



Autodesk
University
2007

AutoCAD® Architecture Solutions: The Power User's Challenge

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AB304-4 This session will answer common production questions using AutoCAD Architecture software. Do you know how to solve them all? If you are the power user in your organization seeking better solutions to every-day production needs with AutoCAD Architecture, you'll want to attend this session. We'll also take a quiz (and award prizes) on AutoCAD Architecture solutions.

About the Speaker:

Jeanne is known for keeping her training sessions fast-moving and fun. She is a nationally known speaker and expert in CAD and presents seminars and workshops on CAD productivity for managers and users in both corporations and colleges. She has more than 20 years of experience in production drafting, user support, standards coordination, programming, and training in various CAD applications. Jeanne is an independent consultant offering training and implementation services and is certified in several Autodesk and Bentley products. She has been a popular speaker at AU for several years.

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So many solutions to everyday issues...so little time!

The topics I selected for this presentation were collected from friends, co-workers, other user groups, and of course the newsgroups.

If you have solved a problem within your work environment and would like to share the solution, I invite you to share your ideas with other users. This only works when we ALL share problems and solutions. Keep the information flowing....and thanks to all those who helped with this collection of solutions.

About this document:



Secret available in ADT 2004



Secret available in ADT 2005



Secret available in ADT 2006



Secret available in ADT 2007



Secret available in ADT 2008

Solution



Solution Provided by....

Thanks to everyone who contributed ideas to this session. And remember me if you have a clever way to use ADT/ACA or AutoCAD, send me YOUR "secrets". We all learn through sharing!

1 Missing Toolbars?




Autodesk

Problem: I just installed AutoCAD Architecture (ACA) and cannot find some of my favorite AutoCAD toolbars such as Draw, Viewports, etc.

Solution: Autodesk Architecture provides modified versions of many standard AutoCAD toolbars and menus. You can use the new modified interface; or you can load the the AutoCAD interface into ACA.

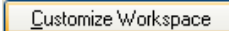
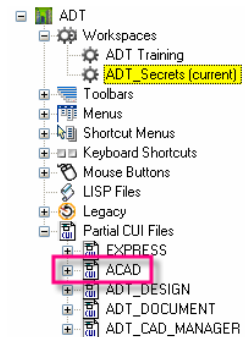
Loading the ACAD.CUI

Step 1: **<Right-Click>** and select **Customize**

Step 2: Select the  button and load the **ACAD.CUI** file into the current CUI interface.

If you expand the **Partial CUI Files** list you should see **ACAD** in the list.

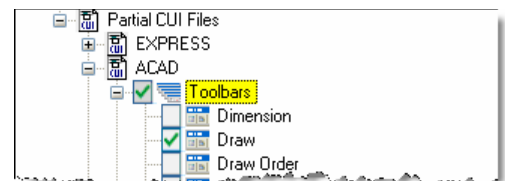
Step 3: Verify that you have highlighted the **CURRENT** workspace, in this case **ADT_Secrets** and select the **Customize Workspace** button.



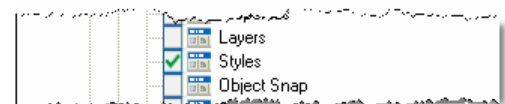
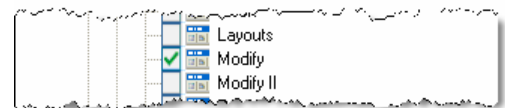
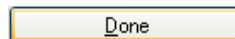
This will give you access to turn off the "extra" AutoCAD tools you don't want.

Step 4: Uncheck the Menu list under the Partial CUI files section. We don't want any ACAD pulldown menus

Step 5: **Uncheck** the Toolbars list under the Partial CUI Files section, and turn only the toolbars you want to use. I selected Draw, Modify, and Styles for this example.



Step 6: Select the **DONE** button to save the changes.





2 No Wall Fillets?



Autodesk

Problem: I can use the FILLET command on line work but not on wall objects while working in Autodesk Architecture?

Solution: This is usually a CUI issue involving the ACAD.CUI loaded in the ACA environment. The AutoCAD FILLET command is “tromping” on top of the ACA FILLET command which has been modified to allow you to fillet or chamfer ACA objects.

Many of us load the ACAD.CUI as a partial menu to gain access to missing AutoCAD commands and toolbars that we still want to use in ACA. To test if this is your problem; unload the partial ACAD.CUI; restart ACA and test the commands. If they work without the ACAD.CUI loaded; you should TRANSER the required ACAD.CUI items into the ACA.CUI environment rather than loading ACAD.CUI as a partial menu.

