

# SolrJBoss

## Solr with JBoss

- Solr runs fine with [JBoss](#), see the instructions in the generic [Solr installation](#) page
- The latest version of JBoss is recommended
  
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## Optional Configuration

### URI Charset Config (only needed before Solr 4.1)

 **Solr4.1** Solr now parses request parameters (in URL or sent with POST using content-type application/x-www-form-urlencoded) in its dispatcher code. It no longer relies on special configuration settings in JBoss or other web containers to enable UTF-8 encoding, which is mandatory for correct Solr behaviour.

Solr now works out of the box with e.g. Tomcat, JBoss,...

In older Solr versions (before [Solr4.1](#)), you have to change the container's default URI encoding: Edit JBoss's `server/default/deploy/jbossweb-tomcat55.sar/server.xml` and add the following attribute to the correct Connector element: `URIEncoding="UTF-8"`. If you're using JBoss v4.0 or above, then the file is located at: `server/default/deploy/jboss-web-deployer/server.xml`

```
<Server ...>
  <Service ...>
    <Connector ... URIEncoding="UTF-8" />
    ...
  </Connector>
</Service>
</Server>
```

This is only an issue when sending non-ascii characters in a query request... no configuration is needed for Solr/Tomcat to return non-ascii chars in a response, or accept non-ascii chars in an HTTP-POST body.

## SNMP Monitoring

For more information on Using SNMP with Solr in JBoss please see [SolrSnmp](#)

## Configuring Solr Home

You can configure the Solr home directory globally via `-Dsolr.solr.home` in the file `bin/run.bat`. But that is often not desired because you potentially want more than one Solr installation deployed.

### Solr Home via web.xml

You can configure the Solr home directory to use per webapp in Solr's `web.xml` file. Add following snippet to the `web.xml`:

```
<env-entry>
  <env-entry-name>solr/home</env-entry-name>
  <env-entry-type>java.lang.String</env-entry-type>
  <env-entry-value>C:\Projects\solr-trunk\example\solr</env-entry-value>
</env-entry>
```

## Solr Home via properties-service.xml

You can also configure it (and other Solr variables, such as the Solr-data-dir) in properties-service.xml like so:

```
<mbean code="org.jboss.varia.property.SystemPropertiesService" name="jboss:type=Service,name=SystemProperties">
  <attribute name="Properties">
    solr.solr.home=C:/jboss-X/server/default/conf/solr
    solr.data.dir=C:/solr/data
  </attribute>
</mbean>
```

## JBoss Logging

By default JBoss uses Log4J for its logging, while the default Solr installation uses the [SLF4J binding](#) to log via the JDK1.4 logging system. In order to get Solr to log via Log4J, you must replace the slf4j-jdk\*.jar binding with the slf4j-log4j\*.jar binding. From that point on, logging can be configured via the log4j.xml configuration file.

For example, this can be used to silence all the INFO messages from Solr:

```
<category name="org.apache.solr">
  <priority value="WARN"/>
</category>
```

## Troubleshooting

If you encounter the error "statements are only available if source level is 5.0" then you have to edit the file *server/default/deploy/jbossweb-tomcat55.sar/conf/web.xml*.

Comment in the block

```
<init-param>
  <param-name>compilerSourceVM</param-name>
  <param-value>1.5</param-value>
</init-param>
```

## JBoss 5

Solr (1.3) (\* TODO: should test with 1.4 too\*) works fine in JBoss 5, but you should remove the following jars:

- xercesImpl-2.8.1.jar
- xml-apis-1.3.03.jar

from the WEB-INF/lib folder of solr.war

Since JBoss ships with its own version, solr will use the lib provided by JBoss 5.

You can even remove all the libs in WEB-INF/lib and put in server/{yourinstance}/lib if you want to deploy multiple instances of solr.

Logging should work without the steps declared in JBoss Logging section.

## JBoss 6 and Solr 3.3

In order for the solr.war deployment to work:

- The velocity-tools-2.0 should be updated from the beta3 version to the non-beta version from upstream.
- The commons-collections and commons-beanutils jars should be removed

## JBoss 7 and Solr 4.0-ALPHA

You can add solr.solr.home and solr.data.dir in "Profile => System Properties".

## UTF-8

Add org.apache.catalina.connector.URI\_ENCODING to the system properties and set the value to UTF-8 so queries with UTF-8 characters (for example Umlaute) work.