



POWER OF CUSTOM DATA

Tyler Moore
CodeCAD
Calgary, Alberta, Canada

Who am I?



- Tyler Moore
- 12 years Cad manager
- 18 Years Oil and Gas
- Piping Background
- Former Autoplant & Smart 3D Administrator
- 2 Years at CodeCAD as Sales and Support Specialist



What is “Custom Data”

- Custom data is any possible information that you can think of that can be applied to any object in the CADWorx Catalog or .Project file to allow for this custom information to be available for information for long descriptions, tracking information, progressing, reporting, etc.
- There are 2 types of custom data:
 - Catalog Data – Information that is applied directly to the component at the data table level.
 - Project data – Information that is applied to the spec level or Project level for use in that particular Project file.



Custom Data Dialog Explanation

- Name
 - ☐ This is the program keyword
- Title
 - ☐ This is the column title
- Description
 - ☐ This is a note field
- Data Type
 - ☐ Integers / Real (numbers only)
 - ☐ Text (Any text)
 - ☐ List (multiple selections for pull down list)
- Required Input
 - ☐ Are you required to input information
- Default Value
 - ☐ Any default text can be entered
- Attach Field to Components
 - ☐ Selecting this option allows for the custom data to show up in the model, including the database and bill of materials. If you attach the property to a component, you can turn that property off by opening the already added property and clearing the check box. Any new component drawn after that point does not contain the property.

The screenshot shows the 'New Field' dialog box with the following values:

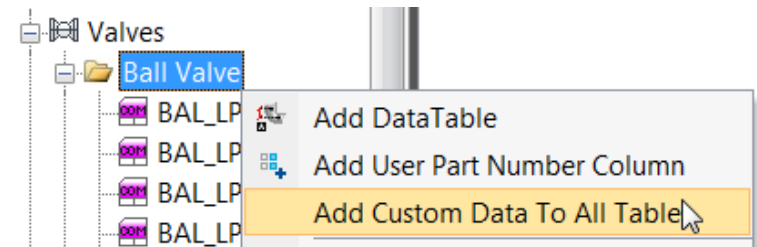
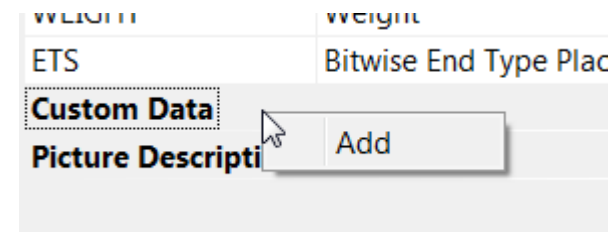
- Name: MANUFACTURER
- Title: Manufacturer
- Description: Manufacturer
- Data Type: Text
- Required Input: No
- Validation Rule: (empty)
- Default Value: Enter Manufacturer Name
- Attach Field to Components: ☒

Buttons at the bottom: OK, OK & New, Cancel, Help.



Adding Custom Data in the Catalog

- There are 2 methods to add custom data to the catalog. You can add it at specific data table level
- Add Custom Data to all tables. You can select a group heading such as valves and add the custom field to all tables under the group.

