***Things to do before you perform the Exam***

Note: You need to install Windows Server in Virtuabox (Guest OS). For the client computer, you can use your Host OS as the client.

Unsay Pasabot sa Host OS? Ang Host Operating System is ang imong Windows 10, etc nga naka install sa imong laptop or desktop. Ang guest OS kay ang OS nga naka install sa Virtualbox/Virtual machine.

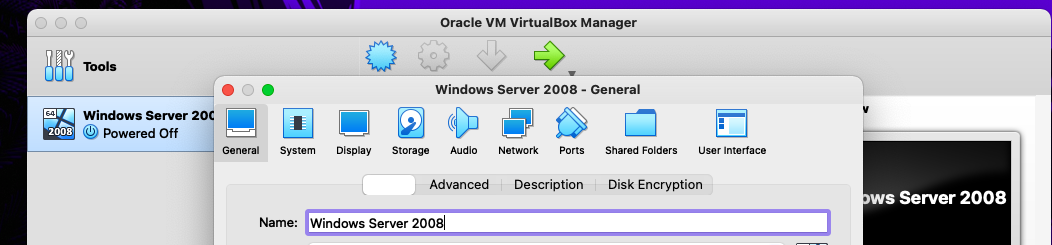
So kari nga activity kelangan ka ug 2 ka computer, 1. Windows Server nga naka install sa virtualbox ug ang 2. Client na Windows 10/8 nga naka install sa imong laptop.

Para ma network diay ang Host OS ug Guest OS kailangan nimo iconfigure ang Network Settings sa Virtual Box.

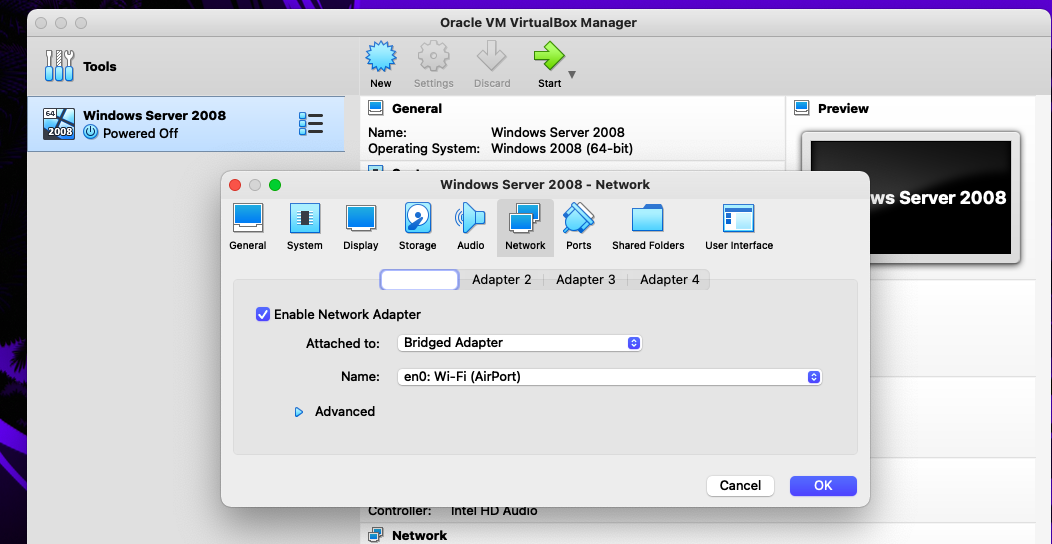
Go to settings



Click Network



Then set the Network Adapter to Bridge Adapter



# WINDOWS SERVER 2008 R2 Installation

1. Install a fresh Installation of Windows Server 2008 R2 in Virtual Box

# WINDOWS SERVER

1. Right Click **LAN Icon** - Click **Open and Sharing Center**
2. Click **Change Adapter Settings** - Click **Properties**
3. Right Click **Local Area Connection**
4. Click **Internet Protocol Version 4(TCP/IPV4)** - Click **Properties**
5. Click **Use the following IP Address**
6. IP Address: **192.168.1.100**
7. Subnet Mask: **255.255.255.0**
8. Default Gateway: **192.168.1.1**
9. Preferred DNS Server: **192.168.1.1**
10. Click **OK**
11. Uncheck **Internet Protocol Version 6(TCP/IPV6)**
12. Click **Close**
13. Click **Start**
14. Right Click **My Computer**
15. Click **Properties**
16. Click **Change Settings**
17. Click **Change Button**
18. Change **Computer Name** into **SERVER**
19. Click **OK** – Click **OK** – Click **Close** – Click **Restart Now**

