

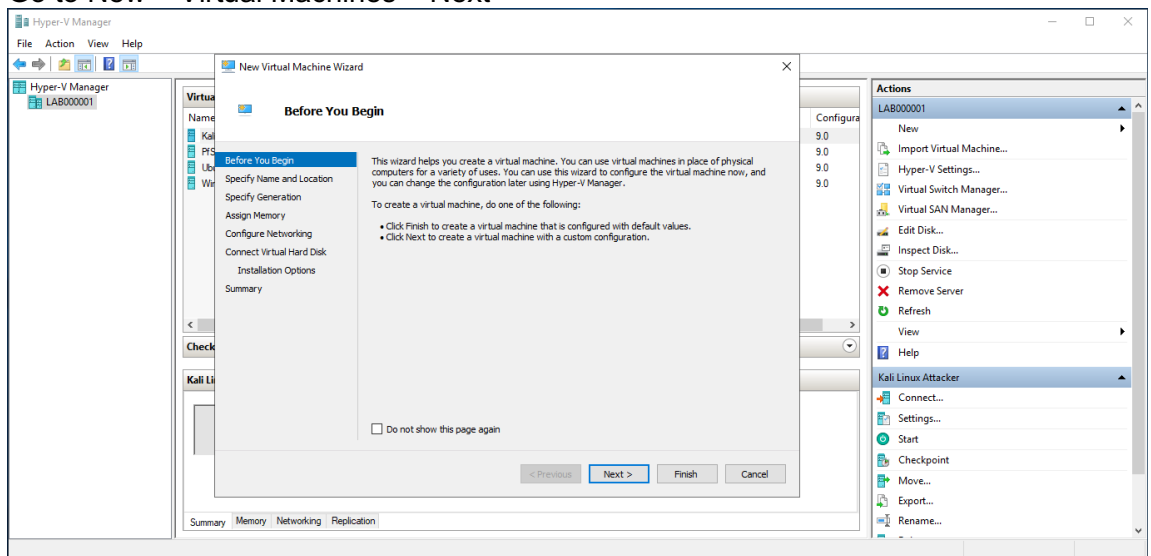
Windows 10 VM installation in Hyper-V

- **Download the ISO file**

1. Go to <https://www.microsoft.com/en-au/software-download/windows10iso>
2. Download the ISO image file.

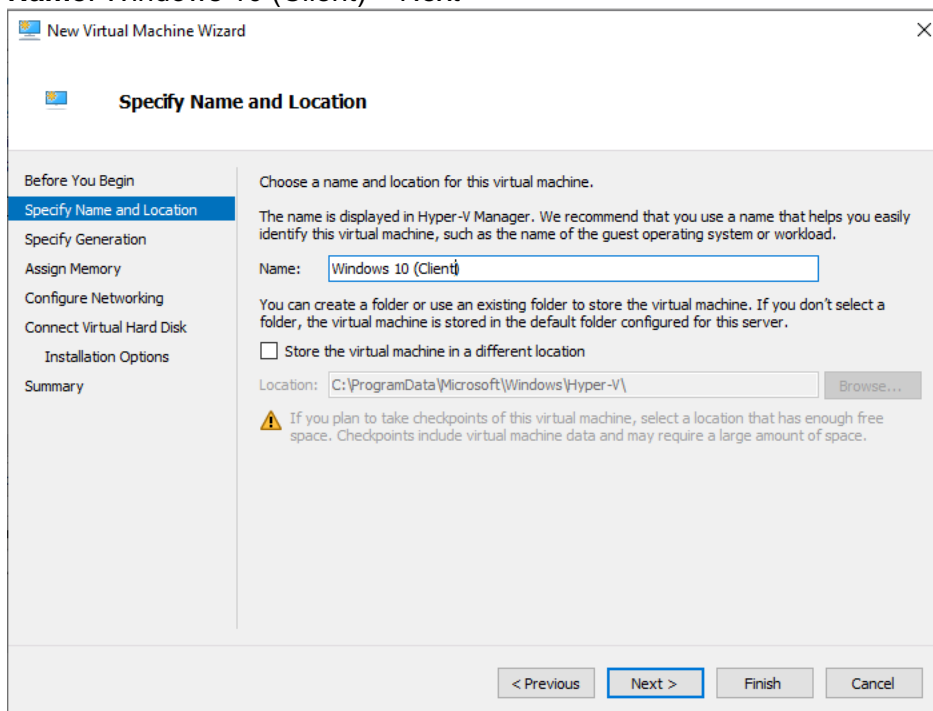
- **Create Windows 10 Virtual Machine in Hyper-V**

1. Open Hyper-V,
Go to New > Virtual Machines > Next



2. **Specify Name and Location**

Name: Windows 10 (Client) > Next



3. Specify Generation: Select **Generation 2** > Next

The screenshot shows the 'Specify Generation' step of the 'New Virtual Machine Wizard'. The left sidebar contains a list of steps: 'Before You Begin', 'Specify Name and Location', 'Specify Generation' (highlighted), 'Assign Memory', 'Configure Networking', 'Connect Virtual Hard Disk', 'Installation Options', and 'Summary'. The main area is titled 'Specify Generation' and contains the following text:

Choose the generation of this virtual machine.

☐ Generation 1
This virtual machine generation supports 32-bit and 64-bit guest operating systems and provides virtual hardware which has been available in all previous versions of Hyper-V.

☒ Generation 2
This virtual machine generation provides support for newer virtualization features, has UEFI-based firmware, and requires a supported 64-bit guest operating system.

! Once a virtual machine has been created, you cannot change its generation.

[More about virtual machine generation support](#)

At the bottom, there are four buttons: '< Previous', 'Next >' (highlighted), 'Finish', and 'Cancel'.

4. Assign Memory Startup memory: 4 GB (dynamic) > Next

The screenshot shows the 'Assign Memory' step of the 'New Virtual Machine Wizard'. The left sidebar contains a list of steps: 'Before You Begin', 'Specify Name and Location', 'Specify Generation', 'Assign Memory' (highlighted), 'Configure Networking', 'Connect Virtual Hard Disk', 'Installation Options', and 'Summary'. The main area is titled 'Assign Memory' and contains the following text:

Specify the amount of memory to allocate to this virtual machine. You can specify an amount from 32 MB through 12582912 MB. To improve performance, specify more than the minimum amount recommended for the operating system.

Startup memory: MB

☐ Use Dynamic Memory for this virtual machine.

i When you decide how much memory to assign to a virtual machine, consider how you intend to use the virtual machine and the operating system that it will run.

