Windows Servers TTTS0500

Lab 3

Task 1 – Configure Sites and Services

1. Create the following locations (sites) using AD Sites and Services MMC

    a. Change the Default-First-Site-Name to HQ

        i. QUESTION: How do you rename objects in AD using PowerShell?

            1. Rename –Adobject –identify "" –newname ""

    b. Branch

2. Create and assign the following subnets using AD Sites and Services MMC

    a. 10.20.10.0   (HQ)

    b. 10.20.20.0   (HQ)

    c. 172.20.10.0   (Branch)

    d. 172.20.20.0   (Branch)

        i. Create at least one of these using PowerShell¨

        ```
        PS C:\Users\Administrator> New-ADReplicationSubnet -Name "10.20.10.0/22" -Site H
        ```

3. Create or modify default site link between HQ and Branch and assign the following properties

    a. HQ-toName: HQ-to-Branch

    b. Cost: 10

    c. Replication interval: 30 min

   d. Replication is not available between 06.00-17.00 on weekdays

Task 2 – Install dc2 as the second domain controller

1. Install and configure dc2 with the same Roles and Features as dc1

    a. Launch dc2

        i. Check network & addressing (refer to lab 1 if necessary)

    b. Install AD DS + DNS

    c. ___

    d. Install DCHP

        i. Create DHCP failover

        ii. Add dc2 as a DHCP server to your router relay configuration

        iii. Test DHCP failover

            1. Wireshark with bootp filter

Task 3 – Configure a logical structure for your domain

1. Create a logical structure for your enterprise (Create OUs to reflect this) with at least four (4) different departments

    a. Marketing

    b. Management

        i. Create these organizational units using Active Directory Users and Computers

    c. HR

        i. Create this OU using Active Directory Administrative Center

    d. ICT

        i. Create this OU using PowerShell

REFLECTION: Draw or print screen your OU structure, attach it and explain your reasoning behind the structure.
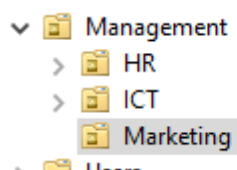
Task 4 – Add and configure users

2. Create a new user to Marketing OU. Define the following settings for the user account

    a. Account logon is permitted only on weekdays between 8.00 – 18.00

    b. Account expires 30.4.2018

3. Create two new users to HR OU. Change the following information for the users in HR OU simultaneously

    a. Organization: Secretary, HR, YourStudentID

    b. Address: Piippukatu 2, 40100 Jkl, Finland

4. Move the user account you created in Marketing OU to HR OU. Then move it back using a different method. Lock the user account afterwards.

5. Add a new OU (Sales) to your domain

    a. Using PowerShell, add a new user to Sales OU

```
PS C:\Users\Administrator.DC1.000> New-ADUser -Name "Sales" -path "OU=Sales,OU=Management,DC=M3227,DC=local"
PS C:\Users\Administrator.DC1.000>
```

    b. Add a second user to Sales OU using dsadd.exe

```
C:\Users\Administrator.DC1.000>dsadd user "cn=Man, OU=Sales, OU=Management, dc=m3227, dc=local"
dsadd succeeded:cn=Man,OU=Sales,OU=Management,dc=m3227,dc=local
```

Questions

Your company HQ is in Jyväskylä and it has just branched out to Oulu. Oulu site is to be added to the company AD network. Following servers exist in Oulu:

- **Server 1:** CPU 3,0 GHz; RAM 3 GB; Role DC

- **Server 2:** CPU 2,6 GHz; RAM 1 GB; Role DC

- **Server 3:** CPU 2,6 GHz; RAM 3 GB; Role Application server

Two site links exist between Jyväskylä and Oulu:

- 10 M Primary link

- 1,5 M Backup link

The administrative tasks of the network are limited to 13.00-04.00 on weekdays and no restrictions on weekends.

Consider the following using information given before:

1. Is it worth it to configure a bridgehead server to Oulu site? If it is, which one of the previously mentioned servers and why would you configure as a bridgehead server?

2. How would you configure the cost on each link?

3. How would you configure the replication schedule and replication interval?

4. Explain the difference between Intrasite and Intersite replication?

5. What is a *Bridgehead Server*?