How To Create A SOLIDWORKS Administrative Image

TITLE:	How To Create A SOLIDWORKS Administrative Image
DATE:	September 2024
SUBJECT:	Administrative images, multi-client Install
ABSTRACT:	Guide to setting up, configuring, and deploying administrative images (multi-client installs) for SOLIDWORKS

An Administrative Image allows configurable installations of SOLIDWORKS products from a single network location. You can install the administrative image from any computer on the network, including a client computer. This allows for easier distribution of multiple installations and has a component to update all clients automatically when the image is upgraded to a newer service pack.

This is not a troubleshooting guide. If you have any technical issues with SOLIDWORKS, please contact Hawk Ridge Systems technical support.

HAWK RIDGE SYSTEMS

Contents

Before Installation

Hawk Ridge Systems recommends taking a moment before installing SOLIDWORKS and checking that you are ready to load your new software by going through the points in our Before Installing SOLIDWORKS Products guide.

Creating an Administrative Image

An administrative image allows configurable installations of SOLIDWORKS products from a single network location. You can install the administrative image from any computer on the network that can access the admin image location. There are a few important steps in preparing an administrative image:

1. Create a shared directory on a network computer that all clients can access.

2. Install an Administrative Image in this shared directory.

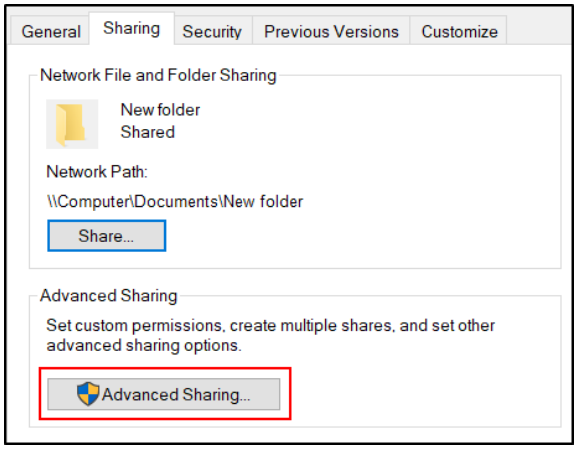
3. Once the image is created, use the Options Editor to customize it.

Other programs can be loaded before or after the SOLIDWORKS installation. The administrative image can also be used to administer certain SOLIDWORKS serial numbers or particular add-ins to be defined for individual users or groups throughout your company.

Setting the Image Location

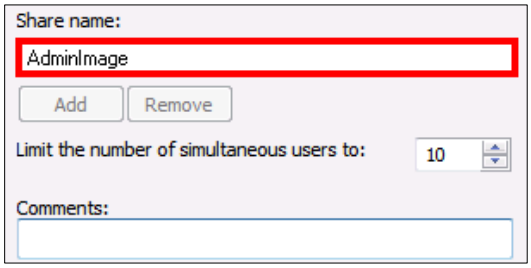
1. In Windows Explorer, create a destination folder where you want the administrative image to reside. This should be a location that all client machines can access via the network.

2. Right-click this new folder and select **Properties** from the pop-up menu. Inside the properties dialog box switch to the **Sharing** tab and click **Advanced Sharing.**



NOTE: If you don't see the sharing tab, you do not have administrative rights and sharing is disabled.

3. The first setting for a shared folder is determining the share name.



If you wish to update SOLIDWORKS service packs automatically the next time SOLIDWORKS is opened, it is important to note several things about the share name scheme (if unfamiliar with network protocols):

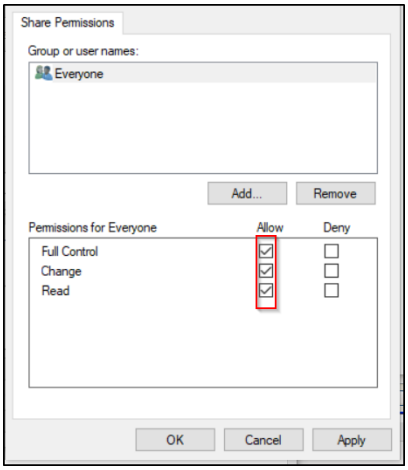
   a. The "share name" by default is the name of the folder you are trying to share.

      i. This name can be changed so it differs from the original folder name.
      ii. Users who view this folder on the network will see it by its "share name".

b. With regard to SOLIDWORKS:

   i. All future service pack updates will be created in a specific folder but will have the "share name" changed to match the same "share name" as the original folder it is replacing.
   ii. A good example of a naming scheme is to name the folder "SOLIDWORKS 20XX SPX.X" and have the share name just be "SOLIDWORKS20XX".

4. Press the **Permissions** button and make sure **Everyone** has full access to this shared folder. Set all permissions to **Allow**.

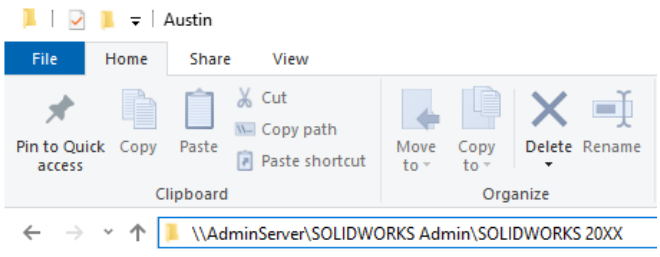


5. Press the **Apply** button, then press **OK** to finish sharing this folder.

6. If using a shared network location for your Toolbox folder, be sure to repeat creating a shared folder (steps # 3, 5, and 6 above) for this folder to make sure that all users can access the shared toolbox location.

7. Using Windows Explorer, locate the folder created in step 2 nested under "Network" and right-click on it and choose **Open**. A new Explorer window will open and in the address bar is the UNC path for this folder.

   IMPORTANT: Write this address down as it will be the location clients will load & unload from later.



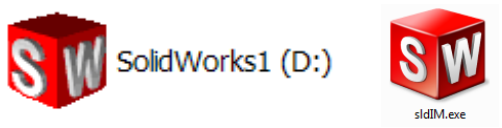
Now that you have a location for the administrative image to reside, the next section illustrates the steps it takes to create the administrative image in this shared folder.

Creating the Admin Image

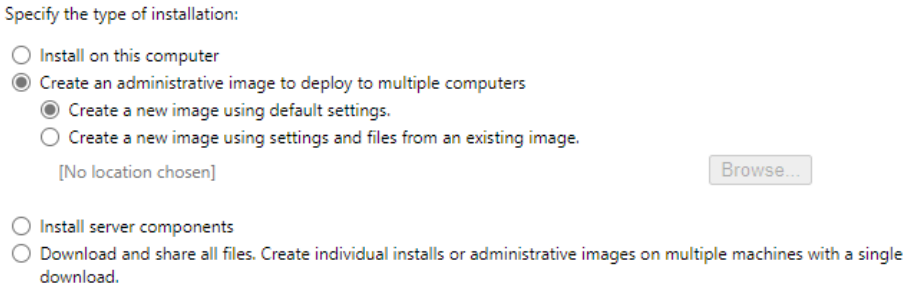
1. Run the SOLIDWORKS Installation Manager

    a. If downloading from the SOLIDWORKS downloads page, run the downloaded SolidWorksSetup.exe file and the Installation Manager should start automatically.

