

Running AltaView on Linux with a Virtual Machine

The AltaView bus analyzer software is a Windows application. This can be run on a Linux platform using a Virtual Machine running Windows. **This only works with Alta ENET devices - does NOT work with PCI/PCIe cards.** This document provides one example of how to do this, but it may be different for other Linux systems or VM software. Alta does not support or guarantee operation with a virtual machine. That being said, this approach can be useful for Linux users who need bus analyzer capability.

We used the following for this exercise:

- Ubuntu 15.10
- VMware Workstation Player 12.1.1
- Windows 10
- Alta Software 3.0.2.0

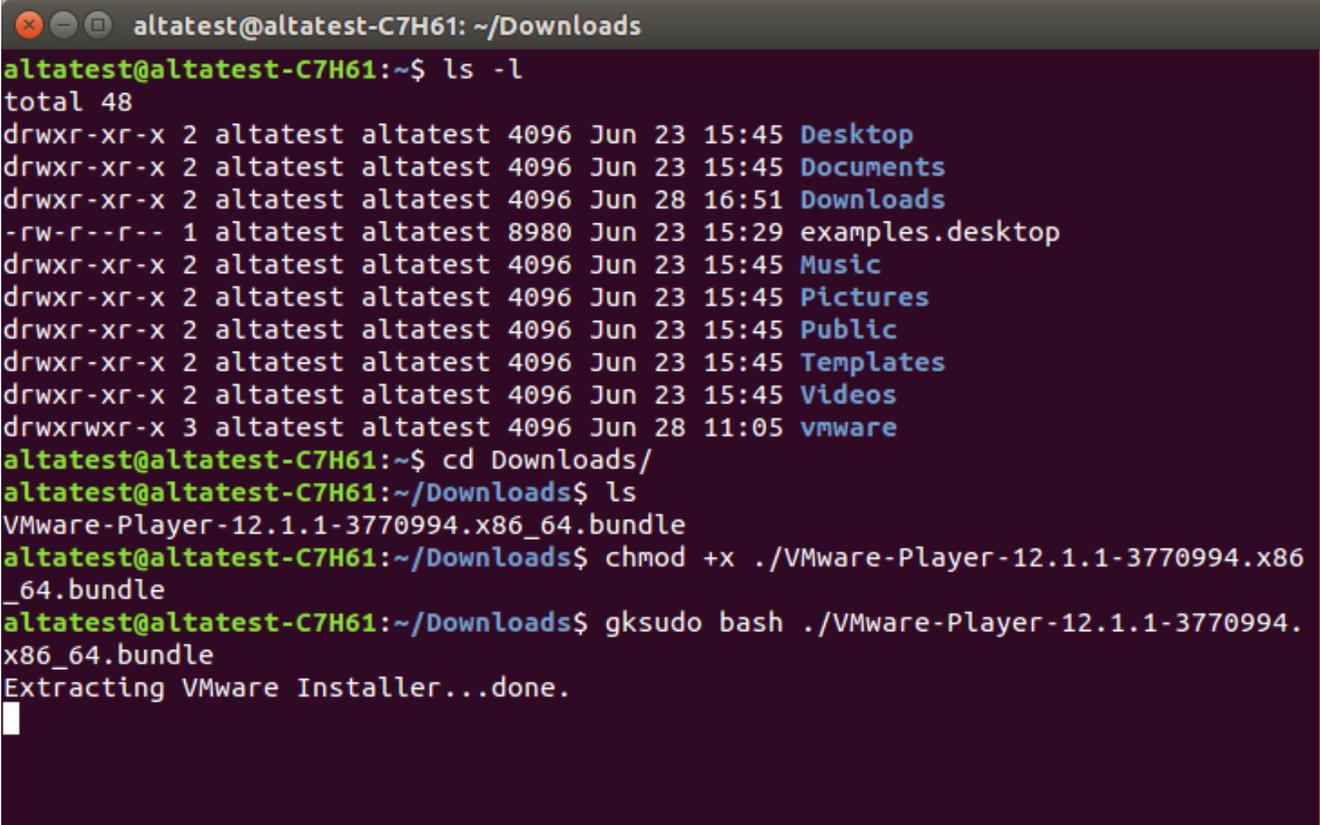
Install VMware Workstation Player

1. On the physical Linux machine, download VMware Workstation Player from www.vmware.com
2. Make sure the installer is marked as executable:

```
chmod +x ./Vmware-Player-<build number>.x86_64.bundle
```

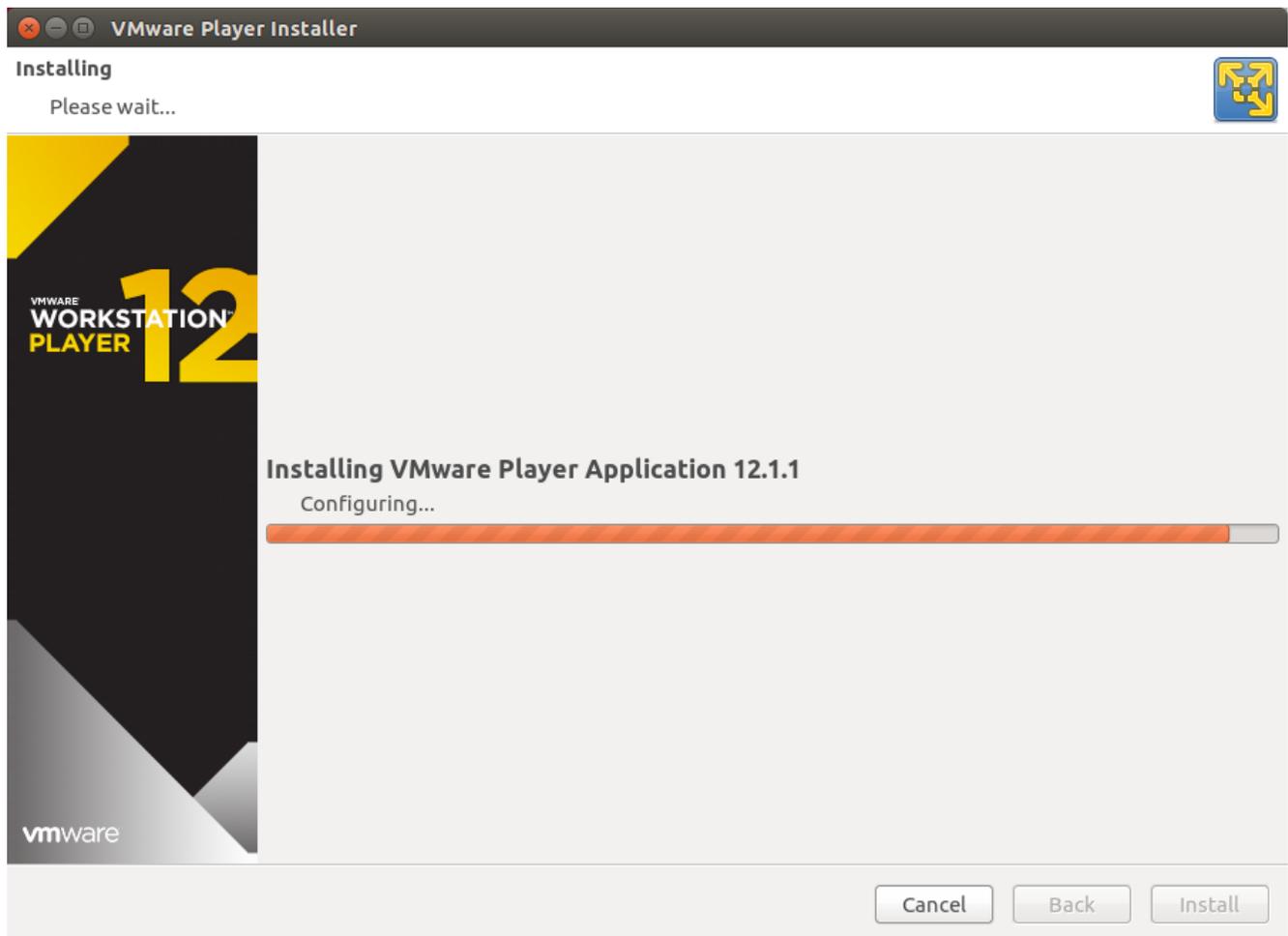
3. Start the install (you may be asked to provide an administrator password):

```
sudo bash ./VMware-Player-<build number>.x86_64.bundle
```



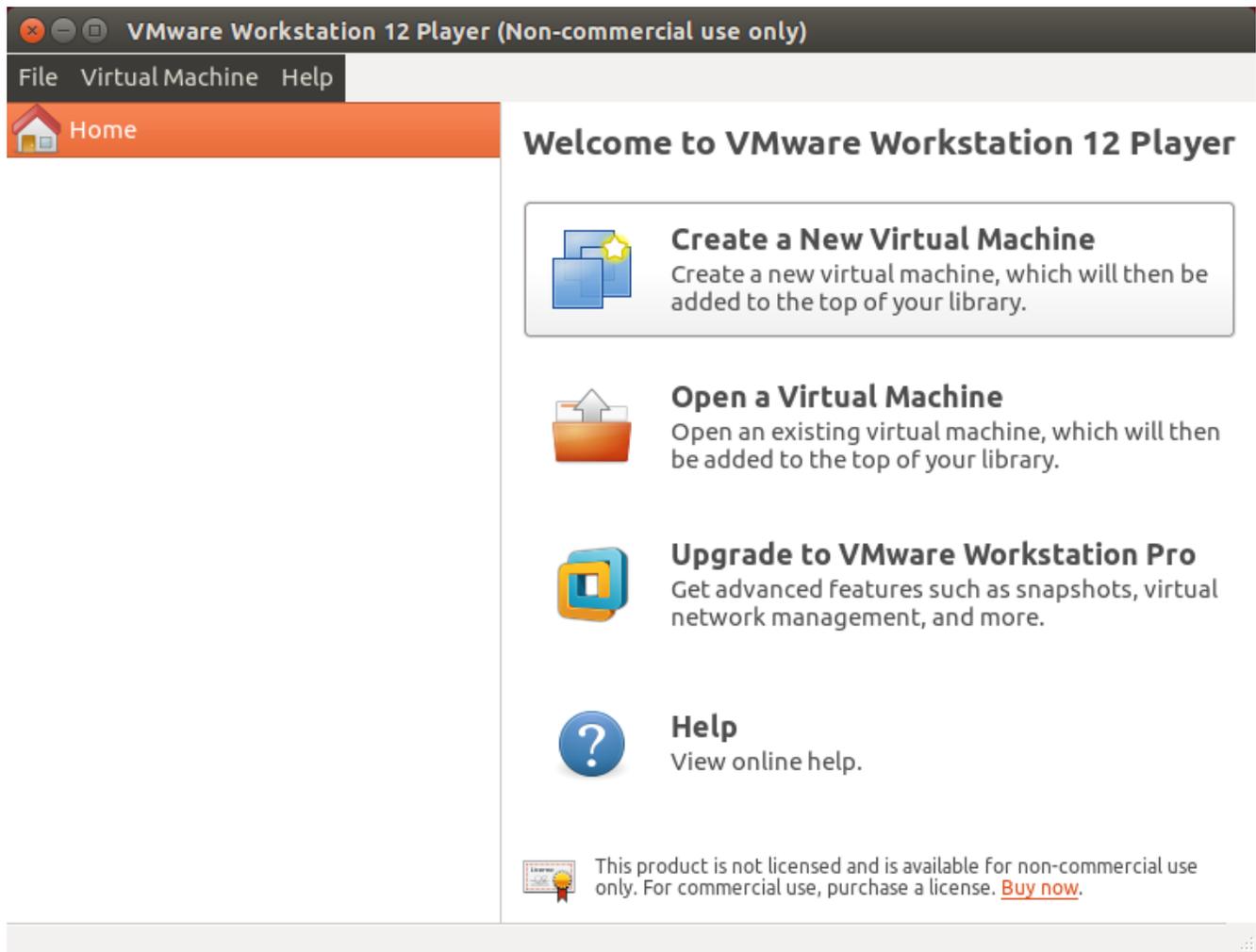
```
altatest@altatest-C7H61: ~/Downloads
altatest@altatest-C7H61:~$ ls -l
total 48
drwxr-xr-x 2 altatest altatest 4096 Jun 23 15:45 Desktop
drwxr-xr-x 2 altatest altatest 4096 Jun 23 15:45 Documents
drwxr-xr-x 2 altatest altatest 4096 Jun 28 16:51 Downloads
-rw-r--r-- 1 altatest altatest 8980 Jun 23 15:29 examples.desktop
drwxr-xr-x 2 altatest altatest 4096 Jun 23 15:45 Music
drwxr-xr-x 2 altatest altatest 4096 Jun 23 15:45 Pictures
drwxr-xr-x 2 altatest altatest 4096 Jun 23 15:45 Public
drwxr-xr-x 2 altatest altatest 4096 Jun 23 15:45 Templates
drwxr-xr-x 2 altatest altatest 4096 Jun 23 15:45 Videos
drwxrwxr-x 3 altatest altatest 4096 Jun 28 11:05 vmware
altatest@altatest-C7H61:~$ cd Downloads/
altatest@altatest-C7H61:~/Downloads$ ls
VMware-Player-12.1.1-3770994.x86_64.bundle
altatest@altatest-C7H61:~/Downloads$ chmod +x ./VMware-Player-12.1.1-3770994.x86_64.bundle
altatest@altatest-C7H61:~/Downloads$ gksudo bash ./VMware-Player-12.1.1-3770994.x86_64.bundle
Extracting VMware Installer...done.
```

