mathsoft™
mathcad®11

Mathcad 11 Enterprise Edition

Installation and License Management Guide

Mathsoft Engineering & Education, Inc.

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Installation and License Management Guide

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Contacting Mathsoft

U.S. and Canada

Web

- Web: http://www.mathsoft.com/support

Email

- Technical support: support@mathsoft.com
- FLEX*lm* License Requests only: license@mathsoft.com

Phone

- Technical Support: 617-444-8102
- Sales: 800-MATHCAD
- Sales: 617-628-4223

Fax

- Technical Support: 617-444-8101

International

If you reside outside the US and Canada, please contact your local authorized Mathcad distributor for technical support. Their contact details can be found at: http://www.mathcad.com/buy/International_Contacts.asp.

If you do not have web access you can contact Mathsoft International direct for assistance at:

- E-mail: help@Mathsoft.co.uk
- Fax: +44 (0)1276 475552
- Telephone: +44 (0)1276 450850

How to Read This Manual

The *Mathcad 11 Installation and License Management Guide* is written primarily for the system administrator — the person who will be responsible for installing and updating Mathcad, and administering the FLEX*lm* server (where appropriate) that serves Mathcad licenses. However, some content presented in this manual may be of use to end-users of Mathcad.

For the System Administrator

If you will be administering an installation of Mathcad, we recommend you read the following sections:

Before You Install	An introduction to the concepts covered and terminology used in this manual (see page 3.)
Installing Mathcad 11 Enterprise Edition	Instructions for performing an installation of Mathcad 11 Enterprise Edition (see page 7.)
License Management	Instructions for installing and configuring a FLEX*lm* license server (see page 14.)
Installing Internet Explorer and Acrobat Reader	Instructions for installing Internet Explorer 6 and Acrobat Reader 5, included on the Mathcad 11 Enterprise Edition CD (see page 25.)

For the End User

If you are a Mathcad user, the following sections may be of interest to you:

Before You Install	An introduction to the concepts covered and terminology used in this manual (see page 3.)
Borrowing FLEXlm Licenses	Using Mathcad while disconnected from a FLEX*lm* server (see page 23.)
Installing Internet Explorer and Acrobat Reader	Instructions for installing Internet Explorer 6 and Acrobat Reader 5, included on the Mathcad 11 Enterprise Edition CD (see page 25.)

Before You Install

CD Contents

The Mathcad 11 Enterprise Edition CD contains the following software:

- **The installation program for Mathcad 11 Enterprise Edition** (performing both server and local installations), Mathcad program, associated online Help, Resources worksheets, and electronic (PDF) versions of both the *Mathcad User's Guide* and this *Installation and License Management Guide*.

- **The installation program for FLEX*lm***. The installation package for FLEX*lm* contains both FLEX*lm* license management software from GLOBE*trotter* Software and a vendor daemon created by Mathsoft to administer Mathcad licenses. (See "Vendor Daemon" on page 6.)

- **The installation program for Internet Explorer 6.0**. Internet Explorer, version 5.5 or higher, is required for full functionality of the Help system, accessing HTML content within the Resources window, and the opening and saving of Web-based files. Internet Explorer does not need to be your default browser to take advantage of this functionality.

- **The installation program for Adobe Acrobat Reader 5.0**. Adobe Acrobat Reader, version 5.0 or higher, is required to view PDF versions of installed Mathcad documentation.

Installation Types

Installation terminology has changed for Mathcad 11 Enterprise Edition. The *concurrent installation* is now referred to as a **server-based shared installation**, and the *non-concurrent installation* is now called a **server-based local installation**. Additionally, you can now install Mathcad 11 Enterprise Edition directly from the CD to a workstation, using either a **CD-based local installation using a license server** or a **CD-based local installation using a local license file**. A brief description of each install type is as follows:

1. **Server-based Shared Installation**. Mathcad is installed to a file server. Workstation installations point to this server; only user-specific pieces of Mathcad, such as custom spelling dictionaries, are stored on the workstation itself. Usage is monitored with FLEX*lm* licenses administered from a license server.

2. **Server-based Local Installation**. An install image of Mathcad is created on a file server. Full copies of Mathcad are installed onto each workstation from this image. Usage is monitored with FLEX*lm* licenses administered from a license server.

3. **CD-based Local Installation Using a License Server**. Mathcad is installed directly onto a workstation from the Mathcad CD. Usage is monitored with FLEX*lm* licenses administered from a license server.

4. **CD-based Local Installation Using a Local License File**. Mathcad is installed directly onto a workstation from the Mathcad CD. Usage is monitored using a unique node-locked license file supplied by Mathsoft and saved to the **LICENSES** directory of the Mathcad installation.

License Management

Mathcad 11 Enterprise Edition uses a license manager program called FLEX*lm*, provided by GLOBE*trotter* Software, Inc., to control access to the program. Additionally, any Extension Pack for which you have purchased a license, such as the *Image Processing, Signal Processing*, and *Wavelets Extension Packs*, are also license-managed with FLEX*lm*.

Mathcad 11 Enterprise Edition is sold with either floating or node-locked licenses. Floating licenses can be used by any workstation on your network. Node-locked licenses can only be used on specified workstations.

Mathcad License Files

In order to use Mathcad 11 Enterprise Edition once it has been installed, you will need the appropriate license file(s). The files you need are dependent upon how you decide to install Mathcad and monitor its usage.

Upon receiving your order for Mathcad 11 Enterprise Edition, Mathsoft will send you an email containing the licensing information you need to run the software. This email will also contain the files necessary for FLEX*lm* to serve your license. In all cases, you will receive a license file (`license.dat`). If you purchased a **node-locked** license for use with a license server, you will receive an options file template (`mathsoft.opt`) as well. You will need to edit the options file template in accordance with your network configuration. See the section "Editing the FLEXlm Options File" on page 21 for more information.

Multiple Versions of Mathcad

Multiple versions of Mathcad are no longer allowed on a workstation. If you are upgrading from a previous version of Mathcad, you must uninstall any previous versions on your system before installing Mathcad 11 Enterprise Edition.

Order of Installation

Before installing Mathcad onto a workstation, you should install and configure FLEX*lm* to serve Mathcad licenses, unless you will be performing *only* **CD-based Local Installations using a local license file**. The last step of the Mathcad 11 Enterprise Edition installation process involves "pointing" Mathcad to a license source; in the case of licenses administered by a FLEX*lm* server, you may want the server available on the network before installing Mathcad, in order to access it during this step.

Product Code

The product code is a *22* character-long string of letters and numbers, and is required to install your Mathcad 11 Enterprise Edition installation. This code is printed on the back of the Mathcad 11 Enterprise Edition CD envelope.

