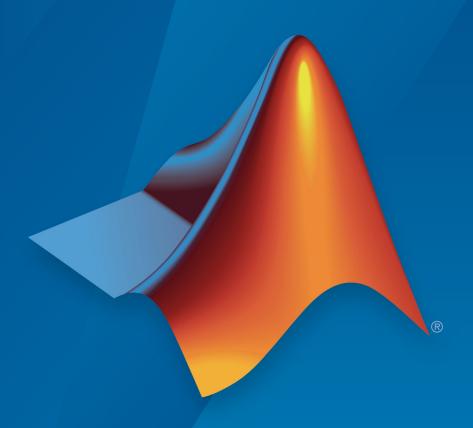
Installation, Activation, and LicensingInstallation Guide



MATLAB® & SIMULINK®



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Installation Guide

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March 2017	Online only	Revised for MATLAB 9.2 (Release 2017a)
September 2017	Online only	Revised for MATLAB 9.3 (Release 2017b)
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September 2019	Online only	Revised for MATLAB 9.7 (Release 2019b)

Installation and Activation Procedures

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Get Started with MATLAB	1-2
Start MATLAB	1-2
Customize Environment	1-2
View License Agreement	1-2
Install Products Online	1-3
Step 1: Preparation	1-3
Step 2: Start the Installer	1-5
Step 3: Install Using a MathWorks Account	1-6
Step 4: Review the Software License Agreement	1-7
Step 5: Sign in to Your MathWorks Account	1-7
Step 6: Enter Two-Step Verification Code	1-10
Step 7: Select the License You Want to Install	1-11
Step 8: Specify the Installation Folder	1-13
Step 9: Specify Products to Install	1-14
Step 10: Specify Installation Options	1-15
Step 11: Confirm Your Choices	1-17
Step 12: Complete the Installation	1-19
Step 13: Activate Installation	1-20
Activate an Installation Online	1-22
Step 1: Start the Activation Application	1-22
Step 2: Choose Whether to Activate Automatically or Manually	
	1-22
Step 3: Log in to Your MathWorks Account	1-25
Step 4: Enter Two-Step Verification Code	1-28
Step 5: Select the License	1-29
Step 6: Specify the User Name	1-30
Step 7: Confirm Your Activation Information	1-31
Step 8: Complete the Activation	1-32
Step 9. What's Next?	1-33

Install Products Offline Step 1: Preparation Step 2: Start the Installer	1-3
Step 3: Install With a File Installation Key	
Step 4: Review the License Agreement	
Step 5: Specify the File Installation Key	
Step 6: Specify the Installation Folder	1-4
Step 7: Specify Products to Install	
Step 8: Specify Installation Options	
Step 9: Confirm Your Choices	1-4
Step 10: Complete the Installation	1-4
Step 11: Activate Installation	1-4
Activate an Installation Offline	1-4
Step 1: Start the Activation	
Step 2: Specify the Path to the License File	
Step 3: Complete the Activation	
Step 4. What's Next?	
Update MathWorks License and Software	1-5
Update an Existing Installation	
Update Your License	1-5
Add Products to an Existing Installation	
Upgrade MATLAB Release	1-5
Uninstall MathWorks Products	1-5
Uninstall MathWorks Products (Interactively)	1-5
Uninstall Noninteractively	
Deactivate an Installation	1-6
Acknowledgments	1-6
MD5	1-6
Installation for Administrators of 1	License
Installation Procedures for Administrators of Licenses	2

Step 2: Choose Log in Option Step 3: Review the Software License Agreement Step 4: Log in to Your MathWorks Account Step 5: Enter Two-Step Verification Code Step 6: Choose Download Only Option Step 7: Specify the Download Folder and Platform Step 8: Specify Products to Download Step 9: Confirm Your Choices Step 10: Complete the Download Install and Activate the Downloadd Software Installing Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps	Download Products Without Installation
Step 3: Review the Software License Agreement Step 4: Log in to Your MathWorks Account Step 5: Enter Two-Step Verification Code Step 6: Choose Download Only Option Step 7: Specify the Download Folder and Platform Step 8: Specify Products to Download Step 9: Confirm Your Choices Step 10: Complete the Download Install and Activate the Downloadd Software Installing Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Folder Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	Step 1: Download and Start the Installer
Step 4: Log in to Your MathWorks Account Step 5: Enter Two-Step Verification Code Step 6: Choose Download Only Option Step 7: Specify the Download Folder and Platform Step 8: Specify Products to Download Step 9: Confirm Your Choices Step 10: Complete the Download Install and Activate the Downloadd Software Installing Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License Files Modifying Network License Files Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Folder Step 6: Specify the File Installation Folder Step 7: Select the Network License Manager for Installation	Step 2: Choose Log in Option
Step 5: Enter Two-Step Verification Code Step 6: Choose Download Only Option Step 7: Specify the Download Folder and Platform Step 8: Specify Products to Download Step 9: Confirm Your Choices Step 10: Complete the Download Install and Activate the Downloaded Software Installing Network License Op Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Folder Step 7: Select the Network License Manager for Installation	
Step 6: Choose Download Only Option Step 7: Specify the Download Folder and Platform Step 8: Specify Products to Download Step 9: Confirm Your Choices Step 10: Complete the Download Install and Activate the Downloaded Software Installing Network License Op Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Step 7: Specify the Download Folder and Platform Step 8: Specify Products to Download Step 9: Confirm Your Choices Step 10: Complete the Download Install and Activate the Downloaded Software Installing Network License Op Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the Installation Folder Step 7: Select the Network License Manager for Installation Step 7: Select the Network License Manager for Installation	Step 5: Enter Two-Step Verification Code
Step 8: Specify Products to Download Step 9: Confirm Your Choices Step 10: Complete the Download Install and Activate the Downloaded Software Installing Network License Op Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Step 9: Confirm Your Choices Step 10: Complete the Download Install and Activate the Downloaded Software Installing Network License Op Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Install and Activate the Downloadd Software Install and Activate the Downloaded Software Installing Network License Op Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Install and Activate the Downloaded Software Installing Network License Op Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	Step 9: Confirm Your Choices
Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	Install and Activate the Downloaded Software
Understanding Network License Files Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	Installing Notwork License O
Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	instanting fretwork Electise c
Network Licenses MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
MATLAB Installation MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
MATLAB Search Path Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Inside the Network License File Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Modifying Network License Files Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Plan Your Network Installation Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Configuration Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	Modifying Network License Files
Installation Procedures for Network License Manager Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Installation Procedures for MATLAB Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Next Steps Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Install Network License Manager Offline Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	
Step 1: Get Ready to Install Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	Next Steps
Step 2: Start the Installer Step 3: Select Use a File Installation Key Step 4: Review the Software License Agreement Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	Install Network License Manager Offline
Step 3: Select Use a File Installation Key	
Step 4: Review the Software License Agreement	Step 2: Start the Installer
Step 5: Specify the File Installation Key Step 6: Specify the Installation Folder	Step 3: Select Use a File Installation Key
Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	Step 4: Review the Software License Agreement
Step 6: Specify the Installation Folder Step 7: Select the Network License Manager for Installation	Step 5: Specify the File Installation Key
	Step 7: Select the Network License Manager for Installation
Step 8: Specify the Location of the License File	
	Step 8: Specify the Location of the License File

Step 9: Configure the Network License Manager: Windows	
Systems Only	3-21
Step 10: Confirm Your Choices	3-22
Step 11: Complete the Installation	3-23
Install Network License Manager Online	3-24
Step 1. Get Ready to Install	3-24
Step 2: Start the Installer	3-26
Step 3: Select Log in with a MathWorks Account	3-27
Step 4: Review the Software License Agreement	3-29
Step 5: Log in to Your MathWorks Account	3-29
Step 6: Enter Two-Step Verification Code	3-30
Step 7: Choose Install Option	3-31
Step 8: Select the License You Want to Install	3-32
Step 9: Specify the Installation Folder	3-33
Step 10: Select Network License Manager for Installation	3-34
Step 11: Specify the Location of the License File	3-35
Step 12: Configure the Network License Manager: Windows	
Systems Only	3-36
Step 13: Confirm Your Choices	3-37
Step 14: Complete the Installation	3-39
Update Network License Manager Software	3-40
Part 1. Stop Network License Manager	3-40
Part 2. Select an Installation Method	3-40
Provide Products and Licensing Information to Clients \dots	3-42
Install MathWorks Software on Client Systems	3-44
Step 1: Start the Installer	3-45
Step 2: Choose an Installation Method	3-47
Step 3: Review the Software License Agreement	3-47
Step 4: Specify the File Installation Key	3-48
Step 5: Log in to Your MathWorks Account	3-48
Step 6: Enter Two-Step Verification Code	3-51
Step 7: Select the License You Want to Install	3-52
Step 8: Specify the Installation Folder	3-53
Step 9: Specify Products to Install	3-54
Step 10: Specify the License File Location	3-55
Step 11: Specify Installation Options	3-56
Step 12: Confirm Your Choices	3-58
Step 13: Complete the Installation	3-60
Next Steps	3-60

Windows Systems	3
Linux and macOS Systems	3
Configure the Network License Manager to Start Automatically	
on Linux Systems	3
Manage the Network License Manager	3
Using LMTOOLS (Windows Systems Only)	3
Using the Network License Manager Command-Line Utilities	3
Update Network License	3
Install Noninteractively (Silent Installation)	3
When to Install Noninteractively	3
Using an Installer Properties File	3
Install Update Release on Offline Machine Troubleshoo	
Install Update Release on Offline Machine Troubleshoo	
Troublesho	
Troubleshoo	3 Oti
Troubleshood Installer Does Not Start Automatically	
Troubleshoo Installer Does Not Start Automatically Why Is a Product Dependency Message Displayed? How Do I Specify Proxy Server Settings?	
Installer Does Not Start Automatically	
Troubleshood Installer Does Not Start Automatically	

Installation and Activation Procedures

This chapter describes how to install MathWorks $^{\mbox{\scriptsize 8}}$ products on your computer and activate your installation.

Get Started with MATLAB

After you have installed the software, you can start the software, customize your environment, and more.

Start MATLAB

Go to the MATLAB® documentation, and under Desktop Environment, find "Startup and Shutdown." This category includes instructions for starting MATLAB on Windows®, Linux®, and macOS operating systems, as well as how to specify startup options and folders.

Customize Environment

Customize the MATLAB environment. Go to the MATLAB documentation and see the following topics to get started:

- MATLAB Startup Folder
- Commonly Used Startup Options
- Specify Startup Options
- Optimize Desktop Layout

View License Agreement

View the end user license agreement by executing the following command in the MATLAB command window:

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

Install Products Online

In this section...

- "Step 1: Preparation" on page 1-3
- "Step 2: Start the Installer" on page 1-5
- "Step 3: Install Using a MathWorks Account" on page 1-6
- "Step 4: Review the Software License Agreement" on page 1-7
- "Step 5: Sign in to Your MathWorks Account" on page 1-7
- "Step 6: Enter Two-Step Verification Code" on page 1-10
- "Step 7: Select the License You Want to Install" on page 1-11
- "Step 8: Specify the Installation Folder" on page 1-13
- "Step 9: Specify Products to Install" on page 1-14
- "Step 10: Specify Installation Options" on page 1-15
- "Step 11: Confirm Your Choices" on page 1-17
- "Step 12: Complete the Installation" on page 1-19
- "Step 13: Activate Installation" on page 1-20

Follow these instructions to install MATLAB on a single machine using your MathWorks Account, for any license type (end user or administrator). You must have an internet connection during the installation process.

Make sure you have the minimum System Requirements for MATLAB.

Step 1: Preparation

To run the installer interactively with an internet connection, you need the following:

- An internet connection. If you do not have an internet connection, follow the instructions in "Install Products Offline" on page 1-34 (Installation, Licensing, and Activation).
- Your email address and your MathWorks Account password. You need them to
 log in to your account during installation. If you have multiple licenses linked to your
 account, determine which license you want to install.

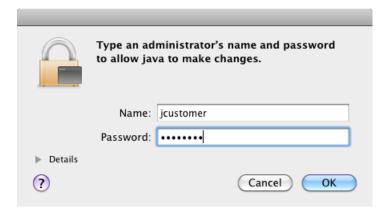
If you are an end user on a network license and you do not have a MathWorks Account, you can create one during installation. You must have an Activation Key to

create an account. An Activation Key is the unique code that identifies a license. Ask the administrator of the license for the Activation Key.

 Correct permissions to install the software. If you have questions about permissions, ask your system administrator.

Note While you use an administrator account to install the software, you typically do not want to activate the software for an administrative user account. Specify the non-privileged account that will use the software when you activate it. Running MATLAB as a user with administrator privileges is not recommended.

- Windows Get the name and password for an account on your computer that has administrator privileges.
- **Linux** Get the root password. You can install MATLAB software without superuser privileges, however, it limits certain installation options. For example, if you want to set up symbolic links to the matlab command, install product files in a protected folder, or edit the system boot script, you must have superuser status.
- macOS Get the name and password of an administrator account on your computer. The administrator account is the user account you set up when you configured your macOS system; this account is not your MathWorks Account.
 During installation, enter this name and password in the Authenticate dialog box.



 To consider disabling anti-virus software and Internet security applications on your system during installation. These applications can slow the installation process or cause it to appear unresponsive (or to hang). When you are ready, proceed to "Install Products Online" on page 1-3 (Installation, Licensing, and Activation).

Step 2: Start the Installer

1 Download the installer from the MathWorks website.

When you select an installer on the website, you receive the files that the installer needs in order 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 logged in. The installer downloads the products that it needs from MathWorks, if necessary.

2 Start the installer. The method you use to start the installer depends on your platform.

Windows

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 R2019b) 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

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

Linux

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

Click Next.

Step 3: Install Using a MathWorks Account

Leave the **Log In with a MathWorks Account** option selected (the default), and then click **Next**. During installation, you log in to your MathWorks Account, select the license you want to install, and follow the prompts in the installer.

Select this option to install products using an Internet connection. MathWorks Installer - - -Select installation method Log in with a MathWorks Account Connection Settings Requires an Internet connection Use a File Installation Key What is this? No Internet connection required MathWorks products are protected by patents (see mathworks.com/patents) and copyright laws. By entering into the Software License Agreement that follows, you will also agree to additional restrictions on your use of these programs. Any unauthorized use, reproduction, or distribution may result in civil and criminal penalties. MATLAB and Simulink are registered trademarks of The MathWorks, Inc. Please see mathworks.com/trademarks for a list of additional trademarks. Other product or brand names may be trademarks or registered trademarks of their respective holders. MathWorks Cancel

If your Internet connection requires a proxy server, click **Connection Settings**. Enter the server name, port, and password in the Connection Settings page. MathWorks supports Basic authentication and Digest authentication proxy configurations.



Note On Windows systems, the installer uses your system proxy settings, by default. If your proxy server requires you to log in, the installer prompts you for your login information.

Step 4: Review the Software License Agreement

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

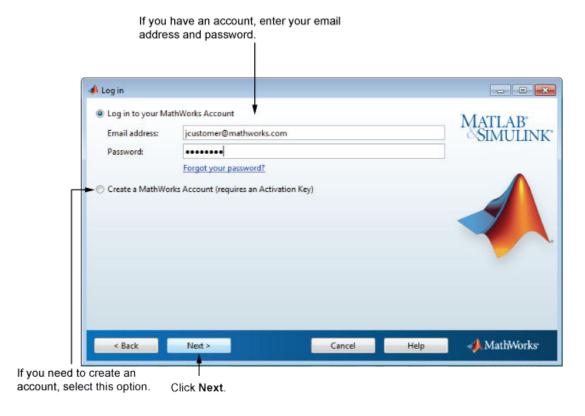
Note To view the end user license agreement at any time after installation, execute the following command in the MATLAB command window:

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

Step 5: Sign in to Your MathWorks Account

To log in to your MathWorks Account, enter your email address and password, and click **Next**. The installer contacts MathWorks to retrieve information about the licenses linked to your account. If you have enabled Two-Step Verification on your account, a verification code is sent to your primary method.

If you do not have a MathWorks Account, select the **Create a MathWorks Account** (requires an Activation Key) option and click **Next**. You are prompted to enter the data needed to create the account.



Create a MathWorks Account

To create an account, enter your email address, first name, last name, and password. You must also provide an Activation Key because a newly created account does not have any licenses linked to it.

The Activation Key identifies the license you want to install. The administrator of this license can retrieve the key by visiting the License Center at the MathWorks website.

Note Entering dashes or spaces for the Activation Key is optional.

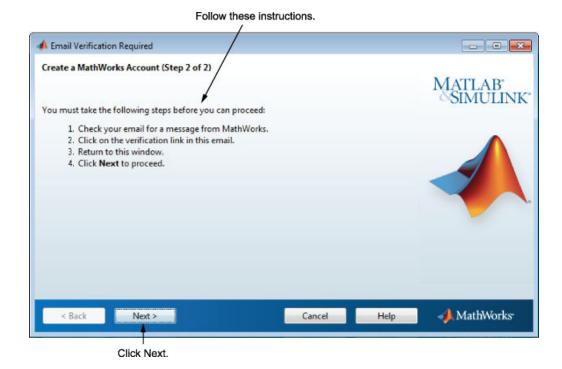
Click **Next** to create your account.



Enter your email address. Create a password for your account.

