

Nokia SDK 2.0 for Java Alpha — Installation Guide

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1. Nokia SDK 2.0 for Java

The Nokia SDK 2.0 for Java is a development tool that lets you preview how mobile application looks and works when it is deployed to a Nokia mobile handset.

The SDK is available for download from Nokia Developer (<http://www.developer.nokia.com>).

2. About Nokia SDK 2.0 for Java installation and configuration

This guide describes how to install and configure the Nokia SDK 2.0 for Java.

Target audience

The guide is meant for developers who work on mobile phone handsets that conform to the Nokia SDK 2.0 for Java application.

Scope

The help contains the following main sections:

- Installing the SDK:
 - [System Requirements](#) on page 5
 - [Downloading the SDK](#) on page 5
 - [Running the SDK Installer](#) on page 6
 - [Integrating the SDK to use with an IDE overview](#) on page 13
 - [Integrating the SDK to use with Eclipse IDE](#) on page 13
 - [Launching the SDK](#) on page 14
 - [SDK component management](#) on page 15
 - [What's Next?](#) on page 19
- Configuring your MIDP IDE for the SDK:
 - [Configurations for MIDP development](#) on page 20
 - [Configuring Eclipse for the SDK](#) on page 20
 - [Configuring NetBeans for the SDK](#) on page 21
- [Developer resources](#) on page 24
- [Discussion about this resource](#) on page 25

This help uses the following typographical conventions:

Conversion	Explanation
Code Ph	Text that you enter (as opposed to system prompts and responses) ; for example, file paths, commands, and program code
<i>Italic</i>	– Names of books and documents – New terminology
Bold	Names of Windows menus, commands, buttons, and icons
URL Link	Active Link

3. Installing the SDK

3.1 System Requirements

Before installing the SDK, verify that you have the minimum hardware and software requirements listed below. With these minimum requirements, you can run the SDK as a standalone application. If you plan to use the SDK within an IDE, make sure you also have the requirements mandated by the IDE.

To install the SDK properly, you must have administrator privileges on your computer. Also, be sure to use your normal logon ID (the one you use to run the SDK). At a minimum, you need administrator privileges assigned temporarily for the installation.

3.1.1 Hardware Requirements

The hardware requirements to install and run the SDK as a standalone tool are:

Minimum	Recommended
PC with a 1-GHz Pentium-class processor	PC with a 2.8-GHz Pentium-class processor
512 MB of RAM	2 GB of RAM
Display capable of displaying 16-bit color at 1,024 x 768 pixel resolution	Display capable of displaying 24-bit color at 1280x1024 pixel resolution
500 MB of free hard disk space	550 MB of free hard disk space
Network interface card	Network interface card
	Sound card

If you plan to work with sound (from MIDlets, for example), you need a sound card that has one channel for each SDK instance you run. If you do not have enough channels, SDK instances that you start after you run out of channels do not have sound.

3.1.2 Software Requirements

The software requirements to install and run the SDK as a standalone tool are:

- Microsoft Windows 7 Ultimate Edition 32bit/64bit
- Microsoft Windows XP Professional Service Pack 3
- Java SE Runtime Environment (JRE) 6 (any release of Java SE 6 up to update 27).

3.2 Downloading the SDK

Before installing the SDK, you must first download the `Nokia_SDK_2_0_Java.zip` file from Nokia Developer (<http://www.developer.nokia.com>).

The SDK is available from Nokia Developer at no cost. If you are not a registered member of Nokia Developer, you need to register (also at no cost) before you can download the SDK. Registration involves providing a user name, password, and E-mail address.

3.3 Running the SDK Installer

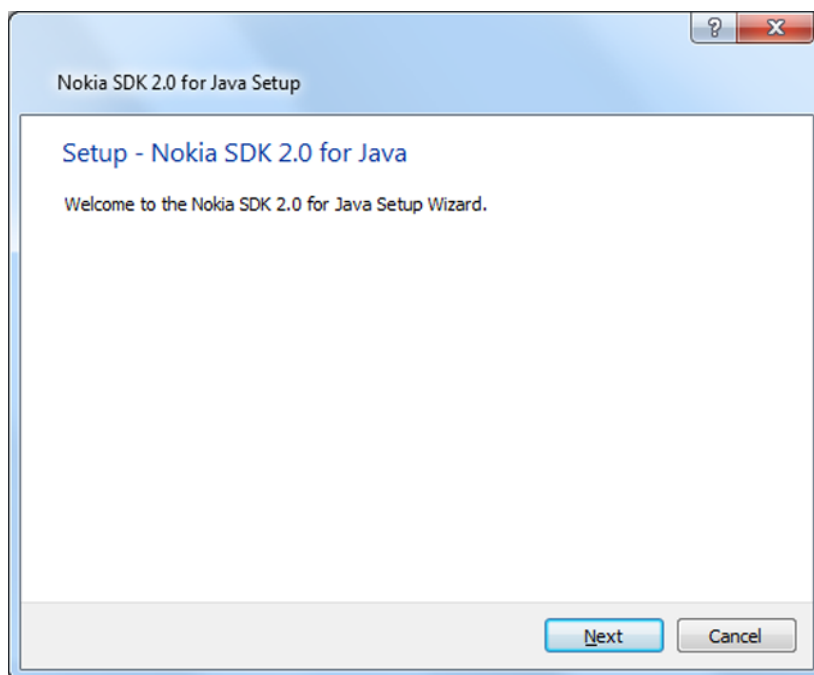
This section provides the basic steps for installing the SDK. By following the steps below you can install the SDK on your PC and start application development. Once you have downloaded the installation package (.zip file) on your PC, installing the Nokia SDK 2.0 for Java takes place through the SDK Installer. The zip file contains two types of installer files: `Nokia_SDK_2_0_Java_installer_em` (online installer) and `Nokia_SDK_2_0_Java_installer_offline_em` (offline installer). The online installer needs an internet connection to download the contents required for installation.

Before you install the SDK, verify that you have installed the supported applications in the correct order so the applications can find the SDK. See [Installing the SDK to use with an IDE overview](#) on page 13.

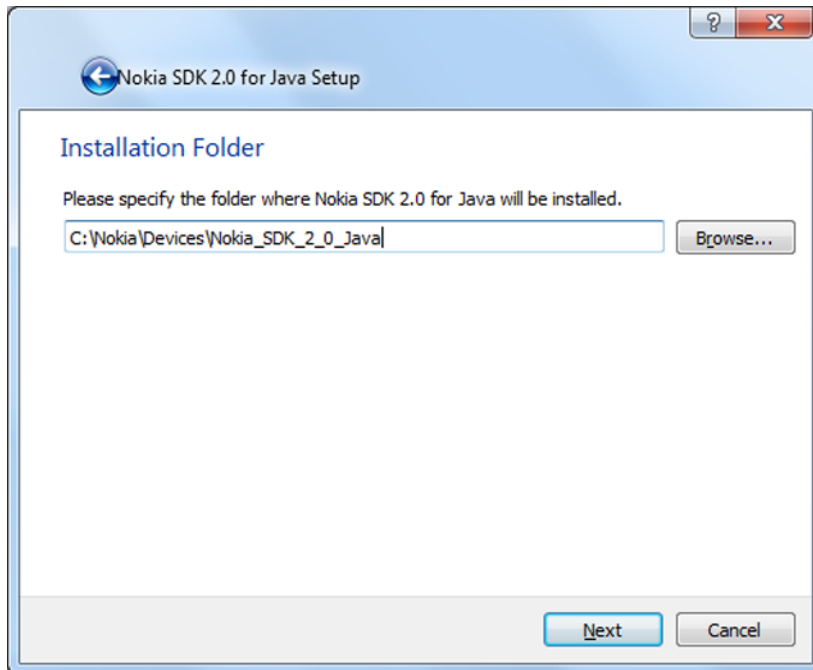
The following takes you through the steps needed to install the SDK.

