# 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

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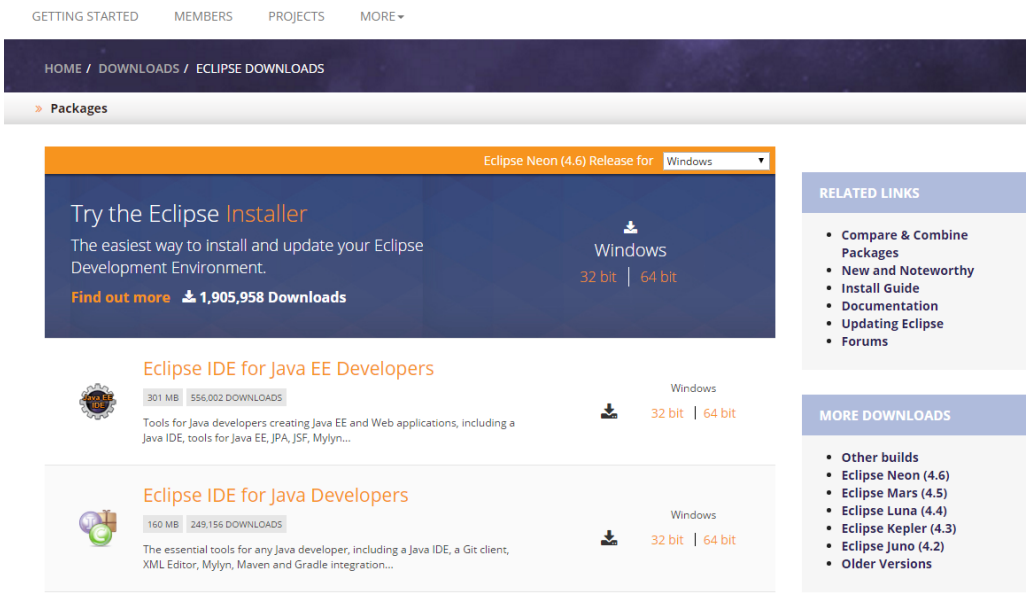
### Step 1: Download Eclipse

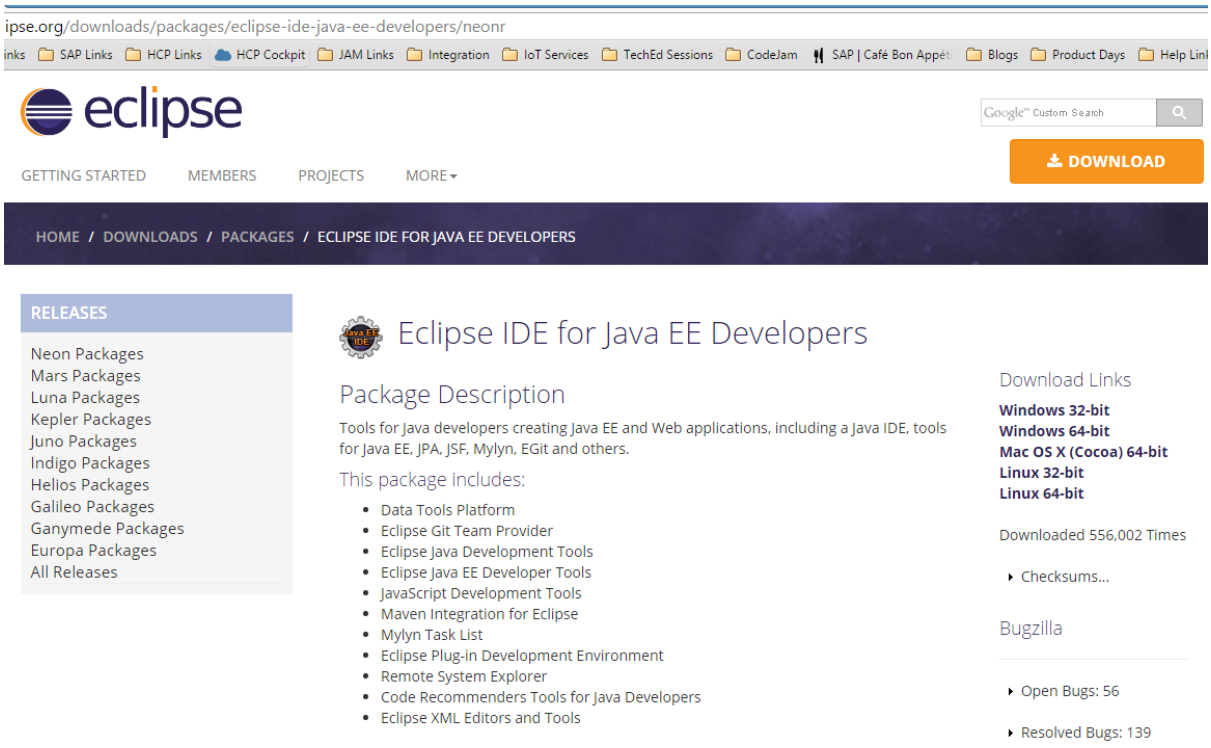
To make use of the SAP Cloud Platform Tools for Java you first need to have a supported version of Eclipse installed on your computer. The Eclipse Neon version is recommended.

