



VDS 2017 What's New

Marco Mirandola
CEO @ coolOrange



AUTODESK UNIVERSITY 2016

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Agenda

Brief introduction to VDS

What's new in VDS 2017

What's changed in VDS 2017

Q&A

Information sources



Brief introduction to VDS



VDS is a product

- It's a free Autodesk Vault Extension
- Works with Vault Workgroup and Professional
- Available since Vault 2014

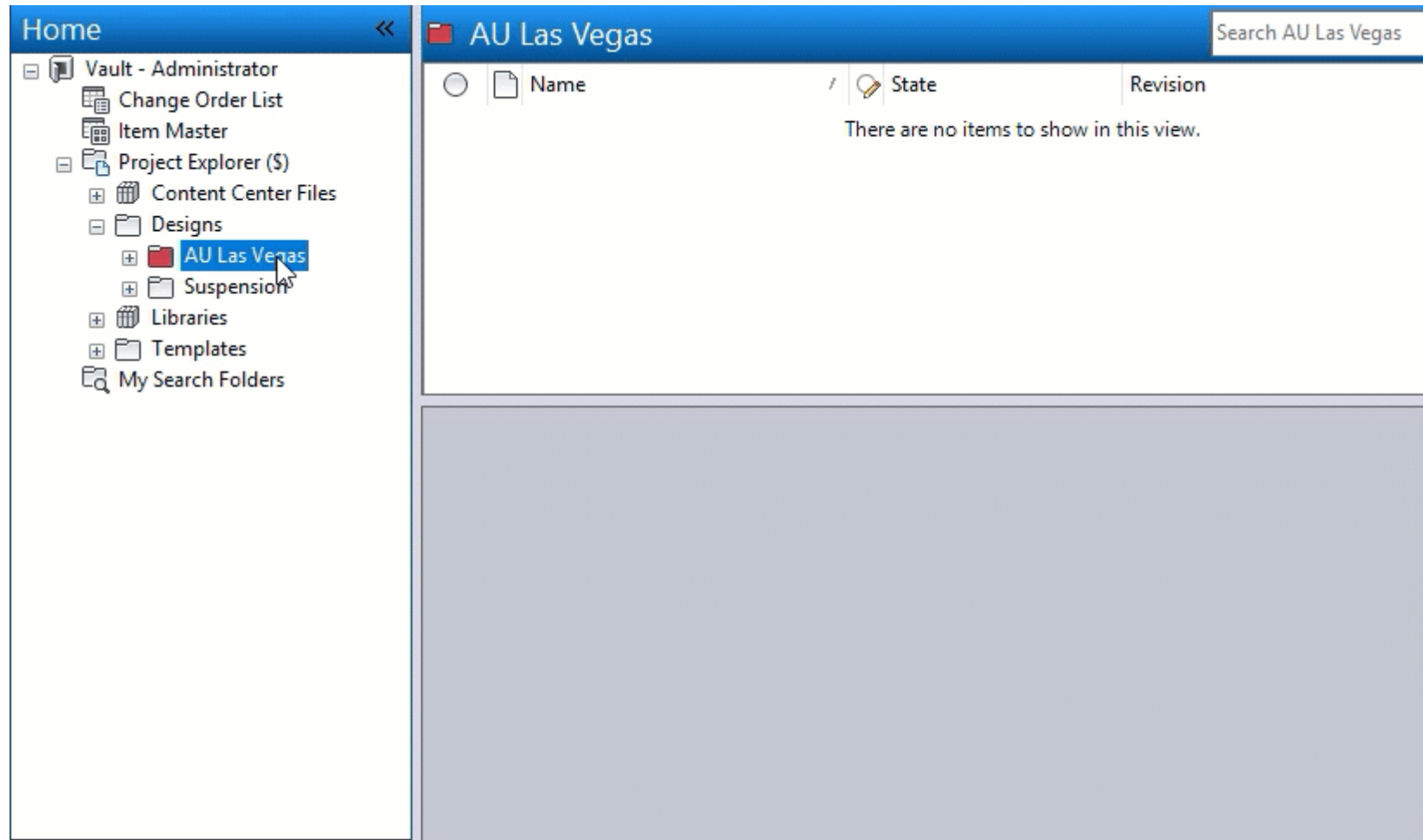
- It helps enter and maintain data in a standard way



VDS with Vault (new/edit folders)



VDS with Vault (new/edit files)



The screenshot displays the Autodesk Vault web interface. On the left, a navigation pane under the 'Home' tab shows a tree structure. The 'AU Las Vegas' folder, located under 'Designs', is selected and highlighted. The main content area on the right, titled 'AU Las Vegas', features a search bar and a table with columns for 'Name', 'State', and 'Revision'. The table is currently empty, with a message stating 'There are no items to show in this view.'

Name	State	Revision
There are no items to show in this view.		



VDS with Vault (new/edit custom objects)

The screenshot displays the Autodesk Vault VDS (Vault Desktop Software) interface. On the left is a navigation pane under the 'Home' tab, listing 'Vault - Administrator' and its sub-items: 'Change Order List', 'Item Master', 'Project Explorer (\$)', 'Transmittals', and 'My Search Folders'. The 'Transmittals' item is selected. The main area shows a list of Transmittals with columns 'Name' and 'Stat'. One Transmittal, 'TRN-000000', is selected and highlighted in blue. Below the list are three tabs: 'Contents', 'Where Used', and 'Datasheet'. The 'Contents' tab is active, showing a table with the following data:

Category	Transmittal
Name	TRN-000000
State	
Create Date	11/11/16 10:58:28
Created By	Administrator

To the right of this table is another section with two columns: 'Property Name' and 'Property Value'. It contains the following properties:

Property Name	Property Value
Send Date	
Approval Date	
Reception Date	



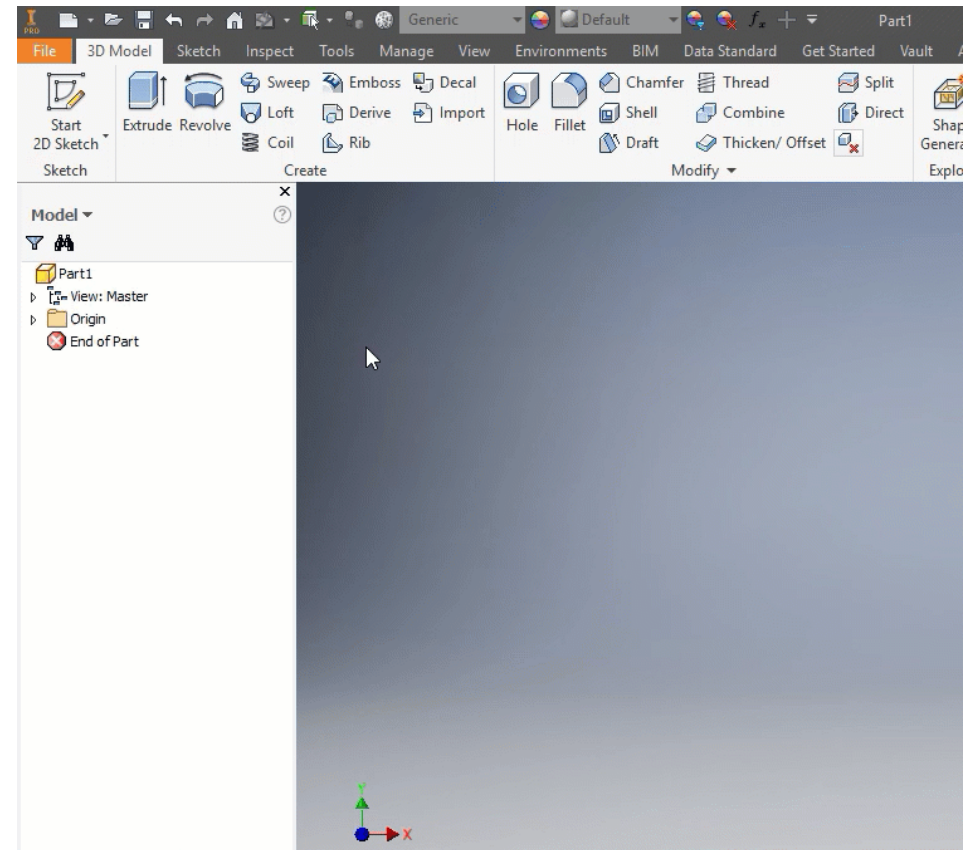
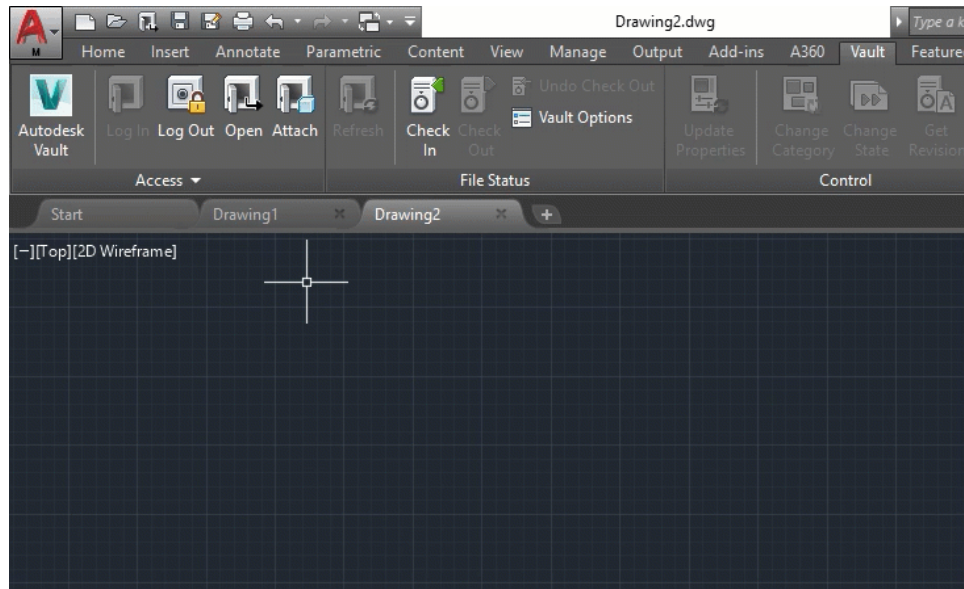
VDS with Vault (tabs)

The screenshot displays the Autodesk Vault user interface. On the left, the 'Vault - Administrator' tree shows a hierarchy including 'Project Explorer (\$)', 'Content Center Files', 'Designs', 'Libraries', 'Templates', 'Transmittals', and 'My Search Folders'. The 'Transmittals' tab is active, showing a list of transmittals with columns for 'Name' and 'State'. The selected transmittal is 'TRN-000000'. Below the list, the 'Datasheet' tab is selected, displaying a table with the following data:

Category	Transmittal	Property Name	Property Value
Name	TRN-000000	Send Date	
State		Approval Date	
Create Date	11/11/16 10:58:28	Reception Date	
Created By	Administrator		



VDS with CAD (AutoCAD/Inventor)



