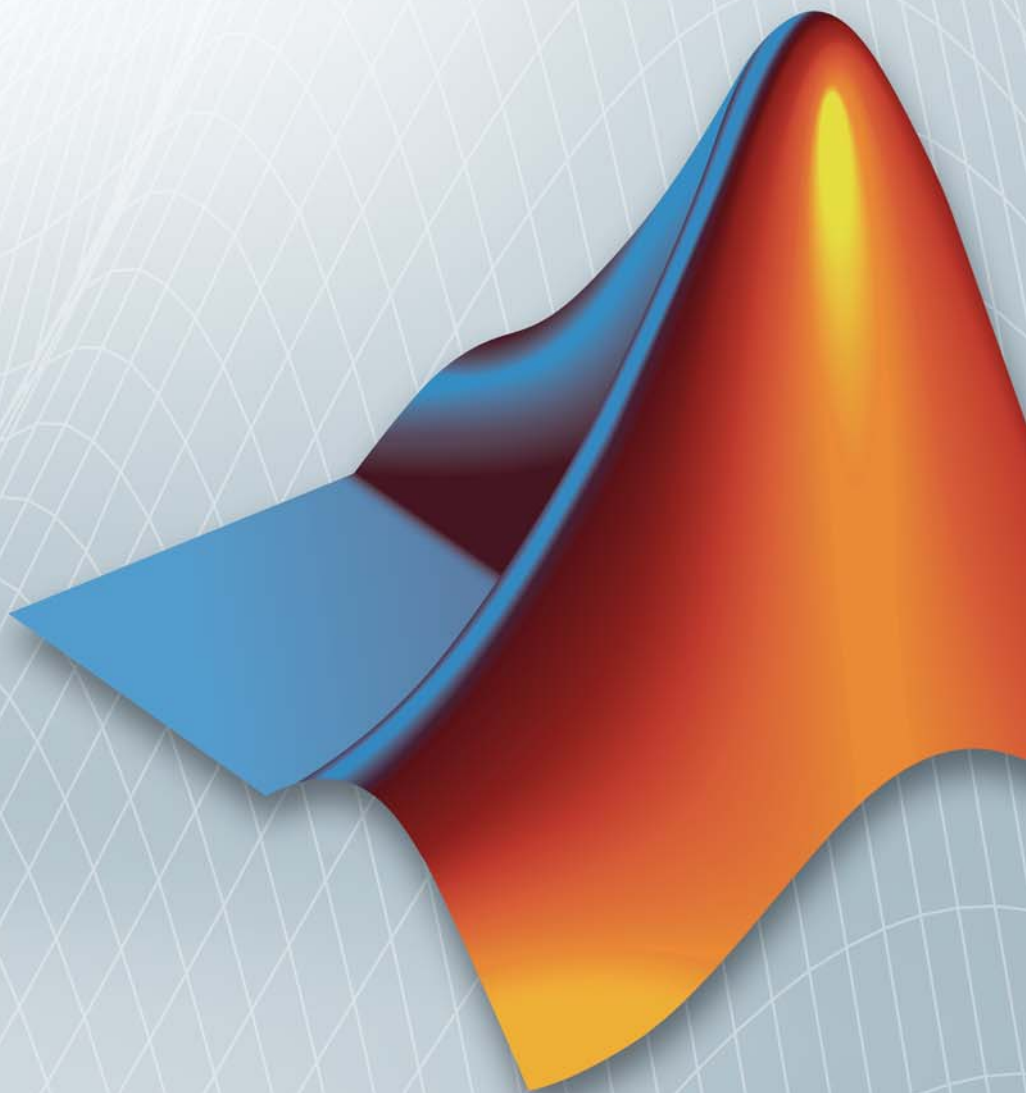


Polyspace[®]

Installation Guide

R2012a



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Polyspace® Installation Guide

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| April 2011 | Online Only | Revised for Version 8.1 (Release 2011a) |
| September 2011 | Online Only | Revised for Version 8.2 (Release 2011b) |
| March 2012 | Online Only | Revised for Version 8.3 (Release 2012a) |

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Hardware and Software Requirements

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| “Polyspace Plug-In Requirements” on page 1-3 |
| “Polyspace Software License Requirements” on page 1-5 |
| “UNIX and Linux Installation Requirements” on page 1-6 |
| “Polyspace Documentation Requirements” on page 1-6 |

Polyspace Product Requirements

Before you install Polyspace® software on a client or server workstation, your hardware and software must meet the following requirements.

| Requirement | 32-Bit and 64-Bit Client | 32-Bit and 64-Bit Server |
|------------------|--|--|
| RAM | 1024 MB minimum 2 GB ECC RAM recommended | 2 GB minimum 4 GB ECC RAM recommended |
| Processor | Any Intel or AMD x86 processor supporting SSE2 instruction set SPARC® and ultraSPARC | |
| Operating system | <p>Linux:¹</p> <ul style="list-style-type: none"> • Red Hat Enterprise Linux® 5.x • SUSE Linux Enterprise Desktop 11.x • Debian 5.x • Ubuntu 9.10 and 10.04 <p>Windows:</p> <ul style="list-style-type: none"> • Windows® 7 • Windows XP (SP3) • Windows Server® 2003 (R2 SP2) | |

| Requirement | 32-Bit and 64-Bit Client | 32-Bit and 64-Bit Server |
|--------------------|--|--------------------------|
| | <ul style="list-style-type: none"> • Windows Vista™ (SP1 or SP2) • Windows Server 2008 (SP2 or R2) <p>For Windows systems, you must also install Microsoft® .NET Framework 3.5</p> | |
| Disk space | 2 GB | |
| Swap space | At least twice the RAM size. | |
| Multi-core support | Polyspace verification benefits from using multi-core processors. The recommended hardware is 4 core processors with 2 GB of RAM per core. | |

Note To install Polyspace software on a 64-bit Linux machine, you must have the 32-bit libraries installed. The Polyspace installer uses 32-bit binaries, which require these libraries.

Polyspace Plug-In Requirements

Before you install Polyspace link products or plug-ins, your hardware and software must meet the following requirements.

| Product | Plug-In Software | Release | Operating System |
|--|-----------------------|-----------------|------------------|
| Polyspace Model Link™ SL (C Only) | MATLAB® | R2010a or later | Windows |
| | Embedded Coder™ | R2010a or later | Windows |
| Polyspace Model Link TL (C Only) | MATLAB | R2010a or later | Windows |
| | TargetLink® (dSPACE®) | 3.0 | Windows |

-
1. The listed distributions are those Linux distributions that MathWorks® products have been validated against. It is likely that other distributions with kernel version 2.6 or later and glibc version 2.5 or later can successfully run MathWorks® products, but MathWorks will be in a limited position to provide technical support for those distributions.

| | | | |
|---|---|----------------------------|------------------|
| Polyspace UML Link™ RH (C/C++ Only) | IBM® Rational® Rhapsody® | 7.4 and 7.5 | Windows |
| Polyspace C++ add-in for Visual Studio® (C++ only) | Microsoft Visual Studio 2005 ^[a] | 8.0 ^[a] | Windows |
| | Microsoft Visual Studio 2008 | 9.0 | Windows |
| | Microsoft Visual Studio 2010 | 10.0 | Windows |
| Polyspace plug-in for Eclipse IDE | Eclipse IDE for C/C++ | 3.5 and 3.6 | n Linux, Windows |
| | Eclipse IDE for Ada ² | 3.5 and 3.6 ^[a] | |
| Excel Macros | Microsoft Excel® | 2003 and 2007 | Windows |

2. Deprecated: will no longer be supported in next release.

Polyspace Software License Requirements

Polyspace software provides two licensing options that, when combined with the supported installation types, provide flexibility in redeploying product licenses to different users.

Polyspace software provides the following license options.

| License Option | Protection | Description |
|---|--|--|
| Designated Computer (Individual) | MAC address or serial disk number of the designated computer | DC licenses are only for Polyspace client software. DC licenses are appropriate for users who want to install and administer the client software themselves. A DC license is provided in a text file. |
| Concurrent | MAC address or serial disk number of the FLEXnet [®] server | Concurrent licenses are for both Polyspace client and server software. Concurrent licenses are appropriate for organizations that use license keys to control software access. Concurrent licenses require a FLEXnet license manager. |

Note For more information, see Chapter 8, “Polyspace License Installation”. This chapter describes the licensing options in detail, and how to install the FLEXnet license manager.

UNIX and Linux Installation Requirements

Configuration

Ensure that the /tmp folder contains at least 10 MB of free space.

Environment Settings

- User path must include *Polyspace_Install/bin* (to launch the product without using the absolute path).
- Place the Polyspace license file in *Polyspace_Common/licenses/license.dat*.
- Polyspace Graphical User Interfaces require **Gnome** on Linux. Behavior on other Window managers is unpredictable.

For more information about installation folders, see “Polyspace Software Installation Folders” on page 1-12.

Access Rights

You must have Read and Execution access rights for all Polyspace software installation.

Polyspace Documentation Requirements

The Polyspace documentation requires Adobe® Acrobat® Reader. If you do not have Acrobat Reader on your system, you can download it from www.adobe.com.

Note The Polyspace documentation requires Acrobat Reader release 5.0 or later.

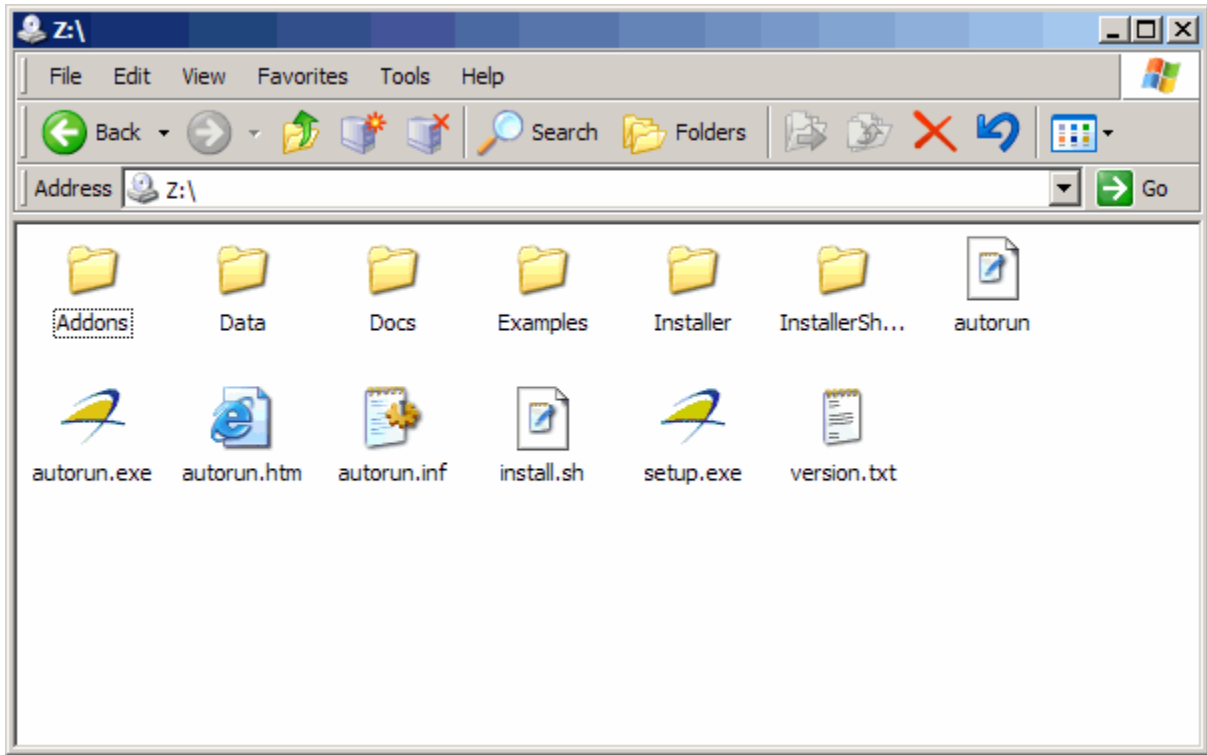
DVD Contents

Depending on the products you purchase, the Polyspace DVD (or downloaded installer file) allows you to install one or more of the following Polyspace products:

- **Polyspace Client™ for C/C++** — Verify and review C and C++ source code.
- **Polyspace Server™ for C/C++** — Verify C and C++ source code on a dedicated server.
- **Polyspace Client for Ada** — Verify and review Ada83 and Ada95 source code.
- **Polyspace Server for Ada** — Verify Ada83 and Ada95 source code on a dedicated server.
- **Polyspace Model Link SL** — Verify and review C source code generated using Embedded Coder software from a Simulink® model.
- **Polyspace Model Link TL** — Verify and review C source code generated using TargetLink code generator from a Simulink model.
- **Polyspace UML Link RH** — Verify and review C, C++, and Ada source code generated from Rhapsody software.

Note The difference between Polyspace Server and Polyspace Client products is described in “Polyspace Installation Options” on page 1-10.7

The DVD (or downloaded installer file) contains six subfolders and program files.



The important subfolders and programs are:

- `Setup.exe` – Runs the Graphical Installation Wizard on a Windows platform.
- `install.sh` – Runs the shell script Installation Wizard on a UNIX® platform.
The `-console` option enables you to execute the command in a console mode.
The `-h` option gives you command options.
- `version.txt` – Contains the complete version number of the Polyspace product that has been burned on the DVD.
- `Addons` folder – Contains useful configuration tools, available for Windows and UNIX platforms.

- Docs folder – Contains all documentation for Polyspace products, in PDF format.
- Data folder – Contains Polyspace data.
- Examples folder – Contains sample verification results from Polyspace tools (using Polyspace Client, Server, and Model Link for each language). These results can be displayed with The Polyspace Verification Environment, available with any of the Polyspace products.

Note Refer to the appropriate getting started guide for a quick description of the Polyspace products for your language:

- *Polyspace Products for Ada Getting Started Guide*
 - *Polyspace Products for C/C++ Getting Started Guide*
-

Polyspace Installation Options

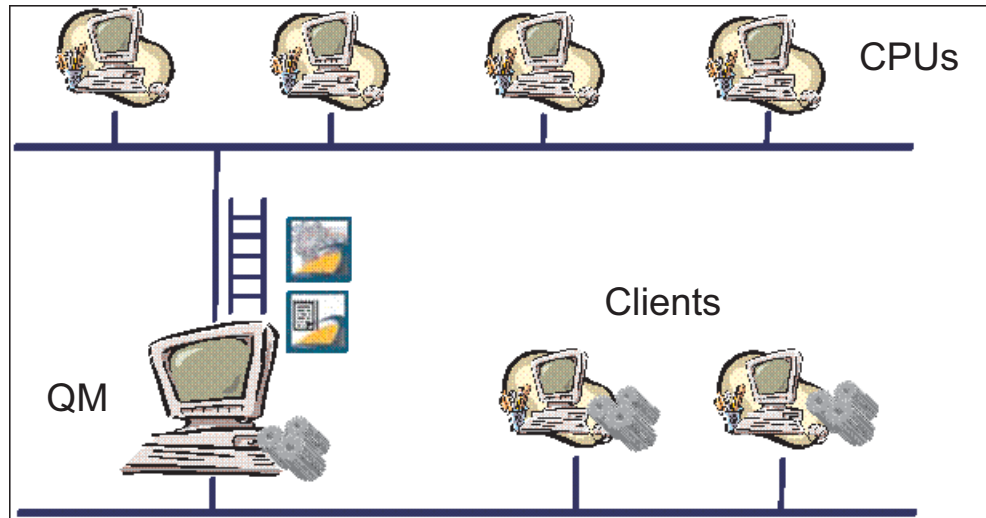
You can install the following products from the Polyspace installation DVD:

- Polyspace Client for C/C++
 - Polyspace Server for C/C++
- or
- Polyspace Client for Ada
 - Polyspace Server for Ada

A *Client* installation allows you to perform local verification, review previously completed code verifications, and send new verification requests to a dedicated server. This option is appropriate for developer workstations. The installation requires approximately 300 to 500 MB of disk space. You must have local administrator rights and access to the registry to complete the installation.

A *Server* installation allows a machine to receive verifications coming from clients. This option is appropriate for machines dedicated to Polyspace software. The installation requires approximately 300 to 500 MB of disk space. You must use a local user login with local administrator rights to complete the installation.

A Polyspace Server can receive Polyspace verification requests from any number of Polyspace Clients.



Polyspace® Client/Server Architecture

Polyspace terminology is described in the following table.

| Term | Description |
|--------------------|---|
| Polyspace Client | Developer workstation that requests Polyspace code verifications to be performed on servers. You can install any number of client systems. |
| Polyspace Server | Computer that manages code verifications from a number of clients. You can configure a Server as either a Queue Manager or a CPU. |
| Queue Manager (QM) | A Polyspace Server that manages code verifications coming from a number of clients. The Queue Manager can run verifications itself, or simply dispatch verification jobs to other CPUs. Typically, there is only one QM system. |
| CPU | A Polyspace Server that is dedicated to running code verifications. A CPU receives verification jobs from the QM and runs them. It typically does nothing but perform verifications. You can install any number of CPUs. |

Polyspace Software Installation Folders

Polyspace software is installed in three folders.

- The principal folder contains the kernel of the installed Polyspace release. The default folder is `C:\Polyspace\PolyspaceForLanguage`, where *Language* can be either `CandC++` or `Ada`.
- A common components folder contains the shared components available for any language, such as the Java run time library, the Polyspace Verification Environment, the Remote Launcher (RL), and any add-ins (such as the Polyspace C++ add-in for Visual Studio and the Polyspace In One Click Toolbar (POC)). The default folder is `C:\Polyspace\Polyspace_Common`.
- A folder contains the Remote Launcher configuration file `polyspace.conf`. The folder is `C:\Polyspace\Polyspace_RLData`.

In this document, these folders are referred to as follows:

- *Polyspace_Install* refers to `C:\Polyspace\PolyspaceForLanguage` (`/usr/local/Polyspace/PolyspaceForLanguage` for UNIX systems),
- *Polyspace_Common* refers to `C:\Polyspace\Polyspace_Common` (`/usr/local/Polyspace/Polyspace_Common` for UNIX systems).
- *PolyspaceRLData* refers to `C:\Polyspace\Polyspace_RLData` (`/var/Polyspace` for UNIX systems).

Installing Polyspace Software

- “Polyspace Products You Can Install” on page 2-2
- “Installing the Polyspace Software” on page 2-4
- “Launching Installation from Command Line” on page 2-26
- “Configuring Polyspace Software” on page 2-28
- “Configuring Polyspace Server to Support Multiple Versions of Client Software” on page 2-44

Polyspace Products You Can Install

| In this section... |
|--|
| “Overview of Polyspace Products” on page 2-2 |
| “Polyspace Client Software” on page 2-2 |
| “Polyspace Server Software” on page 2-3 |

Overview of Polyspace Products

This chapter describes how to install and configure the following Polyspace products:

- Polyspace Client for Ada
- Polyspace Server for Ada
- Polyspace Client for C/C++
- Polyspace Server for C/C++

Polyspace Client Software

Polyspace Client software is the management and visualization tool of Polyspace products. You use it to submit jobs for execution by Polyspace Server, and to review verification results. The Polyspace Client software includes the following features:

- Polyspace Verification Environment (including the Project Manager perspective, Coding Rules perspective, and Run-Time Checks perspective)
- Data Range Specifications (DRS)
- Coding Rules Checker (MISRA C®, MISRA C++, or JSF C++)
- Report Generator
- Automatic Orange Tester

Install the Polyspace Client software on developer workstations that will send verification jobs to the Polyspace Server.