3 Multiple Base Points?



Problem: How can I have more than one insertion base point in a Multi-view block?

Solution: Start the INSERT MVBLOCK command and use the CTRL key to toggle the insertion point dynamically. These points can be defined in the block definitions using POINT objects placed on the DEFPOINTS layer.



4 Details?



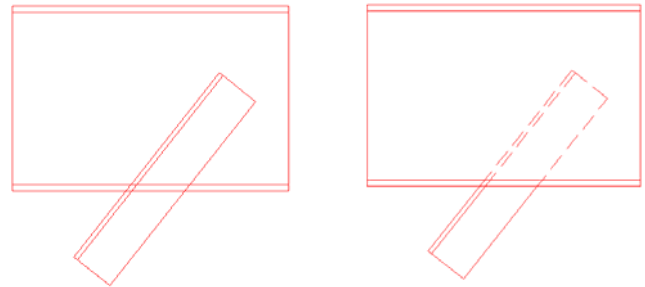
Problem: I heard there was an OBSCURE command in ACA/ADT but I can't find it?

Solution: The details section of the ACA product is probably one of the best kept secrets in ACA. If you're not using these tools, you must take a new look and dive in.

The OBSCURE command is found in the *<Right-Click>* menus while editing "detail" objects. Detail objects are uniquely drawn blocks using ACA tools.

Obscure

- Step 1: Select the detail objects that are hidden.
- Step 2: **<Right-Click>** to access the **AEC Modify Tools → Obscure** command.
- Step 3: Select the boundary object that defines the obscuring object.





5 Import/Export Tool Palettes?



Tony Michniewicz, AEC Solutions

Problem: How can I import and export Tool Palettes in AutoCAD Architecture? When I <Right-Click> in the Tool Palette dialog; the Import and Export commands are missing?

Solution: Starting in ADT 2007, the Import and Export options were intentionally disabled within ADT/ACA because many tools found on the ADT/ACA tool palettes will not work in vanilla AutoCAD. To save confusion; Autodesk removed the ability to export ADT/ACA tool palettes to avoid someone accidentally importing them into AutoCAD.

When working in ADT/ACA, the intended workflow is to use the Content Browser to transfer tools and palettes between systems and users.

- STEP 1: Create a “scratch” tool palette to use as a template for custom tools.
- STEP 2: Create a tool palette in your corporate Content Browser.
- STEP 3: Drag the completed tools from your “scratch” tool palette into your corporate tool palette.
- STEP 4: Organize as needed.
- STEP 5: Drag the completed corporate tool palette into your current workspace. This links the tool palette to the corporate Content.

6 Tool Palettes Keep Disappearing?



Paul Aubin, www.paulaubin.com

Problem: When I switch projects some of my tool palettes disappear? How can I get the tool palettes visible for all projects?

Solution: When you create a tool palette while a project is active; it is assumed that the tool palette is unique to that project only. If you want a tool palette to be “persistent” across all projects; you must not be in an active project when the tool palette is created. If no project is active when the tool palette is created it will remain “persistent” across all projects.

7 Document Tool?



David Koch, Autodesk Discussion Group Facilitator

Problem: How do I open a document from a tool on a tool palette?

Solution: The following macro will allow you to open a PDF document from a tool palette tool, toolbar, menu, etc. You can use

^C^CShell DriveLetter:/Folder/Folder/Etc/Filename.pdf;

You can substitute the drive letter and folder path for your specific file.

Be sure to use forward slashes, rather than backslashes to define the "slash symbol" used in the folder definition.

8 Tag Irritations?



Problem: How can I stop the **Edit Property Set Data** dialog from appearing after every tag?

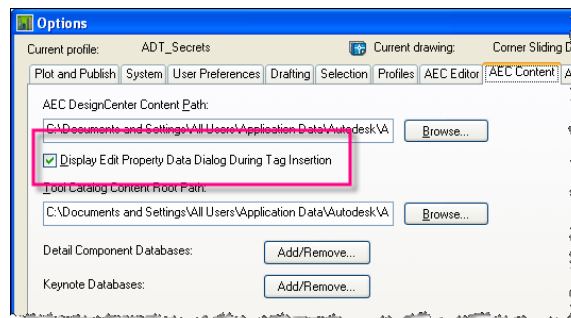
Solution: This is an OPTION setting that can be modified as needed.

Modify AEC Content Setting

STEP 1: Select the **Options** command.

