Table of Contents

Table of Contents	
Lab 1 – Active Directory Lab 1	
Part 1	
Description	
Preparation	
Screenshots	
Reflection	
Lab 2 – Active Directory Lab 2	9
Part 1	9
Description	
Preparation	
Screenshots	
Reflection	15
Lab 3 – Active Directory Lab 3	
Part 1	
Description	
Preparation	
Screenshots	
Reflection	

Lab 1 – Active Directory Lab 1

Part 1

Description

Domain Controller Promotion Lab describes a controlled setting that is configured and tested for domain controller promotion and demotion exercises within an Active Directory System.

Preparation

Your system must be required the minimum specification for installing Windows Server 2019 that is CPU, RAM, Disk Space, Windows License Key etc.

Screenshots

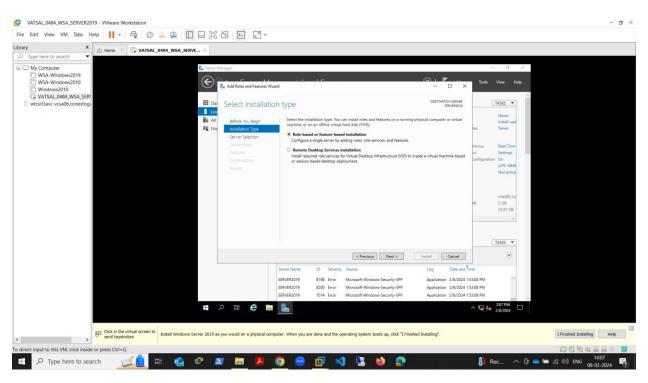


Fig 1-1: It shows that the Installation Type of Windows Server 2019

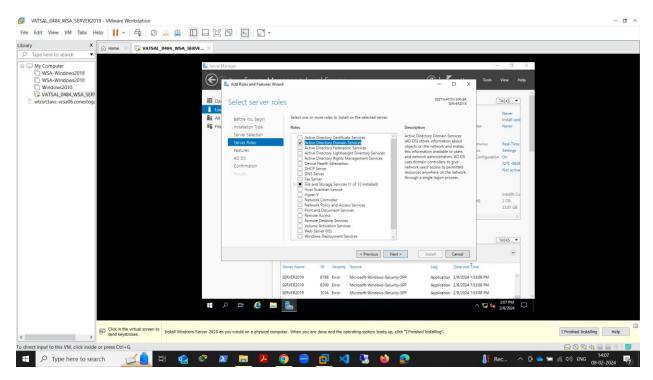


