



SAP Cloud Platform - Technical Workshop

Exercise 5 - Configuring Eclipse with SAP Cloud Platform Tools for Java

You will learn

In this tutorial you'll learn everything you need to know to setup your local development environment based on Eclipse. The main steps are:

Details

- Downloading Eclipse
- Installing SAP Cloud Platform Tools for Java in your Eclipse IDE
- Installing the SAP Cloud Platform Software Development Kit

Step 1: Download Eclipse

To make use of the SAP Cloud Platform Tools for Java you first need to have a supported version of Eclipse installed on your computer. The Eclipse Neon version is recommended.

Open the [Download site for Eclipse](#) and click on the **Eclipse IDE for Java EE Developers** link

The screenshot shows the Eclipse download page. At the top, there are navigation links: GETTING STARTED, MEMBERS, PROJECTS, and MORE+. Below this is a breadcrumb trail: HOME / DOWNLOADS / ECLIPSE DOWNLOADS. A 'Packages' link is visible. The main content area features a large banner for 'Eclipse Neon (4.6) Release for Windows' with a dropdown menu. The banner includes the text 'Try the Eclipse Installer', 'The easiest way to install and update your Eclipse Development Environment.', and 'Find out more' with a download count of 1,905,958. Below the banner, there are two main download options: 'Eclipse IDE for Java EE Developers' (301 MB, 556,002 DOWNLOADS) and 'Eclipse IDE for Java Developers' (160 MB, 249,156 DOWNLOADS). Both options show 'Windows' as the selected operating system and provide links for '32 bit' and '64 bit' downloads. To the right, there are two sidebars: 'RELATED LINKS' with links like 'Compare & Combine Packages', 'New and Noteworthy', 'Install Guide', 'Documentation', 'Updating Eclipse', and 'Forums'; and 'MORE DOWNLOADS' with links like 'Other builds', 'Eclipse Neon (4.6)', 'Eclipse Mars (4.5)', 'Eclipse Luna (4.4)', 'Eclipse Kepler (4.3)', 'Eclipse Juno (4.2)', and 'Older Versions'.

Step 2: Choose operating system

Choose the operating system that you will use to run Eclipse and choose the download site:

The screenshot shows the Eclipse IDE for Java EE Developers download page. At the top, there's a navigation bar with links like 'SAP Links', 'HCP Links', 'HCP Cockpit', 'JAM Links', 'Integration', 'IoT Services', 'TechEd Sessions', 'CodeJam', 'SAP | Café Bon Appétit', 'Blogs', 'Product Days', and 'Help Link'. Below this is the Eclipse logo and a search bar. A 'DOWNLOAD' button is visible. The main content area has a dark header with the path 'HOME / DOWNLOADS / PACKAGES / ECLIPSE IDE FOR JAVA EE DEVELOPERS'. On the left, there's a 'RELEASES' sidebar with links to various package versions like 'Neon Packages', 'Mars Packages', etc. The main content area features the 'Eclipse IDE for Java EE Developers' title, a 'Package Description' section stating it's for Java developers creating Java EE and Web applications, and a list of included tools like 'Data Tools Platform', 'Eclipse Git Team Provider', etc. On the right, there's a 'Download Links' section with links for 'Windows 32-bit', 'Windows 64-bit', 'Mac OS X (Cocoa) 64-bit', 'Linux 32-bit', and 'Linux 64-bit'. It also shows 'Downloaded 556,002 Times' and a 'Bugzilla' section with 'Open Bugs: 56' and 'Resolved Bugs: 139'.

