

## CONFIGURING AND INSTALLING APACHE TOMCAT SERVER

*Apache Tomcat server is an open source Java-capable HTTP server and servlet container developed by Apache Software Foundation(ASF).*

This could execute special Java programs known as Java Servlet and Java Server Pages (JSP). The sites for Tomcat are <http://tomcat.apache.org> or <http://www.apache.org> .

Tomcat was originally written by James Duncan Davison , based on an earlier Sun's server called Java Web Server (JWS). Tomcat is an HTTP application runs over TCP/IP. In other words, the Tomcat server runs on a specific TCP port in a specific IP address. The default TCP port number for HTTP protocol is 80, which is used for the production HTTP server. For test HTTP server, any unused port number between 1024 and 65535 can be chosen.

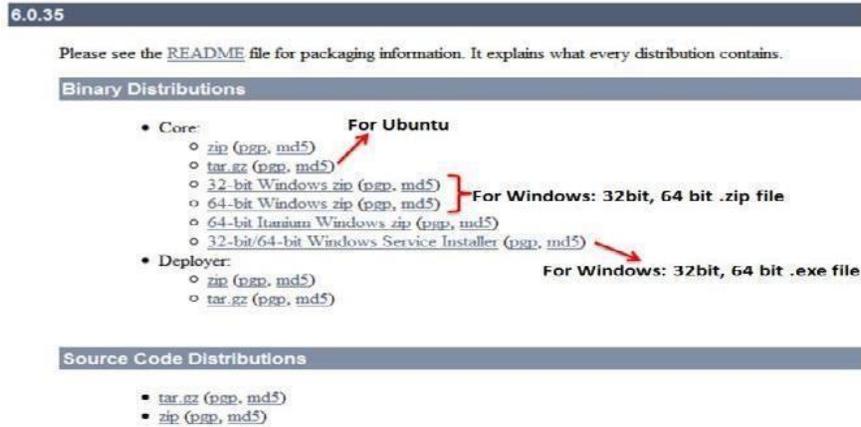
### Installing Apache Tomcat Server

The basic environment required for installing Apache Tomcat Server is given below:

- JDK 6 (Java SE 6) (Tomcat 6 requires any installed Java 5 or later JRE (32-bit or 64-bit). We have used JRE 6.)
- Apache Tomcat 6.x
- Windows OS

#### Step 1: Downloading Apache Tomcat

Download the Apache Tomcat Server from <http://tomcat.apache.org/download-60.cgi>. Here we have used “Apache Tomcat 6.0.35” version.



**Figure 3.9 Tomcat for various OS**

**Step 2: Installing Apache Tomcat**

Tomcat can be installed on any operating system that supports the zip or tar formats. To install Apache Tomcat, unzip the downloaded (.zip) file to a safe location. For simplicity and easy access, unzip Tomcat in “C:\Tomcat6” directory.

**Step 3: Click on the .exe file**

After downloading windows installer file(.exe file), double click on it and follow the steps given below:

**Welcome screen**

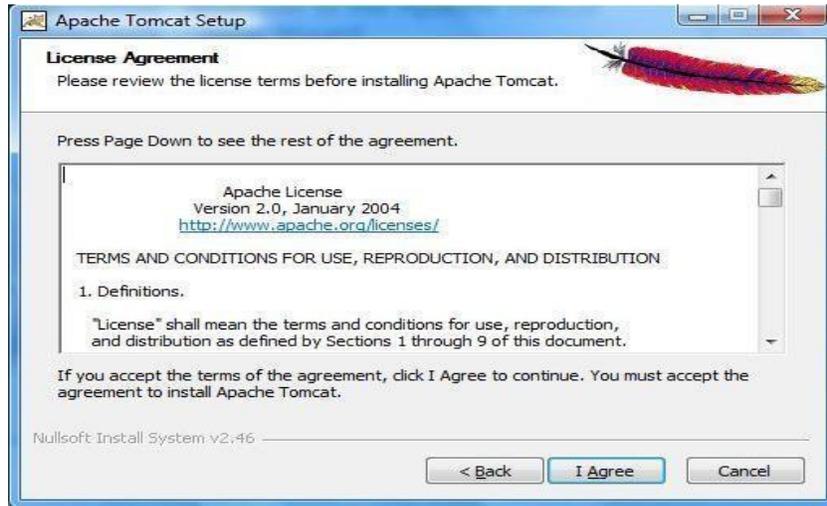
Simply click on the ‘Next’ button to continue installation process.