Fig 1-2: It shows that Server Roles of Windows Server 2019

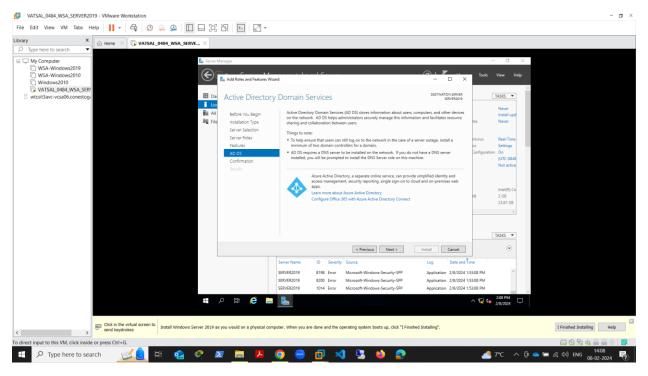


Fig 1-3: It shows that the Active Directory Domain Services

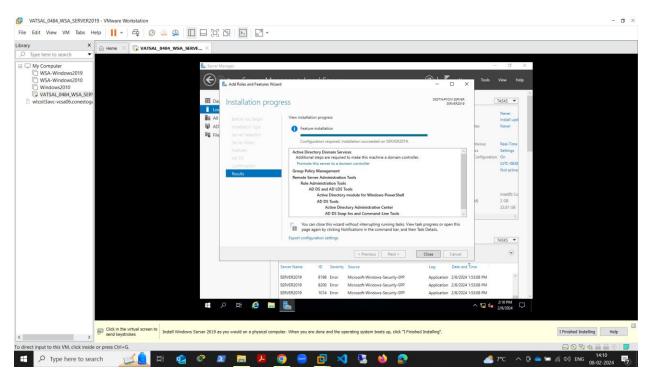


Fig 1-4: It shows that the Installation Progress of Windows Server 2019

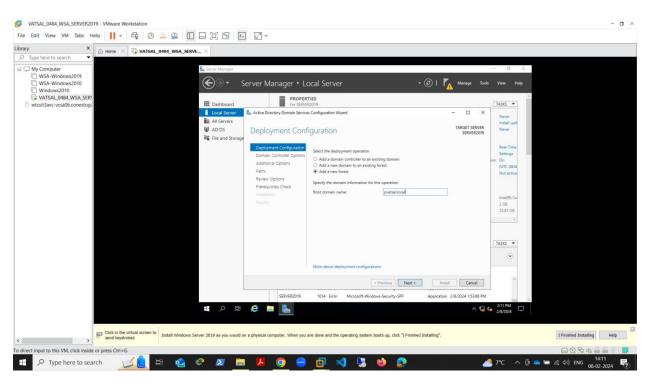


Fig 1-5: It shows that Deployment Configuration – Set the Domain name

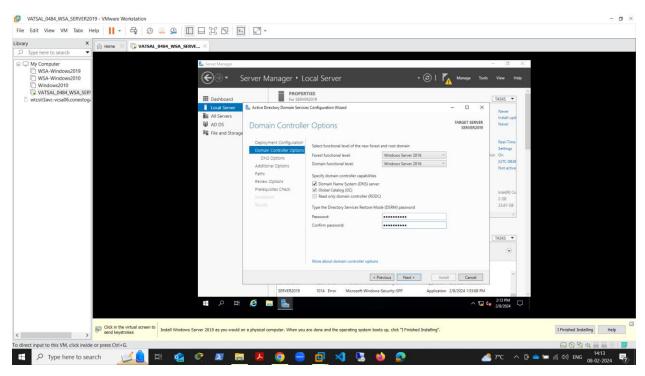


Fig 1-6: It shows that the Domain Controller Options - Set the password

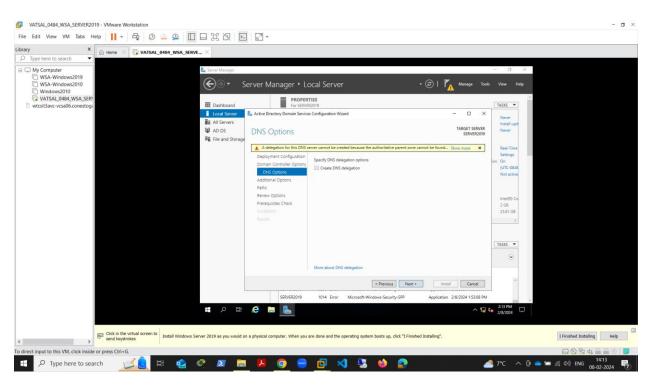


Fig 1-7: It shows that DNS Option

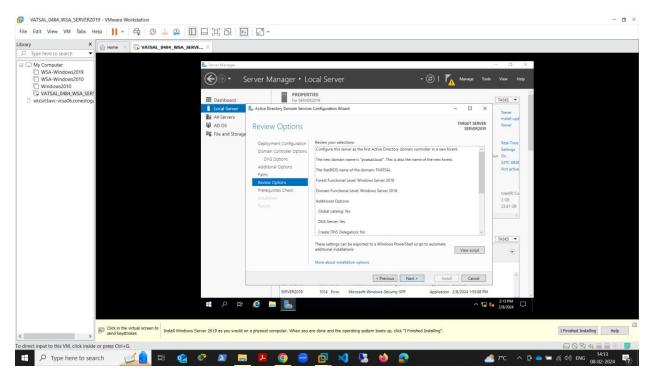


Fig 1-8: It shows that the Review Option – Global Catalog: yes, DNS Server: Yes, Create DNS Delegation: No

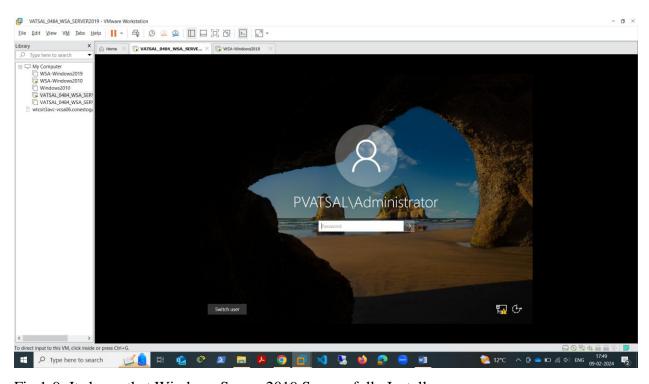


Fig 1-9: It shows that Windows Server 2019 Successfully Install

Reflection

1. What are the two primary tools to install the active directory role?

Ans.

