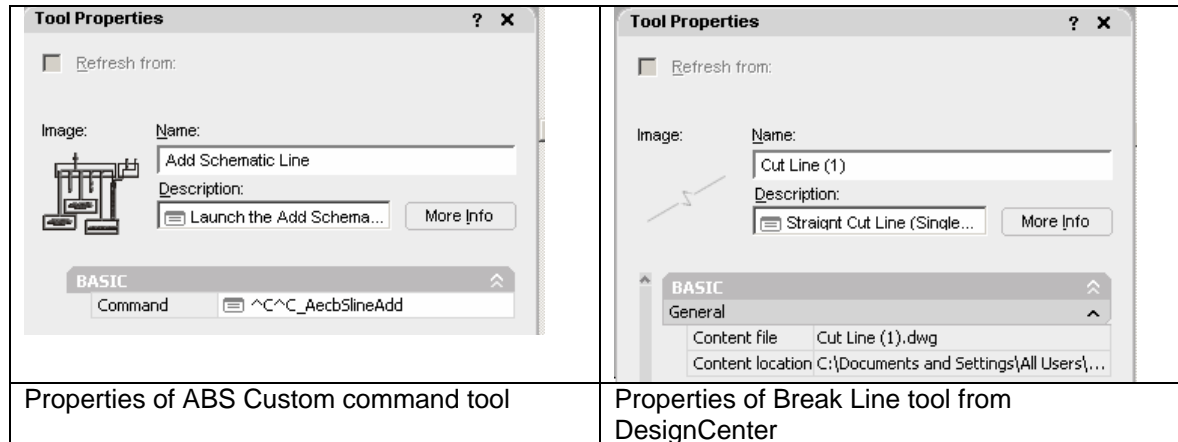
You have to place the cursor over the name tab of the palette to left drag it to the content browser. The palette, all the tools (read xml instructions) and images should be then copied to the server location where the MyOfficeCatalog was created.

B) Drag the OfficeStndPalette back into the local session an notice that now, the properties of this palette allow it to be refreshed from the central location.

Part 6 – A Note to Building System Users

Building Systems users:

Most of your palettes are created with a special type of tool called Custom Command. While at first glance, the Add Schematic Line tool and the break mark tool appear to work in very much the same way, the root functionality is very different. The properties of the tools look like this:

Properties of ABS Custom command tool	Properties of Break Line tool from DesignCenter

When you are creating palettes for your office you can copy these custom command types of tools directly from the supplied palettes to your office standard catalog. If you copy this tool from one of the supplied local palettes or copy the whole local supplied palette to your office catalog, it will copy the images as well, so there is no problem with doing this. Also because the custom command is just that – only a command, there is no source file pathing to muck up the process.

Part 7 – Miscellany and Addenda

Notes on refresh.

The original palette "Temporary Local Standards Based Palette " you created in step 2 will not refresh because it was created only to the local workstation palettes and does not have any links to the catalog.

If you drag an existing palette from the supplied palette catalogs into MyOfficeCatalog and then into a session's palette it will NOT have the ability to refresh. Go figure. - I think I read something about read only attributes at some level – if anyone knows the particulars they can email me at 4d@pobox.com and I will add that to this rant and repost it

Note Re. Options>Files>Tool Palettes Files Location

Once you have seen this setting your first impulse may be to put the catalog out on a server, and then add the path to the server at each station –
Don't do this
There has been some thread on corruption doing this, and also it breaks the refresh options of the local palettes.
While I cannot absolutely say why, or that it does cause corruptions, in the various threads, the end comment was don't do this – so I am passing this advise on here.

ACAD vs. ADT/ABS…the help file and a missing customize tab.

The Content browser system is unique to Architectural Desktop and Building Systems products. It is not available to vanilla AutoCAD users.
Vanilla AutoCAD user can do things like import and export palettes using the customize command. As noted in the help, they will have an extra tab in the customize dialog box that allows them to import and export.

ADT and ABS users have been provided with the enhanced functionality of the content browser for these functions and do not have this tag available in the customize dialog box.

Registry editing Vs the above process

I leave this up to you – there are several threads in the newsgroup that deal with registry hacks and catalog locations. I prefer to leave these alone.

8/18/2004