Report of assignment 1

Note: The video can be viewed normally with Windows Media Player but problematic with the player of Windows 10

Student Information stored on the instance within the file Info.txt at the root directory.

Both graders' ssh keys are appended to the authorized key file

Admin password: firefly

Master password: kbdeqshi

Lord password: kbdeqshi

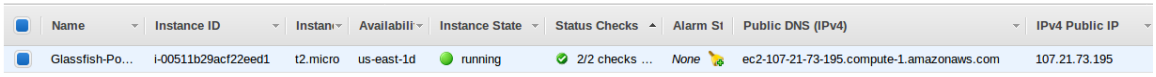
Serf password: wdy931125

IAM link:

https://578971278161.signin.aws.amazon.com/console

Credential is in the rar file uploaded to Canvas

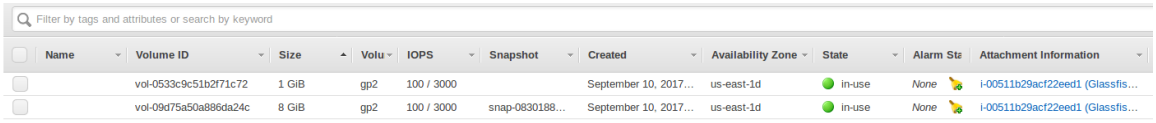
Screenshots:



Name	Instance ID	Instan	Availabili	Instance State	Status Checks	Alarm St	Public DNS (IPv4)	IPv4 Public IP
Glassfish-Po...	i-00511b29acf22eed1	t2.micro	us-east-1d	running	2/2 checks ...	None	ec2-107-21-73-195.compute-1.amazonaws.com	107.21.73.195

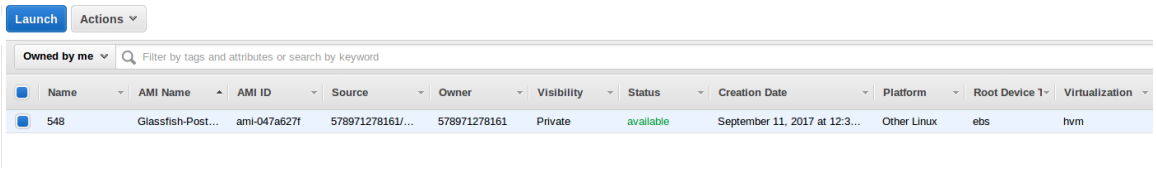
Public DNS:

ec2-52-201-189-127.compute-1.amazonaws.com (Used elastic IP so it doesn't change after stoppage)

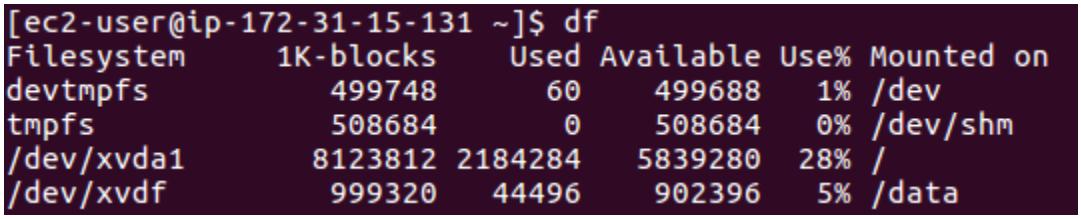


Name	Volume ID	Size	Volu	IOPS	Snapshot	Created	Availability Zone	State	Alarm Sta	Attachment Information
	vol-0533c9c51b2f71c72	1 GiB	gp2	100 / 3000		September 10, 2017...	us-east-1d	in-use	None	i-00511b29acf22eed1 (Glassfis...
	vol-09d75a50a886da24c	8 GiB	gp2	100 / 3000	snap-0830188...	September 10, 2017...	us-east-1d	in-use	None	i-00511b29acf22eed1 (Glassfis...