Step 3: Choose download site

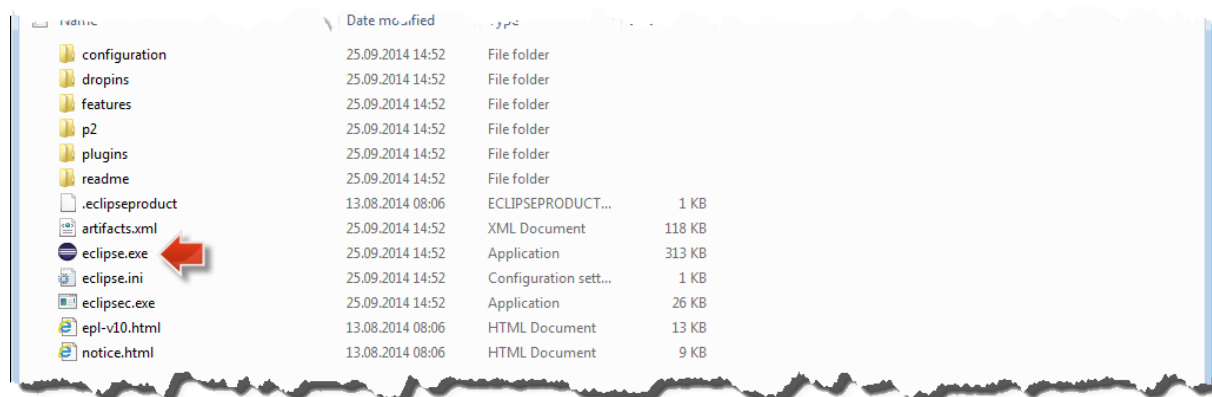
Choose the preferred download site and start the download.

Step 4: Extract the archive

Once the download has finished extract the archive to a local folder of your choice (e.g. `c:\dev\eclipse`).

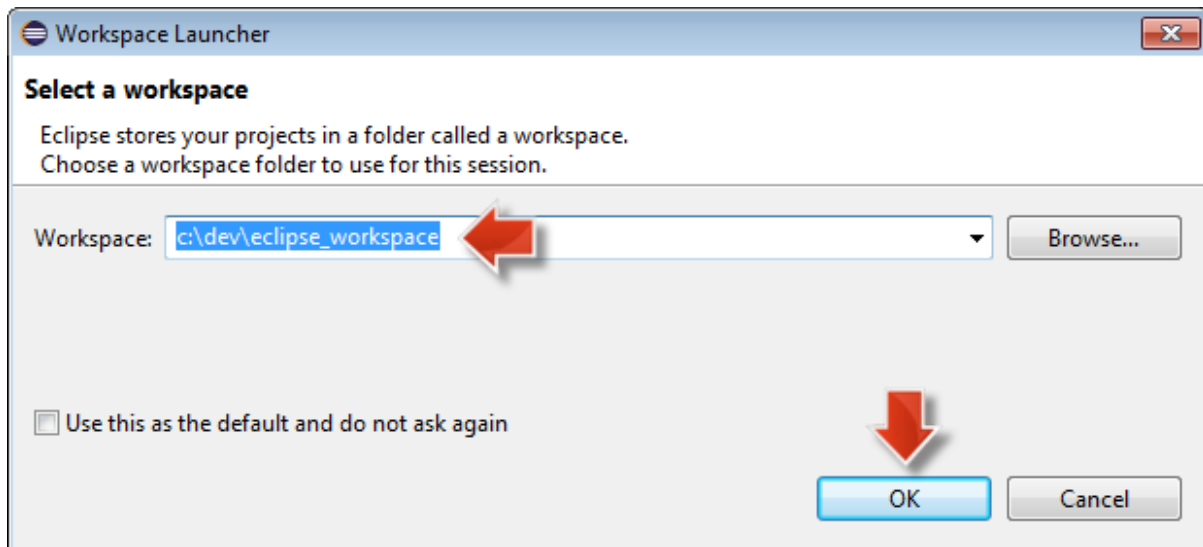
Step 5: Start the Eclipse IDE

Click on the **eclipse** executable file to start the Eclipse IDE.



Step 6: Choose your workspace

Eclipse will first show you a **Workspace Launcher** dialog to choose your workspace. Replace the suggested workspace path with `c:\dev\eclipse_workspace`. Confirm with **OK**.



