

Forte[™] for Java[™], Community Edition Getting Started Guide

Forte for Java, Release 4.0



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Preface

This document provides installation instructions for the Forte[™] for Java[™], Community Edition integrated development environment (IDE). Topics covered include:

- Overview of the installation steps
- System requirements
- Supported platforms
- Setting up databases with the IDE
- Contents of top-level directories of the IDE
- Registering with Forte for Java Developer Resources
- Updating modules with the Update Center
- Uninstalling the IDE
- Using the startup command-line switches
- Other documentation resources

How This Book Is Organized

Chapter 1 gives an overview of the general installation process and information on system requirements for Forte for Java, release 4.0, Community Edition.

Chapter 2 provides instructions on installing and uninstalling the Java 2 Platform, Standard Edition, v. 1.4.0 on your system.

Chapter 3 describes the steps to install the Forte for Java IDE on the supported platforms. The subdirectories installed with the IDE are described and uninstallation instructions are also provided.

Chapter 4 gives instructions on how to start and set up the newly installed Forte for Java IDE. The command-line options are provided and information about product registration is also included.

Chapter 5 provides some information for customizing your IDE installation using a PointBase Restricted Edition 4.2 database.

Chapter 6 describes steps to update the IDE modules using the Forte for Java Update Center. Information about other documentation resources are also included in this chapter.

Chapter 7 provides some troubleshooting hints and Appendix A lists the Solaris patches that are included with the J2SE, v.1.4.0 installer for the Solaris operating environment.

Typographic Conventions

Typeface	Meaning	Examples
AaBbCc123	The names of commands, files, and directories; on-screen computer output	Edit your.login file. Use ls -a to list all files. % You have mail.
AaBbCc123	What you type, when contrasted with on-screen computer output	% su Password:
AaBbCc123	Book titles, new words or terms, words to be emphasized, command-line variables	Read Chapter 6 in the <i>User's Guide</i> . These are called <i>class</i> options. You <i>must</i> be superuser to do this. To delete a file, type rm <i>filename</i> .

Related Documentation

See http://forte.sun.com/ffj/documentation/index.html for more information on documentation related to the Forte for Java, release 4.0, Community Edition.

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Preparing for Installation

This chapter contains information needed to prepare for the installation of the Forte for Java, release 4.0, Community Edition IDE (hereinafter referred to as Forte for Java IDE).

Overview of the Installation

The following is the general process to follow to install the Forte for Java IDE on your system. The process includes the validation, customization, and registration of your Forte for Java IDE installation.

1. Verify that you have local or network access to either Java[™] 2 Platform, Standard Edition, v. 1.3.1 (hereinafter, referred to as J2SE[™], v. 1.3.1 platform) or Java[™] 2 Platform, Standard Edition, v.1.4.0 (hereinafter, referred to as J2SE[™], v. 1.4.0 platform) from the system in which you plan to install the Forte for Java IDE.

Note – The recommended option is for you to use the J2SE, v. 1.4.0 platform with the Forte for Java IDE. Read "Installing the J2SE, v. 1.4.0 Platform" on page 9 for detailed installation instructions.

- 2. Verify that the system you will use for installation meets the minimum system requirements. See "System Requirements" on page 7 for more information.
- 3. Determine which software you will want the Forte for Java IDE installer to install. The Forte for Java, release 4.0, Community Edition installer includes the following software:
 - Forte for Java, release 4.0, Community Edition Core Platform and Modules (required)
 - PointBase Server 4.2 Restricted Edition
- 4. Determine if you want to keep your previous version of the Forte for Java IDE.

- If you do, identify a different directory in which to install the Forte for Java, release 4.0, Community Edition.
- If you want to install over a previous version of the IDE, decide whether you want to backup the files from the previous IDE version.
- 5. Install Forte for Java, release 4.0, Community Edition. Read "Installing the Forte for Java IDE" on page 19 for detailed installation instructions on each of the supported platforms.
- 6. Set up your initial IDE environment and register the product. Read "Using Your Newly Installed Forte for Java IDE" on page 29 for instructions on setting up your user directory and registering the product
- 7. Register with Forte for Java Developer Resources. Read "Registering With Forte for Java Developer Resources" on page 31 for instructions on how to register your installation of the Forte for Java IDE.
- 8. Customize your Forte for Java IDE installation using the instructions in "Customizing Your Installation" on page 35.

Supported Platforms

This release of the Forte for Java, release 4.0, Community Edition has been tested with Solaris 8 operating environment (SPARC platform) and Microsoft Windows 2000 system. It is recommended that you use these platforms for your evaluation of this release.

This release has been tested on a limited basis on the Red Hat Linux 7.1 environment and Microsoft Windows NT4, SP6 system.

System Requirements

TABLE 1-1 lists the system requirements needed to install a minimum or recommended configuration on any of the supported platforms.

TABLE 1-1 Forte for Java, release 4.0, Community Edition System Requirements

Supported platform	Free hard disk space required for installation)	Minimum configuration	Recommended configuration
Solaris [™] 8 Operating Environments (SPARC Platform)	125MB	Ultra-10, 333Mhz, 256MB RAM	Ultra-60, 450MHz, 512 RAM
Windows 2000, Windows NT4, SP6 ¹	125 MB	Pentium III, 500Mhz, 256 MB RAM	Pentium III, 800Mhz, 512 MB RAM
Red Hat Linux 7.1 ¹	125 MB	Pentium III, 500Mhz, 256 MB RAM	Pentium III, 800Mhz, 512 MB RAM

^{1.} This release has been tested on a limited basis on the Red Hat Linux 7.1 environment and Microsoft Window NT4, SP6 system.