At the bottom, there are four buttons: '< Previous', 'Next >' (highlighted), 'Finish', and 'Cancel'.

5. **Configure Networking**
Connection: <YourExternalVSwitch> > Next

The screenshot shows the 'Configure Networking' step of the 'New Virtual Machine Wizard'. The left sidebar contains a list of steps: 'Before You Begin', 'Specify Name and Location', 'Specify Generation', 'Assign Memory', 'Configure Networking' (highlighted), 'Connect Virtual Hard Disk', 'Installation Options', and 'Summary'. The main area has a title bar 'Configure Networking' and a description: 'Each new virtual machine includes a network adapter. You can configure the network adapter to use a virtual switch, or it can remain disconnected.' Below this, there is a 'Connection:' dropdown menu with 'LabServicesSwitch' selected. At the bottom, there are four buttons: '< Previous', 'Next >' (highlighted), 'Finish', and 'Cancel'.

6. **Connect Virtual Hard Disk**
Size: 50 GB > Next

The screenshot shows the 'Connect Virtual Hard Disk' step of the 'New Virtual Machine Wizard'. The left sidebar contains a list of steps: 'Before You Begin', 'Specify Name and Location', 'Specify Generation', 'Assign Memory', 'Configure Networking', 'Connect Virtual Hard Disk' (highlighted), 'Installation Options', and 'Summary'. The main area has a title bar 'Connect Virtual Hard Disk' and a description: 'A virtual machine requires storage so that you can install an operating system. You can specify the storage now or configure it later by modifying the virtual machine's properties.' Below this, there are three radio button options: 'Create a virtual hard disk' (selected), 'Use an existing virtual hard disk', and 'Attach a virtual hard disk later'. The 'Create a virtual hard disk' option has a sub-description: 'Use this option to create a VHDX dynamically expanding virtual hard disk.' Below this, there is a form with three fields: 'Name:' with the value 'Windows 10 (Client).vhdx', 'Location:' with the value 'C:\ProgramData\Microsoft\Windows\Virtual Hard Disks\' and a 'Browse...' button, and 'Size:' with the value '50' GB (Maximum: 64 TB). The 'Use an existing virtual hard disk' option has a sub-description: 'Use this option to attach an existing VHDX virtual hard disk.' Below this, there is a 'Location:' field with the value 'C:\ProgramData\Microsoft\Windows\Virtual Hard Disks\' and a 'Browse...' button. The 'Attach a virtual hard disk later' option has a sub-description: 'Use this option to skip this step now and attach an existing virtual hard disk later.' At the bottom, there are four buttons: '< Previous', 'Next >' (highlighted), 'Finish', and 'Cancel'.

7. Installation Options

Select **Install an operating system from a bootable image file**

Image file: <path/to/*.iso> > Next

The screenshot shows the 'New Virtual Machine Wizard' window, specifically the 'Installation Options' step. On the left, a sidebar lists the steps: 'Before You Begin', 'Specify Name and Location', 'Specify Generation', 'Assign Memory', 'Configure Networking', 'Connect Virtual Hard Disk', 'Installation Options' (which is highlighted in blue), and 'Summary'. The main area contains the text: 'You can install an operating system now if you have access to the setup media, or you can install it later.' Below this are two radio buttons. The first, 'Install an operating system later', is unselected. The second, 'Install an operating system from a bootable image file', is selected. Under the second option, there is a 'Media' section with a text box labeled 'Image file (.iso):' containing the path 'Dent\Downloads\Win10_22H2_English_x64v1.iso' and a 'Browse...' button. Below this is a third radio button option: 'Install an operating system from a network-based installation server', which is unselected. At the bottom right, there are four buttons: '< Previous', 'Next >' (highlighted in blue), 'Finish', and 'Cancel'.

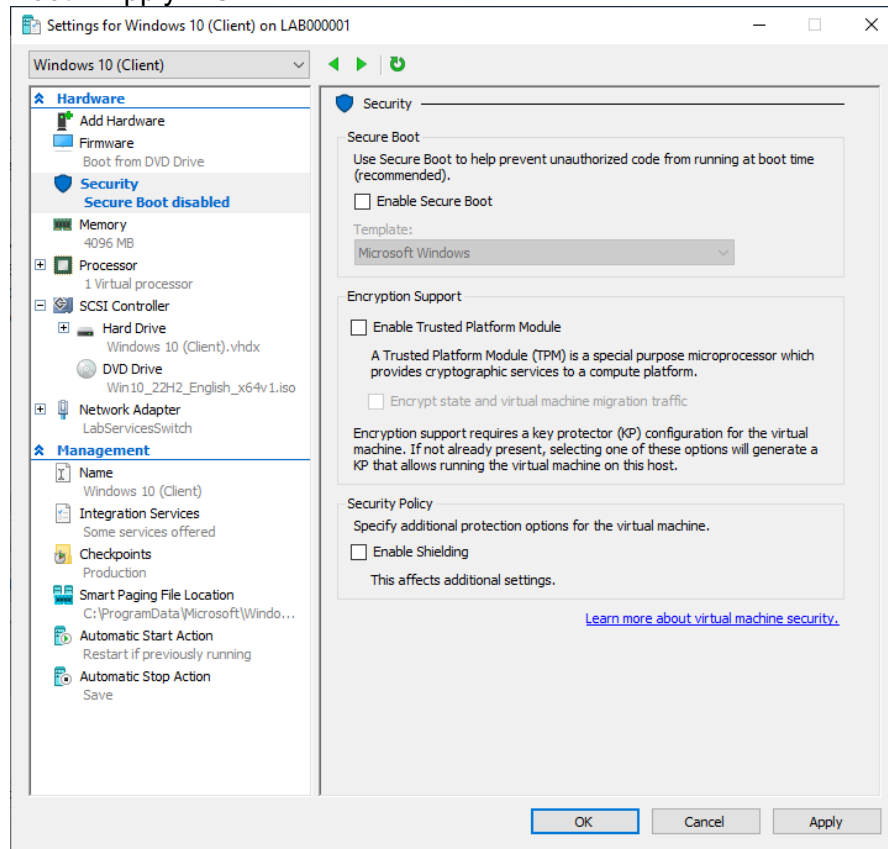
Summary:

The screenshot shows the 'New Virtual Machine Wizard' window, specifically the 'Completing the New Virtual Machine Wizard' step. On the left, the same sidebar as the previous screen is shown, with 'Summary' highlighted in blue. The main area contains the text: 'You have successfully completed the New Virtual Machine Wizard. You are about to create the following virtual machine.' Below this is a 'Description:' section with a table-like view of the virtual machine's configuration. The configuration details are: Name: Windows 10 (Client), Generation: Generation 2, Memory: 4096 MB, Network: LabServicesSwitch, Hard Disk: C:\ProgramData\Microsoft\Windows\Virtual Hard Disks\Windows 10 (Client).vhd, and Operating System: Will be installed from C:\Users\student\Downloads\Win10_22H2_English_x64v1.iso. Below the description is a horizontal scrollbar. At the bottom, there is a message: 'To create the virtual machine and close the wizard, click Finish.' At the bottom right, there are four buttons: '< Previous', 'Next >', 'Finish' (highlighted in blue), and 'Cancel'.