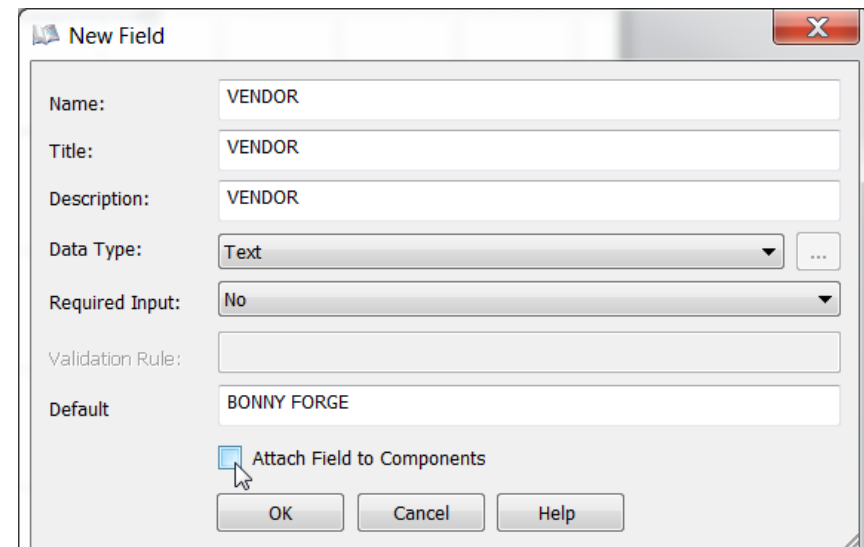


Adding Custom Data in the Catalog

Information only



- Example for information only
 - Adding a Vendor name to a Valve
- We will not attach the field to the component in this example. This is information only that is applied to this valve, to maybe show the vendor information that was used to build the data table.
- This can come in handy due to the discrepancies in some vendor small bore valves. Or if you have a need to have something very specific.

A screenshot of the 'New Field' dialog box in a software application. The dialog has a title bar with a close button (X). It contains several input fields and dropdown menus. The 'Name' field is set to 'VENDOR'. The 'Title' field is set to 'VENDOR'. The 'Description' field is set to 'VENDOR'. The 'Data Type' dropdown is set to 'Text'. The 'Required Input' dropdown is set to 'No'. The 'Validation Rule' field is empty. The 'Default' field is set to 'BONNY FORGE'. At the bottom, there is a checkbox labeled 'Attach Field to Components' which is currently unchecked. Below the checkbox are three buttons: 'OK', 'Cancel', and 'Help'.

Adding Custom Data in the Catalog

Transfer to the models



- Example For tracking Long lead or SP Items
 - Sometimes we would like to see items or information in the model that are critical items to order, or maybe isolate the SP items. As example we have a special Gate valve that is a long lead item.
- We **WILL** attach the field to the component in this example. This is information will then carry across to the model, be able to be added to the BOM, and show in the Line isolate palette.
- I will also add a purchase status item as a list so that you can track in the model if the valve has been ordered or not.

The image contains three overlapping screenshots of software dialog boxes. The top-right box is titled 'New Field' and shows fields for Name, Title, and Description, all set to 'LONGLEAD_STATUS'. The Data Type is set to 'Text', Required Input is 'No', and the Default value is 'Y'. The 'Attach Field to Components' checkbox is checked. The bottom-left box is also titled 'New Field' but for 'PURCHASE_STATUS', with Data Type set to 'List'. The bottom-right box is titled 'List Items' and shows a list with 'Y' and 'N' as items.

Item
Y
N



Adding Custom Data in the Catalog

Transfer to the models

- You have to add the valve to the spec now

New component: GAT_FP_SWxTHRD_800
GAT_FP_TR_1500
GAT_FP_TR_800
Component Setup: GAT_RP_SW_1500
Group: GAT_RP_SW_800
Type: GAT_RP_TR_1500
GAT_RP_TR_800
Data Table: SP_GAT_FL_150
☐ Data Table Update Only

EndType Dat
Start:
End:
Branch1:
Branch2:

0.5-1,1.5-3,4,6-20,24	SPECIALTY GATE VALVE, CL150	SP-001	Gate Valve
-----------------------	-----------------------------	--------	------------

