

Modifying the Autodesk® AutoCAD® Electrical Environment

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Class summary

Tired of clicking through the same paths several times a day just to get to default directories? Do you want to help yourself and others store files in the proper directories? This class is for you. We discuss the WD.ENV and WD_M files used to initiate the AutoCAD® Electrical software environment and provide default paths for various commands. We also touch on templates and shared environments.

Key learning objectives

At the end of this class, you will be able to:

- Modify the WD.ENV environment file
- Modify the WD_M block
- Establish default paths
- Create custom templates

Definitions:

WD.ENV - Text file that contains settings and paths that direct AutoCAD® Electrical to certain files and actions.

WD_M - A special invisible block that must be present on the drawing. The WD_M.dwg is found in the default symbol library. It carries Drawing layout, Ladder defaults, Component tagging, Wire number tagging, Layer names, Fan In/Out, Cross-reference, Referencing, Styles, and Miscellaneous.

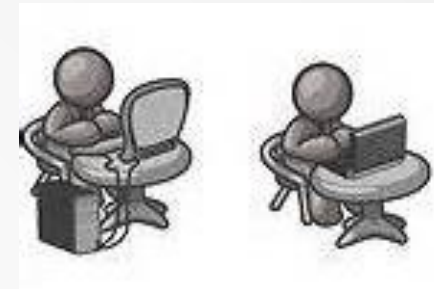
Template - Provides consistency in the drawings that you create by providing standard styles and settings. Drawing template files have a *.dwt* file extension.

Rhetorical questions:

Stand alone & only one person?



Stand alone & multiple users?



Networked a mixture of full time & casual users?

Networked with occasional users?



Users are at multiple locations?



You didn't buy yet?

Some questions for you:

- Currently use AutoCAD® Electrical?
- Have tried modifying the wd.env file, or wanted to?
- Have tried modifying the wd_m.dwg file, or want to?

Successfully?

Emotions you experienced:



I can do this!



I think I can do this!



I can't do this!

After this class:



I can do this!

Top three reasons your changes did not work:

1. Wrong path defined
2. File doesn't exist
3. Typo

Now you are thinking:



All that time and that's all it was!

Environment File: WD.ENV

What to expect from this class:

There will be more areas you will want to modify and turn on in the environment file beyond what can be talked about in this class that will save you time by reducing the amount of clicks. Think of this class as the first steps to take when trying to share data with your group.

Even if you are the only user, making these changes will make it easier for you to work in AutoCAD® Electrical by avoiding those crazy default paths, and will save you time. As you get better with AutoCAD® Electrical you can explore other options to modify and turn on in the environment file.

At the end of this document are links to sites that will help define the additional areas you should consider changing.

SECTION I

(Environment file locations you need to understand, but will not change)

The first areas to consider are the default locations of the databases, and the support locations. Most users prefer to leave these set to the defaults in the environment file. For example, each user has a support and a temp folder, and it's best to leave this set to the default install locations. However, the databases can be moved to a server location and the path can be added to AutoCAD® Electrical's options under the files tab, but you would not change anything in the environment file.

This section controls the user support location:

* Program executable, dialog, and support files

WD,%PF_DIR%/support/%WD_LANG%/,AutoCAD Electrical dialog files, xls templates, and other support files

SECTION I – Continued (User temp folder)

(Environment file locations you need to understand, but will not change)

It is recommended not to modify the default user temp folder location that is created during the install. AutoCAD® Electrical will save files to this location so it needs write permissions. For example, the scratch database AutoCAD® Electrical creates for each project is saved here. When you get messages about updating, or you use the Freshen button, this scratch database is being updated. Prior to Autodesk acquiring the software this file would get corrupted and a trick was to delete this file to force the software to re-create it.

This section controls the user temp location:

* User temp file folder, CANNOT shared with other users

WD_USER,%DS_DIR%/user/,AutoCAD Electrical user temp file folder

SECTION I – Continued (Databases)

(Environment file locations you need to understand, but will not change)

This section controls the databases:

* Catalog Parts Database Path

WD_CAT,%WD_DIR%/ %WD_LANG%/catalogs/,AE catalog file path

*WD_XCAT,x:/some path/wd_xcat.lsp,to override catalog look-up and call user's external routine

Steps you should complete to share the databases:

1. Copy the AeData folder to a server location.
2. Add the server path to AutoCAD® Electrical's options under the Files tab:
3. Rename, or delete, the default location at "C:\Users\ *User login* \Documents\Acade 2014\AeData\" so electrical will not find it there. You can also remove this path from to options if you prefer.