If downloading from another source or the Installation manager does not automatically start, double-click on the setup.exe within the unzipped folder.

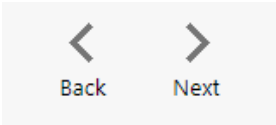


2. The Welcome page asks for the type of installation you would like to perform. You will want to choose **Administrative Image**.

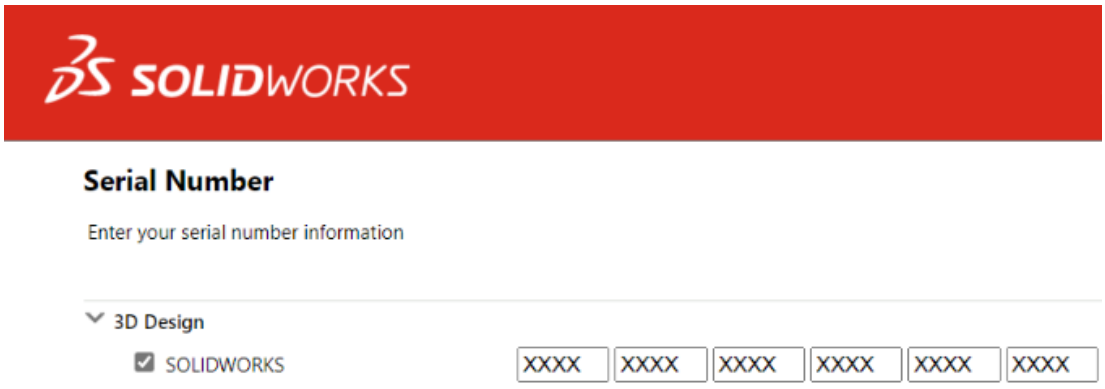


- If you are loading an admin image for the first time, pick the option to **Create a new image using default settings.**
- If you have an existing admin image you would like to update, please go to the section **Upgrading an Image** in this document. This will give full instructions on this type of installation.

3. Press the **Next** button to continue.



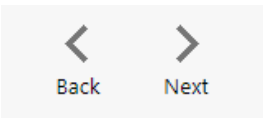
4. The next page will ask for your 16 or 24 digit serial number. If you have this information coming from a document, you can copy and paste this information into the first cell, and it will auto-fill correctly.



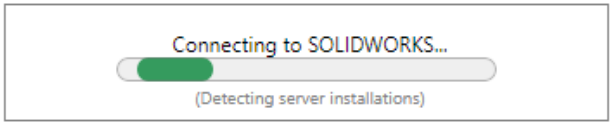
5. If you are loading other products with separate serial numbers, enter these numbers as well.

- NOTE: Enter **ALL** products you plan on installing. Any product with a distinct serial number should be entered here.
- SOLIDWORKS PDM Standard is included with SOLIDWORKS Professional and SOLIDWORKS Premium and only needs to be entered if this item was purchased separately with SOLIDWORKS Standard.
- Also, Basic Simulation and SOLIDWORKS Motion are included with SOLIDWORKS Premium; these items only need to be entered if you have purchased these separately.
- If you purchased Simulation Professional or Simulation Premium, you should enter your serial number for SOLIDWORKS Simulation to ensure the full version is loaded.

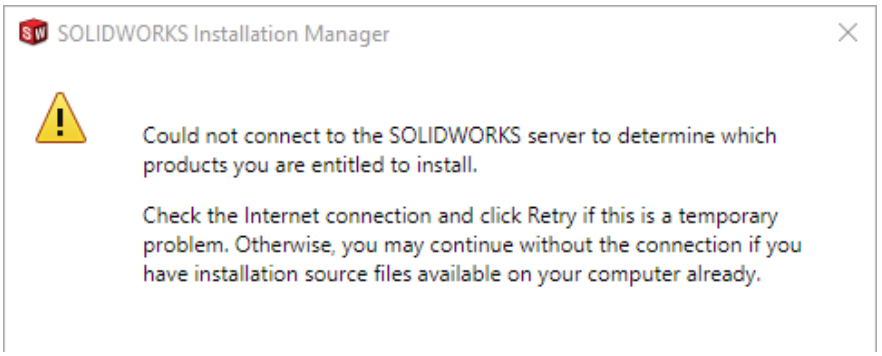
6. Press the **Next** button to continue. You may be informed that there is a newer version of SOLIDWORKS available for download. We recommend you choose to continue installing with your original service pack and upgrade later. Press the **Next** button to continue.



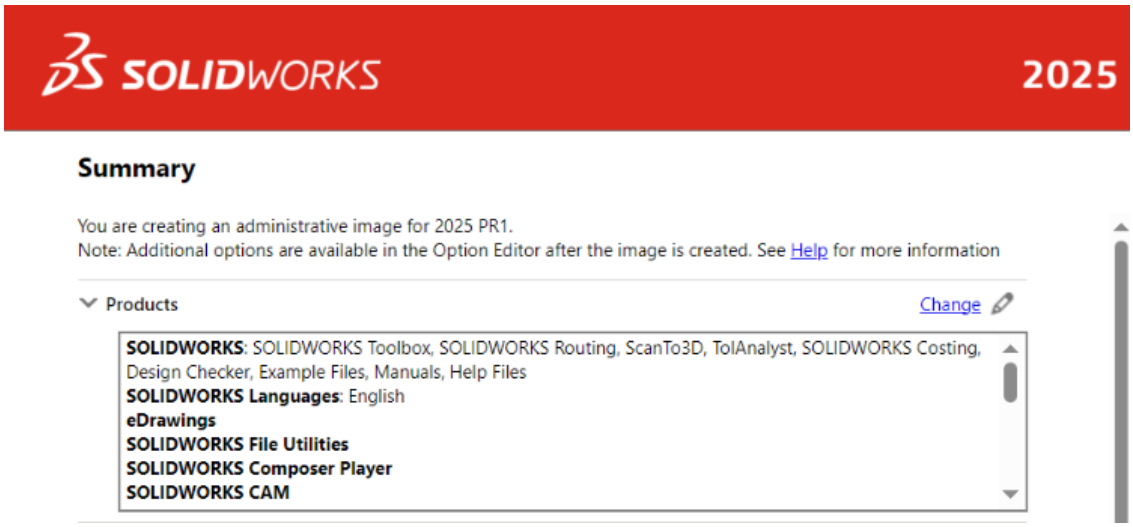
7. The installer will check to see that it is up to date, as well as confirming what products you are entitled to load.



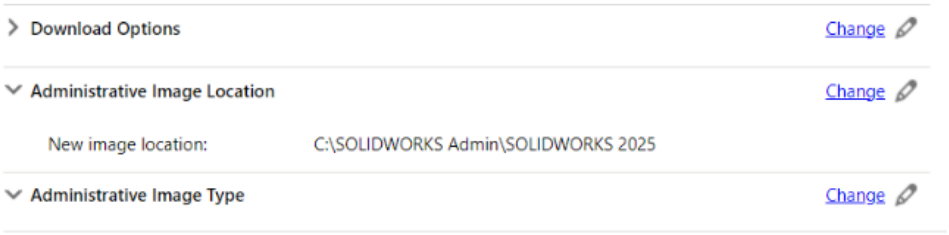
8. If you are not online, a warning will appear informing that you cannot automatically select products to install. Pressing **Cancel** will continue with the load, but you must manually select all your add-ins during the installation instead of being given a list based on your serial number.



