

World Skills Competition

Trade 39: IT PC and Network Support

Day 3

Scenario

The client company has been using NT 4.0 Server. The manager wants, however, to replace the machine with a Linux server. For that purpose they have already bought a new computer.

Your task is now to install Linux Server for the company as replacement for the current NT Server. Install the Linux Server according the following guidelines to ensure that all the required services will be working properly and all devices are functionally optimised.

The Linux operating system must be installed as the international English version. You may proceed with the installation, as you prefer, the server must be configured according the requirements of the task and all services (daemons) must start automatically.

The company has one class B subnet. The class B address 140.150.0.0. is divided into 64 subnets, and the company's (local) being the third one (you cannot use the first or the last subnet)

The second network cards (eth1) IP address is (as the judges for these details)

Guidelines

- The server:
 - Will be called skill**NN** With the **NN** being your work area number eg: skill08
 - Must use the first IP address from the subnet.
 - Passwords **must** be at least 8 characters
 - Has the same users as in the PDC:
 - Starting to X Windows

User	Password
root	"1q2w3e4r"
David Roberts	
Raffaele	
Ed Minter	
Dexter Ying	
Laura Brown	No Password

**** The root and Laura's passwords are supplied; you have to decide the rest. Please write them **CLEARLY** in the spaces provided above.

- Install **DHCP** service services (daemons) local network clients (eth0)
 - Subnet addresses: the first 10 addresses will be set aside for network equipment (including the server) and the next 100 addresses for DHCP.
 - Default Gateway
 - DNS from the Linux server
 - Reserve Raffaele's computer's IP address using the **MAC** address of: 00-D0-59-25-DA-57 and the computer name is **nhfnbrast** (this IP should be the last available address in this DHCP range).

- Transfer the company's and employee's www-pages from PDC into Linux system and install **WWW daemon** to serve them. Users home pages need to be accessible with tilde character (e.g. <http://www.<servername>.com.kr/~participator>). Linux server must resolve URL address <http://www.<servername>.com.kr> locally. These pages are to be found on the NT4 workstation in the folder called: **www**.

- Install **FTP** service to facilitate updating home pages. Define users access rights to home directories of their own for FTP transfers. Only defined users should have FTP access rights.

- Define **Disk quotas** for the accounts transferred from the PDC. You should limit each transferred account's disk usage for it's own home directory to 50MB. As a temporary storage the following directory "/var/local/scratch" needs to exist without any limitations for any account.

- The company is going to expand its usage of Linux-systems. Copy the RH7 installation media (contents of CD #2 RPMS packets directory only) to into the "/var/local/RH7" directory on the Linux server. Export (share name of: "RH7") this directory as an installation point using Network File System (**NFS**). The shared resource should be accessible and secured for read only purposes.

- The computer under construction will act as **router** in the company. For security reasons it is preferred that client addresses from the local network (eth0) should be masqueraded out from the Internet. Only router address should be visible in WAN connections, not the actual machine opening connection from local LAN. Deny traffic from the local network to other smtp (port 25) servers.

- The company's firewall denies outbound smtp-access for every other system than the company's **mail-relay** "mail.<servername>.com.kr". Configure the installed RH-system to pass all its outgoing mail through that relay.

