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- Computation
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Installation Guide for Mac OS X



Release 14 with Service Pack 2 (MATLAB 7.0.4 Product Family)

How to Contact The MathWorks:

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

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Installing and Starting MATLAB

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Installing and Starting MATLAB

This chapter provides specific information for installing the MathWorks products on Macintosh systems running OS X.

"Introduction" (p. 1-2)	Describes MATLAB® for the Macintosh
"Licensing" (p. 1-5)	Describes how to create a License File
"Basic Installation" (p. 1-9)	Describes how to install the MathWorks products on a single system in either a stand-alone workstation or file server environment.
"Custom Installation Tasks" (p. 1-19)	Describes specialized installation tasks that some users may need
"Starting MATLAB Manually" (p. 1-27)	Describes optional ways to start MATLAB
"Printing" (p. 1-29)	Describes how to set up a printer
"Removing (Uninstalling) a MATLAB Installation" (p. 1-30)	Describes how to remove the MATLAB family of products from your Macintosh
"Where to Go from Here" (p. 1-31)	Describes other installation tasks that you may need to perform

Introduction

About This Version

This version of MATLAB® for Macintosh runs on OS X Version 10.3 (or later) systems under the Apple X11 for Mac OS X window system as an X Windows application. It does not include special functionality associated with the Aqua user interface, but it looks like an Aqua application.

Note MATLAB 7 (Release 14) requires X11 for Mac OS X, which is freely available from Apple (see http://www.apple.com/downloads/macosx/apple/x11formacosx.html for more information). We recommend that you install X11 for Mac OS X before installing MATLAB.

Since OS X is based on UNIX, this version of MATLAB is also based on UNIX. Consequently, as you use MATLAB and its related products, you need to keep in mind that your base platform is UNIX. For example, if you use the mex command, you will be using the UNIX version, so the options file is mexopts.sh. You can find more information about mex on UNIX in the External Interfaces documentation, which is accessible from the Help browser.

System Requirements

- Power Macintosh G4 or G5 running OS X (10.3.2 or later)
- X Windows. The only supported version is the Apple X11 for Mac OS X window system.
- 400 MB free disk space for MATLAB and the online help files
- 256 MB RAM minimum, 512 MB RAM recommended
- FLEXIm 9.2, installed by the MATLAB installer
- Netscape Navigator 6.2 or later, Microsoft Internet Explorer 5.1 or later, or Safari is required.
- Mac OS X supported printer

• gcc Version 3.3 compiler as provided on the Apple Development Tools CD to build C MEX-files, or Absoft Pro Fortran v8.2a for OSX to build Fortran MEX-files

Supported Products

This release supports many of the MathWorks products that are available on UNIX. For a complete list of supported products, see Platform/Version Availability in the Products section of www.mathworks.com.

Documentation

The documentation for MathWorks products is not specific for individual platforms unless the product is available only on a particular platform. When you access a product's documentation either in print or online through the Help browser, make sure you refer to the UNIX platform if there is different documentation for different platforms. To view the online documentation, select **Full Product Family Help** from the MATLAB **Help** menu.

Distribution

The MathWorks products are distributed on CDs or over the Internet. (Depending on your license option, you may also receive additional CDs containing the Windows version of the software.)

Where to Go from Here

The installation process requires a License File. You will need to copy and paste the necessary information from the e-mail sent to you by The MathWorks during the License File stage of the installation process. See "Licensing" on page 1-5 for additional information on License Files.

• Basic Installation

If you are installing your MathWorks products on a single system, in either a stand-alone workstation or file server environment, you can follow the instructions in "Basic Installation" on page 1-9. The software is ordinarily installed on a single file system. This can be an individual user's computer, in the case of a stand-alone workstation, or a central file server, for networked installations. • Custom Installation Tasks

For other installation tasks, refer to "Custom Installation Tasks" on page 1-19.

Licensing

There are various licensing options available for the MathWorks family of products on the Macintosh. This section provides information about installing the different licensing options.