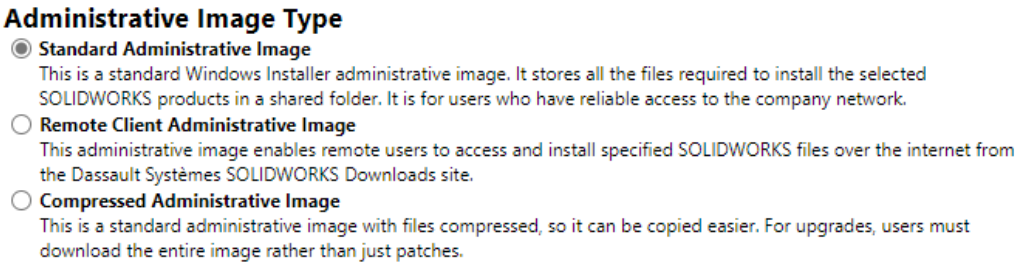
9. With the serial number, you are provided the version of SOLIDWORKS and its add-ins in a list. If you would like to edit what products will be loaded, you can press the **CHANGE** button. However, we recommend that **all** products be included, as this makes installation easier in the future if additional products are purchased at a future date.



To change any of the options of how the administrative image will behave, you can make changes on this page.

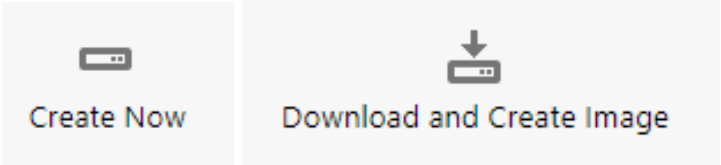


- Administrative Image Location
  - We recommend that you press the **CHANGE** button here and browse from the default location to inside the shared folder that was created earlier in previous section of this document.
- Background Downloader
  - We recommend that users **disable** this feature as we find that most anti-virus software interferes with the background downloader, preventing it from collecting all upgrade files.
- Administrative Image Type (There are three ways to save an administrative image)

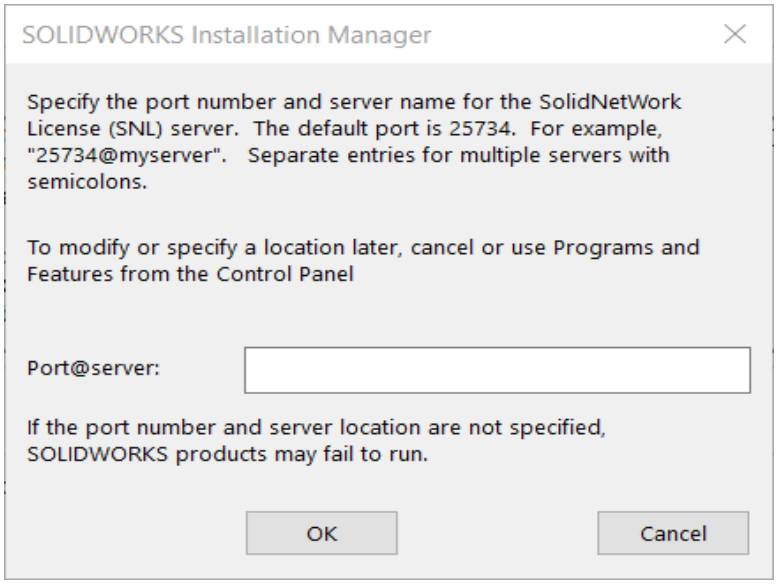


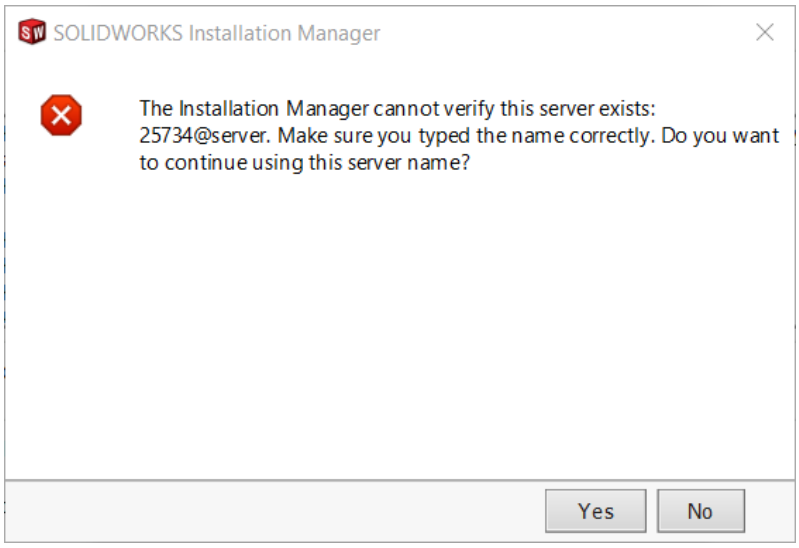
10. You will also be shown the required file size, available disk space and the size of any downloads. You may need to load the selected programs and settings specified in the summary at the bottom of this page.

11. Click the **Create Now** (or **Download and Create Image**) button to continue.

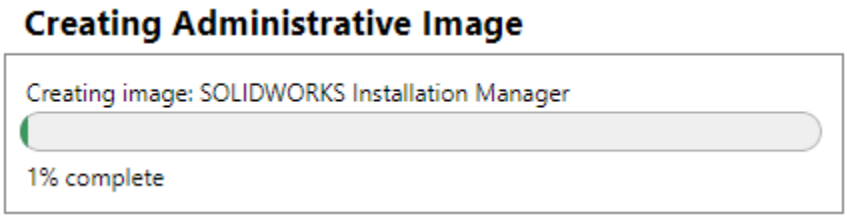


If you are using a network serial number, you will be asked for the location of the network server. Use the default port number "25734@[server name]". If you have not loaded the network server, answer **Yes** to the following warning and you can load the server later.



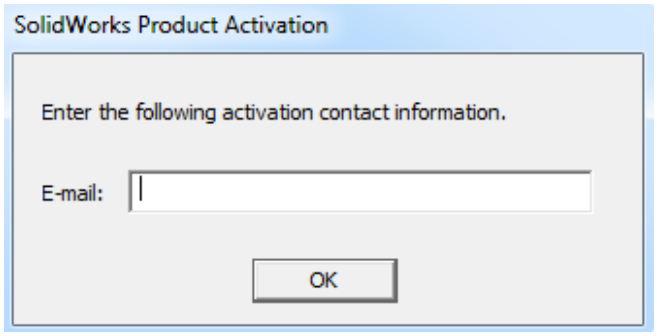


At this point, your administrative image will be written to the shared location you setup in the previous section of this document.