If you are creating a server-based installation of Mathcad, the product code will be automatically passed through to the workstation installation. All seats will carry the same product code. If you are performing CD-based installations, you must use the same product code for each installation.

System Requirements

The System Requirements for your installation of Mathcad will vary depending on how you opt to install the software.

Server Requirements

Mathcad Requirements

- PC with Pentium/Celeron 233 MHz. 300 MHz or higher recommended
- Windows 98, SE, ME, NT® 4.0 SP6, 2000 SP2, XP or higher (NT, 2000, or XP recommended)
- At least 150 MB of hard disk space
- CD-ROM or DVD drive
- SVGA or higher graphics card and monitor
- Mouse or compatible pointing device

FLEX*lm* Requirements

- Windows 95, 98, ME, NT®, 2000, XP or higher (NT, 2000, or XP recommended)
- 16 MB free memory (for license management processes)
- 9 MB of hard disk space (not including log file)
- CD-ROM or DVD drive
- SVGA or higher graphics card and monitor
- Mouse or compatible pointing device

Under regular usage, license administration places little load on your server or network. The FLEX*lm* license daemon and Mathsoft vendor daemon both require approximately 3 MB of memory when running. Additionally, aside from license check-out and check-in, and periodic "heartbeats" sent out to verify the continued presence of the license server, Mathcad generates no network traffic to the FLEX*lm* server when running. However, as more workstations access the license server, network traffic may become an issue, and your log file will grow more quickly.

Workstation Requirements

- PC with Pentium/Celeron 233 MHz. 300 MHz or higher recommended
- Windows 98 SE, ME, NT® 4.0 SP6, 2000 SP2, XP or higher
- Minimum 96 MB of RAM. 256 MB or higher recommended
- At least 150 MB of hard disk space (5 MB for workstations utilizing a Server-based Shared Installation.)
- CD-ROM or DVD drive (not required for server-based installations.)
- SVGA or higher graphics card and monitor
- Mouse or compatible pointing device
- Internet Explorer version 5.5 or higher

Upgrading from a Previous Version of Mathcad

Uninstalling concurrent installations of earlier versions of Mathcad

If you are upgrading from a concurrent installation of an earlier version of Mathcad, you must first uninstall Mathcad from each workstation. You do not need to uninstall the previous version of Mathcad from your server, but if you elect to do so, you must uninstall from all workstations *before* deleting the server directory, as the workstation uninstall requires files on the server in order to perform properly.

Upgrading from Mathcad 2001i

If you are upgrading a network installation of Mathcad 2001i, and have already installed the version of FLEX*lm* provided to you on the Mathcad 2001i CD, you do *not* need to install FLEX*lm* from your Mathcad 11 Enterprise Edition CD. The versions of FLEX*lm* and the Mathsoft vendor daemon provided with Mathcad 2001i are compatible with Mathcad 11 Enterprise Edition.

Vendor Daemon

In addition to a license file, Mathcad also requires that you install its **vendor daemon** to properly serve Mathcad licenses. This vendor daemon is the software that actually dispenses a license to your machine when you start Mathcad. Without it, Mathcad cannot check out a license at start up.

Installing Mathcad 11 Enterprise Edition

The Mathcad 11 Enterprise Edition installation process first asks you a series of questions. Your answers to these questions will determine how you install Mathcad.

When you place the Mathcad 11 Enterprise Edition CD into a CD-ROM drive, the Installation Wizard should automatically start. If it does not:

1. Click **Start** ⇒ **Run** in Windows and browse to your CD-ROM drive.
2. Select the file **SETUP.EXE**.
3. Click "Open" in the **Browse** dialog, then "OK" in the **Run** dialog.

At this point, the Installation Wizard should start.

In the main installation window (see Figure 1), click the Mathcad 11 button to install Mathcad.
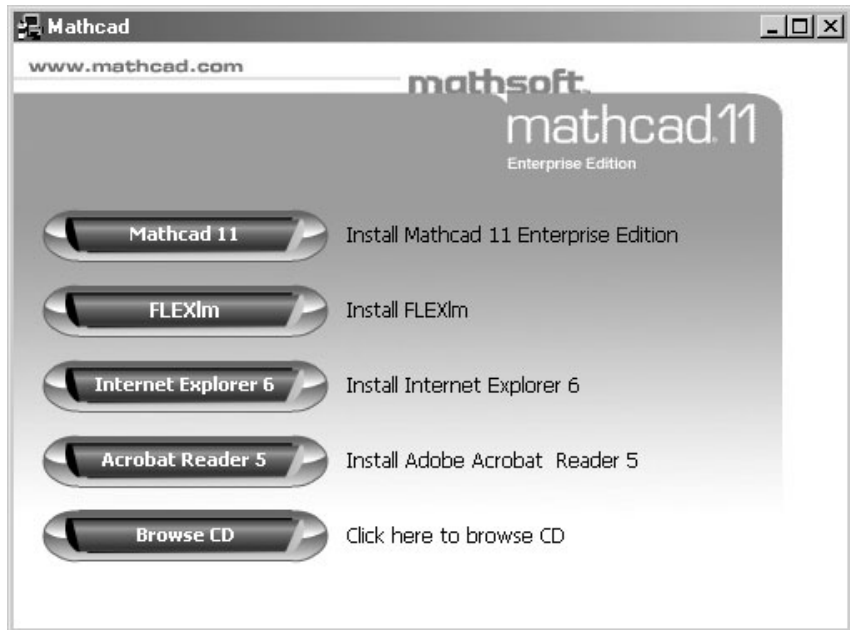
Figure 1: The main page *of the Installation Wizard lists the applications available for installation from your Mathcad 11 Enterprise Edition CD.*

Configuring the Installation Wizard

In the first screen of the Installation Wizard, you will be prompted to enter your **Product Code**. Entering the Product Code correctly will display a green checkmark to the right of the Product Code, and enable the "Next" button, allowing you to click it and proceed to the **Mathcad Install Type** page.

Mathcad Install Type

The *Mathcad Install Type* page has five choices. If you know the installation you want, select it from among the first four choices. If you do not know which installation type best fits your needs, select "Guide Me," and the Install Wizard will ask you a series of up to three questions that will guide you to the appropriate installation.

