

Installation and Licensing

Installation Guide



MATLAB® & SIMULINK®

R2023a



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Installation Guide

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MathWorks Product Installation

This chapter describes how to install MathWorks® products.

Install Products Using Internet Connection

This procedure is the fastest and easiest for installing to a single computer. You must have a MathWorks Account, a license linked to that account, and an active Internet connection. If you have an Activation Key, you can use that instead of your linked license. If you do not have an Internet connection, follow the instructions in “Install Products Using File Installation Key” on page 1-12.

You must have the correct permissions to install MathWorks software. If you have questions about permissions, ask your system administrator.

Before You Begin

To avoid problems during the installation process, read these important notes before you begin.

MathWorks Account

To install MathWorks products, you must have a MathWorks Account or access to one. If you have an individual license, a MathWorks Account was created for you during your purchase.

If you do not have a MathWorks Account, select one of the following procedures determined by your situation:

Your Situation	Action
You are using your university's license.	Go to your institution's portal to install.
You are using your company's (network) license.	After you have created your MathWorks Account and retrieved the network license file from your license or network administrator, you can continue to “Step 1. Sign in to Your MathWorks Account” on page 1-3.
You are using your company's Enterprise license.	See your license administrator.
You do not have a product license or trial.	Go to the MathWorks Store.

Make Sure Your System Meets Requirements

Before you begin, see System Requirements for MATLAB.

Install Multiple Releases

You can install multiple releases on the same machine. For example, you can have both R2022a and R2022b, or R2022b and the prerelease of R2023a. Each release must be installed into its own folder.

Troubleshoot Connection Issues During Installation

Consider disabling antivirus software and Internet security applications on your computer during installation. These applications can slow the installation process or cause it to appear unresponsive (or to hang).

If you lose internet connection while installing, you will need to rerun the installer. If you continue to have connection issues:

- Create a more reliable internet connection (either moving closer to the router or using an ethernet cable).
- Follow the procedure in “Install Products Using File Installation Key” on page 1-12, which requires a computer with an internet connection to download the installer files but then the installation can be done on the target computer while offline (these can be the same computer)..

For additional suggestions on diagnosing internet connection issues, see this [MATLAB Answer](#).

Change the tmp directory for installation

To change the tmp folder for installation, see [MATLAB Answer How can I change the temp directory the MATLAB installer uses?](#)

Step 1. Sign in to Your MathWorks Account

Sign in to your MathWorks Account with your user name and password.

If you have Two-Step Verification enabled in your MathWorks Account, you must enter the verification code sent to your primary method when you signed in to your MathWorks Account.

Step 2. Download and Run Installer

The MathWorks product installer you download contains only the files that the installer needs to run on your selected platform, not the product files. Run the installer to select products that you want to install on the computer where you are signed in. The installer downloads the products that it needs from MathWorks.

From the Downloads page on the MathWorks website, select the release you want to install and the platform of the computer that you are installing on.

When the download is complete, follow your platform-specific instructions to start the installer.

Windows

On Windows® systems, the default installation directory is:

```
C:\Program Files\MATLAB\R2023a
```

To launch the installer on Windows systems:

- 1** Double-click the `matlab_R2023a_win64.exe` installer file to launch the installer.
- 2** When asked if you want to allow the application to make changes, answer **Yes**.
- 3** If your computer has been configured to use a proxy server for Internet access, enter the user name and password to continue with a standard installation. Contact your system administrator for proxy server credentials.

Linux

On Linux® systems, the default installation directory is:

```
/usr/local/MATLAB/R2023a
```

Note You must install MathWorks products to a directory where you have write permissions. Root privileges are not required to run the installer unless you want to install to the default directory.

Follow these steps to install on Linux:

- 1 At the system terminal, unzip the `matlab_R2023a_glnxa64.zip` installer archive to the `matlab_R2023a_glnxa64` directory by entering:

```
unzip matlab_R2023a_glnxa64.zip -d matlab_R2023a_glnxa64
```

- 2 Navigate to the `matlab_R2023a_glnxa64` directory.

- To launch the installer and install to a directory where you have write permissions, execute:

```
./install
```

When prompted by the installer, specify the folder for installation.

- To launch the installer as root, execute:

```
sudo ./install
```

If the installer fails to launch as root, it might not have access to the display. Try this workaround:

```
xhost +SI:localuser:root  
sudo -H ./install  
xhost -SI:localuser:root
```

This allows the root user to access the running X server, launches the installer, and then removes the root user from accessing the X server.

macOS

On macOS systems, the default installation directory is:

```
/Applications/MATLAB_R2023a.app
```

To install on macOS systems:

- 1 Double-click the `matlab_R2023a_maci64.dmg.zip` file to unzip the disk image.
- 2 Double-click the `matlab_R2023a_maci64.dmg` disk image file to mount the virtual disk.
- 3 Double-click the `InstallForMacOSX` installer file in the virtual disk to launch the installer.
- 4 If your computer has been configured to use a proxy server for Internet access, enter the user name and password to continue with a standard installation. Contact your system administrator for proxy server credentials.

Step 3. Accept License Agreement

Review the software license agreement. The license agreement is a legal contract between MathWorks and you that specifies how you are allowed to use MathWorks software and our terms for that use. Some MathWorks products require that you also agree to the terms and conditions for third-party software used in its programs and for application development with its programs, which may be different from or additional to those in The MathWorks, Inc. Software License Agreement.

If you do not agree with the terms of the license agreement, you will be unable to install MathWorks products.

Step 4. Select License or Enter Activation Key

Use a License

Select a license from the list.

If you do not have any licenses listed or you do not see the license you want to use:

- You may need to link a license with your account. See [Link a License](#) on the MathWorks website.
- You may be on an organizational license. Follow one of the procedures in “Have End Users Install Products” on page 4-6 or you can ask your administrator for an Activation Key (see following section).

If you are using a Student license, accept the Student Use Policy when prompted.

If you are still unsure of what to do, contact your administrator or [Contact Support](#) on the MathWorks website.

Use an Activation Key

If you want to install products on a license that is not linked to your MathWorks Account, ask your administrator for the Activation Key. The administrator on the license can retrieve the key by going to the License Center on the MathWorks website. If you are using a trial license, go to <https://www.mathworks.com/licensecenter/trials>.

Select **Enter Activation Key to link to another license**.

Network License Users Only

If you choose to link the network license to your MathWorks Account, after you select the network license, you will be prompted for the network license file (`license.dat` that you got from your administrator). Enter the path to the license file and click **Next** to continue installing.

Step 5. Choose Authentication Option

Note The authentication option is available to Licensed Named Users only.

During installation, you can activate the software right away and you will not require an Internet connection (for authentication) when you use MathWorks software thereafter on this computer. The activation process stores a license file that grants you the right to use the software.

If multiple users are expected to use this computer, or this software is being used in a cloud environment, you can select to authenticate the software each time it is started. This option requires each user to sign in to their MathWorks Account to use MATLAB.

MathWorks uses the account information to grant license rights. With this option, MATLAB periodically checks if the connection to MathWorks is still active. If it cannot detect an active connection after a certain period of time, it terminates the session.

Step 6. Confirm User

The software assumes that the person installing it is also the person using the software. If you are installing the software for someone else, change the user name (login name) to the intended end user.

Step 7. Select Destination Folder

The destination folder is where you want to install MathWorks products.

Accept Default Folder

The installation process creates a default installation folder based on your operating system and the release version. For instance, the default installation folder for R2023a is as follows:

Operating System	Default Installation Folder
Windows	C:\Program Files\MATLAB\R2023a
Linux	/usr/local/MATLAB/R2023a
macOS	/Applications/MATLAB/R2023a

To accept the default installation folder, click **OK**.

Specify Different Folder

To select a different folder click **Browse** to specify an existing folder.

To select a folder that does not exist, enter the path and file name you want, and the installer creates it.

The destination folder must be on an absolute path. MathWorks recommends that you install MathWorks products in their own folder. If you select the top-level drive, you will be asked to confirm your selections.

When specifying a folder name:

- You can use any alphanumeric character and some special characters, such as underscores.
- You cannot use non-English characters.
- Folder names cannot contain invalid characters and the destination cannot be named "private."

If you make a mistake while entering a folder name and want to start over, click **Restore Default**.

Step 8. Select Products

The Product Selection list shows all the products associated with the license you selected, or with the Activation Key you specified.

- To install a particular product, check the box next to its name. MATLAB is selected by default.

- If you do not want to install a particular product, clear the check box next to its name.
- If any of your selected products have a dependency on a product that was not selected, you will get a Product Dependencies warning and you will be asked to add the dependent products.

Dependent products are optional and you can choose to add or not add them. However, while you are still able to install the selected products without dependent products, you may not be able to access all the functionality you require.

- Required products must be installed.

Step 9. Select Options

Some options are available only for certain license types. If no options are presented to you, you can go to the next step.

- **Windows** — You can choose to put shortcuts for starting MATLAB in the **Start** menu and on the desktop.
- **Linux** — You can specify whether you want to create symbolic links to the `matlab` and `mex` scripts. Specify a folder to which you have write access and that is common to all the user paths on this computer, such as `/usr/local/bin`.

Step 10. Confirm Selections and Install

Displays the summary of your installation choices. To change a setting, click the topic on the navigation bar. To proceed with the installation, click **Begin Install**.

When the installation is complete, note if the installer shows you any additional steps required to complete configuration, and click **Finish**. If additional steps are required, complete them before running MATLAB.

Note For server products such as MATLAB Parallel Server™, MATLAB Web App Server™, MATLAB Production Server™, you must navigate to the installation directory and execute commands to set up the server. For details, see “Additional Steps for Server Products” on page 1-7.

Additional Steps for Server Products

MathWorks server products require additional steps to be executed to set up the server. For server product specific instructions, consult the following table for your product:

Product	Instructions
MATLAB Parallel Server	Choose Solution to Install and Configure MATLAB Parallel Server
MATLAB Online Server™	Perform Minimal MATLAB Online Server Installation on Single Machine
MATLAB Web App Server	Set Up MATLAB Web App Server

Product	Instructions
MATLAB Production Server	Set up server instances using either from command line or the dashboard interface: <ul style="list-style-type: none">• Set Up MATLAB Production Server Using the Command Line• Set Up and Log In to MATLAB Production Server Dashboard

Download Products Without Installing

Download products without installing them immediately (either on the same or a different computer). This procedure is useful when you want to install MathWorks products later, on one or more computers, either connected to the Internet or offline. You must be an administrator for a license linked with your MathWorks Account (this includes trial licenses).

After you download the installer and products, you can install MathWorks products from the download location at any time. If you are using a File Installation Key, make sure the downloaded product files include the installer file and are in a location that an off-network computer can access.

Note To download the installer and product files, you must be using a computer connected to the Internet.

Before You Begin

MathWorks Account

To download the product installer, you must have a MathWorks Account or access to one. If you have an individual license, a MathWorks Account was created for you during your purchase.

If you do not have a MathWorks Account, select one of the following procedures determined by your situation:

Your Situation	Action
You are using your university's license.	Go to your institution's portal to install.
You are using your company's (network) license.	After you have created your MathWorks Account, you can continue to "Step 1. Download Installer and Product Files" on page 1-10. If your administrator has downloaded the installer and product files, find out where you can access them and then go to "Install Documentation on Offline Machines" on page 1-20.
You are using your company's Enterprise license.	See your license administrator.
You do not have a product license or trial.	Go to the MathWorks Store.

Make Sure Offline System Meets Requirements

If you are planning to install products on an offline machine, make sure the offline system meets System Requirements for MATLAB.

Troubleshoot Connection Issues During Download

If you lose internet connection while downloading, you will need download again. If you continue to have connection issues, consider creating a more reliable internet connection (either moving closer to the router or using an ethernet cable) or changing machines.

For additional suggestions on diagnosing internet connection issues, see this MATLAB Answer.

Step 1. Download Installer and Product Files

Sign in to your MathWorks Account. If you have Two-Step Verification enabled (in your MathWorks Account), enter the verification code sent to your primary method.

- 1 From the Downloads page on MathWorks, select the release and platform of the computer that you are using to download (not the target computer).
- 2 Start the installer. When prompted to allow the app to make changes, answer **Yes**.
- 3 If prompted again, sign in to your MathWorks Account and accept the MathWorks license agreement.
- 4 From the installer, select **Advanced Options > I want to download without installing**.

Step 2. Select Destination Folder

Enter the path to the folder where you want to download the installer and product files.

When specifying a folder name:

- You can use any alphanumeric character and some special characters, such as underscores.
- You cannot use non-English characters.
- Folder names cannot contain invalid characters and the destination cannot be named “private.”

The destination folder must be on an absolute path.