Product Licensing

When you purchase products, The MathWorks sends you license information by e-mail or fax. You use this licensing information to create a License File. If you did not receive your license information, see "Obtaining Your License File from The MathWorks" on page 1-7. The license information you received from The MathWorks contains a set of license passcodes. These license passcodes

- Identify the products you are licensed to install and use.
- Specify the number of users that may use each product (also known as the *keys* associated with a license).
- Specify the expiration date of each license.
- Specify whether it's a user-based license.

The following is a sample set of license passcodes sent by The MathWorks. Lines that begin with a pound sign (#) are comments. The TMW_Archive INCREMENT line specifies the products you are licensed to install. The other INCREMENT lines identify products you are licensed to run. In this example, the USER_BASED keyword in the INCREMENT lines indicates it's a user-based license.

```
# BEGIN------cut here-----CUT HERE-----BEGIN
# MATLAB license passcode file for use with FLEX1m.
# LicenseNo: 12345 HostID: ID=12345
INCREMENT TMW_Archive MLM 14 01-mar-2004 0 9CC411EC7ACCB4A810 \
VENDOR_STRING="f" HOSTID=DEMO SN=12345
INCREMENT MATLAB MLM 14 01-mar-2004 1 BCECD30AD121BBA7E9917 \
USER_BASED DUP_GROUP=UH SN=12345
INCREMENT SIMULINK MLM 14 01-mar-2004 1 2C5C2C89EF83B8EAD8FD \
USER_BASED DUP_GROUP=UH SN=12345
INCREMENT Control_Toolbox MLM 14 01-mar-2004 1 \
7CACA7BA05CA5C5E38C1 USER_BASED DUP_GROUP=UH SN=12345
INCREMENT Identification_Toolbox MLM 14 01-mar-2004 1 \
```

T

```
EC5C687AGD025B2AD73A USER_BASED DUP_GROUP=UH SN=12345
# END-----cut here----CUT HERE-----END
```

License File

You can create a License File from the licensing information you received in your license e-mail message from The MathWorks by following the instructions below or you can simply copy the license file from the e-mail during the installation process.

To create the License File,

- 1 Open a text file using any text editor.
- 2 In the license e-mail message, select all the information from the BEGIN line to the END line, inclusive. Make sure to copy all the information contained in this section, including the comment lines.
- **3** Copy the license information from the e-mail message and paste it into the open text file.

In general, do not edit the licensing information; you may invalidate a license. However, note the following:

• Make sure you remove any line breaks that your e-mail program may have inserted between the start and end of an INCREMENT line. If an INCREMENT line must continue onto more than one line, use the \ (backslash) character, as in the following:

INCREMENT Identification_Toolbox MLM 14 01-jan-0000 1 \

9CDC648190C0F37C7C30 USER BASED DUP_GROUP=U SN=12345

- Make sure that there is a space between each field in the INCREMENT line. Do not use tabs to separate these fields.
- License Files are case sensitive.
- **4** Save the text file, naming it license.dat, on your desktop or note its location so you can locate it during the installation process.

If you received your license passcodes in a fax, create the License File in the same way, typing in the license passcode information exactly as it appears in the fax.

Obtaining Your License File from The MathWorks

If you do not have your License File, you can obtain it by contacting The MathWorks via

- The Web at www.mathworks.com/mla. Log in to Access Login using your e-mail address and password. Access Login membership is free of charge and available to all customers. An Access Login is automatically created and sent to the primary contact on a new license if that person doesn't already have one. Additional users of that license create a login for themselves, and can then associate themselves with the license after purchase.
- E-mail at service@mathworks.com
- Telephone at 508-647-7000, ask for Customer Service. To find the phone number of one of our international offices, go to the MathWorks Web site at www.mathworks.com and click **Contact Us** at the top of the page.
- Fax at 508-647-7001

Have ready, or include in your e-mail or fax, the following items:

- Your e-mail address
- Your License Number

If you have not previously installed MATLAB at your site, you can find your License Number on the upper right corner of the packing slip. Customers outside North America may obtain this information from their local MathWorks representative.

You may also need the host ID for the machine on which you plan to run FLEXIm, the licensing software used by the MathWorks products. Two ways to determine your host ID are

• Open the Apple System Profiler application in /Applications/Utilities. Look in the **Network overview** of the

System Profile to find your Macintosh's Ethernet Address, for example, 8.0.2b.e6.87.59.

