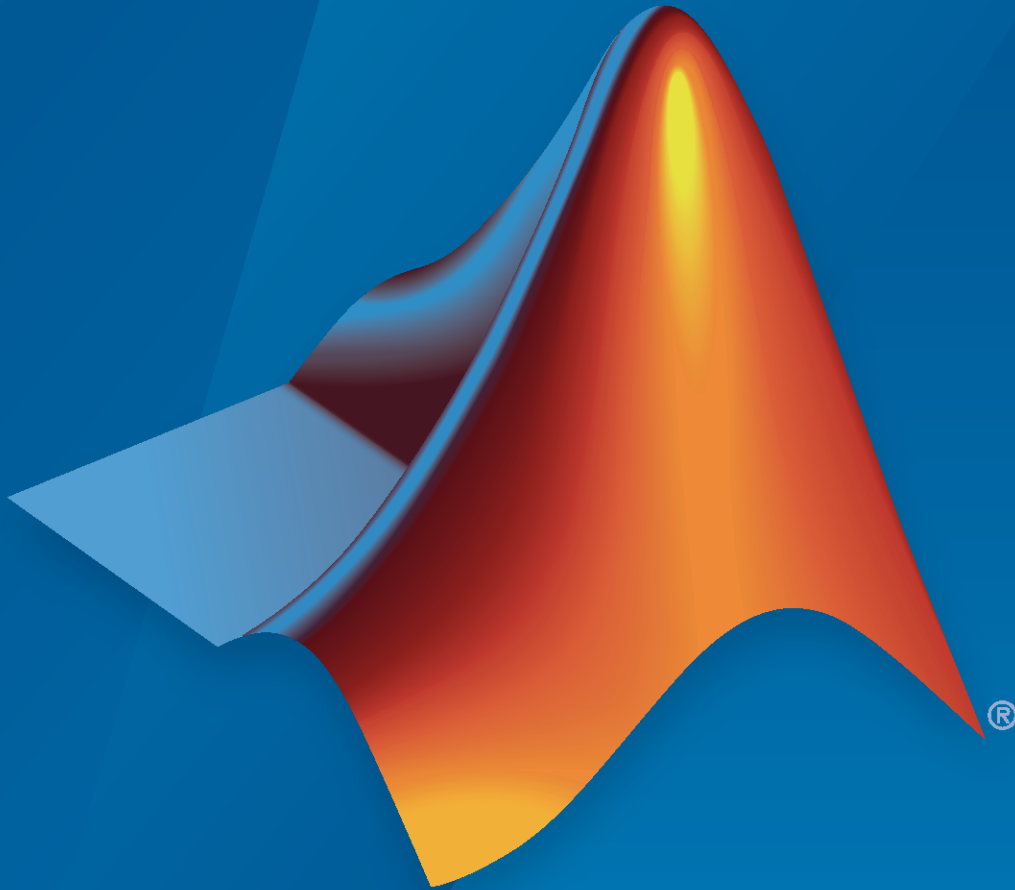


Installation and Licensing

Installation Help



MATLAB® & SIMULINK®

R2022b



How to Contact MathWorks



Latest news: www.mathworks.com
Sales and services: www.mathworks.com/sales_and_services
User community: www.mathworks.com/matlabcentral
Technical support: www.mathworks.com/support/contact_us



Phone: 508-647-7000



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MathWorks Installation Help

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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 1-9.

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).

Before you begin, see System Requirements for MATLAB.

Installing on Shared Computers You must have the correct permissions to install the software. If you have questions about permissions, ask your system administrator.

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?

Linux Users 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?

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 will be prompted to enter the verification code sent to your primary method when you signed in to your MathWorks Account. If you do not have Two-Step Verification enabled, you can go directly to the next step.

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.
You are using your company's license.	Options: <ul style="list-style-type: none">• Use an Activation Key. See your license administrator.• Create a MathWorks Account and link your organization's license to it.
You do not have a product license or trial.	Go to the MathWorks Store.

When you are ready, go to the next step.

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.

- 1 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.
- 2 Start the installer. 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.

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 the steps in "Use an Activation Key" in the next topic.

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**.

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 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**.

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.

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).

Before you begin, see System Requirements for MATLAB.

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.

If the target computer is not connected to the Internet, install products following the procedure in “Install Products Using File Installation Key” on page 1-9.

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.

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

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 1-9

See Also

Related Examples

- “Install Products Using File Installation Key” on page 1-9

Install Products Using File Installation Key

Use this procedure when the computer you want to install MathWorks products on does not have an Internet connection. However, you need an Internet connection to get the File Installation Key and license file, and to download the installer.

