

PL11319 – Evolve with Vault: What's New in Vault 2016

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User Experience Designer

Class summary

Vault software has had some major enhancements in the last year, especially in areas such as Items and Bill of Materials, Inventor Integration, Copy Design, and more. This class will give you an overview of some of these enhancements. Please note that in this class we will be going over some of the features that were introduced in Vault 2015 R2 software as these features are significant contributors to the evolution of Vault software.

Key learning objectives

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

- Learn about changes in Item and BOM area
- Learn about support Inventor's AnyCAD support
- Learn about changes in Copy Design
- Learn about Rollback Lifecycle State Change for Files
- Learn about other changes in the product

New to Vault?

Recommended Classes

- PL11424 – An Introduction to Vault
 - Tuesday, 3:00PM – 4:00PM (Adam & Mikel)

Item & BOM Changes

New to Items?

Recommended Classes

- PL11224 – Moving from Files to Items in Vault – Part 1
 - Tuesday, 5:00PM – 6:00PM (Bill & Andy)
- PL11458 – Moving from Files to Items in Vault – Part 2
 - Wednesday, 1:00PM – 2:00PM (Andy & Bill)

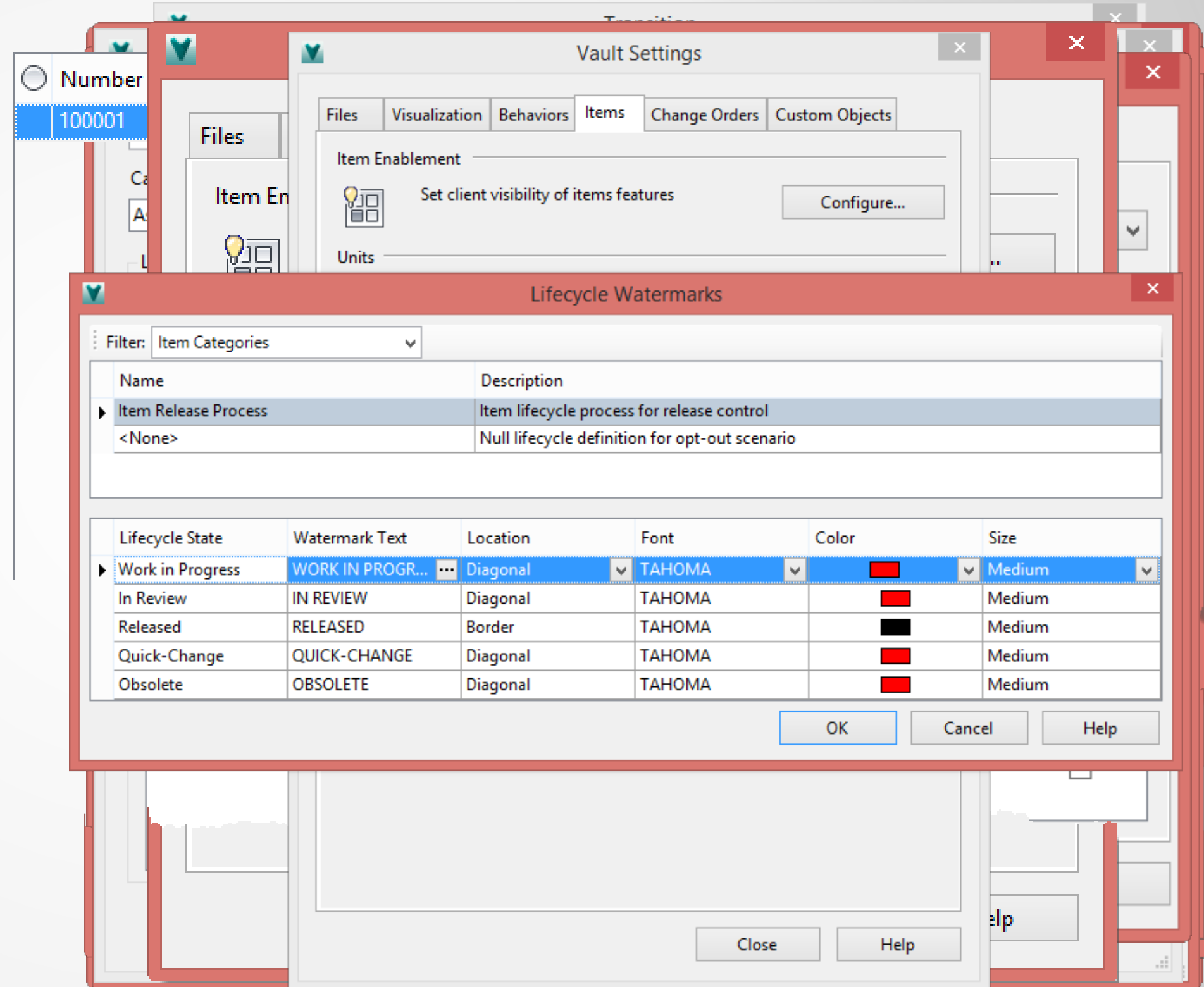
Lifecycles

- Flexible
- Unified administrative interface
- Unified end-user interface



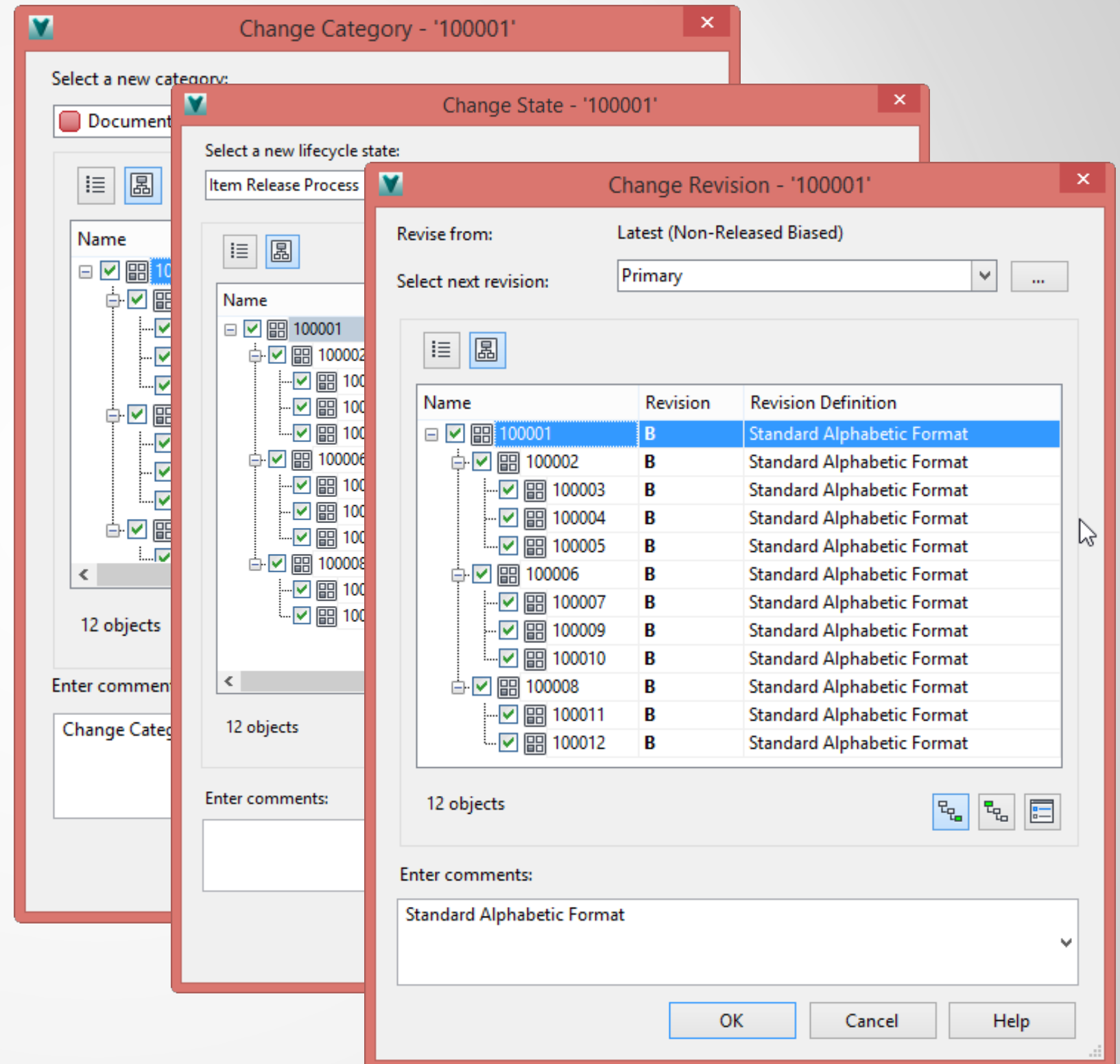
Lifecycles – Administration

- Configure Categories
- Define Lifecycles
 - Transition criteria based on Item properties
 - Transition actions that are specific to items
 - State-based security
 - For items
 - For associated files
- Security override
- Watermarking