• If you are familiar with the Terminal application, you can also use the command

netstat -I enO

assuming en0 is the Ethernet interface. Use the period-separated address such as 8.0.2b.e6.87.59. Note: To use this address as a host ID, you must remove all periods (.) and prefix any single-digit parts of the address with a zero (0). For example, the host ID for the address above would be 08002be68759. For more information, see "Determining your Host ID" in the Installation Guide for UNIX.

Note Be sure to provide the host ID of the system on which you plan to run FLEXIm, not the host ID of a client workstation.

Basic Installation

These instructions describe how to install the MathWorks products on a single system in either a stand-alone workstation or file server environment.

The InstallForMacOSX utility on the MathWorks UNIX CD will guide you through the installation process:

- **1** Place CD 1 in the CD-ROM drive. When the CD's icon appears on the desktop, double-click the icon to display the CD's contents.
- **2** Double-click the InstallForMacOSX icon to begin the installation.
- **3** To install the MathWorks products, you must enter a username and password for an administrator. Enter the username and password in the **Authenticate** dialog box and then click **OK**.

Authenticate
MathWorks Installer requires that you type your password.
Name: login name
Password:
▼ Details
? Cancel OK

Note The user account you set up when you configured your Macintosh is an administrator account. If you don't know the username and password for an administrator, check with the person who administers your Macintosh.

4 When the **Important Information** dialog box appears, review its contents. Click **Continue** to proceed with the installation.

mportant Info	mation
Note: MATLAB r	quires X11 for Mac OS X, which is available as an optional choice i installation CD. We recommend that you install X11 for Mac OS X
	nstaller installs a license manager on your system, which must be you can start MATLAB. The license manager will automatically startup.
Unless otherwi: OS X operating	e specified, references to UNIX in the text below include the Mac system.
	Guide to the MATLAB CD
0. Table of Co	
1. R14 SP2	roduct List
2. System R	quirements
3.CD insta	lation
4 Hain	

5 If you did not previously install X11 for Mac OS X, you will see this message. You can continue with the product installation by clicking **OK**.



Note You will not be able to run the MathWorks Release 14 products until you install X11 for Mac OS X.

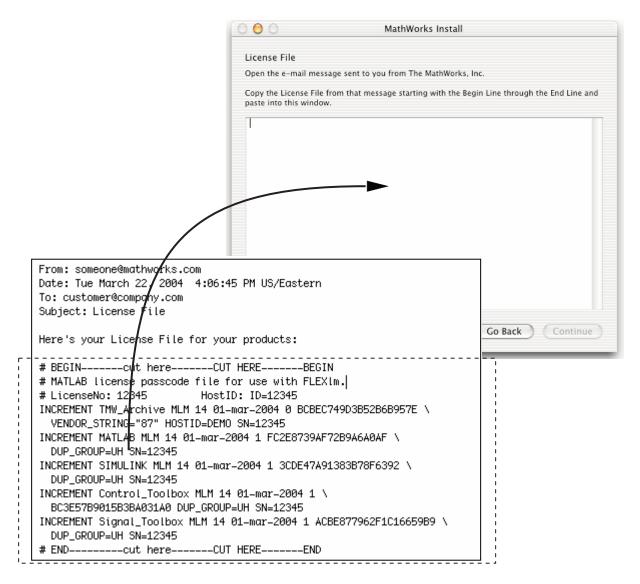
- **6** The Software License Agreement is displayed. If you agree to its terms, you can continue the installation.
- 7 The default installation location is a folder in the Applications folder on your system disk. To accept the default, click **Continue**. To change the location, click **Choose Folder** and then navigate to the desired location.

Note When upgrading an existing installation, always install your MathWorks products in a new installation folder. Do not install MathWorks products over any previous released version.

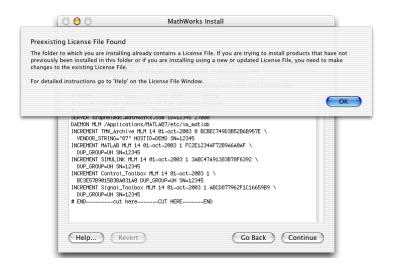
Your installation directory name cannot contain spaces, the @ character, or the \$ character. Also, you cannot have a directory named private as part of the installation path. To create this directory in this location on your system, you must have administrator privileges. For information on setting privileges, see Macintosh Help (**Command+?** from the desktop).