The installation requires approximately 300 to 500 MB of disk space.

Polyspace Server Software

Polyspace Server software is the computational engine of Polyspace products. You use it to run jobs posted by Polyspace Clients, and to manage multiple servers and queues. The Polyspace Server software includes the following features:

- Remote Launcher
- Polyspace Queue Manager (Spooler)
- Report Generator
- HTML Generator.

Install the Polyspace Server software on machines that are dedicated to receiving verifications from clients (the Queue Manager and CPUs).

The installation requires approximately 300 to 500 MB of disk space.

Installing the Polyspace Software

| In this section... |
|--|
| “Before Starting the Installation” on page 2-4 |
| “Installing the Software” on page 2-4 |
| “Configuring the Polyspace Server Software” on page 2-10 |
| “Activating Polyspace Software” on page 2-14 |
| “Polyspace Software Icons” on page 2-25 |

Before Starting the Installation

Before starting the installation process, ensure that you have the following:

- The Polyspace DVD (or downloaded installer file).
- Your email address and password for your MathWorks account.
- A local user login with **administrator** rights.
- At least 2 GB of free disk space.

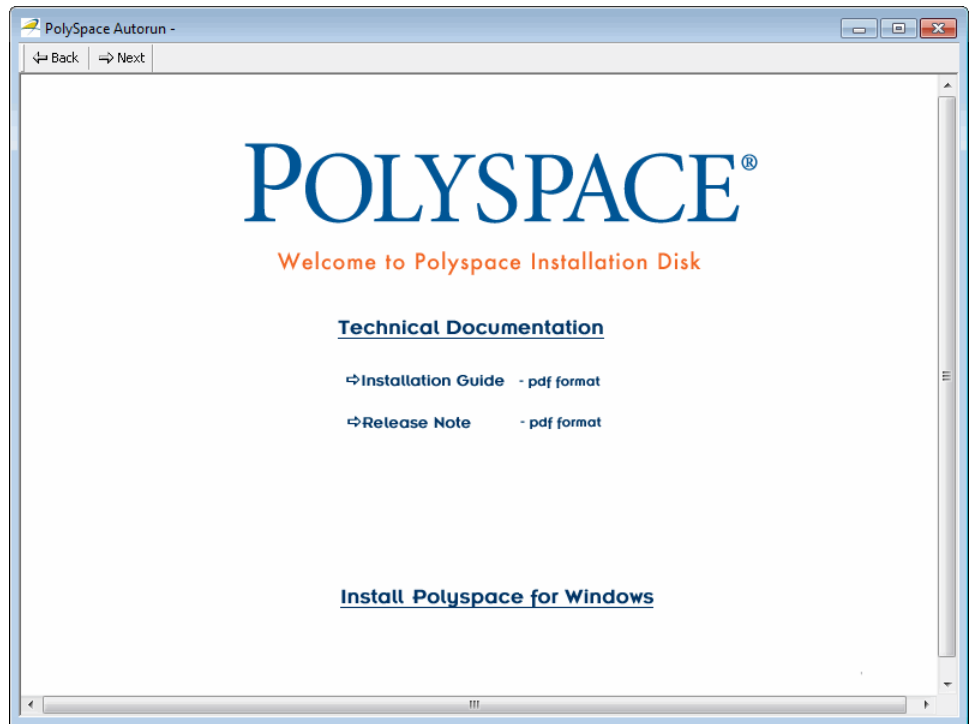
Installing the Software

Polyspace software provides a graphical installation wizard that guides you through the installation process. This wizard is available on Linux or Windows platforms. The following sections describe a complete Windows installation.

To install the Polyspace software:

- 1 Insert the Polyspace DVD into your DVD drive, or double-click the installer file you downloaded from the MathWorks Web site.

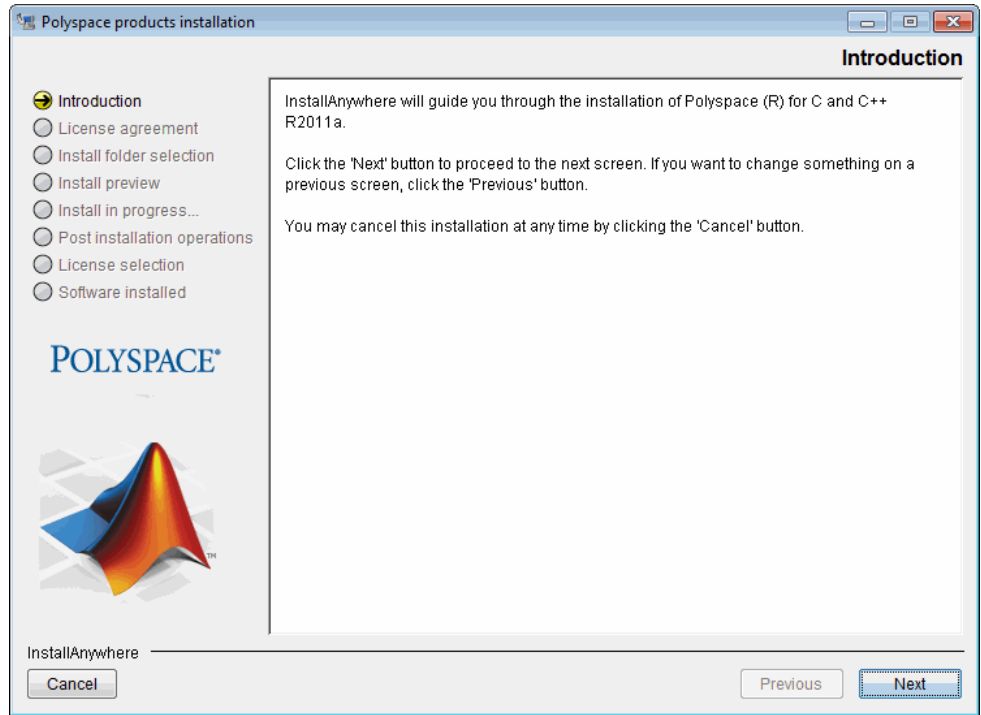
The Polyspace autorun starts.



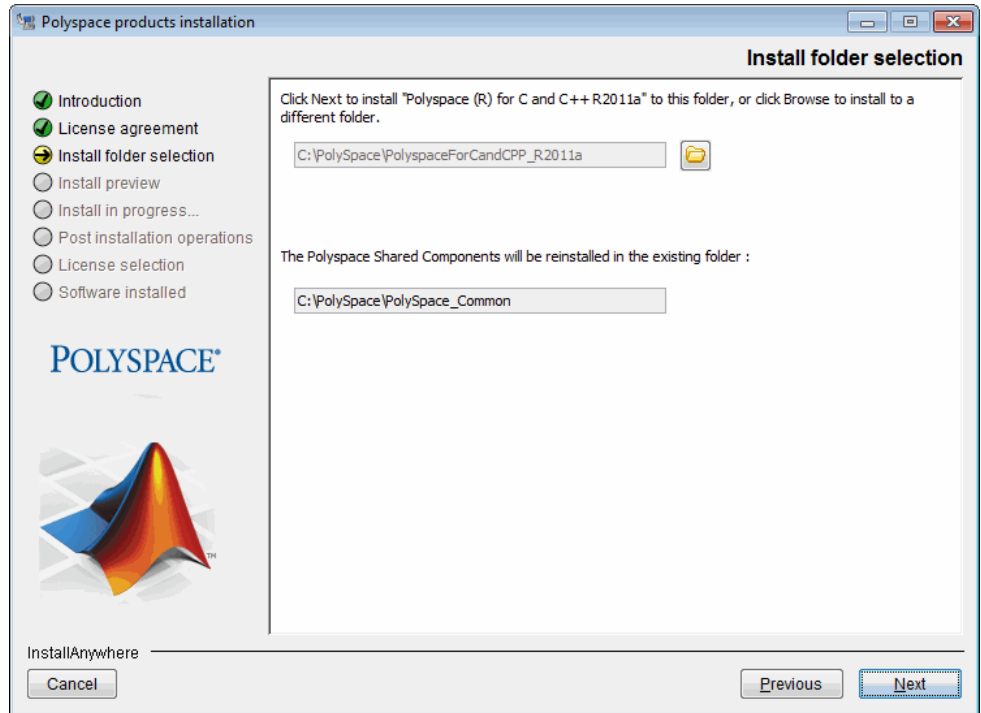
Note If you do not see the autorun window after a few minutes, launch the `setup.exe` program on the DVD.

2 Click **Install Polyspace for Windows**.

The installation wizard runs, preparing Polyspace installer. This process can take a few minutes.



- 3 When the Polyspace products installation window opens, click **Next**.
- 4 In the Software License agreement window, select **I accept the terms of the license agreement**, then click **Next**.



- 5** In the Install folder selection screen, select the folders in which to install the Polyspace software and shared components.

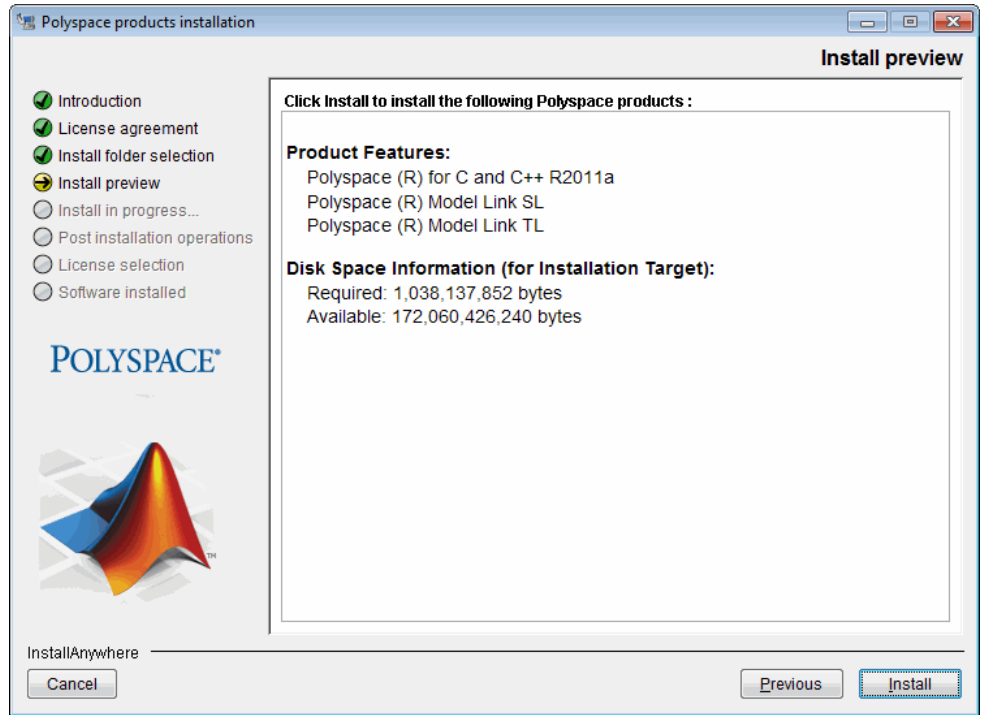
The default folder for the product software is
 C:\Polyspace\PolyspaceFor $language$ where $language$ can be either
 CandCPP or Ada.

The default folder for shared components is
 C:\Polyspace\Polyspace_Common.

- 6** Click **Next**.

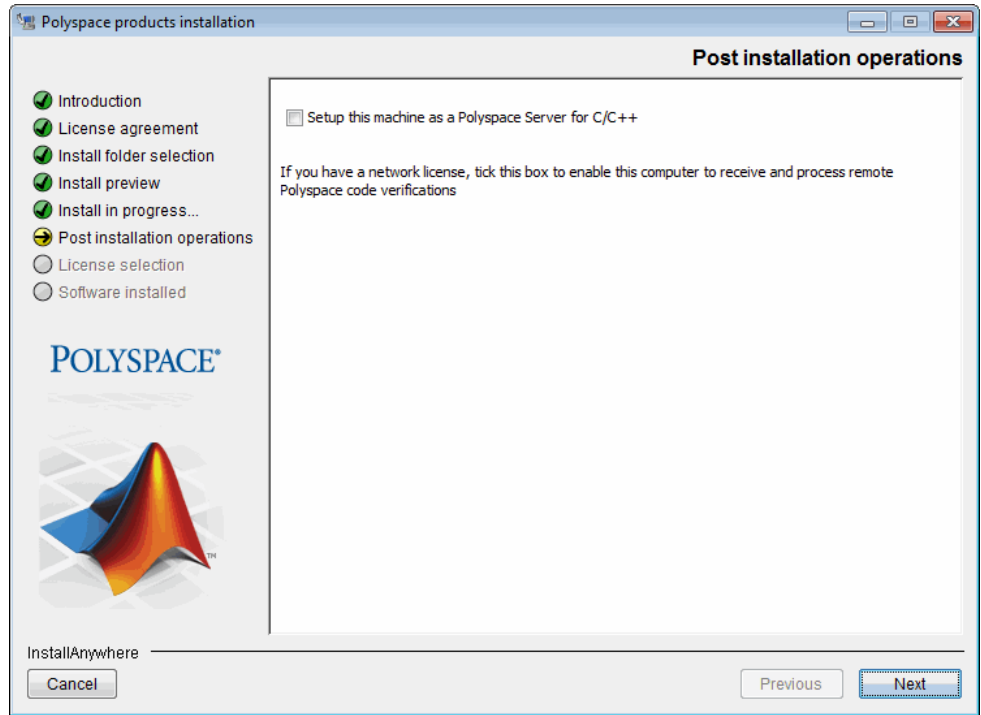
- 7** (Optional) If you are installing Model Link products, select the MATLAB installation you want to use, then click **Next**.

(Optional) If you are installing the Polyspace plugin for Eclipse, specify the Eclipse installation folder, then click **Next**.



8 In the Install preview window, click **Install**.

- Polyspace shared components are installed and configured (this may take a few minutes).
- When shared component installation is complete, the Polyspace product software is installed (this may take a few minutes).



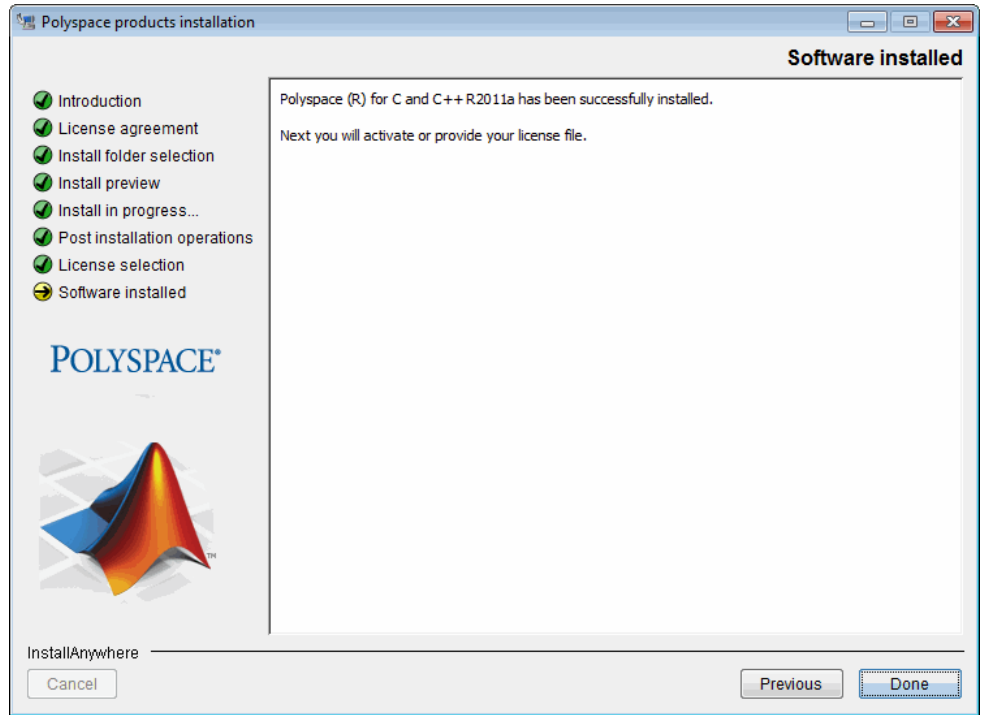
9 In the Post Installation operations window, do one of the following:

- If you are installing a Polyspace *Server*, select **Setup this machine as a Polyspace Server**, then click **Next**.

The Software installed window and the Polyspace Remote Launcher Manager dialog box open. For information on configuring the Remote Launcher, refer to “Configuring the Polyspace Server Software” on page 2-10.

- If you are installing a Polyspace *Client*, click **Next**.

The Software installed window opens.



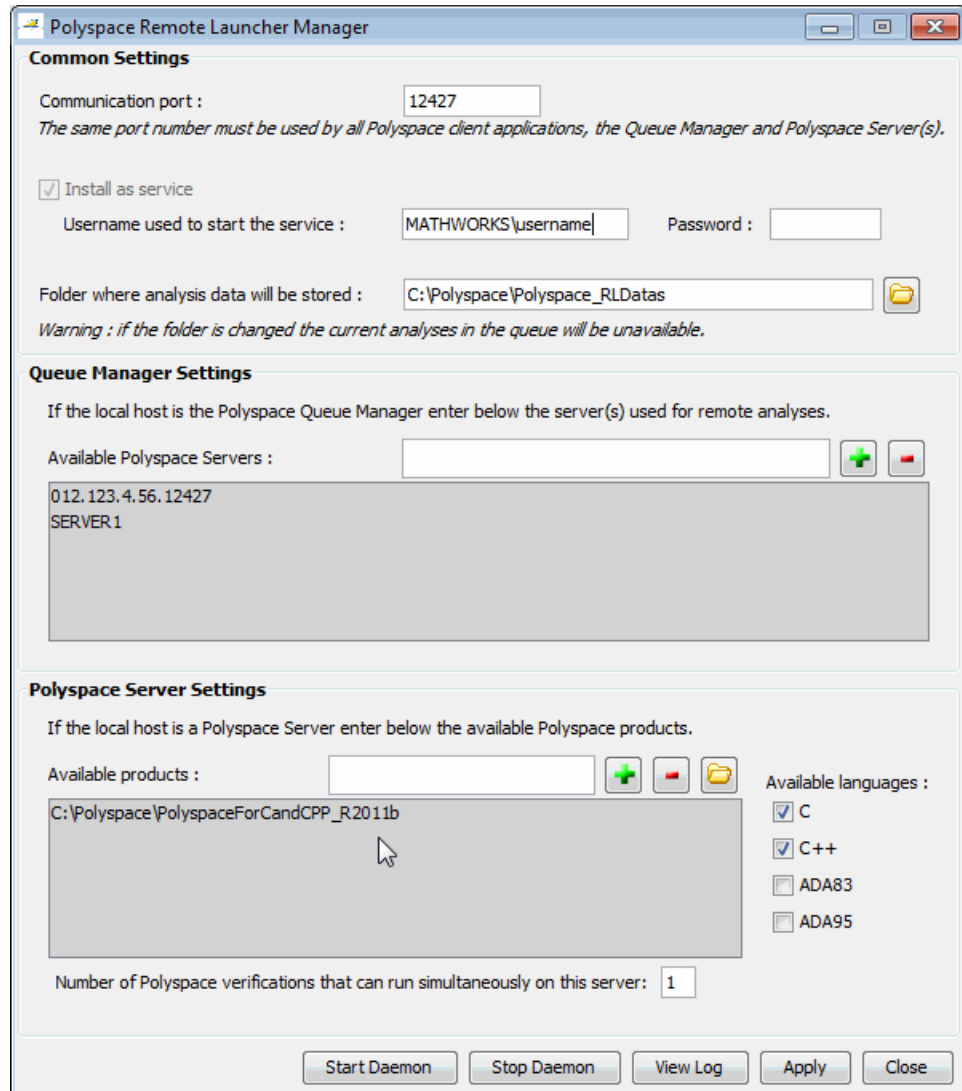
10 Click **Done**.