These are general guidelines. Your requirements might vary depending on what additional software you have installed for use with the Forte for Java IDE.

Installing the J2SE, v. 1.4.0 Platform

This chapter gives instructions for verifying what version of the J2SE platform to which you currently have access. If you need to install J2SE, v. 1.4.0 platform on your system, this chapter also gives step-by-step instructions for installing the J2SE, v. 1.4.0 platform on all the supported platforms. The J2SE, v. 1.4.0 platform is comprised of the Java 2 Software Development Kit, Standard Edition (Java 2 SDK) and the Java Software Runtime Environment, Standard Edition (JRE).

Verifying Your J2SE Platform Version

To use the Forte for Java IDE, you must have one of the following:

- J2SE, v. 1.3.1 or J2SE, v. 1.4.0 platform installed on your system
- Network access to the path in which the J2SE, v. 1.3.1 or J2SE, v. 1.4.0 platform is installed

The recommendation is for you to use the J2SE, v. 1.4.0 platform with the Forte for Java IDE. If you run the Forte for Java IDE without J2SE, v.1.3.1 or J2SE, v. 1.4.0 platform installed or available, you get error and warning messages.

Note – To maximize runtime performance, it is highly recommended that the J2SE be installed on and accessed from your local system.

Use the following steps to help you determine what you need to do next.

1. Identify which Java[™] version is available to your system, by typing the following:

```
% java -version
```

The output looks similar to the following:

```
% java -version
java version "1.4.0"
Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.0-b92)
Java HotSpot(TM) Client VM (build 1.4.0-b92, mixed mode)
```

If you *do not* have J2SE, v. 1.3.1 or J2SE, v. 1.4.0 platform available to your system, you must install the supported J2SE, v. 1.4.0 platform.

- 2. If you *do not* have J2SE, v. 1.3.1 or J2SE, v. 1.4.0 platforms available to your system do the following:
 - a. Obtain the J2SE, v.1.4.0 installer from http://forte.sun.com/eap or from the Forte for Java CD.
 - b. Install the J2SE, v. 1.4.0 platform on your system.
 Read the section following for additional instructions for your specific system.
- 3. (Solaris only) If you *do* have the supported J2SE, v. 1.4.0 platform on your system, you might require the Solaris patches that are applicable to your version of the Solaris operating environment.

If you do not have the required Solaris patches when you invoke the Forte for Java IDE, you will receive a message that includes the Solaris patches you need to install on your system. Install the patches on your system or contact your system administrator.

Note – The J2SE, v. 1.4.0 installer for the Solaris s operating environment also includes required Solaris software patches. For a complete list of the Solaris patches that are installed with the J2SE, v. 1.4.0 platform, see "Solaris Patch Identifications and Descriptions" on page 45.

Installation on Microsoft Windows Systems

To install the J2SE, v. 1.4.0 platform on your Microsoft Windows system, follow these steps:

- 1. If you have not already done so, download the j2sdk-1_4_0-rc-win.exe file from http://forte.sun.com/eap or access it from the Forte for Java CD.
- 2. Double-click the j2sdk-1_4_0-rc-win.exe file to invoke the installation wizard.
- 3. Follow the instructions on the installation wizard panes to complete the J2SE, v. 1.4.0 platform installation on your Microsoft Windows system.

Installation in the Red Hat Linux Environment

To install the J2SE, v. 1.4.0 platform in the supported Red Hat Linux environment, follow these steps:

- 1. If you have not already done so, download the j2sdk-1_4_0-rc-linux-i386-rpm.bin file from http://forte.sun.com/eap or access it from the Forte for Java CD
- 2. Double-click the j2sdk-1_4_0-rc-linux-i386-rpm.bin file to invoke the installation wizard.
- 3. Follow the instructions on the installation wizard panes to complete the J2SE, v. 1.4.0 platform installation in your Red Hat Linux environment.

Installation in the Solaris Operating Environments

There are two ways to install the J2SE, v. 1.4.0 platform and Solaris patches:

- Web Start graphical user interface (see "Using the Web Start Graphical User Interface" on page 12 for instructions)
- installer command-line installation executable if you do not have graphical user interface capabilities (see "Using the Web Start Command-Line Installation" on page 14 for instructions)

Using the Web Start Graphical User Interface

These instructions describe how to use the Web Start software to install the J2SE, v. 1.4.0 platform and Solaris patches.

- 1. If you have not already done so, download the j2sel.4_installer.tar.gz file from http://forte.sun.com/eap or access it from the Forte for Java CD
- 2. Determine the directory, into which you want to extract the downloaded J2SE installer file.
- 3. From the download directory, uncompress and extract the contents of the downloaded J2SE, v.1.4.0 installer file into the *extract-directory* by typing:

```
% cd download-directory
% gzcat j2se1.4_installer.tar.gz | (cd extract-directory; tar xvf - )
```

Note – The gzcat utility can be found in the /usr/bin directory in the Solaris 8 operating environment.

4. To recover disk space, remove the downloaded tar file by typing:

```
% rm -rf j2se1.4_installer.tar.gz
```

5. Go to the directory that was created when you untarred the downloaded file. For example, if the file you untarred is j2se1.4_installer.tar, then type the following

```
% cd extract-directory
% cd j2sel.4_installer
```

6. Become a superuser (root) by typing:

% **su**Password: root-password

7. Start the Web Start Installer

./installer

Note – Do not run the installer in the background.