000	MathWorks Install
Install Loc	ation
instan LOC	Installation will occur in "MATLAB704" in the folder "Applications" on
101	the disk "Mac Hard Drive".
	To choose a different folder, click Choose Folder.
Choose	Folder
Choose	Tolder
	Go Back Continue

8 When the **License File** window appears, copy the relevant contents of the License File from the e-mail sent to you from The MathWorks into the **License File** window.



If a License File is already in the installation folder, the License File is displayed in the window and this message appears.



Read the message and then click **OK** to dismiss it.

The two typical instances when you are informed of a preexisting License File are when you want to

- Install a trial (demo) product You previously installed MathWorks products and now want to install a new, trial product.
- Install a newly purchased product You previously installed MathWorks products and now want to install a newly purchased product.

Trial Product. To install trial (demo) products, copy the INCREMENT lines from the e-mail and paste them at the end of the text in the **License File** window. Click **Continue** to proceed with the installation.

New Product. To install a newly purchased product, replace the old License File with the new License File in the **License File** window. Click **Continue** to proceed with the installation.

- **9** After you click **Continue** to proceed with the installation, there are several common scenarios.
 - You made no change to your License File.
 - You modified your License File and there is a problem with it.

- You modified your License File in order to install a trial or newly purchased product.
- a If you made no change to your License File, you see this message. Clicking Proceed Without Changes allows you to install products you did not install before or reinstall previously installed products. Clicking Go Back returns you to the License File window.



b If there is a problem with your License File, you will see a message similar to the following. Click **OK** to return to the **License File** window and correct your License File.



c If you modified your License File to install a trial or newly purchased product, continue with the next step.

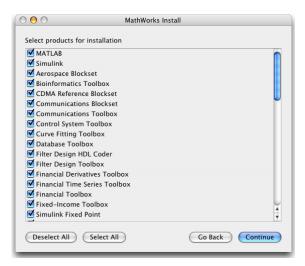
Note Before continuing, you should verify your License File.

Make sure the expiration date, number of keys, and passcode fields in each INCREMENT line match the license information you received from The MathWorks.

Delete INCREMENT lines for products with expired licenses. (This avoids the warning messages that appear in your log file when you start MATLAB.)

Once your License File is correct, you can proceed with the installation.

10 Select the products you want to install from the list of products available for installation and then click **Continue**.



If you are installing products that are on a different CD, the installer will prompt you to insert the CD in your CD-ROM drive at the appropriate time.

Note The Installer might display a message that states one or more of your licensed products are not available on this CD, but are available at the MathWorks Web site, www.mathworks.com. To obtain products that have been released since this installation CD was produced, visit the MathWorks Web site and download them.

11 The license manager must be running before you can start MATLAB. The installation process installs the license manager. The license manager will automatically start at system startup unless you change the default. To accept the defaults, click **Install**. To change the defaults, click **Customize License Manager Installation**.

Note You do not need the license manager running if everything you are installing is a demo. This is not the same as adding a demo product to an existing, nondemo license.

0 🖯 0	MathWorks Install
License Manager	
	ts require a License Manager. The License Manager will be installed as part The License Manager will start at system start up with the user name
Customize Lice	nse Manager Installation
	Go Back Install

12 If you choose to customize the license manager, you can

a Choose whether or not to install the license manager. You might not want to install it if

- Everything you are installing is a demo. This is not the same as adding a demo product to an existing, nondemo license.
- This version of the license manager is already installed.
- You have a concurrent license and you are configured as a client.
- **b** Choose whether to start the license manager at startup time. You might not want to start it if you prefer to start the license manager manually. See "Start the License Manager" on page 1-27 for more information.
- c Change the username associated with the license manager.

	● Yes ○ No
tart the License Manager at tart up time	• Yes No
hange the user name associat User Name: login name	ed with the License Manager
	Cancel 0

After you customize the license manager, click **OK** to return to the **License Manager** window and then click **Install** to continue the installation.

13 When the installation successfully completes, the installer displays the **Installation Complete** dialog box. This dialog box gives you options for accessing MATLAB. Check your desired options and click **Finish** to complete the installation.