Click Next. Enter Activation Key. Enter first name and last name.

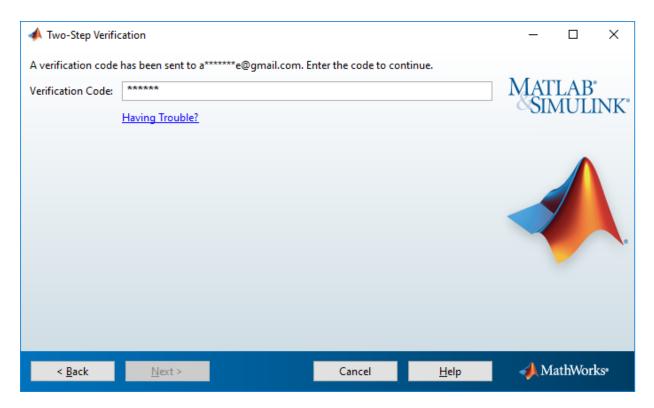
Note When you create a new MathWorks Account, you must verify your email address before you can proceed with installation. Before you click **Next** in the Email Verification Required dialog box, go to your email program, open the message sent to you by MathWorks, and click the verification link. Then return to this dialog box and click **Next**.



Step 6: Enter Two-Step Verification Code

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.

Enter the verification code sent to your primary method.



Click **Next** to proceed with installation.

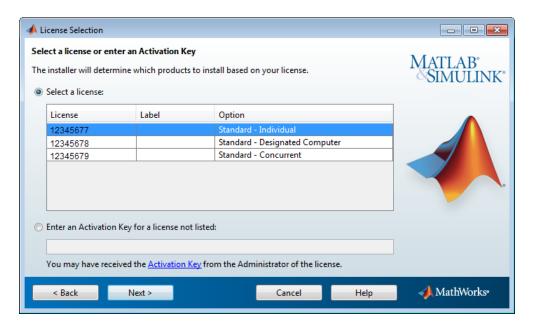
Step 7: Select the License You Want to Install

Select a license from the list of licenses linked to your MathWorks Account and click **Next**.

If you want to install products on a license that is not linked to your MathWorks Account:

- 1 Select the **Enter an Activation Key for a license not listed** option.
- **2** Enter an Activation Key and click **Next**.

An Activation Key is the unique code that identifies a license. Use it to activate a license or allow licensed end users to link their MathWorks Account with a license. The administrator on the license can retrieve the key by visiting the License Center on the MathWorks website.



Specify an Activation Key

If there are no licenses linked to your account, or if permission to activate is disabled on the license you selected, the installer displays the Activation Key dialog box. Enter the required Activation Key and click **Next**. Ask the administrator on the license for the Activation Key.

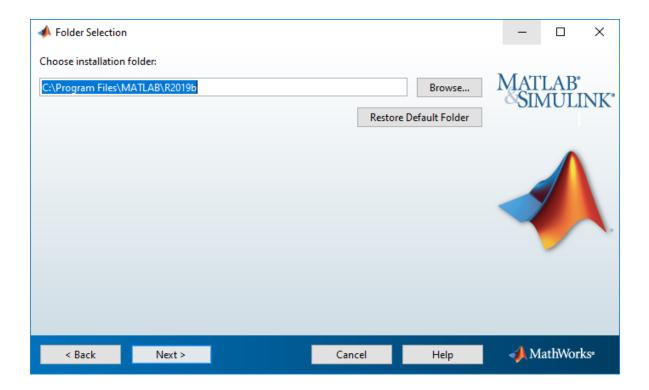
Note Entering dashes or spaces for the Activation Key is optional.



Step 8: Specify the Installation Folder

Specify the name of the folder 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.

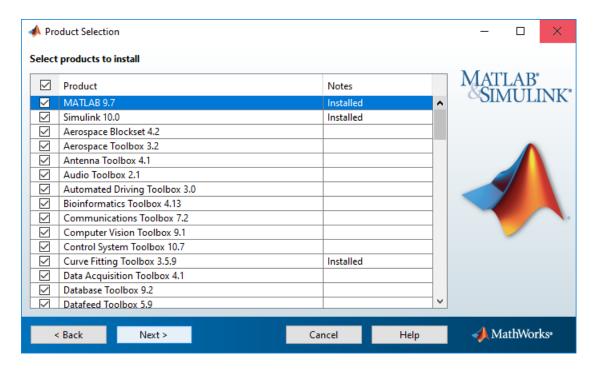
When specifying a folder name, you can use any alphanumeric character and some special characters, such as underscores. If you make a mistake while entering a folder name and want to start over, click **Restore Default Folder**. After making your selection, click **Next**.



Step 9: Specify Products to Install

From the product list, specify which products you want to install. The list shows all the products associated with the license you selected, or with the Activation Key or File Installation Key you specified. If you do not want to install a particular product, clear the check box next to its name. MATLAB is installed by default.

Note If the products you select exist in the default download location on your computer, the installer uses the local files for installation instead of downloading them from MathWorks. If you want to download the products again, go back to the Folder Selection dialog box and select a different installation folder.



After selecting the products you want to install, click **Next** to continue with the installation.

Step 10: Specify Installation Options

You can specify optional installation options, depending on which platform you are installing.

Windows

On Windows, the Installation Options dialog box offers you the option to put shortcuts for starting MATLAB in the **Start** menu and on the desktop.

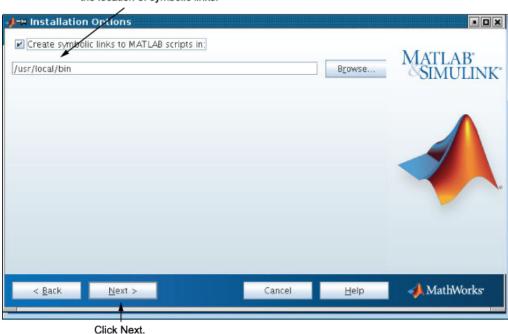


After selecting installation options, click **Next** to proceed with the installation.

Linux

On Linux systems, you can specify whether you want to create symbolic links to the \mathtt{matlab} and \mathtt{mex} scripts. Specify a folder to which you have write access and that is common to all your user's paths, such as $/\mathtt{usr/local/bin}$.

After selecting installation options, click **Next** to proceed with the installation.

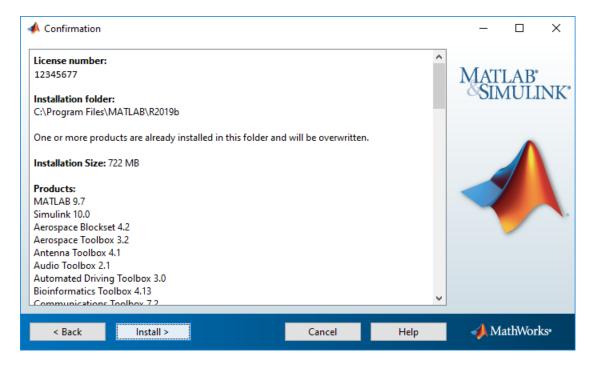


Select this option and specify the location of symbolic links.

Step 11: Confirm Your Choices

Before it begins installing the software on your hard disk, the installer displays a summary of your installation choices. To change a setting, click $\bf Back$. To proceed with the installation, click $\bf Install$.

Note Depending on the method of installation that you use, the confirmation information can vary from the example shown here.

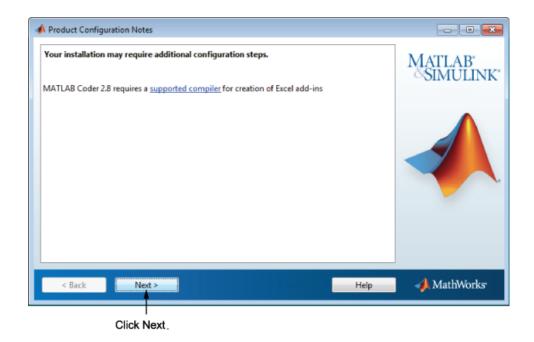


Read Product Configuration Notes

Depending upon which products you install, the installer might display a dialog box containing additional information:

- **Product configuration information** Certain products require additional configuration. If you installed a product requiring additional configuration, the installer lists the configuration commands in this dialog box.
- Supported compilers and SDKs Some products require a supported compiler or software development kit. If you installed a product with this requirement, the installer displays a link to where you can learn more.

Click **Next** to proceed with the installation.



Step 12: Complete the Installation

When the installation successfully completes, you can choose to activate the software you just installed. You cannot use the software you installed until you activate it. Activating immediately after installation is the quickest way to start using MATLAB. Click **Next** to proceed with activation.

If you choose to exit the installer without activating the software, clear the **Activate MATLAB** option and click **Finish** (the button label changes). Use the activation application to activate the software at a later time. If you have not activated the software, the activation application starts automatically when you start MATLAB.



Step 13: Activate Installation

check box, button label changes to Finish.

Your MATLAB installation automatically continues to software activation. See "Activate an Installation Online" on page 1-22 (Installation, Licensing, and Activation) for a step-by-step description of the process.

Note Administrators: You may want to install the software yourself but wait to have the end user activate it. If that's the case, you are done here. When the end user is ready to activate the software, send them to the linked instructions.

See Also

Related Examples

 "Activate an Installation Online" on page 1-22 (Installation, Licensing, and Activation)

Activate an Installation Online

Activation is performed after you have successfully installed the software and are ready to use it. Normally, the installer continues to activation as part of the entire installation process. This topic describes the activation process. If you have not yet installed MATLAB, first follow the procedure in "Install Products Online" on page 1-3 (Installation, Licensing, and Activation).

There may also be cases when you are asked to activate the software that was not installed by you. If so, follow this procedure if you have an internet connection. If you do not, follow the instructions in "Activate an Installation Offline" on page 1-48 (Installation, Licensing, and Activation).

Step 1: Start the Activation Application

To start the activation application, use one of the following methods:

- Leave the Activate MATLAB check box selected on the Installation Complete dialog box at the end of installation.
- Start an installation of MATLAB that has not been activated.
- If you have MATLAB running, on the Home tab, in the Resources section, select Help
 Licensing > Activate Software.
- $\bullet \quad \text{Navigate to your MATLAB installation folder and open the activation application}.$

Windows — Double-click the activate_matlab.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

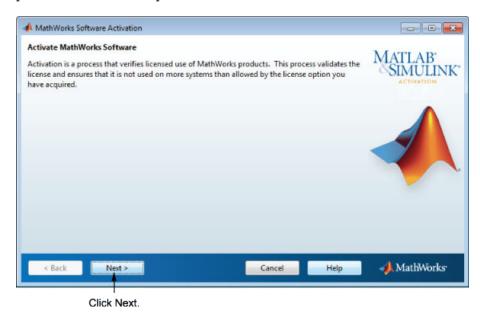
Linux and macOS — Execute the activate_matlab.sh script in the matlabroot/bin folder.

macOS — 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.

Step 2: Choose Whether to Activate Automatically or Manually

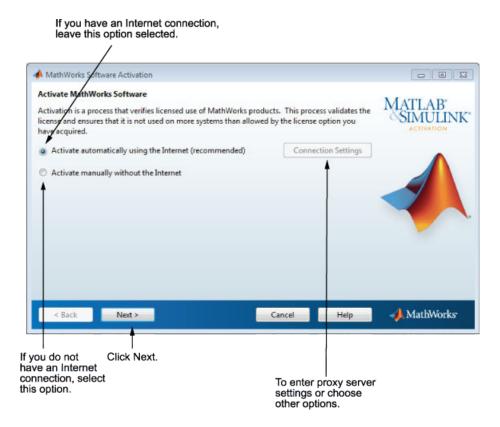
Activation is a process that verifies licensed use of MathWorks products. This process validates the license and ensures that it is not used on more computers or by more users than allowed by the license option you have acquired.

If you let the installer start the activation application, and you were logged in to your MathWorks Account during installation, your login session continues into the activation process. Click **Next** to proceed with activation.



If you were not logged in to your MathWorks Account during installation, or you started the activation application independently, you must choose whether to activate automatically or manually. If you are connected to the Internet, leave the **Activate automatically using the Internet (recommended)** option selected. Activating immediately after installation is the quickest way to start using MATLAB.

If you are not connected to the Internet, select **Activate manually without the Internet**. If you select this option, you need a License File to activate manually. Your License File identifies the products you can run. Contact the Administrator of the license to get the file if you do not already have it.



Specify a Proxy Server

Note On Windows systems, the activation application uses your system proxy settings by default.

If your Internet connection requires a proxy server, click the **Connection Settings** button. You can enter the server name and port information in the Proxy Settings dialog box, and access other activation options. MathWorks supports several types of proxy configurations: Basic authentication and Digest authentication.

Step 3: Log in to Your MathWorks Account

Note If you continued with activation immediately after installation, and you logged in to your account during installation, the activation application skips this step.

Enter the email address and password of your MathWorks Account and click **Next**. The activation application contacts MathWorks to retrieve the licenses linked to your account. If you have enabled Two-Step Verification on your account, a verification code is sent to your primary method.

If you do not have a MathWorks Account, select the **I need to create an Account** (requires an Activation Key) option and click Next.

If you already have a License File, select the **Enter the full path to your license file, including the file name** option, specify the complete path to the file, and click **Next**. Your License File identifies the products you can run. Contact the administrator of your license to obtain this License File. After specifying the License File, the activation application skips all the subsequent steps in the process and goes directly to the Activation Complete dialog box.



Create a MathWorks Account

To create an account, enter your email address, first name, last name, and password. You must also provide an Activation Key. A newly created account does not have any licenses linked to it. The Activation Key identifies the license you want to activate.

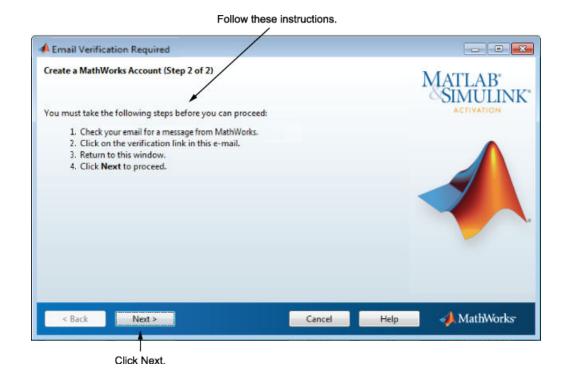
Note Entering dashes or spaces for the Activation Key is optional.

The administrator on the license can retrieve the key by visiting the License Center at the MathWorks website.

Click **Next** to create your account.



Note When you create a new MathWorks Account, you must verify your email address before you can proceed with activation. Before you click **Next** in the Email Verification Required dialog box, go to your email program, open the message from MathWorks, and click the verification link. Then return to this dialog box and click **Next**.

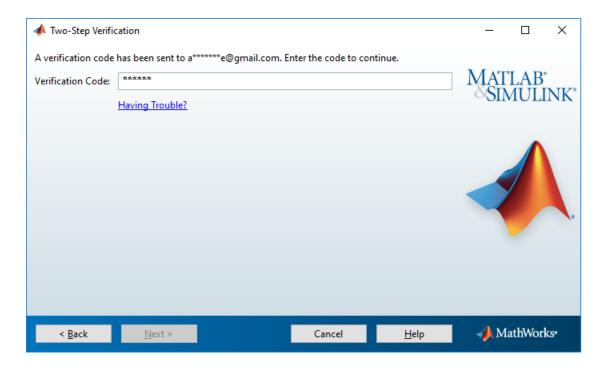


Step 4: Enter Two-Step Verification Code

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 skip this step and go to "Step 5: Select the License" on page 1-29 (Installation, Licensing, and Activation).

Note If you continued with activation immediately after installation, and you verified your account during installation, the activation application skips this step.

Enter the verification code sent to your primary method.

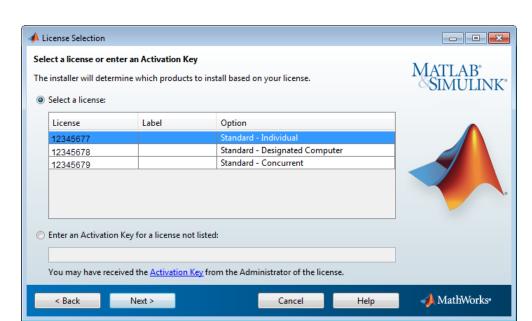


Step 5: Select the License

Note If you continued with activation immediately after installation, the activation application assumes you want to activate the license you just installed and skips this step. Likewise, if you created an account in the previous step and specified an Activation Key, the activation application skips this step.

Select a license from the list of licenses linked with your MathWorks Account and click **Next**. The list contains the following information about the licenses:

If you want to activate products on a license that is not linked to your MathWorks Account, select the **Enter an Activation Key for a license not listed** option, enter an Activation Key, and click **Next**. An Activation Key is the unique code that identifies a license. You can use the key to activate a license or to link a license to your account. Ask the administrator of the license for the Activation Key.



Note Entering dashes or spaces for the Activation Key is optional.

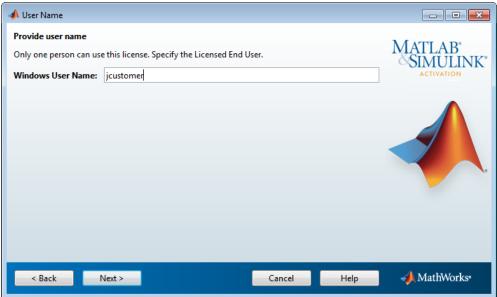
Step 6: Specify the User Name

Note The activation application skips this step when the license is a Designated Computer License.

