

Nokia Developer's Suite for the Java™ 2 Platform, Micro Edition Version 2.2 for Windows

Installation and Configuration Guide

Version 1.0; June 15, 2004

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Nokia Developer's Suite 2.2 for J2ME™

Installation and Configuration Guide

Version 1.0; June 15, 2004

1 Overview

The following steps will guide the installation of Nokia Developer's Suite for the Java™ 2 Platform, Micro Edition, Version 2.2 for Windows. This set of applications includes also Nokia 6230 MIDP Concept SDK Beta 0.2, Series 60 MIDP Concept SDK Beta 0.3.1 and Series 90 MIDP Concept SDK Beta 0.1. The software can be integrated with Borland JBuilder IDE, Sun™ ONE Studio Mobile Edition IDE, Eclipse IDE and IBM WebSphere Studio Device Developer (Deployment tool only).

A Linux installer for Nokia Developer's Suite 2.2 also exists as a different installer, available at Forum Nokia Website <http://www.forum.nokia.com>.

2 System recommendation

Nokia Developer's Suite for J2ME™ and the supported Nokia SDKs are fully tested the following software and hardware components:

Basic environment:

- Microsoft Windows 2000 (SP 3) or Microsoft Windows XP (SP 1a).
- Java™ 2 SDK, Standard Edition 1.4.1 or later
- Msxml4.dll and msxml4r.dll files in Windows's system directory.
- Internet connection (for the registration procedure).

Specific to installation options:

1. Nokia Developer's Suite for J2ME™ as a standalone application (without IDE integration):

- A Pentium 300MHz or faster processor (350MHz recommended)
- 256 megabytes of RAM
- 210 megabytes of free disk space

If you install additional emulators, consult the installation guide of each emulator for its disk space requirements.

2. Nokia Developer's Suite for J2ME™ integrated with Borland JBuilder IDE:

- Processor speed, RAM and hard disk space requirements as for JBuilder

3. Nokia Developer's Suite for J2ME™ integrated with Sun™ ONE Studio IDE:

- Processor speed, RAM and hard disk space requirements as for Sun™ ONE Studio.

4. Nokia Developer's Suite for J2ME™ integrated with Eclipse:

- Processor speed, RAM and hard disk space requirements as for Eclipse

5. Nokia Developer's Suite for J2ME™ integrated with IBM® WebSphere® Studio Device Developer.

- Processor speed, RAM and hard disk space requirements as for WebSphere Studio Device Developer.
- **NOTE:** in IBM® WebSphere® Studio Device Developer integration only Deployment tool from Nokia Developer's Suite for J2ME is integrated.

3 Optional pre-installation requirements

To be able to use this product you will need a serial number. This can be retrieved for free of charge from Forum Nokia website, Tools & SDKs section or it can be received during the installation via e-mail. During the installation, you must use the serial number you received from Forum Nokia. You cannot use a serial number received by another user. The installation program describes how to get the serial number for this product by using your current username **if the serial number is not available yet**. The serial number will be sent to the e-mail address designated in your Forum Nokia account.

Borland JBuilder (See Borland documentation for more information.)

Sun™ ONE Studio, Mobile Edition. To utilize the KVM-debugging capabilities of Sun™ ONE Studio 4, Mobile Edition, J2ME Wireless Toolkit 1.0.4 or 2.0 must be installed.

Eclipse (See <http://www.eclipse.org> for more information.)

IBM® WebSphere® Studio Device Developer (See IBM documentation for more information.)

Network connection is needed to complete the installation if the user does not have a Forum Nokia account and/or a serial number for this product.

4 Installation options

Four different installation sets can be chosen during the installation (see Chapter 5). Each selection includes a different set of files. You should carefully check the system requirements before selecting the install set.

4.1 Without IDE integration (as a standalone application)

Requirements:

Java™ 2 SDK, Standard Edition version 1.4.1 or later (Please update your path/environment settings correspondingly).

