



Autodesk Vault 2023

What's New – Technical Details

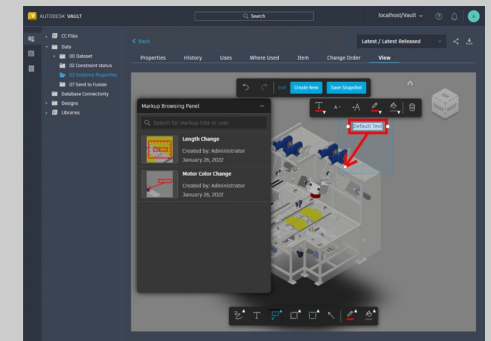
Autodesk on premise PDM solutions, cloud connected

Markus Koechl
Solutions Engineer PDM|PLM | [Community Profile](#)

Agenda

Autodesk Vault 2023 – What's New

- Authors
- Administrators
- Participants

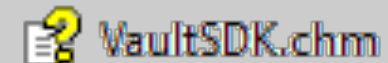
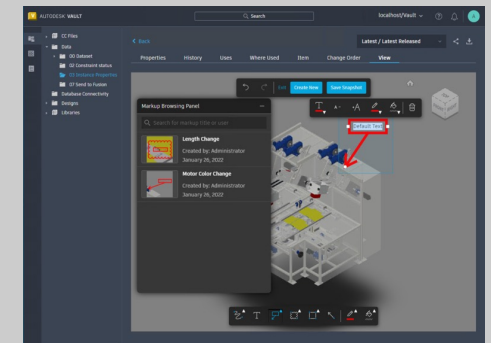


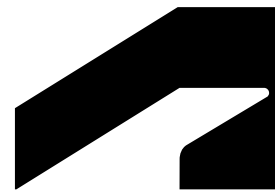
 VaultSDK.chm

Area of detailed focus

Autodesk Vault 2023 – What's New | Technical Details

- Inventor-Vault Instance Property Support and Options
- Model-State-Drawing Support
- Best choice? Discussing multiple options managing library and part family components/varaints with Inventor-Vault
- Vault Gateway – Scope, Details and performance objection handling
- Vault Data Standard – non documented significant changes for Inventor VDS; migration tips
- Vault 2023 API/SDK – What's new with impact on ERP interfaces, UI extensions
- Vault 2023 – Good to know...



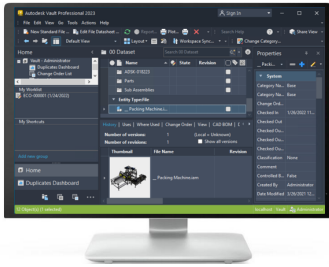


Authors Administrators Participants

What's New

Vault 2023: Collaboration is Easier than Ever

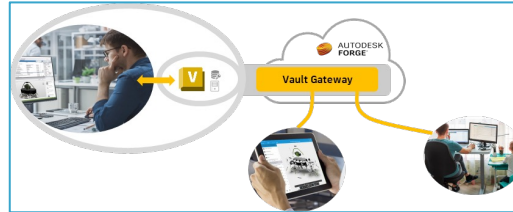
Continues to deliver a more modern, connected, and insightful experience



Authors

Focus on the work you love

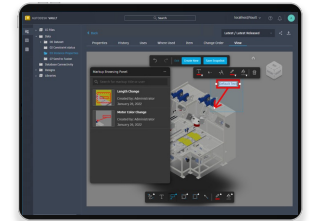
Improved AutoCAD integrated data experience, additional Model State support, and user interface enhancements



Administrators

Connect remote users easier

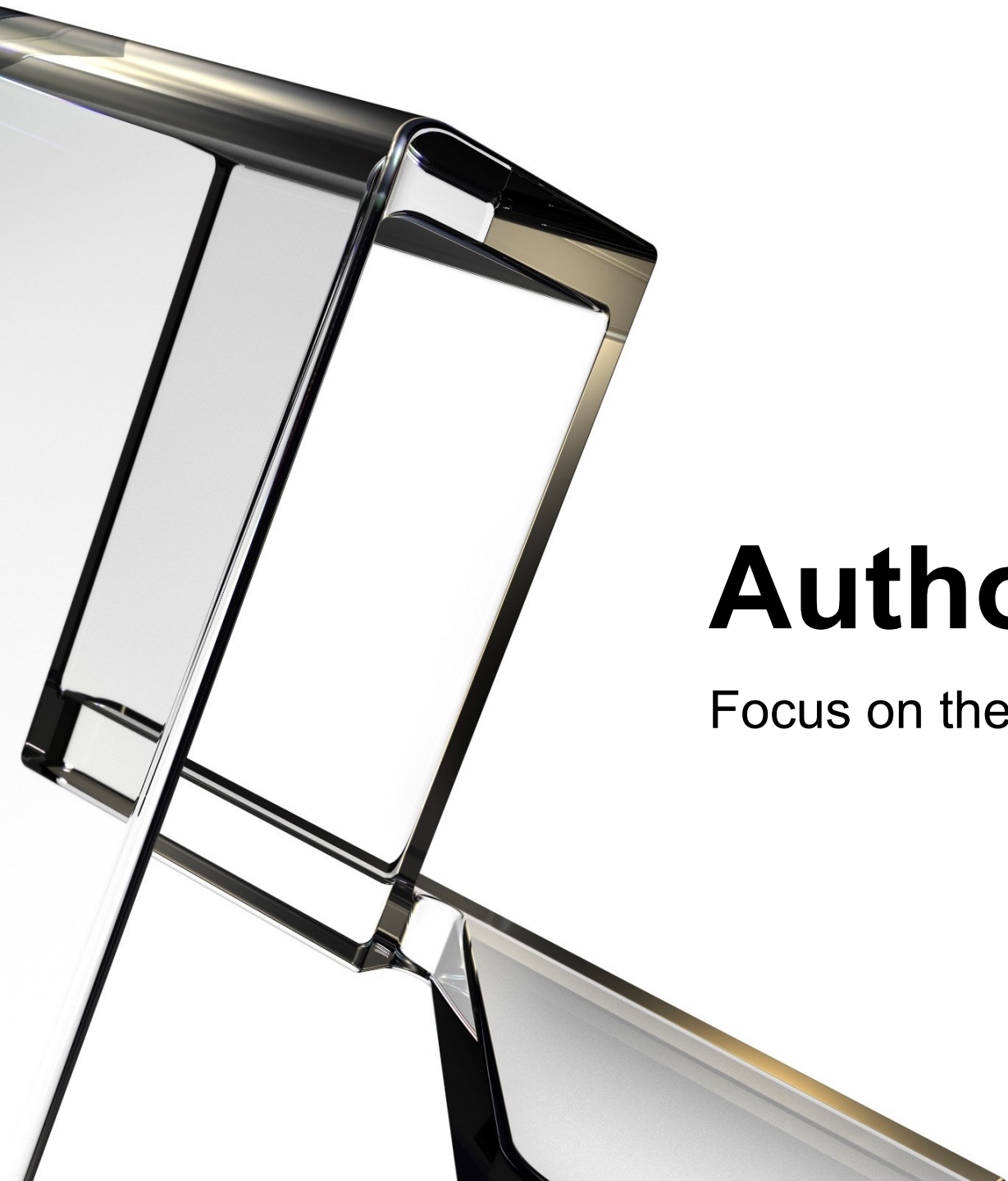
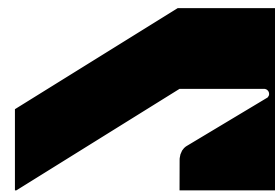
With VPN-less technology, remote access to data behind the firewall is easier with Vault Gateway



Participants

Better ways to provide feedback

Providing the ability to markup in multiple workflows with better management of markup history

An abstract, three-dimensional geometric structure on the left side of the slide, composed of transparent, faceted planes in shades of grey and white, creating a crystalline or architectural form.

Authors

Focus on the work you love

Instance Properties Support

Customer Value

Access Instance Properties in Vault without having to go back to Inventor.

Deliverable

Added support for Inventor Instance Properties in Vault to assign properties to individual component instances. Instance properties work the same way as Item property occurrence within the Vault Bill of Materials (BOM). The model's instance property value groups items with the same part number. If no instance properties exist, the BOM works the same as the previous releases.

Hydration Phase 1
Test Pressure = 45 bar

Purification
Test Pressure = 12 bar

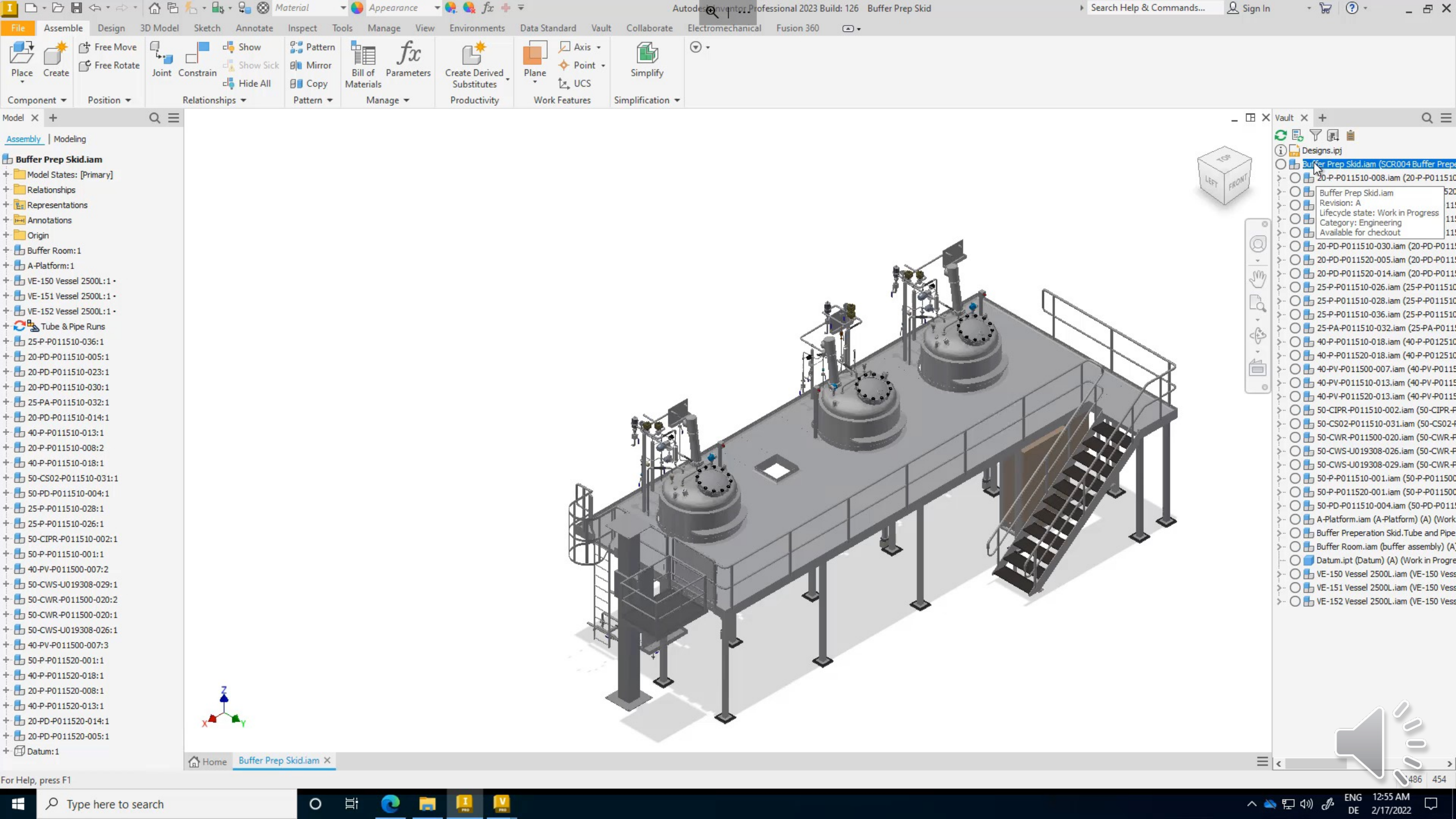
Oxidation
Test Pressure = 22,5 bar

Bill of Materials [Buffer Prep Skid]

Item	Part Number	Functional Designation	BOM Structure	Unit QTY	QTY	Assemble Comments
1	buffer assembly		Normal	Each	1	
2	VE-150 Vessel 2500L	Hydration Phase 1	Normal	Each	1	Test Pressure = 45 bar
51	VE-150 Vessel 2500L	Purification	Normal	Each	1	Test Pressure = 12 bar
52	VE-150 Vessel 2500L	Oxidation	Normal	Each	1	Test Pressure = 22,5 bar
35	Datum		Normal	Each	1	
9	50-PD-P011510-004		Normal	Each	1	
50	50-PD-P011500-004:1		Normal	Each	1	
49	50-P-P011500-001:1		Normal	Each	1	
6	50-P-P011500-001		Normal	Each	2	
48	50-CWS-U019308-026:1		Normal	Each	1	

Bill of Materials Table:

Number	Po...	Item Qty	Title (Item,CO)	Functional Designation	Re...	State (Histori...	Assemble Comments
SCR004 Buffer Preparation Skid	-	-	SCR004 Buffer Prep...	-	A	Work in Progress	-
buffer assembly	1	1	buffer assembly	A	Work in Progress		
VE-150 Vessel 2500L	2	2	VE-150 Vessel 2500L	Oxidation	A	Work in Progress	Test Pressure = 22,5 bar
VE-150 Vessel 2500L	2	2	VE-150 Vessel 2500L	Purification	A	Work in Progress	Test Pressure = 12 bar
VE-150 Vessel 2500L	2	2	VE-150 Vessel 2500L	Hydration Phase 1	A	Work in Progress	Test Pressure = 45 bar
100005	3	3	A-Platform	A	Work in Progress		
50-CWR-P011500-020	4	4	50-CWR-P011500-020	A	Work in Progress		
50-CWR-P011500-020	4	4	50-CWR-P011500-020	A	Work in Progress		



Instance Properties

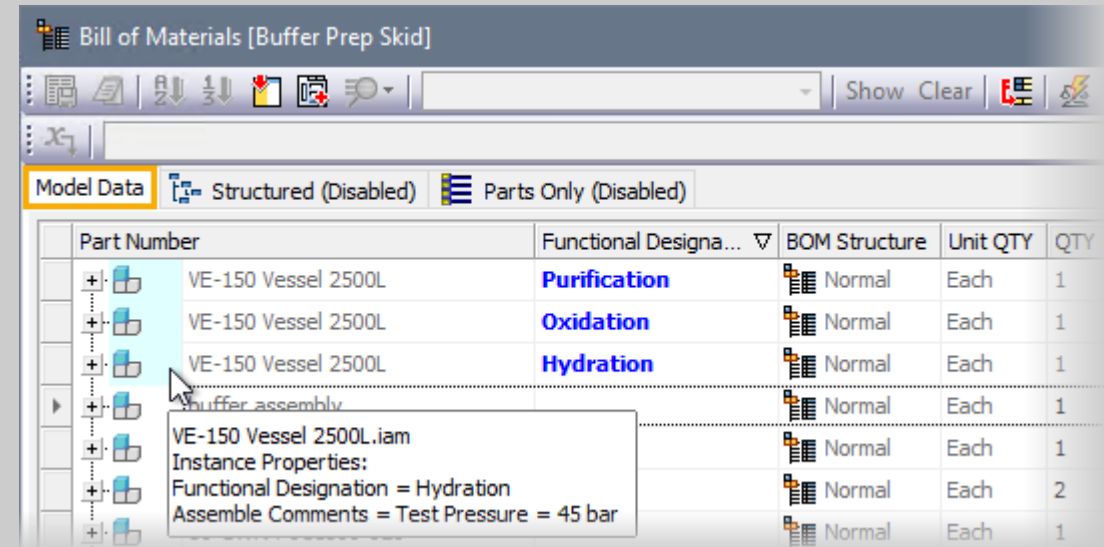
Inventor BOM Options | Vault Item/BOM Options – Slide 1/6

Apply the combination of options to achieve the required result

1.a.

- Inventor BOM – **Model View** | Structured View (Disabled)
 - (Merge Instance Rows not relevant)
- Vault Item – Group BOM rows as per the design BOM
 - **Enabled**

=> Vault Item BOM – Rows split



Part Number	Functional Designa...	BOM Structure	Unit QTY	QTY
VE-150 Vessel 2500L	Purification	Normal	Each	1
VE-150 Vessel 2500L	Oxidation	Normal	Each	1
VE-150 Vessel 2500L	Hydration	Normal	Each	1
Buffer assembly		Normal	Each	1
VE-150 Vessel 2500L.iam		Normal	Each	1
	Functional Designation = Hydration	Normal	Each	2
	Assemble Comments = Test Pressure = 45 bar	Normal	Each	1

Grouping

☒ Group BOM rows as per the design BOM

Number	Qu...	Functional Design...
SCR004 Buffer Preperation Skid	-	-
VE-150 Vessel 2500L	1 Ea...	Purification
VE-150 Vessel 2500L	1 Ea...	Oxidation
VE-150 Vessel 2500L	1 Ea...	Hydration

Instance Properties

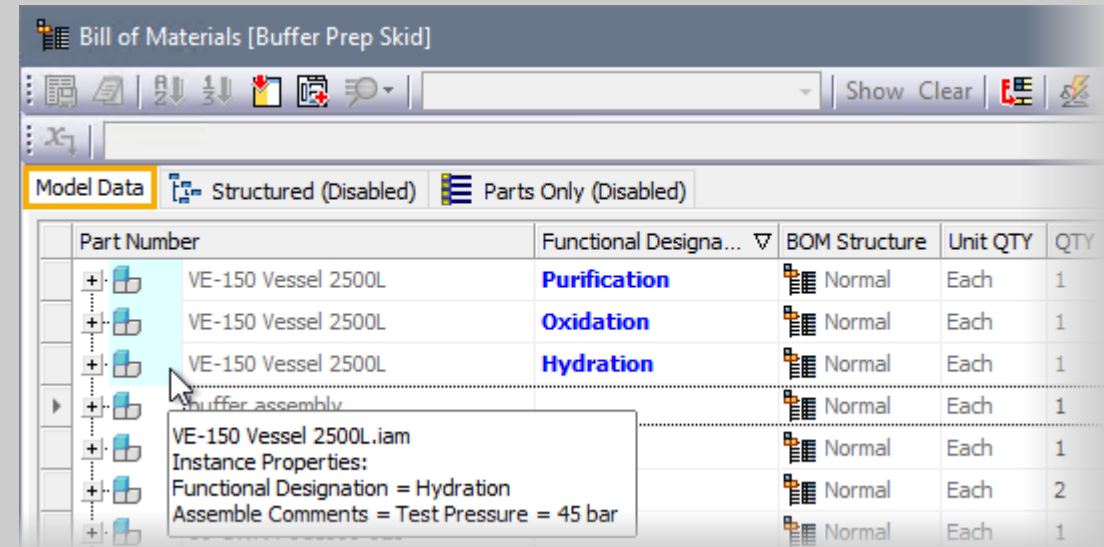
Inventor BOM Options | Vault Item/BOM Options – Slide 2/6

Apply the combination of options to achieve the required result

1.b.