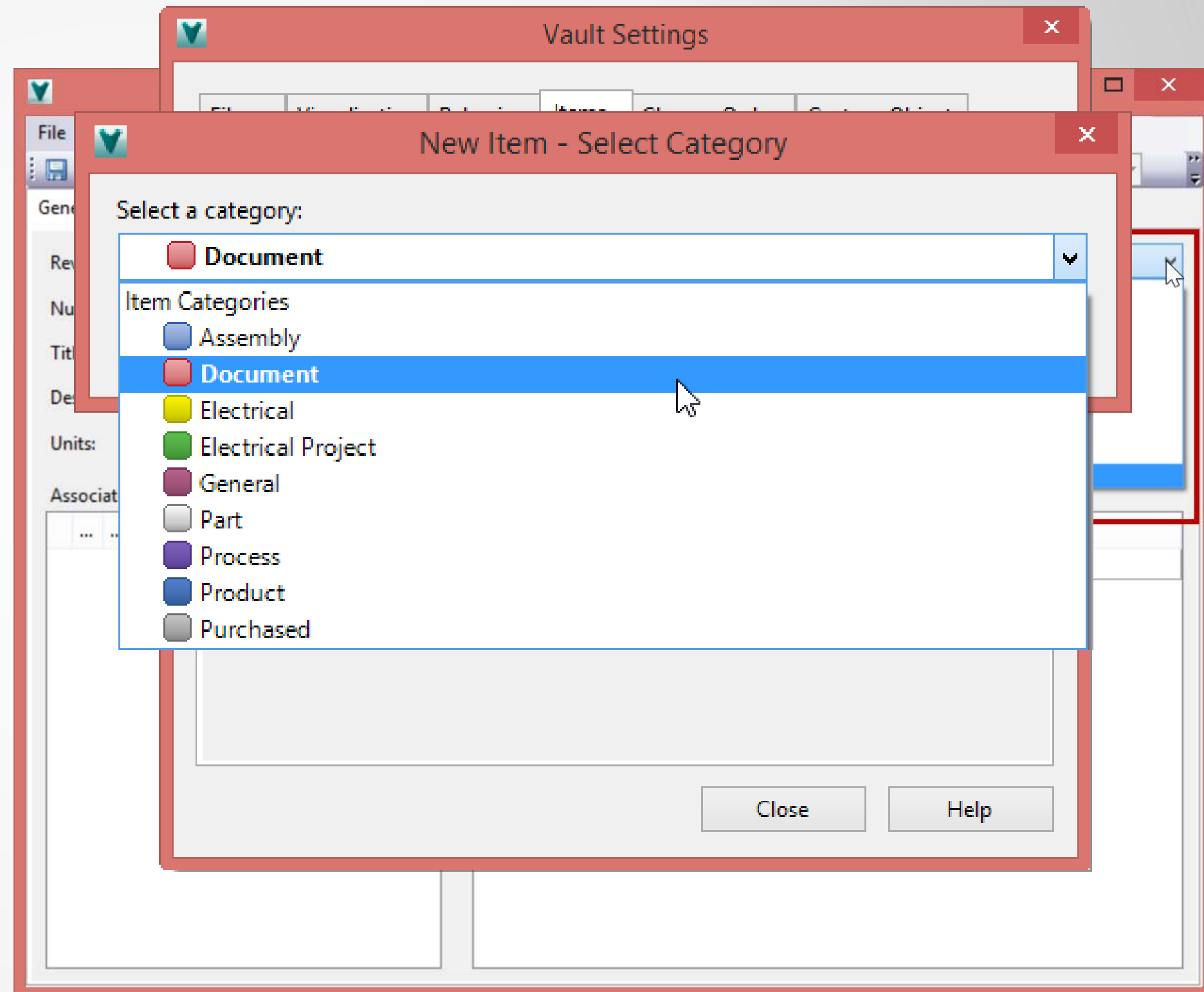
Lifecycles – End-user

- Change operations
 - Change Category
 - Change State
 - Change Revision



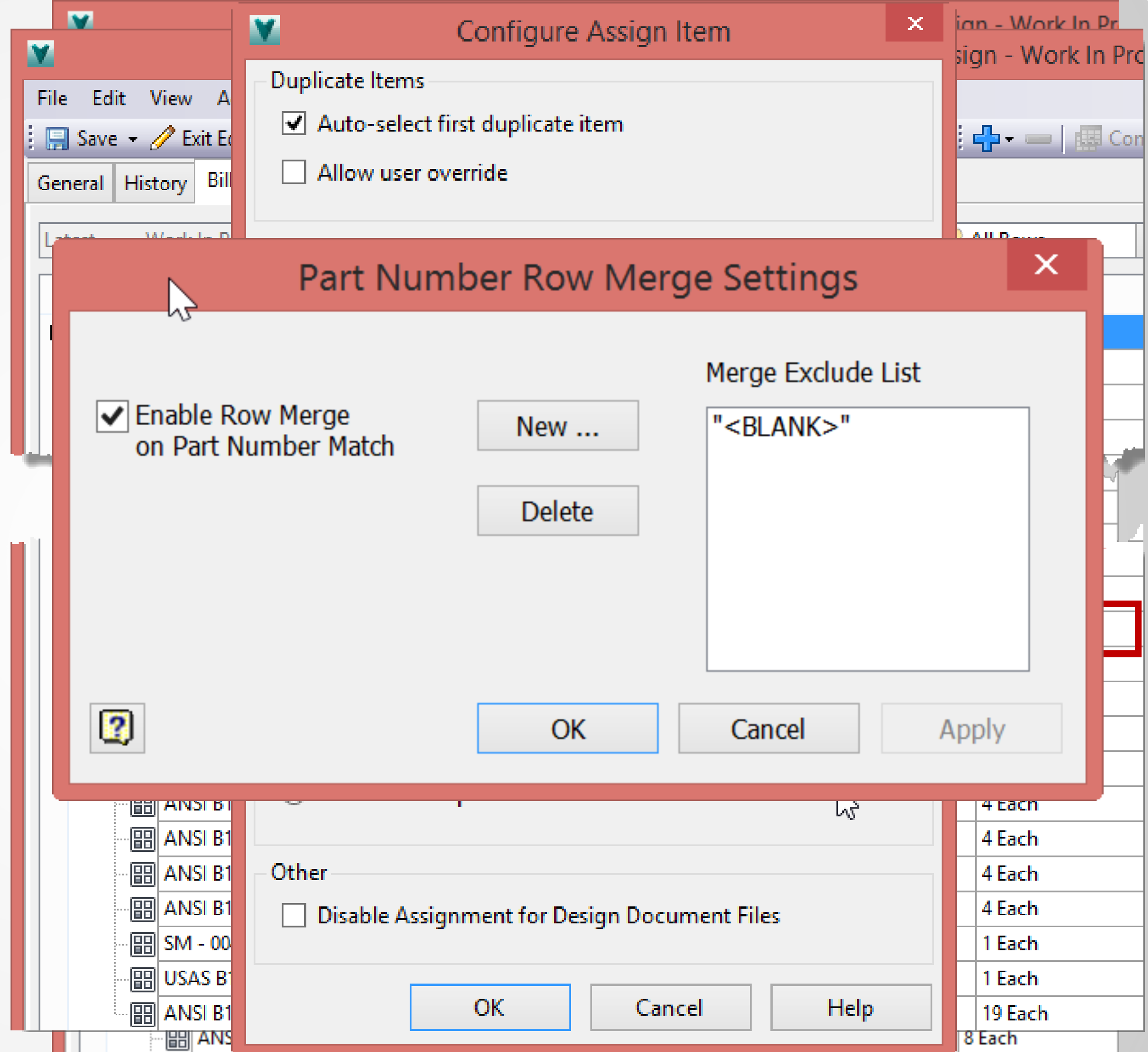
Category for new item

- No longer as a property change on item dialog
- Must be specified during creation
- Administrative control



Multiple BOM Rows

- Rows are grouped by default
- Administrative control
 - Based on BOM in CAD
- Assign item will follow rules



BOM Row Properties

- New association type
- Read-mappings only
- Available for viewing and editing in BOM grids

The image shows a software interface for defining BOM row properties. The main window is titled "New (Property)" and contains fields for "Name" (BOM UDP1), "Type" (Text), and "Assoc". A sub-dialog box titled "Customize Fields" is open, showing a list of available fields and a list of fields to be displayed in a specific order.

New (Property) Dialog:

- Name: BOM UDP1
- Type: Text
- Assoc: [Empty]

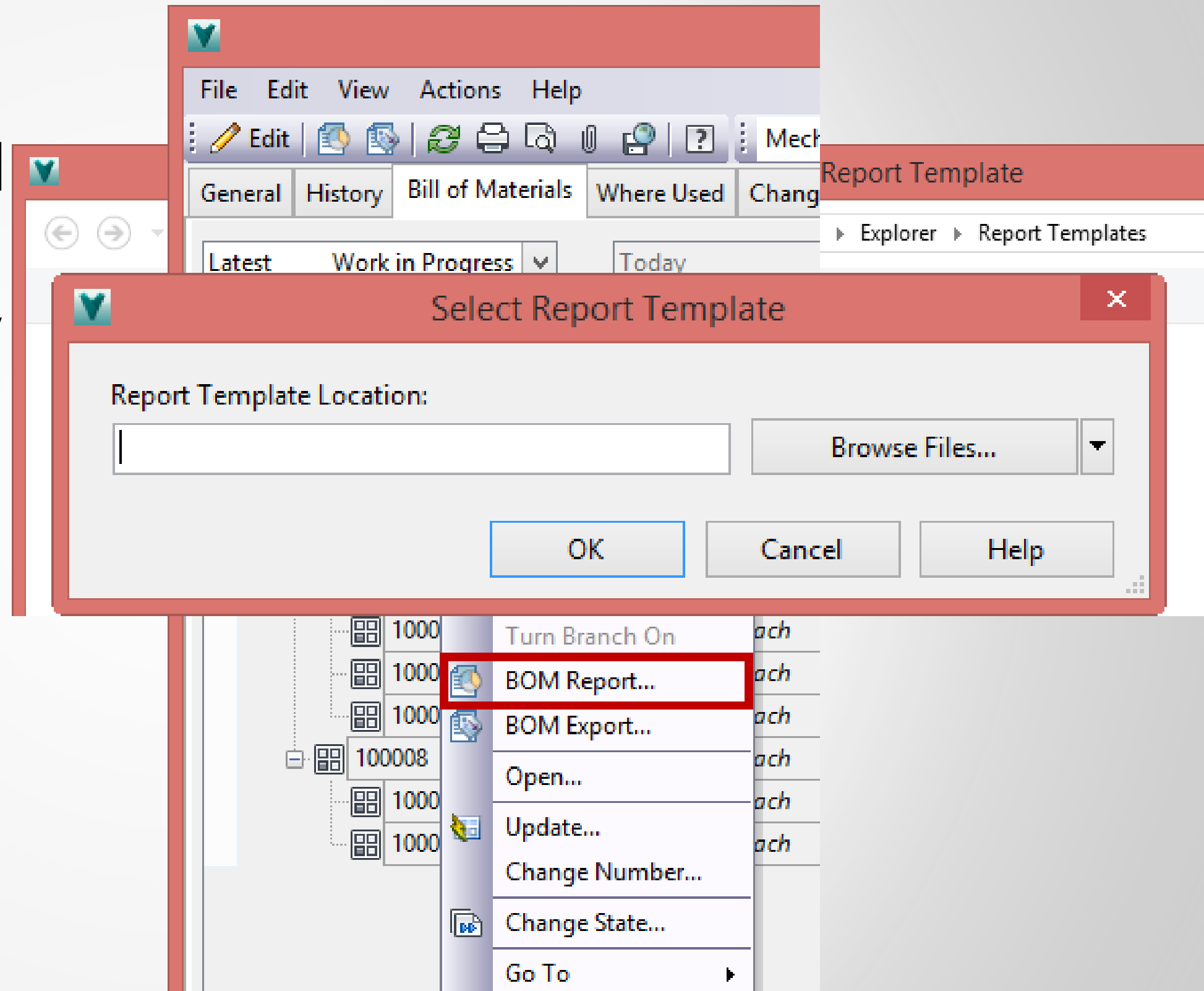
Customize Fields Dialog:

- Select available fields from: Bill of Material Fields
- Available fields: BOM UDP1, Detail ID, GroupType, Item Qty, Row Type, Unit Qty
- Show these fields in this order: Number, Row Order, Position Number, Quantity, Title (Item, CO), Revision, Latest Obsolete, State (Historical), Vault Status, On/Off BOM Row

Buttons: OK, Cancel, Help

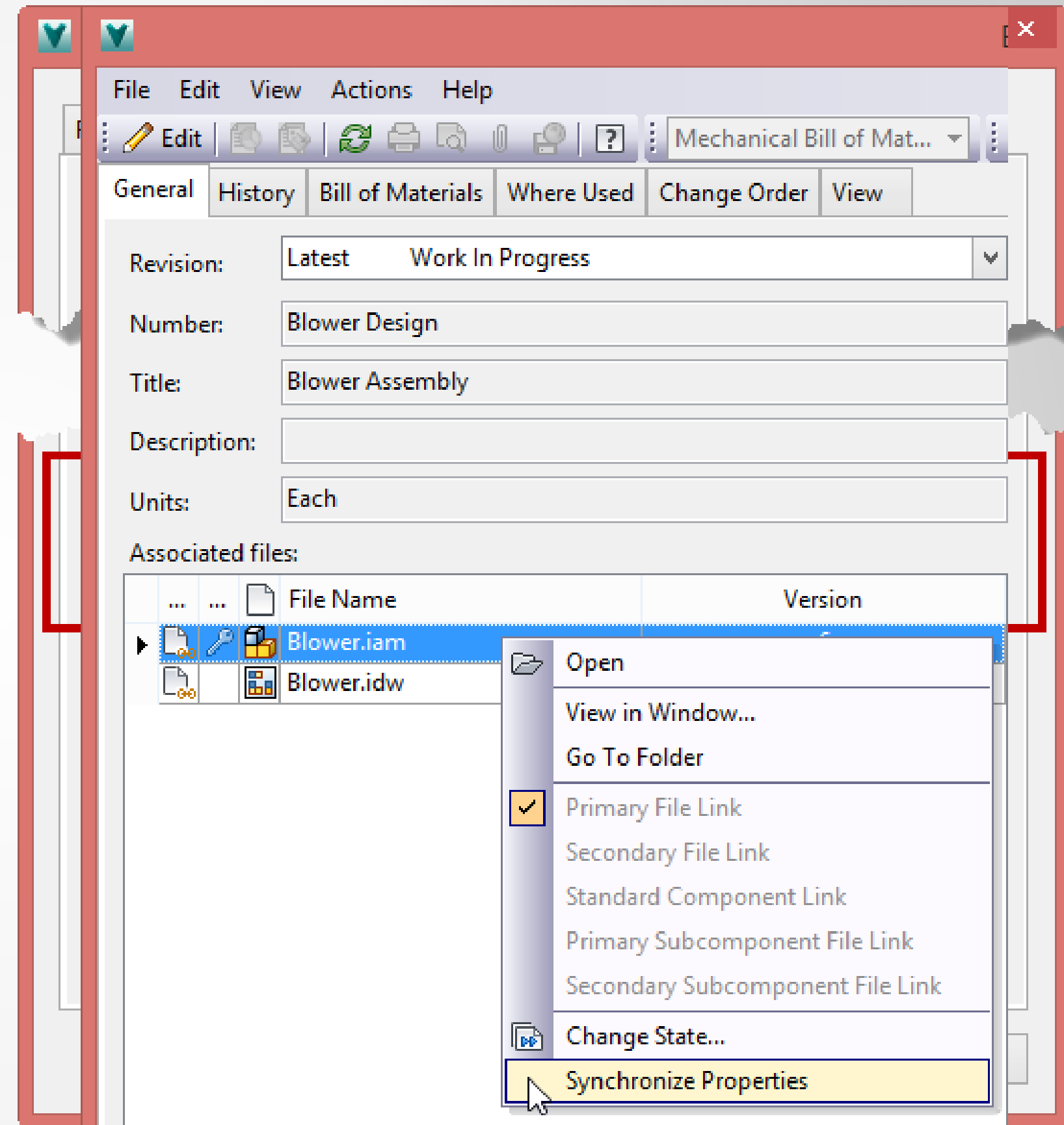
BOM Reports

- New command in BOM tab
- Item must be read-only
- 3 default templates
- Customizable



