Forte^(™) for Java^(™), release 2.0, Community Edition Installation Guide

Copyright 2000 Sun Microsystems, Inc., 901 San Antonio Road, Palo Alto, California 94303, U.S.A. All rights reserved.

This product or document is protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or related documentation may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any. Third party software, including font technology, is copyrighted and licensed from Sun suppliers. This product includes software developed by the Apache Software Foundation (http://www.apache.org/).

Sun, Sun Microsystems, the Sun logo, Java, Forte, NetBeans, Solaris, iPlanet, StarOffice, StarPortal, Jini, Jiro are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries.

Federal Acquisitions: Commercial Software -- Government Users Subject to Standard License Terms and Conditions.

Copyright 2000 Sun Microsystems, Inc., 901 San Antonio Road, Palo Alto, California 94303, Etats-Unis. Tous droits réservés.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a.

Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun. Ce produit comprend un logiciel développé par Apache Software Foundation (http://www.apache.org/)

Sun, Sun Microsystems, le logo Sun, Java, Forte, NetBeans, Solaris, iPlanet, StarOffice, StarPortal, Jini, et Jiro sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays.

LA DOCUMENTATION EST FOURNIE "EN L'ÉTAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFAÇON.

Forte^(™) for Java^(™), release 2.0, Community Edition Installation Guide

This guide describes:

- System requirements
- Installation procedures
 - o WIN NT/2000
 - Solaris 7/8 and other UNIX
 - o Java
 - Linux Redhat 6.2
- Multi-user Shared Installations
 - o WIN NT/2000
 - o Solaris/UNIX
- Command-line switches
- Mounting a JAR or ZIP file as a Javadoc filesystem in the IDE
- Deleting a project in the IDE
- Installation subdirectories

System Requirements

You must have Java^(TM) 2 SDK, Standard Edition, v. 1.3 installed on your system in order to install and run Forte for Java. For further information and download links go to http://java.sun.com/j2se

Java documentation: The Java 2 SDK documentation can be downloaded as either a zip file(Win) or tar file(Unix) at: :http://java.sun.com/j2se/1.3/docs.html. Installation instructions can be found at: http://java.sun.com/j2se/1.3/install-docs.html.

If you want access to the Java 2 SDK documentation from inside Forte for Java, you must

download, install, and mount this documentation as a filesystem in the IDE. To mount the Java documentation as a filesystem within Forte For Java (after installing Forte for Java):

- 1. Open the Forte for Java Explorer window (View>Explorer).
- 2. Click the Javadoc tab at the bottom of the Explorer window.
- 3. Right-click the Javadoc node within the Explorer window.
- 4. Select Mount Directory from the pop-up menu.
- 5. Browse to the directory where you installed the documentation (C:/jdk1.3/docs, for example) and highlight it by single-clicking on it.
- 6. Click Mount.

The documentation will now be accessible from within the IDE via the Javadoc tab in the Explorer window.

See also Mounting a JAR or ZIP file as a Javadoc filesystem in the IDE below.

Windows NT/2000 Platforms:

Hardware

Installation requires 50 MB of hard disk space.

Minimum configuration: 350MHz Pentium II, 128 MB RAM, 128 MB paging file size. (50 MB required for installation).

Recommended configuration: 450MHz Pentium III, 256 MB RAM, 256 MB paging file size.

Software

Forte for Java Community Edition, requires JavaTM 2 SDK, Standard Edition, v. 1.3 for the Windows environment. You can download this at: http://java.sun.com/j2se/1.3/download-windows.html (v. 1.3 Production Release).

Solaris^(™) operating system (SPARC^(™) platform)

Installation requires 50 MB of hard disk space.

Minimum configuration: Ultra(TM) 10, 128 MB RAM, 256 MB swap.

Recommended configuration: Ultra^(TM) 60, 512 MB RAM, 512 MB swap.

Software:

Forte for Java Community Edition requires Java 2 SDK, v. 1.3 for the Solaris environment. The latest SDK is available for download from:

http://www.sun.com/solaris/java/.

