

Parametric Technology Corporation

Pro/ENGINEER[®] Wildfire[™]
Preproduction Installation
and Administration Guide

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About This Guide

About This Guide describes this guide's purpose, how information is presented, and general information on how to contact PTC (Parametric Technology Corporation).

This guide is designed to meet two goals:

- To help you install and set up your license management software
- To help you install and maintain Pro/ENGINEER Wildfire

As a system administrator or an end user, you should be familiar with your workstation and have a good understanding of your operating system.

How to Use This Guide

This guide supplements the online instructions that are provided when you install Pro/ENGINEER and other PTC products, such as the PTC Application Manager. To aid you in the installation process, complete step-by-step procedures are provided here.

Post installation instructions and reference information are also given.

Related Documentation

The following document may be helpful as you use the *Pro/ENGINEER Wildfire Installation and Administration Guide*:

FLEXlm End Users Guide 7.2, which discusses the third-party license management software that is used to distribute Pro/ENGINEER licenses. Available online at <http://www.globetrotter.com/TOC.htm>

Resources and Services

For resources and services to help you with PTC software products, see the *PTC Customer Service Guide*. It includes instructions for using the World Wide Web or fax transmissions for customer support.

Documentation for PTC Products

PTC provides documentation in the following forms:

- Context-sensitive Help
- PDF books

When your PTC software has been installed, you can right-click on any menu or dialog box to get Help. You can also choose a command from the Help menu.

All books are available in HTML and PDF formats on the documentation CD-ROM. You can view HTML books with your Internet browser. To view and print PDF books, you must have the Acrobat Reader installed.

PTC welcomes your suggestions and comments on its documentation. You can send feedback in the following ways:

- Send comments electronically to doc-webhelp@ptc.com.
- Fill out and mail the PTC Documentation Survey located at the end of the *PTC Customer Service Guide*.

PTC Documentation Conventions

PTC documentation uses the following conventions:

Convention	Item	Example
Bold	Menu paths, dialog box options, buttons, and other selectable elements from the user interface.	Click File > Save . Assignee check box. Click OK .
Courier	User input, system messages, directories, and file names.	Processing completed.
Courier with less-than and greater-than symbols (< >)	Variables for which the user substitutes an appropriate value	output=<LOADPOINT>

1

Overview

This chapter describes your distribution materials and the installation utility, PTC.Setup, for Pro/ENGINEER Wildfire. It also explains what steps to take before you install the license management and product software.

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What You Received	1 - 2
Before You Proceed	1 - 2
Receiving Your License Pack Online	1 - 3
Storing Your License Pack Online	1 - 5
Graphical Installation Utility	1 - 5

What You Received

PTC (Parametric Technology Corporation) sends you the following material with the software:

- **Shipment Confirmation Letter**—Before receipt of your PTC software, you receive the shipment confirmation letter via fax or e-mail. This correspondence introduces you to the software distribution process. The Sales Order Number (SON) is included here for new software orders.
- **License Pack**—This documentation provides introductory information and the license codes necessary to install the software at your site.
- **Packing Slip**—The packing slip references the Sales Order Number (SON) and lists the items that were sent with your software shipment.
- **READ THIS FIRST**—This document notifies you of any changes you must make, such as machine settings and recommended operating system patches.
- **Software CD-ROM**—Your order contains one or more software CDs for each product you ordered and for each platform on which you intend to run the software. Check the labels of your software CDs to verify that you have the correct CDs for your platforms.
- **Hardware/Software Configuration Notes**—To provide the most recent information, PTC provides these notes on each product CD-ROM and at:

Online Hardware Configuration Notes for Enterprise Partners:
<http://www.ptc.com/partners/hardware/current/support.htm>

Online Software Configuration Notes for Enterprise Partners:
<http://www.ptc.com/cs/doc/index.htm>.

Note

To access the online Software Configuration Notes, a customer support account is necessary.

Refer to the READ THIS FIRST document for steps on how to access information on the CD-ROM.

Before You Proceed

Make sure you have your License Pack, which contains the required license codes to install your software.

Note

Although not required, it is highly recommended that you have an online copy of your License Pack. Maintaining your license information in file format allows you to import your license codes using the installation utility, PTC.Setup. Importing the file ensures accuracy and eliminates the need to supply the data manually.

Receiving Your License Pack Online

Both new customers and customers who are updating their software receive their PTC License Packs by electronic mail. If you do not have an e-mail address, the License Pack is sent by fax.

New Software Orders, Reconfigurations

After your order has been processed and shipped, you should receive a shipment confirmation letter by electronic mail or fax. At that time, you are asked to contact the PTC License Management Group to configure the purchased products.

VAR customers are asked to contact their VAR.

Note

Before contacting PTC License Management or your VAR, it is important that you gather some critical information for configuring and licensing your PTC products. Use the Software Configuration Worksheet, provided on the World Wide Web and in the forms section of the *PTC Customer Service Guide*, as a guide for gathering the appropriate information. This worksheet contains a checklist of the information that you must supply to License Management.

To review the worksheet or to download a copy of the worksheet, visit PTC License Management at <http://www.ptc.com/olm/index.htm>.

The worksheet includes the following information request:

- License Information
 - Sales Order Number (SON) for a newly purchased license
 - Configuration ID
- Contact information for all shipping, billing, administrative, and technical contacts
 - Name
 - E-mail address
 - Telephone and fax numbers

- Address Information
 - Installation Address—Physical location of your PTC license servers or clients executing PTC software
 - Maintenance Shipping Address—Location to which PTC will ship your software for major release updates
 - Software Correction Address—Location to which PTC will ship your software corrections
- Hardware Information
 - Host ID of the license server or servers for floating licenses and floating optional modules. Three unique Host IDs are required for a Triad configuration
 - Host ID of the independent workstation on which a locked license will run
 - Client and file server information (optional) to ensure appropriate media is shipped with software updates and maintenance releases
- Software Information
 - Licensing Information—Includes license type, languages requested, platform, product action (software upgrade, for example)
 - Configuration Information—Includes product type, number of licenses, Host ID or Ethernet address

Maintenance Shipments

You can obtain an identical electronic copy of your License Pack via e-mail or by visiting PTC on the Web.

A License Pack for a maintenance release shipment contains all qualifying licenses for the site specified. Depending on your site's requirements, one License Pack might contain license information for multiple servers.

Maintenance Release users who are updating their existing PTC software can also request electronic copies of their License Packs using the PTC Maintenance Release Pack Request Tool (General Services: Maintenance Release License Packs at <http://www.ptc.com/olm>). You are asked to supply the Install Site Number, the MSN, the year the software was shipped, your name, your phone number, and an e-mail address. You can find the Install Site Number and the MSN on the first page of the hardcopy version of your License Pack.

Note

The License Pack information reflects the information presented in the customer order. If your configurations have changed since the maintenance release was shipped, contact the License Management Group for a new License Pack.

Storing Your License Pack Online

You can store online the electronic License Packs that PTC sends via e-mail. Upon receipt, perform one of these steps:

- Use your Web browser to download the file.
 - a. In Netscape, for example, click **Save As** from the **File** menu. You see the **Save Message As** dialog box.
 - b. Save the file as plain text (* .txt).
 - c. Specify a file name and directory.
- Copy the mail message and save the text to disk in ASCII format. On Windows systems, for example, you can use Notepad or WordPad as a text editor. On UNIX, you can use vi.

Note

The license file must be in ASCII or plain text.

Graphical Installation Utility

You install Pro/ENGINEER and its software components, including license management software, and PTC software products using PTC.Setup. PTC.Setup is a graphical installation utility with available Help.

Navigation in PTC.Setup is easy to use. Use the **Next** button to proceed. Use the **Back** button to return to previous windows to make changes.

Starting PTC.Setup

If your Windows or UNIX system has autorun enabled for your CD-ROM drive, PTC.Setup starts automatically on Windows. If your UNIX system automatically mounts the CD-ROM, you only need to load the CD-ROM, change to a directory with write permissions, and execute `<cdrom>/setup` where `<cdrom>` is the mounted CD-ROM location of the workstation.

If PTC.Setup does not start automatically, use the procedures listed in the following sections.

Windows

To start PTC.Setup on Windows, choose one of these methods:

- Start Windows Explorer, browse to the CD-ROM drive, and double-click on the icon for the `setup.exe`.
- At an MS-DOS prompt, type the following command:

```
<cdrom>:\setup.exe
```

where `<cdrom>` is the CD-ROM drive letter.
- From the task bar, select **Start > Run**, and enter or browse to `<cdrom>:\setup.exe`

UNIX

To start PTC.Setup on UNIX, follow these steps:

1. Change to a directory where you have write permissions (for example, `/tmp`).
2. At a command prompt, type the following command:

```
<cdrom>/setup
```

where `<cdrom>` is the location of the CD-ROM. In UNIX systems, you mounted the CD-ROM to this directory.
3. If a `/cdrom` directory does not already exist, create one using the following command:

```
mkdir /cdrom
```

If your UNIX system does not automatically mount the CD-ROM, see Loading and Mounting the CD-ROM on UNIX on page B-7 for step-by-step instructions.

Generating a PTC.Setup Trail File

You can record the menu selections of the PTC.Setup installation utility in a trail file so that you can replay them at a later time. You can use this trail file to install the software again with similar settings. Create a trail file by specifying the `-uilog` argument upon startup of PTC.Setup from a command prompt.

Windows `<cdrom>\setup.exe -uilog`

UNIX `<cdrom>/setup -uilog`

When starting PTC.Setup with the `-uilog` argument, a trail file named `ps_tr1.txt.1` is created in the directory from where you started PTC.Setup.

Note

You must have appropriate permissions to write to the directory from where you start PTC.Setup.

If the `ps_tr1.txt.1` file already exists, a new trail file named `ps_tr1.txt.2` is created. Further trail files are named using this naming convention.

Replaying the PTC.Setup Trail File

To replay the PTC.Setup trail file, you must first rename the trail file using the `<filename>.txt` naming convention. For example, rename the `pc_tr1.txt.1` file to `runme.txt`. To replay the trail file, use this new file name with the `-uitrail` argument at the command prompt.

Windows `<cdrom>\setup.exe -uitrail runme.txt`

UNIX `<cdrom>/setup -uitrail runme.txt`

It is recommended that you specify the full path to the `runme.txt` file so that this file is correctly accessed when using it with the `-uitrail` argument.

You can also specify both the `-uilog` and `-uitrail` arguments when running PTC.Setup. In such cases, the specified trail file is replayed and at the same time, a new trail file is created that records the menu selections of the current installation.

The user interface of PTC.Setup opens by default when you run a trail file. You can hide the user interface when replaying a trail file by specifying the `-nographics` argument at the command prompt.

Windows `<cdrom>\setup.exe -nographics -uitrail
 runme.txt`

UNIX `<cdrom>/setup -nographics -uitrail
 runme.txt`

If PTC.Setup goes out of sequence when running a trail file, you are prompted for some input at the point where the trail file went out of sequence. If a trail file goes out of sequence, you can choose to exit PTC.Setup by setting the value of the `CONTINUE_FROM_OOS` environment variable to `false`.

```
Windows    set CONTINUE_FROM_OOS=false
```

```
UNIX       setenv CONTINUE_FROM_OOS false
```

Installing the 64-bit Sun and HP (UNIX) Versions of FLEXlm

To install the 64-bit SUN and HP version of FLEXlm, specify the `-64` argument when running PTC.Setup at the command prompt.

```
<cdrom>/setup -64
```

This makes the 64-bit architectures available for FLEXlm.

Creating an Image of a Customized Installation

You can create an image of the PTC products that you are installing. This allows you to make a smaller image that contains PTC products and components of your choice from the PTC software CD that is shipped to you. You can include Pro/ENGINEER with only certain components. For example, you can leave out the Pro/TOOLKIT components. To create an image specify the `-makecd` argument when running PTC.Setup from the command prompt.

```
Windows    <cdrom>\setup.exe -makecd
```

```
UNIX       <cdrom>/setup -makecd
```

When you start PTC.Setup with the `-makecd` argument from the command prompt, the installation process is similar to the normal process. But, instead of installing the products, an image is created in the specified directory.

Quick-Start Installation

This chapter provides a quick-start approach for experienced users who are installing license management and product software on license server, license client, and node-locked machines. For step-by-step installation instructions using the PTC.Setup utility, read Chapter 3, Installing License Management Software and Chapter 4, Installing and Starting Pro/ENGINEER.

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Installing Software on a Node-Locked Machine	2 - 4

Installing License Management and Product Software

If you update your software to a newer release, you must update your license pack.

Installing Software on the License Server

License management software is always the first component to be installed. Installation of the license management software allows subsequent products to locate and use the license information.

Note

You must have the administrative privileges to install the license management software on a license server.

Installing the FLEXlm License Server

Using the PTC.Setup installation utility, follow these basic steps to install FLEXlm license management software and Pro/ENGINEER on the license server:

1. Obtain an electronic copy of your License Pack, which contains your license codes.
2. Save your License Pack information in a text file, ASCII format only.

Note

This step is highly recommended but not required.

3. Start PTC.Setup, the installation utility.
4. Install FLEXlm, the license management software, into its own directory.
5. Define the platforms, languages, and components that the FLEXlm license management software uses.
6. Import the license file from step 2 into PTC.Setup. Note that PTC.Setup starts the FLEXlm server after installation is complete.

Note

Although the procedure is longer, you can manually enter the license information listed in your License Pack. If you type your license information into PTC.Setup's **FLEXlm license editor**, you can type in the keywords: `__HOSTNAME__` and `__PCTD_PATH__`. When you save the license file, PTC.Setup automatically replaces `__HOSTNAME__` and `__PCTD_PATH__` with the correct values. For complete details, see Using the FLEXlm License Editor on page 3-11.

7. Optionally, provide a user-defined name or alias for a floating license-to-run license PTC product application using the `EXTERNAL_NAME` attribute in the feature line.
8. Supply optional configurations (for example, Windows shortcuts).
9. Install FLEXlm. The license server starts automatically.

For triad configurations, repeat these steps for Triad Partners 2 and 3.

Note

Upon installation of the first triad partner, an error message the server could not be started appears. This is normal. The triad is operational only if at least two of the three partners are installed and started.

Installing Pro/ENGINEER on the License Server

1. Start PTC.Setup, the installation utility.
2. If the license server is also a license client, install Pro/ENGINEER into its own directory.
3. Define the platforms, languages, and components that the product software uses.
4. Specify the location of the license file (that is, the server host name). Provide the host name, an IP (Internet Protocol) address, or a fully qualified host name. Host name restrictions are dependent on the operating system. Alternatively, specify the location of the `license.dat` file (that is, the full path to the license file.)
5. Define the command to run Pro/ENGINEER (for example, `proe`). No file name extension is necessary.
6. Attach or associate the licenses listed within your license information file to the startup command so that the product software can read the license data on the server specified. Multiple licenses can be attached to a single command name.

7. Supply optional configurations (for example, Window shortcuts).
8. Start and run Pro/ENGINEER.

Installing Software on a License Client

When you are installing Pro/ENGINEER and any of its components on a license client, you do not install the License Management software. Instead, you specify the server from which this license client should obtain available licenses.

1. Start PTC.Setup, the installation utility.
2. Install the product software into its own directory.
3. Define the platforms, languages, and components that Pro/ENGINEER will use.
4. Specify the host name of the server that maintains the license management software. Provide either the IP address or the fully qualified host name.
5. Define the command to run Pro/ENGINEER (for example, `proe`). No extension is necessary.
6. Attach or associate the licenses listed within your license information file to the startup command so that your product software can read the license data on the server specified. Multiple licenses can be attached to a single command name.
7. Supply optional configurations (for example, Window shortcuts).
8. Start and run Pro/ENGINEER.

Installing Software on a Node-Locked Machine

License management software is required on node-locked machines (independent workstations) that use counted locked licenses. Using the PTC.Setup installation utility, install FLEXlm license management software and Pro/ENGINEER.

Repeat the steps listed in Installing Software on the License Server on page 2-2.

Where Your Software Is Installed

The PTC.Setup installation utility defines and installs software into a default installation directory that you can modify for your environment during installation.

The default path is as follows:

Windows

`C:\Program Files\<productname>`

UNIX

`/system_directory/ptc`

where `system_directory` is platform-specific.

The license management software, *FLEXlm*, the product software, and any components are installed into separate subdirectories within the `ptc` directory.

Installing License Management Software

This chapter explains how to start the installation utility and how to install your license management software so that you can control usage of licenses for PTC software products.

PTC uses *FLEXlm*, from GLOBEtrouter Software, Inc., as its license management software. Unless an uncounted node-locked license is used, you must install *FLEXlm* before you install your PTC product software. *FLEXlm* license management software is included on your CD-ROM. For the latest information about which version of *FLEXlm* is appropriate for your installation, see the Release Notes that are included with your shipment.

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Importing Your License File	3 - 8
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Before You Proceed

Before you begin, perform the following steps:

- Check the READ THIS FIRST document for any required machine setting changes.
- Obtain an online copy of your License Pack.
- Review your License Pack to make sure your license information accurately reflects your order.

Note

The *FLEXlm End Users Guide 7.2* is available on the Pro/ENGINEER Reference Documentation CD-ROM and at <http://www.globes.com>.

Separating Multiple Licenses

Because PTC sends the License Pack in a single source file for maintenance shipments, your License Pack may contain license files for multiple host machines. A unique PTC Host ID (in most cases, this is the Ethernet MAC address of the computer) identifies these host machines.

If your site ordered multiple licenses for different host machines, save the license file of each host machine in a separate text file. This step is recommended but not required because *FLEXlm* only validates features that are associated with the machine as identified by the `ptchostid` utility.

You can easily identify the start and finish of a license file in your License Pack by searching for `#START: License File for CPUID xxx...` and `#END: License File for CPUID xxx`, where `xxx` represents the host machine's identification number. The Host ID is a series of alphanumeric characters (for example, 00-60-97-E4-91-B7).

Finding the PTC Host ID

You can obtain the PTC Host ID by starting `PTC.Setup` from any PTC CD-ROM. When `PTC.Setup` is started, the PTC Host ID of the machine is automatically displayed in the lower left corner of the main window.

The PTC License Management Group uses the PTC Host ID to assign license codes. You supply this information in the Ethernet address/hostid field in the Software Configuration Worksheet.

Note

A PTC Host ID is necessary only when a feature is locked to a specific machine or to multiple machines.

To download a copy of the PTC `ptchostid` utility and to view online instructions on how to run this tool, visit the PTC Web site at <http://www.ptc.com/olm>. Select the hypertext link, Determining a Machine's CPU ID, that is located on the PTC Global Services: Order & License Support page. Platform-specific instructions are given.

Windows Requirements

For Windows XP, Windows 2000 and Windows NT 4.0, a user with administrative privileges must install FLEXlm license management software.

Your Windows system must use the Windows NTFS (Windows NT File System).

You must have TCP/IP (Transmission Control Protocol/Internet Protocol) installed and configured correctly on your Windows system before installing the software.

UNIX Requirements

PTC.Setup lets you install the software with either root- or user-level privileges. For maximum security, GLOBEtrouter Software, Inc. recommends that you install the FLEXlm license server with root privileges but execute the server with user privileges. PTC.Setup provides the **FLEX configuration options** dialog box to enable this functionality.

Installing License Management Software

You must install FLEXlm license management software on at least one machine to control usage of floating licenses. This machine might not have an installation of the product software.

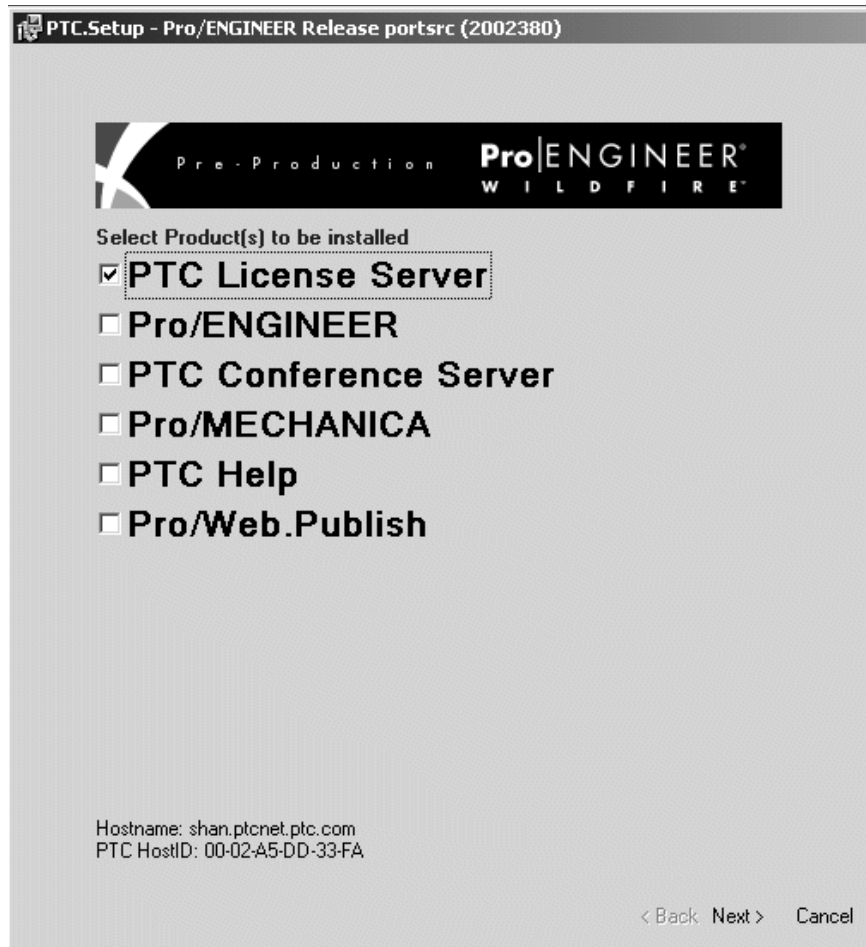
Note

The license server on which you install the license management software must have a static IP (Internet Protocol) address configuration and not a DHCP (Dynamic Host Configuration Protocol) configuration.

License management software is not required for a license client. This client requests a license from the server.

To install FLEXlm, perform the following steps:

1. Obtain an online copy of your License Pack and save your license file as an ASCII file. For more information, see Receiving Your License Pack Online on page 1-3.
2. Start the PTC.Setup installation utility. The main window opens.



3. Keep **PTC License Server** as your default. If you plan to install the software components immediately after installing FLEXlm, check the appropriate component box.
4. Click **Next**. The **Define Installation Components** dialog box opens, with the default FLEXlm installation directory.

PTC.Setup - Pro/ENGINEER Release portsrc (2002320)

Define Installation Components

Installation Directory

C:\Program Files\Flexlm

Disk Space

Available on C: 266 MB

Required on C: 43 MB

Platforms

☒ i486_nt

Languages

☒ English

Components

☒ FLEXlm License Server	4.4 MB
☒ PTC.Setup	35 MB

Subcomponents

Description

Select a component or subcomponent to view its description.

< Back Next > Cancel

5. Define the following parameters:

- a. **Installation Directory**—Enter an installation directory or keep the default value. PTC.Setup creates the installation directory for you. Or, click the folder icon, browse the folder hierarchy, and select a directory and enter a new installation directory.

Note

The installation directory must be a new directory and cannot be an existing directory.

- b. **Platforms**—Keep the default platform (for example, sun4_solaris). This field defines the machine type of the workstation where the FLEXlm installation directory resides. PTC.Setup detects your machine's architecture and lists that platform as the default.

- c. **Languages**—License Management software is available only in the English language.
 - d. **Components**—Keep the following default components:
 - FLEXlm License Server**—Keep this component to install the files necessary to run the license management software.
 - PTC.Setup (Pro/ENGINEER default)**—Keep this component to install the PTC.Setup command line utility. This script enables you to reconfigure your FLEXlm installation from your workstation, without running PTC.Setup from the CD-ROM.
 - e. **Disk Space**—This field displays the available disk space and the amount of disk space that is required to install the selected components.
- 6. Click **Next**. A message tells you that the installation directory (Windows example, Program Files/flexlm) does not exist and asks you if you want to create it.
 - 7. Click **OK**. PTC.Setup creates the FLEXlm installation directory. You see the **PTC License Management** dialog box.

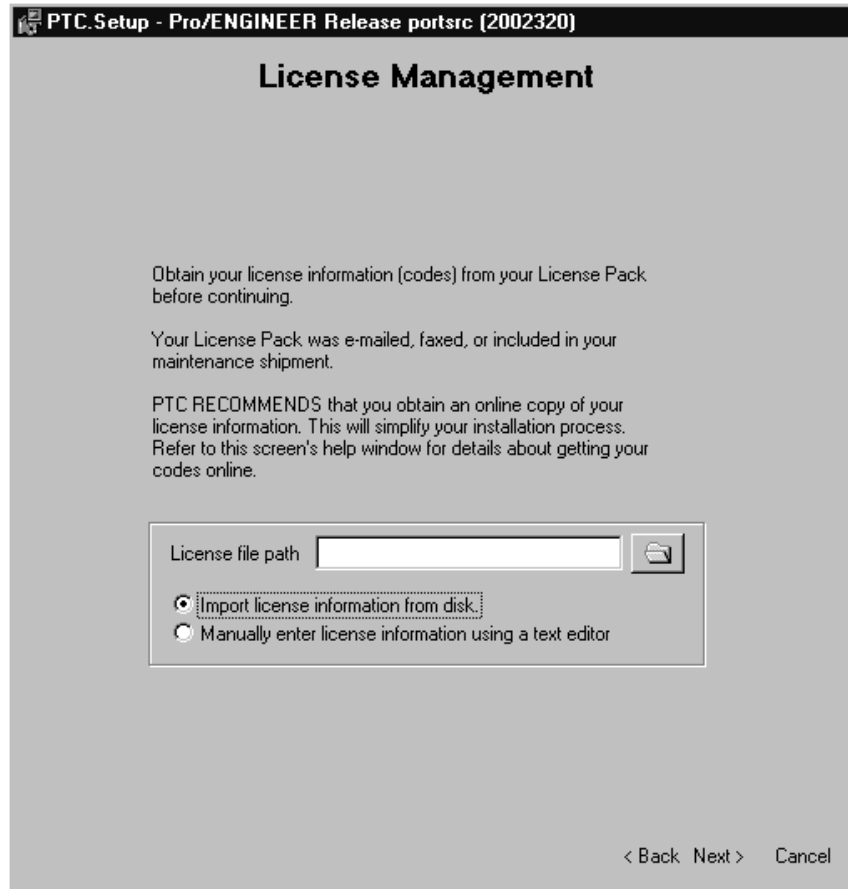
Note

To proceed, you need the licensing information supplied in your PTC License Pack. Although you can either import your license information or type the information, it is highly recommended that you import your license file to save time and promote efficiency.