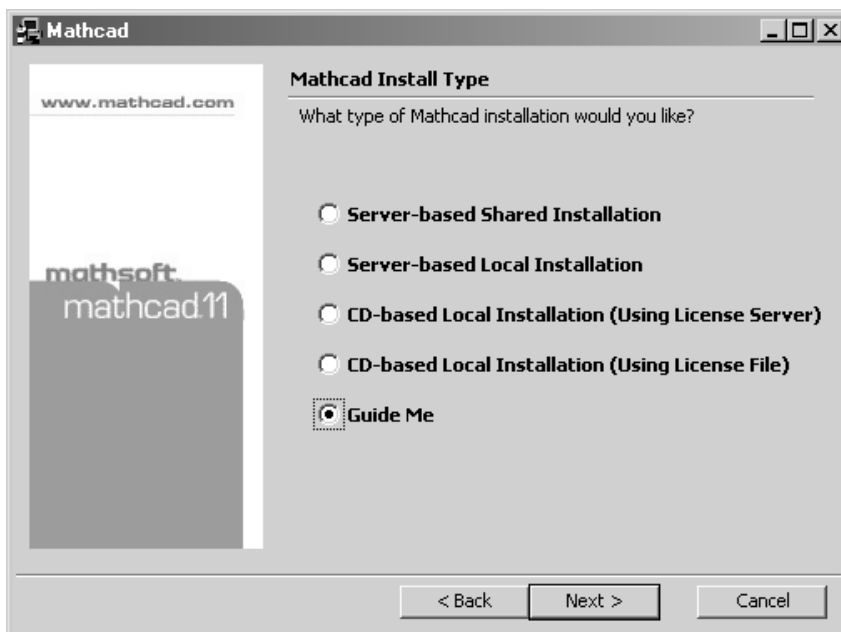*Figure 2: The* Mathcad Install Type *page allows you to choose your installation type from four possible choices. If you do not know which installation type you want, selecting "Guide Me" will take you through a series of questions, configuring the installation wizard to fit your needs.*

Once you have made your selection, click "Next." If you have chosen an installation type, the wizard will bring you to the *Install Mathcad* page. Otherwise, the wizard will begin by asking you the first configuration question.

Guide Me

Mathcad Source Installation

When you click "Next," the Installation Wizard will first ask how you want users to access Mathcad. The available options are:

•   Locating Mathcad on each workstation.

•   Locating Mathcad on a shared network server.

Choosing to use a shared network server will configure the Installation Wizard for a **Server-based Shared Installation**. If you opt to install Mathcad to individual workstations, the wizard will proceed on to the next question, concerning FLEX*lm* usage.

Note The Server-based Shared Installation requires the use of a FLEX*lm* server to administer Mathcad licenses.

FLEX*lm* Server

If you opt to install Mathcad to individual workstations, the Installation Wizard will then ask how you want to monitor usage of Mathcad. The two options available are:

- Administering licenses from a FLEX*lm* license server.
- Administering licenses with a license file on this PC, rather than a FLEX*lm* license server.

Choosing to not connect to a FLEX*lm* server configures the Installation Wizard for a **CD-based Local Installation using a local license file**. If you opt to use a FLEX*lm* server, the wizard will proceed to the last question, concerning how you will deploy Mathcad.

Mathcad Deployment Method

If you have opted to use a FLEX*lm* server to administer your Mathcad licenses, the Installation Wizard will ask you one last question, concerning how you want to install Mathcad:

- From the CD.
- From a shared network server.

Choosing to install from the CD will configure the Installation Wizard for a **CD-based Local Installation using a license server**. Choosing to install from a shared network server will configure the Installation Wizard for a **Server-based Local Installation**.

Once you confirm that you have selected the proper installation type, click "Install" to begin the second phase of the installation (see Figure 3.)
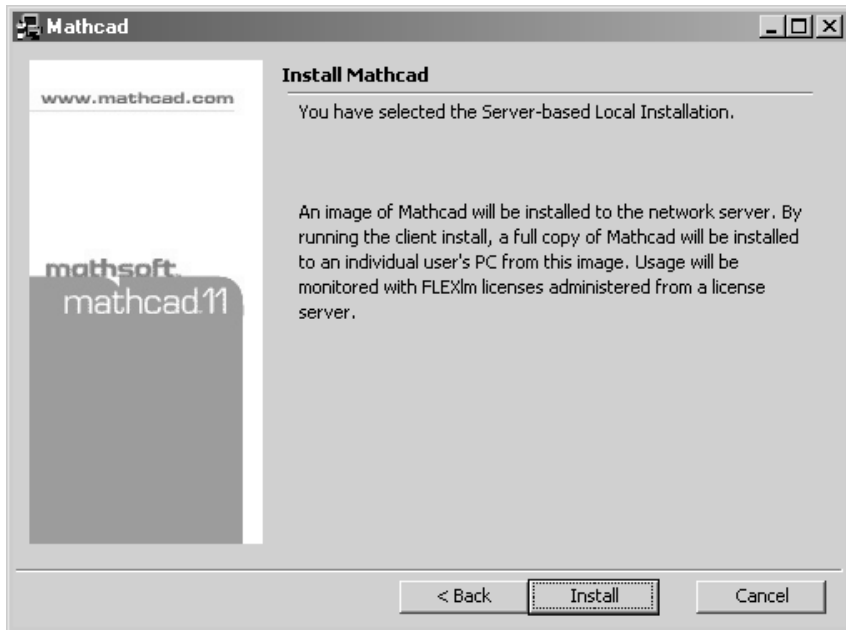
Figure 3: The Installation Type Summary *page of the Installation Wizard briefly describes the installation type you have selected; in this example, a* Server-based Local Installation *will be performed. To change the selected installation type, click "Back" and re-answer the installation type questions.*

If you have chosen either the **Server-based Shared Installation** or **Server-based Local Installation**, proceed to the section "Installing Mathcad to a Server" on page 10. If you have chosen either the **CD-based Local Installation using a license server** or the **CD-based Local Installation using a local license file**, proceed to the section "Installing Mathcad to a Workstation" on page 11.

Installing Mathcad to a Server

If you selected the **Server-based Shared Installation** or **Server-based Local Installation** during the configuration process, follow these steps to begin the installation of Mathcad.

You do not need to uninstall Mathcad from your server before installing Mathcad 11 Enterprise Edition. We recommend that you install Mathcad 11 to another directory, and confirm that all previous versions of Mathcad have been removed from every workstation before removing an older installation of Mathcad from the server.

1. On the **Welcome** page in the Wizard, click "Next."
2. Read the License Agreement, select "I accept the terms in the license agreement," and click "Next." If you do *not* agree to the terms, the wizard will not enable this button, and you will *not* be allowed to proceed with the installation.

3. Specify the location to which you want to install Mathcad. You can either enter the name directly into the dialog, or click "Change…" to browse to the directory you want.

Tip For users of a **Server-based Shared Installation of Mathcad**, changing the location of the Mathcad program files after you have performed a workstation installation — such as by moving the directory or changing the server name — will cause problems when users attempt to run Mathcad. For this reason, we recommend that you use a destination referred to by a mapped drive letter, rather than a UNC path, when specifying the installation location for Mathcad.