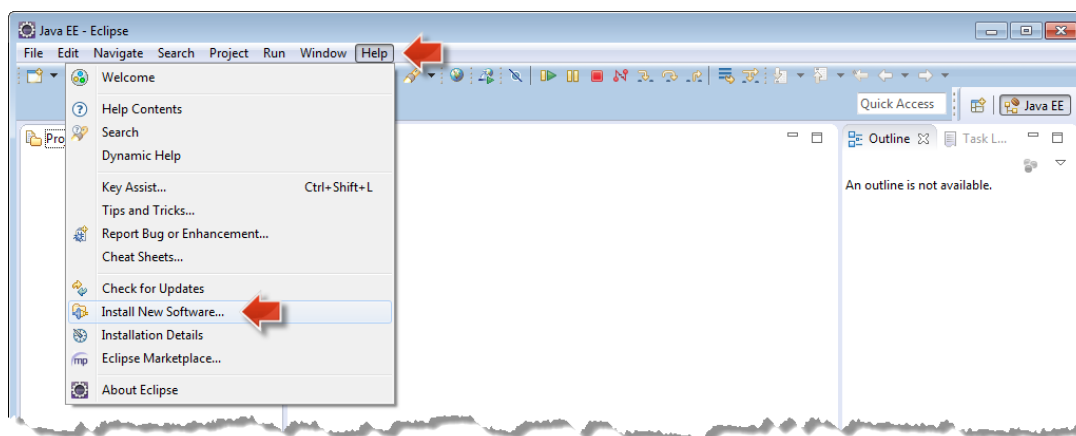
Step 7: Close the Eclipse Welcome Page

Close the Eclipse **Welcome Page**.

Step 8: Install the SAP Cloud Platform tools for Java

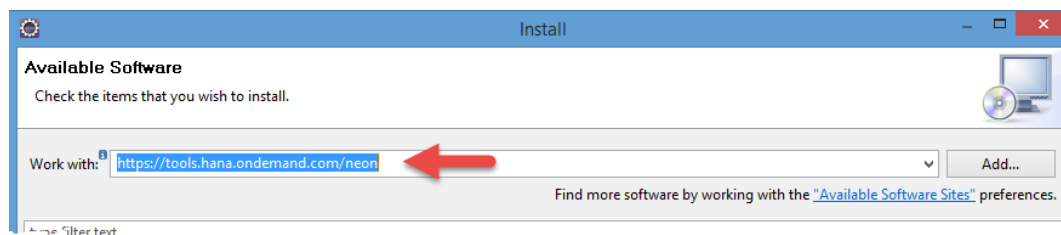
Now that you have installed Eclipse, you need to install the SAP Cloud Platform tools for Java. This is done following the standard approach of Eclipse to install plugins.