Both the instance and the volumes are in us-east-1d



Name	AMI Name	AMI ID	Source	Owner	Visibility	Status	Creation Date	Platform	Root Device T	Virtualization
548	Glassfish-Post...	ami-047a627f	578971278161/...	578971278161	Private	available	September 11, 2017 at 12:3...	Other Linux	ebs	hvm



```
[ec2-user@ip-172-31-15-131 ~]$ df
Filesystem     1K-blocks    Used Available Use% Mounted on
devtmpfs          499748      60    499688   1% /dev
tmpfs             508684       0    508684   0% /dev/shm
/dev/xvda1       8123812 2184284   5839280  28% /
/dev/xvdf         999320   44496    902396   5% /data
```

```
[root@ip-172-31-15-131 ~]# ls -l /data
total 88
drwx------ 6 postgres postgres  4096 Sep 11 03:50 base
drwx------ 2 postgres postgres  4096 Sep 11 04:32 global
drwx------ 2 postgres postgres  4096 Sep 11 03:45 pg_clog
-rw------- 1 postgres postgres  3700 Feb 19  2013 pg_hba.conf
-rw------- 1 postgres postgres  1636 Sep 11 03:45 pg_ident.conf
drwx------ 2 postgres postgres  4096 Sep 11 03:48 pg_log
drwx------ 4 postgres postgres  4096 Sep 11 03:45 pg_multixact
drwx------ 2 postgres postgres  4096 Sep 11 03:48 pg_notify
drwx------ 2 postgres postgres  4096 Sep 11 03:45 pg_serial
drwx------ 2 postgres postgres  4096 Sep 11 03:45 pg_snapshots
drwx------ 2 postgres postgres  4096 Sep 11 04:32 pg_stat_tmp
drwx------ 2 postgres postgres  4096 Sep 11 03:45 pg_subtrans
drwx------ 2 postgres postgres  4096 Sep 11 03:45 pg_tblspc
drwx------ 2 postgres postgres  4096 Sep 11 03:45 pg_twophase
-rw------- 1 postgres postgres     4 Sep 11 03:45 PG_VERSION
drwx------ 3 postgres postgres  4096 Sep 11 03:45 pg_xlog
-rw------- 1 postgres postgres 16947 Feb 19  2013 postgresql.conf
-rw------- 1 postgres postgres    45 Sep 11 03:48 postmaster.opts
```

```
bash-4.2$ /usr/bin/psql -U postgres -c '\du'
could not change directory to "/root"
                             List of roles
 Role name |                   Attributes                   | Member of
-----------+------------------------------------------------+-----------
 lord      | Superuser, Create role, Create DB              | {}
 postgres  | Superuser, Create role, Create DB, Replication | {}
 serf      |                                                | {}
```

```
[ec2-user@ip-172-31-15-131 ~]$ java -version
java version "1.8.0_144"
Java(TM) SE Runtime Environment (build 1.8.0_144-b01)
Java HotSpot(TM) 64-Bit Server VM (build 25.144-b01, mixed mode)
```

```
[root@ip-172-31-15-131 ~]# ls -l /usr/share/payara41
total 20
drwxr-xr-x  2 glassfish glassfish 4096 Aug  4 11:56 bin
drwxr-xr-x 10 glassfish glassfish 4096 Aug  4 11:56 glassfish
drwxr-xr-x  4 glassfish glassfish 4096 Aug  4 11:56 javadb
drwxr-xr-x  5 glassfish glassfish 4096 Aug  4 11:56 mq
-rw-r--r--  1 glassfish glassfish 2664 Aug  4 11:56 README.txt
```

```
[root@ip-172-31-15-131 init.d]# more -10 /data/pg_hba.conf
# PostgreSQL Client Authentication Configuration File
# ===================================================
#
# Refer to the "Client Authentication" section in the
# PostgreSQL documentation for a complete description
# of this file.  A short synopsis follows.
#
# This file controls: which hosts are allowed to connect, how clients
# are authenticated, which PostgreSQL user names they can use, which
# databases they can access.  Records take one of these forms:
#
# local      DATABASE  USER  METHOD  [OPTIONS]
# host       DATABASE  USER  CIDR-ADDRESS  METHOD  [OPTIONS]
# hostssl    DATABASE  USER  CIDR-ADDRESS  METHOD  [OPTIONS]
# hostnossl  DATABASE  USER  CIDR-ADDRESS  METHOD  [OPTIONS]
#
# (The uppercase items must be replaced by actual values.)
#
# The first field is the connection type: "local" is a Unix-domain socket,
# "host" is either a plain or SSL-encrypted TCP/IP socket, "hostssl" is an
# SSL-encrypted TCP/IP socket, and "hostnossl" is a plain TCP/IP socket.
#
# DATABASE can be "all", "sameuser", "samerole", a database name, or
# a comma-separated list thereof.
#
# USER can be "all", a user name, a group name prefixed with "+", or
# a comma-separated list thereof.  In both the DATABASE and USER fields
# you can also write a file name prefixed with "@" to include names from
# a separate file.
#
```

```
# TYPE  DATABASE    USER        CIDR-ADDRESS          METHOD

# "local" is for Unix domain socket connections only
local   all         postgres                          trust
# IPv4 connections:
host    all         lord         0.0.0.0/0            md5
host    all         serf         0.0.0.0/0            md5
# IPv6 local connections:
host    all         all         ::1/128               md5
```