Open the Download site for Eclipse and click on the **Eclipse IDE for Java EE Developers** link




### Step 2: Choose operating system

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




## Step 3: Choose download site

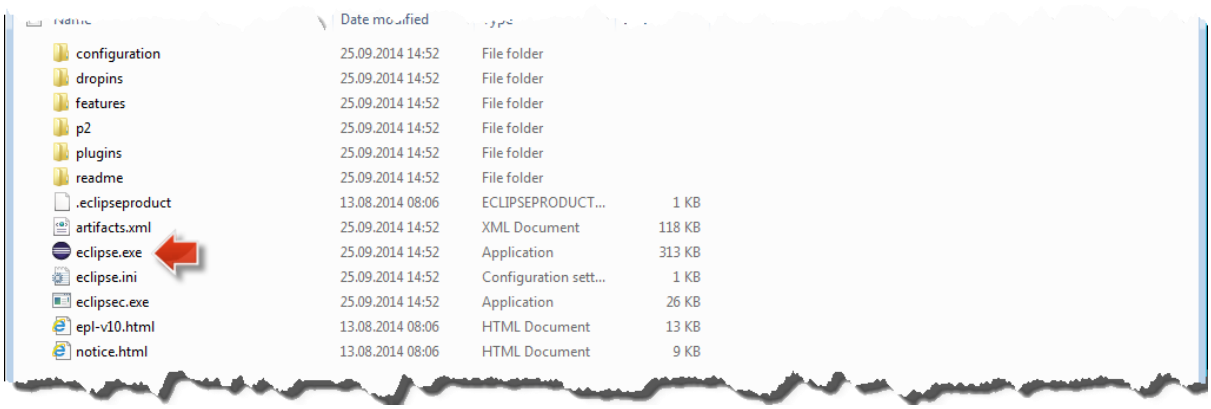
Choose the preferred download site and start the download.

