

# Start Guide Using Centos 6.x

## Start Guide - Installing a cluster with Ambari (with local VMs)

This document shows how to set up a cluster using Ambari on your local machine using virtual machines. This document will describe certain steps and recommendations to be able to install Ambari and a cluster using more operational configurations. This is mostly details from my experience setting up Ambari.

This utilizes [VirtualBox](#) Or [Vmware](#).

This has been tested in Centos 6.3 to 6.6.

## Setup

1. Install VirtualBox from: <https://www.virtualbox.org/wiki/Downloads> or Vmware Player/workstation from : <http://www.vmware.com/products/>
2. Download the Centos ISO From: <http://centos.org/>
3. After you have installed VirtualBox or Vmware Create a New Host and Load the ISO. If you require further steps on how to install CENTOS Go here : <http://www.tecmint.com/centos-6-3-step-by-step-installation-guide-with-screenshots/>
4. During the installation process Stop at the Filesystem Page. In this section instead of using LVM's you will have to create standard partitions for the application and data storage part. You can still use a LVM for the root dir.

Device	Size (MB)	Mount Point/ RAID/Volume	Type	Format
LVM Volume Groups				
vg_cloudnode2	89996			
lv_root	50000	/	ext4	
lv_home	39996	/home	ext4	
Hard Drives				
sda (/dev/sda)				
sda1	500	/boot	ext4	✓
sda2	221499	/data	ext4	
sda3	200000	/app	ext4	
sda4	90000		Extended	
sda5	89999	vg_cloudnode2	physical volume (LVM)	

- A. Create two standard partitions one will have the application files and logs and the other will host the data.
  - B. The other partition can be the LVM for the / and /home. (Later on you will need to change the location of the logs from /var/log to the standard partitions.)
5. Finish Installing the OS.
  6. log-in to your vm and modify **/etc/hosts** so you can resolve hostnames for the VM's.

```
'vim /etc/hosts' and add the hostname and ip. You will need to modify this later on to add the extra nodes.  
'vim /etc/sysconfig/networks' and add the hostname
```

7. Turn **iptables** off during boot.

```
'chkconfig iptables off'
```

8. Turn **selinux** off. Selinux can cause issues during install.(This requires a reboot).

```
'vim /selinux/config' and change 'SELINUX=enforcing' to 'disable'
```

9. Turn **NTPD** on during boot. Nodes can have issues if their time is not correctly sync. Make sure that it can synch with a internet ntp or a local server.

```
'chkconfig ntpd on'
```

10. (Optional) Update CENTOS to the latest packages. I do this part due to security concerns. If you do not want to update the whole host then at least update openssl to the latest package. It can cause issues if using an older version.
11. Download the ambari repository on /etc/yum.repos.d/ (this link will change depending on the latest release).

```
'cd /etc/yum.repos.d/'  
'wget http://public-repo-1.hortonworks.com/ambari/centos6/1.x/updates/1.7.0/ambari.repo'  
'yum clean all'
```

12. Install Ambari Server.

```
'yum install ambari-server'
```

13. Setup Ambari server. This process asks for what user the process runs on, JAVA path and what Database to use.

```
'ambari server setup'
```

14. Depending on your config needs. You can mostly use the default settings during the Ambari Server Setup. I use a modified JAVA\_HOME since I use the latest jdk version and the one downloaded by Ambari is not.
15. Start Ambari server.

```
'service ambari-start'
```

16. Access Ambari by using your browser and go to "**http://ambari-server-name:8080**" and log-in with the default User:**admin** and pass:**admin**.