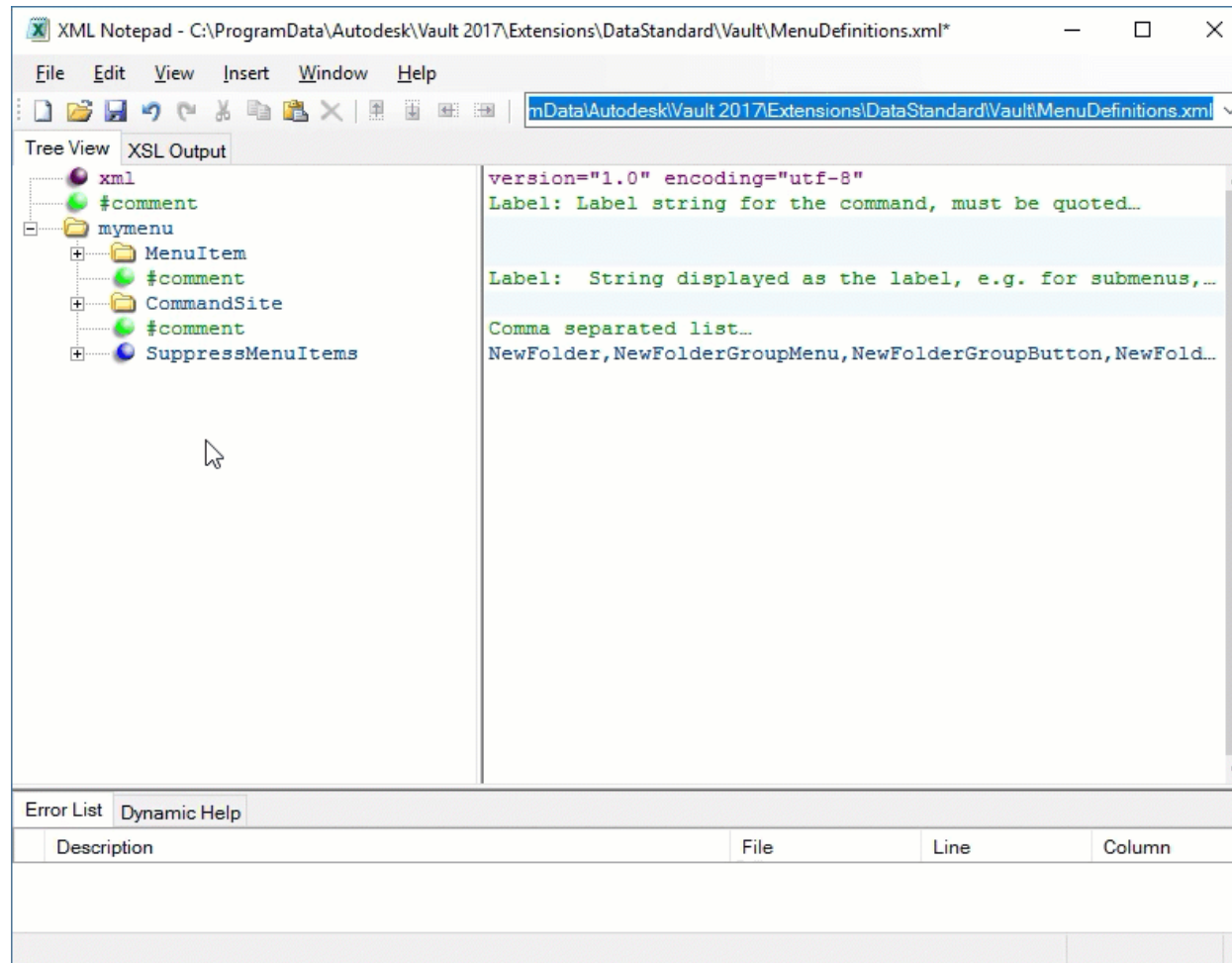
VDS is a customization framework

VDS makes Vault customizations

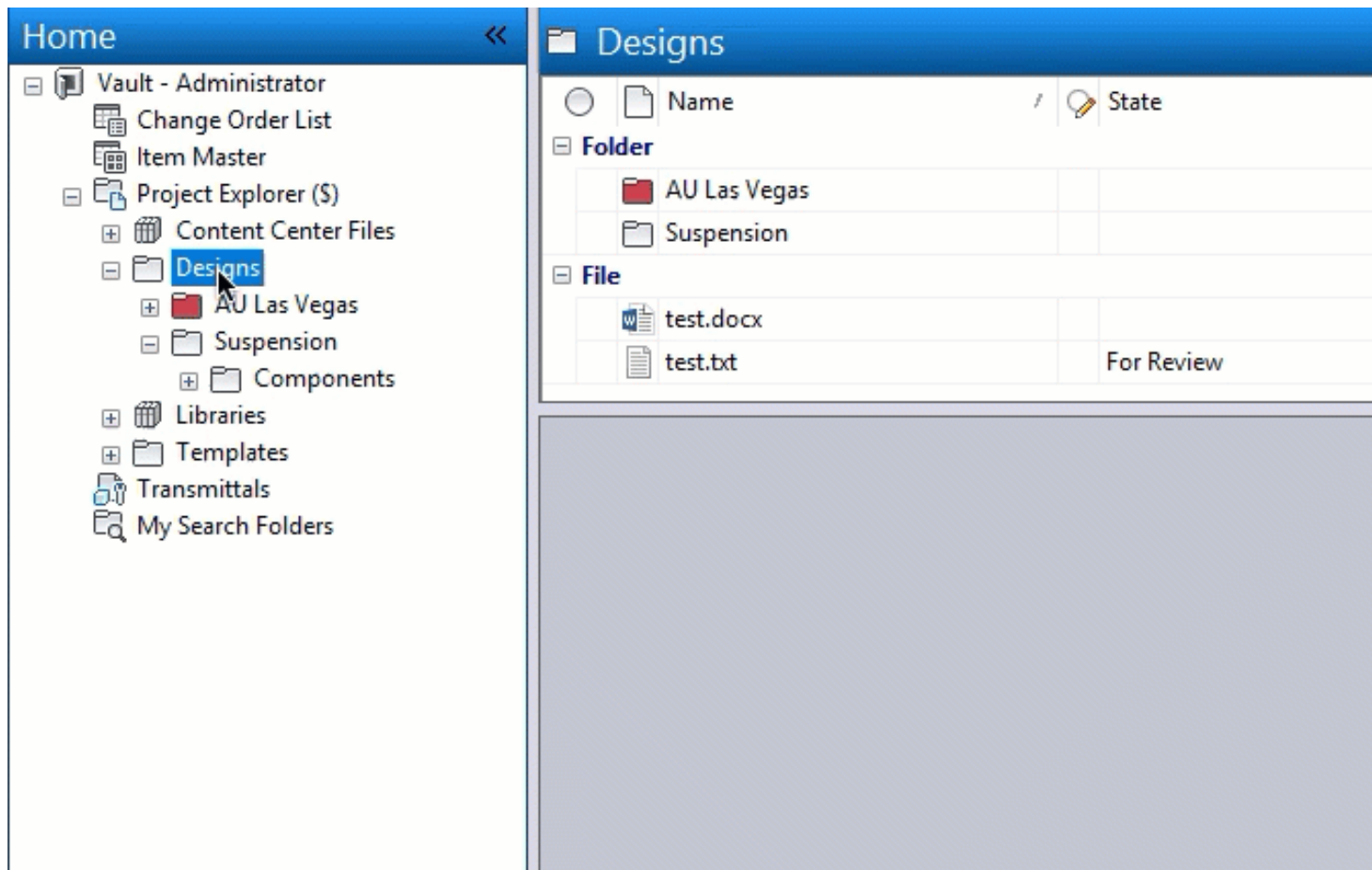
- Simpler
- Accessible
- Compatible