If you selected an Individual License, you must specify the operating system user name of the person who will use the software. The Individual License limits use of the software to a particular user on a particular computer. MathWorks uses the operating system user name to identify this person. The operating system user name is the ID through which a user gains access to a computer. This ID is also known as the computer login name. To use MathWorks software, you must be logged into the computer as the user name that you specify.

By default, the activation application fills in the user name of the person running the activation application. To accept this default, click **Next**. If you used your administrator

account to install the software but will use another account to access the software, you can specify that user name here, then click ${\bf Next}$.



Step 7: Confirm Your Activation Information

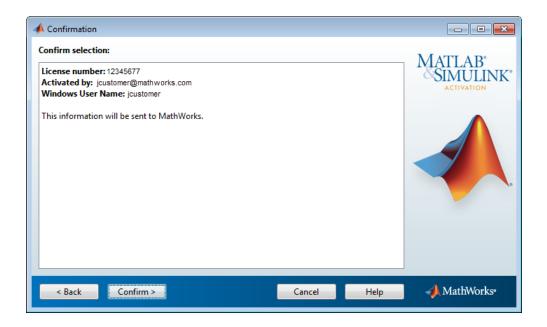
If all the information displayed is correct, click **Confirm**.

Note Depending on the method of installation that you use and your operating system, the confirmation information can vary from the example shown here.

To activate an installation, MathWorks creates a License File that:

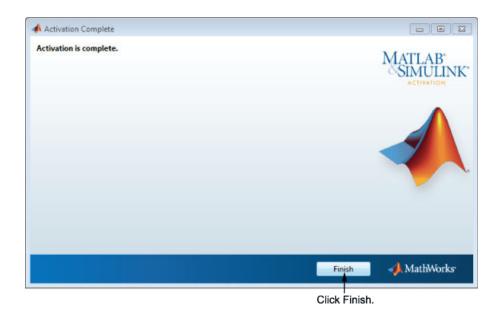
- · Restricts use to only the computer with the installation
- Restricts use to a particular user if you have activated an Individual License

The installer then copies this License File onto your computer. This License File enables you to run MathWorks products on your computer. MathWorks also keeps a record of the activation in MathWorks systems.



Step 8: Complete the Activation

After activating your installation, click **Finish** to exit the activation process.



Step 9. What's Next?

Now that MATLAB and any accompanying toolboxes have been installed, you are ready to begin using MathWorks software. See one of the following topics to get started:

- .
- •
- •

See Also

Related Examples

 "Update MathWorks License and Software" on page 1-53 (Installation, Licensing, and Activation)

Install Products Offline

In this section...

- "Step 1: Preparation" on page 1-34
- "Step 2: Start the Installer" on page 1-36
- "Step 3: Install With a File Installation Key" on page 1-37
- "Step 4: Review the License Agreement" on page 1-38
- "Step 5: Specify the File Installation Key" on page 1-38
- "Step 6: Specify the Installation Folder" on page 1-40
- "Step 7: Specify Products to Install" on page 1-41
- "Step 8: Specify Installation Options" on page 1-42
- "Step 9: Confirm Your Choices" on page 1-44
- "Step 10: Complete the Installation" on page 1-45
- "Step 11: Activate Installation" on page 1-46

Follow these instructions to install MATLAB on a single machine using a File Installation (FIK), for any license type (end user or administrator). This workflow is best to follow when the target machine is not connected to the internet; however, you need an internet connection to the get the FIK and to download the installer (or get them from your system administrator).

Make sure you have the minimum System Requirements for MATLAB.

Step 1: Preparation

To run the installer interactively without an internet connection, you need:the following:

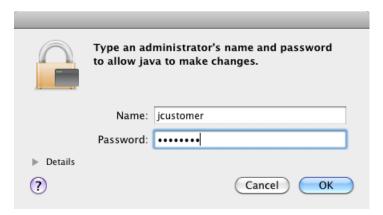
Have your File Installation Key and License File available. You need both these items
to perform an off-network installation and activation.

The File Installation Key identifies the products you can install. The License File activates the installation, identifying which products you can run. The administrator of the license can retrieve the File Installation Key and License File by visiting the License Center at the MathWorks website. Download and save these items on removable storage (for example, USB stick) and copy to the target machine.

- Ensure that the product files, including the MATLAB 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.
- Make sure that you have the correct permissions to install software. If you have questions about this, ask your system administrator.

Note While you use an administrator account to install the software, you typically do not want to activate the software for an administrative user account. Specify the non-privileged account that will use the software when you activate it. Running MATLAB as a user with administrator privileges is not recommended.

- **Windows Systems** Get the name and password of the administrator account on your computer. The installer modifies the system registry during installation.
- **Linux Systems** Get the root password. You can install MATLAB software without superuser privileges, however, it limits certain installation options. For example, if you want to set up symbolic links to the matlab command, install product files in a protected folder, or edit the system boot script, you must have superuser status.
- macOS Systems Get the name and password of an administrator account on your computer. The administrator account is the user account you set up when you configured your macOS system; this is not your MathWorks Account. During installation, you must enter this name and password in the Authenticate dialog box, shown below.



 Consider disabling virus-checking software and Internet security applications on your system for the duration of the installation process. These applications can slow down the installation process or cause it to appear unresponsive or to hang.

If you have an Internet connection, follow the instructions in "Install Products Online" on page 1-3 (Installation, Licensing, and Activation). MathWorks recommends installing and activating using an Internet connection.

You can use this procedure to install one of the standalone or network license options. If you use this with a network license option, you must specify the License File path and choose whether to configure the network license manager. See "Install MathWorks Software on Client Systems" on page 3-44 (Installation, Licensing, and Activation) for more information about these additional steps.

Step 2: Start the Installer

Note Verify that the folder containing the product files includes the installer file for your platform in the root of the folder (setup.exe for Windows, install for Linux, and InstallForMacOSX formacOS) and an archives subfolder. If the archives subfolder contains less than 3 files, you might be missing required files. Ask your administrator to download the files again using the procedure in "Download Products Without Installation" on page 2-3 (Installation, Licensing, and Activation).

1 Copy the products files (including the installer file) to your computer or an accessible location (for example, USB drive or network share).

2 Start the installer. The method you use to start the installer depends on your platform.

Windows

If you or an administrator downloaded the product files previously and copied the product files to your computer, a network share, or to media, go to the top level of the folder where the product files are located and click setup.exe.

macOS

If you or an administrator downloaded the product files and copied the extracted files to your computer, a network share, or to media, go to the top level of the folder where the product files are located and double-click the InstallForMacOSX icon to begin the installation.

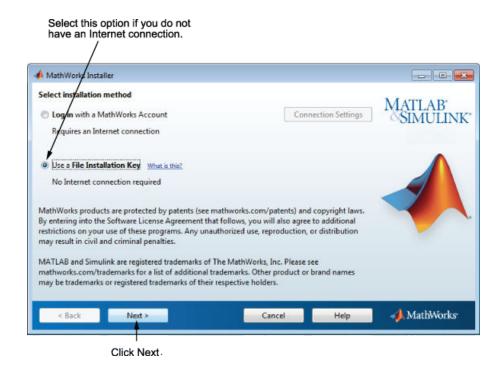
Linux

If you or an administrator downloaded the product files and copied the extracted files to your computer, a network share, or to media, go to the top level of the folder where the product files are located and execute the installer command:

./install

Step 3: Install With a File Installation Key

If you do not have an Internet connection, but have access to product files on your computer or on a network share, select the **Use a File Installation Key** option and click **Next**.



Step 4: Review the 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:

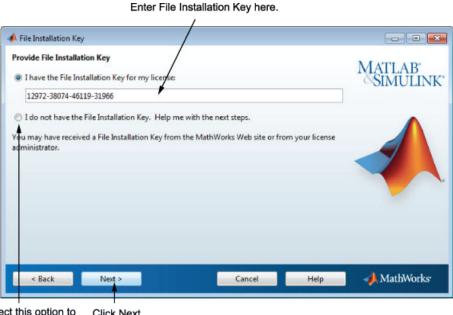
```
>> edit( fullfile(matlabroot, 'license_agreement.txt') )
```

Step 5: Specify the File Installation Key

If you do not have an Internet connection, and choose to install manually, the installer displays the File Installation Key dialog box. A File Installation Key identifies the products you can install.

If you have the key, select the **I have the File Installation Key for my license** option, enter the File Installation Key, and click **Next**. The administrator on a license can retrieve the File Installation Key from the License Center at the MathWorks website.

If you do not have the key, select the **I do not have the File Installation Key** option and click **Next**. The installer provides you with the information you need to get a key.



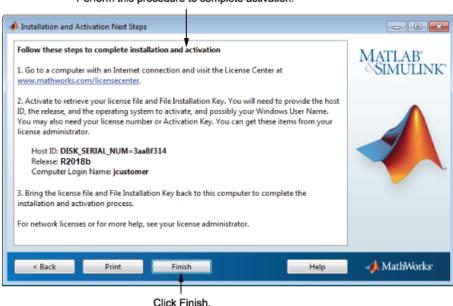
Select this option to Glick Next. gather the information

needed to get a File Installation Key.

If You Do Not Have the File Installation Key

The Installation and Activation Next Steps dialog box contains the information you need to retrieve your File Installation Key from the License Center at the MathWorks website. This information includes:

- Host ID
- Release number (for example, R2019b)
- Operating system user name (Note that user names are case-sensitive in activation.)



Perform this procedure to complete activation.

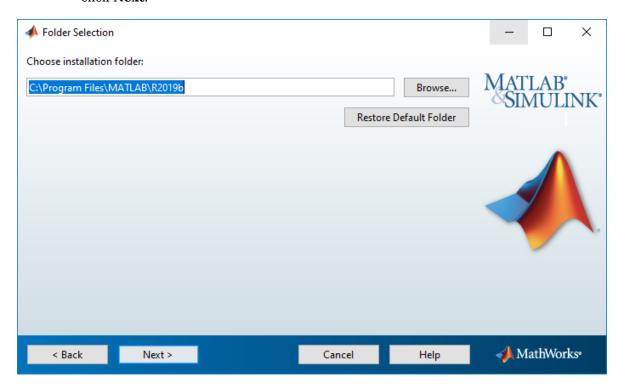
To get your File Installation Key:

- Copy the information displayed in this dialog box and click Finish to exit the installer. On Windows and Linux systems, you can click Print to print the information.
- 2 Go to a computer with an Internet connection and log in to your account at the MathWorks website.
- Visit the License Center and enter the information from this dialog box. MathWorks uses this information to generate a License File and a File Installation Key for your license.
- 4 Return to your computer and run the installer again. With the File Installation Key and a License File, you can install and activate the software without an Internet connection.

Step 6: Specify the Installation Folder

Specify the name of the folder 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.

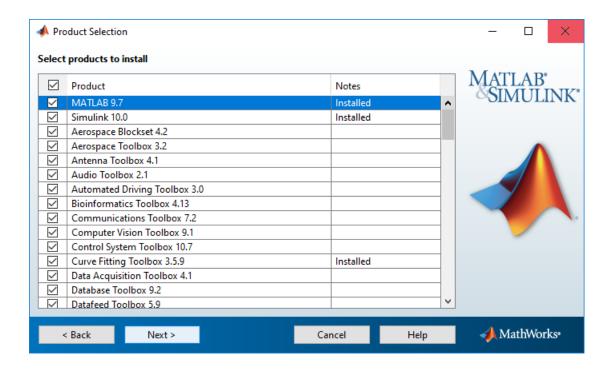
When specifying a folder name, you can use any alphanumeric character and some special characters, such as underscores. If you make a mistake while entering a folder name and want to start over, click **Restore Default Folder**. After making your selection, click **Next**.



Step 7: Specify Products to Install

Specify which products you want to install in the Product Selection dialog box. This dialog box lists all the products associated with the license you selected or with the Activation Key you specified. In the dialog box, all the products are preselected for installation. If you do not want to install a particular product, clear the check box next to its name.

After selecting the products you want to install, click **Next** to continue with the installation.



Note If the product files are not located on your computer or the installer is not located in the same folder as the product files, the installer will be unable to find products to install.

Step 8: Specify Installation Options

You can specify optional installation options, depending on your platform.

Windows Systems

On Windows, the Installation Options dialog box offers you the option to put shortcuts for starting MATLAB in the **Start** menu and on the desktop.

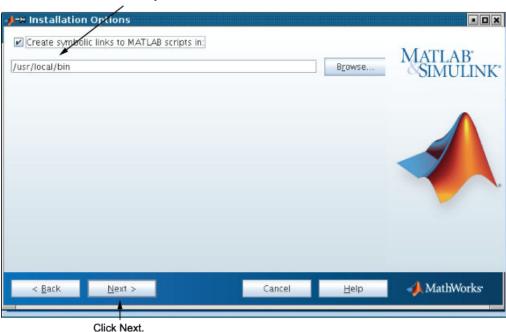


After selecting installation options, click **Next** to proceed with the installation.

Linux Systems

On Linux systems, you can specify whether you want to create symbolic links to the ${\tt matlab}$ and ${\tt mex}$ scripts. Specify a folder to which you have write access and that is common to all your user's paths, such as ${\tt /usr/local/bin}$.

After selecting installation options, click Next to proceed with the installation.

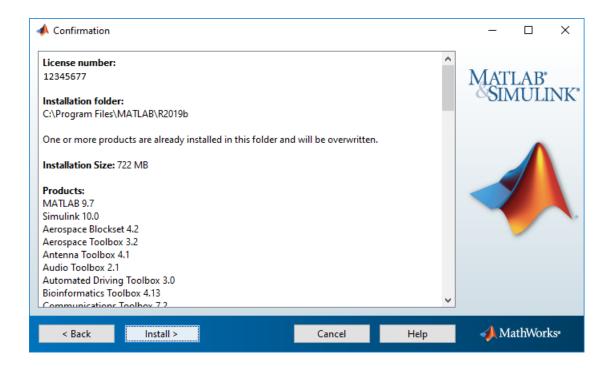


Select this option and specify the location of symbolic links.

Step 9: Confirm Your Choices

Before it begins installing the software on your hard disk, the installer displays a summary of your installation choices. To change a setting, click **Back**. To proceed with the installation, click **Install**.

Note Depending on the method of installation that you use, the confirmation information can vary from the example shown here.



Step 10: Complete the Installation

When the installation successfully completes, the installer displays the Installation Complete dialog box. In this dialog box, you can choose to activate the software you just installed. You cannot use the software you installed until you activate it. Running activation immediately after installation is the fastest way to start using MATLAB. Click **Next** to proceed with activation.

If you choose to exit the installer without performing activation, clear the **Activate MATLAB** option and click **Finish** (the button label changes). You can activate later using the activation application.



Step 11: Activate Installation

Your MATLAB installation automatically continues to software activation. See "Activate an Installation Offline" on page 1-48 (Installation, Licensing, and Activation) for a step-by-step description of the process when you do not have an internet connection.

Note Administrators: You may want to install the software yourself but wait to have the end user activate it. If that's the case, you are done here. When the end user is ready to activate the software, send them to the linked instructions.

See Also

Related Examples

 "Activate an Installation Offline" on page 1-48 (Installation, Licensing, and Activation)

Activate an Installation Offline

In this section...

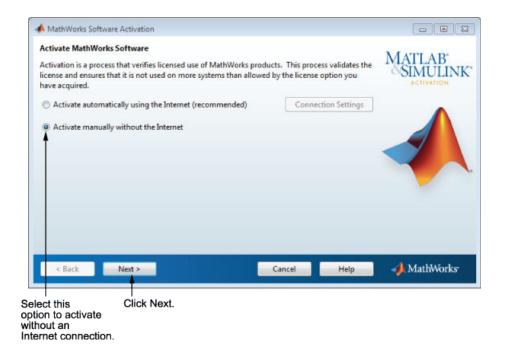
- "Step 1: Start the Activation" on page 1-48
- "Step 2: Specify the Path to the License File" on page 1-49
- "Step 3: Complete the Activation" on page 1-51
- "Step 4. What's Next?" on page 1-51

Activation is performed after you have successfully installed the software and are ready to use it. Normally, the installer continues to activation as part of the entire installation process. This topic describes the activation procedure. If you have not yet installed MATLAB, follow the procedure in "Install Products Offline" on page 1-34 (Installation, Licensing, and Activation)

There may also be cases when you are asked to activate the software that was not installed by you. If so, follow this procedure if you do not have an internet connection. If you do have an internet connection, follow the instructions in "Activate an Installation Online" on page 1-22 (Installation, Licensing, and Activation).

Step 1: Start the Activation

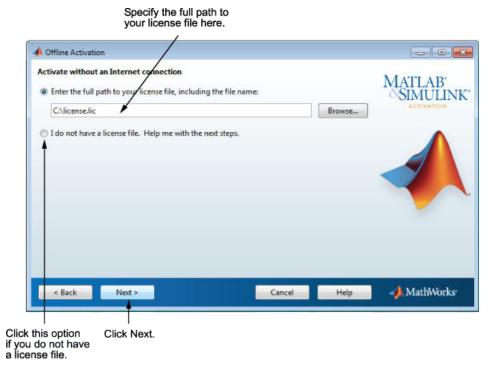
Because you were not logged in to your MathWorks Account during installation, or you started the activation application independently, you must choose whether to activate automatically or manually. Select the **Activate manually without the Internet** (recommended) option and click **Next**.



