

# Beehive Tutorial + Tomcat Setup

The Beehive tutorials can be run on many different J2EE / Servlet application containers. Often, the tutorials use Tomcat as an example application container during discussions of deployment and URLs. The following steps are useful for configuring Tomcat to run the Beehive tutorials. Feel free to switch containers; just be sure to follow your application container's deployment and URL address instructions

Because the Beehive NetUI requires JSP 2.0 and Servlet 2.4 features, the 5.0 version of Tomcat is the minimum container for running Beehive-enabled applications.

(1) Install the latest Tomcat 5.x version -- download  
<http://jakarta.apache.org/site/binindex.cgi#tomcat>

(2) Set the CATALINA\_HOME environmental variable in your shell

(3) Optional. To easily deploy applications on Tomcat at build time, it is often useful to enable the manager username and role in the \$CATALINA\_HOME/conf/tomcat-users.xml file. This allows the manager role to be used in conjunction with Tomcat's Ant tasks for deploying, undeploying, and redeploying web applications. Note, for security reasons, the manager role should often be enabled before deploying applications into production on Tomcat. An example tomcat-users.xml file is below; new XML elements are shown below in **bold** type.

```
<?xml version='1.0' encoding='utf-8'?>
<tomcat-users>
  <role rolename="tomcat"/>
  <role rolename="role1"/>
  <role rolename="manager"/>
  <user username="tomcat" password="tomcat" roles="tomcat"/>
  <user username="role1" password="tomcat" roles="role1"/>
  <user username="both" password="tomcat" roles="tomcat,role1"/>
  <user username="manager" password="manager" roles="manager"/>
</tomcat-users>
```