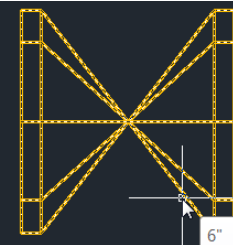
Full Partial Layer

Filter

LINE_N...	SPEC	LONGLEAD_...	PURCHASE_STATUS
6"-AB	_AB	Y	N

Find

Line is

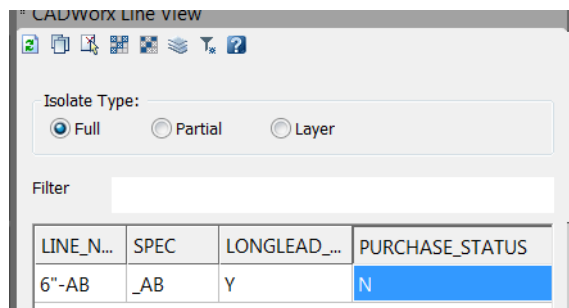


6"
SPECIALTY GATE VALVE, CL150
SP-001
6"-AB
AB
266.7
0

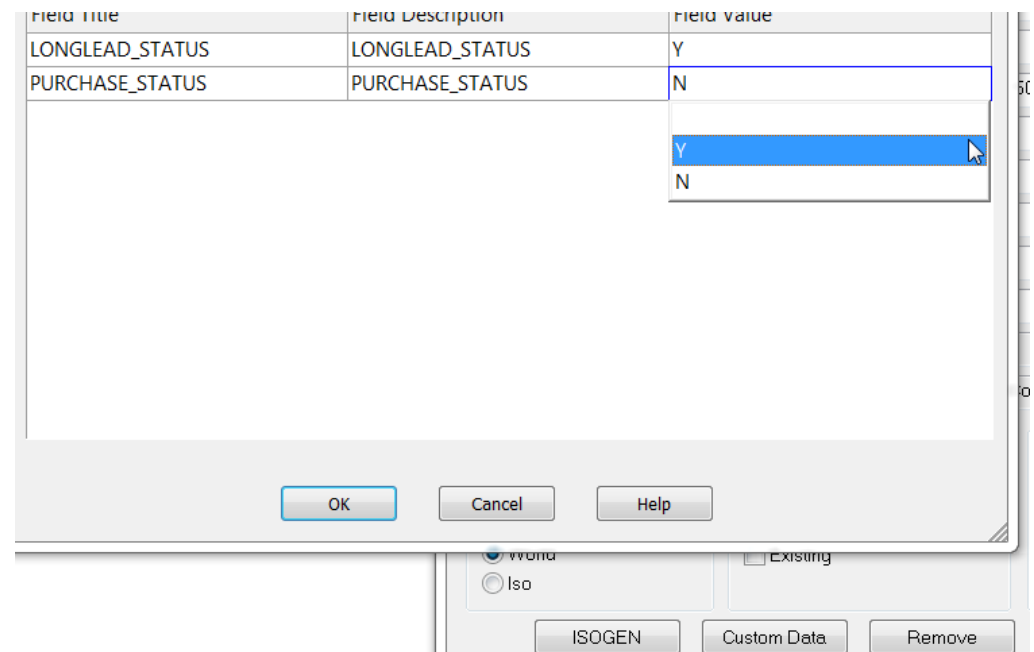
Adding Custom Data in the Catalog Transfer to the models



- When you place that valve in the model now it will show up in the line isolate pallet with the information that we applied with the attach to component option



- When you double click on the component, and select the custom data button the information can be changed.



Other uses for Catalog Custom Data



■ Extra values for long description

Format	VENDOR_CMF_TBL, DESCRIPTION_CMF_TBL, SPEC_MAT_TBL	
<input checked="" type="checkbox"/> 0.5-1,1.5-3,4,8-20,24	SPECIALTY GATE VALVE, CL150	
<input checked="" type="checkbox"/> 0.5-1,1.5	BONNY FORGE, GATE VALVE, RED. PORT, SW, CL800, A105N	
	...	



Project and Spec Custom Data

- The power of the new custom data fields is really in the Project and spec side. You can use the custom data for creating status reports of your lines, tracking materials by module or work area, designers, etc. Basically anything you can think of can be added to the project file to be used.
- The most efficient place to put this kind of information is right at the Project level so it applies to all the specs.



Project and Spec Custom Data

- Adding at the Project level is done by highlighting the Project name and going to the Project file properties, custom data and adding there.

Project Specs	
CAU_MASTER_2015.prj	
150	
300	
600	
CALC_EXAMPLE	

Properties	
Project Name	CAU_MASTER_2015.prj
Catalog Name	CAU_2015.cat
Catalog Path	.\cau_2015.cat
DBCode Table Name	
Long Desc Format Setup	...
Short Desc Format Setup	...
Tag Format Setup	...
Part Number Format Setup	...
BOM Type	Fabrication
Layer Manager	...
Match End Type	...
Version	2013.01
Created by	
Edited by	
Description	
Custom Data	
STRESS_STAT	CURRENT STRESS STAT