- **Individual license users:** You can get the license file and file installation key from License Center. See “Prerequisites”.
- **Network license administrators and end users:**
 - Admins can get the license file and file installation key from License Center. See “Prerequisites”.
 - Network license end users can get these items from their license administrator.

You can use this procedure even if you have an Internet connection. You are not required to disconnect the target computer.

Installing on Shared Computers You must have the correct permissions to install the software. If you have questions about permissions, ask your system administrator.

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

Prerequisites

You must perform the following steps before you can install using a file installation key.

Step 1. Review Requirements

Your system must meet certain requirements to run MATLAB. See System Requirements for MATLAB before performing an installation.

Step 2. Get License File and Installation Key

Activate and obtain your license file and get the file installation key using the License Center. If you are using an organizational license, get the files from your administrator. If you are using a trial license, go to <https://www.mathworks.com/licensecenter/trials>.

First: On 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).

Second: On the target computer:

- 1 Copy the license file and file installation key to the target computer.

Step 3. Download Installer and Product Files

Get the product installer and product files using the procedure in “Download Products Without Installing” on page 1-6. Make sure you follow step 6 for moving the installation files along with the license file and file installation key to the target computer.

Follow the instructions in the next section to run the installer using a file installation key.

Install Procedure Using File Installation Key**Step 1. Start Installer**

Start the installer. When prompted to allow the app to make changes, answer **Yes**.

Note 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).

Step 2. 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 3. 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 4. 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 5. 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 6. 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 7. 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 8. 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.

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 1-6

Install Products on a Network License

Installation options for clients in a network configuration

Plan Your Network License Manager Installation and Configuration

Installation Procedures for Network License Manager

For network installations, MathWorks uses a license manager program from Flexera Software, Inc. (referred to in this documentation as the network license manager).

It is a good practice to install the network license manager before installing MATLAB. 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.

Select a procedure from the Administer Network Licenses category to install and run the network license manager.

After you have installed the network license manager, select a procedure for installing MATLAB.

Caution Follow these recommendations when planning your network installation:

- 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. .
-

Installation Procedures for MATLAB

To install MATLAB on user computers, you must be:

- An administrator for the license that you want to install
- A user named on the license or who has linked the network license to their MathWorks Account

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

Type of Installation	Person Who Installs	Procedures
Install and activate interactively with an Internet connection.	Administrator or user	<p>Administrators:</p> <p>Follow the instructions in “Install Products Using Internet Connection” on page 1-2.</p> <p>Users:</p> <p>Follow the directions in “Have End Users Install Products” on page 2-10. Then, follow the instructions in “Install Products Using Internet Connection” on page 1-2.</p>

Type of Installation	Person Who Installs	Procedures
Administrator downloads installer. User installs and activates interactively with an Internet connection.	Administrator and user	Follow the directions in “Have End Users Install Products” on page 2-10. Then, have the end user follow the instructions in “Install Products Using Internet Connection” on page 1-2.
Install and activate interactively on an offline computer	Administrator or user	Follow the directions in “Have End Users Install Products” on page 2-10.
Administrator downloads installer. User installs and activates interactively on an offline computer.		Then, use the instructions in “Install Products Using File Installation Key” on page 1-9.
Install in silent mode. 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.	Administrator or knowledgeable user	“Install Noninteractively” on page 2-8

See Also

Related Examples

- “Update Network License Manager Software”
- “Administering Network Named User Licenses”
- “Administering Concurrent Licenses”
- “License Requirements for MATLAB on Cloud Platforms”

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 [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 EFD7 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 During MATLAB Installation

When you install MATLAB software, the installer processes the network license file:

On the server, the installer:

- Makes a copy of the network license file named `license.dat`, and puts this copy in the `/etc` folder of the MATLAB installation folder.
- Adds a `SERVER` line and a `DAEMON` line to the file. The `SERVER` line identifies the server host and port number. The `DAEMON` line identifies the name of the network license manager daemon.
- Stores the processed license file in `matlabroot/etc`, where `matlabroot` is the MATLAB installation folder.
- 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 IP address is `144.212.111.103`, the `SERVER` and `DAEMON` lines in your license file would look like this:

```
SERVER thunderball INTERNET=144.212.111.103 27000
DAEMON MLM "C:\Program Files\MATLAB\R2022b\etc\win64\MLM.exe" \
options="C:\Program Files\MATLAB\R2022b\etc\mlm.opt"
```

On the client computer, the installer:

- Creates a copy of the license file you specify named `network.lic`, and puts the file in the `\licenses` folder in the MATLAB client installation folder.
- Deletes all 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.

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`.

After it finds a MathWorks license file, MATLAB stops searching.