The Polyspace Software Activation dialog box opens.

Product installation is complete, but you must activate the software. For more information, see “Activating Polyspace Software” on page 2-14.

Configuring the Polyspace Server Software

When you finish installing the Polyspace Server software, the Polyspace Remote Launcher Manager dialog box opens. You must configure the port number for the Polyspace Server to complete the software installation. Configuring the port number establishes communication between the Polyspace Server and Polyspace Clients.



To complete the server installation:

- 1 Specify the port number on which the server communicates with Clients.
The default port number is 12427.

Note The port number must be the same as the port number for all Polyspace Clients.

- 2 To install the server as a service on a Windows machine (or a daemon on a Linux machine), select **Install server as service (daemon)**, then enter the user name and password to start the server as a service or daemon.

Note Password is not required on a Linux machine.

If you do not select **Install server as service (daemon)**, you must configure the server manually after installation. See “Manual Configuration of the Polyspace Server” on page 2-32.

- 3 If you have purchased more than one license for your server, set the **Number of Polyspace verifications that can run simultaneously on this server** to the number of licenses you plan to activate for this machine.

- 4 Click **Start Daemon**.

You see a message that the configuration has been saved.

- 5 Click **Yes** to start the Daemon.

- 6 Click **Yes** to save your settings.

The Start Daemon log window appears.


```

Start Daemon
*****
* Checking QueueManager configuration... *
*****
Host : AH-SR
User : MATHWORKS\sr
Checking files locations...
- data folder (C:\PolySpace\PolySpace_RLData)
- configuration file (C:\PolySpace\PolySpace_RLData\polyspace.conf)
- locks folder (C:\PolySpace\PolySpace_RLData\locks)
- Results repository directory (C:\PolySpace\PolySpace_RLData\results-repo)
- log file (C:\PolySpace\PolySpace_RLData\polyspaced.log)
*****
* Checking CPUs configuration... *
*****
Checking configuration...
Processor : Intel(R) Core(TM) i7-4790K CPU @ 3.90GHz
R.A.M. : 5.98 GB
O.S. : Microsoft Windows [Version 6.0.6002.18000]
User : MATHWORKS\sr
- product 1 :
  - installation folder : C:\PolySpace\PolyspaceForCandCPP_R2011a\Verification
  - version : CC-8.1.0.1 (R2011a)
- supported languages : C CPP
The CPU is free.
Checking Polyspace licenses...
=====
=> The configuration is now correct.
=====
Installing the polyspaced service...
Setting service logon right for user MATHWORKS\sr...
Starting the polyspaced service...

```

The screenshot shows a 'Start Daemon' window with a scrollable text area containing the above text. A smaller dialog box titled 'Start daemon' is overlaid on the main window, displaying an information icon and the message 'Start of the daemon has succeeded' with an 'OK' button.

The Remote Launcher Manager checks product paths, licenses, and the creation and start up of the service (daemon). When the configuration check is complete, the message “Start of the daemon has succeeded.” appears.

Note If a problem occurs, an error message appears at the bottom of the screen. If you get an error, see “Troubleshooting Common Errors” on page 2-40.

7 When you see the message “Start of the daemon has succeeded,” click **OK**.

8 Click **Close** to close the Remote Launcher Manager

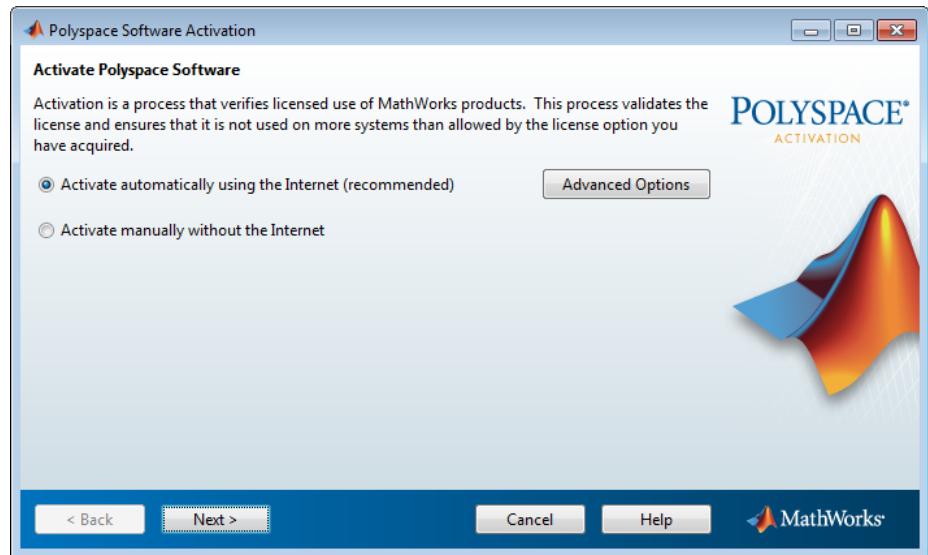
The Polyspace Server installation is complete.

Note By default, the server becomes the first CPU of the architecture.

Activating Polyspace Software

Activation is a process that verifies licensed use of MathWorks products. The process validates your product licenses and ensures that they are used correctly. You must complete the activation process before you can use Polyspace software.

When you finish installing the Polyspace software, the Polyspace Software Activation dialog box opens.



If you are using Designated Computer (Individual) licenses, you must activate the license for each Polyspace system individually. However, if you are using Concurrent licenses for multiple Polyspace systems, you do not need to activate each Polyspace system. You activate the license once (for the FLEXnet license server), then provide license files for each Polyspace system.

To complete the activation process, refer to the following sections:

- “Activating With Existing License File” on page 2-16
- “Activating Automatically (With Internet Connection)” on page 2-17
- “Activating Manually (Without Internet Connection)” on page 2-21

If you cancel the activation process, you can activate the software at any time after installation by selecting **Start > Programs > Polyspace > Activate Polyspace**.

For more information on software activation, including frequently asked questions, refer to the MathWorks Web site:
www.mathworks.com/support/activation/polyspace.html

Activating With Existing License File

If you have an existing license file for the software that you are installing, you can provide a path to the license file to complete the activation process. You do not need to access the MathWorks License Center.

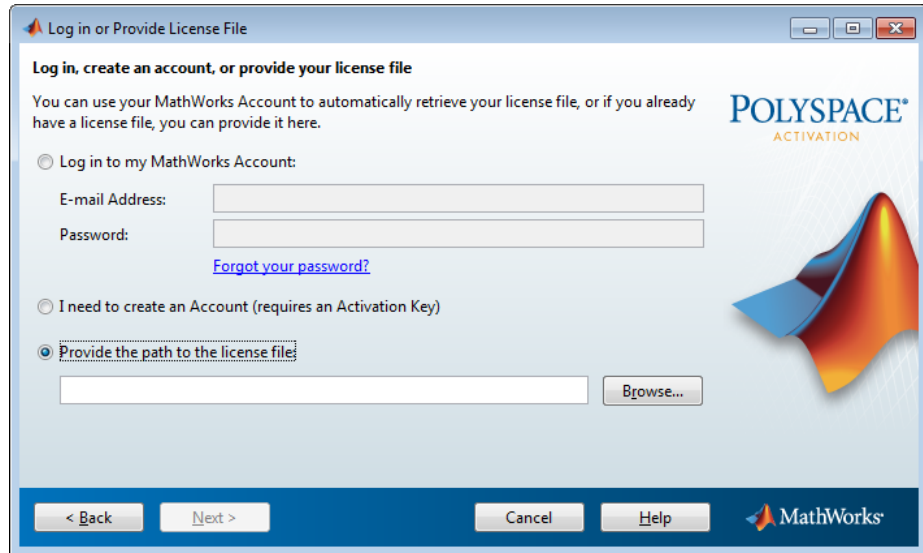
For example, if you use concurrent licenses for Polyspace software, your license manager provides a license file for each Polyspace system. You do not activate the software on each system, you just provide a path to this license file.

Note With concurrent licenses, a FLEXnet license server manages licensing of individual systems. You manually activate the concurrent license once (using the License Center at the MathWorks Web site), and then provide license files for each Polyspace system. For more information, see “Configuring Concurrent Licenses” on page 8-12.

To activate with an existing license file:

- 1** In the Software Activation dialog box, select **Activate automatically using the Internet**, then click **Next**.

The Log In or Provide License File dialog box appears.



2 Select **Provide the path to the license file**.

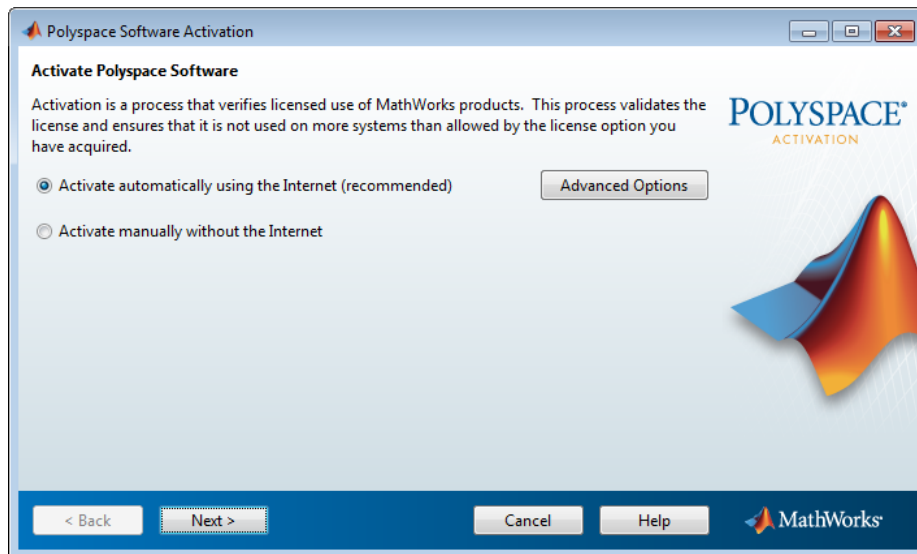
3 Enter the path to your license file, then click **Next**.

The Activation Complete dialog box appears.

4 Select **Finish** to close the Activation Client.

Activating Automatically (With Internet Connection)

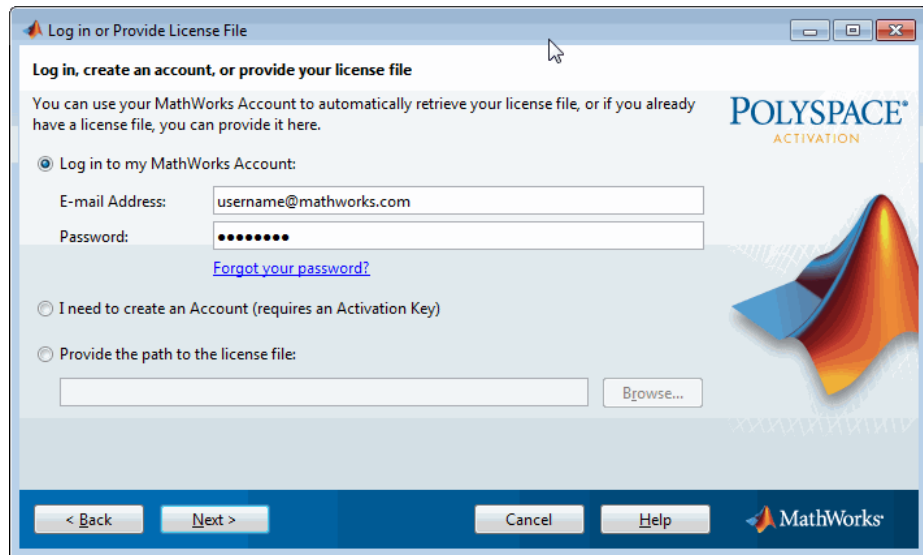
If your Polyspace system is connected to the Internet, you can activate your software automatically after installation. This process involves logging in to your MathWorks account, and selecting the license that you want to activate.



To activate your software automatically:

- 1 In the Polyspace Software Activation dialog box, select **Activate automatically using the Internet**, then click **Next**.

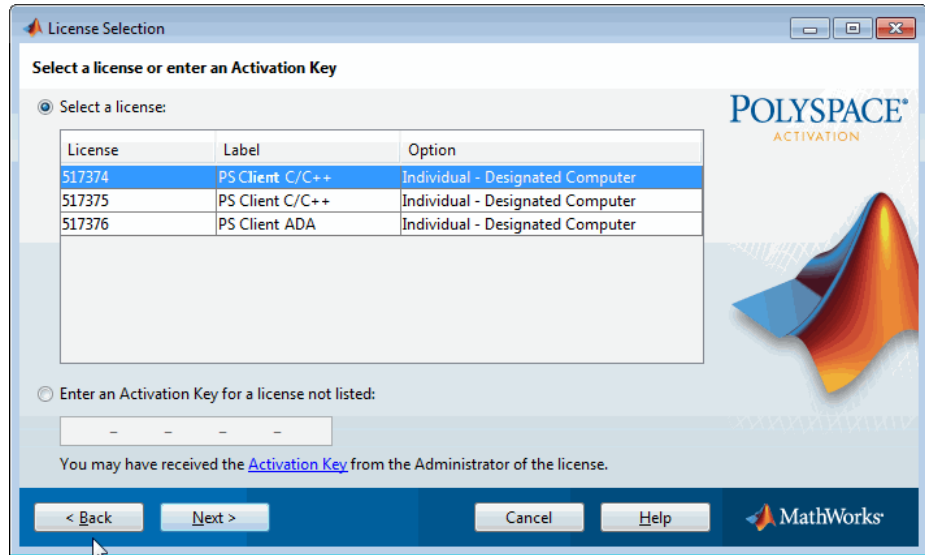
The Log in or Provide License File dialog box appears.



- 2 Enter the login information for your MathWorks account, then click **Next**.

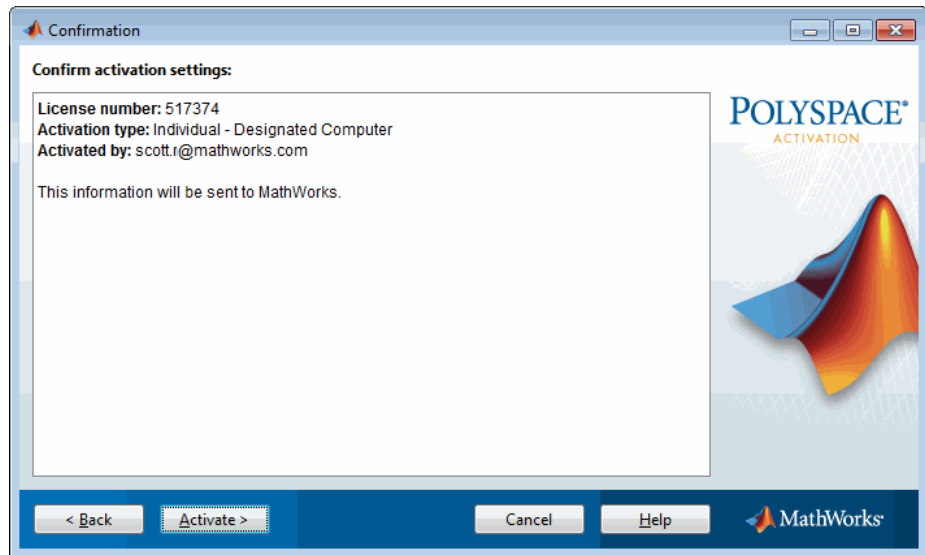
Note If you do not have a MathWorks account, select **I need to create and Account**, and follow the instructions to create one.

The License Selection dialog box appears.



- 3 Select the license you want to activate, then click **Next**.

The Confirmation dialog box appears.

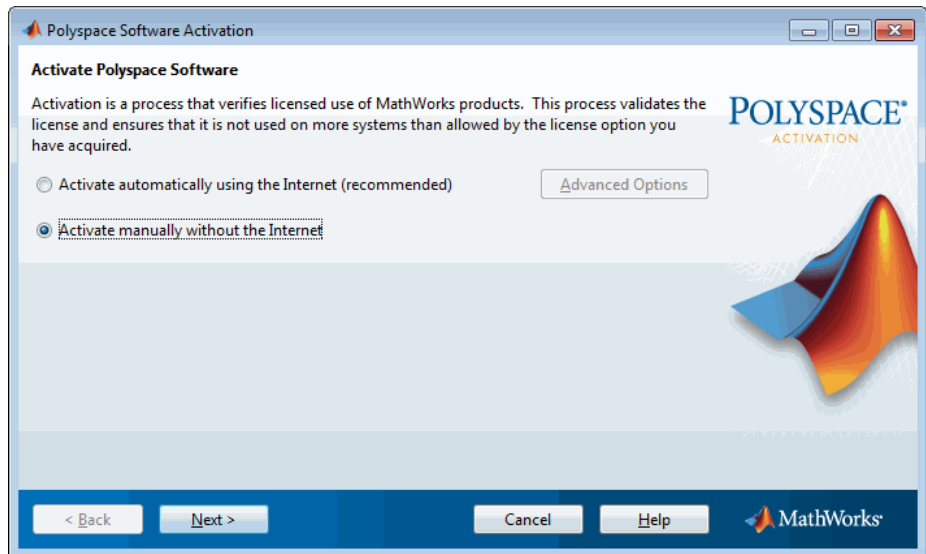


4 Select Activate.

Your license file is automatically copied to the Polyspace system.

