MATLAB® & Simulink® Release 2009b Installation Guide for Windows®





How to Contact The MathWorks



www.mathworks.com comp.soft-sys.matlab

Newsgroup

Web

www.mathworks.com/contact TS.html Technical Support

suggest@mathworks.com bugs@mathworks.com doc@mathworks.com service@mathworks.com Product enhancement suggestions

Bug reports

Documentation error reports

Order status, license renewals, passcodes Sales, pricing, and general information



508-647-7000 (Phone)



508-647-7001 (Fax)

info@mathworks.com



The MathWorks, Inc. 3 Apple Hill Drive Natick. MA 01760-2098

For contact information about worldwide offices, see the MathWorks Web site.

Installation Guide for Windows®

© COPYRIGHT 1996–2009 by The MathWorks, Inc.

The software described in this document is furnished under a license agreement. The software may be used or copied only under the terms of the license agreement. No part of this manual may be photocopied or reproduced in any form without prior written consent from The MathWorks, Inc.

FEDERAL ACQUISITION: This provision applies to all acquisitions of the Program and Documentation by, for, or through the federal government of the United States. By accepting delivery of the Program or Documentation, the government hereby agrees that this software or documentation qualifies as commercial computer software or commercial computer software documentation as such terms are used or defined in FAR 12.212, DFARS Part 227.72, and DFARS 252.227-7014. Accordingly, the terms and conditions of this Agreement and only those rights specified in this Agreement, shall pertain to and govern the use, modification, reproduction, release, performance, display, and disclosure of the Program and Documentation by the federal government (or other entity acquiring for or through the federal government) and shall supersede any conflicting contractual terms or conditions. If this License fails to meet the government's needs or is inconsistent in any respect with federal procurement law, the government agrees to return the Program and Documentation, unused, to The MathWorks, Inc.

Trademarks

MATLAB and Simulink are registered trademarks of The MathWorks, Inc. See www.mathworks.com/trademarks for a list of additional trademarks. Other product or brand names may be trademarks or registered trademarks of their respective holders.

The MathWorks products are protected by one or more U.S. patents. Please see www.mathworks.com/patents for more information.

Revision History

December 1996 May 1997 March 1998 January 1999 November 1999	First printing Second printing Third printing Fourth printing Fifth printing	New for MATLAB 5.0 (Release 8) Revised for MATLAB 5.1 (Release 9) Revised for MATLAB 5.2 (Release 10) Revised for MATLAB 5.3 (Release 11) Revised for MATLAB 5.3.1 (Release 11.1)
November 2000	Sixth printing	Revised for MATLAB 6.0 (Release 12)
June 2001	Seventh printing	Revised for MATLAB 6.1 (Release 12.1)
July 2002	Eighth printing	Revised for MATLAB 6.5 (Release 13) Renamed as
		Installation Guide for Windows
June 2004	Ninth printing	Revised for MATLAB 7.0 (Release 14)
October 2004	Tenth printing	Revised for MATLAB 7.0.1 (Release 14SP1)
March 2005	Eleventh printing	Revised for MATLAB 7.0.4 (Release 14SP2)
September 2005	Twelfth printing	Revised for MATLAB 7.1 (Release 14SP3)
March 2006	Thirteenth printing	Revised for MATLAB 7.2 (Release 2006a)
September 2006	Fourteenth printing	Revised for MATLAB 7.3 (Release 2006b)
March 2007	Online only	Revised for MATLAB 7.4 (Release 2007a)
September 2007	Online only	Revised for MATLAB 7.5 (Release 2007b)
March 2008	Online only	Revised for MATLAB 7.6 (Release 2008a)
October 2008	Online only	Revised for MATLAB 7.7 (Release 2008b)
March 2009	Online only	Revised for MATLAB 7.8 (Release 2009a)
September 2009	Online only	Revised for MATLAB 7.9 (Release 2009b)

Standard Installation and Activation Procedures

1

Installing MathWorks Software in a Standalone	
Environment	1-2
Step 1: Prepare to Install	1-2
Step 2: Choose Whether to Install Automatically or	
Manually	1-4
Step 3: Review the Software License Agreement	1-6
Step 4: Log In to Your MathWorks Account	1-7
Step 5: Select the License You Want to Install	1-9
Step 6: Choose the Installation Type	1-12
Step 7: Specify the Installation Folder	1-13
Step 8: Specify Products to Install (Custom Only)	1-14
Step 9: Specify Installation Options (Custom Only)	1-16
Step 10: Confirm Your Choices	1-17
Step 11: Complete the Installation	1-18
Activating an Installation	1-20
Step 1: Start the Activation Application	1-20
Step 2: Choose Whether to Activate Automatically or	
Manually	1-21
Step 3: Log In to Your MathWorks Account	1-23
Step 4: Select the License You Want to Activate	1-24
Step 5: Select an Activation Type	1-26
Step 6: Specify the User Name	1-27
Step 7: Confirm Your Activation Information	1-28
Step 8: Complete the Activation	1-29
Installing and Activating Without an Internet	
Connection	1-31
Step 1: Prepare to Install	1-31
Step 2: Start the Installer and Choose to Install	
Manually	1-32
Step 3: Review the License Agreement	1-33
Step 4: Specify the File Installation Key	1-34
Step 5: Choose the Installation Type	1-36

Step 6: Specify the Installation Folder	1-37
Step 7: Specify Products to Install (Custom Only)	1-38
Step 8: Specify Installation Options (Custom Only)	1-39
Step 9: Confirm Your Choices and Begin Copying Files	1-40
Step 10: Complete the Installation	1-41
Step 11: Activate Your Installation	1-42
Step 12: Specify the Path to the License File	1-43
Step 13: Complete the Activation	1-46
After You Install	1-47
Starting MATLAB Software	1-47
Updating Your License	1-47
Setting Your Initial Current Folder	1-48
Setting Up MATLAB Environment Options	1-48
Finding Information About MATLAB Software	1-48
Uninstalling and Deactivating a MATLAB	
Installation	1-50
Uninstalling MathWorks Products	1-50
Deactivating a License	1-52
Running the Uninstall Program Noninteractively	1-58
System Requirements	1-60
Windows	1-60
Graphics	1-61
Compilers (for MEX-Files)	1-61
License Management	1-61
Additional Requirements	1-62
Network Installation Proced	lure
Overview	2-2
Installing the License Manager on a Server	2-3
Step 1: Prepare to Install	2-3
Step 2: Choose Whether to Install Automatically or	
Manually	2-5
Step 3: Review the Software License Agreement	2-6

Step 4: Log In to Your MathWorks Account	2-7
Step 5: Select the License You Want to Install	2-9
Step 6: Choose to Perform a Custom Installation	2-10
Step 7: Specify the Installation Folder	2-11
Step 8: Specify Products to Install	2-12
Step 9: Specify the Location of the License File	2-14
Step 10: Configure the License Manager Service	2-15
Step 11: Specify Installation Options	2-16
Step 12: Confirm Your Choices	2-17
Step 13: Complete the Installation	2-20
Step 14: Making Products and Licensing Information	2 20
Available to Clients	2-20
Available to Olicitis	2-20
Installing MathWorks Software on Client Systems	2-22
Step 1: Prepare to Install	2-22
Step 2: Choose Whether to Install Automatically or	
Manually	2-23
Step 3: Review the Software License Agreement	2-24
Step 4: Log In to Your MathWorks Account	2-25
Step 5: Select the License You Want to Install	2-27
Step 6: Specify the Type of Installation	2-29
Step 7: Specify the Installation Folder	2-30
Step 8: Specify Products to Install	2-30
Step 9: Specify the Location of the License File	2-32
Step 10: Specify Installation Options (Custom Only)	2-33
Step 11: Confirm Your Choices	2-34
Step 12: Complete the Installation	2-37
After a Network Install	2-38
Starting and Stopping the License Manager	2-38
Monitoring and Managing the License Manager	2-38
Allowing Access to License Manager Daemons	2-41
In the Ulinear Name and a state of the College of Total College of the College of	0.40
Installing Noninteractively (Silent Installation)	2-43
When to Install Noninteractively	2-43
Using an Installer Initialization File	2-43

${\bf Trouble shooting}$

3

Problems During Installation
Installer Does Not Start Automatically
Accessing Activation Options
Product Dependencies
Problems After Installation
Understanding the License Files

Index

Standard Installation and Activation Procedures

This topic describes how to install and activate MathWorks™ products on a computer running the Microsoft® Windows® operating system (32-bit or 64-bit). Use this procedure if you have an Individual license or Group license. For information about setting up the network license options, see Chapter 2. "Network Installation Procedure".

- "Installing MathWorks Software in a Standalone Environment" on page 1-2
- "Activating an Installation" on page 1-20
- "Installing and Activating Without an Internet Connection" on page 1-31
- "After You Install" on page 1-47
- "Uninstalling and Deactivating a MATLAB Installation" on page 1-50
- "System Requirements" on page 1-60

Installing MathWorks Software in a Standalone Environment

In this section...

- "Step 1: Prepare to Install" on page 1-2
- "Step 2: Choose Whether to Install Automatically or Manually" on page 1-4
- "Step 3: Review the Software License Agreement" on page 1-6
- "Step 4: Log In to Your MathWorks Account" on page 1-7
- "Step 5: Select the License You Want to Install" on page 1-9
- "Step 6: Choose the Installation Type" on page 1-12
- "Step 7: Specify the Installation Folder" on page 1-13
- "Step 8: Specify Products to Install (Custom Only)" on page 1-14
- "Step 9: Specify Installation Options (Custom Only)" on page 1-16
- "Step 10: Confirm Your Choices" on page 1-17
- "Step 11: Complete the Installation" on page 1-18

Step 1: Prepare to Install

Before you run the installer:

- Make sure you have your e-mail address and your MathWorks Account password handy. You will need them to log in to your account during installation. If you have multiple licenses associated with your account, know the number of the license you want to install.
 - If you don't 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 associate their MathWorks Account with a license. Ask the administrator of the license for the Activation Key.
- Exit any existing copies of MATLAB® software you have running.
- Log in to an account with administrator privileges.

- 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 do not have an Internet connection during installation, see "Installing and Activating Without an Internet Connection" on page 1-31.
- If you need to perform a network server or client installation, see Chapter 2, "Network Installation Procedure".

If You Are Upgrading an Existing Installation

If you are upgrading your MATLAB installation to the latest release, The MathWorks recommends that you install the new version in a new installation folder. This is recommended when upgrading an installation of a prerelease version of the software as well. You do not need to delete an existing MATLAB installation before installing this release. Each release is independent of previous releases and you can run multiple releases on the same system.

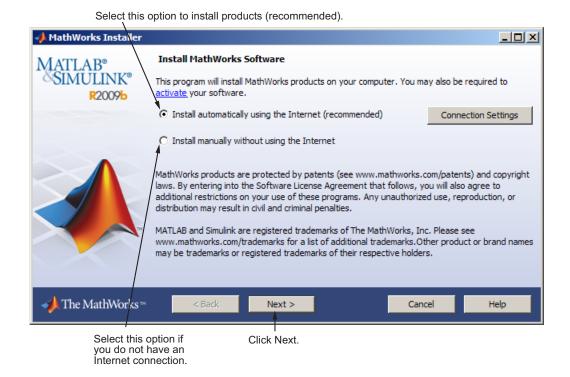
Note If you choose to overwrite an existing installation from a prior release, the installer deletes all the products in your installation folder and installs only those products included in your current license. This avoids potential product incompatibilities. For example, if your existing installation includes 10 products, but your current license only includes 9 of those products, your MATLAB installation only includes the 9 products in your current license.

Step 2: Choose Whether to Install Automatically or Manually

Insert the DVD into the DVD drive connected to your system or double-click the installer file you downloaded from the MathWorks Web site. The installer should start automatically.

If you are connected to the Internet, the easiest way to install is by selecting the **Install automatically using the Internet** option. During installation, you log in to your MathWorks Account, select the license you want to install, and follow the prompts on the other installer dialog boxes. Choose to install manually if you do not have an Internet connection.

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



If your Internet connection requires a proxy server, click the **Connection Settings** button. You can enter the server name, port, and password in the Connection Settings dialog box. The MathWorks supports several types of proxy configurations: Basic authentication, Digest authentication, and NTLM authentication.



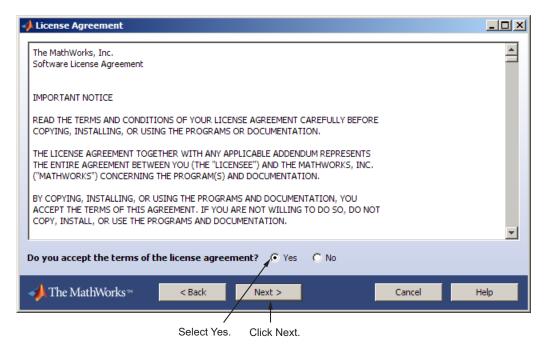
Related Topics

If you are not connected to the Internet during installation, see "Installing and Activating Without an Internet Connection" on page 1-31.

Step 3: Review the Software License Agreement

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

After the installation is complete, you can view or print the license agreement using the file license.txt located in the top-level installation folder.



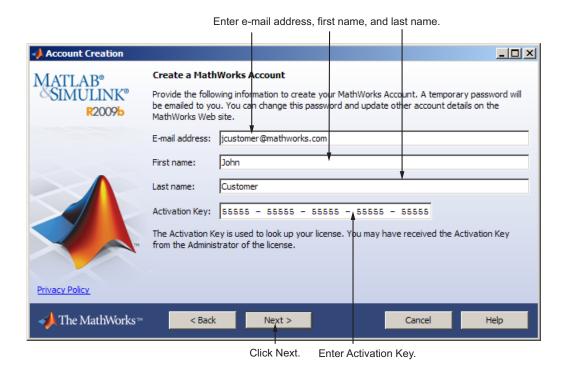
Step 4: Log In to Your MathWorks Account

Enter the e-mail address and password of your MathWorks Account and click **Next**. If you do not have a MathWorks Account, select the **I need to create** a **MathWorks Account** option and click **Next**.