If you have not obtained your PTC License Pack, see Receiving Your License Pack Online on page 1-3 for specific instructions.

In general, if you received your shipment as a software maintenance release, you can obtain an online copy of your license codes from the PTC Web site or via electronic mail. Visit <http://www.ptc.com/olm/index.htm> and click Retrieve Existing License Packs. Via e-mail, contact PTC at lmcodes@ptc.com. In the subject line, provide release information (Site Number) (Maintenance Shipment Number). Your license codes will be sent to you.

8. Click **Next**. You see the **PTC License Management** dialog box.



Supplying Your License Information

You can use one of the following methods to supply the license information that is specific to your site or individual workstation.

- Import the license information from disk (RECOMMENDED).
- Manually enter the license information using a text editor.

After you import or enter your license information, PTC.Setup automatically saves this file within the FLEXlm installation directory.

Restriction: Do not combine your PTC license file with license files of other software vendors on the same FLEXlm license server. Although FLEXlm can handle combined license files, PTC license files use a vendor specific Host ID making them incompatible with license files using a FLEXlm Host ID. The PTC.Setup utility reads combined vendor license files as invalid.

Importing Your License File

To import the license information from your License Pack that you saved electronically, keep **Import license information from disk** (RECOMMENDED) as the default in the **License Management** dialog box.

1. Enter the full path to your license file (including file name). Alternately, click the folder icon and use the Directory Browser to specify the location of the ASCII file you saved (for example, `C:\TEMP\LICENSE.TXT`).
2. Click **Next** to create optional FLEXlm configurations.

Note

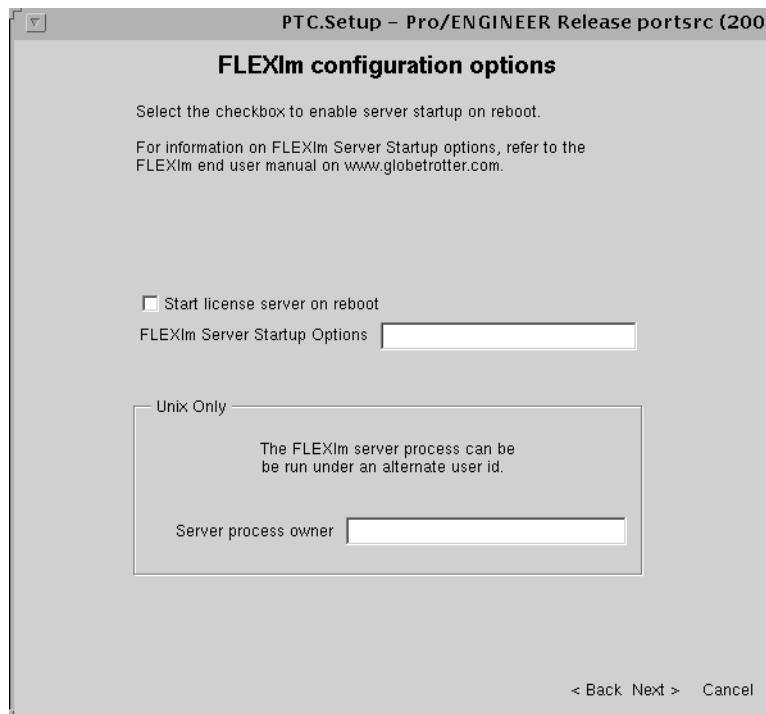
The **Checking FLEXlm License File** dialog box opens if the PTC.Setup utility detects an invalid license. Click **Modify** and correct your license information. You cannot proceed until all the licenses are listed in the valid license column. For further information, see Appendix C, Troubleshooting Tips.

3. To skip this step and begin the installation process, clear the check box in the **Optional Configuration Steps** window and click **Next** to advance to the **Installation Progress** window. See Completing the FLEXlm Installation on page 3-10.

Supplying Optional Configurations

On Windows systems only, you can create shortcuts for each application. See Creating Windows Shortcuts on page 4-13.

On Windows and UNIX systems, you can configure the FLEXlm license server.



In the *FLEXlm* configuration options, you can choose to start the license server on reboot, customize *lmgrd* arguments, and run the *FLEXlm* server process under an alternate user ID.

1. To start the license server on reboot, check the appropriate box. Alternative methods to start the license server include executing the `ptcstartserver` command and clicking **Start in Control Panel > Services > FLEXlm server for PTC** on Windows systems.
2. To customize *lmgrd* arguments, enter the Custom *lmgrd* Arguments in the text box.

For example, you can disable the *FLEXlm* `lmdown` or `lmremove` commands to prevent a user from shutting down the license server.

```
-x lmdown | lmremove
```

3. (UNIX only) To run the *FLEXlm* server process using an alternate user ID, complete the Server process owner field (UNIX systems only). For maximum security, GLOBEtrötter Software, Inc., recommends that you execute the *FLEXlm* license server with user privileges after you have installed the server with root privileges. Enter the user name in the **Server process owner** text box.

4. After setting the optional configuration settings, click **Next** to advance to the **Installation Progress** window.

Note

If you want to manually enter your license file one line at a time or if you want to type your license file information, click **Back**. For detailed information, see *Entering Your License File Information Manually* on page 3-11.

Completing the FLEX/*m* Installation

When you see the **Installation Progress** window, follow these steps.

1. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you can:

- Click **Back** and review information.
- Click **Install** to begin installation.
- Click **Cancel**, respond to a confirmation prompt, and exit PTC.Setup.

2. Click **Next** to proceed with the installation of the next selected product or exit PTC.Setup.

During installation, you can click **Cancel** at any time to terminate installation process.

Upon completion, PTC.Setup starts the license server.

Exception: Triad installations require that you configure two other license servers.

Note

On Windows systems, the **PTC License Management tools** program is added to the **Start > Programs** menu. For more information, see *Lmtools Utility* on page B-3.

Repeating Steps for Triad Installations

To configure the two other license servers, repeat the aforementioned steps in the sections *Installing License Management Software* on page 3-3 and *Importing Your License File* on page 3-8.

Note

PTC recommends that the Triad license servers be at the same geographical site. Refer to the *FLEXlm End Users Guide 7.2, Chapter 4, Selecting Server Nodes*, <http://www.globetrotter.com/TOC.htm> for further details.

Verifying License Server Activity

Before configuring your product software, verify that PTC.Setup has started the FLEXlm license server by running the `ptcstatus` command on the license server machine. PTC.Setup installed the `ptcstatus` command in the `/bin` directory of the FLEXlm installation directory (for example, on Windows:

`C:\ptc\flexlm\bin\ptcstatus`). For Triad installations, two of the three partner machines must be configured before the information is displayed in the `ptcstatus` output.

To run the FLEXlm server, you must have Windows administrator or UNIX user privileges. For additional information see Machine-Specific Configuration on page B-3.

Output from the `ptcstatus` utility displays the feature name (for example, `PROE_38265`), a user-defined name or alias if one was supplied, the number of licenses in use, the number of available licenses, and any restrictions (for example, the license is locked to a particular machine).

Entering Your License File Information Manually

If you do not have an electronic copy of your License Pack, you can enter your license file information manually. To do so, you must type your license information into the License File Editor directly.

Using the FLEXlm License Editor

To enter your license codes manually, follow these steps:

1. In the **License Management** dialog box, select **Manually enter license information using a text editor** option.
2. Click **Next**. The **FLEXlm license editor** dialog boxes opens. The **FLEXlm license editor** appears empty.

You can either import the file or enter each line of your license file in the **FLEXlm license editor**. From the **File** menu, you can:

- **Import** your license file from another location
- **Append** the contents in the FLEXlm license editor with a file on your system

- **Save** your license information
 - **Save As** to create a copy.
3. Use the **Open File** dialog box to import or append your license file if your license information (ASCII format) is on your system.
 4. Alternatively, type each line of your license information exactly as it appears in your PTC License Pack, replacing generic text where appropriate. Start with the line that begins after `#Start: License File for CPUID...`. Format the text exactly as shown in the License Pack, with justification indents. The text is case-sensitive.

Note

You do not have to type any lines that begin with crosshatch signs (#). This text in your License Pack is strictly informational.

5. If you type them in, PTC.Setup will replace the two generic strings, `__HOSTNAME__` and `__PTCD_PATH__`, including the underscore characters with the correct value once you select **File > Save** from the **FLEXlm license editor**.

In your License Pack, the default server line format is as follows:

```
SERVER __HOSTNAME__ PTC_HOSTID=(Your CPUID) 7788
```

6. Replace the variable `__HOSTNAME__` with your license server's host name (for example, `dinos`) and enter your license server's CPU ID and communications port number. For example,

```
SERVER dinos PTC_HOSTID=00-60-97-E4-91-B7 7788
```

Note

For license servers running on Windows 98/95, the host name must be the fully qualified domain name (for example, `dinos.ptc.com`). For Triad installations, replace the `__HOSTNAME__` field for all three server lines.

In your License Pack, the default daemon line format is as follows:

```
DAEMON ptc_d __PTCD_PATH__
```

7. Replace the variable `__PTCD_PATH__` with the appropriate path (including file name) to the `ptc_d` daemon executable, and the path to the PTC options file (`ptc.opt`). For example,

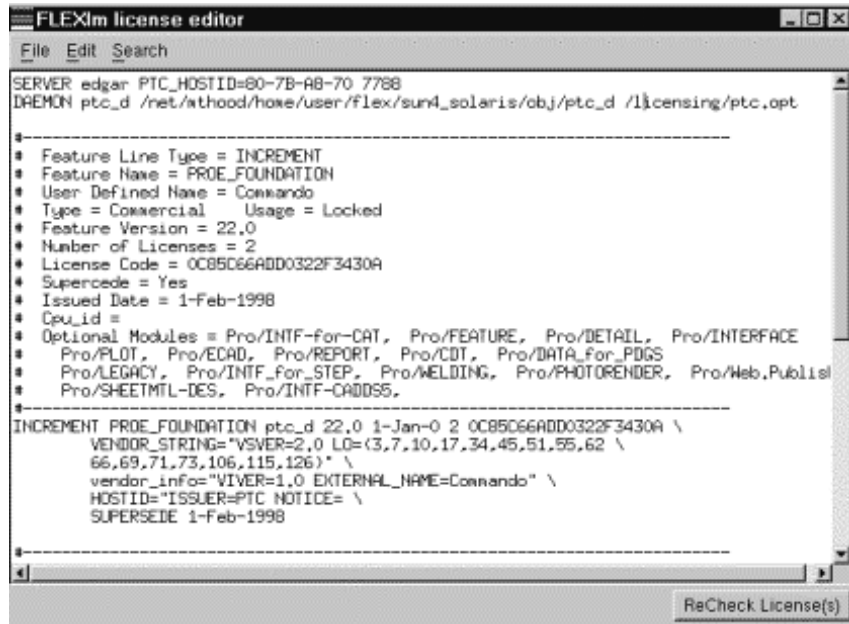
```
DAEMON ptc_d /opt/ptc/flexlm/sun4_solaris/obj/ptc_d  
/opt/ptc/flexlm/licensing/ptc.opt
```

Note

The lines in the preceding example should be on one line in the license editor.

To install your license management software, note that only one vendor daemon line is needed per license server.

When you are finished, the **FLEXlm license editor** should look similar to the next screen shot.



You advance to the **Checking FLEXlm License File** dialog box.

8. PTC.Setup checks to verify the entered information is correct. If an invalid license is listed, click **Modify** and correct your license information. You cannot proceed until all the licenses are listed in the valid license column. For further information, see Appendix C, Troubleshooting Tips.
9. If you have no errors, click **Next**. You see the **Optional Configuration Steps** window.

On Windows systems only, you can create shortcuts for each application. See Creating Windows Shortcuts on page 4-13.

On Windows and UNIX systems, you can configure the FLEXlm license server. See Supplying Optional Configurations on page 3-8.

Note

To skip this step and begin the installation process, clear the check box in the **Optional Configuration Steps** window and click **Next** to advance to the **Installation Progress** window. (See Completing the FLEXlm Installation on page 3-10).

Installing and Starting Pro/ENGINEER

This chapter explains how to install your newly purchased software. The procedures are for new installations only. If you are updating or modifying an installation, refer to Chapter 11, Updating and Modifying an Installation.

You may need to change some machine settings before installing a particular software component. This information is located in the READ THIS FIRST document, which is included with your software package.

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Installing Pro/ENGINEER

You install Pro/ENGINEER after you have installed the license management software. You can install your product software on a license server, a license client, a node-locked machine, or on any combination of these machines.

Note

Usage of uncounted node-locked licenses does not require license management software.

Four major steps are required for successful installation of your product software:

- Defining your installation components, including the installation directory
- Specifying the location of the license servers or license file
- Defining the command names and attaching available features
- Starting the software

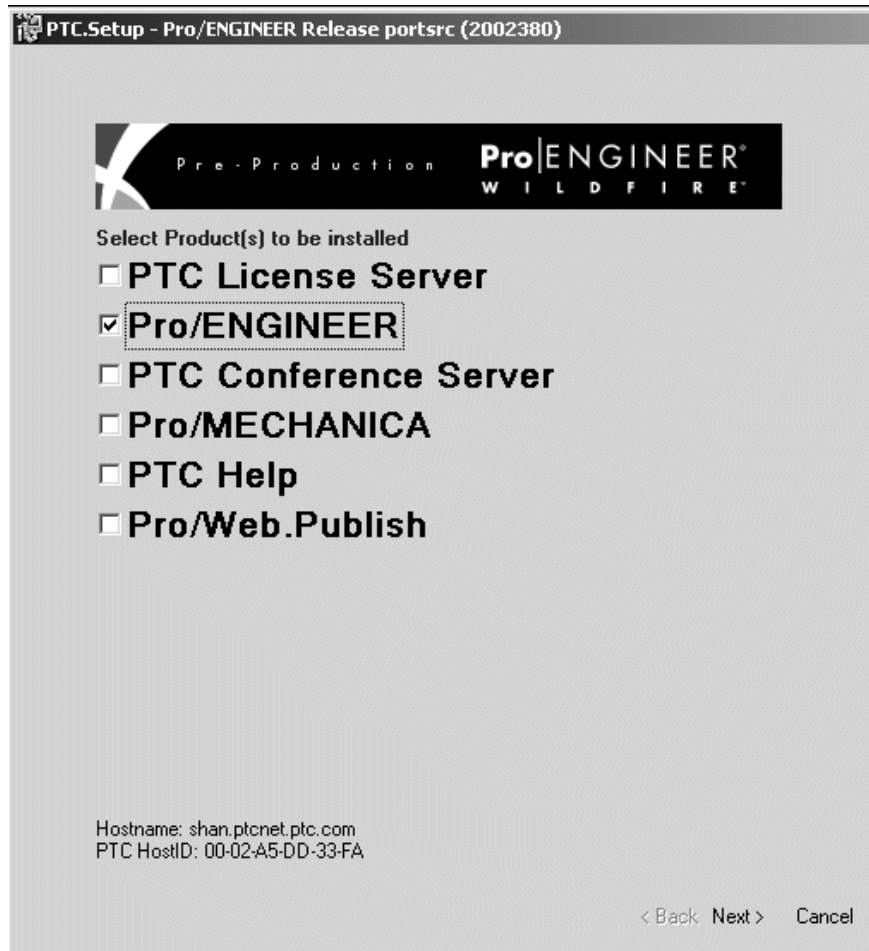
Upward Compatibility

Pro/ENGINEER is upward compatible. That is, Pro/ENGINEER files (parts, assemblies, drawings) created in a previous release of Pro/ENGINEER can be retrieved and saved using Pro/ENGINEER Wildfire.

Defining the Installation Components

1. Insert the product software CD-ROM on your Windows operating system. Insert and mount the product software CD-ROM on your UNIX system. For step-by-step instructions, see Loading and Mounting the CD-ROM on UNIX on page B-7.

The main window opens.



2. Retain **Pro/ENGINEER** as the default.
3. Clear **PTC License Server** (the default). At this point, you have installed FLEXlm either on the license server.

Note

When you update to a new Release of a PTC product you must update your license pack to match the product Release.

4. Click **Next**. The **Define Installation Components** dialog box opens.

Note

On UNIX, the license agreement appears. Accept the agreement to proceed. The **Define Installation Components** dialog box opens.

5. Define the following parameters:

- **Installation Directory (new)**—Enter an installation directory or keep the default value. PTC.Setup creates the installation directory for you. Or, click the folder icon, navigate the folder hierarchy, and select a different installation directory.

For new installations, the directory you enter must be a new, non-existing directory.

- **Platforms**—Select the platforms (for example, sun4_solaris). Use this parameter to define the machine types that access the installation directory. PTC.Setup detects your machine's architecture and lists that platform as the default.
- **Languages**—Keep English as your only language (English is always the default). Or, select the box next to the languages you wish to add.

To view Pro/ENGINEER in a language other than English, you must set the language variable, LANG. For more information, see Setting Foreign Language Defaults on page B-20.

- **Components**—Select or clear the components that you want to install by selecting the check box next to the appropriate component. The available components are as follows:

Pro/ENGINEER (default)—Keep this component to install the files necessary to run the software product for Pro/ENGINEER Wildfire.

Pro/ENGINEER Help Files (default)—Keep this component to install the Pro/ENGINEER Help Files in the product installation directory. To view context-sensitive Help, you must install these HTML files. If, in addition to Pro/ENGINEER, you are installing Pro/MECHANICA, make sure that you select the Pro/MECHANICA Help subcomponent. If you install the Help files in the Pro/ENGINEER load point, you do not have to specify their location. Pro/ENGINEER automatically detects their location when the program is in use.

Note

To install the PTC Help files in a common Help directory, go back and select **PTC Help** in the introductory window. Selecting PTC Help enables you to install Help in a directory other than the Pro/ENGINEER load point (for example, /opt/ptc/ptchelp). You define the common Help directory during the installation of Pro/ENGINEER in the **Help Location** window.

PTC.Setup (default)—Keep this component to install PTC.Setup for future configuration of the product software after the installation. This utility allows you to make configuration changes without running PTC.Setup from the CD-ROM.

Options—Select this component to optionally install ModelCHECK, Mold Component Catalog, Design Animation, Pro/PLASTIC ADVISOR, Pro/NC-GPOST, VERICUT, and Distributed Pro/BATCH for Pro/ENGINEER.

Note

You can install only the Distributed Pro/BATCH client by clearing the selection of all other components, including Pro/ENGINEER, during Pro/ENGINEER installation. Make sure to do this if you plan to use Distributed Pro/BATCH with a Distributed Services Manager. In order to use Distributed Pro/BATCH in standalone mode, you must install Pro/ENGINEER.

API Toolkits—Select this component to optionally install the files necessary to run the Application Program Interfaces Pro/J.Link, Pro/Web.Link, and Pro/TOOLKIT.

Interfaces—Select this component to install various interface tools, specifically the files for Pro/INTERFACE for CADD5, Pro/INTERFACE for CATIA, Pro/CDT, and Pro/FEMPOST.

- **Disk Space**—This field displays the available disk space and the amount of disk space that is required to install the selected components.
6. Click **Next** after you have selected your components.

A message asks you if you want PTC.Setup to create the installation directory.
 7. Click **OK**. You see the **Specify License Servers** dialog box.

Specifying the Location of the License Server or File

The PTC.Setup installation utility can access your license information if it is on a remote license server or on a local machine. Your next task is to tell PTC.Setup the locations of the license servers or license files that you want this installation of your product software to read.

If you attempt to access your license information from a machine that does not have the minimum version of FLEXlm required, an error message tells you to update your license management software. Consult the Release Notes that accompany your order for the most recent information on which version of FLEXlm meets your installation requirements.

Specifying the License Server

If the license management software resides on the same machine on which you are installing the product software, and you have used the default communications port for the license server, you do not have to tell this installation where to obtain its licensing data. PTC.Setup detects the host name of the server and populates the **Specify License Servers** table (see the following figure).

If the license management software resides on a different machine, you must specify where this installation can obtain its licensing information. See the following sections, *Obtaining a License from a Server or Servers* and *Obtaining a Locked License from an Individual License File*.

In order to use Pro/ENGINEER in integrated mode with Pro/MECHANICA, you must include the Pro/MECHANICA license servers in the list of servers.

Note

Click **Info** to view the available features and floating optional modules.

Specify License Servers

Please indicate all license servers that you wish to use with this installation of Pro/ENGINEER

Server Type	Location (port@host)	
Triad Server	7788@ruchi;7788@iwala;7788@maruti	

Specifying the License Client

If you are installing the product software on a license client that does not have FLEXlm installed, the **Specify License Servers** table initially appears blank. To enable this installation to obtain floating licenses from a remote server, you must define the servers that are distributing the licenses. See Obtaining a License from a Server or Servers on page 4-8. If this installation is to read a license file for locked licenses, you must specify the full path to and the name of the license file. See Obtaining a Locked License from an Individual License File on page 4-9.

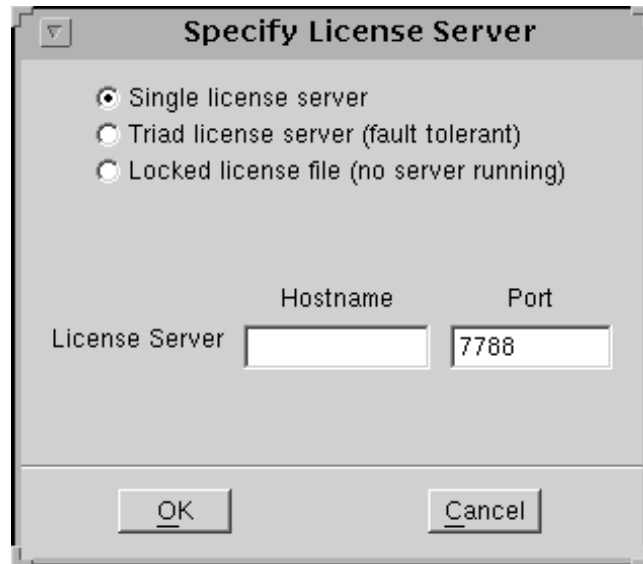
Note

You cannot run the product software without checking out a license. This means that Pro/ENGINEER cannot be installed alone without a license. Pro/ENGINEER Wildfire uses FLEXlm as its license management software.

Obtaining a License from a Server or Servers

To obtain a license from a server or servers:

1. Click **Add** in the **Specify License Servers** dialog box (see the previous window). The **Specify License Server** dialog box opens. You can obtain a license from two types of license servers or from a locked license file (see section, Obtaining a Locked License from an Individual License File):



- **Single license server**—Select this option to specify a single server that serves the licenses.

Enter the host name and the communications port number if it is different than the default. This information identifies the server from which this installation obtains its license codes (for example, aberdeen).

- **Triad license server (fault tolerant)** —Select this option to specify a Triad configuration. The Triad configuration consists of three Triad partners. As long as two or more partners of these three Triad partners are running, the licenses are served out. If two or more partners of these three Triad partners are not functioning, the server stops serving the licenses.

If the client is accessing a Triad configuration, choose the **Triad license server (fault tolerant)** option and define all three license servers. Each Triad partner server is required to have the same license file.

Note

The order of the server list is important (Triad Partner 1, Triad Partner 2, Triad Partner 3). The sequence must be the same in each license file on all three license servers.

PTC recommends that the Triad license servers be at the same geographical site. For further information on redundant license servers, refer to the *FLEXlm End Users Guide 7.2*, Chapter 4, Selecting Server Machines, at <http://www.globetrotter.com/TOC.htm>.

Note

Do not specify the host name of the client nodes, only the license server that controls usage of the licenses. You can use the **Specify License Servers** dialog box several times to configure the clients to access multiple servers or license files across your network.

2. Click **OK** in the **Specify License Server** dialog box to add the server and communications port information to the **Specify License Servers** table (for example, Single Server 7788@aberdeen).
3. Click **Next** in the **Specify License Servers** dialog box to open the **Create and Configure Commands** dialog box. See the section Creating Startup Commands.

Obtaining a Locked License from an Individual License File

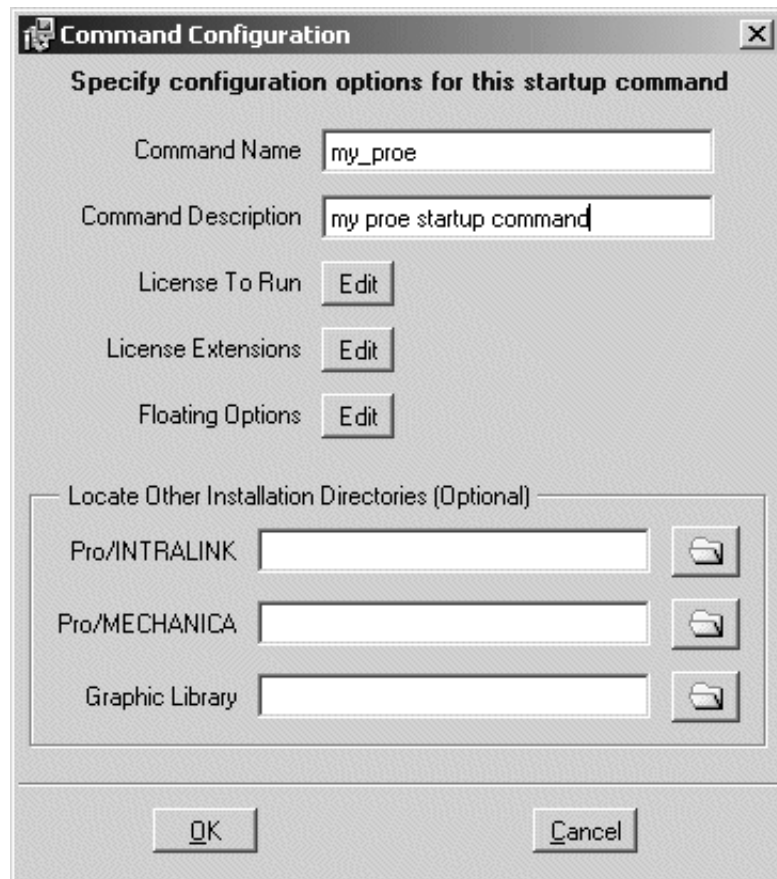
To obtain a locked license from an individual license file:

1. Click **Add** in the **Specify License Servers** dialog box. The **Specify License Server** dialog box opens.
2. To obtain your license from a specific license file that can exist on your local machine or on the network, choose the **Locked license file (no server running)** option (see previous dialog box).
3. Perform one of the following actions:
 - Specify the full path to your license file on your local or NFS-mounted disk (for example, C:\Program Files\flex\license.dat).
 - Click the folder icon, navigate the folder hierarchy, and select the correct license file.
4. Click **OK** in the **Specify License Server** dialog box to add the license file path information to the **Specify License Servers** dialog box.
5. Click **Next**. You see the **Create and Configure Commands** dialog box. See the next section, Creating Startup Commands.

