

Can an Individual License of ExtendSim be installed on a virtual machine?

Yes. Be sure that:

- The virtual machine has the correct permissions so that ExtendSim can be installed and run without security issues.
- The location where user-modifiable files will be installed has read-write access so ExtendSim can read the license file and the end user can open, run, and save models.

Do I need to uninstall ExtendSim 9 from my device when I install 10?

No. Both releases can be installed on the same device. In fact, we suggest you don't uninstall ExtendSim 9 until you've finished converting your files to 10.

Updating ExtendSim when there is an incremental release of ExtendSim (e.g. from 10.x to 10.y).

1. If you are using ExtendSim 10.0.4 or later, use the ExtendSim Updater at <https://www.extendsim.com/download10updater>.
2. If you are using ExtendSim released prior to 10.0.4:
 - For ExtendSim CP, DE, or Pro - the Trial version of ExtendSim is your updater. Download the Trial version of the package you purchased from <https://www.extendsim.com/products/trials> and install over your current installation of ExtendSim 10 using the same name and installing to the same location as the current installation. This updates ExtendSim without affecting the license file.
 - For ExtendSim Student or Analysis RunTime - contact the ExtendSim Team at Andritz Inc. to obtain the newer release.
 - *Note: When using the Trial version to update, if you subsequently launch ExtendSim and get a message that the license has not been activated, it means that you have not installed over the current installation but in fact have two installations of ExtendSim. Uninstall the update and reinstall it so that it replaces the files at the current location.*

Renewing the Maintenance & Support Plan (MSP). *Not applicable to Analysis Runtime or Student.*

1. The renewal date for your license's Maintenance and Support Plan (MSP) is shown on the ExtendSim startup screen (Help > About ExtendSim). Prior to the renewal date, the application will occasionally present a reminder message upon launch.
2. MSP can be renewed at www.ExtendSimStore.com, by contacting Andritz Inc. or local ExtendSim Distributor.
3. After renewing the MSP, your license file (*extendsim.lic*) will need to be updated and reactivated. After we notify you that the change has been made and the license has been updated, you will need to reactivate your license. See the document titled *Reactivating • Individual Licenses*.

Moving an Individual License of ExtendSim from one device to another.

Moving ExtendSim from one device to another works the same as for most applications.

- First, make copies of your ExtendSim models, any custom blocks, etc.
- Remove the license from the previous device using the Help > Revoke License command (or the Help > Deactivate ExtendSim command if prior to ExtendSim 10.0.5).
- Then follow the instructions to *Uninstall an Individual License of ExtendSim*, below.
- Install ExtendSim on the new device by downloading the appropriate Trial version.
- Paste your model files, etc. from the previous device to the new installation of ExtendSim.
- Launch ExtendSim on the new device and activate it using the same Activation Key you used for your initial installation. (If for some reason you weren't able to deactivate ExtendSim on the previous device, you will get an error message stating your Activation Key is already in use on another device. In this case, contact the ExtendSim Team at Andritz Inc.)

Uninstalling an Individual License of ExtendSim.

1. Before you uninstall ExtendSim, be sure to revoke the license using the Help> Revoke License command (or the Help > Deactivate ExtendSim command if prior to 10.0.5).
2. Use the Windows Settings > Apps and Features to uninstall ExtendSim 10.
3. Then delete the two folders: Documents/ExtendSim and Program Files/ExtendSim.

Secure Location Activation.

- Follow the instructions for *Manual Activation* on page 2 of the separate document *Installing & Activating • Individual Licenses*.
- After generating the text file *ExtendSim Activation Info.txt*, copy its information and email it to Sales.ExtendSim@Andritz.com.
- When we email back the license file *extendsim.lic*, copy or print the contents of that license file.
- Using the information from the license file, create a text file on the secure device (use Notepad or right-click on the desktop to create a new text document).
- Name the text file on the secure computer *extendsim.lic*.
- Place it in the folder that contains the user-modifiable files (by default, *UserName/Documents/ExtendSim10*).
- Restart ExtendSim.