- 8. In the Welcome screen, click Next.
- 9. Click Next to install in /usr.

Note – The recommendation is for you to install the J2SE, v. 1.4.0 platform and Solaris patches in the /usr directory.

The installation directory that you choose is your default installation directory for this Web Start session.

10. Select the components you want to install and click Next.

The default selections of J2SE SDK, v. 1.4.0 and Solaris patches for J2SE platform are recommended for installation. To change the default selections, select the components you want to install.

11. Verify the items that you want to install and click Next.

To make changes to your selection, click Back.

12. Click Install Now to proceed with installation.

The Installing pane appears with a progress indicator.

Note – Some of the Solaris patches take a long time to install and can cause the J2SE, v. 1.4.0 installation process to take a few hours. The progress indicator may seem stalled, but the installation is actually still in progress.

- 13. After installation is complete, click the Details button to get information about the installation.
- 14. Review the messages in the Installation Summary pane. Click Exit to complete the installation.

Note – Some Solaris patches require that you reboot your system after installation has completed. The installer prompts you to reboot, if necessary.

15. Exit from superuser privileges by typing:

```
# exit
```

Using the Web Start Command-Line Installation

These instructions describe how to use the Web Start software to install the J2SE, v. 1.4.0 platform and Solaris patches.

- 1. If you have not already done so, download the j2sel.4_installer.tar.gz file from http://forte.sun.com/eap or access it from the Forte for Java CD
- 2. Determine the directory into which you want to extract the downloaded J2SE installer file.
- 3. From the download directory, uncompress and extract the contents of the downloaded J2SE, v.1.4.0 installer file into the *extract-directory* by typing:

```
% cd download-directory
% gzcat j2sel.4_installer.tar.gz | (cd extract-directory; tar xvf - )
```

Note – The gzcat utility can be found in the /usr/bin directory in the Solaris 8 operating environment.

4. To recover disk space, remove the downloaded tar file by typing:

```
% rm -rf downloaded-file.tar
```

5. Become a superuser (root) by typing:

```
% su
Password: root-password
```

6. Go to the directory that was created when you untarred the downloaded file. For example, if the file you untarred is j2se1.4_installer.tar, then type the following:

```
% cd extract-directory
% cd j2sel.4_installer
```

7. Start the command-line installation by typing:

```
# ./installer -nodisplay
```

Note – Do not run the installer in the background.

After the installer opens, the following message appears:

Solaris Web Start will assist you in installing software for J2SE SDK 1.4.0 and Patches.

This installer will assist you in installing J2SE SDK 1.4 and Patches software on your system.

8. Press the Enter key. The Enter key is equivalent to the Return key on some keyboards.

Note – Throughout the command-line installation, you can press the Enter key to select the default selections.

9. Specify a location for installation.

Note – The recommendation is for you to install the J2SE, v. 1.4.0 platform and Solaris patches in the /usr directory.

- 10. Select the components you want to install. The default selections of J2SE SDK, v. 1.4.0 and Solaris patches for J2SE platform are recommended for installation. To change the default selections, do the following:
 - a. Select or deselect a component for installation by entering the number corresponding to the component, and press Enter.
 - b. When finished, type 0 and press Enter.

- 11. A list of components will be shown for verification.
 - Type 1 if you want to proceed with installation.
 - Type 2 if you want to start over from Step 8.
 - Type 3 if you want to exit installation.
- 12. If you typed 1 to proceed with installation, a progress indicator appears.
 - a. When installation is complete, you can view a product's log file by typing the number corresponding to that product.
 - b. When you are finished viewing the log files, type the number corresponding to Done.
- 13. After installation is complete, select the number corresponding to Details to get information about the installation.
- 14. Exit from superuser privileges by typing:

exit

Continue to "Installing the Forte for Java IDE" on page 19 for Forte for Java software installation instructions.

Uninstalling the J2SE, v. 1.4.0 Platform

Use the following information to uninstall the J2SE, v1.4.0 platform from your system:

- In a Microsoft Windows system, use the Add/Remove Programs utility in the Control Panel to uninstall the J2SE, v. 1.4.0 platform from your system.
- For RedHat Linux environment, use the rpm command to uninstall the J2SE, v.1.4.0 platform from your system.
- For Solaris operating environments, use the pkgrm and patchrm commands to uninstall the J2SE, v. 1.4.0 platform and associated Solaris patches from your system.

Caution – Removing the J2SE, v. 1.4.0 software and related Solaris patches can cause regressive behavior on your system.

Refer to "Solaris Patch Identifications and Descriptions" on page 45 for information on patches that were included with the J2SE, v.1.4.0 platform installation.

Use man $\,$ pkgrm and man $\,$ patchrm for additional information on these commands.

Installing the Forte for Java IDE

This chapter contains information on upgrading from previous releases of the Forte for Java IDE and instructions on how to install Forte for Java, release 4.0, Community Edition on each of the supported platforms.

Supporting Previous Forte for Java Software Releases

To upgrade your previous version of the Forte for Java IDE to release 4.0, you can choose from one of the following:

- uninstall your previous version of the IDE, or
- you can preserve your previous version of the IDE and install release 4.0 in a new installation directory.

Uninstalling Your Previous Version of the Forte for Java IDE

If you are upgrading from a previous version and would like to uninstall your previous version of the IDE, use the following steps to guide you in preserving your previous IDE user settings:

1. Run the Forte for Java, release 4.0, Community Edition installer.

Read "Installing the Forte for Java IDE on the Supported Platforms" on page 21 for more details on installing the IDE on your system.

