Course: CSCI660 Operating System Concepts & Theory

Lab 1 Report

Installation of CentOS Server

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Instructor: Dr. Tong Lai Yu

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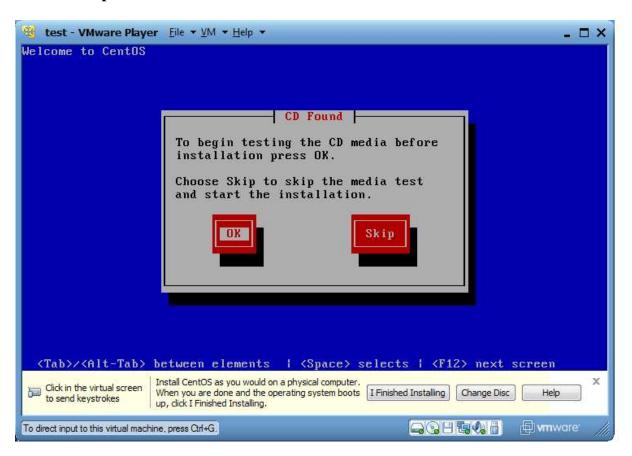
1. Purpose:

In this lab we have to install and configure the CentOS Server. CentOS is community-supported, mainly open source software operating system based on Red Hat Enterprise Linux. We need to install this Linux System so that we can install the Lustre File System which maintains replicas of the folder collection residing on multiple computers.

2. Steps:

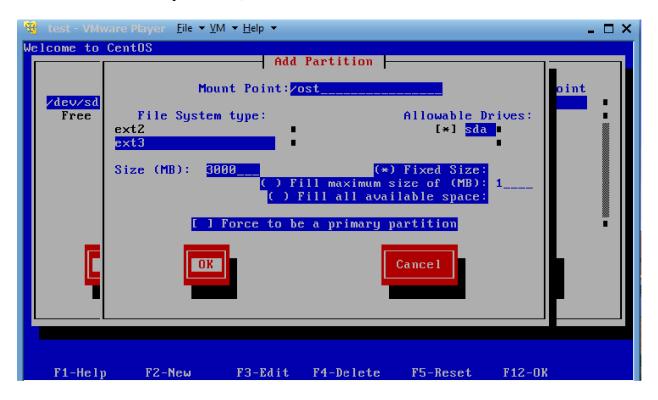
The Steps included in the installation of the CentOS server are as follows with the important screen shots:

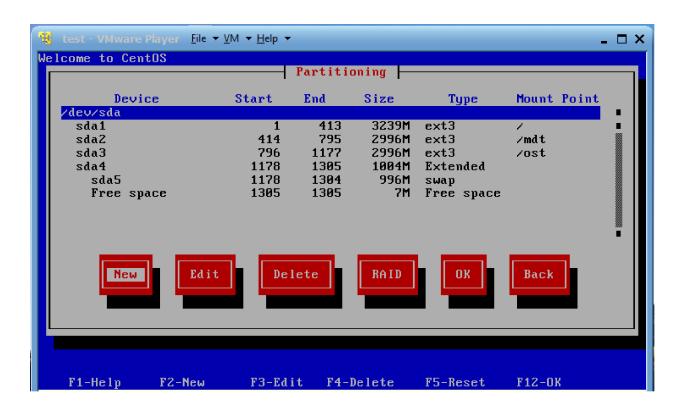
- 1. Obtain a Centos boot disk from the instructor.
- 2. Insert the Centos boot disk into CD-ROM drive.
- 3. Type **linux text** <Enter> from boot prompt.
- 4. Select **skip** from medium check.

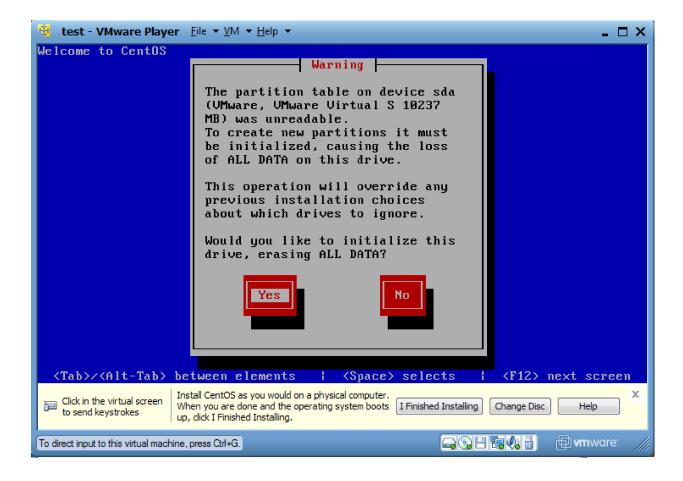


- 5. Select <English><OK>.
- 6. Select <us><OK>.