## 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`).

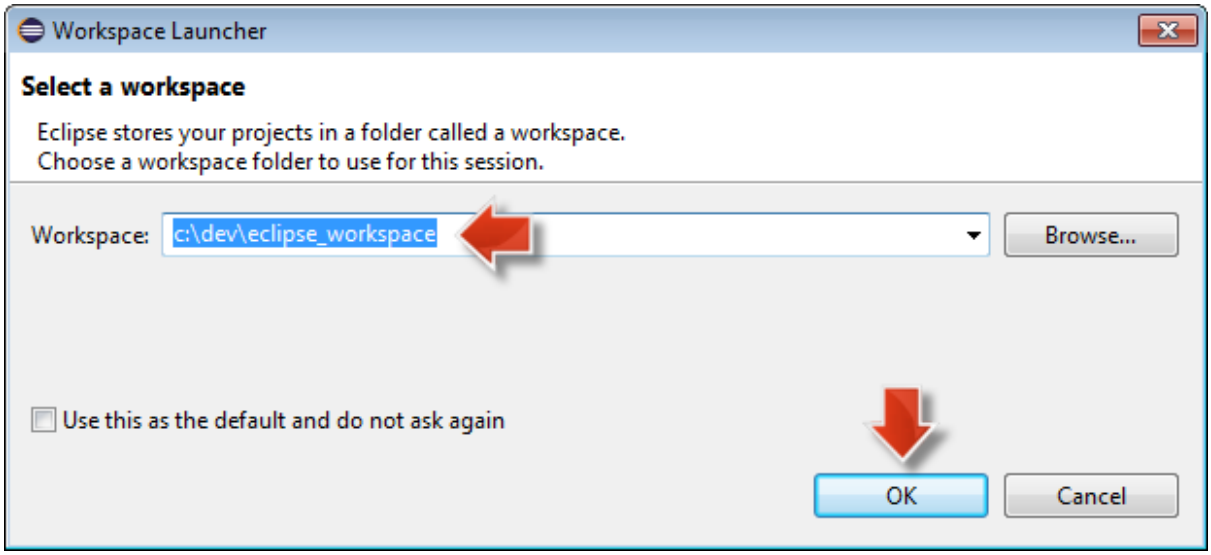
## Step 5: Start the Eclipse IDE

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**.



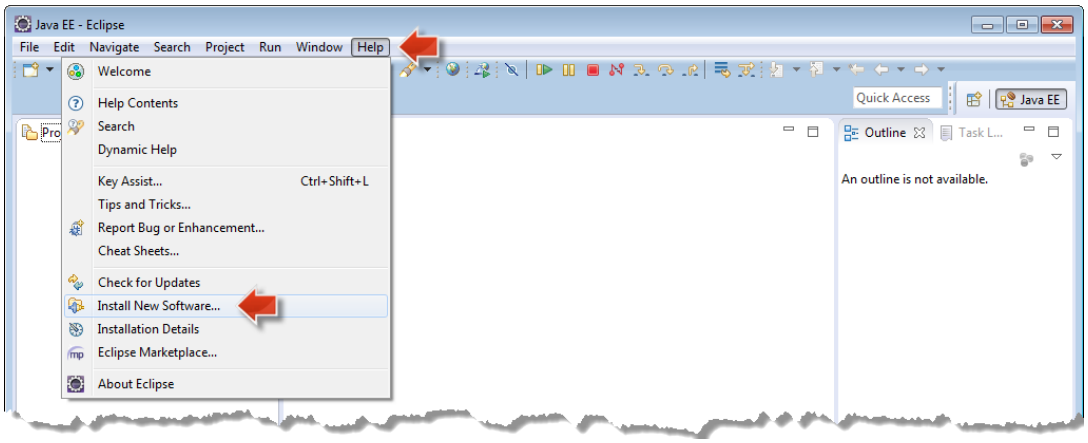

## Step 7: Close the Eclipse Welcome Page

Close the Eclipse **Welcome Page**.

## Step 8: Install the SAP Cloud Platform tools for Java

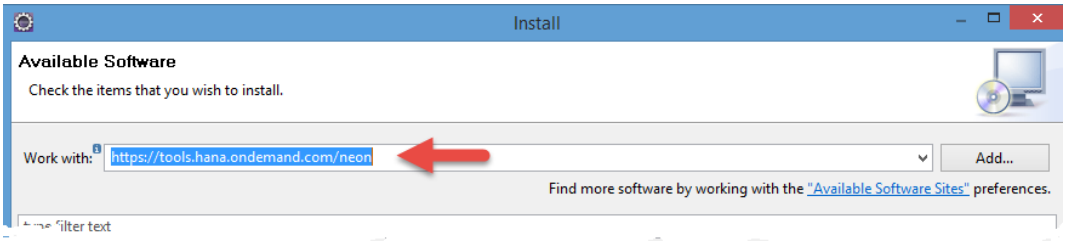
Now that you have installed Eclipse, you need to install the SAP Cloud Platform tools for Java. This is done following the standard approach of Eclipse to install plugins.