14 Drag the CD icon to the trash and remove the CD from the CD-ROM drive.

Starting MATLAB

To start MATLAB, you need

- X11 for Mac OS X installed
- License manager running

If you installed your MathWorks products and accepted the defaults for the license manager, the license manager automatically starts at system startup. If you choose to run the license manager manually, see "Starting the License Manager at Startup" on page 1-22.

To start MATLAB, locate the MATLAB icon on the desktop or Dock and double-click it.

Custom Installation Tasks

This section contains additional information for users who need to customize some of their installation tasks.

- "Installing MATLAB on a Client System" on page 1-19
- "Creating Symbolic Links to MATLAB" on page 1-19
- "Setting Up Network Named User Licensing" on page 1-20
- "Using the License Manager" on page 1-22

To perform many of these tasks, it is helpful to have an understanding of UNIX.

Installing MATLAB on a Client System

If you need to set up a MATLAB network installation, you can do it in several ways. Typically, you install MATLAB and the license manager on a server and users access MATLAB over the network. You can, however, also install MATLAB locally on users' systems. In this configuration, the local installations, or *clients*, need to access the server only to check out a license key when MATLAB starts. For more information on setting up MATLAB on a network, see "Installing MATLAB on a Client System" in the Installation Guide for UNIX.

Creating Symbolic Links to MATLAB

Root status is required to install symbolic links in the default location (/usr/bin) that effectively add MATLAB to your users' paths. The following section describes an alternate way to create symbolic links.

Putting MATLAB on the Path

You must have MATLAB on your path if you want to start MATLAB by just typing matlab at the UNIX prompt. If you do not have MATLAB on the path, you will need to type the full MATLAB pathname each time to run the program from the prompt. To put MATLAB on the path, you can add a symbolic link to MATLAB in a directory that is already on your path. For example, on a stand-alone, single-user machine, you can use /usr/bin.

You can add the symbolic link at the UNIX prompt by entering

ln -s \$MATLAB/bin/matlab

where \$MATLAB/bin/matlab is the full path to the MATLAB program. You must execute this command in a directory that is currently on the path, for example, /usr/bin. (To add mex and mbuild to the path, you must repeat the process.)

For information on adding symbolic links on multiuser machines, see the Installation Guide for UNIX.

Note If you add symbolic links, you might need to rehash the UNIX path. When the MATLAB installation process is complete, type rehash at the prompt.

Setting Up Network Named User Licensing

Network Named User licensing is required if you need to control which users can access particular products.

If you have a Network Named User license, you might need to

- Check the FLEXIm license options file after your installation is complete to make sure all licensed users are included.
- Check that the DAEMON line in your License File includes the options file specification options=\$MATLAB/etc/MLM.opt, where \$MATLAB is your MATLAB installation directory.

Note Do not confuse your License File with your options file. The License File contains the encrypted passcodes for each product you are licensed to install and run. The options file is a text file that contains license manager options statements, such as INCLUDE, EXCLUDE, and GROUP lines.

The Options File

The installer creates the options file \$MATLAB/etc/MLM.opt as part of the installation process. The installer puts in the options file an INCLUDE line for each product you are licensed to install and run. By default, the installer puts the username of the person who performed the install in these INCLUDE lines. If you performed your own installation, the options file might not need editing. However, if you performed the installation for another user, or if you had root privileges when you performed the installation, you will need to edit this options file.

For example, if your username is sysadmin, the options file would look like this.

INCLUDE MATLAB USER sysadmin INCLUDE Signal_Toolbox USER sysadmin INCLUDE Optimization Toolbox USER sysadmin

You must replace sysadmin in these INCLUDE statements with the usernames of the licensed users. If multiple users are licensed for the same product, you must create a separate INCLUDE line for each user or use the FLEXIm GROUP syntax. (The number of users must not exceed the number of license keys available for that product.) This example shows both methods.