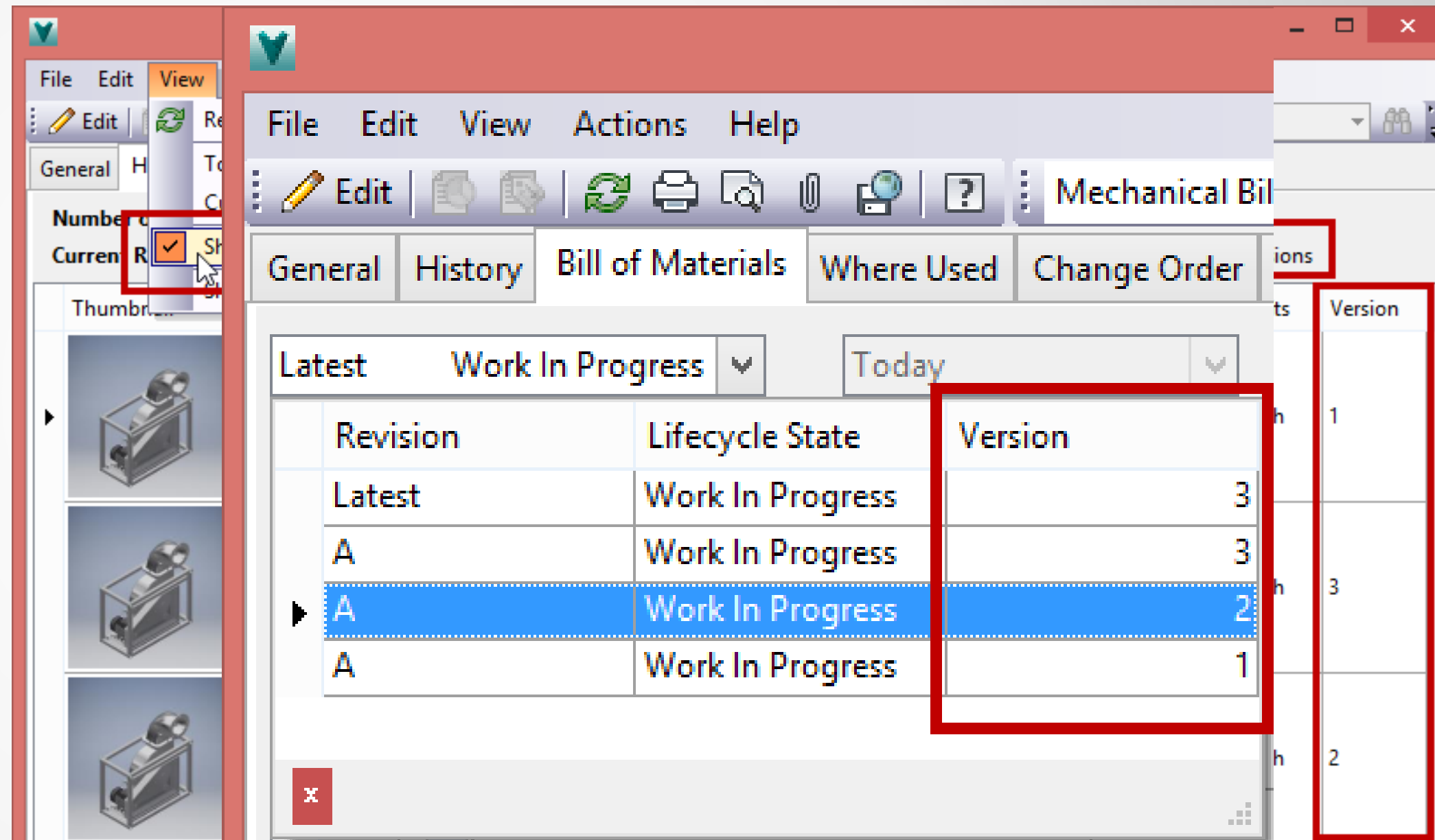
Item property write-back

- Extended to Vault Explorer
- Extended to Tertiary links
- Configurable
 - Applies to Vault Explorer and Add-Ins



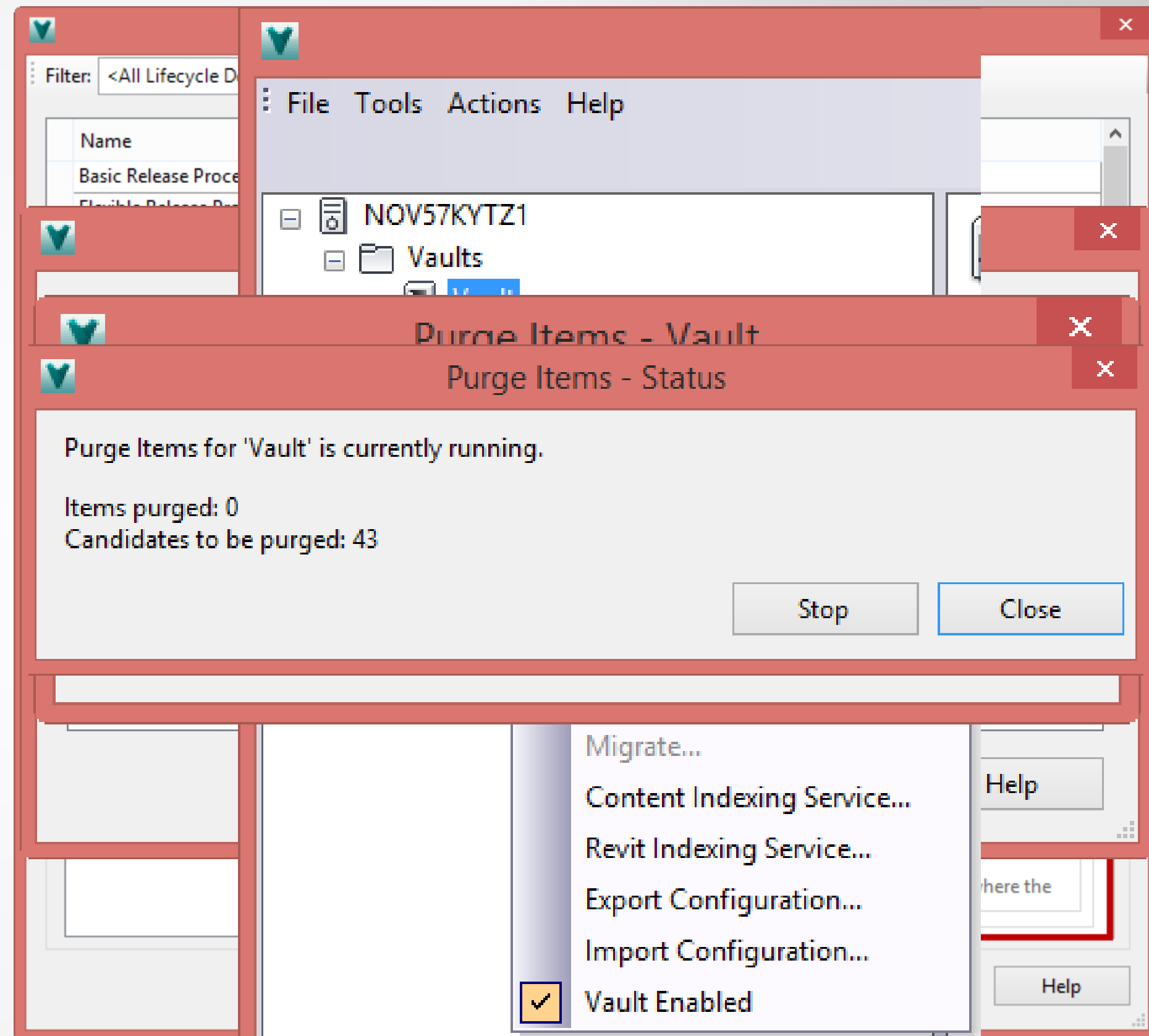
Item Versions

- Version as an item property
- Available as an option for item grids
- Option to show all versions
- Available by default on Revision dropdown for items



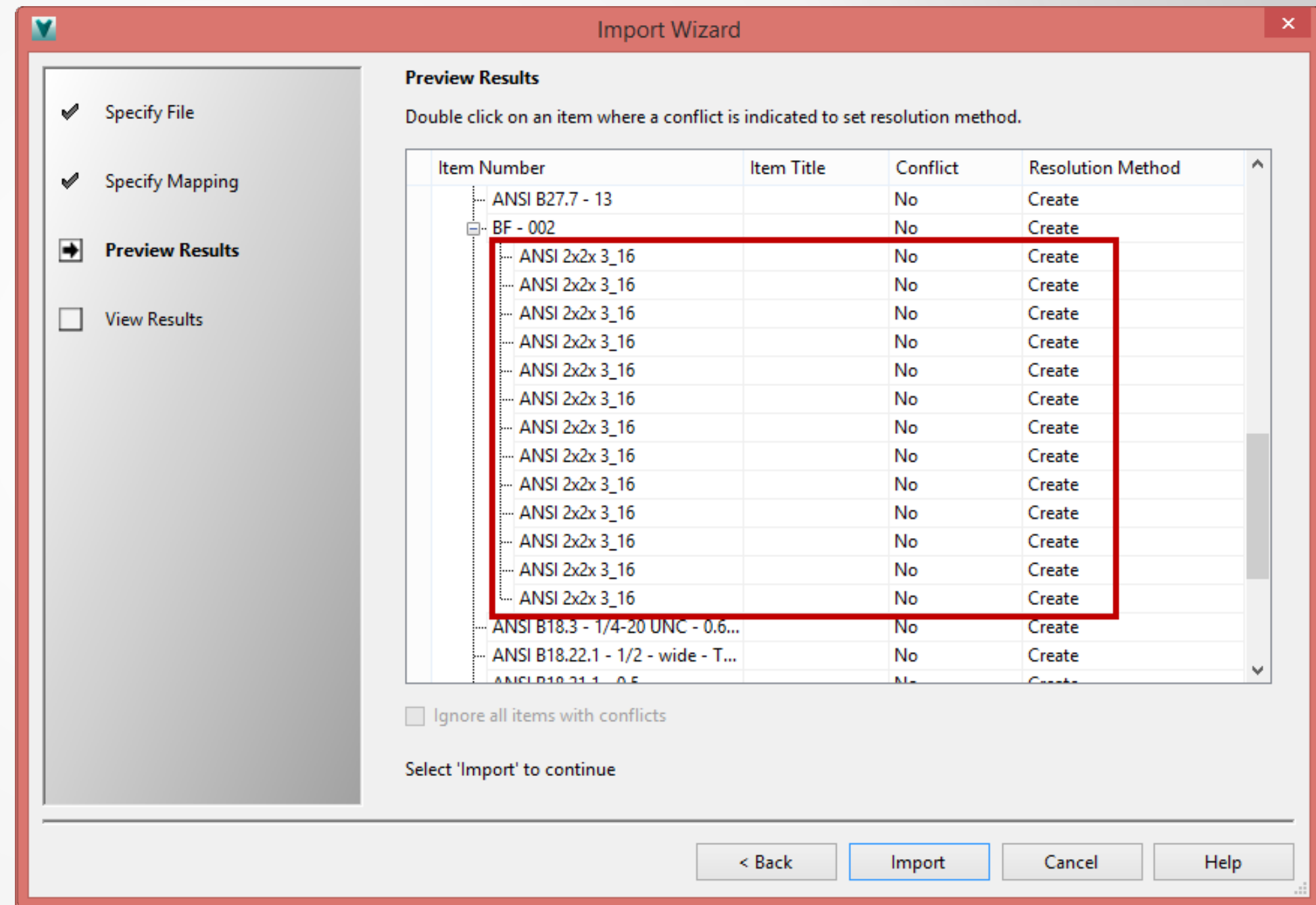
Purge

- Controlled by Control-bit settings
- Purge based on selection-set from Vault Explorer
- Purge across vault from ADMS Console



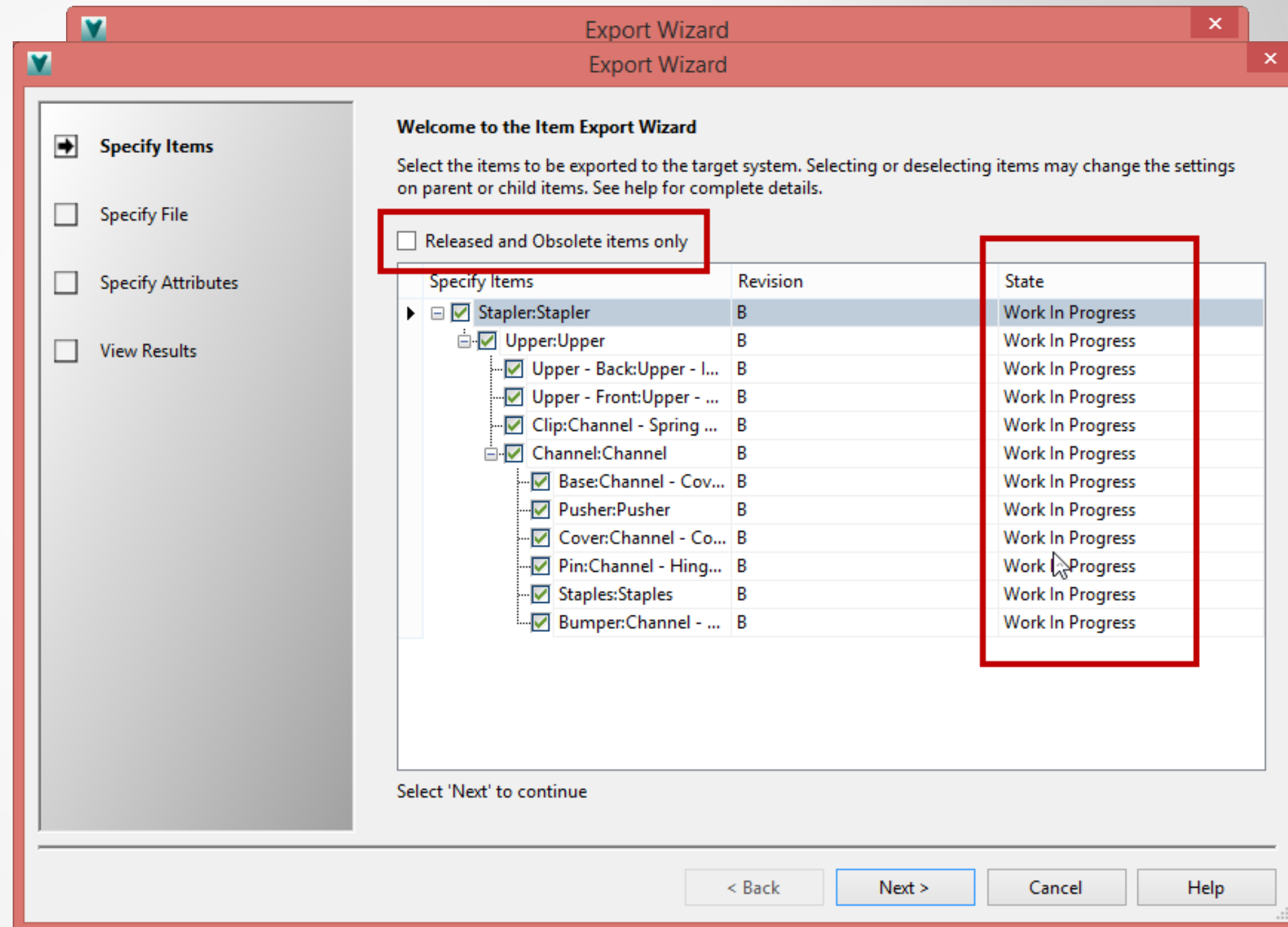
Import Items

- Updated for Lifecycle changes
- Based on Category
- If not specified, default Category will be used
- Support for Groups and multiple BOM rows