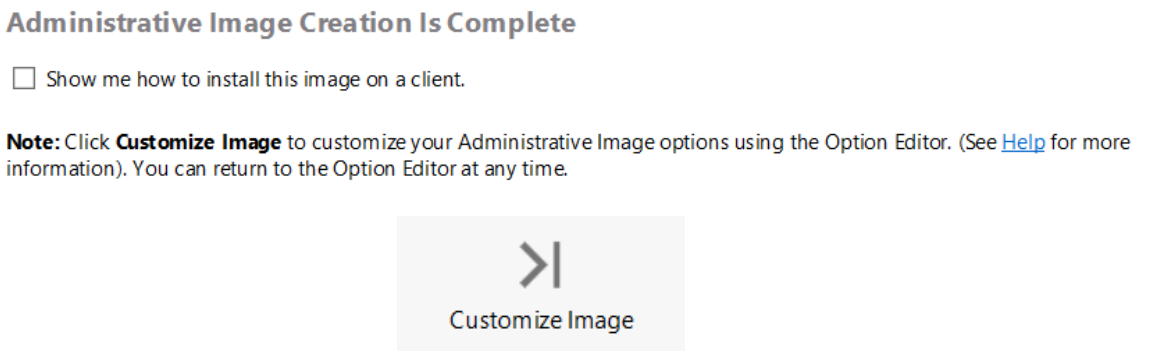


All the files needed to load SOLIDWORKS have been copied over to your administrative folder. You now have the option of opening a help file to guide you through the client installation. You can also launch the Image Option Editor. Both of these are explained in the following section.

If you selected to activate the product, you will need to enter an e-mail address as contact information. Press **OK** to continue.

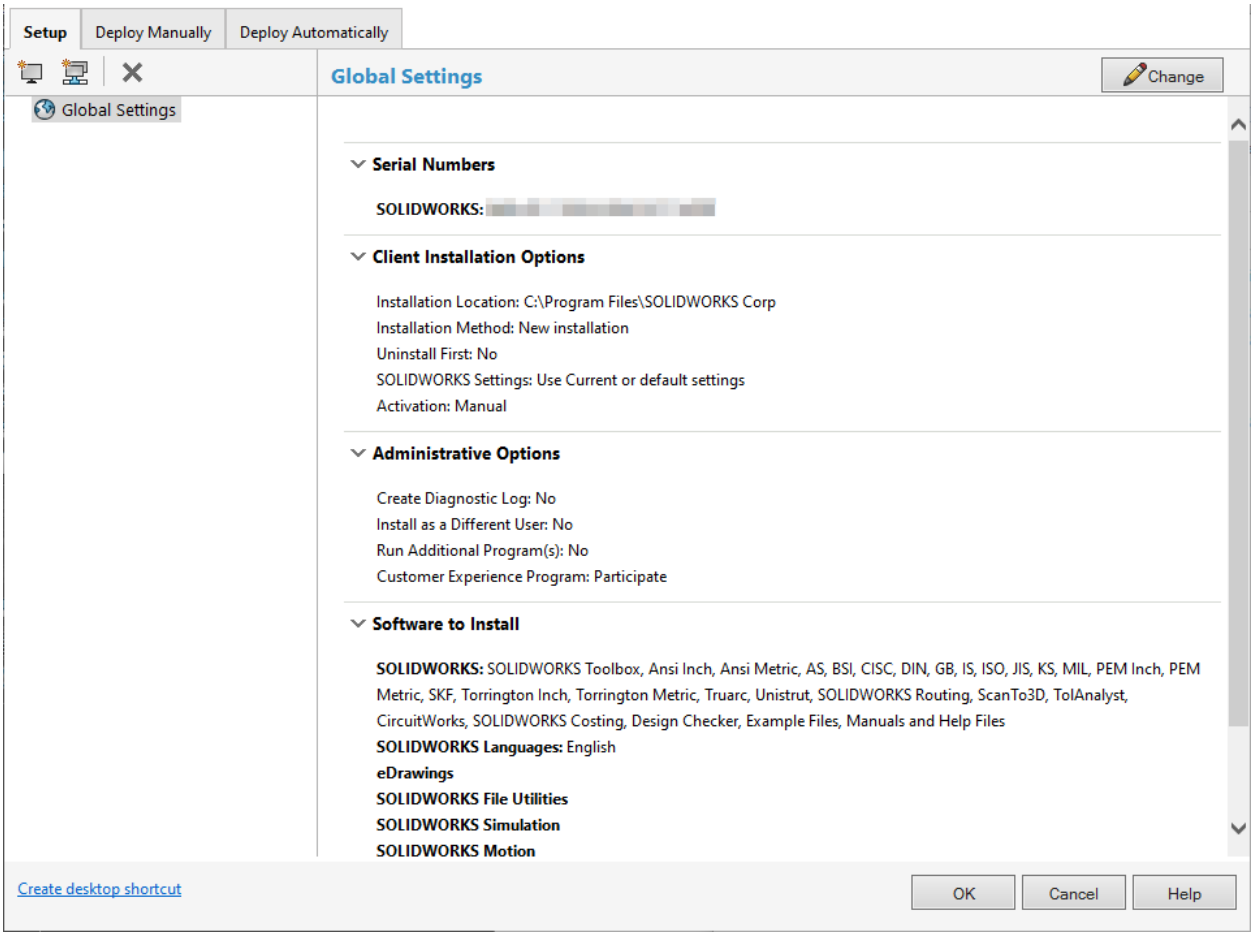


At this point, the administrative image has been loaded on this server. You can choose to have instructions on how to install a client, though we have a more complete guide in the following section of this document. Press the **Customize Image** button to continue. This will start the Options Editor.



Administrative Image Option Editor

The Administrative Option Editor can be started from the installation wizard or it can be accessed later. It can be found in the following location within the administrative image: **<installation directory>\ sldadminoptioneditor.exe**.

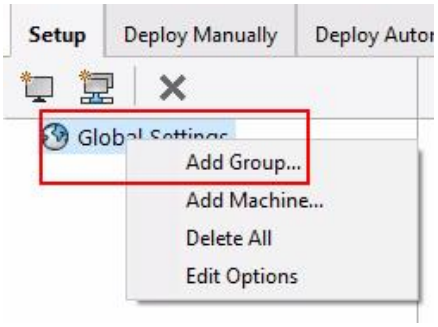


The Option Editor lets you assign serial numbers and options to specific users and groups which will be distributed when the admin image is used to install on a user's computer.

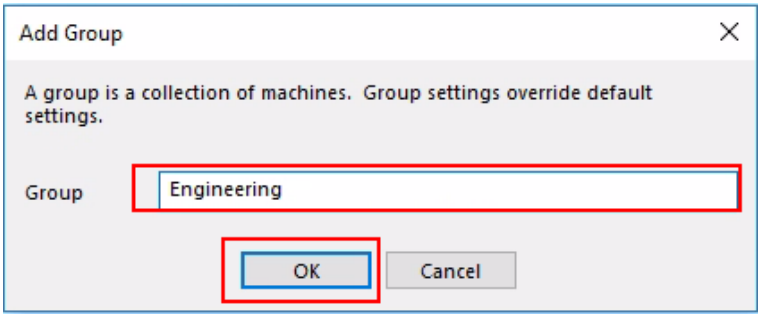
Adding Groups and Machines

You do not need to create groups if you want all clients to use the global settings, but if you would like to assign serial numbers or set specific options and software to load on particular machines, you can set the editor to push these settings automatically.