# CLIENT/WINDOWS 10/WINDOWS 8

1. Right Click **LAN Icon** - Click **Open and Sharing Center**
2. Click **Change Adapter Settings** - Click **Properties**
3. Right Click **Local Area Connection**
4. Click **Internet Protocol Version 4(TCP/IPV4)** - Click **Properties**
5. Click **Use the following IP Address**
6. IP Address: **192.168.1.101**
7. Subnet Mask: **255.255.255.0**
8. Default Gateway: **192.168.1.1**
9. Preferred DNS Server: **192.168.1.1**
10. Click **OK**
11. Uncheck **Internet Protocol Version 6(TCP/IPV6)**
12. Click **Close**
13. Click **Start**
14. Right Click **My Computer**
15. Click **Properties**
16. Click **Change Settings**
17. Click **Change Button**
18. Change **Computer Name** into **CLIENT**
19. Click **OK** – Click **OK** – Click **Close** – Click **Restart Now**

# WINDOWS SERVER

1. Click **Start**
2. Click **Control Panel**
3. Type **Firewall** – Click **Windows Firewall**
4. Click **Turn Windows Firewall On or Off**
5. Click **Turn Off Windows Firewall (not recommended)**
6. Click **OK**

# CLIENT/WINDOWS 10/WINDOWS 8

1. Click **Start**
2. Click **Control Panel**
3. Type **Firewall** – **Click Windows Firewall**
4. Click **Turn Windows Firewall On or Off**
5. Click **Turn Off Windows Firewall (not recommended)**
6. Click **OK**

# WINDOWS SERVER

1. Click **Start**
2. Type **cmd**
3. Click **cmd**
4. Type **ping client –t**

Note: Make sure that Reply from 192.168.1.xxx will appear to cmd, if not the configuration is incorrect

# CLIENT/WINDOWS 10/WINDOWS 8

1. Click **Start**
2. Type **cmd**
3. Click **cmd**
4. Type **ping server –t**

Note: Make sure that Reply from 192.168.1.xxx will appear to cmd, if not the configuration is incorrect

1. Right Click **LAN Icon** - Click **Open and Sharing Center**
2. Click **Change Adapter Settings** - Click **Properties**
3. Right Click **Local Area Connection**
4. Click **Internet Protocol Version 4(TCP/IPV4)** - **Click Properties**
5. Click **Obtain an IP automatically**
6. Click **Obtain DNS server automatically**
7. Click **OK** – Click **Close**

# WINDOWS SERVER

# Install Active Directory Domain Services (ADDS)

1. Click **Server Manager** – Click **Roles** – Click **Add** **Roles** – Click **Next**
2. Check **Active** **Directory** **Domain** **Services**
3. Click **Add** **Required** **Features**
4. Click **Next** – Click **Next** – Click **Install**
5. After Installing Click **Close**

# Install DNS Server

1. Click **Start**
2. Type **dcpromo** – Click **dcpromo**
3. Click **Next** – Click **Next**
4. Click **Create a new domain in a new forest** – Click **Next**
5. Type **css.local** – Click **Next**
6. Select **Windows Server 2008 R2** – Click **Next**
7. Click **Yes** – Click **Next**
8. Type **Password/Confirm Password: P@ssword** – Click **Next** – Click **Next**
9. After Installation Click **Finish** – Click **Restart** **Now**

# Install DHCP Server

1. Click **Server** **Manager** – Click **Roles** – Click **Add** **Roles** – Click N**e**xt
2. Check **DHCP** **Server** – Click **Next** – Click **Next** – Click **Next**
3. Change **127.0.0.1** to **192**.**168**.**1.100**
4. Click **Validate** (make sure that the word **Valid** will appear)
5. Click **Next** – Click **Next**
6. Click **Add**
7. Scope Name: **IP Range**
8. Starting IP Address: **192.168.1.101**
9. Ending IP Address: **192.168.1.105**
10. Default Gateway: **192.168.1.1** – Click **OK** – Click **Next**
11. Click **Disable DHCPv6 stateless mode for this server**
12. Click **Next** – Click **Next** – Click **Install**
13. After Installation Click **Close**

