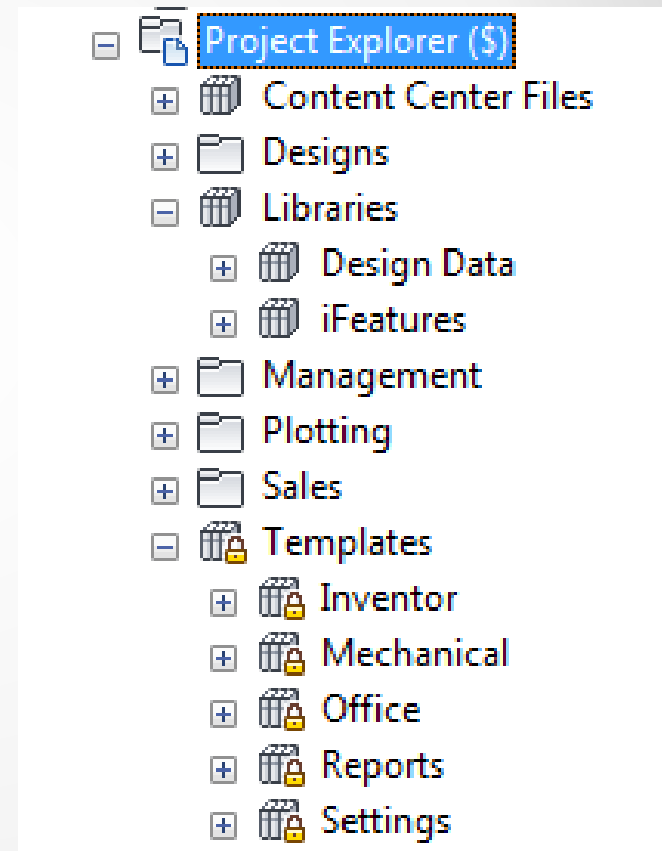
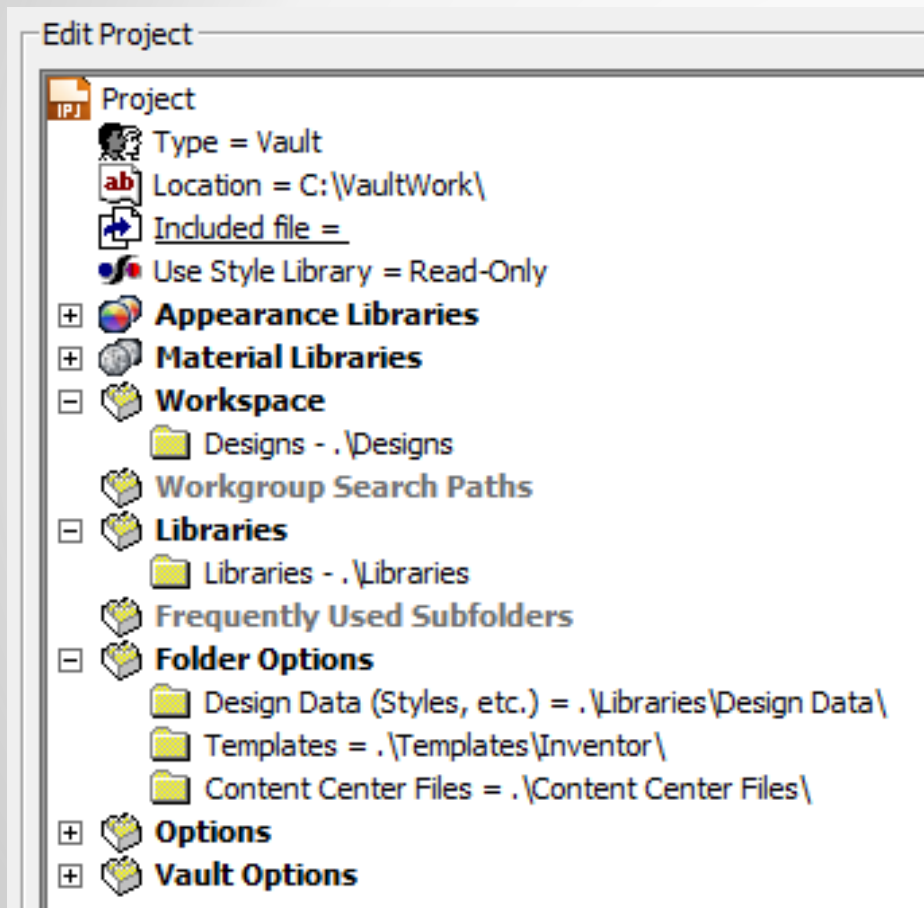


Inventor & Vault – Best Practice Inventor 2015 – Vault 2015

Jens Møller – CAD-Q

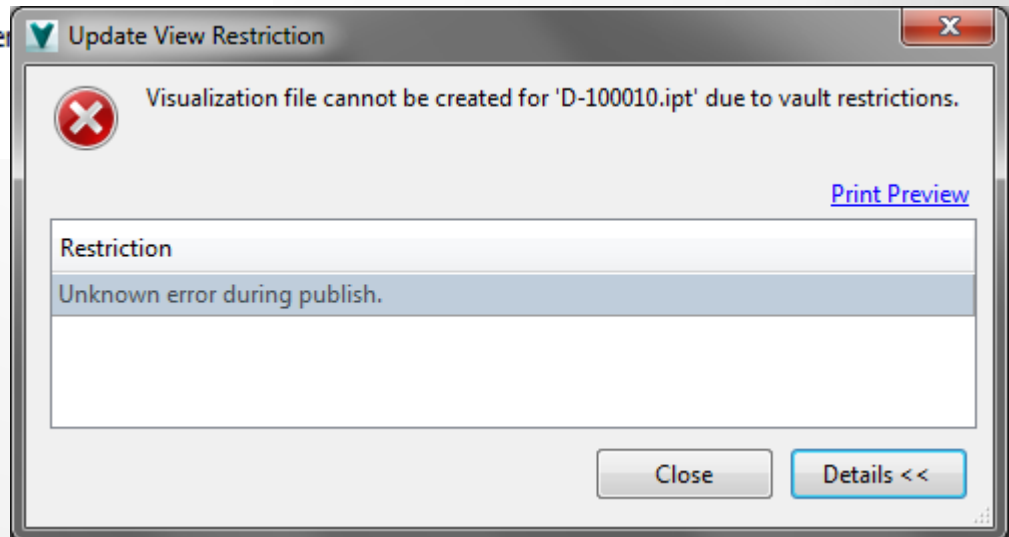
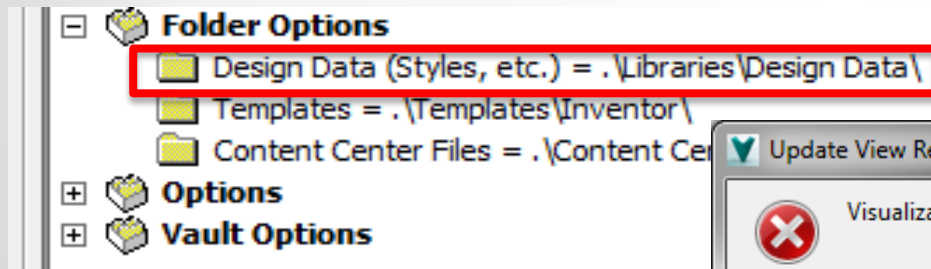
Autodesk Vault and Inventor project file configuration



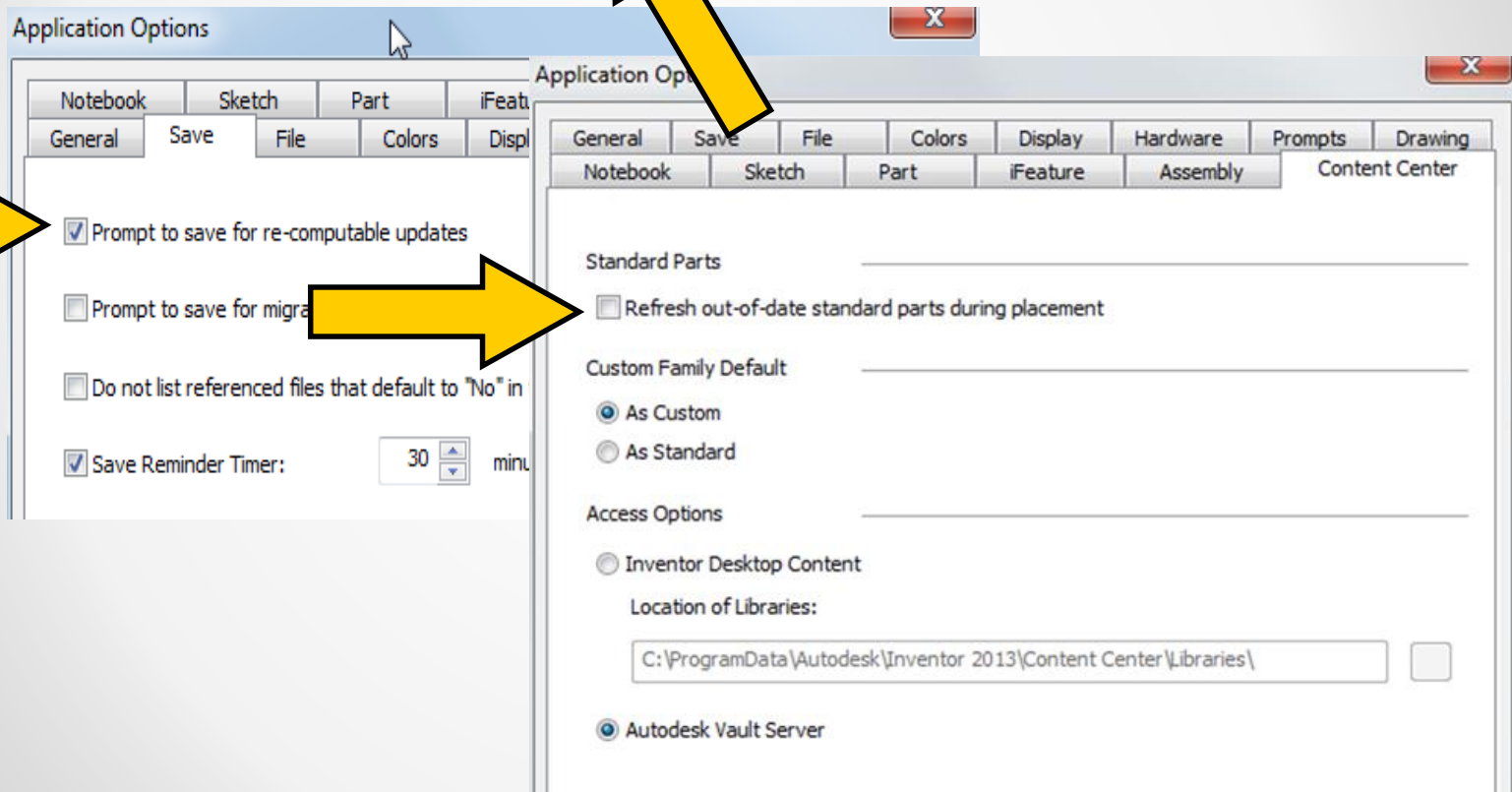
Autodesk Vault & Inventor project file

Challenges with DWF files generation.

