**System Requirements**

To install Eucalyptus, your system must meet the following baseline requirements.

**Note:** The specific requirements of your Eucalyptus deployment, including the number of physical machines, structure of the physical network, storage requirements, and access to software are ultimately determined by the features you choose for your cloud and the availability of infrastructure required to support those features.

**Compute Requirements**

* Physical Machines: All Eucalyptus components must be installed on physical machines, not virtual machines.
* Central Processing Units (CPUs): We recommend that each machine in your Eucalyptus cloud contain either an Intel or AMD processor with a minimum of two, 2GHz cores.
* Operating Systems: Eucalyptus supports the following Linux distributions: CentOS 6 and RHEL 6. Eucalyptus only supports 64-bit architecture.
* Machine Clocks: Each Eucalyptus component machine and any client machine clocks must be synchronized (for example, using NTP). These clocks must be synchronized all the time, not just at installation.
* Hypervisor: CentOS 6 and RHEL 6 installations must have KVM installed and configured on NC host machines. When you install Eucalyptus from packages, KVM will be installed on all NCs.
  + For information about using KVM on CentOS 6, go to the [Virtualization](http://docs.redhat.com/docs/en-US/Red_Hat_Enterprise_Linux/6/html/6.0_Release_Notes/virtualization.html) page.
  + For more information about using KVM on RHEL 6, go to the [Virtualization](http://docs.redhat.com/docs/en-US/Red_Hat_Enterprise_Linux/6/html/6.0_Release_Notes/virtualization.html) page in the Red Hat documentation.
  + VMware-based installations do not include NCs, but must have a VMware hypervisor pool installed and configured (VMware versions 4.0, 4.1 and 5.0).
* Machine Access: Verify that all machines in your network allow SSH login, and that root or sudo access is available on each of them.

**Storage and Memory Requirements**

* Each machine in your network needs a minimum of 30 GB of storage.
* We recommend at least 100GB for Walrus and SC hosts running Linux VMs. We recommend at least 250GB for Walrus and SC hosts running Windows VMs.
* We recommend a range of 50-100GB per NC host running Linux VMs, and at least 250GB per NC host for running Windows VMs. Note that larger available disk space enables greater number of VMs.
* Each machine in your network needs a minimum of 4 GB RAM. However, we recommend more RAM for improved caching.

**Network Requirements**

* All NCs must have access to a minimum of 1Gb Ethernet network connectivity.
* All Eucalyptus components must have at least one Network Interface Card (NIC) for a base-line deployment. For better network isolation and scale, the CC should have two NICS (one facing the CLC/user network and one facing the NC/VM network). For HA configurations that include network failure resilience, each machine should have one extra NIC for each functional NIC (they will be bonded and connected to separate physical network hardware components).
* Some configurations require that machines hosting a CC have two network interfaces, each with a minimum of 1Gb Ethernet.
* Depending on the feature set that is to be deployed, the network ports connecting the Ethernet interfaces may need to allow VLAN trunking.
* Depending on some configurations, Eucalyptus requires that you make available two sets of IP addresses. The first range is private, to be used only within the Eucalyptus system itself. The second range is public, to be routable to and from end-users and VM instances. Both sets must be unique to Eucalyptus, not in use by other components or applications within your network.
* The network interconnecting physical servers hosting Eucalyptus components (except the CC and NC) must support UDP multicast for IP address 228.7.7.3. Note that UDP multicast is not used over the network that interconnects the CC to the NCs.