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 variables.
 - **MLM_LICENSE_FILE** — Specifies the location of the license file, but only for MathWorks products. (Recommended, because it affects only MathWorks products.) MATLAB searches for this environment variable first.
 - **LM_LICENSE_FILE** — Specifies the location of the license file for all applications using the network license manager on this server. It is not recommended that you use this environment variable, as it affects all Flex-enabled products.

You can use one option or the other, but not both.

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”.

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](#)

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 1-9.

To run the installer noninteractively:

- 1 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. For information about downloading product files, see “Download Products Without Installing” on page 1-6.
- 2 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 (typically, `C:\Users\user\AppData\Local\Temp\mathworks_downloads`).

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

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

- 3 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.

```
destinationFolder=C:\Program Files\MATLAB\R2022b
```

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.

- 4 Save your changes to the file.
- 5 Start the installer using the `-inputFile` option to specify the full path of your installer properties file as a command-line argument.

For example, on Windows computers, click the **Start** menu and select the **Run** option. In the Run dialog box, enter:

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

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`).

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.

Select a Procedure

Consult the following table to determine which procedure to use.

Role	Procedure to follow
MATLAB User	"Option #1: Link Network License to Your MathWorks Account" When to use: You plan to update and upgrade MATLAB releases yourself. This option requires you to get a copy of your organization's network license file.
	"Option #2: Use License File and File Installation Key to Install" When to use: 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.
Administrator	"Have Others Install Software" When to use: When you want the MATLAB user or a member of staff to perform the installation.
	"Administrator Installs Software" When to use: When you plan to perform the client installations yourself.

MATLAB Users

As the user of the software, you have two options for installing MATLAB yourself using a network license. Your administrator may have a preference as to which procedure you do.

Both options require you to get a license file from your license administrator. This license has been configured for your organization.

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 license:

- 1 Contact your administrator to get permission to link the network license to your MathWorks Account. The administrator will need to give you the network license number and a license file customized for your organization. Copy this license file to the machine where you are planning to install MATLAB.
- 2 Using the network license number, link the network license to your MathWorks Account. For instructions, go to License Center.

If you select this option, you can follow the online installation procedure as documented in “Install Products Using Internet Connection” 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 license file, one that has been configured specifically for your organization, and a file installation key (FIK).
- 2 Copy the license file to the machine where you are planning to install MATLAB.
- 3 Start the installer. If you did not download the installer, ask the administrator if they put the installer and product files in an accessible place.
- 4 After you start the installer, from Advanced Options, select **I have a File Installation Key**.
- 5 Follow all prompts to finish installing the software.

If you have questions about this process, see “Install Products Using File Installation Key”.

Administrators

You may want your users to install MathWorks software themselves, you may want to assign other staff to do it for you, or you may choose to perform the installation yourself.

Have Others Install Software

To have others perform the installation:

- 1 Decide if you want the person performing the installation to download and run the installer themselves, or if you want to download the installer and put it and the product files somewhere accessible to the person doing the installation. For the latter, see “Download Products Without Installing”.
- 2 Give users a copy of the MathWorks license file that was processed during installation of the network license manager on your server. This license file must contain the correct **SERVER** line for the license server you are using. See “License Processing During MATLAB Installation” on page 2-4.

Note 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.

- 3
 - If the user wants to link the license to their account, give them the license number also.
 - If they are going to follow the offline workflow, give them the FIK also. You can get the FIK from License Center:

Go to the **Install and Activate** tab. Click **Advanced Options**. Select the release or verify the release selected and then click **Done**. You will get both a license file and activation key, but as noted previously, give the user the processed license file, not the one from this procedure.

- 4 For either option, have the person follow the instructions in “MATLAB Users”.

Administrator Installs Software

If you - the administrator - are going to install the software, you can select any of the following procedures:

- “Install Products Using Internet Connection” - For this workflow, you must have a MathWorks Account with the network license and a copy of your organization's MathWorks license file.
- “Download Products Without Installing” and “Install Products Using File Installation Key” - For this workflow, you need both the license file and and a FIK.
- “Install Noninteractively”.

For more information, see “Install Products on Client Machines”.

See Also

Related Examples

- “Plan Your Network License Manager Installation and Configuration” on page 2-2
- “Install Products Using Internet Connection” on page 1-2
- “Install Products Using File Installation Key” on page 1-9

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\glnxa64` 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.

Install Network License Manager

Install and run the network license manager for Network Named User and Concurrent licenses.

Install Network License Manager Offline

Use a network license file to install the network license manager on a machine that does not have an internet connection. However, you must first download the installer and the license file from a computer that does have an internet connection.

You must install the license manager and have it running before you install MATLAB software on client systems. For information about installing MathWorks software on client systems, see “Plan Your Network License Manager Installation and Configuration” on page 2-2.