Creating a MathWorks Account

Enter your e-mail address, first name, last name, and Activation Key. To create an account, you must provide an Activation Key. A newly created account will not have any licenses associated with it. The Activation Key identifies the license you want to install. The administrator contact on the license can retrieve the key by visiting the License Center at the MathWorks Web site. Click **Next** to create your account.



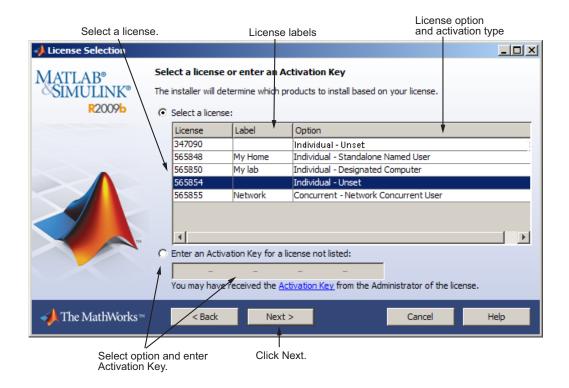
Because the Activation Key you entered specifies a particular license, the installer skips the license selection step.

Step 5: Select the License You Want to Install

Select a license from the list of licenses associated 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. To label a license, go to the License Center at the MathWorks Web site. See the License Center Help for instructions.
- Information identifying the license option and the activation type. If an activation type has not yet been set on the license, the word "Unset" appears.

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



What Is an Activation Key?

An *Activation Key* is the unique code that identifies a license. It can be used to activate a license and also allows licensed end users to associate their MathWorks Account with a license. Ask the administrator of the license for the Activation Key.

Specify an Activation Key

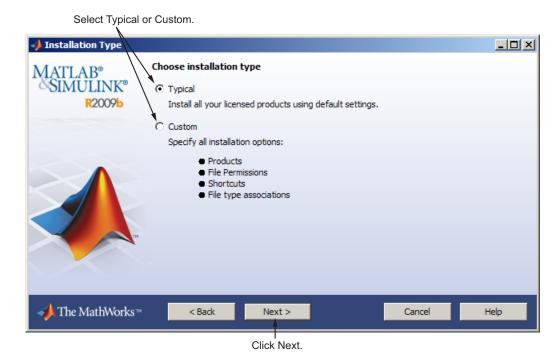
If there are no licenses associated with your account, or if permission to activate is disabled on the license you selected, you might see the Activation Key dialog box. Enter an Activation Key and click **Next**. Ask the administrator contact on the license for the Activation Key.



Step 6: Choose the Installation Type

In the Installation Type dialog box, specify whether you want to perform a Typical or Custom installation and click **Next**.

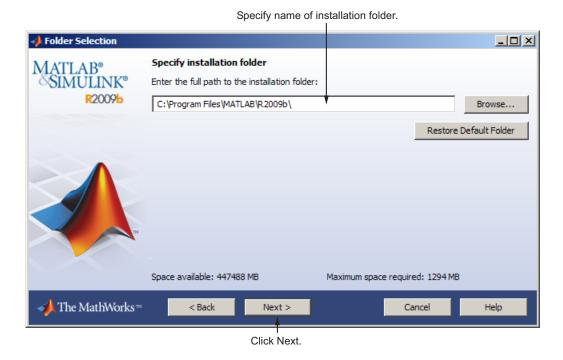
- Choose **Typical** if you have an Individual or Group license and do not need to specify which products you want to install and do not need to access any installation options.
- Choose **Custom** if you need to specify which products to install, need access to installation options, or need to install the license manager (network license options only).



Step 7: Specify the Installation Folder

Specify the name of the folder where you want to install MathWorks products. You can accept the default installation folder or specify the name of a different installation folder. If the folder doesn't exist, the installer creates it.

When specifying a folder name, do not specify a name that contains the @ sign, an exclamation point (!), the percent character (%), the plus sign (+), or the dollar sign character (\$). The full path of the installation folder must not include a folder named private. If you make a mistake while entering a folder name and want to start over using the default folder name, click **Restore Default Folder**. To continue with the installation, click **Next**.

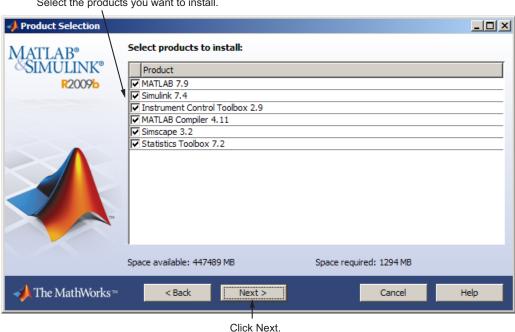


If you chose a Typical installation, the installer skips the product selection and installation options steps.

Step 8: Specify Products to Install (Custom Only)

If you are performing a custom installation, you can 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. After clicking **Next**, you might receive a message telling you that one or more of the products you selected depend on other products. Consider adjusting your product selection.



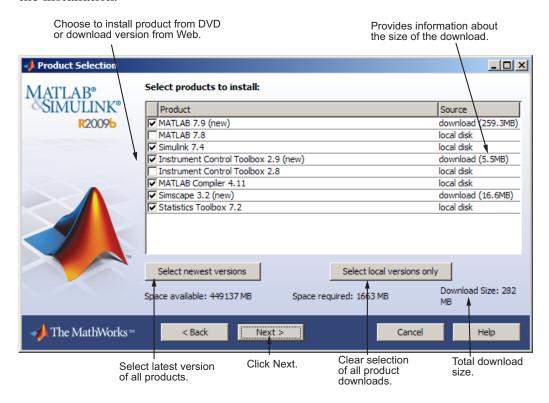
Select the products you want to install.

If you asked the installer to determine if newer versions of your products are available at the MathWorks Web site, the installer displays both versions in the product list. By default, the latest version is preselected for installation. When there are product updates available, the Product Selection dialog box

includes a column, called **Source**, that identifies whether the product will be installed from the DVD or must be downloaded. For product downloads, the **Source** column includes information about the size of the download file. The dialog box also includes information about the total download size for all the products you select.

If you do not want to download any product updates, click **Select local versions only**. This clears the selection of all the product downloads in the product list. If you want to install only the latest versions of all products, click **Select newest versions**.

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

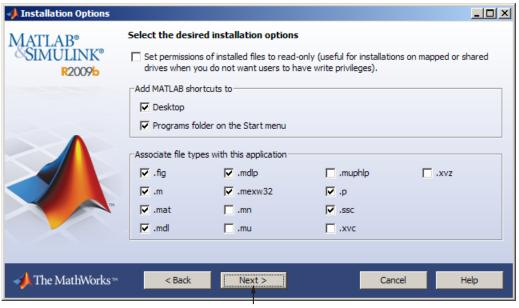


Step 9: Specify Installation Options (Custom Only)

For Custom installations, you can specify several installation options, including:

- Setting the permissions of all installed files to read only.
- Determining whether the installer puts shortcuts for MATLAB software in the **Start** menu and on the desktop.
- Specifying which files the operating system associates with MATLAB, based on their file extension. For example, if you associate files with the .m file extension with MATLAB, the operating system identifies the type of these files as MATLAB M-file.

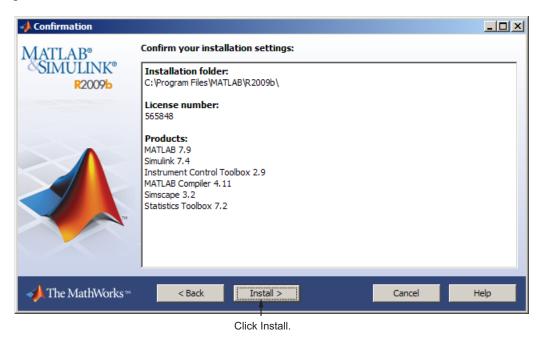
After selecting installation options, click **Next** to proceed with the installation.



Click Next.

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**.



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

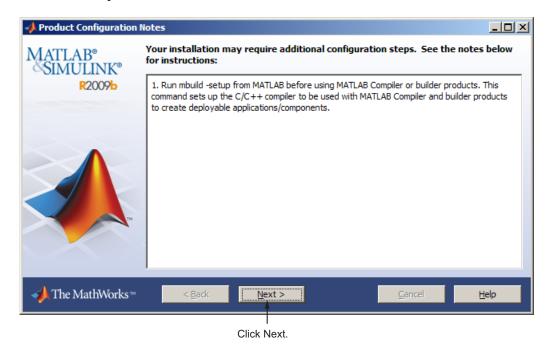
Read Product Configuration Notes

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

• **Product configuration information** — Certain products require additional configuration. If you installed one of these products, the installer lists the configuration commands in this dialog box. You can copy this command to your system clipboard for use after the installation is completed.

• Available product updates — If your license identifies products that are not on the DVD, and you are not currently connected to the Internet or you chose not to download product updates, the installer lists these products in this dialog box. After installation is complete, you can go to the MathWorks Web site to download these products.

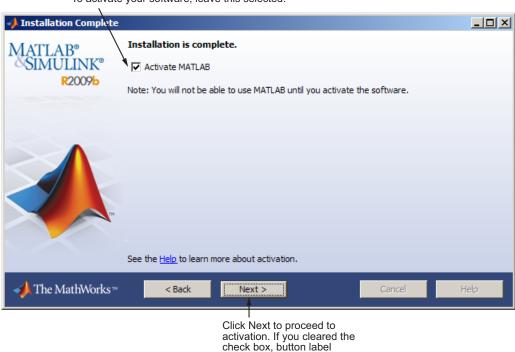
Click **Next** to proceed with the installation.



Step 11: 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. The MathWorks recommends activating immediately after installation. If you logged in to your MathWorks Account during installation, your log-in session continues into the activation process. 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.



changes to Finish.

To activate your software, leave this selected.

Related Topics

For step-by-step instructions on the activation process, see "Activating an Installation" on page 1-20.

Activating an Installation

In this section...

"Step 1: Start the Activation Application" on page 1-20

"Step 2: Choose Whether to Activate Automatically or Manually" on page 1-21

"Step 3: Log In to Your MathWorks Account" on page 1-23

"Step 4: Select the License You Want to Activate" on page 1-24

"Step 5: Select an Activation Type" on page 1-26

"Step 6: Specify the User Name" on page 1-27

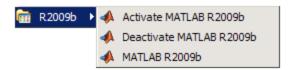
"Step 7: Confirm Your Activation Information" on page 1-28

"Step 8: Complete the Activation" on page 1-29

Step 1: Start the Activation Application

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

- Leave the **Activate MATLAB** option selected on the Installation Complete dialog box at the end of installation.
- Attempt to start a MATLAB installation that has not been activated.
- Click the Windows Start menu, then select
 Programs > MATLAB > R2009b, and click Activate MATLAB R2009b.

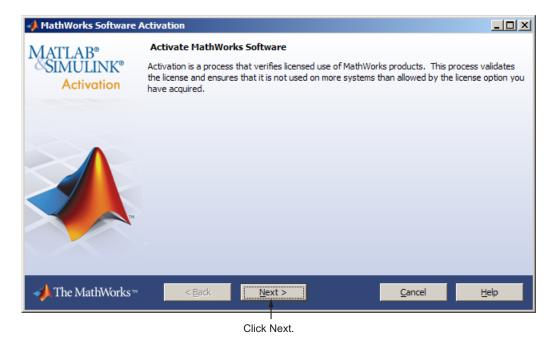


• If you have MATLAB running, click the **Help** menu and select **Licensing > Activate Software**.

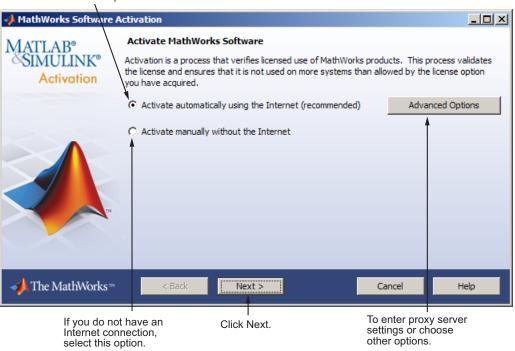
Step 2: Choose Whether to Activate Automatically or Manually

Activation is a process that verifies licensed use of MathWorksTM 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 log-in session continues into the activation process. Simply click **Next** to proceed with activation.



If you were not logged 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** option selected. The MathWorks recommends activating automatically. The option to activate manually is useful if you do not have an Internet connection. Note that you need a License File to activate manually.



If you have an Internet connection, leave this option selected.

Specifying a Proxy Server

If your Internet connection requires a proxy server, click the **Advanced Options** button. You can enter the server name and port information in the Proxy Settings dialog box, and access other activation options. The MathWorks supports several types of proxy configurations: Basic authentication, Digest authentication, and NTLM authentication. See "Accessing Activation Options" on page 3-2 for more information.

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.

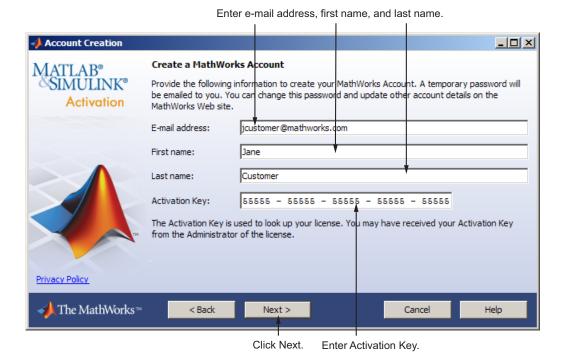
Enter the e-mail address and password of your MathWorks Account and click Next. If you do not have a MathWorks Account, select the I need to create a MathWorks Account option and click Next.