Step 3. Select Platform

Select the platform of the computer you are going to be installing MATLAB on: Windows, Linux, or macOS.

You can select multiple platforms, but note that all platforms are downloaded into the same top level folder.

Downloading on Windows for Linux or macOS If you download the installer on Windows for installation on Linux, before you install on the target machine, you must transfer the files to the machine without compressing them in a file, such as a ZIP archive. Otherwise, you get an error after uncompressing the ZIP archive because Windows can't reliably recreate the symbolic links that were created prior to compression. See this [MATLAB Answer](#) for details and solutions.

Step 4. Select Products

The Product Selection list shows all the products available across all of your linked licenses.

- To make a particular product available for installation on the target computer, check the box next to its name. MATLAB is selected by default.
- If you do not want to have a particular product available for installation on the target computer, clear the check box next to its name.
- If any of your selected products have a dependency on a product that was not selected, you will get a Product Dependencies warning and you will be asked to add the dependent products.

Dependent products are optional and you can choose to add or not add them. However, while you are still able to install the selected products without dependent products, you may not be able to access all the functionality you require.

- Required products must be installed.

When the software is installed, the products available for installation will depend on what is allowed on the license.

Step 5. Confirm Selections and Download

- 1 Review the summary of your download choices. To change a setting, click the topic on the navigation bar. To proceed with the download, click **Begin Download**.
- 2 When the download is complete, click **Close**.

Step 6. Move Installer and Product Files (Optional)

If the target machine is an offline machine, copy the products files (including the installer file) to the target computer or an accessible location (for example, a USB drive or network share).

Verify that the folder containing the product files includes the following:

- The installer file for the target platform in the root of the folder:
 - **Windows**— `setup.exe`
 - **Linux**—`install`

If you plan to run the installer using the root account, see this MATLAB Answer: Why can't I install MATLAB with the root account in Linux?

- **macOS**—`InstallForMacOSX`
- An archives subfolder

If the archives subfolder contains less than three files, you might be missing required files and must download the files again.

Next Steps

The procedure you follow depends on whether or not the target computer is connected to the Internet.

- **With Internet connection:** use the procedure in “Install Products Using Internet Connection” on page 1-2
- **Offline:** use the procedure in “Install Products Using File Installation Key” on page 1-12

See Also

Related Examples

- “Install Products Using File Installation Key” on page 1-12

Install Products Using File Installation Key

Use this procedure when you want to install MathWorks products on a computer that does not have an internet connection. You can use this procedure even if you have an Internet connection; you are not required to disconnect the target computer.

To prepare for this workflow, you must get the following items:

- A File Installation Key and license file. See “Step 1. Get License File and Installation Key” on page 1-13).
- The product installer and product files using the procedure in “Download Products Without Installing” on page 1-9. Make sure you move the installation files along with the license file and file installation key to the target computer.

Downloading on Windows for Linux or macOS If you download the installer on Windows for installation on Linux or macOS, when you install on the target machine, you will get an error because Windows can't reliably recreate the symbolic links that are included with the UNIX[®] installers. See this [MATLAB Answer](#) for details and solutions.

You must have the correct permissions to install MathWorks software. If you have questions about permissions, ask your system administrator.

Before You Begin

To avoid problems during the installation process, read these important notes before you begin.

Make Sure Your System Meets Requirements

Before you begin, see System Requirements for MATLAB.

Install Multiple Releases

You can install multiple releases on the same machine. For example, you can have both R2022a and R2022b, or R2022b and the prerelease of R2023a. Each release must be installed into its own folder.

Change the tmp directory for installation

To change the tmp folder for installation, see [MATLAB Answer How can I change the temp directory the MATLAB installer uses?](#)

Disable Anti-Virus and Security Applications

Consider disabling antivirus software and security applications on your computer during installation. These applications can slow the installation process or cause it to appear unresponsive (or to hang).

Connection Errors

If you get connection errors while running the installer for an offline workflow, then you most likely do not have all the installation files required to install MathWorks products using a File Installation Key. Using a computer connected to the Internet, go to “Download Products Without Installing” on page 1-9 to restart the workflow from the beginning.

Step 1. Get License File and Installation Key

- Individual license users can get their license file and file installation key (FIK) from License Center.

Using a computer with an internet connection:

- 1 Sign in to your MathWorks Account and click the license you want to use.
- 2 Go to the **Install and Activate** tab. If you have not activated a computer for this license yet, click **Activate** to activate the license, download the license file, and get the file installation key.

If you have already activated the license, and you have the file installation key, you can click the download arrow or email icon under **Get License File** instead.

- 3 Download and save these items on removable storage (for example, a USB stick).
 - 4 Copy the license file and file installation key to the target computer.
- Network license users can get the network license file and FIK from their license or network administrator and copy them to their machine.
 - Administrators can get a copy of the network license file from the server hosting the network license manager and the file installation key (FIK) from License Center (do not give your users the license file downloaded with the FIK).
 - If you are using a trial license, go to <https://www.mathworks.com/licensecenter/trials>.

Step 2. Start Installer

Start the installer using the target machine's platform-specific instructions, as shown in this section. When prompted to allow the app to make changes, answer **Yes**.

Windows

On Windows systems, the default installation directory is:

```
C:\Program Files\MATLAB\R2023a
```

To launch the installer on Windows systems:

- 1 Double-click the `matlab_R2023a_win64.exe` installer file to launch the installer.
- 2 When asked if you want to allow the application to make changes, answer **Yes**.
- 3 If your computer has been configured to use a proxy server for Internet access, enter the user name and password to continue with a standard installation. Contact your system administrator for proxy server credentials.

Linux

On Linux systems, the default installation directory is:

```
/usr/local/MATLAB/R2023a
```

Note You must install MathWorks products to a directory where you have write permissions. Root privileges are not required to run the installer unless you want to install to the default directory.

Follow these steps to install on Linux:

- 1 At the system terminal, unzip the `matlab_R2023a_glnxa64.zip` installer archive to the `matlab_R2023a_glnxa64` directory by entering:

```
unzip matlab_R2023a_glnxa64.zip -d matlab_R2023a_glnxa64
```

- 2 Navigate to the `matlab_R2023a_glnxa64` directory.

- To launch the installer and install to a directory where you have write permissions, execute:

```
./install
```

When prompted by the installer, specify the folder for installation.

- To launch the installer as root, execute:

```
sudo ./install
```

If the installer fails to launch as root, it might not have access to the display. Try this workaround:

```
xhost +SI:localuser:root
```

```
sudo -H ./install
```

```
xhost -SI:localuser:root
```

This allows the root user to access the running X server, launches the installer, and then removes the root user from accessing the X server.

macOS

On macOS systems, the default installation directory is:

```
/Applications/MATLAB_R2023a.app
```

To install on macOS systems:

- 1 Double-click the `matlab_R2023a_maci64.dmg.zip` file to unzip the disk image.
- 2 Double-click the `matlab_R2023a_maci64.dmg` disk image file to mount the virtual disk.
- 3 Double-click the `InstallForMacOSX` installer file in the virtual disk to launch the installer.
- 4 If your computer has been configured to use a proxy server for Internet access, enter the user name and password to continue with a standard installation. Contact your system administrator for proxy server credentials.

Step 3. Accept License Agreement

Review the software license agreement. If you do not agree with the terms of the license agreement, you will be unable to install MathWorks products.

Step 4. Enter File Installation Key

Enter the File Installation Key where prompted.

- If the product files are not found by the installer, you will get an error before you enter the File Installation Key. This message includes instructions for downloading the necessary files.

- If you get a message saying that the key is invalid, check to make sure you entered the key correctly. If necessary, get a new File Installation Key.
- If you get a message saying that the key is invalid for the release you are trying to install, see your administrator or go to the License Center to get the files for the File Installation Key you have. If you are using a trial license, go to <https://www.mathworks.com/licensecenter/trials>.

Step 5. Select License File

The license file is required for installation when you use a File Installation Key. It identifies which products you can run.

- The file must be a valid license file.
- If the installer detects that the license file is invalid for any reason, use a different license file or get a new license file.

Step 6. Select Destination Folder

The destination folder is where you want to install MathWorks products. Accept the default installation folder, or click **Browse** to select a different one. If the folder does not exist, the installer creates it.

The destination folder must be on an absolute path. MathWorks recommends that you install MathWorks products in their own folder. If you select the top-level drive, you will be asked to confirm your selections.

When specifying a folder name:

- You can use any alphanumeric character and some special characters, such as underscores.
- You cannot use non-English characters.
- Folder names cannot contain invalid characters and the destination cannot be named "private."

If you make a mistake while entering a folder name and want to start over, click **Restore Default**.

Changing the tmp directory for installation To change the tmp folder for installation, see [MATLAB Answer How can I change the temp directory the MATLAB installer uses?](#)

Step 7. Select Products

The Product Selection list shows all the products associated with the File Installation Key you specified.

- To install a particular product, check the box next to its name. MATLAB is selected by default.
- If you do not want to install a particular product, clear the check box next to its name.
- If any of your selected products have a dependency on a product that was not selected, you will get a Product Dependencies warning and you will be asked to add the dependent products.

Dependent products are optional and you can choose to add or not add them. However, while you are still able to install the selected products without dependent products, you may not be able to access all the functionality you require.

- Required products must be installed.

Step 8. Select Options

Some options are available only for certain license types. If no options are presented to you, you can go to the next step.

- **Windows** — You can choose to put shortcuts for starting MATLAB in the **Start** menu and on the desktop.
- **Linux** — You can specify whether you want to create symbolic links to the `matlab` and `mex` scripts. Specify a folder to which you have write access and that is common to all the user paths on this computer, such as `/usr/local/bin`.

Step 9. Confirm Selections and Install

Review the summary of your installation choices. To change a setting, click the topic on the navigation bar. To proceed with the installation, click **Begin Install**.

When the installation is complete, note if the installer shows you any additional steps required to complete configuration, and click **Finish**. If additional steps are required, complete them before running MATLAB.

If you are installing server products, see “Additional Steps for Server Products” on page 1-7.

License or System Administrators Only If you run into unrecoverable errors, or if your organization has complex license mixing issues, consider performing an ISO download instead. See [How do I download a MATLAB ISO archive?](#)

See Also

Related Examples

- “Download Products Without Installing” on page 1-9
- “Install Documentation on Offline Machines” on page 1-20

Add to Existing Installation

Depending on how you want to expand your MathWorks Software, you can purchase and install additional products or extend the capabilities of products you are already licensed for.

- Additional Products and Toolboxes — Additional products contain functionality that can be used in conjunction with MATLAB and Simulink.

When you purchase additional products to add to a license you already own, rerun the installer to add those products to your existing installation. This procedure is exactly the same as when you installed your original products for the first time.

- Single installation — See the instructions in “Install Products Using Internet Connection” on page 1-2 or “Install Products Using File Installation Key” on page 1-12.
- Multiple installations — Administrators, select a procedure from “Install Products on Client Machines” on page 4-2.
- Add-Ons — Add-ons extend the capabilities of MATLAB by providing additional functionality for specific tasks and applications, such as connecting to hardware devices, additional algorithms, and interactive apps.

To learn more, see .

See Also

Related Examples

- “Install Products”

Install Documentation

By default, when using MATLAB, you access product documentation on the web. This reduces the installation footprint.

To use documentation when your computer is not connected to the Internet—either temporarily or permanently—you can install the documentation on your machine.

- The documentation installer installs documentation for every product installed on your machine for the release of MATLAB you are using to install the documentation. If you have multiple releases of MATLAB on the same machine, run the installation procedure from each of those MATLAB versions.
- If MATLAB was installed using a Designated Computer or Network license, you can install the documentation just one time to have it be available to all users on that license using the machine.
- The amount of disk space the documentation requires depends on how many documentation sets you are installing. As of R2023a, if you install every documentation set for every product that MathWorks provides, the total disk space required is just under 10 GB.

When you are ready to begin, select a procedure from the following table.

Scenario	Workflow
Your machine is usually connected to the Internet when using MATLAB but you work offline occasionally.	“Install Documentation Using Internet Connection” on page 1-19
Your machine is not connected to the Internet when using MATLAB.	“Install Documentation on Offline Machines” on page 1-20
For administrators: You want to make the documentation available on the network server.	“Install Documentation on Network Server” on page 1-23
	Note Make sure that the MATLAB installed on the network server includes <i>all</i> the toolboxes and add-ons that clients may use so that the documentation installer knows what product documentation sets to install.

See Also

Related Examples

- “Install Products Using Internet Connection” on page 1-2
- “Install Products Using File Installation Key” on page 1-12
- “Install Noninteractively” on page 4-4

Install Documentation Using Internet Connection

While your computer is connected to the Internet, you can install a copy of the documentation for later offline use.

