

Lab 12: Network Management in Horizon

Objective 1.

Scope **john/crm-dev**.

Create a New Project Network and New Subnet:

- Name: **dev-www-net**
 - Subnet Name: **dev-www-subnet**
 - Network Address: **192.168.10.0/24**
 - DNS Nameservers: **8.8.8.8**
-

Objective 2.

Scope **john/crm-dev**.

Create a New NS Router:

- Name: **dev-ns-router**
- External Network: **provider**

Add Interface to Router dev-ns-router:

- Subnet: **dev-www-subnet**
-

Objective 3.

Scope **john/crm-dev**.

Create a New Project Network and New Subnet:

- Name: **dev-db-net**
 - Subnet Name: **dev-db-subnet**
 - Network Address: **192.168.11.0/24**
 - Allocation Pools: **192.168.11.100,192.168.11.120**
 - DNS Nameservers: **8.8.8.8**
-

Objective 4.

Scope **john/crm-dev**.

Create a New EW Router:

- Name: **dev-ew-router**

Add Interfaces to Router **dev-ew-router**:

- Subnet: **dev-www-subnet**
 - Subnet: **dev-db-subnet**
-

Objective 5.

Scope **john/crm-dev**.

Create a New Security Group **crm-dev-web-sg**, add all incoming ICMP, SSH and TCP on ports 80 and 443 (HTTP and HTTPS).

Create a New Security Group **crm-dev-db-sg**, add all incoming ICMP, SSH and incoming TCP on 3306 (MySQL) from Security Group **crm-dev-web-sg**.

Objective 6.

Scope **lisa/admin**.

Allocate Floating IP to Project **crm-dev**.

Objective 7.

Scope **john/crm-dev**.

Launch a New Instance:

- Name: **test-db**
- Image: **devOS-3.5**
- Flavor: **m1.tiny**
- Network: **dev-www-net**
- Security Group: **default** plus **crm-dev-web-sg**

Login to Instance **test-db** Console and test ping openstack.org.

Objective 8.

Scope **john/crm-dev**.

Associate Floating IP to Instance **test-db**.

Find UUID of a Router **dev-ns-router**.

Open Terminal Window, find Name Space related to a Router **dev-ns-router**.

SSH to the Instance **test-db**, using Floating IP address in context of **dev-ns-router** Name Space.

Objective 9.

Scope **john/crm-dev**.

Login to Console of Instance **test-db**.

Turn down **eth0** Interface:

```
ifdown eth0
```

Detach Interface from **test-db**.

Attach interface to **test-db**, with Network **dev-db-net**.

Turn up **eth0** interface:

```
ifup eth0
```

Fix Security Groups of **test-db** to **default** plus **crm-dev-db-sg**.

Objective 10.

Scope **john/crm-dev**.

Create a New Instance:

- Name: **test-www**
- Image: **devOS-3.5**
- Flavor: **m1.tiny**
- Network: **dev-www-net**
- Security Group: **default** plus **crm-dev-web-sg**

Open Console for **test-www** and **test-db**. Login and **sudo su** in both.

On **test-www** add a route to **dev-db-net**:

ip route add 192.168.1.0/24 via 192.168.10.x

Ping other instance IP address to verify **dev-ew-router**. Try SSH in opposite direction.

Objective 11.

Create a Provider Network.

Check and note all configuration Parameters of existing Provider Network (login as **admin** user, go to Admin->Network, not Project->Network).

Delete existing Provider Network (consider doing a COA Lab Virtual Machine snapshot before this action) and recreate it with noted configuration Parameters. You may need to delete existing Routers, connected to Provider Network and later on recreate them.
