

# Installation & Deployment Guide for ESME

## on Windows (Vista) & Apache Tomcat (version 6.0.18)

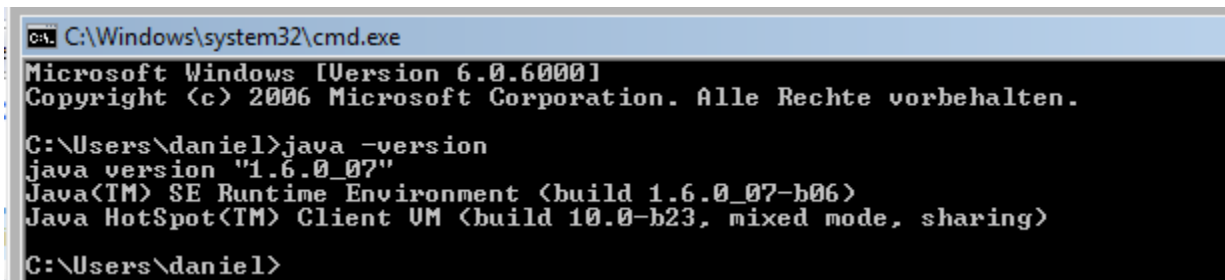
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This guide shows how to setup an ESME installation on a Windows Vista System. The intention for my setup was to checkout potential issues for a larger deployment, you might use it just for testing the application.

### Installation of Java

- You need a current installation of a Java Runtime Environment (JRE) on your machine; I used version 1.6.0\_07-b06, which works well. You can get the Java binary from <http://java.sun.com/javase>.

Your setup is successful, when you can afterwards open a commandline (-->start menu --> execute or search for "cmd.exe" ), issue a "java -version" command and see an output similar to the following:



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.0.6000]
Copyright (c) 2006 Microsoft Corporation. Alle Rechte vorbehalten.

C:\Users\daniel>java -version
java version "1.6.0_07"
Java(TM) SE Runtime Environment (build 1.6.0_07-b06)
Java HotSpot(TM) Client VM (build 10.0-b23, mixed mode, sharing)