If you normally work with MATLAB while not connected to the Internet, follow the procedure in “Install Documentation on Offline Machines” on page 1-20.

To install documentation:

- 1 While connected to the Internet, start MATLAB and sign in (if required).
- 2 On the **Home** tab, in the **Environment** section, click **Preferences** and select **MATLAB > Help**.
- 3 Under **Documentation Location**, select **Installed Locally**. **Install Documentation** appears.
- 4 Click **Install Documentation**.

MATLAB installs documentation in the support package root folder. To find the support package root, use the function `matlabshared.supportpkg.getSupportPackageRoot`.

- 5 Restart MATLAB to complete documentation setup.

Access the documentation as you normally would, online or offline. If MATLAB still tries to open documentation on the web, go to the **Home** tab, and in the **Environment** section, click **Preferences** and select **MATLAB > Help**. Under **Documentation Location**, select **Installed locally**.

Notes

- To revert back to documentation on the web, go to the **Home** tab, and in the **Environment** section, click **Preferences** and select **MATLAB > Help**. Under **Documentation Location**, select **Web, on mathworks.com**.
- For multiple computers, repeat this online procedure as many times as you have computers that need documentation installed. For permanently offline machines, see “Install Documentation on Offline Machines” on page 1-20
- To update installed documentation after adding or removing products, or to make sure you have the most recent documentation, repeat this procedure.

See Also

Related Examples

- “Install Documentation” on page 1-18
- “Install Products Using Internet Connection” on page 1-2

Install Documentation on Offline Machines

Before You Begin

Note This page contains an interactive user interface (UI) for downloading the documentation installation file. You must be using a computer connected to the Internet and viewing this page on the web to follow this workflow.

In this procedure, you download a documentation ISO (Windows and Linux) or DMG (macOS) file and mount it. The documentation ISO/DMG file is about 8.1 GB. If you do not feel comfortable or knowledgeable performing this procedure, contact your system administrator.

Downloading the documentation ISO or DMG file requires a MathWorks Account. However, you do not need a MathWorks Account to install the documentation on the offline machine. Therefore, an administrator with a MathWorks Account can download the file and a colleague can install the documentation for MATLAB users, even if the colleague is not a MATLAB user.

If you normally work with MATLAB while connected to the Internet and only occasionally work offline, follow the procedure in “Install Documentation Using Internet Connection” on page 1-19.

Step 1. Download Documentation Installer

- 1 On this page, select the operating system for the target offline machine and then click **Download documentation**.

Select Operating Systems

MacOS ▾

Download Documentation

- 2 When the download is complete, copy the documentation ISO or DMG file to the offline computer using removable media storage or a shared network location.

Step 2. Install Documentation on Target Machine

- 1 On the target machine, mount the documentation ISO or DMG file (see How do I install MathWorks products using an ISO image?).
- 2 Navigate to `bin/<arch>`, where `<arch>` is the operating system for this computer.
- 3 At the operating system command prompt, run the documentation installer:

```
mpm install-doc --matlabroot=matlabrootfolder
```

Replace *matlabrootfolder* with the folder where you installed MATLAB. *matlabrootfolder* must be a valid folder and formatted correctly.

- Windows example

If you installed MATLAB in the folder "C:\Program Files\MATLAB\R2023a", then you would issue the doc install command as follows:

```
mpm install-doc --matlabroot="C:\Program Files\MATLAB\R2023a"
```

- Linux/macOS

If you installed MATLAB in the folder "/home/username/matlab" for user jomalley, then you would run this command:

```
mpm install-doc --matlabroot=/home/jomalley/matlab
```

By default, MATLAB installs documentation in the support package root folder. To find the support package root, use the function `matlabshared.supportpkg.getSupportPackageRoot`.

To specify a different location for the documentation, use the `--destination` flag. If you mount the documentation ISO/DMG file in a location other than where MATLAB is installed, for example, a network drive, use the `--source` flag to provide the complete path to the installer files:

```
mpm install-doc --matlabroot=matlabrootfolder --source=docinstallfolder --destination=destinationfolder
```

Note

- If you run this command before you install MATLAB, you get an error. Install MATLAB first, and then you can install the documentation.
- If you try to run this command in a release earlier than R2023a, you get an error.

-
- 4 Unmount the documentation ISO or DMG. If you need to reclaim the disk space, delete the image.
 - 5 If you used the `--destination` flag to install the documentation somewhere other than the default location, go to Step 3 to modify the startup file.

Otherwise, restart MATLAB to complete documentation setup.

Step 3. Point MATLAB to Documentation

If you used the `--destination` flag to install the documentation somewhere other than the default location, follow this procedure to point MATLAB to the documentation.

- 1 On the offline computer, open the `startup.m` file for editing.
- 2 In `startup.m`, add this line to set `docroot` to the new documentation location, where `NEW_DOCROOT` is the path to the folder where you installed the documentation:

```
docroot(NEW_DOCROOT)
```

- 3 Restart MATLAB to complete documentation installation.

After Installation

Access the documentation as you normally would. If MATLAB still tries to open documentation on the web, go to the **Home** tab, and in the **Environment** section, click **Preferences** and select **MATLAB > Help**. Under **Documentation Location**, select **Installed locally**.

Notes

- To revert back to documentation on the web, go to the **Home** tab, and in the **Environment** section, click **Preferences** and select **MATLAB > Help**. Under **Documentation Location**, select **Web, on mathworks.com**.
- For multiple computers, repeat this offline procedure as many times as you have computers that need documentation installed. For machines that are normally connected to the Internet, see “Install Documentation Using Internet Connection” on page 1-19.
- To update installed documentation after adding or removing products, or to make sure you have the most recent documentation, repeat this procedure.

See Also

Related Examples

- “Install Documentation” on page 1-18
- “Install Products Using File Installation Key” on page 1-12

Install Documentation on Network Server

Note These instructions are for administrators only.

Defaulting to web documentation is the best way to ensure that your users are getting the most up to date documentation for their installed products. However, if you need to provide access to documentation for your users with machines that can't access the Internet, you can choose to install documentation on a network server that all of your users can access instead of installing documentation on individual machines. The advantages to this setup are that:

- Users do not need to store large amounts of documentation on their machines.
- Users do not have to remember to update documentation when products are added or deleted.
- As long as you keep it updated, users always access the most recent documentation that is available for installation.

Note Make sure MATLAB is installed on the network server. You don't have to have it running, nor does it even need to be in use, but MATLAB must be installed.

In addition, make sure that the MATLAB installed on the network server includes ALL the toolboxes and add-ons that clients may use so that the documentation installer knows what product documentation sets to install. If you omit a product your users are accessing, they do not get the documentation for that product.

To install documentation on the network server:

- 1 Follow the procedure in "Install Documentation on Offline Machines" on page 1-20 to download and install documentation on the network server.
- 2 Edit the `startup.m` file for each user on each computer that has MATLAB and set `docroot` to the network server documentation location.

In the `startup.m` file, add the line

```
docroot(NEW_DOCROOT)
```

Replace `NEW_DOCROOT` with the path to the network folder where you installed the documentation.

Alternatively, give this part of the instructions to your users to have them do it themselves.

- 3 Restart MATLAB on each user machine (or have the user do it).

Access the documentation as you normally would, online or offline. If MATLAB still tries to open documentation on the web, go to the **Home** tab, and in the **Environment** section, click **Preferences** and select **MATLAB > Help**. Under **Documentation Location**, select **Installed locally**.

Notes

- To revert back to documentation on the web, go to the **Home** tab, and in the **Environment** section, click **Preferences** and select **MATLAB > Help**. Under **Documentation Location**, select **Web, on mathworks.com**.

- To update installed documentation after adding or removing products, or to make sure you have the most recent documentation, repeat this procedure.

See Also

Related Examples

- “Install Documentation” on page 1-18
- “Install Noninteractively” on page 4-4

Manage Products

Add products, update current MATLAB installation, update license, and download a newer release.

Update MathWorks Software Using Internet Connection

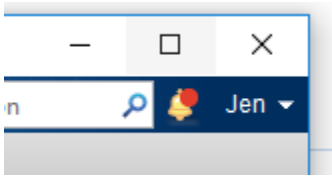
Update Existing Installation

Download and install a more recent version for the release of MATLAB that you currently have installed. For example, if you have R2023a installed, you might be able to download a more recent version of R2023a.

When you install a MATLAB update, you get not only the most recent update for your version, but also all prior updates for your version as well.

Update from Notifications in MATLAB

If a more recent version is available, a notification displays in MATLAB when you start the program.



To install the MATLAB update, click the notification icon and select **Install Update**. If you click the notification and then decide to update at a later time, the notification icon is no longer red, but you can still install the update.

Check for Updates

You can also check for updates manually.

- 1 Make sure that you have an active Internet connection.
- 2 On the **Home** tab, click **Help > Check for Updates**. The Add-On Manager opens with the **Updates** tab selected.
- 3 If an update is available, click the **Update** button to the right of the update name to install it. If no update is available for your version or if you have already installed the latest update, MATLAB displays that information.

Add Products to an Existing Installation

To add products to your existing MATLAB installation, use the Add-On Explorer. For details, see the MATLAB documentation.

See Also

Related Examples

- “Get New MATLAB Release” on page 2-6

External Websites

- License Center

- Web Downloads

Update MathWorks Software on Offline Computer

Note Use this procedure only for R2023a and later. This process can be followed by license administrators only.

Offline Update Overview

The optimal experience for installing an update is from within MATLAB on a computer connected to the Internet. When that is not possible, however, license administrators can perform an update to an existing MATLAB installation on any computer by downloading the update package.

- Each update contains all the fixes from previous updates.
- Update packages require an unzip utility that supports ZIP64.
- Offline installations use a noninteractive command-line process.
- You must have write privileges to *matlabroot* (where MATLAB is installed) to run the command in this process.
- You must be a license administrator to access the update links on mathworks.com.

Offline Update Procedure

Download the update package to an online computer, and then install the package on the user's computer.

On the computer with an internet connection:

- 1 Go to Downloads on the MathWorks website.
- 2 From the **I WANT TO:** menu, select Get Updates.
- 3 Under **Get Updates for MATLAB and Simulink Products**, click **Get Update Package for Offline Installation**.
- 4 Under **Select Release**, choose the release you want to download. If you don't see the release you want, click **Show More**.
- 5 Generally, the downloads page detects the operating system of the computer you are on and shows that update package. Use the down arrow to select a different update package.
- 6 Follow the instructions to download the update package.
- 7 Copy the update package to the offline computer or to a network share location.

On the offline computer:

- 1 Unzip the update package to a new folder to use for the update, for example, `C:\temp\R2023a_Update1_Package`.
- 2 Close all instances of MATLAB.
- 3 Install the update according to the instructions for your operating system. In the command for each platform, argument `destination` specifies the full path to where you installed the MathWorks products you want to update.
 - Windows

- a** Navigate to *updatefolder/bin/win64*, where *updatefolder* is the full path to the folder where you unzipped the update package (step 7).
 - b** In a command window, run the update installer with the *destination* argument:
`MathWorksUpdateInstaller.exe --destination <MATLAB installation folder>`
- Linux
 - a** Open a terminal.
 - b** Navigate to:
`updatefolder/bin/glnxa64`
 Where *updatefolder* is full path to the folder where you unzipped the update package (step 7).
 - c** Run the update installer with the *destination* argument:
`./MathWorksUpdateInstaller.sh --destination <MATLAB installation folder>`
- **macOS**
 On the Mac, when you unzip, the contents of the ZIP file are extracted at the same directory level the unzip command is run at.
 - a** Unzip the update installer, for example:
`unzip ./R2023a_Update1_macOS_package.zip`
 - b** Change directory to *bin/arch* and run the update installer with the *destination* argument:
`./MathWorksUpdateInstaller --destination <MATLAB installation folder>`

Offline Update Log Files

During the installation and activation of MathWorks products, the product installer creates a log file that can be used to obtain information on the installation processes.

The installation log file is named `mathworks_%username%.log` and the activation log file is named `aws_%username%.log`. In both cases, `%username%` is the person running the installer.

To locate your log files, see [Where are the MATLAB Installation and Log Files Located?](#)

Get New MATLAB Release

When a new MATLAB general release becomes available, for example, from R2022b to R2023a, as long as the Software Maintenance Service on your license is current, you can install the new release. For additional information, see MathWorks Software Maintenance Service on the MathWorks website.

To check if a new release is available, in MATLAB, click **Help > Check for Updates**. The Add-On Manager opens with the **Updates** tab selected.

- If there is no newer release, then you are notified that your MATLAB is up to date.
- If there is a new release available, MATLAB displays a banner prompting you to get the new release.