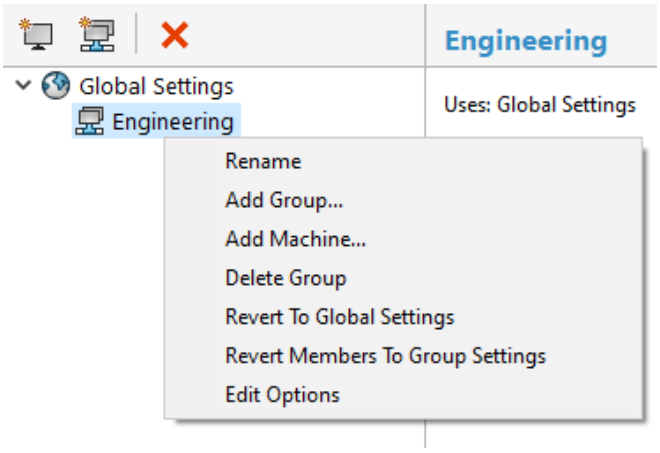
1. Start with right-clicking the **Global Settings** in the left column of the editor and choose to **Add Group**.



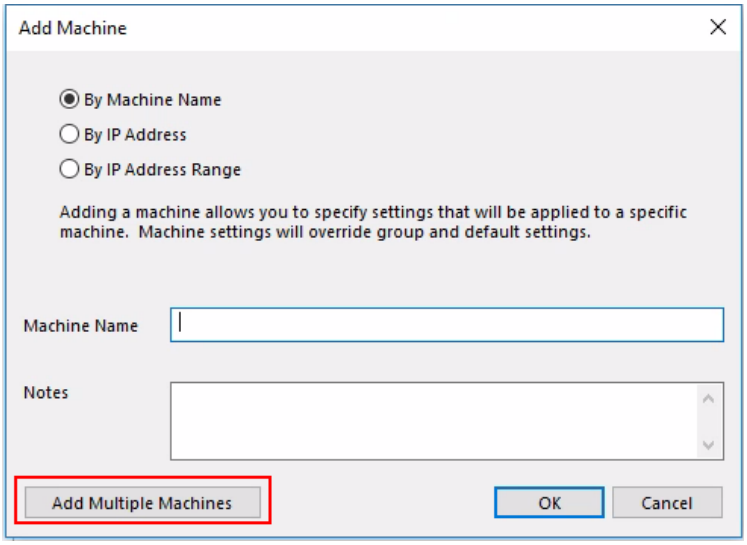
2. In the resulting dialog box, assign a "Group Name" and press **OK**. You can add more groups by repeating these last two steps or continue on to add users.



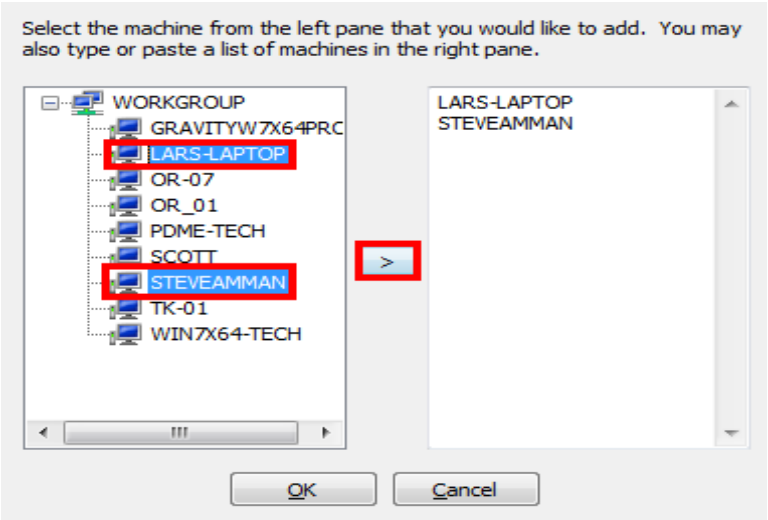
3. Right-click on a group and choose **Add Machine** to add users' machines to the editor.



The resulting dialog box lets you type in a machine name or an IP address or a range of IP addresses, but it may be easier to use the multiple-machines interface. Press the **Add Multiple Machines** button in the lower left corner of the box.

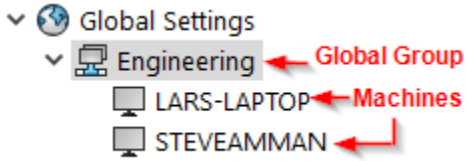


Select the machines from the network list that you want to load SOLIDWORKS onto. Pressing the **arrow** in the center column will populate a list of machines you want to add to the group. Press the **OK** button to finish.



Setting Options

Settings can be assigned globally or to specific groups or machines to change different aspects of the installation. By default, the "Global Settings" will be displayed, and these will be the default settings for all users. If you have setup groups or machines as in the previous section, you can select on one of these items from the left-hand column to edit a specific option for the item selected.

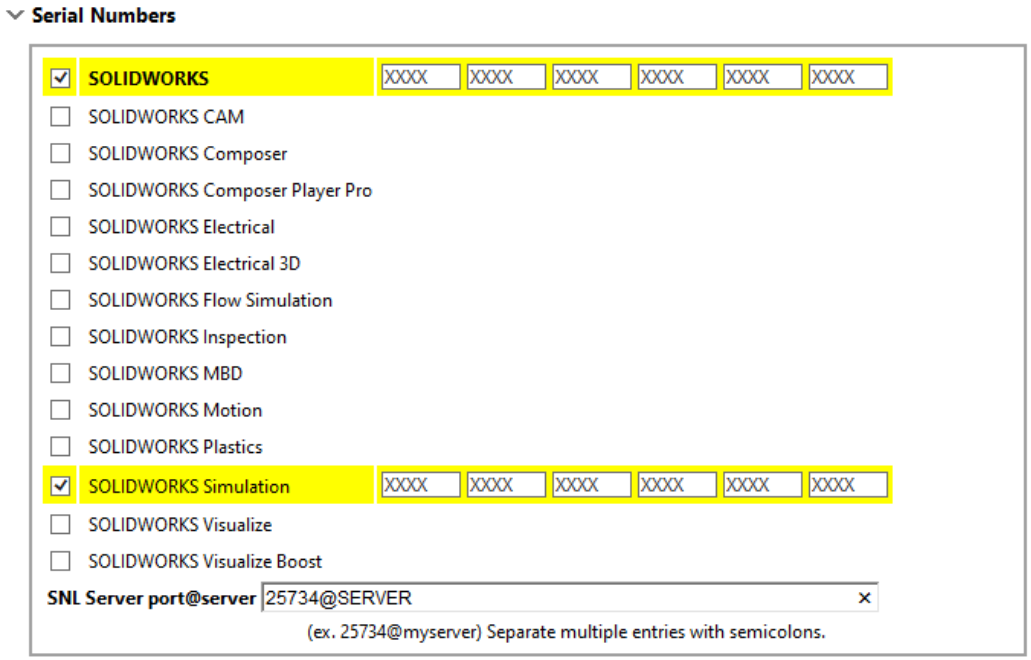


Once you have selected Global Settings, a Group, or a particular Machine, you will see a button with a pencil icon next to the button. The level of assignment and the operating system will be listed. Press this pencil button to edit the installation options.