From the Eclipse menu, choose **Help > Install New Software...**



Step 9: Add URL

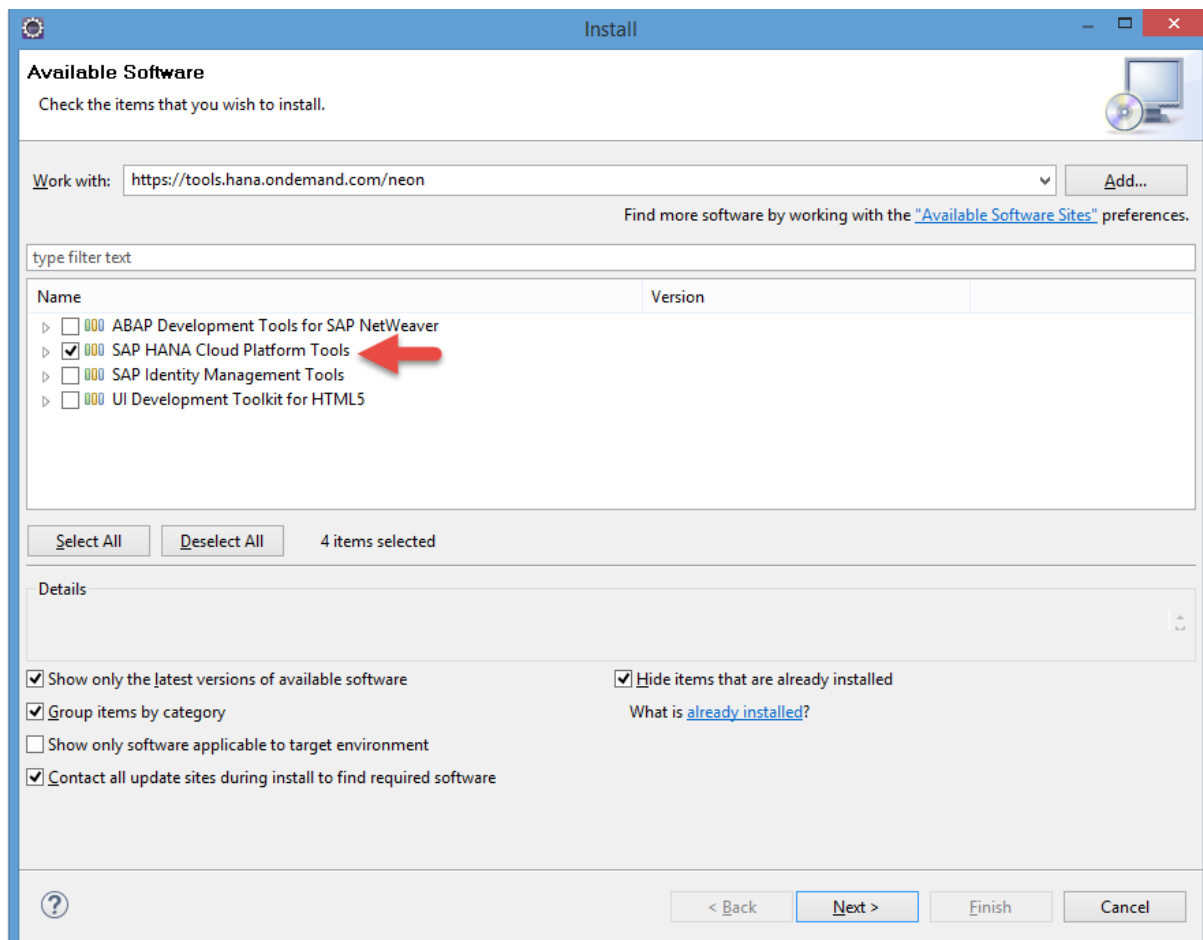
Copy the URL `https://tools.hana.ondemand.com/neon` and paste it in the ****Work with** field and then press the **Enter** (or **Return**) key.



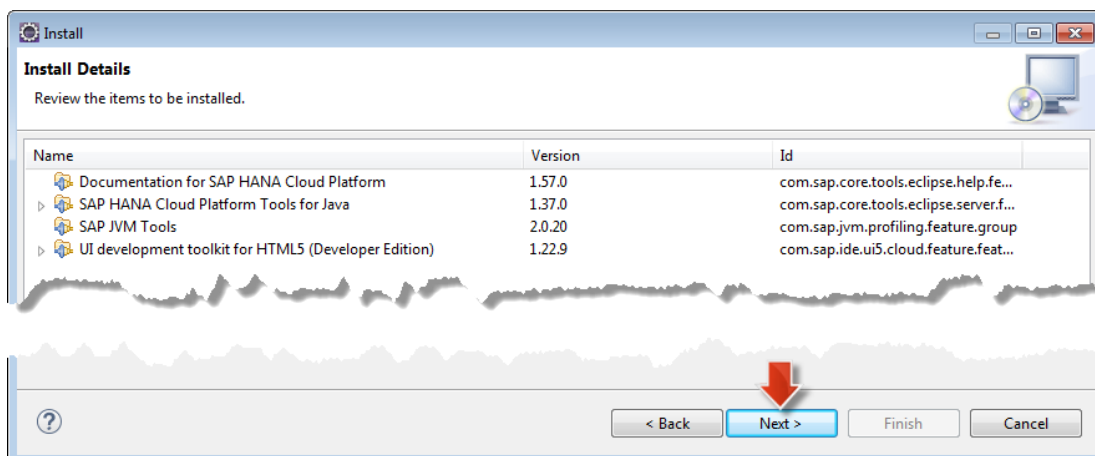
Step 10: Select SAP Cloud Platform Tools

Select **SAP Cloud Platform Tools** and click **Next**.

