



# WHAT'S NEW SOLIDWORKS PDM 2024





# Contents

SOLIDWORKS PDM	3
Assembly Visualization	4
Customize Assembly Visualization Properties Dialog Box	5
Downloading Specific Versions of a File in Web2	6
Download Version Dialog Box	6
Download Version Dialog Box - Small Screen Layout	7
File Type Icons	8
Check Out Option in Change State Command	9
Progress Dialog Boxes (2024 SP1)	9
Viewing Check-Out Event Details	10
System Variables	11
Viewing License Usage	
Data Security Enhancements (2024 SP1)	
SOLIDWORKS PDM Performance Improvements	
Assigning Data Cards to Files and Folders of a Template (2024 SP1)	14
Where Used Card Dialog Box	15
Folder Card Variables in Web2 (2024 SP1)	15
SOLIDWORKS PDM Add-in Enhancements (2024 SP1)	
Handling Large Design Review (LDR) and Detailing Mode in the SOLIDWORKS PDM	
Add-in (2024 SP2)	
Displaying the Preview Tab for Search Results (2024 SP2)	
Bill of Materials (BOM) View - Flattened Type (2024 SP2)	

# SOLIDWORKS PDM

#### Topics:

- Assembly Visualization
- Downloading Specific Versions of a File in Web2
- File Type Icons
- Check Out Option in Change State Command
- Progress Dialog Boxes (2024 SP1)
- Viewing Check-Out Event Details
- System Variables
- Viewing License Usage
- Data Security Enhancements (2024 SP1)
- SOLIDWORKS PDM Performance Improvements
- Assigning Data Cards to Files and Folders of a Template (2024 SP1)
- Folder Card Variables in Web2 (2024 SP1)
- SOLIDWORKS PDM Add-in Enhancements (2024 SP1)
- Displaying the Preview Tab for Search Results (2024 SP2)
- Bill of Materials (BOM) View Flattened Type (2024 SP2)

SOLIDWORKS<sup>®</sup> PDM is offered in two versions. SOLIDWORKS PDM Standard is included with SOLIDWORKS Professional and SOLIDWORKS Premium, and is available as a separately purchased license for non-SOLIDWORKS users. It offers standard data management capabilities for a small number of users.

SOLIDWORKS PDM Professional is a full-featured data management solution for a small and large number of users, and is available as a separately purchased license.

#### Assembly Visualization



You can access SOLIDWORKS PDM variables in the SOLIDWORKS Assembly Visualization tool.

The SOLIDWORKS PDM variables are listed under **Properties** in the **Custom Column** dialog box of the Assembly Visualization tool. You can select variables, for example, **PDM-<Checked Out By>** or **PDM-Date**under the **SOLIDWORKS PDM** section in **Properties** and then view them in the Assembly Visualization panel.

🗸 🗊 SOLIDWORKS	
🗸 🍕 Assembly Visualizaton Properties	
🏟 Props	New List
🏟 Visualization Properties List	Export
國 Revision Table	
🗑 Toolbox	

#### To view SOLIDWORKS PDM custom variables in Assembly Visualization:

- 1. In the SOLIDWORKS PDM Administration tool, right-click **SOLIDWORKS** > **Assembly Visualization Properties**and click **New List**.
- 2. In the Customize Assembly Visualization Properties Visualization Properties List dialog box, create a property list from the available variables.You can create multiple lists of properties and view them in Assembly Visualization depending on the permissions.

#### Customize Assembly Visualization Properties Dialog Box

You can use this dialog box to specify variables for specific users or groups that they can view in the SOLIDWORKS Assembly Visualization tool.

#### To open this dialog box:

- 1. In the Administration tool, expand **SOLIDWORKS**.
- 2. Right-click Assembly Visualization Properties and select New List.

#### Name

Specifies the name of the new properties list.

#### Variables

Variable	Displays the selected variable.
Name	Displays the name of the selected variable.
Add	Adds the selected variable.
Delete	Deletes the selected variable.
Up and down arrows	Moves the selected variables up or down.

#### **Selected Variable**

Variable	Displays the list of available variables and lets you select a variable from the list.
Name	Displays the name of the selected variable and lets you update the name.