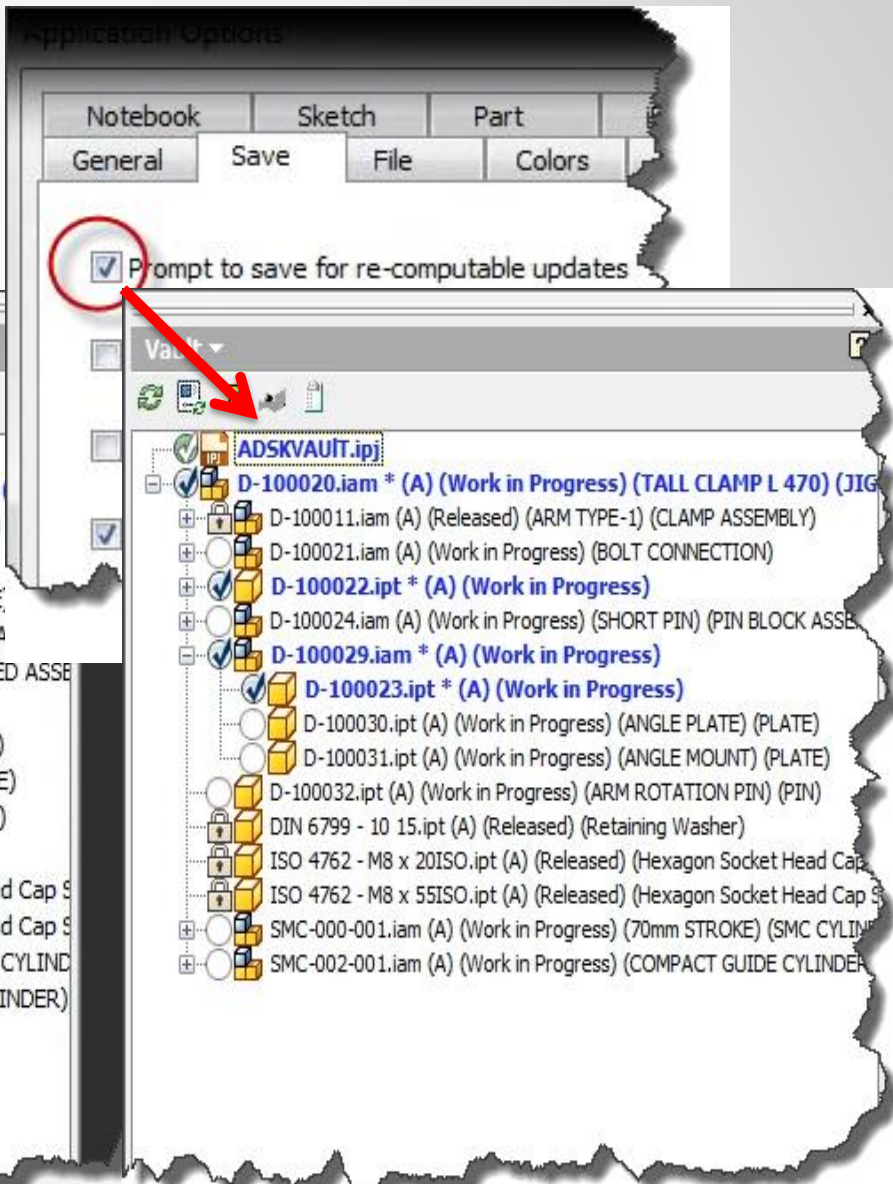
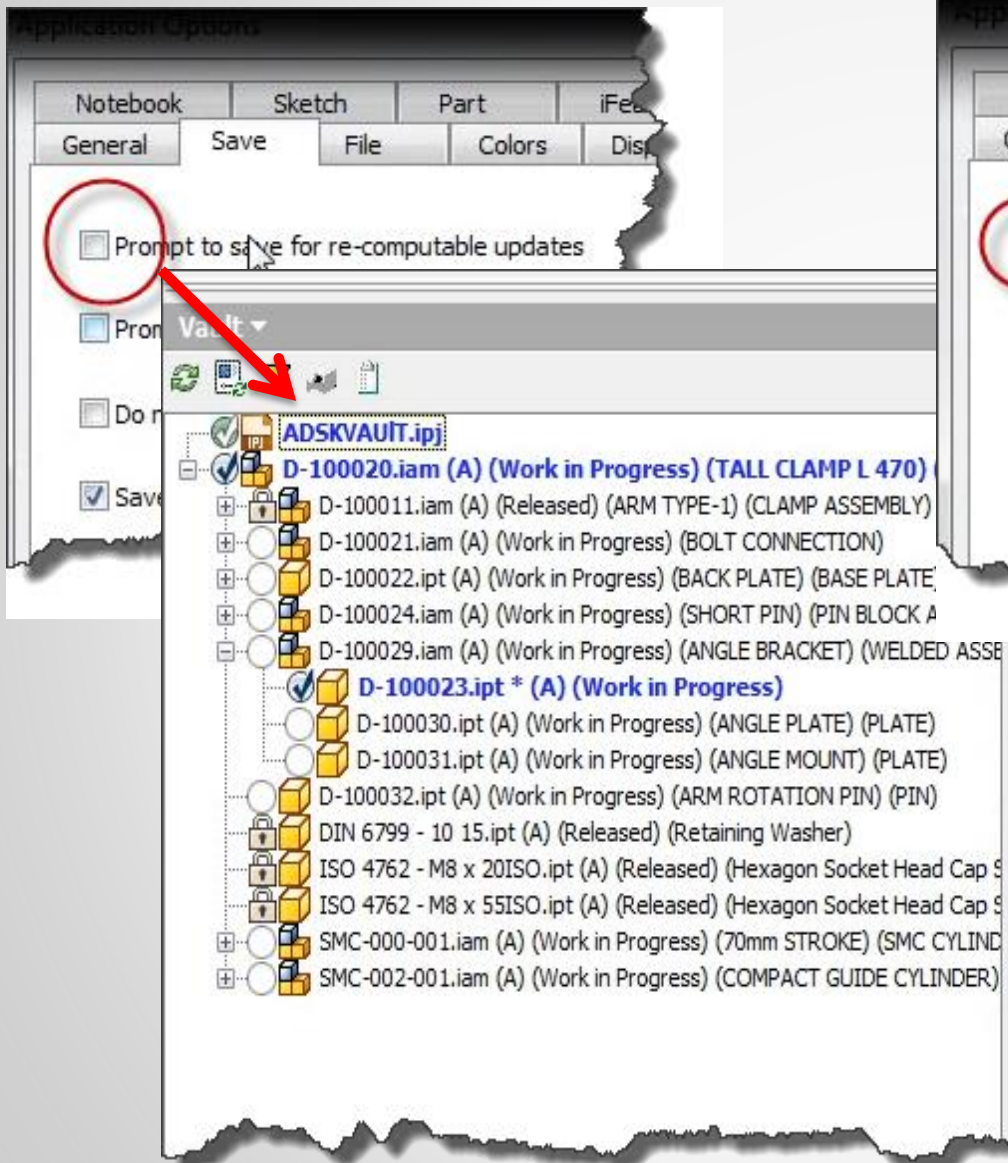
- Create folders ...
 - Templates
 - Design Data: Styles,
- On some files
 - Unkown error during Publish



Vault and Inventor – Dirty file marker

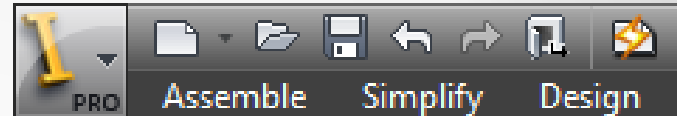


See the difference?



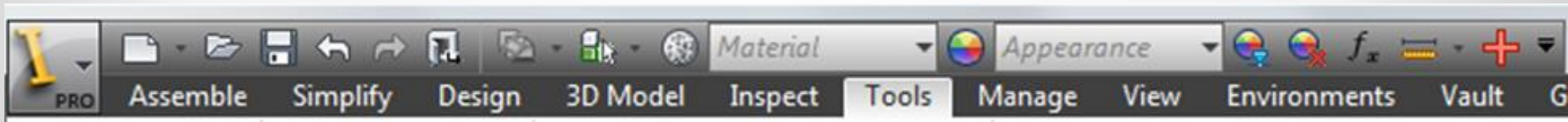
Other process that could mark the files “needs to be saved” (dirty).

- iLogic Rules
- Inventor API
- Property updates from Vault where we write back properties like revision,...
- Make sure your assembly or parts are up to date before you save
(lighting symbol should be grey)



Other process that could mark the files “needs to be saved” (dirty).

- Update physical properties on save.
 - Be consistent and have it active on all user workstations if you wish to have this active.
- Make sure you solve any comatose design before you save



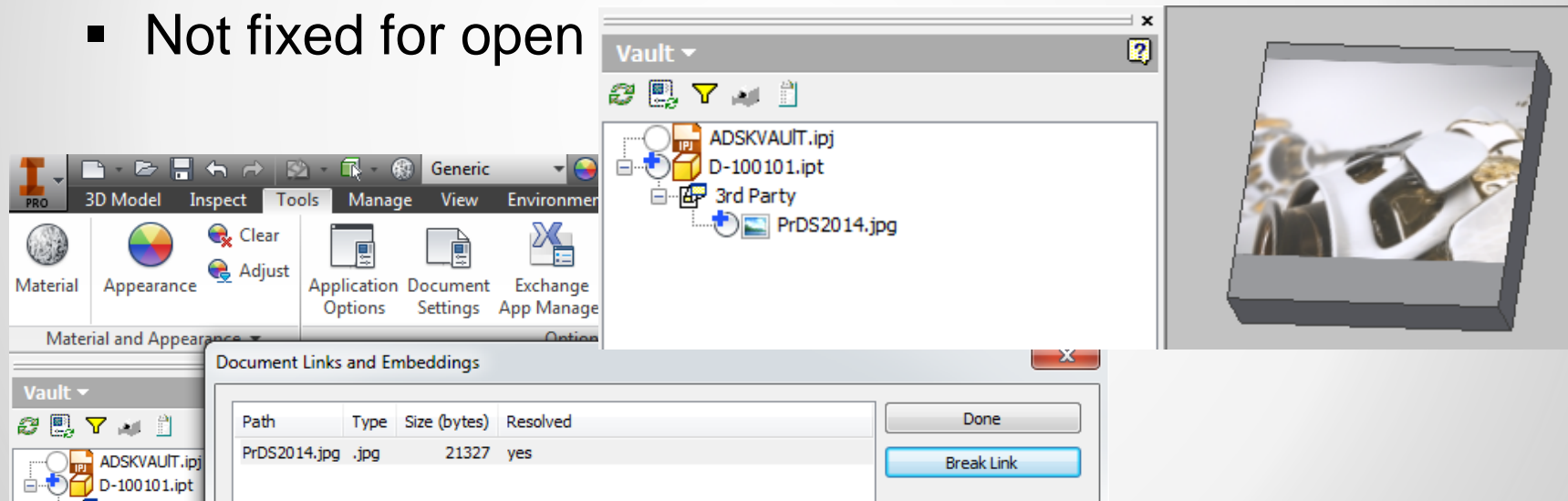
3rd-Party file linking = “needs to be saved” (dirty)

- Cleaning the workspace and re-open from Vault.