GROUP matlab_users tom judy mike jean brad GROUP signal_users tom mike brad INCLUDE MATLAB GROUP matlab_users INCLUDE Signal_Toolbox GROUP signal_users INCLUDE Optimization_Toolbox USER mike INCLUDE Optimization_Toolbox USER jean

Using the License Manager

The installation process automatically configures the license manager to start when you start your machine. This section explains how to

- Manually install the script that starts the license manager automatically at startup
- Troubleshoot the license manager
- Disable the license manager at startup
- Reanable the license manager at startup
- Use the license manager with dynamic hostnames

Starting the License Manager at Startup

Note If you accepted the defaults when you installed your MathWorks products, the script that automatically starts the license manager was installed. This section is provided for those users who require additional information about the script.

The folder MATLABLmgr in \$MATLAB/etc automatically starts the license manager when you start your machine. By installing and configuring this folder, you do not have to manually start the license manager prior to starting MATLAB.

Note If you installed your MATLAB products using the installation defaults, \$MATLAB, which represents the directory where your MATLAB products are installed, is /Applications/MATLAB704.

You must be an administrator to install this startup folder:

- 1 Navigate to the top-level /Library folder.
- 2 Create a folder within /Library called StartupItems, if it does not already exist.

- 3 Copy the \$MATLAB/etc/MATLABLmgr folder into the StartupItems folder.
- **4** Run the Terminal application (/Applications/Utilities) and in the **Terminal** window enter the commands

```
cd /Library/StartupItems/MATLABLmgr
./config_lm.sh
```

5 The script runs and asks you to enter the directory where your MathWorks products are installed, that is, the MATLAB root directory. For example, if your MATLAB products are installed in /Applications/MATLAB704, you would enter

/Applications/MATLAB704

- **6** The script then asks for your username, and defaults to the results of the whoami command. Accept the default or enter a different username.
- 7 When the script finishes, reboot your machine.

During bootup, the message Starting MATLAB License Manager should appear on the screen. If you have difficulty starting the license manager, see the next section, "Troubleshooting the License Manager" on page 1-24 for more information.

When you installed MATLAB, you had the opportunity to customize the license manager. Another method for starting the license manager at startup involves rerunning the installation process and customizing the license manager:

- 1 Double-click the InstallForMacOSX icon to begin the installation.
- **2** Proceed as usual through the installation steps.
- **3** When you get to the **Select Products for Installation** window, click **Deselect All**, and then click **Continue**.
- **4** On the License Manager window, click Customize License Manager Installation and then click Yes next to Start the License Manager at start up time.

5 Continue through the remainder of the installation as described earlier in this chapter.

Troubleshooting the License Manager

License Manager Startup Problem. If the license manager does not start during bootup, you should try to start it manually.

To start the license manager manually,

- **1** Run the Terminal application (/Applications/Utilities).
- 2 At the command prompt in the **Terminal** window, enter
 - cd /Applications/MATLAB704/etc
- **3** To start the license manager, enter
 - ./lmstart

If the license manager fails to start using the manual process, it might be because of a known problem concerning the license manager and dynamic hostnames. "Using the License Manager with Dynamic Hostnames" on page 1-26 provides more information on this issue.

License Manager Errors. If you receive one of the following errors when trying to start the license manager, you should apply the changes that are described in "Using the License Manager with Dynamic Hostnames" on page 1-26.

FATAL MATLAB Error: License Manager Error -95.

or

Checking license file for local hostname and local hostid . . .

Taking down any existing license manager daemons . . .

No license manager daemons running . . .

```
Starting license manager . . .
Debug logfile = /var/tmp/lm_TMW.log
Waiting 300 secs for MATLAB vendor daemon to come up . . .
```

or

```
Cannot find SERVER hostname in network database (-14,7)
```

Disabling the License Manager

If you do not want the license manager to start automatically at startup, you can disable it. To disable the MATLABLmgr script,

- 1 From the Finder, choose Go To Folder from the Go menu.
- 2 In the Go to the folder field in the Go To Folder dialog, enter

/Library/StartupItems/MATLABLmgr

and click **Go**. A window titled **MATLABLmgr** appears, containing several files.

3 Rename the file StartupParameters.plist to StartupParameters_disabled.plist.

Reenabling the License Manager

You can reenable the license manager to start at startup by following steps 1 to 3 above and renaming StartupParameters_disabled.plist back to StartupParameters.plist in step 3.