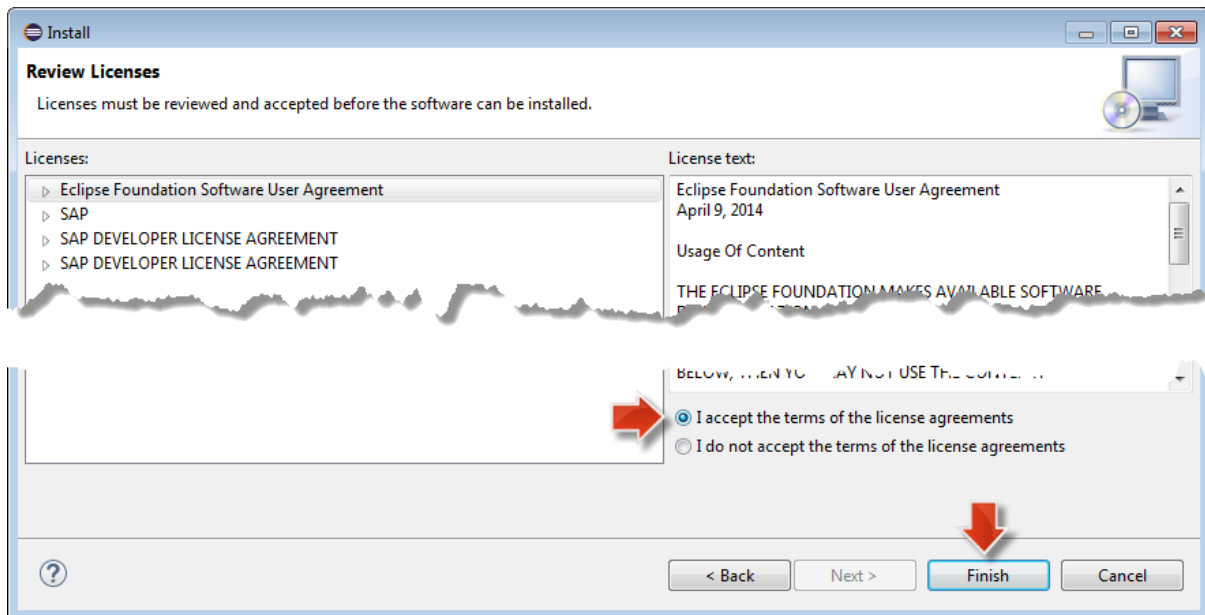
Note: If Eclipse is not able to find the tools then please check your network settings. You might need to configure a proxy, in particular if you are working from a corporate network. How-to setup a proxy in Eclipse is explained in the [Installing SAP Development Tools for Eclipse](#) section of the official online documentation.



Step 11: Accept the license agreement
On the **Install Details** page click **Next**.

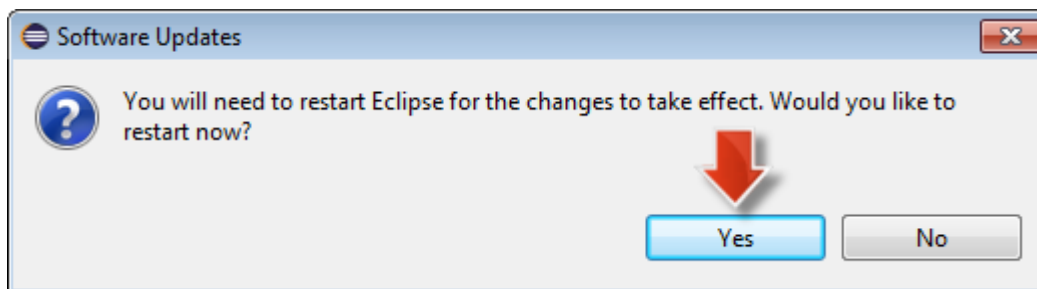


Read and accept the license agreement and choose **Finish**. The installation will now start.



Step 12: Restart Eclipse

At the end of the installation, you will be asked to restart Eclipse. Confirm the dialog with **Yes** to restart Eclipse immediately.



Step 13: SAP Cloud Platform Tools for Java is installed

After Eclipse restarts, close the Eclipse **Welcome Page**. You now have the SAP Cloud Platform Tools for Java installed in Eclipse.