# Create User Account for Folder Redirection and Deploy Printers

1. Click **Start** – **Administrative Tools**
2. Click **Active Directory Users and Computers**
3. Double Click **css.local**
4. Click **Users**
5. Right **Click** – **New** – Click **User**
6. Firstname: **user1**
7. User logon name: **user1** – Click **Next**
8. Uncheck all - Type **Password/Confirm Password: P@ssword**
9. Click **Next** – Click **Finish**
10. Right **Click** – **New** – Click **User**
11. Firstname: **user2**
12. User logon name: **user2** – Click N**e**xt
13. Uncheck all - Type **Password/Confirm Password: P@ssword**
14. Click **Next** – Click **Finish**
15. Right **Click** – **New** – Click **Group**
16. Type **Redirection** – Click OK
17. Right Click **css.local** – **New** – Click **Organizational** **Unit**
18. Type **Printing** – Click **OK**
19. Right Click **css.local** – **New** – Click **Organizational** **Unit**
20. Type **Redirection** – Click OK
21. Right Click **Redirection** **Group** – Click **Properties**
22. Click **Members** – Click **Add**
23. Type **Domain** - Click **Check** **Names** – Select **Domain** **Users** – Click **OK** – Click **OK** 24. Click **Add**
24. Type **Admin** - Click **Check** **Names** – Select **Domain** **Users** – Click **OK**
25. Click **Member** **of** – Click **Add**
26. Click **Members** – Click **Add**
27. Type **Domain** - Click **Check** **Names** – Select **Domain** **Users** – Click **OK** – Click **OK** 29. Click **Add**
28. Type **Admin** - Click **Check** **Names** – Select **Domain** **Users** – Click **OK**
29. Click **Apply** – Click **OK**
30. Right Click **user1** – Click **Move** – Click **Printing** – Click **OK**
31. Right Click **user2** – Click **Move** – Click **Redirection** – Click **OK**
32. Click **Printing** – Right Click **user1** – Click **Member** **of** - Click **Add**
33. Type **Redirect** - Click Check **Names** - Click **OK**
34. Click **Close** – Click **Add**
35. Click **Redirection** – Right Click **user2** – Click **Member** **of** - Click **Add**
36. Type **Redirect** - Click **Check** **Names** - Click **OK** 39. Click **Close**

# Check Connected Client to Domain

1. Click **Server** **Manager**
2. Double Click **Roles** – Double Click **DHCP Server** – Double Click **server.css.local**
3. Double Click **IPv4** – Double Click **Scope** [**192.168.1.0] IP Range**
4. Double Click **Address** **Leases**

Note: Make sure that CLIENT.css.local is existing, if not the configuration is incorrect

# Install File Services/Setup Folder for Folder Redirection

1. Click **Server** **Manager** – Click **Roles** – Click **Add** **Roles** – Click **Next**
2. Check File **Services** – Click **Next** – Click **Next**
3. Check **File** **Server** **Resource** **Manager** – Click **Next**
4. Check **Local** **Disk** **(C:)** – Click **Next** – Click **Next**
5. Click **Install** – Click **Close**
6. Click **Start**
7. Right Click **My** **Computer** – **Click** **Open** 8. Double Click **Local Disk (C:)**
8. Right Click – **New** – Click **New Folder**
9. **Rename** it into **shared**
10. Right Click **shared folder** – Click **Properties**
11. Click **Sharing** **Tab** – Click **Share**
12. Type **Everyone** – Click **Add**
13. Click **Everyone** **Permission** Le**v**el into **Read**/**Write** – Click **Share**
14. Remember the **Root** **Path** of shared folder ([\\SERVER\shared)](file://SERVER/shared)
15. Click **Done** – Click **Close**
16. Type **Group** **Policy** **Management**
17. Click **Group** Policy **Management**
18. Double Click **Forest: css.local**
19. Double Click **Domain**
20. Double Click **css.local**
21. Right Click **Redirection** – Click **Create a GPO in this domain, and link it here…**
22. Type **Folder** **Redirection** – Click **OK** – Double Click **Redirection**
23. Right Click **Folder** Redire**c**tion – Check **Don’t show this message again**
24. Click **OK**
25. Right Click **Folder** **Redirection** – Click **Edit**
26. Under **User** **Configuration** – Double Click **Policies**
27. Double Click **Windows** **Settings** – Click **Folder** **Redirection**
28. Right Click **Documents** – Click **Properties**
29. On Settings change it into **Basic – Redirect everyone’s folder to the same location**
30. On the **Root** **Path** type the location on **Step 15** [(\\SERVER\shared)](file://SERVER/shared)
31. Click **Apply** – Click **Yes** – Click **OK**