To get the new release, if it is available:

- 1** Click **Get Latest Release** to open the Downloads page on the MathWorks website and download the installer.
- 2** Run the MATLAB installer.
- 3** Install the new release in a new installation folder, even if you have the previous version or a prerelease version of the same release installed already.

You do not need to delete an existing MATLAB installation before installing a new release. Each release is independent of previous releases and you can run multiple releases on the same computer.

Note Getting a new release installs only those products currently on your license. For example, if your existing installation includes ten products, but your current license includes only nine of those products, your new MATLAB installation will include only the nine products.

See Also

Related Examples

- “Update MathWorks Software Using Internet Connection” on page 2-2

Update Your License

Automatic License Updates

Throughout the term of your license, your MATLAB installation periodically contacts MathWorks to verify that your license is up to date. If your license is up to date, the validation process is transparent. If it determines that you need to update your license, the validation process displays a dialog box giving you the option to update your license.

You can disable validation in the License Center at the MathWorks website.

Update License Manually from Within MATLAB

To update your license manually from within MATLAB:

- 1 On the **Home** tab, in the **Resources** section, click **Help > Licensing**.
- 2 Select **Update Current Licenses...** and follow the prompts to update your license.

MATLAB contacts MathWorks to retrieve the most current version of the license file for the license. The update process overwrites the current license file on your system. You need to restart MATLAB.

Update License Using Activation

If your license file has expired or another licensing requirement is preventing MATLAB from starting, you can update your license by using the MATLAB activation client.

For instructions on using the activation client, see “Activate MATLAB Installation Manually” on page 4-8.

Update License for Offline Computer

If the computer that is running MATLAB cannot connect to the Internet, you can download a license file manually from the MathWorks website on another computer and move the file to the target computer.

Note If you are a license administrator, follow the procedure in “Update Network License” on page 6-4.

- 1 Sign in to www.mathworks.com.
- 2 Click on your profile picture or initials in the top right and then select **My Account**.

You can also get to your MathWorks Account from within MATLAB. On the **Home** tab, in the **Resources** section, click **Help > Licensing > Manage Licenses**.

- 3 Under **My Software**, select your license number from the list. If you have more licenses than fit on the screen, click **View additional Licenses or Trials**. Clicking a license takes you to the License Center.
- 4 Click the **Install and Activate** tab.

- 5 On the right side, under **Related Tasks**, select **Activate to Retrieve License File**.
- 6 Fill out all required fields and follow prompts. Click **Continue**.
- 7 At **Next Steps**, click **Download License File**.
- 8 Skip **Step 2** (because you have already done it as part of this procedure) and click **Done**.
- 9 Copy the license file to the licenses folder on the offline computer. The following support article contains instructions for finding license file folders on various operating systems: [Where can I find MATLAB license files?](#)
- 10 Start MATLAB.

If you encounter difficulties, Contact Support.

See Also

Related Examples

- “Individual License Administration”

Uninstall MathWorks Products

Your license to use MathWorks products provides a set number of installations you can perform (for particulars, check your license agreement). Each of these installations is called an activation.

When you uninstall, you remove the software for a specific release from that computer, but that installation is still considered activated and counts toward your total.

You may have installations you want to remove but not deactivate, and you may have installations you want to deactivate but not remove. Consult the following table to determine which of these removal processes work best for your scenario.

Action	Rationale
Uninstall (but not deactivate)	<ul style="list-style-type: none"> You want to remove a release of MATLAB but still use a different release of MATLAB. <p>For this scenario, you would uninstall the unwanted version but not deactivate the license.</p> <ul style="list-style-type: none"> You are troubleshooting a corrupted or failed installation. <p>For this scenario, you might want to uninstall the failed version so that you could deactivate the license on the computer unless you decided to install on a different machine.</p>
Deactivate (but not uninstall)	<p>You have used all your activations, and you now want to install on another machine.</p> <p>For this scenario, you would deactivate the license on a machine you no longer need and use the license on a new machine.</p> <p>If you do not plan to run MATLAB again on the deactivated machine, you should uninstall the software.</p>
Uninstall and deactivate	<p>Decommissioning or destroying a machine.</p> <p>For this scenario, if the computer is still working, you can uninstall the software and deactivate the license on the same computer. If the computer is unusable or lost, there is still no need to deactivate the license, but you won't have to uninstall the software.</p> <p>Note If you uninstall the software before you deactivate the license, use one of the other methods for deactivation.</p>

To uninstall, follow the procedures in this section. To deactivate, see “Deactivate Your Installation” on page 2-12.

Uninstall Products Interactively

Uninstall Products from Windows Systems

To uninstall MathWorks products from your computer:

- Exit MATLAB.
- Start the uninstaller, using any of the following methods.
 - On computers running Windows 10, go to **MATLAB R2023a** and open the folder. Right-click MATLAB inside the folder, and select **Uninstall**.

- On computers running Windows 7, click the **Start** menu, and select **Control Panel**. In the Control Panel, select **Uninstall a Program** in the Programs category. From the list of products displayed, click **MATLAB R2023a**.
- Assuming you selected the default folder when you installed MATLAB, navigate to `C:\Program Files\MATLAB\R2023a\uninstall\bin\win64`. If you installed in a different folder, navigate there instead. Double-click the uninstaller executable, `uninstall.exe`.

To use the uninstaller properties file (`uninstaller_input.txt`) to run the uninstaller noninteractively, see “Uninstall Products Noninteractively” on page 2-11.

- 3 In the Uninstall Products dialog box, select the products you want to remove and click **Uninstall**.

If you select MATLAB, you automatically remove all other MathWorks products.

You might receive a message telling you that the product you want to uninstall has other products that depend on it. For example, most MathWorks products require the MATLAB product. To close the message and continue removing products, click **OK**. To change the products you had selected for deletion, click **Cancel**.

If you also want to remove your MATLAB user preferences, click the **Uninstall MATLAB preference files (including Command History)** check box. By default, the uninstaller does not delete these preference files. MATLAB preference files contain your environment settings, such as command history and Help favorites. To find where MATLAB stores your preferences, use the `prefdir` command at the MATLAB prompt, as in the following example:

```
prefdir
ans =C:\Users\username\AppData\Roaming\MathWorks\MATLAB\R2023a
```

username is the user name (login name) of the person who runs MATLAB on this computer.

- 4 (Optional) Choose whether to delete download archive files. If your MATLAB installation folder contains the archive files for downloaded products, the uninstaller displays a message asking if you want to delete these archive files. The installer stores these archive files in the *matlabroot* \archives folder of your installation. To remove these files, click **Yes**.
- 5 To proceed with the removal, click the **Uninstall** button. The uninstaller displays the status of the operation as it progresses and displays a dialog box when the operation is complete. Click **Finish** to exit the uninstaller. When you uninstall a MATLAB installation, the uninstaller displays a dialog box suggesting that you deactivate the installation. For more information about deactivation, see “Deactivate Your Installation” on page 2-12.

Uninstall Products from Linux Systems

- 1 Exit the MATLAB program.
- 2 Enter this command at the Linux prompt, where *matlabroot* represents the name of your top-level MATLAB installation folder:

```
rm -rf matlabroot
```

Uninstall Products from macOS Systems

To uninstall MATLAB:

- 1 Get the user name and password of an administrator account on the macOS computer. Depending on where you installed MATLAB software, you might need administrator privileges to remove it.

- 2 Exit MATLAB.
- 3 Navigate to your MATLAB installation folder. For example, the installation folder might be named `MATLAB_R2023a.app` in your Applications folder.
- 4 Drag your MATLAB installation folder to the trash, and then select **Empty Trash** from the **Finder** menu.

If you need to deactivate the software, see “Deactivate Your Installation” on page 2-12.

Uninstall Products Noninteractively

Note The noninteractive uninstall process is available on Windows platforms only.

To run the uninstaller noninteractively:

- 1 Create an uninstaller properties file.

Make a copy of the uninstaller properties file template, named `uninstaller_input.txt`, located in the `uninstall` folder in your MATLAB installation folder. For example:

```
copy matlabroot\uninstall\uninstaller_input.txt C:\temp\my_uninstall.txt
```

- 2 Open your uninstaller properties file using any text editor, and enter values for all the specified parameters. For example, you can specify the name of the output log file using the `outputFile=` parameter. The template contains detailed descriptions of each parameter with examples.

By default, the uninstaller removes all the products in a particular MATLAB installation, however, you can specify which products to delete. In the product list in the template, remove the comment character at the beginning of the product name. In silent mode, if you specify a product for deletion that is not one of your installed products, the uninstaller exits and writes a message to your log file. If you specified `mode=automated`, the uninstaller displays the Product Selection dialog box and pauses, waiting for you to adjust the product selection.

- 3 Save your changes to the file.
- 4 Run the uninstaller (`uninstall.exe`), using the `-inputFile` flag to specify the properties file as a command-line argument.

For example, click **Start** and select the **Run** option. In the Run dialog box, enter the `uninstall` command, specifying the full path of the properties file as a command-line argument:

```
uninstall.exe -inputFile C:\temp\my_uninstall.txt
```

See Also

Related Examples

- “Deactivate Your Installation” on page 2-12
- “Install Noninteractively” on page 4-4

Deactivate Your Installation

Your license to use MathWorks products provides a set number of machines on which you can install (for particulars, check your license agreement). Each of these installations is called an activation.

When you deactivate a license from a machine, you remove all the activations on the machine that used that license. Deactivating a license makes that activation available for another computer. Deactivating one license does not affect other licenses being used on the same machine.

You may have installations you want to remove but not deactivate, and you may have installations you want to deactivate but not remove. Consult the following table to determine which of these removal processes work best for your scenario.

Action	Rationale
Uninstall (but not deactivate)	<ul style="list-style-type: none"> You want to remove a release of MATLAB but still use a different release of MATLAB. <p>For this scenario, you would uninstall the unwanted version but not deactivate the license.</p> <ul style="list-style-type: none"> You are troubleshooting a corrupted or failed installation. <p>For this scenario, you might want to uninstall the failed version so that you could deactivate the license on the computer unless you decided to install on a different machine.</p>
Deactivate (but not uninstall)	<p>You have used all your activations, and you now want to install on another machine.</p> <p>For this scenario, you would deactivate the license on a machine you no longer need and use the license on a new machine.</p> <p>If you do not plan to run MATLAB again on the deactivated machine, you should uninstall the software.</p>
Uninstall and deactivate	<p>Decommissioning or destroying a machine.</p> <p>For this scenario, if the computer is still working, you can uninstall the software and deactivate the license on the same computer. If the computer is unusable or lost, there is still no need to deactivate the license, but you won't have to uninstall the software.</p> <p>Note If you uninstall the software before you deactivate the license, use one of the other removal processes.</p>

To deactivate, follow the procedures in this section. To uninstall, see “Uninstall MathWorks Products” on page 2-9.

Select a Deactivation Procedure

The deactivation process has two parts: the license must be deactivated on your computer and must also be deactivated in MathWorks systems.

- If you have internet connectivity, the MathWorks deactivation application can take care of both parts of the process. See “Deactivate License on Online Computer” on page 2-13.
- If you do not have internet connectivity, or if you have a limited internet connection (for example, if there is a firewall), there is a two-step process - the first step is performed on the computer and the second part is completed in License Center. See “Deactivate License on Offline or Internet-Limited Computer” on page 2-13.

- You can still deactivate the license if the computer has been destroyed or lost. See “Deactivate License on Lost or Destroyed Machine” on page 2-15.

When you deactivate a license, you deactivate all the installations of that license on a particular computer. For example, if you have two different releases of MATLAB installed using the same license, and you deactivate this license, deactivation renders both of those releases unusable.

Deactivate License on Online Computer

To deactivate a license on a computer with an internet connection:

- 1 Start the deactivation application using any of the following methods.
 - Choose to start deactivation after running the uninstaller.
 - Choose to start deactivation after a validation check that finds the installation is inactive.
 - Choose the deactivate option from the **Help > Licensing** menu in the MATLAB desktop.
 - On computers running Windows 10, go to **MATLAB R2023a** and open the folder. Right-click on MATLAB inside the folder, and select **Deactivate**.
 - On computers running Windows 7, click the **Start** menu and select **MATLAB**. The deactivation application should appear on the list.
 - On all platforms, navigate to the MATLAB installation folder and start the deactivation application executable.

Windows Systems:

```
matlabroot\uninstall\bin\win64\deactivate_matlab.exe
```

Linux Systems:

```
matlabroot/bin/deactivate_matlab.sh
```

macOS Systems:

```
/Applications/MATLAB_R2023a.app/bin/deactivate_matlab.sh
```

- 2 Select the license that you want to deactivate and click **Deactivate**.

When the deactivation application starts, it displays the licenses you currently have installed and activated on your computer. If you start the application from within MATLAB, the license you are using is preselected.