5 In the Activation Complete dialog box, select **Finish to close the Activation Client.****Activating Manually (Without Internet Connection)**

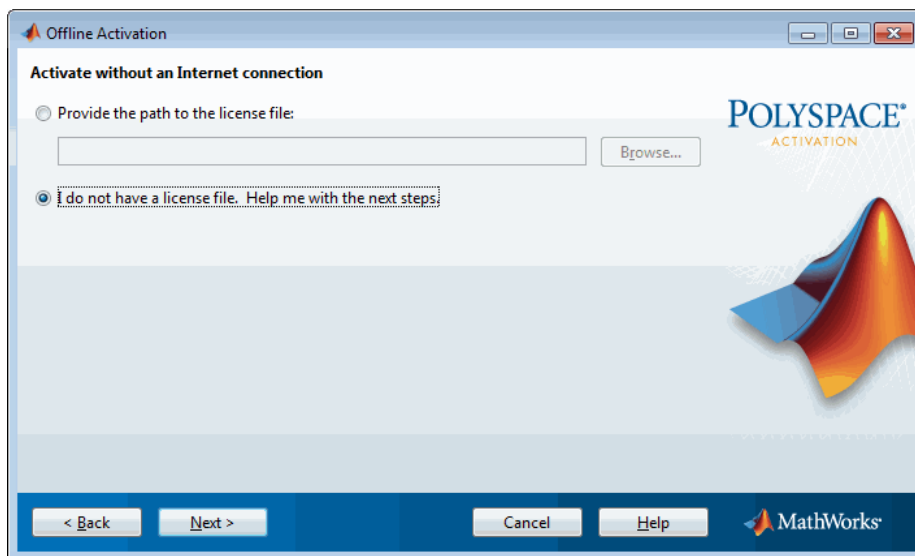
If your Polyspace system does not have an Internet connection, you must activate your software manually. This process involves accessing the MathWorks License Center from another computer, then manually copying your license file to the Polyspace system.



To activate your software manually:

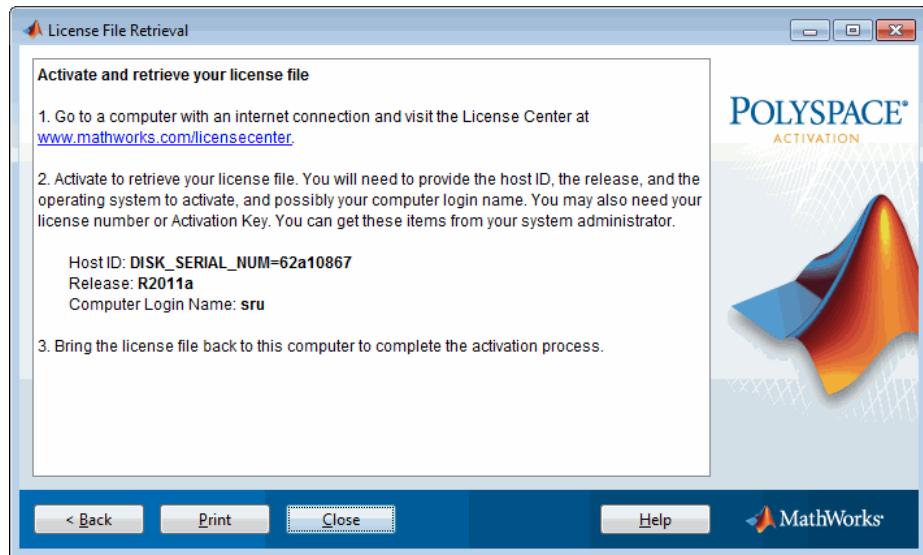
1 In the Polyspace Software Activation dialog box, select **Activate Manually without the Internet, then click **Next**.**

The Offline Activation dialog box appears.



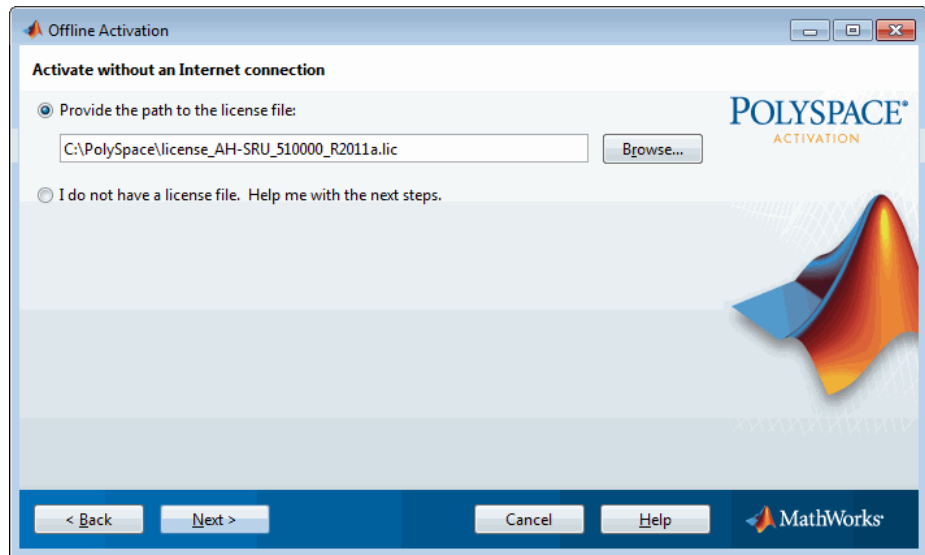
- 2 Select **I do not have a license file**, then click **Next**.

The License File Retrieval dialog box displays the information that you need to activate your software.



- 3** Save the information displayed in the License File Retrieval dialog box. For example, you can print a copy by clicking **Print**.
- 4** Go to a computer with an Internet connection, and then go to the License Center at the MathWorks Web site:
<http://www.mathworks.com/licensecenter>
- 5** Activate your license, then download your license file.

For more information, see the License Center Help.
- 6** Copy your license file to the Polyspace system.
- 7** Return to the Offline Activation dialog box, then select **Provide the path to the license file**.



Note If you closed the Activation window, select **Start > Programs > Polyspace > Activate Polyspace** to restart it.

- 8 Enter the path to your license file, then click **Next**.

The Activation Complete dialog box appears.

- 9 Select **Finish** to close the Activation Client.

Polyspace Software Icons

After you complete the installation, two icons appear on your desktop:



Polyspace
R2011a



Polyspace
Spooler

- **Polyspace** – The Polyspace Verification Environment (PVE) graphical user interface. You use the PVE to set up a verification project, launch verification of your source code, and explore verification results.
- **Polyspace Spooler** — The graphical user interface you use to manage verifications sent to Polyspace Servers.

Launching Installation from Command Line

| In this section... |
|--|
| “Installing Software on a Linux or UNIX Platform” on page 2-26 |
| “Installing Software in Silent Mode” on page 2-26 |

Installing Software on a Linux or UNIX Platform

To install Polyspace products on a Linux or UNIX system, execute the following command in a terminal window:

```
DVD/install.sh
```

This script launches the installation wizard. To complete the installation, refer to “Installing the Polyspace Software” on page 2-4.

Installing Software in Silent Mode

By default, `-silent` mode performs a Polyspace software installation using default parameters (auto server mode and 12427 for the port).

Note If you are installing a Polyspace Server using silent mode, the Polyspace Remote Launcher Manager does not open automatically. After installing the software, you must configure the Polyspace server settings. For more information, see “Configuring Polyspace Server Software” on page 2-29.

UNIX Platforms

To install the software on a UNIX system using silent mode, execute the following command in a terminal window:

```
DVD/install.sh -silent -install-dir Polyspace_Install
```

where *Polyspace_Install* represents the installation folder.

The common components are automatically installed at the same level as the installation folder that you choose, or if it exists, in the existing *Polyspace_Common* folder.

Windows Platforms

To install the software on a Windows system using silent mode, execute the following .bat file in a command prompt shell:

```
DVD\DATA\Windows\setup_silent.bat Polyspace_Install
```

The common components are automatically installed at the same level as the installation folder that you choose, or if it exists, in the existing *Polyspace_Common* folder.

Configuring Polyspace Software

| In this section... |
|--|
| “Configuring Polyspace Client Software” on page 2-28 |
| “Configuring Polyspace Server Software” on page 2-29 |
| “Configuring Polyspace Metrics Web Interface” on page 2-38 |
| “Troubleshooting Common Errors” on page 2-40 |

Configuring Polyspace Client Software

Initial Configuration

By default, the Polyspace Client is configured to automatically detect a Polyspace Server on the network using port 12427.

Manually Configuring the Polyspace Client

By default, the Polyspace Client automatically detects any available Polyspace Server configured as a Queue Manager on the network. However:

- If the Client finds more than one Polyspace Server, the Client displays an error message listing the names of all detected servers. Carefully note all names and close the error dialog box.
- If no Polyspace Server is available, you see the “No QueueManager server found” error message when you launch a verification or execute any Polyspace command.

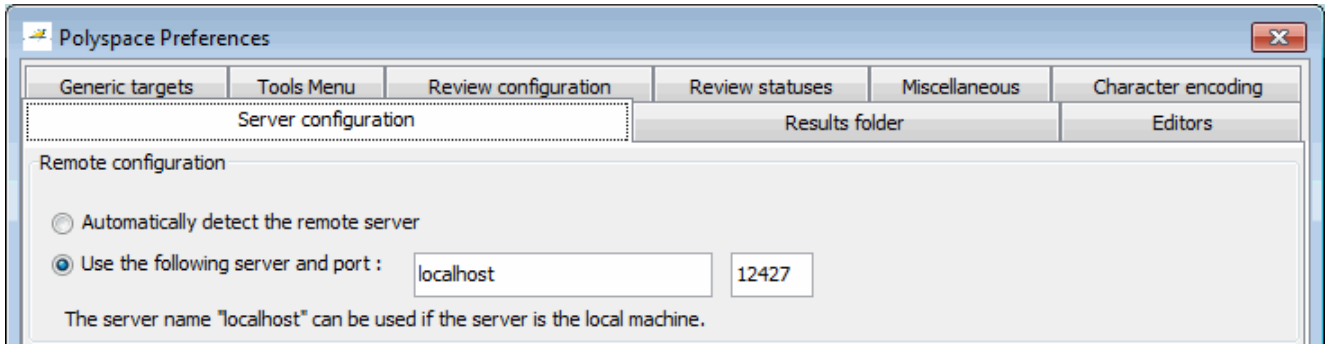
In these cases, you can specify a specific Queue Manager server associated to a specific port number to correct the error.

To manually configure the remote server:

- 1** In the Polyspace verification environment, select **Options > Preferences**.

The Polyspace Preferences dialog box opens.

- 2** Select the **Server configuration** tab.



- 3** In the Remote configuration section, select the **Use the following server and port** button.
- 4** Enter an IP address (or server name) and associated port number (default 12427) for the Polyspace Server. You must use the same port number for all Polyspace clients, Queue Manager and servers.
- 5** If you want to configure access to Polyspace Metrics, see “Configuring Polyspace Metrics Web Interface” on page 2-38.
- 6** Click **OK**.

The preferences are stored in the `polyspace.prf` preferences file in `%AppData%\Polyspace` (`C:\Users\username\AppData\Roaming\Polyspace\polyspace.prf` on a Windows system).

Note Although you can modify this file with an ASCII editor, you should not do so. You should always use the graphical user interface to modify the remote launcher settings.

Configuring Polyspace Server Software

- “Initial Configuration” on page 2-30
- “Updating Configuration of the Polyspace Server” on page 2-30
- “Manual Configuration of the Polyspace Server” on page 2-32

- “Configuration File and Folder” on page 2-35
- “Installing a New CPU” on page 2-36
- “Files and Folders Created When Installing the Queue Manager for Polyspace Server” on page 2-37
- “Specifying Port Number of Polyspace Metrics Web Server in Queue Manager” on page 2-37

Initial Configuration

You perform initial configuration of the Polyspace Server software during installation (see “Configuring the Polyspace Server Software” on page 2-10).

After installation, the Polyspace Server becomes the first CPU of the architecture by default.

Note All the information displayed in the Remote Launcher configuration window during installation is automatically saved as ASCII text in the file *Polyspace_Common / .. / Polyspace_RLDatas / polyspaced.log (/var / Polyspace / polyspaced.log file in UNIX)*.

Updating Configuration of the Polyspace Server

The default Server configuration assumes that the Server is both the Queue Manager and a CPU.

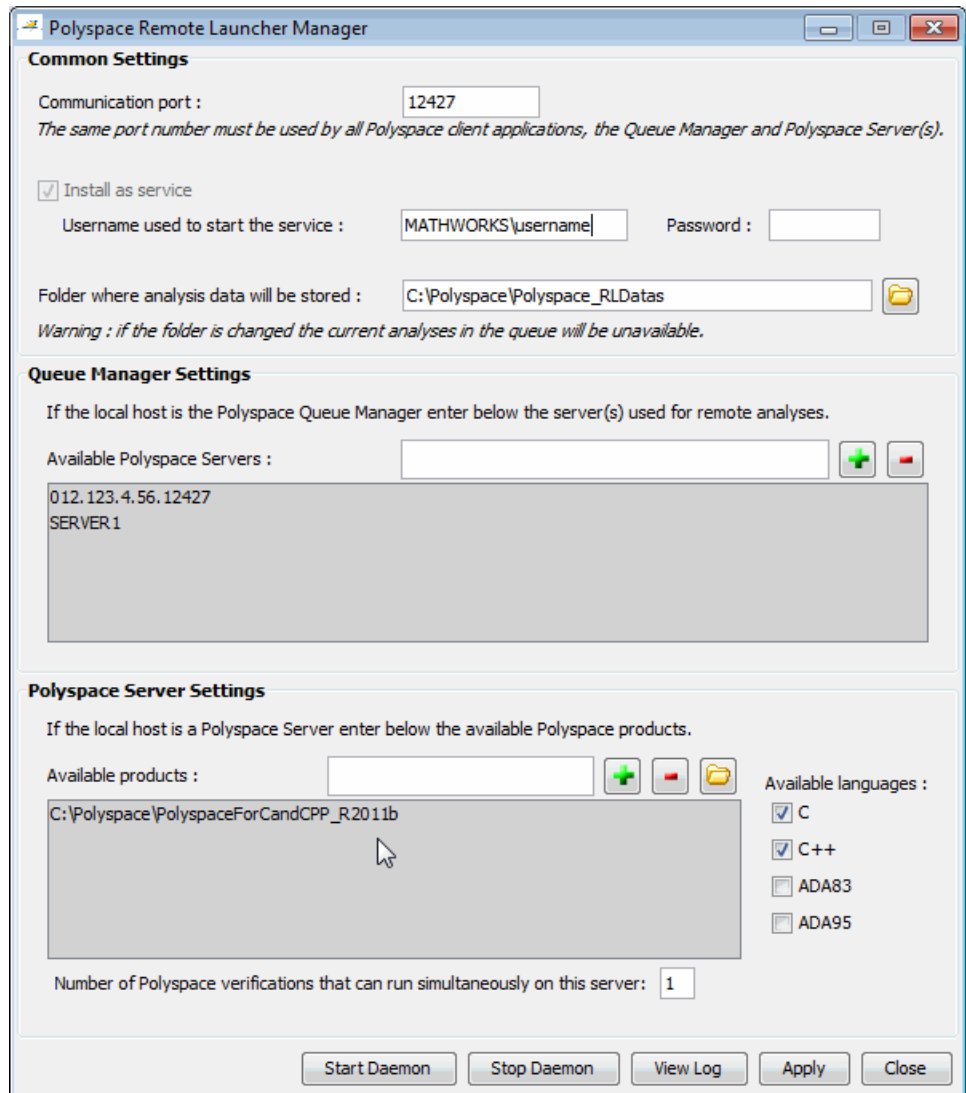
After you install the software, you can configure or update the Queue Manager graphically (on Windows systems) or by using a shell command.

To update your server configuration and associated `polyspace.conf` file:

- 1 Open the Remote Launcher Manager as follows:
 - Select **Start > All Programs > Polyspace > Remote Launcher Manager**
- or

- Enter the command
`Polyspace_Common/RemoteLauncher/PSTRManager.exe`

The Remote Launcher Manager dialog box opens.



- 2 Click **Stop Daemon** to stop the current Queue Manager.

Note You must stop the current Queue Manager before you can change any parameters.

- 3 In the **Common Settings** pane, set the port number and location for the Remote Launcher configuration file (`polyspace.conf`).
- 4 In the **Queue Manager Settings** pane, specify the address of the Queue Manager and all attached CPUs of the Remote Launcher.

The syntax `<describing name/IP address>[:<port number>]` attaches a CPU.

For example, in the previous figure “SERVER1” is the Queue Manager and “012.123.4.56:12427” represents a CPU with a specific port number.

- 5 In the **Polyspace Server Settings** pane, specify the location of Polyspace products installed on the server, and available languages.
- 6 If you have activated more than one license for your server, set the **Number of Polyspace verifications that can run simultaneously on this server** to the number of licenses you have activated for this machine.

Note All information displayed during the execution of commands like “Start Daemon”, “Stop Daemon” are also written in the `polyspaced.log` file in `<Polyspace_Common>/../Polyspace_RLData` (`/var/Polyspace` under UNIX).

Manual Configuration of the Polyspace Server

A configuration of the Server/Verifier, Queue Manager of the Client/Server architecture has been stored in a standard file. A default configuration is generated during the installation: the current machine is at the same time the Queue Manager, and the distant machine.

The batch command

`Polyspace_Common/RemoteLauncher/bin/setup-remote-launcher` can be used to create or destroy the configuration file. It is called `polyspace.conf`. It may be found:

- Windows systems: `\Polyspace_RLData\polyspace.conf`
(For example: `c:\Polyspace\Polyspace_RLData`).
- UNIX systems: `/etc/Polyspace`

The configuration file contains fields which set a Queue Manager and CPU architecture:

- `product=` — It determines the installation folders of Polyspace Verifier. It is possible to have one per language.
- `lang=` — It determines the supported verification languages. The language variable specifies the supported language declaration (CPU only). The values may be: C, C++, CPP, Ada, Ada83, ADA, Ada95 and ADA95.
- `username=` — . The username variable specifies the user name used to run the daemon process. If the daemon is started as root on UNIX, it will automatically change its user ID to run as the given user.
- `datadir=` — The data directory name identifies the place where the data sent remotely are stored.
- `locksdir=` — The locks directory identifies the place where the locks are stored. `<datadir>/locks` will be used by default without specified field.
- `port=` — The port number on which the daemon is listening (default value is 12427). The available port can be specified between *10000* to *15000*. This range depends on the available OS requirements.
- `cpu=` — The CPU name and port specifies available Queue Manager and CPUs. Syntax can be `<address IP or name of CPU>[:port number]`. If more than one `cpu=` is specified, others are CPUs where the Queue Manager can dispatch verifications.
- `results_repository_dir=` — The Polyspace Metrics results repository folder. Default is `<datadir>/results-repository`.
- `process_automation=` — The flag that specifies whether automatic verification is activated (yes). Default is no. If automatic verification is

activated, then Polyspace verifies your code according to the configuration you provide in the file `<results_repository_dir>/Projects.pspj`.

Any change in the configuration file except for the `cpu=` field (for example, to add a new CPU, see next paragraph), the associated daemon/service manager need to be stopped and re started:

- `Polyspace_Common/RemoteLauncher/bin/setup-remote-launcher -stop-service` is used to stop the service. Note that any standard program on OS can stop the service or daemon.
- `Polyspace_Common/RemoteLauncher/bin/setup-remote-launcher -start-service` is used to start or restart the service. Note that any standard program associated to the OS can restart the service or daemon.