#### Users

Lists users and lets you specify users who can select the variables and view the list.

#### Groups

Lists groups and lets you specify groups whose members can select the variables and view the list.

#### Downloading Specific Versions of a File in Web2

S SOLIDWORKS   PDM	Check Out (1) Lownload
Download Version	Download
speaker.sldasm 3 / 3	Download with References
Version	
3, Checked in, Admin, 2023-05-12 13:13:44	Download Version
Settings	Lever roma
Download with References	
Version of references	
Latest	

SOLIDWORKS PDM Web2 lets you download a specific version of a file and its references.

You cannot select and download multiple files in a single operation.

The Download Version dialog box lets you select the version and settings for download. **To access this dialog box**:

- 1. In the File list, select a file:
  - Large screen layout. Click **Download** > **Download Version**.
  - Small screen layout. Touch **Download** and then touch **Download Version**.

#### Download Version Dialog Box

You can use the Download Version dialog box to download a specific version of a file and its references.

#### To open this dialog box:

• Select a file and click **Download** > **Download Version**.

#### Version

Select the version of the file to download.

#### Settings

The collapsible option that displays the download settings options for files.

Download with references	Downloads the file v	vith its references.
Version	Latest	Downloads the latest version.
	Referenced	Downloads the referenced versions.
Preserve relative paths	Preserves the paths creates a folder stru When cleared, the for referenced files are to the parent file.	of references relative to the parent file and cture as required. older hierarchy is flattened, and all uploaded to the same destination folder as
Include drawing	Downloads the draw to download.	ing files associated with the file selected
Include simulation	Downloads the SOLI with the selected file	DWORKS Simulation results associated es.

#### Files

Lists the file references to download. The file list includes customizable columns such as **State**, **Version**, **Size**, and **Path**. Click **Show More** and specify the columns to display.

#### Total Files to Download

Displays the total number of files and the count of individual files to download.

#### Download

Downloads the selected files. When the download is complete, a message appears with the number of downloaded files on the upper bar. If Web2 cannot download any references, a warning message appears.

#### Download Version Dialog Box - Small Screen Layout

You can use the Download Version dialog box to download a specific version of a file and its references.

#### To open this dialog box:

- 1. Select a file and touch **Download**.
- 2. Touch **Download Version**.

Filename and latest version	Displays the version list and where you can select a version to download.
Settings	Lets you specify options.

## File Type Icons

	 		File Name	lvbe
		·······		<b>%</b>
			Cut-List-Item3	
			L 25.40 × 25.40 × 3.175 <1>	۹
			Sheet<1>	ġ
			L 25.40 X 25.40 X 3.175<1> Sheet<1>	\$

You can view the file type icons for weldment cut list items and the files that were shared using pasted shared overlays.

These icons are available in the dialog boxes for:

- File Details
- File Operations
- Web2

The type icons for cut list items are not available for SOLIDWORKS BOMs.

## Check Out Option in Change State Command

Chang	hange State - Do Transition 'Submit fo	or Approval'		1		
Туре	File Name	Warnings	Check Out	Change State	Version	Fot
-	base.SLDPRT				1/1	
2	<ul> <li>BASEWELDMENT.SLDDRW</li> </ul>				1/1	Į.
4	BASEWELDMENT.SLDPRT				1/1	

You can check out a file after the change state operation completes.

You can customize the column set of the Do Transition dialog box to include the **Check Out** system variable. If you select **Change State** and **Check Out** for a file, the file is checked out after its state changes.

Progress Dialog Boxes (2024 SP1)

Copying Tree		
Adding files		
Finishing add operation		
6 of 10 files		

In the SOLIDWORKS PDM File Explorer, the progress dialog box of certain operations displays more information.

The Change State and Copy Tree progress dialog boxes have two progress bars:

- The first progress bar has the primary steps or actions of the overall operation, such as **Copying Files** and **Copying Variables**.
- The second progress bar has detailed information such as secondary steps, total number of files, etc.

The Check In and Reading File References progress dialog boxes have a single progress bar that displays the current action and file names.