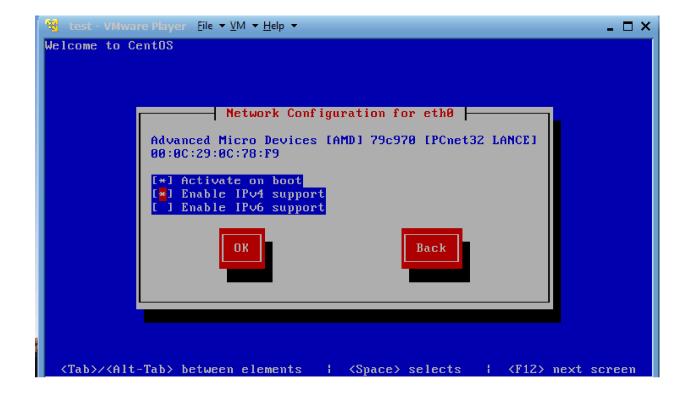
7. Select <Remove all partitions on selected drives ...><OK>. (besides the swap partition, create two more partitions.)



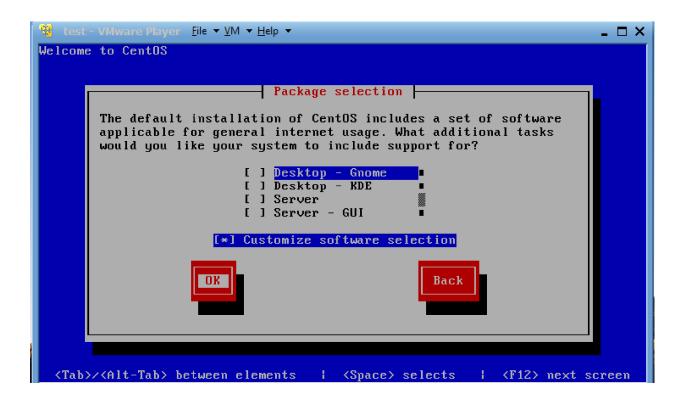


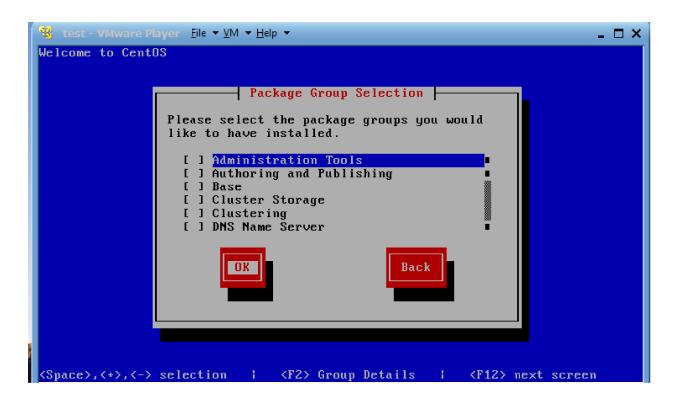


- 8. Select <Yes>.
- 9. Select <Yes>.
- 10. Select <OK><OK><OK>.
- 11. Set Boot Loader Password then <OK><OK>.
- 12. Select MBR then <OK>.
- 13. Select <Yes> on Network setup menu.
- 14. Select the following then <OK>:
 - [*] Active on boot
 - [*]Enable IPv4 support