2. Specify the previous IDE version's installation directory as the destination directory in which to install the new version of the IDE.

The installer checks the destination directory you have specified and you will be prompted whether you want to save the contents of the directory.

3. Confirm whether you want to remove the contents of the destination directory.

The installer proceeds with the installation of the Forte for Java, release 4.0, Community Edition in the destination directory.

4. After the installation has completed, launch the new IDE and specify the previous version's installation directory when prompted for the location of the previous version of the IDE.

The Import Settings wizard imports the user settings from the previous version. See "Setting up Your Forte for Java IDE" on page 29 for more details about setting your user directory.

Preserving Your Previous Version of the Forte for Java IDE

If you would like to keep the previous version of the IDE and want to use the same IDE user settings for release 4.0, use the following steps as a guide to what needs to be done:

1. Run the Forte for Java, release 4.0, Community Edition installer.

Read "Installing the Forte for Java IDE on the Supported Platforms" on page 21 for more information on installing the IDE on your system.

- 2. Specify a new directory as the destination directory in which to install the new version of the IDE.
- 3. After the installation has completed, launch the new IDE and specify the previous version's installation directory when prompted for the location of the previous version of the IDE.

The Import Settings wizard imports the user settings from the previous version. See "Setting up Your Forte for Java IDE" on page 29 for more details about setting your user directory.

Creating a Shared Installation

If you want to share a Forte for Java installation between multiple users, you must install the Forte for Java IDE into a shared directory.

- After installation of the IDE in the supported Solaris operating and Red Hat Linux environments, all user settings are stored in the ffjuser40ce_ea directory created under each user's home directory. This occurs for both shared and unshared installations.
- After installation of the IDE in a Microsoft Windows system, you must set your own user directory using a dialog box that appears immediately upon initial startup of the IDE from your machine. This occurs for both shared and unshared installations.

The recommendation is for you to name the user directory as <code>drive:fully_qualified_path\ffjuser40ce_ea</code>.

Installing the Forte for Java IDE on the Supported Platforms

These instructions describe the installation process for each of the supported platforms.

Installation on Microsoft Windows Systems

You can install the Forte for Java IDE on a supported Microsoft Windows system through an .exe file.

Note – You must have the J2SE, v. 1.3.1 platform or J2SE, v. 1.4.0 platform installed on your system before installing the Forte for Java IDE. The recommended option is for you to use the J2SE, v. 1.4.0 platform with the Forte for Java IDE. Read "Installing the J2SE, v. 1.4.0 Platform" on page 9 for instructions on installing the J2SE, v. 1.4.0 platform.

1. Double-click the ffj_ce_win32_en.exe file.

The InstallShield's Welcome screen appears.

Note – If you encounter any errors at any point during the Forte for Java IDE installer, refer to "Troubleshooting" on page 41 for some troubleshooting hints.

- 2. In the Welcome screen, click Next.
- 3. Read the license agreement carefully. To agree, accept the terms of the license agreement, and click Next.

You must agree to the license to continue with the installation.

InstallShield attempts to locate a compatible JDKTM v. 1.3.1 or JDK v. 1.4.0 on your system.

4. Set the location of a compatible JDK software and click Next.

The Forte for Java IDE requires local or network access to either a JDK v. 1.3.1 software or JDK v. 1.4.0 software. Specify which installed JDK software to use by doing one of the following:

- accept the default location,
- select another location from the list of found JDKs, or
- click Browse to specify a different location.

Click Next after you have set the JDK location.

5. Accept the default installation folder or click Browse to install the IDE in a directory of your choosing. Click Next to continue.

Note – The installation directory name cannot contain any spaces.

6. In the Select Features dialog box, select the desired features.

The following are the features available:

- Forte for Java, release 4.0, Community Edition Core Platform and Modules (required)
- PointBase Server 4.2 Restricted Edition
- 7. Confirm your installation choices in the installation summary dialog box and click Next.

InstallShield installs the Forte for Java features you have selected.

8. Choose whether you wish to associate .java and .nbm files with the Forte for Java IDE. Click Next to continue.

If you choose to associate these file types, the Forte for Java IDE will automatically launch when you choose to open these files.

9. Click Finish to complete the installation.

10. Review the Release Notes file for important information regarding the release. You may access the Release Notes from

http://forte.sun.com/ffj/documentation/index.html.

11. Continue to "Using Your Newly Installed Forte for Java IDE" on page 29 for information on setting up the Forte for Java IDE.

Installation in the Red Hat Linux Environment

You can install the Forte for Java IDE in a supported Red Hat Linux environment with a .bin file.

Note – You must have the J2SE, v. 1.3.1 platform or J2SE, v. 1.4.0 platform installed on your system before installing the Forte for Java IDE. The recommended option is for you to use the J2SE, v. 1.4.0 platform with the Forte for Java IDE. Read "Installing the J2SE, v. 1.4.0 Platform" on page 9 for instructions on installing the J2SE, v. 1.4.0 platform.

1. Execute the ffj_ce_linux_en.bin file by typing the following command.

```
$ ffj_ce_linux_en.bin [-is:javahome javahome]
```

The -is command switch is optional and *javahome* is the path to your installed J2SE, v. 1.3.1 or J2SE, v. 1.4.0 platform. An example of *javahome* is /usr/j2se:

Note – If you encounter any errors at any point during the Forte for Java IDE installer, refer to "Troubleshooting" on page 41 for some troubleshooting hints.