- 1) Active Directory User and Computer: Installing, configuring, and managing server roles, features, and services is possible for administrators using Windows Server's Server Manager management console.
- 2) Active Directory Administrative Center: It is a tool to manage Active Directory users and computers. It was first available with Windows Server.
- **2.** What is the main function of the global catalog?

Ans. The main function of the global catalog is to enable quick and effective searches for objects.

3. Which service is very important for the active directory to function? **Ans.** Active Directory Domain Services is the very important for the active directory to function.

4. When do need to install a tree in existing forest?

Ans. Installing a new tree for organizational restructuring, security requirements, application isolation and delegated administration

5. List five different types of objects in the Active Directory?

Ans.

- 1) User
- 2) Group
- 3) Computer
- 4) Organizational Units
- 5) Printer
- **6.** What is the difference between a Forest and a Domain?

Ans.

- 1) Forest:
- Collection of tree that share a common global catalog, directory schema, logical structure and directory configuration
- Collection of trees or domain trees
- Communicate with each other by creating a forest level trust
- 2) Domain:
- Logical group of network objects that share the same Active Directory database
- Set of Active Directory Objects
- Communicate with each other using domain level trusts

Lab 2 – Active Directory Lab 2

Part 1

Description

Additional Domain Controller Lab is setup in which an extra domain controller is added to an existing Active Directory Domain Environment for testing, redundancy and load balancing purposes.

Preparation

We have to prepare about a Hardware and software, Network Infrastructure Planning, Server Deployment, DNS Configuration, Testing and validation and Documentation and Backup.

Screenshots

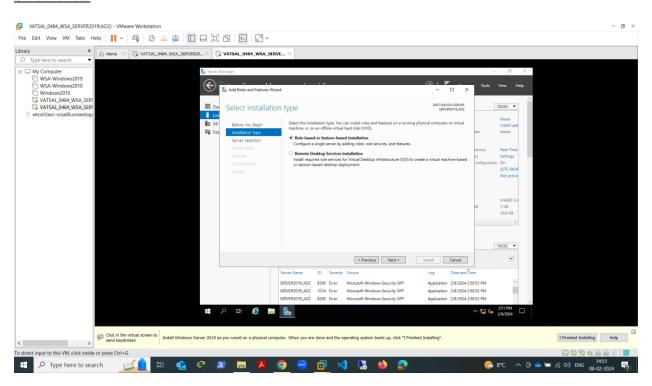


Fig 2-1: It shows that the Additional Windows Server 2019 installation type

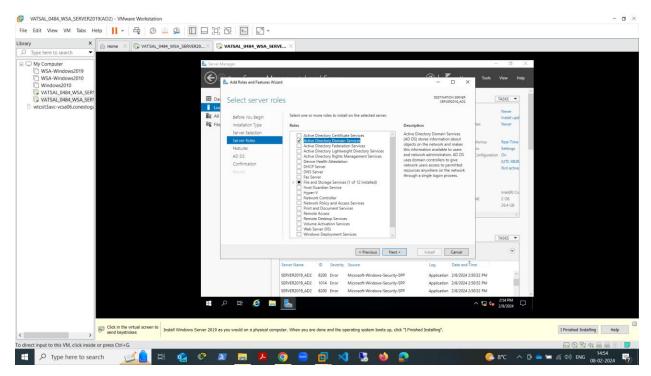


Fig 2-2: It shows that the Additional Windows Server 2019 server roles

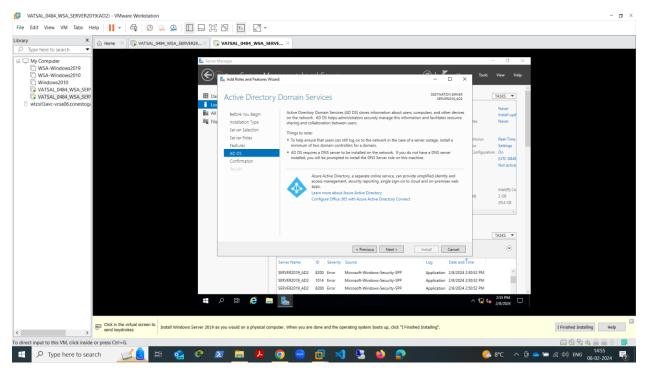


Fig 2-3: It shows that the Additional Windows Server 2019 Active Directory Domain Services

