

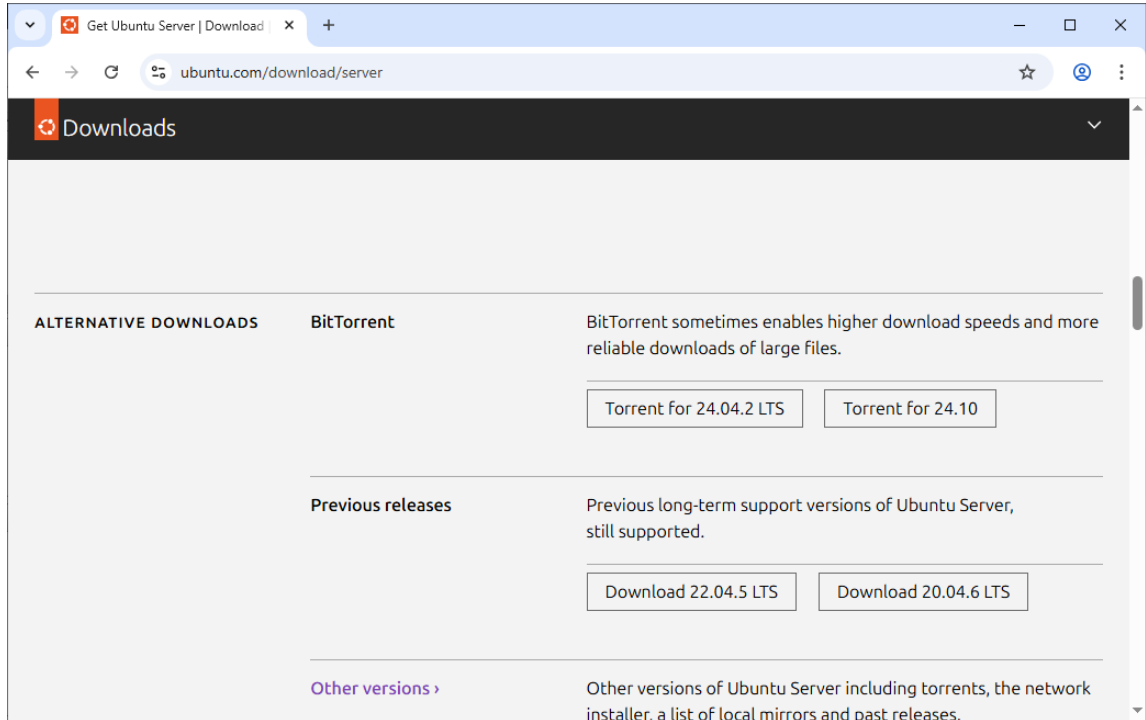
# Install and Configure Ubuntu 22.04 VM in Hyper-V

## Download the ISO File:

Sign in to Azure Lab

Go to <https://ubuntu.com/download/server>

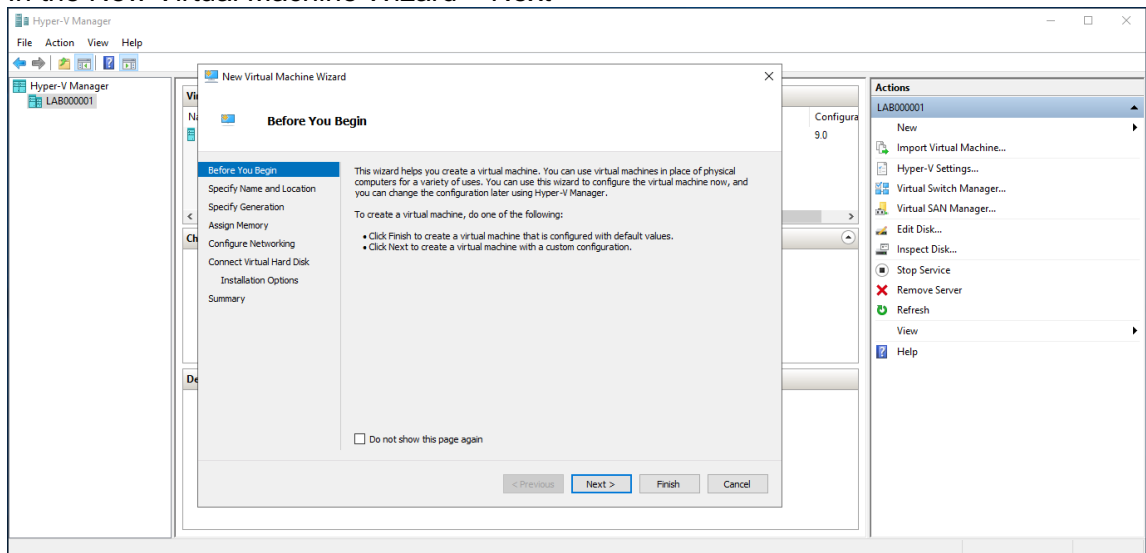
Download 22.04.5 LTS from previous releases in alternative downloads section.