**Figure 3.10 Welcome Screen**

**License Agreement screen**

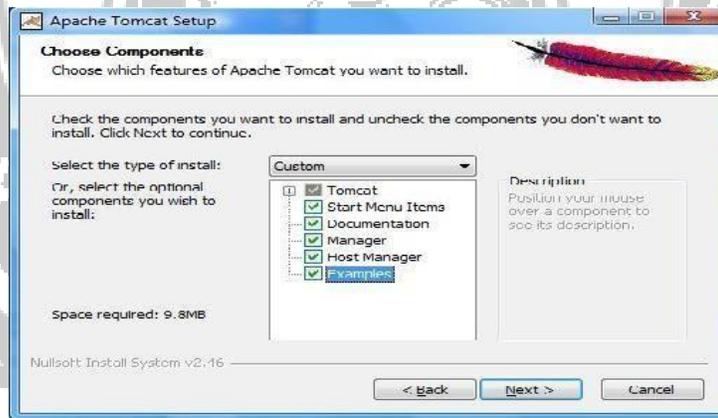
Accept the terms of the agreement by clicking on ‘I Agree’ button.



**Figure 3.11 License Agreement screen**

**Choose the components**

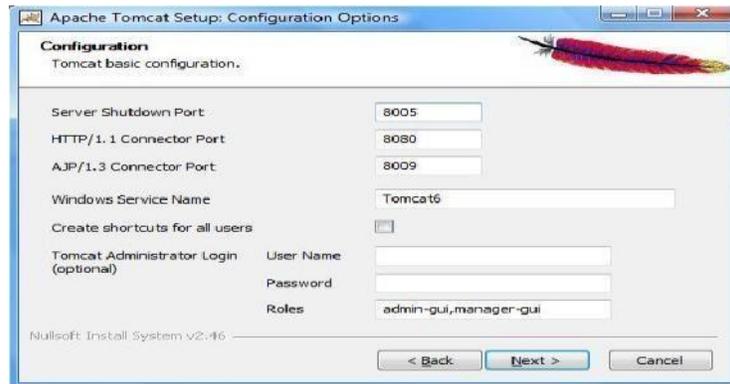
Choose the features of Apache Tomcat you want to install by checking the components and click 'Next'.



**Figure 3.12 Choose the components**

**Tomcat Configuration options**

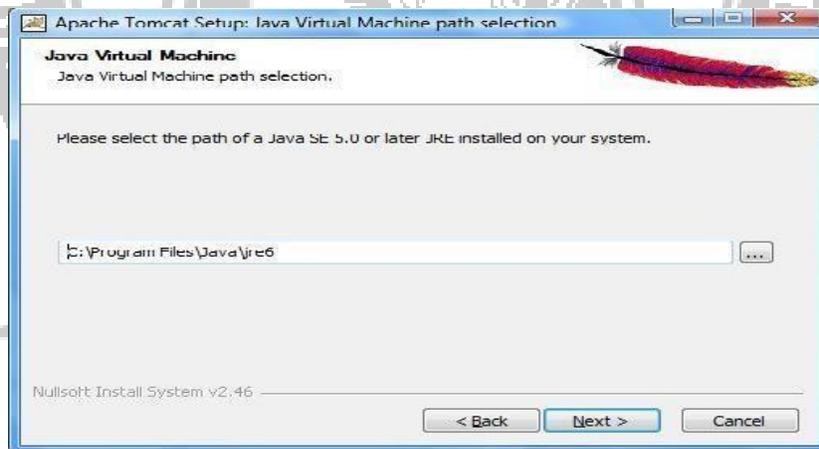
The default port number for Tomcat to process HTTP requests is 8080. The port numbers can be changed after the installation in server.xml which is located in/conf/server.xml. Provide the username and password for Administrator login and click on the 'Next' button.