- 3 Confirm deactivation. Click **Yes** and the deactivation application attempts to contact MathWorks.
- 4 When the confirmation is complete, click **OK**.

After you deactivate a license, the application displays an additional column listing the status of the licenses. To deactivate another license, select it from the list and click **Deactivate**. When you are finished, click **Close** to exit the deactivation application.

Deactivate License on Offline or Internet-Limited Computer

To deactivate a license on a computer without an internet connection, or one with a limited internet connection (for example, if there is a firewall), you perform the first part on the machine with the license you want to deactivate, and the second part in License Center using a machine with an internet connection to complete the deactivation.

Step 1. On the Offline Machine

- 1 Start the deactivation application using any of the following methods.
 - Choose to start deactivation after running the uninstaller.
 - Choose to start deactivation after a validation check that finds the installation is inactive.
 - Choose the deactivate option from the **Help > Licensing** menu in the MATLAB desktop.
 - On computers running Windows 10, go to **MATLAB R2023a** and open the folder. Right-click on MATLAB inside the folder, and select **Deactivate**.
 - On computers running Windows 7, click the **Start** menu and select **MATLAB**. The deactivation application should appear on the list.
 - On all platforms, navigate to the MATLAB installation folder and start the deactivation application executable.

Windows Systems:

`matlabroot\uninstall\bin\win64\deactivate_matlab.exe`

Linux Systems:

`matlabroot/bin/deactivate_matlab.sh`

macOS Systems:

`/Applications/MATLAB_R2023a.app/bin/deactivate_matlab.sh`

- 2 Select the license that you want to deactivate and click **Deactivate**.

When the deactivation application starts, it displays the licenses you currently have installed and activated on your computer. If you start the application from within MATLAB, the license you are using is preselected.

- 3 Confirm deactivation. Click **Yes**.
- 4 The application will attempt to contact MathWorks and when it cannot, it displays the Deactivation Next Steps dialog box. This dialog box contains the deactivation string. Copy or print this string.

Step 2. In License Center

- 1 On a machine connected to the Internet, go to the MathWorks website and sign in to your account
- 2 Select the license you want to deactivate.
- 3 Click the Install and Activate tab. Click the link to Deactivate a Computer.
- 4 You may see more than one activation label. Click the X under "Deactivate" on the line with the activation you want to deactivate.
- 5 In the text box in Step 2, enter the deactivation string you copied from the offline computer.
- 6 Click **Submit Deactivation String**.
- 7 When you have finished, go back to the offline machine.

Step 3. Back on the Offline Machine

- 1 Return to the deactivation application on the offline machine.
- 2 In the **Complete Deactivation** dialog, click **OK**.

After you deactivate a license, the application displays an additional column listing the status of the licenses. To deactivate another license, select it from the list and click **Deactivate**. If you are finished, click **Close** to exit the deactivation application.

Deactivate License on Lost or Destroyed Machine

If you no longer have access to MATLAB on the computer, you can deactivate using the "Manual Deactivation agreement" in License Center.

- 1 On a machine connected to the Internet, go to the MathWorks website and sign in to your account
- 2 Select the license you want to deactivate.
- 3 Click the Install and Activate tab. Click the link to Deactivate a Computer.
- 4 You may see more than one activation label. Click the X under "Deactivate" on the line with the activation you want to deactivate.
- 5 At the bottom of the dialog, click **Manual Deactivation agreement**.
- 6 Follow all prompts to complete deactivation.

See Also

Related Examples

- "Uninstall MathWorks Products" on page 2-9

Install and Run Network License Manager

Install and run the network license manager, configure licenses and modify license options, update network licenses

Install License Manager on License Server

Install the network license manager on a computer connected to the Internet or offline. You must install the license manager and have it up and running before you install MATLAB software on client computers.

You only need to install the network license manager one time at a site.

Note If your license server is offline or behind a firewall, follow the instructions to download the installer before beginning this procedure and follow the instructions, where indicated, for an offline server.

Caution Follow these recommendations when installing the network license manager:

- Do not expose the commands to run the network license manager to the Internet or an untrusted network.
 - Start the network license manager so that local administrator access is required to run the shutdown procedure. .
-

Step 1. Download License File

Perform these steps on a computer that is connected to the Internet.

- 1 Go to the License Center. Sign in to your MathWorks Account, if prompted.
- 2 Click the network license you'll be using.
- 3 Click the **Install and Activate** tab and then click **Activate a Server**.
- 4 Obtain the host ID of the computer on which you intend to run the network license manager. The following support article contains instructions for finding your host ID: "What is a Host ID?".
- 5 Specify the operating system type and host ID of the computer on which you intend to run the network license manager. You can optionally assign a descriptive label to the activation as well. Click **Continue**.
- 6 Answer "No" to **Is the software installed?**. Click **Continue**.
- 7 Select either **Download License File** or **Email License File**.

Whichever option you selected, remember to save the license file to the server where you will be installing the network license manager.

Click **Continue**.

For this workflow, you can skip steps 2 and 3 in the License Center and continue following these instructions.

Step 2. Download Product Installer

On a computer connected to the Internet, download the product installer from mathworks.com/downloads. You can specify release and operating system of the license server.

Install on Server Connected to Internet

When you download the installer from the website, you receive the files that the installer needs in order to run on your selected platform, not the product files. The installer downloads the products that it needs from MathWorks during installation. For this to work, the license server must be connected to the Internet.

If you are installing the license manager on the same machine where you downloaded the installer, and you have an internet connection, go to Step 3. Start the Installer.

Install on Offline Server

If you are installing on an offline machine, download the product files using the procedure described in “Download Products Without Installing” on page 1-9.

Copy the installer and product files to the server where you will be installing the network license manager. Continue to Step 3. Start the Installer.

Step 3. Start the Installer

Start the installer using the procedure that matches the operating system of the license server.

Windows

- 1 If you clicked **Run** when you selected the installer on the MathWorks website, the installer starts automatically.

If you saved the installer instead, double-click the self-extracting installer file in the folder where you saved it. The name of the self-extracting installer file is `matlab_release_$ARCH`, where *release* is the release you are installing (for example, R2023a) and *\$ARCH* is the selected architecture.

The installer should start automatically after file extraction is complete.

- 2 To restart the installer later, click `setup.exe`. This file is located in the top level of the folder where you extracted the files.
- 3 When the installer starts, click **Advanced Options > I want to install network license manager**.

macOS

- 1 Double-click the `dmg` file that you downloaded from the MathWorks website. Double-click `InstallForMacOSX.app`.
- 2 When the installer starts, click **Advanced Options > I want to install network license manager**.

Linux

- 1 Use the `unzip` command to extract the files from the archive file that you downloaded from the MathWorks website. After extracting the files, execute the installer command:

```
./install
```

If you plan to run the installer using the root account, see this MATLAB Answer: Why can't I install MATLAB with the root account in Linux?

- 2 When the installer starts, click **Advanced Options > I want to install network license manager**.

Step 4. Review the Software License Agreement

Review the software license agreement and, if you agree with the terms, select **Yes** and click **Next**.

Step 5. Select License File

Provide the name and path to the license file that you downloaded in Step 1. Click **Next**.

If the installer can't find the hostid in the license, you'll get a message letting you know you must manually add it after you finish installing.

Step 6. Select Destination Folder

The destination folder is where you want to install the network license manager.

- Accept the default installation folder, or click **Browse** to select a different one. If the folder does not exist, the installer creates it.
- The destination folder must be on an absolute path.
- MathWorks recommends that you install the network license manager in its own folder. If you select the top-level drive, you will be asked to confirm your selection.
- When specifying a folder name:
 - You can use any alphanumeric character and some special characters, such as underscores.
 - You cannot use non-English characters.
 - Folder names cannot contain invalid characters and the destination cannot be named "private."

If you make a mistake while entering a folder name and want to start over, click **Restore Default**.

Step 7. Select Options (Windows Only)

Select **Configure as service** if you want the license manager to launch every time you start the computer.

Step 8. Confirm Selections and Install

This screen displays the summary of your installation choices. To change a setting, click the topic on the navigation bar. To proceed with the installation, click **Begin Install**.

When the installation is complete, note if the installer shows you any additional steps required to complete configuration, and click **Close**. If there were additional required steps, complete them before installing and running MATLAB on client computers.

See Also

Related Examples

- “Install Products on Client Machines” on page 4-2
- “Start Network License Manager” on page 5-4

Configure License Manager for MATLAB on Cloud Platforms

If you are a license administrator, you can:

- Configure your network license manager for running MATLAB and other MathWorks products in the cloud.
- Run your network license manager on premises or on the cloud.

Consult the table below for the configuration you want to use.

Scenario	License Type	Procedure
You want your end users to use online licensing.	Campus-Wide	Your license is already configured for cloud use. Make sure the Campus-Wide License is linked to your account.
You want to connect MATLAB running on the cloud to an existing on-premises network license manager.	Campus-Wide, Concurrent, or Network Named User	See “Connect License Server with MATLAB on the Cloud” on page 3-8.
You plan to run the network license manager on a separate virtual machine than MATLAB.	Campus-Wide, Concurrent, or Network Named User	See “Install License Manager on Virtual Machine” on page 3-10.
You want to connect MATLAB running on the cloud to a network license manager that is also running on the cloud.	Campus-Wide, Concurrent, or Network Named User	See: <ul style="list-style-type: none"> • “Run License Manager Using Amazon Web Services” on page 3-14 • “Run License Manager Using Azure” on page 3-13 • “Run Network License Manager from Azure Marketplace” on page 3-12
If you do not see a procedure for what you want to do for your license type, Contact Support..		

Note for Administrators Your network license option may be eligible for online licensing, which greatly simplifies enabling cloud usage. To learn more, and to see if your license option is eligible, Contact Support..

Note for End Users Your license may be eligible for running MathWorks software in the cloud. To learn more, see “License Requirements for MATLAB on Cloud Platforms”.

See Also

Related Examples

- “Connect License Server with MATLAB on the Cloud” on page 3-8

- “License Requirements for MATLAB on Cloud Platforms”

Connect License Server with MATLAB on the Cloud

If you already have an on-premises license server, you can connect MATLAB running in the cloud with a network license manager running on the existing server. (For information about running the network license manager on the cloud instead, see “Configure License Manager for MATLAB on Cloud Platforms” on page 3-6).

Caution Follow these recommendations when installing the network license manager:

- Do not expose the commands to run the network license manager to the Internet or an untrusted network.
 - Start the network license manager so that local administrator access is required to run the shutdown procedure. .
-

Set Up License Server

Make the server modifications.

- 1 On the on-premises license server, you must have a secure connection enabled so that the cloud machine with MATLAB can communicate with the on-premises server. Use a VPN or direct connect and make sure that the server port is open. The license manager may be running on any port between 27000-27009, or on a specific port that is specified on the SERVER line in the `network.lic` file.
- 2 In the `network.lic` file, edit the DAEMON line to include a port number. Make sure that port is also opened.

Contact Support if you require additional assistance. Otherwise, go on to the next step.

Set Up Machine Running MATLAB

- 1 Disable online licensing.

On the client machine, find `license_info.xml` and rename it to something else. License files are generally located in `$MATLAB/licenses`, where `$MATLAB` is the MATLAB root.

- 2 Create license file that points to the server.

- a Open the network license file (`license.dat`) on the server.
- b Copy the SERVER line into a new text file.
- c Beneath it, add `USE_SERVER`. The file should now look something like this:

```
SERVER Server1 0123abcd0123 12345
USE_SERVER
```

- d Save the new text file as `network.lic` in folder `$MATLAB/licenses`, where `$MATLAB` is your MATLAB root.
- 3 Verify that the license is pointing to the server correctly by running MATLAB.

You have completed this procedure. Contact Support if you require additional assistance.

See Also

Related Examples

- Use MATLAB in the Cloud
- “Configure License Manager for MATLAB on Cloud Platforms” on page 3-6
- “Install Products on Client Machines” on page 4-2
- “Start Network License Manager” on page 5-4

Install License Manager on Virtual Machine

Install the network license manager on a virtual machine for use with Amazon Web Services (AWS) or Azure using a reference architecture.

This procedure consists of two steps: setting up the license manager and setting up the machine running MATLAB.

Step 1. Set Up License Manager

- 1 A security group must be added or changed to open the license manager ports inbound.
 - Learn more about AWS Network Security Group
 - Learn more about Azure Network Security Group
- 2 For AWS, the license manager must be in the same Virtual Private Cloud (VPC) as MATLAB. For Azure, the license manager must be in the same Virtual Network (VNET).
- 3 Obtain a fixed MAC address.