Creating Startup Commands

After you have identified where the client can locate the license information, create or edit the startup commands. You can use a startup command to start the application using a particular license configuration. For new installations, PTC.Setup creates a default startup command and attaches all available license-to-run licenses from the license server or servers that you specified earlier in the installation.

1. To create your own startup commands, click **Add** in the **Create and Configure Commands** dialog box. The **Command Configuration** dialog box opens.



The image shows a Windows-style dialog box titled "Command Configuration". The title bar includes a small icon on the left and a close button (X) on the right. The main content area has a subtitle "Specify configuration options for this startup command". Below this, there are several input fields and buttons:

- "Command Name" with a text box containing "my_proe".
- "Command Description" with a text box containing "my proe startup command".
- "License To Run" with an "Edit" button.
- "License Extensions" with an "Edit" button.
- "Floating Options" with an "Edit" button.
- A section titled "Locate Other Installation Directories (Optional)" containing three rows:
 - "Pro/INTRALINK" with a text box and a folder icon button.
 - "Pro/MECHANICA" with a text box and a folder icon button.
 - "Graphic Library" with a text box and a folder icon button.

At the bottom of the dialog box are two buttons: "OK" and "Cancel".

To create a command name, specify a unique name and attach or associate the licenses to that command name. You can attach multiple licenses to a command name.

2. Type the command name in the **Command Name** box. Spaces and slashes are not allowed.
3. Specify a brief description of the command in the **Command Description** box. This description is saved in the configuration file for this startup configuration. If you do not specify the configuration file on startup, this command description helps you to know what the command represents.
4. You can add License Extensions by specifying the value in the **License Extensions** box. You can also add the regular floating bundles or options by specifying the value in the **Floating Options** box. Adding values to either the License Extensions or the Floating Options means those features will be checked out from the license server upon application startup.
5. To modify the licenses attached to a command, click **Modify**. The **Select Licenses** dialog box opens.

PTC.Setup detects the license file you imported earlier and displays the feature names available for that server or license file location in the **FLEXlm Licenses** text box. For example, Pro/ENGINEER licenses have a PROE_ prefix.

6. Attach the licenses to the command by highlighting the desired license and moving it to the Selected Licenses column using the left-pointing arrow (<) button (see the next figure).



Note

PTC.Setup configures the command to execute the licenses selected. If multiple licenses are selected, Pro/ENGINEER executes the first available license it finds. To change the sequence of the licenses in the Selected Licenses pane, highlight the license and use the **Up** and **Down** buttons. You can also add or edit the License Extensions and the Floating Options.

7. After attaching the licenses, supply the optional input information in the **Locate Other Installation Directories (Optional)** fields (see the next section, Supplying Optional Input Fields).
8. Click **OK**. You return to the **Create and Configure Commands** window. The table lists the command name and type (for example, proe and Pro/ENGINEER, respectively).
9. Click **Next**. The **Optional Configuration Steps** window opens. These optional steps vary for Windows and UNIX systems. See either the section Configuring a Windows Installation or the section Configuring a UNIX Installation.

Supplying Optional Input Fields

The following input is optional.

1. Define Pro/ENGINEER command information in the **Command Configuration** dialog box:

Locate Other Installation Directories (Optional)—Directory paths are required only if you run PTC Application Manager, Pro/INTRALINK, and Pro/MECHANICA on this license client in conjunction with Pro/ENGINEER. If none of these optional modules are attached to the command you assigned to start Pro/ENGINEER, you can leave the lines blank or configure them later by rerunning PTC.Setup. If Pro/PHOTORENDER has been purchased as an optional module, enter the full path to the Graphic Library directory.

Optional Input—If you plan to make Pro/ENGINEER a PTC Object Linking and Embedding (OLE) server and you want to use this command with the PTC OLE server, choose the **PTC OLE Server** option.

2. After you entered your optional input, click **OK**. You return to the **Create and Configure Commands** window. The table is populated with the command names and products.
3. Click **Next**. You see the **Optional Configuration Steps** window. The steps, which are optional, vary for Windows and UNIX systems.

Configuring a Windows Installation

The following input is optional when you configure your installation on Windows systems. You can:

- Configure Pro/ENGINEER as an Object Linking and Embedding (OLE) server
- Create Windows shortcuts to start Pro/ENGINEER
- Configure Pro/ENGINEER distributed services
- Configure your Remote Batch Server
- Specify the full path to your Help installation directory (specifying the load point and installing the Help files are necessary steps to enable the users of clients to view Help)

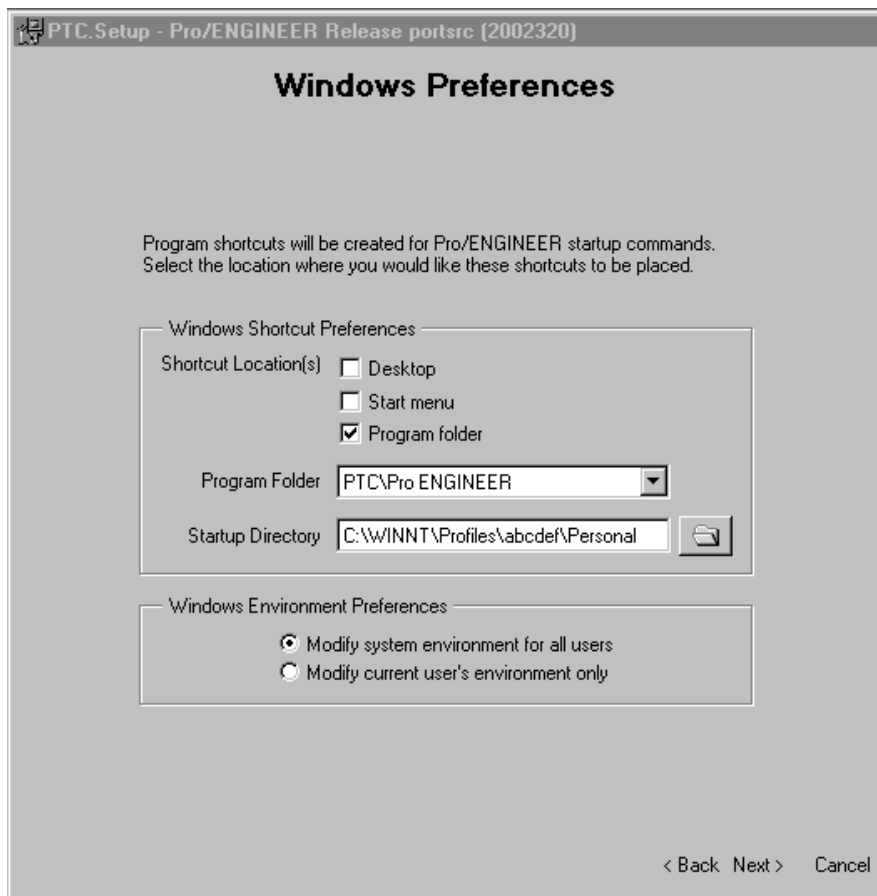
Configuring the PTC OLE Server

By keeping the default **OLE settings** box checked on the **Optional Configuration Steps** window, you can configure Pro/ENGINEER as an OLE server. This allows the user of the client application to import Pro/ENGINEER files (parts, assemblies, and drawings) into Microsoft documents (Word, Excel, and Power Point). This does not configure Pro/ENGINEER as an OLE container, that is, you cannot import Microsoft files into Pro/ENGINEER by performing this step. In the **PTC OLE Server** dialog box, you can:

- Specify the command used to start Pro/ENGINEER.
- Specify the default startup directory for Pro/ENGINEER. Typically, this is the Pro/ENGINEER working directory.
- Keep the language default unless you plan to run Pro/ENGINEER in a language other than English.
- Specify the startup directory of the PTC OLE Server. The Microsoft application program (that is, a PTC OLE container) starts searching for PTC objects (for example, Pro/ENGINEER parts) in this directory.
- Keep the language default unless you plan to run the PTC OLE Server in a language other than English.

Creating Windows Shortcuts

By keeping the default **Windows shortcut preferences** box checked on the **Optional Configuration Steps** window, you can configure the Windows shortcut preferences and path settings for Pro/ENGINEER.



You can set the following shortcut preferences:

- **Shortcut Location**—You can start Pro/ENGINEER from the desktop, the **Start** menu, the **Start > Programs** menu, or any combination of these three options.
- **Program Folder**—If you select **Program folder** as the shortcut location, specify the name of the folder and option in the **Programs** menu.
- **Startup Directory**—If you select **Start menu** as the shortcut location, specify the name of the startup directory.

You can set the following Windows environment preferences:

- **Modify system environment for all users**—Sets the system PATH variable for all users on the system.

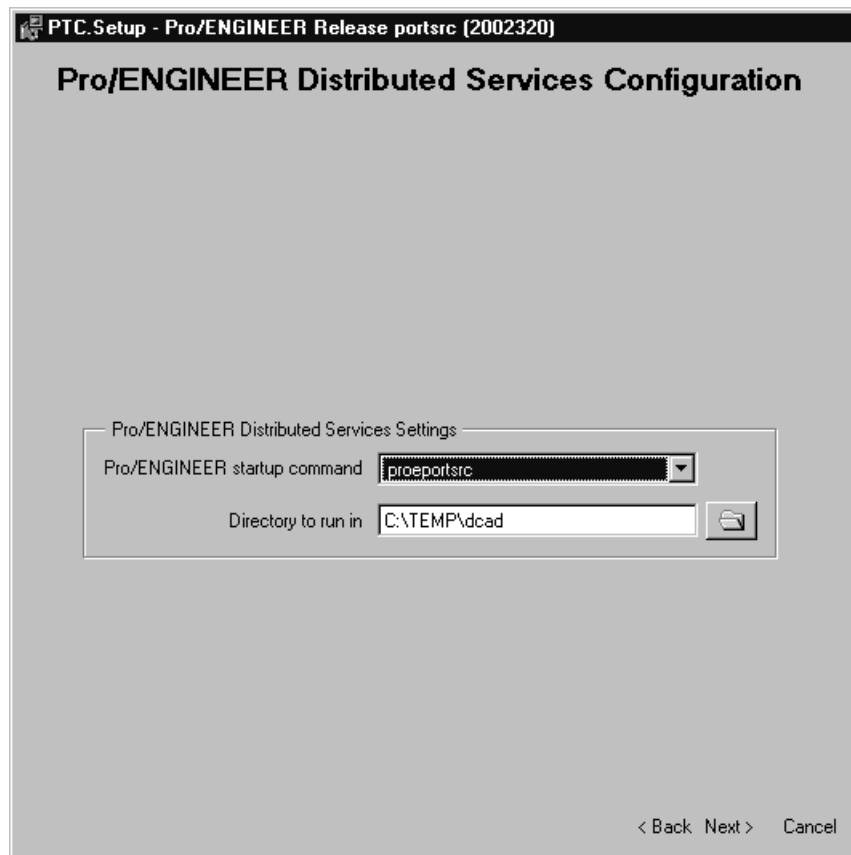
Note

You must have the administrator privileges to set the system environment variable for all users.

- **Modify current user's environment only**—Sets the user's PATH variable for the current user on the system.

Configuring Pro/ENGINEER Distributed Services

By keeping the default **Pro/ENGINEER distributed services configuration** box checked on the **Optional Configuration Steps** window, you can configure your Pro/ENGINEER workstation to participate in distributed processing sessions.



Supply the following information to configure your Pro/ENGINEER workstation to participate in distributed processing sessions:

- The Pro/ENGINEER startup command

- Specify the directory path to use as a temporary working area for the DCAD server. The temporary files are created in this temporary directory during a distributed computing session. You can click the folder icon, navigate the folder hierarchy, and browse to the required location.

Configuring Your Remote Batch Settings

By keeping the default Remote Batch Settings check box, you can configure this Pro/ENGINEER installation for use as a Remote Toolpath Computation Server. This enables remote batch jobs to be issued to this machine. You start the Remote Batch Server after the installation process by running the `rbm_startup` script.

Supply the following information to configure the `rbm_startup` script:

- The Pro/ENGINEER startup command that is used to run remote batch jobs (for example, `proe_rb`)
- The maximum number of Pro/ENGINEER sessions to be started on this machine for processing jobs
- The frequency of communication (in seconds) between Pro/ENGINEER and the Remote Batch Server
- The RPC communications port number that is used to communicate with machines that are using this installation as a Remote Batch server
- The directory in which Pro/ENGINEER runs when processing batch jobs

Specifying the Location of Your Help Information

Note

Identifying the location of your Help files is not necessary if you installed the Pro/ENGINEER Help files within the product installation directory.

By choosing **PTC Help** in the Introductory window, you can install the Pro/ENGINEER Help files in a location other than the Pro/ENGINEER installation directory. In the **Help Location** window, specify the directory that contains or will contain your product Help files. This option lets you specify a common master Help directory, such as `/opt/ptc/ptchelp`.

Note

This procedure identifies the location of the HTML files. It does not install the context-sensitive Help or the online manuals. In order for the Help and the online reference documentation to be visible from a Web browser, the Help search paths to the Help installation directory must be supplied here. The Help files on the Pro/ENGINEER Reference Documentation CD-ROM cannot be installed in the Pro/ENGINEER installation directory. See Chapter 8, Installing PTC Help and Reference Information for details.

1. Add the Help installation directory by clicking **Add** in the **Help Location** dialog box.
2. Enter the URL to the Help installation directory on your Web server (for example, `http://<servername>/<path>/ptchelp2001`). Or, browse to or enter the full path to the load point of a local machine that contains or will contain the product Help files (for example, `C:\ptc\user\ptchelp`).
3. Click **OK** and **Next**. You can **Edit** and **Delete** this location.

Note

Context-sensitive Help for Pro/ENGINEER products is only available on the product CD-ROM.

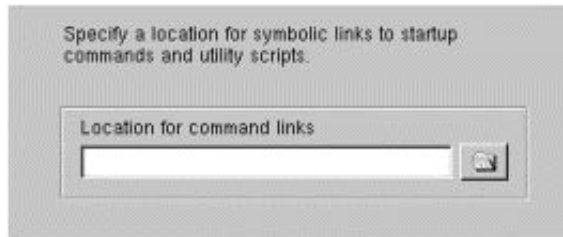
Configuring a UNIX Installation

The following input is optional when you configure your installation on UNIX systems. You can:

- Create a symbolic link to the commands that start your software
- Set the Design Conferencing Server
- Configure Pro/ENGINEER distributed services
- Configure your Remote Batch Server
- Specify the full path to your Help installation directory (specifying the load point and installing the Help files are necessary steps to enable clients to view Help)

Creating Links

By keeping the default **Create links to product startup commands** box checked on the **Optional Configuration Steps** window, you can create a link from the `/bin` directory in your installation directory to another directory on your UNIX system. (If this other directory is in your path environment setting, then simply entering the command name starts Pro/ENGINEER.) To create a link, use the **Startup Command Links** dialog box to enter the full path or browse to the directory in which you want the link created.

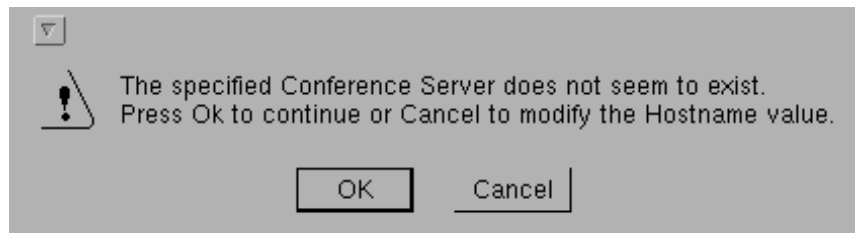


Setting Design Conferencing Server

By keeping the default Design Conferencing Server Settings box checked on the **Optional Configuration Steps** window, you can specify the host name for the conference server.



The conference server can run on a Windows system only. Thus, on an UNIX system, you need to connect to the conference server running on a Windows system. You can do this by specifying the host name of the conference server. PTC.Setup validates the host name you specify. If the validation fails, the following error message appears.



You can continue the installation process even if you do not specify a valid host name. For information on installing the conference server on a Windows system see Chapter 5, Installing and Starting PTC Conference Server (Windows Only).

Completing the Pro/ENGINEER Installation

After you have configured the installation, and when you see the **Installation Progress** window, follow these steps.

1. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you can:

- Click **Back** and review information.
- Click **Install** to begin installation.
- Click **Cancel**, respond to a confirmation prompt, and exit PTC.Setup.

2. Click **Next** to proceed with the installation of the next selected product or exit PTC.Setup.

During installation, you can click **Cancel** at any time to terminate installation process.

PTC.Setup copies files and sets file permissions. During copying, you may be prompted to insert another CD-ROM. Either insert the CD-ROM or provide the path to the CD-ROM.

For procedures, see Specifying the Location of the License Server or File, and Configuring a Windows Installation earlier in this chapter.

Configuration File for Pro/ENGINEER Startup on Windows

When you configure a Pro/ENGINEER startup on the Windows platform, an executable file named `proe.exe` and one or more configuration files (`.psf`) are created. A configuration file is created for each startup configuration. The configuration file contains a section where you can specify and set user-defined environment variables. This user-defined information is preserved during reconfiguration and update installations of Pro/ENGINEER. A configuration file is created when you complete the Pro/ENGINEER installation.

The configuration file is created in the `<loadpoint>\bin` directory.

Note

The configuration file must exist only in the `<loadpoint>\bin` directory.

The startup command is a combination of the startup executable and the configuration file. For example,

```
proe.exe <filename>.psf
```

where <filename> is the name of the configuration file.

Following is a sample configuration file. The text is the default information that is used when you start Pro/ENGINEER. The bold text following the //USER-PSF section is considered user-defined information. This user-defined information is used when starting Pro/ENGINEER.

Note

Modify only the text in bold in this sample configuration file.

```
// PTC - PSF file: proe
//
ENV=PATH+=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%\deflib
ENV=PATH+=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%\lib
ENV=PRO_COMM_MSG_EXE=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%\
OBJ\pro_comm_msg.exe
ENV=CDRS_DATA=%PRO_DIRECTORY%
ENV=PRO_IMAGE_CONVERTER=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%\obj
\convert_image.exe
ENV=PRO_PHOTORENDER=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%\obj\PhotoRender.exe
ENV=GALAXYHOME=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%
ENV=SPG_DIRECTORY=%PRO_DIRECTORY%
ENV=PROTABLE_DIRECTORY=%PRO_DIRECTORY%\protable
ENV=PROTAB=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%\OBJ\protab.exe
ENV=CLHOME=%PRO_DIRECTORY%\text\pcldata
ENV=CV_ENV_HOME=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%\CV102
ENV=LM_LICENSE_FILE=7788@static
ENV=PROE_FEATURE_NAME=PROE_INHOUSE
RUN=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%\nms\nmsd.exe -timeout 300
RUN=%PRO_DIRECTORY%%PRO_MACHINE_TYPE%\obj\xtop.exe

// USER - PSF
// Add User specific environment or run applications below here
ENV=DPS_DEBUG=10
```

You can set the value of an environment variable or specify the invocation of a third party application under the // USER - PSF section of the configuration file.

Specifying Environmental Variables

To specify the value of an environmental variable in the configuration file:

- Use the ENV or RUN entry to specify the value of an environment variable or run an external application.
- Use the equal to sign (=) following the text ENV to change the existing value of the variable.
- Use the plus and equal to signs (+=) to prefix a value to an existing value of the variable.
- Use the minus and equal to signs (-=) to suffix a value to an existing value of the variable.
- Use the RUN entry to execute an external command on startup.

Using the Configuration File when Running Pro/ENGINEER

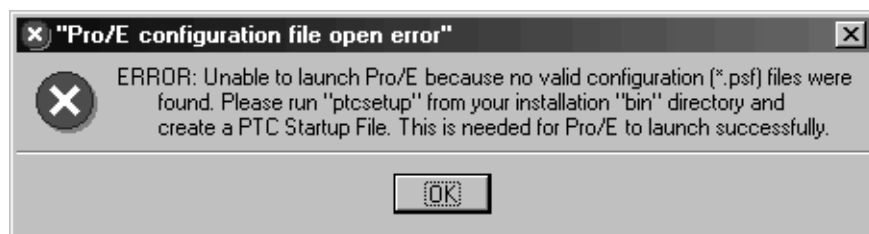
The configuration file is used as an argument when you execute the `proe.exe` executable to start Pro/ENGINEER.

Note

When you run Pro/ENGINEER from the command line, specify the configuration file as the first argument followed by any other argument, such as, a trail file.

If you do not specify the configuration file when running Pro/ENGINEER, a dialog box opens with a list of available configuration files. Select one of these configuration files.

If you run Pro/ENGINEER without creating a configuration file, the following error message appears:



If you create only one configuration file, Pro/ENGINEER uses this configuration file by default.

Generating a Debug Log File

You can run the `proe.exe` executable in the debug mode by setting the value of the environment variable `APPL_STARTUP_LOG` to `true`. A debug output log file named `applstartup.log` is created in `%TEMP%`. The debug output log file contains the environment variables that you have set.

Overriding 64-bit Architecture on Pro/ENGINEER Startup (UNIX Only)

If you installed both the 32-bit and 64-bit architectures in the same Pro/ENGINEER load point on UNIX, then the Pro/ENGINEER startup command always runs the 64-bit architecture by default. To run the 32-bit architecture on startup, set the value of the `FORCE_PMT` environment variable.

For example, on Solaris, set the value of the `FORCE_PMT` environment variable to `sun4_solaris` to run the 32-bit architecture on Pro/ENGINEER startup.

```
setenv FORCE_PMT sun4_solaris
```

Set the value of the `FORCE_PMT` environment variable to `sun4_solaris_64` to run the 64-bit architecture on Pro/ENGINEER startup. If you do not set the `FORCE_PMT` environment variable, then the Pro/ENGINEER startup command runs the 64-bit architecture.

Starting Pro/ENGINEER

After your license management and product software has been installed, start Pro/ENGINEER.

Windows

Execute Pro/ENGINEER using the shortcut defined in the PTC\ProENGINEER program group by double-clicking on the associated icon (for example, `proe`).

UNIX

From a UNIX prompt, navigate to the Pro/ENGINEER installation directory and execute the command name that you defined during the installation process. For example, `/opt/ptc/proe/bin/proe`

Removing Pro/ENGINEER (Windows Only)

You can remove your Pro/ENGINEER software application through the Control Panel after it has been installed using PTC.Setup. This procedure is for Windows systems only.

1. From the **Start** task bar, click **Settings > Control Panel**.
2. Double-click the **Add/Remove Programs** icon to select it. The **Add/Remove Programs Properties** dialog box opens.
3. Click the **Install/Uninstall** tab.
4. In the program application list, highlight the specific release of Pro/ENGINEER you want to remove.
5. Click **Add/Remove**. You see the **PTC Uninstall** dialog box.
6. Click **Uninstall** or **Cancel** to escape. You are presented with a series of confirmation statements asking permission to remove files.
7. Click **Uninstall** to proceed. Upon completion, Pro/ENGINEER is removed.

5

Installing and Starting PTC Conference Server (Windows Only)

This chapter explains how to install and start PTC Conference Server. You can install the PTC Conference Server only on Windows systems.

Topic	Page
Installing PTC Conference Server	5 - 2
Completing the Conference Server Installation	5 - 5
Starting Conference Server	5 - 7
Removing Conference Server	5 - 7

Installing PTC Conference Server

The conference server installation requires administrative privileges.

Three major steps are required for the successful installation of your product software:

- Defining your installation components, including the installation directory
- Performing optional configuration steps
- Starting the software

Defining the Installation Components

1. Insert the product software CD-ROM on your Windows operating system.

To start the PTC.Setup, choose one of these methods if autorun is not enabled:

- Start Windows Explorer, browse to the CD-ROM drive, and double-click on the icon for the setup.exe.
- At an MS-DOS prompt, type the following command:
`<cdrom>:\setup.exe`
where <cdrom> is the CD-ROM drive letter.
- From the taskbar, click **Start > Run**, and enter or browse to
`<cdrom>:\setup.exe`.

The main installation window opens.

2. Select **PTC Conference Server**.

Note

When you perform an update or install a new Release of a PTC product you must update your license information.

3. Click **Next**. You see the **Define Installation Components** dialog box.

Define Installation Components

Installation Directory

C:\Program Files\PTC Conference Server

Disk Space

Available on C: 455 MB

Required on C: 4.8 MB

Platforms

☒ i486_nt

Languages

☒ English
☐ French
☐ German
☐ Italian
☐ Spanish
☐ Japanese
☐ Korean

☐ Chinese_cn
☐ Chinese_tw

Components

☒ Conference Server 1.3 MB

Subcomponents

Description

Select a component or subcomponent to view its description.

< Back Next > Cancel

4. Define the following parameters:

- **Installation Directory**—Enter an installation directory or keep the default value. The default installation directory for Conference Server is C:\Program Files\PTC Conference Server on Windows. PTC.Setup creates the installation directory for you. Or, click the folder icon, navigate the folder hierarchy, and select a different installation directory.

For new installations, the directory you enter must be a new directory.

- **Platforms**—Select the platforms (for example, i486_nt). Use this parameter to define the machine types that access the installation directory. PTC.Setup detects your machine's architecture and lists that platform as the default.

- **Languages**—Keep English as your only language (English is always the default). Or, check the box next to the languages you wish to add.
 - **Components**—The available component is **Conference Server**. Keep this component to install the files necessary to run the software product. The amount of disk space required to install the product is also displayed.
5. Click **Next** after you have selected the component.
A message asks you if you want PTC.Setup to create the installation directory.
 6. Click **Next**. You see the **Optional Configuration Steps** dialog box. Optional configurations vary according to the product and the platform.

Performing Optional Configuration Steps

The following steps are optional.

Setting Shortcut Preferences

1. To configure the Windows shortcut preferences and path settings for Conference Server, keep the default **Windows shortcut preferences** check box in the **Optional Configuration Steps** dialog box.
2. Click **Next**. The **Windows Preferences** dialog box opens.
3. Set the following shortcut preferences:
 - **Shortcut Location**—You can start Conference Server from the desktop, the **Start** menu, the **Start > Programs** menu, or any combination of these three options.
 - **Program Folder**—If you select **Program folder** as the shortcut location, specify the name of the folder and option in the **Programs** menu.
 - **Startup Directory**—If you select **Start menu** as the shortcut location, specify the name of the startup directory.
4. Set the following Windows environment preferences:
 - **Modify system environment for all users**—Sets the system PATH variable for all users on the system.

Note

Administrator privileges are required to apply these changes.

- **Modify current user's environment only**—Sets the user's PATH variable for the current user on the system.

5. Click **Next**. The **Installation Progress** dialog box opens. See the next section Completing the Conference Server Installation.

Completing the Conference Server Installation

When you see the **Installation Progress** window, follow these steps.

1. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you can:

- Click **Back** and review information.
- Click **Install** to begin installation.
- Click **Cancel**, respond to a confirmation prompt, and exit PTC.Setup.

During installation of Conference Server, you are prompted to install the Groove software. See the next section Installing Groove Software.

2. Click **Next** to proceed with the installation of the next selected product or exit PTC.Setup.

During installation, you can click **Cancel** at any time to terminate installation process.

PTC.Setup copies files and sets file permissions. During copying, you may be prompted to insert another CD-ROM. Either insert the CD-ROM or provide the path to the CD-ROM.

Installing Groove Software

During the installation process of Conference Server at the Install Groove Software step the Groove Setup window appears.

1. Click **Next** to continue the installation of Groove software.
2. Enter the destination folder to install the Groove software. The default destination folder for Groove installation is C:\Program Files\Groove Networks\Groove on Windows. Groove Setup creates the destination folder for you. Or, click **Browse** to navigate the folder hierarchy, and select a different destination folder. Click **Next**.
3. Enter the User Data Location folder. The default folder is C:\WINNT\Profiles\<user>\Application Data\Groove Networks\Groove on Windows. Groove Setup creates the user data location folder for you. Click **Browse** to select a different folder. Click **Next**.

4. Enter the System Data Location folder. The default folder is C:\Program Files\Groove Networks\Groove\Data\System on Windows. Groove Setup creates the system data location folder for you. Click **Browse** to select a different folder. Click **Next**.
5. The Installation Options window opens.



Set the following Installation options:

- **Install Groove for All Users**—To allow all users to run the Groove software.
- **Add Groove to Desktop**—To create a shortcut for Groove software on your desktop.

Click **Next**.

6. Specify the Program Folder. Click **Next**.
7. The **Check Setup Information** window opens with the installation information for the Groove software. Click **Back** to go to the previous windows and change the installation settings. Click **Next**.
8. Click **Finish** on the Groove Setup window to complete the installation of Groove software.

Starting Conference Server

Installing the PTC Conference Server creates two new Windows services: PTC Conference Server and PTC Name Service. These services are configured to startup on reboot, so it is not necessary to manually start the Conference server.

It is recommended that you start the conference center and create an account prior to starting the Groove software.

Removing Conference Server

You can remove your Conference Server software application through the Control Panel after it has been installed using PTC.Setup. This procedure is for Windows systems only.

1. From the Start task bar, click **Settings > Control Panel**.
2. Double-click the **Add/Remove Programs** icon to select it. The **Add/Remove Programs Properties** dialog box opens.
3. Click the **Install/Uninstall** tab.
4. In the program application list, highlight the specific release of Conference Server you want to remove.
5. Click **Add/Remove**. You see the **PTC Uninstall** dialog box.
6. Click **Uninstall** or **Cancel** to escape. You are presented with a series of confirmation statements asking permission to remove files.
7. Click **Uninstall** to proceed. Upon completion, Conference Server is removed.

Uninstalling Groove Software

When you uninstall the Conference Server, the Groove uninstaller is also started.

Note

Do not uninstall the Groove software by selecting the **Groove uninstall** entry on the **Add/Remove programs** window. It must be uninstalled along with the Conference Server.

When the Groove software is uninstalled, the software is not completely removed from the system. The account information along with shared spaces are preserved on the system.

To uninstall the Groove software completely from the system, run the executable `GrooveClean.exe` located at path `<Groove loadpoint>\bin`.

Installing Pro/MECHANICA

This chapter explains how to install Pro/MECHANICA. The procedures are for new installations only. You may need to change some machine settings before installing a particular software component. This information is located in the READ THIS FIRST document, which is included with your software package and at

<http://www.ptc.com/partners/hardware/current/prom.htm>.

For supported platforms and configurations, refer to the PTC Services and Support Web site at

<http://www.ptc.com/partners/hardware/current/support.htm>.

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Installing Pro/MECHANICA

To install Pro/MECHANICA, you need licensing information from PTC. If you plan to run Pro/MECHANICA in the integrated mode, it is assumed that you have already obtained licensing information while installing Pro/ENGINEER. If you plan to run Pro/MECHANICA independently, see Chapter 3, Installing License Management Software, to learn how to install your license management software.

You can install your product software on a license server, a license client, a node-locked machine, or on any combination of these machines.

Note

Usage of uncounted node-locked licenses does not require license management software.

Following major steps are required for successful installation of your product software:

- Defining your installation components, including the installation directory
- Specifying the location of the license server or servers or license file
- Starting the software

Note

If you are planning to use Integrated Pro/MECHANICA, it is required that you configure the Pro/ENGINEER command to work with Pro/MECHANICA by specifying the Pro/MECHANICA directory path. If you have not defined the directory path in the **Command Configuration** dialog box when installing Pro/ENGINEER, you can do it now by rerunning the PTC.Setup utility for Pro/ENGINEER. For more information, see Supplying Optional Input Fields on page 4-12.

Defining the Installation Components

1. Insert the product software CD-ROM on your Windows system or insert and mount the product software CD-ROM on your UNIX system. For step-by-step instructions, see Loading and Mounting the CD-ROM on UNIX on page B-7.

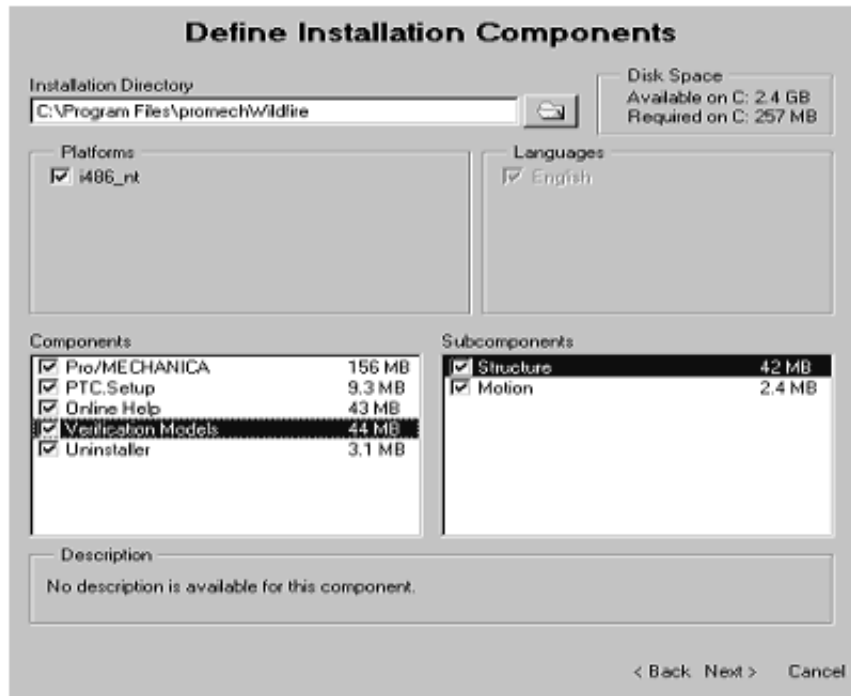
The main window opens with a list of products.

2. Clear **PTC License Management** (the default) and **Pro/ENGINEER**. At this point, it is assumed that you have installed FLEXlm either on the license server or on a node-locked machine.

Note

When you perform an update or install a new release of a PTC product, you must update your license information.

3. Select the **Pro/MECHANICA** option and click **Next**. The **Define Installation Components** dialog box opens.



The dialog box is titled "Define Installation Components". It contains several sections:

- Installation Directory:** A text field showing "C:\Program Files\ptc\proech\wildfire" with a "Browse" button.
- Disk Space:** A box showing "Available on C: 2.4 GB" and "Required on C: 257 MB".
- Platforms:** A list with "i486_nt" selected.
- Languages:** A list with "English" selected.
- Components:** A list of components with their sizes:

Component	Size
☒ Pro/MECHANICA	156 MB
☒ PTC Setup	9.3 MB
☒ Online Help	43 MB
☒ Verification Models	44 MB
☒ Uninstaller	3.1 MB
- Subcomponents:** A list of subcomponents with their sizes:

Subcomponent	Size
☒ Structure	42 MB
☒ Motion	2.4 MB
- Description:** A text area containing "No description is available for this component."
- Navigation:** Buttons for "< Back", "Next >", and "Cancel".

4. Specify the following parameters:

- **Installation Directory**—Enter the name of the directory where you want to install Pro/MECHANICA or click **Browse** to locate the installation directory.

Note

For a new installation, specify a directory that does not exist. The installation directory is created during the installation process.

- **Platforms**—Select the platform for the installation. Your machine's architecture is automatically detected and selected as the default platform.
- **Languages**—Select the required language. English is selected as the default language.

- **Components**—Select the required Pro/MECHANICA components and those that you want to install. The available components are:

Pro/MECHANICA

PTC.Setup

Online Help

Verification Models

The Pro/MECHANICA and PTC.Setup components are selected by default.

When you select a component, the subcomponent or subcomponents appear along with the required disk space. Some products may not have subcomponents.

5. Click **Next** after you have selected the components.

A message appears asking you to confirm that you want to create the installation directory.

6. Click **OK**. The **Specify License Servers** dialog box opens.

Specifying the Location of the License Server or File

The PTC.Setup installation utility can access your license information if it is on a remote license server or on a local machine. Your next task is to tell PTC.Setup the location of the license servers or license files that you want this installation of your product software to read.

If you attempt to access your license information from a machine that does not have the minimum version of *FLEXlm* required, an error message tells you to update your license management software. Consult the Release Notes that accompany your order for the most recent information on which version of *FLEXlm* meets your installation requirements.

Specifying the License Server

If the license management software resides on the same machine on which you are installing the product software, and you have used the default communications port for the license server, you do not have to tell this installation where to obtain its licensing data. PTC.Setup detects the host name of the server and populates the **Specify License Servers** table (see the following figure).

Specify License Servers

Please indicate all license servers that you wish to use with this installation of Pro/ENGINEER

Server Type	Location (port@host)
Triad Server	7788@ruchi;7788@jwala;7788@maruti

If the license management software resides on a different machine, you must specify where this installation can obtain its licensing information. See the following sections, Obtaining a License from a Server or Servers and Obtaining a Locked License from an Individual License File.

Note

Click **Info** to view the available license features and floating optional modules.

In order to use Pro/MECHANICA in integrated mode with Pro/ENGINEER, you must include the Pro/ENGINEER license servers in the list of servers.

Specifying the License Client

If you are installing the product software on a license client machine that does not have FLEXlm installed, the **Specify License Servers** table initially appears blank. To enable this installation to obtain floating licenses from a remote server, you must define the server that is distributing the licenses. See *Obtaining a License from a Server or Servers*. If this installation is to read a license file for locked licenses, you must specify the full path to and the name of the license file. See section *Obtaining a Locked License from an Individual License File* on page 4-9.

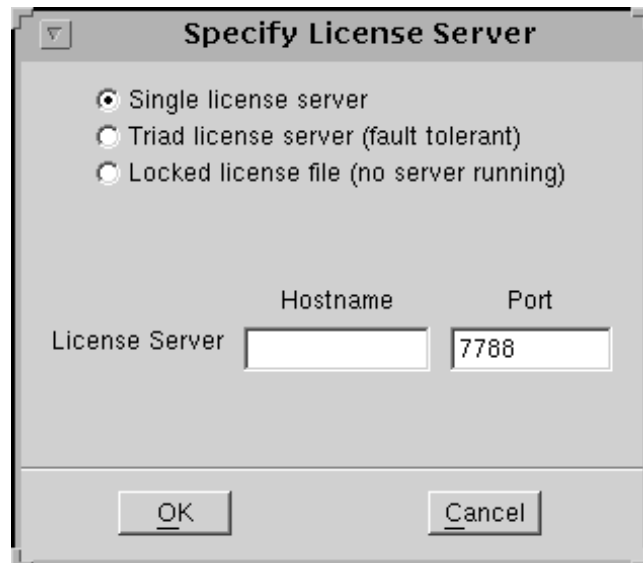
Note

You cannot run the product software without checking out a license. This means that Pro/MECHANICA cannot be installed alone without a license.

Obtaining a License from a Server or Servers

To obtain a license from a server or servers:

1. Click **Add** in the **Specify License Servers** dialog box (see the previous window). The **Specify License Server** dialog box opens. You can obtain a license from two types of license servers or from a locked license file (see the section *Obtaining a Locked License from an Individual License File* on page 6-7):



- **Single license server**—Select this option to specify a single server that serves the licenses.

Enter the host name and the communications port number if it is different than the default. This information identifies the server from which this installation obtains its license codes (for example, aberdeen).

- **Triad license server (fault tolerant)** —Select this option to specify a Triad configuration. The Triad configuration consists of three Triad partners. As long as two or more partners of these three Triad partners are running, the licenses are served out. If two or more partners of these three Triad partners are not functioning, the server stops serving the licenses.

If the client is accessing a Triad configuration, choose the **Triad license server (fault tolerant)** option and define all three license servers. Each Triad partner server is required to have the same license file.

Note

The order of the server list is important (Triad Partner 1, Triad Partner 2, Triad Partner 3). The sequence must be the same in each license file on all three license servers.

PTC recommends that the Triad license servers be at the same geographical site. For further information on redundant license servers, refer to the *FLEXlm End Users Guide 7.2*, Chapter 4, Selecting Server Machines, at <http://www.globetrotter.com/TOC.htm>.

Note

Do not specify the host name of the client nodes. Specify only the license server that controls usage of the licenses. You can use the **Specify License Server** dialog box several times to configure the clients to access multiple servers or license files across your network.

2. Click **OK** in the **Specify License Server** dialog box to add the server and communications port information to the **Specify License Servers** table (for example, Single Server 7788@aberdeen).

Obtaining a Locked License from an Individual License File

To obtain a locked license from an individual license file:

1. Click **Add** in the **Specify License Server** dialog box. The **Specify License Server** dialog box opens.
2. To obtain your license from a specific license file that can exist on your local machine or on the network, choose the **Locked license file (no server running)** option (see previous dialog box).

3. Perform one of the following actions:
 - Specify the full path to your license file on your local or NFS-mounted disk (for example, `C:\Program Files\flex2001\license.dat`).
 - Click the folder icon, navigate the folder hierarchy, and select the correct license file.
4. Click **OK** in the **Specify License Server** dialog box to add the license file path information to the **Specify License Server** dialog box.
5. Click **Next**. The **Optional Configuration Steps** dialog box opens. Further steps are optional and vary for Windows and UNIX systems.

Configuring a Windows Installation

The following input is optional when you configure your installation on Windows systems. You can

- Create Windows shortcuts to start Pro/MECHANICA
- Specify the full path to your Help installation directory (specifying the load point and installing the Help files are necessary steps to enable the users of clients to view Help)
- Specify the location of your Web browser executable file

For step-by-step instructions, see *Configuring a Windows Installation* on page 4-13.

Configuring Context-Sensitive Help

Pro/MECHANICA context-sensitive Help is integrated with Pro/ENGINEER Help. To install the HTML files, you must select **PTC Help** from the product selection window and proceed with the installation steps. When you install Pro/MECHANICA, you must specify the location of your Help installation directory and specify the location of your Web browser executable file.

Configuring a UNIX Installation

The following input is optional when you configure your installation on UNIX systems. You can:

- Create a symbolic link to the commands that start your software
- Specify the full path to the PTC Application Manager

- Specify the full path to your Help installation directory (specifying the load point and installing the Help files are necessary steps to enable clients to view Help)
- Specify the location of your Web browser executable file

For step-by-step instructions, see *Configuring a UNIX Installation* on page 4-17.

Completing the Pro/MECHANICA Installation

After you have configured the installation, when you see the **Installation Progress** window, follow these steps.

1. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you can:

- Click **Back** and review information.
- Click **Install** to begin installation.
- Click **Cancel**, respond to a confirmation prompt, and exit PTC.Setup.

2. Click **Next** to proceed with the installation of the next selected product or exit PTC.Setup.

During installation, you can click **Cancel** at any time to terminate installation process.

PTC.Setup copies files and sets file permissions.

Starting Pro/MECHANICA

After your license management and product software have been installed, start Pro/MECHANICA.

Windows

Execute Pro/MECHANICA using the shortcut defined in the program group by double-clicking on the associated icon (for example, promec).

UNIX

From a UNIX prompt, execute the Pro/MECHANICA command name that you defined during the installation process and you would be able to access Pro/MECHANICA. For example,
`/opt/ptc/proe/bin/promec`

Removing Pro/MECHANICA (Windows Only)

You can remove your Pro/MECHANICA software application through the Control Panel on Windows systems only.

How to Remove Pro/MECHANICA from Your Computer

To remove Pro/MECHANICA after it has been installed using PTC.Setup, follow these steps:

1. From the **Start** task bar, click **Settings > Control Panel**.
2. Double-click the **Add/Remove Programs** icon to select it. The **Add/Remove Programs Properties** dialog box opens.
3. Click the **Install/Uninstall** tab.
4. In the program application list, highlight the specific release of Pro/MECHANICA that you want to remove.
5. Click **Add/Remove**. You see the **PTC Uninstall** dialog box.
6. Click **Uninstall** or **Cancel** to escape. You are presented with a series of confirmation statements asking permission to remove files.
7. Click **Uninstall** to proceed. Upon completion, Pro/MECHANICA is removed.

Installing PTC Application Manager (UNIX Only)

This chapter explains how to install PTC Application Manager and application libraries of models and textures on UNIX system. The PTC Application Manager utility installs a toolbar that gives you easy access to your desktop applications when using Pro/ENGINEER.

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Installing PTC Application Manager (UNIX Only)

The PTC Application Manager is a utility that appears as a toolbar on your UNIX system. Similar to the Windows **Start** menu, the PTC Application Manager includes a menu that enables you to easily start and close applications on UNIX systems. The menu can be configured to include any application, including applications that are not developed by PTC (Parametric Technology Corporation). One key benefit is that the Application Manager can be configured to activate Pro/ENGINEER from Pro/INTRALINK.

The PTC Application Manager includes a menu selection for each application started by the PTC Application Manager, giving you easy access to those applications on your desktop.

1. Click **PTC Application Manager** from the main PTC.Setup window.
2. Click **Next**. The **Define Installation Components** dialog box opens.
3. Define the following parameters:
 - **Installation Directory** (new)—Keep the default installation directory (for example, `/opt/ptc/appmgr`). PTC.Setup creates the installation directory for you. Or, click the folder icon, navigate the folder hierarchy, and select a different installation directory.

For new installations, the directory you enter must be new or empty.

- **Platforms**—Keep the default platform (for example, `hp8k`). Use this parameter to define the machine types that access the installation directory. PTC.Setup detects your machine's architecture and lists that platform as the default. To add more machine types, check the box next to the appropriate machine type.
- **Languages**—Keep English as your only language (English is always the default). Or, check the box next to the languages you wish to add.

To view Application Manager in a language other than English, you must set the language variable before installing your software. For more information, see *Setting Foreign Language Defaults* on page B-20.

- **Components**—Keep PTC Application Manager as your default to install the files necessary to run the utility.
- **Disk Space**—Check to make sure that you have enough disk space for your installation before continuing.

4. Click **Next**.

A message asks you if you want PTC.Setup to create the installation directory.

5. Click **OK**. The **Installation Configuration** window opens.

Configuring the PTC Application Manager Settings

The following input is optional when you configure your installation of the PTC Application Manager.

Each PTC.Setup tab lets you configure a different aspect of your Application Manager installation.

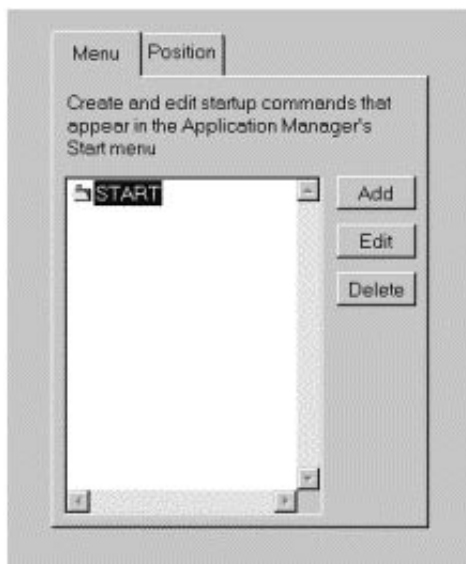
Note

This configuration can also be done dynamically after the PTC Application Manager is started.

Creating Start Menu Commands

You can add the program startup commands that you want the Application Manager **Start** menu to execute (for example, `proe2001`). This enables you to start and close applications easily using the Application Manager.

1. To choose the product for which you want to create a startup command, click **Add** in the **Configure Application Manager Settings** dialog box. The **Application Manager Configuration** dialog box opens.
 - a. In the **Type** field, keep Pro/ENGINEER (default) or choose another product from the list.
 - b. In the **Label** field, enter the text you want to appear in the **Start** menu of the Application Manager.
 - c. In the **Command line**, browse to or enter the full path and the name of the command that you want the label to execute (for example, `C:\ptc\proe\bin\proe.bat`). This command executes the specified license and product type.



2. To change selections, select the product and **Add** a command. You can **Edit**, or **Delete** existing commands.

Note

After installation, new commands can be added and existing commands can be modified and deleted from the PTC Application Manager's **Start > Preferences** menu.

Customizing the Application Manager Settings

You customize the appearance of the Application Manager in the **Position** dialog box.

1. Click the **Position** tab to customize the position of the Application Manager.
2. Specify where you want the Title Bar (toolbar) to appear on your desktop: horizontal top, horizontal bottom, vertical left, or vertical right.

Note

You can also activate Auto Hide. The auto hide feature lets you display the Application Manager as a thin line. The Application Manager reappears when the mouse is scrolled over the thin line.

Completing the PTC Application Manager Installation

After you have configured the installation, when you see the **Installation Progress** window, follow these steps.

1. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you can:

- Click **Back** and review information.
 - Click **Install** to begin installation.
 - Click **Cancel**, respond to a confirmation prompt, and exit PTC.Setup.
2. Click **Next** to proceed with the installation of the next selected product or exit PTC.Setup.

During installation, you can click **Cancel** at any time to terminate installation process.

PTC.Setup copies files and sets file permissions.

Note

After installation, the optional settings can be reconfigured from the PTC Application Manager's **Start > Preferences** menu.

Installing PTC Help and Reference Information

This chapter provides an overview of the Help information you receive with your software purchase. The Help documentation consists of two components: context-sensitive Help, which is distributed on the product CD-ROM, and online reference documentation in book format, which is on a separate CD-ROM. This chapter also explains how to install both types of Help.

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How Is the Context-Sensitive Help Organized?	8 - 2
Overview of Help Installation	8 - 3
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Viewing the Help System	8 - 7

Overview of the Help System

The Help system features:

- Context-sensitive Help, which is integrated with your PTC product.
- PTC Reference Documentation, which distributes online PTC books, such as the installation guide. These manuals are in PDF format.

Context-sensitive Help is integrated with Pro/ENGINEER, Pro/INTRALINK, and CDRS. Pro/MECHANICA information is integrated with the Pro/ENGINEER Help topics.

With Help, you can do the following:

- Install Help files on your local workstation, a network file server, your company's intranet, or on a remote Web server.
- View the contents of PTC online books and context-sensitive Help with your Web browser.

What Is the Reference Documentation?

Pro/ENGINEER Reference Documentation consists of HTML and PDF files that correspond to the PTC printed material, including hardcopy user's and task guides. The Reference Documentation is distributed on separate CD-ROMs for each PTC product.

With the Reference Documentation, you can do the following:

- Print copies of several PTC manuals with Adobe Acrobat Reader.
- Print the table of contents, chapters, or page ranges of PTC manuals.

How Is the Context-Sensitive Help Organized?

Help topics are organized by product. There are four main categories the PTC Help table of contents: Welcome, Pro/ENGINEER Foundation, Using Foundation Modules, and Using Additional Modules. Pro/ENGINEER Foundation, for example, includes information on Core and Part Modeling.

With the Help system, you can do the following:

- Search each product for relevant Help topics or scroll through the table of contents or the alphabetical index.
- Navigate between related topics.
- Print individual topics using your Web browser.

Overview of Help Installation

Using PTC.Setup you can install the Pro/ENGINEER Help files into either the product installation directory or elsewhere on your system. When you install Pro/ENGINEER, you can install the context-sensitive Help files into the product installation directory by default (for example, `/opt/ptc/proe`). Those steps are listed in Chapter 4, *Installing and Starting Pro/ENGINEER*.

You can also install the Pro/ENGINEER Help files into a common Help directory that is compatible with the default Reference Documentation installation directory (for example, `/opt/ptc/ptchelp`). Those steps are described in the next section. Because the Reference Documentation is distributed on individual CD-ROMs by product, a common Help installation directory is advantageous when multiple PTC products are used.

A shared installation directory that contains context-sensitive Help and Pro/ENGINEER Reference Documentation is supported on a network file server and on an intranet or internet Web server.

Note

Only the context-sensitive Help files can be installed in either the product installation directory or elsewhere. The Reference Documentation files cannot be installed in the product load point.

Installing Context-Sensitive Help Locally from the CD-ROM

To install Pro/ENGINEER context-sensitive Help files into a common Help directory, follow these steps:

1. Change to a directory where you have write permission or administrative privileges.
2. Start PTC.Setup using the steps outlined in *Starting PTC.Setup* on page 1-5.
3. Choose **PTC Help** on the introductory window. This component is optional and not selected by default.
4. Click **Next**. The **Define Installation Components** dialog box opens. The Pro/ENGINEER Help Files is the only default component.

5. Define the installation directory:

Installation Directory (new)—Keep the default installation directory (for example, `/opt/ptc/ptchelp`) listed or enter the full path to the desired location. If this is a new installation, (new) appears next to the directory path. PTC.Setup creates the new directory for you. If this is an update to an existing PTC Help installation directory, (update) appears next to the directory path field. You also can click the folder icon, navigate the folder hierarchy, and select a different installation directory.

For new installations, the directory you enter must be new or empty.

6. After you have selected your components, click **Next**. A message asks you if you want PTC.Setup to create the installation directory.
7. Click **OK**.
8. Click **Next**. You see the **Installation Progress** window.
9. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you can:

- Click **Back** and review information.
- Click **Install** to begin installation.
- Click **Cancel**, respond to a confirmation prompt, and exit PTC.Setup.

10. Click **Next** to proceed with the installation of the next selected product or exit PTC.Setup.

During installation, you can click **Cancel** at any time to terminate installation process.

PTC.Setup copies files and sets file permissions.

Installing Reference Documentation Locally from the CD-ROM

To install the reference documentation, follow these steps:

1. Change to a directory where you have write permission or administrative privileges.
2. Start PTC.Setup using the steps outlined in Starting PTC.Setup on page 1-5.
3. Click **Next**. The **Define Installation Components** dialog box opens.