Step 2: Specify the Path to the License File

To activate without an Internet connection, you must have a License File. The License File identifies which products you can run. The administrator on the license can retrieve the License File from the License Center at the MathWorks website. Select the **Enter the full path to your license file, including the file name** option and enter the full path of your License File in the text box (or drag and drop the file) and click **Next**.

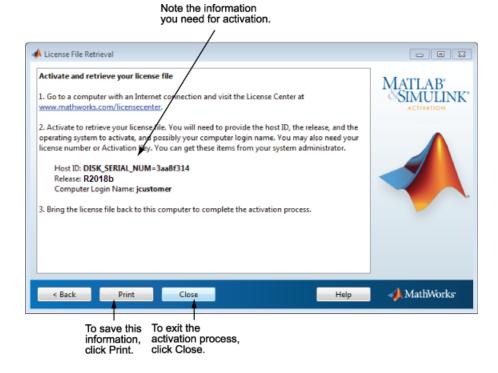
If you do not have your License File, select the **I do not have a license file** option and click **Next** to get information about how to retrieve a License File.



If You Do Not Have a License File

Save the information displayed in this dialog box. You can print a copy of this information by clicking **Print**. Take the information to a computer with an Internet connection and visit the License Center at the MathWorks website. MathWorks uses this information to generate a File Installation Key and a License File. You must have this information with you when you return to the computer on which you want to install and activate the software. To exit the activation application, click **Finish**.

Note Your installation is not activated yet. You cannot run MATLAB until you retrieve your License File.



Step 3: Complete the Activation

After activating your installation, click **Finish** to exit the activation process.

Step 4. What's Next?

Now that MATLAB and any accompanying toolboxes have been installed, you are ready to begin using MathWorks software. See one of the following topics to get started:

- •
- •
- •

See Also

Related Examples

•

"Update MathWorks License and Software" on page 1-53 (Installation, Licensing, and Activation)

Update MathWorks License and Software

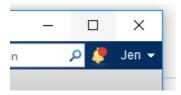
Update an Existing Installation

Download and install a more recent version for the release of MATLAB that you currently have installed. For example, if you have R2019a installed, you might be able to download a more recent version of R2019a.

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

Update from Notifications

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

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 at the License Center at the MathWorks website.

Update License Manually from Within MATLAB

To update your license manually from within MATLAB, perform the following steps:

- 1 On the MATLAB toolstrip in **Resources**, click the down arrow under **Help**.
- 2 Click Licensing.
- **3** Select **Update Current Licenses...**and follow the prompts to update your license.

Update License Using Activation

If your license file has expired or there is another license reason preventing MATLAB from starting, you can update your license by launching the MATLAB activation client.

For instructions on launching the activation client, see "Activate an Installation Online" on page 1-22 (Installation, Licensing, and Activation).

Update License for an Offline Computer

If your computer that is running MATLAB cannot connect to the internet, you can download a license file manually from www.mathworks.com on another computer and move the file over to the computer.

- 1 Sign into www.mathworks.com.
- 2 Click on your profile picture in the top right and then select My Account.
- **3** Select your license number from the list.
- 4 Click the **Install and Activate** tab.
- 5 On the right-hand 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** and click **Done**.
- **9** Copy the license file to the licenses folder on the offline machine. The following support article contains instructions for finding license file folders on various operating systems: Where are the license files for MATLAB located?
- **10** Start MATLAB.

If you encounter difficulties, contact Customer Support.

Add Products to an Existing Installation

To add products to your existing MATLAB installation, use the Add-On Explorer. See .

See Also

Related Examples

• "Upgrade MATLAB Release" on page 1-56 (Installation, Licensing, and Activation)

External Websites

- License Center
- Web Downloads

Upgrade MATLAB Release

Upgrading involves installing a newer general release than the current installation on your machine; for example, from R2019a to R2019b. The Software Maintenance Service on your license must be current. For additional information, see MathWorks Software Maintenance Service.

To upgrade an existing installation:

- Run the MATLAB installer. If you do not have it on your machine, you can get it from the Downloads page on the MathWorks website.
- Install the upgrade in a new installation folder. This is true whether you are upgrading from a previous version or upgrading from a prerelease version of the same release.

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 system.

Note The upgrade will install only those products current on your license. For example, if your existing installation includes ten products, but your current license only includes nine of those products, your MATLAB installation upgrade includes only the nine products in your current license.

See Also

See Also

Related Examples

 "Update MathWorks License and Software" on page 1-53 (Installation, Licensing, and Activation)

Uninstall MathWorks Products

Uninstall MathWorks Products (Interactively)

To move a current copy of MATLAB to another computer, you must uninstall it from the computer it is currently installed on. In this case, do not deactivate the software. You can then install MATLAB on another computer.

If you no longer have a valid license and just want to remove the software from your computer, perform the uninstall procedure first and then deactivate the software; see "Deactivate an Installation" on page 1-62 (Installation, Licensing, and Activation). Conversely, you can deactivate a license without removing the software from your computer. If you need assistance for any part of this process, contact Technical Support.

The method you use to uninstall MathWorks software from your computer varies, depending on your platform.

Remove Products on Windows Systems

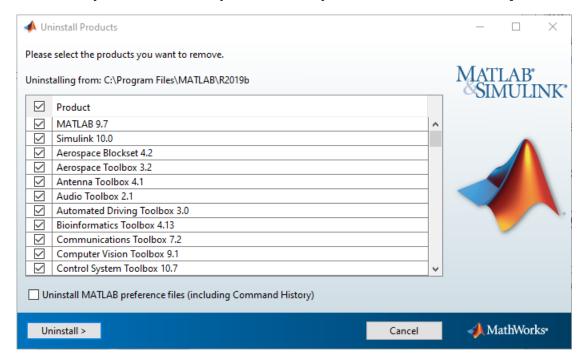
To remove (uninstall) MathWorks products from your system:

- **1** Shut down the MATLAB software.
- **2** Start the uninstaller, using any of the following methods.
 - On systems running Windows 10, click the Windows icon, scroll to the Ms, and then find MATLAB R2019b. Right-click MATLAB R2019b, and then click Uninstall.
 - On systems 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 R2019b**.
 - On systems running Windows XP, click the Start menu, select Settings > Control Panel > Add or Remove Programs. Select MATLAB R2019b from the list of products and click Change/Remove.
 - Navigate to the matlabroot/uninstall/bin/\$ARCH folder, where matlabroot is your MATLAB installation folder and \$ARCH is a platform-specific subfolder, such as win64. Double-click the uninstaller executable, uninstall.exe.

To learn how to use an uninstaller properties file to run the uninstaller noninteractively, see "Uninstall Noninteractively" on page 1-60 (Installation, Licensing, and Activation).

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:\WINNT\Profiles\username\Application Data\MathWorks\MATLAB\R2019b
```

username is the user name of the person who runs MATLAB.

- 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.
- 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 an Installation" on page 1-62 (Installation, Licensing, and Activation).

Uninstall Products on Linux Systems

Note If you want to deactivate a license and remove the software, be sure to deactivate before you remove the software. When you remove the software, you also remove the application you use to deactivate the software. For more information about deactivating, see "Deactivate an Installation" on page 1-62 (Installation, Licensing, and Activation).

- **1** Exit the MATLAB program.
- **2** Enter this command at the Linux prompt:

```
rm -rf matlabroot
```

where <code>matlabroot</code> represents the name of your top-level MATLAB installation folder.

Uninstall Products on macOS Systems

Note When you remove a MATLAB installation, you remove the deactivation application, so it is best to deactivate before removing your installation. For more information about deactivating software, see "Deactivate an Installation" on page 1-62 (Installation, Licensing, and Activation).

To remove a MATLAB installation:

- Get the user name and password of an administrator account on the macOS system. Depending on where you installed MATLAB software, you might need administrator privileges to remove it.
- **2** Exit MATLAB before removing a MATLAB installation.
- Navigate to your MATLAB installation folder. For example, the installation folder might be named MATLAB_R2019b.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 an Installation" on page 1-62 (Installation, Licensing, and Activation).

Uninstall Noninteractively

Note For information about installing MATLAB noninteractively, see "Install Noninteractively (Silent Installation)" on page 3-71 (Installation, Licensing, and Activation).

To run the uninstaller noninteractively, perform these steps:

- 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, on a Windows system, you might execute this command:
 - copy matlabroot\uninstall\uninstaller_input.txt C:\temp\my_uninstall.txt
- 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
```

If you need to deactivate the software, see "Deactivate an Installation" on page 1-62 (Installation, Licensing, and Activation).

See Also

Related Examples

• "Deactivate an Installation" on page 1-62 (Installation, Licensing, and Activation)

Deactivate an Installation

Deactivating an installation renders the MathWorks software unusable on a particular computer. Deactivation can be a useful way to manage usage of the software on multiple computers. For example, if you want to install and activate the software on a new computer, and you have already performed all the activations allowed by your license, you can deactivate one of your existing installations to enable activation on your new computer.

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. If you do not have Internet connectivity, the deactivation application disables the software on your computer and gives you a deactivation string. To complete the deactivation process, visit the MathWorks website, log in to your account, and deactivate using the deactivation string. When you deactivate a license, you deactivate all the installations of that license on a particular computer.

Note Deactivating a license and removing the software are separate activities. You can deactivate a license without removing the software from your computer. For information about removing an installation, see "Uninstall MathWorks Products (Interactively)" on page 1-57 (Installation, Licensing, and Activation).

To deactivate a license on your computer, follow this procedure:

- 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.
 - Navigate to your MATLAB installation folder. matlabroot, and launch the deactivation application executable.

Windows Systems:

matlabroot\uninstall\bin\win64\deactivate_matlab.exe

Linux Systems:

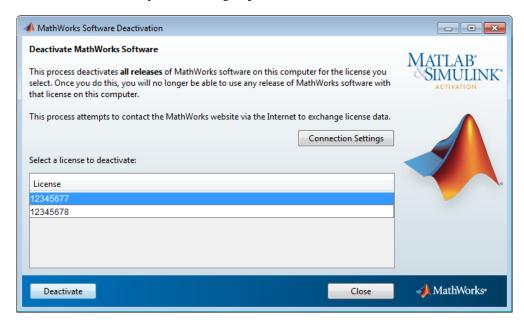
matlabroot/bin/deactivate matlab.sh

macOS Systems:

/Applications/MATLAB_R2019b.app/bin/deactivate_matlab.sh

- On systems running Windows 10, click the Windows icon, scroll to the Ms, and then find MATLAB R2019b. Click the expander and select Deactivate MATLAB R2019b.
- On systems running Windows 7, click the **Start** menu and select **MATLAB**. The deactivation application should appear on the list.
- On systems running Windows XP, you can also click the Start menu and choose Programs > MATLAB > R2019b > Deactivate MATLAB R2019b
- 2 Select the license that you want to deactivate and click **Deactivate**.

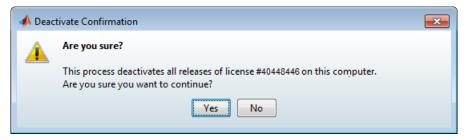
When the deactivation application starts, it displays the licenses you currently have installed and activated on your system. If you start the application from within MATLAB, the license you are using is preselected.



If your Internet connection requires a proxy server, click the **Connection Settings** button and enter the server name and port information. Click **OK** to return to the MathWorks Software Deactivation dialog box.

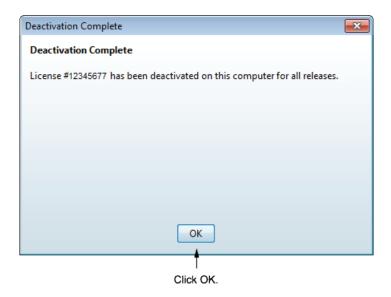


3 Confirm deactivation. Click **Yes** and the deactivation application attempts to contact MathWorks.



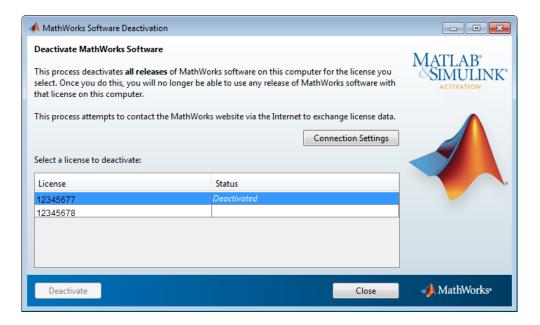
4 Complete deactivation. Click **OK**.

If the deactivation application can deactivate the license on your computer and in MathWorks systems, it displays the Deactivation Complete dialog box. Click \mathbf{OK} to return to the MathWorks Software Deactivation dialog box, where you can choose to deactivate other licenses.



If the deactivation application can deactivate the license on your computer but not in MathWorks systems, it displays the Deactivation Next Steps dialog box. This dialog box contains the deactivation string. To complete deactivation, visit the MathWorks website and log in to your account. In License Center, deactivate the license using the deactivation string. Click \mathbf{OK} to return to the MathWorks Software Deactivation dialog box.

5 After you deactivate a license, the MathWorks Software Deactivation dialog box 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.



The software is now deactivated on this computer.

See Also

Related Examples

 "Uninstall MathWorks Products" on page 1-57 (Installation, Licensing, and Activation)

Acknowledgments

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

MD5

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See Also

Related Examples

• "Determine Which Installation Procedure to Use" (Installation, Licensing, and Activation)

Installation for Administrators of Licenses

- "Installation Procedures for Administrators of Licenses" on page 2-2
- "Download Products Without Installation" on page 2-3

Installation Procedures for Administrators of Licenses

If you are an administrator for the licenses that you want to install, you can:

- Download and install MATLAB software for the computer where you are logged in.
- Download MATLAB products to a specified location and install the products later. You can:
 - Download products for multiple platforms.
 - Install the downloaded software on one or more computers.
- Install products using a File Installation Key. Use this procedure if you have
 downloaded the products previously and do not have an Internet connection. For
 instructions about installation using a File Installation Key, see "Install Products
 Offline" on page 1-34 (Installation, Licensing, and Activation)

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

- **1** Log in to your MathWorks Account.
- **2** Select a license in the displayed list.

Activation for both installation methods is the same as activation for licensed-end user installations. For more information about activation, see "Activate an Installation Online" on page 1-22 (Installation, Licensing, and Activation).

Download Products Without Installation

In this section...

- "Step 1: Download and Start the Installer" on page 2-3
- "Step 2: Choose Log in Option" on page 2-4
- "Step 3: Review the Software License Agreement" on page 2-5
- "Step 4: Log in to Your MathWorks Account" on page 2-5
- "Step 5: Enter Two-Step Verification Code" on page 2-6
- "Step 6: Choose Download Only Option" on page 2-7
- "Step 7: Specify the Download Folder and Platform" on page 2-8
- "Step 8: Specify Products to Download" on page 2-9
- "Step 9: Confirm Your Choices" on page 2-10
- "Step 10: Complete the Download" on page 2-11
- "Install and Activate the Downloaded Software" on page 2-12

This procedure describes how to download products without installing them immediately. This procedure is useful when you want to download products and install them later on one or more computers, either connected to the internet or offline.

To use this procedure, you must be an administrator for the license linked to your MathWorks Account.

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

Step 1: Download and Start the Installer

- **1** Download the installer from the MathWorks website.
 - When you select an installer from the website, you receive the files that the installer needs to run on your selected platform, not the product files. Run the installer to select products for Windows, Linux, and macOS platforms. The installer downloads the products that it needs from MathWorks, if necessary.
- 2 Start the installer. The method you use to start the installer depends on your platform.

Windows — 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
installer should start automatically after file extraction is complete.

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

- macOS Double-click the dmg file that you downloaded from the MathWorks website. Double-click InstallForMacOSX.app.
- **Linux** Use the unzip command to extract the files from the archive file that you downloaded from the MathWorks website and execute this command:

./install

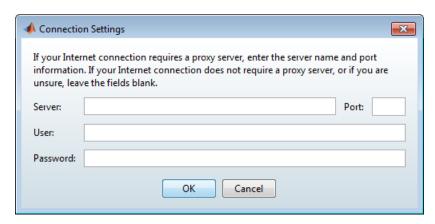
Step 2: Choose Log in Option

Leave the **Log In with a Mathworks Account** option selected (the default), and then click **Next**. During installation, log in to your MathWorks Account and follow the prompts in the installer.

- - X MathWorks Installer ct installation method MATLAB Log in with a MathWorks Account Connection Settings SIMULINK Requires an Internet connection Use a File Installation Key What is this? No Internet connection required MathWorks products are protected by patents (see mathworks.com/patents) and copyright laws. By entering into the Software License Agreement that follows, you will also agree to additional restrictions on your use of these programs. Any unauthorized use, reproduction, or distribution may result in civil and criminal penalties. MATLAB and Simulink are registered trademarks of The MathWorks, Inc. Please see mathworks.com/trademarks for a list of additional trademarks. Other product or brand names may be trademarks or registered trademarks of their respective holders. MathWorks Cancel Help Click Next.