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




## Step 9: Add URL

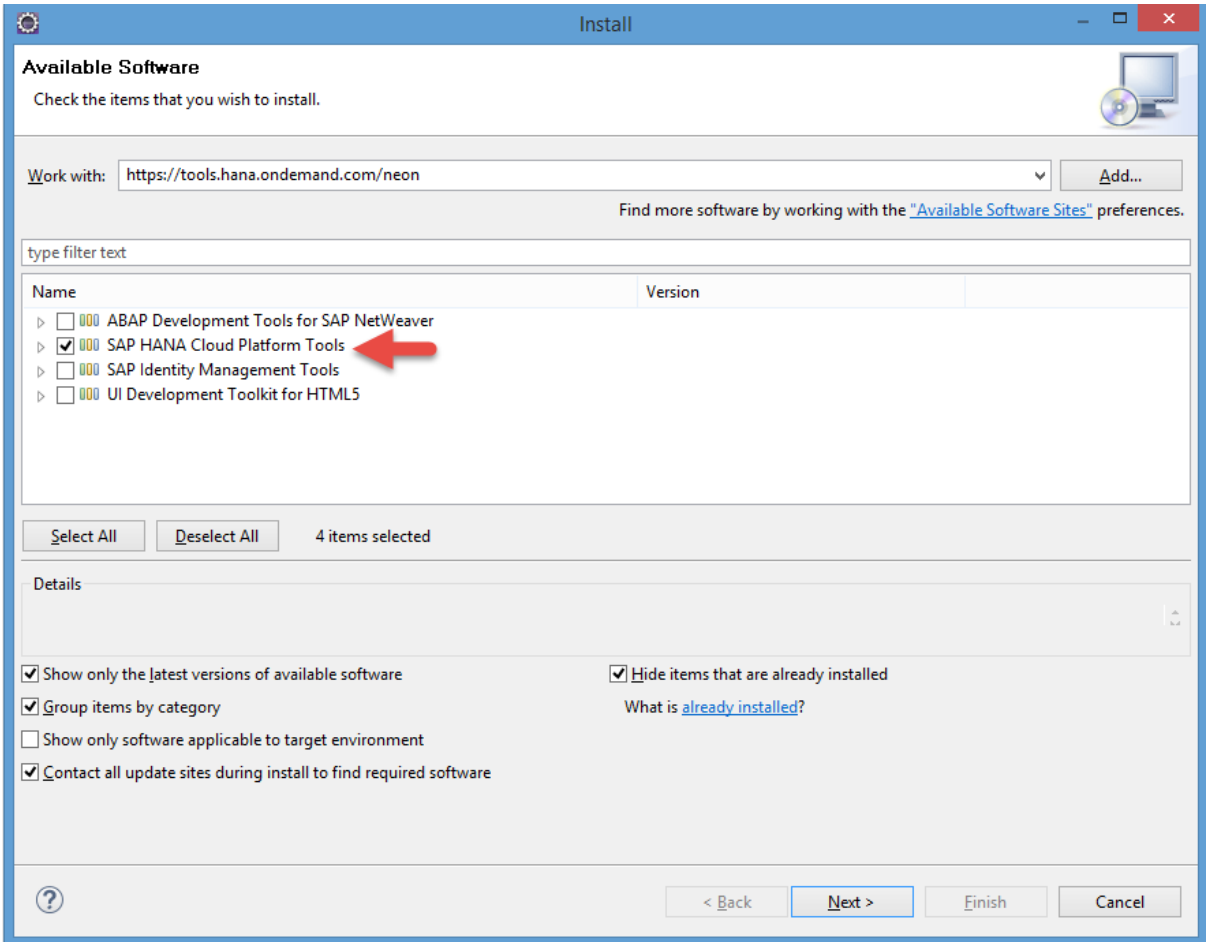
Copy the URL `https://tools.hana.ondemand.com/neon` and paste it in the **Work with **field and then press the **Enter** (or **Return**) key.