Creating a MathWorks Account

Enter your e-mail address, first name, last name, and Activation Key. To create an account, you must provide an Activation Key. A newly created account will not have any licenses associated with it. The Activation Key identifies the license you want to install. The administrator contact on the

license can retrieve the key by visiting the License Center at the MathWorks Web site. Click **Next** to create your account.



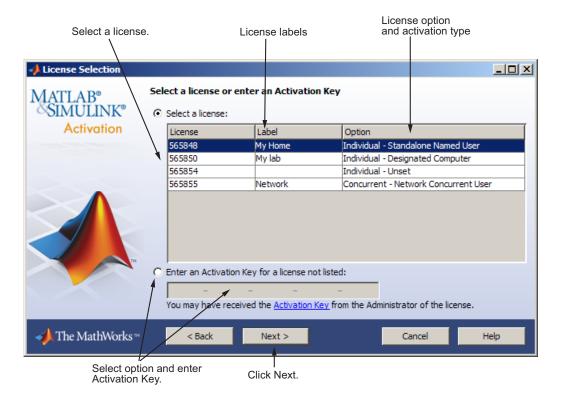
Step 4: Select the License You Want to Activate

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 a new account in the previous step and specified an Activation Key, the activation application skips this step.

Select a license from the list of licenses associated 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. To label a license, go to the License Center at the MathWorks Web site. See the License Center Help for instructions.
- Information identifying the license option and the activation type. If an activation type has not yet been set on the license, the word "Unset" appears.

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



What is 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 associate their MathWorks Account with a license. Ask the administrator of the license for the Activation Key.

Step 5: Select an Activation Type

Note If the license you installed (or selected in the previous step) has the activation type preset, the activation application skips this step.

Select an activation type for your license. If you want to ensure that you are the only person who can use the software, select the **Standalone Named User** option. If you want to share the installation for nonsimultaneous use by several people, choose the **Designated Computer** option.

After making your selection, click **Next** to proceed with activation.

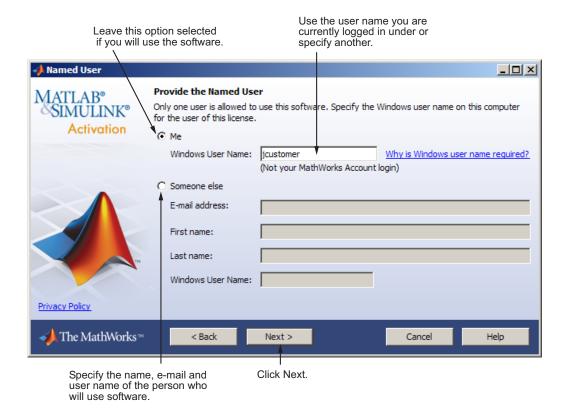


Step 6: Specify the User Name

Note If you picked the Designated Computer activation type for the license, the activation application skips this step. You do not need to specify a user name.

If you selected the Standalone Named User activation type, you must specify the *operating system user name* of the person who will use the software. The operating system user name is the ID under which a user gains access to a computer. It is also known as computer login name. To use the MathWorks software, you must be logged into the computer as the user name you specify. By default, the activation application fills in the user name of the person running the application.

If you are the administrator of the license, you can activate the license for someone else. Select the **Someone else** option and specify their e-mail address, name, and operating system user name. The activation application looks for their MathWorks Account or creates an account for them. Click **Next** to continue with activation.



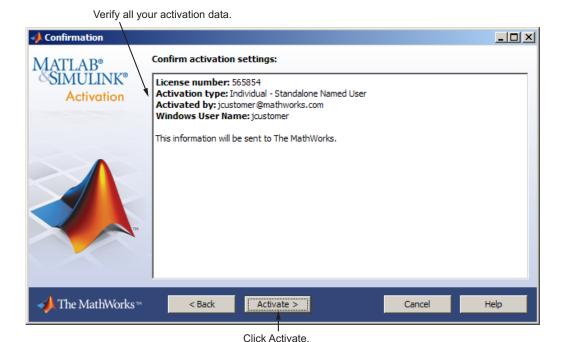
Why Is User Name Required?

The Standalone Named User activation type limits use of the software to a particular user on a particular computer. The MathWorks uses the operating system user name to identify this person.

Step 7: Confirm Your Activation Information

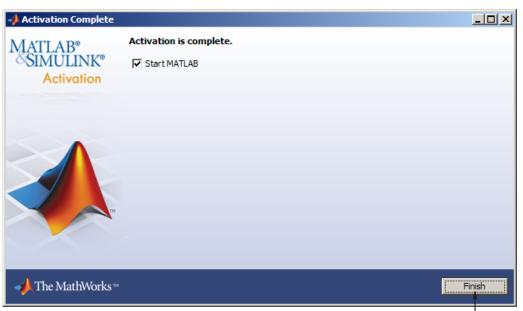
If all the information displayed is correct, click **Activate**.

To activate an installation, The MathWorksTM creates a License File that is locked to the computer, and to a particular user if you chose the Standalone Named User activation type, and copies this License File onto your computer. This License File enables you to run MathWorks products on your computer. The MathWorks also keeps a record of the activation in MathWorks systems.



Step 8: Complete the Activation

After activating your installation, you can run The MathWorks software. If you do not want to run MATLAB now, clear the **Start MATLAB** option and click **Finish** to exit the activation process.



Click Finish.

Installing and Activating Without an Internet Connection

In this section...

- "Step 1: Prepare to Install" on page 1-31
- "Step 2: Start the Installer and Choose to Install Manually" on page 1-32
- "Step 3: Review the License Agreement" on page 1-33
- "Step 4: Specify the File Installation Key" on page 1-34
- "Step 5: Choose the Installation Type" on page 1-36
- "Step 6: Specify the Installation Folder" on page 1-37
- "Step 7: Specify Products to Install (Custom Only)" on page 1-38
- "Step 8: Specify Installation Options (Custom Only)" on page 1-39
- "Step 9: Confirm Your Choices and Begin Copying Files" on page 1-40
- "Step 10: Complete the Installation" on page 1-41
- "Step 11: Activate Your Installation" on page 1-42
- "Step 12: Specify the Path to the License File" on page 1-43
- "Step 13: Complete the Activation" on page 1-46

Step 1: Prepare to Install

Before you run the installer:

- Have your *File Installation Key* and License File handy. 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 contact on the license can retrieve the File Installation Key and License File by going to the License Center at the MathWorks Web site.
- Exit any existing copies of MATLAB software that you have running.
- Get administrator privileges on your computer.

 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 "Installing MathWorks Software in a Standalone Environment" on page 1-2. The MathWorks recommends installing and activating automatically 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 license manager. See "Installing the License Manager on a Server" on page 2-3 for more information about these additional steps.

Step 2: Start the Installer and Choose to Install Manually

Insert the DVD into the DVD drive connected to your system or double-click the installer file you downloaded from the MathWorks Web site. The installer should start automatically. If you do not have an Internet connection, select the **Install manually without using the Internet** option and click **Next**.



Step 3: Review the License Agreement

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

After the installation is complete, you can view or print the license agreement using the file license.txt located in the top-level installation folder.

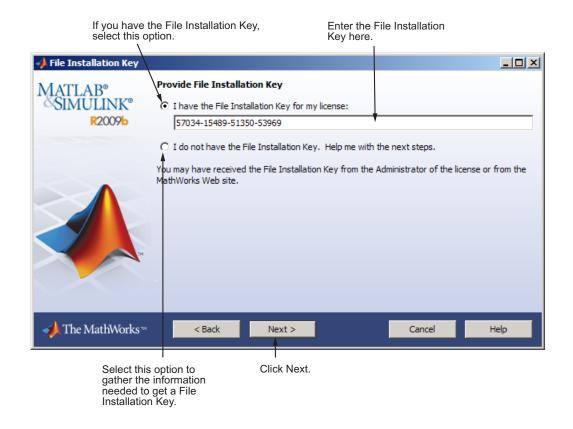


Step 4: Specify the File Installation Key

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 contact on a license can retrieve the File Installation Key from the License Center at the MathWorks Web site.

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



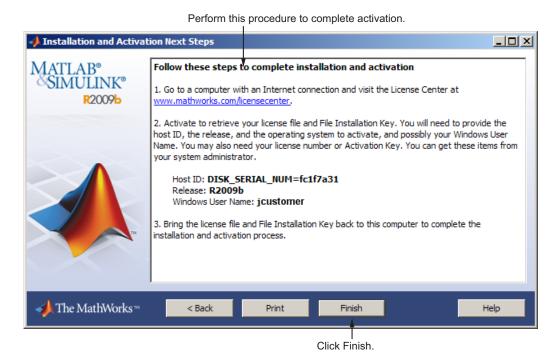
If You Do Not Have the File Installation Key

If you choose the **I do not have the File Installation Key** option, the installer displays the Installation and Activation Next Steps dialog box. This dialog box contains the information you need to retrieve your File Installation Key from the License Center at the MathWorks Web site, including:

- Host ID of your computer
- Release number of the MathWorks software
- Operating system
- Operating system user name (Note that user names are case-sensitive in activation.)

• License number or Activation Key (You can get these items from your system administrator.)

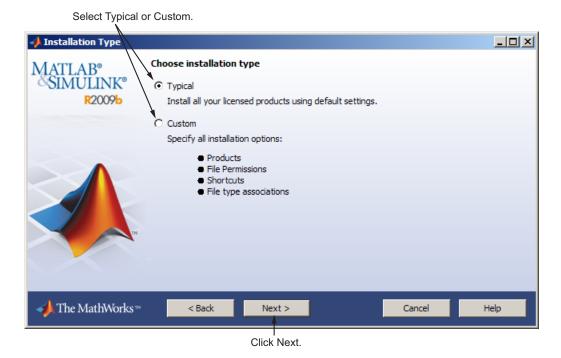
Save the information displayed in this dialog box. For example, you can print a copy by clicking **Print**. Take the information to a computer with an Internet connection and visit the License Center at the MathWorks Web site. The MathWorks uses this information to generate a File Installation Key and 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 process, click **Finish**.



Step 5: Choose the Installation Type

In the Installation Type dialog box, specify whether you want to perform a Typical or Custom installation and click **Next**.

- Choose **Typical** if you have an Individual or Group license and do not need to specify which products you want to install and do not need to access any installation options.
- Choose **Custom** if you need to specify which products to install, need access to installation options, or need to install the license manager (network license options only).

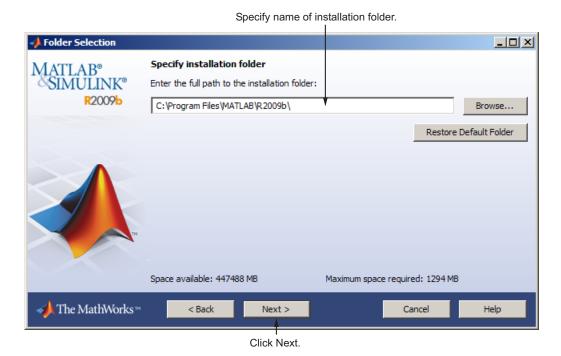


Step 6: Specify the Installation Folder

Specify the name of the folder where you want to install MathWorks products. You can accept the default installation folder or specify the name of a different installation folder. If the folder doesn't exist, the installer creates it.

When specifying a folder name, do not specify a name that contains the @ sign, an exclamation point (!), the percent character (%), the plus sign (+), or the dollar sign character (\$). The full path of the installation folder must not include a folder named private. If you make a mistake while entering

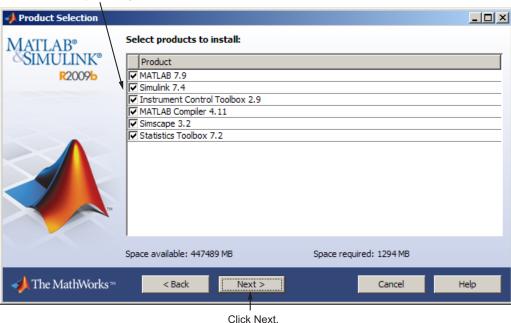
a folder name and want to start over using the default folder name, click **Restore Default Folder**. To continue with the installation, click **Next**.



Step 7: Specify Products to Install (Custom Only)

If you are performing a custom installation, you can 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.



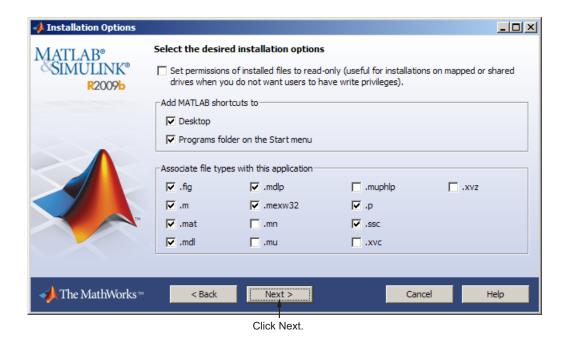
Select the products you want to install.

