

Planning a SOLIDWORKS 2019 Upgrade

TITLE:	Planning A SOLIDWORKS 2019 Upgrade
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SUBJECT:	SOLIDWORKS Upgrade
ABSTRACT:	Comprehensive guide on planning an upgrade for SOLIDWORKS 2019

Introduction

This document is meant to give a general overview of the installation process and provide a simple checklist for system administrators getting ready to deploy SOLIDWORKS and PDM software. Detailed information for installation is available through the Hawk Ridge support portal here: [Help Desk Support Portal](#)

When deploying to any new version compatibility is a major concern. Network-based licensing requires that the license server is updated first to the new version. Without an updated license server, clients will be unable to check out the new version license. In PDM Standard and Professional PDM environments clients must have the same major version as their target vault server.

Changes

Beginning in 2016, SOLIDWORKS incorporated PDM Standard, and the integration of PDM installation with the SOLIDWORKS Installation Manager. Furthermore Enterprise PDM has changed to become PDM Professional, also beginning in 2016. 2019 PDM Standard or Professional can now be installed from the same interface as SOLIDWORKS.

Virtual machine support is limited to only the following platforms for use as a license server:

VMWare, Microsoft Hyper-V, Parallels, and Citrix Xen.

Other platforms will not be able to activate as license servers.

Contents

SOLIDWORKS Standalone Installation	2
SOLIDWORKS Network Licensed Setup	4
PDM Professional Installation	8

SOLIDWORKS Standalone Installation

SOLIDWORKS standalone licensing is activation-based meaning for each stand-alone license one user can activate two of their machines – one for desktop and another for travel/home use.

- Compatibility

	SOLIDWORKS 2017 (EDU 2017-2018)	SOLIDWORKS 2018 (EDU 2018-2019)	SOLIDWORKS 2019 (EDU 2019-2020)
Operating Systems			
Windows 10, 64-bit	✓	✓	✓
Windows 8.1, 64-bit	✓	✓	✗
Windows 7 SP1, 64-bit	✓	✓	✓ (End of life: SW2020 SP5)
Virtual environments	Supported virtual environments		
Hardware			
Processor	3.3 GHz or higher		
RAM	16 GB or more PDM Contributor or Viewer: 8 GB or more PDM Web Client or Web Server: 8 GB or more ECC RAM recommended		
Graphics Card	Certified cards and drivers		
Drives	SSD drives recommended for optimal performance		
Disk Space	PDM Contributor or Viewer: 10 GB or more PDM Web Client or Web Server: 5 GB or more PDM Archive Server or Database Server: 50 GB or more SOLIDWORKS Manage: 10 GB or more		
Software			
Microsoft Excel and Word	2010, 2013, 2016	2010, 2013, 2016	2013, 2016
Browsers (PDM Web2 Client)	Microsoft Internet Explorer, Microsoft Edge, Google Chrome, Mozilla Firefox, Apple Safari		
Anti-virus	Anti-virus products		

For more information on hardware recommendations for SOLIDWORKS see our guides here:

[2019 Recommended Hardware](#)

[2019 Comprehensive Hardware Guide](#)

SOLIDWORKS requires a video card with a certified driver. It's best to update your video driver to the certified version found here before installation:

