Hands-On Lab

Lab Manual

Install Java Development Kit and Tomcat

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2. Restart Tomcat by execute “shutdown.bat” and “startup.bat” 6

Lab 01: Install Java Development Kit and Tomcat

Estimated time to complete this lab: 10 minutes

## Lab Objective

The objective of this lab is to introduce you how to install Java Development Kit and Apache Tomcat.

* Run the JDK installer.

### Setup environment variable JAVA\_HOME.

* Run the apache tomcat package.

**Note: You must have administrative privileges to install the JDK.**

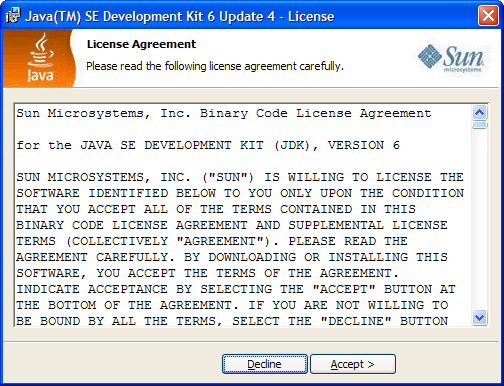
## Exercise 1 – Install Java Development Kit 1.6

This exercise help you to install the JDK. The lab uses JDK 1.6.0\_04 ([[1]](#footnote-1)).

### Task 1 – Run the JDK setup

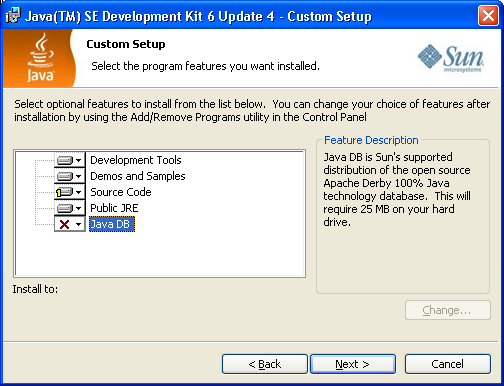
* 1. Execute the JDK setup.

Click **Setup** to continue.

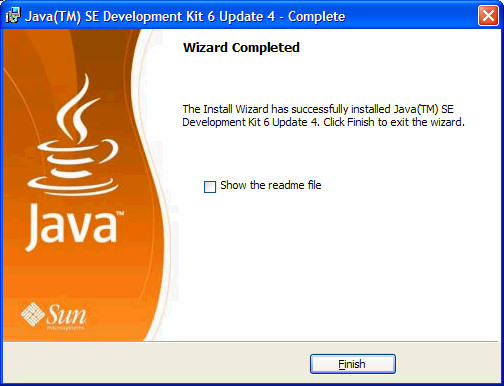


* 1. Deselect unnecessary features.

You can don’t install unnecessary features such as **Java DB**. Click on **Next** to continue.



* 1. After the installer finished, click on Finish button.



### Task 2 – Set environment variable JAVA\_HOME

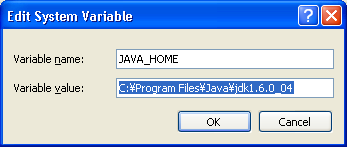
This exercise set the path for environment JAVA\_HOME. It's used by Tomcat and many other Java programs.

* 1. Set variable environment JAVA\_HOME by value “C:\Program Files\Java\jdk1.6.0\_04”

: Click on Start  choose “Control Panel”  choose “System”. In the “System Properties” dialog, select tab “Advanced”  click on button “Environment Variable”. In the section “System variable”, click on “New” button”, input:

Variable name: JAVA\_HOME

Variable value: C:\Program Files\Java\jdk1.6.0\_04



* 1. Run command “java –version” to check whether the java run time is available.

: Click on Start  choose “Run”, input command “cmd” (without double quotes). In window “Command Prompt”, run command “java –version”, the output is as below:

|  |
| --- |
| java version "1.6.0\_04"  Java(TM) SE Runtime Environment (build 1.6.0\_04-b12)  Java HotSpot(TM) Client VM (build 10.0-b19, mixed mode, sharing) |

## Exercise 2 – Run Tomcat from portable package

This exercise helps you extract and executes the apache-tomcat package ([[2]](#footnote-2)).