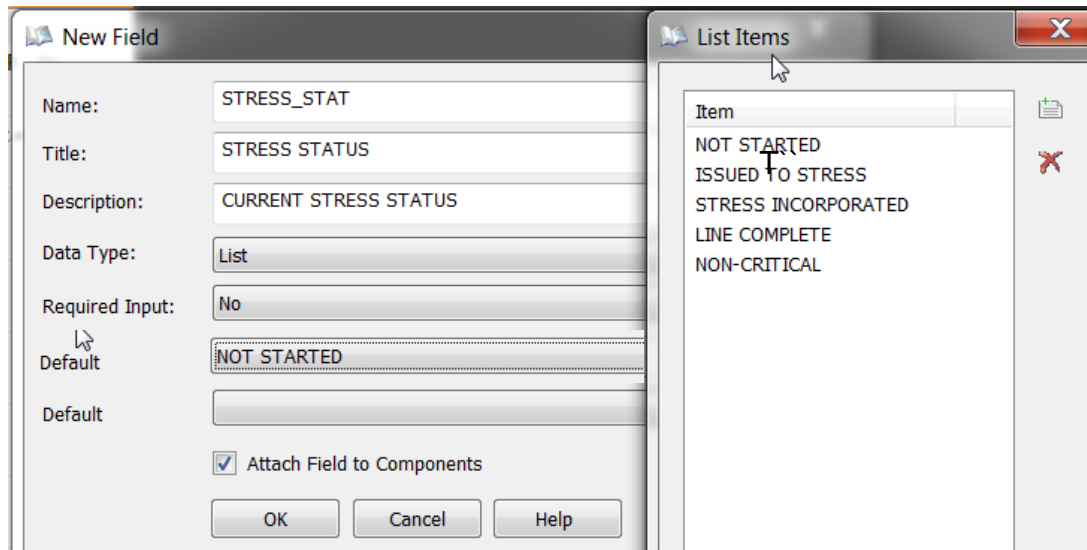
Add

Project and Spec Custom Data Status Example



■ Stress Status:

- Add some criteria for the actual line status using the new list function.
Set default to Not started



The screenshot shows two overlapping dialog boxes. The 'New Field' dialog box on the left has the following fields: Name (STRESS_STAT), Title (STRESS STATUS), Description (CURRENT STRESS STATUS), Data Type (List), Required Input (No), Default (NOT STARTED), and a checkbox for 'Attach Field to Components' which is checked. The 'List Items' dialog box on the right shows a list of items: NOT STARTED, ISSUED TO STRESS, STRESS INCORPORATED, LINE COMPLETE, and NON-CRITICAL. A mouse cursor is pointing at the 'NOT STARTED' item in the list.

- When lines are drawn in the model they will now have the default of not started so that the designers need to select the status of the line as it goes through the process.

Project and Spec Custom Data Status Example



- COMPONENT EDIT, CUSTOM DATA, STRESS STATUS; MODULE_ID, DESIGNER

Field Title	Field Description	Field Value
STRESS_STAT	CURRENT STRESS STATUS	NOT STARTED

- When lines are drawn in the model they will now have the default of not started so that the designers need to select the status of the line as it goes through the process.
- Using the line isolate and then the Gcredit function you can easily update the line status.



Updated Line View Palette

- You can now Isolate by Custom Data
 - All Custom data that is “Attached” to the components will show up as available information in the new Line isolate pallet.
 - You can also do compound selection for filtering.

The screenshot shows the CADWorx Line View window. It includes a toolbar with icons for various functions. Below the toolbar, there is a section for 'Isolate Type' with three radio buttons: 'Full' (selected), 'Partial', and 'Layer'. Below that is a 'Filter' input field. The main part of the window is a table with the following data:

LINE_NUMBER	SPEC	STRESS_ST...	MODULE_ID	ISO_STATUS	CWP
GL-3-007-150	_150	Issued to S...	PRM-001	COMMENTS INCORP	CWP-001
IA-3"-015-150	_300	Non-Critical	PRM-002	IN CHECKING	CWP-002
K-10-018-150		Ready to Is...	PRM-003	ISSUED FOR CONST	
K-4-014-150			SELECT	NOT ISSUED	
P-10-010-150					
P-10-020-150					



Updated Line View Palette

- Isolation Settings File
 - ☐ Save as isolation file
 - ☐ Set constant isolation file in configuration file
- Save and recall Isolation Schemas

Line View Isolation Properties Manager

Isolation Setting File: C:\Cadworx_University_2014\DEMO_MODELS\LINES COMPLETE.lvi