**Figure 3.13 Tomcat Configuration options**

### Installed JRE path

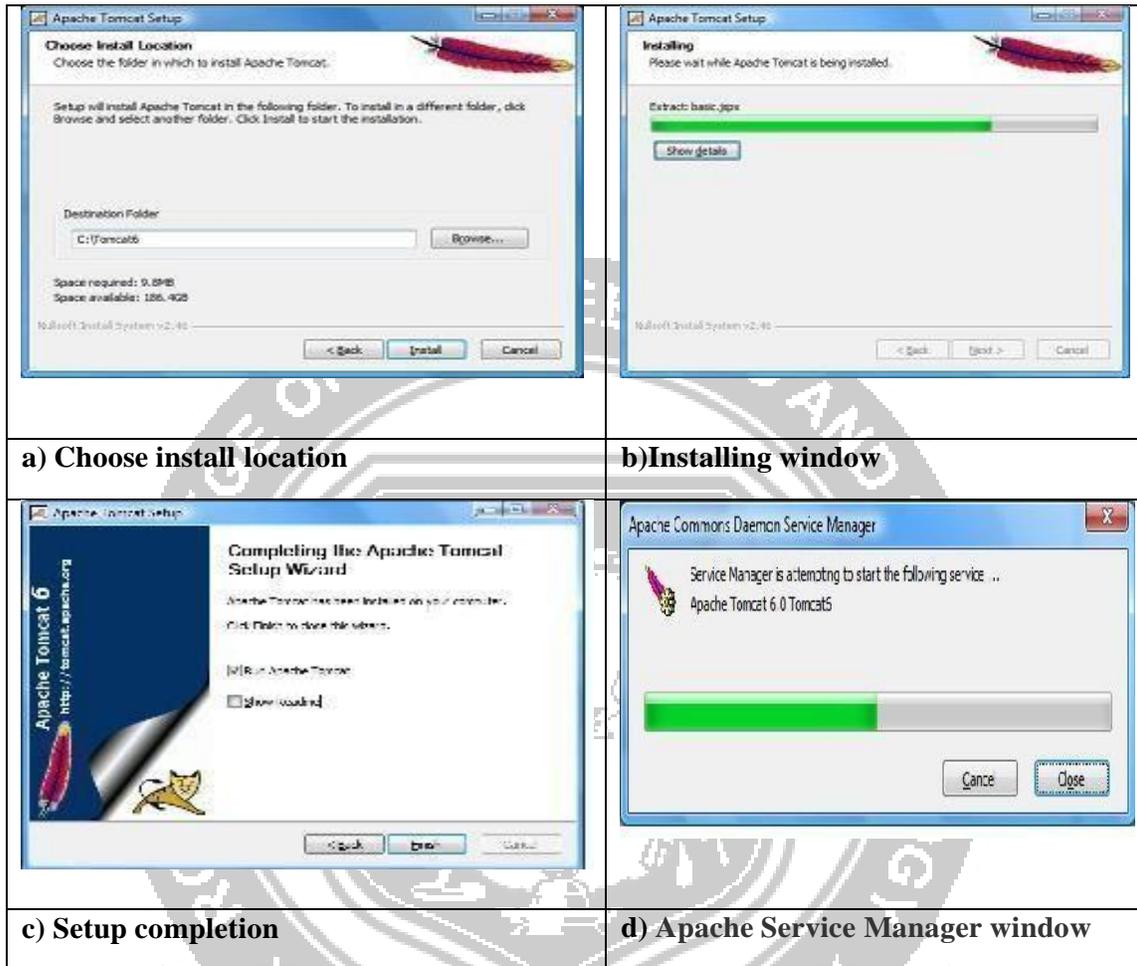
The installer uses the registry to determine the base path of a Java 5 or later JRE, including the JRE installed as part of the full JDK. When running on a 64-bit operating system, the installer will first look for a 64-bit JRE and only look for a 32-bit JRE if a 64-bit JRE is not found. It is not mandatory to use the default JRE detected by the installer. Any installed Java 5 or later JRE (32-bit or 64-bit) may be used by clicking on the browse button and click 'Next'.



**Figure 3.14 Installed JRE path**

### Choose Installation Location

In Windows, by default the location will be provided as 'C:\Program Files\Apache Software Foundation\Tomcat 6.0'. But for simplicity, we recommend you to use 'C:\Tomcat6' as shown below and click 'Install'.



**Figure 3.15 Choose Installation Location**

Once the service has been started, an **Apache Tomcat icon** appears on **Windows Taskbar** (bottom right).

**Test the Installation**

Open browser and type <http://localhost:8080> and see the Apache Tomcat home page as shown below.

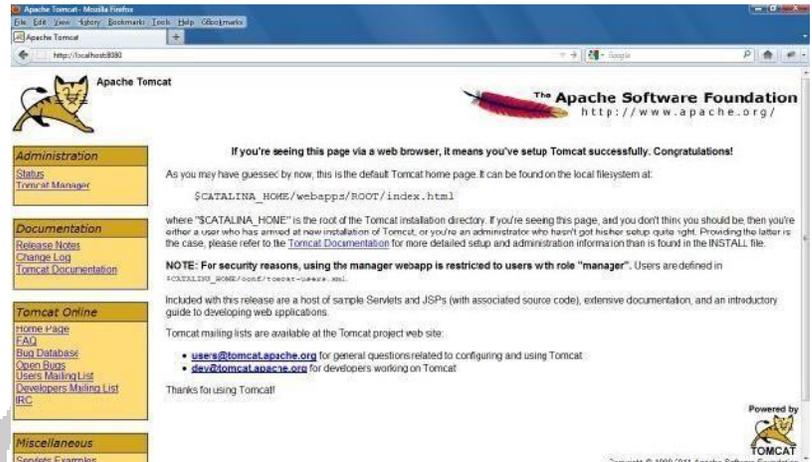


Figure 3.16 Testing the installation

### Configuring Apache Tomcat

To manually configure the server, double-click on the Tomcat icon in Taskbar to open the Apache Tomcat properties dialog. Select Manual as startup type and start the server or stop the server and click OK.



Figure 3.17 Manual configuration

Double-click on /bin/Tomcat6w.exe (in our case, it is C:\Tomcat6\bin) and follow the step as above. If it did not open the Apache Tomcat properties window then try to run it as administrator (Right click on exe file->Run as administrator). Using Windows Services: Open Control Panel\Administrative Tools and double-click on Services. Double-click on Apache Tomcat service and do as above.