Files included with this feature:

- Nokia Developer's Suite for J2ME™ basic files
- Series 60 MIDP Concept SDK Beta 0.3.1, J2ME/MIDP classes and documentation
- Series 90 MIDP Concept SDK Beta 0.1, J2ME/MIDP classes and documentation
- Nokia 6230 MIDP Concept SDK Beta 0.2, J2ME/MIDP classes and documentation
- Example applications with source code
- MIDI example files
- Documentation
- Nokia Update Manager 2.0 application (if not already installed)
- Uninstaller

4.2 Integration with Borland JBuilder

Requirements:

Borland JBuilder IDE (JBuilder 9 or later required). Tested with:

- Borland JBuilder 9 Mobile Edition

Files included with this feature:

- Nokia Developer's Suite for J2ME™ basic files
- Nokia Developer's Suite for J2ME™ integration files for Borland JBuilder
- Series 60 MIDP Concept SDK Beta 0.3.1, J2ME/MIDP classes and documentation
- Series 90 MIDP Concept SDK Beta 0.1, J2ME/MIDP classes and documentation
- Nokia 6230 MIDP Concept SDK Beta 0.2, J2ME/MIDP classes and documentation
- Example applications with source code
- MIDI example files
- Documentation
- Nokia Update Manager 2.0 application (if not already installed)
- Uninstaller

4.3 Integration with Sun™ ONE Studio, Mobile Edition

Requirements:

Sun™ ONE Studio IDE. Tested with:

- Sun ONE Studio 4 Update 1, Mobile Edition
- Sun ONE Studio 5, Mobile Edition - Early Access

Note that with Sun ONE Mobile Edition 4 the KVM-debugging capabilities require the installation of J2ME™ Wireless Toolkit 1.0.4 or 2.0.

Files included with this feature:

- Nokia Developer's Suite for J2ME™ basic files
- Nokia Developer's Suite for J2ME™ integration files for Sun™ ONE Studio, Mobile Edition
- Series 60 MIDP Concept SDK Beta 0.3.1, J2ME/MIDP classes and documentation
- Series 90 MIDP Concept SDK Beta 0.1, J2ME/MIDP classes and documentation
- Nokia 6230 MIDP Concept SDK Beta 0.2, J2ME/MIDP classes and documentation
- Example applications with source code
- MIDI example files
- Documentation
- Nokia Update Manager 2.0 application (if not already installed)
- Uninstaller

4.4 Integration with Eclipse

Requirements:

Eclipse IDE. Tested with:

- Eclipse 2.1.2
- Eclipse 3.0

Files included with this feature:

- Nokia Developer's Suite for J2ME™ basic files
- Nokia Developer's Suite for J2ME™ integration files for Eclipse
- Series 60 MIDP Concept SDK Beta 0.3.1, J2ME/MIDP classes and documentation
- Series 90 MIDP Concept SDK Beta 0.1, J2ME/MIDP classes and documentation
- Nokia 6230 MIDP Concept SDK Beta 0.2, J2ME/MIDP classes and documentation
- Example applications with source code
- MIDI example files
- Documentation
- Nokia Update Manager 2.0 application (if not already installed)
- Uninstaller

4.5 Integration with IBM® WebSphere® Studio Device Developer

Requirements:

IBM® WebSphere® Studio Device Developer 5.6 or 5.7 (This option is available during the installation only if the installer detects the IBM product).

NOTE: Only the Deployment tool from Nokia Developer's Suite for J2ME™ is integrated to IBM® WebSphere® Studio Device Developer but also all other features can be used in stand-alone mode.

Files included with this feature:

- Nokia Developer's Suite for J2ME™ basic files
- Nokia Developer's Suite for J2ME™ integration information for IBM WebSphere Studio Device Developer 5.6.
- Series 60 MIDP Concept SDK Beta 0.3.1, J2ME/MIDP classes and documentation
- Series 90 MIDP Concept SDK Beta 0.1, J2ME/MIDP classes and documentation
- Nokia 6230 MIDP Concept SDK Beta 0.2, J2ME/MIDP classes and documentation
- Example applications with source code
- MIDI example files
- Documentation
- Nokia Update Manager 2.0 application (if not already installed)
- Uninstaller