Note `Polyspace_Common/RemoteLauncher/bin/setup-remote-launcher -h` gives available options

If you did not select the Queue Manager as a service (daemon) during installation, use the following commands to install it:

- **Windows platform:**
`Polyspace_Common/RemoteLauncher/bin/InstallPolyspaceService.bat`

Note The Windows service can also be managed like other services using the **My Computer > Manage > Services and Applications** menu.

- **UNIX platform:**
`Polyspace_Common/RemoteLauncher/bin/setup-remote-launcher -install-service`

Note The Polyspace daemon can also be managed like other daemon in the `/etc/init.d` install services folder.

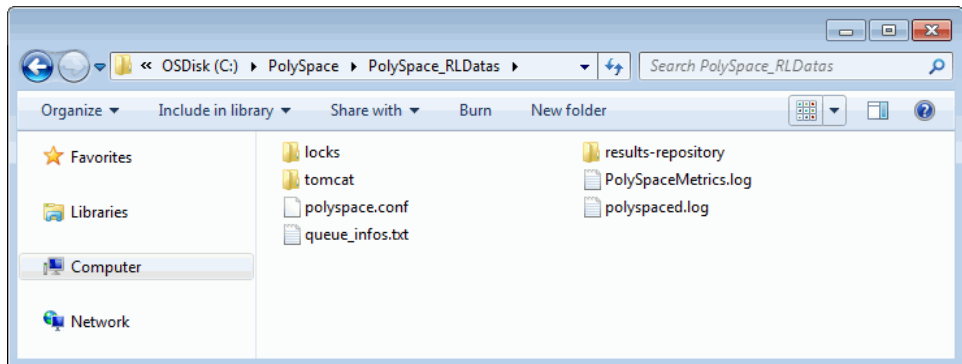
You can then launch the `polyspaced` service (daemon) using the following commands:

- `Polyspace_Common/RemoteLauncher/bin/polyspaced -stop` — Stops the Queue Manager.
- `Polyspace_Common/RemoteLauncher/bin/polyspaced` — Starts or restarts the Queue Manager.

Note `<Polyspace_Common>/RemoteLauncher/bin/polyspaced -h` gives available options.

Configuration File and Folder

The `Polyspace_RLData`s folder contains the following files and folders:



- The `polyspaced.log` file contains installation log information as well as all communication between clients and the Queue Manager during the Queue Manager life.
- The `queue_infos.txt` file contains information of the Queue Manager spooler.
- The `locks` folder contains the locks file for each verification.
- `polyspace.conf` is the configuration file. An example of a Server/Verifier `polyspace.conf` configuration file looks like this:

```
product=c:\Polyspace\PolyspaceForCandCPP
product=c:\Polyspace\PolyspaceForAda
lang=Ada95
lang=C
lang=CPP
datadir=c:\Polyspace\Polyspace_RLData
username=bard
cpu=BERGERON
cpu=192.168.2.79:12428
```

In this example, the BERGERON cpu has been configured to be a Queue Manager and a CPU of C, CPP and Ada95 code verifications on default port 12427. The product installed in `c:\Polyspace\PolySpaceForCandCPP` will be used. Moreover, another CPU of address IP `192.168.2.79` has been declared on port 12428.

On a UNIX system, the directory location containing locks and `datadir` by default is `/var/Polyspace`.

Installing a New CPU

Installing a new CPU is very simple: just follow the standard Polyspace Server installation. Then, edit the `polyspace.conf` of the CPU which has been chosen as Queue Manager, and add the new CPU using the field `cpu=<describing name/IP address>[:<port number>]`

See the following example where there are two declared CPUs.

```
product=c:\Polyspace\PolyspaceForCandCPP
product=c:\Polyspace\PolyspaceForAda
lang=Ada95
lang=C
lang=CPP
datadir=c:\Polyspace\Polyspace_RLData
username=bard
cpu=BERGERON
cpu=192.168.2.79:12428
```

Note On the new CPU, it is important to remove the field `cpu=` in the `polyspace.conf` file to avoid being also a “Queue Manager”.

Files and Folders Created When Installing the Queue Manager for Polyspace Server

When you install the Polyspace daemon/service, the software creates the following items (UNIX):

- `polyspace.conf` file in `/etc/Polyspace`, containing the Polyspace configuration information.
- `/var/Polyspace` folder containing many files, such as `<locks>` `polyspaced.log` `<analysisX>` `queue_infos.txt`.
- `/etc/init.d/polyspaced` file, used to start, stop, and restart the daemon/service.
- `/tmp/polyspace` folder which stores all temporary files.

You must have write access to all of these locations to successfully install the Queue Manager service.

Specifying Port Number of Polyspace Metrics Web Server in Queue Manager

If you change or specify a non-default value for the Web server port number of your Polyspace client (see [Configuring Access to Polyspace Metrics](#)), you must manually configure the same value for your Queue Manager.

In `<Polyspace_Common>/../Polyspace_RLDataS/tomcat/conf/server.xml`, edit the port attribute of the Connector element:

```
<?xml version="1.0" encoding="UTF-8"?>
<Server port="8005" shutdown="SHUTDOWN">
  <Service name="Catalina">
    <Connector port="8080"/>
    <Engine name="Catalina" defaultHost="localhost">
      <Host name="localhost"
appBase="C:\Polyspace\Polyspace_Common\RemoteLauncher\lib\
```

```
apache-tomcat-5.5.28\webapps" />  
    </Engine>  
  </Service>  
</Server>
```

Configuring Polyspace Metrics Web Interface

Polyspace Metrics is a Web-based tool that allows you to evaluate and monitor software quality through the lifecycle of a project.

To configure access to Polyspace Metrics:


- 1** Specify the Queue Manager server on which Polyspace carries out the verification and creates the results repository. See “Configuring Polyspace Client Software” on page 2-28 and “Configuring Polyspace Server Software” on page 2-29.
- 2** Select **Options > Preferences** to open the Polyspace Preferences dialog box.
- 3** Select the **Server configuration** tab.

Metrics configuration

Polyspace Metrics allows you, through a web browser, to drill down to specific coding rule violations and run-time checks. If you want to view or classify these items as defects within Polyspace, you click the item. Polyspace opens with the specific item displayed. However, this requires the downloading of result files from the Polyspace Metrics web interface to a locally accessible folder. On this tab, you specify how result files are downloaded from the Polyspace Metrics web interface and when justifications are saved in the Polyspace Metrics database.

If you select this check box, results are downloaded to the folder where the verification was launched. If this launch folder does not exist, results are downloaded to the location specified in the Folder field. Otherwise, a file browser allows you to select the download location.

Download results automatically

Folder: 

If you select this check box, the save action (Ctrl+S) will save your justifications in the local results folder and the Polyspace Metrics database. If you do not select this check box, the save action will save justifications in the local results folder only. If you want to save justifications in the Polyspace Metrics database, click the 'Save in database' button.

Save justifications in the Polyspace Metrics database

Port used to communicate with the Polyspace Metrics web interface.

Port number:

The Polyspace Metrics web interface URL is defined as follow: `http://<remoteServer>:<portNumber>`.
The remote server can be configured above.

Web server port number:

- 4 In the **Metrics configuration** section, specify a locally accessible folder for downloading result files from the Polyspace Metrics Web interface.
- 5 Select the **Download results automatically** check box. When you click on an item in Polyspace Metrics to view the item in the Polyspace verification environment, the software downloads results to the verification launch folder. However, if this folder does not exist, the software downloads results to the folder that you specify in the **Folder** field, which by default, is `C:\Temp`.
- 6 If you do not select this check box, then when you click on an item in Polyspace Metrics, a dialog box opens. Using this dialog box, you can specify your locally accessible folder.

- 7 The folder and its contents are not deleted when you exit the Polyspace verification environment.
- 8 In the **Port number** field, specify the number of the port for communication between the Polyspace verification environment and the Polyspace Metrics Web interface. The default is 12428.
- 9 In the **Web server port number** field, specify the number of the web server port. The default is 8080. You must configure the same number for the Queue Manager server. See Specifying Port Number of Web Server in Queue Manager “Specifying Port Number of Polyspace Metrics Web Server in Queue Manager” on page 2-37.

Note The Polyspace Metrics Web interface URL is:

`http://ServerName:WSPN`

where *ServerName* is the name or IP address of the Queue Manager server and *WSPN* is the Web server port number.

Troubleshooting Common Errors

This section contains information on troubleshooting the following common errors:

- “Errors Concerning the `polyspace.conf` File” on page 2-40
- “Errors Concerning Problems with Write Access” on page 2-42
- “Java Not Found Errors” on page 2-42
- “Other Errors” on page 2-42

Errors Concerning the `polyspace.conf` File

If you receive any of the following errors:

- 1 Stop the `polyspacedservice` (daemon).
- 2 Update the `polyspace.conf` file.

3 Restart the service (daemon).

The following errors concern the polyspace.conf file.

- "Error: The data folder path should not contain white space.";
- "Error: At least one language should be supported by the CPU.";
- "<polyspace.conf>:<line_number>: Duplicate entry for product <version value>.";
- "<polyspace.conf>:<line_number>: Unknown language : <value>.";
- "<polyspace.conf>:<line_number>: Duplicate entry for language <value>.";
- "<polyspace.conf>:<line_number>: Duplicate entry for <queuemanager name>.";
- "<polyspace.conf>:<line_number>: Duplicate entry for <value>.";
- "<polyspace.conf>:<line_number>: Duplicate entry for username'.";
- "<polyspace.conf>:<line_number>: Duplicate entry for 'port'.";
- "<polyspace.conf>:<line_number>: Invalid port number : <value>";
- "<polyspace.conf>:<line_number>: Invalid CPU name.";
- "<polyspace.conf>:<line_number>: Duplicate entry for CPU <hostname> ";
- "<polyspace.conf>:<line_number>: Unknown key : <value> ";
- "<polyspace.conf>:<line_number>: Parse error.";
- "No Polyspace product found for language <value>.";
- "Warning: Invalid <lang> license for product <version> on host <hostname> ";
- "The Polyspace product <version> was not found.";

Errors Concerning Problems with Write Access

If you receive any of the following errors, check right accesses with username declared in the `polyspace.conf` file in the folder `<dir>`, `<file name>` or `<path>` (given in the error message).

Check also that you have not changed anything linked to “polyspaced” service (daemon) without stopping it.

- "Fatal error: Directory `<dir>` is not accessible.";
- "Fatal error: Could not change the owner of `<path>` to `<username>` ";
- "Fatal error: Could not open file `<file name>` for reading.";
- "Fatal error: Could not set `<permission>` permissions on `<path>` ";
- "Fatal error: Could not open file `<file name>`

Java Not Found Errors

When installing a Polyspace_Common product on a 64 bit Linux machine, the installation program may end with the following error message:

```
exec: 2433: /tmp/install.dir.880/Linux/resource/jre/bin/java: not found
```

This error occurs because the Polyspace installer is itself a 32-bit binary using 32-bit binaries, which may cause problems on a 64-bit machine. It needs 32-bit libraries installed.

To solve this problem, install the 32-bit libraries. For example, on an Ubuntu 64-bit Linux machine, install the package "ia32-libs" from your Linux distribution.

Refer to the documentation for your Linux distribution for more information on installing these libraries.

Other Errors

Other errors may concern OS system, network and standard command available (for example “tar”, “gzip”, etc.).

Double check that these standard commands exist in your system. Error messages are detailed enough to know which command has failed.

Configuring Polyspace Server to Support Multiple Versions of Client Software

You can upgrade your Polyspace Server, and configure it to process jobs from clients running previous versions of the software. This allows you to avoid updating the server and all client machines at the same time.

Note To configure your server to support two releases, you must install the older release first, and then install the newer release on top of it. If you install the newer release first, you must uninstall it before proceeding.

Windows Server Configuration

To configure a Windows server to support two software versions:

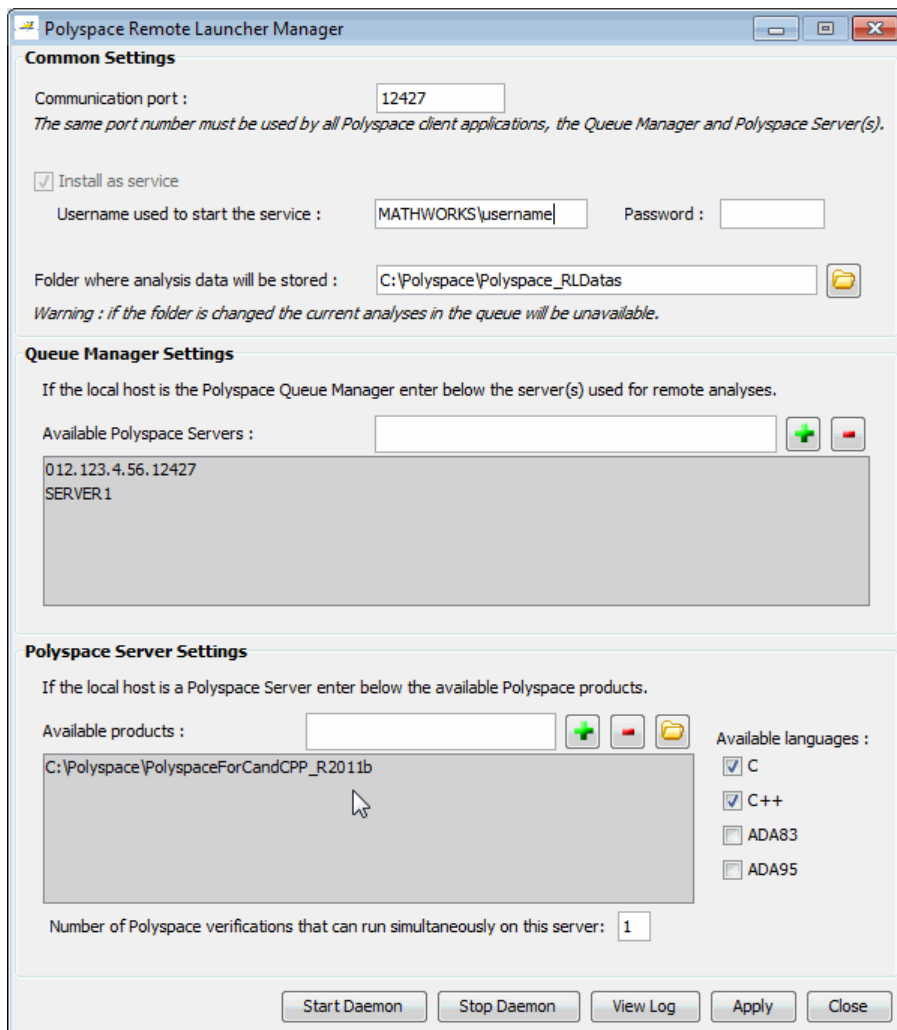
- 1 Install the older version of the Polyspace Server software.
- 2 Install the newer version of the Polyspace Server software, ensuring that you select the same Polyspace root folder.

When installation completes, you have two `PolyspaceForProduct` folders in the Polyspace root folder, one for each release. For example:


```
C:\Polyspace
  \PolyspaceForCandCPP_R2011b
  \PolyspaceForCandCPP_R2011a
```

- 3 Select **Start > All Programs > Polyspace > Remote Launcher Manager**.

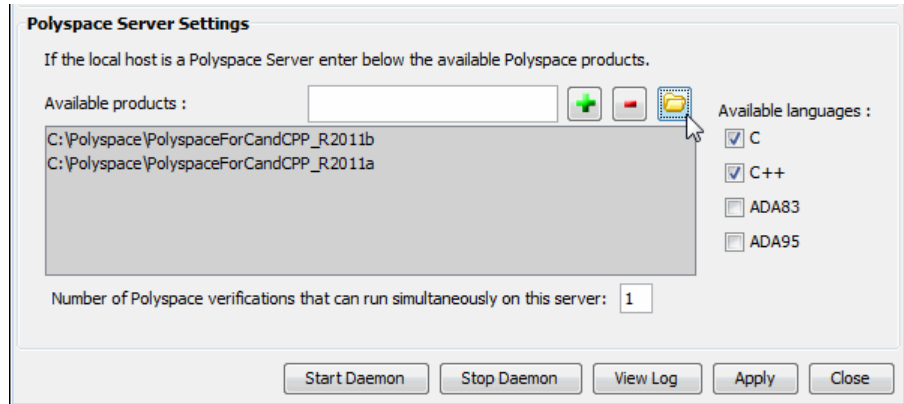
The Remote Launcher Manager opens.



The list of products currently supported by the server appears in the **Polyspace Server Settings** section. In the previous figure, PolyspaceForCandCPP_R2011b is the only product currently supported by the server.

- 4 In the **Polyspace Server Settings** section, click the folder button , then select the folder for the Polyspace software version you want to support.

For example, PolyspaceForCandCPP_R2011a.



- 5 Click **Apply** to save your changes.
- 6 Click **Start Daemon** to restart the service with the changes.

The Polyspace server automatically chooses the appropriate product version, based on the software version of the client that submitted the job.

Linux/Solaris Server Configuration

To configure a Linux/Solaris server to support two software versions:

- 1 Install the older version of the Polyspace Server software.
- 2 Install the newer version of the Polyspace Server software, ensuring that you select the same PolySpace root folder.

When installation completes, you have two **PolyspaceForProduct** folders in the Polyspace root folder, one for each release. For example:

```
C:\Polyspace
```

```
\PolyspaceForCandCPP_R2011b  
\PolyspaceForCandCPP_R2011a
```

3 Open the file `/etc/polyspace/polyspace.conf`.

4 Find the "product=" line for the current software version.

For example: `product=C:\Polyspace\PolyspaceForCandCPP_R2011b`

5 Add a new product= line for the previous software version.

For example: `product=C:\Polyspace\PolyspaceForCandCPP_R2011a`

6 Restart the daemon by running the following command as root:

```
/etc/init.d/polyspaced restart
```

The Polyspace server automatically chooses the appropriate product version, based on the software version of the client that submitted the job.

Installing Polyspace Model Link Products

- “Installing Polyspace Model Link Products” on page 3-2
- “Upgrading MATLAB Software” on page 3-4
- “Troubleshooting Polyspace® Model Link™ SL Installation” on page 3-5

Installing Polyspace Model Link Products

The Polyspace Model Link SL and Polyspace Model Link TL provide automatic error detection for code generated from MathWorks Simulink models.