Selected Items

LINE_NUMBER	SPEC	STRESS_STAT	MODULE_ID	ISO_STATUS	CWP
<input type="checkbox"/> GL-3-007-150	<input type="checkbox"/> _150	<input checked="" type="checkbox"/> Issued to Str...	<input type="checkbox"/> PRM-001	<input checked="" type="checkbox"/> COMMENTS...	<input type="checkbox"/> CWP-001
<input type="checkbox"/> IA-3"-015-1...	<input type="checkbox"/> _300	<input checked="" type="checkbox"/> Non-Critical	<input type="checkbox"/> PRM-002	<input checked="" type="checkbox"/> IN CHECKING	<input type="checkbox"/> CWP-002
<input type="checkbox"/> K-10-018-150		<input type="checkbox"/> Ready to Iss...	<input type="checkbox"/> PRM-003	<input type="checkbox"/> ISSUED FOR ...	
<input type="checkbox"/> K-4-014-150			<input type="checkbox"/> SELECT	<input checked="" type="checkbox"/> NOT ISSUED	
<input type="checkbox"/> P-10-010-150					
<input type="checkbox"/> P-10-020-150					
<input type="checkbox"/> P-10-021-150					
<input type="checkbox"/> P-6-013-300					
<input type="checkbox"/> PG-4-008-150					
<input type="checkbox"/> PG-4-016-150					
<input type="checkbox"/> PG-4-019-150					
<input type="checkbox"/> PG-6-002-150					