# Viewing Check-Out Event Details

logical History on Base.SLDPRT				
🔒 View 🛛 🖟 Get 🛛 릚 Save	Compare	🛃 Print		
Event	Version	User	Date	Comment
🗳 Check out	1	Admin	2023-05-08 16:44:39	Checked out by 'A
🗖 Initial transition to 'Under Editing	j' 1	Admin	2023-04-28 18:53:53	State changed by
🕤 Undo Check out	1	Admin	2023-04-28 18:53:53	Undo Checked out
🎦 Created	1	Admin	2023-04-28 18:53:11	
Details				
Name:		Ver	rsion:	
User:		c	Date:	
Comment:			^	
			· · · · · · · · · · · · · · · · · · ·	

In SOLIDWORKS PDM File Explorer, you can view details of check-out and undo check-out events in the History dialog box of a file.

Along with the other details, you can see which user has performed the operation.

### System Variables

Columns Permission	s				
Preview:	<associated item=""></associated>	~			
Name	<category></category>		ype	State	
<	<checked by="" out=""></checked>				
Sort Column	<date modified=""></date>				
at less b	<days in="" state=""></days>				
<name></name>	<id></id>	_	~	1	
	<last historic="" state=""></last>	_			
Columns:	<name></name>				
Variable	<revision (latest="" version)=""></revision>		1	Width	
<name></name>	<revision (local="" version)=""></revision>		1.	100	
<checked by="" out=""></checked>	<size></size>			100	
<checked by="" odd=""></checked>	<state></state>			100	
<3/26 >	< type >			100	
<type></type>	SW Detailing Mode		e	54	
<state></state>	SW Last Saved With		1	100	
<days in="" state=""></days>	Album		1	100	
<date modified=""></date>	Approved by		1	100	
<checked in="" out=""></checked>	Approved On		1	100	
<category></category>	Assembly No.		1	100	
<associated item=""></associated>	Attachments		1	100	
	Author				
	Body				
Add	BOM Quantity			alize system :	
Add	Checked Date		1000	canco system	
Selected column	ClientSubmitTime	~			
Variable:	<associated item=""></associated>	~	Confi	gurations:	

System variables are more available and easier to access.

- The following system variables are available in the **File List**, **Quick Search Result**, and **Search Result** column set types:
  - <Last historic state>
  - <Last historic workflow>
  - <Revision (Latest version)>
  - <Revision (Local version)>
- The **<Days in State>** system variable is available as a default column in **File list**.
- The SOLIDWORKS PDM task pane add-in has more system variables.
- In SOLIDWORKS PDM File Explorer, the addition of more system variables improves the user interface of the Version tab.

🔒 Preview 🗐 Data Card 📣 Version 2/3 🏢 Bill of Materials
Workflow: Default Workflow
State: 🔀 Approved
Days in state: 0 days
Category: -
Latest version: 3 / 3
Latest version comment: Checked in by transition
Revision (Latest version): A
Local version: , 2 / 3
Local version comment: Checked in by transition
Revision (Local version): No revision
Last historic workflow: Default Workflow
Last historic state: 📓 Waiting for Approval

## Viewing License Usage

2	
	> 🗞 Categories
	> 🛃 Cold Storage Schemas
	> 🎹 Columns
	🔉 🥔 Data Import/Export
	l EXALEAD OnePart
	> 👔 File Types
	C Indexing
	W Items
	V license
	License Lisage
	Server List
l	C Server Ente
	> 🗎 Lists
	🚖 Message System
	> 🔔 Notification Templates
	> 提 Replication
	> 🔽 Revisions

You can view license details without any special administrative permissions.

In the Administration tool, the **License** node has the following subnodes:

• Server List. Lets you edit license servers.

The administrative permission **Can update license keys** is renamed as **Can update license server**. You need this permission to edit license servers.

• License Usage. Lets you view license details. This helps you to ask users to log out if they are not using the tool, request more licenses from the administrator, or decide whether you need to switch to a different license type.

#### Data Security Enhancements (2024 SP1)



In SOLIDWORKS PDM File Explorer and Web2, unauthorized users cannot view file information in file view tabs or in file operations and file reference dialog boxes.