Since you will be running the workstation installation program from the directory you specify in this step, make sure that this directory will be visible on your workstations when performing the workstation installation.

4. Click "Install" to install Mathcad to your server.

5. Click "Finish" to exit the server install.

At this point, Mathcad has been installed to the server. Now, you must install to every workstation that will access this server installation.

Installing Mathcad to a Workstation

The Mathcad 11 Enterprise Edition installation program will not install Mathcad if a previous version is detected on your workstation during installation. If you have not already uninstalled all previous versions of Mathcad from the workstation, you should uninstall them now, before proceeding with the workstation installation.

Note Only persons with administrative privileges can install Mathcad onto a workstation. If you are not listed as an administrator for the workstation onto which you are installing, or are not sure if you have the proper privileges, contact your system administrator.

If you are performing a workstation installation for either the **Server-based Shared Installation** or **Server-based Local Installation**, run **SETUP.EXE** from the directory you created in Step 2 in the section "Installing Mathcad to a Server" on page 10. To do so:

• Open the **Start** menu and click **Run**. In the resulting dialog, click "Browse..." to browse the directory created during the server installation, select the file **SETUP.EXE**, and click "Open." Click "OK."

Once you have completed this step, or if you are installing directly from the CD, perform the following steps:

1. On the **Welcome** page of the Installation Wizard, click "Next."

2. Read the License Agreement, select "I accept the terms in the license agreement," and click "Next." If you do *not* agree to the terms, the wizard will not enable this button, and you will *not* be allowed to proceed with the installation.

3. On the **Customer Information** page, confirm that the **User Name** and **Organization** listed are correct. If you are installing to a workstation running Windows NT, Windows 2000, or Windows XP, decide whether the copy of Mathcad installed onto the workstation should be usable only by the user listed in

User Name ("Only for me"), or for anyone who might use the workstation ("Anyone who uses this computer"). Click "Next."

4. On the **Destination Folder** page, confirm that the given installation destination is correct. If you want to install Mathcad to a different directory, click "Change…", specify the location to which you want to install, and click "OK." Click "Next."

5. On the **Setup Type** page, choose whether you want to perform a **Complete** install, or a **Custom** install to customize which features of Mathcad are installed to the workstation. Click "Next." If you selected the **Complete** install, skip the next step.

6. On the **Custom Setup** page (Figure 4), select which features of Mathcad are to be installed by clicking on the icon next to the feature and selecting an option from the pop-up menu. Once you have finished your selections, click "Next."

Tip	If you are not sure of the free space available on the chosen destination drive, you can click "Space" to display a listing of the free space available on every mapped drive available to the workstation.
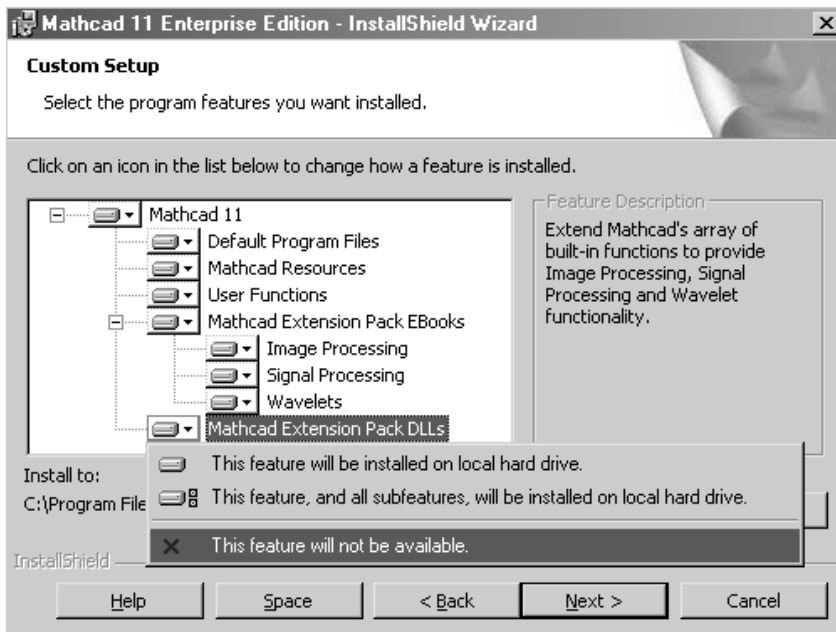
Figure 4: The Custom Setup *page of the Installation Wizard allows you to select which features will be installed. Here, selecting "This feature will not be available" means that the Extension Pack DLLs bundled with Mathcad 11 Enterprise Edition will not be installed.*

Tip	If you have *not* purchased a license for any Extension Pack, you may want to use the **Custom Setup** and set the "Mathcad Extension Pack DLLs" to "This feature will not be available." Doing so will provide a slight increase in start time for Mathcad.

7. Click "Install" to install Mathcad with all of your selections. If you change your mind, click "Back" until you reach the appropriate page in the wizard to edit your choice, and click "Next" until you return to this last page, verifying that any choices along the way have not changed.

8. Once the installation program finishes transferring files to the workstation and creates the Windows Registry entries necessary for Mathcad to run, you will be prompted to locate your license file (see Figure 5). Users selecting a **Server-based Shared Installation**, **Server-based Local Installation**, or **CD-based Local Installation using a license server** of Mathcad 11 Enterprise Edition should enter the name of their FLEX*lm* server. Users selecting a **CD-based Local Installation using a local license file** should click "File" and enter the full path to the local license file, or, if you prefer, click "Browse…," navigate to the local license file, select it, and click "Open." Once you have entered the appropriate information in this dialog, click "OK."
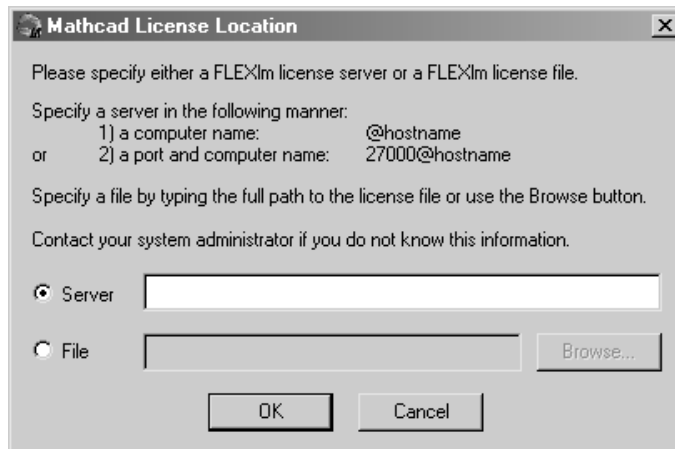

Figure 5: The Mathcad License Location *dialog allows you to specify from where Mathcad will obtain a license when it starts up. Users selecting the* CD-based Local Installation using a local license file *should select "File," and specify the full path to their local license file.*

Note If you are managing your Mathcad license with individual, node-locked license files, rather than a license server, Mathcad will create an extra directory during the workstation installation, called **LICENSES**. We recommend you save the license file you receive from Mathsoft into this directory.