- 2. In the Welcome screen, click Next.
- 3. Read the license agreement carefully. To agree, accept the terms of the license agreement, and click Next.

You must agree to the license to continue with the installation.

InstallShield attempts to locate a compatible JDKTM v. 1.3.1 or JDK, v.1.4.0 platform on your system.

4. Set the location of a compatible JDK software and click Next.

The Forte for Java IDE requires local or network access to either a JDK, v. 1.3.1 software or JDK, v. 1.4.0 software. Specify which installed JDK software to use by doing one of the following:

accept the default location,

- select another location from the list of found JDKs, or
- click Browse to specify a different location.

Click Next after you have set the JDK location.

5. Accept the default installation folder or click Browse to install the IDE in a directory of your choosing. Click Next to continue.

Note – The installation directory name cannot contain any spaces.

6. In the Select Features dialog box, select the desired features.

The following are the features available:

- Forte for Java, release 4.0, Community Edition Core Platform and Modules (required)
- PointBase Server 4.2 Restricted Edition
- Confirm your installation choices in the installation summary dialog box and click Next.

InstallShield installs the Forte for Java features you have selected.

- 8. Click Finish to complete the installation.
- 9. Review the Release Notes file for important information regarding the release. You may access the Release Notes from

http://forte.sun.com/ffj/documentation/index.html.

10. Continue to "Using Your Newly Installed Forte for Java IDE" on page 29 for information on setting up Forte for Java IDE.

Installation in the Solaris Operating Environments

You can install the Forte for Java IDE in a supported Solaris^m operating environment with a .bin file.

Note – You must have the J2SE, v. 1.3.1 platform or J2SE, v. 1.4.0 platform installed on your system before installing the Forte for Java IDE. The recommended option is for you to use the J2SE, v. 1.4.0 platform with the Forte for Java IDE. Read "Installing the J2SE, v. 1.4.0 Platform" on page 9 for instructions on installing the J2SE, v. 1.4.0 platform.

1. Execute the ffj_ce_solsparc_en.bin file by typing the following command:

```
$ ffj_ce_solsparc_en.bin [-is:javahome javahome]
```

The -is command switch is optional and *javahome* is the path to your installed J2SE v. 1.3.1 or J2SE v. 1.4.0 platform. An example of *javahome* is /usr/j2se.

Note – If you encounter any errors at any point during the Forte for Java IDE installer, refer to "Troubleshooting" on page 41 for some troubleshooting hints.

- 2. In the InstallShield's Welcome screen, click Next.
- 3. Read the license agreement carefully. To agree, accept the terms of the license agreement, and click Next.

You must agree to the license to continue with the installation.

InstallShield attempts to locate a compatible JDK^{TM} , v. 1.3.1 or JDK, v. 1.4.0 software on your system.

4. Set the location of a compatible JDK software and click Next.

The Forte for Java IDE requires local or network access to either a JDK v. 1.3.1 software or JDK v. 1.4.0 software. Specify which installed JDK software to use by doing one of the following:

- accept the default location,
- select another location from the list of found JDKs, or
- click Browse to specify a different location.

Click Next after you have set the JDK location.

5. Accept the default installation folder or click Browse to install the IDE in a directory of your choosing. Click Next to continue.

Note – The installation directory name cannot contain any spaces.

6. In the Select Features dialog pane, select the desired features.

The following are the features available:

- Forte for Java, release 4.0, Community Edition Core Platform and Modules (required)
- PointBase Server 4.2 Restricted Edition
- 7. Confirm your installation choices in the installation summary pane and click Next.

InstallShield installs the Forte for Java features you have selected.

- 8. Click Finish to complete the installation.
- 9. Review the Release Notes file for important information regarding the release. You may access the Release Notes from

http://forte.sun.com/ffj/documentation/index.html.

10. Continue to "Using Your Newly Installed Forte for Java IDE" on page 29 for information on setting up the Forte for Java IDE.

Finding Installation Subdirectories

After you have installed the Forte for Java IDE, the subdirectories listed in TABLE 3-1 can be found under *ffj-install-dir*, your Forte for Java installation directory:

TABLE 3-1 Forte for Java Installation subdirectories.

Subdirectory name	Description	
/_uninst	Contains the files used to uninstall in the IDE	
/beans	Contains JavaBeans $^{\scriptscriptstyleTM}$ components installed in the IDE	
/bin	Includes the Forte for Java startup scripts (as well as the ide.cfg file in Microsoft Windows installations)	
/docs	Contains the Forte for Java help files and other miscellaneous documentation	
/lib	Contains the JAR files that make up the IDE's core implementation and the open APIs	
/modules	Stores Forte for Java modules as JAR files	
/pointbase	Contains four subdirectories, client, database, docs, and server. The client directory contains PointBase console, command-line utilities, and examples of a PointBase application and a WebServer application. The database directory contains sample databases. The docs directory contains PointBase documentation. The server directory contains the PointBase server.	

TABLE 3-1 Forte for Java Installation subdirectories.