- Inventor BOM – **Model View** | Structured View (Disabled)
 - (Merge Instance Rows not relevant)
- Vault Item – Group BOM rows as per the design BOM
 - **Disabled**

=> Vault Item BOM – Rows merge/group



Part Number	Functional Designa...	BOM Structure	Unit QTY	QTY
VE-150 Vessel 2500L	Purification	Normal	Each	1
VE-150 Vessel 2500L	Oxidation	Normal	Each	1
VE-150 Vessel 2500L	Hydration	Normal	Each	1
Buffer assembly		Normal	Each	1
VE-150 Vessel 2500L.iam		Normal	Each	1
	Functional Designation = Hydration	Normal	Each	2
	Assemble Comments = Test Pressure = 45 bar	Normal	Each	1

Grouping

☐ Group BOM rows as per the design BOM

Number	Qu...	Title (Item,CO)
SCR004 Buffer Preparation Skid	-	SCR004 Buffer Preparation Skid
VE-150 Vessel 2500L	3 Ea...	VE-150 Vessel 2500L

Instance Properties

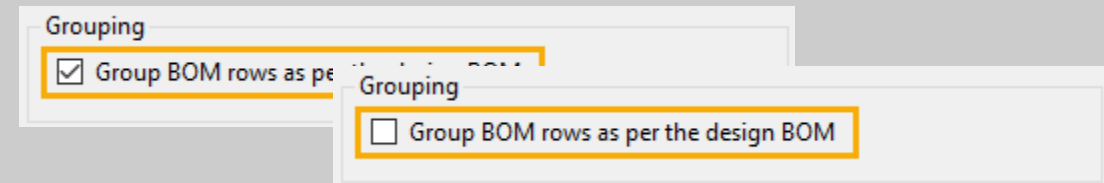
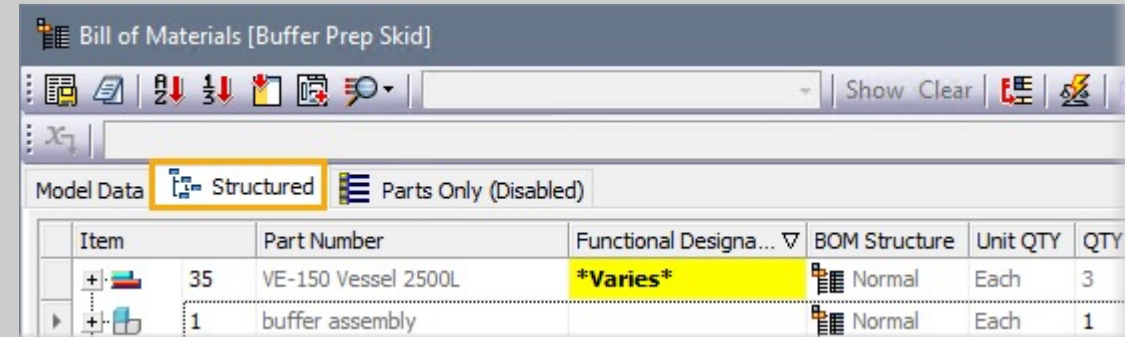
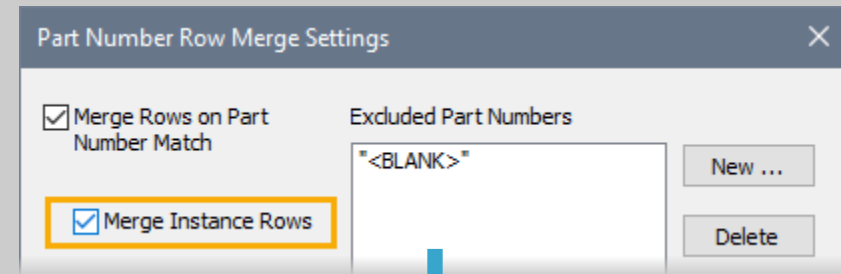
Inventor BOM Options | Vault Item/BOM Options – Slide 3/6

Apply the combination of options to achieve the required result

2.a.

- Inventor BOM – Model View | **Structured View**
 - Merge Instance Rows - **Enabled**
- Vault Item – Group BOM rows as per the design BOM
 - **Enabled or Disabled (not relevant)**

=> **Vault Item BOM – Rows merge/group**



	Number	Qu...	Title (Item,CO)
▼	SCR004 Buffer Preparation Skid	-	SCR004 Buffer Preparation Skid
▶	VE-150 Vessel 2500L	3 Ea...	VE-150 Vessel 2500L

Instance Properties

Inventor BOM Options | Vault Item/BOM Options – Slide 4/6

Apply the combination of options to achieve the required result

2.b.i

- Inventor BOM – Model View | **Structured View**
 - Merge Instance Rows - **Disabled**
- Vault Item – Group BOM rows as per the design BOM
 - **Enabled**

=> Vault Item BOM – Rows split

Part Number Row Merge Settings

☒ Merge Rows on Part Number Match

Excluded Part Numbers

"<BLANK>"

New ...

Delete

☐ Merge Instance Rows



Bill of Materials [Buffer Prep Skid]

Model Data **Structured** Parts Only (Disabled)

Item	Part Number	Functional Designa...	BOM Structure	Unit QTY	QTY
36	VE-150 Vessel 2500L	Purification	Normal	Each	1
37	VE-150 Vessel 2500L	Oxidation	Normal	Each	1
35	VE-150 Vessel 2500L	Hydration	Normal	Each	1

Grouping

☒ Group BOM rows as per the design BOM

Number	Qu...	Functional Designa...
SCR004 Buffer Preperation Skid	-	-
VE-150 Vessel 2500L	1 Ea...	Purification
VE-150 Vessel 2500L	1 Ea...	Oxidation
VE-150 Vessel 2500L	1 Ea...	Hydration

Instance Properties

Inventor BOM Options | Vault Item/BOM Options – Slide 5/6

Apply the combination of options to achieve the required result

2.b.ii

- Inventor BOM – Model View | **Structured View**
 - Merge Instance Rows - **Disabled**
- Vault Item – Group BOM rows as per the design BOM
 - **Disabled**

=> Vault Item BOM – Rows merge/group

Part Number Row Merge Settings

☒ Merge Rows on Part Number Match

Excluded Part Numbers

"<BLANK>"

New ...

Delete

☐ Merge Instance Rows



Bill of Materials [Buffer Prep Skid]

Model Data **Structured** Parts Only (Disabled)

Item	Part Number	Functional Designa...	BOM Structure	Unit QTY	QTY
36	VE-150 Vessel 2500L	Purification	Normal	Each	1
37	VE-150 Vessel 2500L	Oxidation	Normal	Each	1
35	VE-150 Vessel 2500L	Hydration	Normal	Each	1

Grouping

☐ Group BOM rows as per the design BOM

Number	Qu...	Title (Item,CO)
▼ SCR004 Buffer Preparation Skid	-	SCR004 Buffer Preparation Skid
▶ VE-150 Vessel 2500L	3 Ea...	VE-150 Vessel 2500L

Instance Properties

Inventor BOM Options | Vault Item/BOM Options – Slide 6/6

	Inventor BOM	Inventor BOM Merge Instance Rows	Vault Item Option Group BOM as per the CAD BOM	Item BOM Result
1.a	Model View (only)			Rows split
1.b	Model View (only)			Rows group
2.a	Structured View		 	Rows group
2.b.i	Structured View			Rows split
2.b.ii	Structured View			Rows group

Latest Work in Progress

Name	Title	Revisi...	State (Historical)	Cre
ADSK-011295 MSA.ipt	Unit Plate Family	A	Work in Progress	CAD
ADSK-011295 MSA.idw	Unit Plate Family	A	Work in Progress	CAD
ADSK-011295 MSA 4-Units.idw	4 Unit Plate	A	Work in Progress	CAD
ADSK-011295 MSA 3-Units.idw	3 Unit Plate	A	Work in Progress	CAD
ADSK-011295 MSA 2-Units.idw	2 Unit Plate	A	Work in Progress	CAD

Associated Items for: ADSK-011295 MSA.ipt

Select Item:

...	Number	Title (Item,CO)
	ADSK-011295	Unit Plate Family
	ADSK-011295-04	4 Unit Plate
	ADSK-011295-03	3 Unit Plate
	ADSK-011295-02	2 Unit Plate

OK Cancel Help

General | History | Bill of Materials | Where Used | Change Order | View | Associated Files | Datasheet

Revision: Latest Work in Progress

Number: ADSK-011295-02

Title: 2 Unit Plate

Description: PLT-05,FA,CP,03,032,045,MNT,VACUUM_CUP

Units: Each

Category: Part

Lifecycle State: Work in Progress

Last Updated By: CAD Admin

Last Updated: 2/23/2022 11:55 AM

Associated files:

...	File Name	Title	State	Latest Released...	Latest V...
	ADSK-011295 MSA.ipt	Unit Plate Family	Work in Progress	☐	☒
	ADSK-011295 MSA.idw	Unit Plate Family	Work in Progress	☐	☒
	ADSK-011295 MSA 2-Units.idw	2 Unit Plate	Work in Progress	☐	☒

Properties:

Name

Class

Diamet

Dimens

Equival

Length

Model States

Model State Drawings – Item Link

- Individual documentation files per model state link to individual items
- Sample
 - Model 011295 [Primary] – table drawing
 - Model 011295 [**2 Units**] – individual drawing
 - Model 011295 [**3 Units**] – individual drawing
 - Model 011295 [**4 Units**] – individual drawing
- ⇒ Assigned Items link
 - ⇒ Table drawing only for family item
 - ⇒ Table drawing + individual drawing for member items



Content Center



iPart / iAssembly



iLogic



Model State



Factory Asset Library



Instance Properties

Inventor-Vault

Best practice considerations

- Managing components with variable
 - Geometries
 - Metadata/Properties

What are the
arguments?

... from a Vault
perspective

Inventor – Vault Professional

Managing part families/variants/instances

						
Component Type	Part	iPart/iAssembly	Part/Assembly	Part/Assembly	Factory Asset	Assembly Instance
Number of Sizes/Variants	1 .. n (10.000)	1 .. 1000	1 .. n	1 .. 10	1 .. n (100)	1 .. 10
Variable Geometry/Size	predefined/custom	predefined/custom	rule-based/user input	predefined	predefined, user input	--
Variable Metadata	predefined	predefined	based on rule	predefined	predefined + individual (assembly context)	Individual (assembly context)
Number of Files (Vault)	1 .. n	n of Members + Factory	1 .. n	1	1 per variant, 1 lib.pckg	1
Usage/Re-Use	New File / Size	Existing File / Size Existing Files / Variant	- Pre-defined Sizes - Flexible Sizes „Bottom Up“ Configurations (Manage Assembly)	- Existing Size (Part) - Existing State (Part) - Existing State (Assy)	New File / Variant, published library version	Individual per assembly context / no re-use
Re-Use existing Variant	Automatically (Inventor-Vault AddIn)	Insert from Vault (Data Standard Option)	<i>Automatically using iLogic-Vault Library^{*1}</i>	Manually	Automatically (FDU AddIn)	--
Custom variant/instance creation	Available	Not recommended (iFactory Revisioning)	Best for rule-based/automated...	Not Recommended (File Revisioning)	Available	--
File – Item Assignment	1:1	1:1 (members only)	1:1	1:n	1:1	-- (BOM Row assignment)
Vault Duplicate Search	All Members	All Members (Filtering iFactory recommended)	Included (Filtering iLogic Templates recommended)	Active Model State	All created variants	--

AutoCAD Add-in Enhancements

Customer Value

Focus on your design tasks while accessing data management capabilities for optimum efficiency

Deliverable

Show Detail

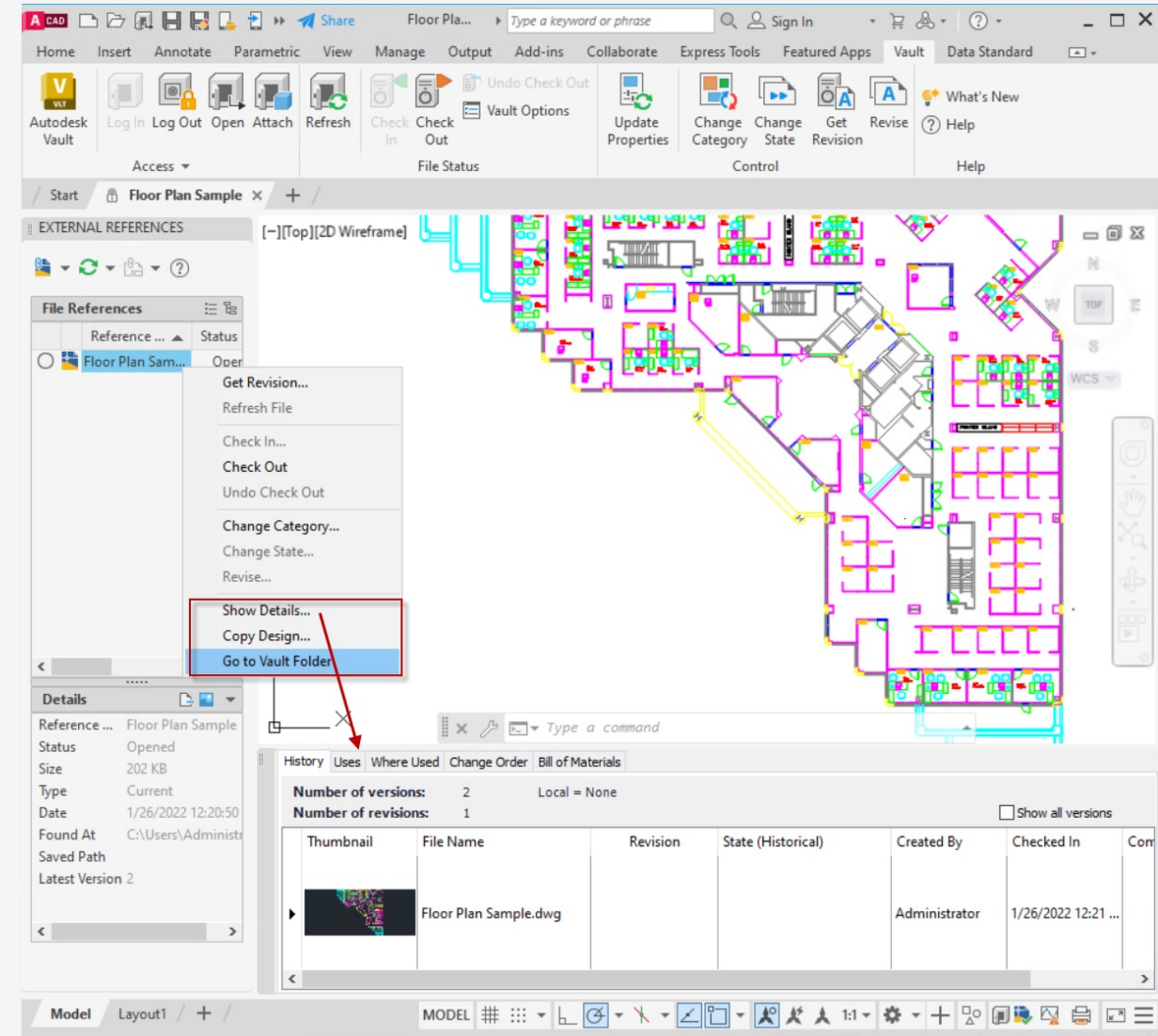
- Use Show Details to view information from Vault about designs and perform common Vault tasks.

Go to Vault Folder

- Use Go to Vault Folder command to directly go to a file in Vault from within AutoCAD.

Copy Design

- Start Copy design directly in AutoCAD and configure your copy as usual.



User Interface Enhancements

Customer Value

Users will have a consistent, cohesive visual experience using the Vault desktop, thin, and mobile clients.