1. Start the SDK installation process by running the executable file `Nokia_SDK_2_0_Java_installer_em` for online installation and `Nokia_SDK_2_0_Java_installer_offline_em` for offline installation.

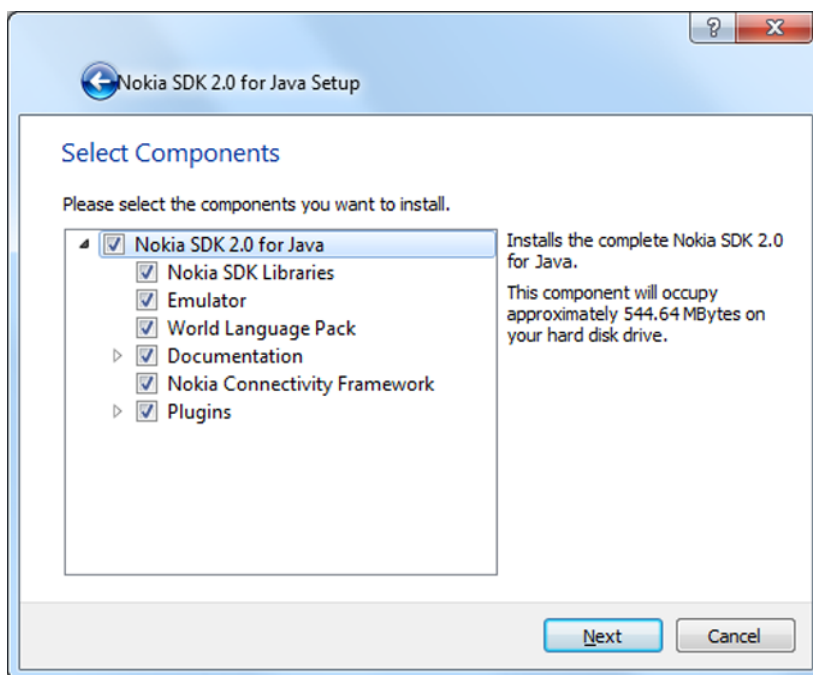
The welcome widget appears :



2. Click **Next**. The Installation Folder Widget appears.



3. Click **Next**. The component selection page is displayed. By default all components are selected.



The components which are available are tabulated below:

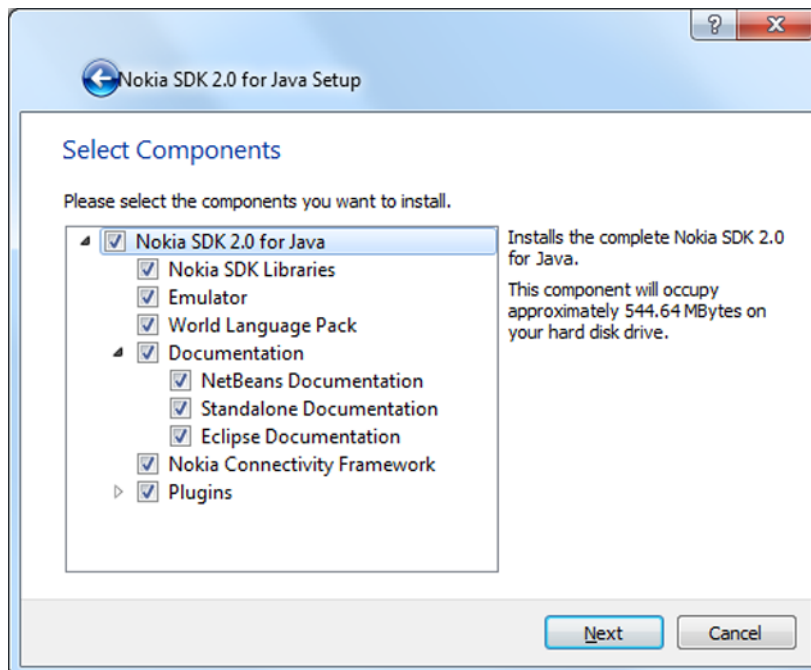
Component Name	Description
Nokia SDK Libraries	Selecting this component installs jars for each supported API which are required for compilation of the application.
Emulator	Selecting this component installs Emulator and its utilities for testing and debugging.

World Language Pack	Selecting this component installs the localization/language support which can be set under Emulator preferences.
Documentation	Selecting this component installs Standalone SDK User Guide, Eclipse Plug-in, and NetBeans Plug-in.
Nokia Connectivity Framework	Selecting this component installs Nokia Connectivity Framework for Bluetooth communication between Emulator instances on the same machine.
Plugins	Selecting this component installs Nokia In-App Analytics and Maps Plug-ins.

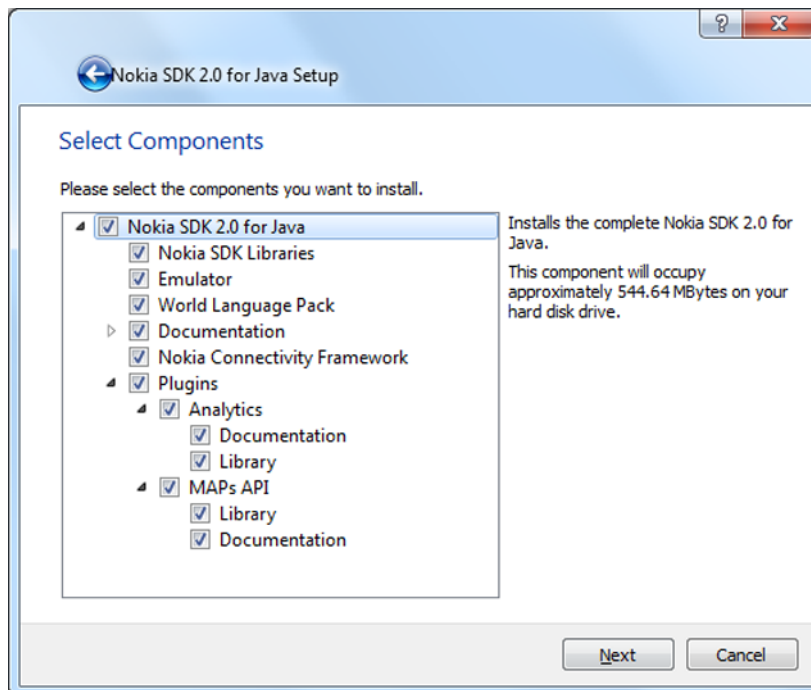


Note: At least one component must be selected for the installation to continue.

- Default installation installs documentations for SDK Standalone, Eclipse IDE, and NetBeans IDE in their respective path. User can only use documentation from the IDE's if recommended IDE's are installed.