To host the license manager in the cloud, you must have a fixed address:

- **Azure:** When you create a virtual network, the virtual network MAC address is retained even when the virtual machine is in the deallocated state. See Azure Virtual Network FAQ.
- **AWS:** Use an Elastic Network Interface (ENI), which contains a static MAC address attribute. See Elastic Network Interfaces.

When you delete cloud resources, you also delete the fixed MAC address. Changing the fixed MAC address in MathWorks License Center is limited to four times per year.

- 4 Deactivate and then activate license.
 - a Deactivate license: If this license has been activated previously, you must deactivate the license first. Otherwise, you can skip this step.
 - i Go to License Center and click the license that you want to deactivate.
 - ii Go to the **Install and Activate** tab.
 - iii Click the Activation Label.
 - iv Click **Deactivate**.
 - b Activate license using the fixed MAC address.
 - i Click on the license to activate
 - ii Go to the **Install and Activate** tab.
 - iii Click **Activate to Retrieve License File**.
 - iv Under Host ID, enter fixed MAC address.
 - v Click **Continue** when you have completed all fields.
- 5 Download the license file provided with activation onto the server machine in folder `$MATLAB/licenses`, where `$MATLAB` is your MATLAB root.
- 6 Install the network license manager following the instructions “Install License Manager on License Server” on page 3-2, using the virtual machine instead of a license server.

- 7 See “Start Network License Manager” on page 5-4.

Step 2. Set Up Virtual Machine Running MATLAB

These instructions assume you have already installed MATLAB on the virtual machine.

- 1 Disable online licensing.

On the client machine, find `license_info.xml` and rename it to something else. License files are generally located in `$MATLAB/licenses`, where `$MATLAB` is the MATLAB root.

- 2 Create license file that points to the server.

- a Open the network license file (`license.dat`) on the server.
- b Copy the `SERVER` line into a new text file.
- c Beneath it, add `USE_SERVER`. The file should now look something like this:

```
SERVER Server1 0123abcd0123 12345
USE_SERVER
```

- d Save the new text file as `network.lic` in folder `$MATLAB/licenses`, where `$MATLAB` is your MATLAB root.
- 3 Verify that the license is pointing to the server correctly by running MATLAB.

You have completed this procedure. Contact Support if you require additional assistance.

See Also

Related Examples

- Use MATLAB in the Cloud
- “Install Products on Client Machines” on page 4-2
- “Start Network License Manager” on page 5-4

Run Network License Manager from Azure Marketplace

You can use the Azure Marketplace to quickly deploy and run a network license manager on Azure.

The elasticity of the cloud infrastructure enables you to deploy your license manager exactly where you need it for cloud computing with MATLAB.

Requirements

To run the network license manager from Azure Marketplace, you need:

- A MATLAB network license file. To obtain the network license file, sign in to your MathWorks Account and select the license you want to use. Go to the **Install and Activate** tab, and under **Get License File**, click **Download** or **Email License File**.
- A Microsoft Azure Account.
- A working knowledge of Azure Resource Manager.

Support

If you encounter an unexpected problem, search MATLAB Answers for solutions first. Most likely, other people have run into the same problem and resolved it already.

If the problem persists, or there are not any relevant posts on MATLAB Answers for the issue, contact Technical Support.

See Also

Related Examples

- Use MATLAB in the Cloud

External Websites

- Network License Manager for MATLAB on Microsoft Azure Reference Architecture

Run License Manager Using Azure

You can connect MATLAB running on the cloud to a network license manager that is also running on the cloud using Azure.

Requirements

To use this network license manager reference architecture for Azure, you need:

- An Azure account.
- A valid MathWorks network license, configured for cloud use.

To configure the network license for cloud use:

- 1** Sign in to your MathWorks Account.
 - 2** Select the license you want to use.
 - 3** Go to **Install and Activate**.
 - 4** In the text box for **License Manager**, click the edit icon (a pencil).
 - 5** Follow the steps for **Change Licensing**.
- To be an administrator of the network license that you want to use.
 - To assume all costs of using Azure.

Deployment

To view instructions for deploying the network license manager for MATLAB reference architecture, select a MATLAB release from this Github repository.

See Also

Related Examples

- Use MATLAB in the Cloud

External Websites

- <https://github.com/mathworks-ref-arch/license-manager-for-matlab-on-azure>

Run License Manager Using Amazon Web Services

You can connect MATLAB running on the cloud to a network license manager that is also running on the cloud using Amazon Web Services (AWS).

Requirements

To use the network license manager reference architecture for AWS, you need:

- An Amazon Web Services (AWS) account with required permissions. To see what is required, look at the example policy.
- An SSH key pair for your AWS account in your chosen region. Create an SSH key pair if you do not already have one. For instructions, see the AWS documentation.
- A valid MathWorks network license, configured for cloud use.

To configure the network license for cloud use:

- 1 Sign in to your MathWorks Account.
 - 2 Select the license you want to use.
 - 3 Go to **Install and Activate**.
 - 4 In the text box for **License Manager**, click the edit icon (a pencil).
 - 5 Follow the steps for **Change Licensing**.
- To be an administrator of the network license that you want to use.
 - To assume all costs of using Amazon Web Services.

Deployment

To view instructions for deploying the network license manager for MATLAB reference architecture, select a MATLAB release from the Github repository.

See Also

Related Examples

- Use MATLAB in the Cloud

External Websites

- <https://github.com/mathworks-ref-arch/license-manager-for-matlab-on-aws>

Install MATLAB on Client Machines

Install Products on Client Machines

Note This section is for license administrators only.

To install MATLAB on user (client) computers, you must be an administrator for the license or licenses that you want to use when you install MathWorks products. You must have a MathWorks Account and the license (or licenses) must be linked to that account.

To determine whether you are an administrator for one or more network licenses:

- 1 Sign in to your MathWorks Account.
- 2 Select a license in the displayed list.
- 3 Click "Contact Administrator(s)".
- 4 If you see your name there, you are one of the administrators on that license. If you do not see your name and would like to be added, contact one of the names on the list.

If you want a member of staff to perform the installation and they do not have a MathWorks Account or access to the license, have them follow the workflow for an offline installation (see table below).

If the user on a network license is installing the software for themselves, see "Have End Users Install Products" on page 4-6.

Before You Begin

Install Network License Manager

Your organization may have a mix of individual, designated computer, and network licenses. If you are installing MATLAB on client machines using a network license, you must install the network license manager first. Doing so makes it easier to verify your MATLAB installations, because you can confirm the client computers are accessing the license server correctly at the time of installation.

For more information and procedures for installing the network license manager, go to "Administer Network Licenses".

Get Network License

You must place a copy of the configured network license (`license.dat`) on the user's machine (or on a network share) before you can install MathWorks products for them. This network license file was processed during the installation of the network license manager for your organization, meaning it contains the correct SERVER line for the network license server you are using. For more information, see "License Processing" on page 6-2.

Note Do not use the original license file you received in the licensing email and do not forward the licensing email you received from MathWorks to users.

You can get the file installation key from License Center and a copy of the network license file (`license.dat`) from the server hosting your network license manager. The configured license is necessary to point the user's MATLAB to the license manager.

Choose Installation Procedure

Use the following table to choose an appropriate MATLAB installation procedure.

Type of Installation	Procedures
Online (internet connected)	<p>Place a copy of the network license on the user's machine (see above) .</p> <p>If you select this option, you can follow the online installation procedure as documented in “Install Products Using Internet Connection” on page 1-2 with the following difference:</p> <p>During the online installation, when prompted, specify the network license linked to your account. The installer recognizes it as a network license and prompts you for the license file. Enter the path to the license file and click Next to continue installing.</p>
Offline	<p>Follow the instructions in “Download Products Without Installing” on page 1-9 and “Install Products Using File Installation Key” on page 1-12. Make sure to select the network license when prompted.</p> <p>This workflow is appropriate if you want a staff member, who may not have a MathWorks Account, to install the software for the user.</p>
<p>Install in silent mode.</p> <p>Instead of performing the installation interactively and providing the information requested by each dialog box, you can run the installer noninteractively. In this mode, you enter all required information into a properties file.</p>	<p>“Install Noninteractively” on page 4-4</p>

Multiple Releases You can install multiple releases on the same machine. For example, the machine can have both R2022a and R2022b, or R2022b and the prerelease of R2023a.

See Also

Related Examples

- “Install Products”
- “Administer Network Licenses”

Install Noninteractively

When to Install Noninteractively

If you have many installations of MATLAB software to perform, and the information you need to enter for each installation is the same, you can put this information into a properties file and run the MathWorks installer noninteractively. You specify the properties file on the command line when you start the installer and the file provides the installer with the information that you would otherwise provide interactively, using the installer dialog boxes. Noninteractive installation (also called *silent* installation) can save time and prevent errors.

Using Installer Properties File

Note You need a File Installation Key to use the installer properties file (`installer_input.txt`). For information about installation using a File Installation Key, see “Install Products Using File Installation Key” on page 1-12.

To run the installer noninteractively:

- 1 Download the installer and product files. See the procedure in “Download Products Without Installing” on page 1-9.
- 2 Ensure that the product files, including the MATLAB product installer, are available in an accessible location; for example, in the default downloads folder on your computer or on a network share. If the product files are located in a folder other than the default downloads folder on your computer, the installer file must be located in the same folder as the product files.
- 3 Create an installer properties file.

Make a copy of the installer properties file template, named `installer_input.txt`. This file is located in the top level of the folder where you downloaded the software.

For example, on a Windows computer, you might execute this command:

```
copy Z:\installer_input.txt C:\temp\my_installer_input.txt
```

- 4 Open your installer properties file using any text editor, and enter values for all the specified parameters. For example, to specify where you want to install products, set the value of the `destinationFolder=` parameter to the full path of the installation folder (make sure you are passing a full path; a relative path may cause the `installer_input` file to not be read correctly).

Note For information about specifying an installer properties file on Linux and macOS computers, see the instructions in the installer properties file template (`installer_input.txt`).

For example, on Windows it might be:

```
destinationFolder=C:\Program Files\MATLAB\R2023a
```

And on Linux or Mac OS it might be:

```
destinationFolder=/opt/MATLAB/R2023a
```

The installer properties file template contains descriptions of each parameter along with valid values. Specify your File Installation Key as the value of the `fileInstallationKey=` parameter.

- 5 Save your changes to the file.
- 6 Make sure you are in the folder where you downloaded the installer and product files. In a command window or terminal, start the installer using the `-inputFile` option to specify the full path of your installer properties file as a command-line argument.

- Windows

```
setup.exe -inputFile C:\temp\my_installer_input.txt
```

- Linux and Mac OS use an install script, as shown:

```
install -inputfile /tmp/my_installer_input.txt
```

Installation Log Files

During the installation and activation of MathWorks products, the product installer creates a log file that can be used to obtain information on the installation processes.

The installation log file is named `mathworks_%username%.log` and the activation log file is named `aws_%username%.log`. In both cases, `%username%` is the person running the installer.

To locate your log files, see [Where are the MATLAB Installation and Log Files Located?](#)

Have End Users Install Products

Note If you arrived at this topic because of the error "Network License File Required" and you have already linked the network license to your MathWorks Account, contact your administrator to get a copy of the network license file, and then return to the installer.

Note These instructions are to help the user on the network license install on their own machine. If you are an administrator installing software for your end users, see "Install Products on Client Machines" on page 4-2. Otherwise, see instructions below for giving your users the items they need to install successfully.

License Requirements

All network license users must have a configured copy of the network license (`license.dat`) on their machine or accessible from a network share before they can install products.

- **Administrators** – Before your network users install MATLAB, give them a copy of `license.dat` from the network license manager. This network license file was processed during the installation of the network license manager for your organization, meaning it contains the correct `SERVER` line for the network license server you are using. To learn more about how the network license is processed during installation, see "License Processing" on page 6-2.

Do not give users a copy of the original license file you received in the licensing email. They cannot use the licensing information in this form — it does not include the correct `SERVER` line. Also, do not forward to users the licensing email you received from MathWorks.

- **MATLAB Users** – You must get a copy of `license.dat` from your license or network administrator before you can install MathWorks products.

If you are using a trial license, go to <https://www.mathworks.com/licensecenter/trials>.

Select a Procedure

Consult the following table to determine which procedure to use.

Scenario	Procedure to follow
You plan to update and upgrade MATLAB releases yourself.	"Option #1: Link Network License to Your MathWorks Account" on page 4-7
You are asked to perform this installation only one time and do not expect to be installing updates and upgrades yourself. If your computer is offline, you must use this option.	"Option #2: Use License File and File Installation Key to Install" on page 4-7

Multiple Releases You can install multiple releases on the same machine. For example, you can have both R2022a and R2022b, or R2022b and R2023a.

Option #1: Link Network License to Your MathWorks Account

If your computer is offline, you must follow the workflow in Option #2.