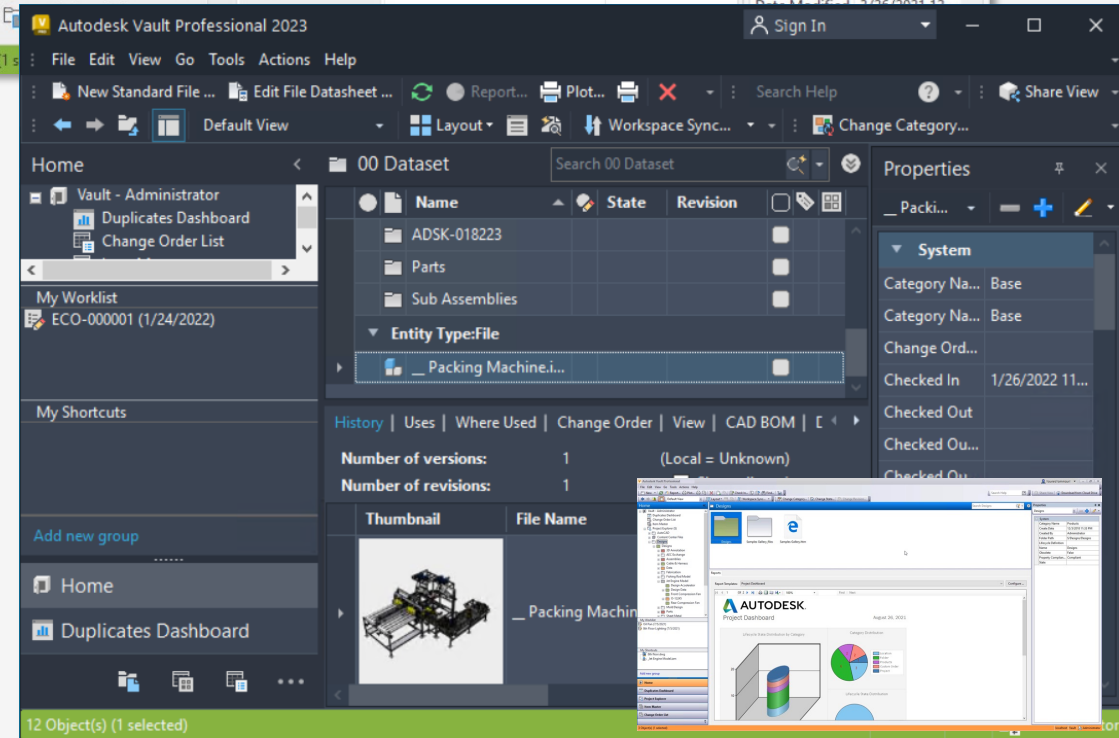
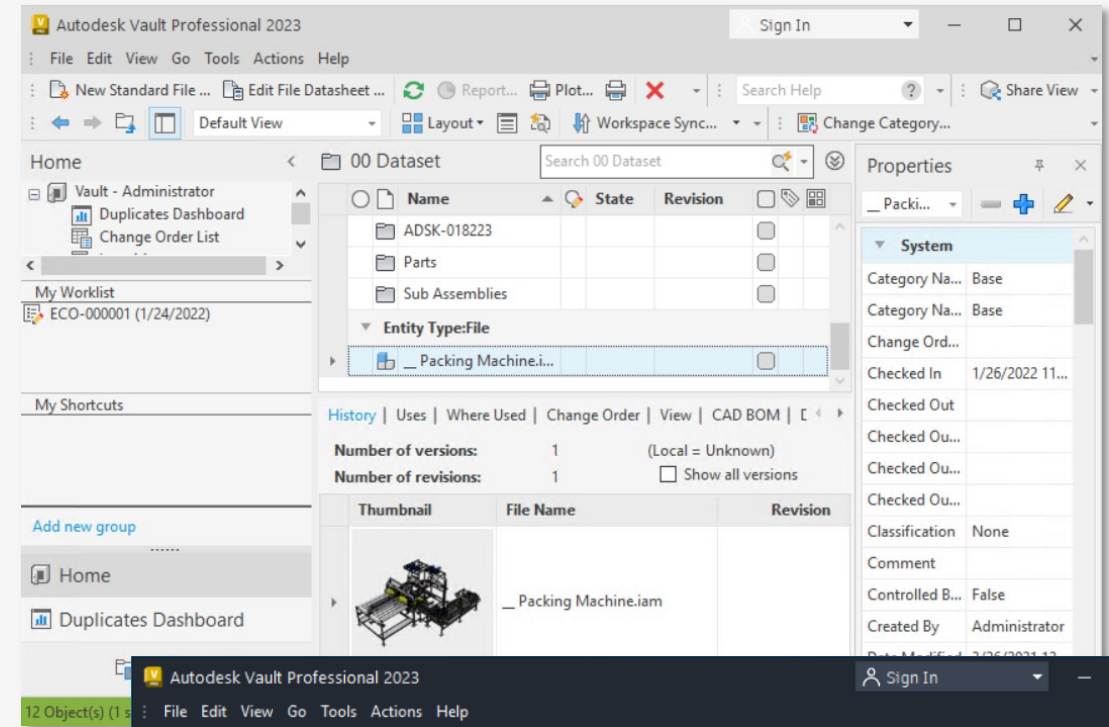
Deliverable

Themes

- Switch between Dark, Light, and Default (Classic) themes to reflect the visual alignment with other adjacent products from Autodesk. The user interface theme controls the color of the application icons, frame, background, property panels, and dialogs.

Icon Refresh

- Vault icons are updated and refreshed to complement the Dark/Light theme interface. The new Vault icons are simple, modern, and have better color accessibility for all users.



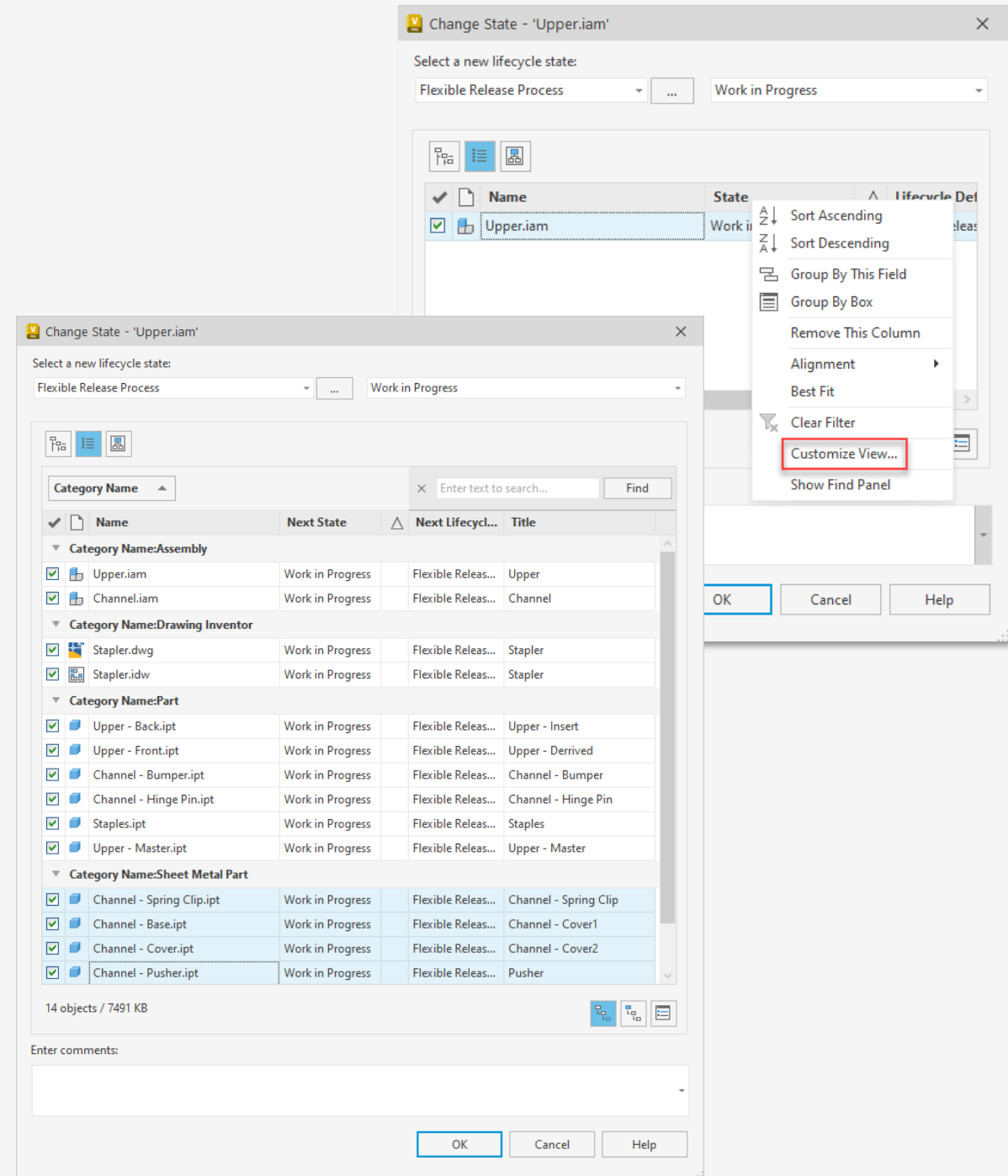
Column customization in multiple dialogs

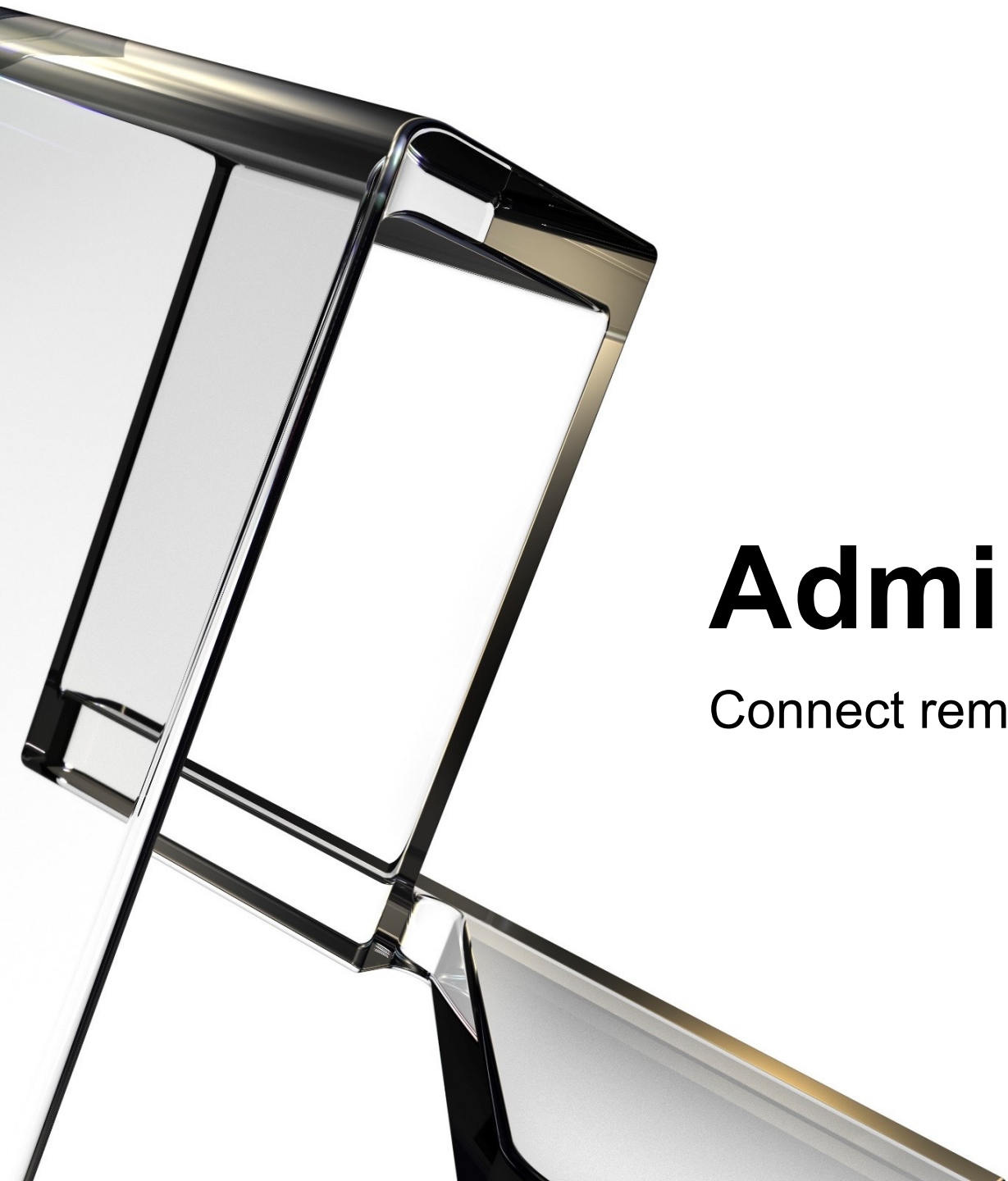
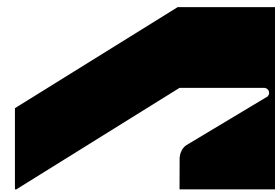
Customer Value

Access to valuable data while performing essential tasks and workflows in Vault through customization options.

Deliverable

Customize view functionality is added to adjust the view of the columns in several dialogs (Change State, Change Revision, Change Category, Pack and Go, Synchronize Properties, Undo Check-Out). By making efficient use of properties and customizing your view, data management becomes much more tailored to your project.



An abstract geometric graphic on the left side of the slide, featuring overlapping translucent planes in shades of grey and black, creating a sense of depth and modern design.

Administrators

Connect remote users easier

Design file restriction

Customer Value

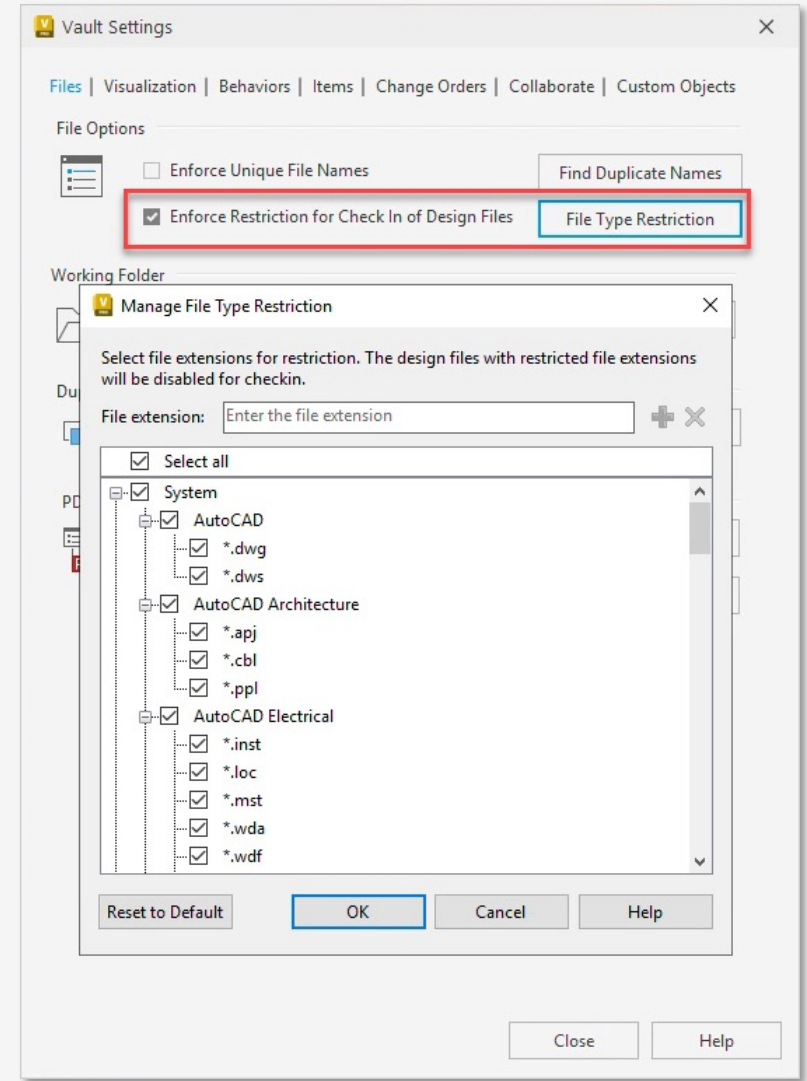
Administrators have more flexibility in restricting the files added to Vault through the Vault client.

Deliverable

As an administrator, you can define the list of files that can or cannot be checked in when the "Enforce Restriction for Check In of Design Files" option is enabled.

Also, administrators can add the file extensions to the user-defined list for more flexibility.

However, administrators cannot remove the system default file extensions.



Design file restriction

Scope

- Add-in and API Access

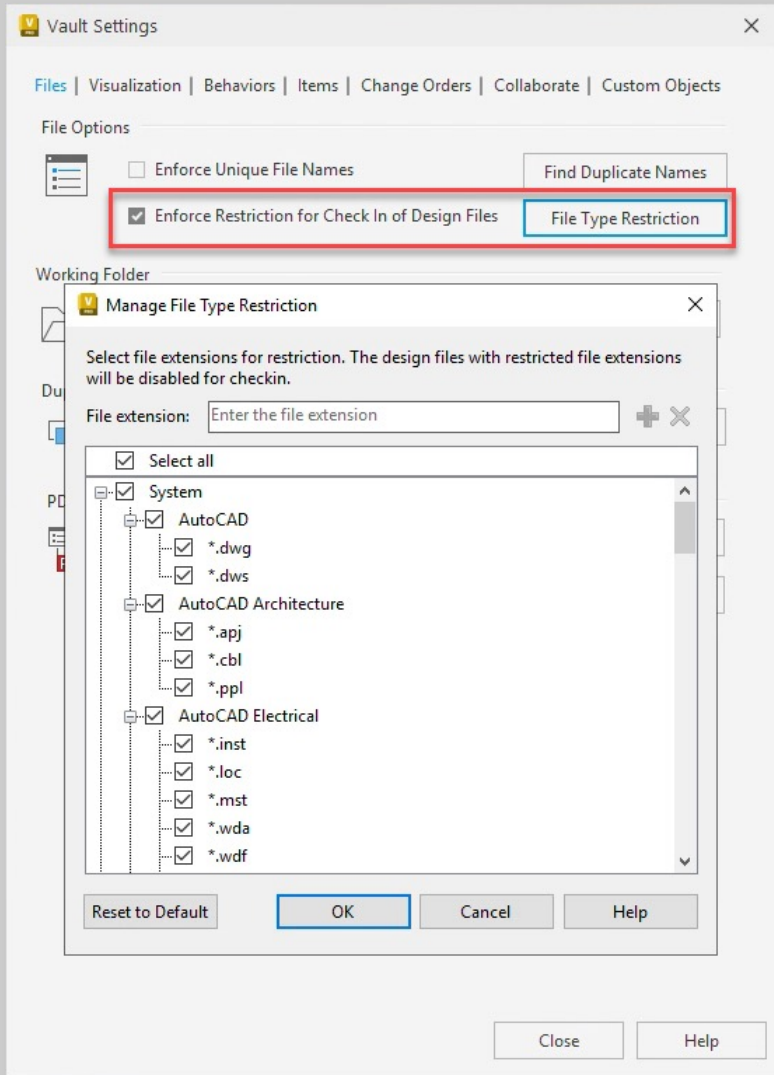
- ✓ Enforce = published

- File Type Restriction = not published

⇒ Extensions need to implement type-based restrictions individually

⇒ E.g., iLogic-Vault implemented restrictions

⇒ `iLogicVault.AddFile()`



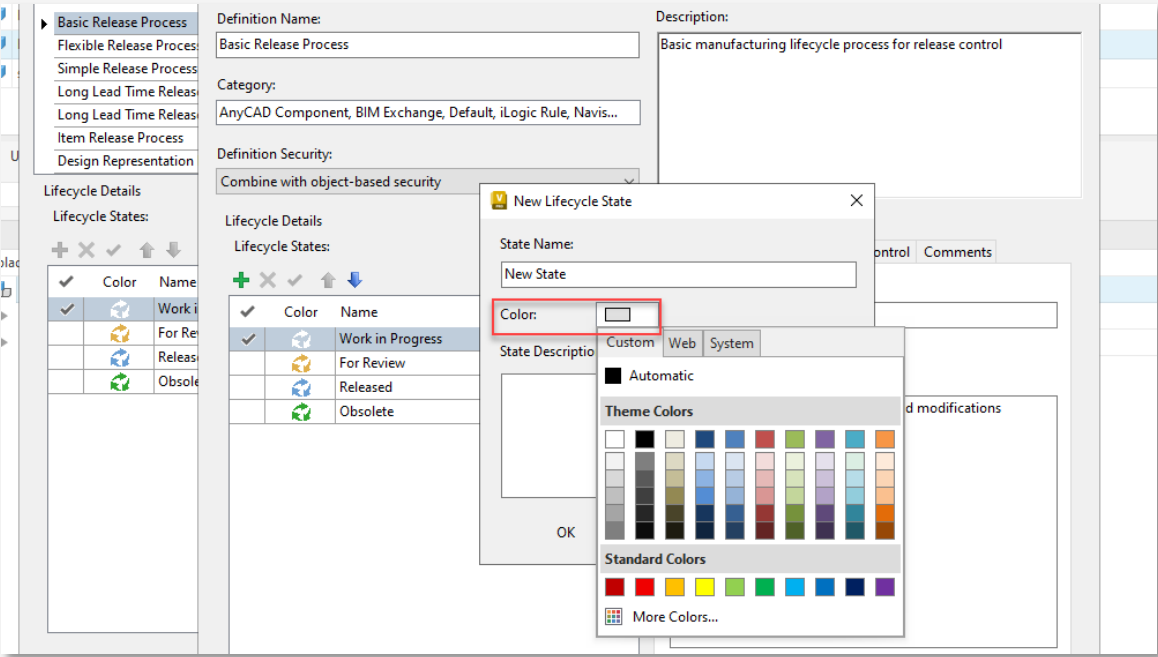
Lifecycle state colors

Customer Value

Users can easily recognize the state of files in the file grid by color like categories.