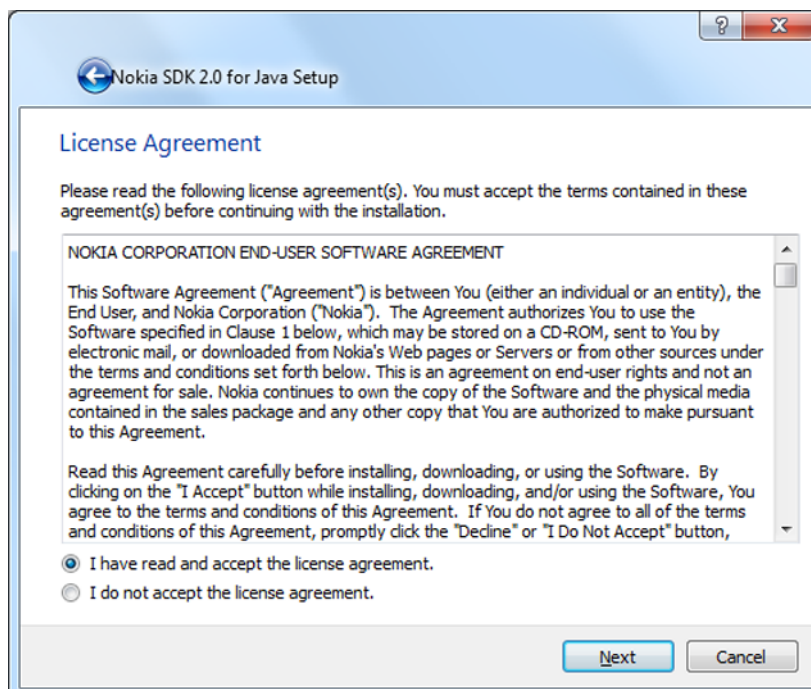


- Default installation installs documentations and libraries for Nokia In-App Analytics and Maps APIs.



Note: Plugin documentation depends on Standalone Documentation component. Standalone docbrowser is installed and the plugin documentation jar files are copied to the
`%Root Dir%\doc\docbrowser\eclipse\plugins\` folder.

6. Click **Next** to continue. The license agreement dialog is displayed. Read the license agreement carefully. After reading (and accepting) the license agreement, click the **I have read and accept the licensee agreement** radio button and click **Next**.

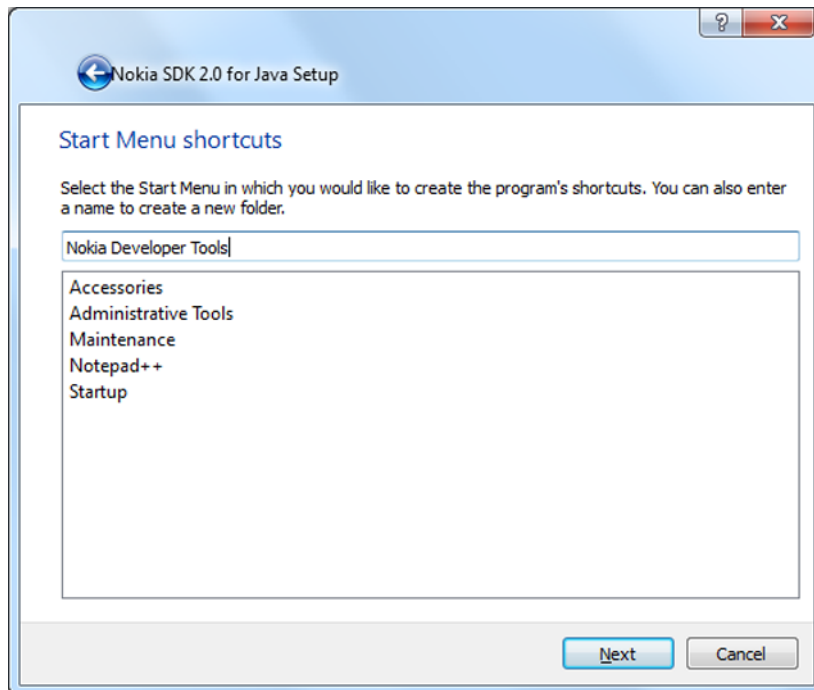


- Click **Next** continue. The Start Menu shortcuts page is displayed. By default the page shows the Nokia Developer Tools shortcut .

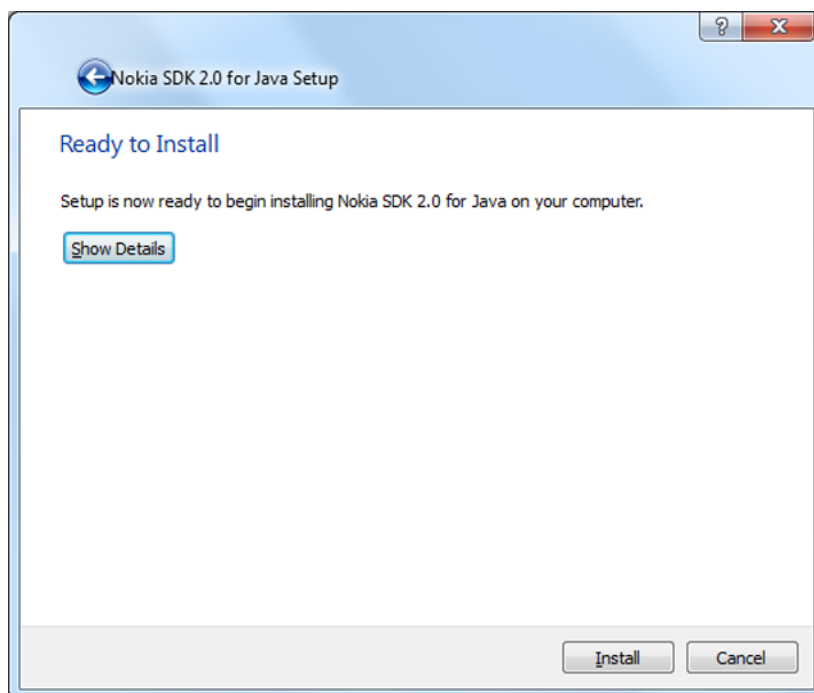


Note: The Names below are taken from

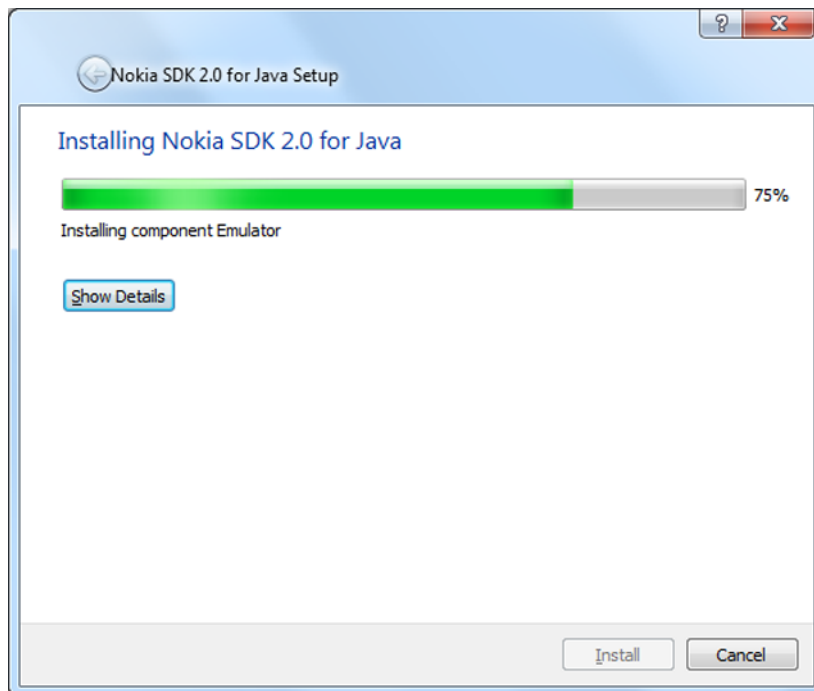
C:\Documents and Settings\User\Start Menu\Programs and either of them can be selected as a start menu shortcut.



