

# Chapter Four

## Installing Eucalyptus

Enable Centos Repo in frontend

```
sed -i.backup 's/enabled = 0/enabled = 1/' /etc/yum.repos.d/CentOS-Base.repo
```

Enable Centos Repo in Nodes

```
for i in {0..4}; do scp /etc/yum.repos.d/CentOS-Base.repo root@vm-  
container-0-$i:/etc/yum.repos.d/CentOS-Base.repo; done
```

Configure the Eucalyptus package repository

On frontend :

```
yum install http://downloads.eucalyptus.com/software/eucalyptus/3.3/centos/  
6/x86\_64/eucalyptus-release-3.3.noarch.rpm
```

```
sed -i.backup 's/enabled = 0/enabled = 1/' eucalyptus-release.repo
```

On the Nodes :

```
for i in {0..4}; do scp /etc/yum.repos.d/eucalyptus-release.repo root@vm-  
container-0-$i:/etc/yum.repos.d/eucalyptus-release.repo ; done
```

Configure the Euca2ools package repository on each host that will run a Eucalyptus component or Euca2ools

On frontend :

```
yum install http://downloads.eucalyptus.com/software/euca2ools/3.0/centos/  
6/x86\_64/euca2ools-release-3.0.noarch.rpm
```

```
sed -i.backup 's/enabled = 0/enabled = 1/' euca2ools-release.repo
```

On the Nodes :

```
for i in {0..4}; do scp /etc/yum.repos.d/euca2ools-release.repo root@vm-  
container-0-$i:/etc/yum.repos.d/euca2ools-release.repo ; done
```

Configure the EPEL package repository

On frontend :

```
yum install http://downloads.eucalyptus.com/software/eucalyptus/3.3/centos/  
6/x86\_64/epel-release-6.noarch.rpm
```

```
sed -i.backup 's/enabled = 0/enabled = 1/' epel.repo
```

On the Nodes:

```
for i in {0..4}; do scp /etc/yum.repos.d/epel.repo root@vm-container-0-$i:/  
etc/yum.repos.d/epel.repo ; done
```

Configure the ELRepo repository on frontend

```
yum install http://downloads.eucalyptus.com/software/eucalyptus/3.3/centos/  
6/x86\_64/elrepo-release-6.noarch.rpm  
sed -i.backup 's/enabled = 0/enabled = 1/' elrepo.repo
```

Install the Eucalyptus node controller software on each planned NC host:

```
rocks run host vm-container "yum install eucalyptus-nc"
```

Check that the KVM device node has proper permissions.

Run the following command:

```
rocks run host vm-container "ls -l /dev/kvm"
```

Verify the output shows that the device node is owned by user root and group kvm.

```
crw-rw-rw- 1 root kvm 10, 232 Nov 30 10:27 /dev/kvm
```

If your kvm device node does not have proper permissions, you need to reboot your node and change settings in BIOS to enable KVM.

Install the Eucalyptus cloud controller software on each planned CLC host:

```
yum install eucalyptus-cloud
```

Install the software for the remaining Eucalyptus components in the frontend

```
yum install eucalyptus-cc eucalyptus-sc eucalyptus-walrus
```

If you would like Load Balancer support enabled in your Cloud, you will need to install the Load Balancer image package on the frontend:

```
yum install eucalyptus-load-balancer-image
```

After you have installed Eucalyptus, test multicast connectivity between each CLC and Walrus, and SC.

Run the following receiver command on the CLC:

```
java -classpath /usr/share/eucalyptus/jgroups-2.11.1.Final.jar  
org.jgroups.tests.McastReceiverTest -mcast_addr 224.10.10.10 -port 5555
```

Once the receiver command blocks, simultaneously run the following sender command on each Walrus host:

```
java -classpath /usr/share/eucalyptus/jgroups-2.11.1.Final.jar  
org.jgroups.tests.McastSenderTest -mcast_addr 224.10.10.10 -port 5555
```

The two applications should be able to connect and arbitrary lines entered on the sender should appear on the receiver.