Local networks

Your company, Machibuya, just open a new office in Bach Khoa. You are charged to set up the required servers so that :

- DHCP is resolved
- DNS is resolved
- A DNS zone is managed for this new office
- A NFS server is available to share files
- A LDAP server is available with the registered users

Question 1 Warming up

2 points

Create three virtual machines with these names on virtualbox :

- eval1-client
- eval1-nfs-server
- eval1-server

Add them an interface on a private network.

Question 2 DHCP stuff

6 points

1. Configure eval1-server to have 192.168.102.5/24 static IP (1 point)
2. Install DHCPD on eval1-server (1 point)
3. Configure dhcpd to allocate IPs from 192.168.102.100 to 192.168.102.200 (2 point)
4. Configure eval1-client to obtain an IP from eval1-server (1 point)
5. Configure eval1-nfs-server to obtain an IP address. eval1-server should always return it the same IP address. (1 point)

Question 3 DNS stuff

6 points

1. Install a DNS server on eval1-server. Configure both eval1-nfs-server and eval1-client to use it (2 point)
2. The main office of the company delegate you the management of bachkhoa.machibuya.com. They asked you to create the entries server.bachkhoa.machibuya.com for eval1-server and nfs.backkhoa.machibuya.com for eval1-nfs-server. (2 point)
3. Create also the reverse entries (2 point)

Question 4 NFS share

3 points

1. Install a NFS server on eval1-nfs-server. This server should export the /data folder. (1 point)
2. eval1-client should mount this share in /mnt/nfs folder upon startup. (2 point)

Question 5 LDAP server

5 points

1. Install a LDAP server on eval1-server. Manage dc=bachkhoa,dc=machibuya,dc=com. Edit the configuration accordingly. You should be able to start it. (2 points)
2. Create dcObject, and organization named dc=bachkhoa,dc=machibuya,dc=com (1 point)
3. Add an organizationalUnit to it : ou=devservices,dc=bachkhoa,dc=machibuya,dc=com (1 point)
4. Add a inetOrgPerson to it : cn=worker1,ou=devservices,dc=bachkhoa,dc=machibuya,dc=com (1 point)