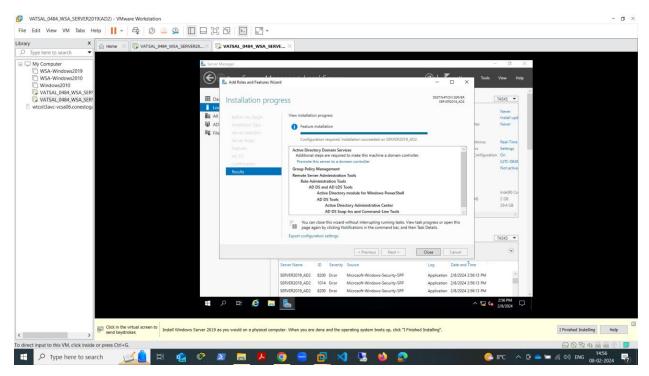


Fig 2-4: It shows that the Additional Windows Server 2019 Installation Progress

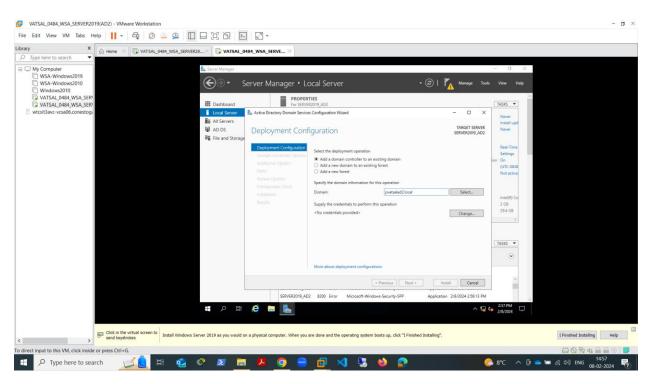


Fig 2-5: It shows that the Deployment Configuration – Given the Domain name

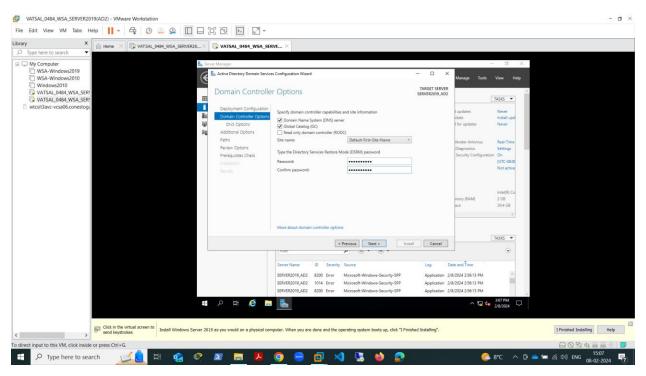


Fig 2-6: It shows that the Additional Windows Server 2019 – Set the Password

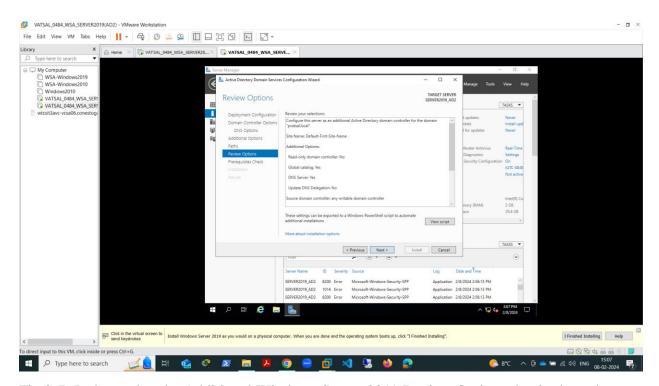


Fig 2-7: It shows that the Additional Windows Server 2019 Review Options that is show that Global Catalog, DNS Server and DNS Delegation