4. Define the installation directory:

Installation Directory (new)—Keep the default installation directory (for example `/opt/ptc/ptchelp`) listed or enter the full path to the desired location. If this is a new installation, (new) appears next to the directory path. PTC.Setup creates the new directory for you. If this is an update to an existing PTC Help installation directory, (update) appears next to the directory path field. You also can click the folder icon, navigate the folder hierarchy, and select a different installation directory.

For new installations, the directory you enter must be new or empty.

5. Click **Next**. A message asks you if you want PTC.Setup to create the installation directory.
6. Click **OK**.
7. Click **Next**. You see the **Installation Progress** window.
8. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you have three choices. You can:

- Click **Back** and review information.
- Click **Install** to begin installation.
- Click **Exit**, respond to a confirmation prompt, and close PTC.Setup.

PTC.Setup copies files and sets file permissions.

Installing Help Topics and Reference Documentation onto a Hard Disk

To easily administer many client machines, install the Help topics and the online books onto a network file server's hard disk. To service remote clients not on the local network, install the files onto a Web server's hard disk.

When installing Pro/ENGINEER Help topics and Reference Documentation onto a Web server, you must place the files within the Web server's document root directory (as specified during the Web server's installation).

Installing Help Topics and Reference Documentation on Your Web Server

To install Pro/ENGINEER context-sensitive Help and Reference Documentation for use with your Web server, repeat the steps listed in the preceding section, How to Install Reference Documentation Locally from the CD-ROM.

Configure your Web server to distribute files from the installation directory as described in the previous section. For example, if you installed the Help files in the /opt/ptc/ptchelp directory, then point the Web server to that directory and set an alias of your choice.

For example, if you configure a Web server named Titan to distribute /opt/ptc/ptchelp with the alias /help, then enter the following address in the Help path field: `http://titan/help` in the **Help Location** window.

Accessing the Reference Documentation

You can view the Pro/ENGINEER online books directly from the Pro/ENGINEER Reference Documentation CD-ROM, on your local network, or on a Web server.

Note

Unlike the context-sensitive Help files, you cannot install the reference documentation in the Pro/ENGINEER installation directory. You can install the files in a common master Help directory (for example, /opt/ptc/ptchelp) or in a separate directory. In either case, you must specify your Web browser during Pro/ENGINEER installation. For each product Reference Documentation CD-ROM, you must configure installation so that the path to the HTML content is defined during installation or during reconfiguration using `ptcsetup`.

To use the Help system to view the reference documentation, install and start a local Web browser. Use the Web browser to point to the files.

To view the reference documentation directly from the CD-ROM, browse to `<loadpoint_or_cdrom>/html/usascii/products.htm` (for example, `C:\ptc\prohelp\22\html\usascii\products.htm`)

Accessing Help Topics

To access context-sensitive Help in Pro/ENGINEER, perform one of the following actions:

- Right click an active object
- Click **Get Help** from a menu
- Click **Help** from the toolbar

Viewing the Help System

In an active session of Pro/ENGINEER, you can view the Help system in the embedded Pro/ENGINEER browser. Outside Pro/ENGINEER, you can use any of the following supported Web browsers to view the Help system:

- Mozilla 1.0
- Embedded Pro/ENGINEER browser
- Netscape 6.2.x
- Netscape 7.0
- Internet Explorer 5.5 with SP2 or later

Installing Pro/Web.Publish

This chapter explains how to install the Pro/Web.Publish component software. Pro/Web.Publish enables you to set up your Web server so that you can publish objects you created using Pro/ENGINEER. Installing Pro/Web.Publish is optional.

With Pro/Web.Publish, you can export assemblies, process assemblies, and manufacturing processes to a directory that is visible in a Web browser.

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Overview

Installation of Pro/Web.Publish involves two procedures:

1. Configuration of your existing Web server. The procedures differ depending on what kind of Web server you have:
 - Apache Web Server (UNIX)
 - Microsoft Internet Information Server (Windows NT)
 - Microsoft Peer Web Services (Windows NT)
 - Netscape Enterprise and FastTrack servers (UNIX and Windows NT)
2. Installation of Pro/Web.Publish as a user with write permission to the Web server.

Locate the configuration procedure for your Web server in the following sections and, after configuration, install Pro/Web.Publish.

Note

Pro/Web.Link requires Netscape Navigator or Communicator 4.0 or later. Do not use Netscape 3.0.

Configuring Your Web Server

Note

For all configuration procedures in this section, the variable <path> represents the full path to the installation directory for your Web server.

Apache Web Server

1. After downloading the Apache Web Server (<http://www.apache.org>), create the following directories in the `apache_x.x.x` directory:
 - `server_root`
 - `home`where `apache_x.x.x` is the directory downloaded from the Apache Web site.
2. Copy the `conf` directory from the `apache_x.x.x` directory into the `server_root` directory created in the previous step.

3. In the `server_root/conf` directory, create copies of the configuration files as indicated in the following table. The original file and the copy should both reside in the `server_root/conf` directory.

Name of the Original File	Name of the Copied File
<code>httpd.conf-dist</code>	<code>http.conf</code>
<code>access.conf-dist</code>	<code>access.conf</code>
<code>srm.conf-dist</code>	<code>srm.conf</code>

4. If you are running the Apache Web Server as the root user, use a text editor to edit the `http.conf` file and locate the following lines:

```
User nobody
Group #-1
```

5. Replace `nobody` with `root` and replace `#-1` with `sys` for the previous lines.
6. If you are running the Apache Web Server as a nonroot user, change the communications port number in the `http.conf` file to a free port number greater than 1023.
7. Use a text editor to edit the `http.conf` file and locate the following line: `Port 80`
8. Replace `80` with a free communications port number that is greater than 1023.
9. Use a text editor to replace configuration lines in your `http.conf` file as indicated in the following table. Save the file when you have finished editing it.

Line	Text to Replace	Text Replacement
<code>ServerAdmin you@your.address</code>	<code>you@your.address</code>	The administrator's electronic mail address
<code>ServerRoot /usr/local/etc/httpd</code>	<code>/usr/local/etc/httpd</code>	The full path to your <code>server_root</code> directory (<code>.../apache_x.x.x/server_root</code>)
<code>#ServerName new.host.name</code>	<code>new.host.name</code>	The server host name Also remove the crosshatch (#) sign.

10. Use a text editor to replace configuration lines in your `access.conf` file as indicated in the following table. Save the file after you have finished editing it.

Line	Text to Replace	Text Replacement
<Directory> /usr/local/etc/httpd/htdocs>	/usr/local/etc/httpd/htdocs	The full path to the <code>home</code> directory created in Step 1
<Directory /usr/local/etc/httpd/cgi-bin>	/usr/local/etc/httpd/cgi-bin	The full path to the <code>cgi-bin</code> subdirectory in the Apache Web Server directory

11. Use a text editor to replace configuration lines in your `srn.conf` file as indicated in the following table. Save the file when you have finished editing it.

Line	Text to Replace	Replace With
<Directory> /usr/local/etc/httpd/htdocs	/usr/local/etc/httpd/htdocs	The full path to the <code>home</code> directory created in Step 1
#ScriptAlias /cgi-bin/ /usr/local/etc/httpd/cgi-bin/	/usr/local/etc/httpd/cgi-bin	The full path to the <code>cgi-bin</code> subdirectory in the Apache Web Server directory Also remove the crosshatch (#) sign.

12. Use a text editor to add the following line to the `mime.types` file located in the `server_root/conf` directory:

```
image/cgm cgm
```

13. Save the file after you have finished editing it.
14. Change directory to the Apache Web Server directory and start the Web server by entering the following command:

```
<path>/src/httpd-<platform>  
<path>/server_root/conf/httpd.conf
```

where `<platform>` is the platform on which you are running the Web server (for example,
`/disk1/apache_1.2.0/src/httpd-irix -f`
`/disk1/apache_1.2.0/server_root/conf/httpd.conf).`

Microsoft Servers

The following section describes how to configure the Microsoft Internet Information Server and Microsoft Peer Web Server.

1. Rename the `... \InetPub\wwwroot` directory to `... \InetPub\home`
2. Create a directory called `cgi-bin` and a file called `mime.typ` in the `<path>\InetPub` directory.
3. From the Windows NT desktop, select:
 - Start
 - Programs
4. From the IIS, select:
 - Microsoft Internet Server (Common)
 - Internet Service Manager

For Peer Web Services:

- Microsoft Peer Web Services (Common)
 - Internet Service Manager
5. In the **Internet Service Manager** dialog box, double-click the server name on the line where `www` appears under the **Service** option. The **WWW Service Properties** dialog box opens.
 6. Select the **Directories** tab from the **WWW Service Properties** dialog box.
 7. Change the value of Default Documentation from `Default.htm` to `index.html` and select the **Enable Default Document** and **Directory Browsing Allowed** check boxes.
 8. Change the location of the document root directory by double clicking the `... \InetPub\wwwroot` listing.
 9. In the **Directory Properties** dialog box, change the directory from `... \InetPub\wwwroot` to `... \InetPub\home` and click **OK**.
 10. Choose **Add** from the **WWW Service Properties** dialog box. A new **Directory Properties** dialog box opens.
 11. Select the **Virtual Directory** and **Execute** check boxes and enter `cgi-bin` for the **Alias** and `<path>\InetPub\cgi-bin` for the **Directory**.
 12. Click **OK**.

13. Click **Apply** in the **WWW Service Properties** dialog box.
14. Click **OK**.
15. If necessary, install plug-ins for your Web browser to allow viewing of CGM and VRML files.

Netscape Server

The following section describes how to configure the Netscape Enterprise and FastTrack Servers on Windows NT and UNIX.

During installation of the Netscape server, take note of the server username and password as well as the communications port number assigned to the Admin server. This information is needed for configuration.

1. After installing your Netscape server, create the following directories in the <path>/docs directory:

- cgi-bin
- home

Note

On Windows NT, you must change the name of the Primary Document directory from the default docs to home, and complete the following steps.

2. Make sure that there is no `index.html` file in the home directory. If this is not done, the Web publications is not listed when the Web server is accessed.
3. Access the Admin server by starting Netscape and opening the following URL:

`servername>:<Admin_server_port_number>`

where <servername> is the machine name of the server and <Admin_server_port_number> is the communications port number assigned to the Admin server during installation.

4. Access the configuration settings for the server by clicking the link to the server, which is located on the left side of the HTML page.
5. Click **Programs** from the menu at the top of the configuration settings page and select **CGI Directory** from the topics list.
6. Enter `cgi-bin` in the URL Prefix field and enter <path>\docs\cgi-bin in the CGI Directory field.
7. Click **OK** and apply the changes.

8. Click **System Settings** from the menu at the top of the configuration settings page and select **View System Settings** from the topics list.
9. Verify that the Primary Document Directory is the `<path>\docs\home` directory and that the URL prefix and path to the `<path>\docs\cgi-bin` directory are correct.
10. Click **On/Off** from the System Setup list to restart the server.
11. After the server has restarted, select the link to access the server as a client. The contents of the home directory should appear.
12. Select the link to the Web publication. The publication begins loading in the Web browser.
13. Add the following entry to the `mimes.types` file:


```
image/cgm exts=cgm
```

The file is located in the directory
`<path>\Server\https-<servername>\config`, where
`<servername>` is the name of the Web server.
14. If necessary, install plug-ins into your Web browser for viewing CGM and VRML files.

Installing Pro/Web.Publish

1. Choose **Pro/Web.Publish** from the list of available software components on the main PTC.Setup window.
2. Click **Next**. You see the **Define Installation Components** dialog box.
3. Define the following parameters:
 - **Installation Directory** (new)—Keep the default installation directory. PTC.Setup creates the installation directory for you. Or, click the folder icon, navigate the folder hierarchy, and select a different installation directory.

For new installations, the directory you enter must be new or empty.

- **Platforms**—Keep the default platform (for example, `i486_nt`). Use this parameter to define the machine types that access the installation directory. PTC.Setup detects your machine's architecture and lists that platform as the default. To add more machine types, check the box next to the appropriate machine type.
- **Languages**—Keep English as your only language (English is always the default). Or, check the box next to the languages you wish to add.

To view Pro/Web.Publish in a language other than English, you must set the language variable before installing your software. For more information, see Setting Foreign Language Defaults on page B-20.

- **Components**—Keep PTC Application Manager as your default to install the files necessary to run the utility.
- **Disk Space**—Check to make sure that you have enough disk space for your installation before continuing.

4. Click **Next**.

A message asks you if you want PTC.Setup to create the installation directory.

5. Click **OK**.

6. Define the following parameters if the PTC.Setup utility cannot detect this information:

- **Cgi-bin Directory**—This is the directory from which your server has permissions to execute programs. Your Web server must be configured to recognize this directory when referenced as `http://<server>/cgi-bin`. Enter the full path to the directory you want to use. Or, click the folder icon, browse the folder hierarchy, and specify the directory.
- **Web Server MIME file**—Enter the location of the MIME type file on the Web server. Or, click the folder icon and browse to and specify the file. This file, which is usually called `mime.type` on Windows and `mime.types` on UNIX platforms, is located in the configuration directory of the Web server. PTC.Setup adds the following lines to this file:

image/cgm	cgm
x-world/x-vrml	wrl vrml

- **Document Root Directory**—Enter the location of the directory where your HTML files are stored on your Web server Or, click the folder icon, browse, and specify the directory. This is the directory from which your Web server reads documents when they are referenced as `http://<server>/`. This directory was specified during configuration of your Web server.

7. Click **Next**. You see the **Installation Progress** window.

8. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you can:

- Click **Back** and review information.
- Click **Install** to begin installation.
- Click **Cancel**, respond to a confirmation prompt, and exit PTC.Setup.

9. Click **Next** to proceed with the installation of the next selected product or exit PTC.Setup.

During installation, you can click **Cancel** at any time to terminate installation process.

PTC.Setup copies files and sets file permissions. Upon completion, the **Installation Progress** window tells you that the installation was successful.

10

Installing and Starting PTC Distributed Services

This chapter explains how to install and start PTC Distributed Services Manager (DSM).

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Installing Distributed Services Manager

You install Distributed Services Manager after you have installed the license management software. You can install your product software on a license server, a license client, or on any combination of these machines.

Successful installation of your product software requires three major steps:

- Defining your installation components, including the installation directory
- Specifying the location of the license servers
- Starting the software

Defining the Installation Components

1. Insert the product software CD-ROM on your Windows system or insert and mount the product software CD-ROM on your UNIX system. For step-by-step instructions, see Loading and Mounting the CD-ROM on UNIX on page B-7.

The main window opens with a list of products.

2. Select **PTC Distributed Services**.
3. Clear **PTC License Server** (the default). At this point, you have already installed *FLEXlm*.

Note

When you perform an update or install a new Release of a PTC product you must update your license information.

4. Click **Next**. The **Define Installation Components** dialog box opens.

Define Installation Components

Installation Directory

Disk Space

Available on C: 453 MB

Required on C: 55 MB

Platforms

☒ i486_ntl

Languages

☒ English
☐ French
☐ German
☐ Italian
☐ Spanish
☐ Japanese
☐ Korean

☐ Chinese_cn
☐ Chinese_tw

Components

☒ Distributed Services Manager	17 MB
☒ PTC.Setup	34 MB

Subcomponents

Description

Select a component or subcomponent to view its description.

< Back Next > Cancel

5. Define the following parameters:

- **Installation Directory**—Enter an installation directory or keep the default value. The default installation directory for Distributed Services Manager is /opt/ptc/ptc_distributed_services on UNIX and C:\Program Files\ptc_distributed_services on Windows. PTC.Setup creates the installation directory for you. Or, click the folder icon, browse the folder hierarchy, and select a different installation directory. No spaces are allowed in the pathname or directory name, with the exception of the Windows platform.

For new installations, the directory you enter must be a new directory.

- **Platforms**—Select the platforms (for example, sun4_solaris). Use this parameter to define the machine types that access the installation directory. PTC.Setup detects your machine's architecture and lists that platform as the default.
- **Languages**—Keep English as your only language (English is always the default). Or, check the box next to the languages you wish to add.

To view Distributed Services Manager in a language other than English, you must set the language variable, `LANG`, before running your software. For more information, see *Setting Foreign Language Defaults* on page B-20.

- **Components**—Select or clear the components that you want to install by selecting the check box next to the appropriate component. The available components are as follows:

Distributed Services Manager—Keep this component to install the files necessary to run the software product. The amount of disk space required to install the product is also displayed.

PTC.Setup (default)—Keep this component to install PTC.Setup for future configuration of the product software after the installation. This utility allows you to make configuration changes without running PTC.Setup from the CD-ROM.

6. Click **Next** after you have selected your components.

A message inquires if you want PTC.Setup to create the installation directory.

7. Click **OK**. The **Specify License Servers** dialog box opens.

Specify License Servers

Please indicate all license servers that you wish to use with this installation of Pro/ENGINEER

Server Type	Location (port@host)
Triad Server	7788@ruchi;7788@jwala;7788@maruti

< Back Next > Cancel

Specifying the Location of the License Server

The PTC.Setup installation utility can access your license information if it is on a remote license server or on a local machine. Your next task is to tell PTC.Setup the locations of the license servers that you want this installation of your product software to read.

Note

PTC does not provide locked licenses for Distributed Services Manager.

Distributed Services Manager uses two different license features, DS_MANAGER and DS_SERVICE. You need both of the license features in order to fully utilize the Distributed Services Manager. The Distributed Services Manager will not be able to receive any incoming tasks without the DS_MANAGER license feature and it will not be able to process incoming tasks without the DS_SERVICE license feature. After specifying the license servers, click **Info** to verify that both these license features are available.

If you attempt to access your license information from a machine that does not have the minimum version of FLEXlm required, an error message tells you to update your license management software. Consult the Release Notes that accompany your order for the most recent information on which version of FLEXlm meets your installation requirements.

Note

This release of the product uses FLEXlm 7.2 as the license management software.

Specifying the License Server

If the license management software resides on the same machine on which you are installing the product software, and you have used the default communications port for the license server, you do not have to tell this installation where to obtain its licensing data. PTC.Setup detects the host name of the server and populates the Specify License Servers table.

If the license management software resides on a different machine, you must specify where this installation can obtain its licensing information. See the following sections, Obtaining a License from a Server or Servers.

Note

Click **Info** in the **Specify License Servers** dialog box to view the available features and floating optional modules.

Specifying the License Client

If you are installing the product software on a license client that does not have FLEXlm installed, the Specify License Servers table initially appears blank. To enable this installation to obtain floating licenses from a remote server, you must define the servers that are distributing the licenses. See Obtaining a License from a Server or Servers on page 10-7.

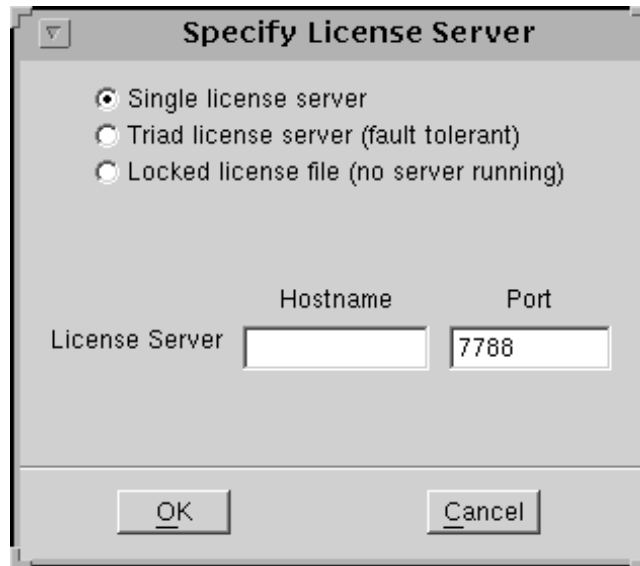
Note

You cannot run the product software without checking out a license. This means that Distributed Services Manager cannot be installed alone.

Obtaining a License from a Server or Servers

To obtain a license from a server or servers:

1. Click **Add** in the **Specify License Servers** dialog box (see the previous window). The **Specify License Server** dialog box opens. You can obtain a license from license servers.



- **Single license server**—Select this option to specify a single server that serves the licenses.

Enter the host name and the communications port number if it is different than the default. This information identifies the server from which this installation obtains its license codes (for example, aberdeen).

- **Triad license server (fault tolerant)** —Select this option to specify a Triad configuration. The Triad configuration consists of three Triad partners. As long as two or more partners of these three Triad partners are running, the licenses are served out. If two or more partners of these three Triad partners are not functioning, the server stops serving the licenses.

If the client is accessing a Triad configuration, choose the **Triad license server (fault tolerant)** option and define all three license servers. Each Triad partner server is required to have the same license file.

Note

The order of the server list is important (Triad Partner 1, Triad Partner 2, Triad Partner 3). The sequence must be the same in each license file on all three license servers.

PTC recommends that the Triad license servers be at the same geographical site. For further information on redundant license servers, refer to the *FLEXlm End Users Guide 7.2*, Chapter 4, Selecting Server Machines, at <http://www.globetrotter.com/TOC.htm>.

Note

Do not specify the host name of the client nodes, only the license server that controls usage of the licenses. You can use the **Specify License Servers** dialog box several times to configure the clients to access multiple servers or license files across your network.

On Windows systems, either the fully qualified server name or the IP address must identify the server.

2. Click **OK** in the **Specify License Server** dialog box to add the server and communications port information to the **Specify License Servers** table (for example, `Single Server 7788@aberdeen`).
3. In the **Specify License Servers** dialog box, click **Info** and verify that the following license features used by Distributed Services Manager are available:
 - DS_MANAGER
 - DS_SERVICE
4. Click **Next** in the **Specify License Servers** dialog box to open the **Optional Configuration Steps** dialog box. Optional configurations vary according to the product and the platform.

Performing Optional Configuration Steps

The following steps are optional.

Setting Shortcut Preferences (Windows Only)

1. To configure the Windows shortcut preferences and path settings for Distributed Services Manager, verify that the default **Windows shortcut preferences** is checked in the **Optional Configuration Steps** dialog box.
2. Click **Next**. The **Windows Preferences** dialog box opens.

3. Set the following shortcut preferences:
 - **Shortcut Location**—You can start Pro/ENGINEER from the desktop, the **Start** menu, the **Start > Programs** menu, or any combination of these three options.
 - **Program Folder**—If you select **Program folder** as the shortcut location, specify the name of the folder and option in the **Programs** menu.
 - **Startup Directory**—If you select **Start menu** as the shortcut location, specify the name of the startup directory.

You can set the following Windows environment preferences:

- **Modify system environment for all users**—Sets the system PATH variable for all users on the system.

Note

You must have the administrator privileges to set the system environment variable for all users.

4. **Modify current user's environment only**—Sets the user's PATH variable for the current user on the system. Click **Next**. The **Installation Progress** dialog box opens. See the section Completing the Distributed Services Manager Installation on page 10-10.

Creating Links to Startup Commands (UNIX Only)

Command names are the script names that PTC.Setup uses to enable you to start the software from your workstation. These scripts maintain the relationship between licensing on the server and your client software command. On Windows, for example, the default command name, `ptcdsm`, results in the creation of a executable file and, optionally, a shortcut icon. This icon is linked to the executable that starts Distributed Services Manager. On UNIX, the standard startup command `ptcdsm` is created in the `bin` directory.

By keeping the default **Create links to product startup commands** checked, you can create a link from the `/bin` directory in your installation directory to another directory on your UNIX system. (If this other directory is in your path environment setting, then simply entering the command name starts Distributed Services Manager.)

To create a link, use the **Startup command links** dialog box to enter the full path or browse to the directory in which you want the link created.

1. Keep the default **Create links to product startup commands** in the **Optional Configuration Steps** dialog box and click **Next**. The **Startup Command links** dialog box opens.

2. Enter the full path or browse to the directory in which you want the link created.
3. Click **Next**. The **Installation Progress** dialog box opens. See the next section to complete the installation.

Completing the Distributed Services Manager Installation

When you see the **Installation Progress** window, follow these steps.

1. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you can:

- Click **Back** and review information.
- Click **Install** to begin installation.
- Click **Cancel**, respond to a confirmation prompt, and exit PTC.Setup.

2. Click **Next** to proceed with the installation of the next selected product or exit PTC.Setup.

During installation, you can click **Cancel** at any time to terminate installation process.

PTC.Setup copies files and sets file permissions. During copying, you may be prompted to insert another CD-ROM. Either insert the CD-ROM or provide the path to the CD-ROM.

Starting Distributed Services Manager

After your license management and product software has been installed, start Distributed Services Manager.

Windows

Execute Distributed Services Manager using the **PTC Distributed Services** program group or by double-clicking the icon **Distributed Services Manager** on the desktop.

UNIX

From a UNIX prompt, navigate to the Distributed Services Manger installation directory and execute the command `ptcdsm`. For example, `/opt/ptc/ptc_distributed_services/bin/ptcdsm`.

Removing Distributed Services Manager (Windows Only)

You can remove your Distributed Services Manager software application through the Control Panel after it has been installed using PTC.Setup. This procedure is for Windows systems only.

1. From the **Start** task bar, click **Settings > Control Panel**.
2. Double-click the **Add/Remove Programs** icon to select it. The **Add/Remove Programs Properties** dialog box opens.
3. Click the **Install/Uninstall** tab.
4. In the program application list, highlight the specific release of Distributed Services Manager that you want to remove.
5. Click **Add/Remove**. You see the **PTC Uninstall** dialog box.
6. Click **Uninstall** or **Cancel** to escape. You are presented with a series of confirmation statements asking permission to remove files.
7. Click **Uninstall** to proceed. Upon completion, Distributed Services Manager is removed.

Updating and Modifying an Installation

This chapter explains how to update or modify PTC software that has been installed onto your system. The procedures in this chapter are for update and modification installations only.

Note

- Because FLEXlm license management software was implemented in Release 20.0, you can update Release 20.0 and later versions with Pro/ENGINEER Wildfire.
- Each time you update your software to a newer release, you must update your license file. New license codes are not required if you are updating to a new build of Pro/ENGINEER within the same release.

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Updating Pro/ENGINEER

An update installation is needed only when you upgrade your PTC software to the next major release (for example, Release 2001 to Wildfire) or when you upgrade your current release with a later version.

Update installations overwrite the outdated files in your existing Pro/ENGINEER installation directory with files from the most recent release.

After you install Pro/ENGINEER Wildfire for the first time, you can perform incremental updates. An incremental update adds only newly-selected components to the existing installation. The components of the existing installation remain unchanged. If you update an existing installation with a different release of the software, all components of the existing installation are replaced with the new components.

Before updating an installation, load and mount the software CD-ROM and start the PTC.Setup installation utility. New license information is required when you update to the next release.

To update the product software on remote servers, node-locked machines, or license clients, repeat the steps outlined in Chapter 4, Installing and Starting Pro/ENGINEER.

Modifying Pro/ENGINEER

Modifying Pro/ENGINEER implies creation of new startup commands and reconfiguration of existing software components. No new license information is required when you modify an installation.