Deliverable

Lifecycle Definition settings are enhanced to allow color customization to indicate a lifecycle state. You can now quickly identify lifecycle states by color across all clients and user interfaces.



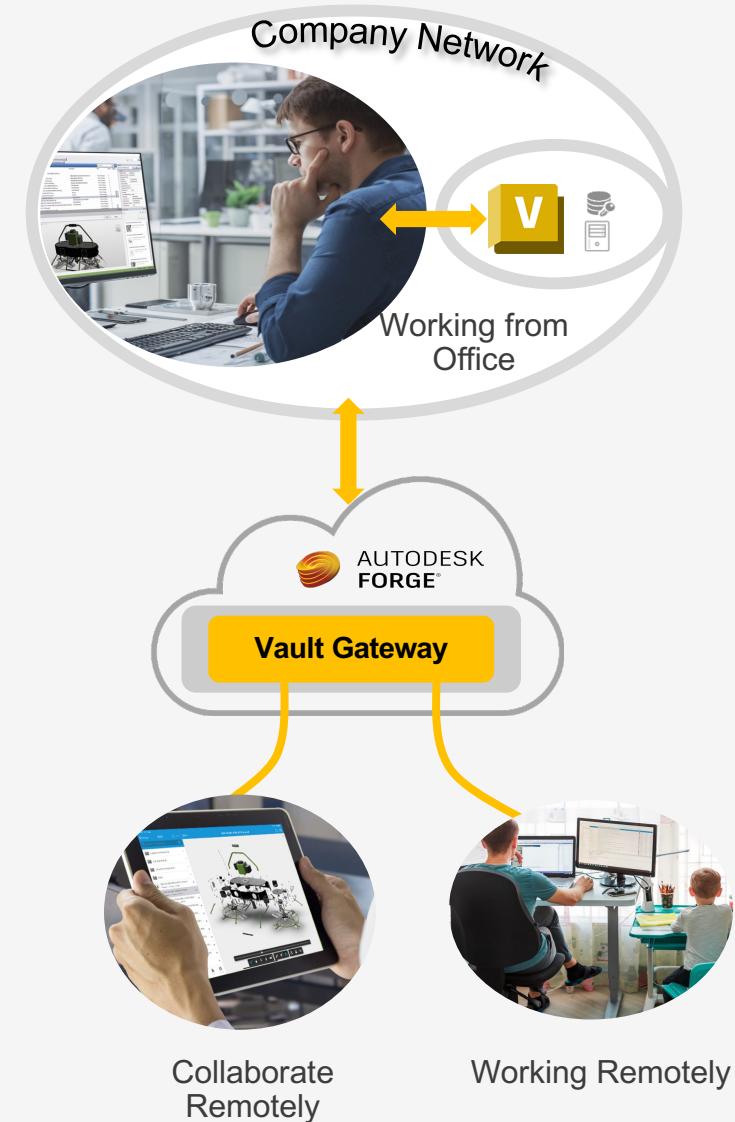
Vault Gateway

Customer Value

Vault Gateway allows better collaboration with suppliers and 3rd party collaborators. There is no need to create domain accounts for these users and give them VPN access.

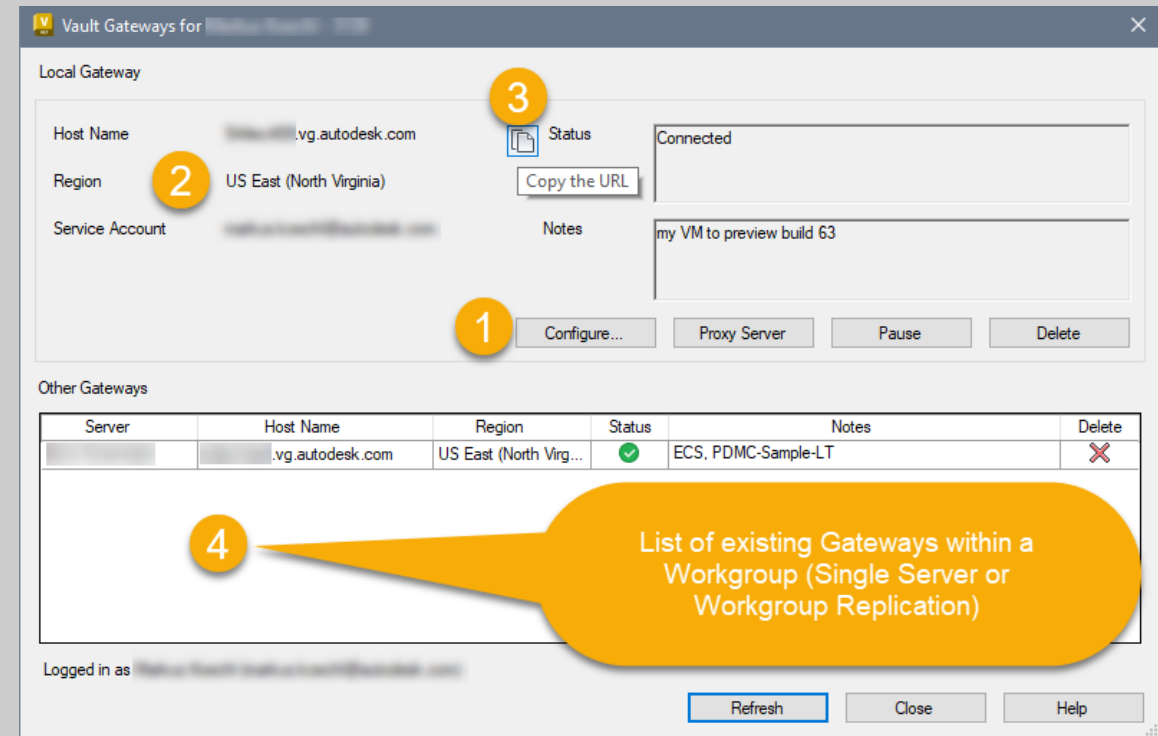
Deliverable

Vault Gateway was developed to provide secure remote access to users working remotely. As a result, remote users can create and manage design data in Vault and enjoy the same experience as in the office. In addition, Vault Gateway allows VPN-less access to Vaulted data behind the firewall with no additional configurations required on the Vault client.



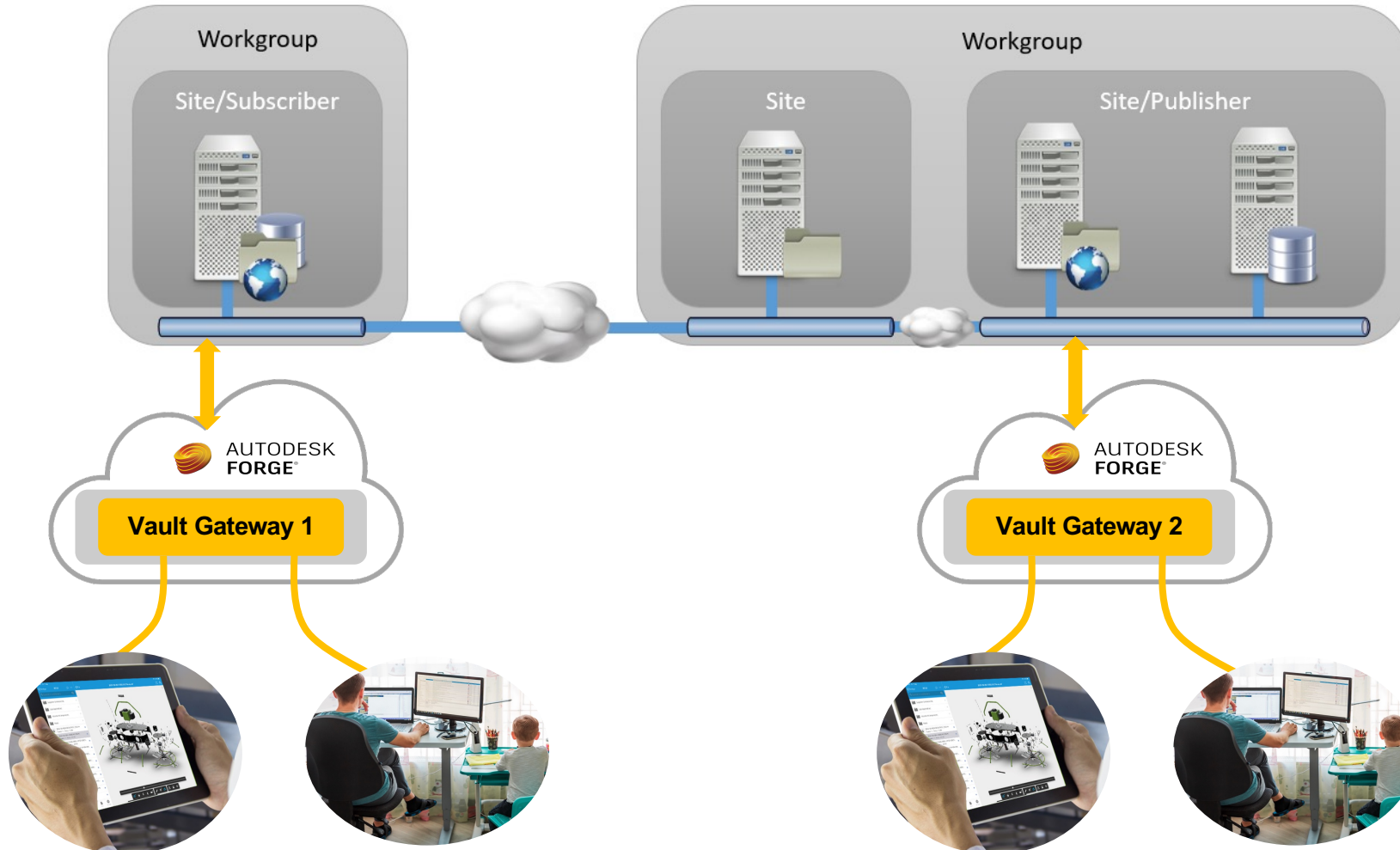
Vault Gateway

- Instant configuration
 - Add configuration by logging in to your service account (1)
 - Select Region (US, Ireland) (2)
 - Copy and Share unique, secure connection URL (3)
- Gateway Administrator = Autodesk Account team administrator
 - Keep the overview of existing Gateways within a workgroup (4)



Vault Gateway

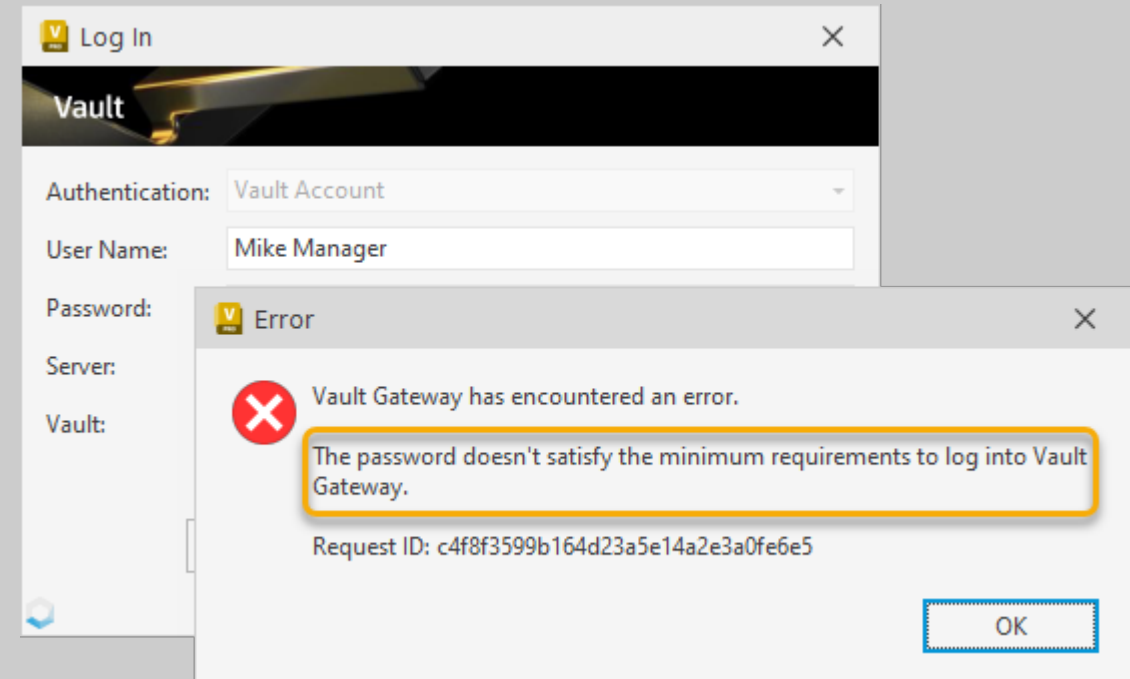
Connected Workgroups | Multiple-Gateways



Vault Gateway

Security

- SSL connection
- Optional Proxy Server Authentication
- No firewall exceptions required
- Password minimum requirements
 - 8 or more characters, one number and letter
- Windows authentication does not apply for domain independency



Password Complexity

Your account password must satisfy Vault Gateway's password complexity requirements to sign in.

Passwords must contain eight or more characters, with at least one number and letter.

Note: The following are valid special characters: !"#%&'()*+,-./:;<=>?@[\\]^_`{|}~

Vault Gateway

Performance metrics considerations

- Vault Gateway primarily addresses
 - Connection security
 - Provide access control without
 - AD account requirements
 - VPN access requirements
- Vault Gateway balances
 - Security requirements
 - WAN network barriers
 - Administrative efforts

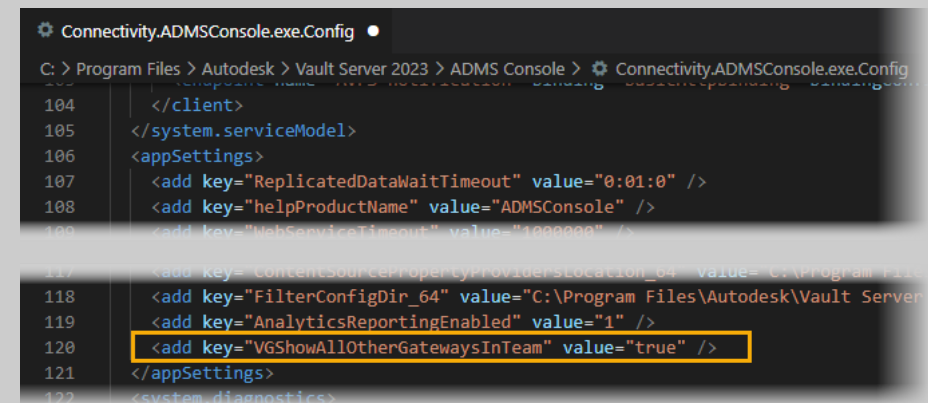
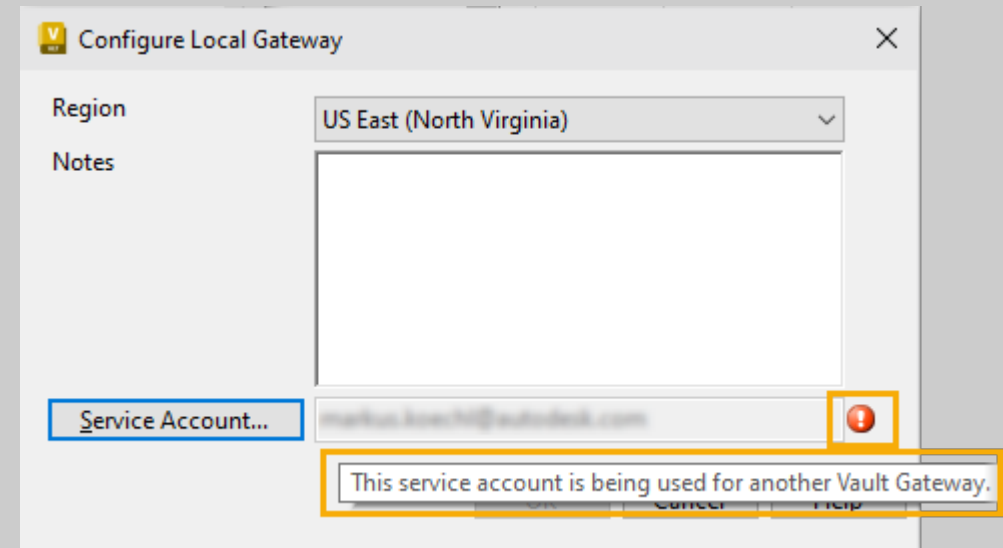


Note – Results may vary for different environments, locations, and times.

Vault Gateway

What if...

- ...you created a Gateway in a virtual environment and don't keep it?
 - You will face the restriction that your account is bound to a Gateway already
 - The orphaned Gateway is not listed in the "Other Gateways" listing
- How to resolve the issue?
 - Enable to list any Gateway managed by your service account by adding a key to the console configuration
 - Delete the orphaned Gateway



Other Gateways		
Server	Host Name	Delete
ICS-TC-1424	230779.vg.autodesk.co	

Vault Basic Entitlement

Deliverable

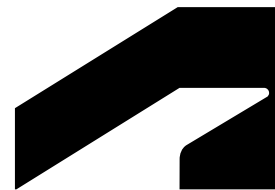
Vault Basic can be used by users who have a license to products which have the Vault Basic entitlement. Vault Basic is an entitlement to the following products.

- Inventor Professional
- 3DS Max
- AutoCAD with Specialized Tools
- Product Design & Manufacturing Collection
- Architecture, Engineering & Construction Collection
- Media & Entertainment Collection

Users will be required to login with their Autodesk ID to verify their entitlement.



AUTODESK
Vault Basic
2023



Participants

Better ways to provide feedback

Markups

Customer Value

Users can markup designs in more Vault areas, which increases the chance to collaborate more through the design process.