## Step 10: Select SAP Cloud Platform Tools

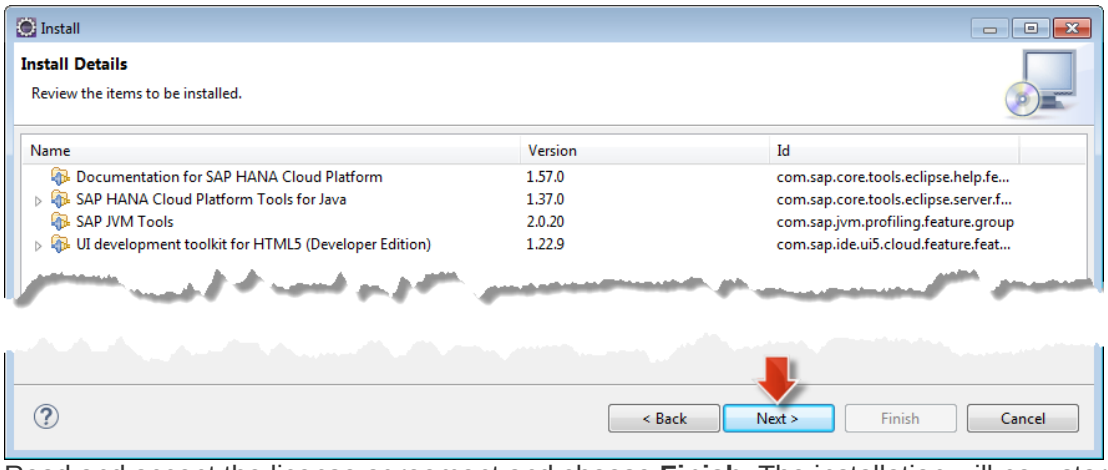
Select **SAP Cloud Platform Tools** and click **Next**.

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.