When do I need to Reactivate the license?


Reactivation is required under the following circumstances:

- The Maintenance & Support Plan (MSP) has been renewed.
 - The maximum number of Reliability Event Cycles has been increased.
 - You've migrated to a different ExtendSim product (e.g. from DE to Pro).
 - The license is being upgraded to a newer release of ExtendSim (e.g. from release 10 to release 11)
- DO NOT reactivate ExtendSim if you are merely updating to an incremental release of ExtendSim (e.g. from 10.x to 10.y). For complete details on reactivating, see the document titled *Reactivating • Individual Licenses*.

Manual activation of ExtendSim.

Manual activation bypasses your device's lack of internet access or its blocking of communication (via firewalls or the like). Secured or hardened locations require manual activation (see below); other locations might need manual activation due to system configuration.

To do a manual activation of an Individual license, the *ExtendSim Activation Info.txt* file (or the equivalent information) must be sent to Sales.ExtendSim@Andritz.com.

A parsed version of the 5 lines of information in that text file is shown here: 

- The first line is whichever ExtendSim product you purchased.
- The user name, user email address, company name, and results of checking the *Notify me* box are taken from what is entered in the Activation Dialog. (The user name and company also show up on the ExtendSim startup screen after activation.) The *CountryCode* is a number identifying which part of the world the license was activated from. The *W* identifies the activated device as using a Windows operating system.
- The set of numbers in the third line is the Activation Key.
- The *rehost* info is a long number that the license management software (RLM) generates and assigns to this license; that number is encrypted and stored in the Reprise folder on the device. It stays with the license even if the license is moved to another device.
- The *reference* number is some number specific to the device ExtendSim is currently installed on, such as the serial number of the disk.

```
Activate: "ExtendSim Product"
LastName;FirstName;EmailAddress;Company;NotifyMe Yes/No;CountryCode;W
1234-5678-9098-7654
rehost=aaaabbbb3333ccccddrrrrxyzqrstuvwxyz
reference=disksn=01234abcd56789xyz
```

For complete instructions to manually activate ExtendSim, see *Installing & Activating • Individual Licenses*.

Issues When Installing, Launching, or Opening ExtendSim Files

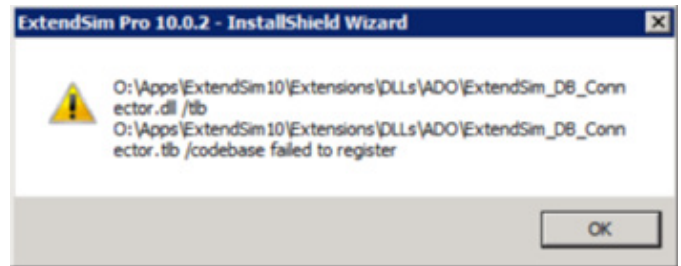
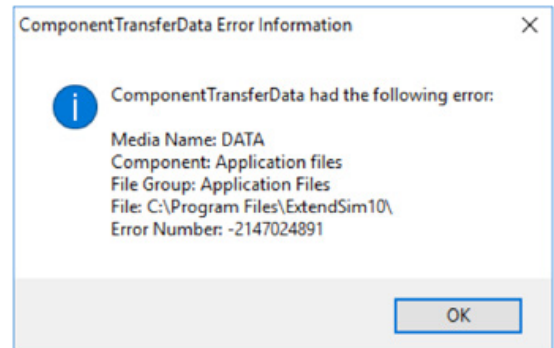
Security Issues When Installing and Launching

Security features in Windows operating systems (especially since Windows 10), and virus protection programs in general, can sometimes interfere with installing or launching ExtendSim files. These issues most often occur because:

- The ExtendSim installer installs DLLs that need to be registered in the Windows Registry during installation. If the Windows operating system or your security software restricts this:
 - You'll get a **ComponentTransferData** or **Codebase failed to register** error as the installer tries to register the DLLs.
 - If that doesn't happen, you might get a **_RightClickConnect database is missing** message when ExtendSim launches and tries to open the *Getting Started* model, indicating that a required DLL is missing.
- The ExtendSim application has an integrated compiler, so it creates and executes compiled code from the DATA segments of memory when it runs. In trying to protect your device:
 - Windows *Data Execution Prevention (DEP)* could cause ExtendSim to fail on launch and report an **Unknown msg** error or fail when placing a block in a new model and give an **Unknown block** message.
 - Some security systems could incorrectly identify ExtendSim as potential malware and stop it from launching or running, even though ExtendSim is digitally signed.

If you are having security problems installing or launching:

- Be sure you have the correct permissions. If possible, right-click the installer or the ExtendSim application and choose **Run as Administrator**. Or contact your IT or Admin to install ExtendSim to your account and launch with permission.
- Temporarily disable your virus protection software while installing ExtendSim. Note that for Windows 10, Windows Defender acts as an anti-virus system as discussed below.
- See the **Data Execution Prevention (DEP)** instructions later in this document if ExtendSim fails on launch or upon block placement.



Permission and Location Issues for User-Modifiable and Other Files

Unlike Word and other apps that by default do not open other files when they launch, when ExtendSim launches it requires the loading of certain files and it expects that those files have been installed at specific locations. If needed files don't have the correct permissions, or if ExtendSim can't find them, ExtendSim will not launch properly.

So that they can open, run, and save files, end users must have physical (correct user account) and permitted (read/write or full) access to the folder that contains user-modifiable files (libraries, example models, etc.) In addition, so that ExtendSim will know where those needed files are located, the installer places a text file (*ExtendSimDocPath.txt*) in the *Program Files/ExtendSim* folder.

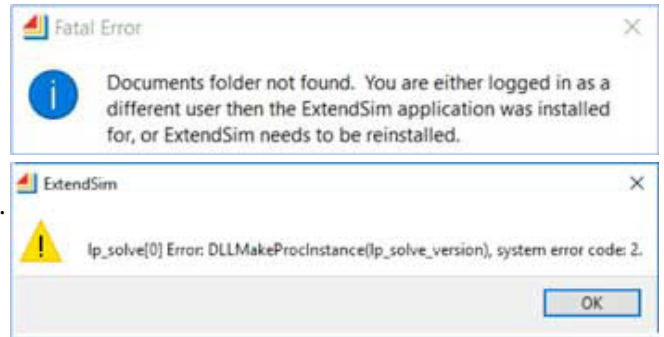
The most common reasons why user-modifiable and other necessary files were not correctly installed are:

- Someone from IT or an Admin installed the user-modifiable files in a folder under their account rather than in a folder accessible by the end user.
- The folder containing user-modifiable files does not give the end user or ExtendSim the correct permissions.
- The folder that contains user-modifiable files has been moved after installation, so ExtendSim is looking for files at the wrong location.

Permission and Location Issues for User-Modifiable and Other Files - continued

If ExtendSim reports a problem (such as “**Documents folder not found**” or “**lp_solve...system error code: 2**”) as it tries to launch or gives a similar error message when end users try to open model or library files:

- Verify that user-modifiable files such as examples and libraries are installed in a folder that is accessible by the end user; by default, that folder is **UserName/Documents/ExtendSim10**.
- Check the folder permissions where user-modifiable files and extensions are installed. End users need read/write or full access to that folder, depending on its location, so they can open, run, and save models.
- So ExtendSim can properly open needed files, right-click its icon and select **Run as Administrator** as you launch it.
- If the user-modifiable files were moved after installation, modify the file **ExtendSimDocPath.txt** (located by default at **Program Files/ExtendSim10**) to indicate the new location.