Deliverable

Markup Browsing Panel

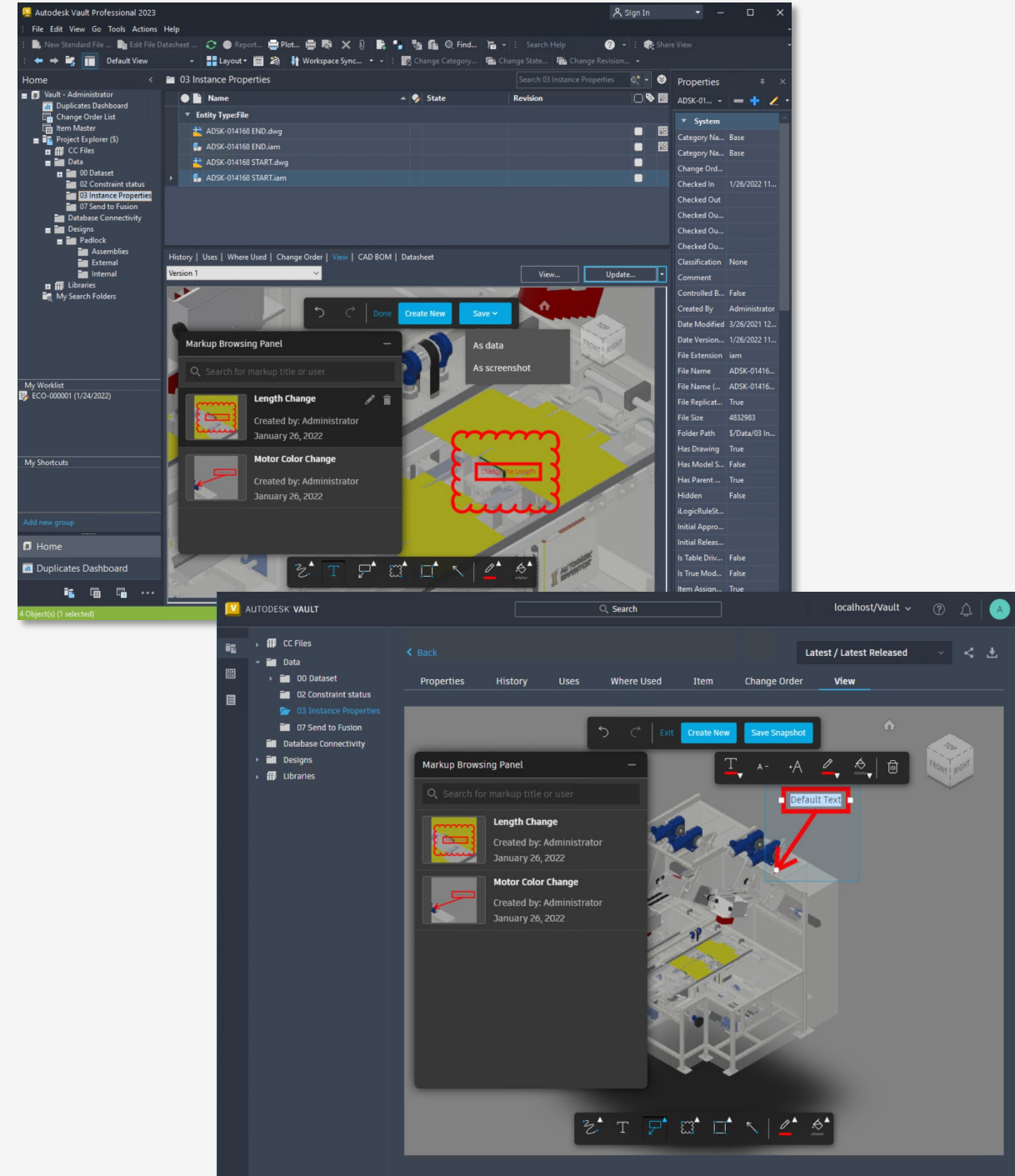
- You can filter markups based on who created the markup and the creation date. You can view, rename, and delete the markup through the panel. You can also collapse/expand the panel window.

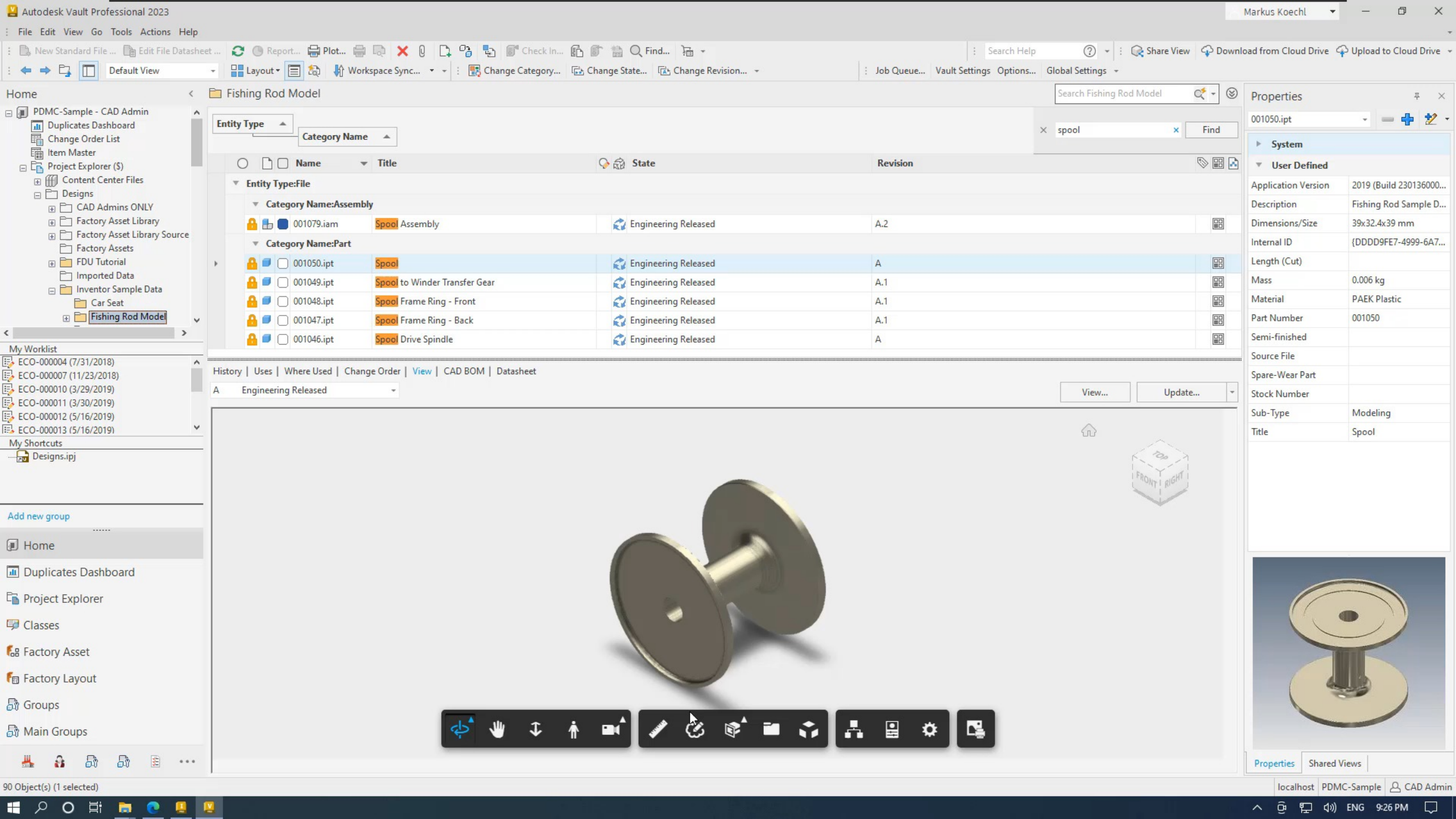
Saving Markups

- You can save the markup as an image on your local machine or save it as data on the Vault. The markup saved as data is listed in the Markup Browsing Panel.

Markup in Change Orders

- You can view markup within a Change Order using Autodesk Viewer, make changes to the markup, and save it as data in the Vault.

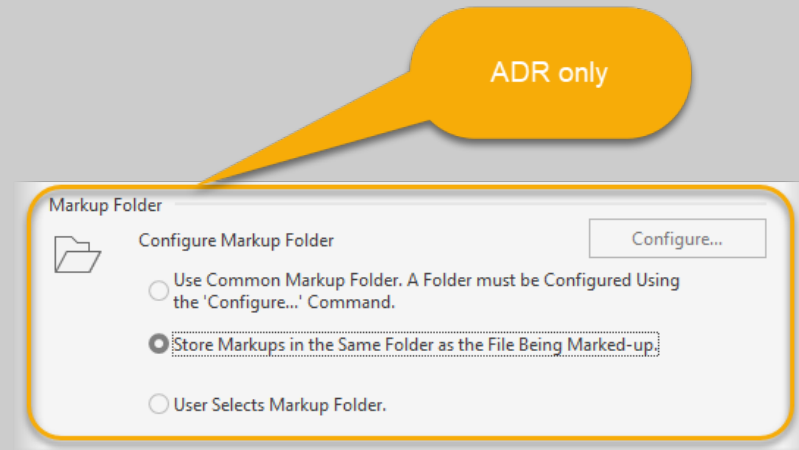




Markups

Technical Insights

- Markup Data save as entity attributes per file version
 - Access/create markup data in Document or ECO context
 - Markup edits do not alter file versions
- Markup Snapshots save as file system file
 - Available in Vault Explorer and Thin Client
 - Markup on historical version/revision save as Snapshot only
- Legacy Markup for Design Review remains as an option
 - Configuration Options target ADR markups only



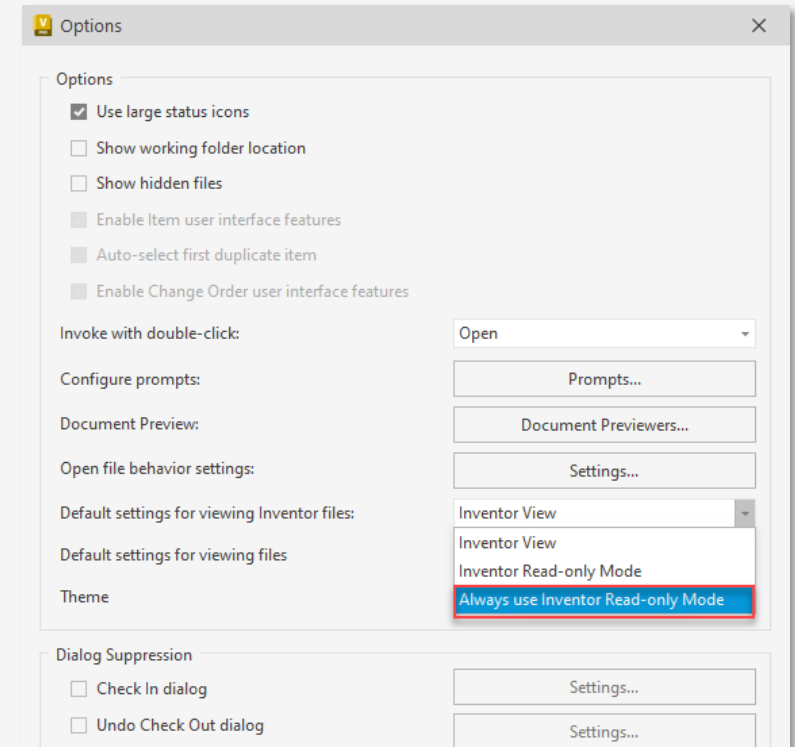
Inventor Read-Only Mode

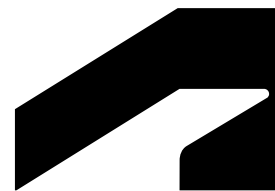
Customer Value

More flexibility to control how Inventor files are viewed.

Deliverable

A new option called "Always use Inventor Read-only Mode" is added to Vault Options for viewing the Inventor files setting. This option is always available regardless of whether the DWF file is available or not.



An abstract, three-dimensional geometric structure made of polished, reflective metal frames is positioned on the left side of the slide. It features sharp angles and a complex arrangement of planes, with some surfaces reflecting light, giving it a modern and architectural feel.

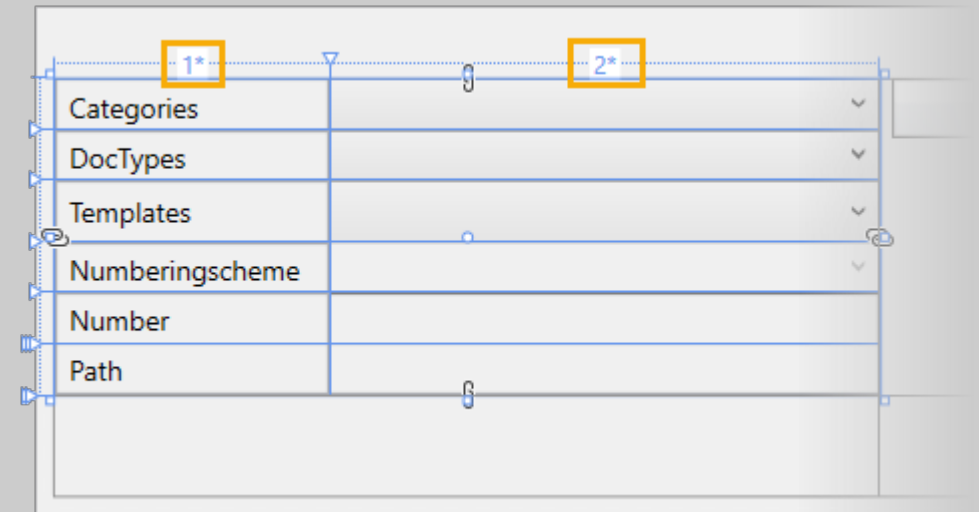
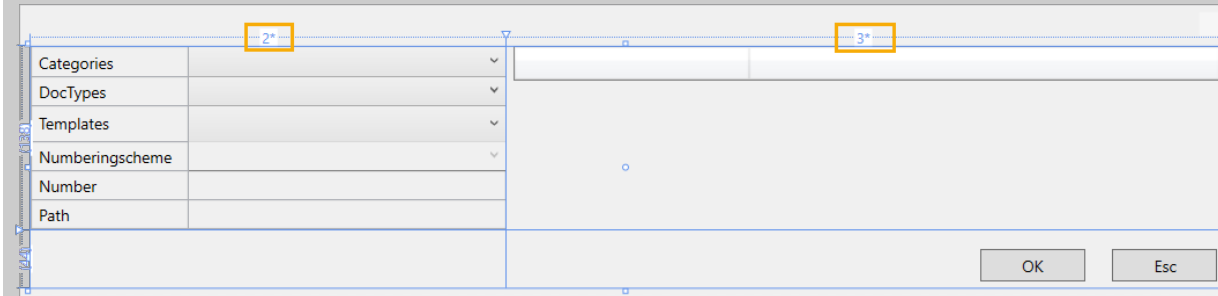
Vault Data Standard 2023

Changes and Improvements

Data Standard

General Enhancements

- Dynamic sizing behavior of all XAML dialogs* for CAD and Vault
 - Improved user experience for large label or field texts



*Note – Dynamic sizing of datasheets in Vault Explorer detail tabs is nominated for future release(s)

Dynamic Sizing

Migration recommendation

- Apply dynamic sizing settings to all data sheets

Reports | Datasheet

Category	Folder	Property Name	Property Value
Name	Factory Asset Library Source	Title	FDU Asset Library Sources
State		Description	Repository for source files of published asset library components
Create Date	2019-01-17 09:52:40		
Created By	CAD Admin		

Reports | Datasheet

Category	Folder	Property Name	Property Value
Name	Factory Asset Library Source	Title	FDU Asset Library Sources
State		Description	Repository for source files of published asset library components
Create Date	2019-01-17 09:52:40		
Created By	CAD Admin		