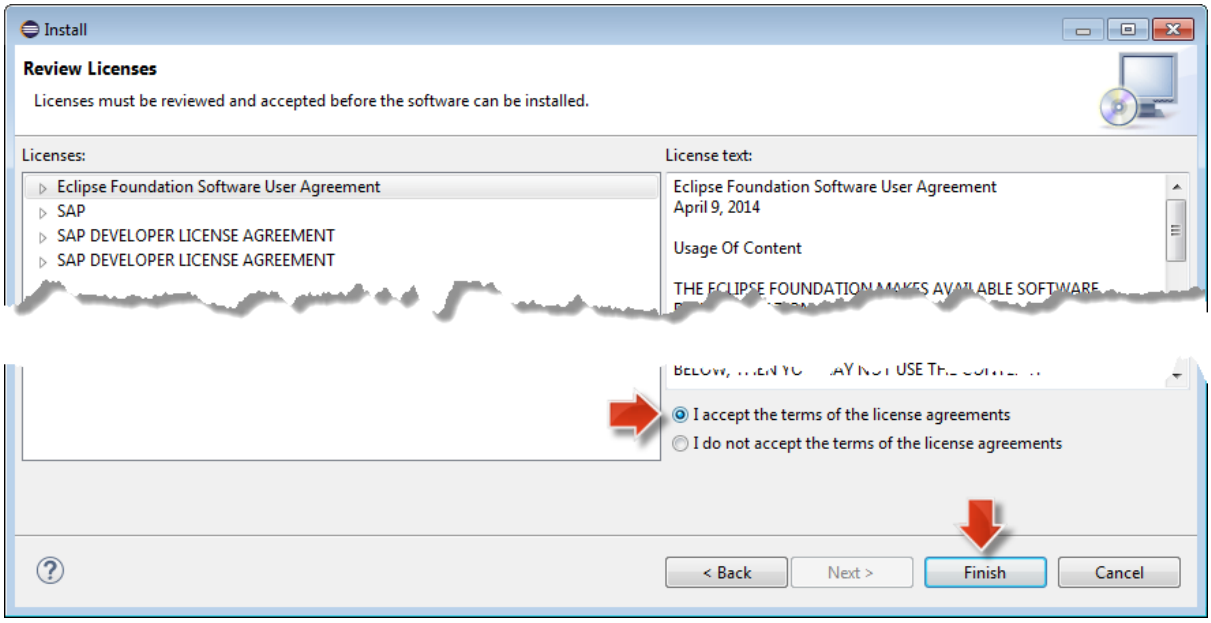



## Step 11: Accept the license agreement

On the **Install Details** page click **Next**.

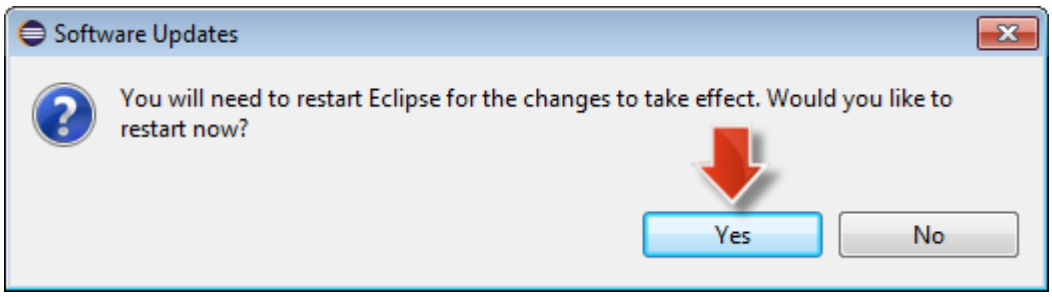



Read and accept the license agreement and choose **Finish**. The installation will now start.




## 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

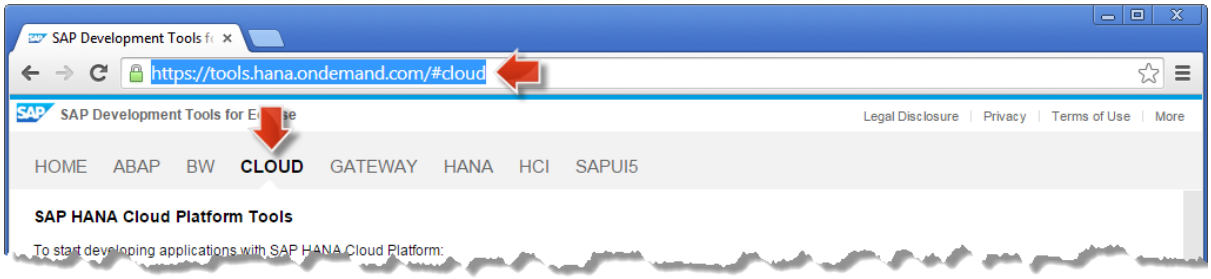
The next step is to download and install the SAP Cloud Platform SDK, which contains all the required artifacts to setup a local development environment as well as the console clientused to interact with your cloud account.

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.