STEP 2: Select the **AEC Content** tab

Turn **OFF** the setting for **Display Edit Property Data Dialog During Tag Placement**.





9

Check for Service Packs



Problem: How can I check if service packs have been applied and if so which ones?

Solution: There is a hidden command - AECVERSION that reports the revision numbers of ARX modules. So you can determine what individual service packs have been applied. This also works for determining what AEC Object Enabler has been installed in AutoCAD.

10

ADT Match Properties



Problem: How do I match ADT properties and not just AutoCAD properties?

Solution: Use the Tool Palette tools and the *<Right-Click>* menu options to match ADT/ACA properties to existing objects.

STEP 1: Select the object that needs to be modified

STEP 2: *<Right-Click>* on a tool and use the **APPLY TO SELECTED OBJECT** command.

You can also use this to create new objects that contain non-style based properties. An example would be a wall containing sweeps.



11 Multiple Structural Members?



Problem: How can I add columns to an existing column grid automatically if they weren't added during the creation of the grid?

Solution: The use of the **<CTRL>** key during column placement to toggle between the following options:

1. Add a column to a node
2. Add columns to all nodes
3. Add column at a point

12 Automatic Stair Openings?



Problem: How can I get stair openings in my slabs automatically?

Solution: Create a STAIR and SPACE object and use an INTERFERENCE CONDITION to determine the opening in the space. Use the SPACE object to generate the SLAB.

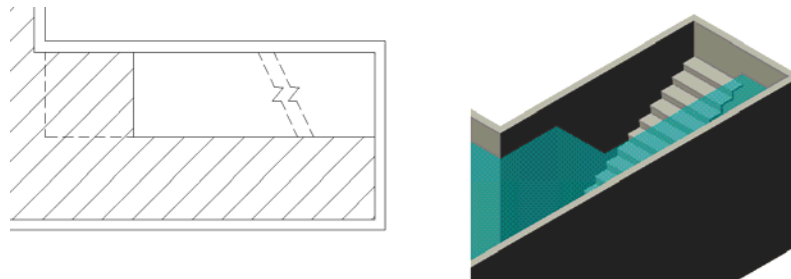
Interference Conditions

Use the Space and Stair objects to calculate the required floor or ceiling openings using interference conditions.

STEP 1: Select the Space object and **<Right-Click>** to access the **Interference Condition → Add** command.

STEP 2: Select the **STAIR** object as the **Interference Object**.

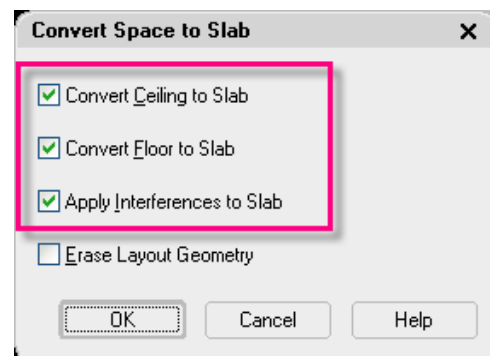
You may not see the “opening” cut in the space ceiling unless you are in a 3D view or using the Reflected display representation.



STEP 3: Select the **SPACE** object and **<Right-Click>** on the **SLAB** tool to access the **Apply Tool Properties to → Slab**

STEP 4: Modify the Convert Space to Slab settings as needed.

The “secrets” don’t stop there. If you modify the stair during the design process; the opening will automatically adjust. Pretty cool, right?



13 Corrupt Profile?



Autodesk

Problem: I have a profile that cannot be deleted? How can I get rid of this profile?

Solution: The profile definition is defined in the windows registry. To remove it you must clean up the registry.

WARNING! WARNING! WARNING!

Be sure to back up your windows registry before making any edits. Autodesk is not responsible for any failures which occur as a result to using the REGEDIT command. If you are unfamiliar with this process you should not use the REGEDIT command.

STEP 1: Close ADT/ACA

STEP 2: Go to **Start** → **Run**, type **REGEDIT** and click **OK**

STEP 3: In the Registry Editor navigate to the following key folder:

HKEY_CURRENT_USER\Software\Autodesk\AutoCAD\R17.1\ACAD-6004:409\Profiles

Substitute the appropriate application folder as listed below:

Autodesk Architectural Desktop 2005 <KEY_NAME> is R16.1\ACAD-304:409
Autodesk Architectural Desktop 2006 <KEY_NAME> is R16.2\ACAD-4004:409
Autodesk Architectural Desktop 2007 <KEY_NAME> is R17.0\ACAD-5004:409
AutoCAD Architecture 2008 <KEY_NAME> is R17.1\ACAD-6004:409

STEP 4: Under this key there will be a key folder corresponding to each ADT/ACA profile

STEP 5: Locate the key folder corresponding to the corrupt profile, <Right-Click> and choose **Export**

STEP 6: Logically name this file and **Export** it as a backup.