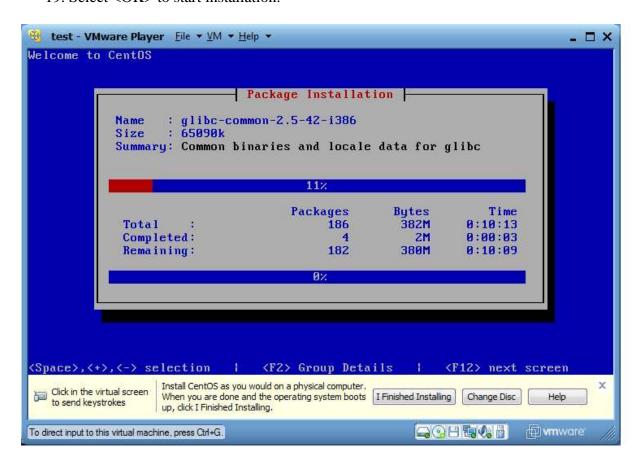


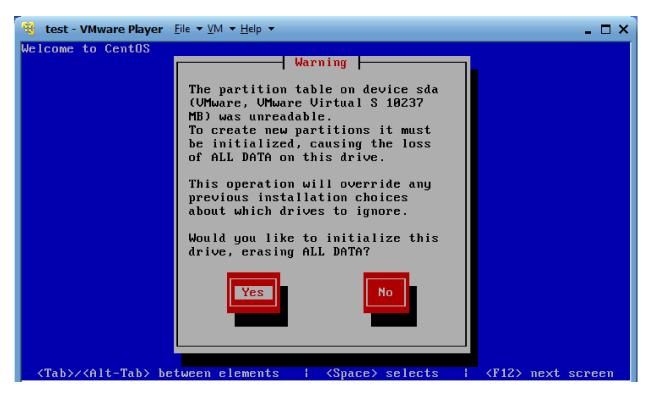
- 15. Select DHCP network configurations.
- 16. Set time zone to "Los Angeles".
- 17. Set root password.
- 18. Set package selection:
 - o Unselect everything from the menu.
 - o Select Custom software Selection



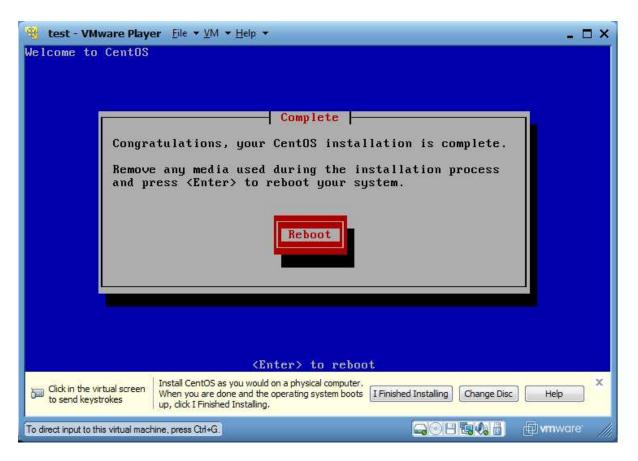


19. Select <OK> to start installation.





20. Take CD out and reboot.



- 21. Login as root.
- 22. Ping **www.yahoo.com** to see if there is any response. If yes, Centos Linux has been successfully installed.

'yum' can be used to install other required components:

yum -y groupinstall 'X Window System'

yum -y groupinstall 'KDE (K Desktop Environment)' (or 'GNOME Desktop Environment')

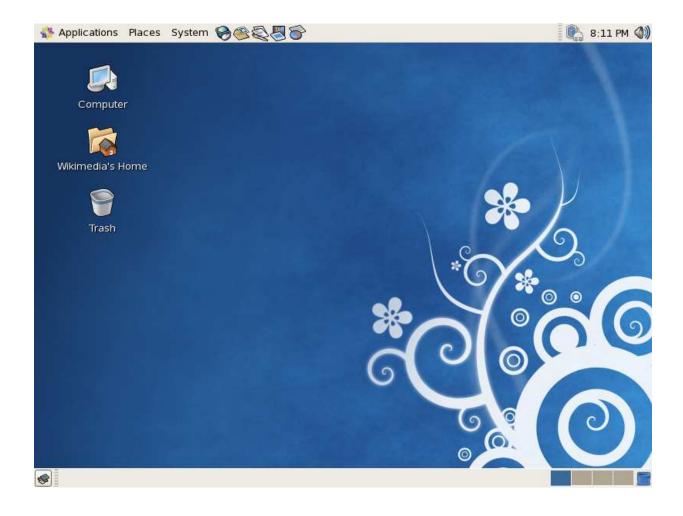
Then execute **system-config-display**. Wait and after some time a gui configuration will pop up. Select the resolution of "1024X768" and hit <OK>.

Execute **startx** to start the X-Window system.

Install firefox and development tools by:

- # yum install firefox
- # yum groupinstall "Development Tools"

At the startx command if we get the following screen then our installation is proper



Conclusion:

The CD provided by the instructor is for a basic CentOS installation. One should be careful to follow the necessary steps. "linux text" command needed to be use at the boot prompt so that one can select the required configurations. Two partitions should be created for the Lustre file system in this installation process. Otherwise, one may need to repeat the whole installation process again. The basic installation was easy and fast. Downloading and installing other things such as X Window System, GNOME Desktop environment, Firefox etc. needed some time, but the instructions were simple for those. Altogether, it was a good experience to install the CentOS.