To link your network license:

- 1 Contact your administrator to get the network license number you should use.
- 2 To link the license to your MathWorks Account, follow the instructions in Link an additional license (you may have to sign in first).

If you do not have a MathWorks Account, you can create one at the linked page.

- 3 Get a copy of your organization's network license file from your administrator and copy this license file to the machine where you are planning to install.

If you select this option, you can follow the online installation procedure as documented in “Install Products Using Internet Connection” on page 1-2 with the following difference:

During the online installation, when prompted, specify the network license linked to your account. The installer recognizes it as a network license and prompts you for the license file. Enter the path to the license file and click **Next** to continue installing.

Option #2: Use License File and File Installation Key to Install

For this workflow, your computer can be connected to the Internet or offline. If your machine is offline, you must use this workflow.

- 1 Contact your administrator to get a copy of the network license file (see “License Requirements” on page 4-6) and a file installation key (FIK).
- 2 Copy the network license file and FIK to the machine where you are planning to install MATLAB.
- 3 Follow the procedures in “Download Products Without Installing” on page 1-9 and “Install Products Using File Installation Key” on page 1-12. If your administrator downloaded the installer, ask them to give you access to the files.

See Also

Related Examples

- “Install Products Using Internet Connection” on page 1-2
- “Install Products Using File Installation Key” on page 1-12

Activate MATLAB Installation Manually

Activation Overview

Activation is a process that verifies licensed use of MathWorks products. This process validates the license and ensures that it is not used on more computers or by more users than allowed by the license option you selected. Normally, activation is performed during installation, and there is no separate action for the end user.

However, there may be occasions to manually activate the software, for example, if the activation during installation fails for some reason, or if the installation was performed using a File Installation Key and no license was supplied.

This topic describes how to activate the software manually should you need to.

You can follow these procedures also if you are an end user who has been asked to activate MATLAB software that was not installed by you.

- To perform an online activation from within MATLAB, the computer must be connected to the Internet.
- To perform an offline activation from within MATLAB, you must have a license file.
 - If you are using an individual license, use an online machine to go to License Center to get the license file (if you don't know what type of license you have, you can find that out in License Center).
 - Select license to use.
 - Go to the Install and Activate tab.
 - Click **Activate to Retrieve License File**. Download and transfer the license file to the offline machine.
 - If you are using a shared license, contact your administrator to get a license file configured especially for your organization. Copy it to the offline machine.

Step 1. Launch Activation App

You can launch the activation app from within MATLAB or from the operating system command line.

Launch Activation App from MATLAB

Follow these steps:

- 1 On the **Home** tab, in the **Resources** section, click **Help > Licensing**.
- 2 Select **Activate Software**.

Launch Activation App from Command Line

- **Windows Systems** — in the search box on the taskbar, enter "Activate" to bring up the **Activate MATLAB** application.
- **macOS Systems** — Double-click the activation application icon in the MATLAB application package. To view the contents of the MATLAB application package, right-click (or **Ctrl**+click) the package and select **Show Package Contents**.

- Navigate to your MATLAB installation folder and open the activation application.
 - **Windows Systems** — Double-click the `MathWorksProductAuthorizer.exe` file in `matlabroot\bin\ARCH` folder, where `matlabroot` is your MATLAB installation folder, and `ARCH` is a platform-specific subfolder, for example: `matlabroot\bin\win64`.
 - **Linux and macOS Systems** — Run `MathWorksProductAuthorizer` in the `matlabroot\bin\ARCH` folder, where `matlabroot` is your MATLAB installation folder, and `ARCH` is a platform-specific subfolder, for example: `matlabroot\bin\linux64` folder.

Step 2. Activate License

Note The license file (offline) workflow is started automatically if the computer is offline. However, if the computer is connected to the Internet, it starts the online workflow.

- To switch to the license file workflow, from **Advanced Options**, select I want to use a license file.
 - To switch from the license file workflow to the online workflow, from **Advanced Options**, select I want to link to a license.
-

Online Workflow

- 1 Enter the email address you use for your MathWorks Account.
If you do not have a MathWorks Account, you can create one at this time.
- 2 Select a license from the list of licenses linked with your MathWorks Account and then click **Next**.
- 3 Make sure the selections are correct and then click **Activate**.

Offline (License File) Workflow

- 1 If you are prompted for your email address, under **Advanced Options**, select I want to use a license file.
- 2 Enter the path to the license file and then click **Activate**.

What's Next?

You are now ready to begin using MathWorks software.

Operate Network License Manager

Update network license manager software, use FLEXlm[®] utilities, start network license manager

Update Network License Manager Software

Updating the network license manager software requires you to stop and then restart the license manager. You must be a network license administrator to perform this procedure.

To avoid any potential issues with license file operation, consider upgrading the network license manager software whenever you upgrade MATLAB software.

Step 1. Stop Network License Manager

If the network license manager is running, shut it down.

- **Linux and macOS Systems** — Use the `lmdown` command. For additional information, see “Using Command-Line Utilities” on page 5-8.
- **Windows Systems** — Remove the existing service to prevent any conflicts.
 - 1 Start LMTOOLS by double-clicking the `lmtools.exe` file in the `matlabroot\etc\$ARCH` folder, where `matlabroot` is your MATLAB installation folder and `$ARCH` is a platform-specific subfolder, such as `win64`.
 - 2 Select the **Config Services** tab.
 - 3 From the **Service Name** menu, select the service you want to remove, and click **Remove Service**.

Step 2. Select Installation Method

You can choose to download only the software daemons or use the MATLAB installer to update the network license manager.

Update Network License Manager Software with Daemon Download

If you already have the network license manager installed and configured, you can download new network license manager daemons directly to your server instead of using the MathWorks installer to install the latest version of the software. The license manager daemons include:

- **lmgrd** — Network license manager daemon
 - **mlm** — MathWorks vendor daemon
- 1 Stop the network license manager as described in Step 1.
 - 2 Download the ZIP file for your platform from License Manager Download on the MathWorks website.
 - 3 Extract the files from the ZIP file to the network license manager folder. The default location for the license manager files is the `matlabroot\etc\$ARCH` folder, where `matlabroot` is your MATLAB installation folder and `$ARCH` is a platform-specific subfolder.
 - 4 Restart the network license manager, and configure it as needed.

Update Network License Manager Software Using MATLAB Installer

- 1 Stop the network license manager as described in Step 1.
- 2 Install license manager software update. Follow the procedure in “Install License Manager on License Server” on page 3-2.

See Also

Related Examples

- “Start Network License Manager” on page 5-4
- “Monitor Network License Manager” on page 5-7

Start Network License Manager

To start MATLAB software on a client computer, the network license manager must be running on the server. If you configured your operating system to start the network license manager when the computer starts up, the easiest way to start the network license manager is to restart the computer on which you installed the license manager.

There are several other ways to start the license manager, depending on your platform. This topic describes these methods.

Note The user name associated with the network license manager process should be a user that is defined locally on the computer, not defined on a network. The license manager starts up properly only if the user name can be found during the startup process on the computer, before network users are available.

Caution Follow these recommendations when using the network license manager:

- Do not expose `lmgrd` or `mlm` to the Internet or an untrusted network.
 - Start `lmgrd` with the options `-2 -p local` so that local administrator access is required to run `lmdown`.
-

Windows Systems

You can start the network license manager on Windows computers using any of the following methods:

- Use the Windows Services control panel to start or stop the network license manager, if you chose to configure it as a service during installation. On the Windows **Start** menu, select **Settings > Control Panel > Administrative Tools > Services**.
- Use the license management utility, `lmtools.exe`, included in your MATLAB installation in the `matlabroot\etc\ARCH` folder, where `ARCH` is a platform-specific subfolder. Start the `lmtools.exe` application and select the **Start/Stop/Reread** tab.

Linux and macOS Systems

To start the network license manager daemons on a Linux or macOS computer, execute the `lmstart` script (located in the `matlabroot/etc` folder), where `matlabroot` represents the name of your top-level MATLAB installation folder. The `lmstart` script stops any currently running daemons and starts new ones.

To run `lmstart` on a macOS computer, open a terminal window using the `Terminal` application (found in `/Applications/Utilities`) and navigate to the `/etc` folder in your MATLAB installation folder:

```
cd /Applications/MATLAB_R2023a.app/etc
```

Caution A user other than root should run the `lmstart` script because it is a security risk to run any program as root that does not require root permissions. The network license manager (`lmgrd`) does not require root permissions.

If you must start the license manager as root, use the `su` command to start `lmgrd` as a nonprivileged user, where *username* is a nonprivileged user.

```
su username -c "lmgrd -c license_file -l /var/tmp/LM_TMW.log"
```

Configure Network License Manager to Start Automatically on Linux Systems

To configure the network license manager to start automatically at boot time on Linux computers, use the standard method for starting services automatically on your Linux distribution.

Start the network license manager service with the `-u username` option, where *username* represents a valid user name other than root.

Caution For security reasons, superuser cannot be an owner of the license manager daemons.

Make sure that the network license manager starts at the very end of the system boot sequence. For the license manager to start correctly, the network must already be running. Use whatever mechanism your version of Linux provides to configure the boot sequence.

See Also

Related Examples

- “Monitor Network License Manager” on page 5-7

Configure License Manager as Service

Configure Service

To configure the network license manager as service, which starts the network license manager when the machine is restarted, follow these steps:

- 1 Start LMTOOLS by double-clicking `lmtools.exe` in the folder `nlmroot\etc\win64` folder, where `nlmroot` is the folder in which you installed the network license manager.
- 2 Go to the **Config Services** tab.
- 3 Provide the following information:
 - A name used to identify the service
 - The path to the network license manager executable (`lmgrd.exe`)
 - The path to the license file
 - The path to the debug log file
- 4 Check both **Start Server at Power Up** and **Use Services**.
- 5 Click **Save Service**.

Remove Service

- 1 Start LMTOOLS by double-clicking `lmtools.exe` in the folder `nlmroot\etc\win64` folder, where `nlmroot` is the folder in which you installed the network license manager.
- 2 Go to the **Config Services** tab.
- 3 If you have more than one network license manager service, select the MathWorks service (for example, "MATLAB License Server").
- 4 Click **Remove Service**.

When prompted for confirmation, answer **Yes**.

- 5 Exit LMTOOLS.

See Also

Related Examples

- "Start Network License Manager" on page 5-4

Monitor Network License Manager

This topic describes several utilities that you can use to manage the network license manager. For detailed information about these utilities, see the *License Administration Guide*, included in PDF format in your MATLAB installation (*matlabroot\etc\LicenseAdministration.pdf*).

LMTOOLS is available for Windows computers only. All operating systems can use the command line utilities.

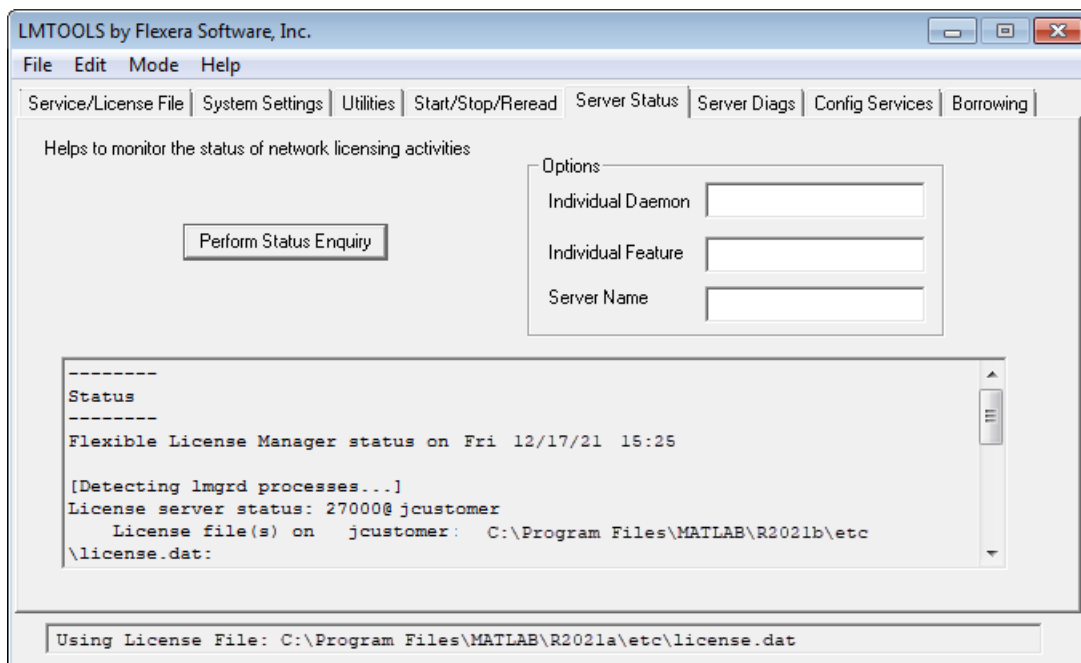
Using LMTOOLS (Windows Only)

On Windows computers, FlexNet® Publisher licensing includes a tool, called LMTOOLS. Using LMTOOLS, you can perform many license management tasks, such as:

- Get the status of the network license manager.
- Start and stop the network license manager.
- Configure the network license manager as a service.