- **Disable Secure Boot before booting the VM**

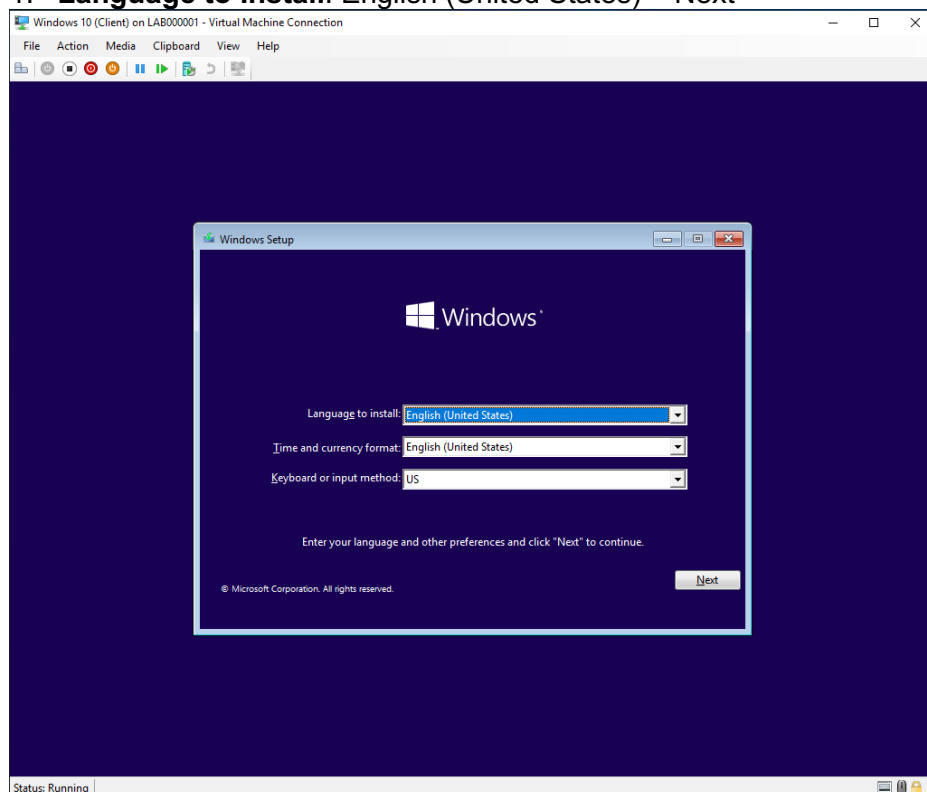
In Hyper-V,

Right-click Windows 10 VM > Settings... > Security > Uncheck Enable Secure Boot > Apply > OK