Tip If you have not yet received your local license file, specify the directory to which you intend to save the license file once you receive it and append the filename **license.dat**. When you receive your license file, save it to this directory.

9. Once the Installation Wizard notifies you that it has completed the installation of Mathcad 11 Enterprise Edition, click "Finish" to quit the installation program.

License Management

About License Management

In order to run Mathcad 11 Enterprise Edition, you must install and run FLEX*lm* version 8.1a or later for Windows. If you already use a supported version of FLEX*lm* in your organization, you do not need to use the version that ships with Mathcad, though you will need to install the Mathsoft vendor daemon. You can add your Mathcad license to your current license server.

If you are not running a supported version of FLEX*lm*, you will need to install the version that ships on the Mathcad 11 Enterprise Edition CD.

Note If you have opted for the **CD-based Local Installation with a local license file**, you do not need to install and configure FLEX*lm*. Simply save the license file you receive from Mathsoft to the LICENSES directory of your Mathcad 11 Enterprise Edition installation.

When you start up Mathcad, it searches for an available valid license. If one is available, Mathcad checks it out, allocating it to the user's PC, and opens it for use. If a license is not available, Mathcad notifies the user with an error message and shuts down. In the case of a **CD-based installation using a local license file**, the license resides on the workstation and cannot be transferred to another workstation. For all other installation types that query a FLEX*lm* server, Mathcad must have access to your license server in order to check out a license.

If users wish to access Mathcad while disconnected from your network — for example, on a laptop while out of the office — they can "borrow" a license from the server for a limited amount of time. This borrowed license is stored on the workstation, and as long as the borrowed license is valid, Mathcad will not need to access the license server in order to start up.

Note Borrowing a license may prove ineffective if you select the **Server-based Shared Installation**. Since this installation places the Mathcad executable on a network server rather than the individual workstation, network access is still required to run Mathcad even if the user borrows a license.

Installing FLEX*lm*

FLEX*lm* is available from the main install screen as a separate install. FLEX*lm* should be installed to a server on your network that can be accessed by Mathcad users. Without access to this server, Mathcad 11 Enterprise Edition will not start up.

To install FLEX*lm*:

1. Click the FLEX*lm* button on the main install screen.

2. Click "Next" to bring up the **Choose Destination Location** page of the wizard (see Figure 6.)

3. If necessary, click "Browse" to change the directory to which you will install FLEX*lm*. Once you are satisfied with the destination, click "Next."
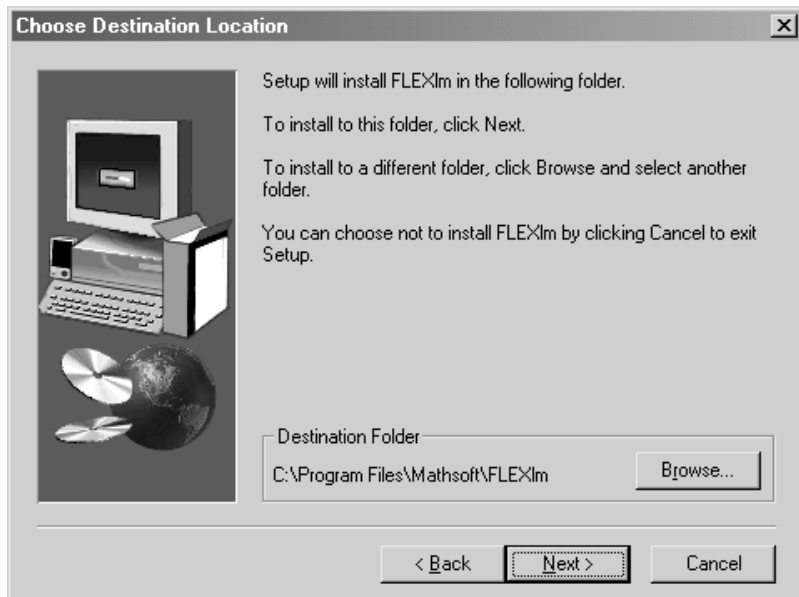

Figure 6: The Choose Destination Location *page of the FLEXlm Installation wizard allows you to specify where you install the FLEXlm administration software.*

4. On the **Setup Type** page, select the installation type you want. If you have never installed FLEX*lm*, or you are currently running a non-Windows version of FLEX*lm* or a Windows version earlier than 8.1a, choose either the "Typical" or "Compact" installation. Click "Next."

Figure 7: On the Setup Type *page, you can choose from among the* Typical*,* Compact*, or* Custom Setup*. For most users, the* Typical *Setup will suffice.*

Note If you already have installed a copy of FLEX*lm* for Windows 8.1a or higher, you can choose the "Custom" installation, click "Next," and deselect "FLEX*lm* Utilities" to install only the Mathsoft vendor daemon (see Figure 8.)
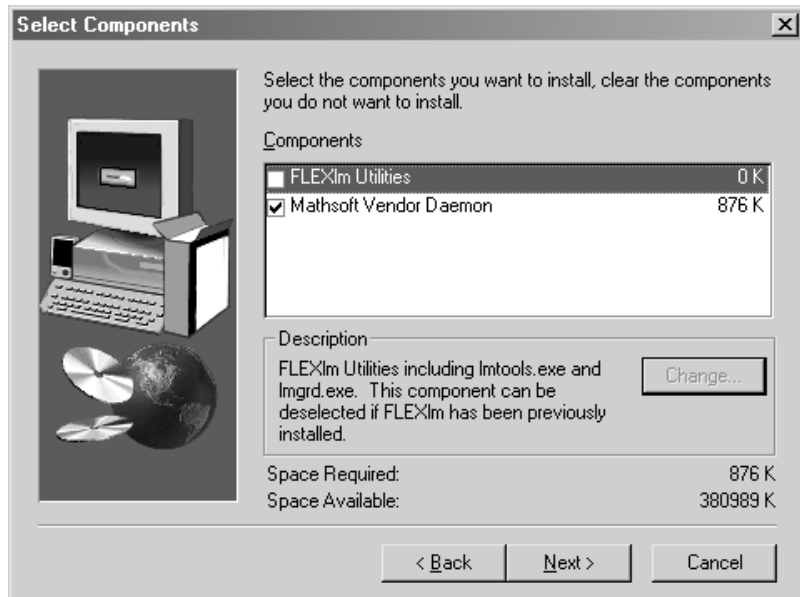
Figure 8: The Select Components *page of the FLEXlm Installation wizard allows you to choose which components are installed. The FLEXlm Utilities can be deselected if you already have FLEXlm 8.1a for Windows installed on your network and will use it to serve Mathcad licenses (license server installations only).*

5. Select the Program folder in which FLEX*lm* icons will be listed in the **Start** menu. Click "Next."

6. Verify that the FLEX*lm* Installation Wizard has properly logged the install options you made. If an option is incorrect, click "Back" until you reach the appropriate page in the wizard, change the option, and click "Next" to return to the **Start Copying** page. When you are satisfied with the options listed, click "Next."

