



Modded Liferay

Enhanced performance, gadgets and tweaks.

Copyright © 2000-2006 Liferay Inc.

Copies of this document may be made for your own use and for distribution to others, provided that you do not charge any fee for such copies and further provided that each copy contains this Copyright Notice, whether distributed in print or electronically.

Version 1.0

Document change control		
When	What	Who
2006-11-26	Document created	Shepherd Ching
2006-11-27	Apache Portable Runtime	Shepherd Ching

Chapter 1: Liferay 4.1.3 running in Tomcat 5.5.20

Step 1.0: Download and install [Tomcat 5.5.20](#) into your preferred directory. From now on, the directory where you installed Tomcat will be referred to as \$TOMCAT_HOME.

Step 2.0: Download and install [JDK 5](#) . Set an environment variable called %JAVA_HOME% to point to your JDK directory in Windows, or \$JAVA_HOME in Linux.

Step 3.0: Move \$TOMCAT_HOME/webapps/ROOT/WEB-INF/lib/**xercesImpl.jar** to \$TOMCAT_HOME/common/endorsed

Step 4.0: Download liferay-portal-4.1.3.ear

Step 4.1: Unzip liferay-portal-4.1.3.ear to your temporary directory.

```
jar xvf liferay-portal-4.1.3.ear
```

Step 4.2: \$TOMCAT_HOME/webapps/ROOT

```
mkdir ROOT
```

```
cd ROOT
```

```
jar xvf liferay-portal-4.1.3.war
```

Step 4.2.1: Except util-taglib.jar and commons-logging.jar, move all files \$TOMCAT_HOME/webapps/ROOT/WEB-INF/lib/* to \$TOMCAT_HOME/common/lib/ext

Step 4.2.2: Download and unzip liferay-portal-dependencies-4.1.3.zip

copy files **portal-kernel.jar** and **portlet.jar** to \$TOMCAT_HOME/common/lib/ext

Step 4.2.3: Download and unzip liferay-portal-src-4.1.3.zip

Goto source directory "lib/development"

Copy files **activation.jar**, **jms.jar**, **jta.jar**, **mail.jar** to \$TOMCAT_HOME/common/lib/ext

Step 4.3: \$TOMCAT_HOME/webapps/cms-web

Go to \$TOMCAT_HOME/webapps

```
mkdir cms-web
```

```
cd cms-web
```

```
jar xvf cms-web.jar
```

Step 4.4: \$TOMCAT_HOME/webapps/laszlo-web

Go to \$TOMCAT_HOME/webapps

```
mkdir laszlo-web
```

```
cd laszlo-web
```

```
jar xvf laszlo-web.jar
```

Step 4.5: \$TOMCAT_HOME/webapps/tunnel-web

Go to \$TOMCAT_HOME/webapps

mkdir tunnel-web

cd tunnel-web

jar xvf tunnel-web

Step 5.0: ROOT.xml

Edit \$TOMCAT_HOME/conf/Catalina/localhost/ROOT.xml

```
<Context path="">
```

```
  <Resource
```

```
    name="jdbc/LiferayPool"
```

```
    auth="Container"
```

```
    type="javax.sql.DataSource"
```

```
    driverClassName="org.hsqldb.jdbcDriver"
```

```
    url="jdbc:hsqldb:test"
```

```
    username="sa"
```

```
    password=""
```

```
    maxActive="20"
```

```
  />
```

```
  <Resource
```

```
    name="mail/MailSession"
```

```
    auth="Container"
```

```
    type="javax.mail.Session"
```

```
    mail.transport.protocol="smtp"
```

```
    mail.smtp.host="localhost"
```

```
  />
```

```
  <Realm
```

```
    className="org.apache.catalina.realm.JAASRealm"
```

```
    appName="PortalRealm"
```

```
    userClassNames="com.liferay.portal.security.jaas.PortalPrincipal"
```

```
    roleClassNames="com.liferay.portal.security.jaas.PortalRole"
```

```
    debug="99"
```

```
    useContextClassLoader="false"
```

```
  />
```

```
</Context>
```

Step 6.0: catalina.properties

Edit \$TOMCAT_HOME/conf/catalina.properties

```
common.loader=${catalina.home}/common/classes,${catalina.home}/common/i18n/*.jar,${catalina.home}/common/endorsed/*.jar,${catalina.home}/common/lib/*.jar,${catalina.home}/common/lib/ext/*.jar
```