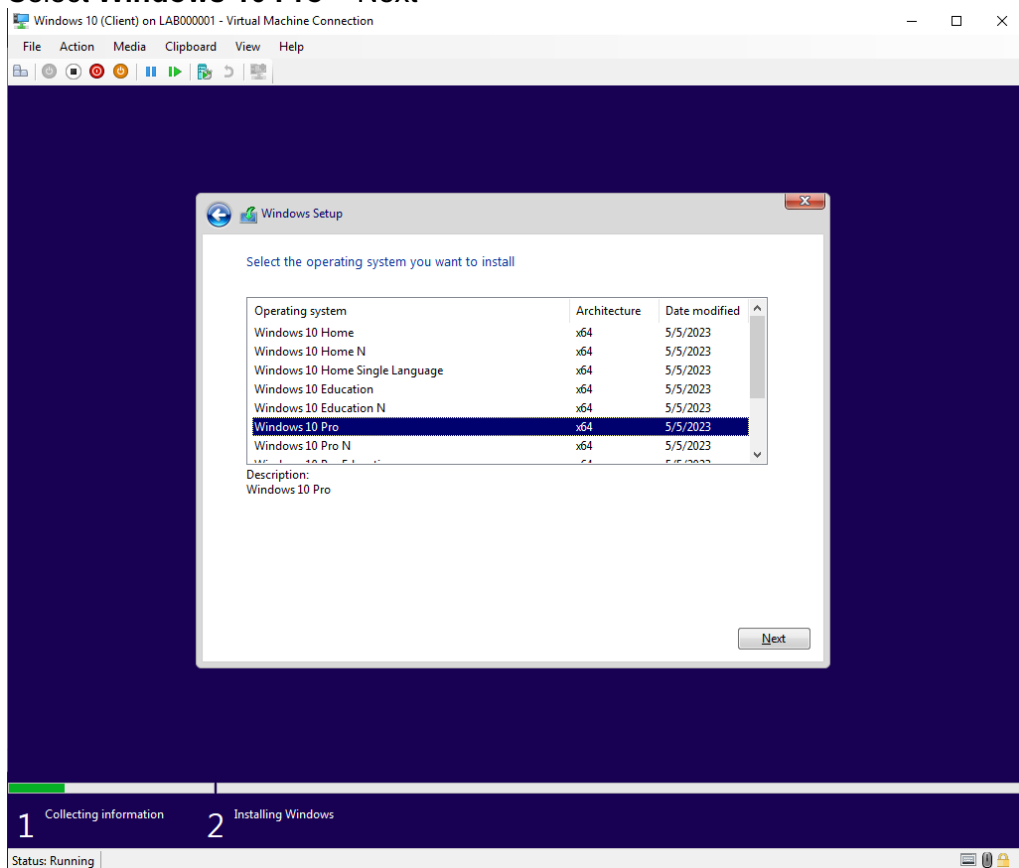


- **Install the Windows 10 VM**

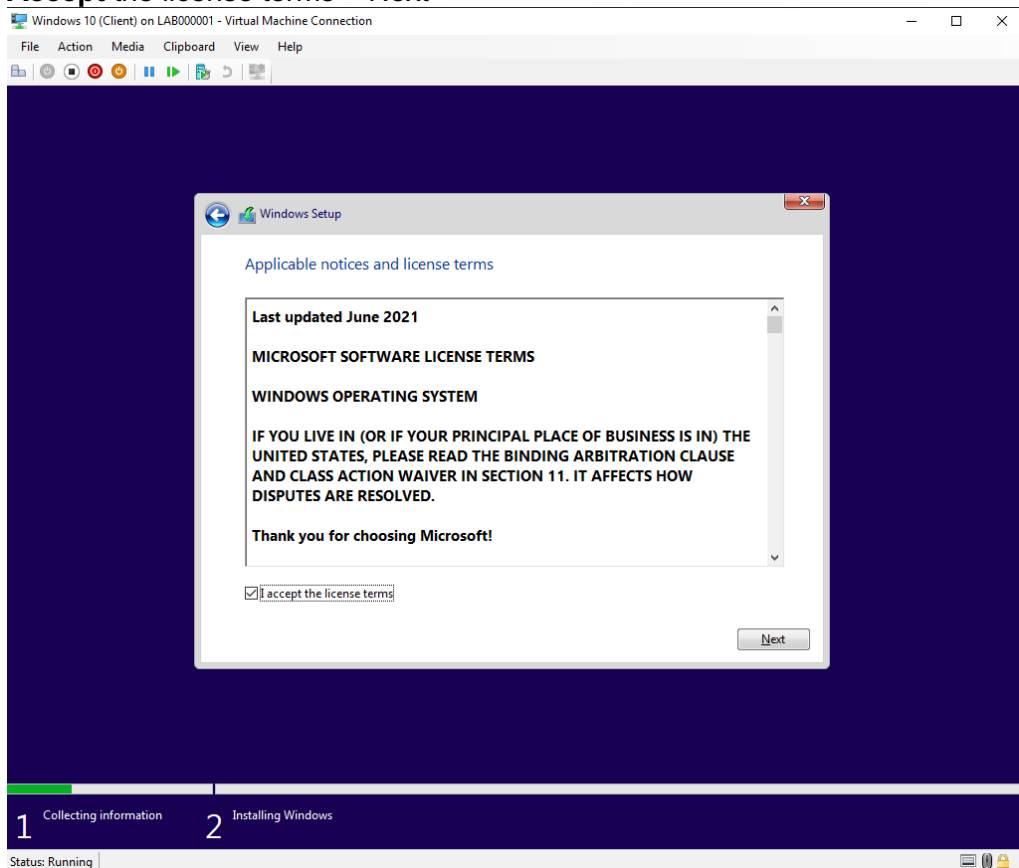
1. **Language to Install:** English (United States) > Next



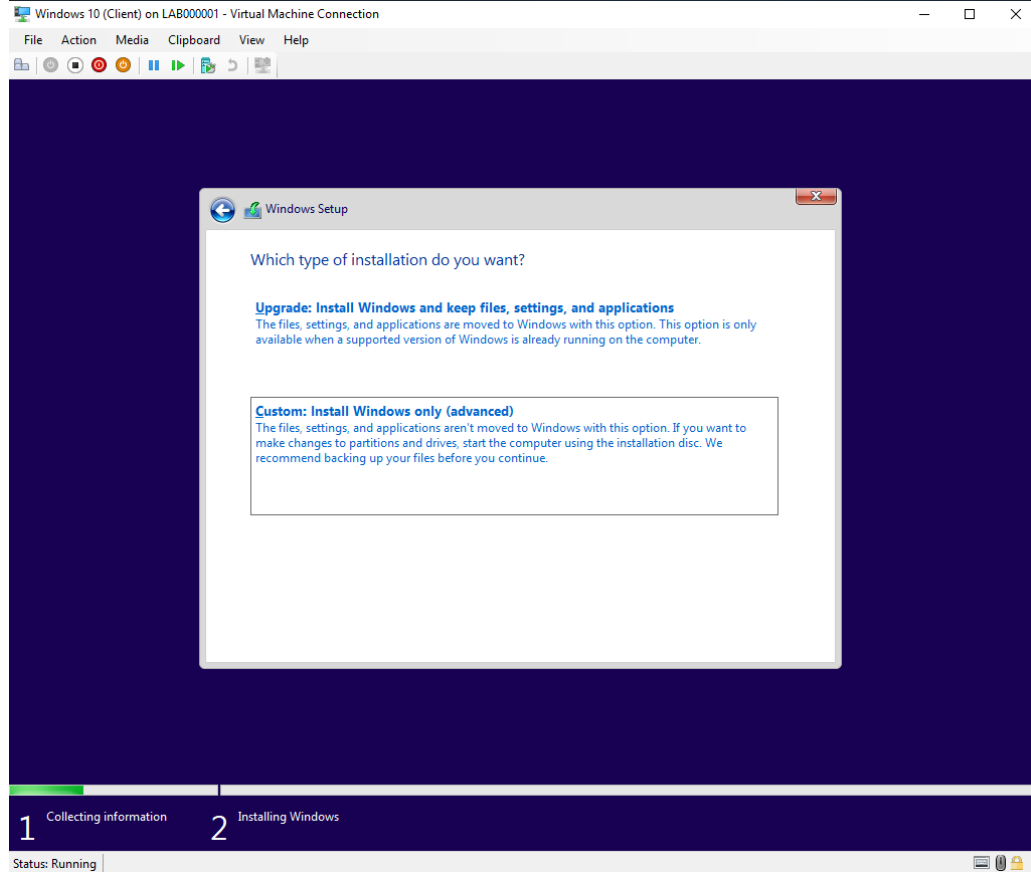
2. Select the operating system you want to install
Select **Windows 10 Pro** > Next