Required JDK patches for Solaris 7 and Solaris 8:

Use the command showrev -p to list the patches installed on your system. The following patches should be installed on your system:

Solaris 7 (5.7) 106541-09 Libthread Patch

Solaris 7 (5.7) 106980-10 Libthread Patch

Solaris 7 (5.7) 107636-03 X Input & Output Method Patch

Solaris 7 (5.7) 108376-07 OpenWindows 3.6.1 Xsun Patch (required in Asian locales--also required for running Java Compatibility Kit tests)

Solaris 7 (5.7) 107153-01 Replaces bad font in zh.GBK locale (required in Asian locales)

Solaris 7 (5.7) 106541-11 Kernel update

Solaris 7 (5.7) 107544-03 To be used with Kernel update patch

Solaris 7 (5.7) 109104-01 To be used with Kernel update patch

Solaris 7 (5.7) 106950-09 Linker Patch

Solaris 7 (5.7) 106327-08 Shared library patch for C++

Solaris 7 (5.7) 106300-09 Patch for C++

Solaris 7 (5.7) 107081-20 Motif 1.2 and Motif 2.1 patch

Solaris 8 (5.8) 108940-07 Motif 2.1 patch

Linux platform

Hardware

Installation requires 50 MB of hard disk space.

Minimum configuration: Pentium II 350 MHz, 128 MB RAM, 128 MB swap.

Recommended configuration: Pentium III 450 MHz, 256 MB RAM, 128 MB swap.

Software

The latest SDK is available for download from: http://java.sun.com/j2se/1.3/

Installation procedures by platform:

note: All platforms require that Java 2 SDK, Standard Edition, v. 1.3 is installed on your system BEFORE installing Forte for Java.

Windows NT/2000

The instructions in this section are only for single-user installations. For information on

multi-user installations, see Multi-user Shared Installations below.

- 1. Double click installation file, forte_ce_2.exe. The Forte for Java welcome screen will appear. Click Next to continue.
- 2. Click Yes to agree to the license terms and continue installation.
- **3.** Enter your name and the name of your company (You may enter "self" instead of a company name). Then click Next.
- **4.** At this point, you can accept the default installation directory or change the directory by either entering a new one or selecting one via the browse button. Note: Be sure the installation directory name does NOT have any spaces in it as this will affect Forte for Java functionality.

After entering a directory, click Next.

- **5.** A menu of all Java Virtual Machines installed on your system appears. Select a compatible JVM (JDK 1.3) then click Next.
- **6.** If you want Forte for Java to launch automatically when you double-click a .java file on your system, then select the radio button to associate .java files with Forte for Java. Then click Next.
- 7. Review your installation choices. Click Next to continue.
- **8.** Select the Release Notes checkbox if you wish to read the release notes after installation. Click Finish to complete the installation.
- **9.** You may now launch Forte for Java either from the new desktop shortcut or from the Forte for Java item on the Windows Start menu.

Alternatively, you can launch Forte for Java from the command line:

Note: runide.exe ignores the value of the CLASSPATH environment variable. This affects access to databases from Forte for Java. If you run Forte for Java without the CLASSPATH variable, you will have to manually add database driver files to <FFJ_HOME>/lib/ext.

If you want runide.exe to use the CLASSPATH variable you must run it with the -cp switch:

Uninstalling Forte for Java

To uninstall Forte for Java, simply run the installer program again to bring up the File Deletion Confirmation window. Click OK to uninstall Forte for Java.

Solaris 7, Solaris 8, Linux Redhat 6.2, and other UNIX software

The instructions in this section are only for single-user installations. For information on multi-user installations, see Multi-user Shared Installations below.

1. Change your working directory to the location where you've saved the forte_ce_2.sh file. Launch the installation (as a non-root user) by executing this file. Type:

```
$ sh forte_ce_2.sh
```

2. The installation program will now verify that a compatible Java Virtual Machine is installed. If you have more than one JVM installed, you will need to select a compatible JVM (JDK 1.3). Then click Next.

Note: If the installation program does not find a compatible JVM, a menu will appear prompting you for one of two actions:

- -Select "0" to specify a path to your JVM.
- -Select "1" to terminate installation.

Select "0" and input your Java path. Then hit the Return key to resume installation.