The warning message **No rights to get latest or attached version** displays for the following:

- File view tabs:
  - Contains
  - Where Used
  - Bill of Materials (Computed BOMs and Named BOMs)
- File operations dialog boxes
- File reference dialog boxes

#### SOLIDWORKS PDM Performance Improvements

SOLIDWORKS PDM 2024 has improved the performance of file-based operations.

The following operations are approximately two times faster:

- Add files
- Change state

• Copy tree

The copy tree to compressed archive operation is orders of magnitude faster.

<ul> <li>Notes-General.docx</li> <li>More facturing</li> <li>Folder Card</li> <li>Group Rights User Rights Copy Variables</li> <li>Folder Card</li> <li>Doc_2024_sp1_231007\Folder Card</li> <li>Add Remove Card Editor</li> </ul>		💫 Edit Template		
> (a) Variables   > (b) Variables   > (c) Variables   > (c) Variables   > (c) Variables   > (c) Variables   Icon   Users and Groups   Folders Folders Folder Files in the folder 'IT': File Name Since Files in the folder 'IT': File Name Since Folder Cards Folder Card: Folder Card Folder Card Add Remove Card Editor	> 🔀 Tasks V 🖏 Templates E IndustryTem	Template Name Execute as	Please add files and folders to your template enclosed in %%, like this: "MyBmp%proj%.	. Both file and folder names can cor mp" (where proj is a variable).
	<ul> <li>B Users and Group</li> <li>W Variables</li> <li>Workflows</li> </ul>	Template Cards • Files and Folders Icon Users and Groups	Folders	Files in the folder 'IT': File Name S Notes-General.docx photo.PNG riables Folder Card File Cards d

Assigning Data Cards to Files and Folders of a Template (2024 SP1)

In the SOLIDWORKS PDM Administration tool, while creating and editing a template, you can assign a folder card and multiple file cards to a folder.

In SOLIDWORKS PDM File Explorer, right-click and click **New** in the right pane. When the software creates the files and folders structure, the respective data cards are assigned automatically.

Changes to the file extensions for a card, assigned to a template, outside of the template configuration are not recognized.

✓ ■ Cards		
> File Cards		
🗸 🚺 Folder Cards		
🔚 Folder Carr	4	
> 🖏 Item Cards	Open	
> Q Search Cards	Show Where Used	
	Fynort	
Where Used - Folder Ca	rd	×
The card is used in the fo	llowing places:	
Name	Used In	
NoutingTemplate	IndustryTemplate\Industry\IT\Pro RoutingTemplate\Assemblies\Prop	perties\Folder Card erties\Folder Card
a Industry Template	IndustryTemplate\Industry\Sales\	Properties\Folder Card

In the SOLDWORKS Administration tool, under **Cards**  $\square$ , for each file, folder, and template card, you can right-click and see where the card is used. For example, click **Cards** > **Folder Cards** > **Folder Cards** > **Show Where Used**. This option is useful when deleting a file or a folder data card.

Where Used Card Dialog Box

You can use this dialog box to display where a file, folder, or template card is used.

#### To open this dialog box:

- 1. In the Administration tool, expand **Cards** .
- 2. Expand a file, folder, or template card menu, for example Folder Card
- 3. Right-click the card.

You can see a list of all the places where the card is used:

Name	Displays the template using the card.
Used In	Displays where the card is used.

#### Folder Card Variables in Web2 (2024 SP1)

<b>35 SOLID</b> WORKS I PDM	-		
□ Name ≜	Project number	Project Name	Document
U Weldment	123	Weldment Project	t
Speaker	201	Speaker	
Hand truck	101	Hand truck	

In Web2, you can view data card variables for folders in a folder list. The values for custom columns for the folders are displayed in the list view of the large screen layout.

