



Installing Active Directory on Windows Server on a Virtual machine (Home Lab)

I. Installing Virtual Machine and setting up Windows Server

1. Download and Install **VMware Workstation Pro** from the link below.
<https://www.vmware.com/products/desktop-hypervisor.html>
2. Download **Windows Server 2022** free license from the link below. Fill up and register for free trial and Select **English(United States) ISO downloads 64-bit edition**.
<https://info.microsoft.com/ww-landing-windows-server-2022.html>
3. Open **VMware Workstation Pro** and click on **Create a New Virtual Machine**
4. Select the option **"I will install the operating system later"** and click **Next**
5. Select **Microsoft Windows** under Guest Operating System and select the version **Windows Server 2022** from the drop down box and click **Next**
6. Type in the name that you want for the virtual machine and click **Next**
7. Click **Next** for Specify Disk Capacity and click **customize Hardware**
8. Select **New CD/DVD (SATA)** and under Connection, select Use ISO image file and Browse to where you have saved the Windows Server ISO that was downloaded earlier and click close.
9. Click **Finish** and Virtual Machine should now be created.
10. Right click the virtual machine and click **Power ON**
11. Click on the virtual machine and press any button to load the Windows Server.
12. Click on **Next** when the Windows Setup window opens with the Language to Install
13. Click on **Install Now** button
14. On the Windows Setup button, Select the second option **"Windows Server 2022 Standard Evaluation (Desktop Experience)"** and click **Next**
15. Check **"I accept the license terms"**
16. Select **Custom: Install Windows only (advanced)**
17. Click **next** on Drive Unallocated Space Window
18. Wait for the Server to finish installing
19. The Virtual Machine will restart on its own after installing and you can type in a password for Admin
20. Windows Server is now ready and you should be able to login with the password you provided



II. Installing Active Directory tools on the Windows Server

1. Log in to the Windows Server
2. Open **Server Manager** and on the top right, click on **Manage**
3. Select **Add Roles and Features**
4. Click **Next** on Before you begin window
5. Select **Role-based or feature-based installation** and click **Next**
6. Click **Next** for Server Selection
7. Select **Active Directory Domain Services** from the options and click on **Add Features** and click Next
8. Keep clicking **Next** until you reach the confirmation page and click the **Install** button.
9. Wait for the Installation to finish and when it's finished, do not close the window yet
10. Click on **Promote the server to a domain controller**
11. Under Deployment Configuration window, select the Option **Add a new forest** and type in a name in the Root domain name textbox (e.g *eastcharmer.local*) and click Next
12. Type the admin password and click Next and Next until you reach Prerequisites Check Window
13. Once you see on top "*All prerequisite checks passed successfully.*" click the **Install** button and wait for it to finish and the computer will restart
14. Log in to the Windows server and you will now see the new Domain name we created and that means that Active Directory and Domain was successfully installed