If you are modifying an existing installation of Pro/ENGINEER, you can start PTC.Setup by using the `ptcsetup` command, located in the `bin` directory of your installation path (`C:\Program Files\proe\bin`). You can also rerun the PTC.Setup installation utility from the CD-ROM and make modifications.

Obtaining a New License Pack

If you are installing a new release of Pro/ENGINEER, you must update your license management software before you install your new product software.

It is highly recommended that you obtain an electronic copy of your new PTC License Pack. Using PTC.Setup, you can quickly and easily import either the new license file or append the existing license file with your new license codes.

For information on how to obtain your License Pack online, see *Receiving Your License Pack Online* on page 1-3.

Updating License Codes

You update FLEXlm license management software with your new license file when updating your PTC software.

Note

If the license server also has Pro/ENGINEER installed, the installed `ptcsetup` utility can be used to update licensing information.

Perform the following steps:

1. Start the PTC.Setup installation utility. The main window opens. Click **Help** to open PTC.Setup Help in your Web browser.
2. Click **Next**. The **Define Components** dialog box opens.
3. Keep the default installation directory for the license management software if this is where your FLEXlm software resides.
4. Click **Next**. The **PTC License Management** dialog box opens.

Note

To proceed, you need the new licensing information supplied in your PTC License Pack. If you have not already done so, request a new License Pack. For detailed information, see *Receiving Your License Pack Online* on page 1-3.

There are several ways to update an existing license file. However, it is strongly recommended that you import the new license file. The new license file contains all of your new license codes as well as any that are still in effect. Note that importing the new license file overwrites the existing file.

You can also import and append the existing license file with your new license data. For information on how to append a license file or manually enter your license codes by typing in the information or by using the License Wizard, see Chapter 3, *Installing License Management Software*.

5. To import the new license information from your License Pack that you saved electronically, keep **Import license information from disk (RECOMMENDED)** as the default in the **PTC License Management** dialog box.
6. Enter the full path (including file name) or click the folder icon and use the Directory Browser navigational tool.

7. Specify the file location of the ASCII file you saved by selecting the license file that you want to import.
8. Click **Next**. The **Optional Configuration Steps** window opens.

Note

The **Checking FLEXlm License File** dialog box opens if the PTC.Setup utility detects an invalid license(s). Click **Modify** and correct your license information. You cannot proceed until all the licenses are listed in the valid license column. For further information, see Appendix C, Troubleshooting Tips.

9. To skip this step and begin the installation process, clear the check box in the **Optional Configuration Steps** window and click **Next** to advance to the **Installation Progress** window. Configuration procedures vary for Windows and UNIX systems. For details, see Supplying Optional Configurations on page 3-8.
10. Click **Next**. The **Installation Progress** dialog box opens.
11. Click **Yes** in the **Install files** dialog box to start the installation process.

If you click **No**, you can:

- Click **Back** and review information.
- Click **Install** to begin installation.
- Click **Cancel**, respond to a confirmation prompt, and exit PTC.Setup.

12. Click **Next** to proceed with the installation of the next selected product or exit PTC.Setup.

During installation, you can click **Cancel** at any time to terminate installation process.

PTC.Setup copies files and sets file permissions.

PTC.Setup restarts the FLEXlm license server. For Triad configurations, two of the three partner machines must be running before licenses can be distributed.

Updating and Modifying Pro/Web.Publish

Updating Pro/Web.Publish requires only that you update your existing Pro/Web.Publish installation. You do not have to reconfigure your Web server.

Note

To update or modify Pro/Web.Publish, you must have write permissions to the Web server.

To update an installation of Pro/Web.Publish, start PTC.Setup using the Pro/ENGINEER CD-ROM or the `ptcsetup` command if you installed this utility. To update the product software, repeat the steps outlined in Chapter 9, Installing Pro/Web.Publish.

To modify an installation of Pro/Web.Publish, start PTC.Setup and change the configuration information you specified during installation.

A

License Management Software

This appendix discusses license management software in general terms and describes the benefits of *FLEXlm*, the license management software of PTC applications.

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Downward License Compatibility Using FLEXlm	A - 7
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Overview of PTC Licensing

PTC software and PTC optional modules must be licensed before they can be used. Licensing authorizes the installed software to run.

PTC supports the following types of licenses:

- **Commercial**—Commercial licenses are not time-sensitive licenses.
- **Evaluation**—Evaluation licenses limit your use of the software to a specified time.
- **Educational**—Educational licenses, which are used at educational institutions, are time-sensitive licenses (also known as student licenses). Also, the objects created in an educational or student version of Pro/ENGINEER are not compatible with the commercial version.

Depending on the product, the licenses can be either locked or floating.

- **Node-locked licenses**—A node-locked license restricts the use of the software to a particular machine (independent workstation). A node-locked license also restricts the DISPLAY setting on UNIX workstations.

Note

Node-locked licenses are not available for all PTC products, such as Pro/INTRALINK.

- **Floating licenses**—A floating license can be used on any one of a group of machines that are on your network.

Simplified License Management Process

Pro/ENGINEER provides an easy license configuration, installation, and tracking process. This process provides flexibility in configuring your licenses and minimizes the number of generated config IDs (Configuration IDs). You can combine all the Pro/ENGINEER licenses and options into a single config ID along with the Pro/INTRALINK or Pro/MECHANICA licenses. You can also assign a single config ID to the required license server.

Each PTC product is uniquely defined in the license file with a unique feature name. This license file format follows a more standard approach by using the FLEXlm license management system. Floating options can be configured to be acquired when you start Pro/ENGINEER.

Note

License configuration has moved from the licensing process to the installation process.

License Simplification—Advantages

- Increased flexibility in managing PTC licenses—With the license configuration process integrated into the installation process, you can alter the assignment and configuration of functions without contacting the PTC License Management team.
- Fewer licensing rules—Many licensing rules that generate numerous config IDs have been removed. Licenses are simply assigned to a machine through a config ID.
- Stable number of licensing config IDs—With the elimination of the licensing requirements for config IDs, you have significantly fewer config IDs to manage. License changes do not force you to change the config ID.
- Reduced time associated with licensing PTC products—You and PTC do not need to research and maintain the tight control over the multiple flavors of licenses based on how you purchased the products originally.
- Reduced system administration time for license changes—With the use of common feature names in licenses, updates to the client are reduced as the licenses are moved between servers. The feature name and the startup commands remain the same.

License Simplification—General Information

- License simplification is integrated into all products of the Pro/ENGINEER family and is available in Pro/ENGINEER 2001 build 2001440 and later.
- A new License Management Web tool called Reconfigure Software Licenses - Config Merge is available on the PTC Order & License Support page at <http://www.ptc.com/olm/index.htm>. Use this tool to upgrade to the new licensing scheme. The tool automatically consolidates the licenses into a selected config ID and returns an updated license file.

License Simplification—Technical Information

- License simplification has changed the license file format and the PTC.Setup utility.

Note

The current version of Pro/ENGINEER requires FLEXlm version 7.2. The license simplification changes use some of the new functionalities of FLEXlm 7.2.

- The format of the *FLEXlm* feature line in the license file has two changes due to license simplification. These changes are:
 - The config ID is no longer a part of the feature name and is moved below the **SN** tag in the feature line.
 - A new classification of floating options or bundles, called License Extension, is created for all locked modules and extensions. This new feature classification is identified by the keyword **STARTUP** in the Vendor String.

License Extensions are available for checkout only at runtime, that is, when starting a base license. You cannot add or release the License Extensions using the **Utilities > Floating Modules** dialog box.

The following sample license file is an example of a license-to-run license and a floating bundle under the license simplification scheme. The new areas described earlier appear in bold:

```
INCREMENT PROE_FlexEng ptc_d 23.0 01-jan-0 0 \
    1CCBD4992306440F61A0 VENDOR_STRING="VSVER=2.0 LO=(0, \
    3, 6, 7, 10, 17, 19, 32, 34, 40, 45, 51, 52, 55, 62, \
    63, 66, 69, 71, 73, 97, 106, 108, 115, 126, 127, \
    128, 158)" HOSTID=PTC_HOSTID=00-CC-DD-33 SUPERSEDE \
    vendor_info="VIVER=1.0 EXTERNAL_NAME=" ISSUER=PTC \
    ISSUED=09-nov-2001 NOTICE=" PTC_CUSROMER, 000" \
    SN=1234568
INCREMENT 10118 ptc_d 23.0 01-jan-0 1 AC2BD4A9DB54B88A6429 \
    VENDOR_STRING="VSVER=2.0 STARTUP LO=()" SUPERSEDE \
    ISSUER=PTC ISSUED=09-nov-2001 \
    NOTICE="PTC_CUSROMER, 000"
INCREMENT PROBUNDLE_10118 ptc_d 23.0 01-jan-0 0 \
    5C9B8499D4B428AA6E42 VENDOR_STRING="VSVER=2.0 \
    LO=(32, 52, 63)" HOSTID=ANY SUPERSEDE ISSUER=PTC \
    ISSUED=09-nov-2001 NOTICE=" PTC_CUSROMER, 000"
```

- Using the PTC.Setup utility, you can define startup commands with additional License Extensions or Floating Options. When you add License Extensions or Floating Options to a startup command, a value is assigned to the `PROE_FEATURE_NAME` variable. This variable is defined in the Pro/ENGINEER startup command. The following example shows valid syntax for a UNIX operating system.

PROE FEATURE NAME before license simplification:

```
setenv PROE_FEATURE_NAME PROE_1274228
```

PROE FEATURE NAME after license simplification:

```
setenv PROE_FEATURE_NAME PROE_FlexEng (10118,32)
```

In addition to checking the `PROE_FlexEng` license, the availability of the bundle 10118 and the floating option 32 is also checked. If some bundles or options are not available, a warning appears listing the unavailable bundles or options.

- During a session, if a license is lost and you try to recover the license-to-run license, Pro/ENGINEER attempts to re-acquire the license-to-run and all other features specified in the startup command.
- The output of the `Ptcstatus` utility provides the location of the config ID in the license file. You can use the `Ptcstatus` utility in two modes,
 - Normal mode: Run the `Ptcstatus` utility at the command line without any arguments

```
ptcstatus
```
 - Verbose mode: Run the `Ptcstatus` utility at the command line with the `-v` argument

```
ptcstatus -v
```

The following output illustrates the difference between the two `Ptcstatus` utility modes:

ptcstatus

Displaying status for license file: 7788@static

License Server: static

License	In Use	Free
-----	-----	---
PROE_FlexEng	Uncounted, Locked	
PROE_Foundation	0	2
Pro/SURFACE *	0	2
Behavioral_Modeler	0	2
Pro/PlasticAdvisor	0	2
ModelCHECK	0	1
Tool_Design_SET *	0	2

* = License Extension - Available only on startup

ptcstatus -v

Displaying status for license file: 7788@static

License Server: static

ptc_d FLEXlm version: 7.2

License	In Use	Free	Version	Expire Date	SCN
-----	-----	---	-----	-----	-----
PROE_FlexEng	Uncounted		24.0	None	FlexEng Locked to 00-10-83-FF-B5- 75
PROE_FOUNDATION	0	2	24.0	None	12345
Pro/SURFACE *	0	2	24.0	None	
Behavioral_Modeler	0	2	24.0	None	
Pro/PlasticAdvisor	0	2	24.0	None	
ModelCHECK	0	1	24.0	None	

* = License Extensions - Available only on startup

- You can specify a name for a license instead of its default name by changing the value of the attribute, `EXTERNAL_NAME`, in the feature line of the license file.

For example, in a license file, to change the feature `PROE_FlexEng` to `My License Name`, specify the value of the `EXTERNAL_NAME` attribute as shown.

Original license file:

```
INCREMENT PROE_FlexEng ptc_d 24.0 1-jan-0 0 \
    4C5570EB8496F36B500F VENDOR_STRING="VSVER=2.0 \
    LO=(3,7,10,17,34,40,45,51,55,62,66,69,71,73,106,115,126,163)" \
    SUPERSEDE vendor_info="VIVER=1.0 \
    EXTERNAL_NAME=" ISSUER=PTC \
    ISSUED=17-jul-2002 NOTICE="PTC Internal Use Only"
```

Change to:

```
INCREMENT PROE_FlexEng ptc_d 24.0 1-jan-0 0 \
    4C5570EB8496F36B500F VENDOR_STRING="VSVER=2.0 \
    LO=(3,7,10,17,34,40,45,51,55,62,66,69,71,73,106,115,126,163)" \
    SUPERSEDE vendor_info="VIVER=1.0 \
    EXTERNAL_NAME=My License Name" ISSUER=PTC \
    ISSUED=17-jul-2002 NOTICE="PTC Internal Use Only"
```

Notice the text after the `EXTERNAL_NAME` attribute in the changed license file. With this change, the output of the `Ptcstatus` utility displays the new name, `My License Name`, instead of `PROE_FlexEng`.

FLEXlm License Management Software

FLEXlm, license management software developed by *GLOBEtrötter* Software, Inc., is integrated into PTC software. For more information, visit the *GLOBEtrötter* web site at <http://www.globetrotter.com>.

Downward License Compatibility Using FLEXlm

FLEXlm license servers have downward compatibility with PTC applications using *FLEXlm*. For example, a Pro/ENGINEER Wildfire license can run Pro/ENGINEER 2001 software because they both use *FLEXlm* licensing.

FLEXlm cannot serve licenses to an installation using Pro/SERVER (Release 19 and earlier). However, Pro/SERVER and FLEXlm license management software may run on the same machine in parallel.

Running FLEXlm with Other Applications

It is important to know that you can use FLEXlm to run PTC products as well as other applications.

Each vendor application that uses FLEXlm has its own lmgrd or FLEXlm daemon. The FLEXlm daemon starts the vendor daemon (for example, ptc_d), which controls the usage of licenses. Globetrotter strongly recommends that the lmgrd daemon program be run as a non privileged (not root) user on UNIX systems.

Note that you cannot combine a PTC license file with a license file of another vendor. Do not, for example, combine PTC feature lines with those of other vendors in a single license file. This action causes the licenses to be invalid.

If all applications and vendor daemons are FLEXlm 6.1 or later, lmgrd can process multiple license files. This is true even when the Host IDs are different (as long as the license files refer to the same node). Refer to the chapter on multiple license files in the *FLEXlm End Users Guide* 7.2 at <http://www.globetrotter.com/TOC.htm>.

Understanding Timeout Parameters

Timeout parameters enable the license client and the license server to communicate with one another so that licenses are free and available upon request.

You can reconfigure the Inactivity Timeout parameter within a specified range, as described in the next section, Changing the Inactivity Timeout Parameter.

Timeout Parameter	Value	Description
Inactivity timeout	120 minutes (default)	This parameter prevents a license from remaining idle. If the license client is inactive for a specific period, the license can be reclaimed by the license server and used by another license client. In Pro/ENGINEER, the inactivity timeout default is 120 minutes. Activity is measured as active menu selections. You can change the default of 120 minutes so that the parameter ranges from between 20 minutes (minimum value) and infinity (maximum value).
Validation that the license is available	1 minute	After each one-minute interval, the next time the user makes a menu selection, the license client communicates with the license server. The license client queries the server whether the license is still available. The application has a minimum of 1 minute to validate the license.
Validation retries	None	The first time a license client cannot validate its license the application's graphical user interface will freeze. The customer is immediately given the following three options: Click Retry to request a license from an active license server Click Save File(s) Click Exit to close the application without saving the file or files.
Startup	10 seconds	Upon starting a session, the license client requests a license and has 10 seconds in which to have the request validated.

Changing the Inactivity Timeout Parameter

You can set the parameter that determines how long the system allows a license to remain idle before it is reclaimed by the license server.

To change the default inactivity timeout parameter, you must update the FLEXlm option file, `ptc.opt`. The default is 120 minutes. The `ptc.opt` file resides in

```
<ptc License Server loadpoint>/flexlm/licensing.
```

Edit the default parameter

```
TIMEOUTALL 7200
```

by changing 7200 seconds (120 minutes) to another value represented in seconds.

The minimum value you can set is 20 minutes (or 1200 seconds) and the maximum value you can set is infinity. To make infinity the default, remove the TIMEOUTALL parameter from the `ptc.opt` file. If you set a minimum value to less than 20 minutes, the system defaults to a minimum value of 20 minutes.

Suppressing the Regained Network License Dialog Box

Beginning with Pro/ENGINEER 2000i, you can disable the **Regained Network License** dialog box using a `config.pro` option. In the `config.pro` file set the `suppress_license_loss_dialog` option to `yes`. The default is `no`. If you lose or regain your network license-to-run license Pro/ENGINEER, a status message displays but no dialog box appears.

Using the Ptcflush Utility

The `ptcflush` utility is necessary when a license client application shuts down in a way that does not break the TCP/IP connection between the license server and the client. This situation most commonly occurs when a client exits prematurely, or does not respond, or when the network connection between the license server and the license client is interrupted. Normally, it is not necessary to use `ptcflush` utility.

You are allowed to use the `ptcflush` utility once every 12 minutes. The syntax is as follows:

```
% ptcflush feature_name hostname port handle
```

Execute the `ptcstatus` command to list the `<feature host port handle>` information and copy and paste this listing at the command prompt to run `ptcflush`.

To flush a license in use, for example, type

```
% ptcflush PROE_2 titan 7788 101
```

using the feature name and not the user-defined name if you assigned an alias.

Note

On UNIX systems, you can use root privileges to flush user licenses; however, it needs to be done individually. You cannot flush multiple licenses simultaneously.

Benefits of Using FLEXlm

Using FLEXlm to control usage of licenses offers the following key advantages.

- **Single-Server Solution**—FLEXlm can manage PTC software and other vendor applications without conflict. Note that the PTC license file cannot be combined with the license files of other vendors.
- **Immediate License Recovery**—If there is a premature exit of the license software (for example, the system shuts down), the FLEXlm license server automatically reclaims the PTC license.
- **Increased Flexibility**—System administrators can reserve or deny licenses based on user name, host name, display name, or IP address. For more information refer to Chapter 5, The Options File, in the *FLEXlm End Users Guide 7.2* at <http://www.globetrotter.com/TOC.htm>.
- **Centralized License Storage**—PTC customers can store all PTC licenses for all PTC products in a single file for each license server.
- **Multiple Licenses for a Single Command**—One command can be used to execute multiple licenses of PTC software based on availability.

Additional Information

The *FLEXlm End Users Guide 7.2* is located on the GLOBEtrouter Software, Inc. Web site at <http://www.globetrotter.com/TOC.htm>. Answers to FLEXlm frequently asked questions can be found at <http://www.globetrotter.com/faq.htm>.

B

System Administration Information

This appendix describes general system administration information, including system management utilities and machine configuration settings.

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System Management Utilities	B - 2
Machine-Specific Configuration	B - 3
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Temporary Directories

Pro/ENGINEER uses the temporary directory as defined by your system environment to store Pro/ENGINEER parts. You can modify the location of the temporary directory by setting the temporary directory environment variable in the Pro/ENGINEER startup window before executing the Pro/ENGINEER command name. On Windows systems, this environment variable is TMP. On UNIX systems, this environment variable is TMPDIR.

System Management Utilities

This section briefly describes Pro/ENGINEER and FLEXlm utilities. The files listed in the next two tables, Pro/ENGINEER Utilities and FLEXlm Utilities, are installed into the bin directory of your installation directory. On UNIX systems, symbolic links may have been made to these files from a user-specified directory. Further information can be found in the *FLEXlm End Users Guide 7.2*, Chapter 7, License Administration Tools, at <http://www.globetrotter.com/TOC.htm>.

Pro/ENGINEER Utilities

You execute the Pro/ENGINEER commands, listed next, from the \<proe loadpoint>\bin directory when the license server is running. The load point is the directory where the software is installed.

Command	Function
ptchostid	Returns the PTC Host ID with required formatting used for FLEXlm license codes.
proewildfire	Run Pro/ENGINEER. Can be user-defined.
ptcflush	Free licenses. This may be necessary if there are network problems. Formerly called proflush.
ptcsetup	Run PTC.Setup from disk. Allows you to reconfigure an existing installation without running PTC.Setup from the CD-ROM. Command, located in the bin directory, is created during installation. PTC.Setup is used for modifications or reconfigurations only. It cannot install your PTC product software.
ptcstatus	Display information on the current usage and availability of licenses.

FLEXlm Utilities

You execute the FLEXlm commands, listed next, from the \<flexlm loadpoint>\flexlm\bin directory when the license server is running.

Command	Function
Lmtools	A batch file, <code>lmtools.bat</code> , runs the PTC License Management tools utility on Windows systems only. Functionality includes customer configuration of the FLEXlm service, starting and stopping the lmgrd license server(s), server and licensing status, as well as diagnostic tools. On Windows systems, the shortcut icon created in Start > Programs > PTC License Management tools starts the Lmtools graphical user interface. The lmutil script provides the same information in text-based format for UNIX users
Lmutil	A single executable, <code>lmutil</code> , provides optional arguments to check the server and licensing status. Refer to the <i>FLEXlm End Users Guide 7.2</i> at http://www.globetrotter.com/TOC.htm .
ptcshutdown	Shut down a license server process for administrative maintenance of the license server. On Windows systems, you can also use the FLEXlm Control Panel to stop a license server process.
ptcstartserver	Start a license server process. On Windows systems, you can also use the FLEXlm Control Panel to start a license server process. See, License Administration Tools, <i>FLEXlm End User Guide 7.2</i> , at http://www.globetrotter.com/TOC.htm .

Lmtools Utility

With FLEXlm 7.0 and later, a `lmtools.bat` program is added to the FLEXlm installation directory on Windows platforms only. The lmtools program runs the PTC License Management tools utility that is started from the **Start > Programs > PTC License Server tools** menu. Functionality includes starting and stopping the FLEXlm license server from the **Start/Stop/ReRead** tab.

Machine-Specific Configuration

The sections that follow describe machine configuration procedures so that you can take full advantage of Pro/ENGINEER features.

Hewlett-Packard Company

This section discusses machine configuration changes that may be necessary to run PTC software on Hewlett-Packard machines. For complete details, go to the technical support area at http://www.hp-partners.com/ptc_public/html/technical_support/index.htm and view PTC Frequently Asked Questions and Tuning HP-UX for Pro/ENGINEER.

Silicon Graphics, Inc.

This section discusses machine configuration changes that may be necessary to Silicon Graphics, Inc. machines.

Silicon Graphics 4Dwm Window Environment

Pro/ENGINEER supports the 4Dwm windowing environment on Silicon Graphics machines. Certain resource files may need to be updated in order to use this windowing environment. These updates can be made manually or you can use the script called 4Dwm-setup in the `<loadpoint>/install/unix` directory to have Pro/ENGINEER make the appropriate changes for you.

Resources are to be specified in the `/usr/lib/X11/app-defaults/4Dwm` and `/usr/lib/X11/app-defaults/Toolchest` files. Updates can also be made in the `$HOME/.Xresources` file as well as for individual users.

Overlay Planes

Systems from Silicon Graphics should be equipped with a graphics adapter with at least four overlay planes, and the 4DWM windowing environment should be used. To avoid unnecessary damage to the underlying graphics windows, Pro/ENGINEER uses the overlays for the user interface. SGI systems with four or more overlay planes can support the user interface in the overlay.

Sun Microsystems, Inc.

This section discusses machine configuration changes that may be necessary to Sun Microsystems machines. For complete details, visit <http://www.sun.com/technical-computing/ISV/PTCFaq.html>.

Overlay Planes

A Creator3D or Elite3D graphics adapter is required for the use of overlay planes. In addition, the overlay visual should be the default visual. Use the command:

```
ffbconfig -propt
```

to determine if overlay is the default visual. If overlay is not your default visual, you need to set overlay visual as the default visual.

How to Set Overlay Visual as the Default Visual

1. In a command window, log in as root on the machine to be set.
2. Enter the command:

```
ffbconfig -defoverlay true
```

3. Log out as root from the command terminal and restart the session manager.

Setting the Gamma Correction Value

Default colors can appear washed out in a Pro/ENGINEER Wildfire installation on a Sun workstation. To rectify this, run the `set_solaris_gamma` script available in the `<loadpoint>/bin` directory. Running the `set_solaris_gamma` script sets the gamma correction value for the graphics card to 1.5 from the default value of 2.20.

Pro/ENGINEER in X Windows

The following sections provide information on using Pro/ENGINEER in a UNIX X Windows environment.

Display Devices Supported

Pro/ENGINEER operates in an X Windows environment on computers from the following companies:

- Hewlett-Packard
- SGI
- Sun Microsystems, Inc.

Using the Node-locked License option, the display device must be the same machine as the license (the X-client Pro/ENGINEER and the X-server must be running on the licensed machine).

However, for those who use floating licenses, the display device and the computer running Pro/ENGINEER can be different. It is possible, for example, to use a HP as a server running Pro/ENGINEER and an SGI as the display device. Each separate display device used at the same time counts as a user against the total number of licenses available.

It is also possible to use an X-terminal as the display device. In this case, you are cautioned to make sure that the display terminal has sufficient resources to properly display Pro/ENGINEER.

Running on a Remote Computer

In a floating license configuration, all the computers listed previously may be used as X display devices. To enable the ability to run Pro/ENGINEER on one machine and the X-server on another, follow the instructions from the manufacturer.

How to Start Pro/ENGINEER on a Remote System

1. On the X-server, open a window and set `xhost+`.
2. From the X-server, log in remotely to the machine on which you want to execute Pro/ENGINEER.
3. On the remote machine, type

if using `csh`:

```
setenv DISPLAY <xserver_machine_name>:0
```

if using `sh`:

```
DISPLAY=<xserver_machine_name>:0
```

```
export DISPLAY
```

4. Run Pro/ENGINEER.

X Term Path

When running in an X Windows environment, Pro/ENGINEER needs to know the X Windows terminal emulator command used to open system windows for editing relations, entering datum point arrays, and so on. The full path name and the command must be provided for your system. For example, the SOLARIS command is `shelltool`. Enter the path and name `/bin/shelltool`.

Use the configuration file option:

```
terminal_command_path_and_name
```

Graphics Configuration

For Pro/ENGINEER graphics support information, refer to the PTC Hardware Configuration Notes. Connect to the PTC home page at <http://www.ptc.com/support/support.htm>.

General Plotter Information

PTC supplies software that writes plot files in plotter format. It is possible to specify a plot command in the `config.pro` file. The physical connection, however, is the responsibility of the computer and plotter vendors because they are hardware and system software experts. Depending on the hardware configuration, the system software may require a different setup.

In general, connection to the plotter is by RS232 cable with null modem configuration (pins 2 and 3 reversed, pin 7 ground). If this is the connection, the computer and plotter communicate using `xon` and `xoff`. It is usually necessary on UNIX to establish an entry in `/etc/printcap` to let UNIX know the characteristics of the connection. A typical `printcap` entry is as follows:

```
hp7585|plotter|hp:\
:lp=/dev/ttyb:sd=/usr/spool/lpd:br#9600:\
:sf:pl#0:pw#0:mx#0:sh:lf=/usr/adm/lpd-errs:
```

If you have difficulty in setup, contact the customer support department of your hardware vendor.