Step 8: Specify Installation Options (Custom Only)

For Custom installations, you can specify several installation options, including:

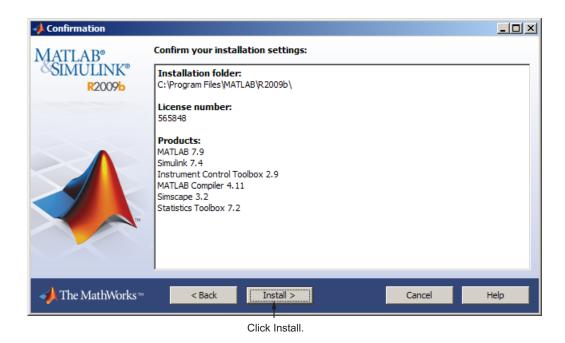
- Setting the permissions of all installed files to read only.
- Determining whether the installer puts shortcuts for MATLAB software in the **Start** menu and on the desktop.
- Specifying which files the operating system associates with MATLAB, based on their file extension. For example, if you associate files with the .m file extension with MATLAB, the operating system identifies the type of these files as MATLAB M-file.

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



Step 9: Confirm Your Choices and Begin Copying Files

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**.

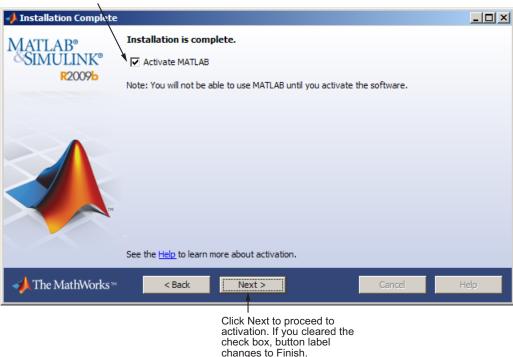


As it copies files to your hard drive, the installer displays a status dialog box to show the progress of the installation.

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. The MathWorks recommends activating immediately after installation. If you logged in to your MathWorks Account during installation, your log-in session continues into the activation process. Click **Next** to proceed with activation.

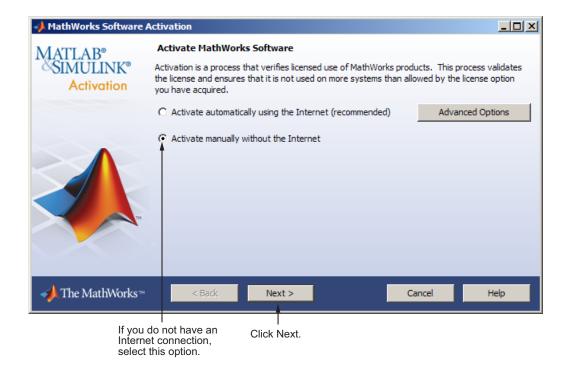
If you choose to exit the installer without performing activation, clear the **Activate MATLAB** option and click **Finish** (the button label changes). You can activate later using the activation application.



To activate your software, leave this selected.

Step 11: Activate Your Installation

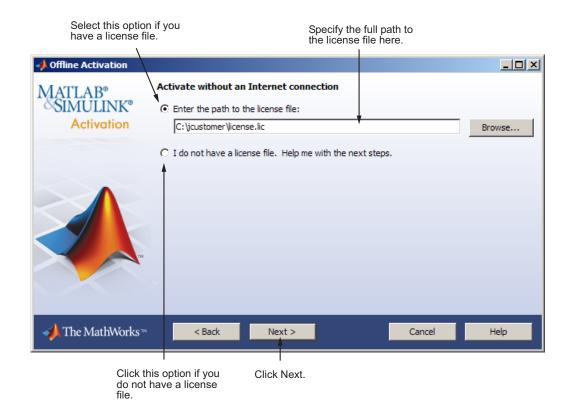
Because you were not logged in to your MathWorks Account during installation, or you started the activation application independently, you must choose whether to activate automatically or manually. Select the **Activate** manually without the Internet option and click **Next**.



Step 12: 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 contact on the license can retrieve the License File from the License Center at the MathWorks Web site.

Select the **Enter the path to the License File** 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 see "If You Do Not Have a License File" on page 1-44 for more information.



If You Do Not Have a License File

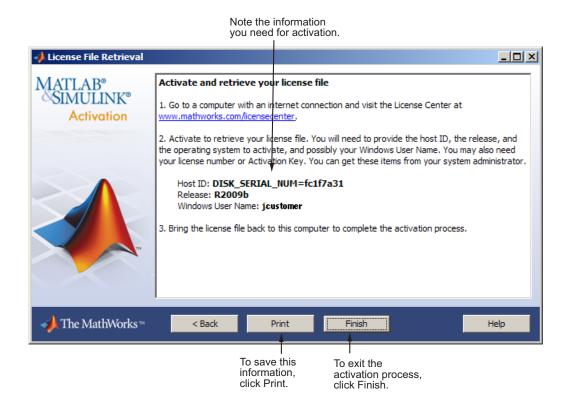
If you are activating manually and do not have your License File, the License File Retrieval dialog box explains how to get your License File and finish activation. The dialog box displays the information you will need to get your License File, including:

- Host ID
- Release number (e.g., R2009b)
- Operating system user name (Note that user names are case-sensitive in activation.)

Save the information displayed in this dialog box. For example, you can print a copy by clicking **Print**. Take the information to a computer with an Internet

connection and visit the License Center at the MathWorks Web site. The 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 will not be activated. You cannot run MATLAB until you retrieve your License File.



Step 13: Complete the Activation

After activating your installation, you can run The MathWorks software. If you do not want to run MATLAB now, clear the **Start MATLAB** option and click **Finish** to exit the activation process.



Click Finish.

After You Install

In this section...

"Starting MATLAB Software" on page 1-47

"Updating Your License" on page 1-47

"Setting Your Initial Current Folder" on page 1-48

"Setting Up MATLAB Environment Options" on page 1-48

"Finding Information About MATLAB Software" on page 1-48

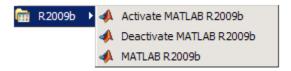
Starting MATLAB Software

To start MATLAB software, you can use any of these methods:

• **From the desktop** — Double-click the MATLAB icon (called a *shortcut*) that the installer creates on your desktop.



• Click the Windows Start menu, then select Programs > MATLAB > R2009b, and click MATLAB R2009b.



• **Using Windows Explorer** — Navigate to your MATLAB installation folder. Expand the MATLAB folder, expand the R2009b folder, and then double-click the shortcut to the MATLAB executable, MATLAB R2009b.

Updating Your License

Throughout the term of your license, your MATLAB installation periodically contacts the 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 Web site. See the License Center Help for step-by-step instructions.

Setting Your Initial Current Folder

By default, when you start MATLAB using the shortcut the installer puts on your desktop, the initial current folder (or startup folder) is the MATLAB folder in your My Documents folder. You can, however, use any folder as your MATLAB initial current folder. See "Startup Folder for the MATLAB Program" in the MATLAB Desktop Tools and Development Environment documentation.

Setting Up MATLAB Environment Options

To include welcome messages, default definitions, or any MATLAB expressions that you want executed every time MATLAB is invoked, create a file named startup.m in the <code>matlabroot\toolbox\local</code> folder. Every time you start MATLAB, it executes the commands in the <code>startup.m</code> file. The local folder includes a sample startup file, named <code>startupsav.m</code>, that you can rename and use as a starting point.

Finding Information About MATLAB Software

After successfully installing MATLAB, you are probably eager to get started using it. The following list provides pointers to sources of information and other features you might find helpful in getting started with MATLAB.

Task	Description
To get an overview of MATLAB and its capabilities	Read the MATLAB Getting Started documentation.
To find out what's new in this release	Read the Release Notes documentation.
To start a product or access product demonstration programs	Use the Start button on the MATLAB desktop.

Task	Description
To get information about specific MATLAB features	Choose the Help item on the MATLAB menu bar to view reference and tutorial information in hyperlinked HTML form.
To get help with specific questions you can't find answered in the documentation	Go to the MathWorks Web site (www.mathworks.com), click Support , and use the Technical Support solution search area to find more information.

Uninstalling and Deactivating a MATLAB Installation

In this section...

"Uninstalling MathWorks Products" on page 1-50

"Deactivating a License" on page 1-52

"Running the Uninstall Program Noninteractively" on page 1-58

Uninstalling MathWorks Products

Note Deactivating a license and removing the software are separate activities. You can deactivate a license without removing the software from your computer. When you uninstall the software, the uninstaller offers you the option to deactivate it as well. For information about deactivating software, see "Deactivating a License" on page 1-52.

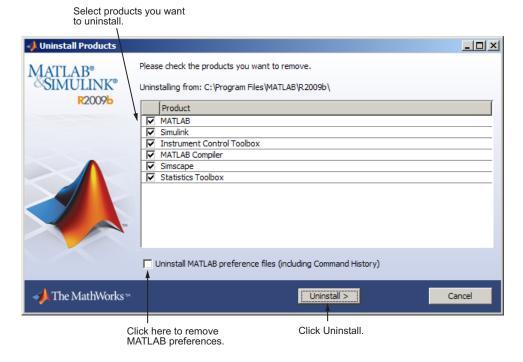
To remove MathWorks products from your system, follow this procedure:

- 1 Shut down the MATLAB software.
- **2** Start the uninstaller.

On the Windows **Start** menu, select **Settings > Control Panel > Add or Remove Programs**. Select **MATLAB R2009b** from the list of products. (You can also start the uninstaller by navigating to your MATLAB installation folder, opening the uninstall folder, and double-clicking uninstall.exe.) To learn how to use an initialization file to run the uninstaller noninteractively, see "Running the Uninstall Program Noninteractively" on page 1-58.

3 Select the products you want to remove and click Uninstall.

When it starts, the uninstaller displays a list of products associated with the release you selected. If you select MATLAB, you automatically remove all other MathWorks products.



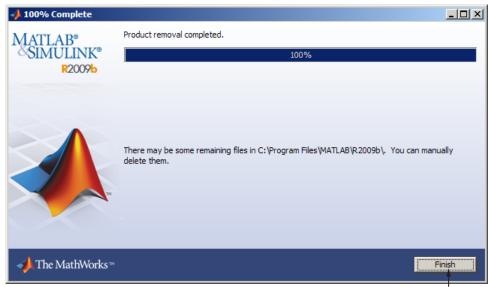
You might receive a message telling you that the product you want to uninstall has other products that depend on it. For example, all MathWorks products require the MATLAB product. To dismiss the message and continue removing products, click **OK**. To change the products you had selected for deletion, click **Cancel**. For more information, see "Product Dependencies" on page 3-5.

If you also want to remove your MATLAB preferences file, click the **Uninstall MATLAB preference files** 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\R2009b
```

username is the user name of the person running the uninstaller.

- **4** (Optional) Choose whether to delete download archive files. If your MATLAB installation folder contains the archive files for downloaded products, the uninstaller displays a message asking if you want to delete these archive files. The installer stores these archive files in the matlabroot/archives folder of your installation. To remove these files, click **Yes**.
- **5** To proceed with the removal, click the **Uninstall** button. The uninstaller displays the status of the operation as it progresses and displays a dialog box when the operation is complete. Click **Finish** to exit the uninstaller. When you uninstall a MATLAB installation, the uninstaller displays a dialog box suggesting that you deactivate the installation. For complete information about deactivation, see "Deactivating a License" on page 1-52.



Click Finish.

Deactivating a License

Deactivating a license 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

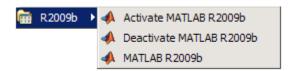
activate the software on a new computer, and you've already performed all the activations allowed by your license, you can deactivate one of your existing installations to enable activation on your new computer.

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, you must visit the MathWorks Web site and enter 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 "Uninstalling MathWorks Products" on page 1-50.

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

- 1 Start the deactivation application, using any of the following methods:
 - Click the Windows Start menu and choose
 Programs > MATLAB > R2009b > Deactivate MATLAB R2009b.



- 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, open the uninstall folder, and double-click deactivate matlab.exe.
- **2** Select the license that you want to deactivate and click **Deactivate**.

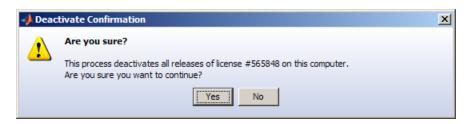
When the deactivation application starts, it displays the licenses you currently have installed and activated on your system. If you start the application from within MATLAB, the license you are using is preselected.



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 the MathWorks.



4 Complete deactivation. Click OK.

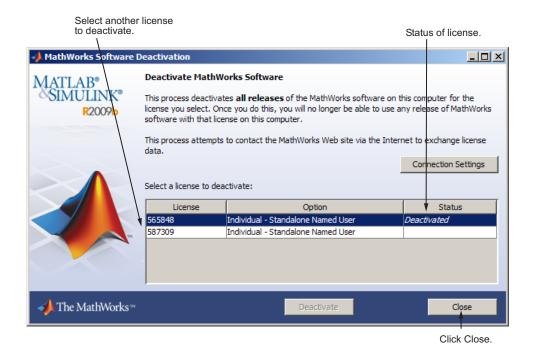
If the deactivation application can deactivate the license on your computer and in MathWorks systems, it displays the Deactivation Complete dialog box. Click **OK** to return to the MathWorks Software Deactivation dialog box, where you can choose to deactivate other licenses.



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, you must go to the MathWorks Web site, log in to your account, and enter the deactivation string. See the License Center help for more information. Click **OK** to return to the MathWorks Software Deactivation dialog box.



5 Select another license from the list and click **Deactivate** to repeat the deactivation procedure, or click **Close** to exit the deactivation application. After you deactivate a license, the MathWorks Software Deactivation dialog box displays an additional column listing the status of the licenses.



Running the Uninstall Program Noninteractively

To run the uninstaller noninteractively, perform these steps:

1 Create an uninstaller initialization file.

Make a copy of the uninstaller initialization template file, named uninstaller.ini, located in the uninstall folder in your MATLAB installation folder.

copy matlabroot\uninstall\uninstaller.ini C:\temp\my uninstall.ini

2 Open your copy of the initialization file using any text editor, and enter all the required information. For example, use the directory parameter to specify the name of the root folder of the installation you want to remove:

directory=C:\Program Files\MATLAB\R2009b

In this initialization file, you can specify the name of the products you want to remove and other parameters. By default, the uninstaller removes all products. If your initialization file is missing a required parameter, the uninstaller stops and writes an error to the output log. Two optional parameters you might want to set are:

• **visible=** — By default, when you run the uninstaller in silent mode, the uninstaller still displays the dialog box, even though no interactive response is required. If you want to suppress the display of this dialog box, set the value of the **visible** parameter to false.

visible=false

• **outlog=** — To request that the uninstaller create an output log file that reports the status of removing an installation, specify the full path as the value of the **outlog** parameter.