7. Click "Finish" to end the FLEX*lm* install. If you want to launch FLEX*lm* or read the release notes, check the appropriate box(es).

Configuring FLEX*lm*

Once you have installed FLEX*lm*, you will need to configure it so that it properly interacts with Mathcad 11 Enterprise Edition. If your organization already uses FLEX*lm* to manage licenses for another application, read the section "Using FLEX*lm* with Mathcad and Other Applications" on page 22 before proceeding.

To configure FLEX*lm* for serving Mathcad licenses:

1. Create a directory named **LICENSES** within your FLEX*lm* installation directory (referred to as **INSTALLDIR**, in these instructions). Copy your license file — and options file, if you received one — into **LICENSES**.

2. Launch the **FLEX*lm* Utilities** (**lmtools.exe**) from **Programs** ⇒ **Mathsoft Apps** in the **Start** menu.

3. Select **Configuration using Services**, from either the **Mode** menu or the **Service/License File** tab (see Figure 9.)
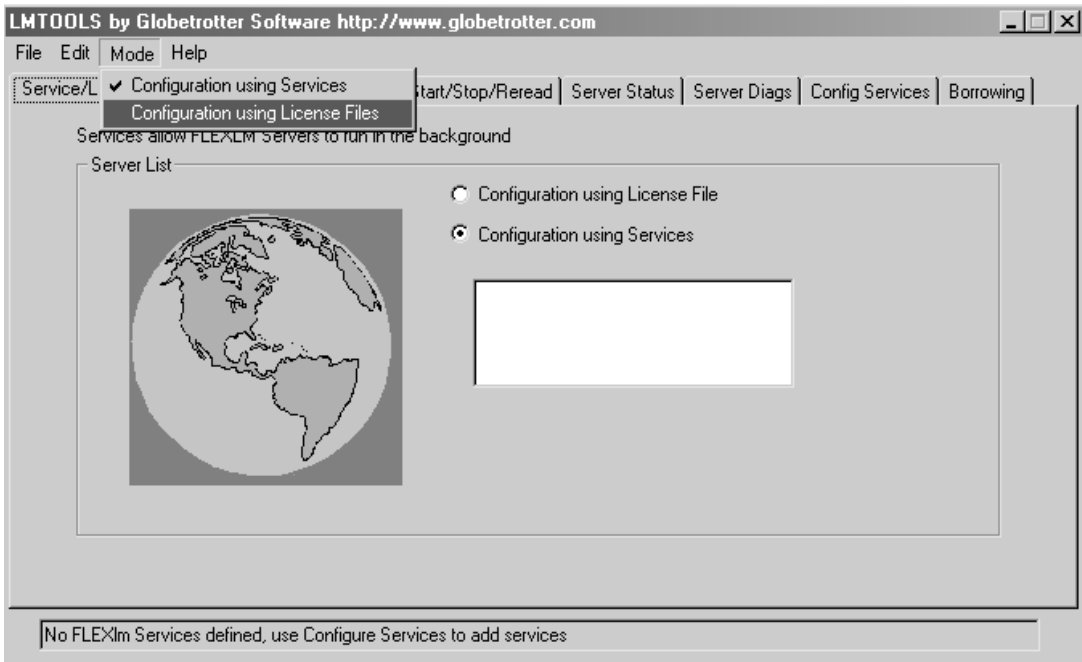

Figure 9: Use either the Mode *menu or the* Service/License File *tab to configure LMTOOLS to use services to serve Mathcad 11 Enterprise Edition licenses.*

4. On the **Config Services** tab (see Figure 10):

- Type **Mathcad 11** in the **Service Name** drop-down box.

- Set the full paths to the FLEX*lm* daemon (**lmgrd.exe**, in **INSTALLDIR**), and your license file (**license.dat**, in **LICENSES**).

- Specify the name and full path for the log file you want FLEX*lm* to create (we recommend naming the file **mathsoft.log**, and saving it in **INSTALLLDIR**).

- Select **Use Services**.

- If you want to run the Mathcad License Manager service automatically at startup, select **Start Service at Power Up**.

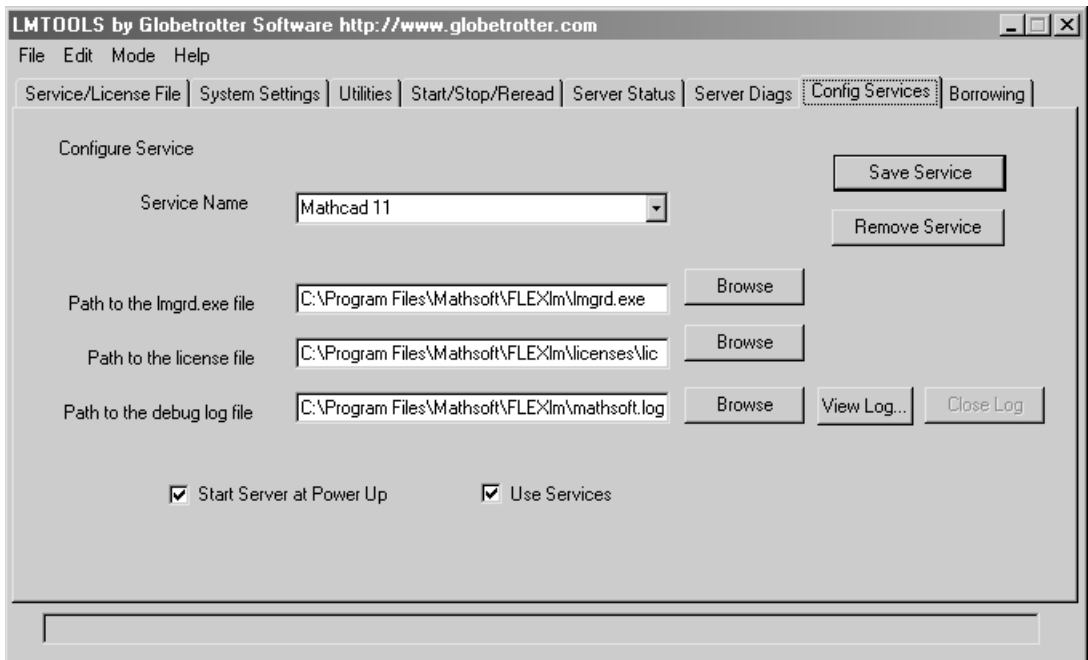- Click the **Save Service** button to save your settings, and click "Yes" in the confirmation dialog box.