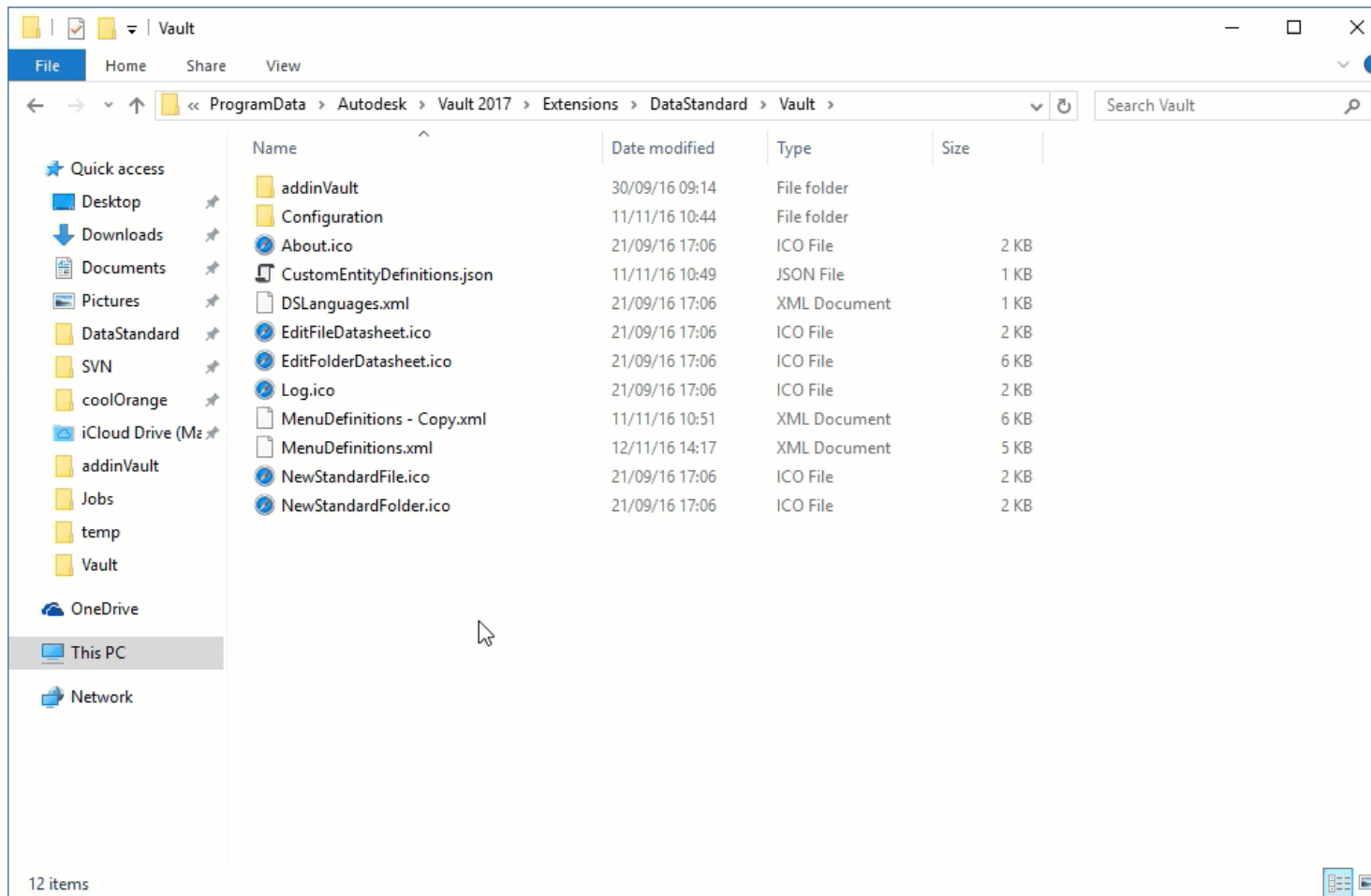
Vault new menu items



Vault custom dialogs



Vault custom tabs



Purpose of VDS

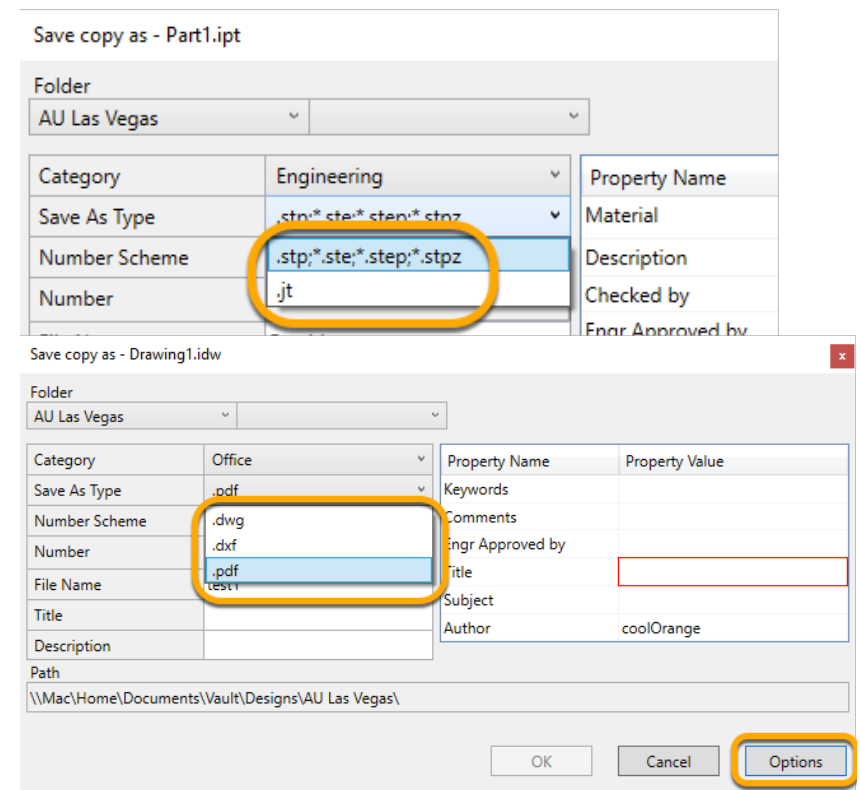
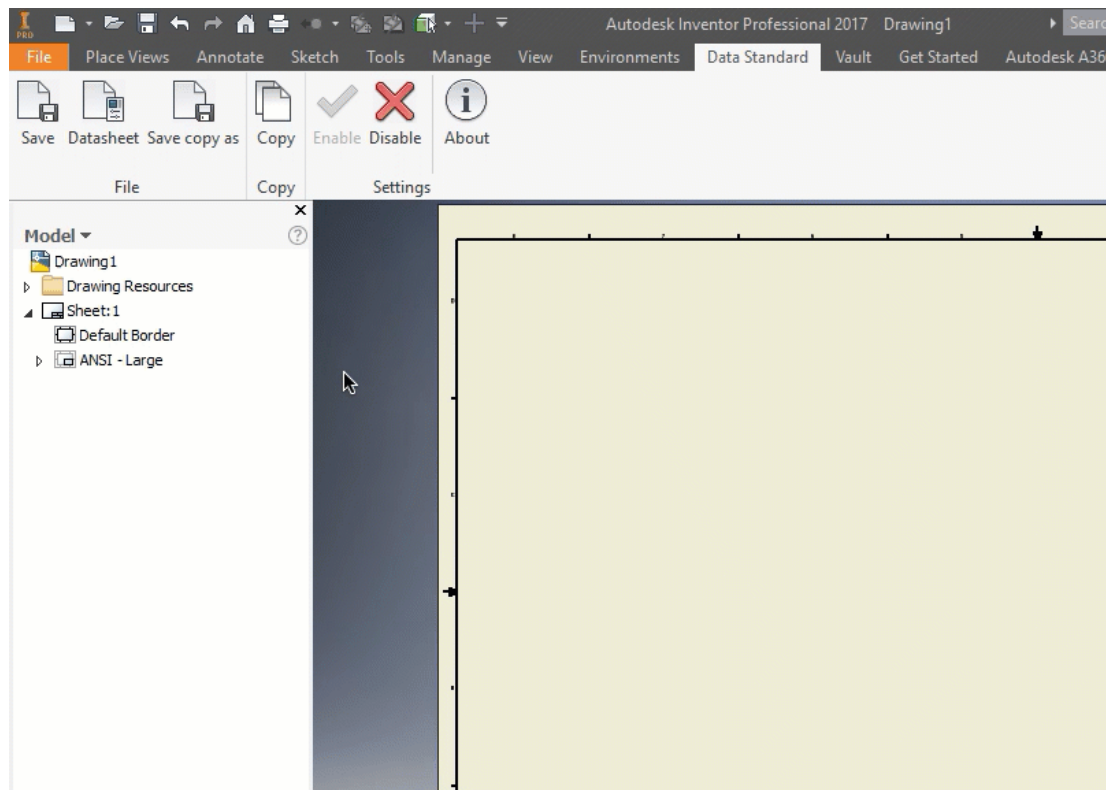
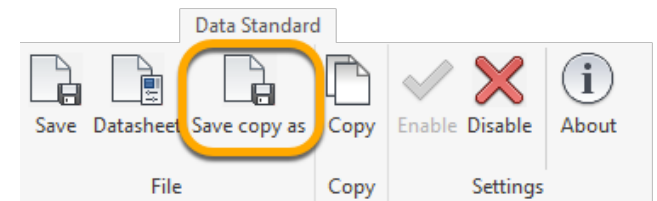
- Simplify and standardize data entry
- Reflect and respect the Vault configurations
- Configure rather customize
- Make it simple to customize