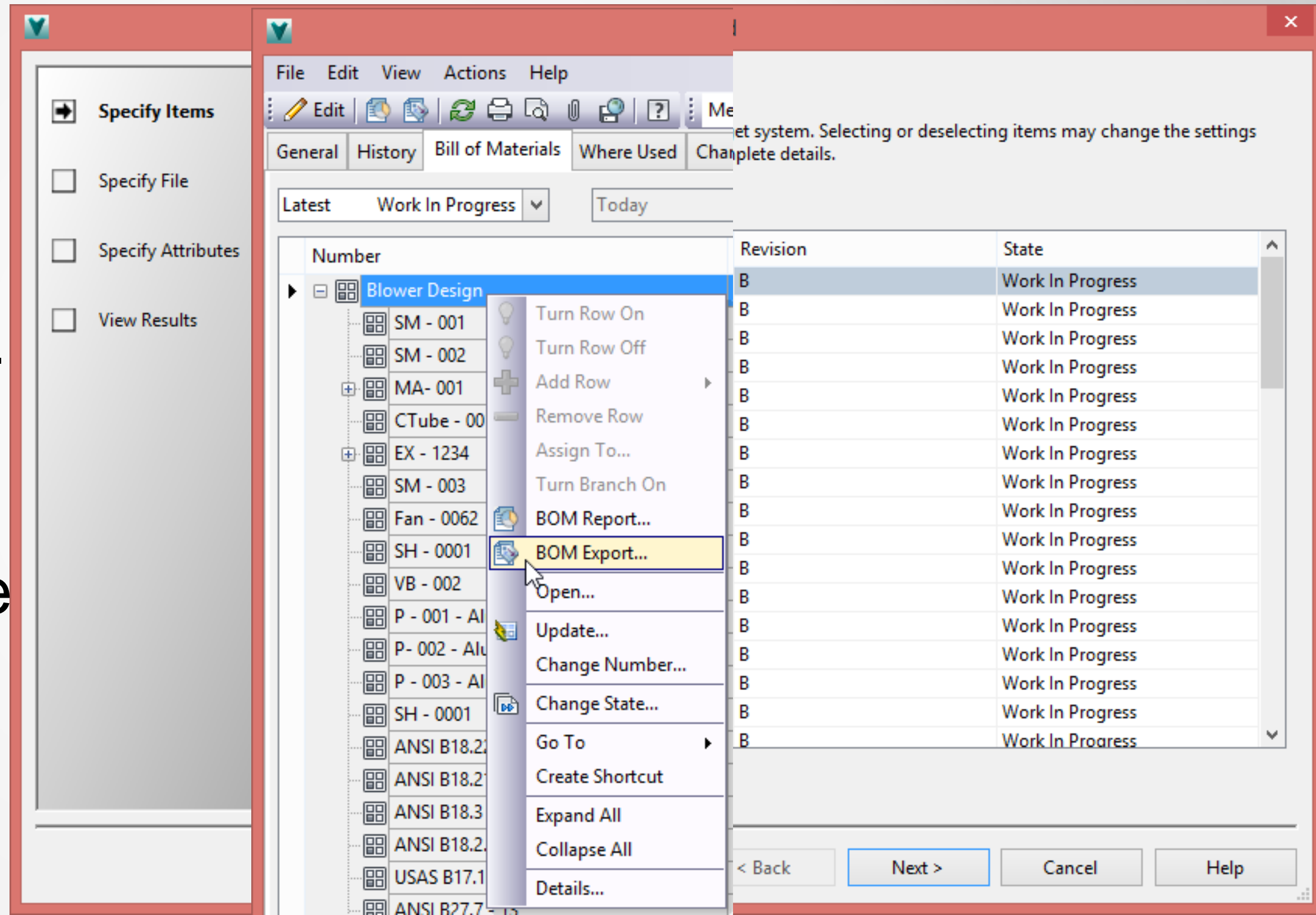
Export Items

- Updated for Lifecycle changes
- On rows only
- Released and Obsolete only as default
- Support for non-Released items
- Support for Multiple BOM Rows
- Support for BOM Row UDPs



BOM Export

- New command
- Available only on BOM tab
- Available for read-only items
- Exports the BOM regardless of state of the items



BOM Compare

- Supports Versions
- Supports Groups and Multiple BOM rows
- Supports BOM Row properties

BF - 002 - Work In Progress - Item (Read Only)

File Edit View Actions Help

Mechanical Bill of Mat... Compare BF - 002 A - 1 - Work In Progress

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

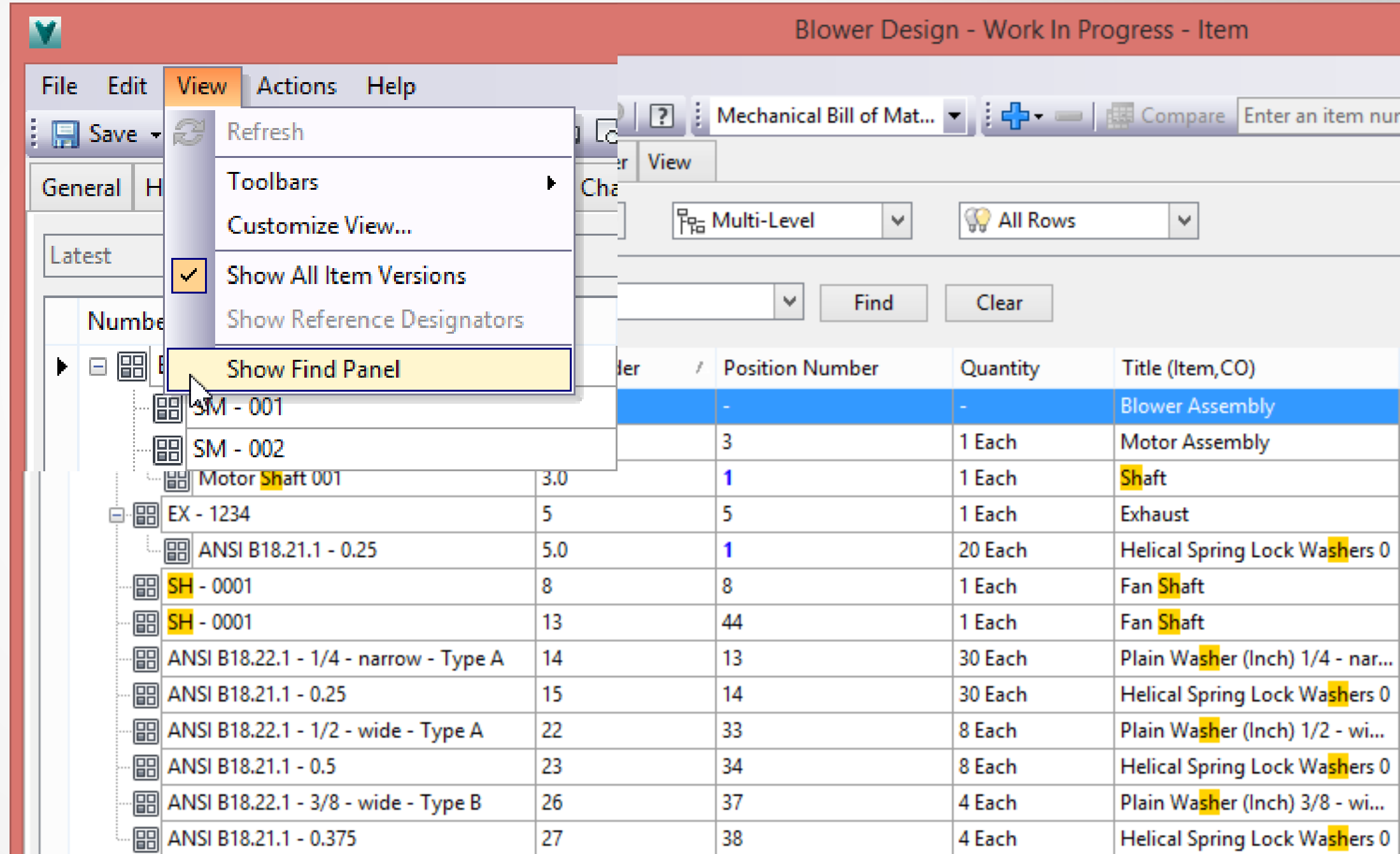
Latest Work In Progress Today Multi-Level All Rows

Number	Row Order	Position Number	Quantity	Title (Item, CO)	Revision	...	State (His
BF - 002	-	-	-	Frame Assembly	A		Work In P
ANSI 2x2x 3_16	1	1	20.5 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	2	2	20.5 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	3	3	20.5 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	4	4	20.5 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	5	5	38.465 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	6	1	389.189 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	6	6	38.465 Inch	Frame	A		Work In P
ANSI 2x2x 3_16					A		Work In P
ANSI 2x2x 3_16	8	8	38.465 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	9	9	27.716 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	10	10	27.716 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	11	11	27.716 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	12	12	27.716 Inch	Frame	A		Work In P
ANSI 2x2x 3_16	13	13	42.465 Inch	Frame	A		Work In P

Row exists in revision A, version 2 of item BF - 002 but not in revision A, version 1 of item BF - 002