JDBC Connection Pools

To store, organize, and retrieve data, most applications use relational databases. Java EE applications access relational databases through the JDBC API. Before an application can access a database, it must get a connection.

Pools (3)

New... Delete

Select	Pool Name	Resource Type	Classname
☐	DerbyPool	javax.sql.DataSource	org.apache.derby.jdbc.ClientDataSource
☐	__TimerPool	javax.sql.XADataSource	org.apache.derby.jdbc.EmbeddedXADataSource
☐	serfdbPool	javax.sql.ConnectionPoolDataSource	org.postgresql.ds.PGConnectionPoolDataSource

JDBC Resources

JDBC resources provide applications with a means to connect to a database.

Resources (3)

New... | Delete | Enable | Disable

Select	JNDI Name	Logical JNDI Name	Enabled	Connection Pool	Description
☐	jdbc/__TimerPool		✔	__TimerPool	
☐	jdbc/__default	java:comp/DefaultDataSource	✔	DerbyPool	
☐	jdbc/serfdb		✔	serfdbPool	JNDI name for Serf database connection

Edit JDBC Resource

Edit an existing JDBC data source.

Load Defaults

JNDI Name: jdbc/serfdb

Pool Name: serfdbPool

Use the JDBC Connection Pools page to create new pools

Deployment Order: 100

Specifies the loading order of the resource at server startup. Lower numbers are loaded first.

Description: JNDI name for Serf database connection

Status: ☑ **Enabled**

Additional Properties (0)

Add Property | Delete Properties

Select	Name	Value
No items found.		

General | Advanced | Additional Properties

Edit JDBC Connection Pool

Modify an existing JDBC connection pool. A JDBC connection pool is a group of reusable connections for a particular database.

Load Defaults | Flush | Ping

General Settings

Pool Name: serfdbPool

Resource Type: javax.sql.ConnectionPoolDataSource

Must be specified if the datasource class implements more than 1 of the interface.

Datasource Classname: org.postgresql.ds.PGConnectionPoolDataSource

Vendor-specific classname that implements the DataSource and/or XADataSource APIs

Driver Classname:

Vendor-specific classname that implements the java.sql.Driver interface.