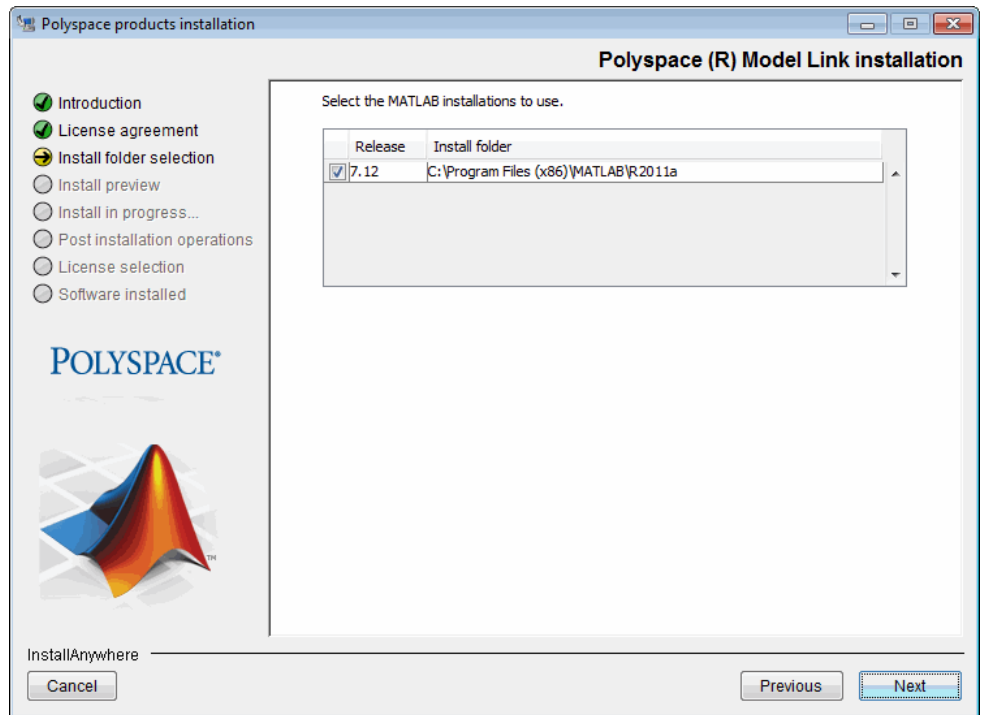
Polyspace Model Link SL installation consists of two components:

- Simulink Polyspace library with associated blocks
- “Back to model” (HTML links in the code source) extension in the Polyspace Run-Time Checks perspective that allows direct navigation from a run-time error in the auto-generated code to the corresponding block in the Simulink model.

To install Polyspace Model Link SL:

- 1 Install the Polyspace software as described earlier in this guide.

The Polyspace Installer automatically detects that MATLAB and Simulink components are installed and displays the following window:



2 Select the MATLAB releases to link with Polyspace.

Upgrading MATLAB Software

If you upgrade your MATLAB release, you must re-install Polyspace Model Link SL or Polyspace Model Link TL for that release.

You can re-install Polyspace Model Link SL without using the installation DVD:

- 1 Copy the file

Polyspace_Common\PolyspaceModelLink\startup\polyspacerc.m to the folder *matlabroot(new)*\toolbox\local.

matlabroot(new) is your new MATLAB installation folder, for example C:\Program Files\MATLAB\R2011b.

- 2 In the MATLAB Command Window, enter `edit matlabrc`. The MATLAB Editor opens, displaying the file `matlabrc.m`.

- 3 Go to the end of the file, and add the following lines:

```
%% POLYSPACE CONFIGURATION
polyspacerc;
%% END OF POLYSPACE CONFIGURATION
```

- 4 Save the file. Then exit MATLAB.

- 5 Register your new MATLAB release. From a DOS command window, run the following command:

```
matlabroot(new)\bin\matlab.exe /regserver /r quit
```


Troubleshooting Polyspace Model Link SL Installation

In this section...

“MATLAB Software Is Not Installed Locally” on page 3-5

“No Write Access to MATLAB Product Root” on page 3-6

MATLAB Software Is Not Installed Locally

If MATLAB is not installed locally, the registry entries do not contain reference to MATLAB, which Polyspace uses to detect installation folders. In this case, the Polyspace installer will not detect MATLAB, and will skip installation of the Polyspace Model Link tools. Therefore, you must perform a manual installation.

To perform a manual installation:

- 1 Insert the Polyspace DVD into your DVD drive.
- 2 Locate the corresponding windows drive (for example D:\), and copy the entire folder `D:\Data\Windows\Addin\Mathworks\pslink` into `Polyspace_Common\PolyspaceModelLink`.
- 3 Copy the file `D:\Data\Windows\Addin\Mathworks\pslink\startup\polyspacerc` into `matlabroot\toolbox\local`.
- 4 Edit `matlabroot\toolbox\local\matlabrc`, and add the following lines at the end of the file:

```
%% POLYSPACE CONFIGURATION
polyspacerc;
%% END OF POLYSPACE CONFIGURATION
```

- 5 Run MATLAB in “regserver” mode, to post-install your MATLAB release on the local machine. To do this, enter the following command:

```
matlabroot(new)\bin\matlab.exe /regserver /r quit
```

Where *matlabroot(new)* is the MATLAB installation folder, for example C:\MATLAB\R2009a.

No Write Access to MATLAB Product Root

If the installer detects that there is no write access to *matlabroot*, it asks you if you want to add a desktop shortcut to start MATLAB and configure the Polyspace Model Link software.

- If you select **Yes**, a shortcut is added to your desktop. Double-click the shortcut to execute `matlabroot\bin\win32\matlab.exe /r polyspacerc`. This command starts MATLAB and automatically configures the Polyspace Model Link software.
- If you select **No**, the installer will describe how to manually configure Polyspace Model Link software

Installing Polyspace UML Link RH

Installing Polyspace UML Link RH Product

The Polyspace UML Link RH product provides an add-in inside the Rhapsody Model-Driven development tool. It concerns the installation of two components:

- Polyspace library
- “Back to model” extension (HTML link inside the code) in the Polyspace Run-Time Checks perspective that allows direct navigation from a run-time error in the auto-generated code to the corresponding block in the UML model.

The Polyspace Installer automatically detects that Rhapsody components are installed and installs Polyspace UML Link RH during the “Shared components” installation.

By default, a folder *Polyspace_Common/PolyspaceUMLLink* is created where we can find all the components of Polyspace UML Link RH.

If you install the Rhapsody software after installing Polyspace software, you can either re-install the Polyspace software or manually copy the add-in files from the DVD to *Polyspace_Common/PolyspaceUMLLink*.

Installing Polyspace C++ Add-In for Visual Studio

Installing the Polyspace C++ Add-In for Visual Studio

The Polyspace installer automatically detects that Visual Studio is installed and installs the add-in during the “Shared Components” installation.

If you install Visual Studio after installing Polyspace software, you can either re-install the Polyspace software, or manually copy the plug-in files from the Polyspace installation to the Visual Studio Addins folder.

To manually copy the plug-in files:

- 1 In a command window, enter the following command:

```
%windir%\System32\Regsvr32.exe /s  
"%POLYSPACE_COMMON%\VisualInterfaceXXXX\VSUserControlHost.dll"
```

Where *XXXX* can be 2005, 2008 or 2010, depending on the Visual Studio version.

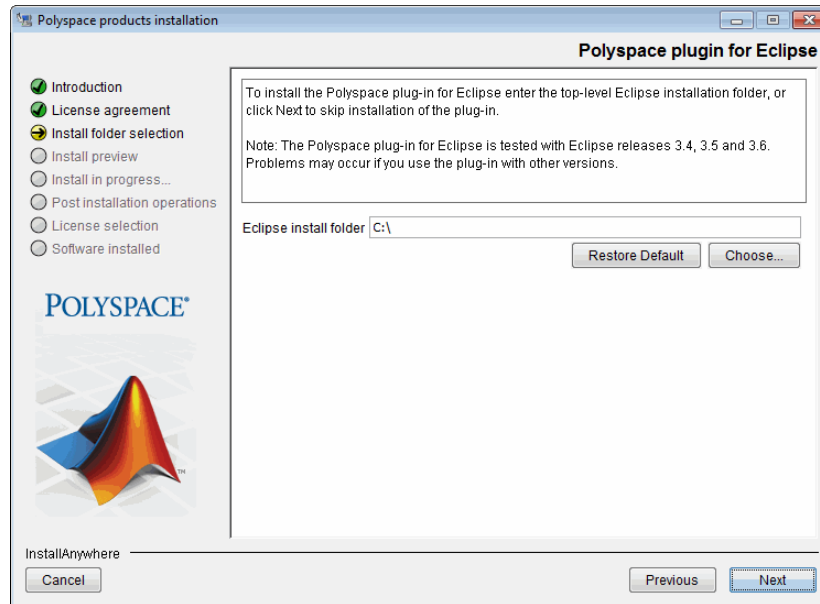
- 2 Copy all files and folders from:
%POLYSPACE_COMMON%\VisualInterfaceXXXX

to:
%ALLUSERSPROFILE%\Application
Data\Microsoft\MSEnvShared\Addins

Installing Polyspace Plug-In for Eclipse IDE

Installing the Polyspace Plug-In for Eclipse IDE

During the installation process, you will see the following screen:

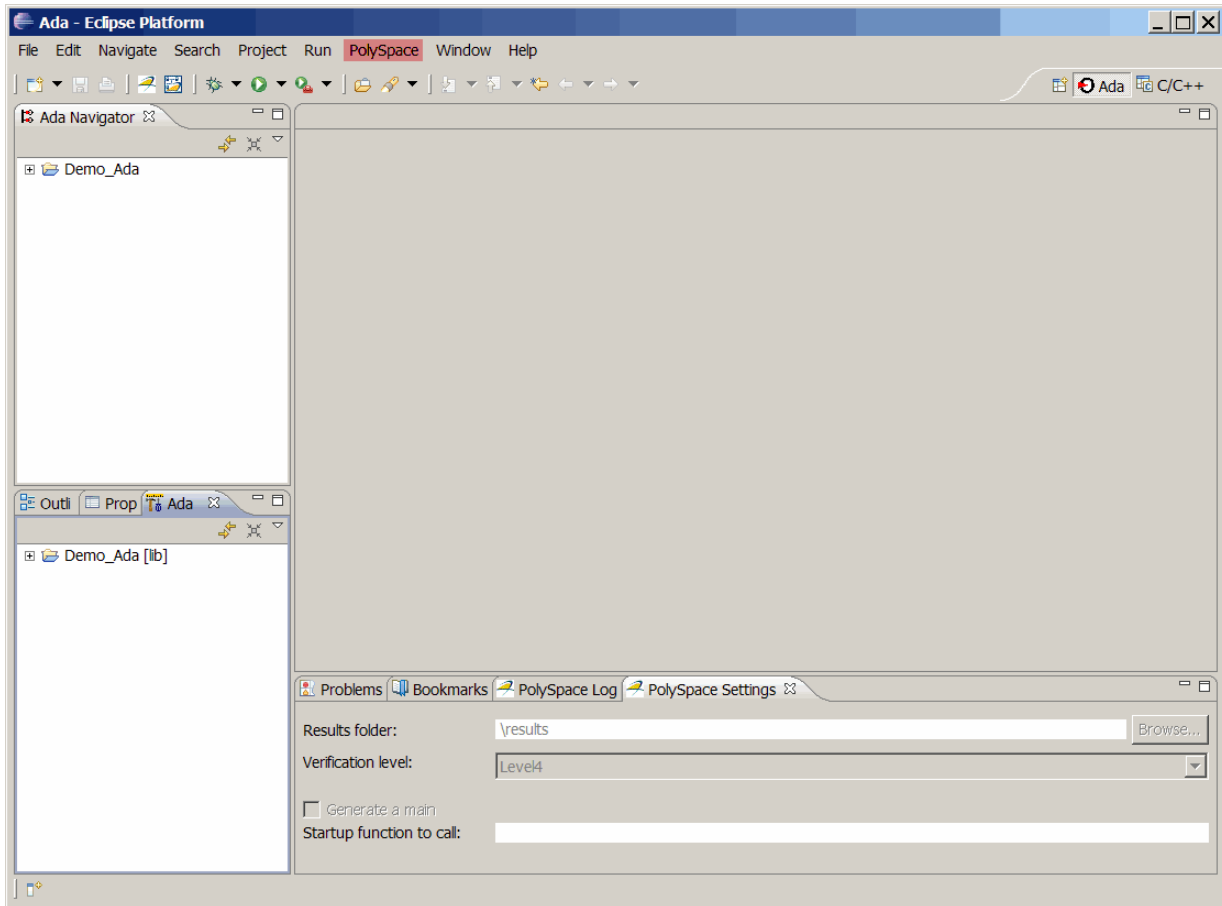


To install the Polyspace Plug-In for Eclipse™ IDE:

- 1 Select **Choose**, then specify the location of your Eclipse folder, for example, `C:\eclipse`.
- 2 Click **Next** to proceed with the installation process.

The Polyspace plug-in is installed only if you have already set up the Eclipse Integrated Development Environment (IDE). For information on installing this IDE, see the Eclipse documentation at www.eclipse.org.

When the installation process is complete, the menu bar of the Eclipse editor has the Polyspace menu:



If you install the Eclipse IDE after installing Polyspace software, you can either re-install the Polyspace software, or manually copy the plug-in files from the Polyspace installation to the Eclipse installation folder.

To manually install the plug-in, copy the following files into the `<Eclipse_install_folder>\plugins` folder:

- `%POLYSPACE_COMMON%\PolySpaceForEclipse\plugins*.jar`
- `%POLYSPACE_COMMON%\PolySpaceForEclipse\resources*.jar`

Uninstalling Polyspace Products

- “Uninstalling on Windows Platforms” on page 7-2
- “Uninstalling on Linux or UNIX Platforms” on page 7-4

Uninstalling on Windows Platforms

| In this section... |
|---|
| “Should I Uninstall Previous Releases Before Installing?” on page 7-2 |
| “Uninstalling the Polyspace Software” on page 7-2 |
| “Uninstalling Shared Components” on page 7-3 |

Should I Uninstall Previous Releases Before Installing?

If you are upgrading your existing Polyspace software to the latest release, you may need to uninstall the existing software before installing the new release.

- If you are currently running release R2008a or later, **do not** uninstall the previous release before installing the current release. The new server software can run verifications launched from both releases. Before installing the new release, however, you need to stop the Polyspace service. You can run the command: `%POLYSPACE_COMMON%\RemoteLauncher\PSTRManager.exe` to check if the service is running and stop it if necessary. After installing, you can restart the service using the same command.
- If you are currently running release R2007a+ or earlier, **you must uninstall** the previous release before installing the current release. R2007a+ and earlier releases used the Cygwin API, which is incompatible with the current release.

Uninstalling the Polyspace Software

You can uninstall the Polyspace software through the standard interface available on a Windows PC.

To uninstall the Polyspace software:

- 1 From the Windows desktop, select *Start > Settings > Control Panel > Add or Remove Programs*.
- 2 Select the Polyspace product you want to uninstall.

3 Select **Change/Remove**.

The uninstallation procedure goes through steps. Please follow the instructions and refer to paragraphs below for specifics components, if necessary.

Note Some files and folders added after installation can remain after the uninstall process is complete. After reboot, check the *Polyspace_Install* and *Polyspace_Common* folders for remaining files and subfolders. You can remove these files by hand.

Uninstalling Shared Components

You can also uninstall specific shared components.

To uninstall Polyspace shared components:

- 1** From the Windows desktop, select *Start > Settings > Control Panel > Add or Remove Programs*.
- 2** Select **Polyspace Shared Components**.
- 3** Select **Change/Remove**.

The shared components are removed.

Uninstalling on Linux or UNIX Platforms

| In this section... |
|---|
| “Should I Uninstall Previous Releases Before Installing?” on page 7-4 |
| “Uninstalling the Polyspace Software” on page 7-4 |
| “Uninstalling Shared Components” on page 7-4 |

Should I Uninstall Previous Releases Before Installing?

If you are upgrading your existing Polyspace software to the latest release, you **do not** need to uninstall the existing software before installing the new release. The new server software can run verifications launched from both releases.

Before installing the new release, you must stop the polyspaced daemon. Using an administrator login, you can run the command `/etc/init.d/polyspaced stop` to stop the daemon. After installing, you can restart the service using the command `/etc/init.d/polyspaced start`.

Uninstalling the Polyspace Software

To uninstall components under Linux or UNIX system:

- Enter `Polyspace_Install/Uninstall/Uninstall .`
This script launches the graphical uninstall wizard.

Uninstalling Shared Components

You can also uninstall specific shared components.

To uninstall Polyspace shared components:

- 1 Enter `Polyspace_Common/Uninstall/Uninstall`

The shared components are uninstalled.

Polyspace License Installation

- “Polyspace License Overview” on page 8-2
- “Common Licensing Questions” on page 8-8
- “Configuring Designated Computer Licenses” on page 8-10
- “Configuring Concurrent Licenses” on page 8-12
- “Checking Installed Licenses” on page 8-28
- “License Error Messages” on page 8-29

Polyspace License Overview

| In this section... |
|---|
| “Overview” on page 8-2 |
| “Polyspace Licensing Options” on page 8-2 |
| “Obtaining a License File” on page 8-5 |

Overview

This chapter describes Polyspace licensing for administrators and users of Polyspace products. It describes:

- Types of licensing available
- How to configure your license
- FLEXnet server installation
- How to use Polyspace products with FLEXnet licenses

Polyspace Licensing Options

There are two licensing options:

- “Designated Computer (Individual) Licenses” on page 8-2
- “Concurrent (Floating) Licenses” on page 8-4

Designated Computer (Individual) Licenses

Designated Computer (DC) licenses are used only for Polyspace client software. DC licenses are appropriate for end users who want to install, operate, and administer the client software themselves. A DC license authorizes you to use your Polyspace client software on any one computer system to which you have access. If you are running Polyspace software on your work computer, a DC license does not authorize you to run the software on your home system as well. The system you choose can be a Microsoft Windows or UNIX computer.

With a DC license, you are the system administrator. In this role, you are responsible for:

- Installing and activating the Polyspace client software on your computer.
- Ensuring that you are the only person who runs the software on your computer.

To generate a DC license, you need to activate your software using either the Polyspace Software Activation Client, or the License Center at the MathWorks Web site. To obtain a DC license, refer to “Checking Installed Licenses” on page 8-28.

Note DC licenses do not use the FLEXnet server. For DC licences, you need only to activate your software.

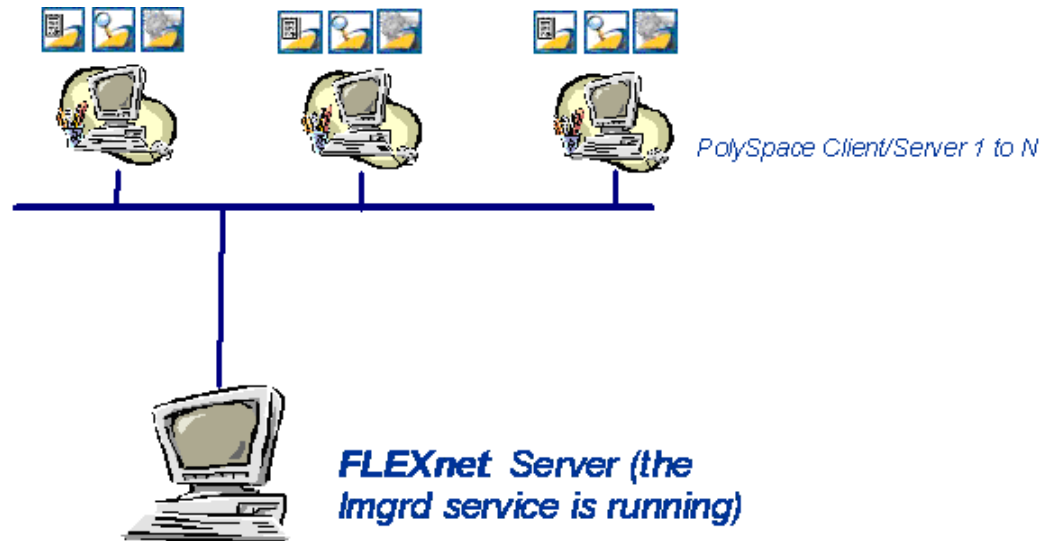
Concurrent (Floating) Licenses

Concurrent licenses are used for both Polyspace client and Polyspace server software. Concurrent licenses are appropriate for organizations that have standardized on the FLEXnet license manager, or who want to impose limits on software use for accounting or license management purposes.