4. After accepting the license agreements, and answering a few questions click on the 'Install' button to start the installation process.



Create the Virtual Windows Machine

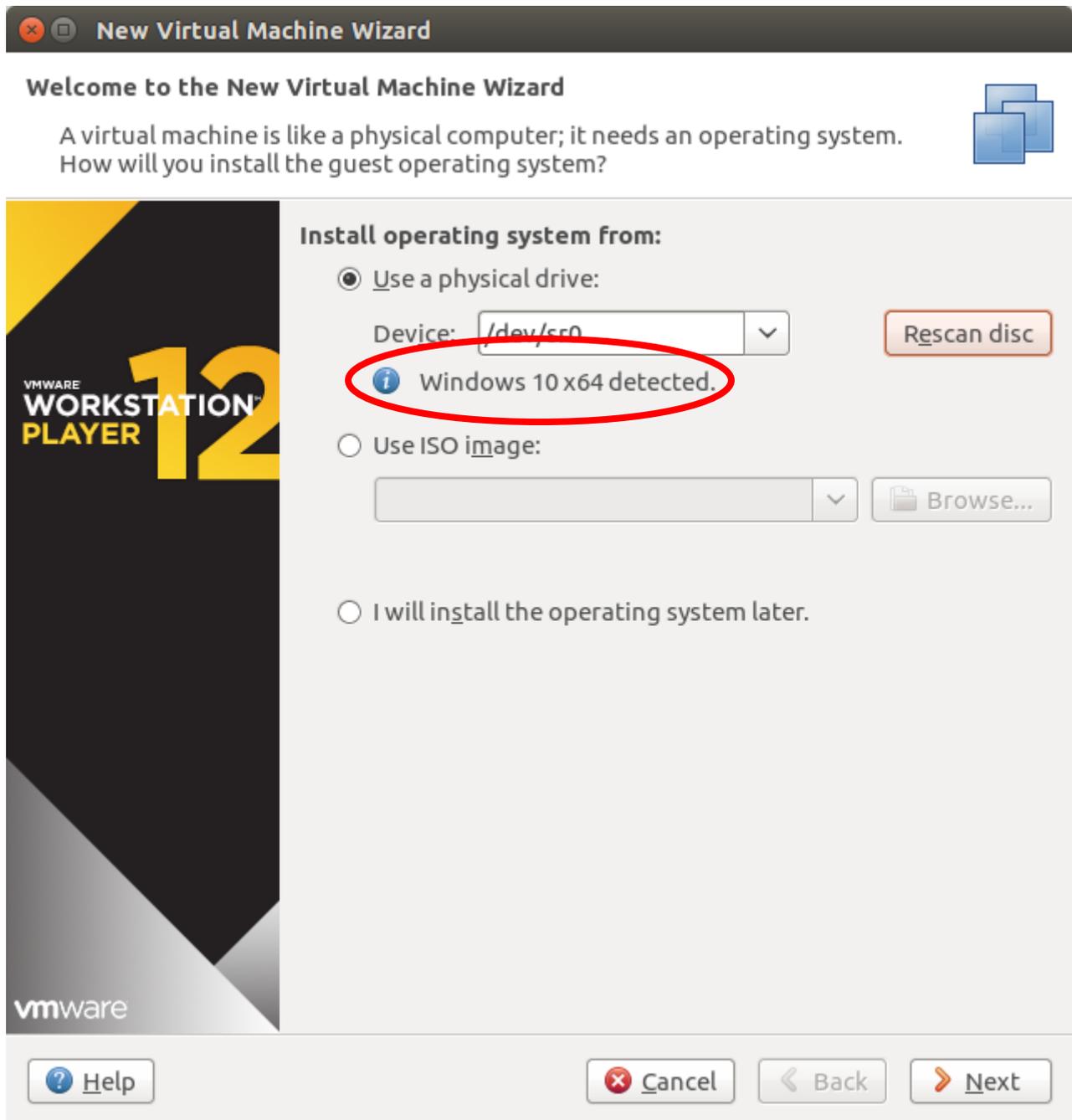
5. When the VMware installation completes, launch VMware and click on 'Create a New Virtual Machine'.



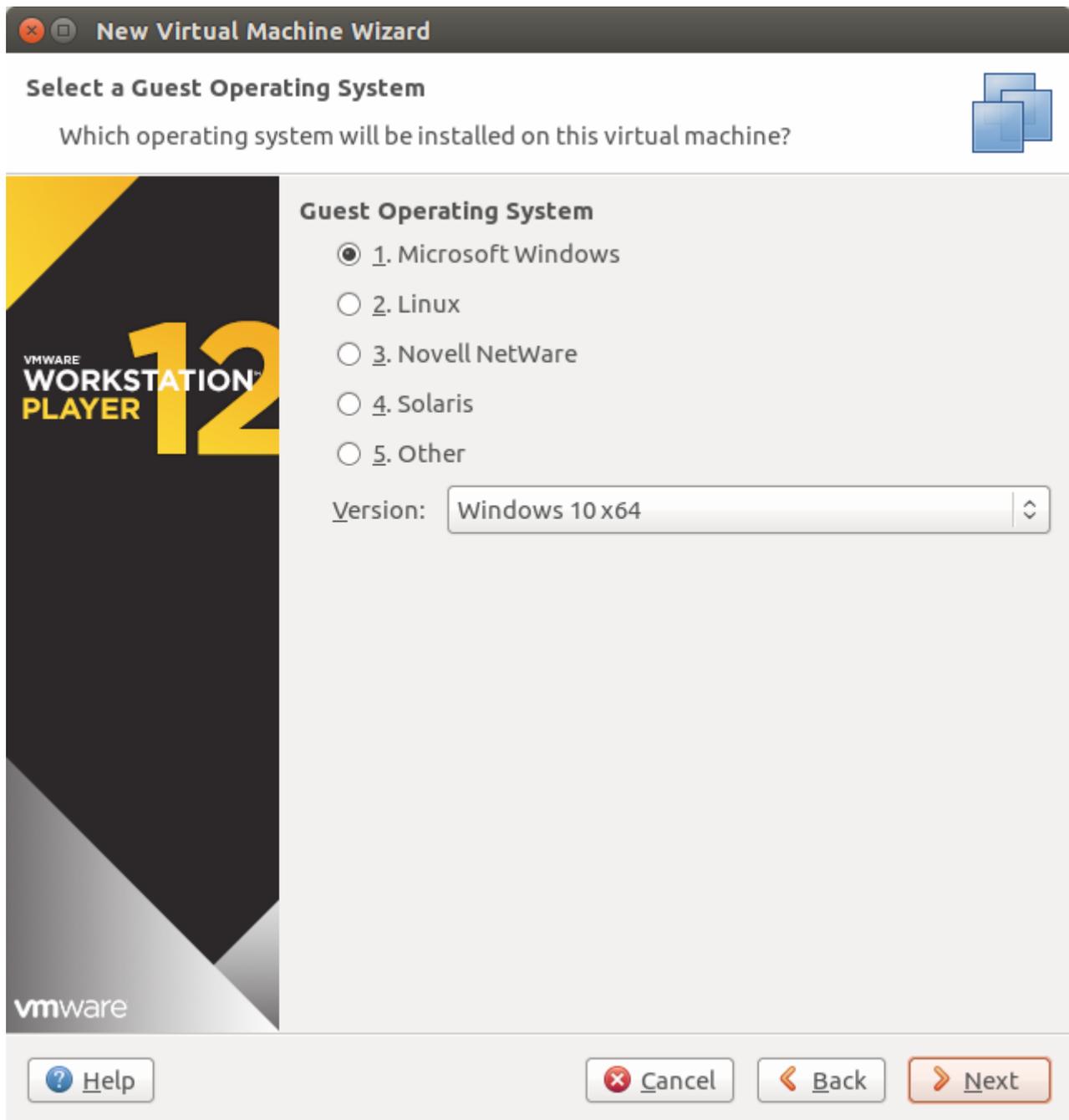
- Specify the location of the Windows installer. If using a CD then insert the disk in the drive and click 'Rescan disc'.