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

Step 1. Download License File

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

- 1 Go to License Center on the MathWorks website. Sign in to your MathWorks Account, if prompted.
- 2 Click the network license you want to use.
- 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. See What is a Host ID? in MathWorks Answers.
- 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 already installed?** and click **Continue**.
- 7 Select either **Download the 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 License Center and continue following these instructions.

Step 2. Download Installer

- 1 On a computer connected to the Internet, download the MathWorks product installer from the Downloads page on the MathWorks website.
- 2 Copy the installer files and the license file to the server where you will be installing the network license manager.

Step 3. Start Installer

- 1 Start the installer.
 - **Windows Systems**

If you click **Run** when you select 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 R2020a) and *\$ARCH* is the selected architecture.

The installer should start automatically after file extraction is complete.

To restart the installer later, click `setup.exe`. This file is located in the top level of the folder where you extracted the files.

- **macOS Systems**

Double-click the `dmg` file that you downloaded from the MathWorks website. Double-click `InstallForMacOSX.app`.

- **Linux Systems**

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
```

Step 4. Review Software License Agreement

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

Note To view the end user license agreement at any time after installation, execute the following command in the MATLAB Command Window:

```
>> edit( fullfile(matlabroot, 'license_agreement.txt') )
```

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 cannot find the host ID in the license, you will get a message instructing you to manually add the host ID 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 Systems Only)

Configuring the network license manager service provides automatic startup at system boot time and centralizes administration of the license manager through the Windows Services control panel. If you want the license manager to start automatically when you start the system, check **Configure as service**.

To review the default network license manager configuration settings, click **View Default Settings**. If you choose not to configure the network license manager service, you can do it later.

Note If you have an existing network license manager that you want to continue to use until you install the new one, do not check **Configure as service**. The installer still installs the network license manager files. After installation, you can stop your existing license manager and start your new license manager.

Step 8. 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 **Close**. If additional steps are required, complete them before installing and running MATLAB on client machines.

See Also

Related Examples

- “Plan Your Network License Manager Installation and Configuration” on page 2-2

Install Network License Manager Using Internet Connection

Install the network license manager on a computer connected to the internet. You must install the license manager and have it running before you install MATLAB software on client systems. See “Plan Your Network License Manager Installation and Configuration” on page 2-2.

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

Step 1. Download License File

- 1 Go to License Center on the MathWorks web site. Sign in to your MathWorks Account, if prompted.
- 2 Click the network license you plan to use for this installation.
- 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. See 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 already installed?** and click **Continue**.
- 7 Select either **Download the 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 License Center and continue following these instructions.

Step 2. Download and Start Product Installer

- 1 Download the MathWorks product installer from the Downloads page on the MathWorks website.

When you select an installer on the website, you receive the files that the installer needs to run on your selected platform, not the license manager files. The installer downloads the files that it needs from MathWorks during installation.

- 2 Start the installer.

- **Windows Systems**

If you click **Run** when you select 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 R2020a) and *\$ARCH* is the selected architecture.

The installer should start automatically after file extraction is complete.

To restart the installer later, click `setup.exe`. This file is located in the top level of the folder where you extracted the files.

- **macOS Systems**

Double-click the `dmg` file that you downloaded from the MathWorks website. Double-click `InstallForMacOSX.app`.

- **Linux Systems**

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
```

- 3 When the installer prompts you to sign in, click **Advanced Options > I want to install network license manager**.

Step 3. Review Software License Agreement

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

Note To view the end user license agreement at any time after installation, execute the following command in the MATLAB Command Window:

```
>> edit( fullfile(matlabroot, 'license_agreement.txt') )
```

Step 4. Select License File

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

If the installer cannot find the host ID in the license, you will get a message instructing you to manually add the host ID after you finish installing.

Step 5. 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 6. Select Options (Windows Systems Only)

Configuring the network license manager service provides automatic startup at system boot time and centralizes administration of the license manager through the Windows Services control panel. If you want the license manager to start automatically when you start the system, check **Configure as service**.

To review the default network license manager configuration settings, click **View Default Settings**. If you choose not to configure the network license manager service, you can do it later.

Note If you have an existing network license manager that you want to continue to use until you install the new one, do not check **Configure as service**. The installer still installs the network license manager files. After installation, you can stop your existing license manager and start your new license manager.

Step 7. 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 **Close**. If additional steps are required, complete them before installing and running MATLAB on client machines.

See Also

Related Examples

- “Plan Your Network License Manager Installation and Configuration” on page 2-2

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”.
- **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”.

See Also

Related Examples

- “Start Network License Manager”
- “Monitor Network License Manager”