☐ Select / deselect all

Isolation Setting List

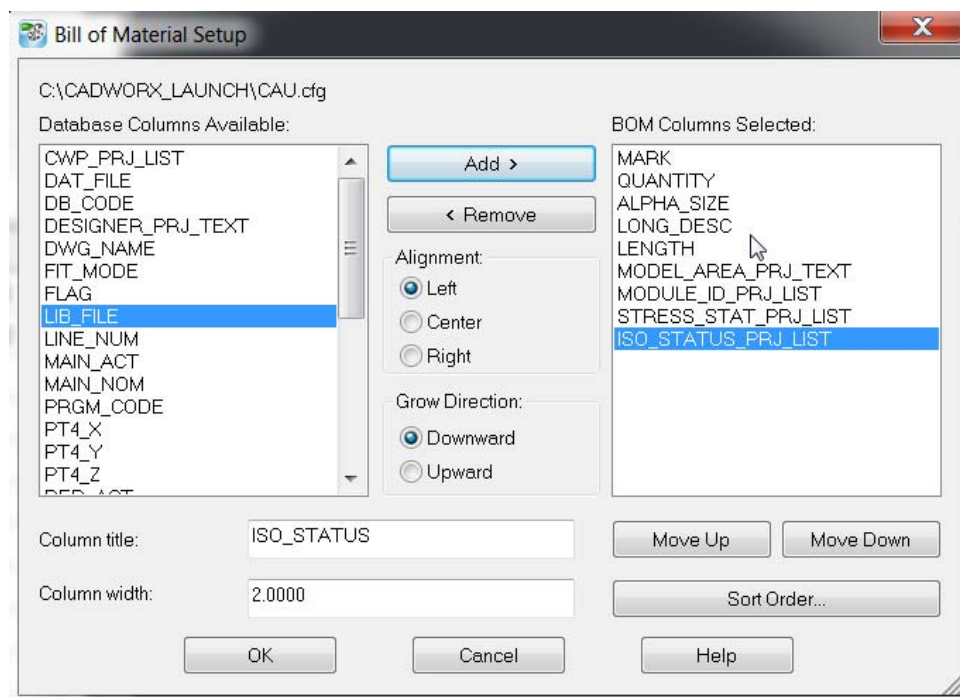
ALL LINES NOT IFC
LINES COMPLETE

Buttons: Load, New, Delete, Rename, Save, SaveAs, Help, OK, Cancel



Custom Data in Bill of Material

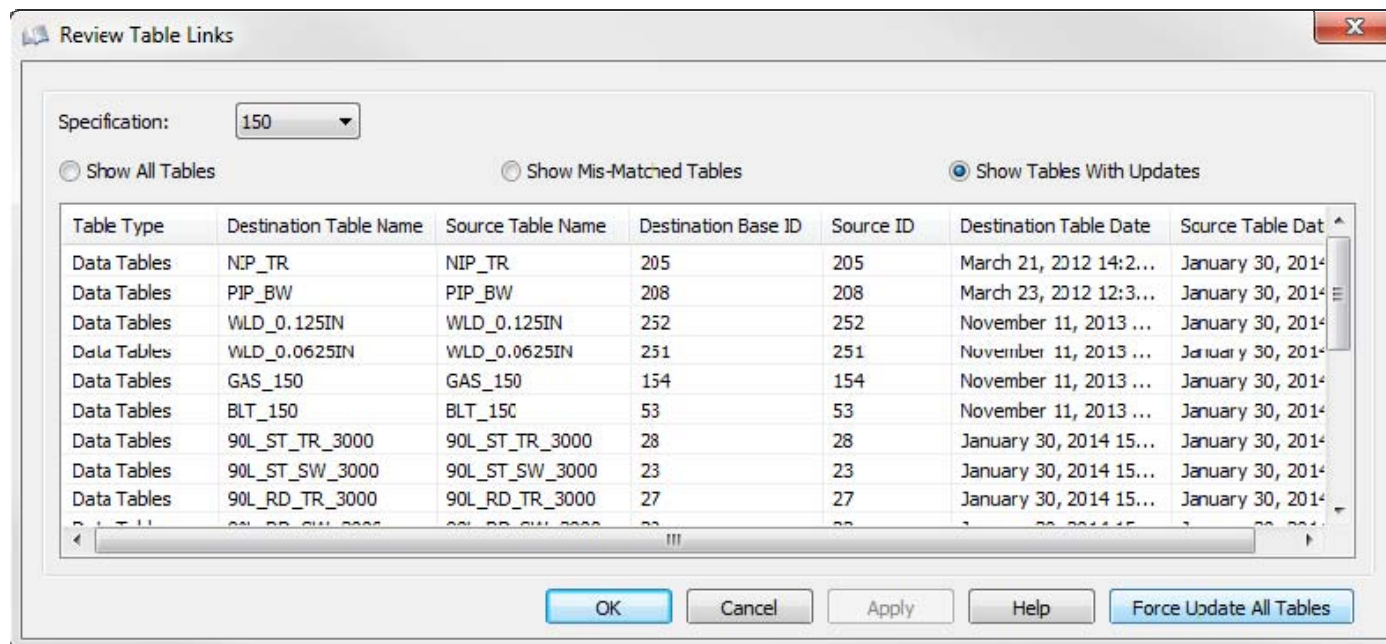
- Custom Data in Bill of Material
 - All custom data fields are available for adding to the BOM export, as well as going into the database.



Tips



- Force update will ensure all data is in your project specification



Tip



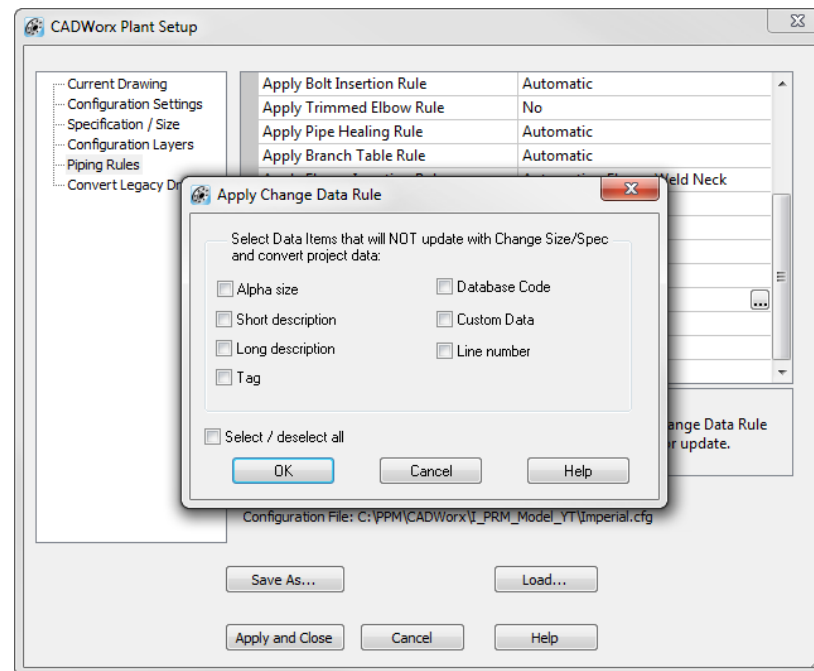
- Don't add 100s fields of custom data to components
- Component have size limits
- Drawings become large in size

