**How to Configure Data source on JBoss 7..?**

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**Configure Other Database (Example PostgresQL)**

**Method 1:**

Copy JDBC driver (e.g. postgresql-9.1-901.jdbc4.jar) to $JBOSS\_HOME\standalone\deployments folder

**Method 2: Install Driver As a Module (Standard Way)**

1. Create folder named postgresql under:

$JBOSS\_HOME\modules\org

That will bring new directory:

$JBOSS\_HOME\modules\org\postgresql

1. Create Sub Folder named main under:

$JBOSS\_HOME\modules\org\postgresql

That will bring new directory:

$JBOSS\_HOME\modules\org\postgresql\main

1. Copy JDBC driver to main folder:

$JBOSS\_HOME\modules\org\postgresql\main

1. Create file named module.xml with contents

<?xml version="1.0" encoding="UTF-8"?>

<module xmlns="urn:jboss:module:1.0" name="**org.postgresql**">

<resources>

<resource-root path="postgresql-9.1-901.jdbc4.jar"/>

</resources>

<dependencies>

<module name="javax.api"/>

<module name="javax.transaction.api"/>

</dependencies>

</module>

It will configure database driver with name given in attribute value. For this example name of module will be **org.postgresql**

**Configure DataSource**

Open $JBOSS\_HOME/standalone/configuration/standalone.xml

Add following Node at path: /server/profile/subsystem/ datasources/

<datasource jndi-name="**jboss/datasources/jdbc/MyDS**" pool-name="jboss/datasources/jdbc/MYDS\_Pool" enabled="true" jta="true" use-java-context="true" use-ccm="true">

<connection-url>jdbc:postgresql://localhost/gisdb</connection-url>

<driver-class>org.postgresql.Driver</driver-class>

<driver>postgresql-jdbc4</driver>

<security>

<security-domain>encrypted-ds</security-domain>

</security>

</datasource>

Add following Node at path /server/profile/subsystem/ datasources/ drivers

<driver name="postgresql-jdbc4" module="**org.postgresql**"/>

Note that value of the module should be same as given in first step while adding database driver as a module.

It will create Data Source with name **jboss/datasources/jdbc/MyDS**

That can be accessed from java source with name **java:/ jboss/datasources/jdbc/MyDS**

**Securing Database Password in Data Source**

We have not provided password for database connection while defining data-source. If you want to specify you can replace security node with following:

<security>

<user-name>db\_user\_name</user-name>

<password>db\_password</password>

</security>

Since password is written there as plain text so it is not secure.

In order to secure the database password in data source, configure Encrypted Data Source.

<security>

<security-domain>encrypted-ds</security-domain>

</security>

**Defining Encrypted –DS**

To define Encrypted DS, Add following node to path: /server/profile/subsystem/security-domains

<security-domain name="encrypted-ds" cache-type="default">

<authentication>

<login-module code="org.picketbox.datasource.security.SecureIdentityLoginModule" flag="required">

<module-option name="username" value="user\_name"/>

<module-option name="password" value="48d5a747e6dae9dddf8592078de921bc"/>

<module-option name="managedConnectionFactoryName" value="jboss.jca:service=LocalTxCM,name=jboss/datasources/jdbc/GISCore\_Pool"/>

</login-module>

</authentication>

</security-domain>

The node defines a DS which is having user name as user\_name while password is encrypted password.

To generate Encrypted password use following command:

java -classpath %JBOSS\_HOME%\modules\org\picketbox\main\picketbox-4.0.1.jar;%JBOSS\_HOME%\modules\org\jboss\logging\main\jboss-logging-3.0.1.GA.jar org.picketbox.datasource.security.SecureIdentityLoginModule user\_password

user\_password is actual password of database.

It will generate encrypted password displayed on command line.

**Configure Security Domain**

To Define Security Domain for JAAS, Add following node to path:

/server/profile/subsystem/security-domains

<security-domain name="LmktAcm" cache-type="default">

<authentication>

<login-module code="Database" flag="required">

<module-option name="dsJndiName" value="java:/jboss/datasources/jdbc/MYDS"/>

<module-option name="principalsQuery" value="select login\_password from t\_acm\_user where username=?"/>

<module-option name="rolesQuery" value="select role, 'Roles' from t\_acm\_user where username=?"/>

</login-module>

</authentication>

</security-domain>