```
outlog=C:\temp\my uninstall.log
```

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

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

```
uninstall.exe -if C:\temp\my uninstall.ini
```

Note When run noninteractively, the uninstaller does not automatically start the deactivation application.

System Requirements

In this section...

"Windows" on page 1-60

"Graphics" on page 1-61

"Compilers (for MEX-Files)" on page 1-61

"License Management" on page 1-61

"Additional Requirements" on page 1-62

Note For the most up-to-date information about system requirements, go to the MathWorks Web site (www.mathworks.com).

Windows

32-Bit MathWorks Products

Operating System	Processors	Disk Space	RAM
Windows XP Service Pack 2 or 3	Intel [®] Pentium 4 and above	680 MB*	512 MB
Windows Server 2003 Service Pack 2 or R2	Intel Celeron**	(MATLAB only)	(At least 1024 recommended)
Windows Vista TM Service	Intel Xeon		
Pack 1	Intel Core		
Windows Server 2008	AMD Athlon™ 64**		
	AMD Opteron		
	AMD Sempron**		

64-Bit MathWorks Products

Operating System	Processors	Disk Space	RAM
Windows XP x64 Service Pack 2	Intel Pentium 4 and above)	680 MB*	$1024~\mathrm{MB}$
	,	(MATLAB only)	(At least 2048
Windows VistaService Pack 1	Intel Celeron**		recommended)
	Intel Xeon		
Windows Server 2003			
x64 Service Pack 2 or	Intel Core		
R2			
	AMD64		
Windows Server 2008			

*Disk space requirements vary depending on size of partition. The MATLAB installer will inform you of the hard disk space requirement for your particular partition. Installation size is determined by the installer and can vary for NTFS and FAT formats.

Graphics

• 16-, 24-, or 32-bit OpenGL capable graphics adapter

Compilers (for MEX-Files)

For the most up-to-date information about compilers, go to the MathWorks Web site (www.mathworks.com) and click **Support**.

License Management

- Some license types require a license server running FLEXnet[®] 11.6.1, which is provided by the MathWorks installer.
- TCP/IP is required on all platforms when using a license server.

^{**}Processor must support SSE2 instruction set.

Additional Requirements

- Microsoft Word 2002, 2003, or 2007 is required to run the Notebook tool in MATLAB.
- Microsoft[®] Excel[®] 2002, 2003, or 2007 is required to run MATLAB[®]
 Builder[™] EX (for Microsoft Excel) and Spreadsheet Link EX (for Microsoft Excel).

Network Installation Procedure

This topic describes how to install the MathWorks products on a computer running the Microsoft Windows operating system (32-bit or 64-bit). Use this procedure for license options that can be installed in a network configuration, such as Concurrent or Network Named User. For information about performing standalone installations of MathWorks products, see Chapter 1, "Standard Installation and Activation Procedures".

- "Overview" on page 2-2
- "Installing the License Manager on a Server" on page 2-3
- "Installing MathWorks Software on Client Systems" on page 2-22
- $\bullet\,$ "After a Network Install" on page 2-38
- "Installing Noninteractively (Silent Installation)" on page 2-43

Overview

Depending on your network configuration, you might have to perform multiple installations:

- Installing the license manager on a server For network installations, you must install the FLEXnet 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 your *license server*. If you are already running the FLEXnet license manager at your site and are familiar with licensing, you can copy the daemons into the proper directories and use your existing installed license manager. See "Installing the License Manager on a Server" on page 2-3 for step-by-step instructions.
- Installing MathWorks products on a server If your configuration calls for users to use MathWorks products from a central location, rather than having them installed on their local system, you must install the product files on a server. If this server is the same system as your license server (it doesn't have to be), you can install MathWorks products at the same time as you install the license manager.
- Installing MathWorks products on each client system If your network configuration calls for users to install MathWorks products on their own systems, and only access the license server over the network, then you must install the product files on each system. The client systems must be able to connect to the license server over a network. See "Installing MathWorks Software on Client Systems" on page 2-22

Instead of performing the installation procedures interactively, providing the information requested by each dialog box, you can run the installer noninteractively. In this mode, all the information you would normally provide using the installer dialog boxes you enter in an initialization file. For more information, see "Installing Noninteractively (Silent Installation)" on page 2-43.

Note For the network license options, you do not need to run the activation application to activate the software. Instead, you activate the license server in the License Center at the MathWorks Web site before you install. Client installations do not need to be activated.

Installing the License Manager on a Server

In this section...

- "Step 1: Prepare to Install" on page 2-3
- "Step 2: Choose Whether to Install Automatically or Manually" on page 2-5
- "Step 3: Review the Software License Agreement" on page 2-6
- "Step 4: Log In to Your MathWorks Account" on page 2-7
- "Step 5: Select the License You Want to Install" on page 2-9
- "Step 6: Choose to Perform a Custom Installation" on page 2-10
- "Step 7: Specify the Installation Folder" on page 2-11
- "Step 8: Specify Products to Install" on page 2-12
- "Step 9: Specify the Location of the License File" on page 2-14
- "Step 10: Configure the License Manager Service" on page 2-15
- "Step 11: Specify Installation Options" on page 2-16
- "Step 12: Confirm Your Choices" on page 2-17
- "Step 13: Complete the Installation" on page 2-20
- "Step 14: Making Products and Licensing Information Available to Clients" on page 2-20

Note If your configuration calls for the license manager and MATLAB software to run on the same server, you can perform both installations at the same time.

Step 1: Prepare to Install

Before you run the installation program:

Have your License File handy. For network configurations, you activate
the license before you run the installer on the server. Visit the License
Center at the MathWorks Web site, providing the host ID of the computer
on which you intend to run the license manager. The MathWorks creates a

License File that you can download from the License Center. You specify this License File during installation of the license manager on the server. Only the administrator contact on a network license option can activate the software.

- Exit any existing copies of MATLAB you have running on the system where you are performing the installation.
- Shut down the license manager, if it is running. See "Starting and Stopping the License Manager" on page 2-38 for more information.
- Get administrator privileges for the system on which you plan to install MATLAB.
- 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 license manager once at a site. For information about installing MathWorks software on clients, see "Installing MathWorks Software on Client Systems" on page 2-22.

If You Are Upgrading an Existing Installation

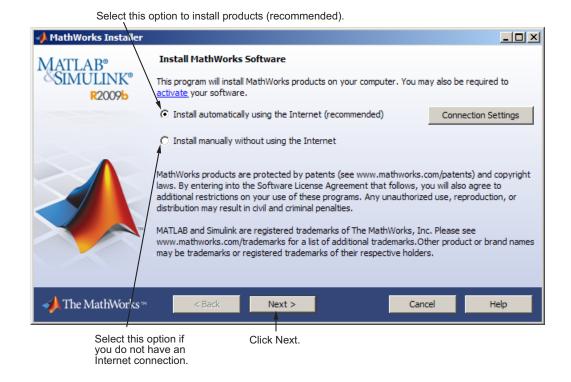
If you are upgrading your MATLAB installation to the latest release, The MathWorks recommends that you install the new version in a new installation folder. This is recommended when upgrading an installation of a prerelease version of the software as well. You do not need to delete an existing MATLAB installation before installing this release. You can run multiple releases of MATLAB on the same system.

Note If you are installing the license manager in a new directory, you should either remove the license manager service before running the installer or choose to not configure the license manager when asked at step 10. You cannot run two license managers at the same time, even if they are in different directories.

Step 2: Choose Whether to Install Automatically or Manually

To start the MathWorks installer, insert the DVD into the DVD drive connected to your system. The installer starts automatically. If the installer does not start, navigate to the top-level folder on the DVD and double-click the installer (setup.exe). If you downloaded products from the MathWorks Web site, open the folder containing the product files and double-click the installer.

In the first dialog box, you must decide how you want to perform the installation. If you are connected to the Internet, the easiest way to install is by selecting the **Install automatically using the Internet** option. During installation, you log in to your MathWorks Account, select the license you want to install, and follow the prompts on the installer dialog boxes. The installer can determine if newer versions of products that you are installing are available at the MathWorks Web site and offers you the option of downloading these updated versions. Click **Next** to proceed with the installation.



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



Related Topics

If you do not have an Internet connection during installation, see "Installing and Activating Without an Internet Connection" on page 1-31. Note that a network installation has additional steps.

Step 3: Review the Software License Agreement

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

After the installation is complete, you can view or print the license agreement using the file license.txt located in the top-level installation folder.



Step 4: Log In to Your MathWorks Account

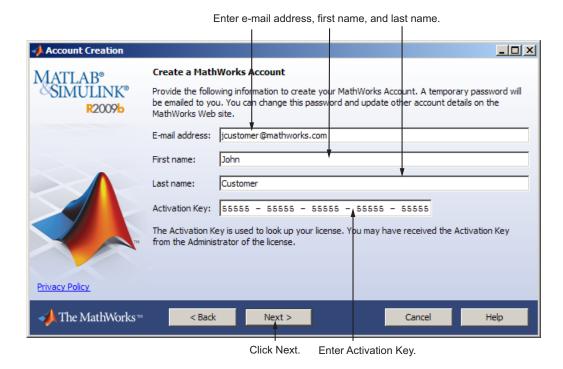
Note Only the administrator contact on a license can activate a network license.

Enter the e-mail address and password of your MathWorks Account and click **Next**. If you do not have a MathWorks Account, select the **I need to create** a **MathWorks Account** option and click **Next**.



Creating a MathWorks Account

Enter your e-mail address, first name, last name, and Activation Key. To create an account, you must provide an Activation Key. A newly created account will not have any licenses associated with it. The Activation Key identifies the license you want to install. The administrator contact on the license can retrieve the key by visiting the License Center at the MathWorks Web site. Click **Next** to create your account.



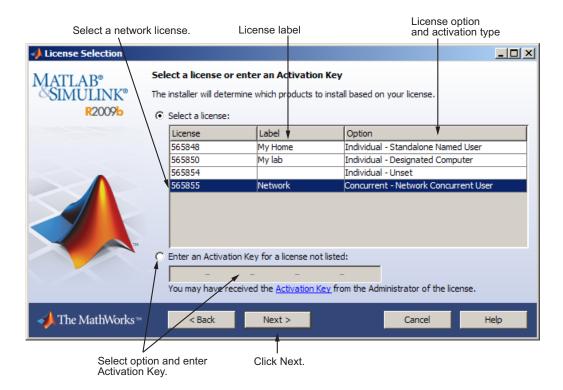
Because the Activation Key you entered specifies a particular license, the installer skips the license selection step.

Step 5: Select the License You Want to Install

Select a license with one of the network license options from the list of licenses associated 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. To label a license, go to the License Center at the MathWorks Web site. See the License Center Help for instructions.
- Information identifying the license option and the activation type. For server installation, select a license with one of the network license options. If you haven't set the activation type, the word "Unset" appears.

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



What Is an Activation Key?

An *Activation Key* is the unique code that identifies a license. It can be used to activate a license and also allows licensed end users to associate their MathWorks Account with a license. Ask the administrator of the license for the Activation Key.

Step 6: Choose to Perform a Custom Installation

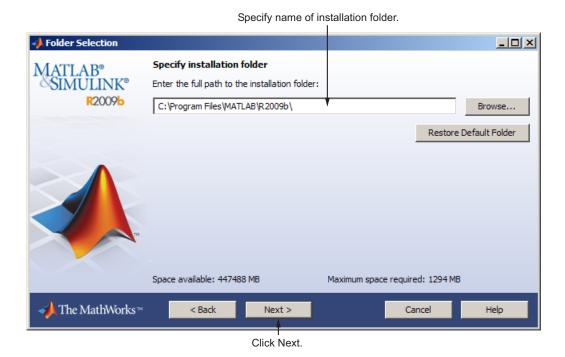
To install the license manager, you must choose the **Custom** option and click **Next**.



Step 7: Specify the Installation Folder

Specify the name of the folder where you want to install MathWorks products. You can accept the default installation folder or specify the name of a different installation folder. If the folder doesn't exist, the installer creates it.

When specifying a folder name, do not specify a name that contains the @ sign, an exclamation point (!), the percent character (%), the plus sign (+), or the dollar sign character (\$). The full path of the installation folder must not include a folder named private. If you make a mistake while entering a folder name and want to start over using the default folder name, click **Restore Default Folder**. To continue with the installation, click **Next**.

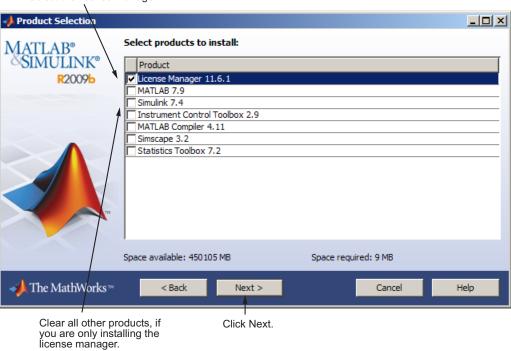


Step 8: Specify Products to Install

To install the license manager, you must select the 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.

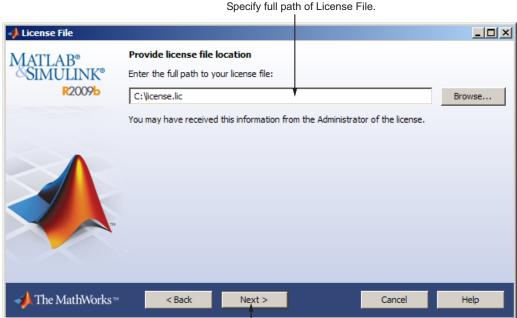
After making your selections, click **Next** to proceed with the installation. After clicking **Next**, you might receive a message telling you that one or more of the products you selected depend on other products. See "Product Dependencies" on page 3-5 for more information.



Step 9: Specify the Location of the License File

Enter the full path of your License File in the text box (or drag and drop the file) and click **Next** click.

When installing the license manager on a server, specify the License File you received from the MathWorks.



Click Next.

License File Processing on Server

During a server installation, where you install the license manager, you must specify the location of the License File you received from The MathWorks. The installer performs the following processing of this License File:

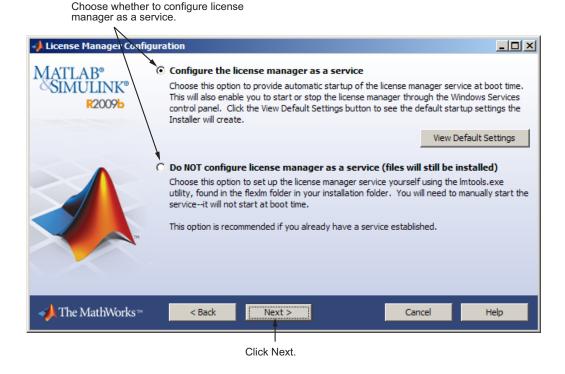
Makes a copy of your License File, naming it license.dat, and puts this
copy in the \flexlm directory of your MATLAB installation directory.

• 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 license manager daemon (matlabroot/flexlm/mlm.exe).

Step 10: Configure the License Manager Service

The MathWorks recommends configuring the license manager service. This provides automatic startup at system boot time and centralizes administration of the license manager through the Windows **Services** control panel. If you choose not to configure the license manager service, you can do it later.

Note If you have an existing license manager that you want to continue to use until you install this new one, select the **Do NOT configure license** manager service option. The installer still installs the license manager files. After installation, you can stop your existing license manager and start your new license manager.



Step 11: Specify Installation Options

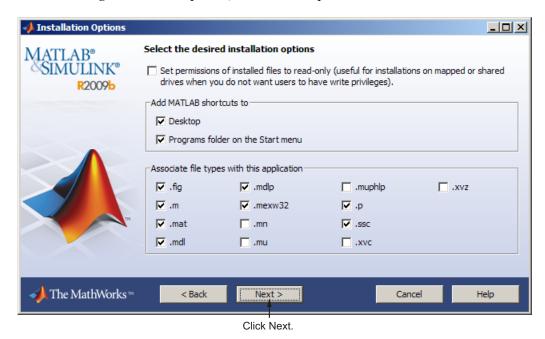
Note You only see this dialog box if you are installing MATLAB software on your server. If you are only installing the license manager, you will not see this dialog box.

For Custom installations, you can specify several installation options, including:

- Setting the permissions of all installed files to read only.
- Determining whether the installer puts shortcuts for MATLAB software in the **Start** menu and on the desktop.

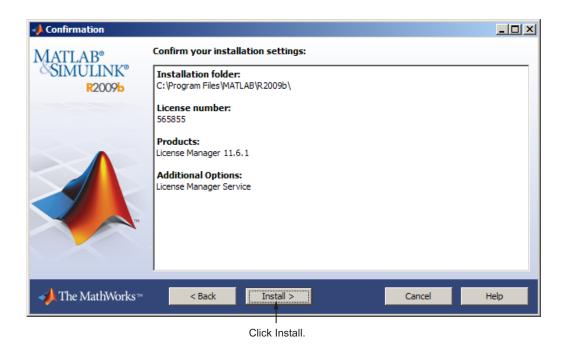
• Specifying which files the operating system associates with MATLAB, based on their file extension. For example, if you associate files with the .m file extension with MATLAB, the operating system identifies the type of these files as MATLAB M-file.

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



Step 12: 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**.

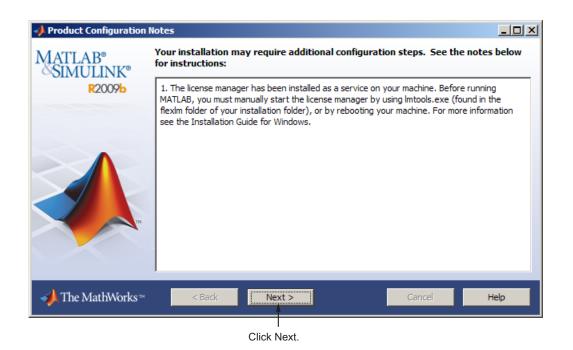


As it copies files to your hard drive, the installer displays a status dialog box to show the progress of the installation.

Read Product Configuration Notes

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

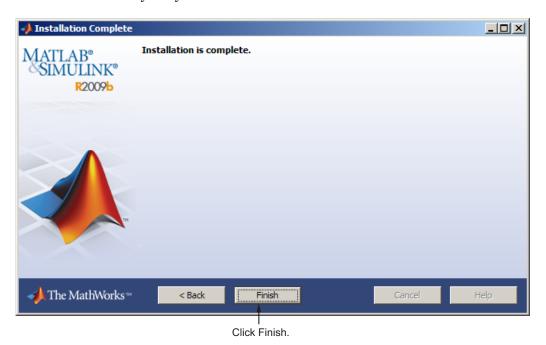
Click **Next** to proceed with the installation.



Step 13: Complete the Installation