# Connect Client to Domain

1. Click **Start**
2. Right Click **My** **Computer**
3. Click **Properties**
4. Click **Change** **Settings**
5. Click **Domain** – **Type** **css.local** – Click **OK**
6. User Account Control will appear – Type **Administrator and it’s password** - Click **OK** 7. Click **OK** – Click **OK** – Click **Close** – Click **Restart** **Now**

# Client Side – Folder Redirection

1. Restart Client Computer (wait to boot the computer)
2. Login user in Redirection (**user2**)
3. Press **Ctrl + Alt + Delete** – Click **Switch** **User** – Click **Other** **User**
4. Login **Username: user2 and Password: P@ssword** – Press **Enter**
5. Click **Start** – Click **Documents**
6. Right Click – **New** – Click **Folder** - Rename it to **Testing** **Folder**
7. Right Click – **New** – Click **Text** **Document** - Rename it to **Testing** **Folder**

# Server Side - Folder Redirection

1. Click **Start** – Right Click My **Computer**
2. Double Click **Local** **Disk** (**C:)** Note: Make sure that user2 folder will appear
3. Double Click **user2** **folder**
4. Right Click **Documents** – Click **Properties** – Click Secu**r**ity **Tab**
5. Click **Continue** – Click **Other** **users** **or** **groups**
6. Type **Domain** - Click **Check** **Names** – Select **Domain** **Users** – Click **OK** – Click **OK**
7. Click **OK** – Click **OK**
8. Double Click **Documents** – Click **Continue**

Note: Make sure that Sample Folder and Sample Document are existing

# Install Remote Desktop Services

1. Click **Server** **Manager** – Click **Roles** – Click **Add** **Roles** – Click **Next**
2. Check **Remote** **Desktop** **Services** – Click **Next** – Click **Next**
3. Check **Remote** **Desktop** **Session** **Host**
4. Click **Install Remote Desktop Session Host anyway (not recommended)**
5. Check **Remote** **Desktop** **Gateway** – Click **Required** **Role** **Services**
6. Click **Next** – Click **Next** – Select **Do not require Network Level Authentication**
7. Click **Next** – Click **Next** – Click **Add**
8. Type **Domain** - Click **Check** **Names** – Select **Domain** **Users** – Click **OK** – Click **OK**
9. Click **Next** – Click **Next** – Select **Choose a certificate for SSL encryption later**
10. Click **Next** – Click **Next** – Click **Add**
11. Type **Domain** - Click **Check** **Names** – Select **Domain** **Users** – Click **OK** – Click **OK**
12. Click **Next** – Click **Next**
13. Select **Allow users to connect to any computer on the network** – Click **Next**
14. Click Next – Check **Routing** **and** **Remote** **Access** **Services**
15. Check **Health** **Registration** **Authority** – Click **Add** **Required** **Role** **Services**
16. Check **Host** **Credential** **Authorization** **Protocol** – Click **Add** **Required** **Role** **Services**
17. Click **Next** – Choose **Select a CA later using the RHA console**
18. Click **Next** – Click **Next**
19. Select **Don’t use SSL or choose a certificate for SSL encryption later**
20. Click **Next** – Click **Next** – Click **Next** – Click **Install** – Click **Close** – Click **Yes** Note: Wait to restart and finish the configuration of updates

# Allow Remote Desktop Connection

1. Press **Ctrl + Alt + Del**
2. Type **Username: Administrator and Password: P@ssword**
3. Wait to finish the installation of Remote Desktop Services
4. Click **Close**
5. Right Click **My** **Computer** – Click **Properties**
6. Click **Remote** **Settings**
7. Select **Allow connection from computers running any version of Remote Desktop (less secure)**
8. Click **OK** – Click **Apply** – Click **OK**

**LEGEND:**

**BLUE** – Server Side

**RED** - Client Side