Activation Dialog Issues

After you have activated ExtendSim, the Activation Dialog should not appear again spontaneously. If it does appear, it could indicate that:

- The license file (*extendsim.lic*) has been moved, deleted, renamed, modified, or replaced by someone else's license file:
 - The license file should be located in the ExtendSim folder that contains the user-modifiable files (libraries and example models); by default, that folder is *UserName/Documents/ExtendSim10*.
 - There should only be one *.lic* file in that ExtendSim10 folder and it must be named *extendsim.lic*.
 - Each license file is signed as being specific to the Activation Key that was used and the device that ExtendSim was activated on. Do not modify the license file or attempt to use someone else's license file.
- There is more than one installation of the same ExtendSim product on your device.
 - Someone else may have installed the same ExtendSim product on this device. For example, maybe an Admin installed an Individual license of ExtendSim to their account and you installed the same license to your account. In this case, the Documents folders for those accounts will each have an ExtendSim10 folder. The solution is to uninstall ExtendSim from all duplicate locations. (If you want multiple users on one device, you must purchase a Node-Locked license.)
 - You may have improperly installed a Trial version when updating ExtendSim. To update existing files, the Trial version must be installed using the exact same folder name and to the same location as the current installation. If that didn't happen, there will be two installations of the same ExtendSim10 product, as indicated in your Documents folder. The solution is to uninstall the Trial version and reinstall it over the existing installation so that it updates the ExtendSim 10 files.

Other Issues When Installing or Launching ExtendSim

- In certain unusual cases, standard C runtime libraries that ExtendSim expects to find may be missing from your Windows operating system. In that case you will get the error message *api-ms-crt-runtime.dll is missing from the computer* when you try to launch ExtendSim. In this case you need to update your Windows operating system with the Universal C Runtime (CRT) component. See Microsoft support for information.
- In an ActiveX/COM client/server process, if a Client app tries to launch ExtendSim as a Server, you might get the error message **Run-time error 429: ActiveX component can't create object**. This occurs when the operating system restricts ExtendSim from registering as an OLE/COM server. So ExtendSim can register itself as an OLE/COM server to interface with Excel and other apps, right-click the ExtendSim application and choose **Run as Administrator**.

Specific Situations to be Aware of

- **Windows Defender Security Center** • In addition to any installed virus protection apps, Windows 10 installs with a Windows Defender Security Center that has virus, threat, account, firewall, and network protection. So even if you have temporarily disabled your virus protection app, the Security Center could be blocking the installation or launching of ExtendSim. You may need to change the settings or set the ExtendSim installer to be excluded in the Windows Defender Security Center. Be especially aware of those settings if you are attempting to install ExtendSim on virtual machines using Windows 10.
- **Data Execution Prevention (DEP)** • If ExtendSim fails on launch with *Unknown message* or fails when placing a block in a new model with the *Unknown block* message, it is probably due to a Windows security feature called *Data Execution Prevention (DEP)*.
 - DEP can help prevent damage to your computer from viruses and other security threats. It does this by stopping the execution of potentially malicious code from the DATA segments of memory.
 - ExtendSim has an integrated compiler, so it creates and executes compiled code from the DATA segments of memory. DEP can interpret this as malicious data, rather than legitimate code, and stop ExtendSim from properly launching or running.
 - To access DEP:
 - Go to the *System & Security* or *Maintenance* in *Windows Settings*.
 - Click *System*, then go to *Advanced System Settings*.
 - Under *Performance*, click the *Settings* button and select the *Data Execution Prevention* tab.
 - Since many legitimate applications execute code in the DATA segments of memory, Windows has two methods for allowing applications to be exempt from DEP restrictions:
 - The default setting for DEP is "*Turn on DEP for essential Windows Programs only*." If DEP is in this mode, ExtendSim will run properly.
 - The higher security setting for DEP is "*Turn on DEP for all programs and services except those I select*". If DEP is in this mode, it will interpret ExtendSim as being a potential threat and prevent ExtendSim from properly running unless ExtendSim is added to the list of exempted programs. To add ExtendSim to the list of programs that allow Data Execution, find the DEP dialog and add ExtendSim.