The image displays two screenshots related to CAD file linking. On the left, a CAD workspace shows a tree view for 'Excel-100010.iam' and 'Vessel_Platform.iam'. The 'Excel-100010.iam' tree includes folders for Relationships, Representations, Origin, and a '3rd Party' folder containing 'Box_100'. The 'Vessel_Platform.iam' tree includes Relationships, Representations, Origin (with YZ, XZ, XY planes and X, Y, Z axes), a 'Control Parameter: 1' folder (containing '3rd Party' and 'Control Parameter'), 'Folded Model', and 'Concrete_Base: 1'. On the right, a Microsoft Excel spreadsheet titled 'Worksheet in Control Parameter.ipt [Compatibility Mode] - Microsoft Excel' is shown. The spreadsheet contains a blue header row with the text 'NOTE! STAIRS BELOW 16 STEPS....SINGLE STAIRWAY REQUIRED SEE MESSAGE & IMAGE BELOW FOR CONFIGURATION PREVIEW'. Below this is a red row with 'Replace the following Assembly with ...' and '10-5500.iam', and a green row with '...with this Assembly' and '10-5300.iam'. A 3D model of a vessel platform with a staircase is visible on the right side of the spreadsheet. Below the model are several input fields: 'Walkway length' (5500), 'Walkway width' (1500), 'Vessel Height' (3000), 'Platform Height' (2500), 'No of Vessels in X' (1), and 'Vessel Ø' (2000). A tooltip for 'Vessel Diameter' is shown, indicating it is 'NOT Required' and 'Enter Vessel Diameter'.

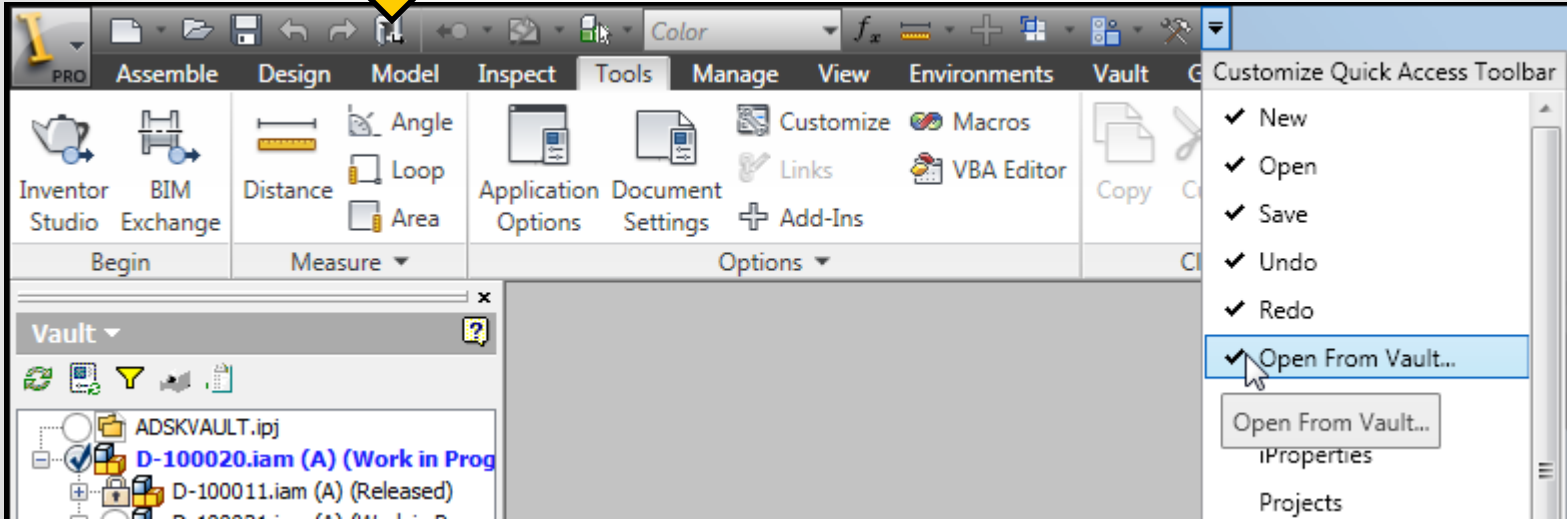
Other process that could mark the files “needs to be saved” (dirty).

- Decal Images or Drawing logo's Linked to Inventor
 - Fixed in Inventor 2014, 2015 Vault addin
 - Not fixed for open



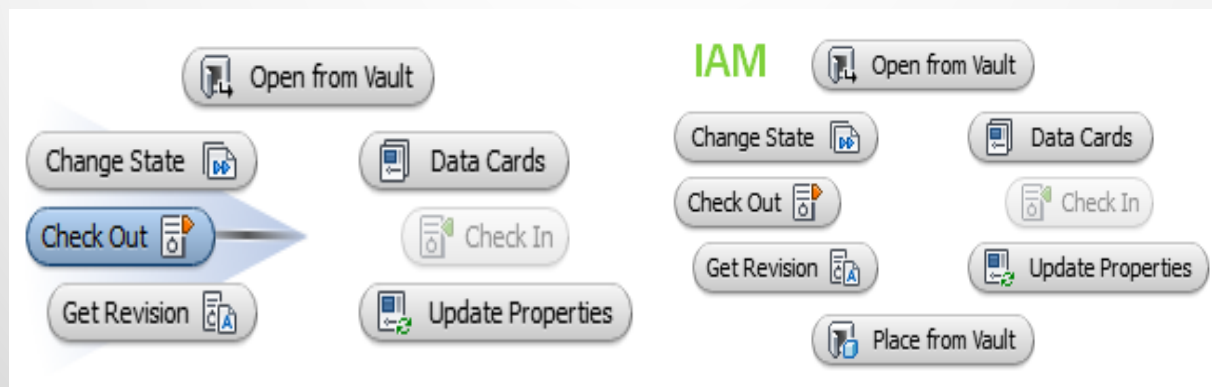
Alternative: Do NOT link images but embed them
!

Best Practices using Vault and Inventor



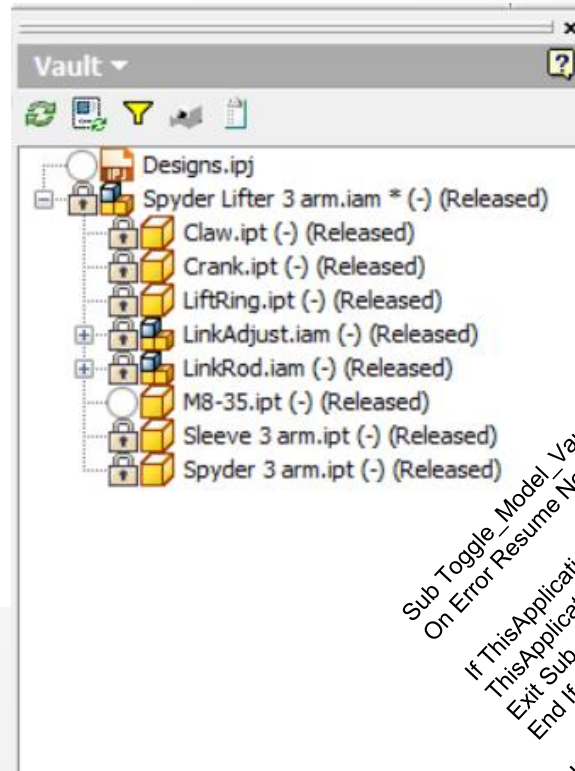
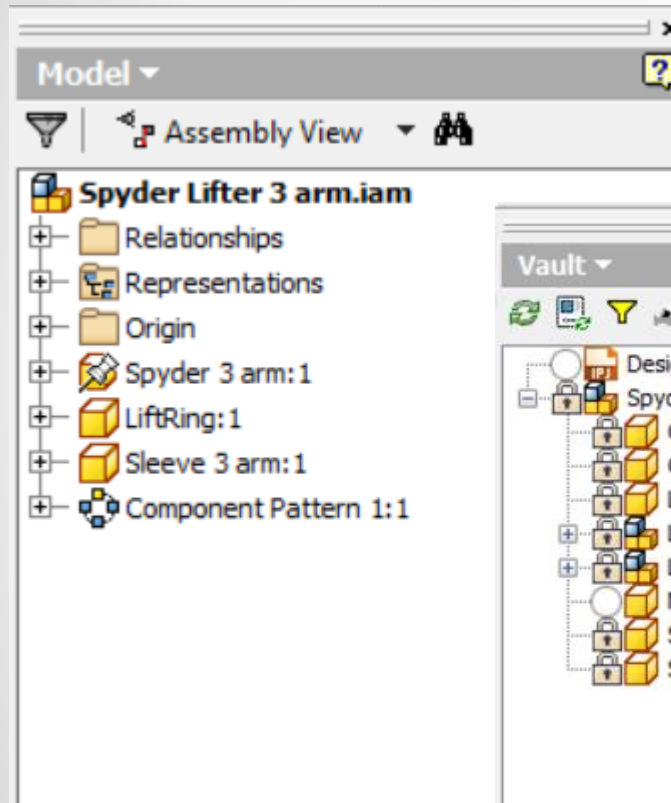
Inventor Vault | Marking menu

- Configured – ready to use Partial import
 - Language independent
 - Environments: Part, Sheet metal, Assembly, Welding, Presentation, Drawing, Nailboard



Inventor Vault | Toggle Vault ↔ Model

- Create shortcut for switch between Model and Vault



```
Sub Toggle_Model_Vault()  
On Error Resume Next  
If ThisApplication.ActiveDocument.BrowserPanels.ActivePane.Name = "Model" Then  
ThisApplication.ActiveDocument.BrowserPanels.Item("Vault").Activate  
Exit Sub  
End If  
If ThisApplication.ActiveDocument.BrowserPanels.ActivePane.Name = "Vault" Then  
ThisApplication.ActiveDocument.BrowserPanels.Item("Model").Activate  
Exit Sub  
End If  
End Sub
```


Customize Inventor Vault Dialog Boxes

The screenshot displays the Autodesk Inventor Professional 2013 interface. The 'Vault' tab is active in the ribbon, and the 'Options' button is circled in red. The 'Options' dialog box is open, showing the 'Options' section with 'Use large status icons' checked and 'Generate file numbers for drawing and presentation files' unchecked. The 'Configure prompts' button is also circled in red. The 'Manage Prompts' dialog box is open in the foreground, showing a table of prompts and their responses.

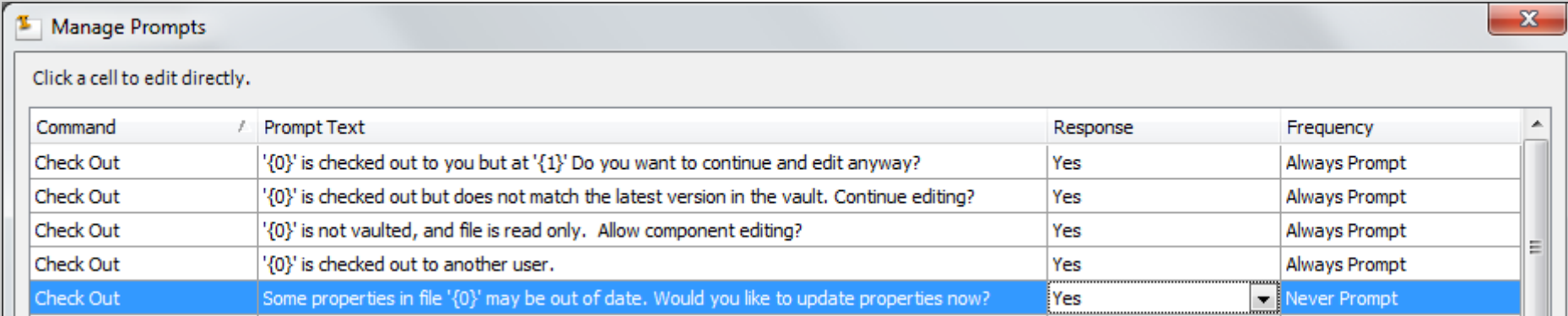
Command	Prompt Text	Response	Frequency
Check Out	'{0}' is checked out to you but at '{1}' Do you want to continue and...	Yes	Always Prompt
Check Out	'{0}' is checked out but does not match the latest version in the va...	Yes	Always Prompt
Check Out	'{0}' is not vaulted, and file is read only. Allow component editing?	Yes	Always Prompt
Check Out	'{0}' is checked out to another user.	Yes	Always Prompt
Check Out	Some properties in file '{0}' may be out of date. Would you like to u...	Yes	Never Prompt
File Edit	File '{0}' is not checked out. Do you want to check it out now?	Yes	Always Prompt
File is locked.	'{0}' is currently locked.	Yes	Always Prompt
Get (Download)	File '{0}' is checked out to you. Are you sure you want to overwrit...	No	Never Prompt
Get (Download)	File '{0}' is NEWER than the data in the vault. Are you sure you wa...	Yes To All	Always Prompt
On File Close	File '{0}' is checked out to you. Do you want to check it in now?	Yes	Always Prompt
Open From Vault	File '{0}' is not checked out. Do you want to check it out?	No	Always Prompt

Prompt Text

'{0}' is checked out to you but at '{1}' Do you want to continue and edit anyway?