Step 7.0: jaas.config

Edit. \$TOMCAT_HOME/conf/jaas.config

```
PortalRealm {  
    com.liferay.portal.kernel.security.jaas.PortalLoginModule required;  
};
```

Step 8.0: catalina.sh

In Linux: edit \$TOMCAT_HOME/bin/catalina.sh

```
JAVA_OPTS="-Xms128m -Xmx512m -Dfile.encoding=UTF8 -Duser.timezone=GMT  
-Djava.security.auth.login.config=$CATALINA_HOME/conf/jaas.config"
```

In Windows: edit \$TOMCAT_HOME\bin\catalina.bat

```
set JAVA_OPTS="-Xms128m -Xmx512m -Dfile.encoding=UTF8 -Duser  
.timezone=GMT -Djava.security.auth.login.config=$CATALINA_HOME/conf/jaas.config
```

Step 9.0: portal-ext.properties

Edit \$TOMCAT_HOME/webapps/ROOT/WEB-INF/classes/portal-ext.properties

```
portal.release=professional  
portal.ctx=/  
auto.deploy.dest.dir=../webapps  
auto.deploy.enabled=false  
auto.deploy.deploy.dir=/home/liferay/temp/deploy  
lucene.dir=/home/liferay/temp/lucene/  
dl.root.dir=/home/liferay/documentlibrary/root/  
dl.version.root.dir=/home/liferay/documentlibrary/vroot/  
jcr.jackrabbit.repository.root=/home/liferay/jackrabbit/
```

Chapter 2: Databases

HSQLDB

Step 1: Download and unzip liferay-portal-src-4.1.3.zip

Step 2: copy file lib/development/hsqldb.jar to \$TOMCAT_HOME/common/lib/ext

Step 3: Download and unzip liferay-portal-sql-4.1.3.zip

Step 4: Run the Hypersonic Database Manager and log into the database instance, example: test. Cut and paste the contents of portal-hypersonic.sql into the manager and execute the SQL statements.

Step 5: copy files test.properties & test.script to \$TOMCAT_HOME/bin

Chapter 3. Apache Portable Runtime

Tomcat can use the [Apache Portable Runtime](http://tomcat.apache.org/tomcat-5.5-doc/apr.html) to provide superior scalability, performance, and better integration with native server technologies. (Reference: <http://tomcat.apache.org/tomcat-5.5-doc/apr.html>)

Under Windows:

Step 1: Download <http://tomcat.heanet.ie/nativs/1.1.7/win32/tcnative-1-ipv4.dll>

Step 2: Copy tcnative-1-ipv4.dll %TOMCAT_HOME%

Step 3: Edit \$TOMCAT_HOME/bin/catalina.bat
set CATALINA_OPTS=-Djava.library.path=..

Under Linux:

Step 1:

If using Debian or Ubuntu:

```
sudo tar jxvf apr-1.2.7.tar.bz2
cd apr-1.2.7
sudo ./configure --prefix=/usr/local/apr
sudo make
sudo make install
```

If using Fedora or Redhat:

wget -c <http://apache.cdpa.nsysu.edu.tw/apr/binaries/rpm/i386/apr-devel-1.2.7-1.i386.rpm>

wget -c <http://apache.cdpa.nsysu.edu.tw/apr/binaries/rpm/i386/apr-1.2.7-1.i386.rpm>

under root mode:

```
rpm -ivh apr-1.2.7-1.i386.rpm apr-devel-1.2.7-1.i386.rpm
```

or just type yum install apr-1.2.2 apr-devel-1.2.2

Step 2: wget -c <http://www.apache.org/dist/tomcat/tomcat-connectors/native/tomcat-native-1.1.4.tar.gz>

Step 2.1: cd \$TOMCAT_HOME

Step 2.2: tar zxvf tomcat-native-1.1.4.tar.gz

Step 2.3: cd \$TOMCAT_HOME/bin/tomcat-native-1.1.4/jni/native

```
./configure --with-apr=/usr/bin/apr-1-config --with-java-home=/usr/java/jdk1.5.0_07/
make
su
make install
```

Step 2.4: Edit \$TOMCAT_HOME/bin/catalina.sh

```
CATALINA_OPTS="-Djava.library.path=/usr/local/apr/lib"
```