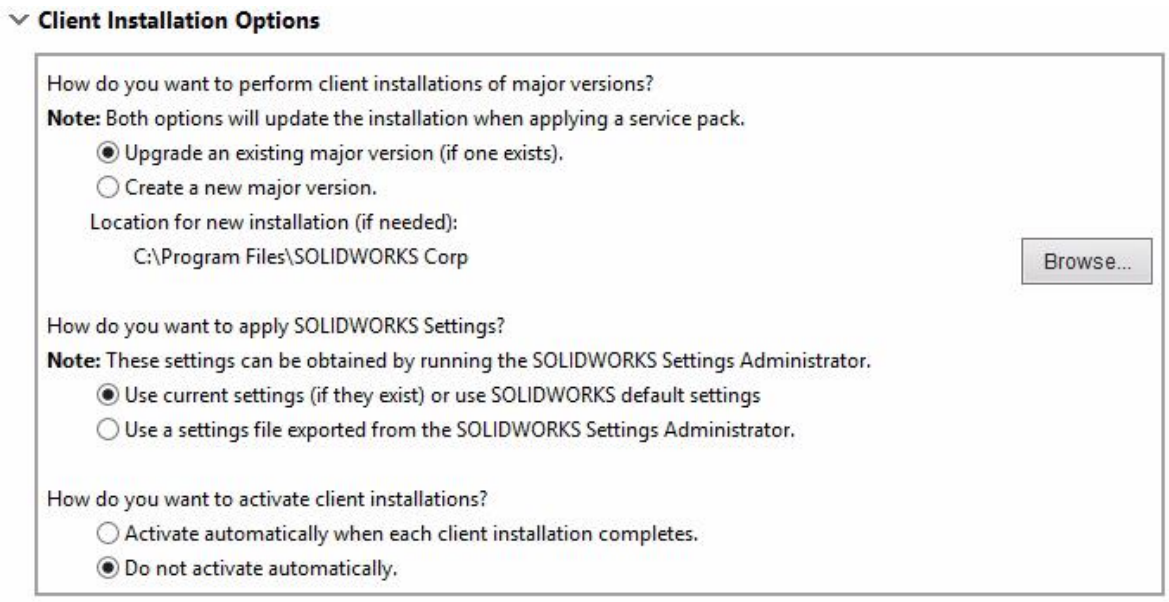
All settings will default to the higher-level settings, meaning Global Settings will be the basic options. These can be overridden by group settings and group settings can be overridden by machine settings. If the default settings are overridden, they will be highlighted in yellow to let the administrator easily see what items have been modified.

Let's go through sets of options in order now.

1. **Serial Numbers** can be assigned in the first group. Also, the Network Server can be mapped if using Network Licenses.



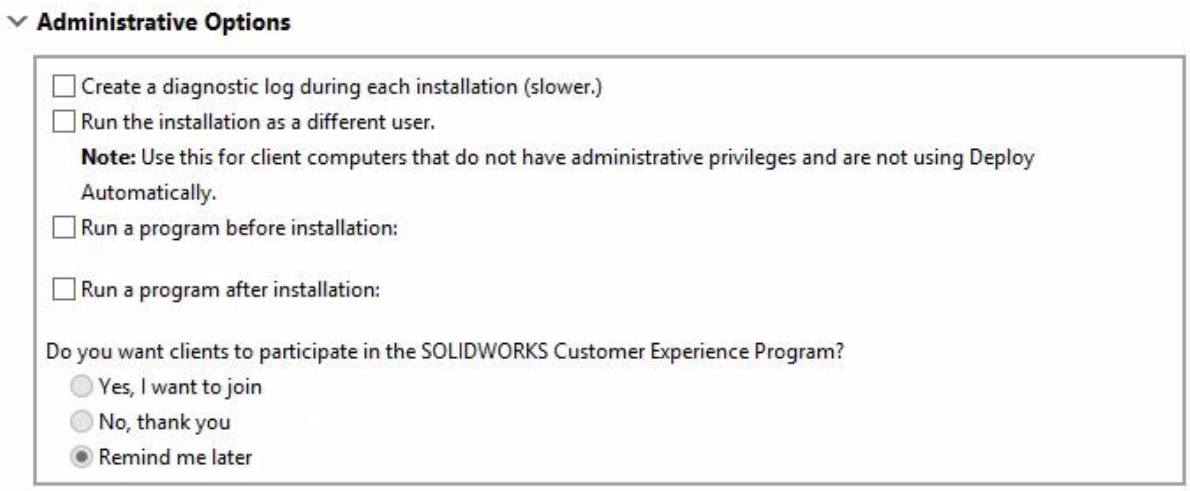
2. The next area is **Client Installation Options**; these allow you to determine if the installation creates a new version or updates an older installation. We recommend upgrading the existing image if available. However, the Admin Image now has the ability to uninstall the previous major version of SOLIDWORKS. There are options for how you would like to do this once you select the option to uninstall. You can also install with SOLIDWORKS default options or use a .sldreg file created with the Copy Settings Wizard. You can also determine if the client will activate their SOLIDWORKS license automatically.



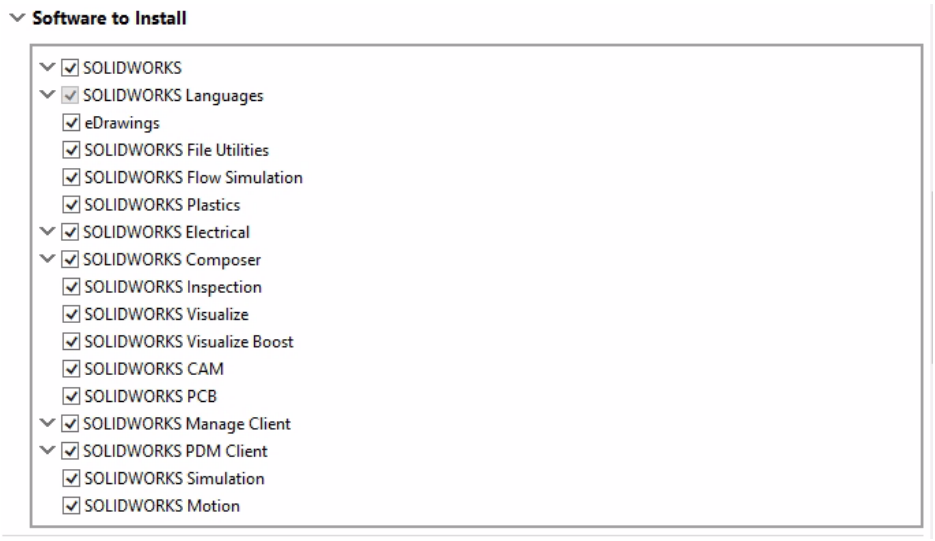
3. The third area is **Administrative Options**, where you can choose to create a log file during each installation. (We recommend selecting this option, as it can be a useful troubleshooting tool.)

   You can select the option to load a program before and after installation. If these are checked on, you can browse to a network location where these programs reside.