Concurrent licenses use license keys to control access. Users check out a license key when they launch a Polyspace product. When all the keys for a particular product are checked out, the license manager denies further requests.

A Network Named User (NNU) configuration is an option for concurrent licensing that may be set up as a protective measure to restrict the usage of shared licenses.

The system administrator for Concurrent licenses must set up an installation that optimizes accessibility to the products. Concurrent licenses allow you to install the software only in a Network Concurrent User installation type.



Polyspace® FLEXnet® Server Architecture

The previous figure shows how to use Polyspace products with a FLEXnet license manager:

- Polyspace products are used by any number of users. The Polyspace products can include both Client and Server products.
- Each Polyspace product requests licenses from the FLEXnet server.
- The FLEXnet server can be installed on the same machine as a Polyspace product, as long as it is running a mutually supported operating system (see “Supported Machines and Versions” on page 8-16).

Note With concurrent licenses, you do not need to activate the software on each Polyspace system. You manually activate the concurrent license once (using the License Center at the MathWorks Web site), and then provide license files for each Polyspace system.

Obtaining a License File

When you activate your software through the MathWorks Activation Client, you automatically receive a license file. You do not need to take any additional steps.

If you are using a concurrent license, or do not have access to the Activation Client, you must obtain a license file from MathWorks. You can obtain license files from the License Center at the MathWorks Web site:

<http://www.mathworks.com/licensecenter>

To obtain a concurrent license file, you need either the MAC address or Serial disk number of your computer. You will provide this number to MathWorks to obtain the license file.

Getting the License hostid on UNIX Platforms

On a UNIX machine, the hostid corresponds to the MAC address of the machine where the FLEXnet server is running (using a concurrent license) or where the DC license is used.

You can display the `hostid` of a UNIX machine using the `lmutil FLEXnet` utility available on the Polyspace DVD at `DVD/Data/Unix/FLEXLM/x86-linux` for a Linux system.

Use the following command:

```
./lmutil lmhostid
```

The result on a shell window looks like the following:

```
lmutil - Copyright (c) 1989-2007 by Macrovision Corporation.  
All rights reserved.
```

```
The FLEXlm host ID of this machine is "831da5d6"
```

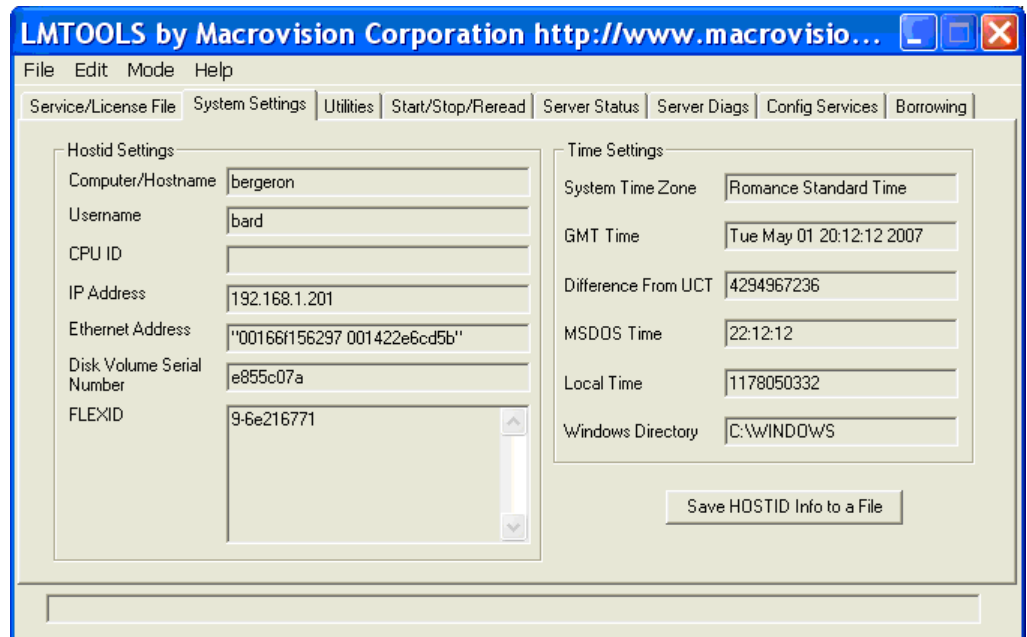
Transmit the number between double quotes to MathWorks in order to obtain the license file.

Getting the License `hostid` on Windows Platforms

On a Windows machine, `hostid` or `machine_hostid` corresponds to the Serial disk number of the machine where the FLEXnet server is running (using a concurrent license) or where the DC license is used.

You can display the `hostid` of a Windows machine using the `lmtools.exe FLEXnet` utility available on the Polyspace DVD at `DVD\Data\Windows\FLEXLM\x86-win32`.

The **Disk volume serial number** needs to be checked in the System Settings tab of `lmtools.exe` on Windows.



Disk Volume Serial Number Accessible from LMTOOLS

It can also be obtained using the following command prompt:

```
lmutil.exe lmhostid -vsn
```

The result on a Command Prompt window looks like the following:

```
lmutil - Copyright (c) 1989-2007 by Macrovision Corporation.  
All rights reserved
```

The FLEXlm host ID of this machine is "DISK_SERIAL_NUM=e855c07a"

Transmit the number between double quotes to MathWorks in order to obtain the license file.

Common Licensing Questions

In this section...

“Do I need a FLEXnet Server to Use an Individual License?” on page 8-8

“How Do I Identify Designated Computer and Concurrent Licenses?” on page 8-8

“What If I Have Other MathWorks Products Installed?” on page 8-8

“What If I Have an Old Polyspace FLEXnet License Server?” on page 8-9

Do I need a FLEXnet Server to Use an Individual License?

Designated Computer (individual) licenses **do not** use the FLEXnet server. For DC licences, you need only activate your software license.

For more information, see “Configuring Designated Computer Licenses” on page 8-10.

How Do I Identify Designated Computer and Concurrent Licenses?

DC license files have the word *uncounted* in the license line. This line is used directly in the license file. See the example in “DC License File Format” on page 8-11.

What If I Have Other MathWorks Products Installed?

Polyspace products use the same license mechanism as other MathWorks products.

If you receive a Designated Computer license for Polyspace products, refer to “Configuring Designated Computer Licenses” on page 8-10.

If you receive a Concurrent License and you already use a FLEXnet Server for other MathWorks products, you must add all concurrent INCREMENT lines in the Polyspace license to the FLEXnet Server, and reread it.

Then, refer to “Configuring Licenses on a Polyspace Client or Polyspace Server System” on page 8-24.

What If I Have an Old Polyspace FLEXnet License Server?

To use Polyspace products release R2007a+ or later, you must upgrade the FLEXnet Server to the version available on the Polyspace product DVD. The upgrade process involves uninstalling your old FLEXnet server and installing the new one.

For installation information, see “Installing FLEXnet Manager” on page 8-17.

Then, refer to “Configuring Concurrent Licenses” on page 8-12 for licensing information.

Configuring Designated Computer Licenses

In this section...

“Overview” on page 8-10

“Installing License Files” on page 8-10

“DC License File Format” on page 8-11

Overview

This section describes how to install a Designated Computer (individual) license for Polyspace products, using a `license.dat` file. It also describes how to check license usage.

Designated Computer licenses are available only for Polyspace client software

Note When you activate your software through the MathWorks Activation Client, your license is configured automatically. You do not need to take any additional steps.

Installing License Files

To install a DC licence, you copy the `license.dat` file to the appropriate path. The same `license.dat` file must be used for all Polyspace products and must be set up with the standard Polyspace subfolder localization (see format in “DC License File Format” on page 8-11).

Place the license file in the `Polyspace_Common/licenses` folder. If you installed the Polyspace software in the default folder, place the file in the following location:

- `/Polyspace/Polyspace_Common/licenses/license.dat` on a UNIX platform.
- `\Polyspace\Polyspace_Common\licenses\license.dat` on a Windows platform.

Caution Remove any previous `license.dat` file from the `/licenses` folder.

DC License File Format

This kind of license is used for an individual user and computer. It *does not* require a FLEXnet license manager to be running. It has the following format:

```
INCREMENT Polyspace_Feature MLM passcode_version_number  
date_of_license_end uncounted key HOSTID=machine_hostid  
SN=serial_number
```

machine_hostid – This is the hostid of the machine, usually the Mac address on UNIX system and the disk serial number on Windows (see Getting the License hostid). The *machine_hostid* must be given to obtain a license file.

Example

```
# MATLAB license passcode file.  
# License No: 517786  
INCREMENT Polyspace_Client_C_CPP MLM 19 3-jan-2008 uncounted \  
          ABCDEF12345678A HOSTID=DISK_SERIAL_NUM=388ab914 SN=517786 TS_OK
```

Configuring Concurrent Licenses

| In this section... |
|--|
| “Introduction to FLEXnet Licensing” on page 8-12 |
| “Installing FLEXnet Manager” on page 8-17 |
| “Configuring a Concurrent License” on page 8-23 |
| “Installing Licenses on an Existing FLEXnet Server” on page 8-27 |

Introduction to FLEXnet Licensing

- “What is FLEXnet Manager?” on page 8-12
- “FLEXnet Software Components” on page 8-13
- “Supported Machines and Versions” on page 8-16

What is FLEXnet Manager?

A Concurrent license requires FLEXnet Manager. Macrovision® FLEXnet Manager is a network license manager used to control the use of the Polyspace software products.

FLEXnet Manager is the most popular license manager in the software industry. FLEXnet Manager allows software licenses to be available anywhere on a network, instead of being tied to specific machines. Floating licensing benefits both users and license administrators. Users make more efficient use of fewer licenses by sharing them on the network. License managers control the users and machines that have access to the software managed by FLEXnet Manager.

Note FLEXnet Manager is not automatically installed as part of the Polyspace software installation. Refer to “Installing FLEXnet Manager” on page 8-17 for information about installing the FLEXnet software.

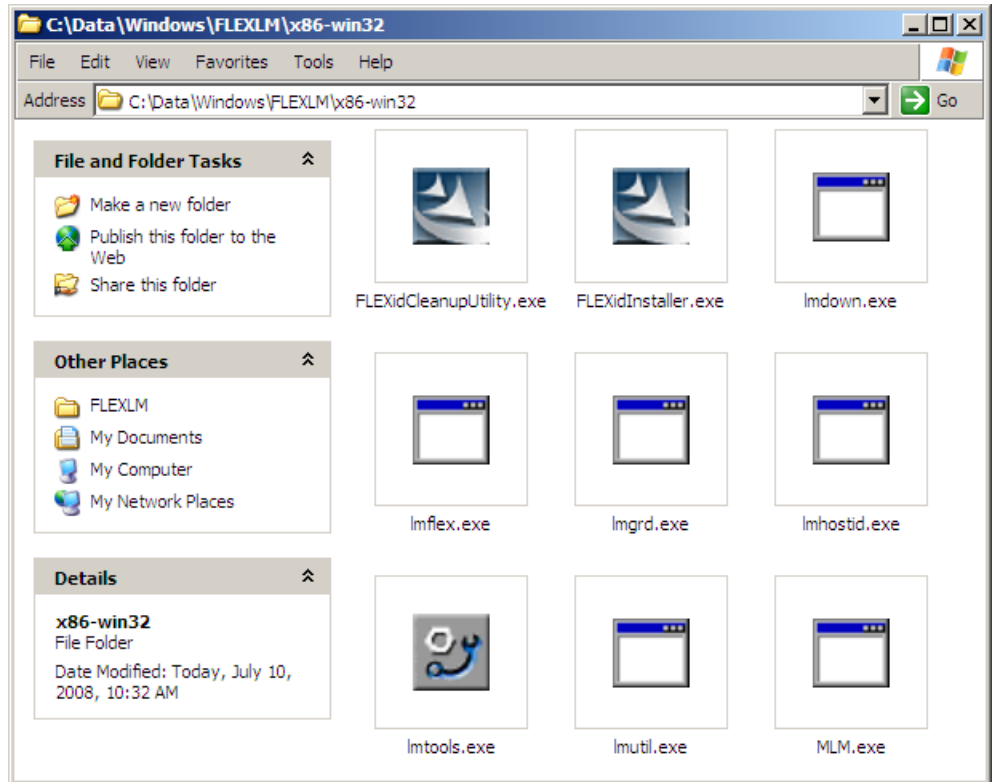
FLEXnet Software Components

- “Windows Platforms” on page 8-14
- “Linux Platforms” on page 8-16

Windows Platforms. On a Windows system, the following software components relate to the standard FLEXnet package (see FLEXnet® Components on page 8-15).

| FLEXnet Component | Description |
|--------------------------|--|
| license.dat | License file. If you do not have a license, contact MathWorks. |
| lmtools.exe | Allows you to manage the license. |
| MLM.exe | Vendor service that keeps track of the number of licenses checked out, and where they are. |
| lmgrd.exe | License service that handles the initial contact with Polyspace products, passing the connection on to MLM.exe. This service also starts and restarts MLM.exe. |
| lmutil.exe | Allows you to perform license server management and administration, for example, displaying the MAC address, IP address, disk serial number, and user name. Can be used from the command line. |

The following figure shows the FLEXnet components available on the DVD in `DVD\Data\Windows\FLEXLM\x86-win32`.



FLEXnet® Components

Linux Platforms. On a Linux system, the following software components relate to the standard FLEXnet package.

| FLEXnet Component | Description |
|-------------------|---|
| MLM | Vendor service that keeps track of the number of licenses checked out, and where they are. |
| lmgrd | License daemon that handles the initial contact with Polyspace products, passing the connection on to MLM.exe. This service also starts and restarts MLM.exe. |
| lmutil | Allows you to manage the license server, for example, displaying the MAC address, IP address, disk serial number, and user name. |

Note Installing these components consists of copying them from the DVD:

DVD/Data/Unix/FLEXLM/x86-linux.

Supported Machines and Versions

- “Supported FLEXnet Releases” on page 8-16
- “Supported Machines” on page 8-16
- “Network Recommendations for Concurrent Licensing” on page 8-17

Supported FLEXnet Releases. Polyspace products support FLEXnet release 11.9.

Supported Machines. You can install the FLEXnet server on all platforms supported by Polyspace products.

Network Recommendations for Concurrent Licensing. You must have a good network configuration for the FLEXnet client to obtain good performance for your Polyspace verifications.

If the client machine knows the FLEXnet server in its hosts file, Polyspace verifications run quickly. However, if the client machine does not know the FLEXnet server (ping *server_name* does not work), the Polyspace verification takes more than twice the time.

Installing FLEXnet Manager

- “Installing FLEXnet Manager on Windows Systems” on page 8-17
- “Installing FLEXnet Manager on UNIX Systems” on page 8-21

Installing FLEXnet Manager on Windows Systems

- “Software Location” on page 8-17
- “Installing the FLEXnet Server” on page 8-17
- “Configuring the License Manager” on page 8-18

Note FLEXnet Manager is not installed as part of the Polyspace software installation.

Software Location. The FLEXnet software components are located on the Polyspace Products DVD in:

DVD\Data\Windows\FLEXLM\x86-win32.

Note The current documentation is located in *DVD/Docs/Manuals*.

Installing the FLEXnet Server. Installation consists of a copy and paste:

- 1 Copy the `DVD\Data\Windows\FLEXLM\x86-win32` folder on the machine. A permanent folder must be chosen on this machine.
- 2 Copy the license file (`license.lic`) to the chosen folder.

The previous picture (see FLEXnet® Components on page 8-15) shows an example of a copy of the FLEXnet server in a chosen folder.

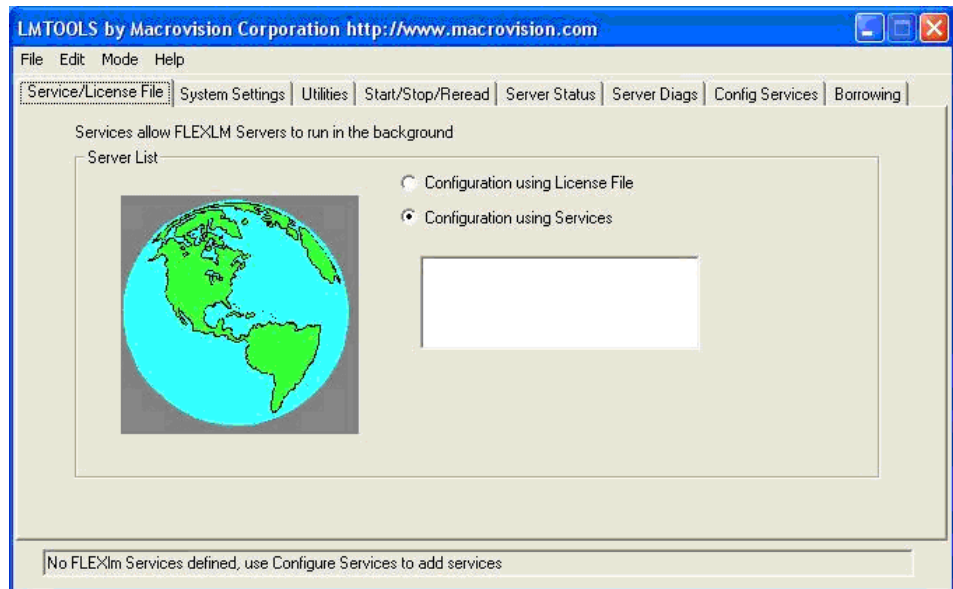
Configuring the License Manager. Before setting up the FLEXnet server, you must update the `license.dat` file with the name of the server, or its IP address. For more information, see “Configuring a Concurrent License” on page 8-23

You must have Administrator privileges to configure a license server as a service.