Select this option to install products using an Internet connection.

If your Internet connection requires a proxy server, click the **Connection Settings** button. Enter the server name, port, and password in the Connection Settings dialog box. MathWorks supports Basic authentication and Digest authentication proxy configurations.



Note On Windows systems, the installer uses your system proxy settings, by default. If your proxy server requires you to log in, the installer prompts you for your login information.

Step 3: Review the 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:

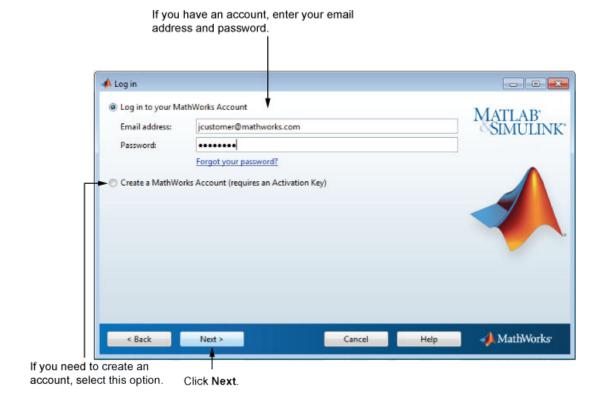
```
>> edit( fullfile(matlabroot, 'license_agreement.txt') )
```

Step 4: Log in to Your MathWorks Account

To log in to your MathWorks Account, enter your email address and password, and click **Next**. The installer contacts MathWorks to retrieve information about the licenses linked

to your account. If you have enabled Two-Step Verification on your account, a verification code is sent to your primary method.

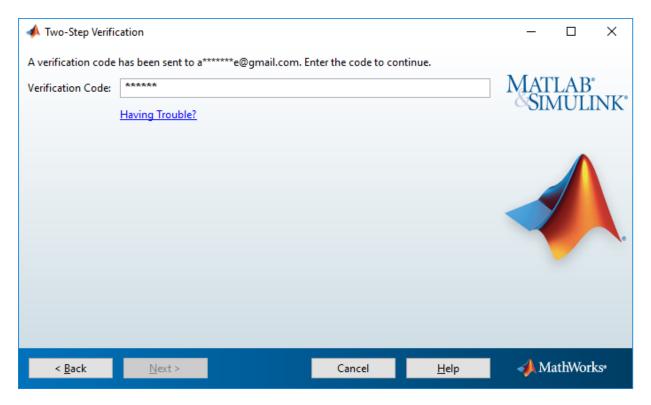
If you do not have a MathWorks Account, select the **Create a MathWorks Account** (requires an Activation Key) option and click **Next**. You are prompted to enter the data needed to create the account.



Step 5: Enter Two-Step Verification Code

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.

Enter the verification code sent to your primary method.



Click **Next** to proceed with installation.

Step 6: Choose Download Only Option

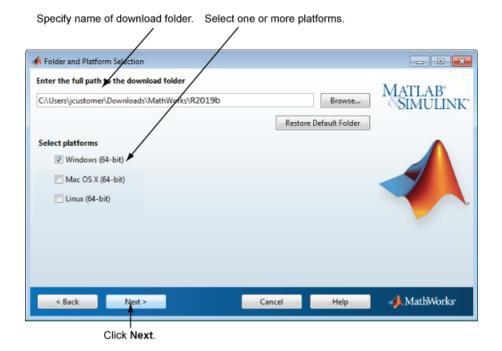
Choose the **Download Only** option.

This option downloads your products from the MathWorks website for installation at a later time.



Step 7: Specify the Download Folder and Platform

- 1 Specify the name of the folder where you want to download the MathWorks software.
 - You can accept the default download folder or click **Browse** to select a different one. If the folder does not exist, the installer creates it.
- **2** Select one or more platforms.
 - After the download completes, the root folder or directory in the download location includes the installer for each selected platform.

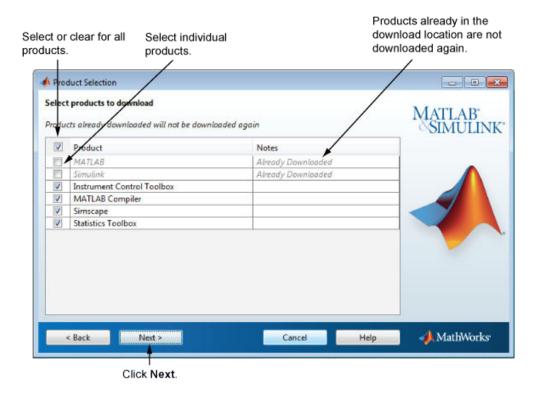


Step 8: Specify Products to Download

Specify which products you want to download. If you do not want to download a particular product, clear the check box next to its name.

If a product already exists in the specified download location, it is not selectable. The installer does not download these products again. If you want to download the products again, go back to the Folder Selection dialog box and select a different download location.

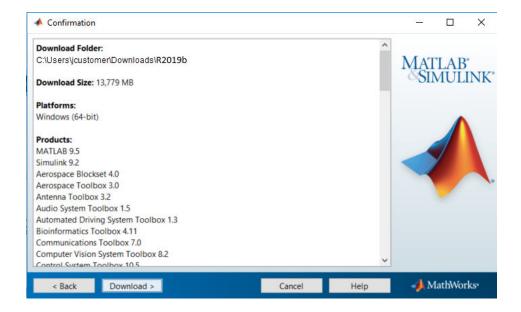
After selecting the products you want to download, click Next.



Step 9: Confirm Your Choices

Before it begins downloading files to your hard disk, the installer displays a summary of your choices.

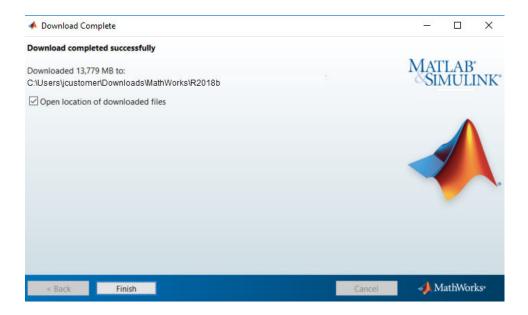
- To change the download location or the product selection, click **Back**.
- To proceed with the download, click **Download**.



Step 10: Complete the Download

When the download completes successfully, you can view the total size of the downloaded files and open the download location.

Click **Finish** to end the download procedure.



Install and Activate the Downloaded Software

After you download the software, you can install it from the download location at any time. If you plan to install the software using a File Installation Key, make sure the downloaded product files, including the installer file, are in a location that an off-network computer can access. For example, you can copy the files to the default Downloads folder on the off-network computer or copy the software to media, such as a USB drive. If you do not copy the files to the computer's default Downloads folder, make sure that the installer file is located in the same folder as the product files.

To install the software, consult the section "Plan Your Network Installation" on page 3-6 (Installation, Licensing, and Activation) for the appropriate procedure for your organization's setup.

See Also

Related Examples

 "Install MathWorks Software on Client Systems" on page 3-44 (Installation, Licensing, and Activation) • "Provide Products and Licensing Information to Clients" on page 3-42 (Installation, Licensing, and Activation)

Installing Network License Options

This topic describes how to activate and install MathWorks products on computers in a network configuration for licenses such as Concurrent or Network Named User. The computers can be running the Microsoft® Windows operating system (64-bit), the Linux operating system (64-bit), or the macOS operating system.

- "Understanding Network License Files" on page 3-2
- "Plan Your Network Installation" on page 3-6
- "Install Network License Manager Offline" on page 3-14
- "Install Network License Manager Online" on page 3-24
- "Update Network License Manager Software" on page 3-40
- "Provide Products and Licensing Information to Clients" on page 3-42
- "Install MathWorks Software on Client Systems" on page 3-44
- "Start the Network License Manager" on page 3-62
- "Manage the Network License Manager" on page 3-65
- "Update Network License" on page 3-69
- "Install Noninteractively (Silent Installation)" on page 3-71
- "Install Update Release on Offline Machine" on page 3-73

Understanding Network License Files

In this section...

"Network Licenses" on page 3-2

"MATLAB Installation" on page 3-2

"MATLAB Search Path" on page 3-3

"Inside the Network License File" on page 3-4

"Modifying Network License Files" on page 3-5

Network Licenses

Network licenses contain the encrypted passcodes for each product that your organization is licensed to install and run. If you are the license administrator or system administrator of a network server, there are times you must access the network license files.

MATLAB Installation

When you install MATLAB software, the installer performs the following processing of 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.
 - When it 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\R2019b\etc\win64\MLM.exe" \
options="C:\Program Files\MATLAB\R2019b\etc\mlm.opt"

- On the client machine, 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 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:

- License File specified on MATLAB startup command line using the -c option.
- Environment variables MLM LICENSE FILE and LM LICENSE FILE.
- The profile folder of the person starting the program
- The \licenses folder in the MATLAB installation for files named license.dat or any file with the extension .lic.

After it finds a license file, MATLAB stops searching.

Set MATLAB Search Path

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

• Specify the path to the License File on the command line during MATLAB startup using the -c option. MATLAB searches this path first.

You can specify a list of paths to search. When you use the -c option, you explicitly prohibit the searching of the environment variables. 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. MATLAB searches these paths second.
 - 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.
- Restrict a license to an individual user. MATLAB searches this path third.

MATLAB searches the profile folder of the person starting the program. For a license that is restricted to use by a particular user, the activation application puts the license file in a folder in the profile for that user.

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.

Modifying Network License Files

In general, you do not need to modify the network license file on the server or on the client machines. However, there are some situations in which 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). See "Update Network License" on page 3-69 (Installation, Licensing, and Activation).
- When you change the port number (for example, if the port address for the server has changed). See Migrate MATLAB Client Installations to New License Server.
- When you update the network installation with a new license file. See Update License File on License Server.

See Also

More About

 "Using the Network License Manager Command-Line Utilities" on page 3-66 (Installation, Licensing, and Activation)

External Websites

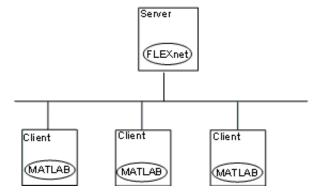
License Center

Plan Your Network Installation

Configuration

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

In a *local client access* configuration, you install the network license manager on a server, and you install MATLAB on each client system. The license manager uses license keys to control access to MathWorks products. MATLAB checks out a license key when it starts up or uses functions in other products. When all the keys for a particular product are checked out, the license manager denies further requests.



To set up a network installation, you must install the network license manager on a server and install MathWorks products on client workstations.

- Installing the network license manager on a server For network installations, you must install the network license manager to control product access. You install the license manager on a server that is available to all your network users, referred to in this documentation as the license server.
- Installing MathWorks products on each client system Install the product files
 on each client system. Client systems must be able to connect to the license server
 over a network.

You can choose online or offline installation and activation, and you can choose to perform the installations yourself or have others do it.

You can use the MathWorks installer to perform both types of installations.

If you want to integrate MathWorks products into an already established license management scheme, you can copy the MathWorks license management daemons onto your system instead of using the installer to install the network license manager. For instructions, see "Update Network License Manager Software" on page 3-40 (Installation, Licensing, and Activation).

Note Activate the license for the installation before you run the installer. To retrieve the License File needed for your configuration, visit the License Center at the MathWorks website. Provide the Host ID of the system on which you intend to run the network license manager when requesting a License File. You specify the location of your License File during installation.

Installation Procedures for 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 machines are accessing the license server correctly at the time of installation.

Select one of the following installation procedures for the network license manager:

- "Install Network License Manager Online" on page 3-24 (Installation, Licensing, and Activation) for online installation
- "Install Network License Manager Offline" on page 3-14 (Installation, Licensing, and Activation) for offline installation

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

Note 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 shut down (see "Start the Network License Manager" on page 3-62 (Installation, Licensing, and Activation)).

Installation Procedures for MATLAB

To install MATLAB on end-user systems, you must be an administrator for the licenses that you want to install. The person performing the installation must have or create a MathWorks Account and add the license to their account.

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

- **1** Log in to your MathWorks Account.
- **2** Select a license in the displayed list.

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

Type of Installation	Person Who Installs	Procedures
Install and activate interactively with an Internet connection	Administrator or end user	Follow the instructions in "Install Products Online" on page 1-3 (Installation, Licensing, and Activation). If you want the end user to install the software: • "Provide Products and Licensing Information to Clients" on page 3-42 (Installation, Licensing, and Activation) • Have end user follow the instructions in "Install Products Online" on page 1-3 (Installation, Licensing, and Activation)
		Note To install the software but leave the activation for the end user, at the end of installation, clear the checkbox for Activate MATLAB and click Finish. Have user follow the procedure described in "Activate an Installation Online" on page 1-22 (Installation, Licensing, and Activation).

Type of Installation	Person Who Installs	Procedures
Administrator downloads installer. End user installs and activates interactively with an Internet connection.	Administrator and end user	Products Without Installation" on page 2-3 (Installation, Licensing, and Activation).
		If the machine you used to download is not the target machine, copy the download files to the client machine or put them in a network-accessible location.
		Give end user the installation artifacts they need as described in "Provide Products and Licensing Information to Clients" on page 3-42 (Installation, Licensing, and Activation)
		4 Have end user follow the instructions in "Install Products Online" on page 1-3 (Installation, Licensing, and Activation)

Type of Installation	Person Who Installs	Procedures
Install and activate interactively on an offline computer	Administrator only	Follow the instructions in "Download Products Without Installation" on page 2-3 (Installation, Licensing, and Activation).
		If the machine you used to download is not the target machine, copy the download files to the client machine or put them in a network-accessible location.
		3 "Install MathWorks Software on Client Systems" on page 3-44 (Installation, Licensing, and Activation)
		Note To install the software but leave the activation for the end user, at the end of installation, clear the checkbox for Activate MATLAB and click Finish. Have user follow the procedure described in "Activate an Installation Online" on page 1-22 (Installation, Licensing, and Activation).

Type of Installation	Person Who Installs	Procedures
Administrator downloads installer. End user installs and activates interactively on an offline computer.	Administrator and end user	Products Without Installation" on page 2-3 (Installation, Licensing, and Activation).
		If the machine you used to download is not the target machine, copy the download files to the client machine or put them in a network-accessible location.
		Give end user the installation artifacts they need as described in "Provide Products and Licensing Information to Clients" on page 3-42 (Installation, Licensing, and Activation). Also make sure you give end user the File Installation Key (FIK).
		4 Have the end user follow the instructions in "Install Products Offline" on page 1-34 (Installation, Licensing, and Activation).
Silent (noninteractive) installation 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 only	"Install Noninteractively (Silent Installation)" on page 3-71 (Installation, Licensing, and Activation)

Next Steps

After you have installed MATLAB on end user machines, you can investigate MATLAB configuration and startup options, such as:

•

•

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See Also

Related Examples

- "Install Network License Manager Offline" on page 3-14 (Installation, Licensing, and Activation)
- "Install Network License Manager Online" on page 3-24 (Installation, Licensing, and Activation)
- "Start the Network License Manager" on page 3-62 (Installation, Licensing, and Activation)

Install Network License Manager Offline

Use a File Installation Key (FIK) to install the network license manager on a machine that is not connected to the internet. You must download the installer and the FIK from a computer that does have an internet connection.

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

Note Starting with R2013b, network License Files have a new format. As a result, R2013b and later releases require an update to the latest version of the network license manager that ships with R2013b or later. You can continue to use older License Files and previous versions of the MATLAB software if you decide not to upgrade to R2013b or a later release.

Step 1: Get Ready to Install

- Obtain the Host ID of the computer on which you intend to run the network license manager.
 - Windows Systems The Host ID can be the MAC Address (Physical Address) or the IP Address of the first Ethernet adapter. To obtain the MAC Address, open a Command Prompt window, and run the command:

getmac

Use the first Physical Address listed (for example. 00-11-22-aa-bb-cc).

To obtain the IP address, open a Command Prompt window, and run the command:

ipconfig

• **Linux Systems** — The Host ID is the MAC Address of the eth0 device (first Ethernet device). In a Terminal window, run following command:

/sbin/ifconfig eth0

The Host ID is the value listed next to the tag "HWaddr".

• macOS Systems — The Host ID is the MAC Address of the built-in Ethernet device (en0). Use Terminal in /Applications/Utilities and run the command:

netstat -I en0

The Host ID is listed in the first row of the output, under the "Address" column.

- Activate the license or obtain the License file, if you activated the license previously.
 - 1 Visit the License Center at the MathWorks website.
 - **2** Select the license to activate.
 - 3 Select the **Activation and Installation** tab and click **Activate**.
 - 4 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**.
 - 5 Choose whether to download the License File and File Installation Key or receive them in email. Click **Continue**.
- If the network license manager is running, shut it down. See "Start the Network License Manager" on page 3-62 (Installation, Licensing, and Activation) for more information.
- If you are installing the network license manager only, run the installer from the MathWorks website.
- To install the network license manager and the rest of your MathWorks products at the same time, the MathWorks products must be available on your computer. Use the MathWorks installer to download products without installing them.
- Make sure that you have the correct permissions to install the software. If you have questions about permissions, ask your system administrator.
 - **Windows Systems** Get the name and password of the administrator account on your computer.
 - **Linux Systems** Get the root password. You can install MATLAB software without superuser privileges, however, it limits certain installation options. For example, you need superuser status if you want to set up symbolic links to the matlab command, install product files in a protected folder, or edit the system boot script.
 - macOS Systems Get the name and password of an administrator account on your computer. The administrator account is the user account you set up when you configured your macOS system; this account is not your MathWorks Account. During installation, you must enter this name and password in the Authenticate dialog box.