Step 14: Download and install the SAP Cloud Platform SDK

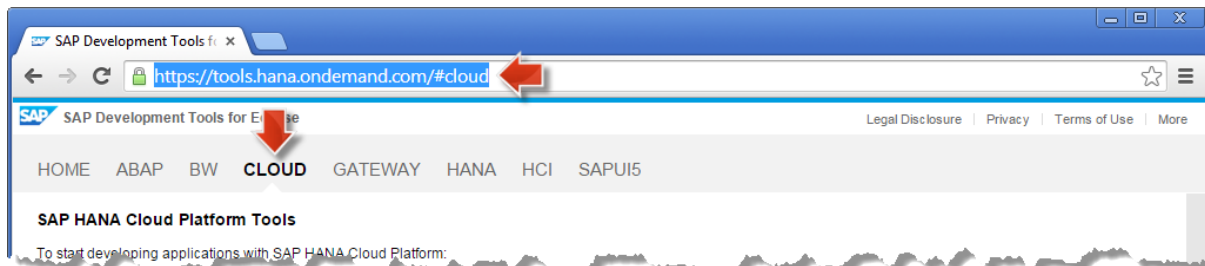
The next step is to download and install the SAP Cloud Platform SDK, which contains all the required artifacts to setup a local development environment as well as the [console client](#) used to interact with your cloud account.

The SDK comes in different flavors:

- Java Web: Provides a lightweight runtime supporting a subset of the standard Java EE APIs (Servlet, JSP, JSTL, EL). Currently there is a 1.x version of this runtime available
- Java EE 6 Web Profile: Provides certified support for the whole Java EE 6 Web Profile APIs. Currently there is a 2.x version of this runtime available
- Java Web Tomcat 7: Provides support for some of the standard Java EE APIs (Servlet, JSTL, EL). Currently there is a 2.x version of this runtime available
- Java Web Tomcat 8: Provides support for some of the standard Java EE APIs (Servlet, JSTL, EL). Currently there is a 3.x version of this runtime available

For this tutorial you will use the Java Web SDK 1.x version of the SDK. To install it on your system do the following:

Open <https://tools.hana.ondemand.com/#cloud>. Make sure you are on the Cloud tab of the page.



Step 15: Choose download version

Choose the Java Web (neo-java-web-sdk.X.X.X) (use the latest version) for download.

Note: The version of the Java Web SDK shown on this screenshot might be lower than the one that you will actually download. This is OK. The procedure should work with any higher version as well. Just make sure that you always use the SDK version that you actually downloaded in the following steps.

| SAP HANA Cloud Platform SDK | Comment | Version | File Size | Download | Show old versions |
|-----------------------------|---------|---------|-----------|--|-------------------|
| Java Web | | 1.109.9 | 79.9 MB | neo-java-web-sdk-1.109.9.zip | |
| Java Web Tomcat 7 | | 2.56.7 | 68.9 MB | neo-java-web-sdk-2.56.7.zip | |
| Java EE 6 Web Profile | | 2.91.7 | 99.6 MB | neo-java-web-sdk-2.91.7.zip | |
| Java Web Tomcat 8 | | 3.10.6 | 61.1 MB | neo-java-web-sdk-3.10.6.zip | |

Step 16: Agree to the SAP Developer License agreement

Before you are allowed to download the SDK you have to read and agree to the SAP Developer License agreement. After accepting the license by clicking **I Have Read and Agree** the download of the SDK will start.



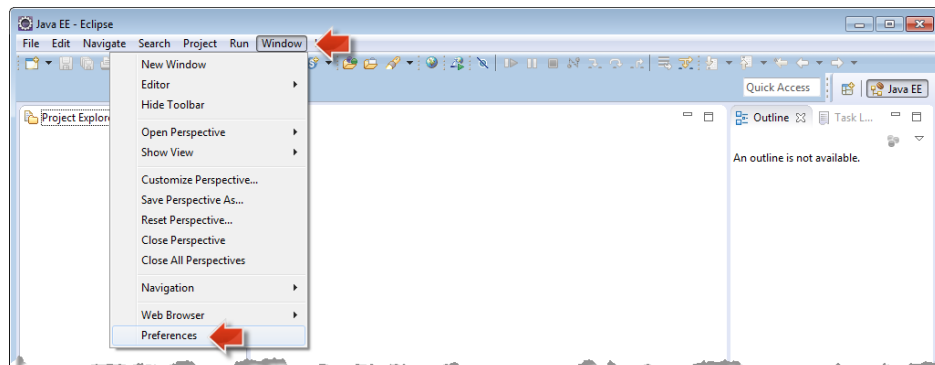
Step 17: Extract the archive

Once the download has finished extract the archive to a local folder of your choice. It is recommended to place the folder in `c:\dev` and to name it like the just downloaded file, e.g. `c:\dev\neo-java-web-sdk-1.109.9`