When the MathWorks Installer finishes, it displays the Installation Complete dialog box. Click **Finish** to exit the installer.

If you installed the license manager as a service, The MathWorks recommends that you restart your computer now. 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.



Step 14: Making Products and Licensing Information Available to Clients

After you install the license manager on your server, you must provide users who want to install MathWorks products on their computers with:

Licensing information — Give users a copy of the License File that was
processed during installation of the license manager on your server. The
installer made a copy of your original License File, named it license.dat,

and added information that clients need to connect to the license manager. You can find this License File in: <code>matlabroot\flexlm\</code>, where <code>matlabroot</code> is your MATLAB installation folder.

Note Do not give users performing client installations a copy of the original License File you created from the licensing e-mail. They can't use the licensing information in this form. Also, do not forward to users the licensing e-mail you received from The MathWorks.

Depending on how you provide access to product files, you must also give users performing client installations a File Installation Key for the license or the Activation Key for the license.

 Access to product files — There are several ways to make product files available to users performing client installations. You can share the MathWorks product DVD with users. You can also download the product files and make the files available on a server that is accessible to all clients. For these scenarios, users will need a File Installation Key to install products.

If users performing client installations have MathWorks Accounts, you can give them the Activation Key for the license and let them log in to their accounts during installation and download product files from the MathWorks.

• Installation instructions — Give users a copy of the instructions in "Installing MathWorks Software on Client Systems" on page 2-22. Do not give them the license manager installation instructions because this might confuse them.

Installing MathWorks Software on Client Systems

In this section...

- "Step 1: Prepare to Install" on page 2-22
- "Step 2: Choose Whether to Install Automatically or Manually" on page 2-23
- "Step 3: Review the Software License Agreement" on page 2-24
- "Step 4: Log In to Your MathWorks Account" on page 2-25
- "Step 5: Select the License You Want to Install" on page 2-27
- "Step 6: Specify the Type of Installation" on page 2-29
- "Step 7: Specify the Installation Folder" on page 2-30
- "Step 8: Specify Products to Install" on page 2-30
- "Step 9: Specify the Location of the License File" on page 2-32
- "Step 10: Specify Installation Options (Custom Only)" on page 2-33
- "Step 11: Confirm Your Choices" on page 2-34
- "Step 12: Complete the Installation" on page 2-37

Step 1: Prepare to Install

Get required installation and licensing information from your license administrator. This includes:

- Client installations must use the License File that was processed during
 installation of the license manager on your server. The installer adds
 information to the License File during installation that clients need.
 Depending on how your license administrator intends to provide you with
 access to product files, you will need either a File Installation Key or an
 Activation Key. Ask your license administrator for details.
- Exit any existing copies of MATLAB you have running on the system where you are performing the installation.
- Get administrator privileges for the system on which you plan to install MATLAB.

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).

If you have many client installations to perform, you can create an installer initialization file and run the installer noninteractively—see "Installing Noninteractively (Silent Installation)" on page 2-43.

If You Are Upgrading an Existing Installation

If you are upgrading your MATLAB installation to the latest release, The MathWorks recommends that you install the new version in a new installation folder. This is recommended when upgrading an installation of a prerelease version of the software as well. You do not need to delete an existing MATLAB installation before installing this release. You can run multiple versions of MATLAB on the same system.

Step 2: Choose Whether to Install Automatically or Manually

To start the MathWorks installer, insert the DVD into the DVD drive connected to your system. The installer starts automatically. If the installer does not start, navigate to the top-level folder on the DVD and double-click the installer (setup.exe). If you downloaded products from the MathWorks Web site, open the folder containing the product files and double-click the installer.

In the first dialog box, you must decide how you want to perform the installation. If you are connected to the Internet, the easiest way to install is by selecting the **Install automatically using the Internet** option. During installation, you log in to your MathWorks Account, select the license you want to install, and follow the prompts on the installer dialog boxes. The installer can determine if newer versions of products that you are installing are available at the MathWorks Web site and offers you the option of downloading these updated versions. Click **Next** to proceed with installation.



Select this option to install products (recommended).

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

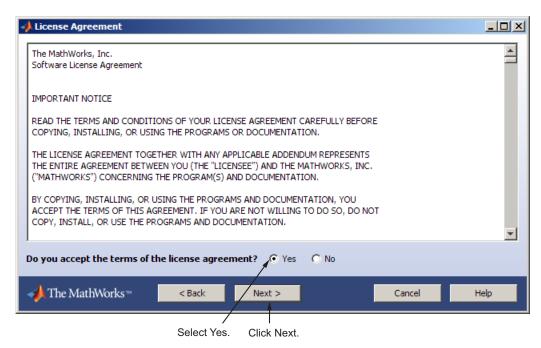
Related Topics

If you do not have an Internet connection during installation, see "Installing and Activating Without an Internet Connection" on page 1-31. Note that a network installation has additional steps.

Step 3: Review the Software License Agreement

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

After the installation is complete, you can view or print the license agreement using the file license.txt located in the top-level installation folder.



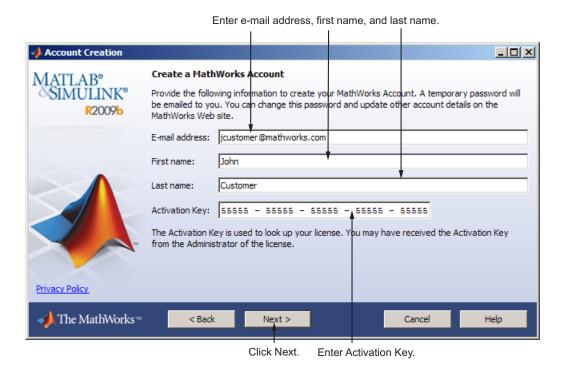
Step 4: Log In to Your MathWorks Account

Enter the e-mail address and password of your MathWorks Account and click **Next**. If you do not have a MathWorks Account, select the **I need to create** a **MathWorks Account** option and click **Next**.



Creating a MathWorks Account

Enter your e-mail address, first name, last name, and Activation Key. To create an account, you must provide an Activation Key. A newly created account will not have any licenses associated with it. The Activation Key identifies the license you want to install. The administrator contact on the license can retrieve the key by visiting the License Center at the MathWorks Web site. Click **Next** to create your account.



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

Step 5: Select the License You Want to Install

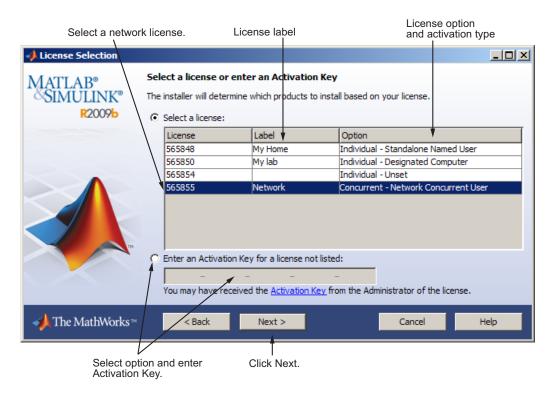
Note If you specified an Activation Key in the previous step, the installer skips this step.

Select a license from the list of licenses associated 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. To label a license, go to the License Center at the MathWorks Web site. See the License Center Help for instructions.
- Information identifying the license option and the activation type. If an activation type has not yet been set on the license, the word "Unset" appears.

If you do not see the license you want in the list, select the **Enter an Activation Key for a license not listed** option and enter an Activation Key. An Activation Key is the unique code that identifies a license.



Step 6: Specify the Type of Installation

Note In a client installation, you can pick the Typical option because the license manager is not preselected for installation.

In the Installation Type dialog box, specify whether you want to perform a Typical or Custom installation and click **Next**.

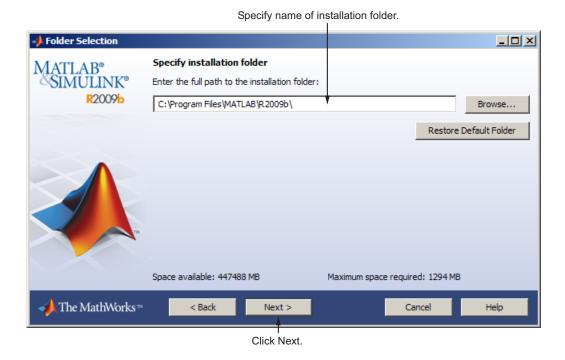
- Choose **Typical** if you have an Individual or Group license and do not need to specify which products you want to install and do not need to access any installation options.
- Choose **Custom** if you need to specify which products to install, need access to installation options, or need to install the license manager (network license options only).



Step 7: Specify the Installation Folder

Specify the name of the folder where you want to install MathWorks products. You can accept the default installation folder or specify the name of a different installation folder. If the folder doesn't exist, the installer creates it.

When specifying a folder name, do not specify a name that contains the @ sign, an exclamation point (!), the percent character (%), the plus sign (+), or the dollar sign character (\$). The full path of the installation folder must not include a folder named private. If you make a mistake while entering a folder name and want to start over using the default folder name, click **Restore Default Folder**. To continue with the installation, click **Next**.



Step 8: Specify Products to Install

If you chose a custom installation, you can specify which products you want to install in the Product Selection dialog box. 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 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. See "Product Dependencies" on page 3-5 for more information.

Product Selection Select products to install: MATLAB® SIMULINK® Product R2009b License Manager 11.6.1 MATLAB 7.9 Simulink 7.4 ▼ Instrument Control Toolbox 2.9 MATLAB Compiler 4.11 ▼ Simscape 3.2 ✓ Statistics Toolbox 7.2 Space available: 450204 MB Space required: 1391 MB The MathWorks™ < Back Next > Cancel

Do not select the license manager.

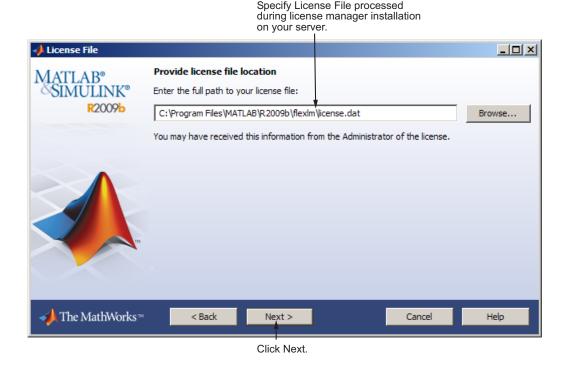
Make any product selections.

Click Next.

Step 9: Specify the Location of the License File

Enter the full path of your License File in the text box (or drag and drop the file) and click **Next**.

When installing MathWorks software on a client computer, you must specify the License File the License File that was processed during installation of the license manager on the server, <code>matlabroot\flexlm\license.dat</code>, where <code>matlabroot</code> represents your MATLAB installation folder. You should have received this License File from your license administrator.



License File Processing on Client

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

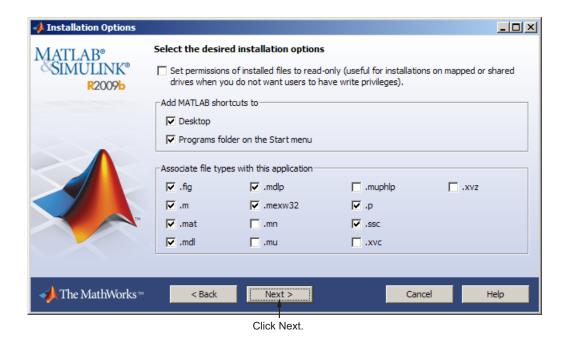
- Makes a copy of the License File you specify, naming it network.lic, and
 puts the file in the \licenses directory in your MATLAB client installation
 directory.
- Deletes all the INCREMENT lines and the DAEMON line in the License File, leaving the SERVER line. Adds the statement USE SERVER to the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

Step 10: Specify Installation Options (Custom Only)

For Custom installations, you can specify several installation options, including:

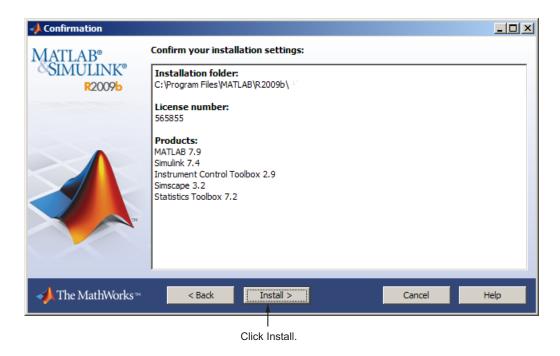
- Setting the permissions of all installed files to read only.
- Determining whether the installer puts shortcuts for MATLAB software in the **Start** menu and on the desktop.
- Specifying which files the operating system associates with MATLAB, based on their file extension. For example, if you associate files with the .m file extension with MATLAB, the operating system identifies the type of these files as MATLAB M-file.

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



Step 11: 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.

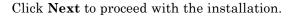


As it copies files to your hard drive, the installer displays a status dialog box to show the progress of the installation.

Read Product Configuration Notes

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

- **Product configuration information** Certain products require additional configuration. If you installed one of these products, the installer lists the configuration commands in this dialog box. You can copy this command to your system clipboard for use after the installation is completed.
- Available product updates If your license identifies products that are not on the DVD, and you are not currently connected to the Internet or you chose not to download product updates, the installer lists these products in this dialog box. After installation is complete, you can go to the MathWorks Web site to download these products.

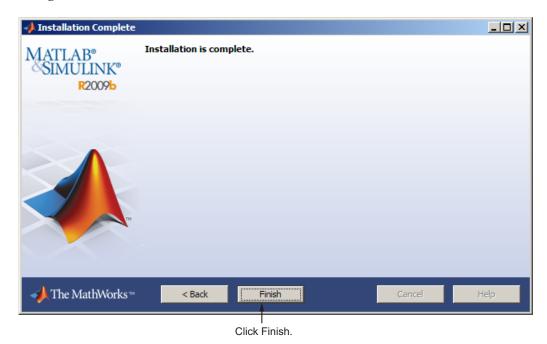




2-36

Step 12: Complete the Installation

When the MathWorks installer finishes, it displays the Installation Complete dialog box. Click **Finish** to exit the installer.



After a Network Install

In this section...

"Starting and Stopping the License Manager" on page 2-38

"Monitoring and Managing the License Manager" on page 2-38

"Allowing Access to License Manager Daemons" on page 2-41

For general information about post-installation tasks, see "After You Install" on page 1-47.

Starting and Stopping the License Manager

If you configure the license manager as a service, you can use the Windows **Services** control panel to start or stop the license manager service. On the Windows **Start** menu, select **Settings > Control Panel > Administrative Tools > Services**.

You can also use the license management tools available in the *matlabroot*\flex1m folder. These tools provide better diagnostic messages.

Monitoring and Managing the License Manager

This section describes several utilities provided by **FLEXNET** licensing that you can use to monitor and manage the license manager. For detailed information about these utilities, see the *FLEXnet Licensing End User Manual*, included in PDF format in your MATLAB installation (matlabroot\flexlm\enduser.pdf).

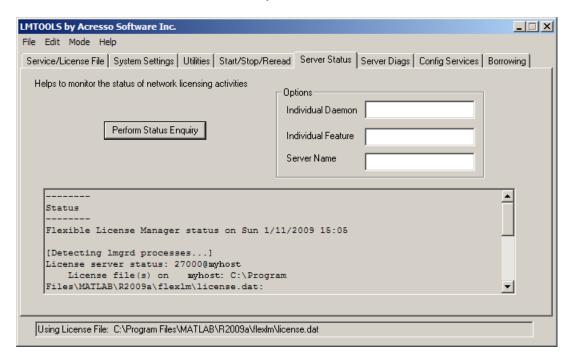
- "Using the LMTOOLS GUI" on page 2-38
- "Using the lmutil Command Line Utility" on page 2-39

Using the LMTOOLS GUI

FLEXnet licensing includes a graphical user interface (GUI), called LMTOOLS. Using LMTOOLS you can get the status of the license manager, configure the license manager as a service, start and stop the license manager, and perform many other license management tasks. To illustrate, the

following example shows how to use the LMTOOLS GUI to see the current status of the license manager:

- 1 Start LMTOOLS by double-clicking the 1mtools.exe file in the matlabroot\flex1m folder.
- 2 Click the Server Status tab.
- **3** Click the **Perform Status Enquiry** button. LMTOOLS displays the same information as if you had entered the command lmutil lmstat -a.



Using the Imutil Command Line Utility

On Windows systems, FLEXnet licensing packages all their license management utilities in a single, command line executable called lmutil.exe. The installer includes this utility in every server installation in the <code>matlabroot\flexlm</code> folder. To view a list of all the capabilities of the lmutil utility, open a Command Prompt window, go to the <code>matlabroot\flexlm</code> folder and type

lmutil

The following table lists the names of the most useful tools available through lmutil.

Utility	Description
lmdiag	Diagnose license checkout problems.
1mdown	Shut down all license daemons (both 1mgrd and all vendor daemons) on the license server node.
lmhostid	Report the host ID of a system.
lmreread	Make the license manager daemon reread the License File and start any new vendor daemons. Note: When you use Imreread to reprocess a License File for a user-based license, changes to INCLUDE statements
	in the associated FLEXnet 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.

To illustrate, the following example shows how to get the current status of the license manager.

Open a DOS command prompt window and enter the lmutil command, specifying the name of the lmstat utility.