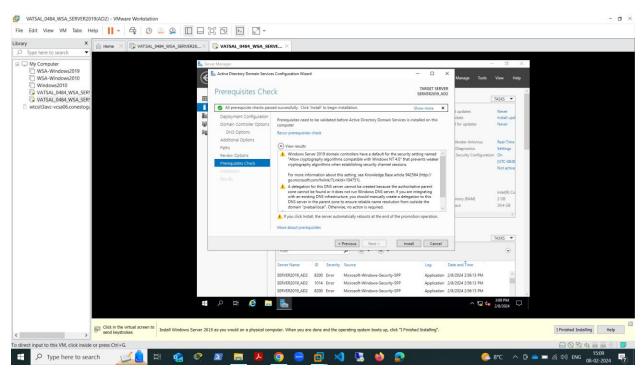


Fig 2-8: It shows that the All Prerequisites Checks passed successfully

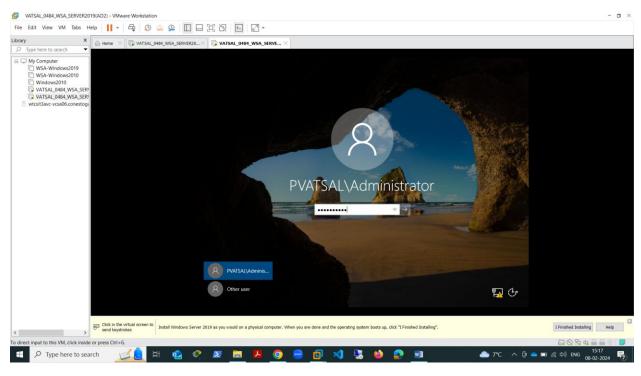


Fig 2-9: It shows that the Additional Windows Server 2019 – Successfully Install

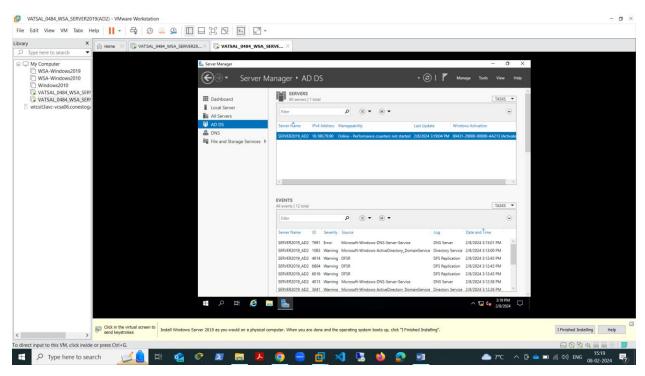


Fig 2-10: It shows that the Additional Windows Server 2019 – Server name, IP address etc..

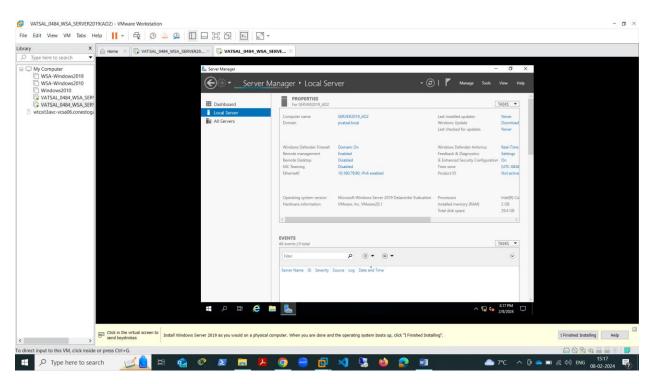


Fig 2-11: It shows that the Computer name, Domain and IP Address

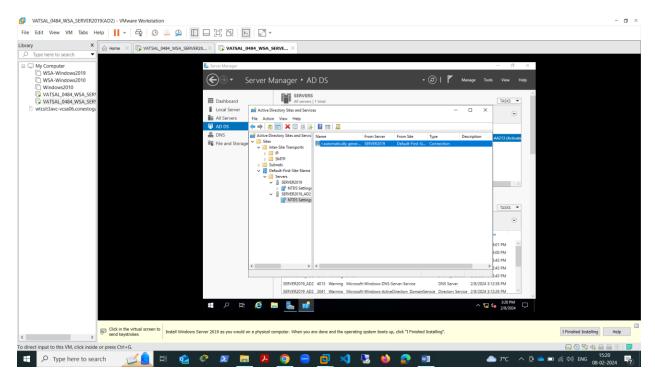


Fig 2-12: It shows that the Active Directory Sites and Services NTDS Setting

Reflection

- **1.** What are the two primary tools to install the active directory role? **Ans.**
 - 1) Active Directory User and Computer: Installing, configuring, and managing server roles, features, and services is possible for administrators using Windows Server's Server Manager management console.
 - 2) Active Directory Administrative Center: It is a tool to manage Active Directory users and computers. It was first available with Windows Server.
- **2.** What is the main function of the global catalog? **Ans.** The main function of the global catalog is to enable quick and effective searches for objects.
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- **4.** When do need to install a tree in existing forest? **Ans.** Installing a new tree for organizational restructuring, security requirements, application isolation and delegated administration.

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Ans.

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- 3) Computer
- 4) Organizational Units
- 5) Printer

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Ans.

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- Collection of trees or domain trees
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- 2) Domain:
- Logical group of network objects that share the same Active Directory database
- Set of Active Directory Objects
- Communicate with each other using domain level trusts

Lab 3 – Active Directory Lab 3

Part 1

Description

We have to create Active Directory Environment where the Administrators can perform tasks related to creating and managing the objects such as users, groups, computers and organizational units.