BOM Search

- Find Panel in BOM views
- Also available in Uses and Where Used tabs



Blower Design - Work In Progress - Item

File Edit View Actions Help

Save Refresh

General H

Latest

Number

SM - 001

SM - 002

Motor Shaft 001 3.0

EX - 1234 5

ANSI B18.21.1 - 0.25 5.0

SH - 0001 8

SH - 0001 13

ANSI B18.22.1 - 1/4 - narrow - Type A 14

ANSI B18.21.1 - 0.25 15

ANSI B18.22.1 - 1/2 - wide - Type A 22

ANSI B18.21.1 - 0.5 23

ANSI B18.22.1 - 3/8 - wide - Type B 26

ANSI B18.21.1 - 0.375 27

Mechanical Bill of Mat... + Compare Enter an item number

View

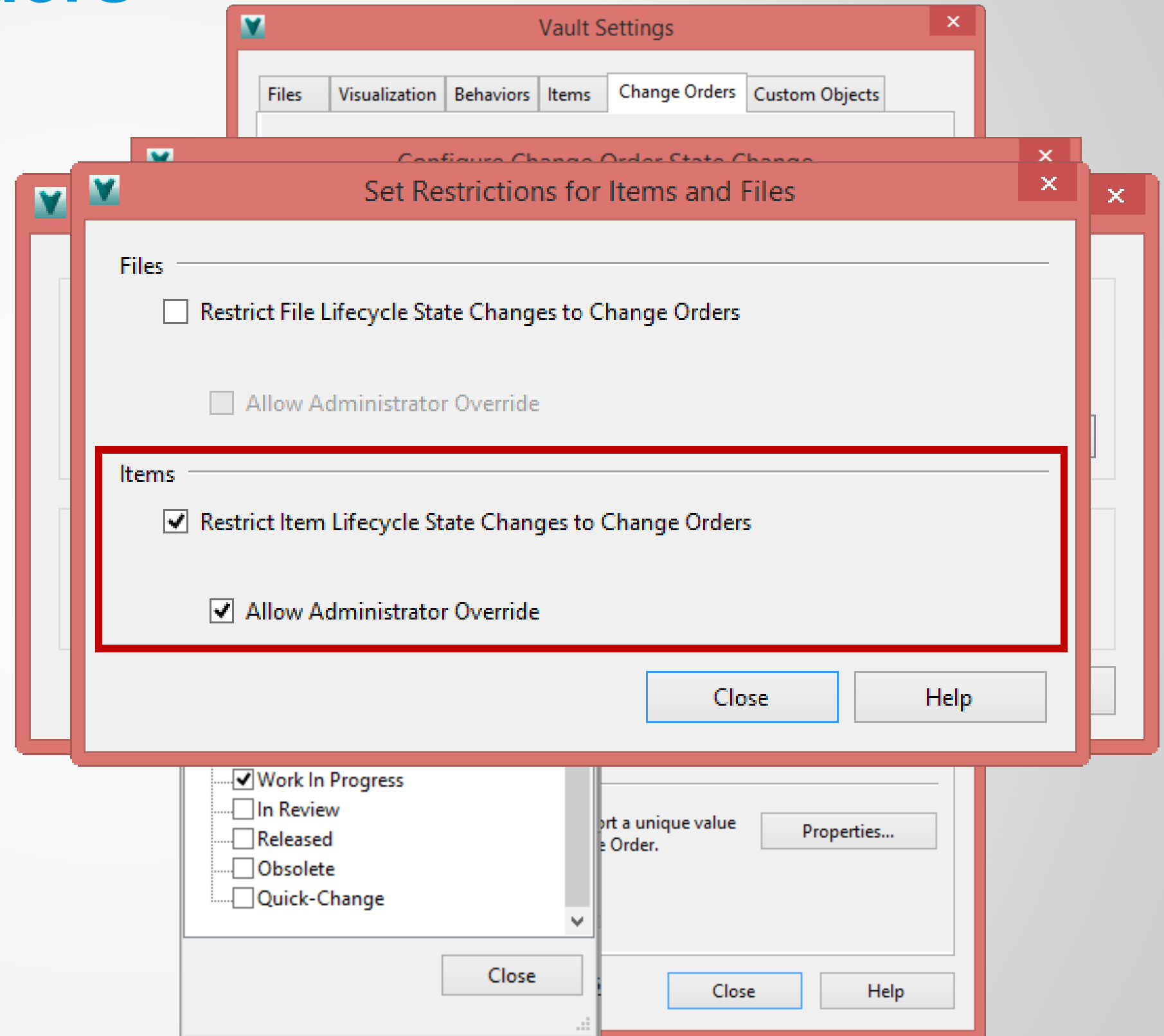
Multi-Level All Rows

Find Clear

Item	Position Number	Quantity	Title (Item, CO)
	-	-	Blower Assembly
	3	1 Each	Motor Assembly
	1	1 Each	Shaft
	5	1 Each	Exhaust
	1	20 Each	Helical Spring Lock Washers 0
	8	1 Each	Fan Shaft
	44	1 Each	Fan Shaft
	13	30 Each	Plain Washer (Inch) 1/4 - nar...
	14	30 Each	Helical Spring Lock Washers 0
	33	8 Each	Plain Washer (Inch) 1/2 - wi...
	34	8 Each	Helical Spring Lock Washers 0
	37	4 Each	Plain Washer (Inch) 3/8 - wi...
	38	4 Each	Helical Spring Lock Washers 0

Settings for Change Orders

- Restrict Lifecycle state changes of files and items to ECOs
- Restrict ECO state change based on the lifecycle state of file and item records



Subcomponent Links

- Subcomponents links instead of Standard Component links
- Configurable

Link Type	Read Properties?	Write-back Properties?	Create the Link Automatically?	Update Item?
Standard Component	No	Yes	Yes	No
Primary Subcomponent	Yes	Yes [#]	Flexibility: Yes/No	Yes
Secondary Subcomponent	No	Yes [#]		No

Configure Assign Item

Duplicate Items

☒ Auto-select first duplicate item

☒ Allow user override

Link Type	Read Properties?	Write-back Properties?	Create the Link Automatically?	Update Item?
Standard Component	No	Yes	Yes	No
Primary Subcomponent	Yes	Yes [#]	Flexibility: Yes/No	Yes
Secondary Subcomponent	No	Yes [#]		No

☐ Group BOM rows as per the design BOM

Subcomponent Links

Type of link to be created for subcomponents during Assign / Update Item:

☒ Primary and Secondary subcomponent links

☐ Standard component links

Other

☐ Disable Assignment for Design Document Files

OK

Cancel

Help

Thin Client Changes

On/Off Rows

- On rows only by default
- Configurable

File and Item Display Settings

Filters to limit the types of data that are displayed

Items

☒ Released items

History

☒ Latest version

Bill of Materials

☒ ON rows ☐ OFF rows ☐ Both rows

Comment
Controlled By Change Order
Current Owner

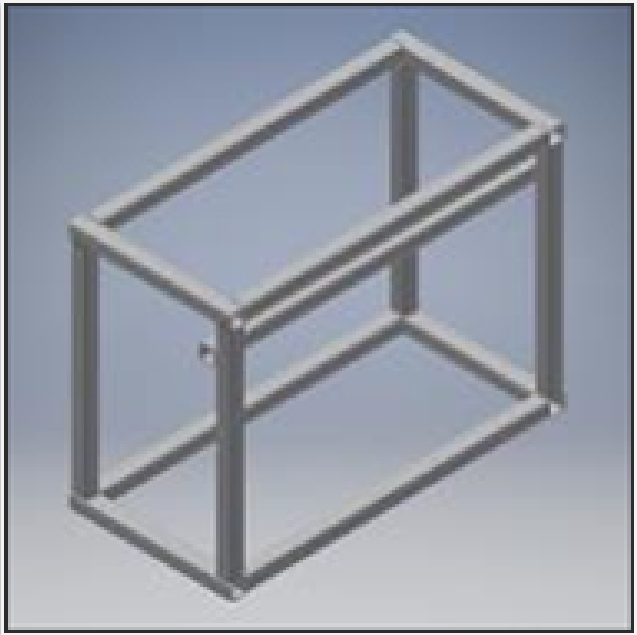
NOV57KYTZ1A\AUTODESKVAULT

Upper - Derived
Upper - Insert

Groups and Multiple BOM Rows

- Based on Server settings
- BOM Row properties

BF - 002



Title (Item,CO): Frame Assembly
Revision: A
State: Work In Progress
Category Name: Assembly

System

Attachments

Category Glyph

Category Glyph (Historical)

Category Name

Assembly

Number ▲

Quantity

ANSI 2x2x 3_16

389.189

1 Total Items, 1 First-Level Items, 1 Unique Items

ANSI 2x2x 3_16

20.5

ANSI 2x2x 3_16

20.5

ANSI 2x2x 3_16

20.5

ANSI 2x2x 3_16

38.465

ANSI 2x2x 3_16


38.465

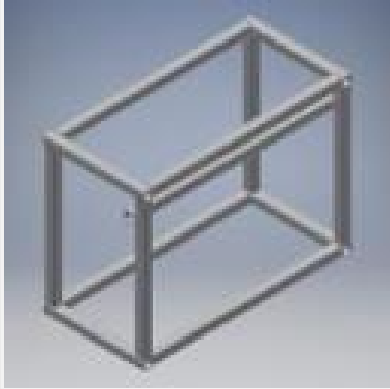
ANSI 2x2x 3_16

20.5

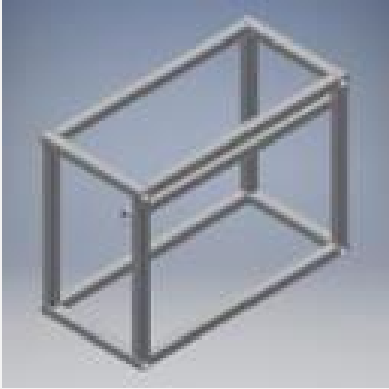
Item Versions

- Latest by default
- Configurable and all versions can be shown on History





BF - 002
Revision: A
Title (Item,CO): Frame Assembly
State: Work In Progress
Category Name: Assembly
Version: 2



BF - 001
Revision: A
Title (Item,CO): Frame Assembly
State: Work In Progress
Category Name: Assembly
Version: 1