Figure 10: The Config Services *tab allows you to specify the FLEXlm daemon, as well as the license and log files used by the "Mathcad 11" service.*

5. On the **Start/Stop/Reread** tab, confirm that the Mathcad service is selected and click **Start Server**.

6. On the **Server Status** tab (see Figure 11), set the **Individual Daemon** to **mathsoft.exe** and the **Server Name** to the name of your license server.
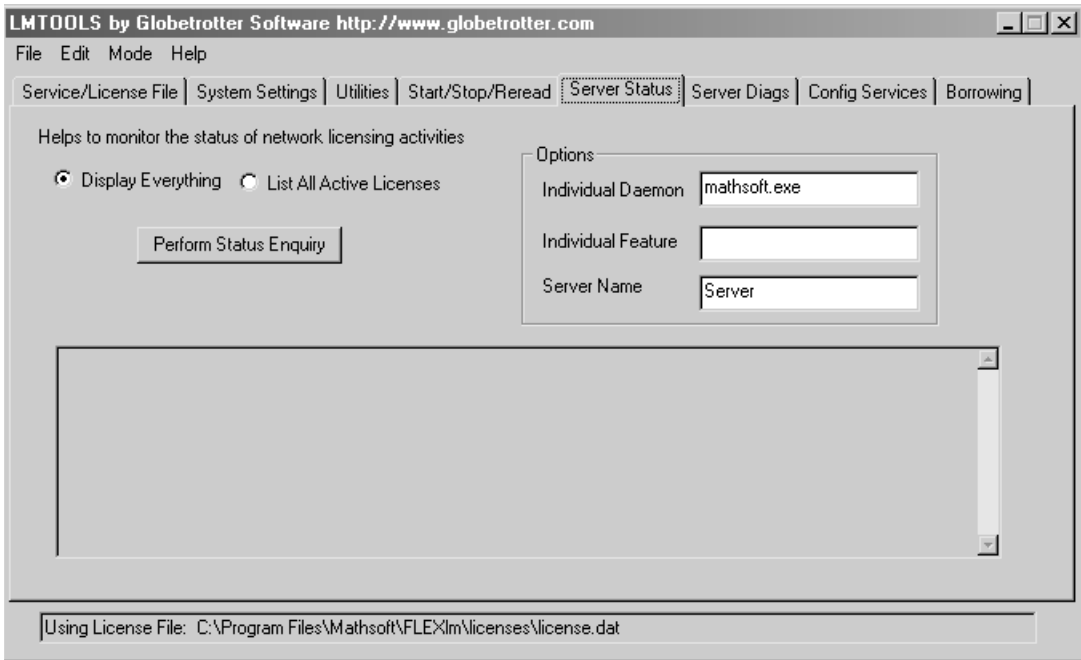

Figure 11: The Server Status *tab allows you to check that FLEXlm is up and running and can read your license file.*

Click **Perform Status Enquiry**. If the service has been configured properly, you should see a status report similar to the example in Figure 12. If your status does not look like this example, verify that you have configured the server properly. Double-check that paths to files have been fully qualified — that is, the path includes the name of the file.

Note "Server" is the name of the license server in this example.

```
--------
Status
--------
Flexible License Manager status on Fri 1/4/2002 14:54

[Detecting lmgrd processes...]
License server status: 27000@Server
     License file(s) on Server: C:\Program
Files\Mathsoft\FLEXlm\licenses\license.dat:

     Server: license server UP (MASTER) v8.0

DAEMONs in configuration file: mathsoft
Vendor daemon status (on Server):

  mathsoft: UP v8.0

Users of features served by mathsoft.exe:
Feature usage info:

Users of Mathcad:  (Total of 20 licenses available)

NOTE: lmstat -i does not give information from the server,
      but only reads the license file.  For this reason,
      lmstat -a is recommended instead.

Feature   Version   # licenses   Expires   Vendor
_____   _____   _____   _____   _____
Mathcad   1.0           20       1-jan-0   mathsoft
```

Figure 12: Example of a FLEXlm status report

Editing the FLEX*lm* Options File

If you purchased a "node-locked" license for Mathcad, an options file template was provided with your purchase; you will need to tailor this file to your particular environment. The options file consists of a series of lines with the following syntax:

```
INCLUDE mathcad HOST hostname
```

To configure the Options file for Mathcad, you would edit it to read:

```
INCLUDE mathcad HOST Client
```

where **Client** is the name of the workstation on which you will use Mathcad. You will need one line for each workstation covered by your license. The workstation name is case-sensitive.

Using FLEX*lm* with Mathcad and Other Applications

If you are already using FLEX*lm* to manage licenses for other software packages, you may not need to use the version that ships with Mathcad 11 Enterprise Edition. If you are already serving licenses with FLEX*lm* version 8.1a or later for Windows, you do not need to install FLEX*lm* — only the Mathsoft vendor daemon (`mathsoft.exe`); see "Installing FLEXlm" on page 15 for instructions on how to install only the vendor daemon. In addition, when configuring FLEX*lm* to serve Mathcad licenses, make sure "Mathcad 11" is selected as the **Service Name** on the **Config Services** tab (see Step 4 on page 19).

Note To prevent name conflicts between Mathcad license files and those for other applications, we recommend that you save your Mathcad license files to a `MATHCAD` directory within your existing license directory.

More Information on FLEX*lm*

More information on installing and configuring FLEX*lm* is available from the following sources:

Mathcad License Management

For general questions regarding MathSoft licensing policies:

`http://www.mathcad.com/buy/License_Management.asp`

MathSoft Technical Support — FLEX*lm* FAQ

For technical questions regarding FLEX*lm* installation and its interaction with Mathcad:

`http://support.mathsoft.com/mcad2001i/FLEXlm.asp`

Mathcad Knowledge Base

For known support issues regarding FLEX*lm* and Mathcad:

`http://support.mathsoft.com/support.htm`

FLEX*lm* End Users Guide

For specific issues with FLEX*lm* functionality, including supported features and troubleshooting tips:

`http://www.globetrotter.com/TOC.htm`

Borrowing FLEXlm Licenses

If you normally access a FLEX*lm* server for a license when you run Mathcad, but will occasionally need to run Mathcad without network access, you can borrow a license from the server for use while disconnected from the network. Licenses can be borrowed for up to 17,520 hours, or approximately 2 years.