- **3.** The message "Extracting Installation class" appears for a moment before the Welcome screen is launched. Select Next from the Welcome screen to continue Installation.
- **4.** The Readme screen appears. After reading this document, click Next.
- **5.** The License Agreement appears. After reviewing the agreement, select the Agree radio button and click Next to continue installing Forte for Java.
- **6.** A list of installed Java Virtual machines appears. Be sure you have a compatible JVM (JDK 1.3) installed on your system and that this JVM is selected. Then click Next.
- **7.** You will now be prompted to either accept the default installation directory or browse to one of your choosing. Note: Be sure the installation directory name does NOT have any spaces in it as this will affect Forte for Java functionality. Click Next.

If the installation directory you chose does not already exist, a message will appear confirming that the installer should create it. Click Yes to create the directory.

- **8.** Forte for Java is now ready to be installed. Click Install Now to proceed.
- **10.** After the files are installed, the Installation Summary window appears. After reviewing the summary, click Exit.
- 11. You may now launch Forte for Java using the runide.sh script in forte4j/bin/.

Note: runide.exe ignores the value of the CLASSPATH environment variable. This affects access to databases from Forte for Java. If you run Forte for Java without the CLASSPATH variable, you will have to manually add database driver files to <FFJ_HOME>/lib/ext.

If you want runide.exe to use the CLASSPATH variable you must run it with the -cp switch:

```
$ runide.sh -cp${CLASSPATH}
```

Uninstalling Forte for Java

To uninstall Forte for Java, simply run the uninstall.class located in /forte4j.

```
$ java uninstall
```

Follow the dialog boxes to complete the uninstall.

To reinstall Forte for Java, run the installer again.

Java .class Installation

As an alternative, Forte for Java can be installed via a class file on all supported platforms.

To install:

1. Change your working directory to the location where you have saved the .class file.

Note: If you have a CLASSPATH set, and it does not include the current directory, add the current directory to your existing CLASSPATH.

If you do not have a CLASSPATH set, skip to the next step. (To check whether you have a CLASSPATH currently set, type set at a command prompt. If you see CLASSPATH listed, you have a CLASSPATH setting.)

To add the current directory to your CLASSPATH on a Windows machine, type:

```
set CLASSPATH=.; %CLASSPATH%
```

On a UNIX machine with a Bourne-type shell (which typically gives a \$ prompt), type:

```
CLASSPATH=.:$CLASSPATH;export CLASSPATH
```

On a UNIX machine with a C-type shell (which typically gives a % or > prompt), type this command:

setenv CLASSPATH .: \$CLASSPATH

2. Next, on all platforms, type the following command where filename is the name of the appropriate class file for your platform; do not type the .class extension:

```
java <filename>
example (windows):
java forte_ce_2.class
```

Note: This assumes you have compatible JVM (JDK 1.3) in your path. If you do not, you must specify the full path to the java interpreter executable--for example (in windows):

```
C:\TEMP>C:\jdk1.3\bin\java forte_ce_2.class
```

This initiates the installation routine.

- **3.** Work through the dialog boxes to complete installation.
- **4.** Once complete, use the runide script in your installation directory to launch Forte for Java.

If you are installing from a .class on a Microsoft Windows machine, you will be able to launch Forte for Java from the new desktop shortcut or from the Forte for Java item on the Windows Start menu. Alternatively, you can launch Forte for Java from the command line:

c:/>runide.exe

Note: runide.exe ignores the value of the CLASSPATH environment variable. This affects access to databases from Forte for Java. If you run Forte for Java without the CLASSPATH variable, you will have to manually add database driver files to <FFJ_HOME>/lib/ext. PointBase will do this automatically if you install it.

If you want runide.exe to use the CLASSPATH variable you must run it with the -cp switch:

```
$ runide.exe -cp${CLASSPATH}
```

Uninstalling Forte for Java

To uninstall Forte for Java, simply run the uninstall.class located in /forte4j.

```
$ java uninstall
```

Follow the dialog boxes to complete the uninstall.

To reinstall Forte for Java, run the installer again.

Linux Redhat 6.2

There are three methods for installing Forte for Java on the Linux Platform.