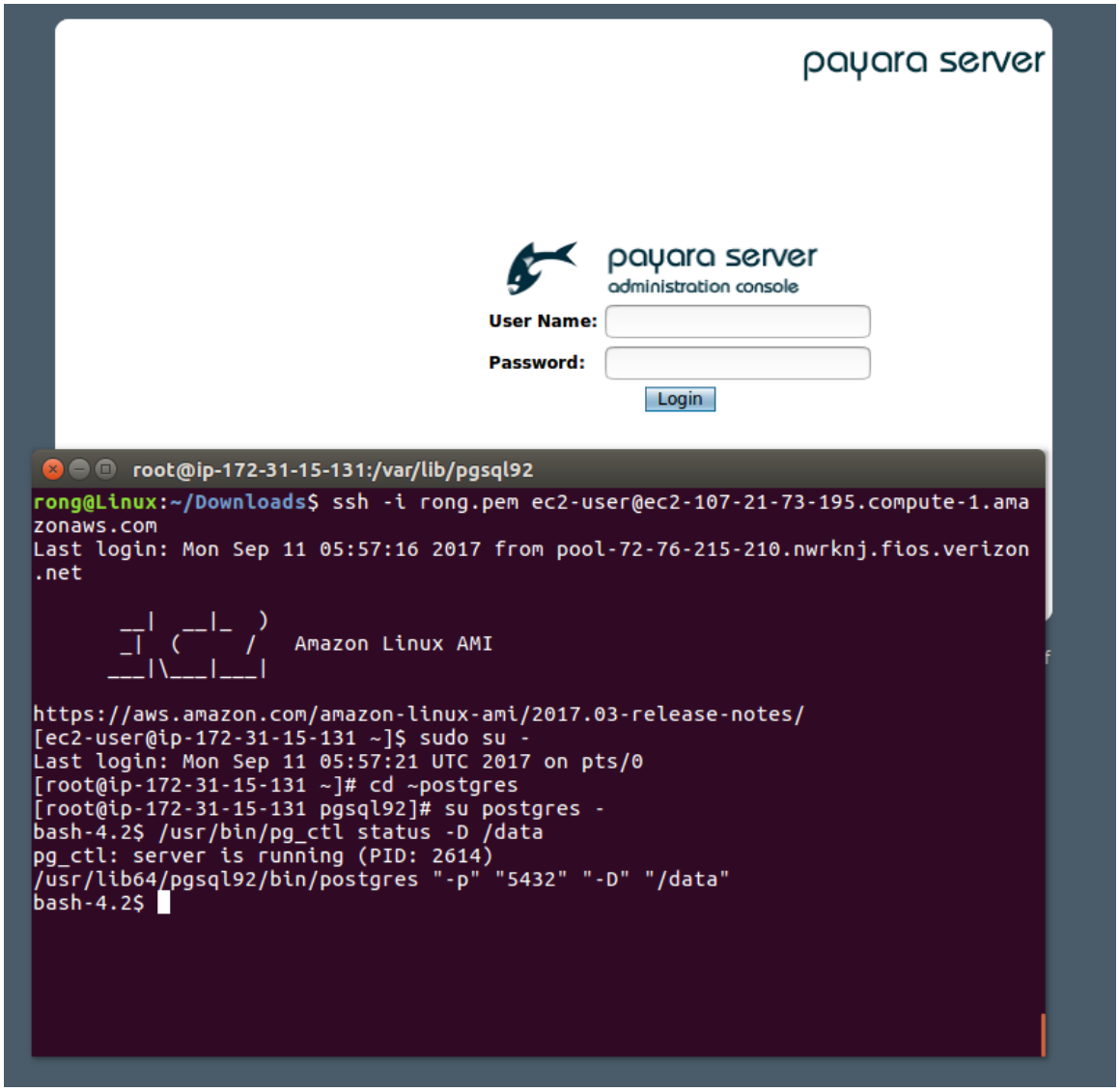
Ping: ☐ **Enabled**

When enabled, the pool is pinged during creation or reconfiguration to identify and warn of any erroneous values for its attributes

Deployment Order: 100

Specifies the loading order of the resource at server startup. Lower numbers are loaded first.

Description:



Both Payara and Postgresql autostart