- Click the **Next** button to continue. The **Ready to Install** page is displayed. Click **Install** to start the installation of the selected components.

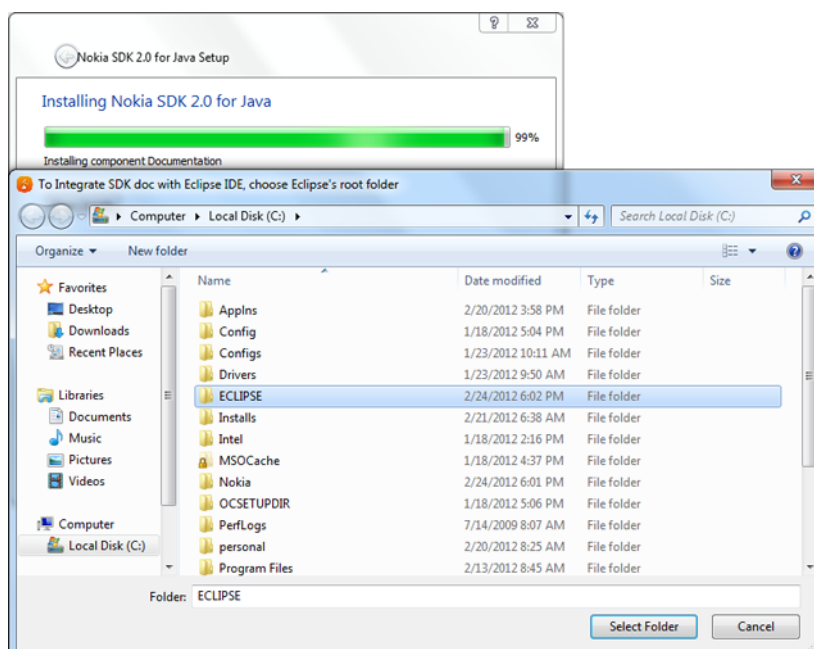


9. The installation progress bar appears with status.



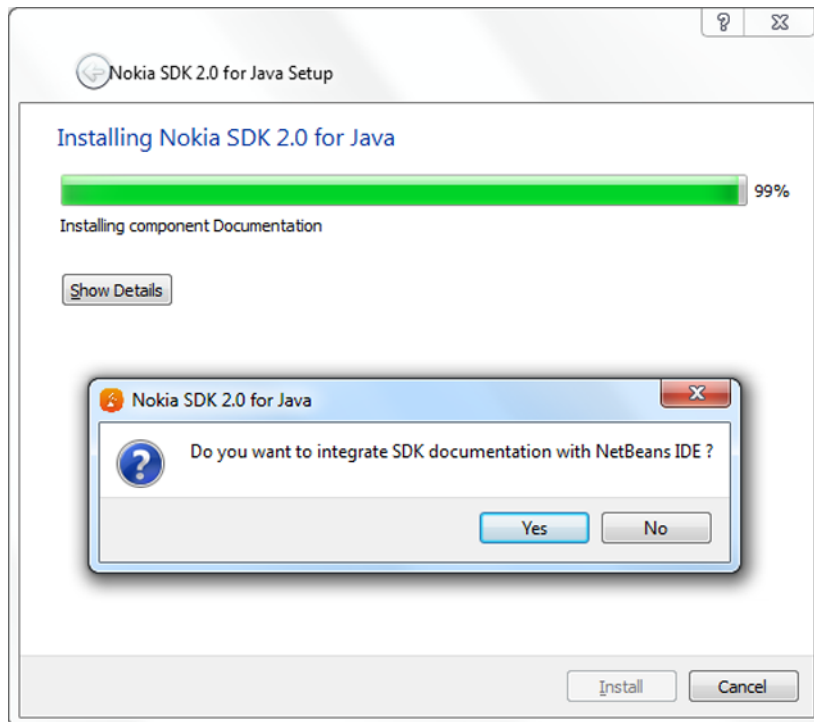
A confirmation view appears for Eclipse IDE integration.

10. To Integrate the SDK documents with Eclipse IDE, browse to Eclipse's root folder. If Eclipse IDE is not to be installed, select **cancel** to continue.



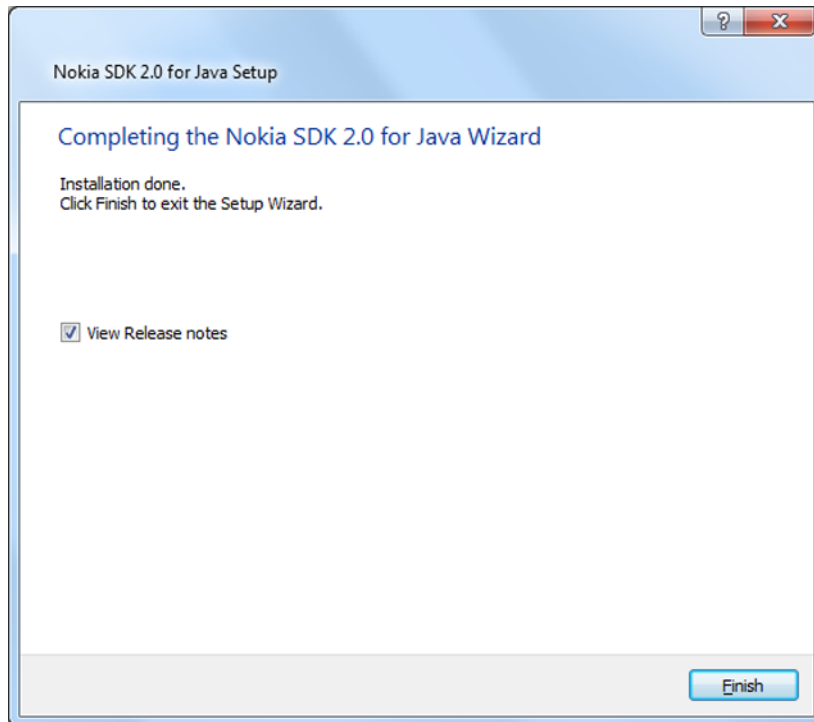
After integration, a confirmation view appears labeled as “SDK documentation is integrated with Eclipse IDE”.

11. Click **OK** to continue. A confirmation view appears for NetBeans IDE integration. If two versions of NetBeans are pre-installed on the machine, the SDK application chooses the latest NetBeans version to integrate.



Note: You need to close the NetBeans application on your machine before opting for documentation integration. If NetBeans application is running, the documentation integration fails.

12. Click **Yes**. If NetBeans IDE is installed, the installer integrates the SDK documents with NetBeans IDE. After installation, a confirmation message appears as *Installation done*. Click *Finish* to exit the setup Wizard.
13. Click **Finish**.