<https://www.SOLIDWORKS.com/sw/support/videocardtesting.html>

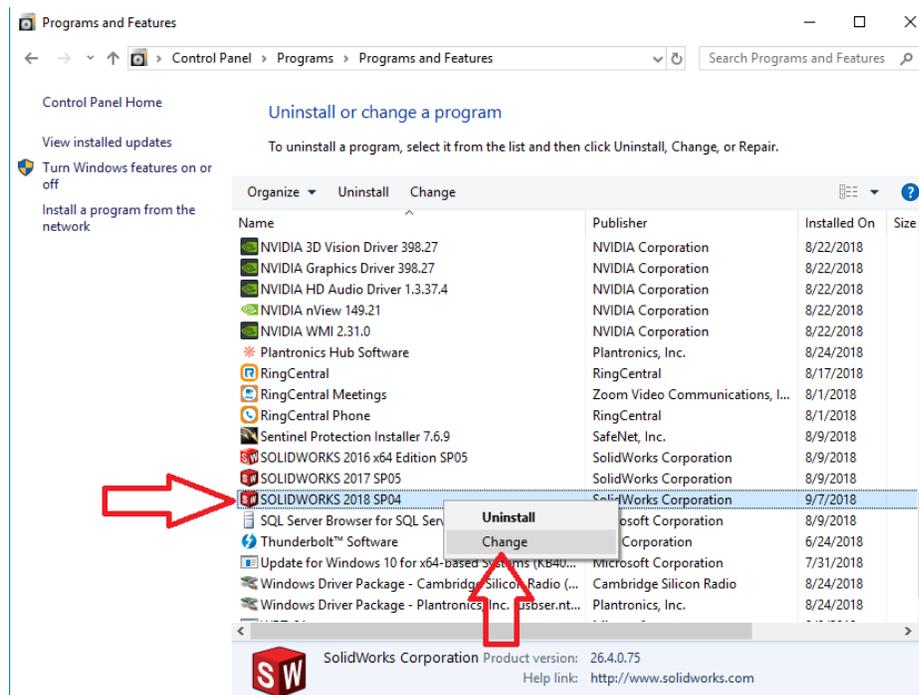
- Licensing

Each stand-alone license is allowed to be activated on only two machines - one for a workstation and another for a home/travel machine. If you are planning to simply upgrade one machine from a previous version the activation will carry over. However if you need to switch machines or install on a new machine you will need to first transfer the license from your old machine.

To transfer your license: open SOLIDWORKS then use the Help > Transfer License feature. This feature deactivates the product on your current machine so it can be reactivated on the new machine. You then go to the new computer, install SOLIDWORKS then start it and select Help > Activate to proceed with the activation process.

Depending on your activation status you may also need to change the serial number of the installed version of SOLIDWORKS. For example, if you purchased a new license of SOLIDWORKS Premium and wanted to switch from a SOLIDWORKS Standard license.

To change the serial number of your SOLIDWORKS license: go to the windows control panel and select 'Programs and Features'. Find SOLIDWORKS in the list of programs highlight it and select 'Change':



This will launch the SOLIDWORKS installation manager. Select the option to 'modify' your current installation then input your new serial number. REMEMBER, if you currently have SOLIDWORKS active on your machine, you will need to transfer this license first.

- Access
SOLIDWORKS installation requires the use of an unrestricted administrator account. Turning off user account controls and any anti-virus software is also recommended during installation.
- Copy Settings Wizard
The copy settings Wizard can be used to copy all the configuration of one version of SOLIDWORKS to the next. Making it possible to backup and restore SOLIDWORKS configuration across version.
- Upgrading Hole Wizard/Toolbox
The Hole Wizard/toolbox is a critical component of SOLIDWORKS. To avoid data loss be sure to back up your Toolbox folder – usually found at C:\SOLIDWORKS Data. For more information please find our comprehensive toolbox guide here:

[Comprehensive Toolbox Guide.](#)

SOLIDWORKS Network Licensed Setup

The first step in a SOLIDWORKS upgrade is to upgrade the license server. License servers are backwards compatible but not forwards compatible. Therefore, if you plan to use SOLIDWORKS 2019, you must have an updated 2019 license server. The detailed guide to the 2019 license manager installation can be found here:

[2019 Network Server Installation](#)

- Network server version
Before starting the upgrade process review the operating system compatibility here:

	SOLIDWORKS 2017	SOLIDWORKS 2018	SOLIDWORKS 2019
Operating Systems			
Windows Server 2016	✓ (2017 SP2)	✓	✓
Windows Server 2012 R2	✓	✓	✓
Windows Server 2012	✓	✓	✗
Windows Server 2008 R2, SP1	✓	✗	✗

- Support for virtual machines
Currently only the following platforms virtual machine platforms will allow activation of a license server:

VMWare, Microsoft Hyper-V, Parallels, and Citrix Xen.