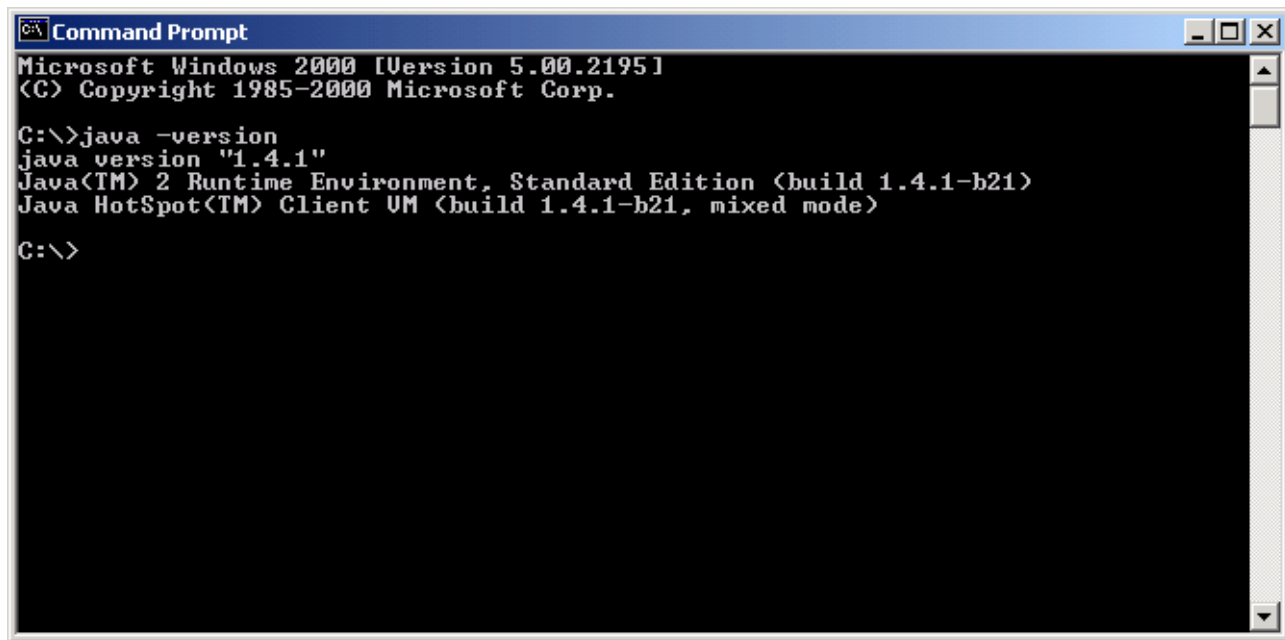
5 Installation steps

Before downloading the software, you must either log in as a Forum Nokia member or register (free of charge) at Forum Nokia. If you have received the software to be installed in some other way and have not yet registered as a Forum Nokia member, you should register before or during the installation procedure.

During the installation, you can submit your current Forum Nokia username and password, and the corresponding serial number for the product will then be sent to the e-mail address specified in your Forum Nokia account. The product's serial number can also be retrieved from the Tools and SDK section at www.forum.nokia.com.

Note: If you already have a Forum Nokia account and have received the serial number, installation can be done **without a network connection**.

Note: Before you start the installation, you should check that your Java Runtime Environment is found from system path. Open Command prompt from your PC and type command `java -version`. The result depends on your JRE version. Correct result with JRE 1.4.1 is shown in Figure 2. If you will get result as in Figure 3, then you should install JRE using .exe file that can be downloaded from Sun website. If you know that JRE 1.4.1 or later is already in your machine (e.g. with JBuilder), then you need to configure it to system path.