```
lmutil lmstat -a -c "C:\Program Files\MATLAB\R2009b\flexlm\license.dat"
```

The example uses the -a option to get a verbose listing of available licenses and the -c option to specify the location of the License File to use. You must specify the -c option with every tool invoked through lmutil.exe. If your installation path contains spaces, enclose the path in quotes.

View the status information returned.

lmutil - Copyright (c) 1989-2008 Acresso Software Inc. All Rights Reserved.

```
Flexible License Manager status on Sun 1/11/2009 15:12

[Detecting lmgrd processes...]

License server status: 27000@customerj

License File(s) on customerj: C:\Program Files\MATLAB\R2009b\flexlm\license.dat:

customerj: license server UP (MASTER) v.11.6

Vendor daemon status (on customerj):

MLM: UP v11.6

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).
```

Allowing Access to License Manager Daemons

If you run the license manager on a server that is protected by a security firewall, you must open the firewall to allow client installations to communicate with the license manager daemons: mlm.exe and lmgrd.exe. For 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 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, you must 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.

Installing Noninteractively (Silent Installation)

In this section...

"When to Install Noninteractively" on page 2-43

"Using an Installer Initialization File" on page 2-43

When to Install Noninteractively

If you have many installations of MATLAB software to perform, and the information you need to enter for each installation is the same, you can put this information in an installer initialization file and run the MathWorks installer noninteractively. An initialization 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 Initialization File

Note You need a File Installation Key to use an initialization file.

To run the installer noninteractively, perform these steps:

1 Create an installer initialization file.

The MathWorks provides an initialization file template, named installer.ini, located in the top-level folder on the MathWorks DVD. Using Windows Explorer, create a copy of this template file in any convenient folder, giving it any name you want. For example, you might create the initialization file:

C:\temp\my install.ini

2 Open your copy of the initialization file, using any text editor, and enter all the required installation information.

The initialization file template includes parameters for all the information you need to enter. For example, to specify where you want to install

products, set the value of the destination parameter to the full path of the installation folder.

destination=C:\Program Files\MATLAB\R2009b

There are several required parameters, such as name, company name, and File Installation Key. If your initialization file is missing a required field, the installer stops the installation and writes an error to the output log. Two optional parameters you might want to set are:

- **visible=** By default, when you run the installer in silent mode, it still displays the dialog boxes as it progresses through the installation, even though no interactive response is required. If you want to suppress the display of these dialog boxes during a silent installation, set the value of the visible parameter to false.
- **outlog=** To request that the installer create an output file that reports the status of the installation, specify the full path as the value of the **outlog** parameter.

If you are using an initialization file for client installations in a network configuration, you might want to set the following additional parameters:

- **createActivateShortcut=** If the property is set to false, the installer does not add a Activate software shortcut on the MATLAB entry in the Windows **Start** menu. By default, the installer adds this shortcut to the MATLAB menu.
- **createDeactivateShortcut=** If the property is set to false, the installer does not add a Deactivate software shortcut on the MATLAB entry in the Windows **Start** menu. By default, the installer adds this shortcut to the MATLAB menu.
- 3 Save your changes to the file.
- **4** Run the installer (setup.exe), using the -if flag to specify the initialization file as a command-line argument. You must specify the full path of the initialization file. For example, click the **Start** menu and select the **Run** option. In the Run dialog box, enter