Showing 2 of 2

File and Item Display Settings

Filters to limit the types of data that are displayed

Items

☒ Released items

History

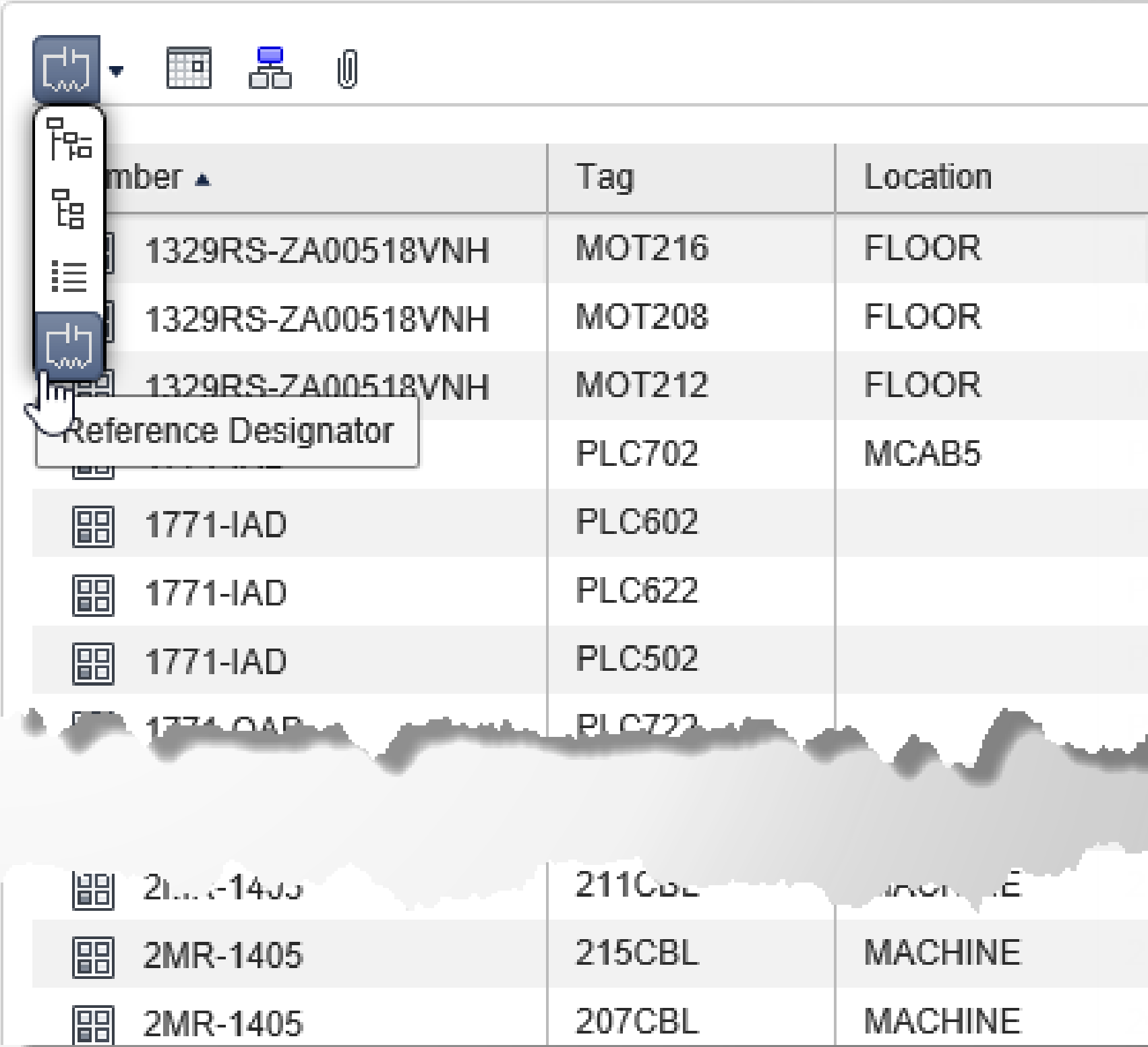
☒ Latest version

Bill of Materials

☒ ON rows ☐ OFF rows ☐ Both rows

Reference Designators

- Additional view for AutoCAD Electrical BOM



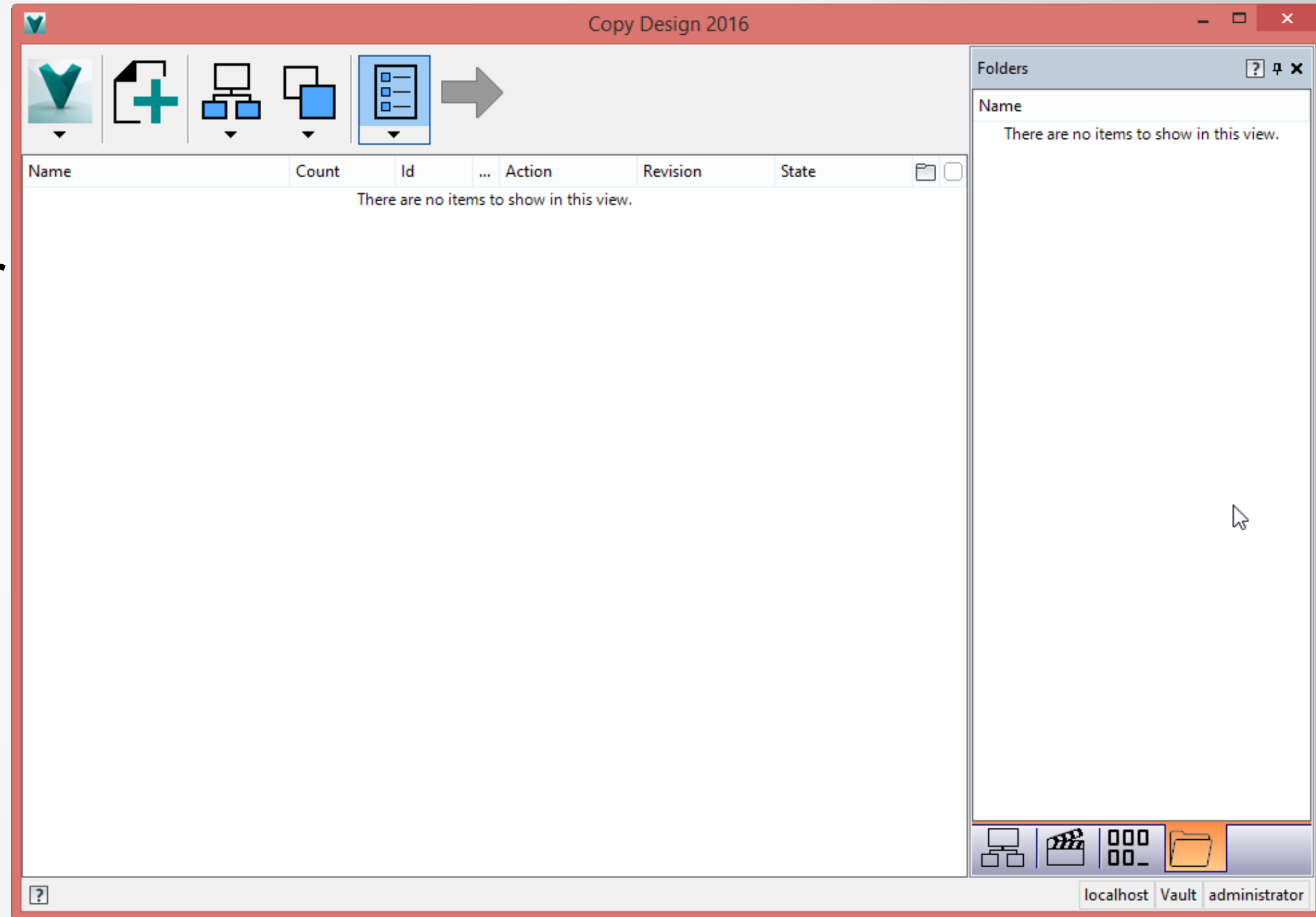
The screenshot shows the 'Reference Designator' view in AutoCAD Electrical. A toolbar at the top contains icons for a circuit diagram, a table, a hierarchy, and a clipboard. A vertical menu on the left shows the 'Reference Designator' option selected. The main area displays a table with three columns: 'Number', 'Tag', and 'Location'. The table lists various components, including three instances of '1329RS-ZA00518VNH' (motors) and three instances of '1771-IAD' (PLCs). A mouse cursor is pointing at the 'Reference Designator' menu item.

Number	Tag	Location
1329RS-ZA00518VNH	MOT216	FLOOR
1329RS-ZA00518VNH	MOT208	FLOOR
1329RS-ZA00518VNH	MOT212	FLOOR
1771-IAD	PLC702	MCAB5
1771-IAD	PLC602	
1771-IAD	PLC622	
1771-IAD	PLC502	
1771-IAD	PLC722	
2MR-1405	211CBL	MACHINE
2MR-1405	215CBL	MACHINE
2MR-1405	207CBL	MACHINE

Copy Design Changes

New Interface

- Stand-alone app
- Installed with VE
- Launch from VE or separately
- Server-side copy



Reference-based copy

- Ability to view number of references
- Actions apply to all references by default
- Configurable so that actions apply to selected reference

The screenshot displays the 'Copy Design 2016' application window. The main area features a table with the following columns: Name, Count, Id, ..., Action, Revision, and State. The table lists various components and their reference counts. The 'E-Clip.ipt' component is highlighted, showing a count of 2. To the right, the 'Where Used' panel shows a tree view of the source file 'E-Clip.ipt' and its references to 'Suspension.iam' and 'Shock Strut.iam'. The bottom status bar indicates the user is 'administrator' on 'localhost'.

Name	Count	Id	...	Action	Revision	State
Suspension.iam	1	79			A	Work in Progress
ANSI B18.22.1 - No. 5 - ...	1	0			A	Work in Progress
E-Clip.ipt	2	1			A	Work in Progress
Front Hub Carrier R.iam	1	2			A	Work in Progress
Front Lower Arm Brace...	1	3			A	Work in Progress
Front Lower Hinge Pin...	1	4			A	Work in Progress
Front Shock Brace.ipt	1	5			A	Work in Progress
front side plate l.ipt	1	6			A	Work in Progress
front side plate r.ipt	2	7			A	Work in Progress
Front Suspension Adju...	1	8			A	Work in Progress
Front Upper Arm Mou...	1	9			A	Work in Progress
Front Upper Hinge Pin...	1	10			A	Work in Progress
ISO 4035 - M3ISO.ipt	1	11			A	Work in Progress
ISO 4762 - M3 x 12ISO.ipt	1	12			A	Work in Progress
ISO 4762 - M3 x 20ISO.ipt	1	13			A	Work in Progress
Shock Bushing.ipt	1	14			A	Work in Progress
Shock Absorber Front.i...	1	15			A	Work in Progress
Front Hub Carrier L.iam	1	16			A	Work in Progress
Front Lower Arm.iam	1	17			A	Work in Progress
front Upper arm.iam	1	18			A	Work in Progress

Numbering schemes

- Ability to access Vault numbering schemes
- Dedicated panel for numbering schemes

Copy Design 2016

Numbering

Engineering

Old Name	New Name
Suspension.iam	ENG-####.iam

Name	Count	Id	...	Action	Revision	State
ENG-####.iam	1	79		Copy	A	Work in Progress
ANSI B18.22.1 - No. 5 - ...	1	149			A	Work in Progress
E-Clip.ipt	2	150			A	Work in Progress
Front Hub Carrier R.iam	1	151			A	Work in Progress
Front Lower Arm Brace...	1	152			A	Work in Progress
Front Lower Hinge Pin...	1	153			A	Work in Progress
Front Shock Brace.ipt	1	154			A	Work in Progress
front side plate l.ipt	1	155			A	Work in Progress
front side plate r.ipt	2	156			A	Work in Progress
Front Suspension Adju...	1	157			A	Work in Progress
Front Upper Arm Mou...	1	158			A	Work in Progress
Front Upper Hinge Pin...	1	159			A	Work in Progress
ISO 4035 - M3ISO.ipt	1	160			A	Work in Progress
ISO 4762 - M3 x 12ISO.ipt	1	161			A	Work in Progress
ISO 4762 - M3 x 20ISO.ipt	1	162			A	Work in Progress
Shock Bushing.ipt	1	163			A	Work in Progress
Shock Absorber Front.i...	1	164			A	Work in Progress
Front Hub Carrier L.iam	1	165			A	Work in Progress
Front Lower Arm.iam	1	166			A	Work in Progress
front Upper arm.iam	1	167			A	Work in Progress

None

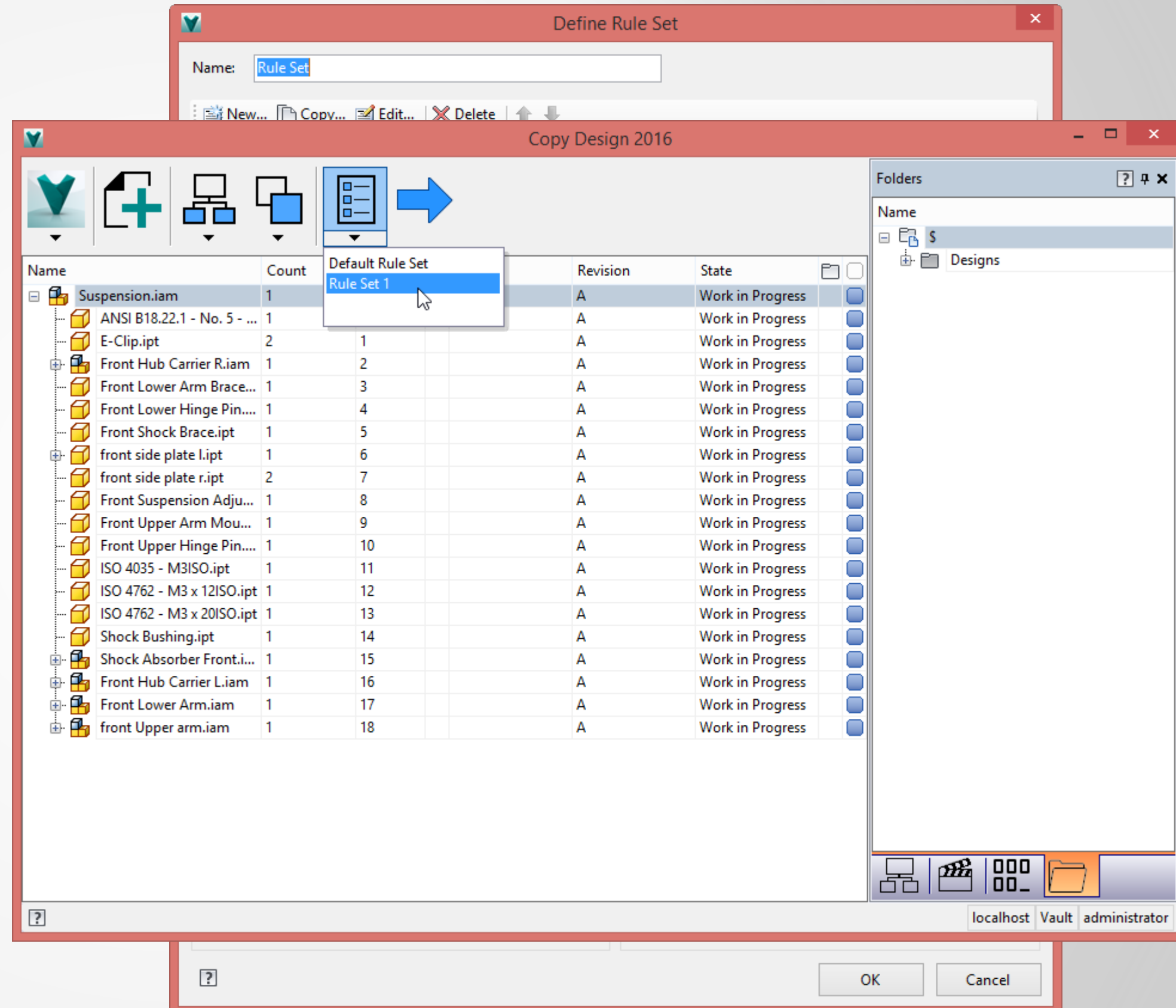
Engineering

General

localhost Vault administrator

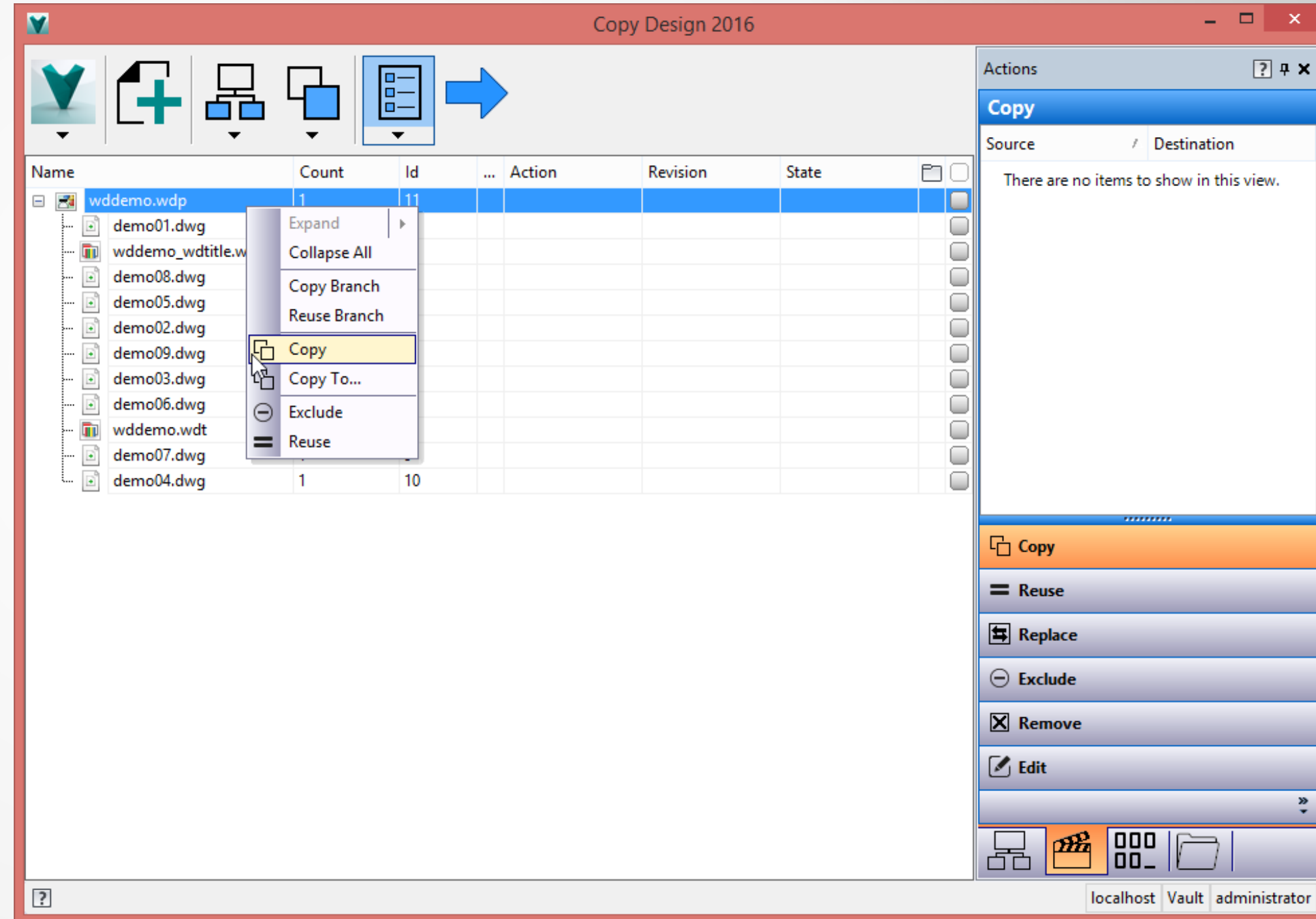
Properties

- Rules can be defined for properties
- Multiple rule sets can be defined
- A rule set can be selected to apply during copy operation