Subdirectory name	Description
/sources	Contains sources for libraries that might be redistributed with user applications
/system	Includes files and directories used by the IDE for special purposes. Go to your individual ffj-user-dir/system directory to get the ide.log, which provides information useful when requesting technical support, and to view project.basic and project.last files, which contain information on Forte for Java projects. In a Microsoft Windows system, this ffj-user-dir/system directory contains the project specific files under project.basic_hidden and project.last files.
/tomcat401	Contains Tomcat specific files

Uninstalling the Forte for Java IDE

An uninstaller wizard is made available to assist you in the uninstallation of the Forte for Java IDE. Follow the steps below to uninstall your copy of the Forte for Java IDE, release 4.0

- **1. Invoke the uninstaller from** *ffj-install-dir*/_uninst **directory.**
 - In the supported Solaris operating environment or Red Hat Linux environment, type:

```
$ java -jar uninstall.jar
```

■ In the Microsoft Windows system, execute the uninstaller.exe file located at ffj-install-dir/_uninst directory or use the Add/Remove Program utility in the Control Panel.

The uninstaller's Welcome screen appears.

2. Click Next from the Welcome screen.

A list of Forte for Java features is displayed.

- 3. Select the features you want to uninstall and click Next.
- 4. Click Next to confirm the features to be uninstalled.

The uninstaller wizard proceeds with the uninstallation of the IDE.

Click Finish to close the uninstaller wizard.

Using Your Newly Installed Forte for Java IDE

After you have successfully installed the Forte for Java IDE, use the information in this chapter to launch, set up and register your Forte for Java IDE. Details about the available command-line switch options are also included.

Setting up Your Forte for Java IDE

When you first start up the Forte for Java IDE, you are prompted to specify the user directory to use with the IDE, whether you would like automatic update checking, and to register your Forte for Java IDE software. Use the following steps to guide you through setting up your initial IDE environment.

1. Start the Forte for Java IDE

■ For the supported Solaris operating environments or Red Hat Linux environment, type:

```
$ cd ffj-install-dir/bin
```

\$ runide.sh

■ For the Microsoft Windows system, click the Start menu and select Forte for Java 4.0 EE > Forte for Java or from a command prompt window, type:

```
C:\> cd ffj-install-dir\bin
C:\> runidew.exe
```

A popup dialog window appears and asks you to specify the fully qualified path for the user directory.

2. Specify the name of your user directory.

- For supported Solaris operating or Red Hat Linux environments, the default user directory name is \$HOME/ffjuser40ce_ea.
- On a Microsoft Windows system, there is no default directory name. The recommendation is for you to name the user directory as drive:fully_qualified_path\ffjuser40ce_ea.

The Settings Import wizard appears.

3. Specify whether you want to import your settings from a previous version of the IDE.

- If you do not want to import your previous user settings, select No and click Finish to exit the wizard.
- If you want to import your previous user settings, select Yes and click Next. You are prompted for the location of the previously installed IDE.
 - i. Specify the path or click Browse to locate the directory. Click Next The IDE imports the settings.
 - ii. Click Finish to exit the wizard.

The IDE continues with the startup and several windows appear.

4. From the Automatic Update Check dialog, specify whether you want to check for new IDE updates.

- If you replied Yes, the Update Center wizard appears. Follow the instructions on the wizard to complete the setup for automatic update checking.
- If you replied No, you can invoke the Update Center wizard, at a later time, from Tools > Update Center from the Main window of the IDE.

The registration wizard appears.

5. Register your Forte for Java IDE software using the registration wizard.

It is recommended that you register your Forte for Java IDE software to obtain the many benefits offered to registered users. Read "Registering With Forte for Java Developer Resources" on page 31 for more information.

- a. Choose Register/Update now and click Next.
- b. Select your preferred method of registration.
 - Web based registration

the IDE.

The recommendation is that you use the Web based registration, which allows you to register your Forte for Java IDE software and also registers you with the Forte for Java Developer Resources. For more information about the benefits of registering with the Forte for Java Developer Resources, read "Registering With Forte for Java Developer Resources" on page 31.

Email registration or Print for FAX and Postal mail
 This method of registration allows you to register your Forte for Java IDE software only. If you decide to register with the Forte for Java Developer Resources at a later time, choose Help > Registration from the Main window of

If you choose not to register now, you can access the registration wizard by accessing Tools > Registration Wizard from the Main window of the IDE.

Registering With Forte for Java Developer Resources

Registering with Forte for Java Developer Resources enables you to:

- Use the Update Center to download and install new modules and updates specific to your environment
- Subscribe to the Early Access Program (http://forte.sun.com/eap) and receive new, non-public builds of the IDE, preview releases of Forte for Java modules, patches and bug fixes
- Receive product announcements, if desired
- Use the same user name and password to access the Update Center, the Early Access Program, and the Sun Download Center (from which you may have downloaded the Forte for Java IDE)

To register with Forte for Java Developer Resources, go Help > Registration from the Main window of the IDE or to

http://forte.sun.com/services/registration/new-user.

If you are already registered with the Sun Download Center, mysun.sun.com, or the Sun Store, you can use the same user name and password, but you will be prompted for additional information. To update your account information, go to: http://forte.sun.com/services/registration/accountmaintenance.html.

Using the IDE Startup Command-Line Options

The Forte for Java IDE startup scripts for all supported platforms can be run with additional options. These command-line options are specified with flags.

In the supported Solaris operating environments, for example, you might type:

runide.sh -help

Alternatively, you can put the options in the *ffj-install-dir*/bin/ide.cfg file. The IDE reads this file before parsing any command-line options. You can break options into multiple lines in ide.cfg.

TABLE 4-1 lists the Forte for Java startup command-line options for all supported platforms.