 Consider disabling virus checking software and Internet security applications on your system for the duration of the installation process. These applications can slow down or cause the installation process to appear to become unresponsive (hang).

You need to install the network license manager only one time at a site. For information about installing MathWorks software on clients, see "Install MathWorks Software on Client Systems" on page 3-44 (Installation, Licensing, and Activation).

Step 2: Start the Installer

1 Download the installer from the MathWorks website.

When you select an installer on the website, you receive the files that the installer needs in order 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 logged in. The installer downloads the products that it needs from MathWorks, if necessary.

2 Start the installer. The method you use to start the installer depends on your platform.

Windows

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 R2019b) 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

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

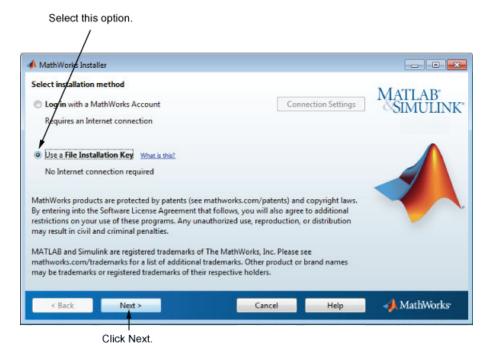
Linux

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 3: Select Use a File Installation Key

Select Use a File Installation Key and click Next.



Step 4: Review the Software License Agreement

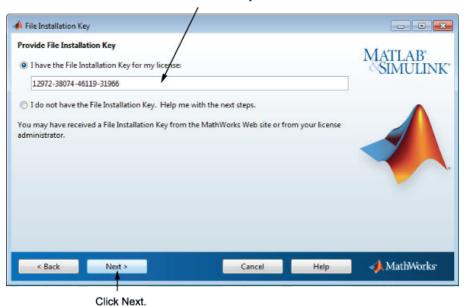
Review the software license agreement and, if you agree with the terms, select Yes and click Next.

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: Specify the File Installation Key

Select the **I have the File Installation Key for my license** option, enter the File Installation Key, and click **Next**.



Enter File Installation Key here.

Step 6: Specify the Installation Folder

Specify the name of the folder 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.

After making your selection, click Next.



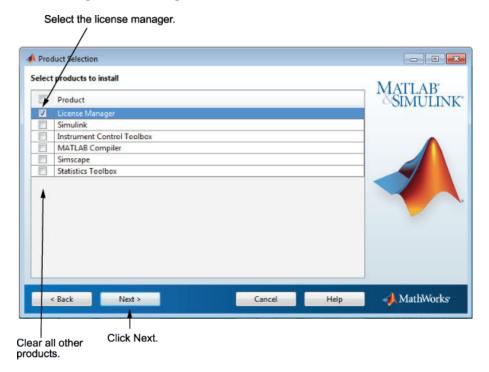
Step 7: Select the Network License Manager for Installation

Select the network license manager in the product list. By default, it is not selected for installation.

If you are only installing the network license manager on your server, clear the check boxes next to the other products. If you are setting up a remote access configuration where users will run MathWorks products on a central server, and this central server is your license server, leave all the other products in the list selected for installation.

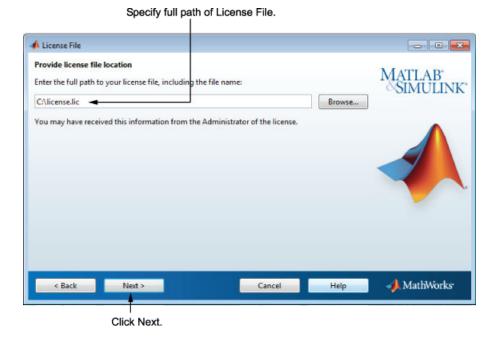
Note If you plan to install other MathWorks products when you install the network license manager, the products must be available locally on your computer. For additional information about downloading products to your computer, see "Download Products Without Installation" on page 2-3 (Installation, Licensing, and Activation).

After making your selections, click **Next** to proceed with the installation. After clicking **Next**, you might receive a message telling you that one or more of the products you selected depend on other products.



Step 8: Specify the Location of the License File

In the text box, enter the full path of the License File you retrieved from the License Center at the MathWorks website. Then, click **Next**.



License File Processing on Server

The installer performs the following processing of this License File:

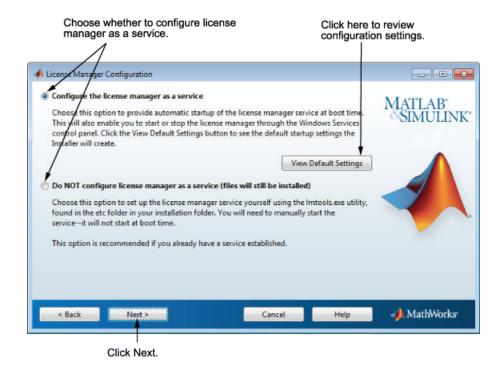
- Makes a copy of your License File, naming it license.dat, and puts this copy in the \etc folder of your MATLAB installation folder.
- Adds a SERVER line and a DAEMON line to the file. The SERVER line identifies the server
 host and port number. The DAEMON line identifies the name of the network license
 manager daemon.
- Stores the processed license file in matlabroot/etc, where matlabroot is your MATLAB installation folder.

Step 9: Configure the Network License Manager: 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. To review the default network license manager configuration

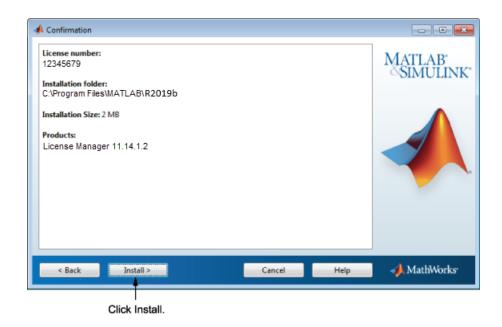
settings, click **View Default Settings**. If you choose not to configure the network license manager service, you can do it later.

Note If you have an existing network license manager that you want to continue to use until you install the new one, select the **Do NOT configure license manager as a service (files will still be installed)** option. 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 10: Confirm Your Choices

Before it begins copying files to your hard disk, the installer displays a summary of your installation choices. To change a setting, click **Back**. To proceed with the installation, click **Install**.



Step 11: Complete the Installation

When the installer finishes, click **Finish** to exit the installer.

If you installed the network license manager as a service, restart your computer after completing the installation. The license manager must be running to start MATLAB on client systems. As a service, the network license manager gets started automatically at system boot time.

See Also

Related Examples

- "Start the Network License Manager" on page 3-62 (Installation, Licensing, and Activation)
- "Install MathWorks Software on Client Systems" on page 3-44 (Installation, Licensing, and Activation)

Install Network License Manager Online

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

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

Note Starting with R2013b, network License Files have a new format. As a result, R2013b and later releases require an update to the latest version of the network license manager that ships with R2013b or later. You can continue to use older License Files and previous versions of the MATLAB software if you decide not to upgrade to R2013b or a later release.

Step 1. Get Ready to Install

- Obtain the Host ID of the computer on which you intend to run the network license manager.
 - Windows Systems The Host ID can be the MAC Address (Physical Address) or the IP Address of the first Ethernet adapter. To obtain the MAC Address, open a Command Prompt window, and run the command:

getmac

Use the first Physical Address listed (for example. 00-11-22-aa-bb-cc).

To obtain the IP address, open a Command Prompt window, and run the command:

ipconfig

• **Linux Systems** — The Host ID is the MAC Address of the eth0 device (first Ethernet device). In a Terminal window, run following command:

/sbin/ifconfig eth0

The Host ID is the value listed next to the tag "HWaddr".

• macOS Systems — The Host ID is the MAC Address of the built-in Ethernet device (en0). Use Terminal in /Applications/Utilities and run the command:

netstat -I en0

The Host ID is listed in the first row of the output, under the "Address" column.

- Activate the license, or obtain the License File, if you activated the license previously:
 - **1** Visit the License Center at the MathWorks website.
 - **2** Select the license to activate.
 - 3 Select the **Activation and Installation** tab and click **Activate**.
 - 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**.
 - 5 Choose whether to download the License File or receive it in email. Click **Continue**.
- If it is running, shut down the network license manager. See "Start the Network License Manager" on page 3-62 (Installation, Licensing, and Activation) for more information.
- Make sure that you have your email address and your MathWorks Account password handy. You will need them to log in to your account during installation. If you have multiple licenses linked to your account, know the number of the license you want to install.

If you do not have a MathWorks Account, you can create one during installation. However, you must have an Activation Key. An Activation Key is the unique code that identifies a license. It is used to activate the license. The Activation Key also allows licensed end users to link their MathWorks Account with a license. Ask the administrator of the license for the Activation Key.

- Make sure that you have the correct permissions to run the installer. If you have questions about permissions, ask your system administrator.
 - **Windows Systems** Get the name and password of the administrator account on your computer.
 - **Linux Systems** Get the root password. You can install MATLAB software without superuser privileges, however, it limits certain installation options. For example, if you want to set up symbolic links to the matlab command, install product files in a protected folder, or edit the system boot script, you must have superuser status.
 - macOS Systems Get the name and password of an administrator account on your computer. The administrator account is the user account you set up when you

configured your macOS system; this account is not your MathWorks Account. During installation, you must enter this name and password in the Authenticate dialog box,



 Consider disabling virus checking software and Internet security applications on your system for the duration of the installation process. These applications can slow down or cause the installation process to appear to become unresponsive (hang).

You only need to install the network license manager one time at a site. For information about installing MathWorks software on clients, see "Install MathWorks Software on Client Systems" on page 3-44 (Installation, Licensing, and Activation).

Step 2: Start the Installer

1 Download the installer from the MathWorks website.

When you select an installer on the website, you receive the files that the installer needs in order 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 logged in. The installer downloads the products that it needs from MathWorks, if necessary.

2 Start the installer. The method you use to start the installer depends on your platform.

Windows

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 R2019b) 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

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

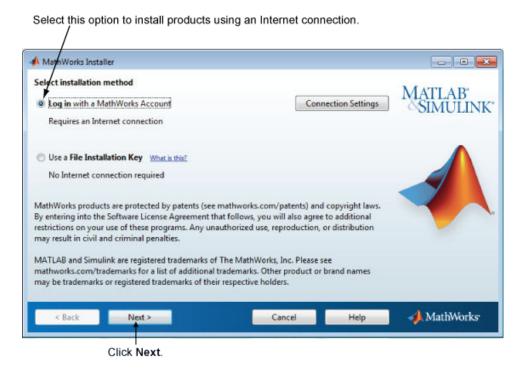
Linux

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 3: Select Log in with a MathWorks Account

Leave the **Log In with a MathWorks Account** option selected (the default), and then click **Next**. During installation, you log in to your MathWorks Account, select the license you want to install, and follow the prompts in the installer.



If your Internet connection requires a proxy server, click **Connection Settings**. Enter the server name, port, and password in the Connection Settings page. MathWorks supports Basic authentication and Digest authentication proxy configurations.



Note On Windows systems, the installer uses your system proxy settings, by default. If your proxy server requires you to log in, the installer prompts you for your login information.

Step 4: Review the Software License Agreement

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

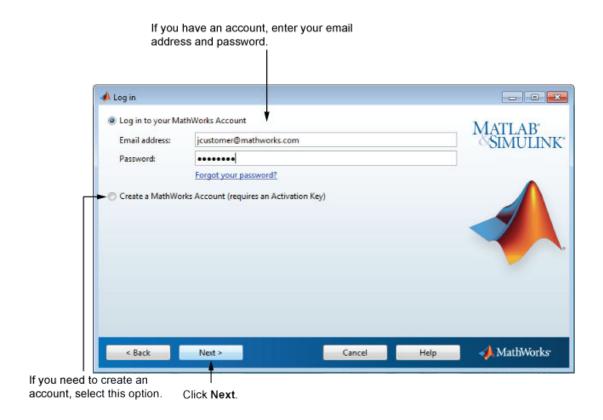
Note To view the end user license agreement at any time after installation, execute the following command in the MATLAB command window:

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

Step 5: Log in to Your MathWorks Account

To log in to your MathWorks Account, enter your email address and password, and click **Next**. The installer contacts MathWorks to retrieve information about the licenses linked to your account. If you have enabled Two-Step Verification on your account, a verification code is sent to your primary method.

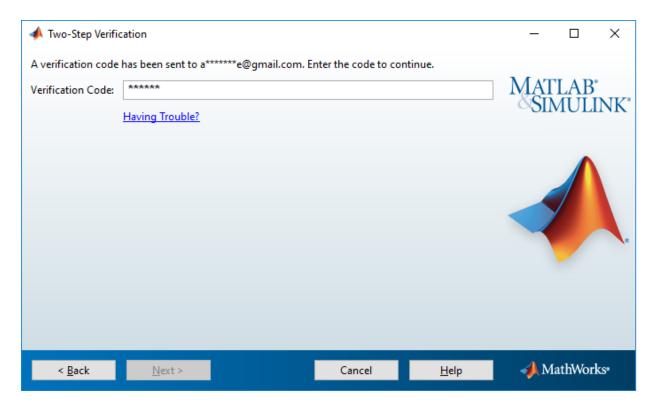
If you do not have a MathWorks Account, select the **Create a MathWorks Account** (requires an Activation Key) option and click **Next**. You are prompted to enter the data needed to create the account.



Step 6: Enter Two-Step Verification Code

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.

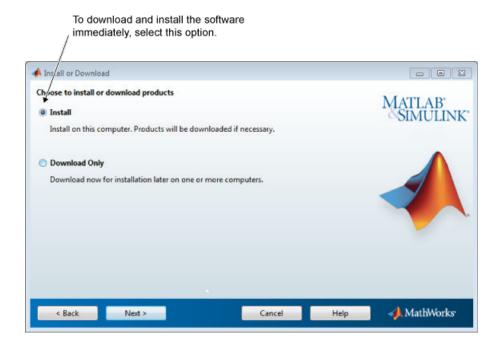
Enter the verification code sent to your primary method.



Click Next to proceed with installation.

Step 7: Choose Install Option

Leave the **Install** option selected (the default) and click **Next**.



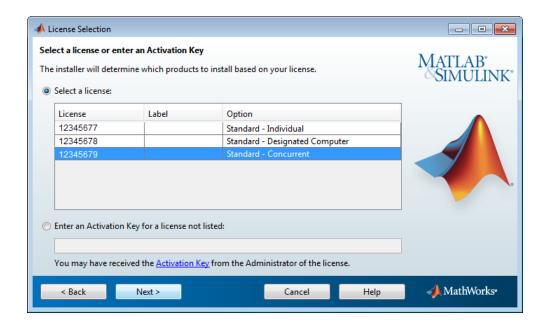
Step 8: Select the License You Want to Install

Select a license with one of the network license options from the list of licenses linked with your MathWorks Account and click **Next**. The list contains the following information about the licenses:

- · License number.
- An optional descriptive text label that can help identify the license.
- Information identifying the license options. For server installation, select a license with one of the network license options.

If you want to install products on a license that is not linked to your MathWorks Account, select the **Enter an Activation Key for a license not listed** option, enter an Activation Key, and click **Next**. An Activation Key is the unique code that identifies a license.

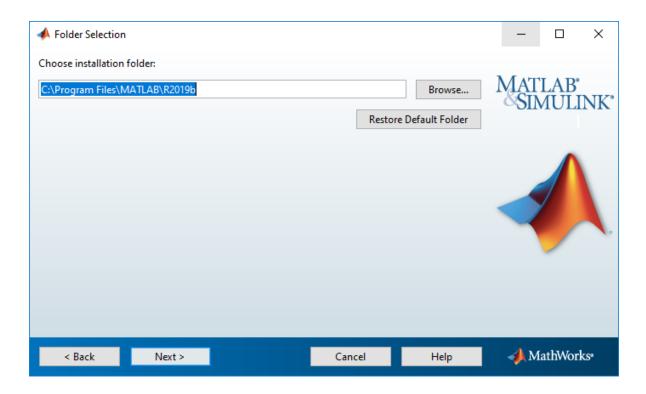
Note Entering dashes or spaces for the Activation Key is optional.



Step 9: Specify the Installation Folder

Specify the name of the folder 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.

When specifying a folder name, you can use any alphanumeric character and some special characters, such as underscores. If you make a mistake while entering a folder name and want to start over, click **Restore Default Folder**. After making your selection, click **Next**.

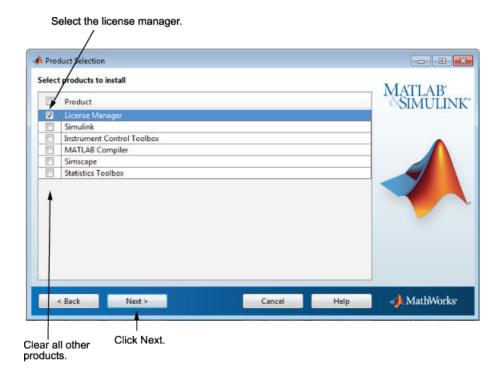


Step 10: Select Network License Manager for Installation

Select the network license manager in the product list. By default, it is not selected for installation.