## 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.

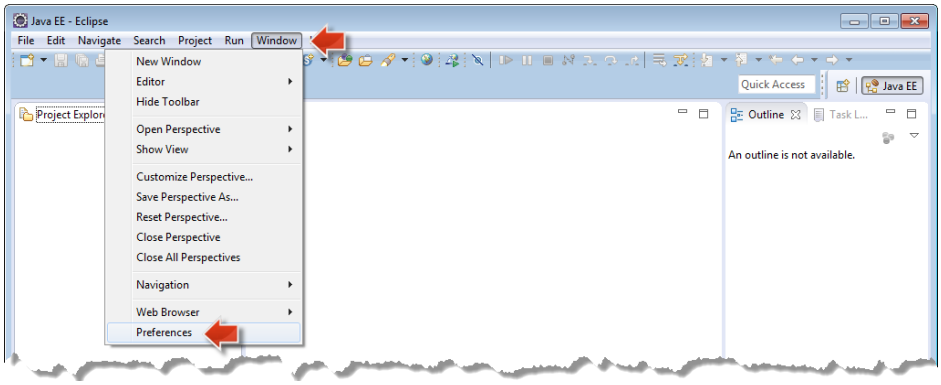

## Step 17: Extract the archive

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`

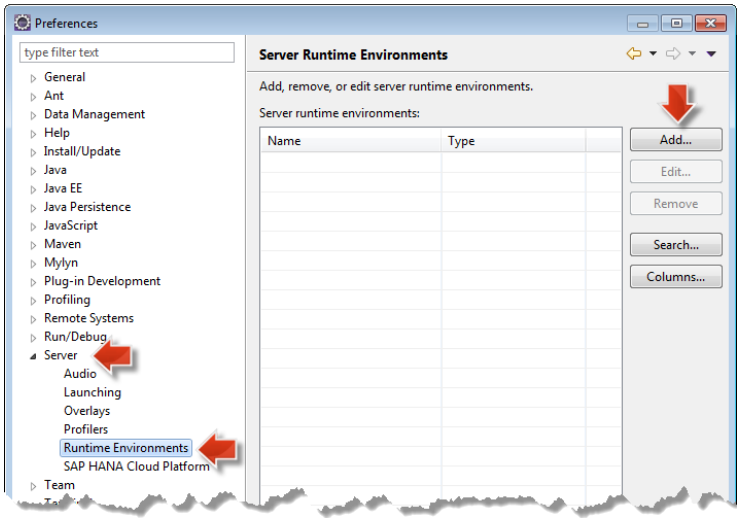
Note: To familiarize yourself further with the content of the SDK, especially note the location of the console client within the tools directory and the provided samples in a respective samples directory. Also, you might be interested to learn about the supported APIs.

## Step 18: Configure the SAP Cloud Platform Tools for Java

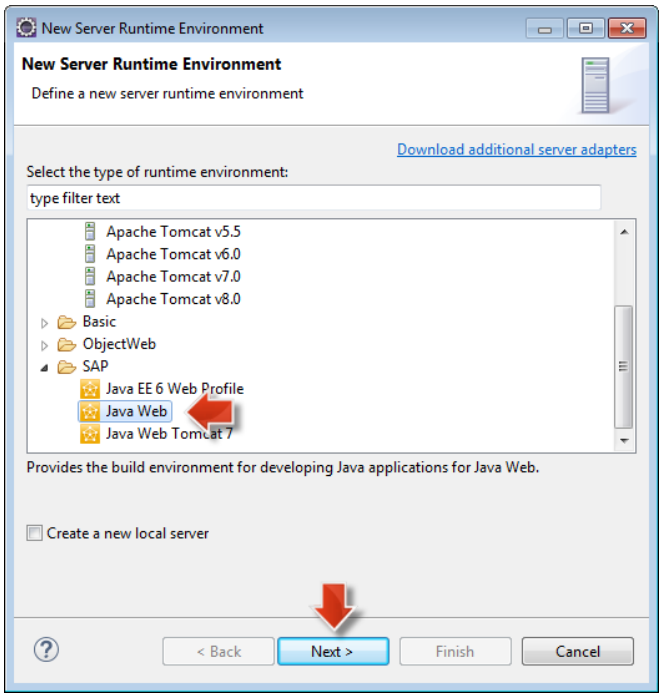
The next thing to do is to configure the SAP Cloud Platform Tools for Java so they make use of the just downloaded SDK. From the Eclipse IDE main menu, choose **Window > Preferences**.