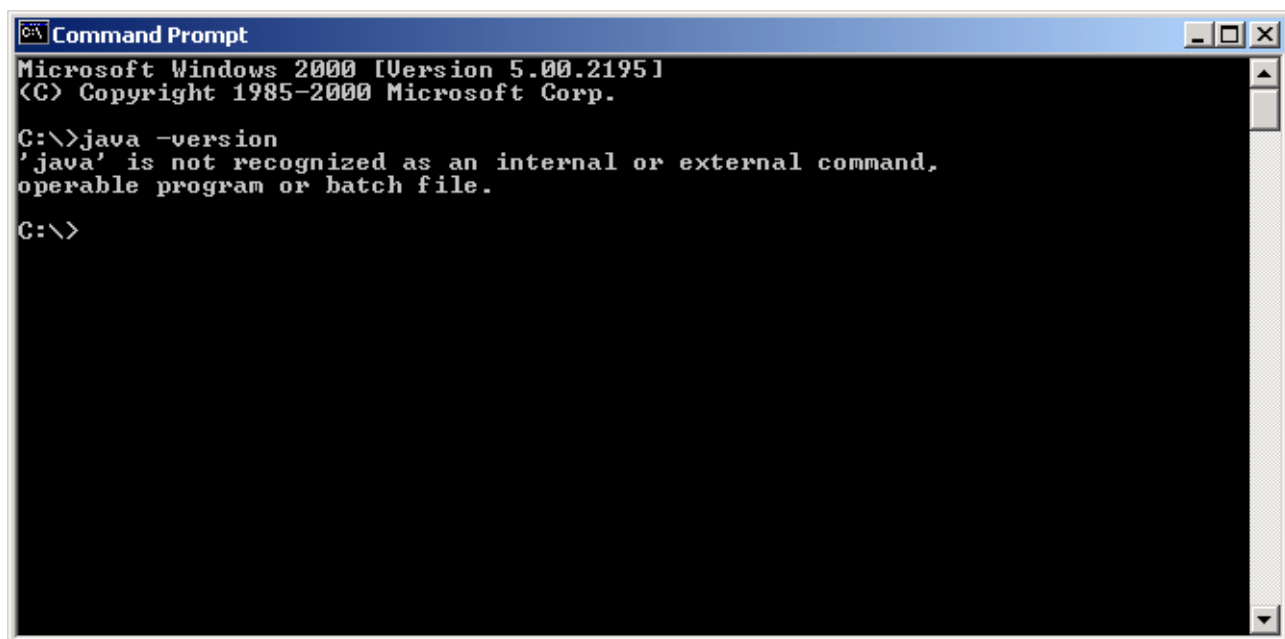


```
Microsoft Windows [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>java -version
java version "1.4.1"
Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.1-b21)
Java HotSpot(TM) Client VM (build 1.4.1-b21, mixed mode)

C:\>
```

Figure 2. Correct result for Java version check.



```
Microsoft Windows [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>java -version
'java' is not recognized as an internal or external command,
operable program or batch file.

C:\>
```

Figure 3. Java not configured correctly to the path or not installed at all.

Start by running the installation executable (setup.exe).

Note: At the start of the installation procedure, JRE version will be checked from your system. If current JRE version is not 1.4.1 or later, information dialog recommending an upgrade to version 1.4.1 is shown. The installer will also stop if you have older version of Nokia Developer's Suite for J2ME installed and advises you to uninstall it prior installing the version 2.2.

Note: If you have an early version of Nokia Developer's Suite for J2ME installed, you might want to back up any key stores and certificates that you have used and sample codes you have modified prior uninstalling the early version Nokia Developer's Suite for J2ME™.

Step 1. Introduction panel. This panel displays general information about the software to be installed. Press the **Next** button to continue.

Step 2. End-user software agreement panel. Read the terms of the license agreement. Accept the terms by selecting the appropriate option, and then press the **Next** button to proceed with the installation.

Step 3. Welcome panel.

- a. If the Forum Nokia username or the product's serial number is **not** available, leave both the *username* field and the *serial number* field empty, and press **Next**. Go to step 4.
- b. If both the Forum Nokia username and the correct product serial number are available, fill in both fields and press **Next**. Go to step 8.

Step 4. Proxy Settings panel. If the installation program succeeds in automatically detecting the current proxy settings, these settings are suggested for use. Alternatively, specify the desired settings or select *No proxy*. If your proxy needs a *username* and *password*, type them in the appropriate fields. **Note that the registration procedure requires an Internet connection.** Press the **Next** button to continue.

Step 5. Registration panel.

- a. *If you have a Forum Nokia account:* Fill in your Forum Nokia username and password, and press the **Next** button. You will be connected to the Forum Nokia server, and the serial number will be sent to the e-mail address specified in your Forum Nokia account.
- b. *If you do NOT have a Forum Nokia account:* Press the **Register** button, and then register (at forum.nokia.com/reg_form) as a Forum Nokia member using your Web browser. After typing in your new Forum Nokia username and password, press the **Next** button to continue with the installation.