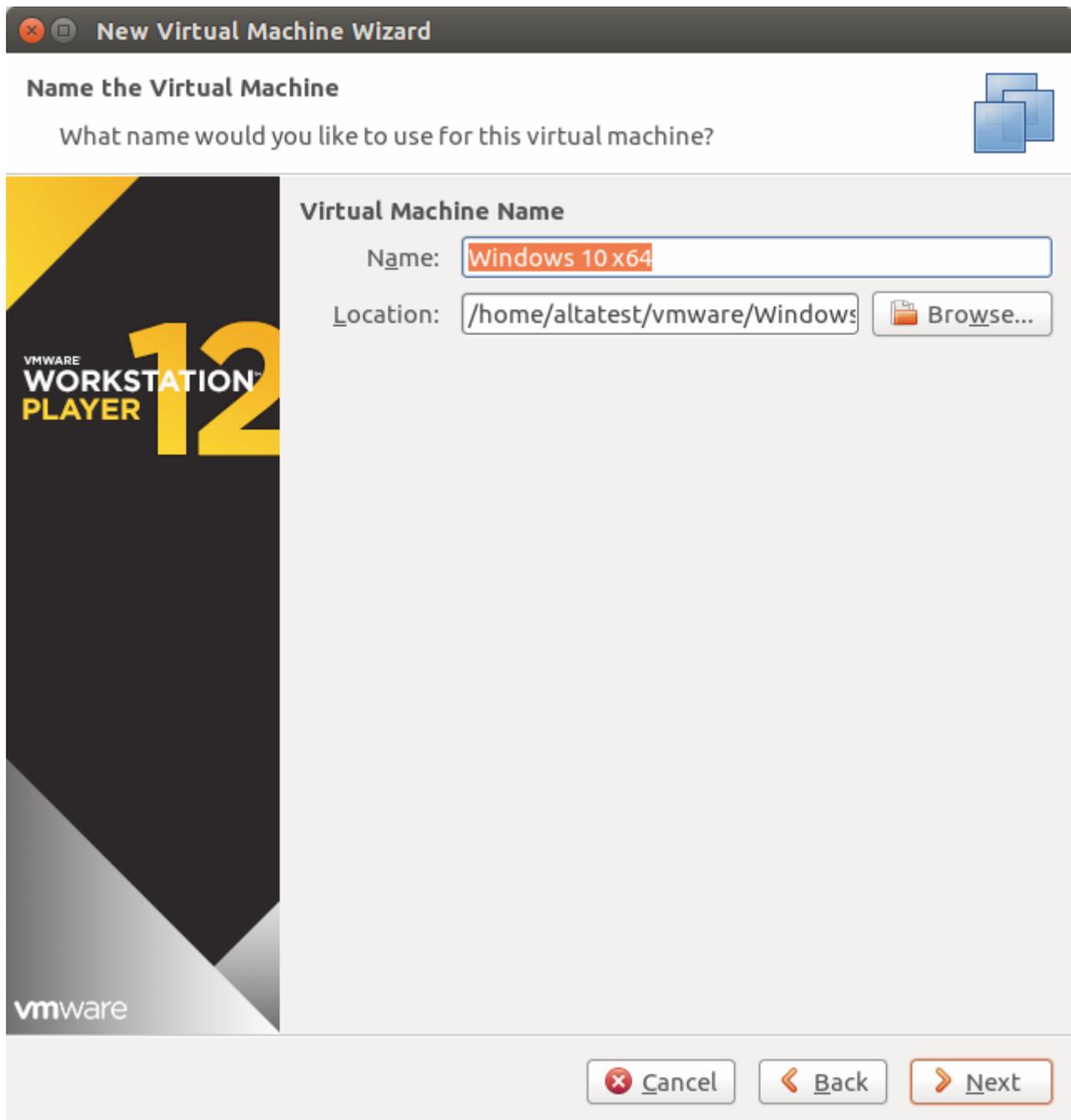
7. Verify the correct operating system is recognized. Click 'Next'.



8. Click the '1. Microsoft Windows' radio button and select 'Windows 10 x64' from the 'Version' pulldown and click 'Next':



- Use the default values or specify a name for the virtual machine and a location to store the virtual machine files and click 'Next':



10. Accept the default values of 60GB for the 'Maximum disk size' and 'Split virtual disk into multiple files' and click 'Next':



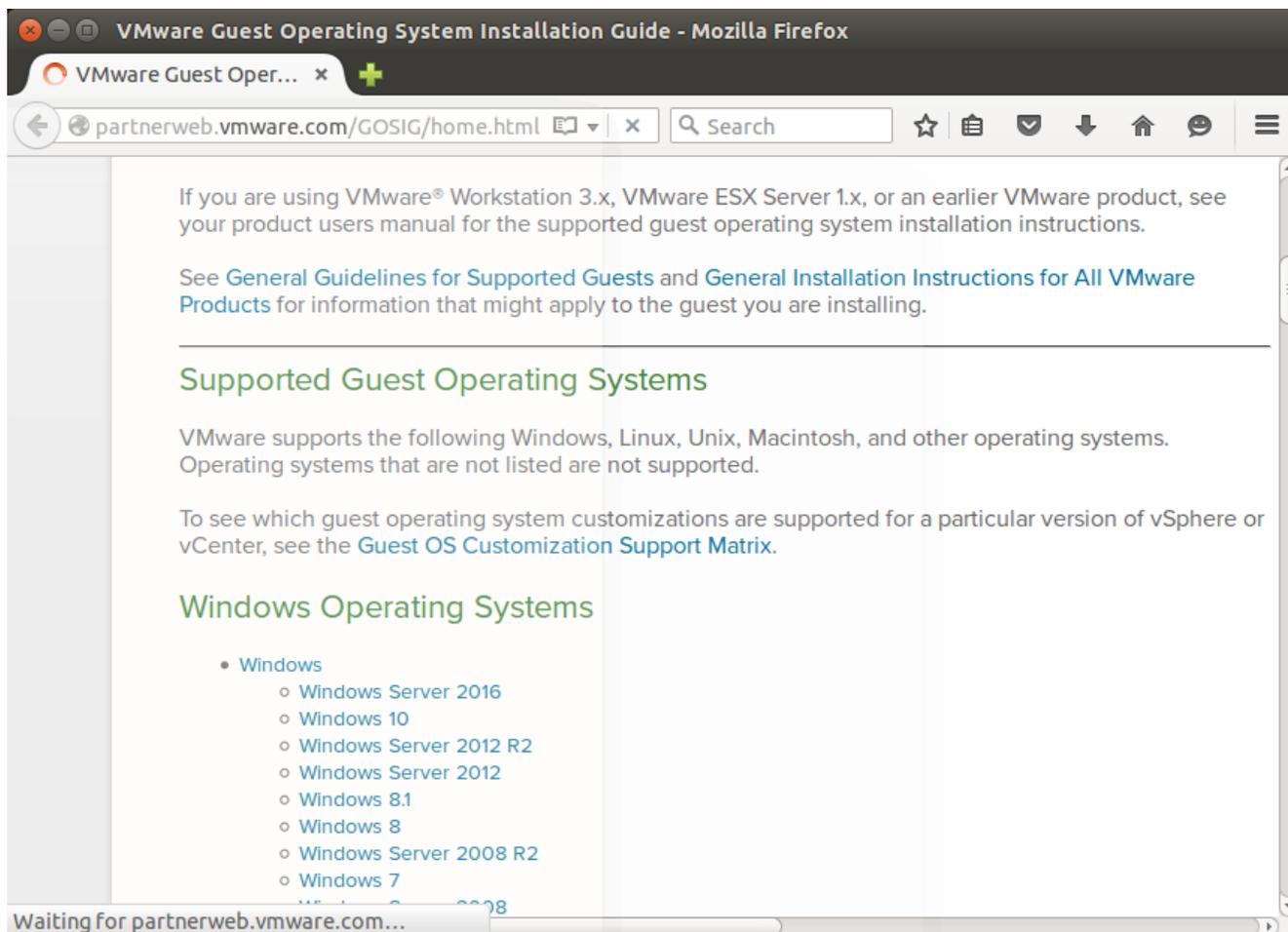
11. Click 'Finish':



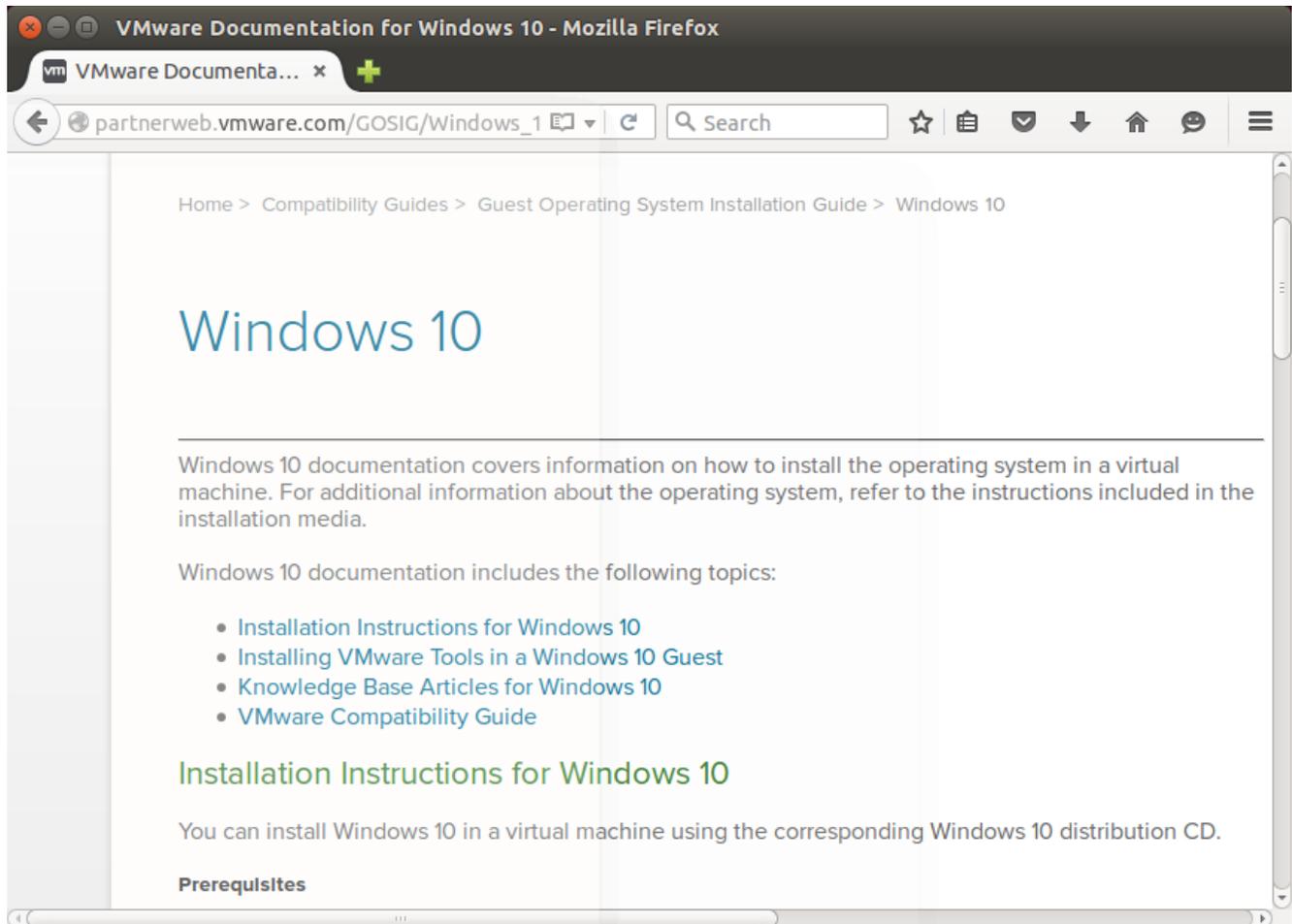
12. Click on the 'Guest Operating System Installation Guide' link:



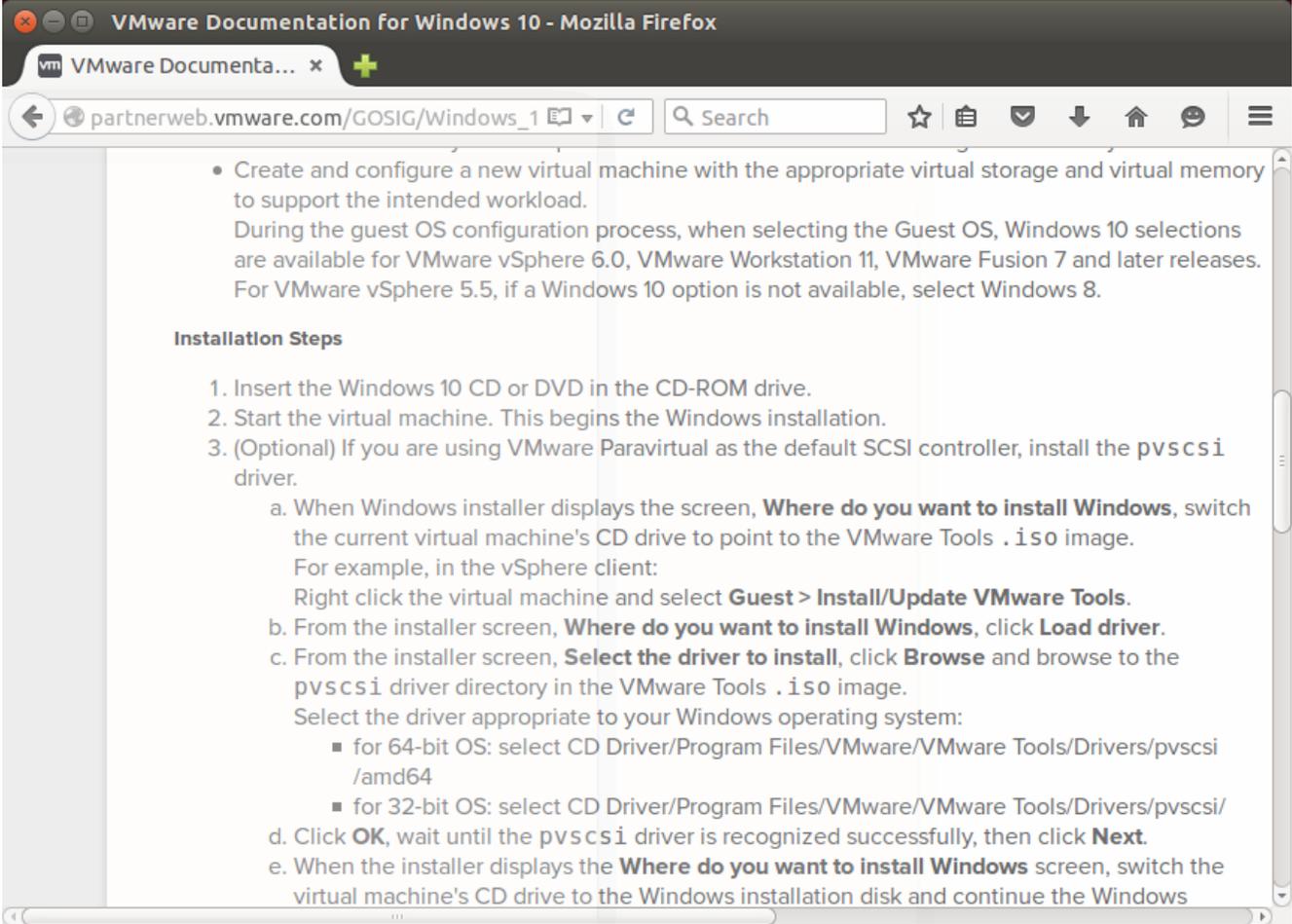
13. Click on the link for 'Windows 10':



14. Click on 'Installation Instructions for Windows 10':



15. Follow the Installation Steps:



VMware Documentation for Windows 10 - Mozilla Firefox

partnerweb.vmware.com/GOSIG/Windows_1

- Create and configure a new virtual machine with the appropriate virtual storage and virtual memory to support the intended workload.
During the guest OS configuration process, when selecting the Guest OS, Windows 10 selections are available for VMware vSphere 6.0, VMware Workstation 11, VMware Fusion 7 and later releases. For VMware vSphere 5.5, if a Windows 10 option is not available, select Windows 8.

Installation Steps

1. Insert the Windows 10 CD or DVD in the CD-ROM drive.
2. Start the virtual machine. This begins the Windows installation.
3. (Optional) If you are using VMware Paravirtual as the default SCSI controller, install the `pvscsi` driver.
 - a. When Windows installer displays the screen, **Where do you want to install Windows**, switch the current virtual machine's CD drive to point to the VMware Tools `.iso` image.
For example, in the vSphere client:
Right click the virtual machine and select **Guest > Install/Update VMware Tools**.
 - b. From the installer screen, **Where do you want to install Windows**, click **Load driver**.
 - c. From the installer screen, **Select the driver to install**, click **Browse** and browse to the `pvscsi` driver directory in the VMware Tools `.iso` image.
Select the driver appropriate to your Windows operating system:
 - for 64-bit OS: select `CD Driver/Program Files/VMware/VMware Tools/Drivers/pvscsi/amd64`
 - for 32-bit OS: select `CD Driver/Program Files/VMware/VMware Tools/Drivers/pvscsi/`
 - d. Click **OK**, wait until the `pvscsi` driver is recognized successfully, then click **Next**.
 - e. When the installer displays the **Where do you want to install Windows** screen, switch the virtual machine's CD drive to the Windows installation disk and continue the Windows

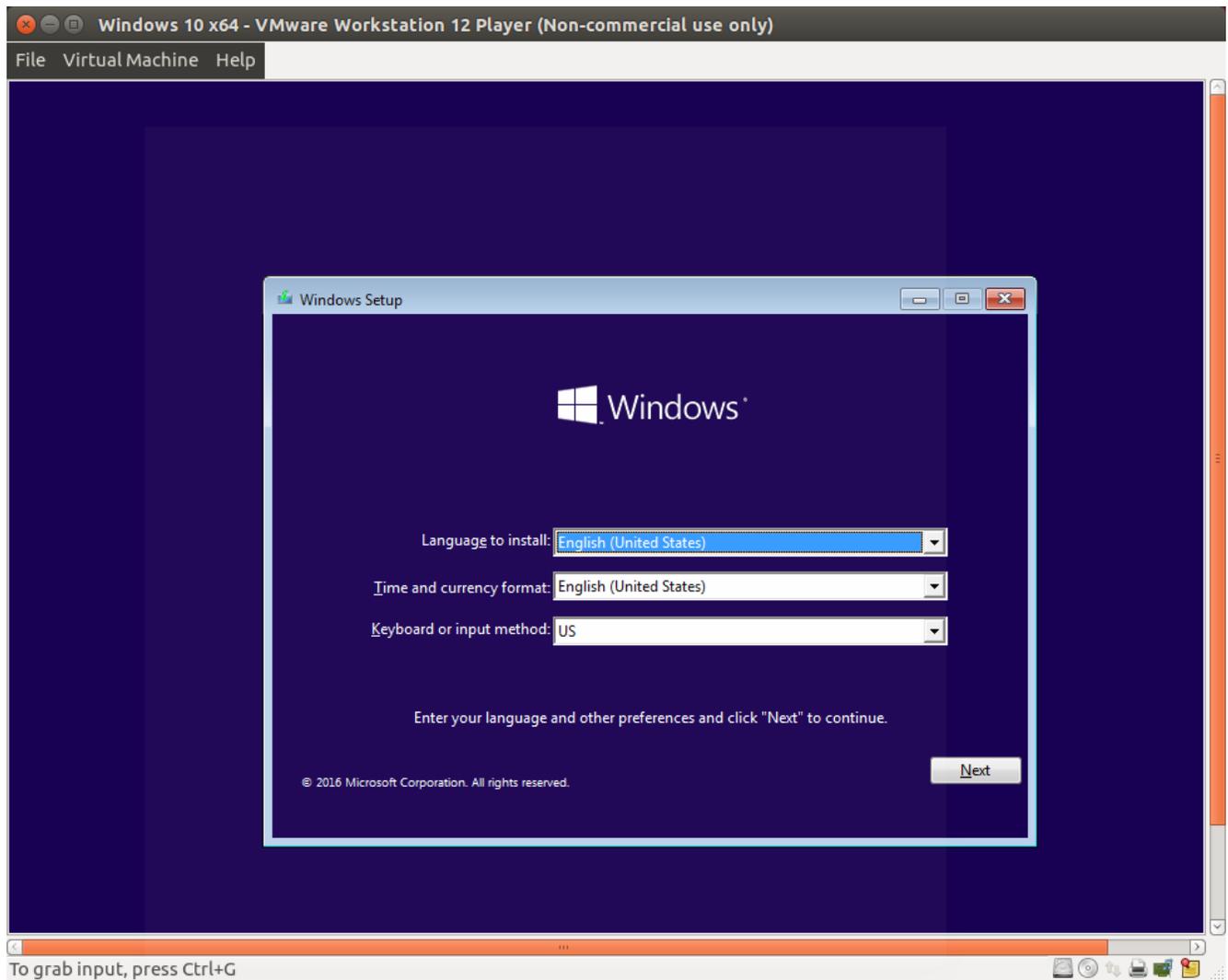
16. Close the 'Virtual Machine Created' window:



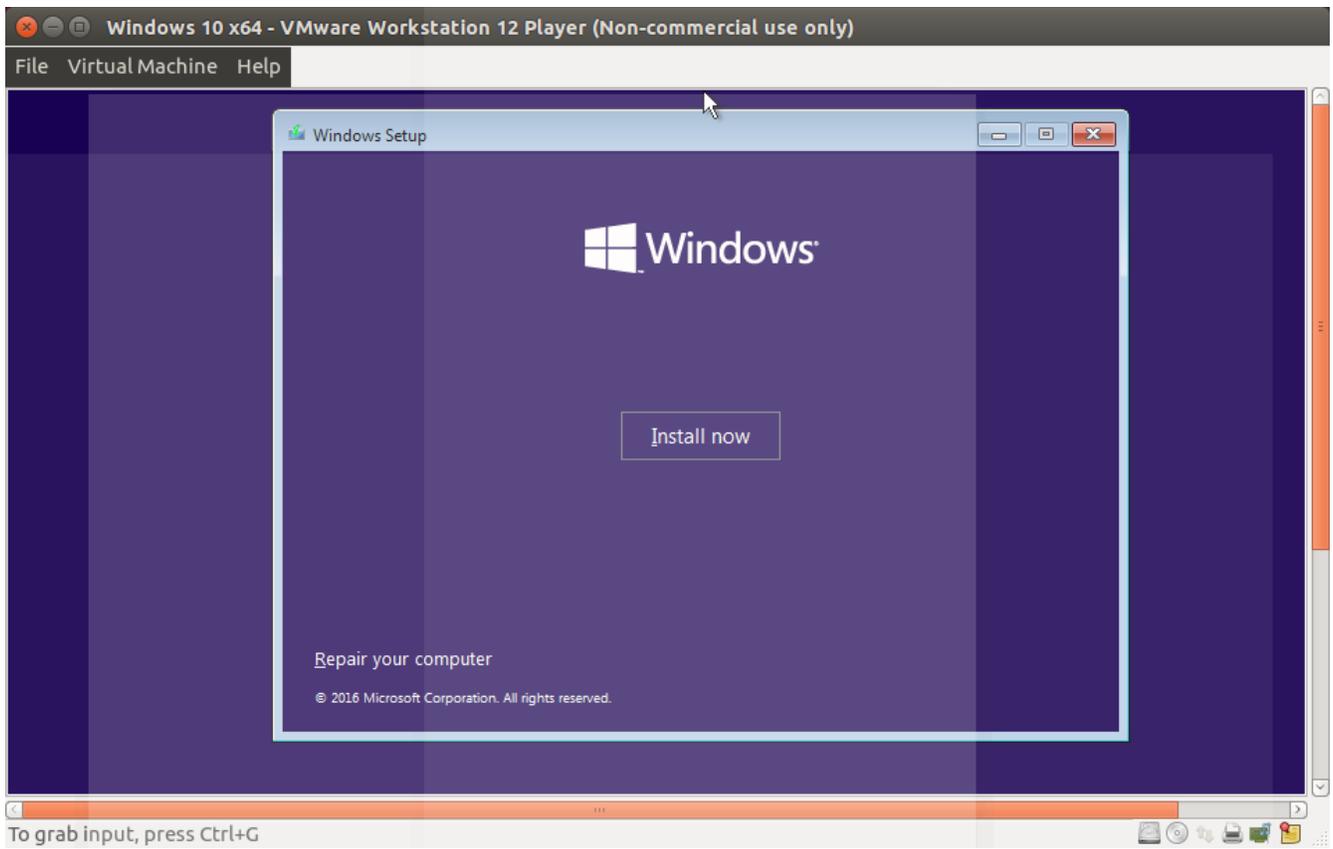
17. Select 'Remind Me Later' to the install VMware tools question:



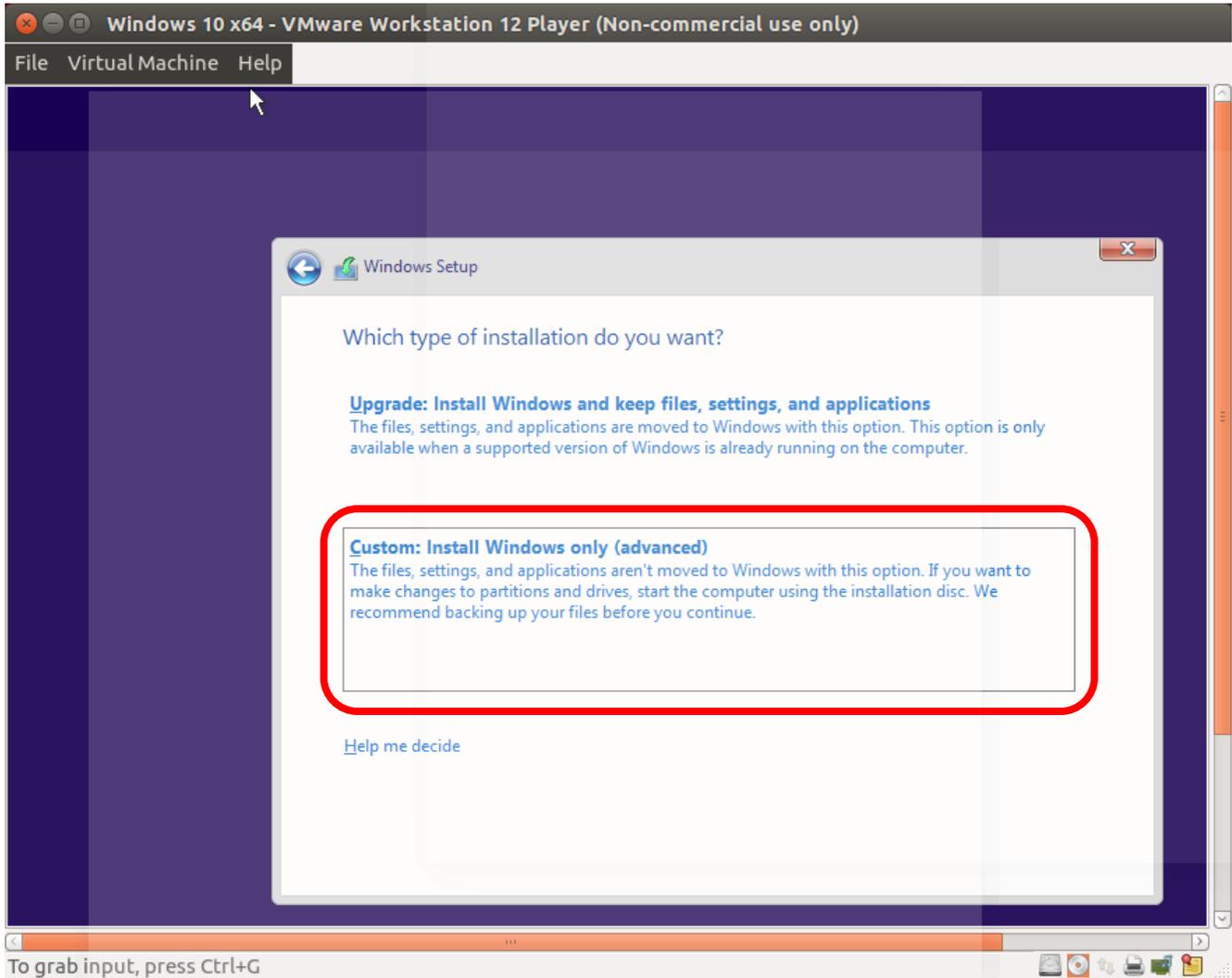
18. Select the desired options in the pulldowns, then click 'Next':



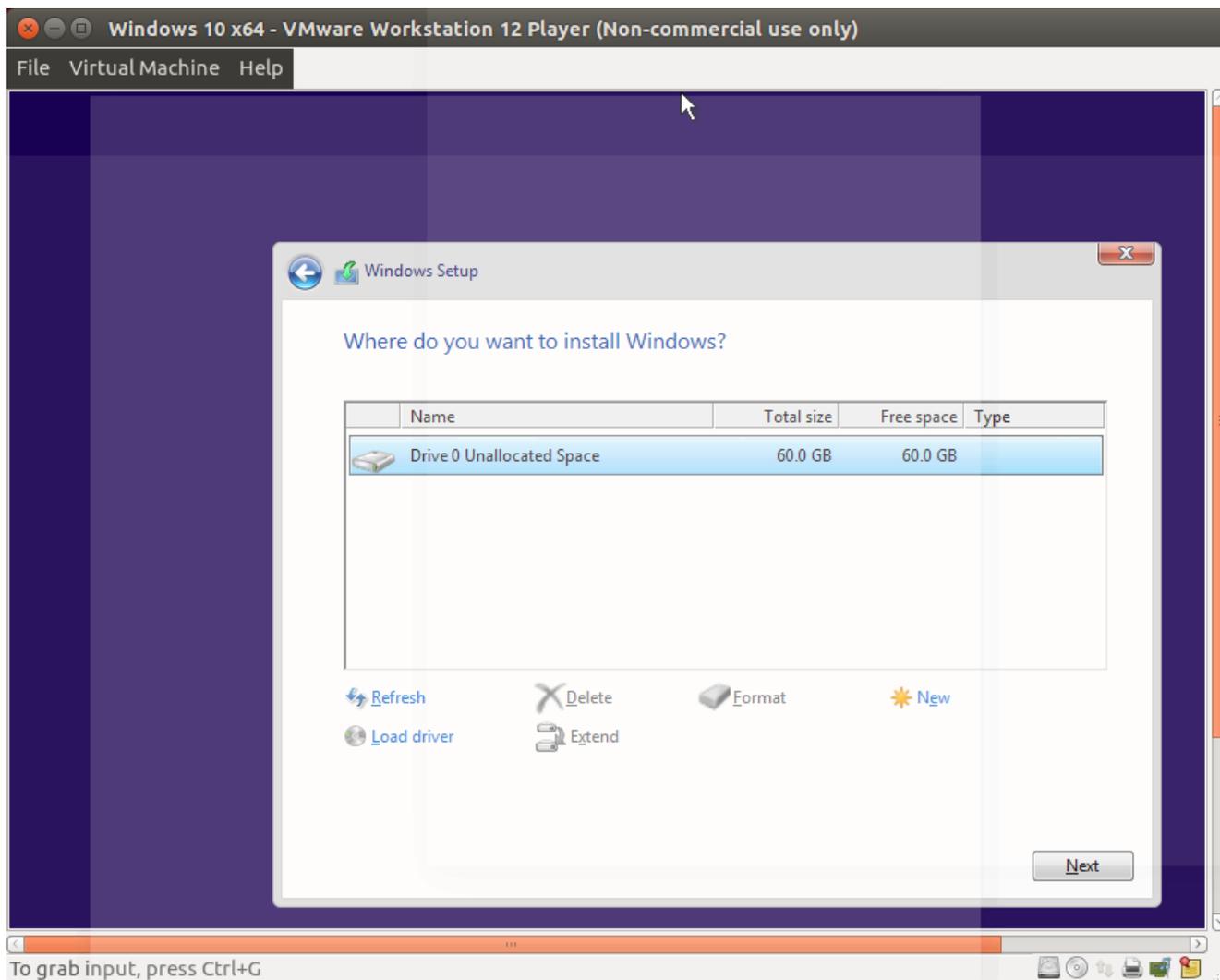
19. Click 'Install Now':