Customize Inventor Vault Dialog Boxes

- Some properties in file may be out of date, Would you like to update properties now?
 - YES
 - Never Prompt



Manage Prompts

Click a cell to edit directly.

Command	Prompt Text	Response	Frequency
Check Out	'{0}' is checked out to you but at '{1}' Do you want to continue and edit anyway?	Yes	Always Prompt
Check Out	'{0}' is checked out but does not match the latest version in the vault. Continue editing?	Yes	Always Prompt
Check Out	'{0}' is not vaulted, and file is read only. Allow component editing?	Yes	Always Prompt
Check Out	'{0}' is checked out to another user.	Yes	Always Prompt
Check Out	Some properties in file '{0}' may be out of date. Would you like to update properties now?	Yes	Never Prompt

Customize Inventor Vault Dialog Boxes

- Open From Vault: File is missing from your workspace Would you like to download it from Vault?
 - YES
 - Never Prompt

Open From Vault	File '{0}' is not checked out. Do you want to check it out?	No	Always Prompt
Open From Vault	File '{0}' is missing from your workspace. Would you like to download it from the vault?	Yes	Never Prompt
Replication	The file you are attempting to access has not yet been copied to your local server. The file is ...	Yes To All	Always Prompt
Save Changes	'{0}' and {{1}} dependent files must be saved before they can be checked in. Save and conti...	Yes	Always Prompt

Customize Inventor Vault Dialog Boxes

- The file is checked out to you. Are you sure you want to overwrite it with data from the Vault?
 - NO
 - Never Prompt

Not valid anymore 2014SR & 2015?

File is locked.	'{0}' is currently locked.	Yes	Always Prompt
Get (Download)	File '{0}' is checked out to you. Are you sure you want to overwrite it with data from the vault?	No	Never Prompt
Get (Download)	File '{0}' is NEWER than the data in the vault. Are you sure you want to overwrite it?	Yes To All	Always Prompt
On File Close	File '{0}' is checked out to you. Do you want to check it in now?	Yes	Always Prompt

Workspace changes behaviour

Get / Check Out - D-100020.iam

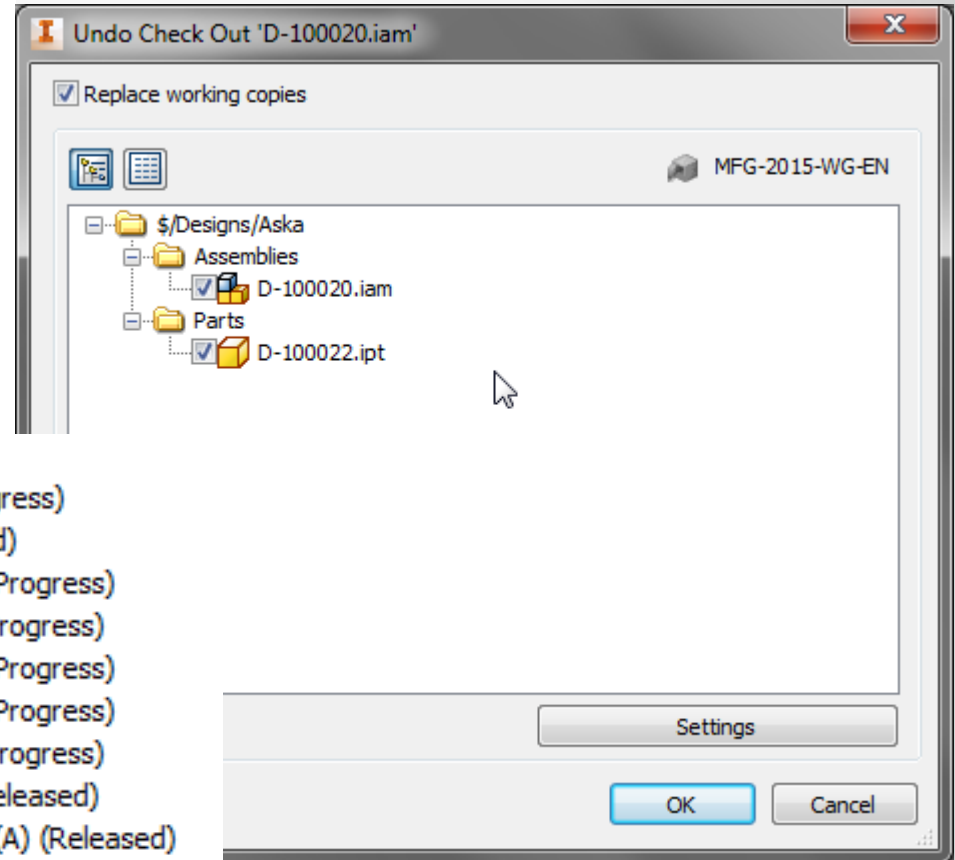
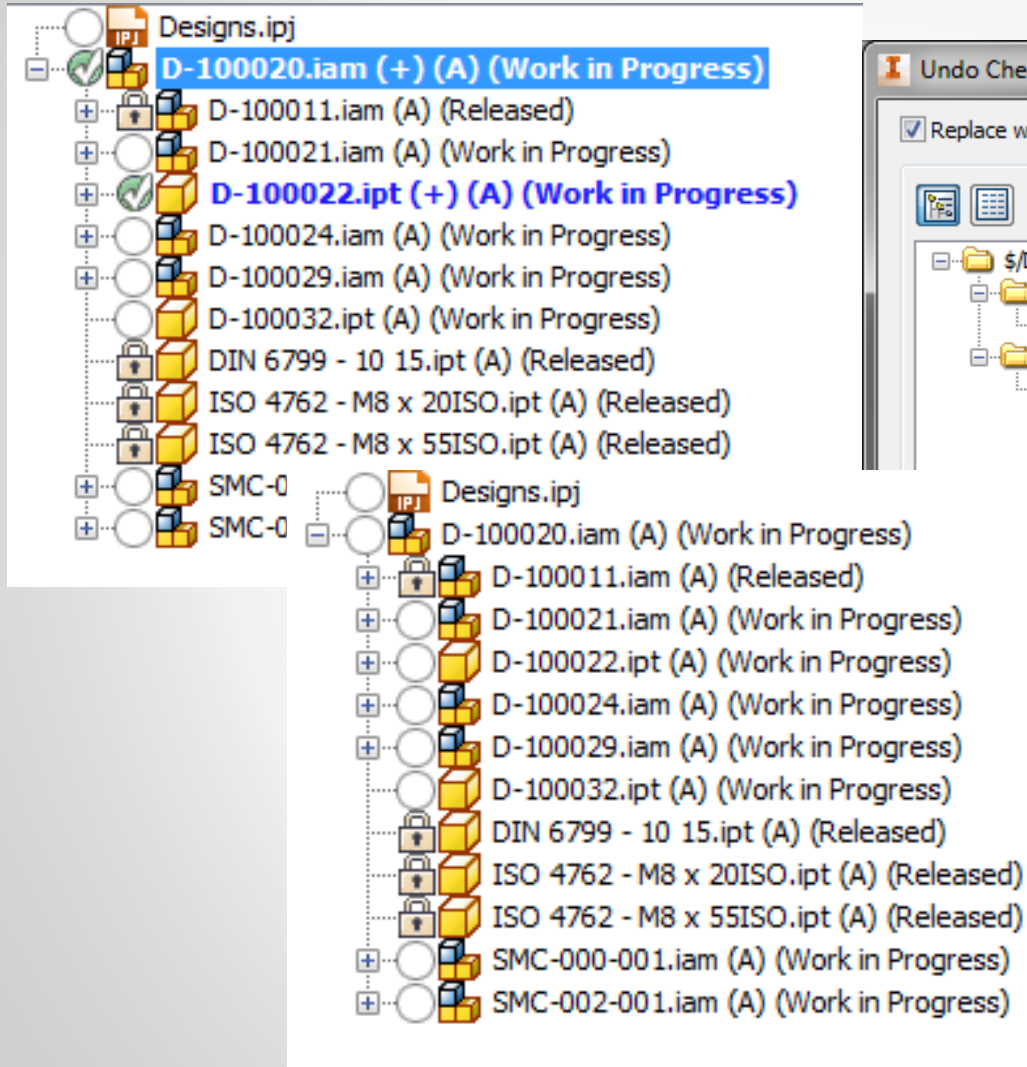
Latest Work in Progress Use released for related files

Name	Revision	State (Historical)	Vault Path	Local Path	
D-100010.ipt	A	Released	\$/Designs/Aska/Pa...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100011.iam	A	Released	\$/Designs/Aska/As...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100012.ipt	A	Released	\$/Designs/Aska/Pa...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100013.ipt	A	Released	\$/Designs/Aska/Pa...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100020.iam	A	Work in Progress	\$/Designs/Aska/A...	C:\VaultWork\Desi...	<input type="checkbox"/>
D-100021.iam	A	Work in Progress	\$/Designs/Aska/As...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100022.ipt	A	Work in Progress	\$/Designs/Aska/P...	C:\VaultWork\Desi...	<input type="checkbox"/>
D-100023.ipt	A	Work in Progress	\$/Designs/Aska/Pa...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100024.iam	A	Work in Progress	\$/Designs/Aska/As...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100025.ipt	A	Work in Progress	\$/Designs/Aska/Pa...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100026.ipt	A	Work in Progress	\$/Designs/Aska/Pa...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100027.ipt	A	Work in Progress	\$/Designs/Aska/Pa...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100028.ipt	A	Work in Progress	\$/Designs/Aska/Pa...	C:\VaultWork\Desig...	<input type="checkbox"/>
D-100029.iam	A	Work in Progress	\$/Designs/Aska/As...	C:\VaultWork\Desia...	<input type="checkbox"/>