Using the License Manager with Dynamic Hostnames

OS X 10.3.x Systems. Typically, dynamic hostnames are used with computers that are used both on and off a network, such as a laptop. To get the license manager to start successfully on OS X 10.3.x systems with dynamic hostnames, you will need to use your Rendezvous hostname in the license.dat file. The Rendezvous hostname is the hostname that is given to the computer when it is off the network:

- **1** Reboot your computer while disconnected from the network.
- 2 Run the Terminal application (/Applications/Utilities) and enter

hostname

The output of the hostname command is your Rendezvous hostname. You will need it in the next step, so record it.

3 Open your license.dat file in /Applications/MATLAB704/etc using the TextEdit application and edit the SERVER line to read

SERVER <your_rendezvous_name> ID=<license_number> 27000

where

<your_rendezvous_name> is the Rendezvous hostname from step 2.

4 Save the license.dat file as plain text and exit TextEdit.

You should now be able to start the license manager on or off the network.

Starting MATLAB Manually

If necessary, you can manually execute the steps required to start MATLAB.

- Start X11 for Mac OS X
- Start the license manager
- Run MATLAB

Start X11 for Mac OS X

To start X11 for Mac OS X, locate the X11 for Mac OS X icon and double-click it.

Start the License Manager

The license manager must be running for you to start MATLAB. If the license manager daemons are not running, start them by executing the lmstart script (located in the \$MATLAB/etc directory).

```
$MATLAB/etc/lmstart
```

Note Any time you make changes to the license.dat file, you must restart the license manager daemons by running lmstart. The lmstart script stops any currently running daemons and starts new ones.

Run MATLAB

Using Symbolic Links

If you set up symbolic links or you added MATLAB to the path, you can run MATLAB by entering at the command prompt

matlab

Using Full Pathname

If you did not set up symbolic links to MATLAB, you can run MATLAB from any directory by typing the full pathname to the executable program. For example, if the MATLAB executable (matlab) is located in /Users/jsmith/MATLAB704/bin, and you are in the /Documents directory, you can run MATLAB by entering

/Users/jsmith/MATLAB704/bin/matlab

Using Relative Pathname

You can also run MATLAB by entering the relative path to the MATLAB executable. For example, if you are in the MATLAB704 directory, you can enter

bin/matlab

If you are in the actual directory where the executable is located, you must enter

./matlab

Printing

Printers must be added to the Printer Setup Utility in the /Applications/Utilities directory for MATLAB to recognize them. The MATLAB print command uses lpr like other UNIX systems. MATLAB uses the Macintosh default printer as set in the Printer Setup Utility if you do not use -P<printer>. For example, to print the current figure to printer trinity, you can use

print -Ptrinity

To set up a printer, open the Printer Setup Utility in /Applications/Utilities. Click Add Printer. Refer to Macintosh Help (Command+?) for additional information.

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Removing (Uninstalling) a MATLAB Installation

To remove a MATLAB installation, you need to remove MATLAB and its related products. Depending on where these components are located, you might need administrator privileges to remove them. Make sure to exit MATLAB and stop the license manager before removing a MATLAB installation. You can use the 1mdown command to stop the license manager. See "License Manager Tools" in the Installation Guide for UNIX for information about the 1mdown command.

Remove MATLAB

Locate the folder that contains MATLAB and its related products. If you followed the installation process, the folder is named MATLAB704. Drag the MATLAB704 folder to the trash and then choose **Empty Trash** from the **Finder** menu.

Remove the License Manager

- 1 From the Finder, choose Go To Folder from the Go menu.
- 2 In the Go to the folder field in the Go To Folder dialog, enter

/Library/StartupItems/MATLABLmgr

and click **Go**. A window titled **MATLABLmgr** appears, containing several files.

3 Drag the MATLABLmgr folder to the trash and then choose **Empty Trash** from the **Finder** menu.

Where to Go from Here

This chapter provided the basics for getting your MathWorks products installed and running on individual Macintosh systems. Other installation tasks include

- Specifying print options
- Specifying documentation viewing options
- Reducing startup time with toolbox path caching
- Specifying MATLAB startup options
- Configuring MATLAB products
- Installing additional products
- Managing your licenses

All of these are fully described in the Installation Guide for UNIX documentation.

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