SOLIDWORKS PDM Add-in	Enhancements	(2024 S	SP1)
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«		SOLIDWORKS PE	M
<b>\$ 1 1 1 1 1 1 1 1 1 1</b>	<b>E P</b>	1 👂 😵 🍕	) 🗟 🔓 Q
File / Variable	Value	Version Numb	oer   Checked Out By
🔫 🚯 Assem1 (Default)		-/1	Admin
Checked out by	Admin		
Category			
• 🦓 (=) Part1 ()		1/1	Admin
Checked out by	Admin		
Category			
Countersunk nib is ()		2/2	
Checked out by			
Catagony			

- When you save an assembly file as a part file, an internal component (saved as an external file in the vault), or a mirror component using the **Save as** command, a data card for the new file displays generating serial numbers and default values if set in the card.
- The SOLIDWORKS PDM add-in displays an icon overlay and supports all SOLIDWORKS PDM operations for components that are open in lightweight mode.
- You can enable the **Automatically optimize resolved mode, hide lightweight mode** option even when the SOLIDWORKS PDM add-in is active.

Handling Large Design Review (LDR) and Detailing Mode in the SOLIDWORKS PDM Add-in (2024 SP2)



For assemblies opened in **Large Design Review (LDR)** mode and for drawings opened

in **Detailing** mode, you can view the SOLIDWORKS files structure in the SOLIDWORKS PDM Task Pane (along with icons) similar to the FeatureManager design tree.

Because the display of both the FeatureManager design tree and the Task Pane tree are identical, you can work on the product structure with more clarity and ease.

Res Drav	卲 olve wing	CA Detail View	Dreak View	Crop View	Empty View														
Dra	wing	Anno	tation	- <sup>ررر ر</sup>	100	٠ġ٠	 100		0 <mark></mark>	··· 60	0 <sup></sup>	·· 400	) Li le	·· 50	»				
300400		obile Gi Anno Sheet	o antry tations :1 heet Fc Drawing	ormat1 View1 bile Gar	>	0		₽ C ▲					× (		File	Varia	• obile Mot	Gantry bile Gant	try

For the **Detailing** mode, the PDM Task Pane tree displays child components only to the first level similar to the FeatureManager design tree.

For the **Large Design Review (LDR)** mode, you can perform SOLIDWORKS PDM operations such as **Check in** and **Check out** on the components from both the FeatureManager design tree and the Task Pane assembly tree.



Displaying the Preview Tab for Search Results (2024 SP2)

In the SOLIDWORKS PDM File Explorer, you can display the **Preview** tab for an item in the search result (Quick, Integrated, and Standalone search) at the bottom or to the right side of the window using the existing **Preview Placement** option.

Preview 📓 Da	ata Card	Version	1/1 🖽 B	ill of Mater	ials 몲 Co	ontains	뫕 Where Used			
🌐 вом 👻	🔛 Activa	ted 🕶	🧐 tool v	ise.SLDAS	М					
📲 Flattened 👻	Show	Selected +	ected 👻 🐐 Version: 1 ('' <created>'') 👻</created>							
🔓 Indented	As Bui	lt 🕶	🍋 Defau	ilt <del>-</del>			_			
Parts Only	ype	File Name		Confi	Part Nu	Qty	State			
Battened :	4	tool vise.SLI	DASM	Default	tool vise	1	Under Editing			
	4	compound	center	Default	compo	1	Under Editing			
	4	lower plate.	SLDPRT	Default	lower pl	2	Under Editing			
	4	upper comp	oound	Default	upper c	1	Under Editing			
	4	eccentric.SL	DPRT	Default	eccentric	4	Under Editing			
	4	Saddle.SLDF	PRT	Default	Saddle	1	Under Editing			
	4	upper plate	SLDPRT	Default	upper pl	2	Under Editing			
	4	cap screw.S	LDPRT	Default	cap screw	8	Under Editing			
	4	locking han	dle.SLD	Default	locking	4	Under Editing			
	<u>.</u>	As all baldes		Defects	As all hall		and a second state of			

Bill of Materials (BOM) View - Flattened Type (2024 SP2)

In the SOLIDWORKS PDM File Explorer, in the BOM view of the Bill of Materials tab,

you can use the new type **Flattened** to view the total number of quantities required of a component present in the product structure.

This option saves time and effort in calculating the total number of quantities of the components.

The Flattened BOM view displays:

- The product structure as a list of components without indentation.
- The component only once if it is present at multiple levels of the product structure.
- The quantity of the component by adding the quantities at each level.

The **Flattened** type is available when viewing the computed BOMs in the desktop client and in Web2.



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