INSTALLATION AND MAINTENANCE OF SERVICES AND DAEMONS

Installation

When it comes to network administration, we are interested in Multi-User Multi-Tasking or network types of operating systems. These are operating systems that perform several tasks from several users at a given period of time and therefore the need for administration, management and maintenance. It is therefore the responsibility of the network administrator to install and manage such a system for the benefit of organization users. To begin with, the administrator need to know the requirements required to establish one.

The first requirement is the choice of the system. The choice is critical depending on two things:

i) The environment

ii) User demands

The environment

If it is a highly secure environment such as military barracks or intelligent services in this terror prone times where warfare has gone cyber, then the choice shall demand that the administrator goes for a highly secure server. Other high

sensitive environments include financial institutions such as banks, examinations environments in academic institutions, etc.

User demands

The choice is also depended on user demands. Are we going to put up a webserver, a database server or a mail server? What are the demands from the users? The moment the admin answers this question, that is the moment he/she makes a choice of the system to establish.

Other requirements go to the hardware specifications. What memory capacity, processor speed and storage space shall be required. This depends highly on user demands. If the system is to serve a large organization with a massive number of users running demanding services such as a database server or web services then a powerful server computer is required. Otherwise if it's just storage such as email server or a print server, then a moderate server can do.

During installation, the following items are important to note:-

1. Keyboard selection
2. Type of installation i.e. Fresh installation or an upgrade
3. Storage facility

4. The Partitioning scheme
5. Choice of file system and formatting
6. The choice of the installation directory
7. The administrative password
8. The regional settings
9. Network configurations
10. The type of server to install
11. Selection of packages to install
12. Post installation configurations

Class Work II

1)

a) Document the minimum requirements required to install a Red hat or Centos web service computer.

b) Document the minimum requirements required to install a Windows 2012 server.

2)

a) Compare and contrast the two servers in terms of:

i) Requirement specifications

ii) Security

3) Explain the importance of each of the steps identified above

Lab Work II

You are provided with the Scientific Edition of the Linux Operating System. You are required to install the operating system, explaining each and every step until it is ready to serve users in a networked environment.

Running Services (Daemons)

Network operating systems are operating systems that run functions that are meant to listen to requests for the functions from other network devices then provide the requested functionality. These functions are known as services in the Windows operating System family and daemons in the Linux oriented operating system families. These services can be started, stopped, restarted and/or reloaded. Start avails the functionality to requesting devices. Stop halts the functionality from being available. Restart halts the functionality then re-avails it once again. Reload removes the file from memory then loads it back afresh so that the availed fresh file reflects the new changes that may have been done on the file. Some of the services (daemons) that are run in these servers

include network service, remote administration services such as telnet, SSH and FTP, etc.

Lab Work III

In the Scientific Edition of the Linux Operating System you installed, enable the following daemons and ensure that they are running:-

i) HTTP

ii) FTP

iii) Network

iv) telnet