Note

Pro/ENGINEER does not support any HPIB interfacing.

Loading and Mounting the CD-ROM on UNIX

Most UNIX systems mount the CD-ROM after it is loaded into the CD-ROM drive. For users whose machines do not mount automatically, the following instructions explain how to load and mount the CD-ROM locally and remotely.

Note

Sun Solaris 2.x has automatic CD mounting. For information specific to how PTC products run on Sun Microsystems hardware, visit <http://www.sun.com/technical-computing/ISV/PTCFaq.html>. This site also discusses how to edit the `config.pro` file to adjust Pro/ENGINEER fonts

Determining the SCSI ID of the CD-ROM Drive

You specify the SCSI identification number of your CD-ROM drive when you mount the CD-ROM file system to your UNIX workstation.

If you already know the SCSI ID of your CD-ROM drive, proceed to the next step, *How to Load and Mount the CD-ROM Locally*.

For external CD-ROM drives, the SCSI ID can be found on the back of your CD-ROM drive. Look for a single-digit switch. The displayed number is the SCSI ID number.

For internal CD-ROM drives, use the following table to find the command or commands you need to enter to determine the SCSI ID of the CD-ROM drive (the bold # is the ID).

Platform	Command and Output	SCSI ID
HP-UX	Insert the CD-ROM into the drive and use the command. Become root user. For each file in the /dev/rdisk directory, at the command line type <code>/etc/diskinfo /dev/rdisk/<device file name>^a</code> for the device file identified as <code>type:CD-ROM</code> . The SCSI ID is to the right of the letter <i>t</i> in this example of a device file name, <code>c0t3d0</code> . Note that the identified device file name is the same file name that is used in the command to mount the CD-ROM.	
SGI IRIX	<code>hinv grep CDROM</code> CDROM: unit 3 on SCSI controller 0	3 (unit #)

a. Replace `<device>` with each item in the `/dev/dsk` directory.

Note

The inclusion of a platform in this table does not indicate support for that platform. This information is included to help you determine the SCSI ID for CD-ROM drives that is remotely mounted to your workstation. See the Hardware Configuration Notes for information on supported systems and platforms.

How to Load and Mount the CD-ROM Locally

1. Turn on the CD-ROM drive and insert the CD-ROM.
2. If the `/cdrom` directory does not already exist, create it using the following command:

```
mkdir /cdrom
```

- Use the next table to find your UNIX workstation platform. Enter the command listed for your platform to mount the CD-ROM drive. Substitute the pound sign (#) with the SCSI ID of your CD-ROM drive (see Determining the SCSI ID of the CD-ROM Drive).

Platform	CD Device Mounting Commands
HP ^a	<code>/etc/mount -F cdfs -o ro,cdcase /dev/dsk/c?t#d0a /cdrom</code>
SGI MTFS ^b	<code>mount -t iso9660 -o ro /dev/scsi/sc0d#l0b /cdrom</code>

- Replace the question mark (?) with the Interface Card Instance Number and replace the crosshatch (#) with the device's SCSI ID number.
- The SGI device name uses the lowercase alpha character L, not the numeric 1.

How to Load and Mount the CD-ROM Remotely

Note

The CD-ROM drive should be mounted using NFS version 2. In machines that support NFS 3, an extra argument needs to be added to the mount command to force the use of NFS 2.

- Load and mount the CD-ROM on the remote UNIX system to which the CD-ROM drive is connected. Use the procedure outlined in the section, How to Load and Mounting the CD-ROM Locally.
- Before a remote UNIX system can allow access to the CD-ROM from your local UNIX workstation, the CD-ROM file system needs to be exported. A line needs to be added to a file on your local UNIX workstation and, in some cases, a command needs to be executed.
- Use the following table to look up the platform of the remote UNIX system and add the line in the Line to add row to the file in the File to edit row. You need the correct write permissions to edit the files.
- After you have made the changes, if necessary, execute the command listed in the Command row.

Platform	File to Edit	Line to Add	Command
HP-UX	<code>/etc/exports</code>	<code>/cdrom -ro</code>	<code>exportfs /cdrom</code>
SGI	<code>/etc/exports</code>	<code>/cdrom</code>	<code>exportfs /cdrom</code>
SUN	<code>/etc/dfs/dfstab</code>	<code>share -F nfs -o ro /cdrom</code>	<code>shareall</code>

5. If the `/cdrom` directory does not already exist on your local UNIX workstation, create it using the following command:

```
mkdir /cdrom
```

6. You mount the CD-ROM mount directory from the remote UNIX system to your local workstation. Use the following table to look up the platform of your local UNIX workstation and execute the command for your UNIX platform. In the command you execute, substitute `<node>` with the name of the remote UNIX system to which the CD-ROM drive is connected and substitute `<cdmount>` with the CD-ROM mount directory used on the remote UNIX system.

Platform	Remote Mounting Command
HP	<code>/etc/mount -o ro,hard <node>:<cdmount> /cdrom</code>
SGI ^a	<code>mount -o ro,hard <node>:<cdmount> /cdrom</code>
SUN ^a	<code>mount -o ro,hard <node>:<cdmount> /cdrom</code>

a. If you experience problems using PTC.Setup from a remote-mounted CD-ROM, you can try remounting the remote CD-ROM for SGI and Sun systems using the command

```
mount -o ro,hard,vers=2 <node>:<cdmount> /cdrom
```

Installing Libraries

Some applications come with libraries of models or textures that can be used in models of your own.

For Pro/ENGINEER, all libraries except the Electrical Symbol, the Piping and Heating Symbol, and graphic libraries must be installed under the Pro/ENGINEER installation directory. The following subdirectories are automatically created in this common installation directory for each of the following libraries:

- `Objlib`—Basic Library
- `Connlib`—Connector Library
- `Fittinglib`—Pipe Fitting Library
- `Hmflib`—Human Factors Library
- `Mfglib`—Tooling Library
- `Moldlib`—Moldbase Library

Note

The Electrical Symbol Library and the Piping and Heating Symbol Library must be installed into a directory called `library_syms` in the `symbols` directory of your Pro/ENGINEER installation directory.

If you are updating your installation, make sure that the installation directory you have chosen does not contain any models that you want to save. During an update installation, any library files you enter in the installation directory are deleted and replaced with the current version of the library you install. You might want to back up your existing library installation before updating it. For further information, see the *Pro/ENGINEER Introduction to the Libraries*, which is available as a PDF file on the documentation CD-ROM.

To install a library:

1. After starting PTC.Setup with the appropriate library CD-ROM, choose the library name from the list of available software components.
2. Click **Next** to confirm that you are installing that library.
3. Click **Next**.
4. Enter the following information:
 - **Installation Directory**—A default installation directory has been specified.

Note

For new installations, the directory you enter must be a new directory. If you specify an existing installation directory, PTC.Setup updates the software in that directory. A subdirectory under the main installation directory is recommended (for example, `C:\ptc\libraries`).

- **Components**—Select the components that you want to install by clicking the check box next to the component. A check in the box indicates that a component has been selected.
- **Subcomponents**—Some components, when selected, have a set of subcomponents that you can choose to install. If you have selected a component that has subcomponents, select the subcomponents that you want to install. Select subcomponents in the same manner as components.
- **Disk space**—As you select and clear various components for your installation, the amount of disk space required for your installation changes. Check to make sure that you have enough disk space for your installation before continuing.

5. Click **Next**. You are asked to confirm the creation of the directory you specified.
6. Click **Next**.

Note

If you need to change any of the choices you made, use the **Back** button to return to the appropriate dialog box. Modify the information as needed.

7. When you are satisfied that your choices are correct, click **Yes** in the **Install files** dialog box to begin installation.

Further configuration is required to access the Install library files. See the *Pro/ENGINEER Introduction to the Libraries* manual, which is available as a PDF file on the documentation CD-ROM.

Pro/ENGINEER Fonts

PTC provides 42 third-party TrueType fonts in addition to the default PTC fonts that you receive with your software. In addition, you can also use other TrueType fonts in Pro/ENGINEER, that is, any TrueType font available on Windows machines. The third-party TrueType fonts include 13 different font styles, each containing plain, bold, and italic variations. If you are running Chinese Traditional or Chinese Simplified Pro/ENGINEER, you can use two additional TrueType fonts. These fonts are:

- Chinese Traditional
 - Monotype Hei Medium
 - Monotype Sung Light
- Chinese Simplified
 - Monotype HeiGB Medium
 - Monotype SungGB Light

New fonts appear in the current font list in Pro/DETAIL and Sketcher. PTC fonts are listed first, followed by the third-party fonts supplied by Agfa Corporation.

Note

Only fonts provided by PTC are supported in Sketcher for the creation of features.

TrueType fonts are stored in the <loadpoint>/text directory. You can change this default location by placing the fonts in another directory and setting the value of the `pro_font_dir` config.pro option to this directory. Pro/ENGINEER uses the fonts in the directory specified by the `pro_font_dir` config.pro option.

The new TrueType fonts and their corresponding file names follow:

Font Name	File Name
Blueprint MT	bluprnt.ttf
Blueprint MT Bold	bluprntb.ttf
CG Century Schoolbook	schlbk.ttf
CG Century Schoolbook Bold	schlbkb.ttf
CG Century Schoolbook Bold Italic	schlbkbi.ttf
CG Century Schoolbook Italic	schlbki.ttf
CG Omega	cgomg.ttf
CG Omega Bold	cgomgb.ttf
CG Omega Bold Italic	cgomgbi.ttf
CG Omega Italic	cgomgbit.ttf
CG Times	cgtime.ttf
CG Times Bold	cgtimebd.ttf
CG Times Bold Italic	cgtimebi.ttf
CG Times Italic	cgtimeit.ttf
CG Triumvirate	trium.ttf
CG Triumvirate Bold	triumb.ttf
CG Triumvirate Bold Italic	triumbi.ttf
CG Triumvirate Condensed Bold	triumcb.ttf
CG Triumvirate Italic	triumi.ttf
Garamond	garamd.ttf

Font Name	File Name
Garamond Bold	garamdb.ttf
Garamond Italic	garamdi.ttf
Garamond Kursiv Halbfett	garamdbi.ttf
Garth Graphic	gargra.ttf
Garth Graphic Black	gargrabl.ttf
Garth Graphic Bold Italic	gargrabi.ttf
Garth Graphic Italic	gargrai.ttf
Grotesque MT	grotesq.ttf
Grotesque MT Bold	grotesqb.ttf
Microstyle Extended	microex.ttf
Microstyle Extended Bold	microexb.ttf
Neographik MT	neograph.ttf
Sackers English Script	sackengs.ttf
Shannon	shanno.ttf
Shannon Bold	shannob.ttf
Shannon Extra Bold	shannoeb.ttf
Shannon Oblique	shannoo.ttf
Spartan Four MT	sparton4.ttf
Spartan One Two MT	sparton12.ttf
Spartan One Two MT Bold	sparton12b.ttf
Symbol	symbol.ttf
Triumvirate Inserat	triin.ttf

If required, you can purchase additional TrueType fonts. For information, contact the Agfa Monotype Corporation at <http://www.agfamonotype.com/>.

When you work with Pro/ENGINEER, you use two categories of fonts:

- Pro/ENGINEER fonts—These fonts appear in Pro/ENGINEER graphics windows. They define alphanumeric characters and special symbols in text files. You can edit these files by:
 - Modifying the look of existing characters and symbols
 - Adding new symbols to the files
 - Creating new fonts
- Hardware fonts—These fonts appear in window headers and menu items. They are machine- and language-specific.

Available System Fonts

To specify the font for menu items, set the configuration file option `menuitem_font`. The value for this option is the name of the font file, supported by the X-server running Pro/ENGINEER. To obtain the list of available fonts on UNIX machines, use the `xlsfonts` command. On Windows systems, the available fonts are listed in the Control Panel under Fonts. The font for text in Pro/ENGINEER window headers is determined by the current setting of your window manager.

Extended ASCII Set

ASCII is the default font in all Pro/ENGINEER modules. You can modify ASCII characters. You can also replace ASCII with your own font as the default.

The extended ASCII character set used in the United States and Western Europe is supplied by Pro/ENGINEER through a combination of two font files—`ascii.src` and `latin_1.src`.

Note

Characters up to number 146 are defined in `ascii.src`. The remaining characters are defined in `latin_1.src`.

To use the European LATIN_1 characters, do one of the following procedures:

- Make sure your keyboard is set up for the appropriate language. A specific set of LATIN_1 characters is available with each keyboard language setting.
- Use a key sequence specific to your machine type to produce the desired character. If necessary, contact your hardware vendor for additional information.

Displaying Special Symbols Palette

To display the Special Symbol Palette, create a note by clicking **DETAIL > Create > Note**. Select the location of the note and the **Special Symbol Palette** dialog box opens. Click on the symbol in the palette.

Alternatively, you can create a new symbol. Pro/ENGINEER represents special symbols with standard ASCII characters.

To use special symbols in drawing notes, follow these steps:

1. Enter the sequence CTRL+A.
2. Enter the ASCII character that represents the special symbol.
3. Enter the sequence CTRL+B.

When you create a new symbol, you should either redefine an existing character to the new symbol or create a new special symbol font. You can add new special symbols to the font file, `special.src`, by defining the graphic representation.

Exporting Special Symbols to IGES

Special symbols and their corresponding ASCII characters map to the IGES font table 1001. Only two symbols (Total Runout and the Least Material Condition) do not map to the 1001 table. They are supported by the 1003 font table. The configuration file option `use_iges_font_1003` determines which IGES font table outputs data to IGES. When you assign an ASCII character to a new symbol, select a character from either the 1001 or 1003 font table. Use 1001 or 1003 exclusively when you anticipate that a drawing will be exported in an IGES file. (Refer to your IGES documentation for more information on IGES font tables.)

How to Edit Pro/ENGINEER Fonts or Create New Fonts

1. Edit an existing or create a new `.src` file, which resides in `<loadpoint>/text/<language>`.
2. Compile the font file by using the `compile_font` command.
3. Make the new font available locally or for all users.

How to Modify a Pro/ENGINEER Font File

1. Copy the appropriate `.src` font file into your working directory. The `.src` files reside in `<loadpoint>/text/<language>`.
2. Modify the font file.

3. From the <loadpoint>/text/<language> area, copy the appropriate index file to your working directory.
4. Copy the `compile_font` command to your working area. If you are working on a UNIX machine, copy the executable `compile_font` to your working directory. The executable is in the following directory: <loadpoint>/<machine_type>/obj.
5. To compile the font, enter the following command for each font file you modify: `compile_font fontfilename.src fontfilename.fnt`

Note

If you modify the ASCII font definitions, it alters the appearance of the default font in every Pro/ENGINEER module.

How to Create a User-Defined Font File

1. Define a new font in a file with the extension `.src`. Store the new font in your working directory.
2. Create an index file that includes the new font file. Make sure the index file contains fonts with unique codesets.
3. Copy the `compile_font` command to your working area. If you are working on a UNIX machine, copy the executable `compile_font` from <loadpoint>/<machine_type>/obj into your working directory.
4. Enter the following command for each font file you create:
`compile_font fontfilename.src fontfilename.fnt`
5. Recompile user-defined fonts whenever you install a new major release of Pro/ENGINEER.

You can include user-defined fonts as default or auxiliary fonts in drawings.

How to Store a New Font

1. Store the updated index file with the `.src` and `.fnt` files in your local directory if the new font is for your personal use.
2. To make a new font available to all users, reference the font in the index and store the index and source files in the directory <loadpoint>/text/<language>. Store the `.fnt` file in the following directory:
<loadpoint>/<machine_type>/text/<language>

How to Set Your Font as the Default

1. Rename your file to `ascii.src`.
2. Recompile the `ascii.src` file using the `compile_font` command to produce a local `ascii.fnt` file.

How to Create or Customize a Font

1. Copy or create font source files in the local working directory. In this example, the default primary ASCII and special symbol fonts are copied and renamed.

```
cp /usr/pro/text/usascii/ascii.src custom.src
(primary font with codeset 0)
cp /usr/pro/text/usascii/special.src symbols.src
(special symbols font with codeset 4)
```

2. Edit the source files to include all the required definitions and changes.

```
vi custom.src
vi symbols.src
```

3. Copy the `compile_font` script from the directory `<loadpoint>/<machine_type>/obj` into the same local working directory.

```
cp /usr/pro/sgi/obj/compile_font
```

4. Compile the font files.

```
compile_font custom.src custom.fnt
compile_font symbols.src symbols.fnt
```

5. Create a new index file to reference the compiled font files. Note that the index file name does not need to be the same as the primary font name. If the custom font created is not a primary font (codeset 0), be sure to include a font with a codeset of 0 in the index file. In this example, the new font index file references both customized font files (primary and special symbols).

```
myfont.ndx (new customized .ndx file)
custom (new custom primary font (codeset 0))
latin_1 (system extended ASCII font (codeset 2))
symbols (new special symbols font (codeset 4))
```

This font index file references the new customized special symbols font only. It uses the system default primary font.

```
myfont2.ndx (new customized .ndx file)
ascii (system default primary font (codeset 0))
latin_1 (system extended ASCII font (codeset 2))
symbols (new special symbols font (codeset 4))
```

You can use the new font in the following ways:

- For personal use of the new font, leave the .src, .fnt, and .ndx files in your local directory. Then reference the new font index file name in the detail setup file as an auxiliary font.

```
aux_font # myfont
```

In this command, # is the auxiliary font number (1 to 8).

- To use the font as a global auxiliary font, place the .src and .ndx files in the <loadpoint>/text/<language> directory. Then put the compiled .fnt files in the directory <loadpoint>/<machine_type>/text/<language>.

```
mv custom.src symbols.src myfont.ndx
/usr/pro/text/usascii
```

```
mv custom.fnt symbols.fnt /usr/pro/sgi/text/usascii
```

- To set the new font as the system default, rename the primary source and compiled font (codeset of 0) files to ascii.src and ascii.fnt, respectively. The system font.ndx file already references the ASCII font file and, therefore, does not need to be modified. Locate the new ascii.src and ascii.fnt files in the appropriate directories (see the section above that describes how to use the font as a global auxiliary font). Note that the system overrides the original ascii.src and ascii.fnt files, unless you first rename them.

The next time you start Pro/ENGINEER, it uses the new custom font as the system default font.

```
mv custom.src /usr/pro/text/usascii/ascii.src
mv custom.fnt /usr/pro/sgi/text/usascii/ascii.fnt
```

Setting Foreign Language Defaults

Pro/ENGINEER supports English, French, Italian, German, Spanish, Chinese (Simplified and Traditional), Korean, and Japanese characters, with English as the default language.

Note

Pro/MECHANICA supports English, French, German, and Japanese characters only.

To run the installation utility and Pro/ENGINEER in a language other than English, set the value of the system language environment variable, `LANG`, before you start the installation process. To set the value of the system language environment variable `LANG`, see [Setting the System Language Environment Variable](#) on page B-20 .

To run Pro/ENGINEER in a language other than the default language set by the system language environment variable `LANG`, set the standard language environment variable `PRO_LANG`. To set the value of the environment variable `PRO_LANG`, see [Setting the Standard Language Environment Variable](#) on page B-23 .

Setting the System Language Environment Variable

To run Pro/ENGINEER in a language other than English, set the value of the system language environment variable `LANG` before you start Pro/ENGINEER. The default value of the `LANG` variable is obtained from the local platform setting. Setting the value of the `LANG` variable is essential because some languages, especially the Asian languages, use the system fonts and local system values.

- For Windows:

```
set LANG = <language>
```

where <language> is the language specification for your platform.

Note

On Windows 2000 and Windows NT systems, you can also set the language environment variable by clicking **Start > Settings > Control Panel > System**. In the **System Properties** dialog box, click the **Environment** tab. Specify `LANG` in the **Variable** field and the appropriate language variable, for example, French, in the **Value** field.

- For UNIX (C Shell):

```
setenv LANG <language>
```

where <language> is the language specification for your platform. UNIX settings are case-sensitive.

Note

Pro/ENGINEER and Pro/INTRALINK must be run in the same language.

The following tables list the values that you can specify for the LANG environment variable for different languages on different platforms.

Platform	Chinese Simplified	Chinese Traditional	French	German
DEFAULT	chinese_cn	chinese_tw	french	german
HP	zh_CN.hp15CN	zh_TW.big5	c-french c-french.iso88591 fr_CA.iso88591 fr_FR.iso88591 french french.iso88591	de_DE.iso88591 german german.iso88591
LINUX	zh_CN zh_CN.gbk	zh_TW zh_TW.euctw	fr_FR french	de_AT de_CH de_DE german
SGI	zh_CN.eucgbk zh_CN.gbk zh_CN.ugb	zh_TW.big5	fr fr_BE fr_CA fr_CH	de de_AT de_CH
SOLARIS	chinese zh zh_CN.EUC	big5 tchinese zh_TW zh_TW.BIG5 zh_TW.EUC zh_TW.big5	fr fr_BE fr_BE.ISO8859-1 fr_CA fr_CA.ISO8859-1 fr_CH fr_CH.ISO8859-1 fr_FR fr_FR.ISO8859-1	de de_AT de_AT.ISO8859-1 de_CH de_CH.ISO8859-1 de_DE de_DE.ISO8859-1
WINDOWS	chinese-simplified chs	chinese-traditional cht	french	german

Platform	Hebrew	Italian	Japanese	Korean
DEFAULT	hebrew	italian	japanese	korean
HP	iw_IL.hebrew8 iw_IL.iso88598	it_IT.iso88591 italian italian.iso88591	ja_JP.eucJP japanese.euc	ko_KR.eucKR
LINUX	he_IL hebrew	it_IT italian	ja_JP ja_JP.eucjp japanese japanese.euc	ko_KR ko_KR.euckr korean korean.euc
SGI	iw	it it_CH	ja_JP.EUC	ko_KR.euc
SOLARIS	he he_IL he_IL.ISO8859-8	it it_CH it_IT	ja ja_JP ja_JP.eucJP japan japanese	ko ko_KR.EUC korean
WINDOWS	hebrew	italian	japanese	korean

Platform	Russian	Spanish	USASCII
DEFAULT	ru russian	spanish	C usascii
HP	ru russian	es_ES.iso88591 spanish spanish.iso88591	C usascii
LINUX	ru russian	es_ES spanish	C usascii
SGI	ru russian	es es_AR es_MX	C usascii

Platform	Russian	Spanish	USASCII
SOLARIS	ru russian	es es_AR es_BO es_CL es_CO es_CR es_EC es_GT es_MX es_NI es_PA es_PE es_PY es_SV es_UY es_VE	C usascii
WINDOWS	ru russian	spanish	C usascii

Setting the Standard Language Environment Variable

To run Pro/ENGINEER in a language other than the default language set by the system language environment variable `LANG`, set the value of the standard language environment variable `PRO_LANG`. For example, to run Pro/ENGINEER in the French language, on a system with English as the default system language, set the value of the standard language environment variable `PRO_LANG` to `french`.

To run Pro/ENGINEER in a language other than the default system language, it is recommended to set the value of the standard language environment variable `PRO_LANG` instead of setting the value of the system language environment variable `LANG`.

The value of the environment variable `PRO_LANG` supersedes the value of environment variable `LANG` when you run Pro/ENGINEER.

- For Windows

```
set PRO_LANG = <language>
where <language> is the required language, for example, french.
```

- For UNIX (C shell)

```
setenv PRO_LANG <language>
where <language> is the required language, for example, french.
```

Values that you can specify for the environment variable `PRO_LANG` include:

Language	Value
French	french
German	german
Italian	italian
Spanish	spanish
Chinese Simplified	chinese_cn
Chinese Traditional	chinese_tw
Korean	korean
Japanese	japanese

Using Asian Language Input Method Switch Keys

When you use the Asian languages along with English, you can switch the language input mode between the Asian language and English. Use the sequence of keystrokes that follow to switch the input mode language:

Platform	Language	Key Sequence
HP	Chinese Simplified	Right META (Use the Right ALT key if no META key on the keyboard) for English to Chinese Simplified
		Left META (Use the Left ALT key if no META key on the keyboard) for Chinese Simplified to English
		F9 五笔 F10 五画
		F11 拼音 F12 字符
		SHIFT+F9 区位 SHIFT + F10 内码 (Big5)
		SHIFT+F11 仓颉 SHIFT+F12 速成
	Chinese Traditional	CTRL+SPACE Chinese Traditional to English
		SHIFT+SPACE 全形/半形 input Switch
		F9 倉頡 F10 速成
		F11 注音 SHIFT+F11 內碼 (Big5)
		SHIFT+F9 全形
	Korean	Right ALT to activate Korean mode
		Left ALT to deactivate Korean mode
	Japanese	漢字 or Extend Char or Left ALT to activate or deactivate Japanese mode
		F9 Hirakana Input F10 Katakana Input
		SPACE or 変換 to convert to Kanji

Platform	Language	Key Sequence
SGI	Chinese Simplified	CTRL+SPACE to switch between Chinese and English input
		F1 全拼/二拼/三拼 Switch
		F2 五笔/钱码 Switch
		F3 全角/半角 Switch
		F5 常用/国标/区位/内码
	Chinese Traditional	CTRL+SPACE to switch between Chinese and English input
		F1 倉頡 F2 簡易
		F3 注音 F4 內碼
		F5 倚天 F6 智慧
		F7 視算 F8 全形/半形 input Switch
		F9 倉頡/簡易/注音/內碼/倚天/智慧/視算 Switch
	Korean	CTRL+SPACE to activate or deactivate Korean (no conversion necessary)
	Japanese	CTRL+ \ to activate or deactivate
		CTRL+ k to toggle between Hirakana and Katakana Input
		CTRL+ w to convert to kanji

Platform	Language	Key Sequence
SUN	Chinese Simplified	CTRL+ SPACE to switch between Chinese and English input
		F2 区位 F3 双拼
		F4 首尾 F5 全拼
		F6 金码 F7 智慧拼音
	Chinese Traditional	CTRL+SPACE to switch between Chinese and English input
		F5 注音 F6 倚天
		F7 電信 F8 倉頡
		F9 簡易 F10 注音
		F11 內碼 F12 全形
	Korean	CTRL+SPACE to activate or deactivate Korean input (no conversion necessary)
	Japanese	日本語 or CTRL+SPACE to activate or deactivate Japanese
		SPACE to convert to Kanji
Windows	Chinese Simplified	CTRL+SHIFT to activate or deactivate Chinese input
	Chinese Traditional	CTRL+SHIFT to activate or deactivate Chinese input
	Korean	Right ALT to activate or deactivate Korean input (no conversion necessary)
	Japanese	ALT+ 半角 / 全角 or ALT+~ to activate or deactivate Japanese input
		SPACE to convert to Kanji

Modifying the Configuration File for Multiple Languages

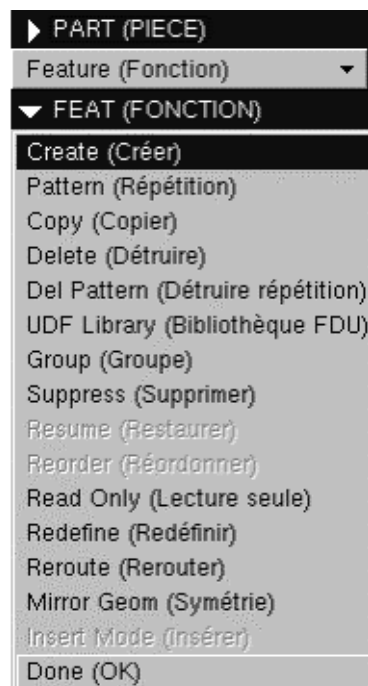
The configuration file, `config.pro`, controls many attributes of a Pro/ENGINEER session. You can modify the value of the attributes defined in the `config.pro` file. The following table lists the attributes and their values that you can set in the `config.pro` file:

config.pro Attribute	Value	Description
MENU_TRANSLATION	YES (default)	Displays menus in the set Language
	NO	Displays menus in English
	BOTH	Displays menus in both English and the set Language
HELP_TRANSLATION	YES (default)	Displays help in the set Language
	NO	Displays help in English
MSG_TRANSLATION	YES (default)	Displays messages in the set Language
	NO	Displays messages in English
DIALOG_TRANSLATION	YES (default)	Displays dialog and top menus in the set Language
	NO	Displays dialog and top menus in English
SET_MENU_WIDTH	Integer	Sets the menu width
DXF_IO_SJIS (From Pro/ENGINEER 2000i2 only)	NO (default)	Imports/exports DXF file in EUC
	YES	Imports/exports DXF file in SJIS

For example, if you set the value of the MENU_TRANSLATION attribute to BOTH in the config.pro file, then the Pro/ENGINEER menu appears in English and in the set language. The following figures show the Pro/ENGINEER menu in both English and in the set language, when you set the value of the MENU_TRANSLATION attribute to BOTH.