 TABLE 4-1
 Command-Line Switch Options

Switch Options	Description
-h -help	Prints usage.
-jdkhome jdk-home-dir	Selects a JDK other than the default JDK. On Microsoft Windows, by default, the IDE checks the registry and selects the latest JDK available.
-hotspot -server -client -classic -native -green	Explicitly specifies the JVM variant to be used.
-ср:р additional-classpath	Prepends the specified classpath onto the IDE's classpath.
-cp:a additional-classpath	Appends the specified classpath to the IDE's classpath.
-ui UI_class-name	Selects a given class as Forte for Java's look and feel.
-fontsize size	Sets the font size, expressed in points, in the IDE's user interface.
-single	Launches the IDE from ffj-install-dir instead of from your ffj-user-dir directory. Runs the Forte for Java IDE in single-user mode. The default mode is multi-user.
-userdir ffj-user-dir	Explicitly specifies the fff-user-dir directory (the location where your user settings are stored). If this option is not used in Solaris or Linux operating environments, the location is user-home-dir/ffjuser40ee_ea. If this option is not used in Microsoft Windows NT, the user is prompted at the initial startup of the IDE for the fff-user-dir directory to use. On Microsoft Windows systems, this value is stored in the registry for later use.

 TABLE 4-1
 Command-Line Switch Options (Continued)

Switch Options	Description
-Jjvm-flags	Passes specified flags directly to the JVM.
-J-Xverify:none	Tells the JVM not to verify the correctness of the bytecode for faster startup. Bytecode verification is a slow process since whenever a class is loaded, the JVM scans all bytecode and detects an invalid byte sequence even if a method is never called. Also, the JVM loads certain classes referred to in method signatures and in the method body, even though they are not called during startup. However, setting this flag removes some of the protection that the Java™ language gives you. (Refer to the JVM documentation for more information.)
-J-Xms24m	Sets up the initial heap size of the JVM to 24 MB. This switch prevents the JVM from extending the heap size during startup, which enables faster startup time for the IDE.

Solaris and Linux users can modify startup scripts to suit their needs.

Customizing Your Installation

This chapter contains information that would assist you in customizing your installation of the Forte for Java, release 4.0, Community Edition.

Using Databases With the Forte for Java IDE

The Forte for Java IDE includes the PointBase Network Edition 4.2 database. You can use other databases with the IDE by configuring the JDBC $^{\text{TM}}$ enabled database drivers for those databases.

Using a PointBase Database With the IDE

PointBase Network Edition 4.2 database is the default database that is provided with the Forte for Java IDE installation. For information on using this database and on database tables, see the PointBase documentation at either <code>ffj-install-dir/pointbase/server/GettingStarted.html</code> or <code>ffj-install-dir/pointbase/client/GettingStarted.html</code>.

Starting the PointBase Database Server

You have to start the PointBase database server before you can use it, whether you want to access a PointBase database from an application you developed using the IDE or you want to create your own tables or database with PointBase.

To start the PointBase database server:

 Choose Tools > PointBase Network Server > Start Server from the Main window of the IDE.

Alternatively, on Microsoft Windows systems, start the PointBase server by choosing Forte for Java 4.0 CE > PointBase > Network Server > Server from the Start menu.

The PointBase 4.2 window appears.

Stopping the PointBase Database Server

To stop the PointBase database server:

Note — The following action only stops the PointBase database server that was started by Tools > PointBase Network Server > Start Server action.

• Choose Tools > PointBase Network Server > Stop Server from the Main window of the IDE or choose Server > Shutdown! from the PointBase 4.2 window.

Starting the PointBase Client Console

To start a PointBase console, do the following

• In the supported Solaris operating and Red Hat Linux environments, type:

\$ sh ffj-install-dir/pointbase/client/Console

• On Microsoft Windows systems, start the PointBase client console by choosing Forte for Java 4.0 CE > PointBase > Console from the Start menu.

Stopping the PointBase Client Console

To stop the client console, terminate the window from which it is running.

Note – Note that the above steps apply only to the locally installed version of the PointBase database.

Using Other JDBC Enabled Databases With the IDE

The following information applies to database drivers other than PointBase databases.

You must place the database driver files in the Forte for Java lib/ext directory before you start the Forte for Java IDE. If you do not do this, the dbschema wizard does not enable you to select the proper database driver when you create a new schema. You cannot mount the driver file in the IDE's Explorer to do this, nor can you simply place the driver file in the CLASSPATH environment variable. You must copy the driver file into the lib/ext folder.

For more information on database configuration and adding new database drivers, see: http://www.sun.com/forte/ffj/resources/articles/configdb.html.

Where to Go From Here

This chapter contains information about what to do next after you have installed and validated your installation of Forte for Java, release 4.0, Community Edition.

Updating Modules With the Update Center

Once you have Forte for Java, release 4.0 installed in your system, use the Update Center to add new IDE modules or update the existing IDE modules already installed in your system. Use the following steps to update your IDE.

1. Start the IDE.

See "Using Your Newly Installed Forte for Java IDE" on page 29 for instructions on how to start the IDE.

2. Select the Update Center from the IDE's Welcome screen or choose Tools > Update Center from the Main window of the IDE).

The Update Center wizard appears.

- 3. Select Forte for Java Update Center as the Update Center to connect and deselect NetBeans Update Center.
- 4. Click the Proxy Configuration to set your proxy configuration, if needed.

The Proxy Configuration dialog appears.

a. Modify the values as needed and click OK to return to the Update Center wizard.

5. Click Next and type your Forte for Java Update Center login name and password.

See "Registering With Forte for Java Developer Resources" on page 31, for information on registering and creating a login name and password.