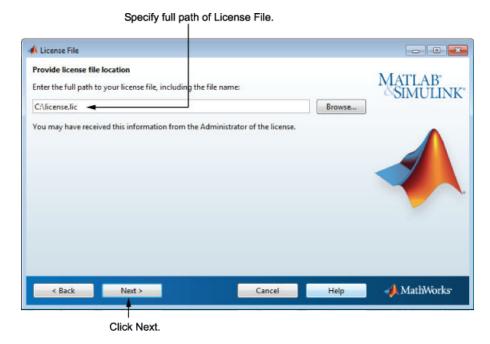
If you are only installing the license manager on your server, clear the check boxes next to the other products. If you are setting up a remote access configuration where users will run MathWorks products on a central server, and this central server is your license server, leave all the other products in the list selected for installation.

After making your selections, click **Next** to proceed with the installation. After clicking **Next**, you might receive a message telling you that one or more of the products you selected depend on other products.



Step 11: Specify the Location of the License File

In the text box, enter the full path of the License File you retrieved from the License Center at the MathWorks website. Then, click **Next**.



License File Processing on Server

When you install the network license manager, the installer performs the following processing of this License File:

- Makes a copy of your License File, naming it license.dat, and puts this copy in the \etc folder of your 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.

Step 12: Configure the Network License Manager: Windows Systems Only

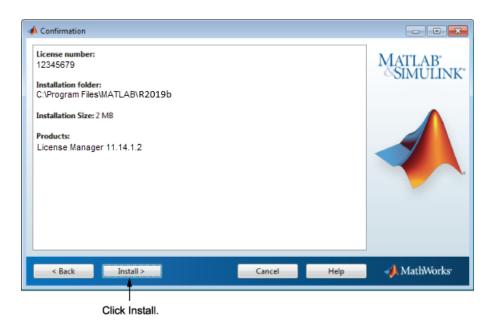
Configuring the network license manager service provides automatic startup at system boot time and centralizes administration of the license manager through the Windows Services control panel. To review the default network license manager configuration settings, click **View Default Settings**. If you 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, select the **Do NOT configure license manager as a service (files will still be installed)** option. 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 13: Confirm Your Choices

Before it begins copying files to your hard disk, the installer displays a summary of your installation choices. To change a setting, click **Back**. To proceed with the installation, click **Install**.

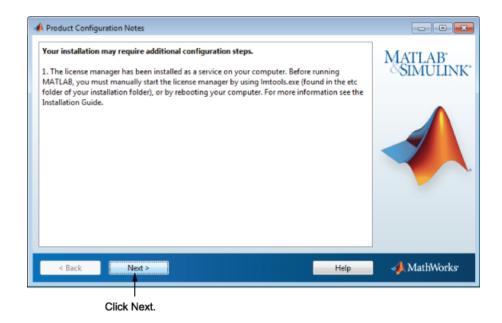


As it copies files to your hard drive, the installer displays a status dialog box to show the progress of the installation.

Read Product Configuration Notes

The installer includes information about how to start the network license manager on your server. If you installed other products, you might also see some additional product configuration and product update information.

Click **Next** to proceed with the installation.



Step 14: Complete the Installation

When the installer finishes, click **Finish** to exit the installer.

If you installed the network license manager as a service, you should restart your computer after completing the installation. The license manager must be running to start MATLAB on client systems. As a service, the license manager gets started automatically at system boot time.

See Also

Related Examples

- "Start the Network License Manager" on page 3-62 (Installation, Licensing, and Activation)
- "Install MathWorks Software on Client Systems" on page 3-44 (Installation, Licensing, and Activation)

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.

After you stop the network license manager, choose an installation method for updating the software.

Part 1. Stop Network License Manager

- **1** If the network license manager is running, shut it down.
 - Linux and macOS Use the lmdown command. For additional information, see "Using the Network License Manager Command-Line Utilities" on page 3-66 (Installation, Licensing, and Activation).
 - Windows Remove the existing service to prevent any conflicts.
 - a Start LMT00LS 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.
 - **b** Select the **Config Services** tab.
 - **c** From the **Service Name** menu, select the service you want to remove, and click **Remove Service**.

After stopping the network license manager service, decide whether you want to install the update by downloading the daemons (step 2a) or by using the installer (step 2b).

Part 2. Select an 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. See "Part 1. Stop Network License Manager" on page 3-40 (Installation, Licensing, and Activation).
- 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. See "Part 1. Stop Network License Manager" on page 3-40 (Installation, Licensing, and Activation).
- **2** Install license manager software update:
 - With Internet connection See "Install Network License Manager Online" on page 3-24 (Installation, Licensing, and Activation).
 - Without Internet connection See "Install Network License Manager Offline" on page 3-14 (Installation, Licensing, and Activation).

See Also

Related Examples

- "Start the Network License Manager" on page 3-62 (Installation, Licensing, and Activation)
- "Manage the Network License Manager" on page 3-65 (Installation, Licensing, and Activation)

Provide Products and Licensing Information to Clients

You may want your end users to install MathWorks software themselves, or you may want to assign other staff to do it for you. You can choose to have the person performing the install to download and run the installer themselves, or you can download the installer and put it somewhere accessible to the person doing the install.

For this workflow, provide the person doing the installation with the following installation artifacts:

• A License File — Give users a copy of the 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. For information about this License File, see "License File Processing on Server" on page 3-36 (Installation, Licensing, and Activation).

Note Do not give users performing client installations a copy of the original License File you created from 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.

Access to product files — You can download the product files and make them
available on a server that is accessible to all clients or on removable media. For these
scenarios, users need a File Installation Key to install products.

If users performing client installations have MathWorks Accounts, you can give users the Activation Key for the license and let them log in to their accounts to install their MathWorks products.

• **Installation instructions** — Refer to the table in "Plan Your Network Installation" on page 3-6 (Installation, Licensing, and Activation) to provide the person performing the installation with the correct instructions, as they differ slightly depending on whether the target machine has an internet connection.

If you have many client installations to perform, you can create an installer initialization file and run the installer noninteractively — see "Install Noninteractively (Silent Installation)" on page 3-71 (Installation, Licensing, and Activation).

See Also

Related Examples

- "Plan Your Network Installation" on page 3-6 (Installation, Licensing, and Activation)
- "Install Products Online" on page 1-3 (Installation, Licensing, and Activation)
- "Install Products Offline" on page 1-34 (Installation, Licensing, and Activation)

Install MathWorks Software on Client Systems

Before installing MathWorks software, you will need the following:

Product access:

- If products are on removable media or on a server, obtain the File Installation Key from your license administrator.
- If you are planning to use a File Installation Key for installation, ensure that the product files, including the MATLAB installer, are available in an accessible location, such as 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 in the same folder as the product files.
- If you are expected to use your MathWorks Account to install products, make sure
 that you have your email address and your MathWorks Account password handy.
 You need them to log in to your account during installation.

If necessary, obtain the Activation Key. If you do not have a MathWorks Account, you need the Activation Key to create one during installation. An Activation Key is the unique code that identifies a license. It also allows licensed end users to link their MathWorks Account with a license.

- The client License File. The License File must include the correct SERVER line for the license server you need to use.
- Correct permissions to install the software. If you have questions about permissions, ask your system administrator.
 - Windows Systems Get the name and password of the administrator account on your computer. The installer modifies the system registry during installation.
 - **Linux Systems** Get the root password. You can install MATLAB software without superuser privileges, however, it limits certain installation options. For example, if you want to set up symbolic links to the matlab command, install product files in a protected folder, or edit the system boot script, you must have superuser status.
 - macOS Systems Get the name and password of an administrator account on your computer. The administrator account is the user account you set up when you configured your macOS system; this account is not your MathWorks Account. During installation, you must enter this name and password in the Authenticate dialog box,



Whether to disable virus checking software and Internet security applications.
 These applications can slow down or cause the installation process to appear to become unresponsive (hang).

Make sure the target machine meets the System Requirements for MATLAB.

If You Are Upgrading an Existing Installation For best results when upgrading your MATLAB installation to the latest release, install the new version in a new installation folder. Installing in a new installation folder also applies when upgrading an installation of a prerelease version of the software. You do not need to delete an existing MATLAB installation before installing a new release. You can run multiple versions of MATLAB on the same system.

Step 1: Start the Installer

Note If you are accessing products from a shared location and planning to use a File Installation Key, verify that the folder containing the product files includes the installer file for your platform in the root of the folder (setup.exe for Windows, install for Linux, and InstallForMacOSX for macOS) and an archives subfolder. If the archives subfolder contains fewer than 3 files, you might be missing required files. Ask your administrator to download the files again using the procedure in "Download Products Without Installation" on page 2-3 (Installation, Licensing, and Activation).

1 Start the installer. The method you use to start the installer depends on your platform.

Windows

- Previously downloaded product files If you or an administrator downloaded
 the product files previously and copied the product files to your computer, a
 network share, or to media, go to the top level of the folder where the product
 files are located and click setup.exe.
- Downloaded installer file Double-click the self-extracting installer file in the folder where the downloaded files are located. 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

- Previously downloaded product files If you or an administrator downloaded
 the product files and copied the extracted files to your computer, a network
 share, or to media, go to the top level of the folder where the product files are
 located and double-click the InstallForMacOSX icon to begin the
 installation.
- Downloaded installer file Double-click the archive file in the folder where
 the downloaded files are located. After extracting the files, open the installer
 folder and double-click InstallForMacOSX.app.

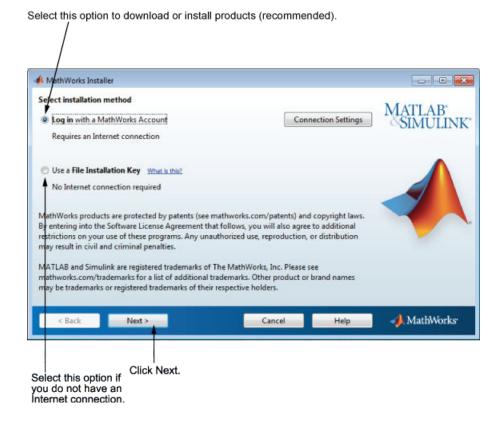
Linux

- Previously downloaded product files If you or an administrator downloaded
 the product files and copied the extracted files to your computer, a network
 share, or to media, go to the top level of the folder where the product files are
 located and execute the installer command:
 - ./install
- Downloaded installer file Use the unzip command to extract the files from the archive file in the folder where the downloaded files are located. After extracting the files, execute the installer command:
 - ./install

Step 2: Choose an Installation Method

Choose whether you want to install using a File Installation Key or a MathWorks Account. If you have a File Installation Key, choose **Use a File Installation Key** and click **Next**.

If you have an Internet connection and are expected to use a MathWorks Account to install products, choose **Log in with a MathWorks Account**. For this option, you might need to obtain an Activation Key from the license administrator.



Step 3: Review the 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: Specify the File Installation Key

If you are expected to use a MathWorks Account to access products for installation, skip this step and go to Step 5.

If the product files are accessible on a server or on removable media, select **Use a File Installation Key** and click **Next**.

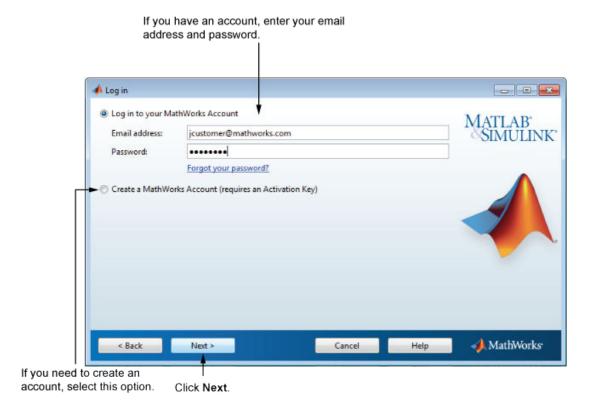


Step 5: Log in to Your MathWorks Account

To log in to your MathWorks Account, enter your email address and password, and click **Next**. The installer contacts MathWorks to retrieve information about the licenses linked

to your account. If you have enabled Two-Step Verification on your account, a verification code is sent to your primary method.

If you do not have a MathWorks Account, select the **Create a MathWorks Account** (requires an Activation Key) option and click **Next**. You are prompted to enter the data needed to create the account.



Creating a MathWorks Account

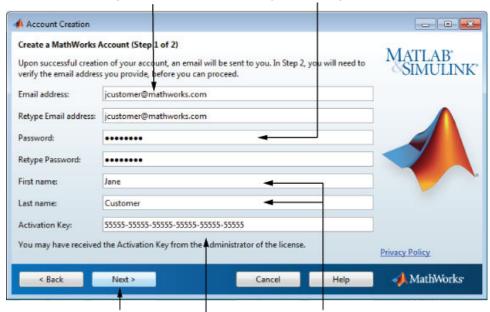
To create an account, enter your email address, first name, last name, and password. You must also provide an Activation Key because a newly created account does not have any licenses linked to it.

The Activation Key identifies the license you want to install. The administrator of this license can retrieve the key by visiting the License Center at the MathWorks website.

Note Entering dashes or spaces for the Activation Key is optional.

Click **Next** to create your account.

Enter your email address. Create a password for your account.



Click Next. Enter Activation Key. Enter first name and last name.

Note When you create a new MathWorks Account, you must verify your email address before you can proceed with installation. Before you click **Next** in the Email Verification Required dialog box, go to your email program, open the message sent to you by MathWorks, and click the verification link. Then return to this dialog box and click **Next**.

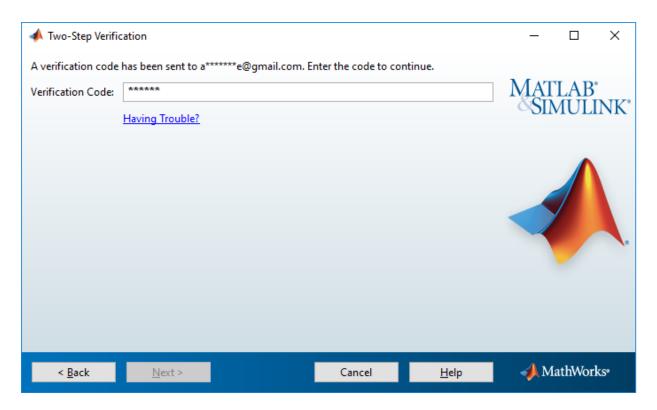


Because the Activation Key you entered specifies a particular license, the installer skips the license selection step.

Step 6: Enter Two-Step Verification Code

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.

Enter the verification code sent to your primary method.



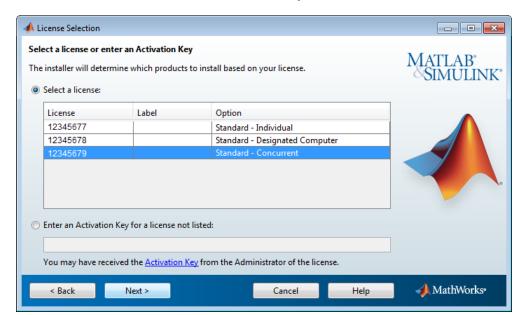
Click **Next** to proceed with installation.

Step 7: Select the License You Want to Install

Note If you specified an Activation Key in the previous step, the installer skips this step.

Select a license from the list of licenses linked to your MathWorks Account and click **Next**. The list contains the following information about the licenses:

- · License number.
- An optional descriptive text label that can help identify the license.
- Information identifying the license options. For server installation, select a license with one of the network license options.

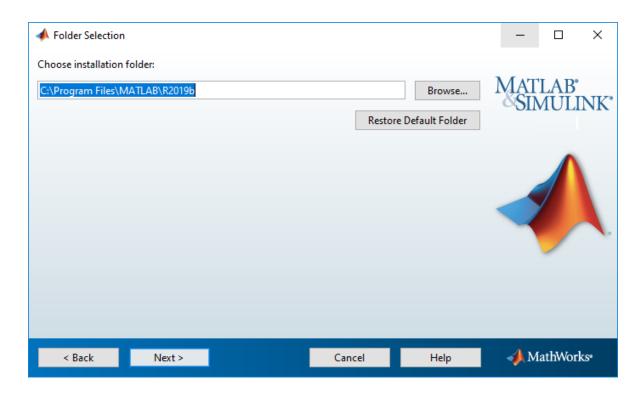


If you do not see the license you want in the list, select **Enter an Activation Key for a license not listed** and enter an Activation Key.

Step 8: Specify the Installation Folder

Specify the name of the folder 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.

When specifying a folder name, you can use any alphanumeric character and some special characters, such as underscores. If you make a mistake while entering a folder name and want to start over, click **Restore Default Folder**. After making your selection, click **Next**.

