

V-Books Production Environment And Deployment Process

Prerequisites for V-Books:

1. **jdk1.5 or higher**
2. **apache-tomcat-6.0**
3. **apache-activemq-5.5**
4. **apache-maven-3.0**

1) We need to change the default heap size(JAVA_OPTS) for JVM in the following location **“/etc/environment”**.

**JAVA_OPTS=-Xms256m -Xmx1024m -XX:PermSize=256m
-XX:MaxPermSize=512m**

2) We need to change the database engine from **MYISAM** to **INNODB**. Because MYISAM won't support transactions on multiple table, where as INNODB will support transactions. To change the engine, we need to add the following key, value pairs under [mysqld] section in the configuration file **/etc/mysql/my.cnf** .

1. **default-storage-engine=innodb**
2. **transaction-isolation = READ-COMMITTED**
3. **innodb_buffer_pool_size= 512M**

3) we need to enable the following tags and made change in it as below in **“/apache-activemq-5.5.1/conf/activemq.xml”**.

```
<systemUsage>
  <systemUsage>
    <memoryUsage>
      <memoryUsage limit="512 mb"/>
    </memoryUsage>
    <storeUsage>
      <storeUsage limit="1 gb"/>
    </storeUsage>
    <tempUsage>
      <tempUsage limit="1 gb"/>
    </tempUsage>
  </systemUsage>
</systemUsage>
```

4) We need to update the following lines in **“/apache-activemq-5.5.1/bin/activemq.sh”** as follows.

```
ACTIVEMQ_OPTS_MEMORY="-Xms256M -Xmx512M"
```

```
if [ -z "$ACTIVEMQ_OPTS" ] ; then
ACTIVEMQ_OPTS="$ACTIVEMQ_OPTS_MEMORY
-Dorg.apache.activemq.UseDedicatedTaskRunner=false
-Djava.util.logging.config.file=logging.properties"
```

```
fi
```

Database creation/deployment

- 1) Open Linux Terminal
- 2) Move to File System Path/Location where SQL scripts are available (create.sql, auth.sql)
- 3) login to mysql
 1. mysql -u<user name> -p<password>;
- 4) At mysql execute the below sql command to create new database
 1. Create database <DB Name>;
 2. Create user <user name> identified by <password>;
 3. Grant all on <DB Name> .* to <user name>;
 4. exit mysql command prompt
- 5) At the terminal run the below command to execute the sql scripts provided to create all the tables required in the in the database mentioned below.
- 6) mysql -u <username> -p <password> <DBName> <create.sql>;
- 7) mysql -u <username> -p <password> <DBName> <auth.sql>;
- 8)

Steps to Deploy V_Books project into Tomcat server:**Step – 1:-**

Check out the project from the below SVN repository url.

<http://192.168.1.43/svn/vbooks/branches/v-books-1.0>

Ex:-

svn co [http://192.168.1.43/svn/vbooks/branches/v-books-1.0/](http://192.168.1.43/svn/vbooks/branches/v-books-1.0) -r <revision>

Step – 2:-

Now from project directory, execute the following maven goal to compile the code.

../v-books> mvn clean install

Step – 3:-

After executing above goal, maven will create a target directory, where maven will place **v-books.war** and **v-books folder**. Now replace the jar files presented in the below directory **“[target/v-books/WEB-INF/lib](#)”** with the following jar files.

List of jar files:

activation.jar	camel-http4-2.9.0.jar	mail.jar	spring-webmvc-portlet.jar
activemq-all-5.1.0.jar	cglib-2.1.3.jar	mondrian-3.1.1.12687.jar	spring-webmvc-struts.jar
activemq-core-5.3.0.jar	cleanimports.jar	mysql-connector-java-5.1.5-bin.jar	standard-1.1.2.jar
activemq-pool-5.2.0.jar	commons-beanutils-1.8.0.jar	ojdbc14.jar	struts.jar
activemq-web-5.5.1.jar	commons-codec.jar	oscache-2.1.jar	swarmcache-1.0rc2.jar
ant-1.7.1.jar	commons-collections-3.2.1.jar	png-encoder-1.5.jar	syndiag2.jar
ant-antr-1.6.5.jar	commons-collections-3.2.jar	poi-3.5-FINAL-20090928.jar	tomcat-jdbc-7.0.27.jar
ant-junit-1.6.5.jar	commons-dbcp-1.2.2.jar	project.jar	versioncheck.jar
ant-launcher-1.6.5.jar	commons-digester-1.7.jar	proxool-0.8.3.jar	xalan-2.6.0.jar
antlr-2.7.5.jar	commons-fileupload-1.2.1.jar	quartz-all-1.6.5.jar	xerces-2.6.2.jar
antlr.jar	commons-io-1.4.jar	rhino-1.7R1.jar	xercesImpl-2.7.0.jar
ant-swing-1.6.5.jar	commons-javafLOW-20060411.jar	rome-0.5.jar	xml-apis-ext.jar
aopalliance-1.0.jar	commons-lang-2.4.jar	rome-fetcher-1.0.0.jar	xml-apis.jar