Working Folders

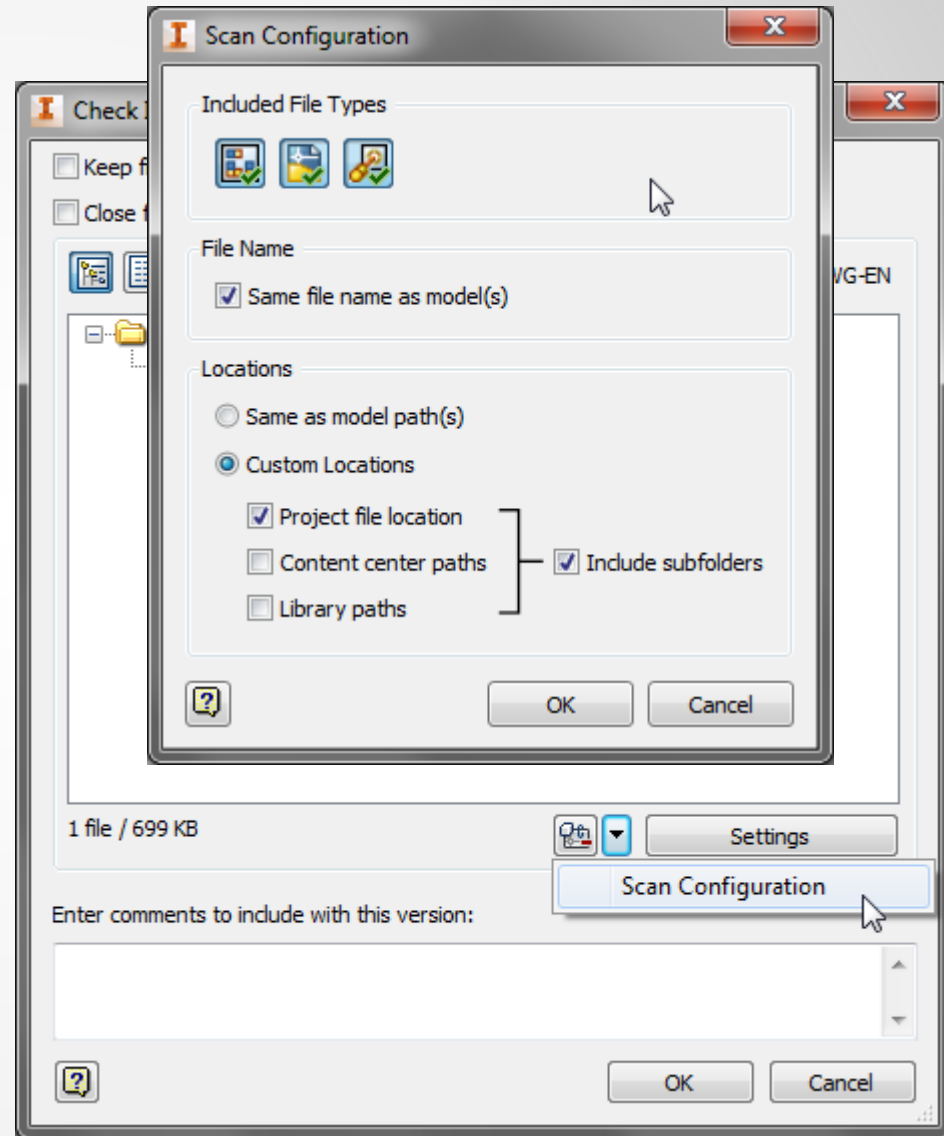
- Working Folders
- Working Folders - Force Overwrite**
- None

Workspace changes behaviour



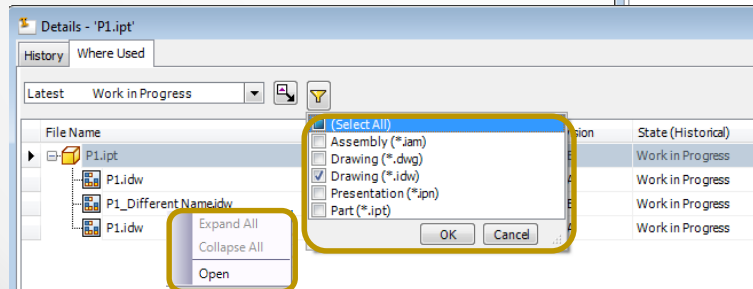
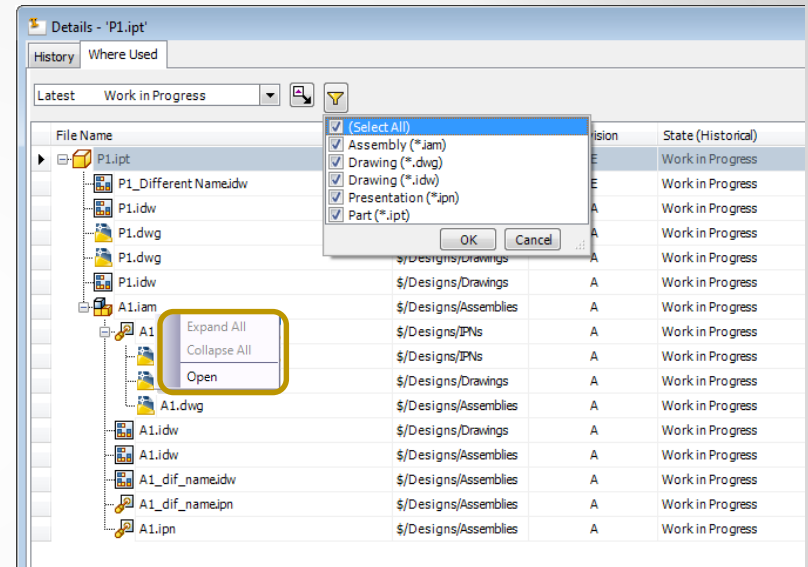
Inventor Vault add-in - Increased Efficiency with the Check In Process

- Support related files during a Check In to make sure models and drawings are always in sync

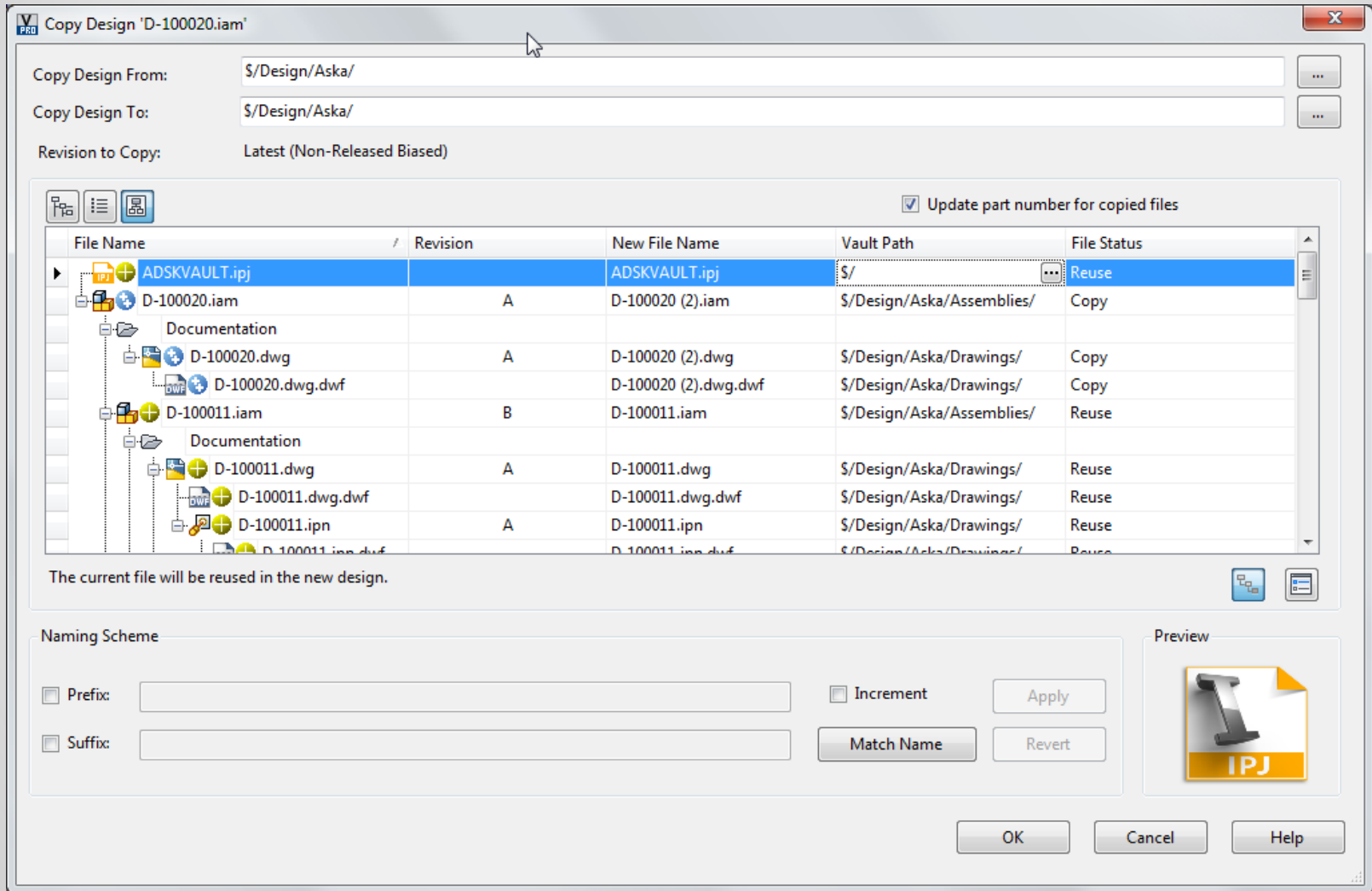


Inventor Vault addin - Easy Access to Related Parents

Easy and fast way to access and edit managed related 2D drawing and other parents



Copy Design

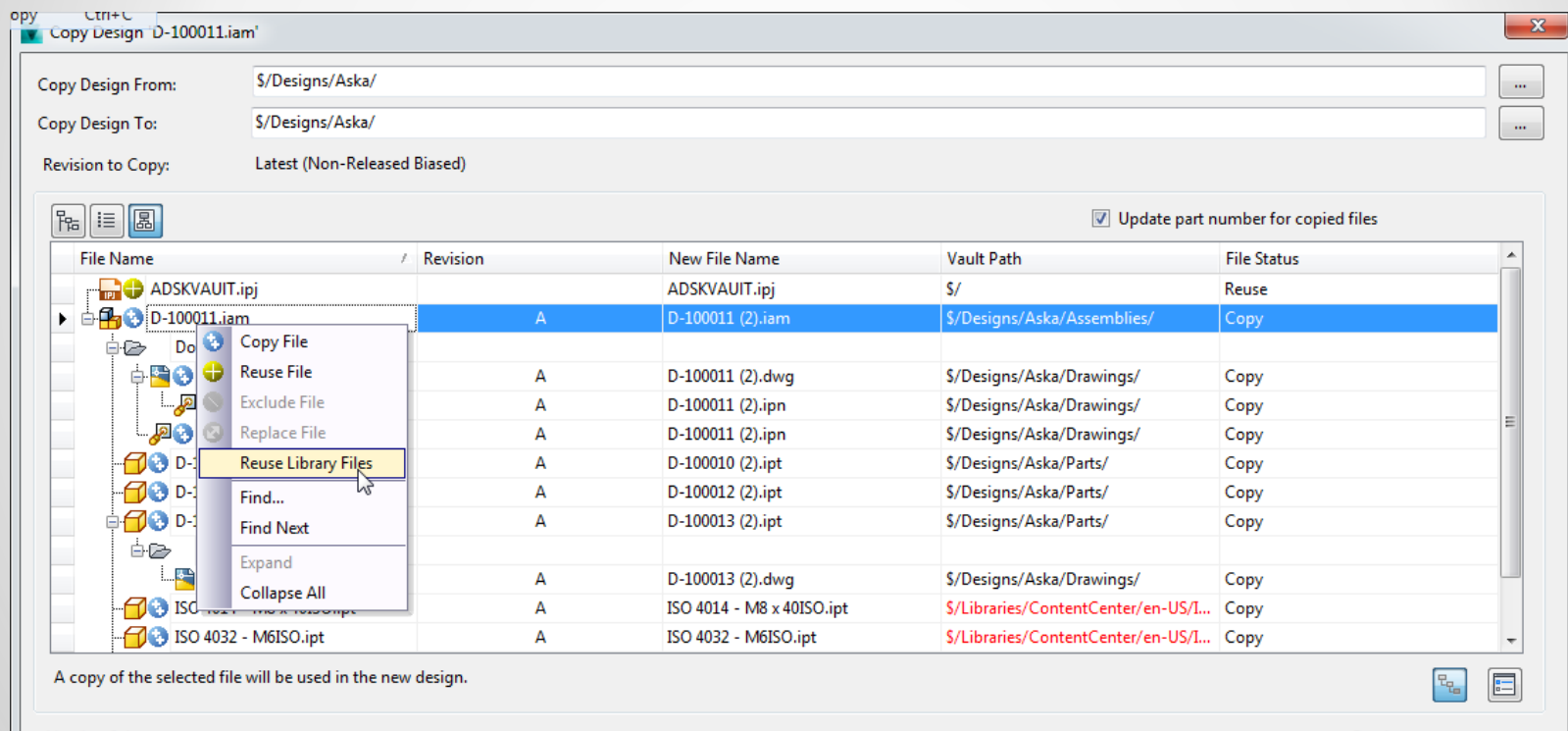


Copy Design

- CTRL – select copy all
- Reuse Library parts.
- Prefix or suffix for easy rename
- Replace

