**Install Eucalyptus from Release Packages**

To install Eucalyptus from release packages, perform the tasks listed in this topic.

If you plan to install Eucalyptus HA, we recommend that you install each Eucalyptus component on a separate host. For example, if you are installing CLC, Walrus, CC, and SC, you will install each of these components on a separate host. You will also install each secondary component (the secondary CLC, Walrus, CC, and SC) on a separate host. In this case, you will need eight machines. Each additional cluster needs four more machines for its CCs and SCs. This does not account for NCs, which are not redundant.

1. Configure the Eucalyptus package repository on each host that will run a Eucalyptus component:

yum install http://downloads.eucalyptus.com/software/eucalyptus/4.0/centos/6/x86\_64/eucalyptus-release-4.0.el6.noarch.rpm

Enter y when prompted to install this package.

1. If you are not a Eucalyptus subscriber, skip this step. If you are a Eucalyptus subscriber, you should have received an rpm package file containing your license for subscription-only components. Install that package, along with the Eucalyptus subscription package, on each host that will run a Eucalyptus component, as follows:
2. yum install eucalyptus-enterprise-license\*.noarch.rpm \

http://subscription.eucalyptus.com/eucalyptus-enterprise-release-4.0-1.el6.noarch.rpm

Enter y when prompted to install this package.

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

yum install http://downloads.eucalyptus.com/software/euca2ools/3.1/centos/6/x86\_64/euca2ools-release-3.1.el6.noarch.rpm

Enter y when prompted to install this package.

1. Configure the EPEL package repository on each host that will run a Eucalyptus component or Euca2ools:

yum install http://downloads.eucalyptus.com/software/eucalyptus/4.0/centos/6/x86\_64/epel-release-6.noarch.rpm

Enter y when prompted to install this package.

1. If you are using Walrus as your object storage backend configure the ELRepo repository on each machine that will run Walrus. Otherwise, skip this step.

yum install http://downloads.eucalyptus.com/software/eucalyptus/4.0/centos/6/x86\_64/elrepo-release-6.noarch.rpm

Enter y when prompted to install this package.

1. For RHEL 6 systems only, you must enable the Optional repository in Red Hat Network for each NC, as follows:
   1. Go to [http://rhn.redhat.com](http://rhn.redhat.com/) and navigate to the system that will run the NC.
   2. Click **Alter Channel Subscriptions**.
   3. Make sure the **RHEL Server Optional** checkbox is checked.
   4. Click **Change Subscriptions**.
2. If you are a Eucalyptus subscriber and use VMware Broker, install the VMware Broker packages on the hosts that will run your Cluster Controller (CC) and Cloud Controller (CLC), as follows:

yum install eucalyptus-enterprise-vmware-broker eucalyptus-enterprise-vmware-broker-libs

Enter y when prompted to install this package.

1. **Note:** Clouds that use the VMware hypervisor do not have NCs; if you plan to use VMware then skip this step.
   1. Install the Eucalyptus node controller software on each planned NC host:

yum install eucalyptus-nc

* 1. Check that the KVM device node has proper permissions.

Run the following command:

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 NC host.

1. **Note:** Skip this step if you plan to use VMware.

If you plan to run in [Edge networking mode](https://www.eucalyptus.com/docs/eucalyptus/4.0/install-guide/planning_edge.html), install the package for Edge support on each planned NC host.

yum install eucanetd

1. On each planned CLC host, install the Eucalyptus cloud controller software.

yum install eucalyptus-cloud

1. Install the Imaging Worker image package on the machine hosting the primary CLC:

yum install eucalyptus-imaging-worker-image

1. Install the software for the remaining Eucalyptus components. The following example shows most components being installed on the same host. We recommend that you use different hosts for each component:

yum install eucalyptus-cc eucalyptus-sc eucalyptus-walrus

1. If you would like Load Balancer support enabled in your Cloud, you will need to install the Load Balancer image package on the machine hosting the primary CLC:

yum install eucalyptus-load-balancer-image

1. If you are a subscriber and use SAN, run the appropriate command for your device on each machine hosting a CLC:

For EMC SAN:

yum install eucalyptus-enterprise-storage-san-emc-libs

For EqualLogic SAN:

yum install eucalyptus-enterprise-storage-san-equallogic-libs

For NetApp SAN:

yum install eucalyptus-enterprise-storage-san-netapp-libs

1. If you are a subscriber and use SAN, run the appropriate command for your device on each machine hosting a SC:

For EMC SAN:

yum install eucalyptus-enterprise-storage-san-emc

**Important:** To use Eucalyptus with EMC SAN support, you must have the NaviCLI-Linux-64-latest.rpm package installed on each SC. This package is not supplied with Eucalyptus, please see your SAN vendor if it is not already installed.

For EqualLogic SAN:

yum install eucalyptus-enterprise-storage-san-equallogic

For NetApp SAN:

yum install eucalyptus-enterprise-storage-san-netapp

1. After you have installed Eucalyptus, test multicast connectivity between each CLC and Walrus, SC, and VMware broker host.
   1. Install the the network tomography package on the Cloud Controller, Cluster Controller, Storage Controller, and any machines running Walrus or VMware Broker.

yum install --nogpgcheck http://downloads.eucalyptus.com/software/tools/centos/6/x86\_64/network-tomography-1.0.0-3.el6.x86\_64.rpm

* 1. Run the network-tomography tool on the Cloud Controller, Cluster Controller, Storage Controller, and any machines running Walrus or VMware Broker, passing a list of IP addresses for each of these machines.
  2. /usr/bin/network-tomography 192.168.51.174 192.168.51.196 192.168.51.86

192.168.51.99

This tool may take up to an hour to run. Check the output for reports of packet loss. If there is significant packet loss, ensure that your network is available and multicast enabled.

Your installation is complete.