### Task 1 – Extract the tomcat package

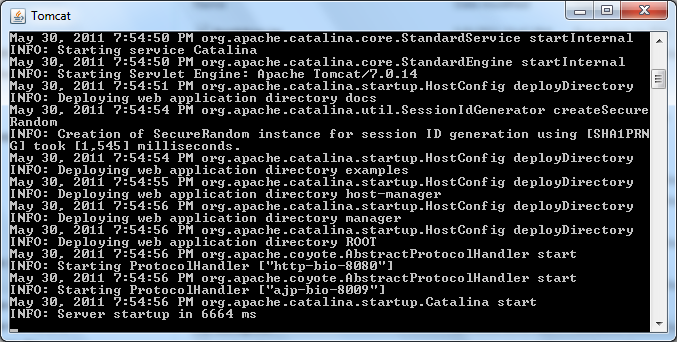
* 1. Extract the tomcat package apache-tomcat-x.y.z.zip (or apache-tomcat-x.y.z.tar.gz)

You should use a folder jPackages (such as D:\jPackages) to contain portable Java Packages.

After extract the tomcat package into the folder D:\jPackages, the home directory of Tomcat is “D:\jPackages\apache-tomcat-7.0.14”. It is abbreviated to $TOMCAT\_HOME.

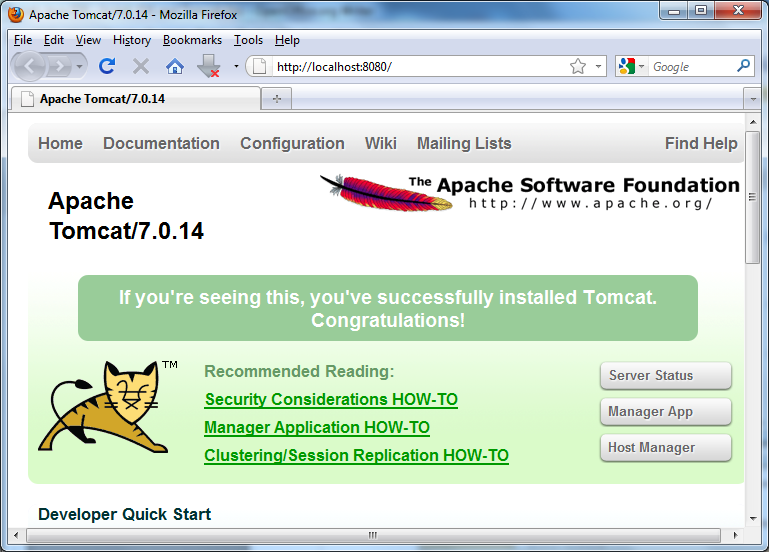
* 1. Execute batch file “startup.bat” in $TOMCAT\_HOME\bin to start the Tomcat.

The console output is as below.



* 1. Using browser to open URL [http://localhost:8080](http://localhost:8080/)

The home page of Tomcat is as below:



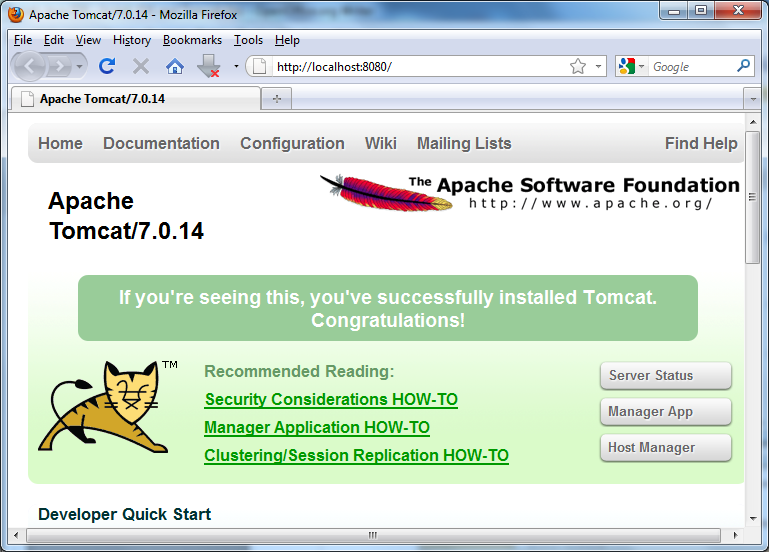
* 1. Execute “shutdown.bat” in $TOMCAT\_HOME\bin to stop the Tomcat.

### Task 2 – Add user admin to Tomcat

Edit $TOMCAT\_HOME\conf\tomcat-users.xml. For Tomcat 7, add 2 new below bold lines within tag “<tomcat-users>”:

|  |
| --- |
| ...  <tomcat-users>  **<role rolename="manager-gui, admin-gui"/>**  **<user username="admin" password="admin" roles="manager-gui, admin-gui"/>**  </tomcat-users> |

Restart Tomcat by execute “shutdown.bat” and “startup.bat”



Logon by account admin/admin

1. Download the latest version of JDK at http://www.oracle.com/technetwork/java/javase/downloads [↑](#footnote-ref-1)
2. Download the latest version of JDK at http://tomcat.apache.org/ [↑](#footnote-ref-2)