Borrowed licenses are removed from the available pool until they expire, regardless of whether the workstation using the borrowed license is running Mathcad. For example, if you have a pool of 25 floating licenses and borrow one, the workstations on your network can only use the remaining 24 licenses, regardless of whether the borrowed license is in use or not. Since FLEX*lm* does not allow you to "return" a borrowed license, we advise that you take special care when setting expiration dates.

Note Borrowing a license may prove ineffective if you installed Mathcad using a **Server-based Shared Installation**. Since this installation places the Mathcad executable on a network server, network access is still required to run Mathcad — even if you borrow a license.

To borrow a license, perform the following steps on the workstation that requires the borrowed license:

1. If you have not already done so, connect to the network hosting the license server.

2. Run the FLEX*lm* Utilities software (**LMTOOLS**). To do so,

    •   Open Windows Explorer and navigate to the FLEX*lm* directory. If you do not know where this directory is, contact your system administrator.

    •   Locate the file **LMTOOLS.EXE**. Double-click the file to launch it.

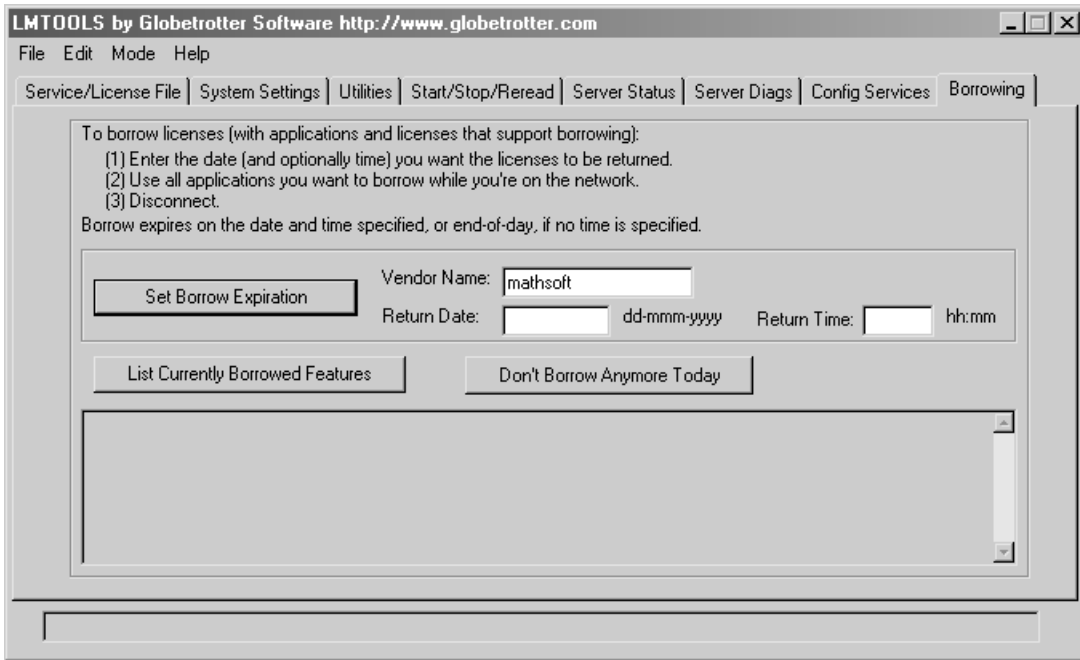3. Go to the **Borrowing** tab (see Figure 13.)

Figure 13: The Borrowing *tab allows you to "check out" a license from your license server for a specified period of time. By doing so, you will not need to access your FLEXlm server to start Mathcad.*

4. In the **Vendor Name** field, type `mathsoft`.

5. Specify a Return Date in the format `dd-mmm-yyyy`; for example, type `01-jul-2003` for a license expiring on July 1, 2003.

6. Optionally, you may specify a Return Time in the format `hh:mm`; for example, type `14:00` for a license expiring at 2 PM. If no time is specified, the license will expire at midnight on the date specified.

7. Click "Set Borrow Expiration."

8. Launch Mathcad.

9. Close Mathcad. This will check out the license.

10. Click "Don't Borrow Anymore Today" to end the borrowing process.

11. Close **LMTOOLS**.

12. Disconnect from the network. A dialog box may appear, saying that the FLEX*lm* server is no longer available. Click "OK" to dismiss the dialog.

13. Restart Mathcad. You will now be using the borrowed license.

Installing Internet Explorer and Acrobat Reader

In addition to installing Mathcad 11 Enterprise Edition and FLEXlm, you may find it necessary to install either Internet Explorer 6 or Adobe Acrobat 5 in order to fully utilize your installation of Mathcad. Internet Explorer 5.5 or higher is required for full functionality of the Help system, accessing HTML content within the Resources window, and the opening and saving of Web-based files. Internet Explorer does not need to be your default browser to take advantage of this functionality. Adobe Acrobat Reader, version 5.0 or higher, is required to view PDF versions of installed Mathcad documentation.

For your convenience, installation programs for both of these software packages are available on the Mathcad 11 Enterprise Edition CD. To install either Internet Explorer 6 or Acrobat Reader 5 follow the instructions for your installation type:

Server-based Installations

If you are installing Mathcad to a server, installation programs for both Acrobat Reader and Internet Explorer will be copied to the server directory you specify. You can install both Acrobat Reader and Internet Explorer onto a workstation from this directory. To do so:

1. Access the directory in which you performed the Mathcad server install.

2. For Acrobat Reader, open the **Acrobat** directory. Double-click the file **rp505enu.exe** to launch the Acrobat Reader Installation Wizard, and follow the prompts.

3. For Internet Explorer, open the **IE** directory. Double-click the file **ie6setup.exe** to launch the Internet Explorer Installation Wizard, and follow the prompts.

CD-based Installations

If you are installing Mathcad directly from the CD, you can access the installation programs for either Acrobat Reader or Internet Explorer from the main installation window, which appears when you place the Mathcad 11 Enterprise Edition CD into your CD-ROM drive. If this window does not appear automatically, you can access it manually by performing the following steps:

1. Click **Start ⇒ Run** in Windows, and browse to your CD-ROM drive.

2. Select the file **SETUP.EXE**.

3. Click "Open" in the Browse dialog, then "OK" in the **Run** dialog.

At this point, the main installation window should appear.

Select either Internet Explorer 6 or Acrobat Reader 5 to launch the Installation Wizard for each software package. The Installation Wizard will guide you through the installation process.