Tip

New fields from the catalog to the models



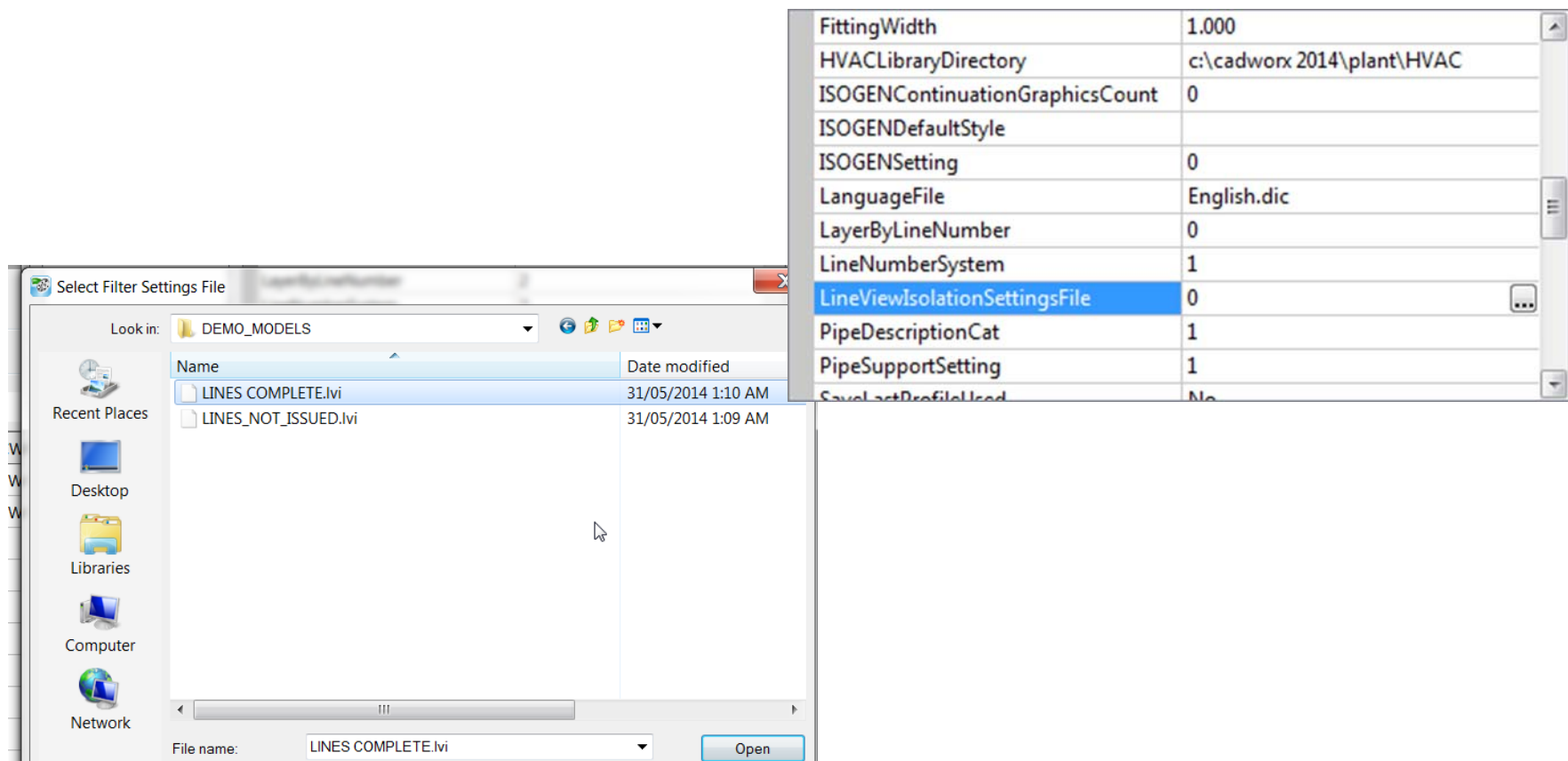
- Apply Change Data Rule
 - Control updates to custom data



Tip



- A defaults isolations filter file can be set in the configuration file



Questions



■ That's a Wrap