Datasheet.xml* x

Category	2*	3*
Name		
State		
Date Created		
Created By		

Datasheet.xml x

Category	1*	2*
Name		
State		
Date Created		
Created By		

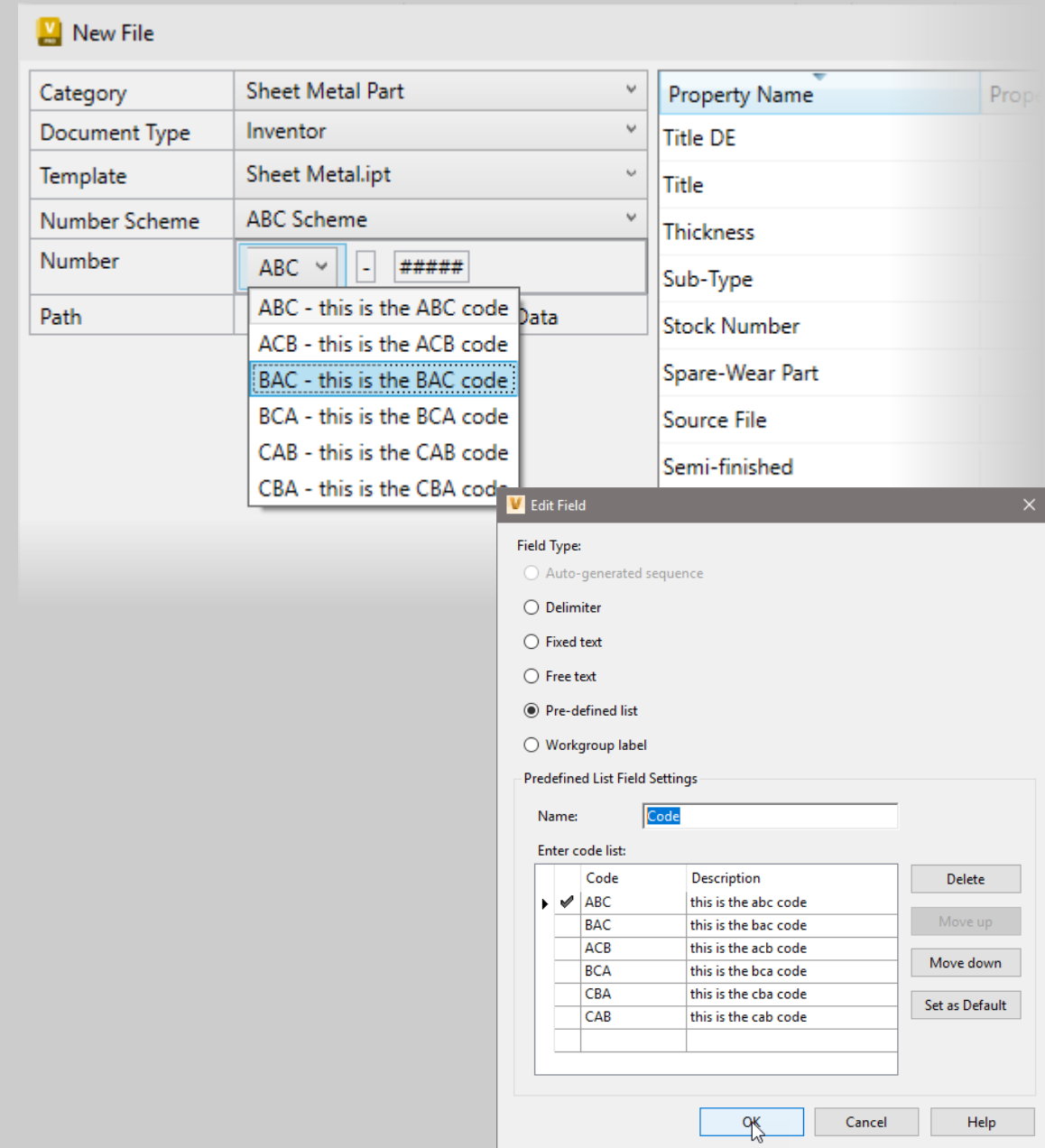
DSDynCatPropGrid

Columns		
[DataGridTextBoxColumn]	1*	o
[DataGridTextBoxColumn]	2*	o

VDS Numbering Control

List Value Descriptions

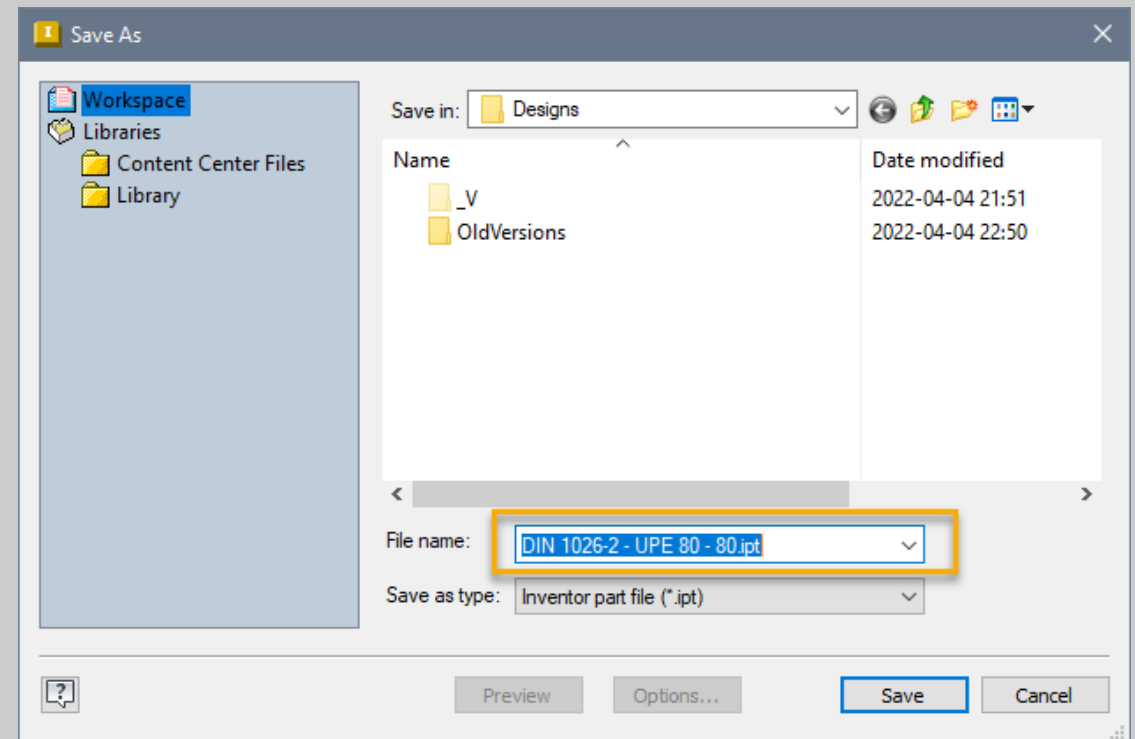
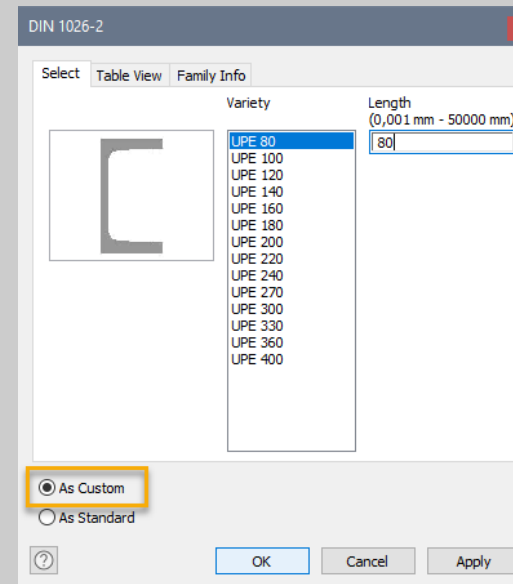
- **Change** – The VDS Numbering Control supports description display of Pre-defined list codes
 - Inventor (2022.1)
 - AutoCAD, Vault (2023)
- **Benefit** – Users can select codes by reviewing their full description as configured in the Vault numbering scheme definition



Data Standard

Inventor

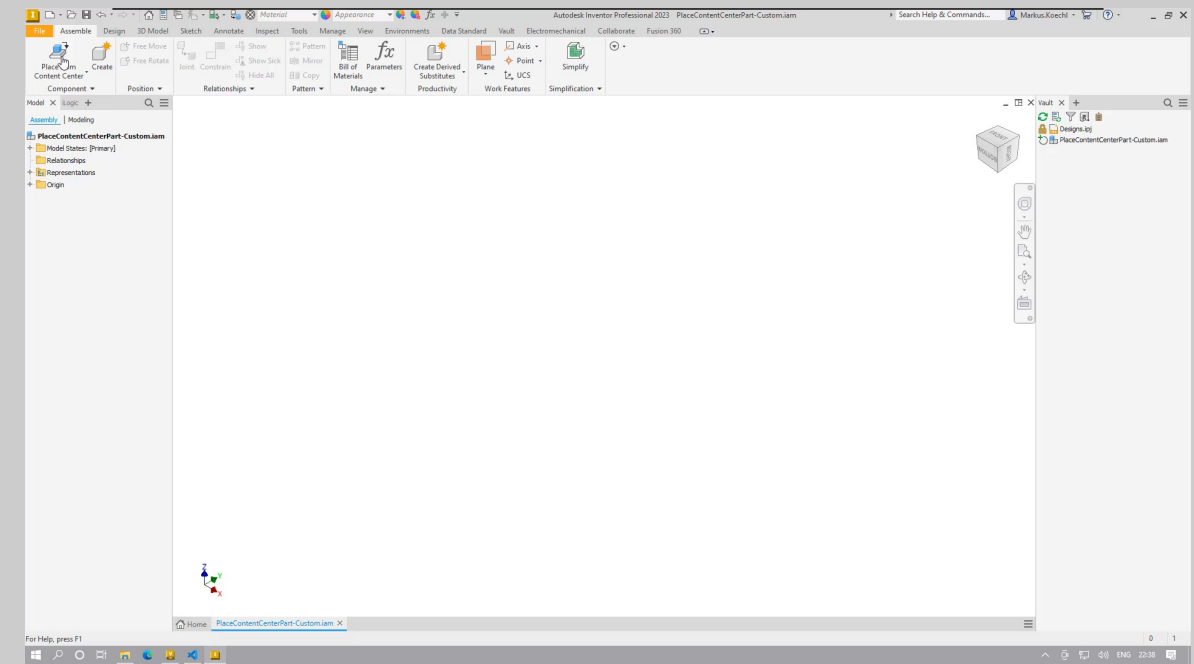
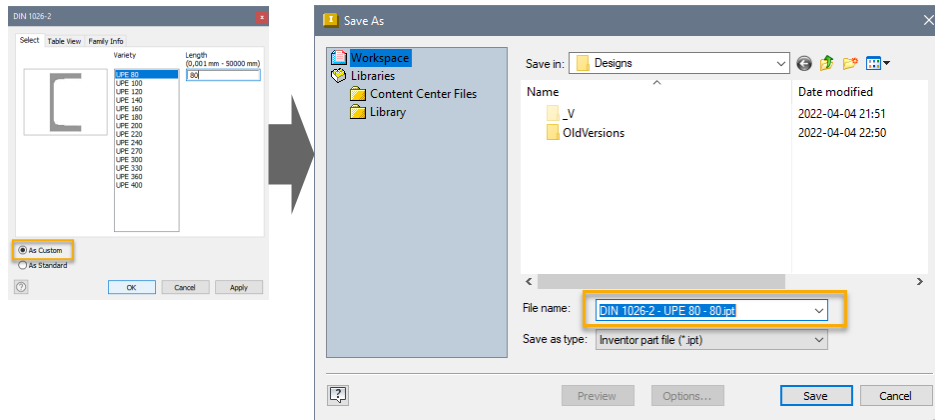
- Place from Content Center – Custom
 - VDS 2021.2.2 | VDS 2022.2 | VDS2023 changed the default behavior
 - No file numbering
 - No VDS interaction
- ⇒ Save custom CC component to project path and don't touch metadata (completed by source library)



Demo Video

New default workflow

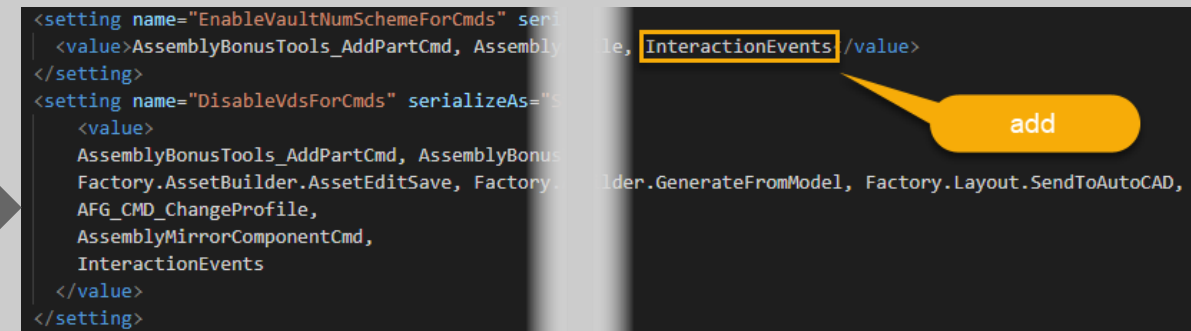
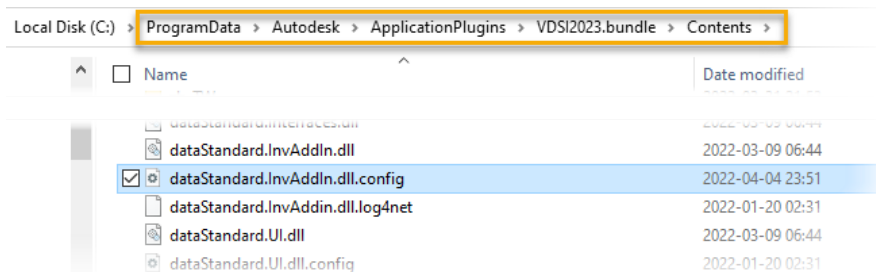
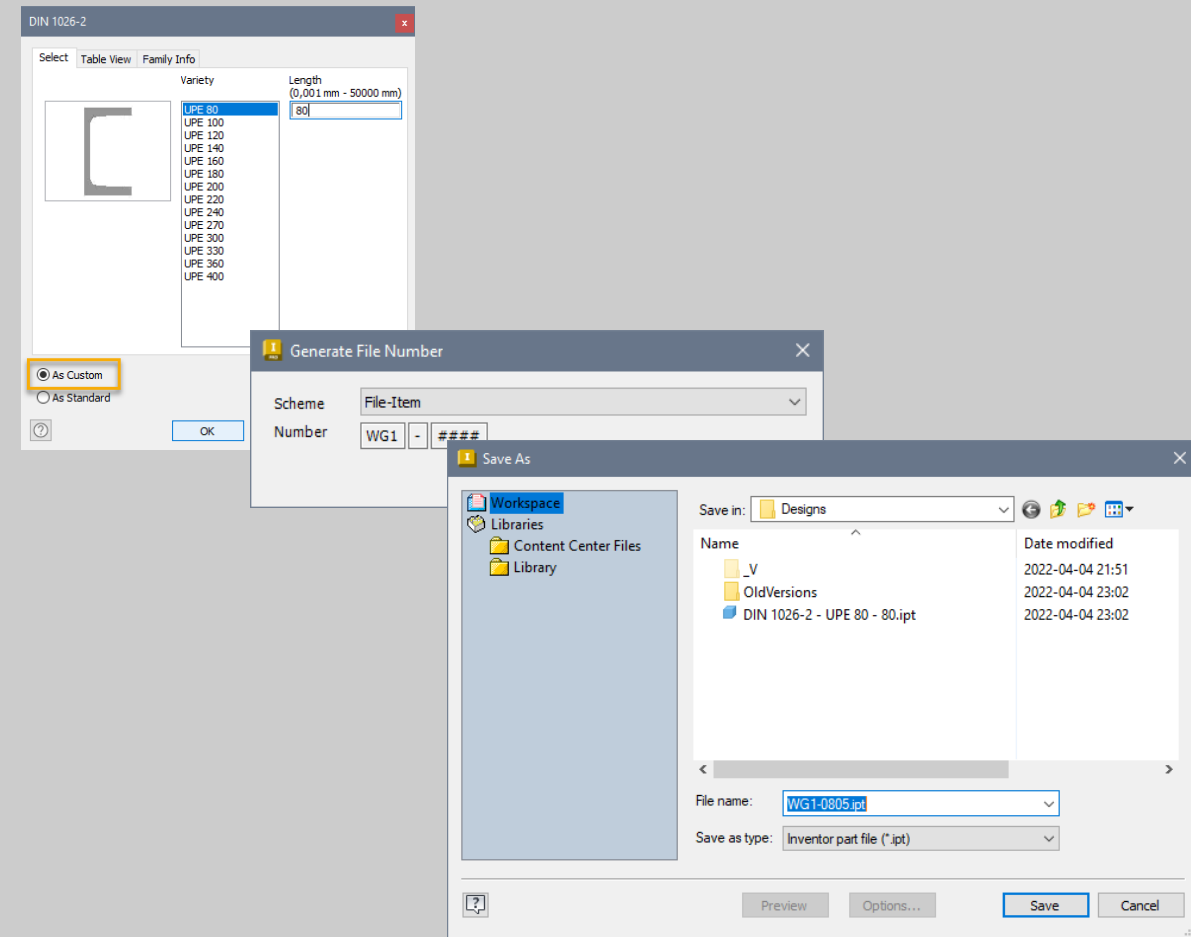
- Place from Content Center – Custom
 - **Default** workflow characteristics
 - Behaves like Inventor without Vault
 - No Vault file number proposed
 - No VDS interaction



Data Standard

Inventor

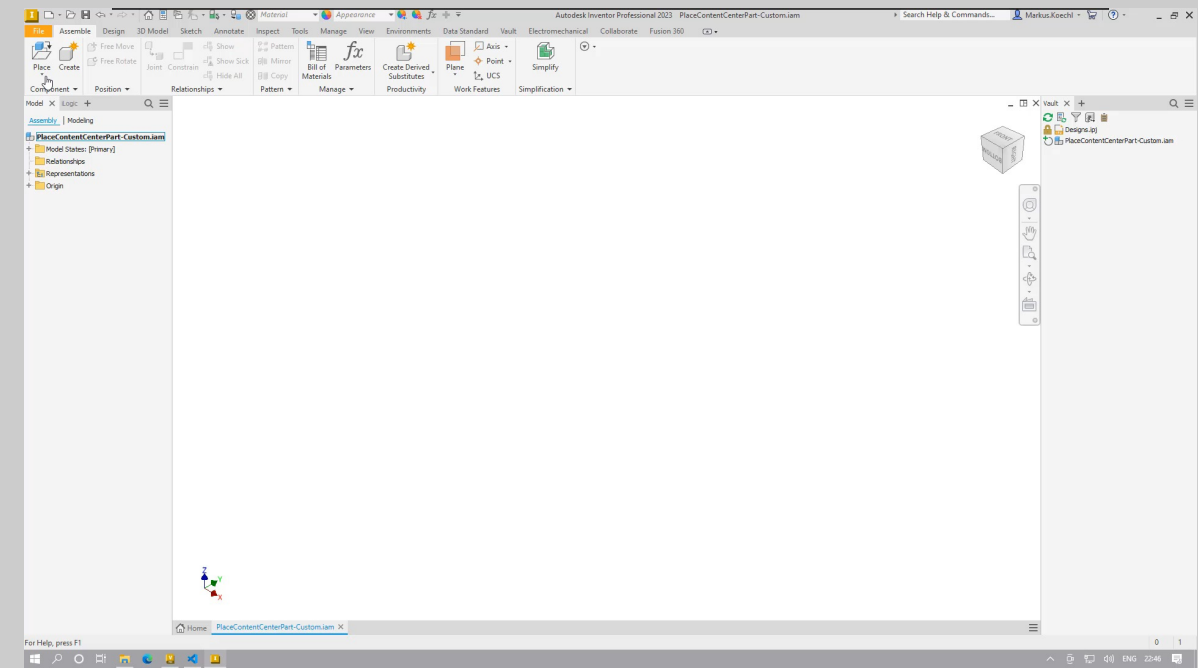
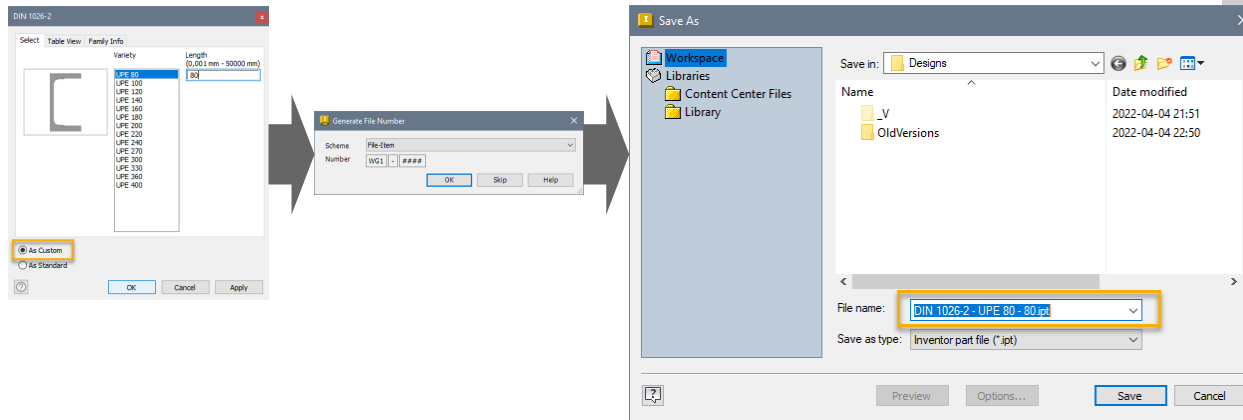
- Place from Content Center – Custom
 - Configuration options to enable
 - **Vault numbering only**
 - ⇒ Vault File Number Dialog to propose file name
 - ⇒ Save As Dialog to select file location
 - Enable by editing the configuration file
 - Add “InteractionEvents” to EnableVaultNumSchemeForCmds



