Planning a SOLIDWORKS 2020 Upgrade

TITLE:	Planning A SOLIDWORKS 2020 Upgrade
DATE:	September 2019
SUBJECT:	SOLIDWORKS Upgrade
ABSTRACT:	Comprehensive guide on planning an upgrade for SOLIDWORKS 2020
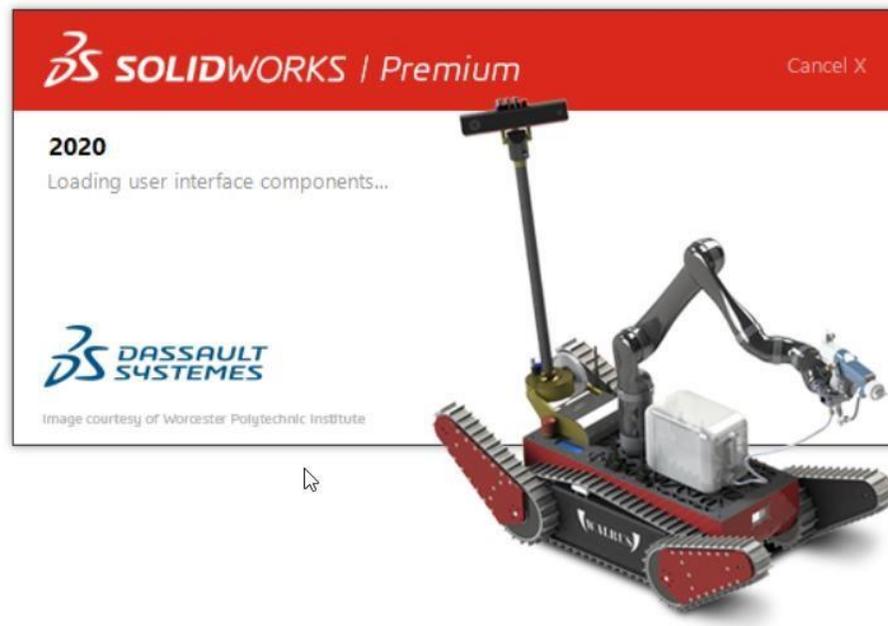
Introduction

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 implementing any new version, compatibility is a significant 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.

Contents

SOLIDWORKS Standalone Installation

SOLIDWORKS standalone licensing is activation-based meaning for each stand-alone license one user can activate on one machine at a time.

- Compatibility

	SOLIDWORKS 2018 (EDU 2018-2019)	SOLIDWORKS 2019 (EDU 2019-2020)	SOLIDWORKS 2020 (EDU 2020-2021)
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 (hypervisors)		
Hardware			
Processor	3.3 GHz or higher		
RAM	16 GB or more PDM Contributor or Viewer: 8 GB or more ECC RAM recommended		
Graphics Card	Certified cards and drivers		
Drives	SSD drives recommended for optimal performance		
Software			
Microsoft Excel and Word	2010, 2013, 2016	2013, 2016, 2019 (SW2019 SP2)	2013, 2016, 2019
Antivirus	Antivirus products		