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

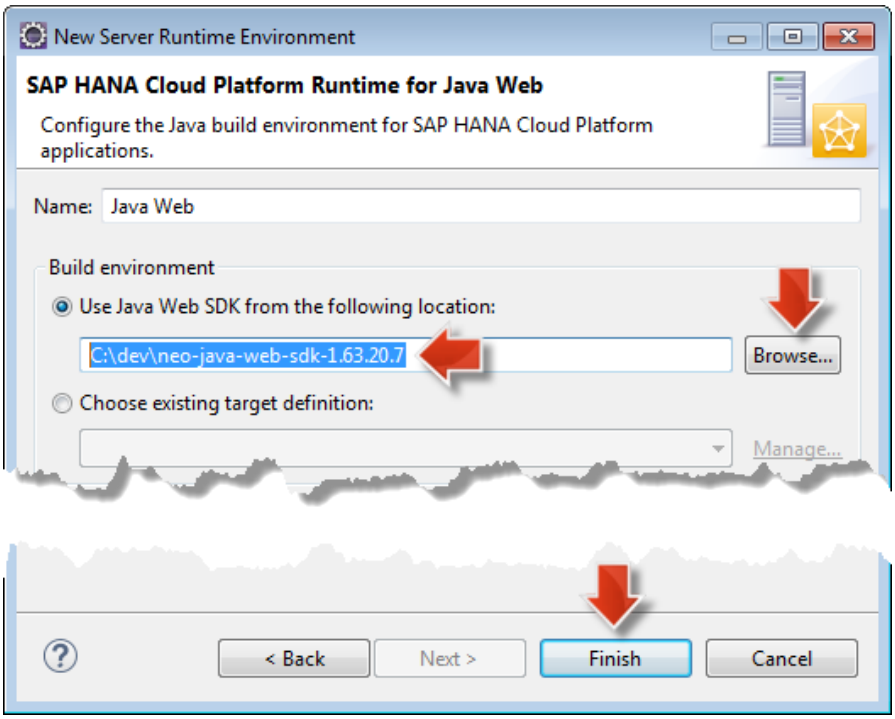



Select **SAP > Java Web** as the Server Runtime Environment and click **Next**.



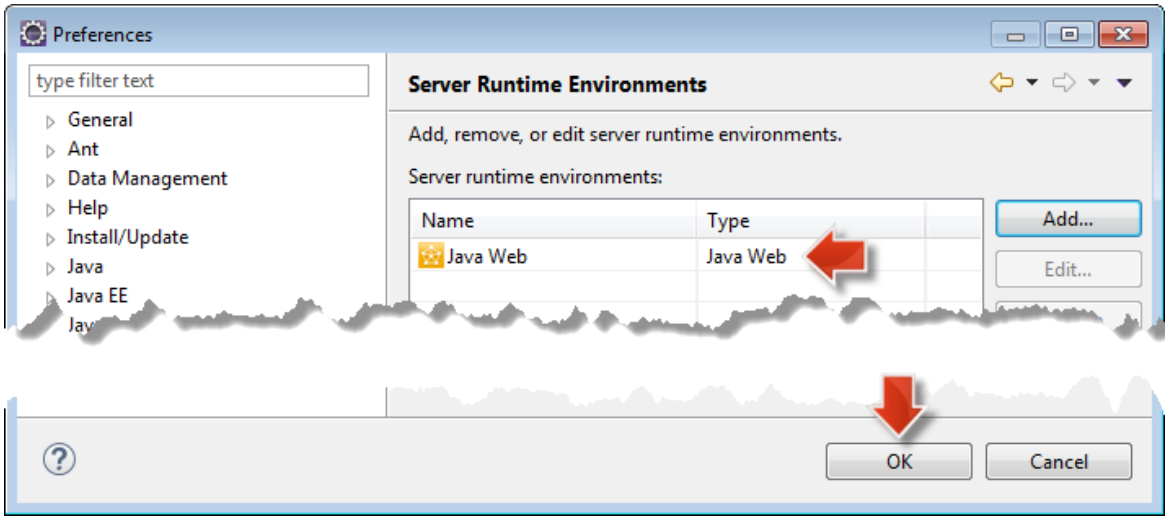
## Step 19: Choose folder and finish

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.