3.4 Integrating the SDK with an IDE

3.4.1 Integrating the SDK with an IDE overview

In addition to using the SDK as a standalone tool, you can also use the SDK within an IDE. Nokia SDK 2.0 for Java has been tested with the following IDEs but may work with other IDEs as well:

- Eclipse Indigo with Mobile Tools for Java (MTJ)
- Netbeans 7.0 or Later

For more information, see:

- [Configurations for browser and message content development overview](#) on page 0
- [Configurations for MIDP development overview](#) on page 20

3.4.2 Integrating the SDK with an Eclipse IDE

To use Eclipse Indigo with the SDK, install the applications in the following order:

1. Java SE Development Kit (JDK)
2. Eclipse Indigo, download from <http://www.eclipse.org/downloads/>
3. Install MTJ plug-in
4. Nokia SDK 2.0 for Java



Note: Install latest Eclipse MTJ plug-in available at

<http://www.eclipse.org/mtj/> through update site. For more information on installing plug-ins through update site, refer Eclipse documentation.

3.5 Launching the SDK Emulator

You can launch the Nokia SDK 2.0 for Java Emulator either as a standalone application or within an IDE.

3.5.1 Launching the SDK as a standalone application

To launch the SDK standalone on Windows XP:

select **Start -> Programs -> Nokia Developer Tools -> Nokia SDK 2.0 for Java -> Nokia SDK 2.0 for Java Emulator**

To launch the SDK standalone on Windows 7:

Navigate to **Start -> All Programs -> Nokia Developer Tools -> Nokia SDK 2.0 for Java -> Nokia SDK 2.0 for Java Emulator**

3.5.2 Launching the SDK within an IDE

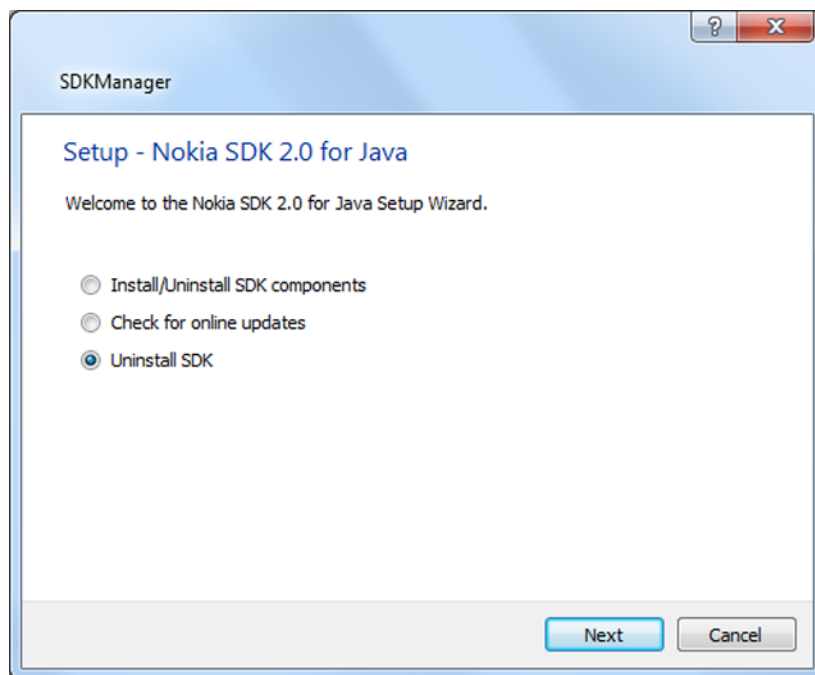
You must configure some IDEs to recognize the SDK as a supported device before you can launch the SDK from within the IDE interface. For this information, see:

- Documentation for your IDE:
 - [Eclipse](#)
 - [Netbeans](#)
- [Configurations for MIDP development overview](#) on page 20

4. SDK component management

To open the SDK Manager, navigate to:

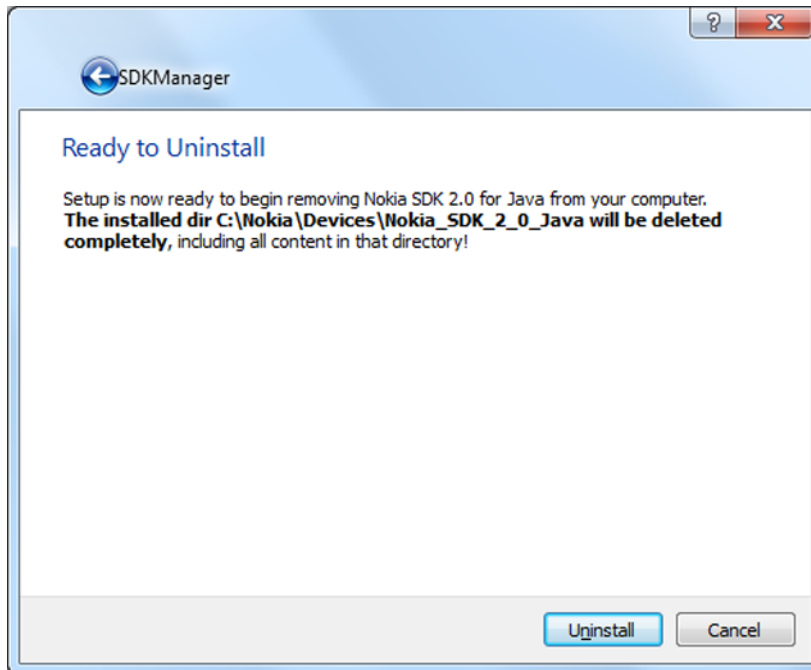
Start -> All Programs -> Nokia Developer Tools -> Nokia SDK 2.0 for Java -> SDK Manager .



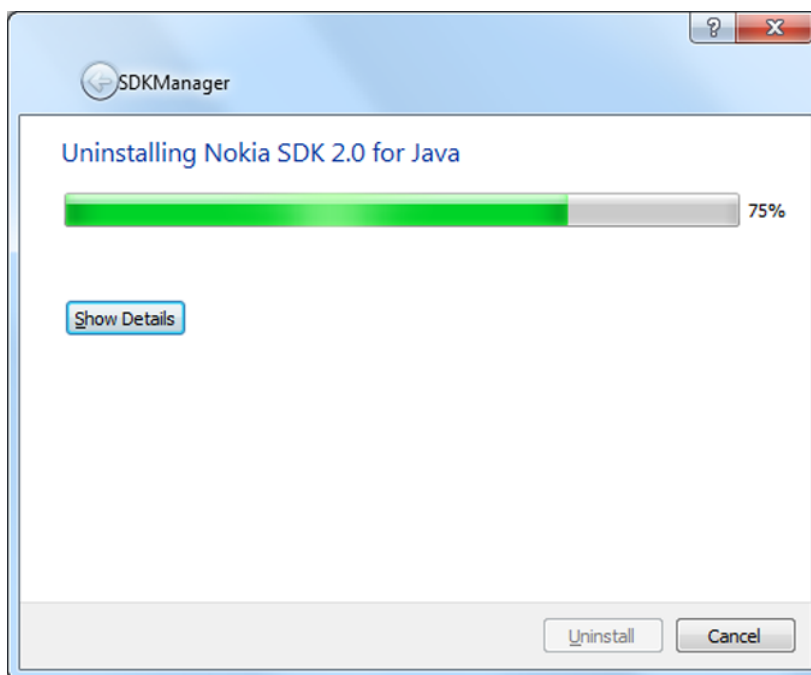
Uninstalling the SDK

To uninstall the SDK:

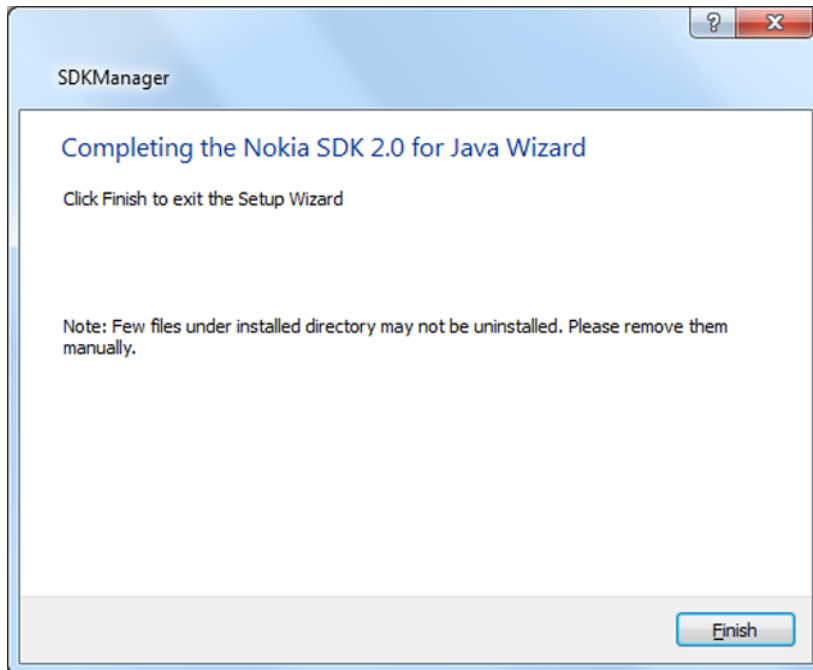
1. On the SDK Manager screen, select **Uninstall SDK** for Windows 7. Click **Next**.
2. A confirmation window appears for uninstallation. .



3. Click **Uninstall**. An uninstallation progress bar appears.



4. After uninstallation is completed, uninstalled confirmation view appears.

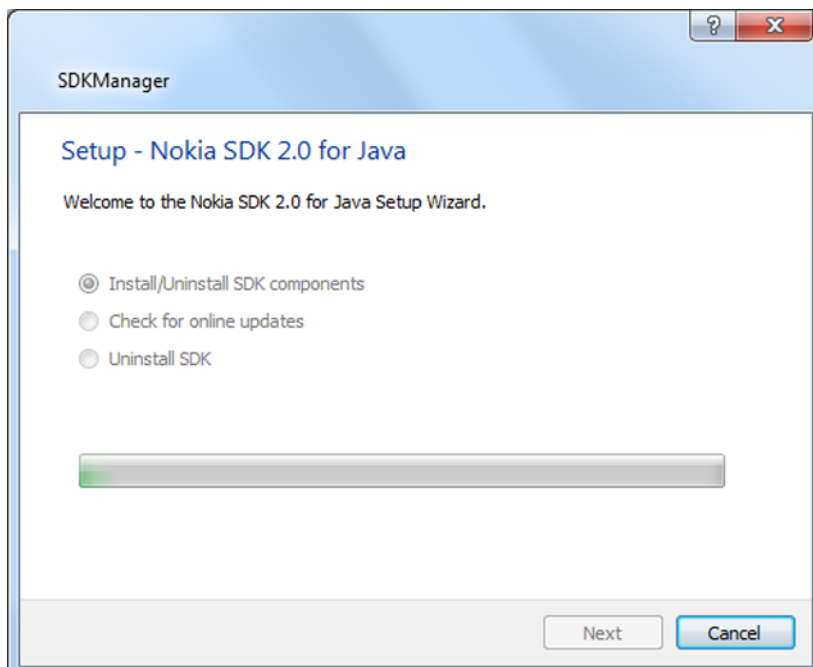


5. Click **Finish**.

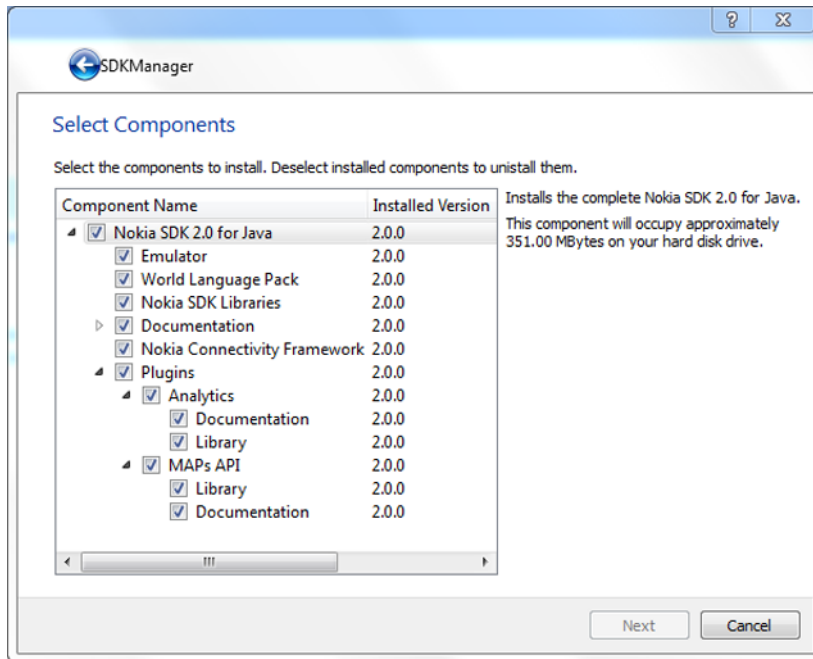
Installing or Uninstalling SDK components

To install or uninstall SDK components:

1. On the SDK Manager screen, select **Install/Uninstall** . Click **Next**.



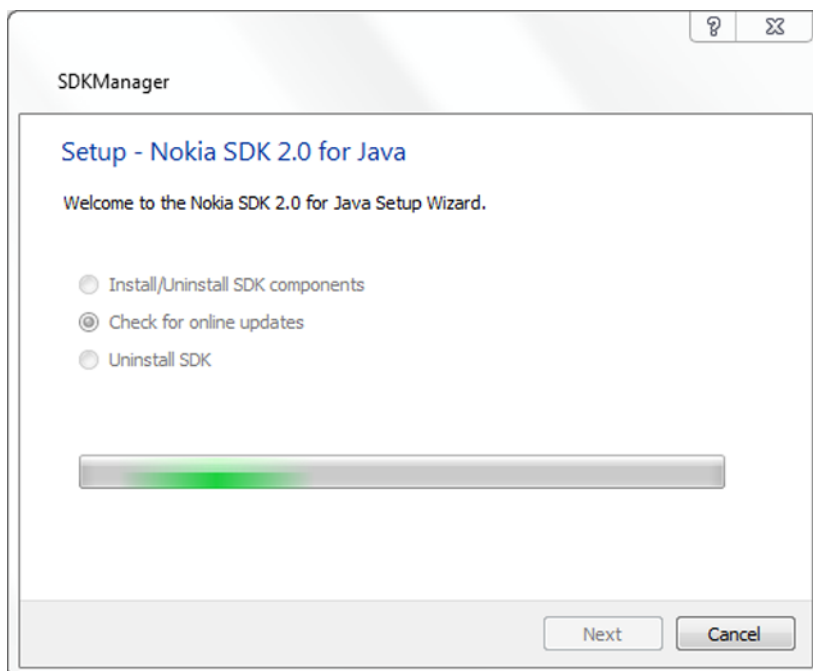
2. SDK Manager scans the repository for the available components. The component selection window is displayed. By default all components are selected. Deselect components to be uninstalled. Click **Next**.