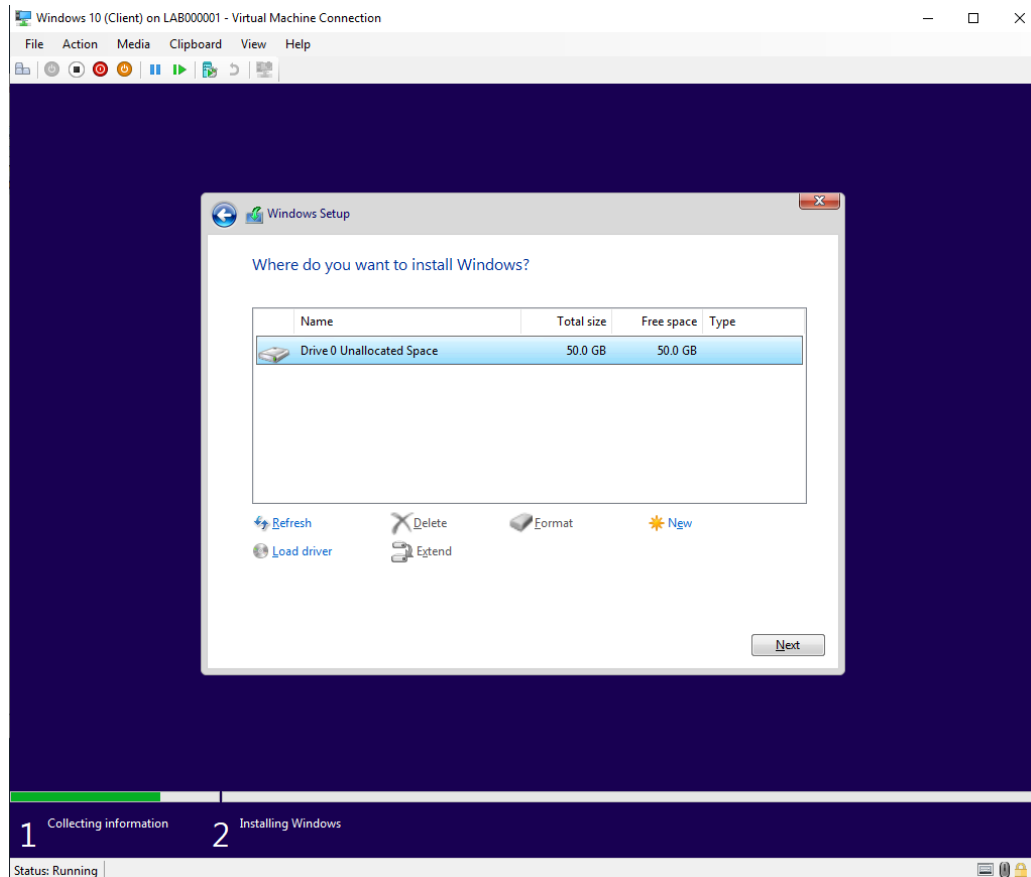
3. **Accept** the license terms > Next



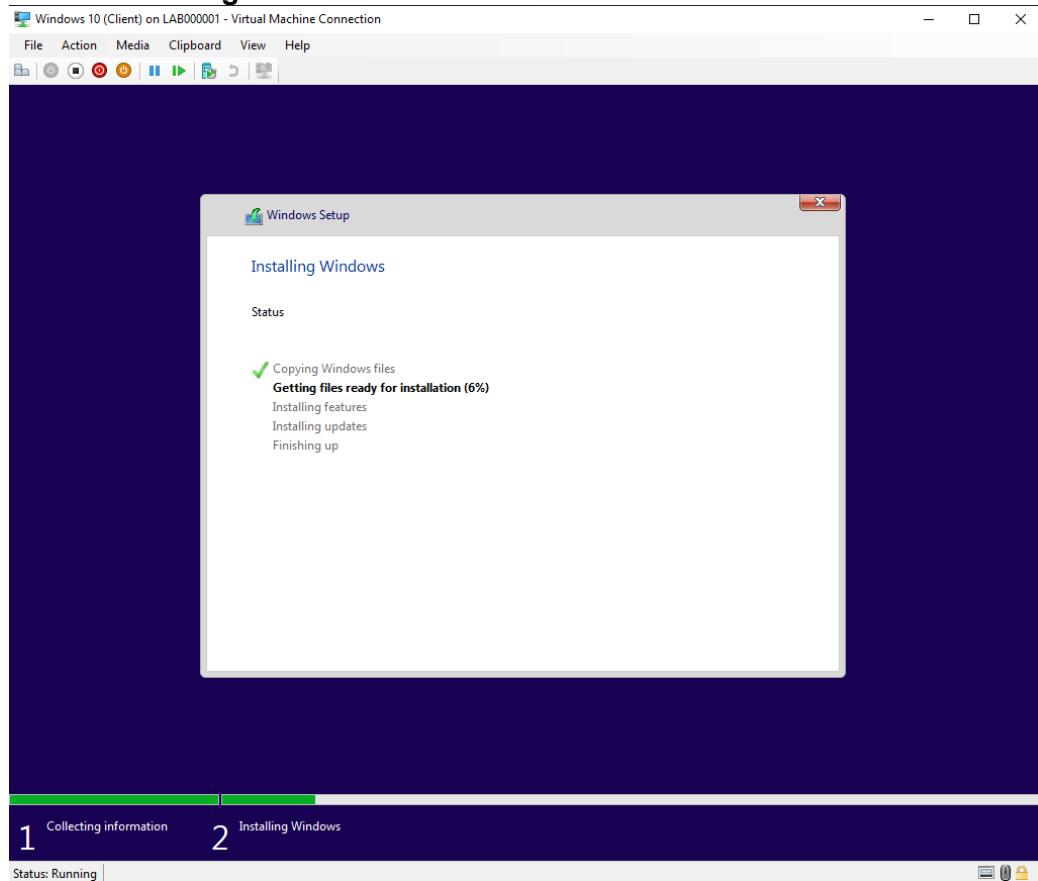
4. Select **Custom: Install Windows only (advanced)**