To illustrate, the following example shows how to use LMTOOLS to see the current status of the network license manager:

- 1 Start LMTOOLS by double-clicking the `lmtools.exe` file in the `matlabroot\etc\$ARCH` folder, where `matlabroot` is your MATLAB installation folder and `$ARCH` is a platform-specific subfolder, such as `win64`.
- 2 Select the **Server Status** tab.
- 3 Click the **Perform Status Enquiry** button. LMTOOLS displays the same information as if you had entered the command `lmutil lmstat -a`.



Using Command-Line Utilities

FlexNet licensing includes a set of license management utilities that you can use to start, stop, and monitor the network license manager.

On Windows computers, FlexNet packages all the utilities in a single, command-line executable called `lmutil.exe`. This program is available in the `matlabroot\etc\ARCH` folder, where `matlabroot` is your MATLAB installation folder and `ARCH` is a platform-specific subfolder, such as `win64`. For example, to run a status check of the network license manager, open a DOS command window and run `lmutil` specifying `lmstat` as an argument:

```
lmutil lmstat -a -c "C:\Program Files\MATLAB\R2023a\etc\license.dat"
```

The `-a` option requests a verbose listing. You must also include the `-c` option to specify the license file to use. You must use this option with every `lmutil` option. If your installation path contains spaces, enclose the path in quotes. The following listing is a portion of the information returned.

```
lmutil - Copyright (c) 1989-2018 Flexera Software Inc. All Rights Reserved.
Flexible License Manager status on Fri 12/17/2021 10:11

[Detecting lmgrd processes...]
License server status: 27000@lmsvr-837962
License File(s) on lmsvr-837962: C:\Program Files\MATLAB\R2023a\etc\license.dat:
```

```
    lmsvr-837962: license server UP (MASTER) v.11.16.2
```

```
Vendor daemon status (on lmsvr-837962):
```

```
    MLM: UP v11.16.2
```

```
Feature usage info:
```

```
Users of MATLAB: (Total of 5 licenses available)
```

```
Users of SIMULINK: (Total of 5 licenses available)
```

```
Users of Control_Toolbox: (Total of 5 licenses available)
```

```
Users of Identification_Toolbox: (Total of 5 licenses available)
```

To view a list of all the utilities in the `lmutil` package, type:

```
lmutil -h
```

To get help for a particular utility, type the name of the utility with the `-h` option, as in the following example:

```
lmutil lmstat -h
```

On Linux and macOS computers, these license management utilities are individual executables, available in the `matlabroot/etc` folder. For example, to view the status of the network license manager, use the `lmstat` utility, as follows:

```
lmstat -a
```

```
lmutil - Copyright (c) 1989-2018 Flexera Software Inc. All Rights Reserved.
Flexible License Manager status on Fri 12/17/2021 10:11
```

```
License server status: 27000@lmsvr-837962
License File(s) on lmsvr-837962: /usr/local/MATLAB/R2023a/etc/license.dat:
```

```
    lmsvr-837962: license server UP (MASTER) v.11.16.2
```

```
Vendor daemon status (on lmsvr-837962):
```


MLM: UP v11.16.2

Feature usage info:

Users of MATLAB: (Total of 5 licenses available)

Users of SIMULINK: (Total of 5 licenses available)

To get help for a particular utility, use the `-h` option, as in the following example:

```
lmstat -h
```

The following table lists the names of the most useful license management tools included.

Utility	Description
lmdiag	Diagnose license checkout problems.
lmdown	Shut down all license daemons (both <code>lmgrd</code> and all vendor daemons) on the license server node.
lmhostid	Report the host ID of a system.
lmreread	Make the network license manager reread the license file and start any new vendor daemons. Note When you use <code>lmreread</code> to reprocess a license file for a user-based license, changes to INCLUDE statements in the associated network license manager options file take effect after a 15-minute delay.
lmstat	Display the status of all network licensing activities.
lmswitchr	Switch to another report log file.
lmver	Determine the version of a library or binary file.

Acknowledgments

This topic lists the copyright owners of content used in the network license manager vendor daemon.

MD5

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See Also

Related Examples

- “Start Network License Manager” on page 5-4
- “Update Network License” on page 6-4

Uninstall Network License Manager

Note This procedure is for Windows only.

Use the uninstall script to remove the network license manager.

At the command prompt:

- 1 Navigate to <installRoot>/etc/win64.
- 2 Run uninstall.bat, either by double-clicking the script or entering it at the command prompt.

Running the script performs the following:

- Stops the "MATLAB License Server" service
- Removes "MATLAB License Server" service
- Deletes all the files in <installRoot>/etc/win64

See Also

Related Examples

- "Start Network License Manager" on page 5-4
- "Update Network License Manager Software" on page 5-2

Administer Network Licenses

Configure licenses and modify license options, update network licenses

Update or Modify Network License Files

About Network Licenses

Network licenses contain the encrypted passcodes for each product that your organization is licensed to install and run.

In general, you do not need to modify the network license file on the server or on the client computers. However, in some situations, you must edit the license file:

- When you change the license server name (for example, if the license is now being hosted on a new server).
- When you change the port number (for example, if the port address for the server has changed). The following support article contains instructions for migrating MATLAB client installations: [Migrate MATLAB Client Installations to New License Server](#).
- When you update the network installation with a new license file. See [MATLAB Answer How Do I Update the License File Used By the License Manager?](#)

Inside the Network License File

The network license file is a specially formatted ASCII text file that contains encrypted product passcodes for each product you are licensed to run. Each product passcode identifies the number of keys available for that product. The network license manager grants or denies access to a product depending on the availability of the license keys associated with each product.

- Each INCREMENT line identifies a product, the number of keys available for the product, and other information. (The INCREMENT lines in your license file might not include every element shown in the example.)
- The backslash (\) character indicates that the line continues onto the next line.
- The lines that begin with a pound sign (#) are comments. The MathWorks installer uses the information in these comment lines such as license server host ID or Internet address when it processes the license file during installation.

```
# BEGIN-----BEGIN-----BEGIN
# MATLAB license passcode file.
# LicenseNo: 123456           HostID: 6C4B905F446E
#
# R2021b
#
INCREMENT MATLAB MLM 46 30-jan-2025 13 FDC7243F4976 \
  VENDOR_STRING=vi=0:at=200:ae=1:lu=300:lo=CN:ei=1234567:lr=1:2p=0: \
  DUP_GROUP=UH asset_info=123456 ISSUED=21-Nov-2021 BORROW=720 \
  NOTICE=product=MATLAB SN=123456 SIGN="00C8 0547 EFDF 50D7 B9CE \
  4C9D 3348 561B E9E3 6CCA 7986 C2F6 38C8 794F EE84"
INCREMENT SIMULINK MLM 46 30-jan-2025 1 7DE4D05FF067 \
  VENDOR_STRING=vi=0:at=200:ae=1:lu=300:lo=CN:ei=1234567:lr=1:2p=0: \
  DUP_GROUP=UH asset_info=123456 ISSUED=21-Nov-2021 BORROW=720 \
  NOTICE=product=SIMULINK SN=123456 SIGN="00BE C534 0A32 1821 \
  AFCE D040 2085 3E00 9005 4983 7EFB 875F E4A7 FEE6 9548"
```

License Processing

When you install the network license manager or MATLAB software, the installer processes the network licenses for use on the server and client machines, respectively:

During Network License Manager Installation on Server

On the server, the installer:

- Makes a copy of the network license file named `license.dat`, processes the file to add the `SERVER` and `DAEMON` lines, and puts this copy in the `/etc` folder where you are installing the network license manager. MATLAB installation folder.
- The `SERVER` line identifies the server host and port number. The `DAEMON` line identifies the name of the network license manager daemon.
- For Network Named User licenses, when the installer creates an options file during installation, it also adds the `Options=` syntax to the `DAEMON` line in your license file. This syntax specifies the path name of the options file.

For example, if your server is named `thunderball` and its mac address is `03:42:f8:1b:b2:72`, the `SERVER` and `DAEMON` lines in your license file would look like this:

```
SERVER thunderball 03:42:f8:1b:b2:71
DAEMON MLM "C:\Program Files\MATLAB\R2023a\etc\win64\MLM.exe" \
          options="C:\Program Files\MATLAB\R2023a\etc\mlm.opt"
```

During MATLAB Installation on Client Computer

First, you must copy the `license.dat` file configured during the installation of the network license manager and put it either on the client machine or somewhere network accessible before you can run the installer.

Then, during installation, the installer creates a copy of `license.dat`, and processes it to remove the `INCREMENT` lines and the `DAEMON` line in the license file, leaving the `SERVER` line. It also adds the statement `USE_SERVER` to the file. This line points the client to the network license file on the server, which contains all the passcodes for the products.

It names this configured file `network.lic` and puts the file in `matlabroot\licenses`.

Note Do not give users the license file you download from License Center. They can install only with the license file that was specially configured during the installation of the network license manager.

MATLAB License Search Path

MATLAB reads the license file at startup to check for product licensing. MATLAB searches for the license file in the following locations, in the specified order:

- 1 The license file specified on MATLAB startup command line using the `-c` option. The `-c` option overrides the entire search order and uses only what was specified on the command line. This is the *only* path MATLAB searches.
- 2 Environment variables `MLM_LICENSE_FILE` and `LM_LICENSE_FILE`.
- 3 The profile folder of the person starting the program
- 4 The `\licenses` folder in the MATLAB installation for files named `license.dat` or any file with the extension `.lic`.

When MATLAB is checked out from a network license server, all toolbox checkouts in that same session will also come from that license server. If a license file on the path is not a server license (that

is, it is a standalone license file for Individual, Designated Computer, or Trial), toolboxes can still be checked out from that file or from the license server.

Set MATLAB License Search Path

By default, MATLAB installs the license file on the client computer in the `\licenses` folder in the MATLAB client installation folder. However, you can override that location in one of either of the following ways:

- Specify the path to the license file on the command line during MATLAB startup using the `-c` option.

The `-c` option overrides the entire search order, including environment variables, and uses *only* what was specified on the command line. This is the *only* path MATLAB searches.

You can specify a list of paths to search. When using the `-c` option, keep in mind the following:

- If the path to your license file contains a space, enclose the path name in quotation marks.
- If you are specifying more than one license file, make sure to enclose the entire list of license files in quotation marks.
- Set environment variable.

MLM_LICENSE_FILE specifies the location of the license file for MathWorks products. MATLAB searches for this environment variable first.

Note Although you can set the environment variable `LM_LICENSE_FILE`, use of this variable is discouraged as it affects all Flex-enabled products. Instead, use `<VENDOR>_LICENSE_FILE`.

Note If you use the environment variable `MLM_LICENSE_FILE`, you must delete `matlab/licenses/network.lic`.

Update Network License

When you receive a new license from MathWorks because the products or seat counts have changed, plan to update the license file on the network server at a time when users are least likely to be accessing a MATLAB license. This procedure requires you to stop and start the network license manager (do not perform a re-read as it can interfere with certain licenses).

Note Do not follow this procedure to upgrade to a new release of MATLAB. To upgrade to a later release, see “Get New MATLAB Release” on page 2-6.

You must be a license administrator to perform a license file update.

To update the license file on the server:

- 1 Go to the License Center on the MathWorks website and sign in to your account.
- 2 Select the licenses you want to update.
- 3 Click **Install and Activate**.

- 4 Get the license file for the server you are updating.
- 5 Stop the network license manager.
- 6 Open both the existing license on the server and the new license in an editor. You are going to copy most of the new license into the old license with these instructions:
 - a In the existing license, delete all content except the SERVER and DAEMON lines at the top of the file.
 - b In the new license, copy all content starting from below the SERVER and DAEMON lines to the end.
 - c Paste the copied content into the existing license below the SERVER and DAEMON lines.
 - d Save the existing license. You can store the new license as a backup, remembering that the SERVER and DAEMON lines must be replaced with those specific to your organization.
- 7 If you have an options file, depending on how it is configured, you may have to update it. If you do not have an options file, skip this step.
- 8 Start the network license manager.

You can perform a status inquiry to confirm that the license file has been updated. The following support article contains instructions for performing a status inquiry: "Monitor the Usage of Licenses or Keys".

See Also

External Websites

- [License Center](#)