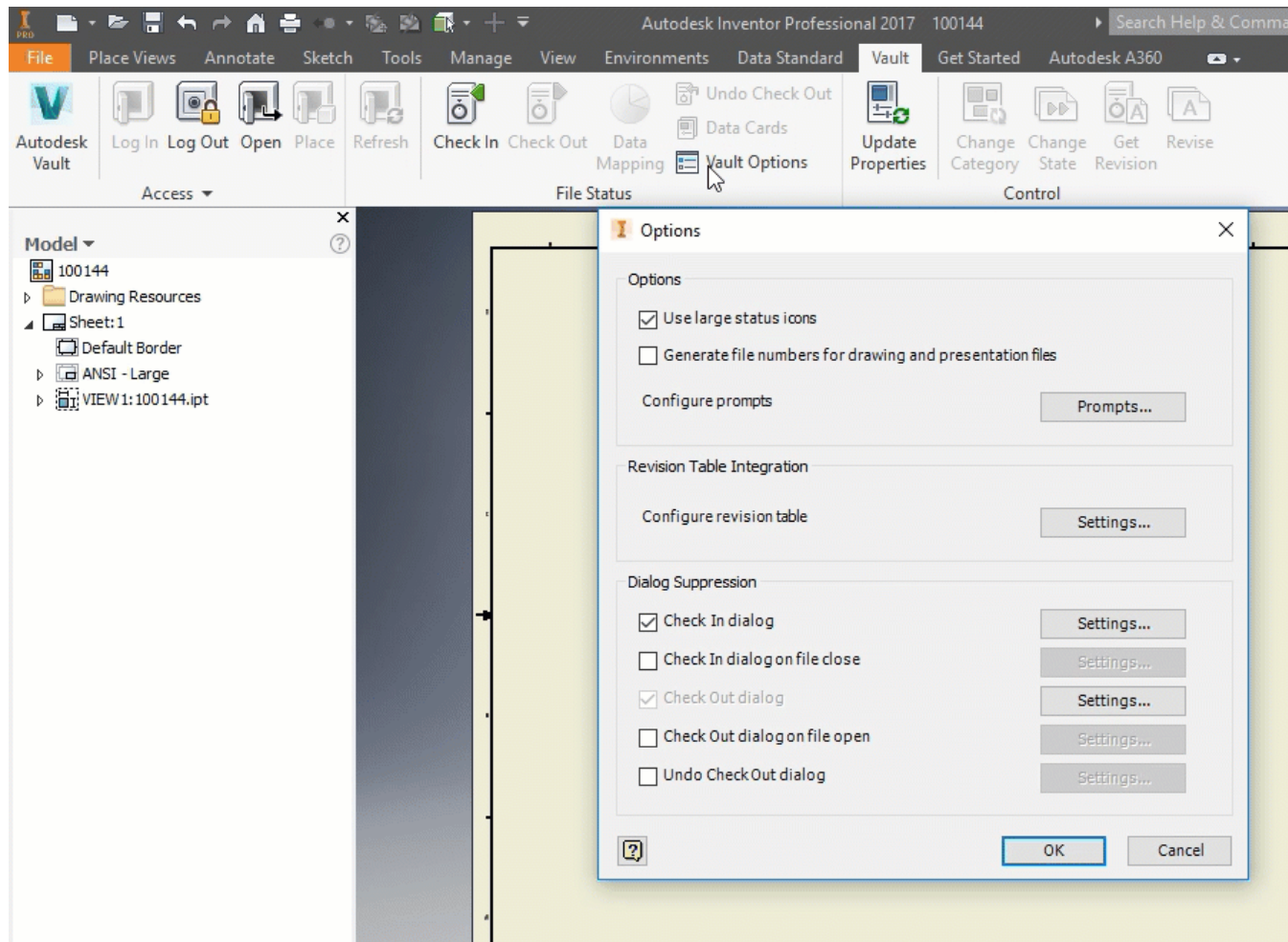
What's new in VDS 2017



Inventor Save Copy As



No numbering for drawings



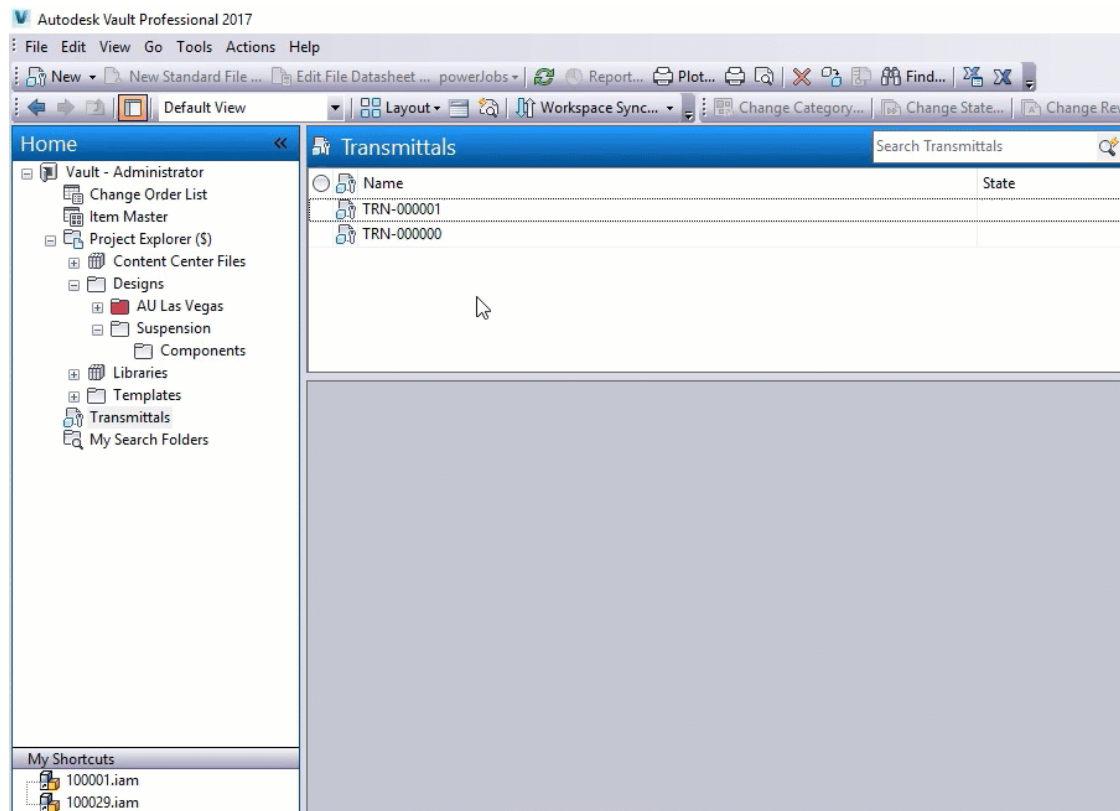
Category = Numbering

Property Name	Property Value
Author	
Manager	
Engr Approved By	
Engineer	
Designer	
Stock Number	
Part Number	
Material	
Description	
Cost	
Checked By	
Company	