Open Hyper-V,

Click New > Virtual Machine

In the New Virtual Machine Wizard > Next



## Specify Name and Location: Name: Ubuntu (WebServer) > Next

The screenshot shows the 'Specify Name and Location' step of the 'New Virtual Machine Wizard'. The left sidebar contains a list of steps: 'Before You Begin', 'Specify Name and Location' (highlighted), 'Specify Generation', 'Assign Memory', 'Configure Networking', 'Connect Virtual Hard Disk', 'Installation Options', and 'Summary'. The main area has the title 'Specify Name and Location' and a sub-header 'Choose a name and location for this virtual machine.' Below this, it says 'The name is displayed in Hyper-V Manager. We recommend that you use a name that helps you easily identify this virtual machine, such as the name of the guest operating system or workload.' The 'Name' field contains 'Ubuntu (WebServer)'. Below the name field, it says 'You can create a folder or use an existing folder to store the virtual machine. If you don't select a folder, the virtual machine is stored in the default folder configured for this server.' There is a checkbox 'Store the virtual machine in a different location' which is unchecked. The 'Location' field shows 'C:\ProgramData\Microsoft\Windows\Hyper-V\' with a 'Browse...' button next to it. A warning icon and text state: 'If you plan to take checkpoints of this virtual machine, select a location that has enough free space. Checkpoints include virtual machine data and may require a large amount of space.' At the bottom, there are four buttons: '< Previous', 'Next >' (highlighted), 'Finish', and 'Cancel'.

New Virtual Machine Wizard

**Specify Name and Location**

Before You Begin  
Specify Name and Location  
Specify Generation  
Assign Memory  
Configure Networking  
Connect Virtual Hard Disk  
Installation Options  
Summary

Choose a name and location for this virtual machine.


The name is displayed in Hyper-V Manager. We recommend that you use a name that helps you easily identify this virtual machine, such as the name of the guest operating system or workload.

Name:

You can create a folder or use an existing folder to store the virtual machine. If you don't select a folder, the virtual machine is stored in the default folder configured for this server.

☐ Store the virtual machine in a different location

Location:

 If you plan to take checkpoints of this virtual machine, select a location that has enough free space. Checkpoints include virtual machine data and may require a large amount of space.

< Previous   Next >   Finish   Cancel

## Specify Generation: 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 has the title 'Specify Generation' and a sub-header 'Choose the generation of this virtual machine.' Below this, there are two radio button options: 'Generation 1' and 'Generation 2'. 'Generation 1' is described as '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' is selected and described as 'This virtual machine generation provides support for newer virtualization features, has UEFI-based firmware, and requires a supported 64-bit guest operating system.' A warning icon and text state: 'Once a virtual machine has been created, you cannot change its generation.' At the bottom, there is a link 'More about virtual machine generation support'. At the bottom of the wizard, there are four buttons: '< Previous', 'Next >' (highlighted), 'Finish', and 'Cancel'.

New Virtual Machine Wizard


**Specify Generation**

Before You Begin  
Specify Name and Location  
Specify Generation  
Assign Memory  
Configure Networking  
Connect Virtual Hard Disk  
Installation Options  
Summary

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](#)

< Previous   Next >   Finish   Cancel

## Assign Memory: Startup memory: 1536 MB (min) – 2048 MB (max) > Next

New Virtual Machine Wizard

### Assign Memory

Before You Begin  
Specify Name and Location  
Specify Generation  
**Assign Memory**  
Configure Networking  
Connect Virtual Hard Disk  
Installation Options  
Summary

Specify the amount of memory to allocate to this virtual machine. You can specify an amount from 32 MB through 251658240 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.

< Previous   Next >   Finish   Cancel

## Configure Networking: Connection: "LabServicesSwitch" > Next

New Virtual Machine Wizard

### Configure Networking

Before You Begin  
Specify Name and Location  
Specify Generation  
Assign Memory  
**Configure Networking**  
Connect Virtual Hard Disk  
Installation Options  
Summary

Each new virtual machine includes a network adapter. You can configure the network adapter to use a virtual switch, or it can remain disconnected.

Connection:

< Previous   Next >   Finish   Cancel

## Connect Virtual Hard Disk:

Select "Create a virtual hard disk":

Name: "Ubuntu (WebServer)"

...

Size: 30 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 close button. Below the title bar, there is a descriptive text: '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.' 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 are input fields for 'Name' (Ubuntu (Web Server).vhdx), 'Location' (C:\ProgramData\Microsoft\Windows\Virtual Hard Disks\), and 'Size' (30 GB (Maximum: 64 TB)). There are 'Browse...' buttons for the 'Location' and 'Size' fields. At the bottom, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

## Installation Options:

Select "Install an operating system from a bootable image file":

Media: Image file (.iso): [PATH\_TO\_ISO\_FILE] > Next

The screenshot shows the 'Installation Options' 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', 'Installation Options' (highlighted), and 'Summary'. The main area has a title bar 'Installation Options' and a close button. Below the title bar, there is a descriptive text: 'You can install an operating system now if you have access to the setup media, or you can install it later.' There are three radio button options: 'Install an operating system later', 'Install an operating system from a bootable image file' (selected), and 'Install an operating system from a network-based installation server'. The 'Install an operating system from a bootable image file' option has a sub-description: 'Media'. Below this, there is an input field for 'Image file (.iso):' with the value 'downloads\ubuntu-22.04.5-live-server-amd64.iso' and a 'Browse...' button. At the bottom, there are four buttons: '< Previous', 'Next >', 'Finish', and 'Cancel'.