English and Japanese



English and French

Web Browser Requirements

The following sections describe the requirements for the Web browser when using Pro/ENGINEER. You can find information on Web browser support for Pro/ENGINEER at <http://www.ptc.com/partners/hardware/current/proe.htm#sysrq>. For information on Web browser support for the Help system, see Viewing the Help System on page 8-7.

Browser Requirements for Windows

On Windows systems, you must have Internet Explorer version 5.5 with Service Pack 2 or later installed. When you start a Pro/ENGINEER session, Pro/ENGINEER checks for a browser. If a browser is not found, an error message appears and the Pro/ENGINEER session starts with the embedded browser disabled.

Pro/ENGINEER uses the existing settings of Internet Explorer and these settings are inherited by the embedded browser.

Browser Requirements for UNIX

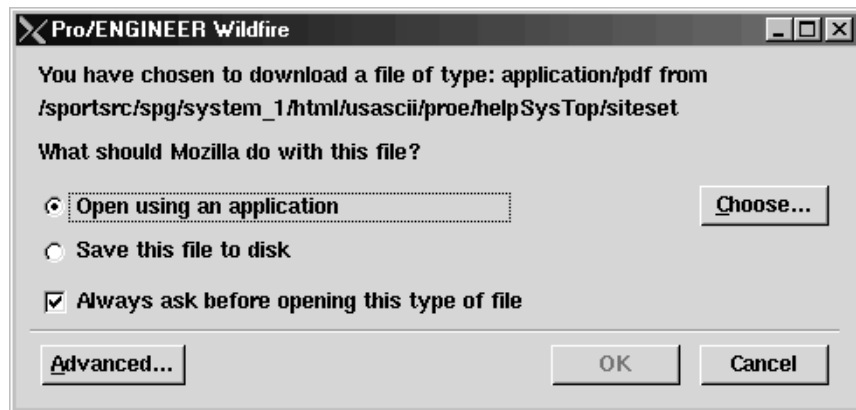
When installing Pro/ENGINEER on UNIX systems, an undocked, embedded Mozilla browser is automatically installed. This browser has its own profile directory, `$HOME/.mozilla/ptc-browser`. Pro/ENGINEER does not use any existing settings of a separate Mozilla installation. To change the settings of this embedded browser, click **Tools** > **Browser Options** in an active Pro/ENGINEER window. The Mozilla-native **Preferences** dialog box opens.

Opening a PDF File within the Embedded Browser

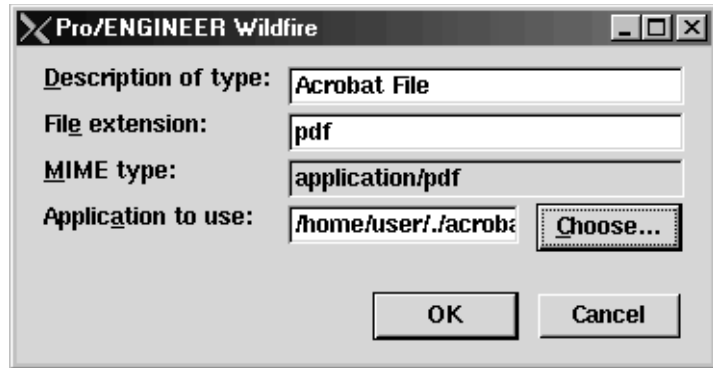
You can view a PDF document in the embedded browser using Acrobat Reader. On Windows, Acrobat Reader is available as a plug-in. On UNIX, use Acrobat Reader as a helper application to view the PDF document in the embedded browser.

Follow these steps to register the Acrobat Reader as the helper application on UNIX.

1. When you open a PDF file for the first time, the following dialog box opens:



2. Select the **Open using an application** option. You can choose to clear the **Always ask before opening this type of file** option.
3. Click **Advanced**. The following dialog box opens:



4. Specify a description for the file type and pdf as the file extension.
5. Click **Choose** and browse to the path for the acroread command in the Acrobat Reader load point.
6. Click **OK**.
7. Click **OK** again, to complete the registration of Acrobat Reader as a helper application on UNIX.

In the current and all future sessions of Pro/ENGINEER you can directly view the PDF document in embedded browser using Acrobat Reader.

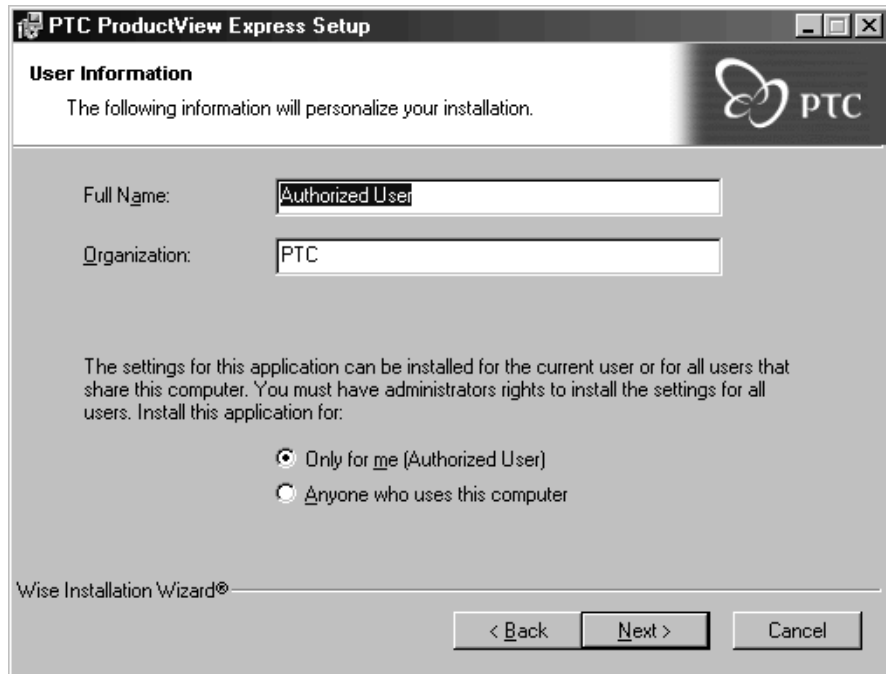
Printing a Viewed PDF Document

You can view a PDF document in the embedded browser using Acrobat Reader. To print the viewed PDF document, click the Acrobat Reader **Print** icon instead of the embedded browser **Print** icon.

Setting Up ProductView Express (PVX)

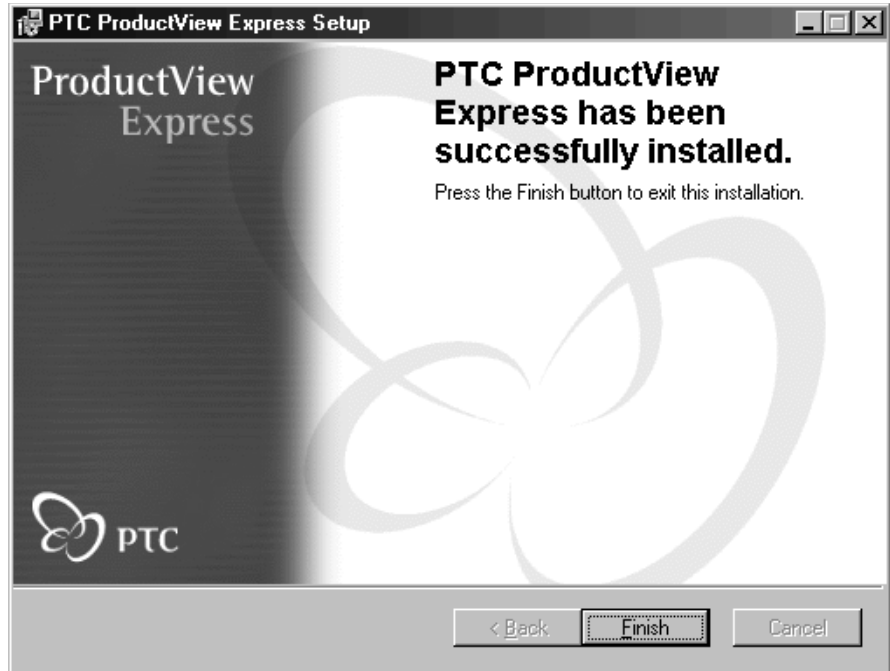
For a Pro/ENGINEER installation on Windows, when you visit a Web page for the first time that requires PVX, the ProductView Express installer opens. Perform the following steps to install ProductView Express:

1. In the **PTC ProductView Express Setup** dialog box, click **Next**. The license agreement window opens.
2. Accept the license agreement to proceed. The **User Information** dialog box opens.



3. Specify your full name in the **Full Name** box and organization details in the **Organization** box. If you have appropriate permissions you can choose to make this ProductView Express setup available to yourself or anyone else who uses this workstation.
4. Click **Next**. The **Destination Folder** dialog box opens.
5. Specify the destination folder to install ProductView Express or keep the default value.
6. Click **Next**. The **Start Installation** dialog box opens.
7. Click **Next**. A window opens indicating successful installation of ProductView Express.

8. Click **Finish**.



When installation is complete, ProductView starts without your having to restart the Pro/ENGINEER session.

With ProductView Express installed, if you update to a newer Pro/ENGINEER date code, then upon startup of Pro/ENGINEER, ProductView Express is installed automatically without displaying the user interface.

Following are the Pro/ENGINEER objects that you can open using ProductView Express:

File Extension	File Type
.asm	Pro/ENGINEER Assembly file
.dft	Pro/ENGINEER DFT file
.dgm	Pro/ENGINEER Diagram file
.drw	Pro/ENGINEER Drawing file

File Extension	File Type
.frm	Pro/ENGINEER Format file
.pic	Pro/ENGINEER PIC file
.prt	Pro/ENGINEER Part file
.rep	Pro/ENGINEER REP file

Opening Pro/ENGINEER Objects from Windows Explorer

You can open a Pro/ENGINEER object directly from Windows Explorer in a Pro/ENGINEER session. Pro/ENGINEER objects typically appear with a PTC icon in Windows Explorer. Double-click such an object in Windows Explorer to open the object in a Pro/ENGINEER session. You can open objects with the following file types:

File Extension	File Type
.asm	Pro/ENGINEER Assembly file
.dgm	Pro/ENGINEER Diagram file
.drw	Pro/ENGINEER Drawing file
.frm	Pro/ENGINEER Format file
.lay	Pro/ENGINEER Layout file
.mfg	Pro/ENGINEER Manufacturing file
.mrk	Pro/ENGINEER Markup file
.prt	Pro/ENGINEER Part file
.sec	Pro/ENGINEER Sketcher Section file

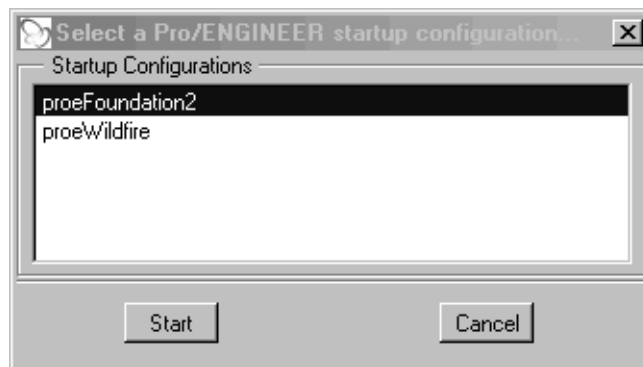
Objects other than those listed in the preceding table do not open in Pro/ENGINEER.

Note

Pro/ENGINEER appears as an option in the **Open With** list of applications provided by Microsoft Windows.

If a Pro/ENGINEER session is already running and you double-click an object in Windows Explorer, the object is automatically loaded within the same Pro/ENGINEER session in a new window. This new window becomes the active window.

If a Pro/ENGINEER session is not running and you double-click an object in Windows Explorer, the **Pro/ENGINEER startup config file** dialog box opens. You are prompted to select a file from the list of available Pro/ENGINEER configuration files. Upon selecting the required startup configuration file, a Pro/ENGINEER session is launched using the selected configuration file. The selected object is loaded in this Pro/ENGINEER session.



If multiple sessions of Pro/ENGINEER are running, the selected object is loaded in the session that was started first.

C

Troubleshooting Tips

This appendix documents common problems that users have when they install PTC software and FLEXlm license management software. This appendix also provides general debugging techniques and cites other sources of information.

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Online Information	C - 2
Troubleshooting List	C - 2

General Debugging Hints

The log file, `ptclmgrd.log`, records license server activities and can be found in `ptc/flexlm/licensing/ptclmgrd`. This file has useful information that you should check when you have a problem.

Online Information

See <http://www.ptc.com/support/support.htm>. for a wealth of how-to information for new and experienced users. The Read This First document, as well as other general installation information, can be found on the PTC Customer Service home page.

Links are provided to hardware and software configuration notes, licensing information, and technical documents. Technical Application Notes, or TANs, discuss software issues and provide alternate solutions with step-by-step procedures, and the specific build of the software that resolves the issue. Technical Points of Interest, or TPIs, describe the intended functionality of the software for specific tasks and may provide alternate solutions. These documents are not specific to a particular release.

For information on FLEXlm diagnostic environment variables, consult the *FLEXlm End Users Guide 7.2*. The *FLEXlm End Users Guide 7.2* can be found on the Pro/ENGINEER Reference Documentation CD-ROM or on the GLOBETrotter Software Inc. Web site at <http://www.globetrotter.com/TOC.htm>.

Troubleshooting List

Scan through the following list of problems to find any that appear to be the same as the one you are experiencing. The information is presented in the following format.

Symptom: Describes the problem.

Cause: Lists the cause of the problem.

Solution: Provides steps on how to resolve the problem.

Failure to Launch the Software

Symptom: On Windows systems, when you attempt to start your PTC software, you see an MS-DOS window that contains the message:

Cannot find

<Installation_Directory>\<mc_type>\filename

Cause: The system PATH, an environment variable, is either not set to the <Installation_Directory>\bin or it is improperly set due to a syntax or spelling error.

Solution: Check the system PATH.

Xtop Icon Appears in the Taskbar and Quickly Disappears

Symptom: An Xtop icon appears and quickly disappears in the taskbar for a few seconds and disappears.

Cause: Network configuration settings are not properly set.

Solution: Make sure that the network settings are in accordance with the Suggested Technique for Configuration of a Windows Workstation for executing Pro/ENGINEER (found at:

http://www.ptc.com/cs/cs_20/howto/win515/win515.htm)

Look for a file in the startup location called std.out and see if there are references to network errors. If there is a line that states Exception Code Was -1073741819, make sure the latest graphics driver is installed. The most recent graphics driver can be downloaded from the manufacturer's Web site, An alternative is to set the config.pro option graphics win32_gdi.

Inaccurate Ptcstatus Command Information

Symptom: On Windows systems for Release 20 and later, the ptcstatus command returns the following message,

Displaying status for license file 77880@ptc Warning
(-15): Cannot connect to license servers (-15, 10;
10061).

Cause: The license server is not running or the license client cannot reach the server.

Solution: Verify that the lmgrd and ptc_d daemons are running. A network problem exists if a license client attempts to ping the server by host name and the ping fails.

Invalid Licenses

Symptom: You receive the error message, `Invalid license`.

Cause: Licensing information is inaccurate.

Solution: Return to the **FLEXlm license editor** and verify that the information entered is exactly as it appears in your License Pack. If no licenses are listed, return to the **FLEXlm license editor** and ensure no text is highlighted.

If all licenses are listed as `invalid`, verify that the PTC Host_ID in the License Pack corresponds with what you see in the **FLEXlm license editor**. For example, one server line and one daemon line represent a single server. Three server lines and one daemon line represent a fault-tolerant or Triad configuration. Remove all the lines that do not pertain to the PTC HOST_ID.

Your increment lines should have no blank lines. Verify that all continuation characters `\` are at the end of each line, except for the last line. If some licenses are valid while others are invalid, find the invalid feature name lines in the License File window and correct the text.

If you received your license codes via e-mail, remove any extraneous text such as the header and footer. Another option is to delete the invalid license in the **FLEXlm license editor** window.

FLEXlm Fails to Start (Triad Configurations)

Symptom: License management software does not start after a Triad server is installed and configured.

Cause: The following requirement has not been met: two of the three partners of the Triad configuration must be running (Quorum) before licenses can be distributed.

Solution: Go to a shell window or a command prompt and change into the `<FLEXlm_Installation_Directory>\bin`. Type in `pctstartserver`.

Glossary

Application Program Interface (API) A set of standards or conventions by which programs can call specific operating system or network services.

configuration ID This identification number is used to determine the software licenses that are used in a particular installation. It is also the number used to identify and track your PTC product software.

counted locked license Although a locked license is managed by a *FLEXlm* license server, its usage is restricted to the machine(s) for which it is licensed. The license server allows customers to use up to the number of licenses purchased at one time.

CPU information Information about your hardware (for example CPU or Host ID, platform, and operating system).

date code A unique number used to identify a specific version of PTC software. For Release 2000*i* and higher, the number has been expanded from four to seven digits. The datecode can be found printed on the jacket of the software CD-ROM.

daemon line

- An entry in the license file that defines
 - The name of the PTC daemon, which is a customized software program that grants/denies floating PTC licenses by reading the license file
 - The path where this executable resides, that is in the *FLEXlm* installation directory
 - The path to the *FLEXlm* options file, which contains various operating parameters

Design Animation A software option that enables users to create animation sequences of parts and assemblies, from within Pro/ENGINEER.

evaluation license An evaluation license allows use of a software product for a trial period.

FLEXlm The license management software that is used to distribute licenses.

feature line The feature or increment line is an entry in the license file that describes the product that the user is allowed to use, as well as any optional software products that are associated with that license.

Following is a sample of the feature line:

```
INCREMENT PROE_FlexEng ptc_d 23.0 01-jan-0 4\  
AC0C6BED48DABD0CA081 VENDOR_STRING="VSVER=2.0 \  
LO=(0,3,6,7,10,17,32,34,51,55,62,66,69,73,106,\  
126,133,163)" \  
SUPERSEDE vendor_info="VIVER=1.0 EXTERNAL_NAME=" \  
ISSUER=PTC ISSUED=29-jun-2002 NOTICE="BMW_AG, \  
137661" SN=23134
```

feature name The feature name is the name of the license that the application requests. It is composed of a Product Prefix and a Configuration ID (for example, PROE_FlexEng).

floating license A floating license can be used on more than one system.

Floating licenses are distributed by a license server process that runs on a machine. This machine is also called the license server. See license-to-run.

Globetrotter, Inc. Developers of FLEXlm, license management software.

Further Globetrotter information can be found at
<http://www.globetrotter.com>.

hardware reconfiguration The process of changing any aspect of the machines currently mapped to the Configuration ID.

increment line See feature line.

installation directory The directory in which PTC software is installed. Also call the load point.

install number A number used by PTC's order management system before October 20, 1997 to identify a single software installation.

license A license grants a user permission to run a PTC product.

license client A machine or software session that requests a license from another machine or software session. For example, if you start Pro/INTRALINK on machine A and it requests a license from license server B, then machine A is a license client.

license file The file (`license.dat`) that is saved onto the user's disk when FLEXlm is installed and configured. This file contains the information used by FLEXlm to authorize the use of software.

license information The information that is used by FLEXlm to authorize the use of software. Also used to describe the information that is contained in the PTC License Pack, particularly before a customer has imported or entered that information into the FLEXlm license file. (for example, Enter the license information into the editor).

- license-locked** Refers to an optional module that has been purchased for use with a specific licensed product, which may be either floating or node-locked. If an optional module is license-locked to a node-locked license, it may only be used on the specifically authorized machine. If an optional module is license-locked to a floating license, it may be used on any machine in the network (in conjunction with that license).
- license-locked option** An optional module of PTC software that is locked to a license of PTC software. When the license is successfully started, all license-locked options associated to the licenses are available.
- license management** The PTC organization responsible for all installation-based activities.
- license management software** See FLEXlm.
- license pack** The packet sent to a customer (either by e-mail, fax, or U.S. mail) that contains the license codes necessary to run your software.
- license-to-run** A license-to-run invokes the license of a specific PTC application, such as Pro/ENGINEER. Floating licenses are available for use on any host machine on the network at any particular site. See floating license.
- license server** A machine or system process that distributes licenses to license clients. For example, if you start Pro/ENGINEER on machine A and it requests a license from machine B, then machine B is the license server. The license server keeps track of the number of licenses in use. A system administrator can use a license server to control licenses by placing restrictions on a particular feature.
- load point** Directory where the software is installed. An example of the Pro/ENGINEER load point on UNIX systems is `/usr/local/proe22`).
- lmgrd daemon** The FLEXlm license manager daemon (lmgrd) runs on the license server and works with the PTC vendor daemon. It does not manage license usage. The lmgrd daemon starts vendor daemons, refers applications to the appropriate vendor daemon, and communicates with other lmgrd daemons on the network (for Triad installations).
- maintenance release request** A request for postproduction PTC software, which features enhancements after a major new revision.
- maintenance shipment** An update to the next major release of PTC software.
- ModelCHECK** A software productivity tool for Pro/ENGINEER, ModelCHECK analyzes parts, drawings and assemblies, and recommends proper Pro/ENGINEER modeling techniques.
- name_service daemon (nmsd)** This daemon process enables remote communication between Pro/ENGINEER and other PTC applications.

node-locked license A license that can be used on only one specific machine or node. Node-locked licenses are restricted to a specific Host ID, or CPU ID. If the node-locked license does not match the CPU ID of the machine running the software, then the license cannot be used on that machine. Node-locked licenses can be counted or uncounted.

part file A file that contains Pro/ENGINEER part information (for example, object dimensions).

product prefix This standard prefix corresponds to a particular product. For example, the product prefix for Pro/ENGINEER is PROE_. This product prefix might be used as a prefix within a feature name, such as PROE_12345, where 12345 is the Configuration ID; or for an environment variable, such as PROE_FEATURE_NAME, which designates the feature that Pro/ENGINEER requests on startup.

Pro/BUNDLE A type of floating optional module that is comprised of several existing optional modules. PTC licensing recognizes the bundled software as a single licensed entity.

Pro/ENGINEER A 3-D mechanical design automation suite, Pro/ENGINEER provides associative and interoperable product design and an engineering modeling system.

Pro/J.Link A Java-based toolkit, Pro/J.Link allows developers to create Java applications that access a Pro/ENGINEER session.

Pro/Plastic Advisor Pro/Plastic Advisor simulates mold filling for injection molded plastic parts and provides designers with immediate, easy access to reliable manufacturing feedback and advice.

Pro/TOOLKIT An API, Pro/Toolkit enables customers and third parties to add functionality to Pro/ENGINEER using the C programming language.

Pro/Web.Link An API, Pro/Web.Link extends the capabilities of the Netscape browser so it can communicate with Pro/ENGINEER.

PTC Application Manager A utility that appears as a toolbar that enables the user to start and close other applications during a Pro/ENGINEER session.

PTC.Setup A graphical installation utility that uses common menus, dialog boxes, and screen icons to help customers install PTC product applications.

PTC.Setup Help Online user installation instructions displayed in a Web browser.

PTC daemon The PTC vendor daemon (ptc_d) runs on the license server and works with the FLEXlm daemon. It manages license usage by reading the PTC license file. The PTC daemon also contains the authentication information for PTC license security.

- PTC Host ID** The number used to uniquely identify your machine. This is the same number used in PTCIm, called the CPU ID. Also referred to as the machine address.
- PTC license management** The license distribution and maintenance software and concept that was used prior to FLEXlm. Also known as PTCIm. Before FLEXlm, PTC's proprietary software (Pro/SERVER) used a serial number-based licensing scheme to manage PTC products.
- reconfigurations** The process of modifying the configuration of software (moving modules from one license to another).
- server line** An entry in the license file that identifies the server or servers that distribute the software.
- startup command** The command that is used to start an installed software product. The startup command is created during installation and is associated with at least one license from the license management component. Modules that are in separate feature lines can also be associated with the startup command. When a startup command is executed, the associated licenses and modules are automatically licensed for use by the user who executed the startup command.
- trail file** A trail file records the procedures the end user performed while running a Pro/ENGINEER session.
- triad servers** A configuration of three license servers on the same network that work together to manage a pool of floating licenses.
- uncounted node-locked license** A node-locked license whose permission to use the license is managed by the PTC application, not the license server. Unlimited number of uncounted node-locked license sessions can be run on a single machine at one time.
- Web.Link** A Pro/ENGINEER feature, Web.Link lets you interact with Pro/ENGINEER through a Netscape browser. With this feature, you can create a customized Web page, which you can then use to automate and streamline aspects of your engineering process.

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