

# **Module 3 Mastery Lab**

#### Introduction

This is an assessment of a student's knowledge of the Module's material.



Fueling The Future.

### **Objectives**

In this lab the student will:

- Install Active Directory.
- Create Organizational Units.
- Create users and groups.
- Create and configure a DNS zone.
- Create and configure a DHCP scope.
- Join the client computer to the domain.
- Replace all instances of **XX** with your initials.

#### **Resources Needed**

- Computer with Internet access
- VMWare Workstation Pro

## **Assignment**

- → Install Active Directory Domain Services
- → Create Organizational Units
- → Create User Accounts and Group Accounts
- → Create and configure a DNS zone
- → Create and configure a DHCP scope
- → Join the Windows 10 Client computer to the new domain

#### **Procedure**

## Part 1: Complete the following tasks on your TXServerXX server VM:

- 1. Install the Active Directory Domain Services role.
- 2. Promote your server to a domain controller by adding it to a new forest.
- 3. Name your new domain **LearnTexXX.local**. (where **XX** is your initials.)
- 4. Set the domain and forest functional levels to **Windows Server 2016**.
- 5. Set the directory services restore mode password to **Password1**.
- 6. Open a command prompt and type **dsquery computer**. Take a screenshot.
- 7. In Server Manager, open Active Directory Domains and Trusts. Right-click your domain and select properties. Take a screenshot.

### Part 2: Complete the following tasks on your TXServerXX server VM:

- 1. Create the following OUs in your LearnTexXX.local domain:
  - Research
  - Accounting
  - Accounting\Payroll (Payroll is an OU inside the Accounting OU)
- 2. Create the following users in the Research OU:

First Name	Last Name	User Logon Name
Bob	Smith	bsmith
Sally	Jones	sjones

3. Create the following global groups in the Research OU:

Group Name	Scope	Members
Team1-G	Global	Bob Smith
Team2-G	Global	Sally Jones

- 4. Create a Global group in the Accounting OU called Acct-G.
- 5. Create a user template account in the Accounting OU with the following settings:
  - Full name: \_AccountingUserTemplate

User logon name: acct-template

• Password: Password1

- Uncheck User must change password at next logon
- Check Password never expires
- Check Account is disabled
- 6. Add the \_AccountingUserTemplate account to the Acct-G group
- 7. Create two user accounts using the \_AccountingUserTemplate with the following settings:

First Name	Last Name	User Logon Name
Accounting	User1	Accountinguser1
Accounting	User2	Accountinguser2

- 8. Open a command prompt and type **dsquery user**. Take a screenshot.
- 9. Open a command prompt and type **dsquery group**. Take a screenshot.
- 10. Open a Powershell prompt and type **Get-ADGroupMember Acct-G**. Take a screenshot.
- 11. At the Powershell prompt, type **Get-ADGroupMember Team1-G**. Take a screenshot.

# Part 3: Complete the following tasks on your TXServerXX server VM:

- 1. In the DNS Console, create a new Forward Lookup Zone with the following settings: (Accept the defaults unless listed here)
  - Zone Type: Primary
  - Zone Name: Zone2-LearnTexXX.local
  - Dynamic Update: Do not allow dynamic updates
- 2. Create a new Host (A) record in the Zone2-LearnTexXX.local zone with the following settings:

Name: TXSERVERXX-PRT

• IP Address: 172.20.0.65

3. Open a Powershell prompt and type **Get-DNSServerZone**. Take a screenshot.

4. At the Powershell prompt, type:

**Get-DNSServerResourceRecord Zone2-LearnTexXX.local**. Take a screenshot.

### Part 4: Complete the following tasks on your TXServerXX server VM:

1. Install the DHCP server role

2. Add a new DHCP IPv4 scope to TXServerXX with the following settings: (Accept defaults for all settings not listed)

• Name: TXScopeXX

Description: DHCP Scope 1

• IP range: 192.168.5.100 - 192.168.5.200

• Exclusion: 192.168.5.110 - 192.168.5.120

Lease Duration: 4 Days

• Router (Default Gateway): 192.168.5.1

Do NOT activate the scope

 Open a Powershell prompt and type Get-DHCPServerv4Scope | select \*. Take a screenshot.

# Part 5: Complete the following tasks on your TXClientXX computer VM:

- 1. Join the Windows 10 **TXClientXX** computer to the **LearnTexXX.local** domain.
- 2. Login to the TXClientXX computer with the LearnTexXX\administrator account.
- 3. Open a command prompt and type **whoami**. Take a screenshot.

#### **Rubric**

<u>Concerns</u> Working Towards Proficiency	<u>Criteria</u> Standards for This Competency	Accomplished Evidence of Mastering Competency
	Criteria #1: (PrtScr1.png) Server name & Domain name displayed in 'dsquery computer' output correct. (10 points)	
	Criteria #2: (PrtScr2.png) Domain & Forest Functional Levels correct.	

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(10 points)	
Criteria #3: (PrtScr3.png) User accounts in 'dsquery user' output are correct. (10 points)	
Criteria #4: (PrtScr4.png) Group accounts in 'dsquery group' output are correct. (10 points)	
Criteria #5: (PrtScr5.png) Group members in Acct-G group in Get-ADGroupMember output are correct. (10 points)	
Criteria #6: (PrtScr6.png) Group members in Team1-G group in Get-ADGroupMember output are correct. (10 points)	
Criteria #7: (PrtScr7.png) DNS Zone information from Get-DNSServerZone output correct. (10 points)	
Criteria #8: (PrtScr8.png) DNS Record information from Get-DNSServerResourceRecord output correct (10 points)	
Criteria #9: (PrtScr9.png) ) DHCP Scope information from Get-DHCPServerv4Scope correct. (10 points)	
Criteria #10: (PrtScr10.png) Screenshot proving client successfully joined the domain. (10 points)	