Preparation

There are numerous important procedures to take in order to ensure a successful setup while setting up a lab environment for creating objects in Active Directory.

Screenshots

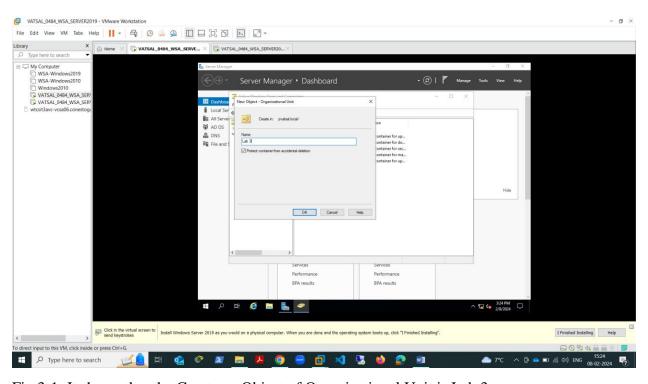


Fig 3-1: It shows that the Create an Object of Organizational Unit is Lab 3

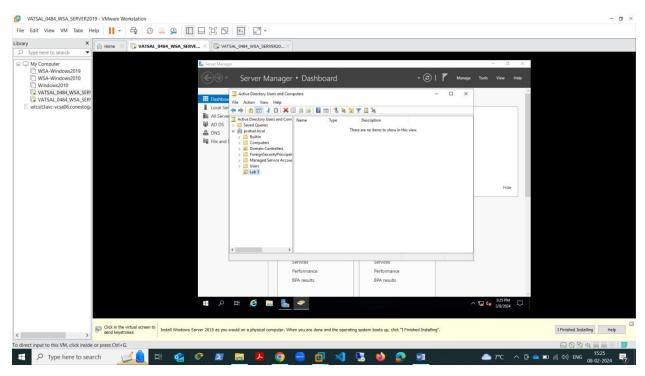


Fig 3-2: It shows that the Lab 3 is create successfully

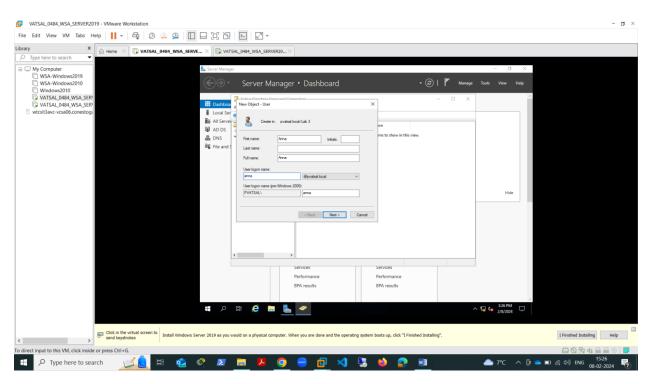


Fig 3-3: It shows that the Creating a New User Anna

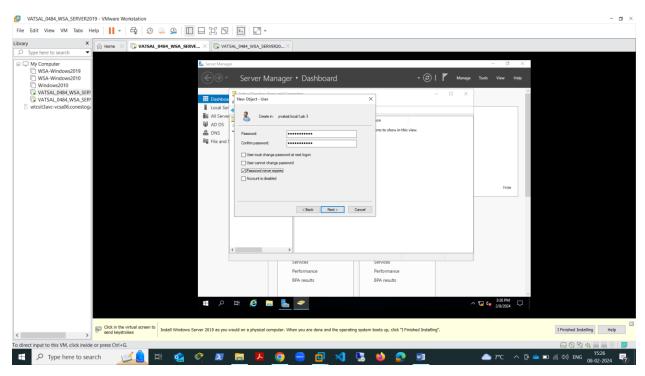


Fig 3-4: It shows that the Set the password of Anna User

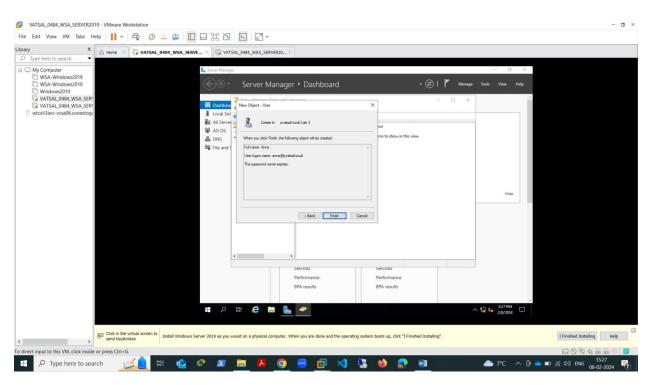


Fig 3-5: It shows that the User Anna Create successfully

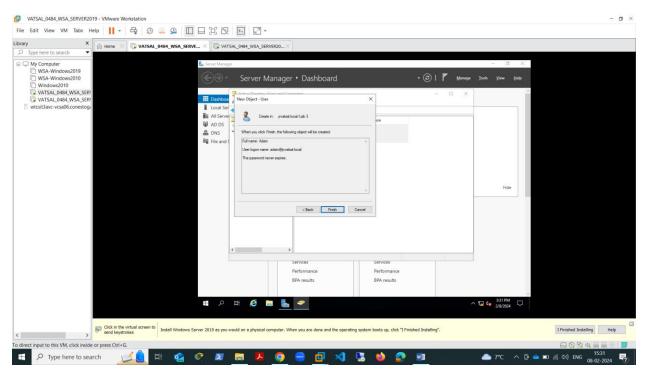


Fig 3-6: It shows that the User Adam Create successfully

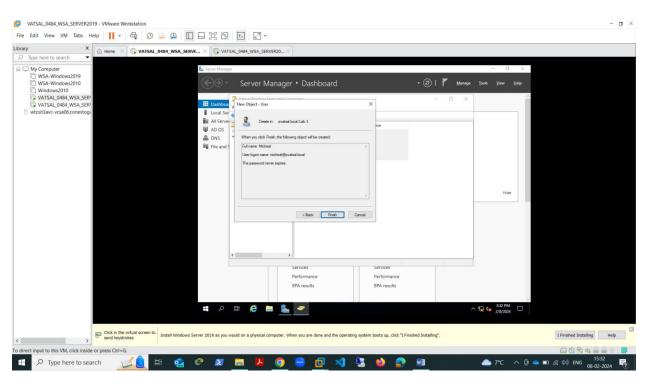


Fig 3-7: It shows that the User Micheal Create successfully

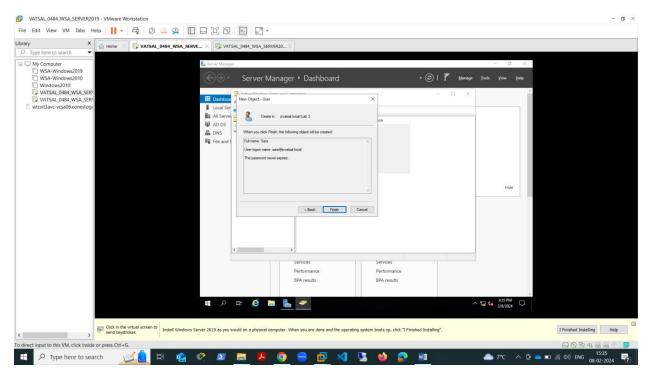