Method One: forte_ce_2.sh

This installer runs identically to the Solaris .sh file. Follow the Solaris, Linux, and other UNIX software installation instructions above to install Forte for Java.

Method Two: forte_ce_2.class

Follow Java .class Installation instructions above.

Method Three: ForteCE-FCS-2.noarch.rpm

- 1. If you haven't already, set JAVA_PATH variable to the Java home directory.
- **2.** Make yourself root:

su

3. Open the command prompt and enter:

```
rpm -i ForteCE-FCS-2.noarch.rpm
```

4. After the RPM files are installed, you can run Forte for Java by entering runide from the command line.

Multi-user Shared Installations

Multi-user installations are intended for machines where more than one user will be using this installation of Forte for Java. These installations create the Forte for Java file tree in a shared location such as /usr/local/forte4j/. When you launch Forte for Java for the first time, a forte4j directory is created under the user's home directory and some system files are copied there. Any development that the user does is saved, by default, to this directory.

This type of installation requires an "admin" user, who has the responsibilities of maintaining, upgrading, and installing new modules, and so on. This admin user can be an existing individual user, a separate admin user, or an admin group.

UNIX/Solaris Platform

- **1.** As the root user, use the .sh or .class format, and install to /usr/local/forte4j.
- 2. Change ownership of the /usr/local/forte4j directory tree to the admin user or Forte for Java user group. The command to change ownership to a user group would look something like this:
- # chown -R f4jadmin.f4jusers /usr/local/forte4j
- **3.** Set the permissions on this directory:
- # chmod 750 /usr/local/forte4j
- **4.** Run runide.sh. For example, if the IDE's files are located at /usr/local/forte4j, type the following command:

```
/usr/local/forte4j/bin/runide.sh
```

5. Create a symlink to forte4j/bin/runide_multiuser.sh.

For example, to link to runide_multiuser.sh from /usr/local/bin/:

```
# ln -s /usr/local/forte4j/bin/runide_multiuser.sh (space)
/usr/local/bin/runide
```

6. Assuming the user has /usr/local/bin in the \$PATH, the user can launch Forte for Java by typing runide on the command line.

The first time a user launches Forte for Java on a multi-user installation, the launch script will copy and create some configuration files under that user's \$HOME. Thereafter, each user has personal settings and preferences files and can save work locally.

Upgrades and Maintenance

Upgrades of modules and installation of new modules are handled within the IDE, using the Update Center. Upgrades should be performed by the admin user. When this user uses the Update Center, updates are made to /usr/local/forte4j and thus made available to all of the Forte for Java users.

If a user who is not admin (or not a member of the admin group) makes module upgrades or installs new modules, these updates will be made to that user's local forte4j directory, where their personal settings and configuration files are stored. These updates will then be available only to that user: other Forte for Java users will not be able to see or use these updated modules. However, any local modules take precedence over those in the shared installation. So if the admin later upgrades the same module to a later version than this user has, this user will still use the older, local version.

Microsoft Windows NT/2000 Platform

- **1.** Install the software on a Windows NT machine that will act as the server. Use the instructions in the Windows Platform section or the Class Install section. The installation directory should be write protected to normal users, but this is not mandatory.
- **2.** Create a shared directory on the machine where you installed the product and map this onto the user's local machine as a network drive.
- **3.** When the installation is complete, users should launch Forte for Java using runide_multiuser.exe. The first time this is run, each user is prompted to enter a directory where their files will be stored.

Administrators who want to update modules in the central installation should use runidew.exe.

Command-line Switches

On Windows machines, you can set options when running the IDE on the command line or by modifying the ide.cfg file that is in the bin folder of your installation directory. If you use the ide.cfg file, you can break the options into multiple lines. The loader tries to read this file before it starts parsing the command line options. This means that even Java applications options can be put in this file.

On UNIX machines, you can modify the runide.sh file in the bin subdirectory of the installation directory, or you can create your own shell script that calls runide.sh with options.