The Update Center displays the modules that are available to you.

- 6. Select individual modules or select all by clicking the >> button. Use the < button to remove those versions that are not appropriate to your platform.
- 7. Click Next and follow the Update Center installation procedure.

The IDE installs the selected modules, then restarts itself.

For more information about how the Update Center works and Sun's privacy policy regarding your personal information, see the Developer Resources Site FAQs at http://forte.sun.com/ffj/resources/sitefaq.html.

Other Documentation Resources

You can access the following resources to learn more about the different features of the IDE and how to use them.

- The online help is available by accessing the Help menu from the Main window of the IDE. You may view the available help sets by clicking Help Sets from the Help menu.
- A set of programming books, tutorials and code examples are available at http://forte.sun.com/ffj/documentation/index.html
- The Forte for Java Developer Resources site at http://forte.sun.com/ffj/index.html also contains a wealth of information and support resources, including Forte for Java news, technical articles, a support knowledge base, forums and more.

You can also access this site from the IDE by selecting Help > Web Resources from the Main window of the IDE.

Troubleshooting

This chapter provides some troubleshooting hints to help you during your installation and start up of the Forte for Java IDE

Forte for Java IDE Installation

The following describes some errors you may encounter during the Forte for Java IDE installation.

1. Error: Error writing file = Not enough temporary disk space

If you received an error similar to the following, use the solution below to
continue with the Forte for Java IDE installation.

■ **Solution**: Invoke the installer with the -is:tempdir commandline option. For example, on a Solaris operating environment, type the following:

```
$ ffj_ce_solsparc_en.bin -is:tempdir /temp javahome
```

2. Error: Could not find JVM

If you received an error similar to the following, use the solution below to continue with the Forte for Java IDE installation.

```
$ InstallShield Wizard

Initializing InstallShield Wizard...

Searching for Java(tm) Virtual Machine...

Could not find JVM
```

■ **Solution**: Invoke the installer with the -is:javahome command line option. For example, on a Solaris operating environment, type the following:

```
$ ffj_ce_solsparc_en.bin -is:javahome javahome
```

Forte for Java IDE startup

The following are some error messages you might have received during configuration of the newly installed Forte for Java IDE software.

1. Error: No J2SE was found at /usr/j2se/bin/java

```
$ ./runide.sh
$ ERROR: No J2SE was found at /usr/j2se/bin/java.
ERROR: The following required 5.7 patches have not been installed
on system "yourmachine": 106950-16 106327-11 106541-17 106980-17
108376-29 107656-07 107081-37 107636-08 107702-08 108374-05
107226-18 108244-03 106748-04 106300-12 107058-01
NOTE: For help with the J2SE and patch installs please refer to
the file /opt/SUNWspro/prod/READMEs/client_readme.txt, or talk to
your system administrator.
Current runtime environment is not compatible. Exiting...
[1] Exit 2 ./runide.sh
```

■ **Solution**: Install the J2SE v.1.4.0 software on your system.

For Solaris operating environment, include any patches needed. Refer to "Installing the J2SE, v. 1.4.0 Platform" on page 9 for more information. on installing J2SE, v. 1.4.0 on your system.

- 2. Error: Unable to load java.dll
 - Solution: Make sure there is no space in the name of the directory in which you have installed the J2SE, v.1.3.1 or J2SE, v.1.4.0 platform.
- 3. Forte for Java IDE is not pointing to the J2SE, v.1.4.0 platform you had specified during the IDE installation.

If you have had specified the location of the J2SE, v.1.4.0 platform during the Forte for Java IDE installation, but the IDE is not pointing to that location, you may have received an error similar to the following:

\$./runide.sh

ERROR: The J2SE[tm] 1.3.0 found at /yourmachine/jdk1.3/bin/java cannot be used by Forte Community Edition. J2SE[tm] 1.4 is recommended.

NOTE: You can download and install the J2SE[tm] related Solaris[tm] operating environment patches from

http://accessl.sun.com/fortedevprod or see your system administrator.

Current runtime environment is not compatible. Exiting...

[1] Exit 2 ./runide.sh

• **Solution**: Check the JAVA related environment variables already set prior to invoking the IDE and unset them.

The values of the \$JAVA_PATH and \$JDK_HOME environment variables override the value of the J2SE path you had specified during the IDE installation. You need to unset these environment variables or use the – jdkhome command line option when starting the IDE.

APPENDIX A

Solaris Patch Identifications and Descriptions

This appendix provides the SolarisTM patch identification numbers and descriptions of the patches included with the JavaTM 2 Platform, Standard Edition 1.4.0 (J2SETM, v.1.4.0 platform) installation.

TABLE A-1 lists the Solaris patch identification numbers and description for the Solaris $^{\text{\tiny TM}}$ 8 SPARC Platform Edition.

 TABLE A-1
 Patch Identifications and Descriptions for Solaris 8 SPARC Platform Edition

Patch Identification Number	Patch Description
109147-14	Solaris 8 interprocedural optimizer
108434-04	Solaris 8 libC sparc
108435-04	V9 libC
111293-04	/usr/lib/libdevinfo.so.1
112334-01	/usr/include/sys/archsystem.h
111310-01	/usr/lib/libdhcpagent.so.1
108528-13	SIGEMT
108652-40	Xserver
108921-13	CDE 1.4 dtwm
108940-40	Motif 2.1
108773-12	X input methods
109607-01	/usr/include/iso/stdlib_iso.h