Copy Design – After CTRL (copy all)

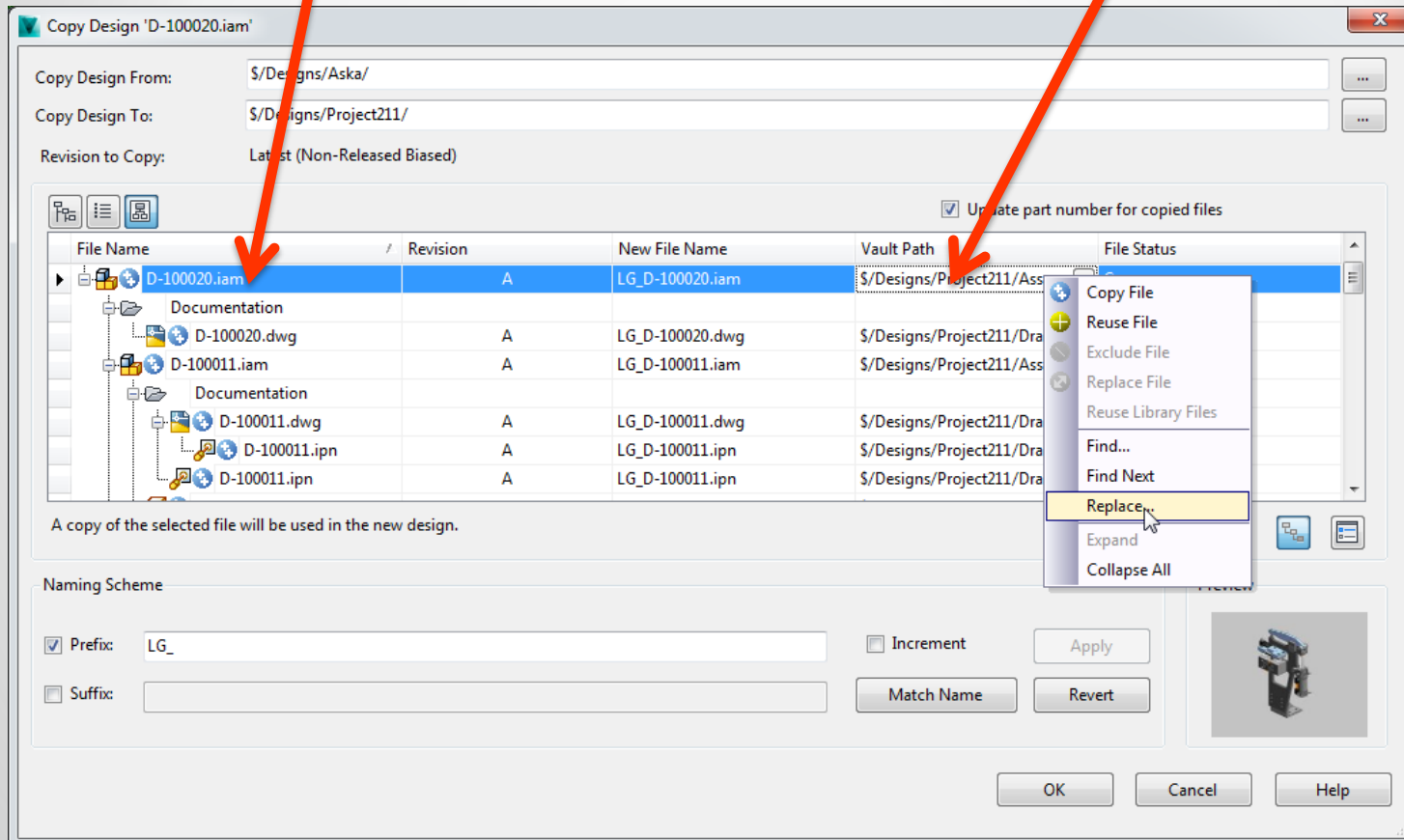
- Reuse Library parts on the highest level



Copy Design - Replace

1. Left mouse click here

2. right mouse click here



Copy Design Demo

Autodesk Vault Professional 2014

File Edit View Go Tools Actions Help

New Report... Plot... Check In... Find... Change Category... Change State... Revise...

Home << Assemblies

ADSKVAULT - dave

- Change Order List
- Item Master
- Project Explorer (\$)
 - Designs
 - Aska
 - Assemblies
 - Drawings
 - Parts
 - Special
 - Libraries
 - My Search Folders

Name	Description	Title	State	Revision
D-100011.iam	ARM TYPE-1	CLAMP ASSEMBLY	Released	A
D-100018.iam	TWO STATION CLAMP WELDING JIG	FINAL ASSEMBLY	Work in Progress	A
D-100019.iam	MAIN JIG	JIG ASSEMBLY	Work in Progress	A
D-100020.iam	TALL CLAMP L 470	JIG ASSEMBLY	Work in Progress	A
D-100021.iam	BOLT CONNECTION		Work in Progress	A
D-100024.iam	SHORT PIN	PIN BLOCK ASSEMBLY	Work in Progress	A
D-100029.iam	ANGLE BRACKET	WELDED ASSEMBLY	Work in Progress	A
D-100037.iam	MAIN SUB-FRAME	WELDED ASSEMBLY	Work in Progress	A

History Uses Where Used Change Order Preview

Latest Work in Progress

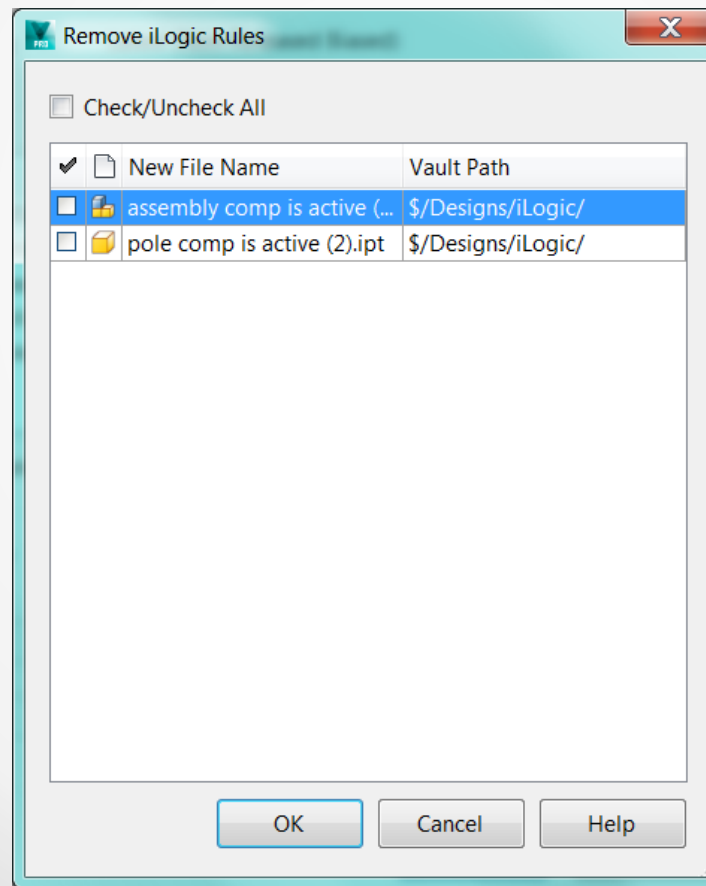
File Name	Revision	State (Historical)	Description	Created By	Checked In	Comment
D-100020.iam	A	Work in Progress	TALL CLAMP L 470	Dave	23/05/2013 18:24	
D-100021.iam	A	Work in Progress	BOLT CONNECTION	Dave	23/05/2013 18:24	
ISO 4762 - M10 x ...	A	Released	Hexagon Socket Head Cap Sc...	Dave	09/05/2013 23:14	Released to manufact...
ISO 7089 - 10 - 1...	A	Released	Washers - Product grade A	Dave	09/05/2013 23:14	Released to manufact...
DIN 6799 - 10 15.ipt	A	Released	Retaining Washer	Dave	09/05/2013 23:14	Released to manufact...
ISO 4762 - M8 x 20IS...	A	Released	Hexagon Socket Head Cap Sc...	Dave	09/05/2013 23:14	Released to manufact...
ISO 4762 - M8 x 55IS...	A	Released	Hexagon Socket Head Cap Sc...	Dave	09/05/2013 23:14	Released to manufact...
D-100024.iam	A	Work in Progress	SHORT PIN	Dave	23/05/2013 18:24	
D-100025.ipt	A	Work in Progress	PIN BLOCK	Dave	09/05/2013 23:05	
D-100026.ipt	A	Work in Progress	LOCATING PIN	Dave	09/05/2013 23:05	
D-100027.ipt	A	Work in Progress	PIN BLOCK	Dave	09/05/2013 23:05	

My Worklist

ECO-000002 (20/01/2011)

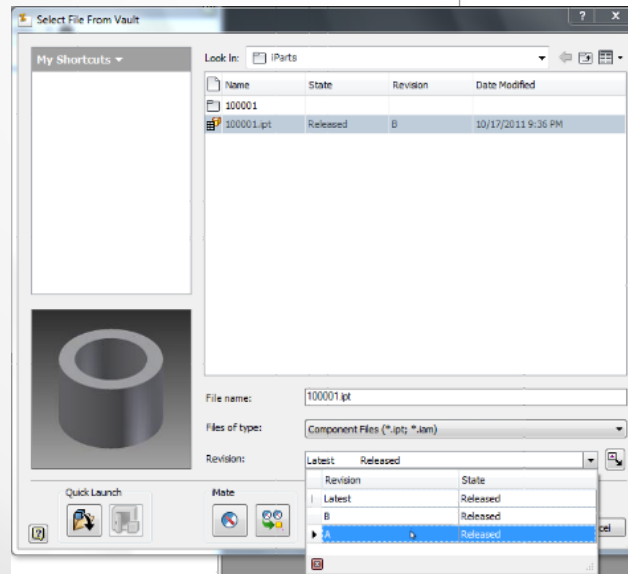
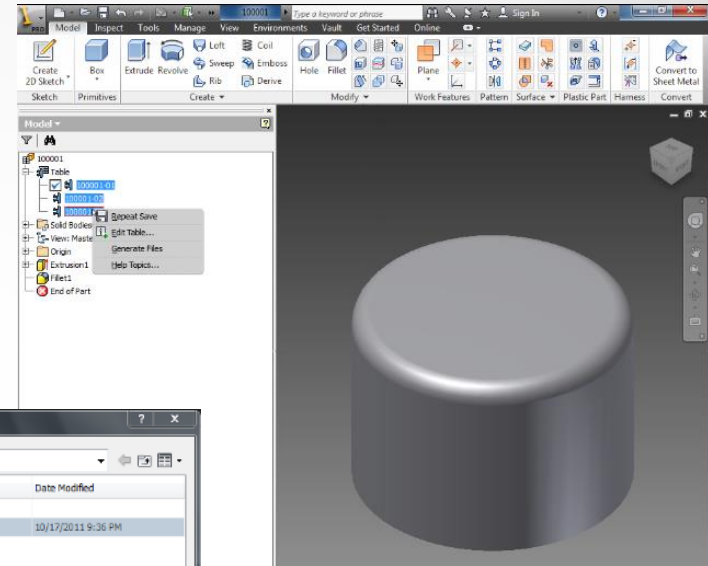
iLogic | Copy Design