The following is a list of switches that you can use (either in a shell script or the ide.cfg file) when loading Forte for Java:

- * jdkhome jdk_home_dir use the Java 2 SDK specified in the jdk_home_dir argument instead of the default SDK.
- * -hotspot
- * -classic use the classic JVM. By default, the HotSpot JVM is used.
- * -cp:a *additional classpath* add the class path specified in the additional classpath parameter to the end of the Forte for Java class path.
- * -Jjvm_flags pass the flag specified by the jvm_flags parameter directly to the JVM. There is no space between -J and the argument.
- * -ui com.sun.java.swing.plaf.windows.WindowsLookAndFeel run the IDE with the Windows look and feel.
- * -ui com.sun.java.swing.plaf.motif.MotifLookAndFeel -run the

IDE with the Motif look and feel.

- * -fontsize fontsize set the font size used in the IDE's graphical user interface.
- * -userdir user directory specify a different directory for configuration files.
- * -h or -help opens up a GUI dialog that lists the command-line options.

Mounting a JAR or ZIP file as a Javadoc filesystem in the IDE

To mount a JAR or ZIP file (without running unzip or jar commands) as a Javadoc filesystem, use this procedure:

- 1. Open the Explorer window in the IDE.
- 2. Click the Javadoc tab on the bottom of the Explorer window.
- 3. Right-click the Javadoc node and select Mount JAR.
- 4. Browse to the JAR or ZIP file and select it by single-clicking.
- 5. Click Mount.

If the IDE does not find Javadoc index files, you will be asked if you wish to continue. Click Yes to continue.

The documentation will now be available via the Javadoc tab.

Deleting a Project in the IDE

There are two methods for deleting projects in Forte for Java.

Method Two: Through the IDE

- 1. Choose Project | Settings from the main window.
- 2. In the Project Settings window, expand the Filesystems Settings node and choose the Default System node.
- 3. Set the Hidden property to False. The Default System filesystem will be displayed in the Explorer.
- 4. In the Explorer, expand the Default System node and expand the Projects node, and

then select the project you want to delete.

- 5. Under Default System / Projects, right-click the project you want to delete and choose Delete from the contextual menu. The default project cannot be deleted.
- 6. In the Project Settings window, set the Hidden property for the default System filesystem back to true.

Warning: The Default System filesystem consists of files that the IDE itself uses. You should keep this filesystem hidden so that you do not accidentally change or remove these files.

Method One: From the operating system

- 1. In the IDE's installation directory, navigate to system/project and delete the directory that has the name of the project you want to delete.
- 2. Delete the project.last file in the system directory.

Warning: If you use this method while the IDE is running, you risk deleting the currently opened project

Installation subdirectories

/beans - contains JavaBeans^(TM) components installed in Forte for Java.

/bin - includes the Forte for Java launchers (as well as the ide.cfg file on Windows installations) and addtopath.bat, which is used by the batch file startup.

/Development - the directory mounted by default in Filesystems. Objects you create in Forte for Java will be saved here unless you mount other directories and use them.

/docs - contains Forte for Java documentation.

/javadoc - the directory mounted by default in Forte for Java javadoc repository. Javadoc documentation that you create in Forte for Java will be stored here.

/lib - contains JAR files that comprise the IDE's core implementation and the open APIs.

/lib/ext - contains extensions to the IDE for other functionality such as JavaHelp, Absolute Layout, javac, and regular expressions.

/lib/patch - any JAR or ZIP files included in this folder will be automatically included at the beginning of the IDE's startup class path; it will be a patch against the core.

/modules - any JAR file in this folder is an IDE module.

/modules/ext - contains libraries used by the modules.

/sources - contains sources for libraries which may be redistributed with user applications.

/system - includes files and directories used by the IDE for special purposes. It includes ide.log, which provides information useful when requesting technical support, and project.basic and project.last which contain information on Forte for Java projects. It is mounted as a hidden file system.

/system/actions - contains actions that appear in Global Options under Actions.

/system/applet - contains policy file for debugging applets.

/system/Bookmarks - contains web bookmarks.

/system/parserDB - holds databases that are used for Java code completion and other Editor functions.

/system/startup - holds classes that are run at IDE startup.

/temp

Copyright © 2000 Sun Microsystems, Inc., 901 San Antonio Road, Palo Alto, California 94303, U.S.A. All rights reserved.