Works for File, Folder,
Custom Objects



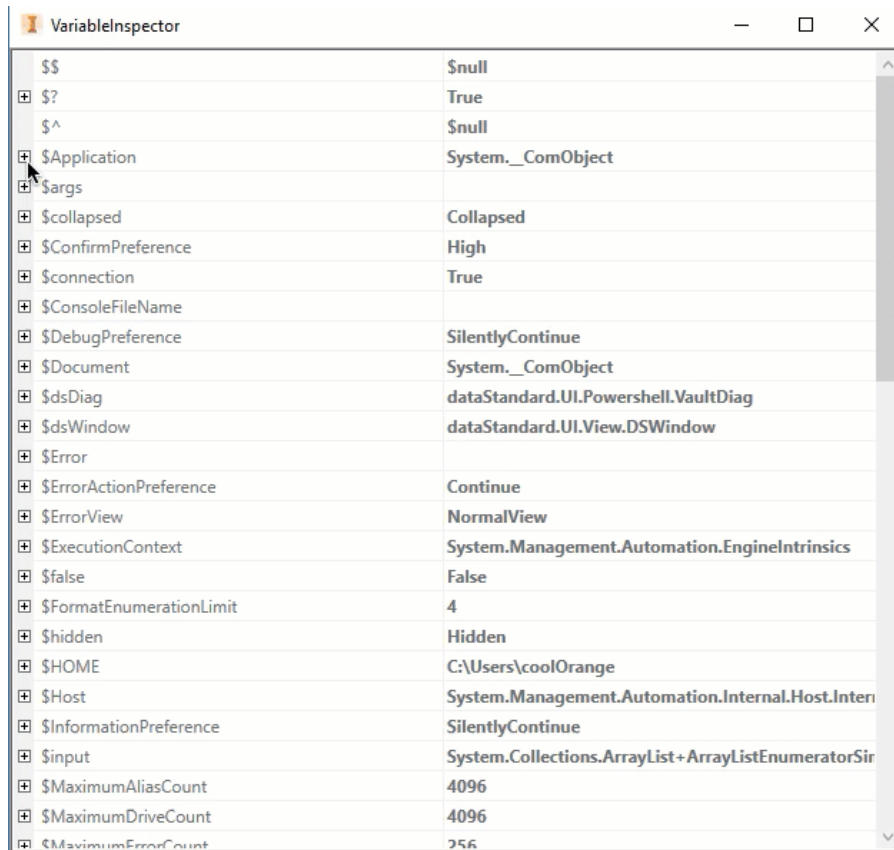
Custom objects ease



If the Custom Object name equals the Category name and Numbering name, then all it's preset



Application & Document object in PowerShell



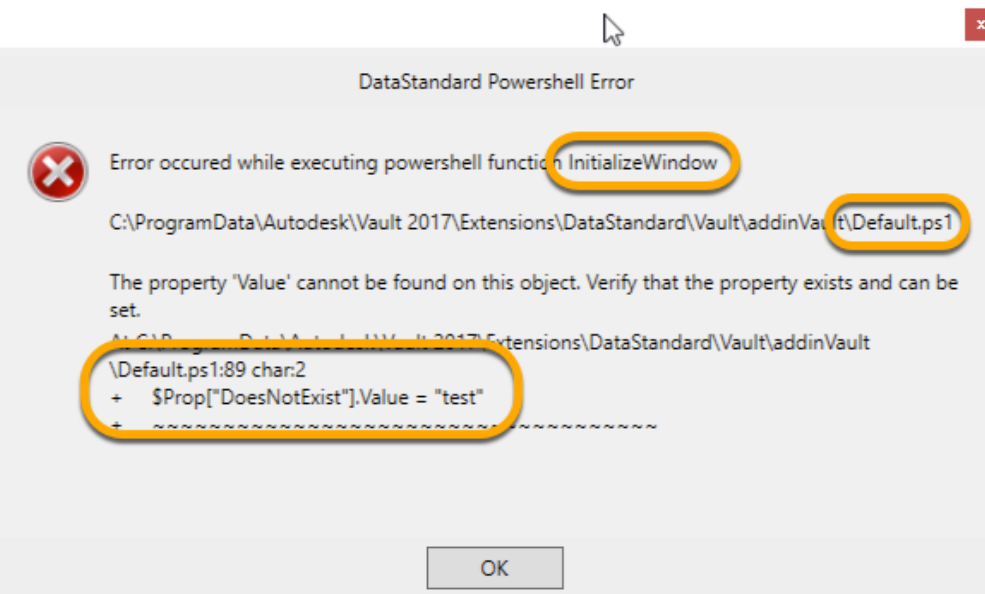
\$\$	\$null
\$?	True
\$^	\$null
\$Application	System._ComObject
\$args	
\$collapsed	Collapsed
\$ConfirmPreference	High
\$connection	True
\$ConsoleFileName	
\$DebugPreference	SilentlyContinue
\$Document	System._ComObject
\$dsDiag	dataStandard.UI.Powershell.VaultDiag
\$dsWindow	dataStandard.UI.View.DSWindow
\$Error	
\$ErrorActionPreference	Continue
\$ErrorView	NormalView
\$ExecutionContext	System.Management.Automation.EngineIntrinsics
\$false	False
\$FormatEnumerationLimit	4
\$hidden	Hidden
\$HOME	C:\Users\coolOrange
\$Host	System.Management.Automation.Internal.Host.Inter
\$InformationPreference	SilentlyContinue
\$input	System.Collections.ArrayList+ArrayListEnumeratorSir
\$MaximumAliasCount	4096
\$MaximumDriveCount	4096
\$MaximumErrorCount	256