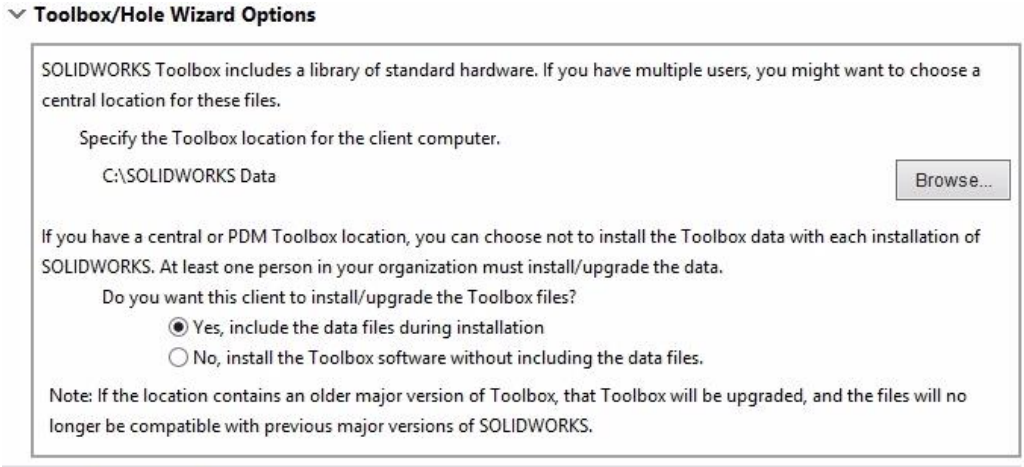
   Finally, you can select if the clients will participate in the Customer Experience Program which will periodically send e-mails to SOLIDWORKS regarding performance and feature usage.



4. The next area, **Software to Install,** allows you to determine which components of SOLIDWORKS will be loaded onto the client machine.



5. The final tab is **Standard Libraries**. If you are using a central toolbox library, which is recommended for a large number of users, you can set the location of this shared library to be accessed by the clients.



6. To save the settings, simply close the editor, press the **Close** button or the "X" in the upper right corner of the option editor window and then click the **Yes** button when asked to save changes.

Deploying Installation from Option Editor

You can deploy installations directly from the Option Editor by using either a manual or push method.

- Use the Deploy Manually page of the Option Editor to email instructions to users on how to start the installation. This method should also be used when users have administrative privileges for their client machines
- Use the Deploy Automatically page of the option Editor to push installations automatically to target machines. Customs uninstalls can also be performed. This method should also be used when users do not have administrative privileges to install software on their systems.

To use either method, you must change the administrative image installation directory to a Windows shared directory, so it is available through a network location (for example, \\machine\shared _directory or copy the whole image to a local directory on each machine, such as C:\SOLIDWORKS Admin\SOLIDWORKS 20XX

Administrative Client Installation

1. Please review our Before Installing SOLIDWORKS Products guide.

2. Clients should browse to the Administrative Image that is installed on the server, find the location ***<install_dir>*\StartSWInstall.hta** and double-click on this file.

3. A webpage will open in their web browser. They will need to click the **Install SOLIDWORKS products now** button.

- SOLIDWORKS will automatically begin to load according to the options set in the last section.
- Once the installation is complete, the client will then be able to run SOLIDWORKS.
- When SOLIDWORKS is loaded using this "one touch" deployment, service pack upgrades will happen automatically when the administrative image is updated as outlined in the following section. When the user starts SOLIDWORKS and a newer administrative image is detected, they will be prompted to update. When they choose to update, the process will happen automatically. They can choose to continue without updating but will be prompted until they have upgraded to the same level with the administrative image.

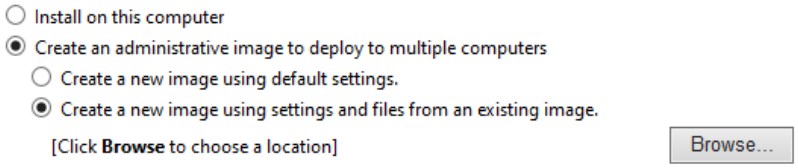
Updating an Image

To update an Administrative Image, you load a new image from the latest version of SOLIDWORKS and switch the shared directory location to this new image. The clients will automatically update the next time they start SOLIDWORKS and the new image is detected. Alternatively, you can control when the updates go out manually, by creating a new image on the network and simply running the new StartSWInstall.hta file on your clients.

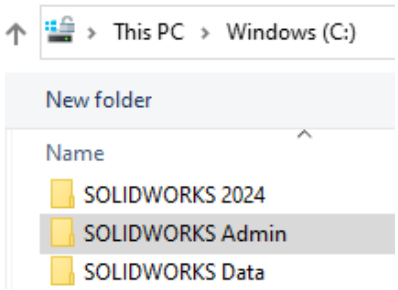
To Update the Administrative Image

1. You can download the latest SOLIDWORKS Installation Manager from the SOLIDWORKS downloads page and select the service pack you require.

2. Start the SLDIM.exe. On the **Welcome** screen, you will be asked for the type of installation. Pick **Administrative image and server products** and **Create or update an administrative image**. Then select **Use installation settings from an existing image**.

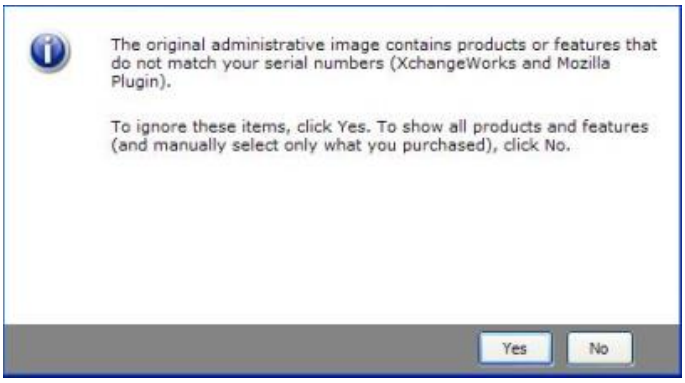


   Press the **Browse** button and locate your existing admin image to use the same settings from this location.

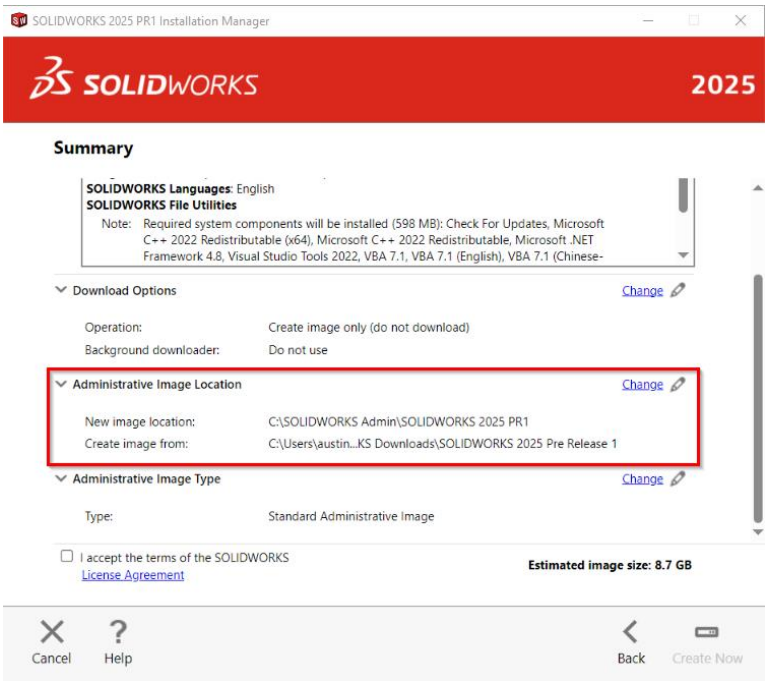


3. Press the **Next** button to continue.

4. If you are warned about any products with different serial number, press **Yes** to ignore and use the current serial numbers.