Demo Video

Workflow option 1 – Vault numbering only

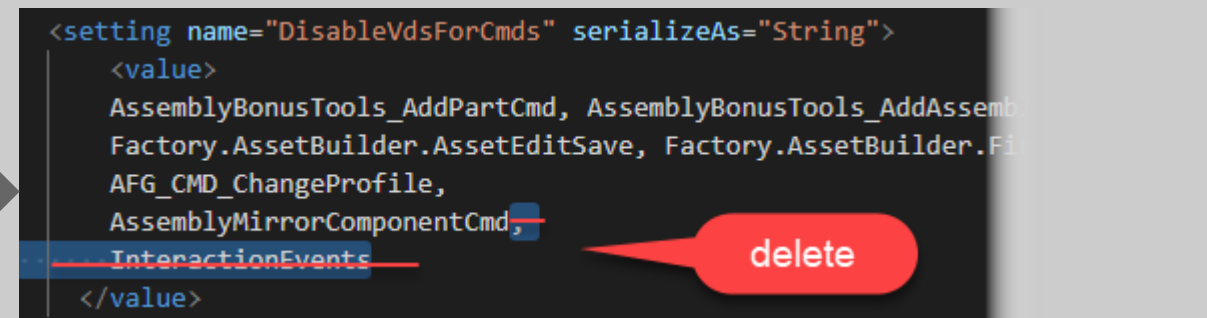
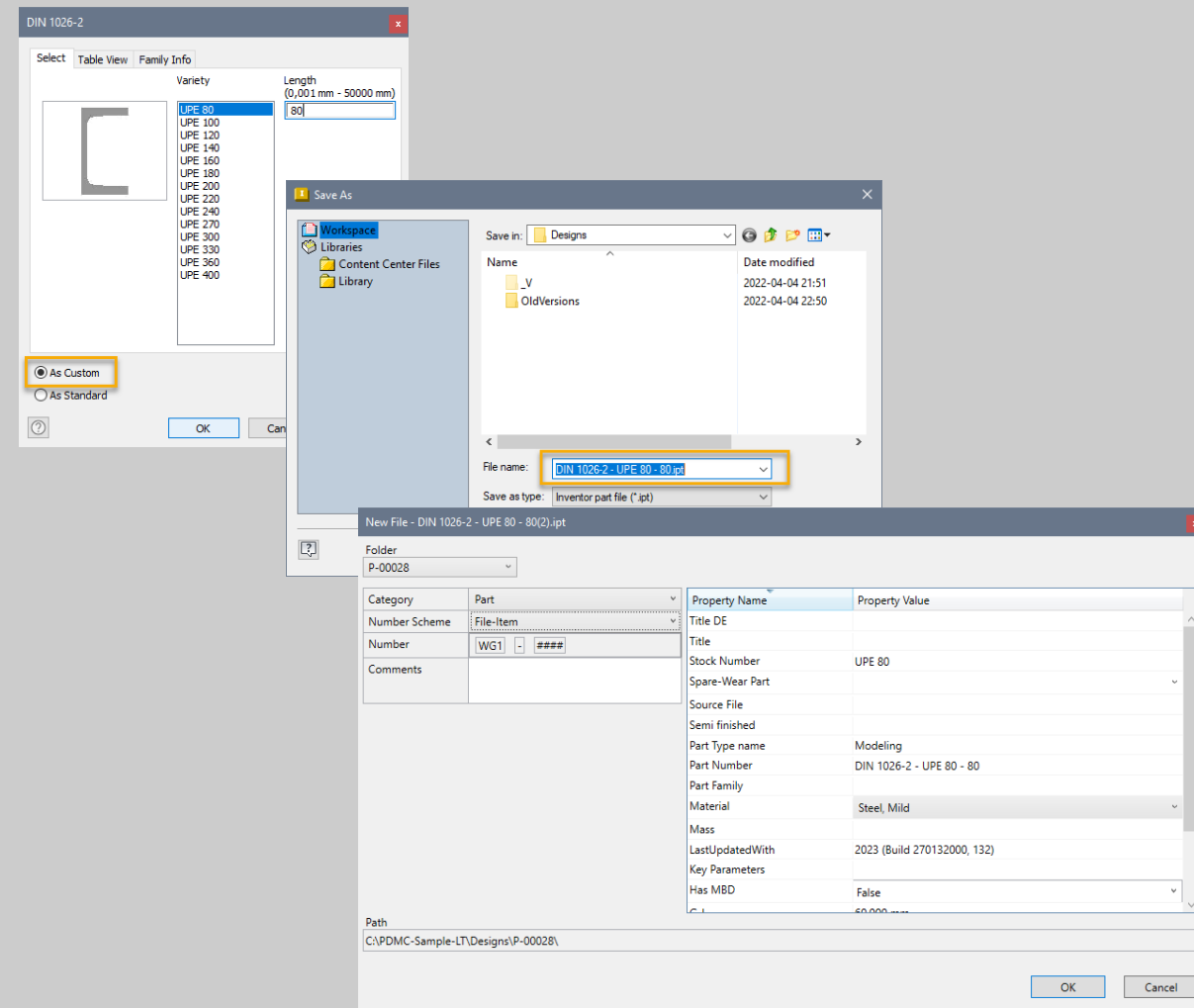
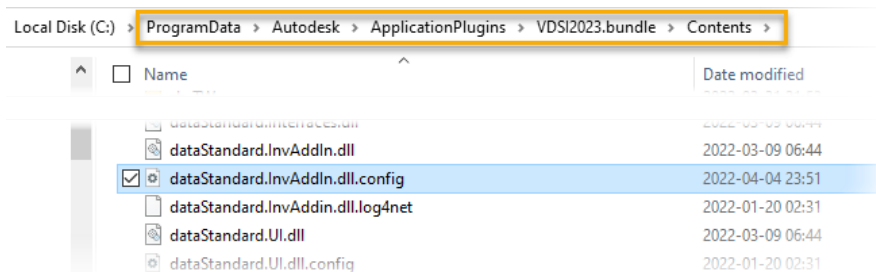
- Place from Content Center – Custom
 - Configuration option 1 characteristics
 - Behaves like Inventor **with** Vault
 - Vault file number proposed
 - No VDS interaction



Data Standard

Inventor

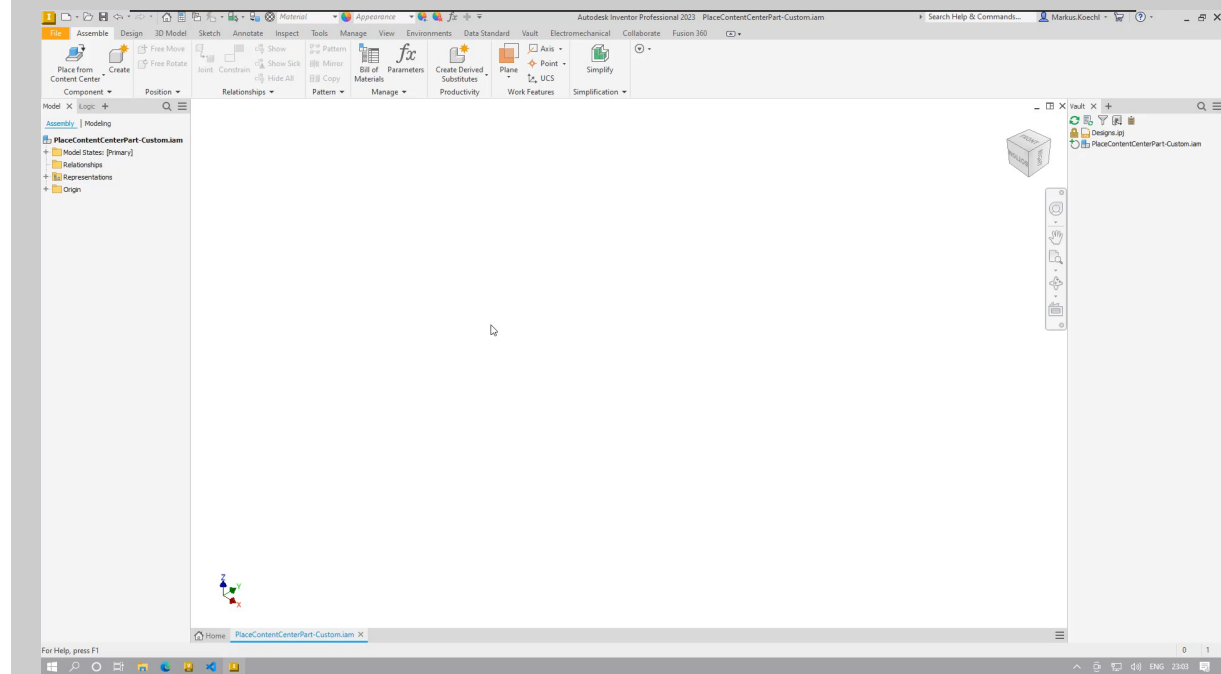
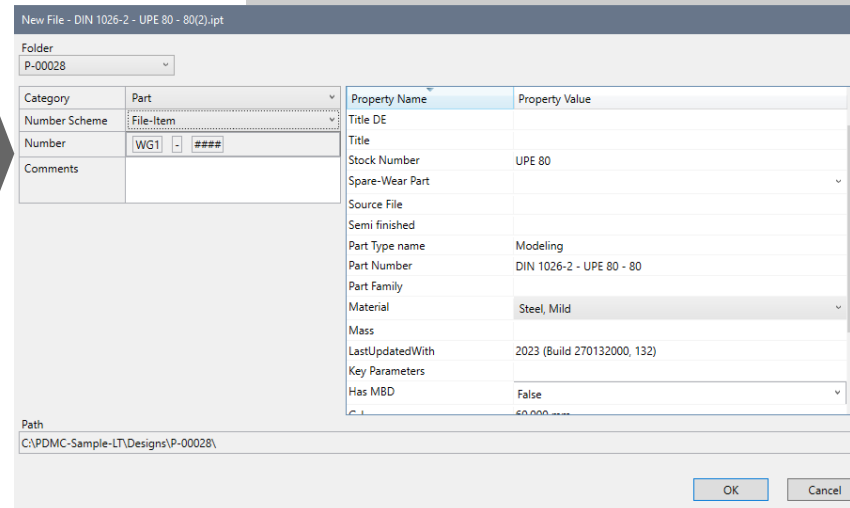
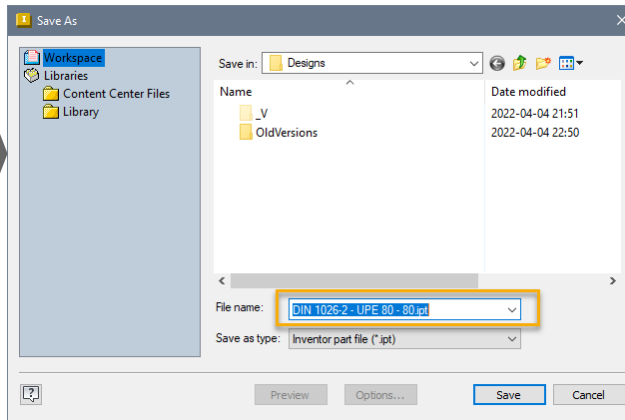
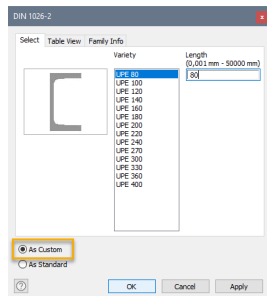
- Place from Content Center – Custom
 - Configuration options to enable
 - **Vault numbering & VDS Datasheet interaction**
 - ⇒ Save As Dialog is part of “Place from Content...”
 - ⇒ VDS Dialog overwrites
 - ⇒ File location (As selected in the VDS dialog)
 - ⇒ File name with file Vault number or manual file name
 - Enable by editing the configuration file
 - Remove “InteractionEvents” from DisableVdsForCmds



Demo Video

Workflow option 2 – Vault Data Standard

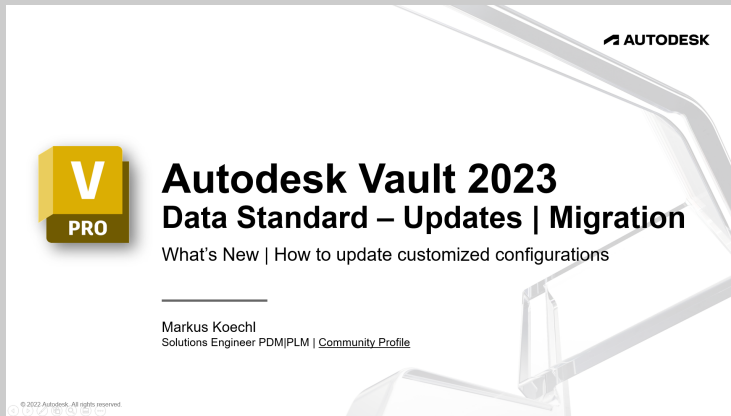
- Place from Content Center – Custom
 - Configuration option 2 characteristics
 - Inventor Save As appears
 - VDS Dialog drives (overrides Save As input)
 - Folder location
 - File name/numbering



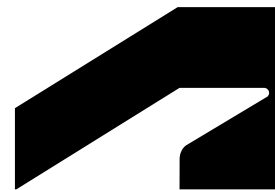
Additional Documentation

Autodesk Vault 2023 Data Standard – Updates|Migration

- What's New – Enhancements and changes
- Editing custom configurations
 - Visual Studio project template 2023
 - Visual Studio project “VDS-2023-Sample-Configuration
- Migrating custom configurations 2021/2022 → 2023
 - Minimum Updates
 - Recommended Updates



To be published on OTS/DAM and Channel Tech by May 6th, 2022.



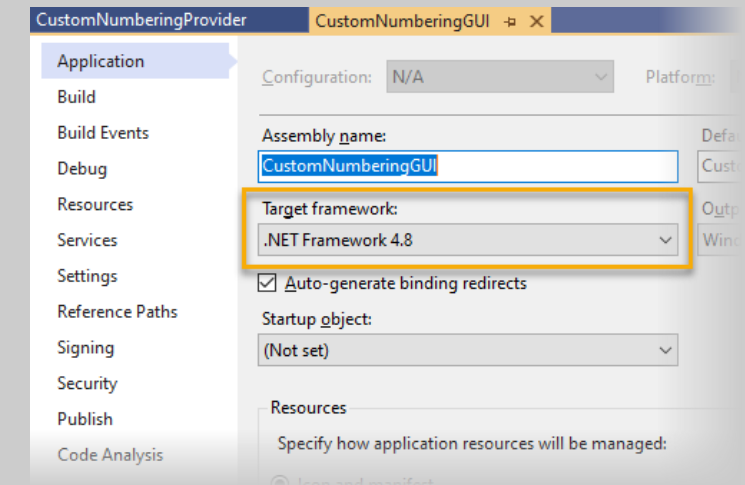
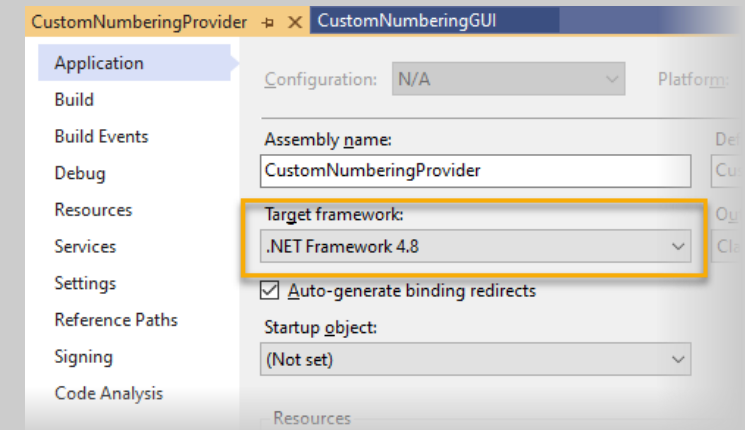
Vault 2023 API/SDK

What's New Overview

Vault 2023 API | SDK

.NET Framework

- Vault Server Extensibility
 - .NET Framework 4.8
- Vault Client Extensibility
 - .NET Framework 4.8



Vault 2023 API | SDK

Major additions*

- Inventor Instance Property Support
 - BOM class extended, leveraging new BOMInstArray class
- Managing Entity Attributes (major use case – save metadata without incrementing iterations)
 - New default properties for Create Date/User and Update Date/User information
- Lifecycle state color support
- Customize restriction dialogs by adding detailed reason information
 - New RestrictionReason property, optional 3rd grid column in dialogs

*For all details – Go to Vault SDK 2023.cham/Vault API 2023 Changes

INSTRUCTIONAL DEMO MFG225143

API Enhancements in Vault 2019

Paul Gunn

Key Learnings

- Understand how Project Sync was built on this functional foundation
- Learn how to store your custom data on Vault objects like files and folders
- Learn how to schedule nightly or recurring custom jobs
- Learn how to capitalize on this functionality to enhance your own custom Vault extensions

My Custom Restriction

Something happened with the file.