Step 6. Check your e-mail for the serial number. (You must access your e-mail account using a separate application. You cannot check your e-mail from the installation program.)

Step 7. Licensing panel. Type in the product serial number and press the **Next** button.

Step 8. Choose Install Set panel. Choose the correct install set according to the instructions in Chapter 4. Press **Next** to continue.

If you have installed IBM WebSphere Studio Device Developer 5.6 or 5.7 on your computer, the installer will ask you, do you want to integrate Nokia Developer's Suite 2.2 for J2ME™ with it. Choose **Yes** if you want to integrate Nokia Developer's Suite for J2ME™ to WebSphere Studio Device Developer or **No** if you do not want to integrate to WebSphere Studio Device Developer.

If you chose to integrate Nokia Developer's Suite for J2ME™ with JBuilder, perform step 9. If Sun™ ONE Studio integration was chosen, perform step 10. If you chose the Eclipse integration, continue with step 11.

Step 9. Choose the Installation Directory of Borland JBuilder panel. The installation directory for JBuilder will be suggested. To change the suggested directory, either press the **Choose...** button or type a new directory. After the directory for JBuilder has been accepted, press the **Next** button and go to step 12.

Step 10. *Select the Installation Directory of your SUN IDE panel.* The installation directory for SUN™ One Studio is suggested. To change the suggested directory, either press the **Choose...** button or type a new directory. After the directory for your SUN IDE has been accepted, press the **Next** button and go to step 12.

Step 11. *Choose the Root Directory of the Eclipse IDE.* Eclipse installer does not write its location to the Windows registry, so you need to select Eclipse's file location manually. To change the default directory, press the **Choose...** button to browse or type directory. After the directory for Eclipse has been accepted, press the **Next** button and go to step 12.

Step 12. *Choose an Installation Directory panel.* Either press the **Choose...** button to select the installation directory, or type the directory name in the directory path field. After the location has been accepted, press the **Next** button.

Step 13. *Pre-Installation Summary panel.* Check that the installation locations are correct. Press the **Install** button. The installation will be completed. After installing you will be prompted whether you wish to read product release notes.

Step 14. Restart your computer after the installation is complete.

6 Uninstallation steps

Select one of the following options to start the uninstaller:

- Navigate the Windows Start menu by choosing
Settings | Control Panel | Add/Remove Programs | Nokia Developer's Suite 2.2 for J2ME™
and then press **Remove** button.
- Navigate the Windows Start menu as follows:
Programs | Nokia Developer Tools | Nokia Developer's Suite 2.2 for J2ME™ | Uninstall
- Run the following executable in the installation directory of Nokia Developer's Suite 2.2 for J2ME™
e.g. c:\Nokia\Tools\Nokia_Developers_Suite_for_J2ME2_2\uninstall\ :
Uninstaller.exe

Note: Nokia Update Manager application is not uninstalled during the Nokia Developer's Suite for J2ME™ uninstallation.

7 Getting started

1. If Nokia Developer's Suite for J2ME™ is used as a standalone application, navigate the Windows Start menu as follows:

Programs | Nokia Developer Tools | Nokia Developer's Suite 2.2 for J2ME™ | Run as a Standalone

2. If Nokia Developer's Suite for J2ME™ is used with JBuilder, Sun™ ONE Studio or Eclipse start from the following menu in your IDE:

Tools | Nokia Developer's Suite for J2ME™

3. If Nokia Developer's Suite for J2ME™ is used from IBM WebSphere Studio Device Developer, getting started information can be found from:

IBM WebSphere Studio Device Developer | Help Contents in section Nokia MIDP SDK Support - Deploying into a Device.

See User's Guide for more information. You can open it from the Windows Start menu as follows:

Programs | Nokia Developer Tools | Nokia Developer's Suite 2.2 for J2ME™ | User's Guide

8 Troubleshooting

Problem: You get the error message "Required dynamic link libraries (dll) are missing in your environment" during the installation and Deployment to device always fails.

Possible cause: msxml4.dll and msxml4r.dll files are missing.

Suggested solution: Go to the website below, download and install msxml.msi to your environment.

<http://www.microsoft.com/downloads/details.aspx?FamilyID=3144b72b-b4f2-46da-b4b6-c5d7485f2b42&displaylang=en>