AutoCAD Electrical

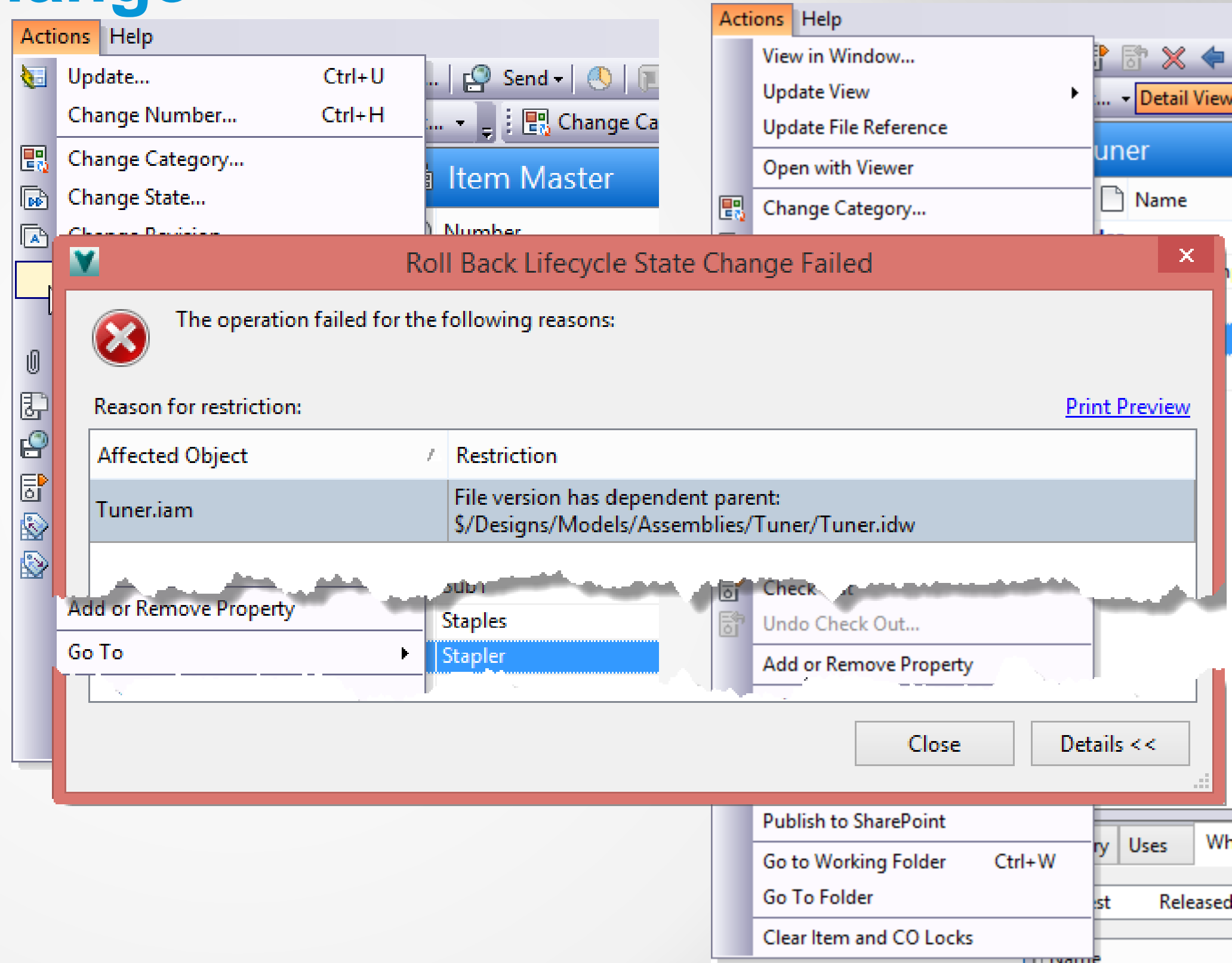
- ACAD files can be copied
- *ACADE files can be moved and renamed*



Rollback Lifecycle State Change

Rollback LC state change

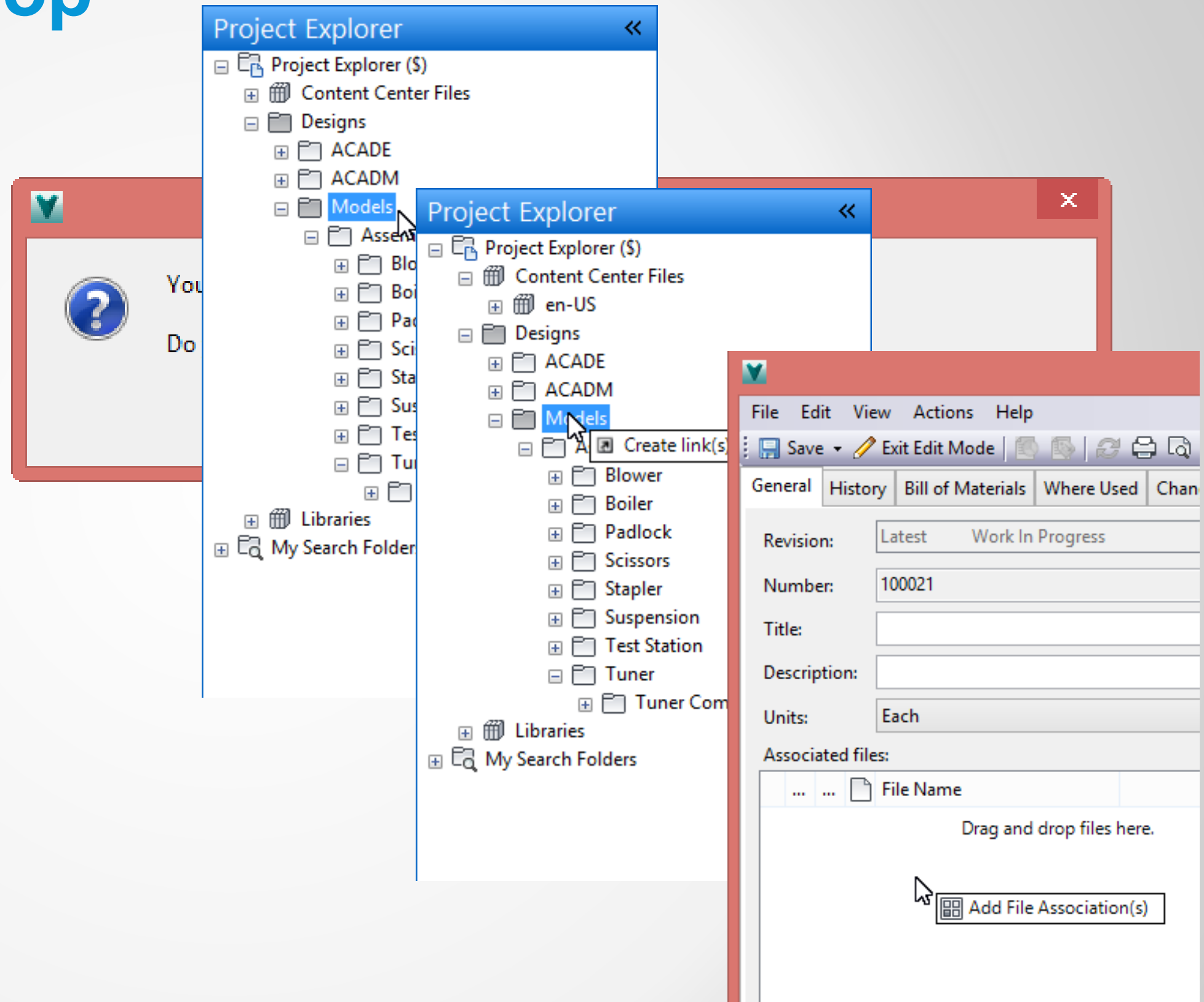
- Available for items
 - Item Editor Level 2
- Also available for files
 - Doc. Manager Level 2
- Only one file at a time can be rolled back
- Child cannot be rolled back when a parent is referencing it



Usability

Enhanced Drag & Drop

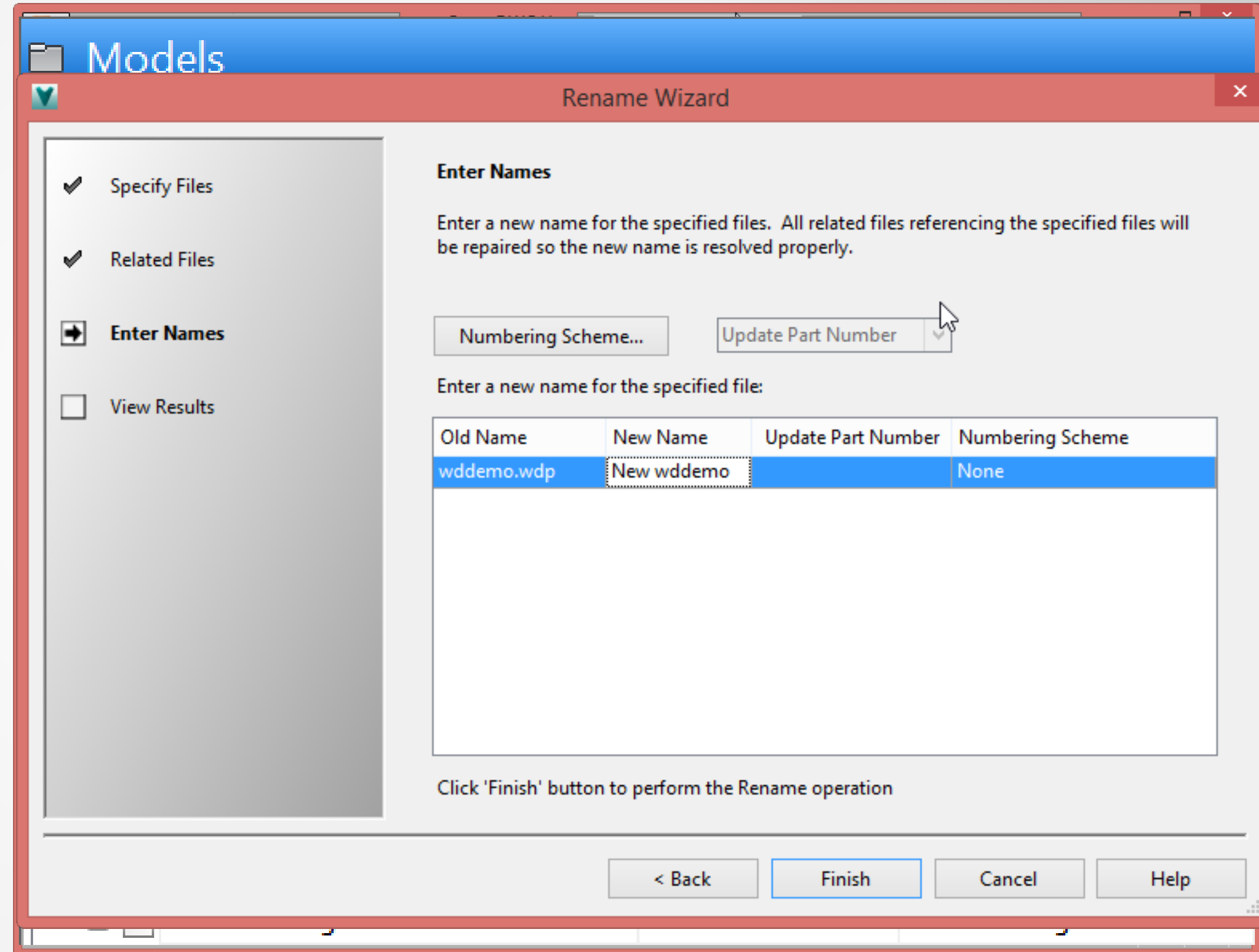
- Prompt for Move
 - Off by default
- Tooltip showing the resulting action