Reason for restriction:

Affected File	My Restriction = What happened?	My Reason = Why did this occur?
FDU Tutorial.docx	Could not check out the file.	File is checked out by you on computer XY

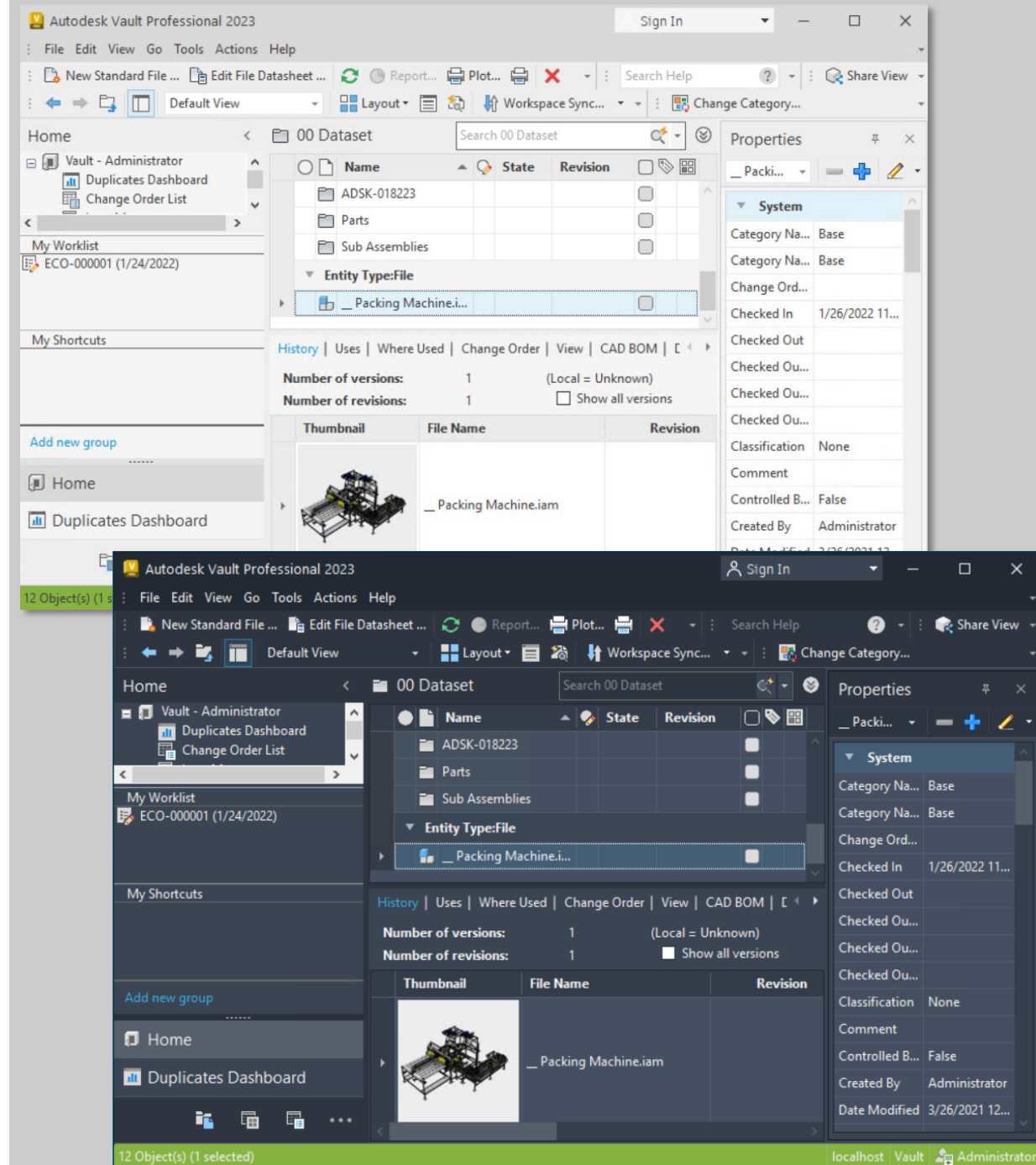
☐ Enable my privilege to continue

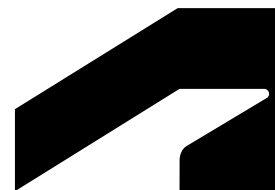
Close Details <<

Vault 2023 API | SDK

Themes support

- Vault 2023 theme support uses 3rd party licensed DevExpress libraries
- The Vault SDK / VDF includes a redistributable subset of DevExpress libraries
 - The redistributable subset does not include the full theme support





Vault 2023

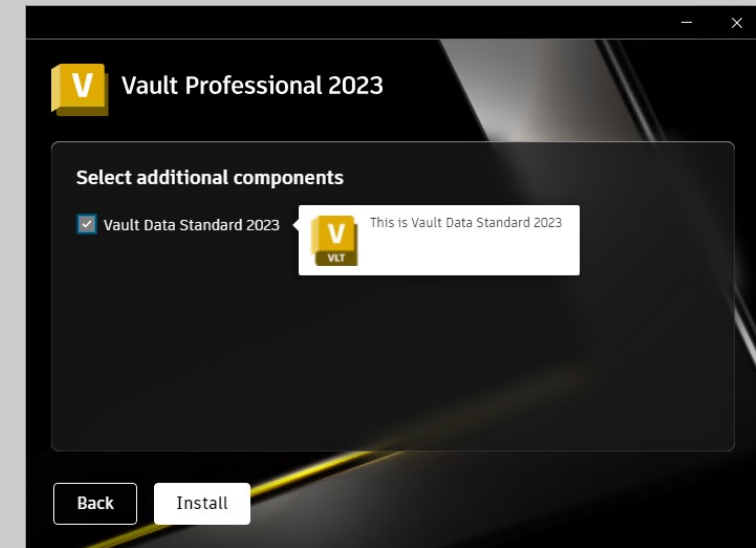
Good to know

Installation

Vault Client (2022, 2023)

- Installs all Vault Add-ins and Applications
- Installation Option Vault Data Standard
 - Installs VDS Inventor, VDS AutoCAD/Mechanical, VDS Vault
- *Autodesk Applications with individual Client Add-ins*
 - *3ds Max*
 - *Navisworks*
 - *Plant3D*
 - *Alias*
 - *Simulation Products*

- AutoCAD incl. specialized tools
- Autodesk Civil 3D
- Inventor
- Revit
- MS Office
- Autoloader
- Copy Design
- Job Processor



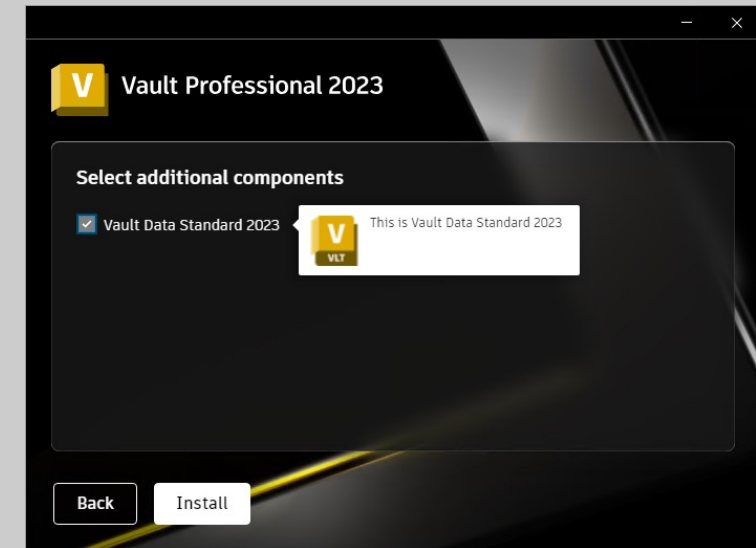
Installation

Vault Client (2022, 2023)

Installs all Vault Add-ins and Applications

- Benefits
 - Removed dependencies
 - Flexible installation order

- AutoCAD incl. specialized tools
- Autodesk Civil 3D
- Inventor
- Revit
- MS Office
- Autoloader
- Copy Design
- Job Processor



Recommendation

Vault Client (2022, 2023)

Custom Install (Autodesk Account)

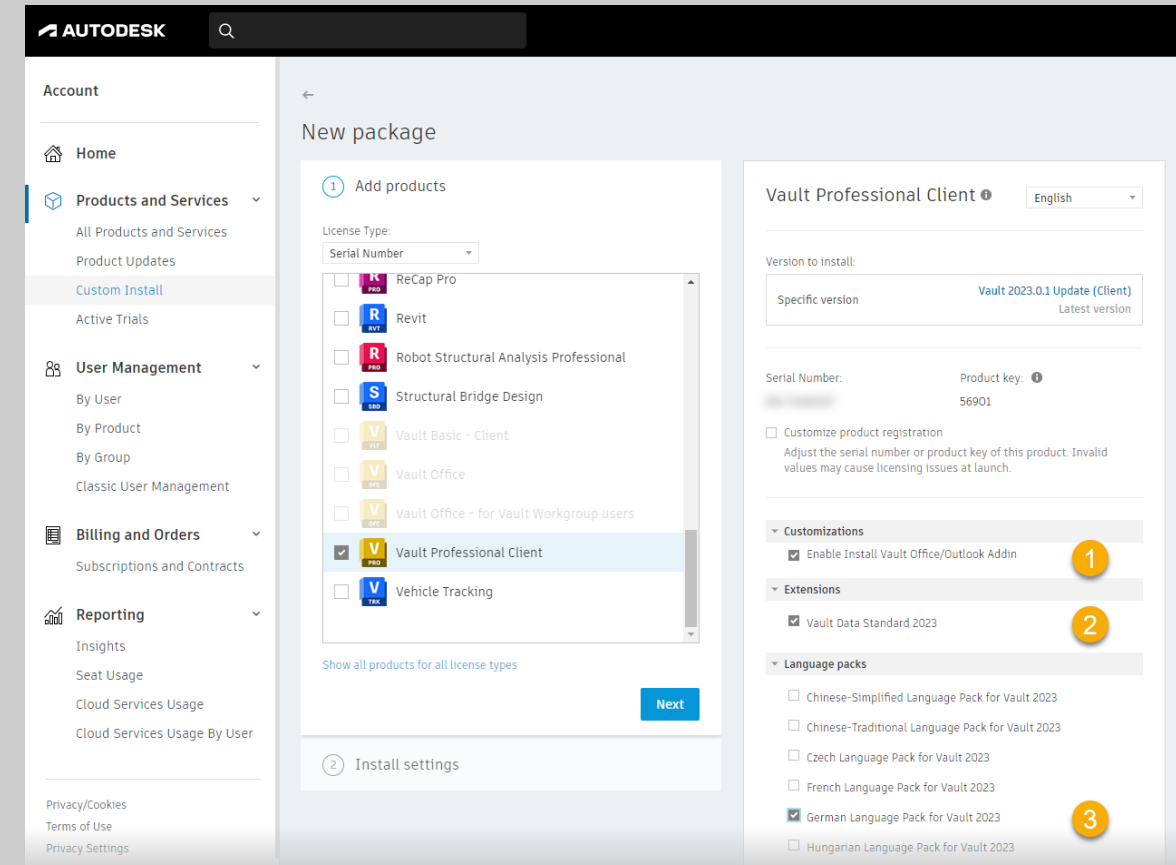
1. Customization Option

- MS Office Addins

2. Extensions Option

- Vault Data Standard

3. Language Pack(s)



Licensing

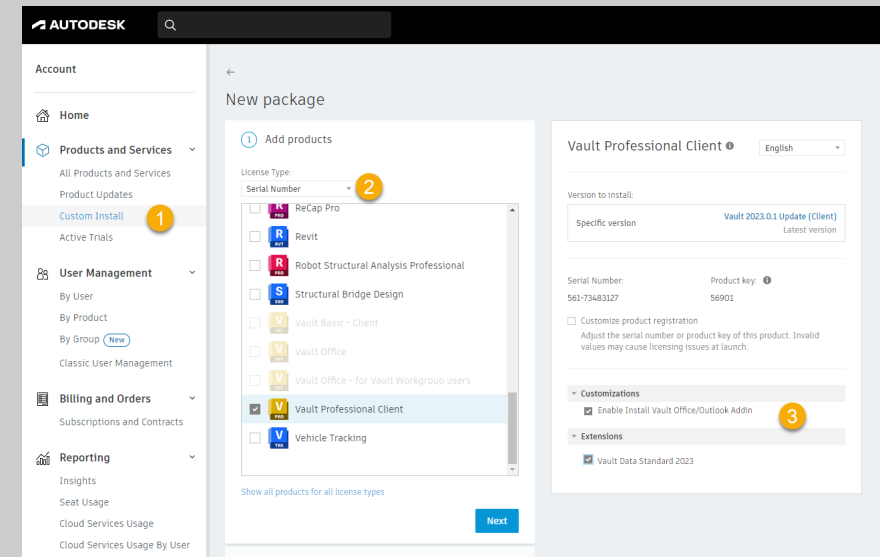
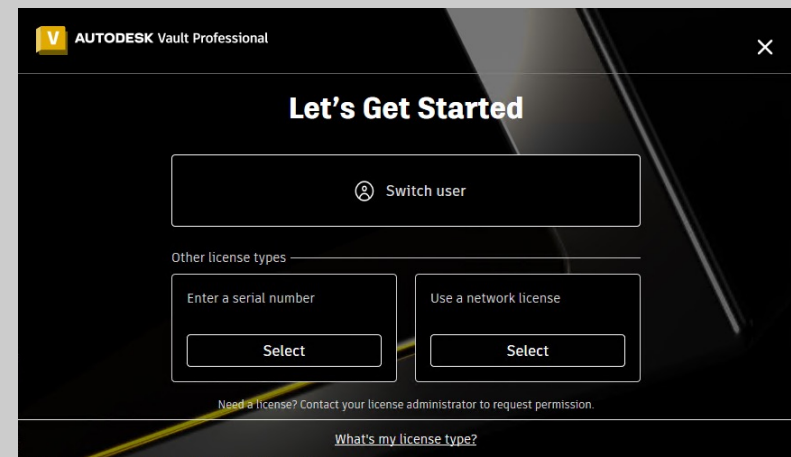
Licensing options | default

- Autodesk Account
- Serial Number
- Network License (default)

⇒ Customize the download/installation to change the default

⇒ Apply the license reset if the installed option does not match the desired license type

⇒ How to change License type for already installed Products after contract is changed to Named User(Sign-In) type | AutoCAD 2022 | Autodesk Knowledge Network



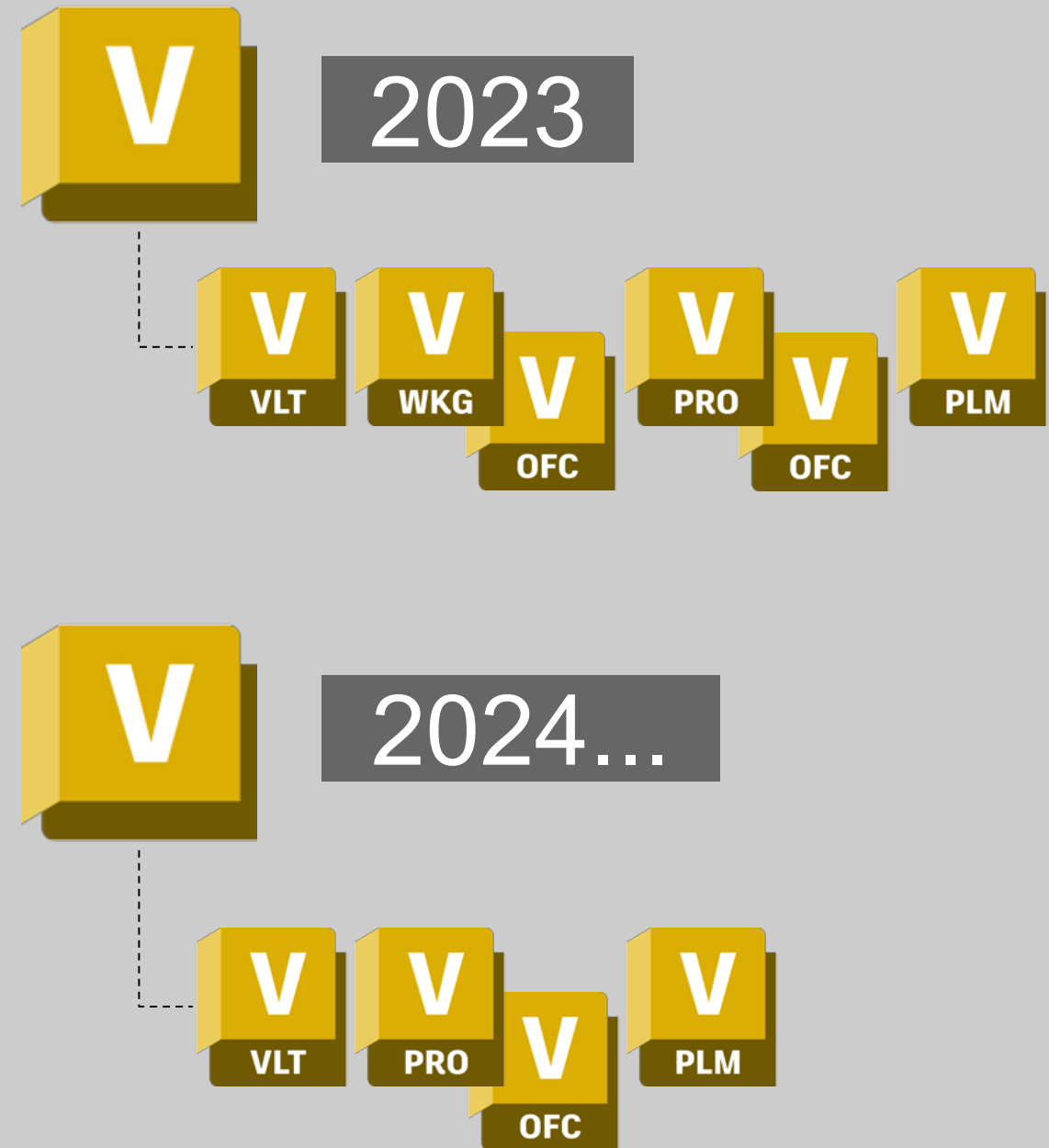
Copy to cmd:

```
C:\Program Files (x86)\Common Files\Autodesk  
Shared\AdskLicensing\Current\helper\AdskLicensingInstHelp  
er.exe" change -pk 569O1 -pv 2023.0.0.F -lm USER
```

Vault Product Line

Vault Workgroup – end of sale

- Vault Workgroup 2023 – last release
- Subscription customers receive entitlements for Vault Professional
- Last **new** subscription purchase dates
 - July 6th, 2022 – 1 Year Sub, 3 Year Sub
- Last subscription **renewal** dates
 - July 6th, **2023** – 1 Year Sub
 - July 6th, 2022 – 3 Year Sub





AUTODESK
Vault

Summary

Vault 2023 What's New – Technical Details

- Vault is “the” established mature on-premise PDM solution for Autodesk’s authoring tools
 - Best in class 3D CAD to Engineering BOM workflows supporting all Inventor BOM types/BOM views, iPart/iAssembly, Model States and Instance Properties
 - Inventor/AutoCAD, Show Details: boost productivity performing 4/5 major PDM tasks within the CAD application
- Vault 2023 starts a new era of cloud-connected, on-premise PDM introducing Vault Gateway
 - Customers on Vault 2022.1 are included
- Seamless markup workflows boost collaboration for desktop-, web- and mobile users
- Updated modern user interface balancing legacy usability experience with modern appearances and themes