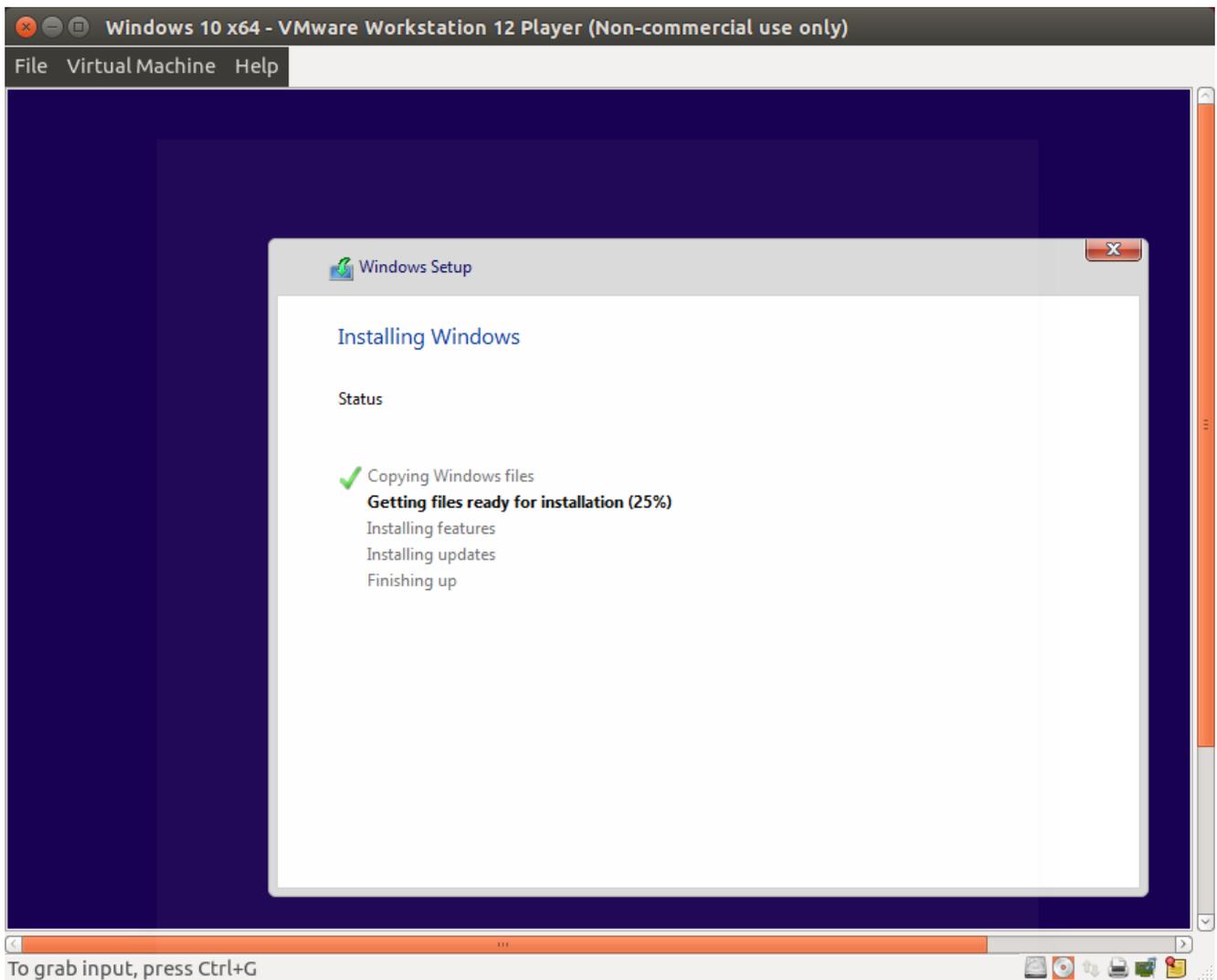
20. There will be several pop-up screens to accept the Windows license agreement and set various options, etc. When the screen below appears be sure to select '**Custom: Install Windows only (advanced)**' since this is a first time installation of Windows on the Virtual Machine:



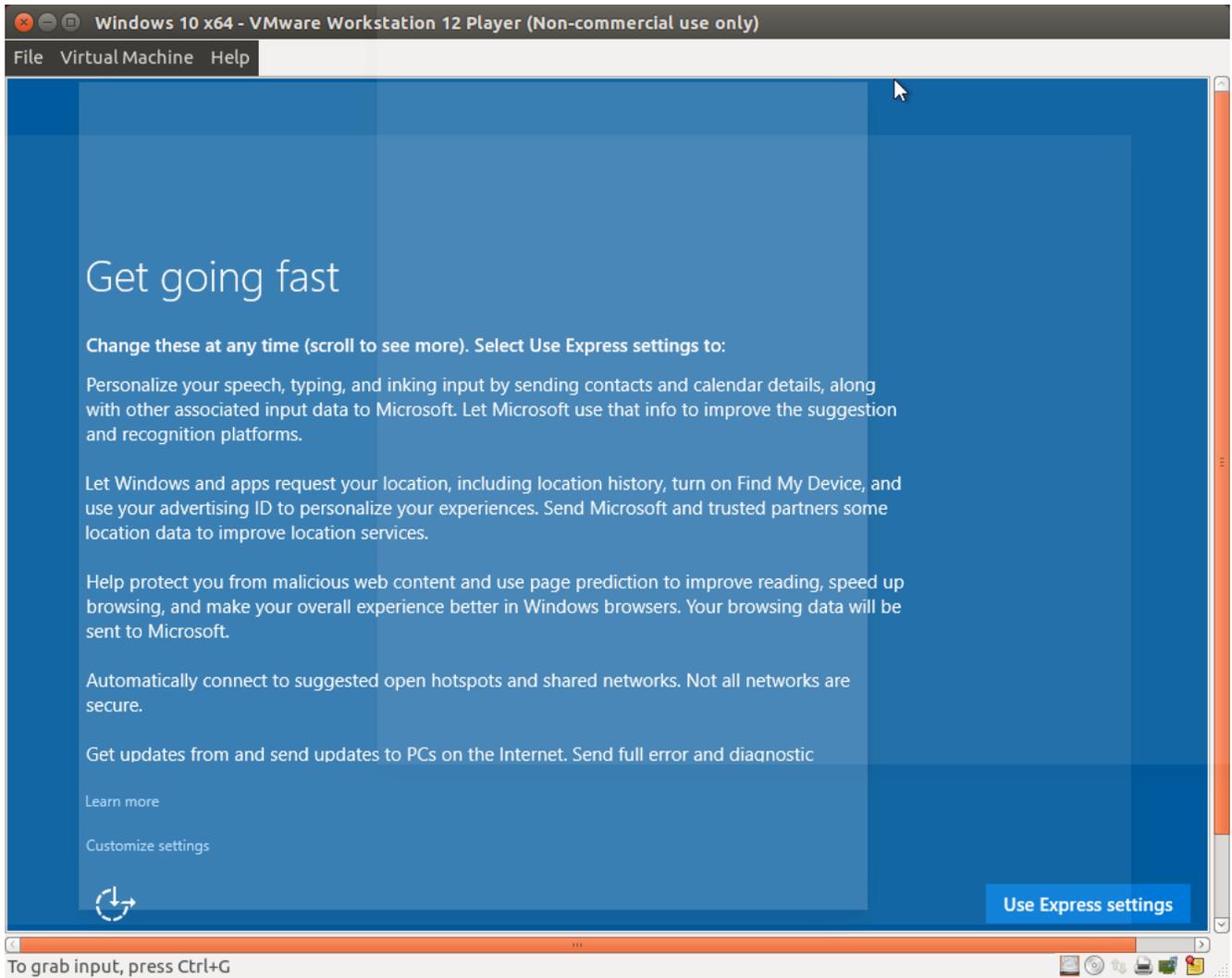
21. Click 'Next':



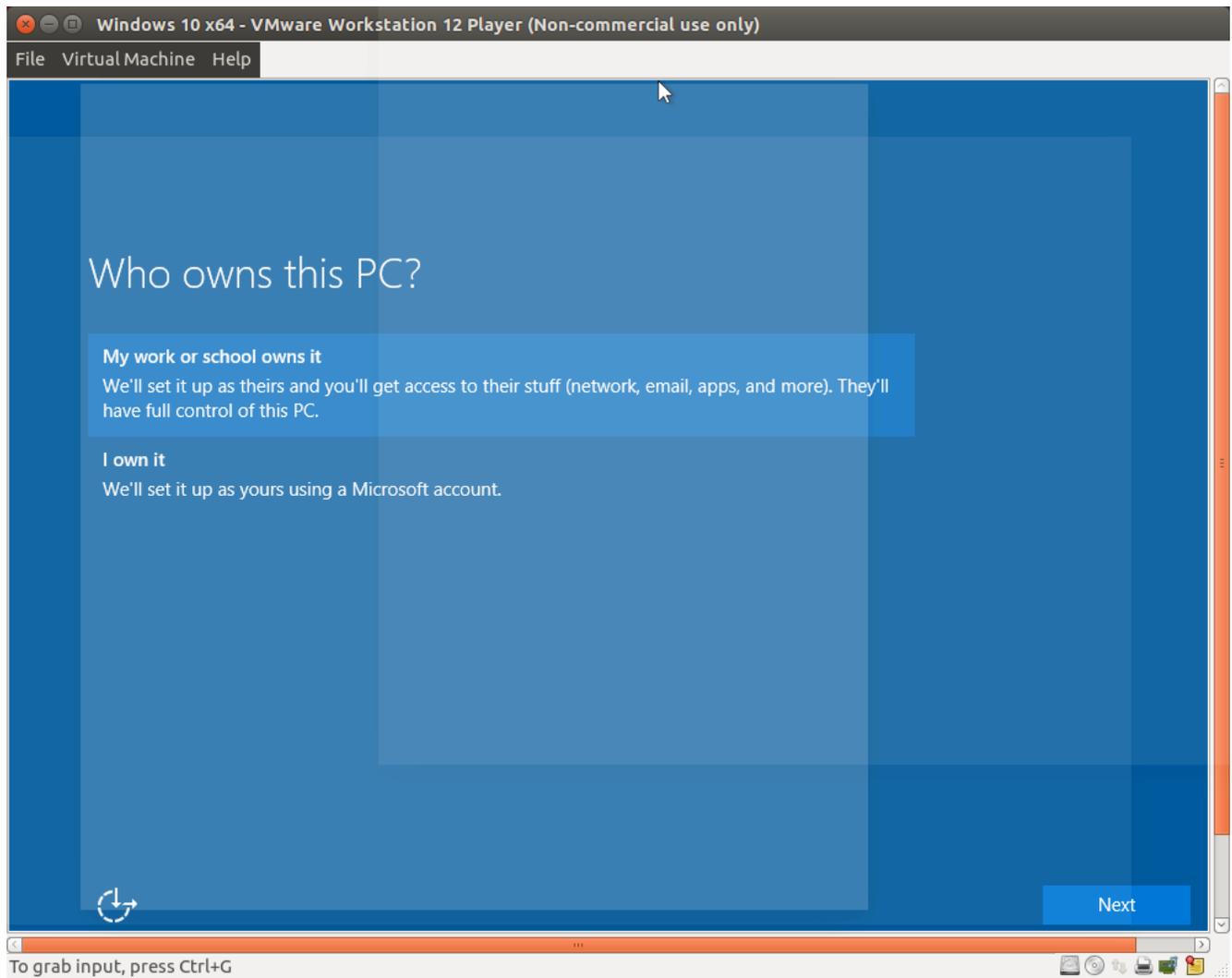
22. Windows setup should begin. Be patient. This will take several minutes with a couple of restarts and seemingly forever blank screens:

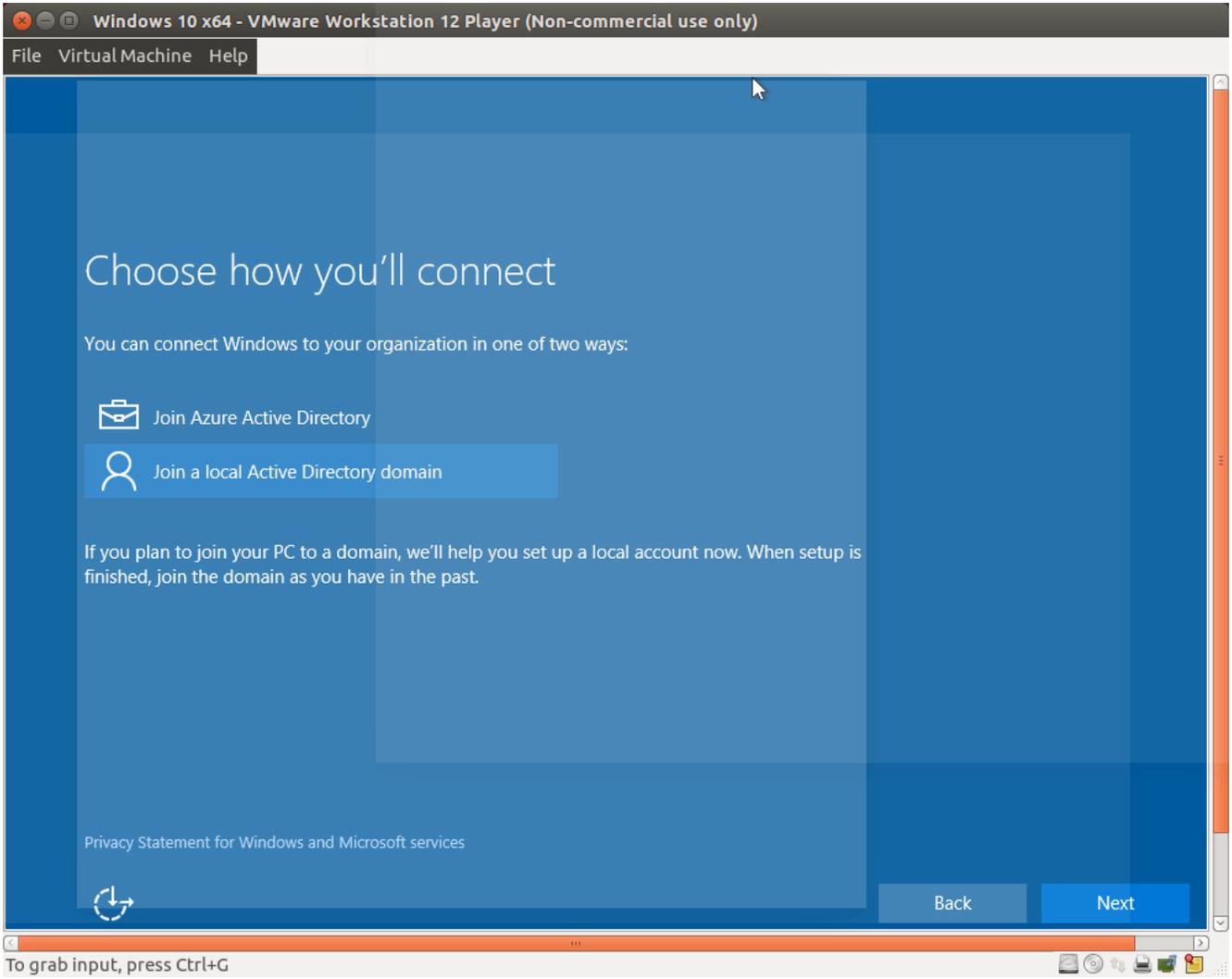


23. Click 'Customize settings' or 'Use Express settings':

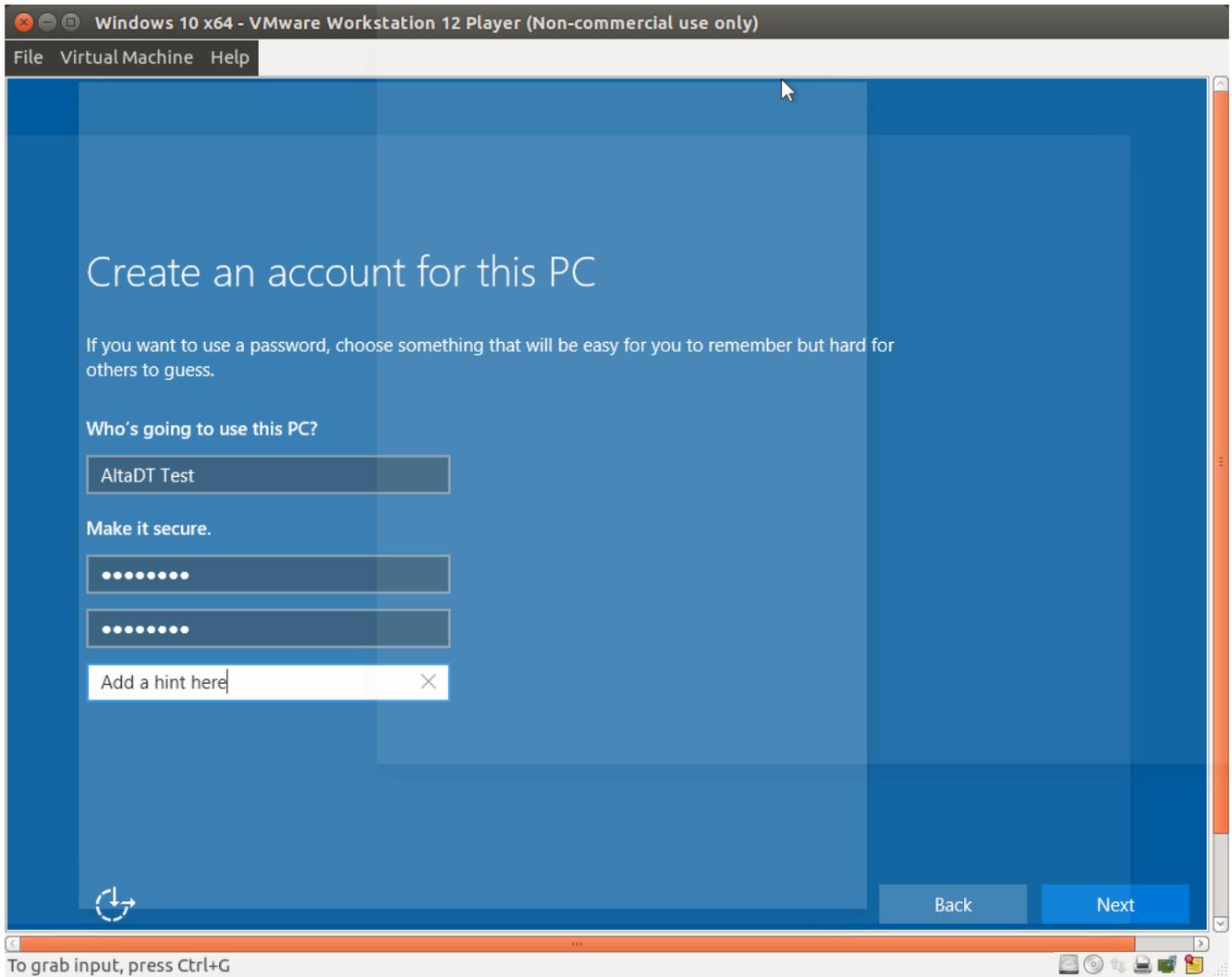


24. Select the applicable option:

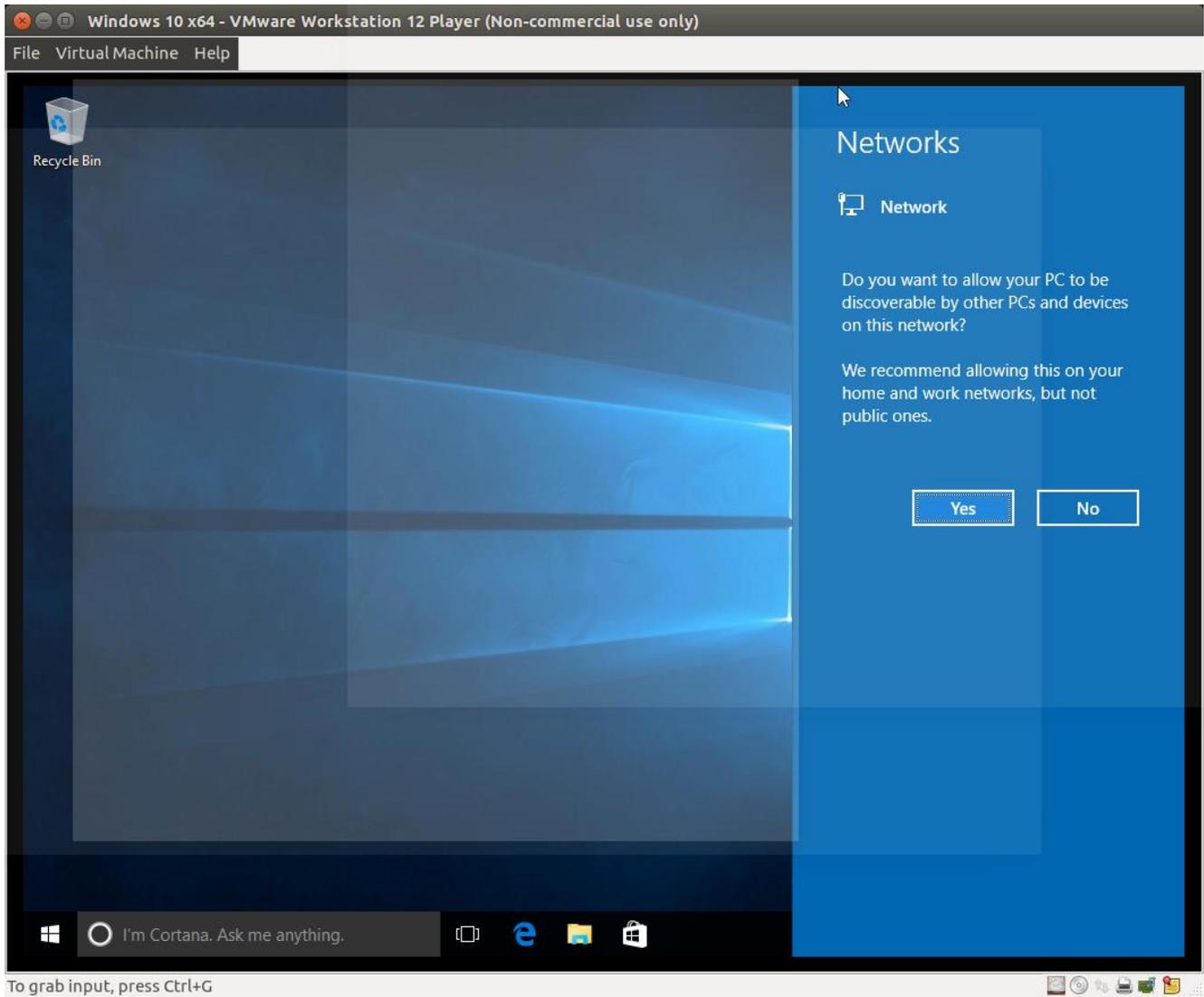




25. Setup an account on the Windows virtual machine:



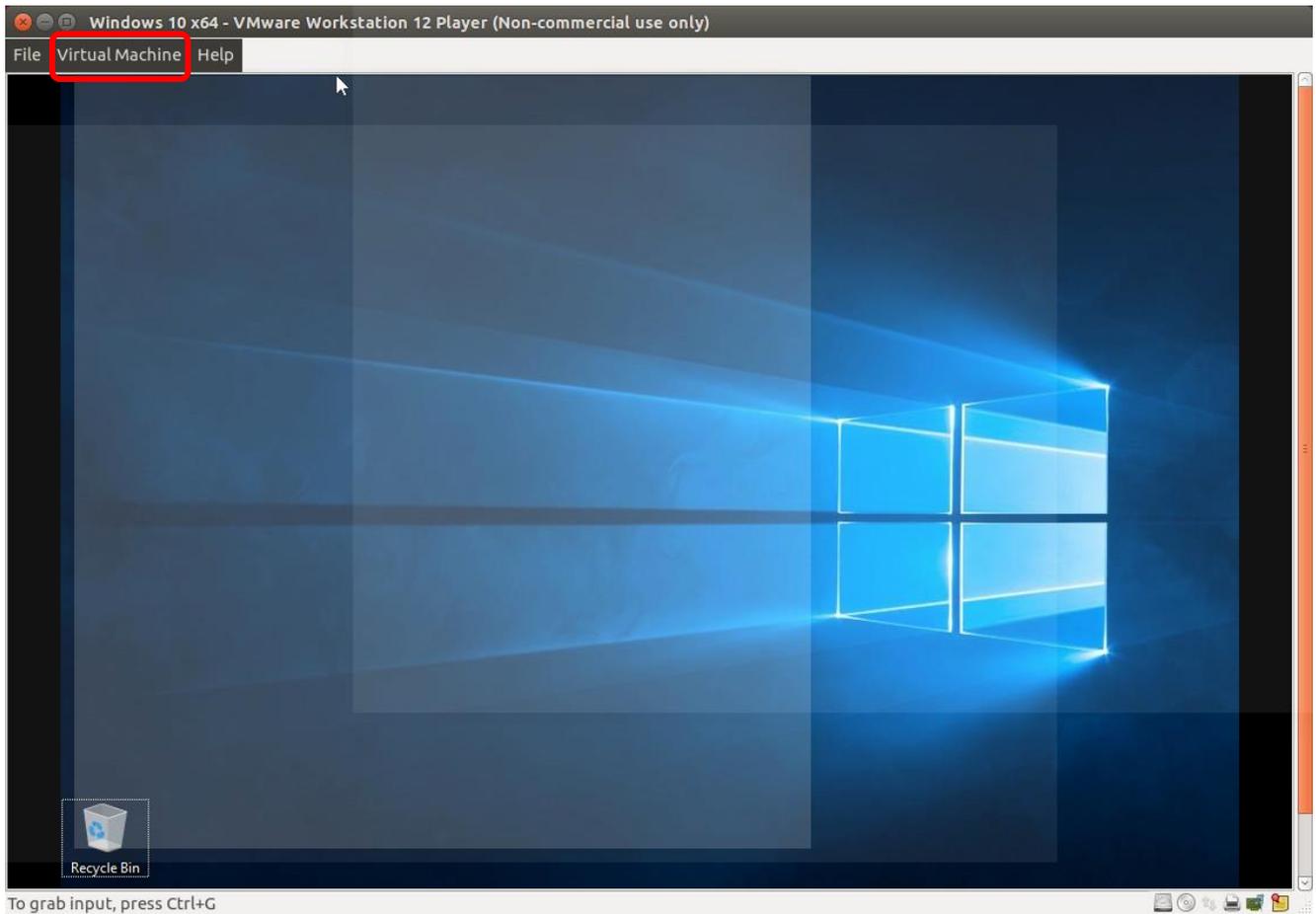
26. After a few minutes, you'll be prompted to select how to connect to the network:



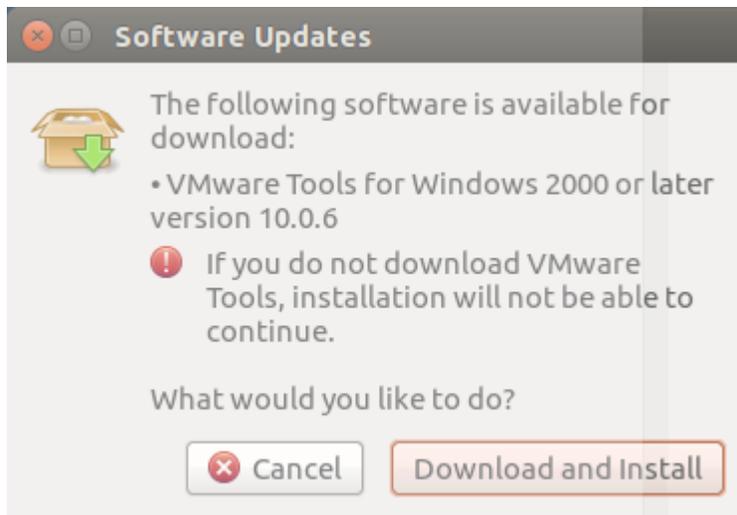
Windows installation is now complete.

27. Install VMware Tools:

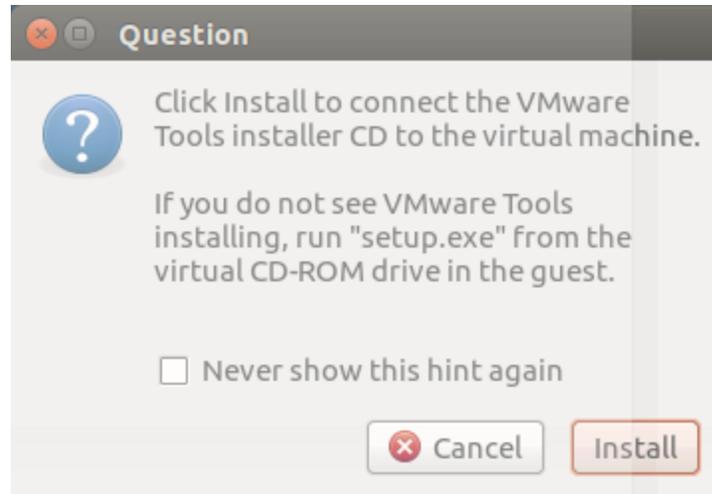
Virtual Machine → Install VMware Tools



28. Click 'Download and Install' (you may be asked to provide an administrator password):



29. Click 'Install':

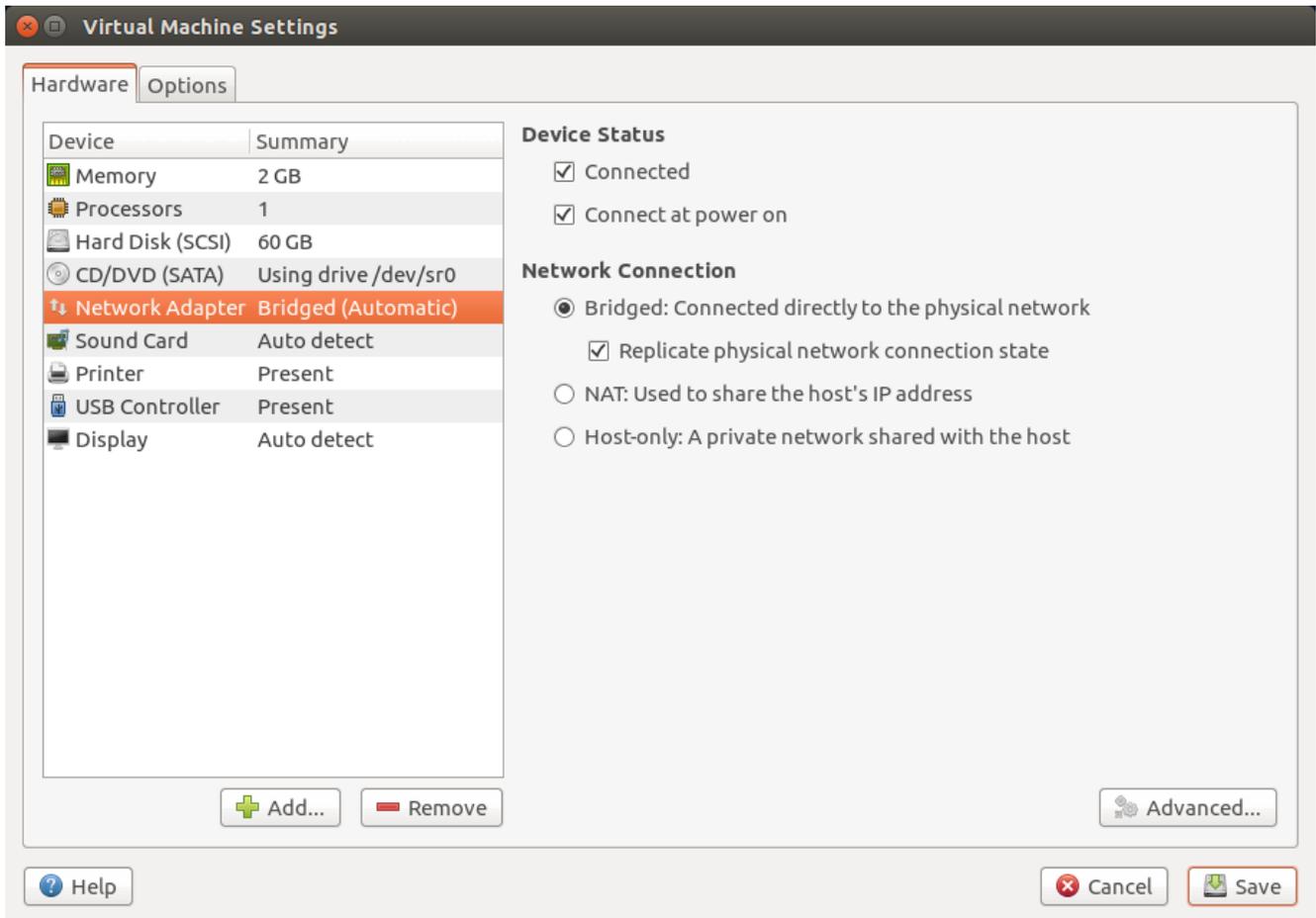


30. Open the virtual DVD drive. Click 'Yes' to allow the tool installer to run. Select the 'Typical' install. Restart the virtual machine when prompted.

31. Configure the VMware Ethernet adapter for the virtual Windows machine.

Virtual Machine → Virtual Machine Settings

32. Select 'Ethernet Adapter'. Click the options shown below. Click 'Save'.



Install Alta Software

33. Ensure the computer is connected to the Internet to allow the necessary .NET libraries to be downloaded during the Alta software install.
34. Insert the AltaDT software install disk into the DVD drive.
 - Open the Win64 folder
 - run setup.exe
 - Allow the Visual C++ and .NET libraries to be installed
 - After the libraries have been installed, you may need to minimize the DVD file folder in order to view the Alta install window.
35. Complete the Alta software install – being sure to select the 'Full' install option.
36. Remove the installation disk from the DVD drive.
37. Restart Windows
38. Configure the Ethernet adapter to the desired Client IP address for communication with the ENET device:
 - Control Panel → View network status and tasks
 - Network and Sharing Center → Change adapter settings
 - Network Connections → Ethernet0
 - Ethernet0 Status → Properties
 - Ethernet0 Properties → Click on text for Internet Protocol Version 4 (TCP/IPv4) → then click Properties
 - Internet Protocol Version 4 (TCP/IPv4) Properties
 - Enter the static IP address the Client computer will use to communicate with the ENET device
 - Set Subnet mask to 255.255.255.0
 - Close all of the networking related windows
39. AltaView is ready to run. Refer to the AltaView User's Manual for details on the AltaView software.

***** NOTE:**

- Be sure to verify the correct Client IP address has been selected when opening the ENET device.
- The factory default Server IP address for ENET devices is 192.168.0.128.
- If the connection to the ENET device times out try unplugging the Internet connection and try to Open the device again.