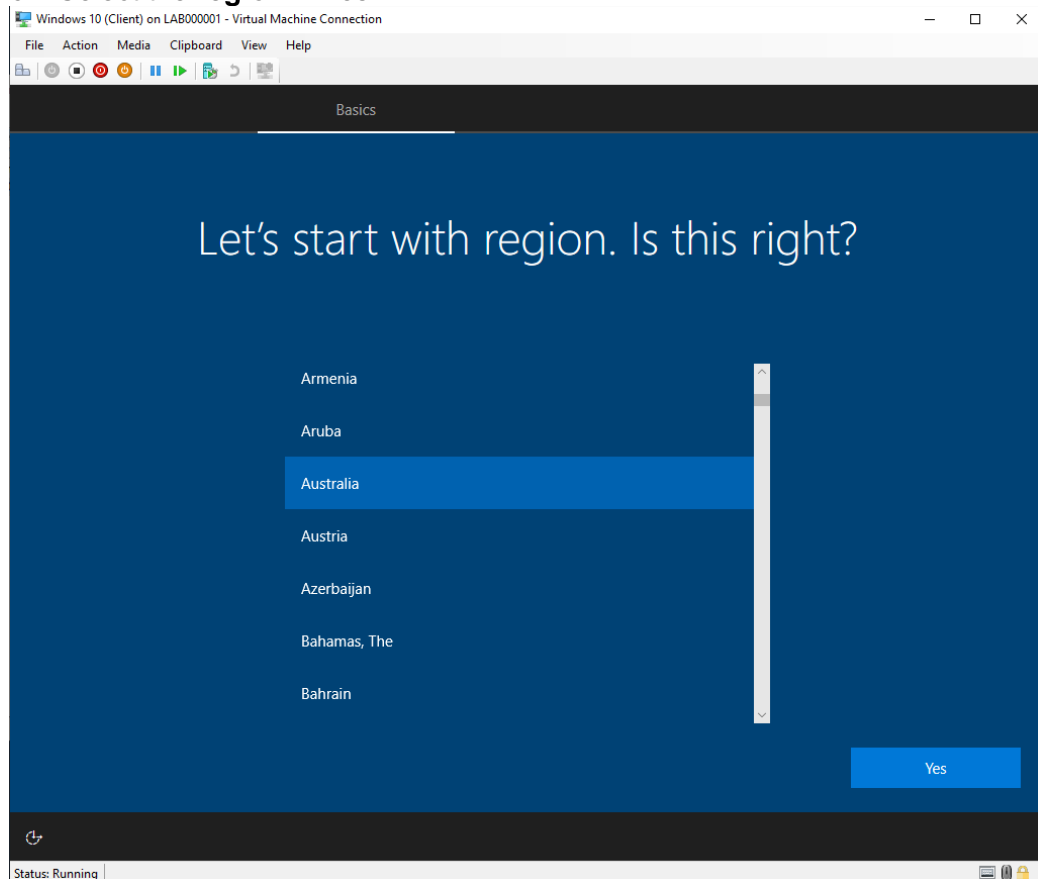
5. Select the 50 GB Hard Disk for installation > Next