- [Client Installation](#)
SOLIDWORKS network client installation is the same as stand-alone installation. The network license key is used to install SOLIDWORKS and no activation is required. All clients must be able to freely communicate with the license server on port 25734 and 25735.
- [Migration from standalone](#)
 - i. When switching workstations to use a network license, the first step will be to designate and install the SNL (SolidNetwork License) manager on the new license server.
 - ii. Removing previous activations. Client installations will need to be modified to use the network serial number and receive their licenses from the license server. Follow the procedure to switch the licenses using the windows control panel -> Programs and Features -> highlight SOLIDWORKS and select 'change'. This will give the option to change the installed serial number and add the client license manager.
- [Admin image deployment](#)
Creating an admin image for deployment provides a method to create a single image to be pushed out to each client machine. Images can be customized per machine to change installation modules for specific workstations.
- PDM Version
Before updating your clients and license server, it is important to consider if you have an active PDM system as this system will need to be upgraded as well. With SOLIDWORKS Professional, Standard or Workgroup PDM clients, if you wish to use a newer version of SOLIDWORKS your PDM vault and client software will need to be upgraded as well. A newer client will be unable to connect to an older vault.
- License Troubleshooting
The most common error associated with a network license is the Windows firewall blocking access to the license server. Make sure that the ports 25734 and 25735 are open on all clients and the license server.

PDM Professional Installation

PDM Professional consists of three modules: Archive server, Database server and clients. Each of these must be updated to work together. Before upgrading be sure to have a [backup of your SQL database](#) and vault data. Once you have current backups, to complete the installation you will need to have logins to the SQL SA user account and Vault Admin account.

- Change in licensing method
2015 added activation based licensing for PDM using the SolidNetwork license manager. Licenses for PDM are now managed through the SNL with FlexLM, giving administrators real-time information on license usage.
- SQL Server installation
- PDM does not include a copy of SQL server. Either a current installation will need to be used or a new install created. Hawk Ridge systems can provide installation media for SQL server 2014. PDM Professional is only compatible with SQL Server 2008 R2 and newer.

- **Vault and Client Version**
All clients must be running the same version of the PDM software as the vault.

Client Compatibility – CAD Editor:

	SOLIDWORKS 2017 (EDU 2017-2018)	SOLIDWORKS 2018 (EDU 2018-2019)	SOLIDWORKS 2019 (EDU 2019-2020)
Operating Systems			
Windows 10, 64-bit	✓	✓	✓
Windows 8.1, 64-bit	✓	✓	✗
Windows 7 SP1, 64-bit	✓	✓	✓ (End of life: SW2020 SP5)
Virtual environments	Supported virtual environments		
Hardware			
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Drives	SSD drives recommended for optimal performance		
Disk Space	PDM Contributor or Viewer: 10 GB or more PDM Web Client or Web Server: 5 GB or more PDM Archive Server or Database Server: 50 GB or more SOLIDWORKS Manage: 10 GB or more		
Software			
Microsoft Excel and Word	2010, 2013, 2016	2010, 2013, 2016	2013, 2016
Browsers (PDM Web2 Client)	Microsoft Internet Explorer, Microsoft Edge, Google Chrome, Mozilla Firefox, Apple Safari		
Anti-virus	Anti-virus products		

- **Archive Server Compatibility**

	SOLIDWORKS 2017	SOLIDWORKS 2018	SOLIDWORKS 2019
Operating Systems			
Windows Server 2016	✓ (2017 SP2)	✓	✓
Windows Server 2012 R2	✓	✓	✓
Windows Server 2012	✓	✓	✗
Windows Server 2008 R2, SP1	✓	✗	✗
SQL Server			
SQL 2017	✗	✓	✓
SQL 2016	✓	✓	✓
SQL 2014	✓	✓	✓
SQL 2012	✓	✓	✓

- Database and Archive Server Compatibility

Microsoft Products	Start of Life	End of Life ¹
Windows 10, 64-bit	2015 SP5	Active
Windows 8.1, 64-bit	2014 SP1	2018 SP5
Windows 7, 64-bit	2010 SP1	2020 SP5
Windows Server 2016	2017 SP2	Active
Windows Server 2012 R2	2014 SP3	2019 SP5
Windows Server 2012	2014 SP0	2018 SP5
Windows Server 2008 R2, SP1	2009	2017 SP5
SQL Server 2017	2018 SP0	Active
SQL Server 2016	2017 SP0	Active
SQL Server 2014	2015 SP0	2021 SP5
SQL Server 2012	2013 SP2	2019 SP5
SQL Server 2008 R2	2010 SP4	2017 SP5
IE 11	2014 SP3	Active