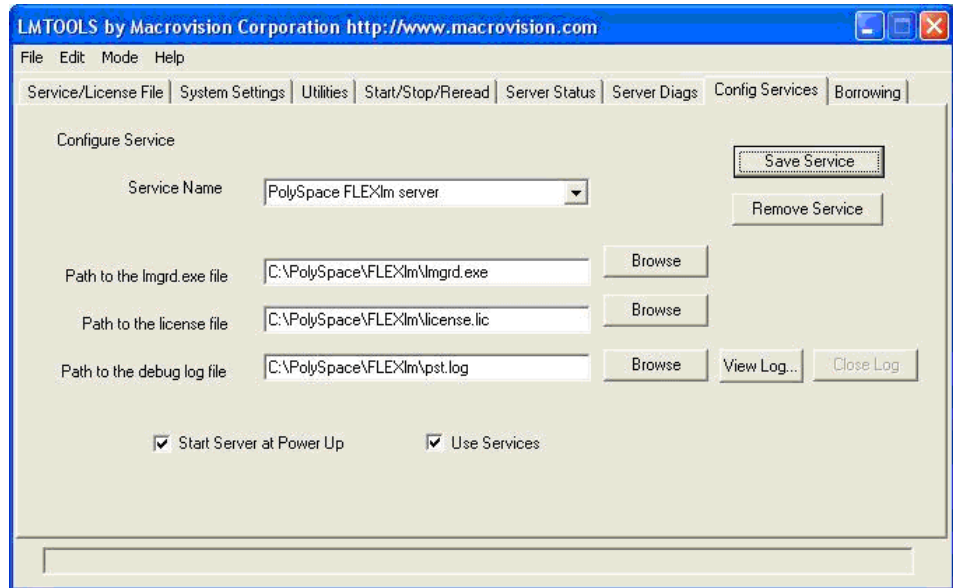
To configure the license server as a service:

- 1 Run `lmtools.exe`.

The LMTOOLS dialog box appears.



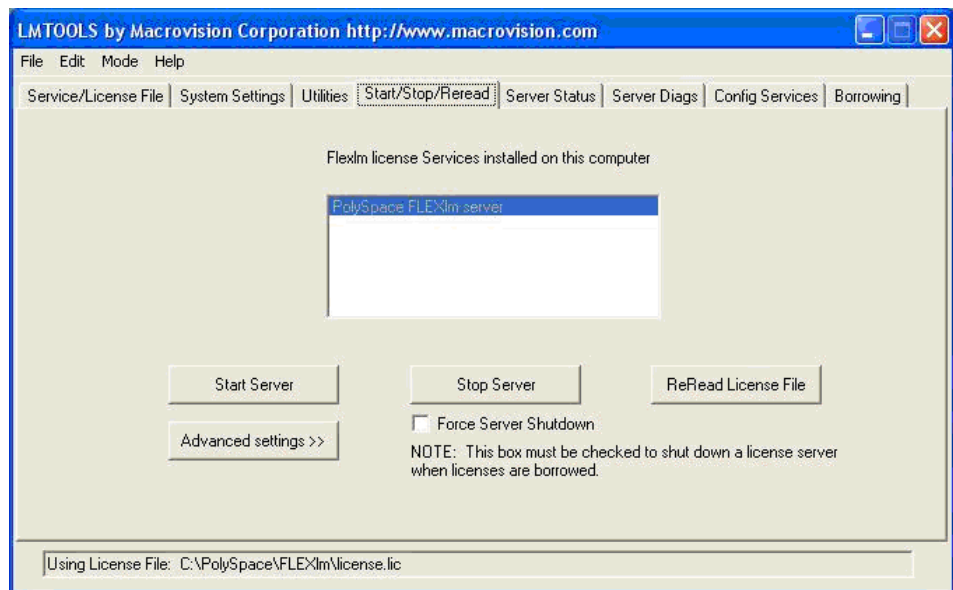
- 2 Select the **Configuration using Services** radio button.
- 3 Select the **Config Services** tab.



- 4 In the **Service Name** field, type the name of the service that you want to define, for example, Polyspace FLEXlm Server.
- 5 In the **Path to the lmgrd.exe file** field, enter or browse to `lmgrd.exe` for the license Server.
- 6 In the **Path to the license file** field, enter or browse to the license file for the license Server. It relates to the `license.lic` file. The license file is provided when you buy a Polyspace product.

Note The server name or IP address must be updated in the license file (see “Configuring a Concurrent License” on page 8-23).

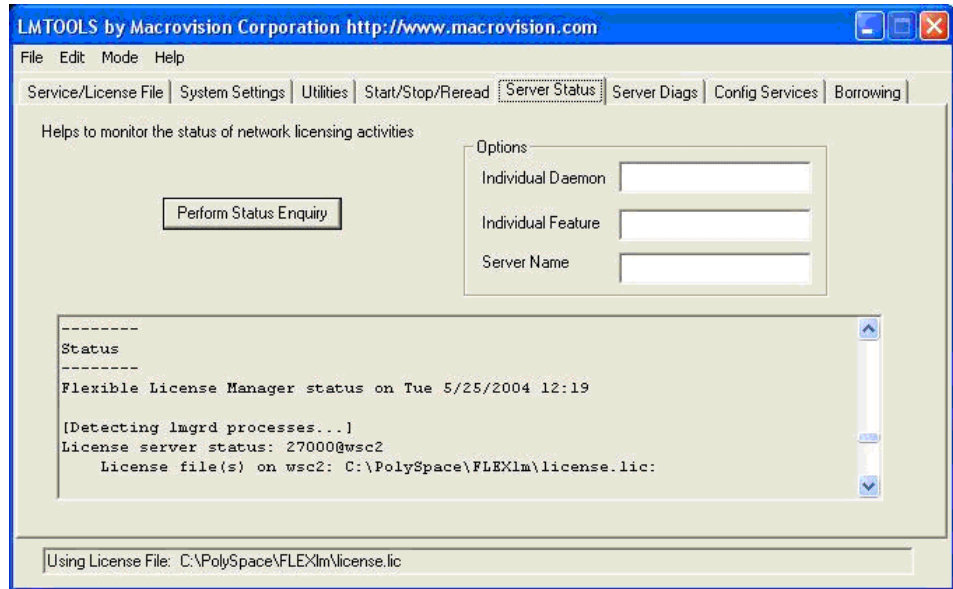
- 7 In the **Path to the debug log file** field, enter or browse to the debug log file that this license server writes. Before, you have created it in the permanent chosen folder.
- 8 Select the two radio button **Use Services** and **Start server at power up**.
- 9 Click **Save Service** to save the new “Polyspace_Common FLEXlm Server” service.
- 10 Select the Start/Stop/Reread tab.



- 11 Click **Start Server** to Start the FLEXlm Server .

Note Any modification to `license.lic` requires the server to reread the license file; this is accomplished by using the “ReRead license file” button.

- 12 Select the **Server Status** tab.



- 13** Click the **Perform Status Enquiry** button to verify the status of the server.

On the output window, a message gives the status of the Server and of the license file (see format in “Concurrent License File Format” on page 8-25).

Installing FLEXnet Manager on UNIX Systems

- “Software Location” on page 8-21
- “Installing the FLEXnet Server” on page 8-22
- “Configuring the FLEXnet Server” on page 8-22

Note FLEXnet Manager is not installed as part of the Polyspace software installation.

Software Location. The FLEXnet software components are located on the Polyspace Products DVD in:

DVD/Data/Unix/FLEXLM.

This folder contains a sub-folder, *x86-linux*, that concerns all Linux OS supported by Polyspace software.

Note The current documentation is located in *DVD/Docs/Manuals*.

Installing the FLEXnet Server. Installation consists of a copy and paste:

- 1 The first step: copy the *DVD/Data/Unix/FLEXLM/x86-linux* folder on the server. A permanent folder must be chosen on this machine.
- 2 Then copy the license file *license.dat* in the chosen folder.

Configuring the FLEXnet Server. Before setting up the FLEXnet server, you must update the *license.dat* file with the name of the server, or its IP address. For more information, see “Configuring a Concurrent License” on page 8-23.

To configure the license server on a UNIX system:

- Start the FLEXnet daemon server:

```
FLEXnetPath/lmgrd -c license_lic_path -l filename.log &
```

where *license_lic_path* is the absolute location of the file *license.dat* file. It is recommended that you launch the server with the option *l filename.log*. This permits you to have a log file where all accesses and exchanges are recorded to the a file named *filename.log*.

For example, with all commands and the *license.dat* file located in */usr/local/Polyspace/FLEXnet*:

```
/usr/local/Polyspace/FLEXnet/lmgrd -c  
/usr/local/Polyspace/FLEXnet/license.dat -l  
/usr/local/Polyspace/FLEXnet/FLEXnet.log &
```

Note `./lmgrd -h` gives more information about all available options of the program. Also, FLEXnet `.log` file gives a state of the FLEXnet server.

Note `./lmutil -h` gives more information about all available options of the `lmutil` program.

Configuring a Concurrent License

- “Overview” on page 8-23
- “Configuring Licenses on a Polyspace Client or Polyspace Server System” on page 8-24
- “Configuring Licenses on the FLEXnet Server System” on page 8-25
- “Concurrent License File Format” on page 8-25

Overview

A Concurrent license requires a FLEXnet server. Before configuring a concurrent license, you must install the FLEXnet Server from the Polyspace DVD. Refer to “Installing FLEXnet Manager” on page 8-17 for information about installing the FLEXnet Server.

To obtain a concurrent license, you must provide the MAC address of the machine where you will install the FLEXnet server manager. For more information, see “Obtaining a License File” on page 8-5.

For example, if you provide the following information:

- **MAC address** – 00123456abc1
- **Hostname** – MyFlexServer

You will receive a license file that looks like the following:

```
BEGIN-----cut here-----CUT HERE-----BEGIN
# MATLAB license passcode file.
```

```
# LicenseNo: 517786 HostID: 00123456abc1
INCREMENT Polyspace_Server_C_CPP MLM 19 01-jan-0000 2 \
    A1B2C3D4E891011AB HOSTID=ID=517786 SN=517786
INCREMENT Polyspace_Client_C_CPP MLM 19 01-jan-0000 1 \
    A1B2C3D4E891011AB HOSTID=ID=517786 SN=517786
# END-----cut here-----CUT HERE-----END
```

This license file contains a line for a concurrent Polyspace Server for C/C++ license, and a line for a Polyspace Client for C/C++ license.

Depending on whether you plan to use the license on the Polyspace client system, the Polyspace server system, or on the machine where you installed the FLEXnet manager, you must make some modifications to the file.

Configuring Licenses on a Polyspace Client or Polyspace Server System

Since the license mechanism is compatible with the environment variables `LM_LICENSE_FILE` and `MLM_LICENSE_FILE` on either a client or server system, you have two options:

- Set the environment variable `LM_LICENSE_FILE` using the command:

```
set LM_LICENSE_FILE=27000@MyFlexServer
```

where 27000 is the port on which to reach the FLEXnet server on the host MyFlexServer.

- Create a `license.dat` file containing the following two lines:

```
SERVER MyFlexServer 00123456abc1 27000
USE_SERVER
```

Then, place the `license.dat` file in
`C:\Polyspace\Polyspace_Common\licenses`

Note If you do not specify a port number, the default value is 27000.

Configuring Licenses on the FLEXnet Server System

After copying the FLEXnet tools to a folder on the dedicated MyFlexServer host, you must update the license file by adding the following lines at the top of the license.dat file:

```
SERVER MyFlexServer 00123456abc1
VENDOR MLM
INCREMENT Polyspace_Server_C_CPP MLM 19 01-jan-0000 2 \
    A1B2C3D4E891011AB HOSTID=ID=517786 SN=517786
INCREMENT Polyspace_Client_C_CPP MLM 19 01-jan-0000 1 \
    A1BCD3EF12311078A HOSTID=ID=517786 SN=517786
```

Note If you use an IP address as your hostid, insert the keyword “INTERNET=” before the hostid.

For example: `SERVER this_host INTERNET=10.94.78.128`

The license file is now fully compatible with a standard FLEXnet mechanism. For more information, refer to the *FLEXnet Licensing End User’s Guide*, available at: www.globes.com.

This procedure also applies if you want to add the features of the license file to an existing FLEXnet server.

Note FLEXnet server can be installed on a Polyspace Client machine, a Polyspace Server machine or any machine on the same network.

Concurrent License File Format

This license file requires a FLEXnet license manager running. It has the following format:

```
SERVER server_name server_hostid
VENDOR MLM
```

```
INCREMENT Polyspace_Feature MLM passcode_version_number
date_of_license_end number_of_licenses key
HOSTID=internal_number DUP_GROUP=UH SN=a_serial_number
```

- *server_name* — name of the FLEXnet server or IP address.

Note This is the only value that can be edited (with an ASCII editor) by the administrator when the location of the FLEXnet server changes. This file can be edited and *server_name* changed before setting up the FLEXnet server (see “Configuring the License Manager” on page 8-18 for Windows systems, or “Configuring the FLEXnet Server” on page 8-22 for UNIX systems).

- *server_hostid* — This is the *hostid* of the server, usually the Mac address on UNIX system and the disk serial number on Windows (see Getting the License *hostid*). The *server_hostid* must be given to obtain a license file.
- MLM: Vendor daemon for Polyspace products licensing.
- *Polyspace_Feature* — type of license.

| Polyspace Feature | License Type |
|------------------------|---|
| Polyspace_Client_C_CPP | Polyspace Client for C/C++ (including Polyspace Verification Environment, Coding Rules checker, DRS, Main generator and Report features). |
| Polyspace_Client_Ada | Polyspace Client for Ada (including Polyspace Verification Environment and Report features). |
| Polyspace_Server_C_CPP | Polyspace Server for C/C++ (including Remote Launcher, DRS and Report features). |
| Polyspace_Server_Ada | Polyspace Server for Ada (including Remote Launcher and Report features). |

| Polyspace Feature | License Type |
|-------------------------|---|
| Polyspace_Model_Link_SL | Polyspace Model Link SL (including Run-Time Checks, Coding rules, DRS and Report features). |
| Polyspace_Model_Link_TL | Polyspace Model Link TL (including Run-Time Checks, Coding Rules, DRS and Report features). |
| Polyspace_UML_Link_RH | Polyspace UML Link RH (including Run-Time Checks and Report features). |

- *passcode_version_number* and *date_of_license_end* — available maintenance (and end dates).
- *number_of_licenses* — number of available licenses for a given type.

Example:

```
# MATLAB license passcode file.
# LicenseNo: 517786 HostID: 00123456abc1
SERVER dev13 831da5d6
VENDOR MLM
INCREMENT Polyspace_Client_C_CPP MLM 17 3-jan-2008 20 DF1FB89EB243
HOSTID=ID=12345 DUP_GROUP=UH SN=12345
INCREMENT Polyspace_Server_C_CPP MLM 17 3-jan-2008 20 9BFB0453E70F
HOSTID=ID=1234E DUP_GROUP=UH SN=1234E
INCREMENT Polyspace_Model_Link_SL MLM 17 3-jan-2008 20 B639E1D6739A
HOSTID=ID=324AF DUP_GROUP=UH SN=324AF
```

Installing Licenses on an Existing FLEXnet Server

If you are already using a FLEXnet license manager, refer to the FLEXnet Manager user manual for information on how to add licenses for your Polyspace software. You can access the FLEXnet user manual directly from the Macrovision web site (<http://www.macrovision.com>).

Note The `lmgrd` or `lmgrd.exe` service, `lmutils` and `lmtools` must have the correct version number. Polyspace products support FLEXnet Version 10.8.

Checking Installed Licenses

You can check which Polyspace licenses are installed on your system using the `-check-license` command. Polyspace product usage is standard.

To check your licenses, enter the command:

```
polyspace[-desktop]-[c|ada|cpp|ada95]-check-license
```

The results appear in the Polyspace log file:

```
<polyspace-c-check-license 2008b PID460 PGID2616>  
<polyspace-viewer V4.2.2.12>
```

Options used with Verifier:

```
-prog=polyspace  
-polyspace-version=4_2_1_6  
  
-lang=C  
-no-exec=true
```

```
Verifying host configuration ...
```

```
*** Configuration of the host : OK  
Checking license ...  
license is OK
```

On a Windows machine, the same command is available:

```
Polyspace_Install\wbin\polyspace[-desktop]-[c|cpp|ada95]-check-license.exe
```

License Error Messages

In this section...

“Overview” on page 8-29

“Error -15, the FLEXnet server is unreachable” on page 8-29

“Error -5, the Polyspace feature is not available” on page 8-30

“Error -21, license file does not support this version” on page 8-30

“Error -10, the license date has expired” on page 8-30

Overview

Most of the error messages are displayed in the log file after a license check.

However, since licensing is checked during code verification, a message can also be displayed at any location in the associated Polyspace Log file. An error message will generally cause the verification to stop.

This section describes common licensing errors. For other errors, please refer to the *FLEXnet Licensing End User Guide* available at www.macrovision.com.

Error -15, the FLEXnet server is unreachable

```
Checking license ...
```

```
Unable to checkout feature Polyspace_Client_C_CPP for version 17:
Cannot connect to license server system.
```

```
The license server manager (lmgrd) has not been started yet,
the wrong port@host or license file is being used, or the
port or hostname in the license file has been changed.
```

```
Feature:      Polyspace_Client_C_CPP
```

```
Server name:  fitou
```

```
License path: /usr/local/attol/atu/v33a/sun4/sunOS5/bin/license.txt:
               /usr/local.rhone/pst/tmp/nnu.lic:/usr/local.rhone/pst/*.lic
```

```
FLEXnet Licensing error:-15,570. System Error: 115 "Operation
now in progress"
```

```
For further information, refer to the FLEXnet Licensing
End User Guide, available at "www.macrovision.com".
```

```
*** License error
```

*** Aborting.

Error -5, the Polyspace feature is not available

Checking license ...

Unable to checkout feature Polyspace_Client_C_CPP for version 17:

No such feature exists.

Feature: Polyspace_Client_C_CPP

License path: /usr/local/attol/atu/v33a/sun4/sunOS5/bin/license.txt:
/usr/local.rhone/pst/tmp/nnu.lic:/usr/local.rhone/pst/*.lic

FLEXnet Licensing error:-5,357

For further information, refer to the FLEXnet Licensing

End User Guide, available at "www.macrovision.com".

*** License error

*** Aborting.

Error -21, license file does not support this version

Checking license ...

Unable to checkout feature Polyspace_Client_C_CPP for version 17:

License file does not support this version.

Feature: Polyspace_Client_C_CPP

Application version > License version: 17 > 16

License path: /usr/local/attol/atu/v33a/sun4/sunOS5/bin/license.txt:
/usr/local.rhone/pst/tmp/nnu.lic:/usr/local.rhone/pst/*.lic

FLEXnet Licensing error:-21,126

For further information, refer to the FLEXnet Licensing

End User Guide, available at "www.macrovision.com".

*** License error

*** Aborting.

Error -10, the license date has expired

Checking license ...

Unable to checkout feature Polyspace_Client_C_CPP for version 17:

Feature has expired.

Feature: Polyspace_Client_C_CPP

Expire date: 31-jan-2007

License path: /usr/local/attol/atu/v33a/sun4/sunOS5/bin/license.txt:
/usr/local.rhone/pst/tmp/nnu.lic:/usr/local.rhone/pst/*.lic

FLEXnet Licensing error:-10,32

For further information, refer to the FLEXnet Licensing
End User Guide, available at "www.macrovision.com".
*** License error
*** Aborting.

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