```
setup.exe -if C:\temp\my install.ini
```

Troubleshooting

This topic provides information that can help you solve common problems that you might encounter installing MathWorks software on a PC running the Microsoft Windows operating system.

- "Problems During Installation" on page 3-2
- "Problems After Installation" on page 3-6

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

Problems During Installation

In this section...

"Installer Does Not Start Automatically" on page 3-2

"Accessing Activation Options" on page 3-2

"Product Dependencies" on page 3-5

Note If the installer appears to become unresponsive (hang), you might want to turn 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 insert the MathWorks DVD into your DVD drive or when you double-click the installer file you downloaded from the MathWorks Web site.

If the installer does not start, open a Microsoft Windows Explorer window, select your DVD drive, and double-click the setup.exe program in the top-level folder.

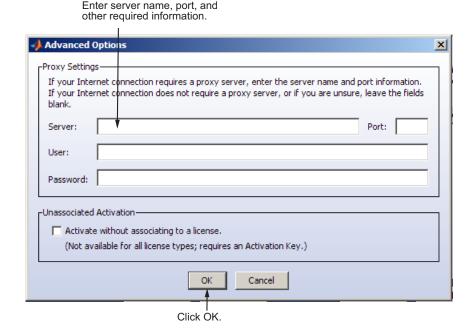
Accessing Activation Options

Specifying Proxy Server Connection 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 process or at the beginning of the activation process. The MathWorks supports several types of proxy configurations: Basic authentication, Digest authentication, and NTLM authentication.

To specify proxy information during installation, click the **Connection Settings** button in the first dialog box displayed by the installer. To specify proxy information during activation, click the **Advanced Options** button in the first dialog box displayed by the activation application. (For information

about Unassociated Activation, see "Activating Without a MathWorks Account" on page 3-3.)



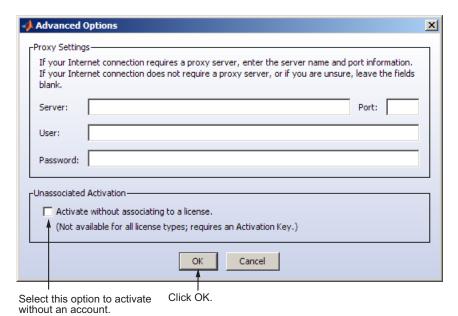
Activating Without a MathWorks Account

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, some users might not be able to create an account for security reasons.

To activate without providing MathWorks Account information, follow this procedure:

1 Install the software using the installer. On the first dialog box displayed by the installer, choose to install manually without using an Internet connection. You will need a File Installation Key. For complete instructions, see "Installing and Activating Without an Internet Connection" on page 1-31.

- **2** When the installer displays the Installation Complete dialog box, leave the **Activate MATLAB** option selected and click **Next**.
- **3** In the MathWorks Software Activation dialog box:
 - Choose **Activate automatically using the Internet**. To perform unassociated activation, you must use the Internet.
 - Click **Advanced Options**. In the Advanced Options dialog box, select the **Activate without associating to a license** option and click **OK**.



- When you return to the MathWorks Software Activation dialog box, click Next.
- **4** Enter an Activation Key in the Activation Key dialog box and click **Next**. Because you are not logged into an account, you must enter an Activation Key to identify a license.

Note The only activation type available for unassociated activation is Designated Computer.

5 Click Activate.

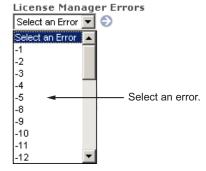
Product Dependencies

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 dismiss the message and continue with the installation, click **OK**. For a Custom installation, if you want to adjust your product selections, click **Cancel**.

Problems After Installation

After a successful installation, you may encounter problems starting MATLAB software. Many of these problems originate in the FLEXnet license manager used by the 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 FLEXnet log file, lmlog.txt, in the matlabroot\flexlm 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 "Monitoring and Managing the License Manager" on page 2-38.

For more complete diagnostic information about an error message, go to the MathWorks Web site, www.mathworks.com, and click **Support**. The Support page includes a Search facility that lets you search the support database for help with an error message by error number. You can also select the error number from the **License Manager Errors** menu.



You can also get information about license manager error messages in the *FLEXnet Licensing End User Manual*, available in PDF format in *matlabroot*\flexlm\LicenseAdministration.pdf.

Understanding the License Files

A 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 license

manager grants or denies access to a product depending on the availability of the license keys associated with each product.

The following figure presents a sample License File. 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 (license server host ID or Internet address) when it processes the License File during installation.

```
# BEGIN------cut here------CUT HERE------BEGIN

# MATLAB license passcode file.

# LicenseNo: 12345 HostID: INTERNET=144.212.101.43

INCREMENT TMW_Archive MLM 18 01-sep-2009 0 \
BC9DE773A77D15AF8 VENDOR_STRING=83 HOSTID=DEMO SN=12345

INCREMENT MATLAB MLM 18 01-sep-2009 1 \
4C9D3348561BE9E3B USER_BASED DUP_GROUP=U SN=12345

INCREMENT SIMULINK MLM 18 01-sep-2009 1 \
1CD148466EF58DF8B USER_BASED DUP_GROUP=U SN=12345

INCREMENT Signal_Toolbox MLM 18 01-sep-2009 1 \
6CF74B458BA143DC3 USER_BASED DUP_GROUP=U SN=12345

# END--------cut here-------CUT HERE------END
```

License File Search Path

When you start MATLAB, it reads the License File to check for product licensing. MATLAB searches for the License file in the following locations, in the specified order. Once it finds a License File, MATLAB stops searching.

- 1 License File specified on MATLAB startup command line using the -c argument. 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 pathname 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.
- 2 If no License File is specified at the MATLAB command, MATLAB searches two environment variables, described in the following table. MATLAB searches the vendor specific environment variable, MLM LICENSE FILE first.

Environment Variable	Purpose
MLM_LICENSE_FILE	Specifies the location of the License File, but only for products of The MathWorks. (Recommended, because it only affects MathWorks products.)
LM_LICENSE_FILE	Specifies the location of the License File for all applications using FLEXnet licensing on this server.

- **3** If it doesn't find any License File specified using environment variables, MATLAB searches the profile directory of the person starting the program. For licenses that are locked to individual users, the activation application puts the License File in a directory in your user profile.
- 4 If it doesn't find any License File specified in environment variables or in your user profile, MATLAB checks the \licenses folder in your MATLAB installation for files named license.dat or any file with the extension .lic.

A	activation label
activating MATLAB software	viewing during activation
choosing automatic or manual on systems running Windows 1-21 choosing manual option on systems running Windows 1-42 completing off-network activation on systems running Windows 1-46	on systems running Windows 1-24 activation type selecting during activation on systems running Windows 1-26 Advanced Options button activating without a MathWorks Account 3-3
confirming settings 1-28 for someone else on systems running Windows 1-27 procedure 1-20 selecting a license during activation on systems running Windows 1-24 starting activation application	client installation procedure network client 2-22 current folder initial 1-48
on systems running Windows 1-18 1-21 starting activation application after off-network installation on systems running Windows 1-42 starting activation application after off-network installations on systems running Windows 1-41 starting the activation application 1-20 without a MathWorks Account 3-3 activation application	daemons opening access in security firewalls 2-41 deactivating MATLAB installations on Windows systems 1-52 deactivation string deactivating without an Internet connection on Windows systems 1-52 retrieving 1-56
starting on systems running Windows 1-20 Activation Key creating an account during network	Designated Computer activation type selecting during activation on systems running Windows 1-26
installations on systems running Windows 2-8 creating an account during standalone installations on systems running Windows 1-7 specifying 2-10 2-28 specifying during activation 1-25 specifying during standalone installations	File Installation Key entering for off-network installation on systems running Windows 1-34 obtaining 1-35 required for off-network installations on systems running Windows 1-31
on systems running Windows 1-9 to 1-10 used to create MathWorks Account on systems running Windows 1-23	firewalls opening access to license manager daemons 2-41

FLEXnet® troubleshooting 3-6	installer.ini 2-43 installing
troubleshooting 5-6	starting the installer manually 3-2
н	turning off virus-checking software during installation 3-2
host ID	installing MATLAB
in License File 3-7	choosing automatic or manual in network installations
1	on systems running Windows 2-5 2-23
INCREMENT lines	choosing automatic or manual installation
in License Files 3-7	on systems running Windows 1-4
initial current folder 1-48	choosing manual for off-network installations
initialization files	on systems running Windows 1-32
using with installer 2-43	in network configurations
installation folder	on systems running Windows 2-1
specifying	in standalone environments
on systems running Windows 1-13	on systems running Windows 1-2
specifying for off-network installations	preparing for installation in standalone environments
on systems running Windows 1-37	
specifying in network installations	on systems running Windows 1-2 preparing for off-network installations
on systems running Windows 2-11 2-30	on systems running Windows 1-31
installation options	preparing to install in a network
specifying in network installations 2-16 2-33	configuration
specifying in off-network installations 1-39	on systems running Windows 2-3 2-22
installation procedure	setting permission of installed files to read
network 2-3	only 1-39
network client 2-22	standard installation procedures
noninteractive 2-43	on systems running Windows 1-1
installation type	installing MATLAB software
choosing during standalone installations	finishing network installation
on systems running Windows 1-12	on systems running Windows 2-20 2-37
choosing typical or custom 1-36 choosing typical or custom in network	
installations	L
on systems running Windows 2-10 2-29	-
installer	License Files
running noninteractively 2-43	comment lines 3-7
installer initialization file	getting the information you need to obtain
specifying 2-43	on systems running Windows 1-44 INCREMENT lines 3-7

processing in installation	shutting down the license manager 2-40
on systems running Windows 2-14 2-32	lmhostid
required for off-network installations	getting system host ID 2-40
on systems running Windows 1-31	<pre>lmlog.txt</pre>
search path 3-6	license manager log file 3-6
specifying during activation after off-network	lmreread
installation	forcing license manager to reprocess the
on systems running Windows 1-43	License File 2-40
specifying location in network installation	lmstat
on systems running Windows 2-14 2-32	viewing license manager status 2-40
license manager	lmswitchr
configuring in network installation	specifying the report log file 2-40
on systems running Windows 2-15	LMTOOLS
installing on server in network	using the FLEX NET utilities GUI 2-38
configurations 2-3	lmtools.exe
troubleshooting 3-6	FLEXNET utilities GUI 2-39
using the LMTOOLS GUI 2-38	<pre>lmutil.exe</pre>
utility programs 2-39	license manager utilities 2-39
license numbers	lmver
selecting during activation	get FLEXnet® version number 2-40
on systems running Windows 1-24	log files
license options	license manager 3-6
viewing during activation	login name
on systems running Windows 1-24	specifying during activation
licenses	on systems running Windows 1-27
deactivating	
on Windows systems 1-52	M
selecting during installation	
on systems running Windows 1-9	MathWorks Account
selecting in network installations	creating during activation
on systems running Windows 2-9 2-27	on systems running Windows 1-23
validating	creating during installation
on systems running Windows operating	on systems running Windows 1-7
system 1-47	creating during network installations
licensing	on systems running Windows 2-8
viewing the log file 3-6	creating for someone else during activation
LM_LICENSE_FILE environment variable 3-6	on systems running Windows 1-27
lmdiag	installing without an account 3-3
diagnosing license checkout problems 2-40	logging in
lmdown	on systems running Windows 1-7

logging in during activation	port numbers
on systems running Windows 1-23	opening access in security firewalls 2-41
logging in during network installations	preference files
on systems running Windows 2-7 2-25	removing 1-51
MATLAB	product files
getting started 1-48	setting permission to read-only 1-16
starting 1-47	products
MATLAB installation folder	downloading during standalone installations
specifying	on systems running Windows 1-14
on systems running Windows 1-13	selecting during installation
specifying for off-network installations	on systems running Windows 1-14
on systems running Windows 1-37	selecting for off-network installations
specifying in network installations	on systems running Windows 1-38
on systems running Windows 2-11 2-30	selecting in network installations
MLM_LICENSE_FILE environment variable 3-6	on systems running Windows 2-12 2-30
	proxy server
N	specifying 3-2
	specifying during activation
network client installation procedure	on systems running Windows 1-22
installing software on clients in network	proxy server settings
configurations 2-22	setting
network configurations	on systems running Windows 1-21
installing MATLAB software	v
on systems running Windows 2-1	D
network installation procedure	R
installing MATLAB in network	read-only permission
configurations 2-3	setting permissions of installed product
post-installation tasks 2-38	files 1-16
	removing a MATLAB installation 1-50
0	using initialization file 1-58
	requirements. See system requirements
operating system user name	reviewing software license agreement
specifying during activation	for network installations
on systems running Windows 1-27	on systems running Windows 2-6 2-24
overwriting an existing installation	on systems running Windows 1-6
individual installation 1-3	off-network installations 1-33
P	S
passcode	
encrypted in license file 3-7	security firewalls
, F 111 11001100 1110 0 .	

opening access to license manager	on systems running Windows 1-29	
daemons 2-41	startup folder 1-48	
selecting licenses	system requirements 1-60	
in network installations		
on systems running Windows 2-9 2-27	т	
on systems running Windows 1-9	•	
selecting products	troubleshooting during installation 3-2 FLEXnet® 3-6	
for off-network installations		
on systems running Windows 1-38		
in network installations	starting MATLAB 3-6	
on systems running Windows 2-12 2-30		
on systems running Windows 1-14	U	
setup.exe	unassociated activation	
in noninteractive installations 2-43	defined 3-3	
starting 3-2	uninstall.exe	
shortcut		
MATLAB shortcut on desktop 1-47	using the -if option 1-59 uninstalling 1-50	
shortcuts to MATLAB executable	using initialization file 1-58	
deciding where to include them 1-39	upgrading an installation	
silent installations	network installations 2-4 2-23	
running without screen displays 2-43	standard installations 1-3	
software license agreement	user name	
reviewing	selecting during activation	
on systems running Windows 1-6	on systems running Windows 1-27	
reviewing for off-network installations	on systems running windows 1-27	
on systems running Windows 1-33		
reviewing in network installations	V	
on systems running Windows 2-6 2-24	validating an installation	
Standalone Named User activation type	on systems running Windows operating	
selecting during activation	system 1-47	
on systems running Windows 1-26	virus checking software	
specifying user name during activation	disabling during network installations 2-4	
on systems running Windows 1-27	2-23	
starting MATLAB 1-47	virus-checking software	
troubleshooting 3-6	turning off during installation 3-2	
starting MATLAB software		
after activation is complete		