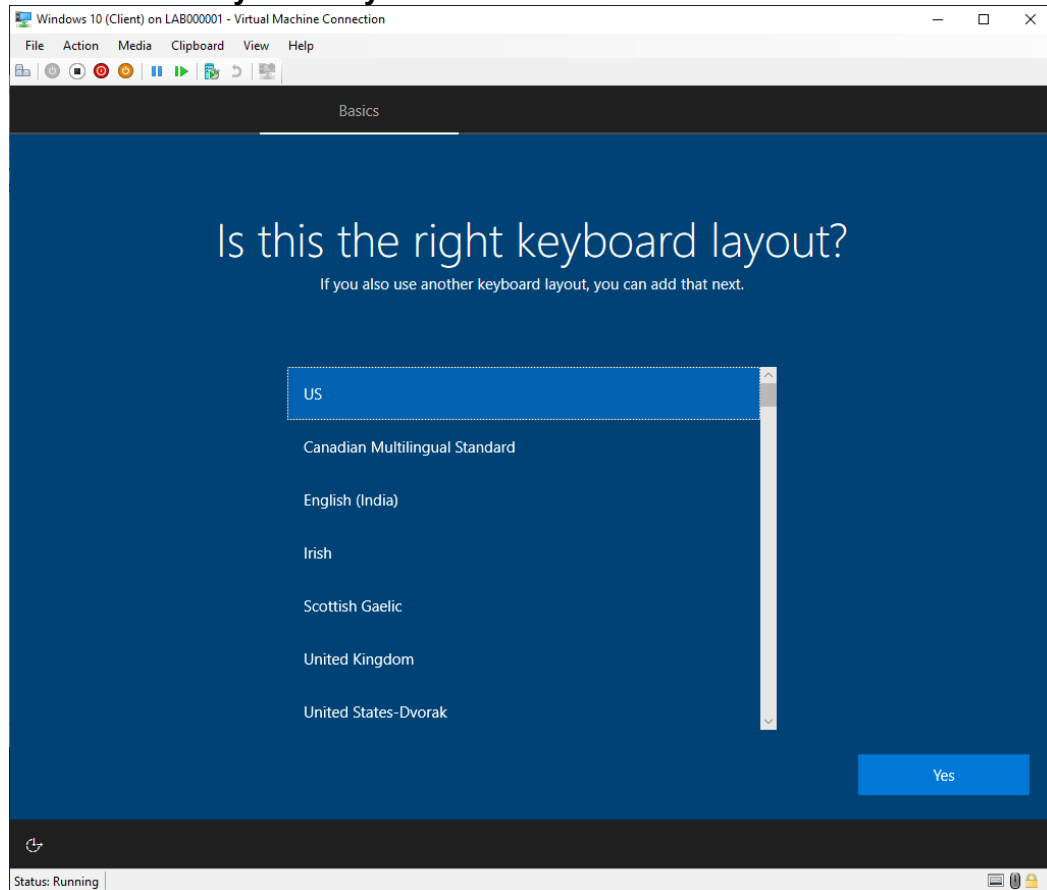
Installation Progress



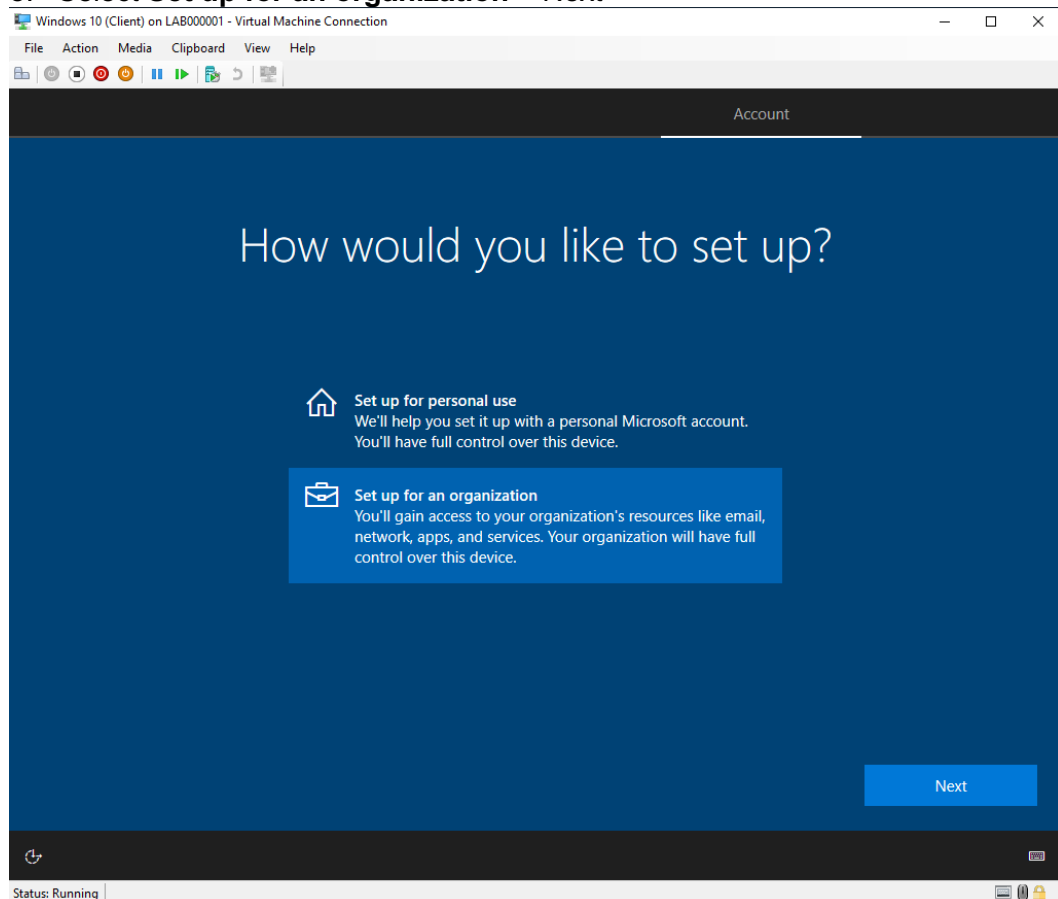
6. Select the region > Yes



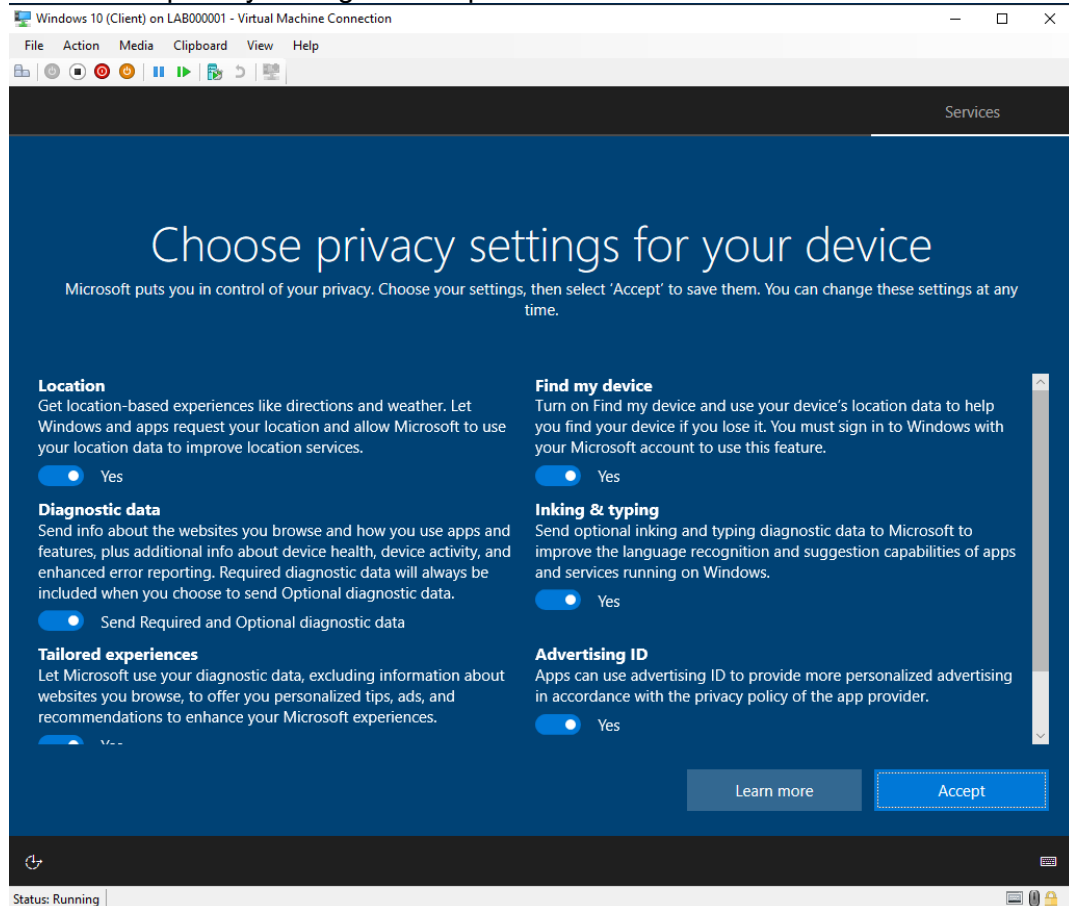
7. Select the **Keyboard layout**: US > Yes



8. Select **Set up for an organization** > Next



9. Choose privacy settings > Accept



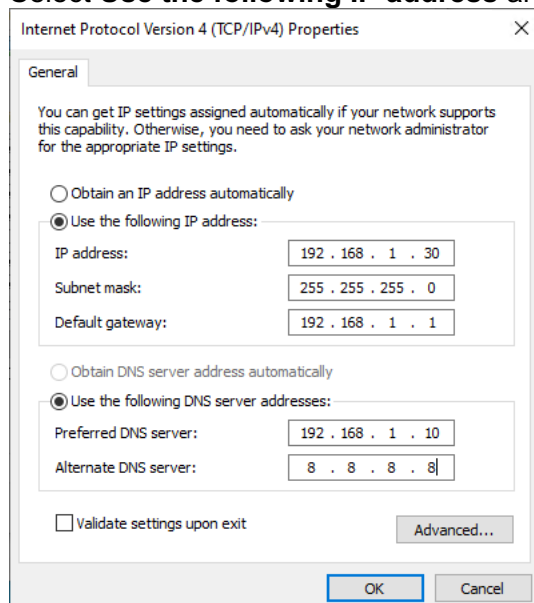
- **Connect Windows 10 to Windows Server 2022**

Note: These steps are to be performed only after creating an Active Directory Domain Users on the Windows Server.