C:\Users\daniel>
```

### Installation of Apache Tomcat

- Download the current Apache Tomcat binary from <http://tomcat.apache.org/download-60.cgi>.
- You will see a similar screenshot as the following:

## 6.0.18

Please see the [README](#) file for packaging information. It explains what

### Binary Distributions

- Core:
  - [zip](#) ([pgp](#), [md5](#))
  - [tar.gz](#) ([pgp](#), [md5](#))
  - [Windows Service Installer](#) ([pgp](#), [md5](#))
- Deployer:
  - [zip](#) ([pgp](#), [md5](#))
  - [tar.gz](#) ([pgp](#), [md5](#))

- The best option is the Windows Service Installer. Download it and execute the installer.
- You can follow the recommended install parameters: the only exception is the installation path: Tomcat recommends (along with MS-Windows settings) to be installed in c:\Program Files\Apache\... As this path includes spaces, some Java programs and configuration files have trouble starting files with path information (with spaces included): it is more safe (and better for the overview) to use an own folder high in the drive hierarchy without spaces. (e.g. take something like d:\tomcat\_60)
- Tomcat recommends the port 8080 for development needs: however if port 80 is not used otherwise, you will have less trouble (e.g. related to firewall issues), when you use port 80 for your deployment. (Another reason for port 80 is that browsers by default use port 80, for any other port setting the user needs to be aware of the fact, as he/she has to include this in the URL.)

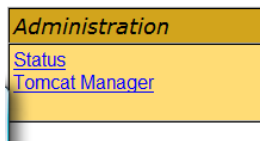
Your setup is successful, when you can reach afterwards the following page:



Apache Tomcat



The Apache Software Foundation  
<http://www.apache.org/>



If you're seeing this page via a web browser, it means you've setup Tomcat successfully. Congratulations!

As you may have guessed by now, this is the default Tomcat home page. It can be found on the local filesystem at:

## Deployment of the ESME Application

- Download the binary files from Google code page (at <http://code.google.com/p/esmeproject/downloads/list>).
- You will see the following list:

Filename ▾	Summary + Labels ▾
<a href="#">actions.pdf</a>	ESME Actions
<a href="#">ESMEDesktop_v0.012.air</a>	ESME Desktop v0.012 <span style="color: green;">Featured</span>
<a href="#">scala-library-2.7.1.jar</a>	Scala library - copy to WEB-INF/lib
<a href="#">lift-webkit-0.10-20080908.220934-106.jar</a>	Main lift library - copy to WEB-INF/lib
<a href="#">esme-2008-09-09.war</a>	WAR file for deploying to a servlet container (requires lift-webkit and scala-library jars in WEB-INF/lib)

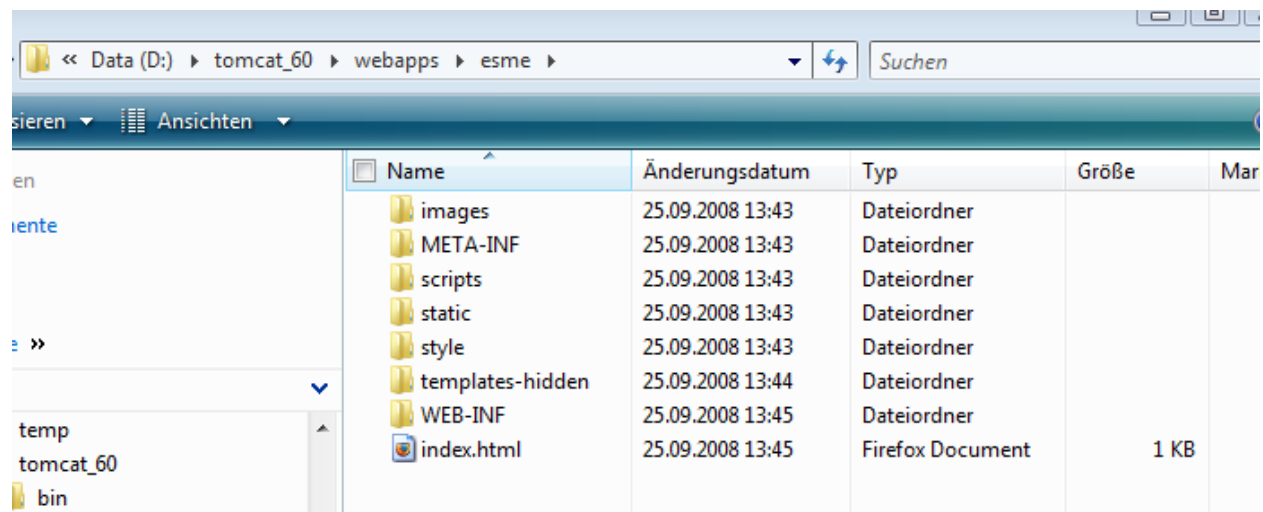
For hosting an ESME pilot or for the testing, the last three files are needed: Download them with a right mouse click to a temporary folder on your computer.

- For deployment you need to the contents of the WAR-file and the two jar-files to the right locations. For this to work, you have to stop the Apache Tomcat service via the service console.

**!!! For all further examples I assume Tomcat to be installed in d:\tomcat\_60. !!!**

- Create a directory called esme under d:\tomcat\_60\webapps.(I recommend not to take over the naming of the WAR file - with the complete date, as this requires the later user to remember also the ESME build date)-

- Extract the content of the WAR file to d:\tomcat\_60\webapps\esme.



- Now take the the two other Jar-files from your download (lift\*.jar and scala\*.jar) and put them to d:\tomcat\_60\webapps\esme\WEB-INF\lib.

- You are now ready to start the tomcat server (via the service console) and to see your application running.

- Open your browser, and enter the following link: <http://localhost:8080/esme>.

**Your setup was successful, when you can see a similar screen:**



From now on you can enter the ESME world and try out everything.

It is recommended to start with the creation of a user based on an existing OpenID.

## **Further options for ESME deployment**

As I also need to figure out further options for deployment, I just list my ideas here (knowing that these partly need further descriptions).

- Enabling HTTPS-Encryption on Tomcat (--> <http://tomcat.apache.org/tomcat-6.0-doc/ssl-howto.html>) Even some intranets require this nowadays.
- Linking ESME user base to an existing LDAP directory (in some scenarios better than requiring an OpenID login)
- Making the ESME Desktop client (based on Adobe AIR) directly linked and accessible from the starting page of ESME. (this would require some configuration work in the Flex application.