Fig 3-8: It shows that the User Sara Create successfully

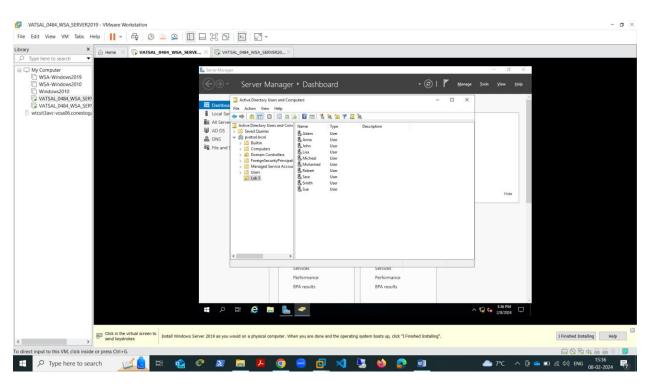


Fig 3-9: It shows that the All the Users are Create Successfully

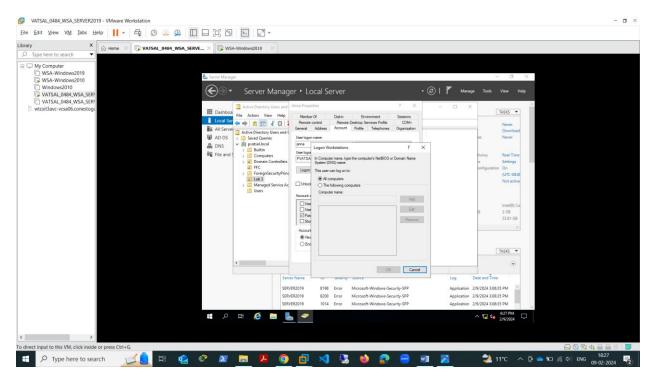


Fig 3-10: It shows that the Anna User can log on from anywhere

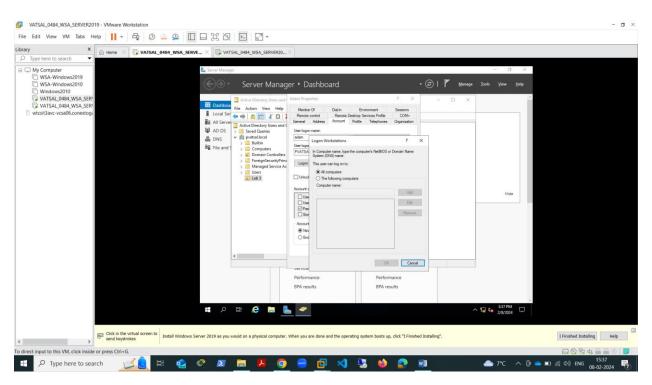


Fig 3-11: It shows that the Adam User can log on from anywhere

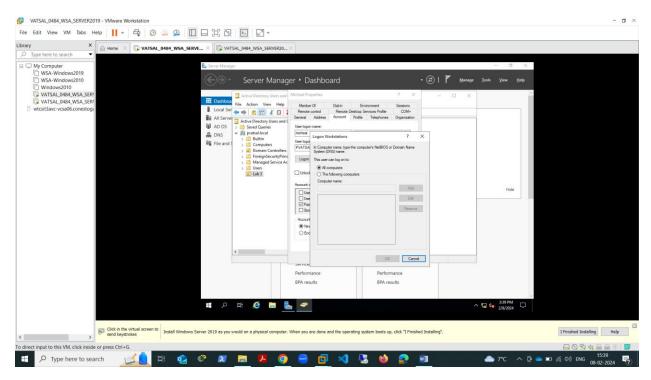


Fig 3-12: It shows that the Micheal User can log on from anywhere

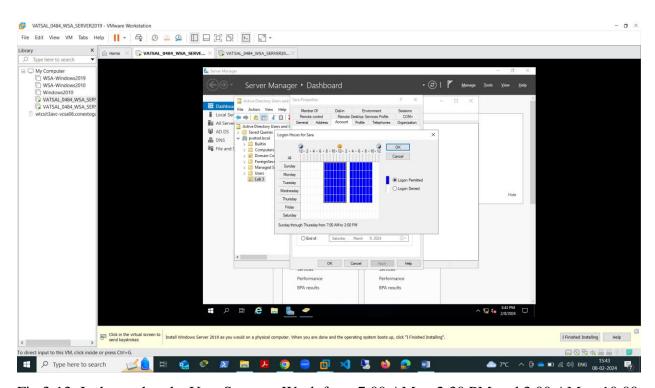


Fig 3-13: It shows that the User Sara can Work from 7:00 AM to 2:30 PM and 3:00 AM to 10:00 PM - Sunday to Thursday

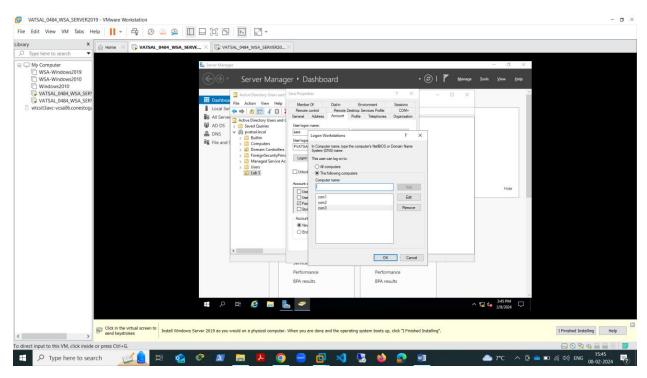


Fig 3-14: It shows that the User Sara can only use Workstation "com1", "com2" and "com3"

Reflection

1. When do you disable an account?

Ans. When the user is no longer needs to access the console you can remove access without deleting the account. So you do this by changing the account status is disable.

- **2.** Why would restrict the number of hours?
- **Ans.** Restrict the number of hours for user access is a security measure commonly employed in it environments to enhance the security and reduce the risk of unauthorized access.
- **3.** How do you choose the logon users names...what convention do you follow? **Ans.** It is essential to follow a consistent and standardized convention to ensure clarity, structure and security. The convention that we follow is First name, Initials, Last name, Full name, User logon name.
- **4.** Does the password requirements matter when choosing the password? Explain **Ans.** Yes. The password requirements matter when choosing the password. It is important to consider them carefully to ensure that your password is strong and secure. It enhances the security and protect against the unauthorized user to access your accounts.