Linux Lab

Lab 1: DHCP Server Configuration in Linux Machine:

• Package: dhcp

• Package service name: dhcpd

• Listening port: 67/udp

• Configuration files: /etc/sysconfig/dhcpd; /etc/dhcpd/dhcpd.conf

Step 1: Installing required packages

#yum –y install dhcp

Step 2: Setting specific interface for DHCP server (if multiple NIC is present)

#gedit /etc/sysconfig/dhcpd

DHCPARGS=ens33

Step 3: Parameter Configuration

#gedit /etc/dhcp/dhcpd.conf

Basic parameters-

- default-lease-time 3600;

- max-lease-time 7200;

IP subnet declaration-

- subnet 192.168.228.0 netmask 255.255.255.0 {

- option routers 192.168.228.1;

- range 192.168.228.2 192.168.228.254;

}

Step 4: Starting dhcp service and checking its status

#systemctl start dhcpd

#systemctl enable dhcpd

#service dhcpd status

Lab 2: Apache Web Server Configuration in Linux Machine:

- Package: httpd

- Package service name: httpd

- Listening port: 80/tcp, 80/udp

- Configuration files: /etc/httpd/conf/httpd.conf

Step 1: Installing required packages

#yum –y install httpd

Step 2: Starting the web service

#systemctl start httpd

#systemctl enable httpd

Step 3: Configuring web server

#gedit /etc/httpd/conf/httpd.conf

/Listen

Listen 80 (default port address)

/DocumentRoot

DocumentRoot "/var/www/html" (default location of web page)

Step 4: Hosting a website

#cd /var/www/html

#gedit index.html

<h1> This is Test Page for Prime College. </h1>

#systemctl restart httpd (restart web service)

Client-Side

Step 1: Installing browser or curl tool to test the website

#yum –y install firefox curl

Step 2: Testing web page using curl

#curl ip_address

Step 3: Testing web page using browser

Entering ip address in browser url.

Lab 3: FTP Server Configuration in Linux Machine:

• Package: vsftpd

• Package service name: vsftpd

• Listening port: 20/tcp, 21/tcp

• Configuration files: /etc/vsftpd/vsftpd.conf

Step 1: Installing required packages

#yum –y install vsftpd

Step 2: Starting FTP service

#systemctl start vsftpd

#systemctl enable vsftpd

Step 3: Configuring FTP server

#gedit /etc/vsftpd/vsftpd.conf

Anonymous_enable=YES

Step 4: Creating test files

#cd /var/ftp (any files in this directory is publicly accessible without username and password)

#ls (list all directories and files)

#touch f1.txt f2.pdf f3.mp3 (creating blank files for testing purpose)

#ls

Step 5: Restarting ftp service

#systemctl restart vsftpd

Client-side Configuration

ftp server can be accessed using tools like: ftp, lftp, wget, openssh-clients, firefox, nautilus etc.

Connecting FTP server using lftp

#yum –y install lftp (to install lftp package)

#lftp <FTP server> (to connect the FTP server as anonymous users)

#lftp 192.168.228.128

#ls

Connecting FTP server using browser

Entering ip address in browser url.

Thank You Guys For Doing Practical