STEP 7: Locate the key folder corresponding to the corrupt profile, <Right-Click> and choose **Delete**

STEP 8: **Exit** the Registry Editor and restart ADT/ACA.

14 Trashed Interface?



Autodesk

Problem: I am experiencing strange interface problems with my CUI and profiles. Tools will not remember whether they are on or off and their location keeps changing on-the-fly. The out-of-the-box profiles have not fixed the problems as they are experiencing the same issues.

Solution: Similar to the previous item; you need to edit the windows registry to re-build the interface without having to re-install the software.

WARNING! WARNING! WARNING!

Be sure to back up your windows registry before making any edits. Autodesk is not responsible for any failures which occur as a result to using the REGEDIT command. If you are unfamiliar with this process you should not use the REGEDIT command.

STEP 1: Backup any Profiles in ADT/ACA you need to keep and close the application.

STEP 2: Close ADT/ACA

STEP 3: Go to **Start → Run**, type **REGEDIT** and click **OK**

In the Registry Editor navigate to the following key folder:

HKEY_CURRENT_USER\Software\Autodesk\AutoCAD\R17.1\ACAD-6004:309

Substitute the appropriate application folder as listed below:

Autodesk Architectural Desktop 2005 <KEY_NAME> is R16.1\ACAD-304:409
Autodesk Architectural Desktop 2006 <KEY_NAME> is R16.2\ACAD-4004:409
Autodesk Architectural Desktop 2007 <KEY_NAME> is R17.0\ACAD-5004:409
AutoCAD Architecture 2008 <KEY_NAME> is R17.1\ACAD-6004:409

STEP 4: Select the key folder and <Right-Click> to choose **Export**

STEP 5: Logically name this file and **Export** it as a backup.

STEP 6: Select the key folder and <Right-Click> to **Delete** to remove this folder.

STEP 7: **Exit** the Registry Editor and restart ADT/ACA

STEP 8: The interface will be re-built automatically in the windows registry and give you a “clean” interface installation.

15 Managing Tool Palettes and Groups?



Steve Bennett

Problem: How can I create and distribute Tool Palettes across the enterprise?

Solution: When you create a tool palette and group it is stored in association with the ACTIVE PROFILE and CURRENT USER. Tool palettes are defined in XML files that are easily copied from one machine to another or stored on an enterprise server.

Tool palette groups however; are stored in the windows registry and are not as easily transferred. One method is to copy the PROFILE.AWS file from the “developers” computer to each user computer to transfer the groups as needed.

What is the PROFILE.AWS?

This file contains all the information associated with the tool palettes on the developer's system. It stores the order of palettes; which palettes belong in which group; and the location/size of the palette on the computer screen. This file exists for both vanilla AutoCAD and ADT/ACA.

There will be a **PROFILE.AWS** in a folder that corresponds to the PROFILE NAME in the application. This is the *.aws file you want; do not copy the FIXEDPROFILE.AWS file since it will do you no good.

This file is typically found at the following location.

C:\Documents and Settings\USERNAME\Application Data\Autodesk\ADT2006\enu\Support\Profiles

What does AWS stand for? **Autodesk Work Space**



Places You Need to Know

Autodesk		www.autodesk.com/archdesktop
Mike Massey		www.knowingwhatyoudontknow.blogspot.com
Richard Binning	“Beside the Cursor”	www.integr-8.com/besidethecursor
ARCHIdigm		www.archidigm.com
Tomislav Zigo		bimology.blogspot.com
Erhan Toker		www.dailyautocad.com
Chris Yanchar	“Between the Walls”	adt_blog.typepad.com
Paul Aubin		www.paulaubin.com
Matt Dillon	“Breaking Down the Walls”	modocrmadt.blogspot.com
Todd Shackelford	“The Lazy Drafter”	lazydrafter.blogspot.com
Avatech		www.avat.com/training/elearning/techtips
CAD Digest	ADT Reading Room	http://www.caddigest.com/subjects/adt/index.htm



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That's probably more than I have time for....but hopefully
not more that you wanted to know!

Thank you for your time
Hope you enjoyed the session!

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