apache-log4j-extras-1.0.jar	commons-logging-1.1.1.jar	saaj-api-1.3.jar
apache-log4j-extras-1.1.jar	commons-pool-1.5.3.jar	servlet.jar
asm-attrs.jar	commons-validator.jar	slf4j-api-1.7.2.jar
asm.jar	concurrent-1.3.2.jar	slf4j-log4j12-1.7.2.jar
aspectjrt-1.6.8.jar	connector.jar	sojo-optional-0.5.0.jar
aspectjweaver-1.6.8.jar	dom4j-1.6.1.jar	spring-amqp-1.1.2.RELEASE.jar
barbecue-1.5-beta1.jar	ehcache-1.1.jar	spring-aop-3.0.1.RELEASE.jar
barcode4j-2.0.jar	flexjson.jar	spring-asm-3.0.1.RELEASE.jar
batik-anim.jar	google-collect-1.0.jar	spring-beans-3.0.1.RELEASE.jar
batik-awt-util.jar	groovy-all-1.5.5.jar	spring-context-3.0.1.RELEASE.jar
batik-bridge.jar	hibernate3.jar	spring-context-support-3.0.1.RELEASE.jar
batik-css.jar	hsqldb-1.8.0-10.jar	spring-core-3.0.1.RELEASE.jar
batik-dom.jar	iText-2.1.7.jar	spring-dao.jar
batik-ext.jar	jaas.jar	spring-expression-3.0.1.RELEASE.jar
batik-gvt.jar	jacc-1_0-fr.jar	spring-hibernate.jar
batik-parser.jar	jakarta-oro.jar	spring.jar
batik-script.jar	jasperreports-4.5.0.jar	spring-jdbc-3.0.1.RELEASE.jar
batik-svg-dom.jar	jasypt-1.2.jar	spring-jms.jar
batik-svggen.jar	jaxen-1.1.1.jar	spring-json-1.3.0.jar
batik-util.jar	jboss-cache.jar	spring-mock.jar
batik-xml.jar	jboss-common.jar	spring-orm.jar
bcel-5.2.jar	jboss-jmx.jar	spring-rabbit-1.1.2.RELEASE.jar
bsh-2.0b4.jar	jboss-system.jar	spring-remoting.jar
c3p0-0.9.0.jar	jcommon-1.0.15.jar	spring-security-acl-3.0.2.RELEASE.jar
camel-core-2.9.0.jar	jdbc2_0-stdext.jar	spring-security-config-3.0.2.RELEASE.jar
jta.jar	jdom-1.1.jar	spring-security-core-3.0.2.RELEASE.jar
junit-3.8.1.jar	jdt-compiler-3.1.1.jar	spring-security-web-3.0.2.RELEASE.jar
jxl-2.6.jar	jfreechart-1.0.12.jar	spring-support.jar
log4j-1.2.15.jar	jgroups-2.2.8.jar	spring-test.jar
log4j-1.2.16.jar	jpa.jar	spring-tx-3.0.1.RELEASE.jar
log4j-1.2.17.jar	json-lib-2.2.3-jdk15.jar	spring-web-3.0.1.RELEASE.jar
lucene-1.4.3.jar	jstl-1.1.2.jar	spring-webmvc-3.0.1.RELEASE.jar

Step – 4:-

Now change the following values of key in `jdbc.properties` file available in the below directory, "[/v-books/target/v-books/WEB-INF/classes](#)".

Database changes:

1. `jdbc.username=<username>`
2. `jdbc.password=<password>`
3. `jdbc.url=jdbc:mysql://<host>:3306/<database name>?`
`zeroDateTimeBehavior=convertToNull&autoReconnect=true`

#Reports image URL.

1. `image.url=../../<Application Name>/images?image=`

and in `MessagesBundle_en_US.properties` also we need to change the following properties for Active MQ.

1. `ACTIVEMQ_BROKER_URL = tcp://<host>:61616`
2. `ACTIVEMQ_IP = <host>`

Step – 5:-

Now deploy the application in Tomcat webapps folder, and then start tomcat and Active mq by using the following commands.

To start tomcat:-

```
../apache-tomcat-6.0.37/bin$ ./startup.sh
```

```
Using CATALINA_BASE:   /home/sudhakar/Application/apache-tomcat-6.0.37
Using CATALINA_HOME:   /home/sudhakar/Application/apache-tomcat-6.0.37
Using CATALINA_TMPDIR: /home/sudhakar/Application/apache-tomcat-6.0.37/temp
Using JRE_HOME:        /home/sudhakar/Application/jdk1.7.0_13
Using CLASSPATH:       /home/sudhakar/Application/apache-tomcat-6.0.37/bin/bootstrap.jar
../apache-tomcat-6.0.37/bin$
```

To stop Tocat:-

```
../apache-tomcat-6.0.37/bin$ ./shutdown.sh
```

To start Active MQ:-

```
/home/sudhakar/Application/apache-activemq-5.5.1/bin$ ./activemq start
```

```
INFO: Using default configuration
(you can configure options in one of these file: /etc/default/activemq
/home/sudhakar/./activemqrc)
INFO: Invoke the following command to create a configuration file
./activemq setup [ /etc/default/activemq | /home/sudhakar/./activemqrc ]
INFO: Using java '/home/sudhakar/Application/jdk1.7.0_13/bin/java'
INFO: Starting - inspect logfiles specified in logging.properties and
log4j.properties to get details
INFO: pidfile created : '/home/sudhakar/Application/apache-activemq-5.5.1/data/activemq.pid' (pid '6976')
../apache-activemq-5.5.1/bin$
```



To stop Active MQ:-

```
../apache-activemq-5.5.1/bin$ ./activemq stop
```

---END---