Access to the Inventor and AutoCAD application and active document object from within PowerShell



XAML & PowerShell errors visible

```
257 <Label Content="{Binding UIString[LBL2], FallbackValue=
258 <TextBox Text="{Binding ValidatedBinding Prop[ XLTN TITLE1
259 86 function InitializeWindow
260 87 {
261 88 #begin rules applying commonly
262 89 $Prop["DoesNotExist"].Value = "test"
263 90 $Prop["Category"].add_PropertyChanged({
264 91 if ($_.PropertyName -eq "Value")
265 92
266 93
267 94
268 95
269 96
270 97
271 98
272 99
273 100
274 101
275 102
276 103
277 104
278 105
279 106
280 107
281 108
```



XAML & PS errors
File, line, error



What's changed in VDS 2017



MNU is now XML

```
mymenu.mnu
39
40 item newFile
41 {
42     Description = "$UIString[MNU11]";
43     Id = "DSNewStandardFile";
44     Hint = "$UIString[MNU7]";
45     Label = "$UIString[MNU1]";
46     MultiSelectEnabled = false;
47     NavigationTypes = [Folder, File];
48     ToolbarPaintStyle = TextAndGlyph;
49     PSFile = "CreateFile.ps1";
50     Image="NewStandardFile.ico";
51 }
52
124 */
125 site fileContext
126 {
127     Id="DSSiteFileContext";
128     Label="myMenu";
129     DeployAsPullDown=false;
130     Location=FileContextMenu;
131     MenuItems={$newFile, $editFile};
132 }
133
```

XML Notepad - C:\ProgramData\Autodesk\Vault 2017\Extensions\DataStandard\Vault\MenuDefinitions.xml*

File Edit View Insert Window Help

C:\ProgramData\Autodesk\Vault 2017\Extensions\DataStandard\Vault\MenuDefinitions.xml*

Tree View XSL Output

mymenu

MenuItem

HelloWorld

Description: Hello World

Hint: Hello World

PSFile: Hello World.ps1

Image: Hello World.ico

ToolbarPaintStyle: TextAndGlyph

NavigationTypes: File, Folder

MultiSelectEnabled: false

AboutDialog

#comment

CommandSite

FileContext

Label: myMenu

DeployAsPullDown: false

Location: FileContextMenu

Item

Name: HelloWorld

Item

Item

FolderContext

StandardToolbar

ToolsMenu

HelpMenu

Label: String displayed as the label, e.g. for



List of template folders is external XML

Navigation: << Vault 2017 > Extensions > DataStandard > Vault > Configuration

Name	Date modified	Type	Size
Eco	30/09/16 00:08	File folder	
File	12/11/16 05:20	File folder	
Folder	30/09/16 00:08	File folder	
Item	30/09/16 00:08	File folder	
Task	30/09/16 00:08	File folder	
Transmittal	11/11/16 01:44	File folder	
CustomObject.xml	21/09/16 08:06	Windows Mar...	17 KB
File.xaml	11/11/16 07:37	Windows Mar...	20 KB
File.xml	21/09/16 08:06	XML Document	1 KB
FileOffice.xaml	21/09/16 08:06	Windows Mar...	20 KB
FileOffice.xml	21/09/16 08:06	XML Document	1 KB
Folder.xaml	21/09/16 08:06	Windows Mar...	17 KB
VaultDynamicProper...	11/11/16 01:59	XML Document	2 KB

File.xml

```
1 <?xml version="1.0" encoding="utf-8"?>
2
3 :MainWindow xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
4
5 <Window.Resources>
6
7 <Style x:Key="ButtonGridStyle" TargetType="{x:Type Grid}">
8
9 <!-- This XmlDataProvider is used for defining Name/TemplatePath pairs that are used in the combo box "Document Type" -->
10 <XmlDataProvider x:Key="DocTypes"
11 Source="C:\ProgramData\Autodesk\Vault 2017\Extensions\DataStandard\Vault\Configuration\File.xml"
12 XPath="/DocTypeData" />
13 </Window.Resources>
14
15 </MainWindow>
```

File.xml

```
1 <?xml version="1.0" encoding="utf-8" ?>
2 <DocTypeData xmlns="">
3 <DocTypeInfo>
4 <DocName>Inventor</DocName>
5 <Path>$/Templates/Inventor</Path>
6 </DocTypeInfo>
7 <DocTypeInfo>
8 <DocName>AutoCAD Drawings</DocName>
9 <Path>$/Templates/AutoCAD</Path>
10 </DocTypeInfo>
11 <DocTypeInfo>
12 <DocName>Office Document</DocName>
13 <Path>$/Templates/Office</Path>
14 </DocTypeInfo>
15 </DocTypeData>
```



New system properties

- CAD
 - `_Category => VDS_Category`
 - `_NumSchm => VDS_NumSchm`
- All
 - `_CreateMode, _EditMode`



Update – things to consider

- MNU changed to XML
- Templates path is external
- Dialogs have been simplified
- Category-Numbering logic

You can take your 2016 and overwrite into 2017

Or, take the 2017 as baseline and apply your changes



Q&A



Sources

- Autodesk Knowledge Network
 - Vault Customization Forum
 - coolOrange blog
-
- coolOrange paid support: support@coolorange.com



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