

Table of Contents

Glassfish server installation and Configuration.....	1
Configuring a Connection pool on the Web application Server.....	1

Glassfish server installation and Configuration

Here we describe how to install and configure the glassfish Web Application Server. [Note](#): For development using the netbeans IDE [you](#) want to use the glassfish server that is bundled with netbeans. In that case you still have to make sure that the G4Expert and G4Admin users are created and that the connection pools and DataSources are created.

we will run the server as user glassfish. So first (as root) we create user glassfish:

```
/usr/sbin/adduser -d /usr/glassfish4 -m --shell /bin/bash glassfish
```

Then as user glassfish obtain glassfish from the glassfish download site <http://download.oracle.com/glassfish/4.1/release>

```
wget "target='_blank'>http://download.oracle.com/glassfish/4.1/release/glassfish-4.1.zip]]"
```

```
cd /usr unzip ~/glassfish-4.1.zip
```

```
chown -R glassfish.glassfish /usr/glassfish4
```

get jdk from: [here](#) Now change the configuration file for glassfish to point to the correct jdk: `emacs /usr/glassfish4/glassfish/config/asenv.conf` add the line (replace the xxxx with the correct java version `AS_JAVA="/usr/java/jdk1..xxxx"` Start up scripts: edit `/etc/rc.d/init.d/glassfish` make sure the glassfish path is set correctly: `GLASSFISHPATH=/usr/glassfish4/bin` now before starting set the glassfish server set the admin password `/usr/glassfish4/bin/asadmin change-admin-password --user admin` that will prompt you for the new admin password now start the server and allow for remote administration:

```
/etc/rc.d/init.d/glassfish start
```

```
/usr/glassfish4/bin/asadmin --port 4848 enable-secure-admin
```

this will ask you for the admin account and password you now can administer the server remotely using the following url in case of the g4devel machine: <https://g4devel.fnal.gov:4848/> use the Gui to create the G4Expert and G4Admin account and then to deploy the web application.

Configuring a Connection pool on the Web application Server

Our Web Application and Web Service depend on connection pools (one that connects to the database read only, the other with read/write access for authenticated users) being made available on the web application server (glassfish) as a DataSource. This provides efficient access to the database and avoids that any database info like username, port, dbname and passwords are exposed. Currently the creation and configuration via the web admin gui doesn't seem to work below we list the command line (asadmin) instructions used to set up the pools on the g4devel server providing access to the development database. To be able to use connection pools first one needs to Install the correct jar file containing the PostgreSQL JDBC driver in the domains area:

```
/usr/glassfish4/glassfish/domains/domain1/lib/postgresql-9.4.1208.jar
```

or:

```
/usr/glassfish4/glassfish/domains/domain1/lib/ext/postgresql-9.4.1208.jar
```

The jar file can be obtained from the PostgreSQL download site: <https://jdbc.postgresql.org/download.html>

then as user glassfish execute the following command to create the 2 connection pools. These will be started automatically whenever the glassfish server is started.

```
path_to_glassfish_binaries/asadmin create-jdbc-connection-pool --datasourceclassname
org.postgresql.ds.PGConnectionPoolDataSource --restype javax.sql.ConnectionPoolDataSource --property
user=xxxxxx:password=yyyyy:url="jdbc\:postgresql://fnalpgsdev.fnal.gov\:5453/validationdb"
myjdbc_postgres-pool
path_to_glassfish_binaries/asadmin create-jdbc-resource --connectionpoolid myjdbc_postgres-pool
DataSource
path_to_glassfish_binaries/asadmin get domain.resources.jdbc-connection-pool.myjdbc_postgres-pool
path_to_glassfish_binaries/asadmin ping-connection-pool myjdbc_postgres-pool
```

```
path_to_glassfish_binaries/asadmin create-jdbc-connection-pool --datasourceclassname
org.postgresql.ds.PGConnectionPoolDataSource --restype javax.sql.ConnectionPoolDataSource --property
user=xxxxxx:password=yyyyy:url="jdbc\:postgresql://fnalpgsdev.fnal.gov\:5453/validationdb"
myjdbc_postgres-writerpool
path_to_glassfish_binaries/asadmin create-jdbc-resource --connectionpoolid myjdbc_postgres-writerpool
WriterSource
path_to_glassfish_binaries/asadmin get domain.resources.jdbc-connection-pool.myjdbc_postgres-writerpool
path_to_glassfish_binaries/asadmin ping-connection-pool myjdbc_postgres-writerpool
```

This topic: Geant4 > ServerConfiguration

Topic revision: r4 - 2016-06-21 - HansWenzel



Copyright &© 2008-2021 by the contributing authors. All material on this collaboration platform is the property of the contributing authors.

or Ideas, requests, problems regarding TWiki? use [Discourse](#) or [Send feedback](#)