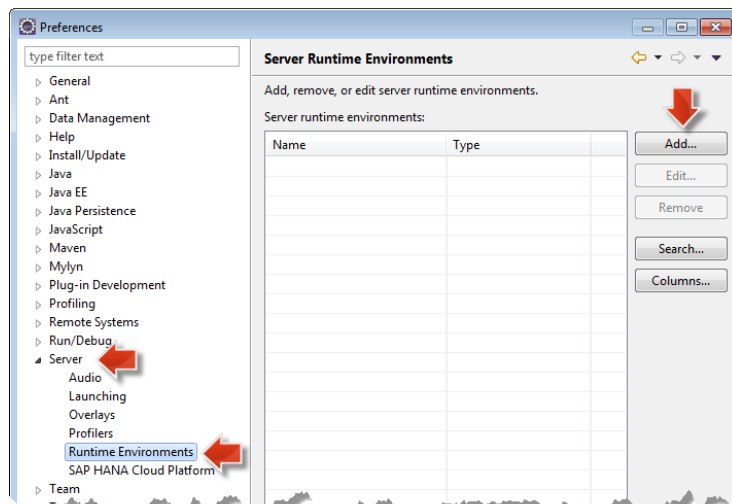
Note: To familiarize yourself further with the content of the SDK, especially note the location of the [console client](#) within the tools directory and the provided samples in a respective samples directory. Also, you might be interested to learn about the [supported APIs](#).

Step 18: Configure the SAP Cloud Platform Tools for Java

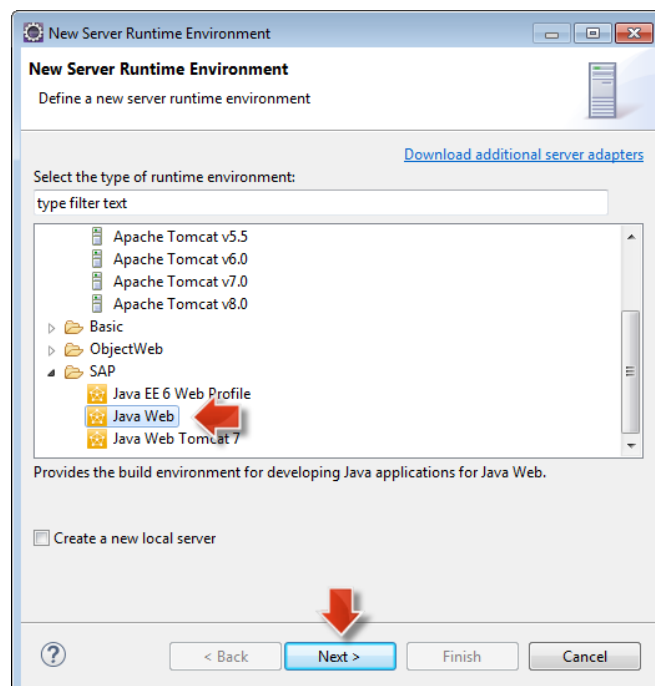
The next thing to do is to configure the SAP Cloud Platform Tools for Java so they make use of the just downloaded SDK. From the Eclipse IDE main menu, choose **Window > Preferences**.



Choose **Server > Runtime Environment**. Click the **Add...** button to open the **New Server Runtime** dialog.