- Remove iLogic Rules
- Rename Browser Nodes



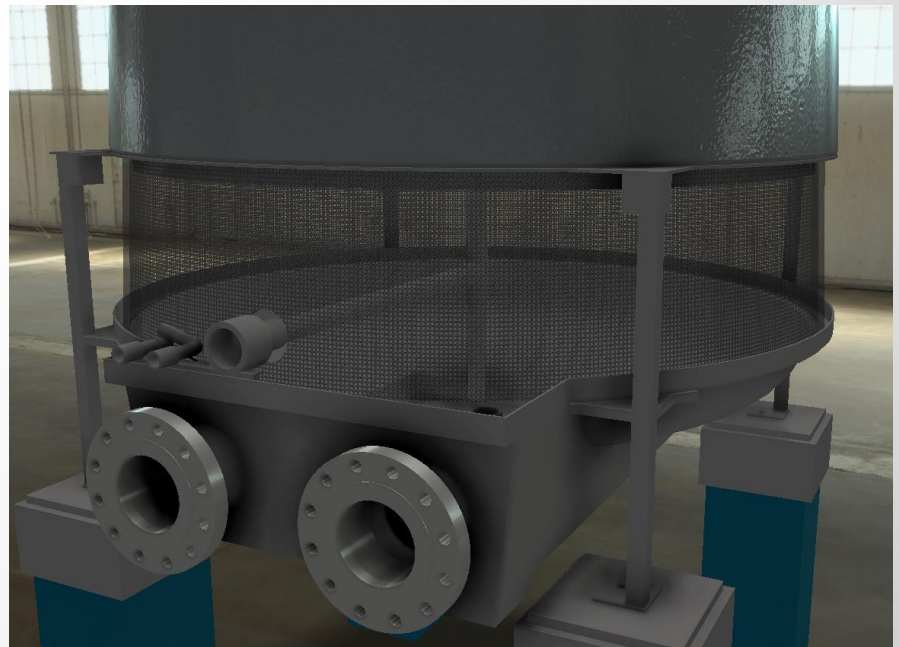
iParts and iAssemblies Improvements

Update members along with factories Improve iParts and iAssemblies handling



Autodesk Material / Appearance Libraries & Vault

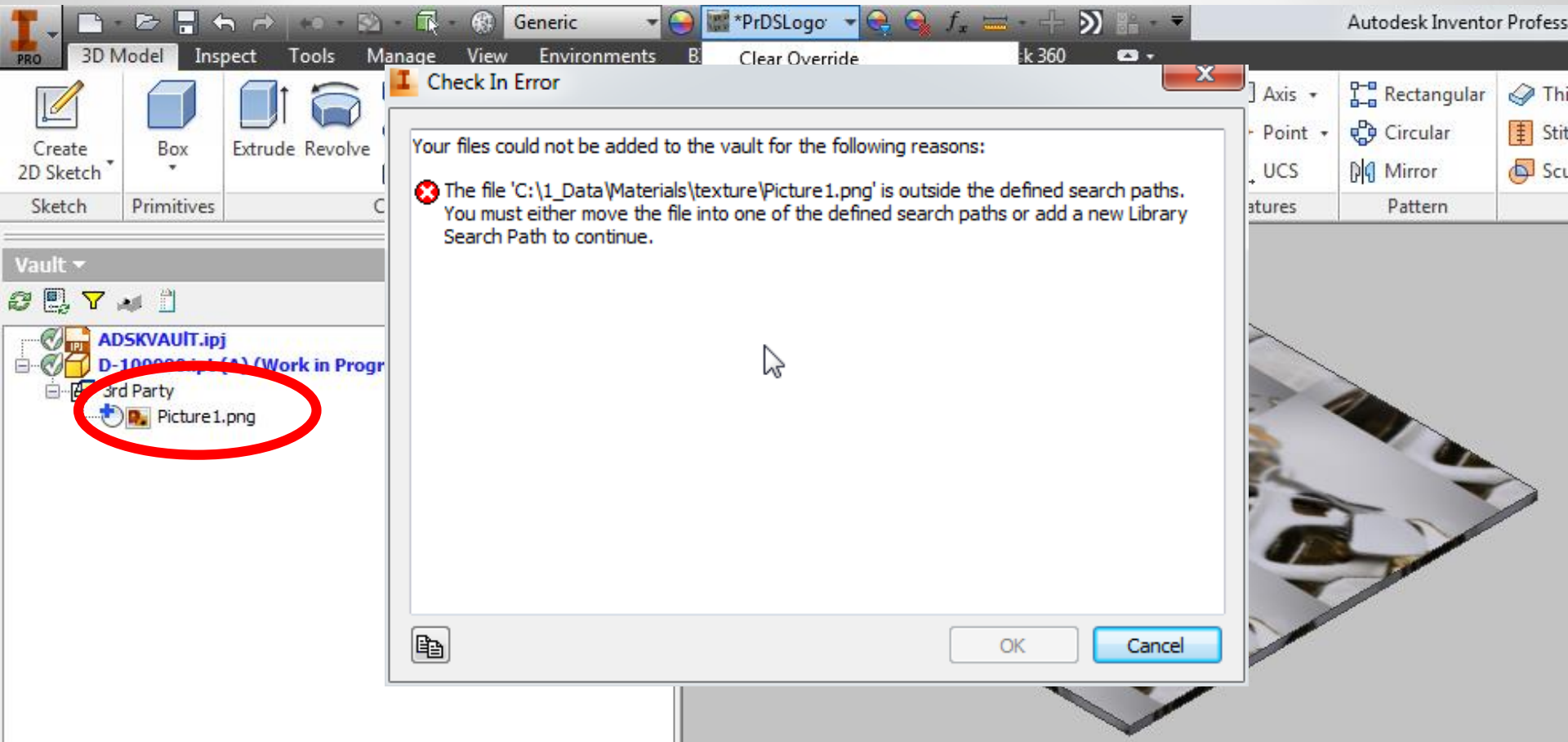
- Custom Material / Appearance Libraries
 - Material
 - Appearance
 - Texture Image
 - Bump Image
 - ...



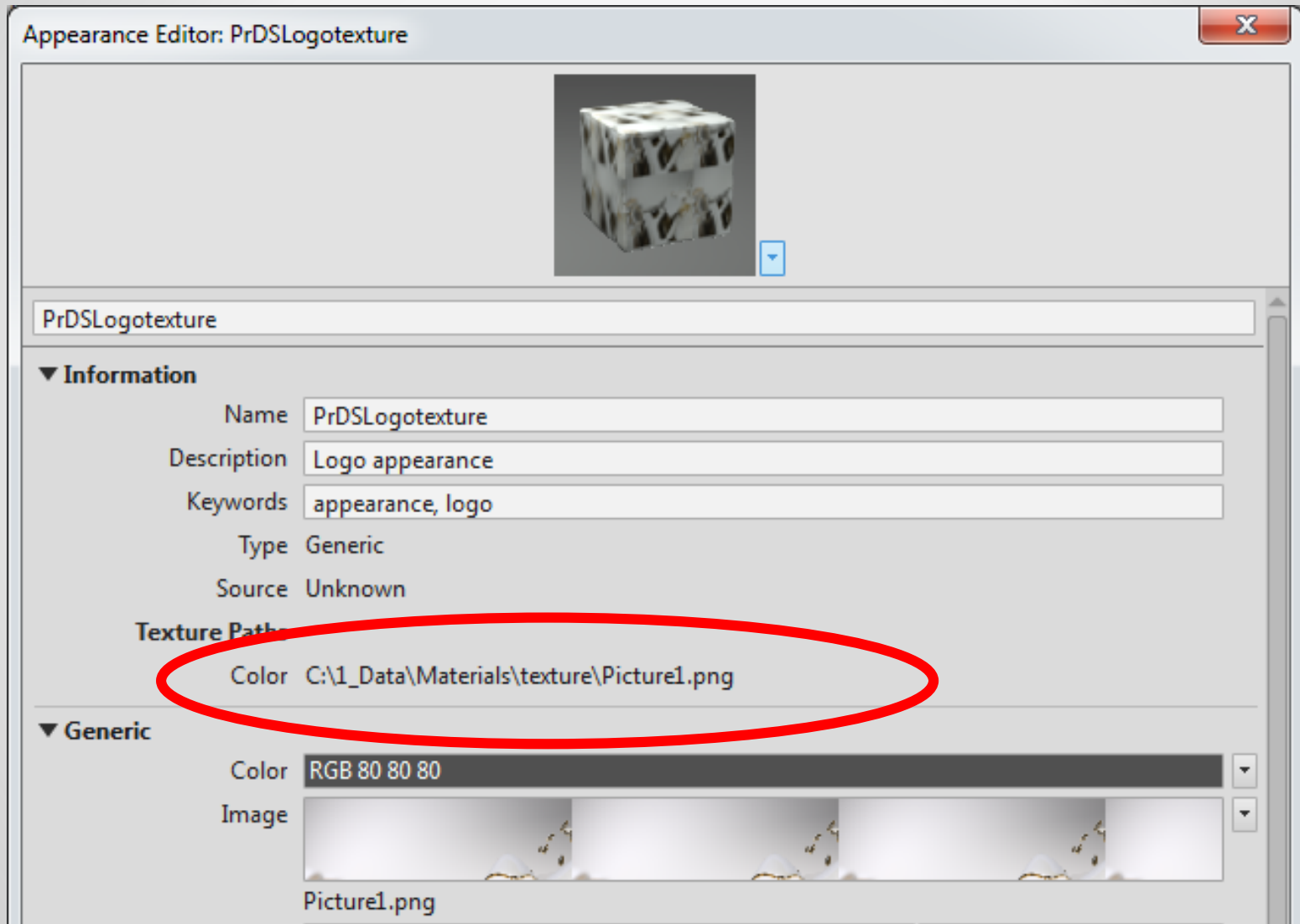
Autodesk Material / Appearance & Vault

The challenge:

- Custom Appearance with own textures

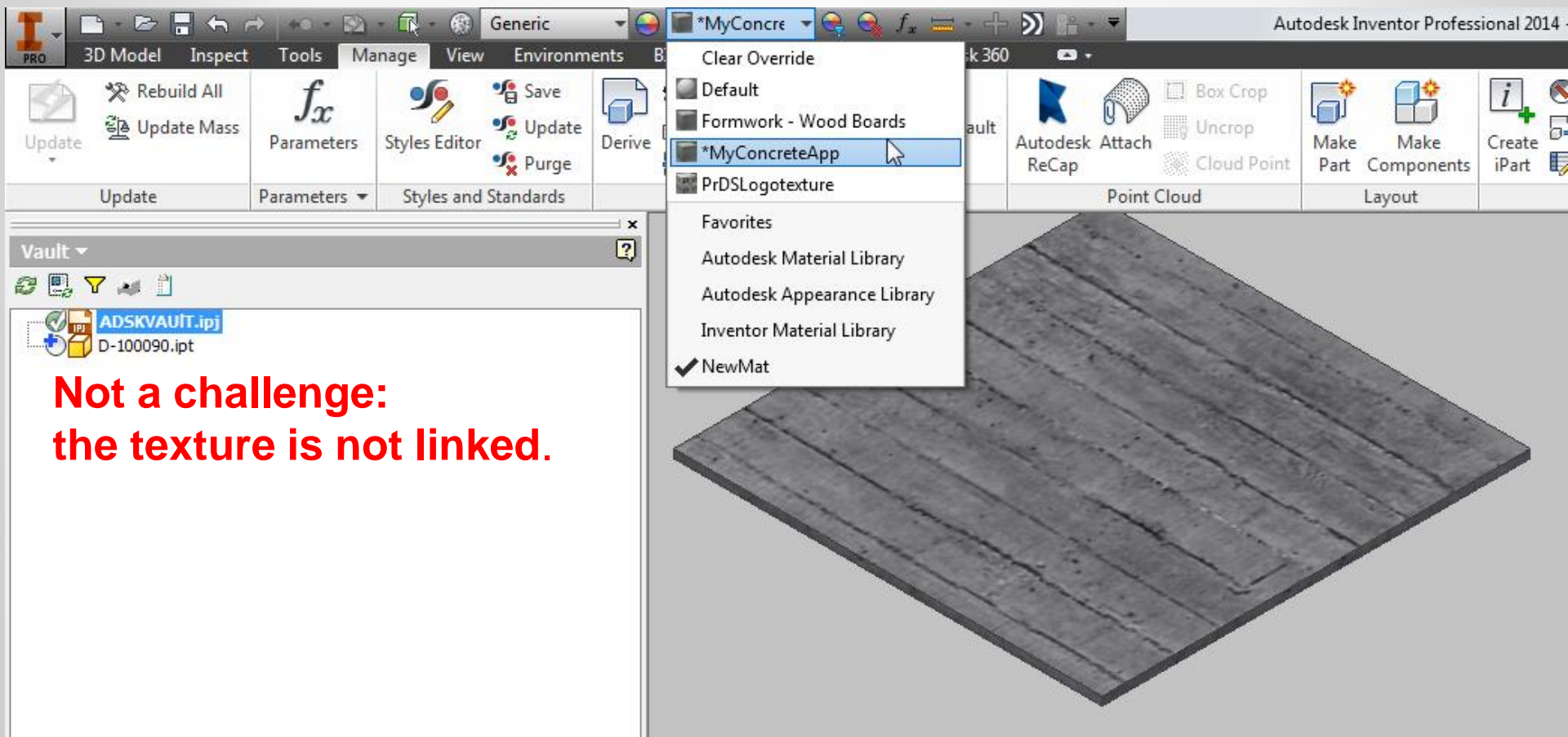


Autodesk Material / Appearance & Vault



Autodesk Material / Appearance & Vault

- Using the installed Appearances / Materials
- Custom Appearance with out of the box textures



**Not a challenge:
the texture is not linked.**

Autodesk Material / Appearance & Vault Solution 1: Managing the Material Library

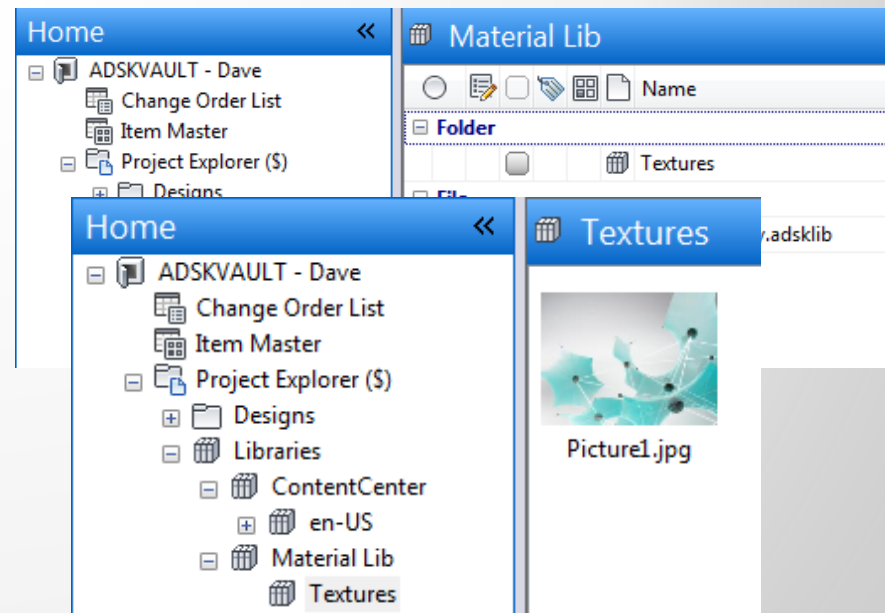
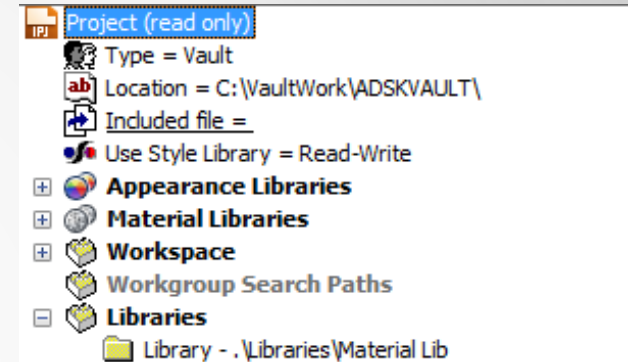
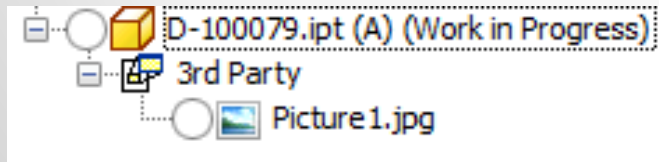
Managing the custom Material Library:

Advantages:

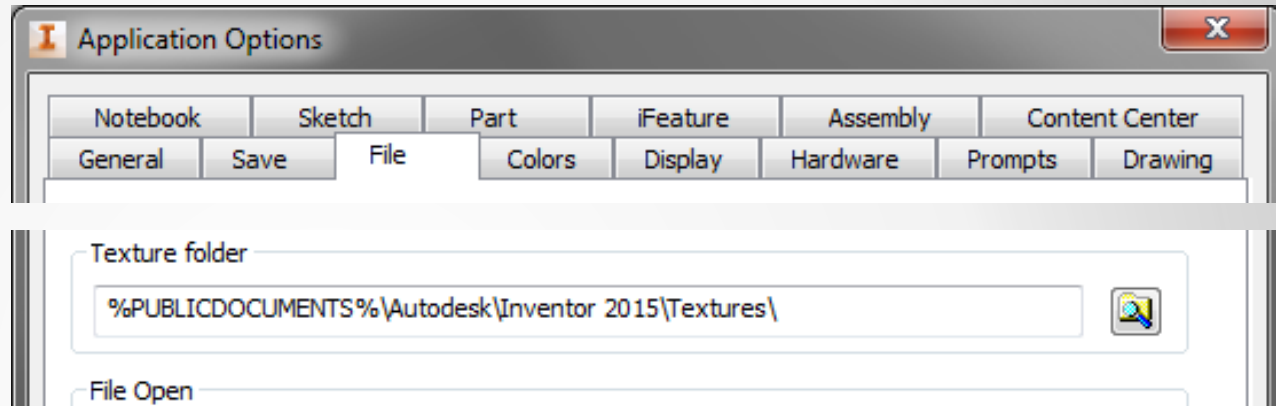
- Mat./Appear. Library managed.
- Textures managed
- Control who modifies
 - Material properties
 - Appearance properties

Disadvantages:

- Where used on image list.



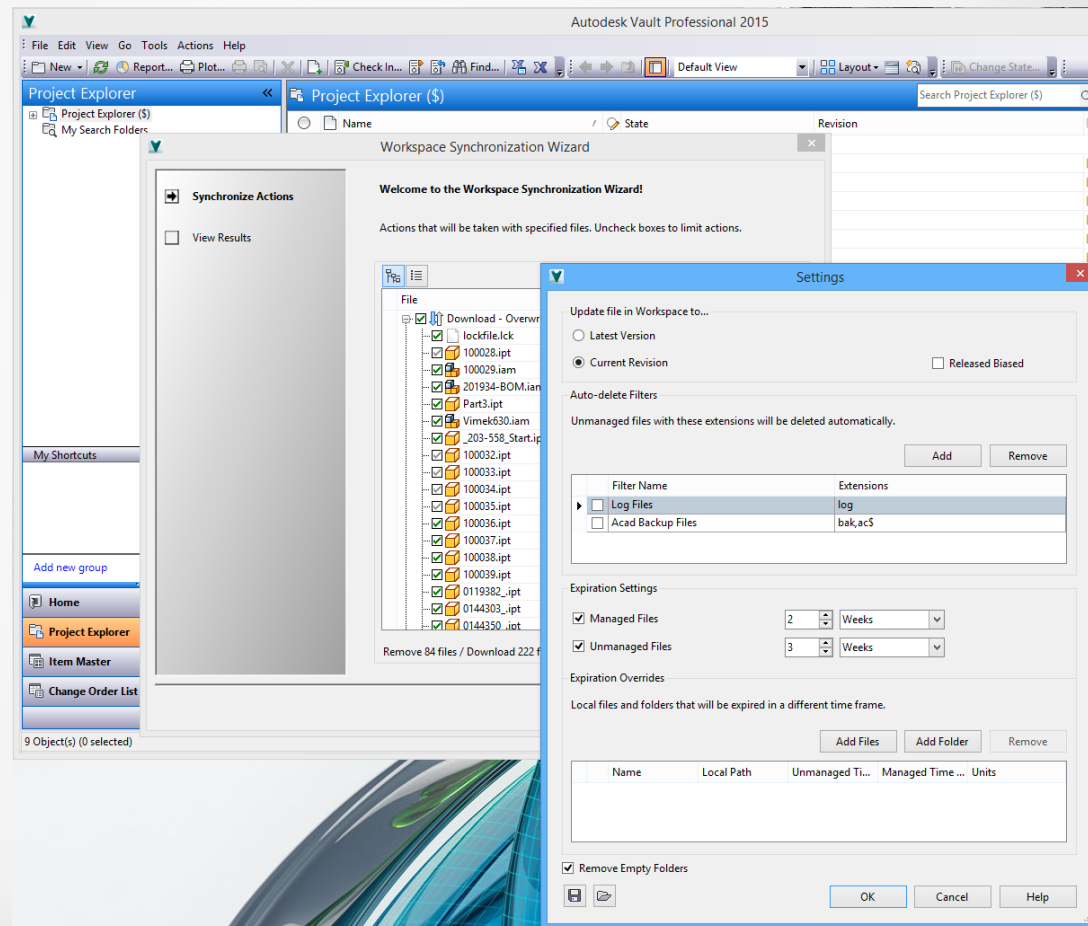
Autodesk Material / Appearance & Vault Solution 2: No Link (New Inventor 2015)



No link to the texture file(s)
(Management by Vault still an option)

Workspace Synhroniz

- Clean up your workspace



PDM-In-A-Box

Cad-Q PDM-in-a-box er en færdigkonfigureret og gennemtestet Autodesk Vault PDM løsning til en fast pris med nem implementering. Installer og lær... nemmere kan det ikke være!



Any
Questions?