CAD Integrations

CAD Integration

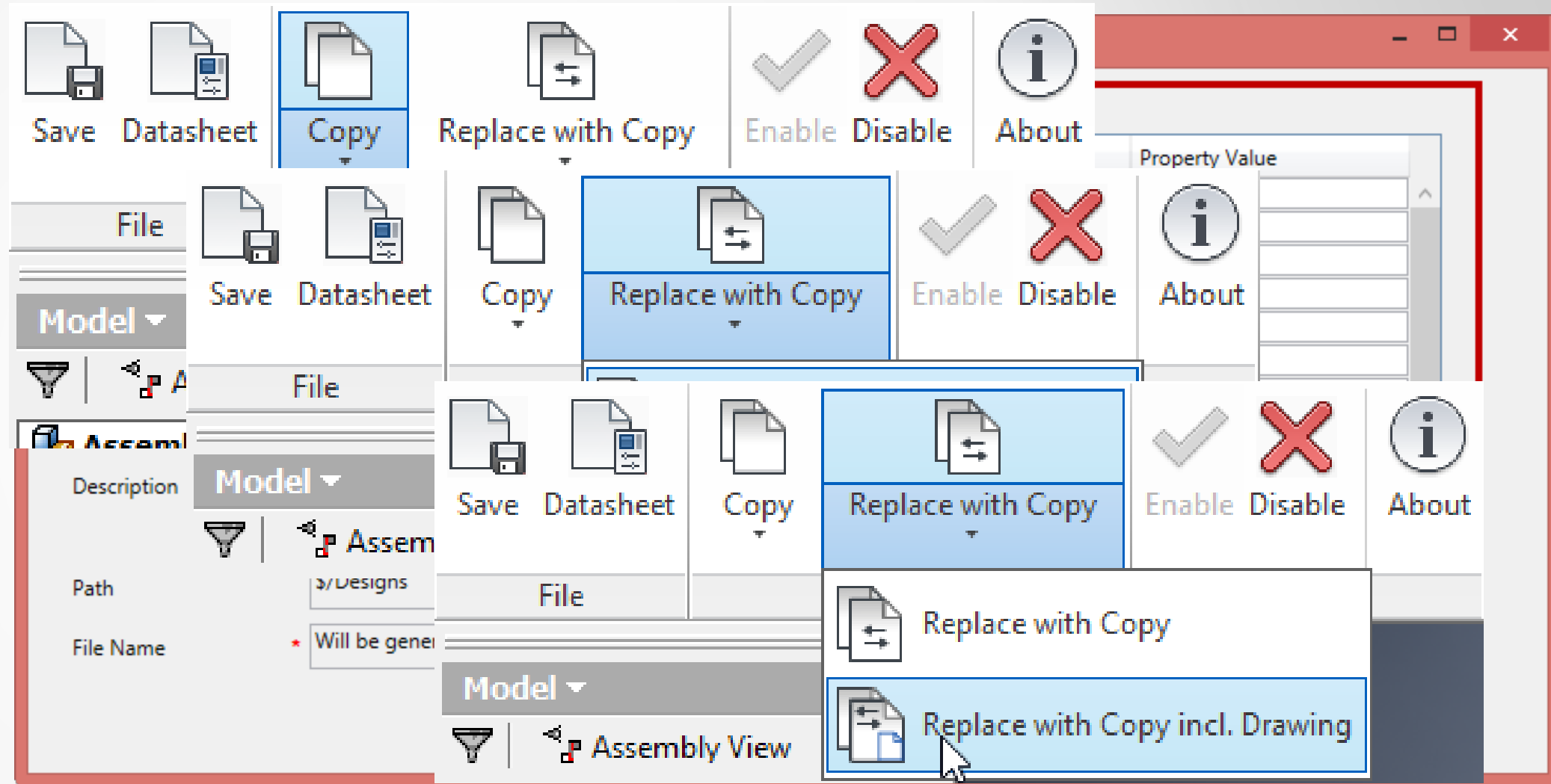
- Inventor
 - Support for AnyCAD
 - AutoCAD Drawing Underlay
- ACADE
 - Move & Rename



Data Standard

Data Standard

- Copy incl. Drawing
- Replace with Copy
- Replace with Copy incl. Drawing
- Category Properties on New File dialogs



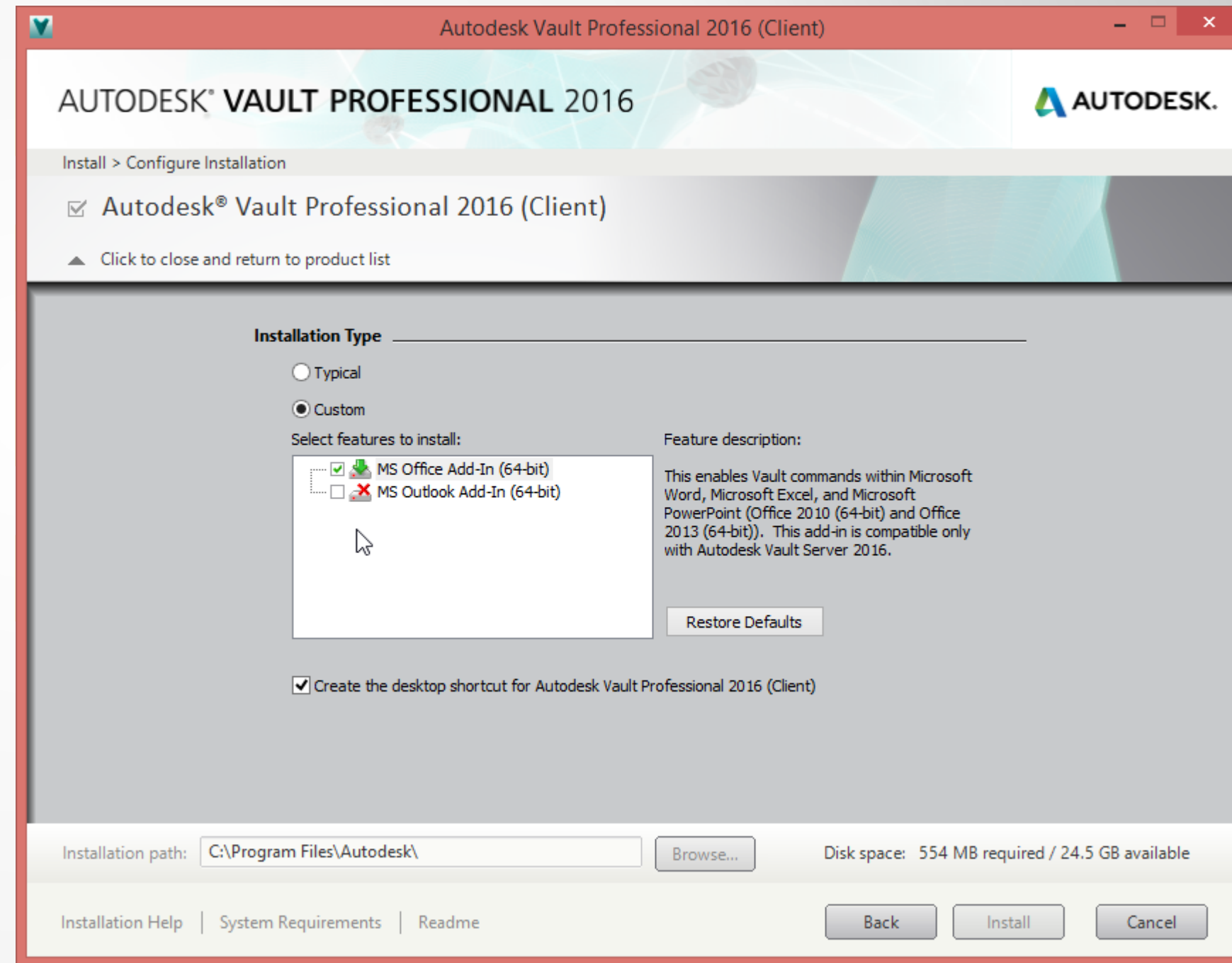
Recommended Classes – Data Standard

- PL11369 – Vault Data Standard 2016 – An Introduction
 - Tuesday, 3:00PM – 4:00PM (Marco Mirandola)
- PL11397 – Into the Habit Hole – Advanced Data Standard Configuration and Customization
 - Wednesday, 8:00AM – 9:30AM (Marco Mirandola)

Vault Office

Vault Office

- Vault for the non-CAD user
 - Different license type
- New installer option
 - Vault Office (Client)
 - Office & Outlook Add-Ins available



Recommended Classes – Vault Office

- PL10600 – Beyond Engineering to Sales, Purchasing and Management with Vault Office
 - Wednesday, 3:00PM – 4:00PM (Eike Hengst)

Be heard! Provide AU session feedback.

- Via the Survey Stations, email or mobile device.
- AU 2016 passes awarded daily!
- Give your feedback after each session.
- Give instructors feedback in real-time.



Voice of Customer

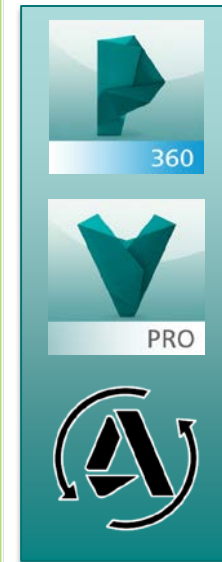
Be Heard and Win!

Help shape the future Autodesk experience...

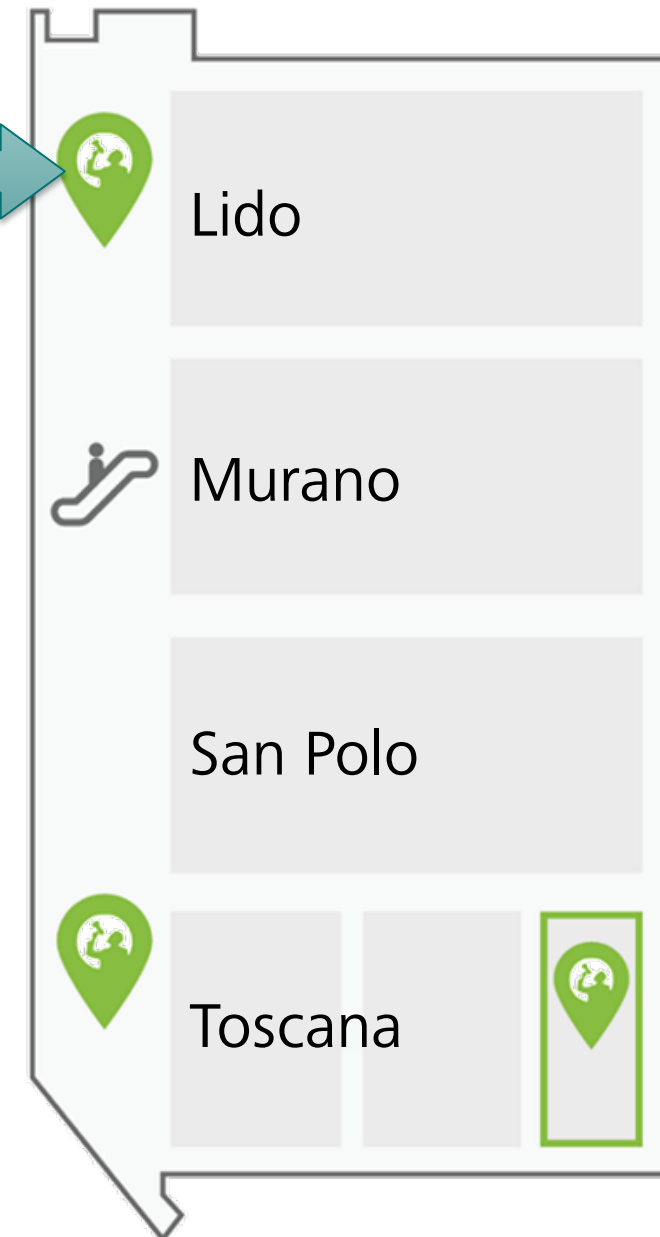
9am – 6pm every day



...and maybe win a
GoPro camera!



Venetian Level 3



For more information visit autode.sk/AU2015VOC

Other Vault Classes

Vault Classes

- PL10597 – Behaviors 101 for Younglings
 - Tuesday, 3:00PM – 4:00PM (Allan & Ralf)
- PL11233 – Behaviors 201 for Padawan Learners
 - Wednesday, 1:00PM – 2:00PM (Ralf & Irvin)
- PL10386 – Autodesk Vault – Looking into the Crystal Ball
 - Thursday, 8:00AM – 9:30AM (Mikel & Allan)
- Behaviors 301 for the Jedi Master
 - Thursday, 10:00AM – 11:30AM (Irvin & Ralf)
- PL10733 – The Power of Custom Objects
 - Thursday, 10:00PM – 11:30PM (Robert Stein & Adam Luttenbacher)

Vault Classes

- PL11390 – Integration Options for Vault
 - Thursday, 1:00PM – 2:00PM (Kevin, Rodney & Marco)
- PL10593 – Data Management Avengers III
 - Thursday, 3:00PM – 4:00PM (Allan, Irvin, Anil, Adam, Ralf & Bill)

More Questions? Visit the AU Answer Bar

- Seek answers to all of your technical product questions by visiting the **Answer Bar**.
- Open daily 8am-10am and Noon-6pm and located just outside of Hall C on Level 2.
- Staffed by Autodesk developers, QA, & support engineers ready to help you through your most challenging technical questions.



