

# Installing JIRA on JBoss 3

These instructions will help you install JIRA on [JBoss 3.x](#) (with embedded Jetty or Tomcat). These instructions have been tested with JBoss 3.2.3. Earlier releases are not expected to work fully (see [JIRA-4977](#), [JIRA-3667](#)).

There is also [separate guide](#) for installing JIRA on JBoss 2.4, but we recommend using JBoss 3.x rather than JBoss 2.4 if you can (though if you have a choice, prefer [Tomcat](#) — it is significantly faster).

If you're having problems, see [debugging JIRA](#).

## 1. 1. Configure JBoss

The application server (JBoss) is responsible for establishing a database connection, and making it available to webapps like JIRA as a "DataSource". JBoss comes with one DataSource preconfigured using a built-in [hsqldb](#) database. You can see the configuration for this in `server/default/deploy/hsqldb-ds.xml`. In the rest of this guide, we assume use of this DataSource (called 'DefaultDS').

If you wish to use another database (MySQL, Oracle etc), create another config file in the 'deploy' directory, eg `server/default/deploy/jira-ds.xml`:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- DataSource for JIRA webapp,
      called 'JiraDS' (must be same in entityengine.xml) -->
<datasources>
  <local-tx-datasource>
    <jndi-name>JiraDS</jndi-name>
    <connection-url>jdbc:mysql://localhost/jiradb?autoReconnect=true</connection-url>
    <driver-class>com.mysql.jdbc.Driver</driver-class>
    <user-name>jira_mysql_username</user-name>
    <password>jira_mysql_password</password>
  </local-tx-datasource>
</datasources>
```

Here we have created a MySQL DataSource called 'JiraDS'. We would also have to copy the MySQL JDBC jar to `servers/default/lib/`. See the [database configuration page](#) for details.

## 2. 1. Configure JIRA

Open the `edit-webapp/WEB-INF/classes/entityengine.xml` file, and make the following changes:

### 2.1. 1.1 Modify transaction factory attribute

Make the following changes (in bold) to the `<transaction-factory>` tag:

```
<transaction-factory
  class="org.ofbiz.core.entity.transaction.JNDIFactory">
  <user-transaction-jndi jndi-server-name="default"
    jndi-name="UserTransaction" />
  <transaction-manager-jndi jndi-server-name="default"
    jndi-name="java:TransactionManager" />
</transaction-factory>
```

### 2.2. 1.2 Modify datasource attributes

Lower down in `entityengine.xml`, the `<datasource>` tag needs modifying in two locations:

```
<datasource name="defaultDS"
  field-type-name="hsql"
  schema-name="PUBLIC"
  helper-class="org.ofbiz.core.entity.GenericHelperDAO"
  check-on-start="true" use-foreign-keys="false"
  use-foreign-key-indices="false"
  check-fks-on-start="false"
  check-fk-indices-on-start="false"
  add-missing-on-start="true">
  <jndi-jdbc jndi-server-name="default"
    jndi-name="java:/DefaultDS"/>
</datasource>
```

- The `field-type-name` parameter needs to be set appropriately for the type of database you use.
- The `jndi-name` attribute needs to point to a `DataSource` to use. As mentioned above, JBoss comes preconfigured with a "DefaultDS" `DataSource`, which we assume use of here. If instead, you added the MySQL `DataSource` above, the `jndi-name` value would be `java:/JiraDS`.

### 3. 2. Build JIRA

Now build JIRA by typing `build` (Windows) or `./build.sh` (Unix) on the command line, in the directory where you originally extracted JIRA to. This will produce a deployable WAR file in the `dist-generic` directory.

### 4. 3. (optional) Remove old deployments

On some versions of JBoss you may need to undeploy any old JIRA EARs/WARs and remove all deployed files before deploying the new WAR.

### 5. 4. Deploy the WAR in JBoss

Rename the WAR to `jira.war`, and drop it into your deployment directory (usually `jboss/server/default/deploy/`). If JBoss is running, you should see messages on the JBoss console saying that it is deploying the WAR.

#### Note:

The version of tomcat that ships with JBoss 3.2.x ships with an earlier version of the `commons-collections.jar`. JIRA requires the `commons-collections-3.1.jar`. You will need to replace the version shipped with the tomcat instance in JBoss (usually found in `{JBOSS_HOME}/server/default/deploy/jbossweb-tomcat50.sar/commons-collections.jar`) with the version shipped with JIRA (usually found in `{JIRA_HOME}/WEB-INF/lib/commons-collections-3.1.jar`).

Start JBOSS by running `bin/run.bat` under the JBoss directory. Watch the startup logs for errors. Once JBoss has started, JIRA should be accessible at `http://localhost:8080/jira/` (change the host and port as needed; the 'jira' part is whatever the WAR name is).

### 6. User-contributed notes

Have experiences to share with JBoss and JIRA? We welcome your thoughts. Please see the [user-contributed JBoss 3 notes](#).