SECTION II

(Minimum environment file locations you should change)

There are several locations in the environment file you should consider modifying, or turning on. This section describes what should be done at a minimum. As you get more proficient with AutoCAD® Electrical you can turn additional option on as you need them, or discover you need them. Not all line options will be shown. Refer to the links at the end of this document.

This section controls where the library data is retrieved from:

* Symbol Insertion and Library Paths

WD_LIB,%SL_DIR%/jic125;%SL_DIR%/jic125/1-
;%SL_DIR%/pneu_iso125;%SL_DIR%/pid;%SL_DIR%/hyd_iso125, schem, 1-line, and
pneumatic/pid/hydraulic default paths

WD_PNL,%SL_DIR%/panel, panel layout symbol library base folder

~ ~ ~ ~ ~

Example of how the symbol library would be changed to a server location:

WD_LIB,G:/AutoCAD Electrical Resources/Libs/jic125;.....

SECTION II - Continued

(Minimum environment file locations you should change)

This section controls where the default path is for projects:

* Project and drawing-related paths and settings

WD_PROJ,%WD_DIR%/proj/,AutoCAD Electrical default project data folder

~ ~ ~ ~ ~

Steps you should complete to change this path:

1. Determine where you want to store your projects. This is typically a location you are already using when you worked with standard AutoCAD®, but it can be a new location.
2. Replace all the %WD_DIR% text shown above with the server address. When you use the New Project tool AutoCAD® Electrical reads this and populates this location in the dialog box

Example of how the project path could be changed to a server location:

WD_PROJ, WD_LIB, **G:/AutoCAD Electrical Resources/Projects/**, AutoCAD Electrical default project data folder

~ ~ ~ ~ ~

SECTION II - Continued

(Minimum environment file locations you should change)

This section controls where the menu files are retrieved from:

* Menu & Slide Path

*WD_MENU,%DS_DIR%/my_menu.dat,to override default schem icon menu

*WD_PMENU,%DS_DIR%/mypnlmnu.dat,to override default panel layout icon menu

*WD_SLB,x:/some path/,to override path pointing to ".slb" slide lib support files

*****See the next slide for steps on changing this section to be shared by your group**

Example of how the menu path could be changed to a server location:

WD_MENU, **G:/AutoCAD Electrical Resources/Menu Files/**Company_Menu.dat,to override default schem icon menu

~ ~ ~ ~ ~

SECTION II - Continued

(Minimum environment file locations you should change)

Steps you should complete to change this path:

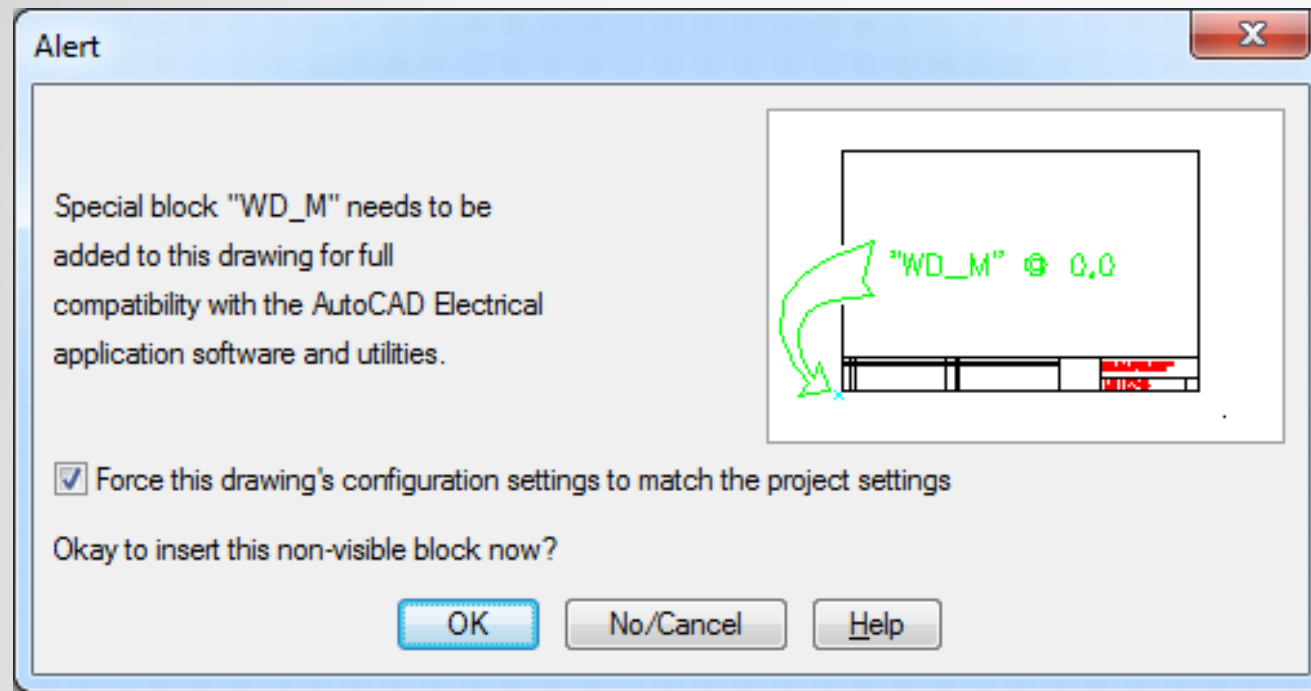
1. Determine where you want to store your menu file data. Making a folder on the server called “AutoCAD® Electrical Resources” is one option. Then, create a subfolder called “Menu Files”.
2. Determine which *.dat files you will be using, or create a new one. The first line is for the schematic symbols icon menu. The second line is for the panel icon menu. Once you have the files figured out change the names in each line to reflect the correct file.
3. Replace all the %DS_DIR% text shown in the previous slidee with the server address. When you use the Icon Menu tool AutoCAD® Electrical reads this and pulls the data from this location into the dialog box.
4. Remove the asterisk from the beginning of each line to turn on the option.

NOTE: There are several files AutoCAD® Electrical uses to populate the icon menu. There are *.dll, *.slb, and *.dat files which are in the default user’s support folder, and the program files support folder. Search for these files and place them all in the new “Menu Files” location you made.

WD_M.DWG & Templates

If a drawing isn't an AutoCAD® Electrical file:

You will get this message for a schematic drawing:



Categories the WD_M block controls:

Drawing layout

Ladder defaults

Component tagging

Wire number tagging

Layer names

Fan In/Out

Cross-reference

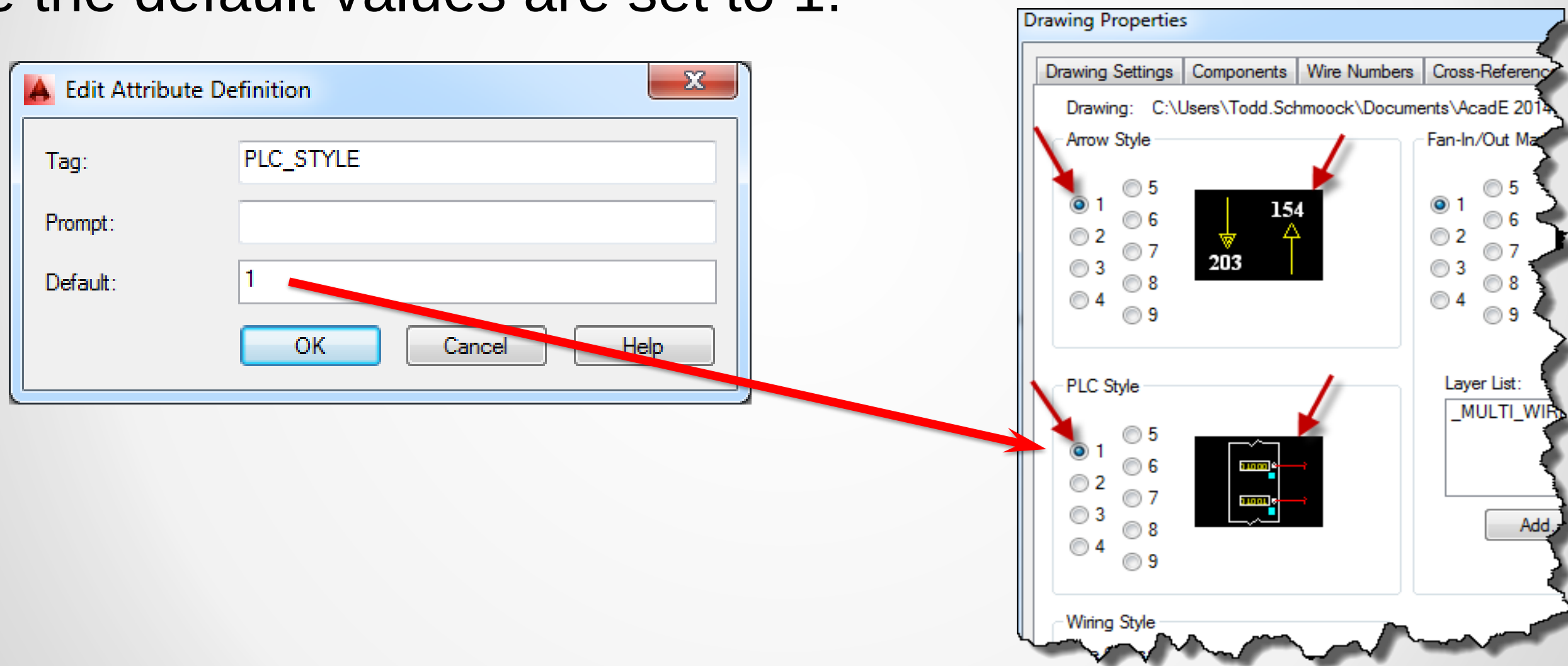
Referencing

Styles

Miscellaneous

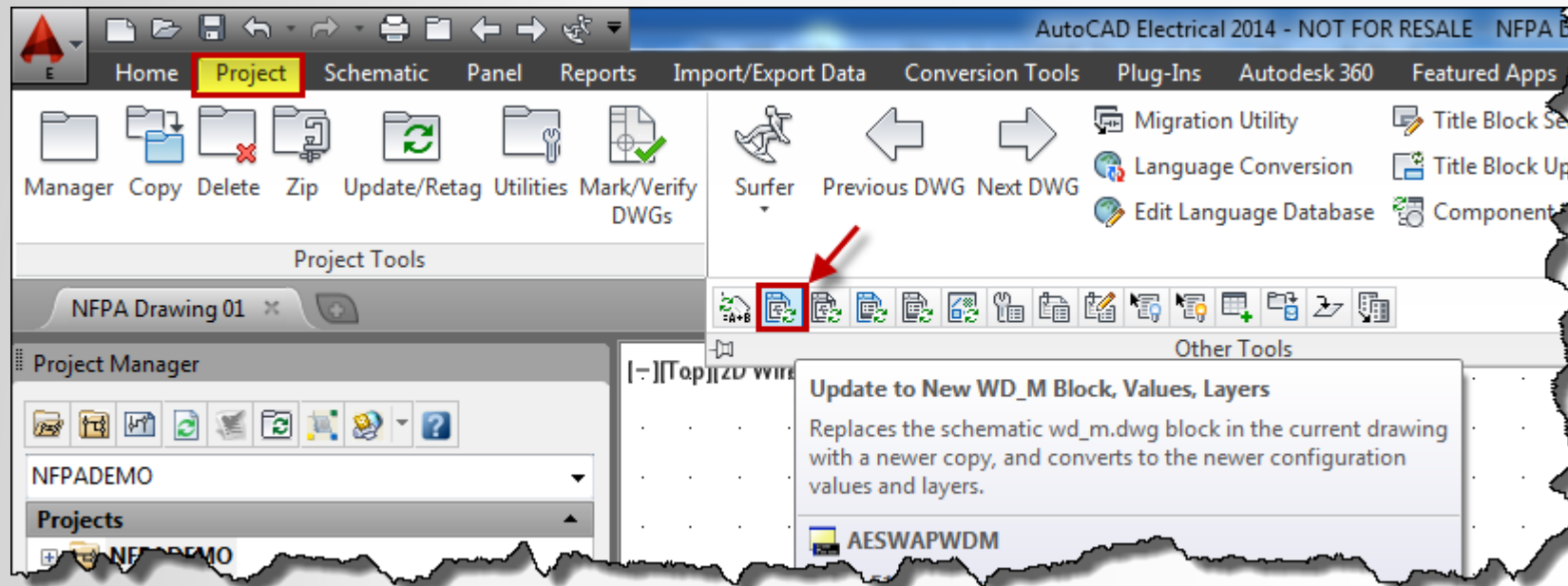
Looking at 'Styles' from the list of categories:

After opening the wd_m.dwg file located in the library being used for the active project you will have a list of attributes in the model space of the drawing. If you zoom to the PLC_STYLE double click to open them you will see the default values are set to 1:

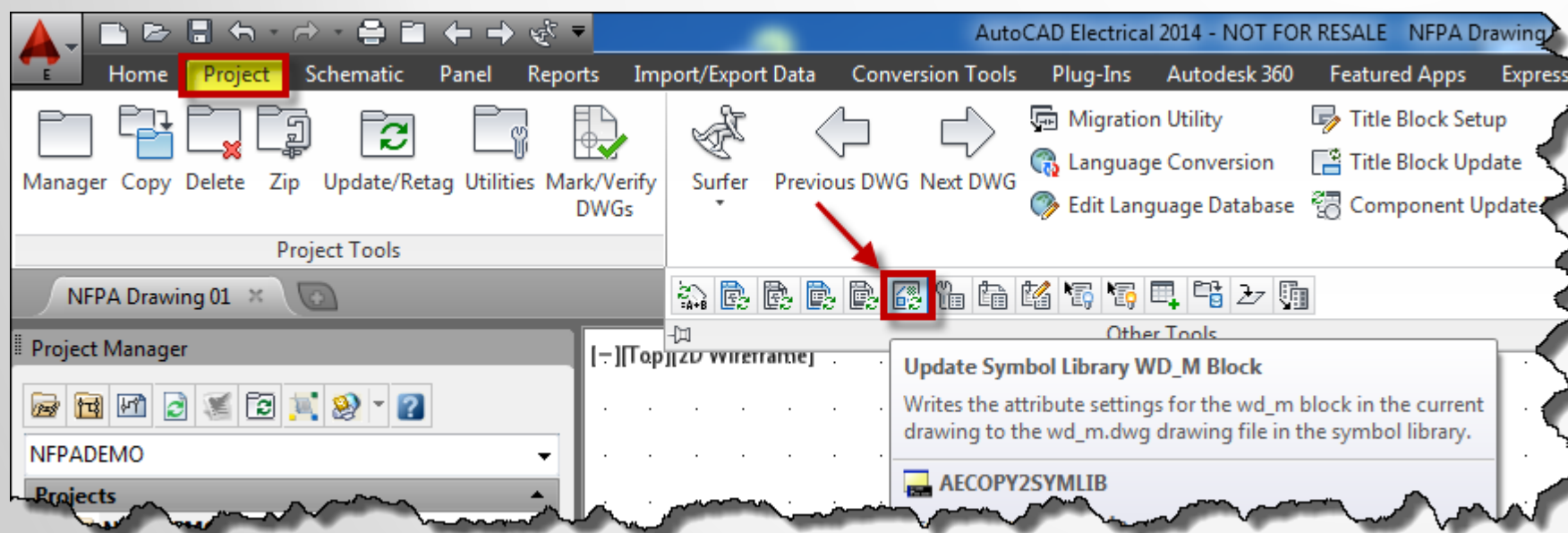


How do you make the WD_M & DWGs the same?:

Go to the Project ribbon and use the WD_M Update tools:



This tool updates the drawing based on the library's WD_M settings.



This tool updates the library's WD_M block based on the drawing's settings.

Make sure the templates, DWGs, and WD_M match!:

Whether you define your standards in the wd_mdwg file first, last, or during the creation of the project you have the tools to keep all the templates, drawings, and the library symbol's wd_m.dwg file the same.

The most important thing to keep in mind is to make sure the layers and settings match in all your files so you do not constantly have to adjust them. This will ensure your drawings are consistent with your company standards.

Links you will want to look at:

[Modifying the WD.ENV Environment File](#)

[Modifying the WD_M Block](#)

[Updating Project Files to New WD.ENV File Settings](#)

Note: Right-click on the links above and select “Open Hyperlink”.

Thank you!



Don't forget to fill
out your eval
for a chance to
win a AU 2014 free
pass.

MA2004
Todd Schmooch
Allan Chalmers

Remember the
winning answer is:

Best Class at AU 2013!



