**NIT3122 Assignment (30%) Network Design and Implementation**

**Requirements:**

You are given time **until Friday 11:30pm** to complete **Assignment** on **the provided platform independently** without assistance from other people including your Lab Tutor and classmates:

(1) Create a new word document called **Assignment\_YourName\_YourID.docx** where YourName is your real name and YourID is your VU Student ID.

(2) You are required to submit your documentation that provides the network design and describes the steps taken and the screenshots of the system. **All screenshots must show date and time from task bar.**

(3) The description of steps does not need to be as detailed as in the lab manual, but it should provide enough information to understand what you have achieved the desired outcome. Mark will be given to screenshot of the system and **quality** of the step description.

(4) Upon completion, upload the following two files via dropbox on VU Collaborate: a. **CoES Assignment Cover Sheet** and

b. **Assignment\_YourName\_YourID.docx**

**Late Submission Penalty**

• 1-3 days – 30 points each day

• After 3 days – **0** (**zero**) mark

**Deduction**

• Missing Cover Sheet or Wrong file name – 5 points each

• Combined cover sheet file with Lab Assessment file – 5 points

• Missing figure numbers/captions – 5 points each

• **Captured screens without task bar – up to 50 points**

**Important**: When you start the lab, **PLABDC01** must be powered on first. Please note that some network services require Active Directory in order to function.

• **PLABDC01** (Windows Server 2016 - Domain Controller)

• **PLABDM01** (Windows Server 2016 - Domain Member Server)

• **PLABDCORE01** (Windows Server 2016 - Domain Member Server Core)

• **PLABSA01** (Windows Server 2016 - Domain Member Server)

• **PLABWIN10** (Windows 10 Enterprise - Domain Workstation)

**Lab Diagram**



**Scenario**

• You are a network specialist for **PracticeLabs.com**. Your company have four (4) servers running Window Server 2016 (**PLABDC01**, **PLABDM01**, **PLABDMCORE01**, and **PLABSA01**). You are required to design and configure a network with active directory according to the following requirements:

• The root Domain Controller (**PLABDC01**) is located in Melbourne. Two other server computers must act as active directory domain controller for the **PracticeLabs.com**, to support the high volume of user for your company. Among them, one should be configured as **Read Only** Domain Controller which does not allow modification of the active directory database. Your company opens one branch in **Kaifeng** and takes the child domain name as **Kaifeng.PracticeLabs.com**. Additional testing computer have been configured as a member computer (**PLABWIN10**) of the root domain.

The Assignment includes the following three tasks:

**Task 1 – Active Directory Design** (6%)

• Design and draw the network **topology** based on the above scenario in your **Assignment\_Your Name\_YourID.docx**. Clearly label the server computer **names**, assigned **IP** addresses, assigned **domains**, and **DNS** IP addresses.

• Use commands **dates;ipconfig /all** to record the existing configurations, and take screenshots for each machine.

**Task 2 – Active Directory Installation** (9%)

• Configure the active directory according to the above design.

• Capture necessary screenshots to demonstrate the steps taken to configure the network, and provide some explanation for your steps.

• After the configuration, take screenshots of **Computers** and **Domain Controllers** folder in Active Directory User and Computers of the root domain controller to verify the existing domain controllers and member computer in the network.

• Use commands **dates;ipconfig /all** to verify the new configurations, and take screenshots for each server/computer.

**Task 3 – Active Directory Management** (15%)

• **A – User Account and Group Management** (5%)

o Create an Organization Unit called **NIT3122HENU**

o Inside **NIT3122HENU** OU, create a global security group called **NIT3122CGO**.

o Create a new user using your ID e.g. **s1234567** as Domain **User** who must change password at the first logon and belong to **NIT3122CGO**.

o Create 2nd new user using your **Lab Tutor’s** name as Domain **Administrator** who is a member of **NIT3122CGO** and whose password never expiries.

o Log on the testing computer to verify the above two user settings are working.

o Take screenshots of the above account creation, **NIT3122HENU** folder and **NIT3122CGO** Member List.

• **B – Application Management** (5%)

o Create a new GPO named “**Desktop restrictions**” which **Prohibit access to Control Panel and PC settings** for **NIT3122HENU** OU

o Use **YourID** to log on the testing computer to verify the setting is working.

o Switch to **Administrator** to verify the setting.

o Take screenshots of the above procedures and explain the results.

• **C – Software Management** (5%)

o Create another new GPO named “**Software restrictions**” which block users in **NIT3122CGO** from opening **Notepad.exe** on any computer in the domain **PracticeLabs.com**.

o Use **YourID** to log on the testing computer (**PLABWIN10**) to verify if Notepad.exe can be opened.

o Use **Lisa.Scott,** an existing user to log on the testing computer (**PLABWIN10**) to verify the setting.

o Set **Lisa.Scott** as a member of **NIT3122CGO** and, then logon to verify the setting.

o Take screenshots of the above procedures and explain the results.

Use commands **dates;ipconfig /all** to record the configurations, and take screenshots for each server/computer.

**Once you complete the Assignment**, log on VU Collaborate and upload your **Assignment\_YourName\_YourID.docx** via dropbox.