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

2020 Recommended Hardware

2020 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 only allowed 1 active machine per standalone license. If you are planning to upgrade one computer from a previous version, the activation will carry over. However, if you need to switch machines or install on a new machine, you will first need to transfer the license from your old machine.
  To transfer your license: open SOLIDWORKS then use the Help > Deactivate Licenses 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 Licenses 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 'Modify':
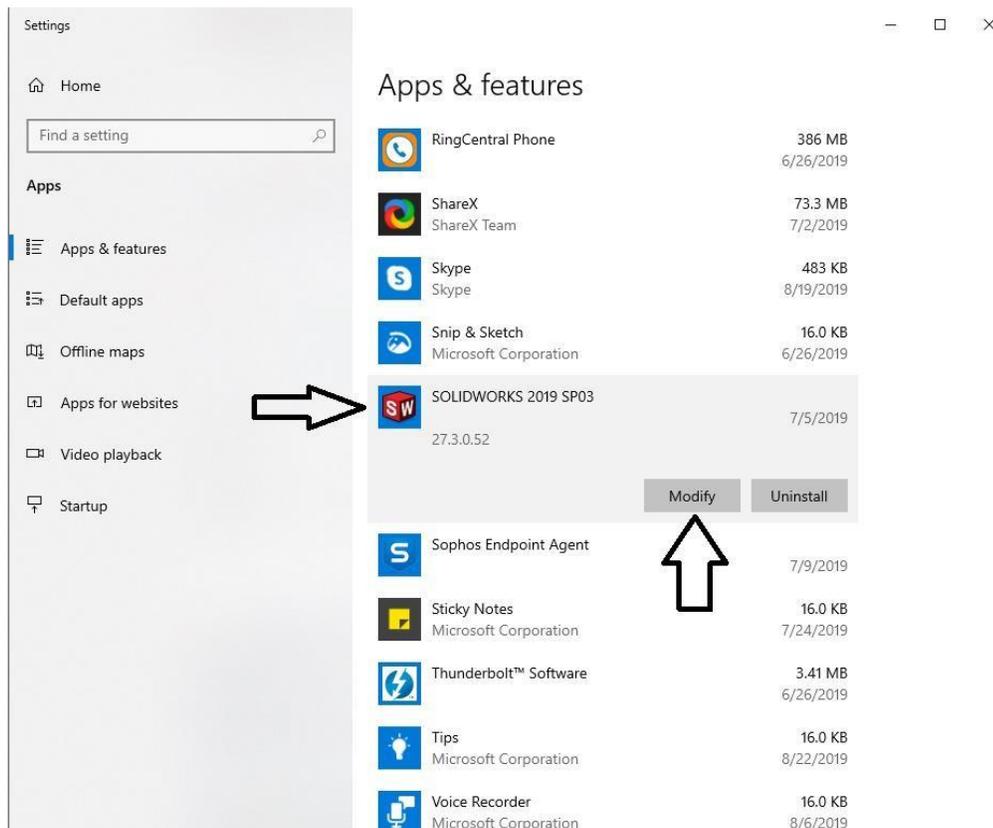
This will launch the SOLIDWORKS installation manager. Select the option to 'modify' your current installation then input your new serial number. REMEMBER, if you currently have SOLIDWORKS active on your machine, you will need to deactivate this license first.

- Access
  SOLIDWORKS installation requires the use of an unrestricted administrator account. Turning off "Windows user account controls" (UAC), 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 the 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 see 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 backward compatible but not forwards compatible. Therefore, if you plan to use SOLIDWORKS 2020, you must have an updated 2020 license server. A detailed guide to the 2020 license manager installation can be found here: 2020 Network Server License Manager Installation Guide

2020 Network Server Installation

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

	SOLIDWORKS 2018	SOLIDWORKS 2019	SOLIDWORKS 2020
Operating Systems			
Windows Server 2019	✖	✔ (2019 SP3)	✔
Windows Server 2016	✔	✔	✔
Windows Server 2012 R2	✔	✔	✖
Windows Server 2012	✔	✖	✖

- Support for virtual machines
  Currently only the following 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 a 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
  1. 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.
  2. To remove the 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's 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 essential 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 the 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 2014 and newer.
- Vault and Client Version
  All clients must be running the same year version of the PDM software as the vault.

Client Compatibility – CAD Editor

	SOLIDWORKS 2018 (EDU 2018-2019)	SOLIDWORKS 2019 (EDU 2019-2020)	SOLIDWORKS 2020 (EDU 2020-2021)
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 (hypervisors)		
Hardware			
Processor	3.3 GHz or higher		
RAM	16 GB or more PDM Contributor or Viewer: 8 GB or more ECC RAM recommended		
Graphics Card	Certified cards and drivers		
Drives	SSD drives recommended for optimal performance		
Software			
Microsoft Excel and Word	2010, 2013, 2016	2013, 2016, 2019 (SW2019 SP2)	2013, 2016, 2019
Antivirus	Antivirus products		

Archive Server Compatibility

	SOLIDWORKS 2018	SOLIDWORKS 2019	SOLIDWORKS 2020
Operating Systems			
Windows Server 2019	✘	✔ (2019 SP3)	✔
Windows Server 2016	✔	✔	✔
Windows Server 2012 R2	✔	✔	✘
Windows Server 2012	✔	✘	✘
SQL Server			
SQL 2017	✘	✔	✔
SQL 2016	✔	✔	✔
SQL 2014	✔	✔	✔ (End of Life: SW2021 SP5)
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 2019	2019 SP3	Active
Windows Server 2016	2017 SP2	Active
Windows Server 2012 R2	2014 SP3	2019 SP5
Windows Server 2012	2014 SP0	2018 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
IE 11	2014 SP3	Active
Excel, Word 2019 (64-bit recommended)	2019 SP2	Active
Excel, Word 2016 (64-bit recommended)	2016 SP3	Active
Excel, Word 2013	2013 SP4	2020 SP5
Excel, Word 2010	2010 SP5	2018 SP5