- **Change Windows 10 IP to static**

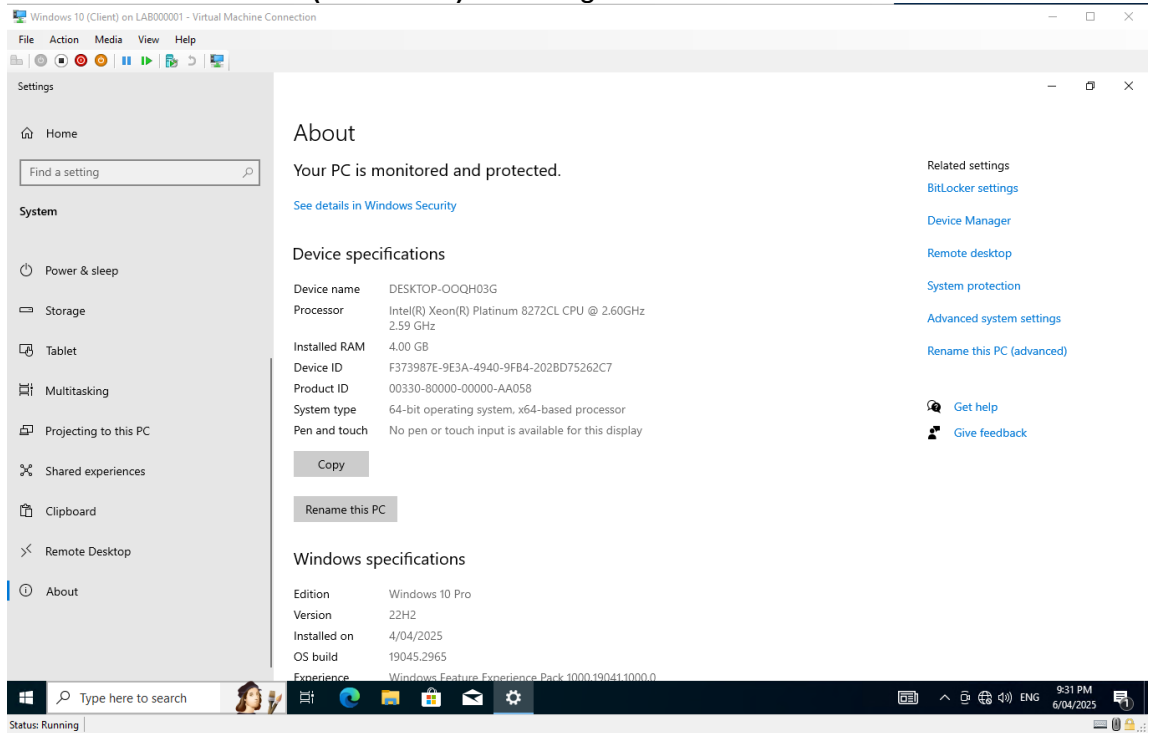
Go to **Start > Control Panel > Network and Sharing > Right-click Network instance > Properties > Select Internet Protocol Version 4 (TCP/IPv4) > Properties**

Select **Use the following IP address** and make changes > OK

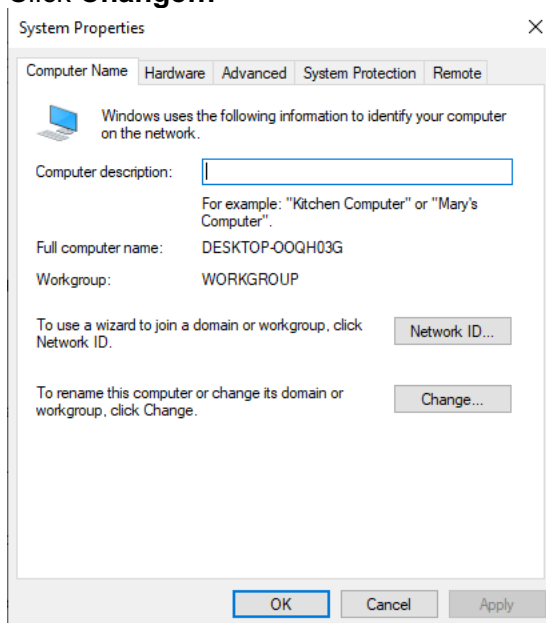


- **Join the Windows 10 to the Domain**

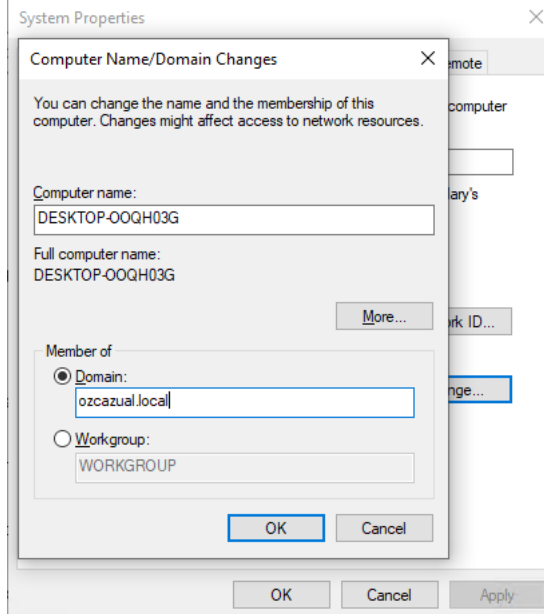
1. Go to **Start > Settings**,
Click **Rename this PC (advanced)** on the right-side menu



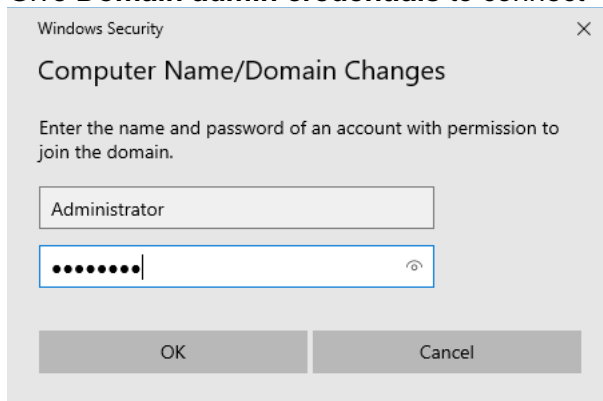
2. Click **Change...**



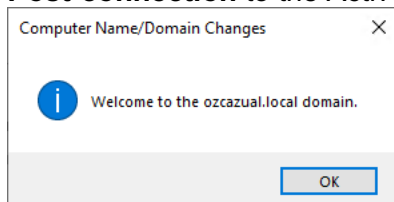
3. Select **Domain** > [yourdomain.local] > OK



4. Give **Domain admin credentials** to connect



5. **Post-connection** to the Active Directory Domain Services (AD DS)



6. Restart the Windows 10.