Updating the SDK

To update the SDK:

1. On the SDK Manager screen, select **Check for online updates** . Click **Next**.



2. SDK Manager scans the repository for updates to installed components. The component selection window is displayed. Select the version of the components to be updated. Click **Update**.

5. What's Next?

If you plan to work within an IDE, you need to configure the supporting applications to work with the SDK.

To prepare an IDE in which to create:

- MIDlets (Java Application Descriptor (JAD) and Java ARchive (JAR) files) - Games or applications that can be downloaded from the Internet and used on a mobile phone. See [Configurations for MIDP development overview](#) on page 20.

More information on using the SDK, navigate to **Start -> All Programs -> Nokia Developer Tools -> Nokia SDK 2.0 for Java -> SDK Help**.

6. Configuring your IDE for the SDK

6.1 Overview

You can work more efficiently by creating an IDE where you can develop a MIDlet in an application and directly test it on the SDK.

Some IDEs automatically detect the SDK as a device. You need to configure other IDEs to recognize the SDK before you can start the SDK from within the application's interface.

You need to configure the MIDP development applications to use the SDK. For more information, see:

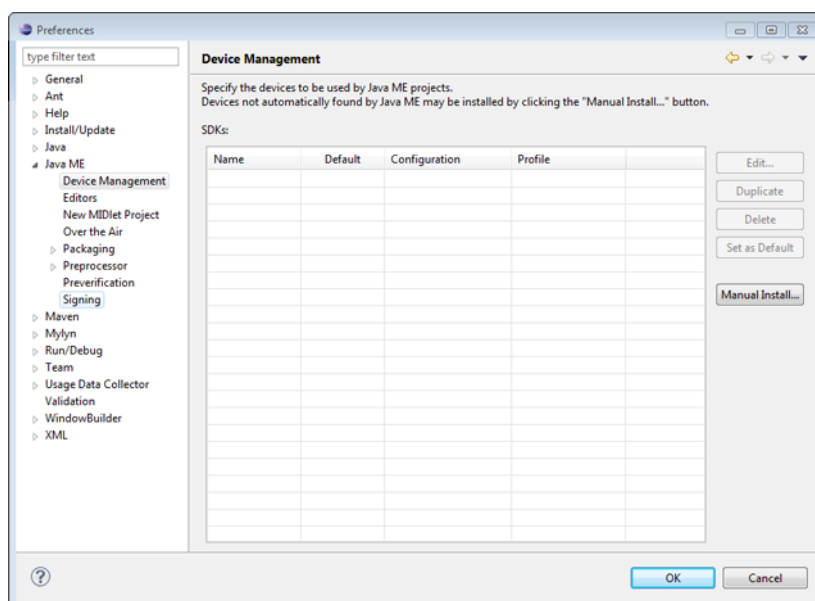
- [Configuring Eclipse for the SDK](#) on page 20
- [Configuring NetBeans for the SDK](#) on page 21

For more information on installation, see IDE documentation. For more information on using the SDK in MIDP development, see Overview to creating and testing MIDlets in the SDK Help.

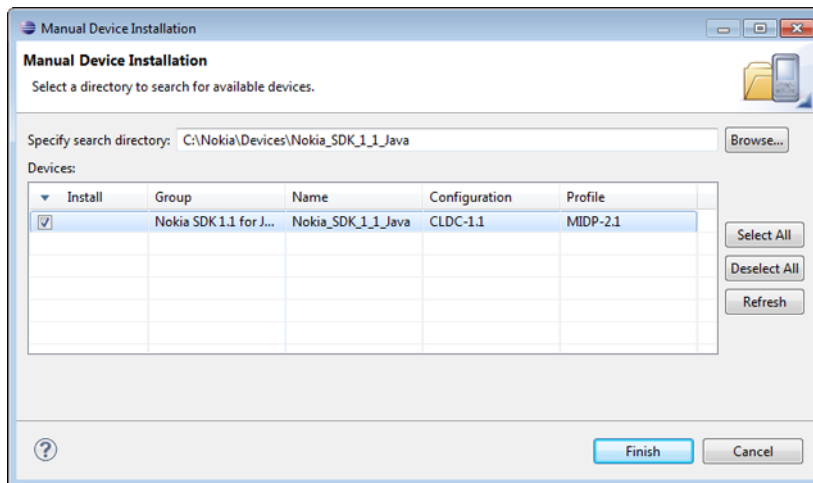
6.1.1 Configuring Eclipse for the SDK

Download the Eclipse IDE from <http://www.eclipse.org/downloads/>. To configure Eclipse to recognize the SDK:

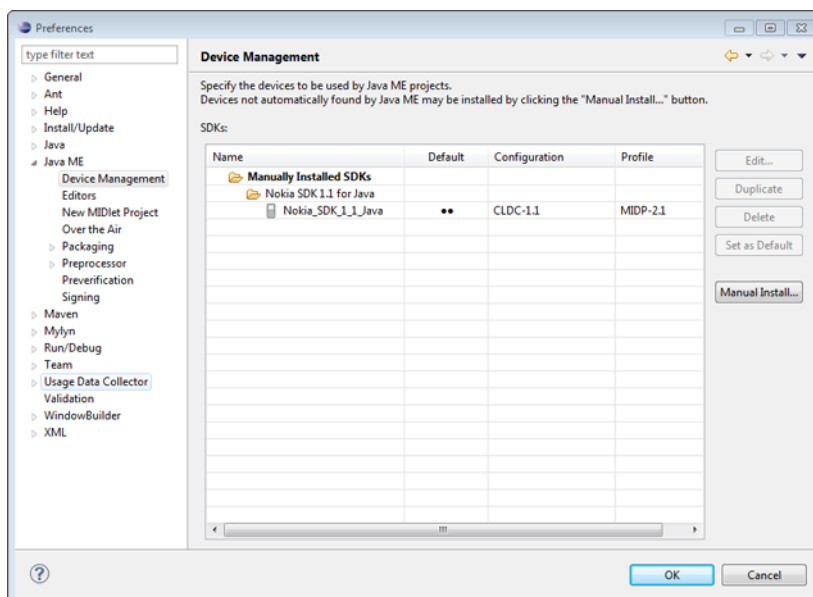
1. Run **eclipse.exe** application. The Eclipse application opens.
2. From the **Window** menu, click **Preferences**. The Preferences window appears.
3. On the Preferences window left pane, click **Java ME** menu to expand it.
4. Click **Device Management** from the sub menu. The Device Management view appears on the right pane.



5. Click **Manual Installation**. The Manual Device Installation window appears.
6. **Browse** to the installed SDK application and then select it.



7. Click **Finish**. The Device Management view appears with the selected SDK included.
8. To save the definitions, click **OK**.