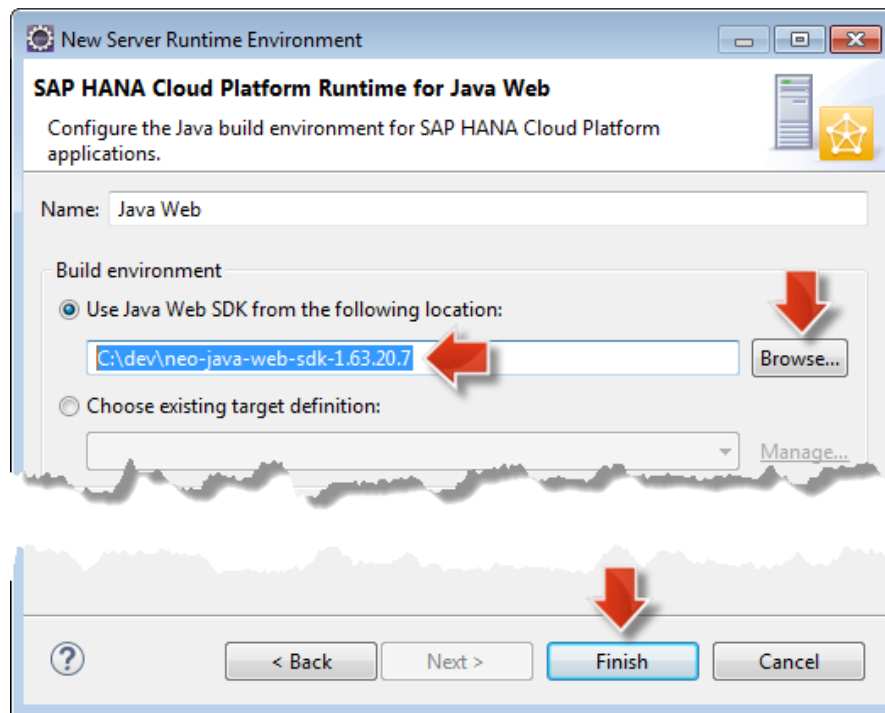


Select **SAP > Java Web** as the Server Runtime Environment and click **Next**.



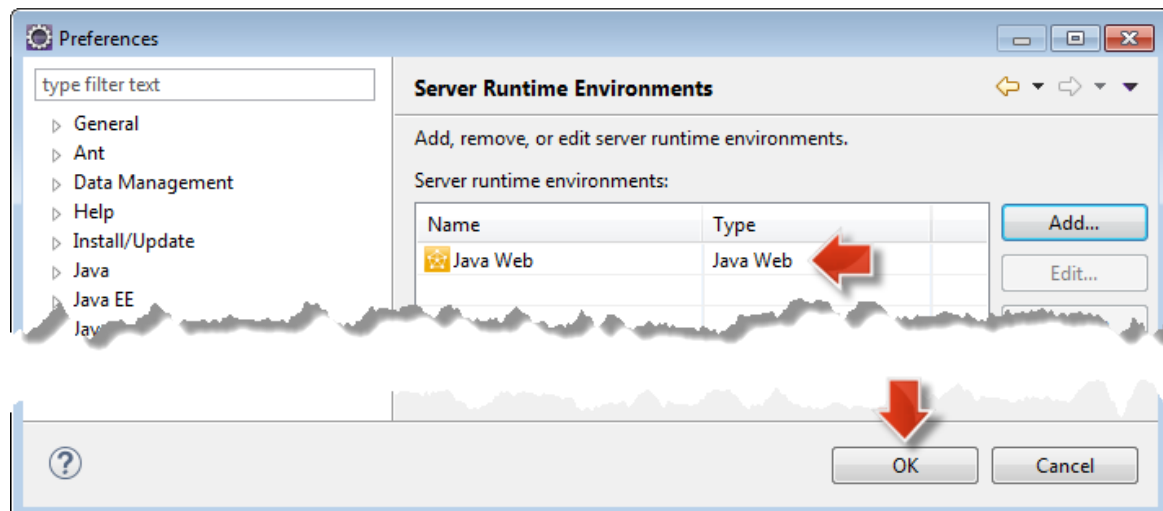
Step 19: Choose folder and finish

Provide the folder to which you have extracted the SDK by clicking the **Browse...** button and choosing the respective folder, e.g. `c:\dev\neo-java-web-sdk-1.63.20.7`. Click on **Finish**.



Step 20: New Java Web runtime is available

With this a new Java Web runtime is now available that will be used for your SAP Cloud Platform projects. You can now close the dialog by clicking **OK**



Congratulations: You have now installed the SAP Cloud Platform Tools for Java and are ready to start with your Java project on SAP Cloud Platform.