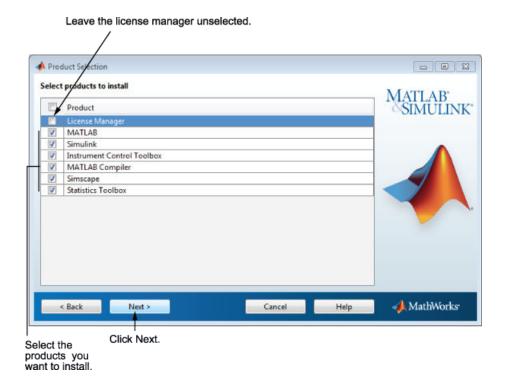


Step 9: Specify Products to Install

Specify which products you want to install. This dialog box lists all the products you are licensed to install. The products in the list are preselected for installation.

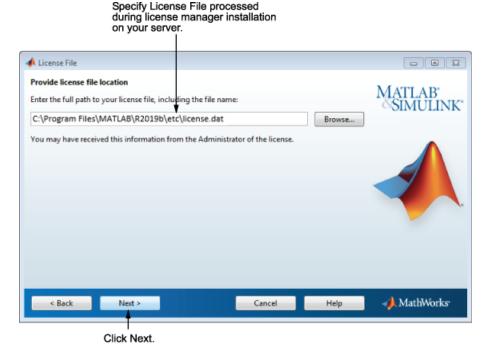
Note Do not install the network license manager on client systems.

After making your selections, click **Next** to proceed with the installation. After clicking **Next**, you might receive a message telling you that one or more of the products you selected depend on other products.



Step 10: Specify the License File Location

In the text box, enter the full path of the License File that you received from the license administrator and click **Next**.



License File Processing on Client

The installer performs the following processing of the License File on client systems:

- Creates a copy of the License File you specify, naming it network.lic, and puts the file in the \licenses folder in your MATLAB client installation folder.
- Deletes all the INCREMENT lines and the DAEMON line in the License File, leaving the SERVER line. Adds the statement USE_SERVER to the file.

Step 11: Specify Installation Options

Specify the installation options, depending on which platform you are installing.

On Windows Systems

On Windows, the Installation Options dialog box offers you the option to put shortcuts for starting MATLAB in the **Start** menu and on the desktop.

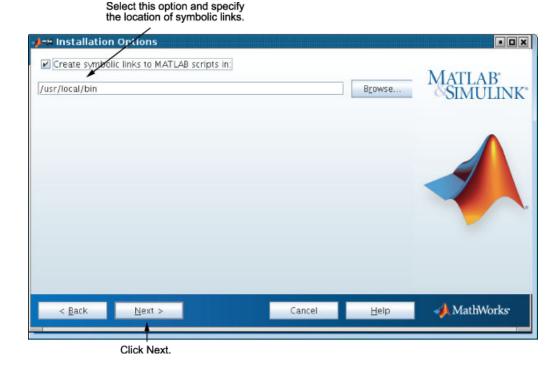


After selecting installation options, click **Next** to proceed with the installation.

On Linux Systems

On Linux systems, 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 your user's paths, such as /usr/local/bin.

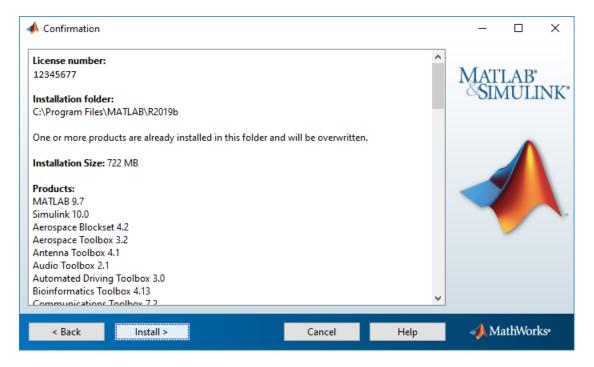
After selecting installation options, click Next to proceed with the installation.



Step 12: Confirm Your Choices

Before it begins installing the software on your hard disk, the installer displays a summary of your installation choices. To change a setting, click **Back**. To proceed with the installation, click **Install**.

Note Depending on the method of installation that you use, the confirmation information can vary from the example shown here.

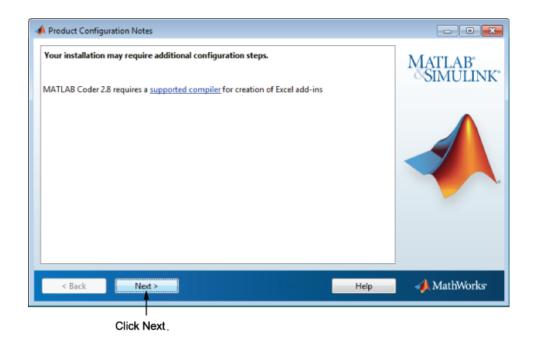


Read Product Configuration Notes

Depending upon which products you install, the installer might display a dialog box containing additional information:

- **Product configuration information** Certain products require additional configuration. If you installed a product requiring additional configuration, the installer lists the configuration commands in this dialog box.
- Supported compilers and SDKs Some products require a supported compiler or software development kit. If you installed a product with this requirement, the installer displays a link to where you can learn more.

Click **Next** to proceed with the installation.



Step 13: Complete the Installation

When the MathWorks installer finishes, click **Finish** to exit the installer. Concurrent license installations do not need to activate the software.

Next Steps

On each client installation, verify that the license file is pointing to the network license server by starting MATLAB. Startup procedures vary depending on the operating system.

- •
- •
- •

See Also

Related Examples

- "Plan Your Network Installation" on page 3-6 (Installation, Licensing, and Activation)
- •
- •
- •

Start the Network License Manager

To start MATLAB software on a client computer, the network license manager must be running on the server. On Windows systems, the installer configures the license manager to start automatically when you start your system. (On Linux systems you must edit the system boot scripts-see "Configure the Network License Manager to Start Automatically on Linux Systems" on page 3-63 (Installation, Licensing, and Activation).) If you accepted this default configuration, 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. The following section describes these methods.

Note The user name associated with the network license manager process should be a user that is defined locally on the system, 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.

Note 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 systems 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 system, 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 system, 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_R2019b.app/etc

Note 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:

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

where username is a nonprivileged user.

Configure the Network License Manager to Start Automatically on Linux Systems

To configure the network license manager to start automatically at boot time on Linux systems, 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. 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

 "Manage the Network License Manager" on page 3-65 (Installation, Licensing, and Activation)

Manage the Network License Manager

This section describes several utilities provided by FlexNet licensing 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).

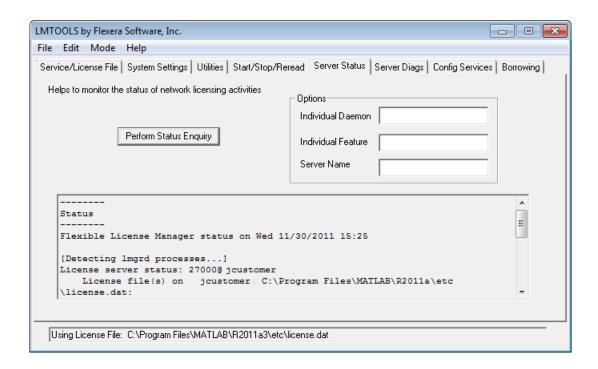
Using LMTOOLS (Windows Systems Only)

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

- Getting the status of the network license manager
- Starting and stopping the network license manager
- Configuring 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. LMT00LS displays the same information as if you had entered the command lmutil lmstat -a.



Using the Network License Manager 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 systems, 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\R2019b\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 is a portion of the information returned.

```
lmutil - Copyright (c) 1989-2014 Flexera Software Inc. All Rights Reserved.
Flexible License Manager status on Tue 11/5/2014 10:11
[Detecting lmgrd processes...]
License server status: 27000@ah-jcustomer
License File(s) on customerj: C:\Program Files\MATLAB\R2019b\etc\license.dat:
  customerj: license server UP (MASTER) v.11.9
Vendor daemon status (on ah-jcustomer):
   MLM: UP v11.9
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:
lmutil lmstat -h
On Linux and macOS systems, 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) 1989-2016 Flexera Software Inc. All Rights Reserved.
Flexible License Manager status on Fri 11/4/2016 10:11
License server status: 27000@ah-jcustomer
License File(s) on customerj: /user/local/MATLAB/R2019b/etc/license.dat:
  customerj: license server UP (MASTER) v.11.9
Vendor daemon status (on customeri):
   MLM: UP v11.9
```

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;

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 lmgrd 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 lmreread 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 the report log file.		
lmver	Determine the version of a library or binary file.		

See Also

Related Examples

- "Start the Network License Manager" on page 3-62 (Installation, Licensing, and Activation)
- "Update Network License" on page 3-69 (Installation, Licensing, and Activation)

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 (no re-read as it can interfere with certain licenses).

This procedure assumes you are not updating the license manager software at this time. If you are, also see Update License Manager Software on page 3-40.

Note Do not follow this procedure to update to a new release of MATLAB. To update to a later release, see "Installation for License and System Administrators" (Installation, Licensing, and Activation).

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

To update the license file on the server:

- **1** Go to License Center 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.
- 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:
 - In the existing license, delete all content except the SERVER and DAEMON lines at the top of the file.
 - In the new license, copy all content starting from below the SERVER and DAEMON lines to the end.
 - Paste the copied content into the existing license below the SERVER and DAEMON lines.
 - 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.

- 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; see Monitor the Usage of Licenses or Keys.

See Also

Related Examples

- "Using LMTOOLS (Windows Systems Only)" on page 3-65 (Installation, Licensing, and Activation)
- "Using the Network License Manager Command-Line Utilities" on page 3-66 (Installation, Licensing, and Activation)

External Websites

- https://www.mathworks.com/matlabcentral/answers/102901-how-do-i-update-the-license-file-on-the-license-server
- ${\color{blue} \bullet } \quad https://www.mathworks.com/matlabcentral/answers/105860-how-do-i-install-or-update-the-matlab-license-manager \\$
- https://www.mathworks.com/matlabcentral/answers/100407-how-do-i-transfer-a-concurrent-or-network-named-user-matlab-license-to-a-new-server

Install Noninteractively (Silent Installation)

In this section...

"When to Install Noninteractively" on page 3-71

"Using an Installer Properties File" on page 3-71

When to Install Noninteractively

Note For information about removing (uninstalling) a MATLAB installation noninteractively, see "Uninstall Noninteractively" on page 1-60 (Installation, Licensing, and Activation).

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 an Installer Properties File

Note You need a File Installation Key to use an installer properties file. For information about installation using a File Installation Key, see "Install Products Offline" on page 1-34 (Installation, Licensing, and Activation).

To run the installer noninteractively, perform these steps:

1 Ensure that the product files, including the MATLAB installer, are available in an accessible location, for example, in the default Downloads folder on your computer or 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 Installation" on page 2-3 (Installation, Licensing, and Activation).

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 system, you might execute this command:

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

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\R2019b
```

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 systems, click the ${\bf Start}$ menu and select the ${\bf Run}$ 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 systems, see the instructions in the installer properties file template.

See Also

Related Examples

- "Plan Your Network Installation" on page 3-6 (Installation, Licensing, and Activation)
- "Install Products Online" on page 1-3 (Installation, Licensing, and Activation)
- "Install Products Offline" on page 1-34 (Installation, Licensing, and Activation)

Install Update Release on Offline Machine

Note Use this procedure only for R2018b and later.

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

- Each update contains all the fixes from previous updates.
- Update packages require an unzip utility that supports ZIP64.
- Offline installs are supported via a non-interactive command line-based installation process.
- You must have write privileges to <code>matlabroot</code> (where MATLAB is installed) to run the command in this process.

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

- **1** Go to Downloads and select your release.
- 2 Under Related Links, click **Get R20XXy Updates**, where *XXy* is the name of the release you selected.
- 3 Under Related Links, click **R20XXy Administrator Update Package for Offline Installation**, where *XXy* is the name of the release you selected.
- Follow the instructions on this page to download the update package to user's machine or to a network share location. Make sure you download the package that matches the platform for the machine that requires the update.
- 5 Unzip the update package to a new folder; for example, "C:\temp \R2018b Update1 Package". Make sure the folder is accessible to the user's machine.
- **6** On the user's machine, close all instances of MATLAB.
- 7 Install the update on your platform.
 - Windows:
 - **a** Go to a command prompt.
 - **b** Change folder to:

matlabroot\bin\win64

matlabroot is the path to the MATLAB installation.

c Run update installer.exe with the following command line arguments:

```
update_installer.exe -updatepackage package_folder
```

The argument *package_folder* is the full path to the directory where you unzipped the update package.

- Linux or macOS:
 - a Open a terminal.
 - **b** Change folder to

matlabroot/bin/glnxa64 or matlabroot/bin/maci64

matlabroot is the path to the MATLAB installation.

c Run update installer with the following command line arguments:

```
./update installer -updatepackage package folder
```

The argument *package_folder* is the full path to the directory where you unzipped the update package.

Installation status is not displayed in the terminal or at the command prompt; instead, you can find all status messages in the log at $\TEMP\$ mathworks_yourusername.log (Windows) or \terminal mathworks_yourusername.log (Linux/macOS). Examine the log carefully for errors.

See Also

Related Examples

 "Update MathWorks License and Software" on page 1-53 (Installation, Licensing, and Activation)

Troubleshooting

This topic provides information that can help you solve common problems that you might encounter installing MathWorks software.

If you cannot find a description here that matches your problem, check the MATLAB Release Notes documentation that you received with your MathWorks products. That document contains the most up-to-date information available about products and installation procedures. Installation troubleshooting information is also available at the MathWorks website on the Support page, www.mathworks.com/support/.

Note If the installer appears to become unresponsive (hang), consider turning off any virus-checking software you are running on your system and restart the installer.

Installer Does Not Start Automatically

The installer should start automatically when you double-click the installer file you downloaded from the MathWorks website.

If the installer does not start, open a Microsoft Windows Explorer window, go to Downloads or to whatever folder you downloaded the installer to, and double-click setup.exe.

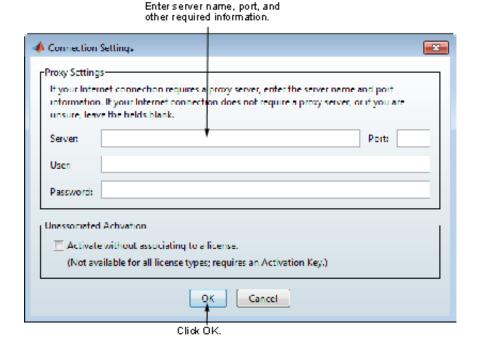
Why Is a Product Dependency Message Displayed?

After clicking **Next** in the Product Selection dialog box, you might receive a message telling you that one or more of the products that you selected for installation have dependencies on other products that were not selected. To close the message and continue with the installation, click **OK**. For a Custom installation, if you want to adjust your product selections, click **Cancel**.

How Do I Specify Proxy Server Settings?

If your Internet connection requires a proxy server, you can enter the server name, port, and password of the proxy server at the beginning of the installation or activation process. MathWorks supports several types of proxy configurations: Basic authentication and Digest authentication.

To specify proxy information during installation, click **Connection Settings** in the first dialog box displayed by the installer. To specify proxy information during activation, click **Advanced Options** in the first dialog box displayed by the activation application. (For information activating without providing MathWorks Account information, see "How Can I Activate Without a MathWorks Account?" on page 4-5 (Installation, Licensing, and Activation).)



4-4

How Can I Activate Without a MathWorks Account?

While every user can benefit from having a MathWorks Account, it is possible to install and run MathWorks software without one. For example, at some sites, certain users might not be able to create an account for security reasons.

To activate without providing MathWorks Account information, follow the procedure for "Activate an Installation Offline" on page 1-48 (Installation, Licensing, and Activation).

What Does This License Manager Error Mean?

Many problems starting MATLAB software after an installation originate with the network license manager used by MathWorks products. When a problem occurs, the license manager displays an error message in a window on your display and also writes the message to the license manager log file, lmlog.txt, in the matlabroot\etc\\$ARCH folder. Read the error message carefully; it provides information that can help solve the problem. For information about viewing the license manager log file, see "Manage the Network License Manager" on page 3-65 (Installation, Licensing, and Activation).

For diagnostic information about a particular error message:

- 1 Visit the Installation Help support page at the MathWorks website, www.mathworks.com/support/install.
- **2** Search for the error message.

You can also get information about license manager error messages in the *License Administration Guide* for the FlexNet Publisher Licensing Toolkit, available in PDF format in *matlabroot*\etc\LicenseAdministration.pdf.

How Do I Allow Access to License Manager Daemons?

If you run the license manager on a server that is protected by a security firewall, open the firewall to allow client installations to communicate with the license manager daemons. For more information about these daemons, see the License Administration Guide.

Opening Access to the License Manager Daemon

Using the interface provided by your firewall program, allow access on port 27000 for the license manager daemon. This port is the default port used to communicate with the license manager. If you changed this port number, specify the port number used at your site. For more information about specifying the license manager daemon port number, see the License Administration Guide.

Opening Access to the Vendor Daemon

The port used by the vendor daemon is assigned dynamically. If you need to open access to the vendor daemon in your firewall,assign a port for vendor daemon communication, rather than using this dynamic port assignment. You can then open the assigned port number in your firewall.

To specify the vendor daemon port number, edit the License File on your license server and add the port= syntax to the DAEMON line. For more information about specifying the vendor daemon port number, see the License Administration Guide.