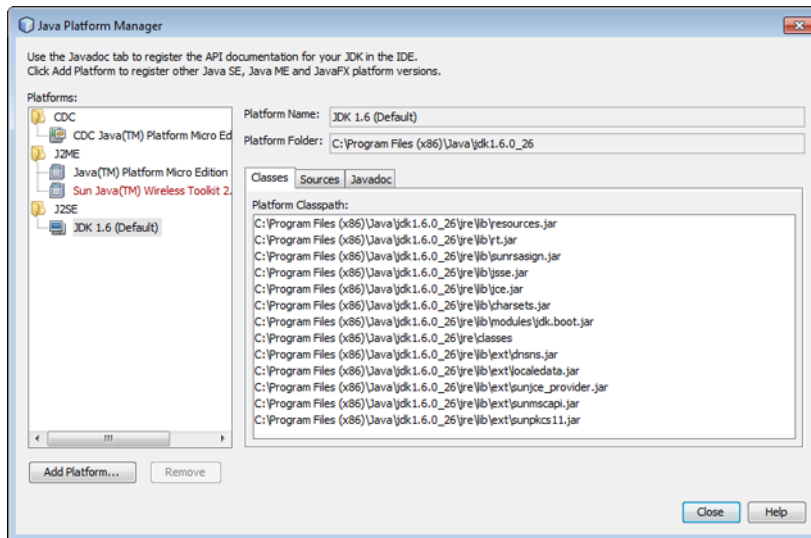


6.1.2 Configuring NetBeans for the SDK

Download the NetBeans IDE from <http://www.netbeans.com/downloads/index.html>. To configure the SDK with Netbeans with Mobility Pack:

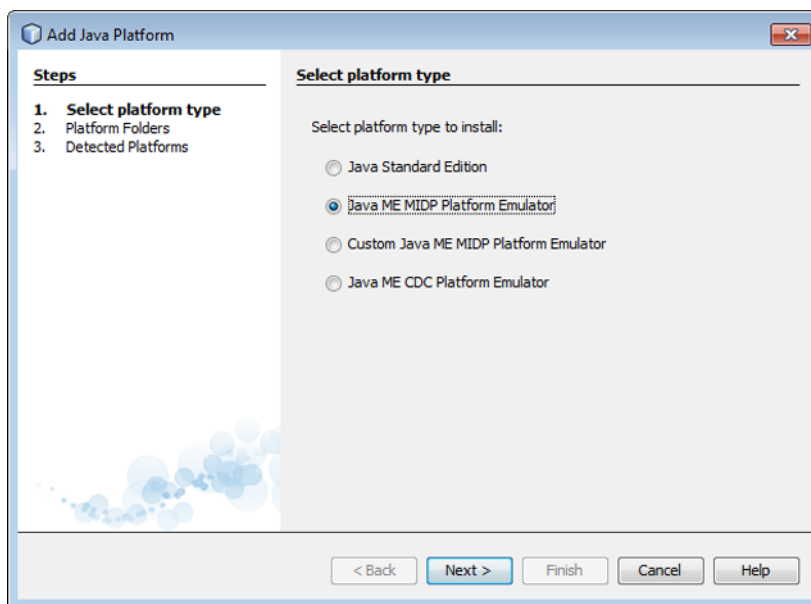
1. In the NetBeans main window, navigate to **Tools > Java Platforms**.

The following **Java Platform Manager** window appears:

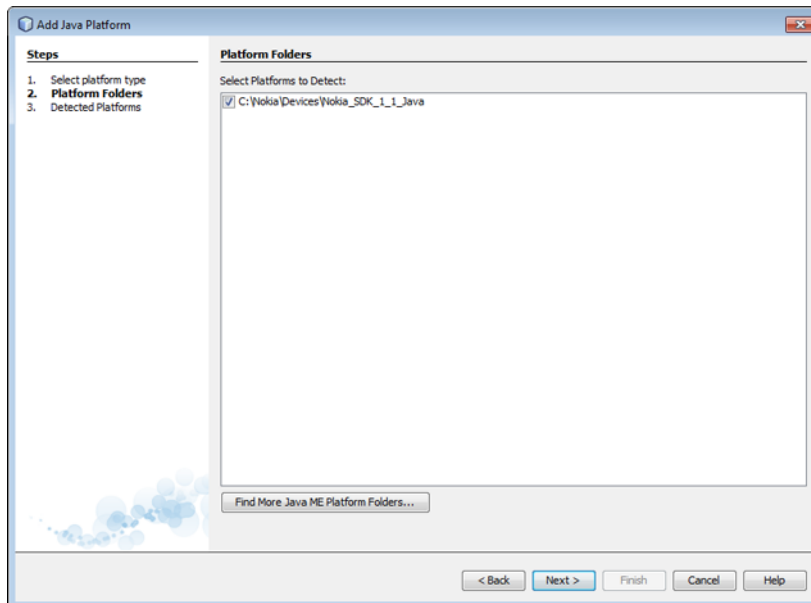


2. Click **Add Platform ...**. The **Add Java Platform** window appears:

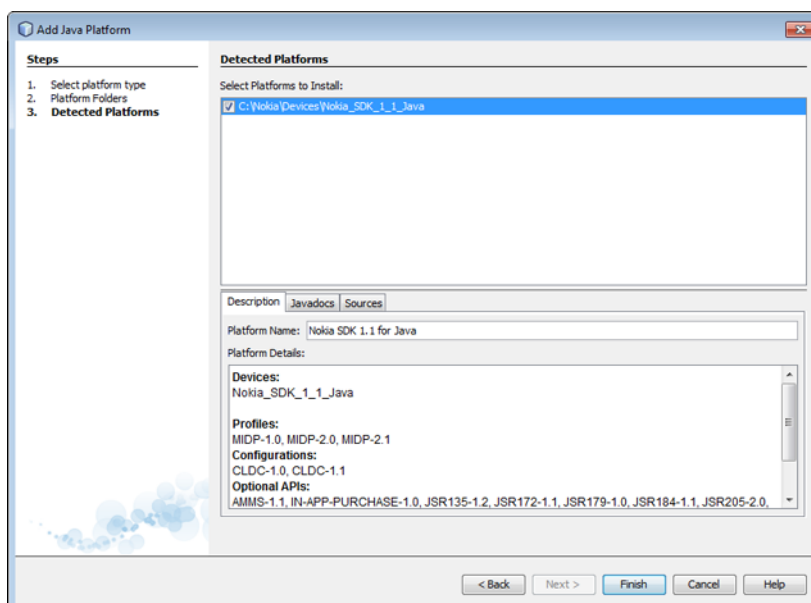
Select the **Java ME MIDP Platform Emulator** radio button.



3. Click **Next>**. The IDE detects the available platforms. The available platforms are displayed on the right pane:



4. Confirm that the box next to this version of the **Nokia SDK for Java** is checked and boxes corresponding to other SDKs are unchecked.
5. Click **Next**. The chosen SDK and its details are displayed on the right pane at the bottom:



6. Click **Finish**. The SDK is added to the **Platforms** field in the Java Platform Manager window.
7. Click **Close** to close the **Java Platform Manager** window.

7. Developer Resources

The following documents contain additional information about the SDK:

- Nokia SDK 2.0 Help
- Nokia SDK 2.0 for Java Release Notes

These documents are available in the doc directory of the SDK 2.0 installation directory or using the SDK 2.0 Help menu of the SDK 2.0 from the Windows 7 **Start > All Programs > Nokia Developer Tools > Nokia SDK 2.0 for Java > SDK Help**.

Additional documents about this product and related technologies may also be available at Nokia Developer ([Java Developer's Library](#))

8. Discussion about this resource

You can provide feedback, comments and suggestions about the SDK to Nokia and other SDK users using the Nokia Developer Discussion Boards: <http://www.developer.nokia.com/Community/Discussion/>.