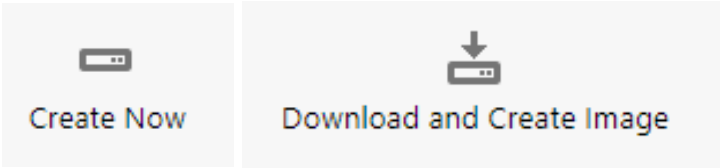
5. The Summary page will show all the products of which you are going to create an image, and how and where any downloads will come across.



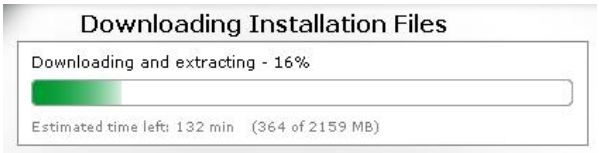
The most important setting on this page is the **Administrative Image Location**, this is where your new administrative image will be loaded. The new admin image must reside in an entirely new folder separate from the old admin image. You will want to take note of this. Once the new image is created, you will share this location with the same share name you used for your original image. If you are not sure about this, please see the **Creating an Admin Image** section about how to properly set up a network share name for an admin image.

Client options can also be set here but can later be changed in the Option Editor as in the first section of this guide.

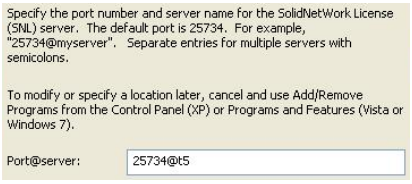
6. Click **Create Now** or **Download and Create Image**. If you see a message that the install directory does not exist, click **Yes** to create it.



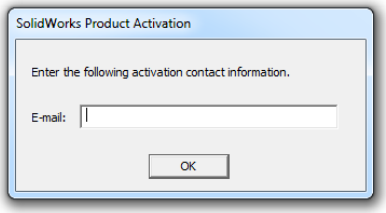
7. If any downloads are required, based on the programs you selected on the summary page, these will now be retrieved from the internet.

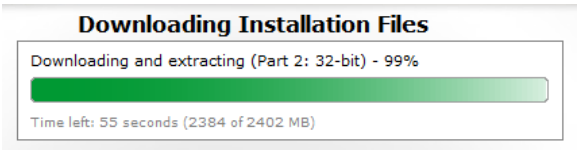


8. If you are using a network license serial number, you will be prompted for the port and machine location of your SolidNetWork License server. Press **OK** to continue.

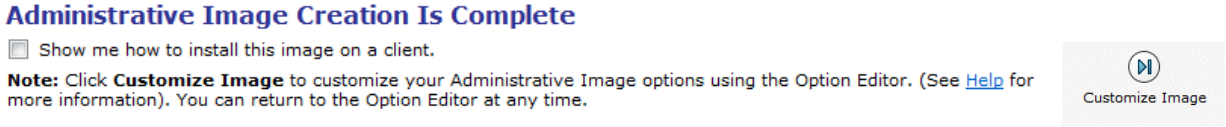


9. If you selected to activate the product, you will need to enter an e-mail address as contact information. Press **OK** to continue.





10. At this point the administrative image has been loaded on this server. You can choose to have instructions on how to install a client, though we have a more complete guide in the following section of this document. Press the **Customize Image** button to continue; this will start the Options Editor.



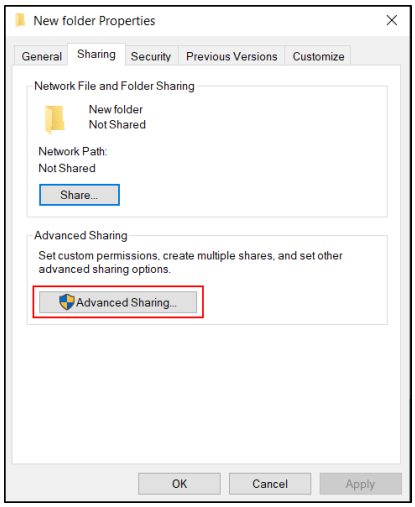
11. Your Options Editor will have the same information that was in the options from your previous administrative image. You can close the options editor to complete the update.

Updating Your Image Location

1. Find your original administrative image with Windows File Explorer, right-click and choose **Properties**. Go to the **Sharing** tab, note the share name as you will need to use this for the new image. Pick the **Advanced Sharing** button and on the resulting dialog box deselect the **Share this Folder** check box.

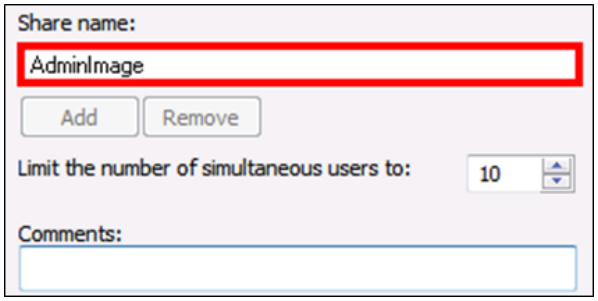
2. Move the new administrative image to the same, top level area on the server as the old administrative image with Windows Explorer.

3. Right-click this new folder and select **Properties** from the pop-up menu. Inside the properties dialog box, switch to the **Sharing** tab and select **Advanced Sharing**.

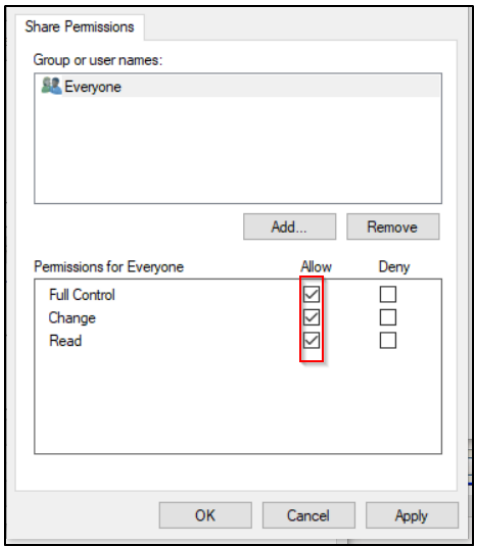


NOTE: If you don't see the sharing tab you don't really have administrative rights or are an administrator with limited rights.

The first setting for a shared folder is determining the share name.



Press the **Permissions** button to set Share Permissions and make sure **Everyone** has full access to this shared folder. Set all permissions to **Allow**.



Press the **Apply** button, then press **OK** to finish sharing this folder.

The Option Editor will retain all of the settings from the original administrative image. It is now a good time to make any adjustments to the Option Editor and save the changes before deploying.

- You cannot be using the Option Editor while users are updating. The Option Editor writes XML directly to the administrative image and may corrupt or prevent SOLIDWORKS from successfully updating if this action takes place while users are accessing the administrative image.
- When SOLIDWORKS starts on a client machine that installed from the original administrative image, it sees the new version and prompts the user to upgrade the client.
- When the user accepts the upgrade, the client machine is automatically upgraded to the same version as the administrative image with the options setup within the admin image.
- For additional documentation, please refer to the SOLIDWORKS Authored Administration Guide which also includes information on silent and active directory installations.
- Official System Requirements page https://www.solidworks.com/support/system-requirements

For further assistance, please contact our support team at support@hawkridgesys.com, or 877-266-4469 (US) or 866-587-6803 (Canada).