## Completing the New Virtual Machine Wizard: Summary > Finish

New Virtual Machine Wizard

Completing the New Virtual Machine Wizard

Before You Begin  
Specify Name and Location  
Specify Generation  
Assign Memory  
Configure Networking  
Connect Virtual Hard Disk  
Installation Options  
**Summary**

You have successfully completed the New Virtual Machine Wizard. You are about to create the following virtual machine.

Description:

Name:	Ubuntu (Web Server)
Generation:	Generation 2
Memory:	1536 MB
Network:	Default Switch
Hard Disk:	C:\ProgramData\Microsoft\Windows\Virtual Hard Disks\Ubuntu (Web Server).vhc
Operating System:	Will be installed from C:\Users\Anusha\Desktop\ISOs\ubuntu-22.04.5-live-server

To create the virtual machine and close the wizard, click Finish.

< Previous   Next >   **Finish**   Cancel

## New Ubuntu VM created in Hyper-V

Hyper-V Manager

File Action View Help

Hyper-V Manager  
LAB000001

Name	State	CPU Usage	Assigned Memory	Uptime	Status	Configura
Ubuntu (WebServer)	Off					9.0
Windows Server 2022	Off					9.0

Checkpoints

The selected virtual machine has no checkpoints.

Ubuntu (WebServer)

Created: 27/03/2025 9:09:00 PM   Clustered: No

Configuration Version: 9.0

Generation: 2

Notes: None

Summary   Memory   Networking   Replication

LAB000001: 1 virtual machine selected.

Actions

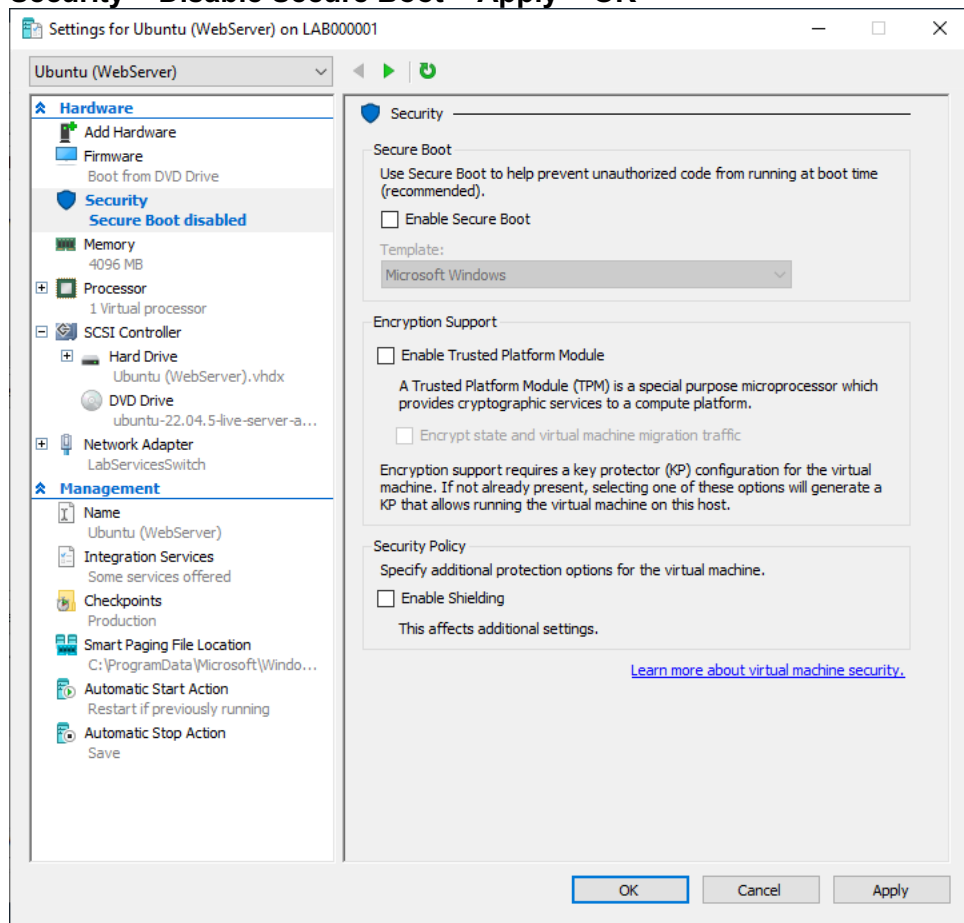
LAB000001

- New
- Import Virtual Machine...
- Hyper-V Settings...
- Virtual Switch Manager...
- Virtual SAN Manager...
- Edit Disk...
- Inspect Disk...
- Stop Service
- Remove Server
- Refresh
- View
- Help

Ubuntu (WebServer)

- Connect...
- Settings...
- Start
- Checkpoint
- Move...
- Export...
- Rename...

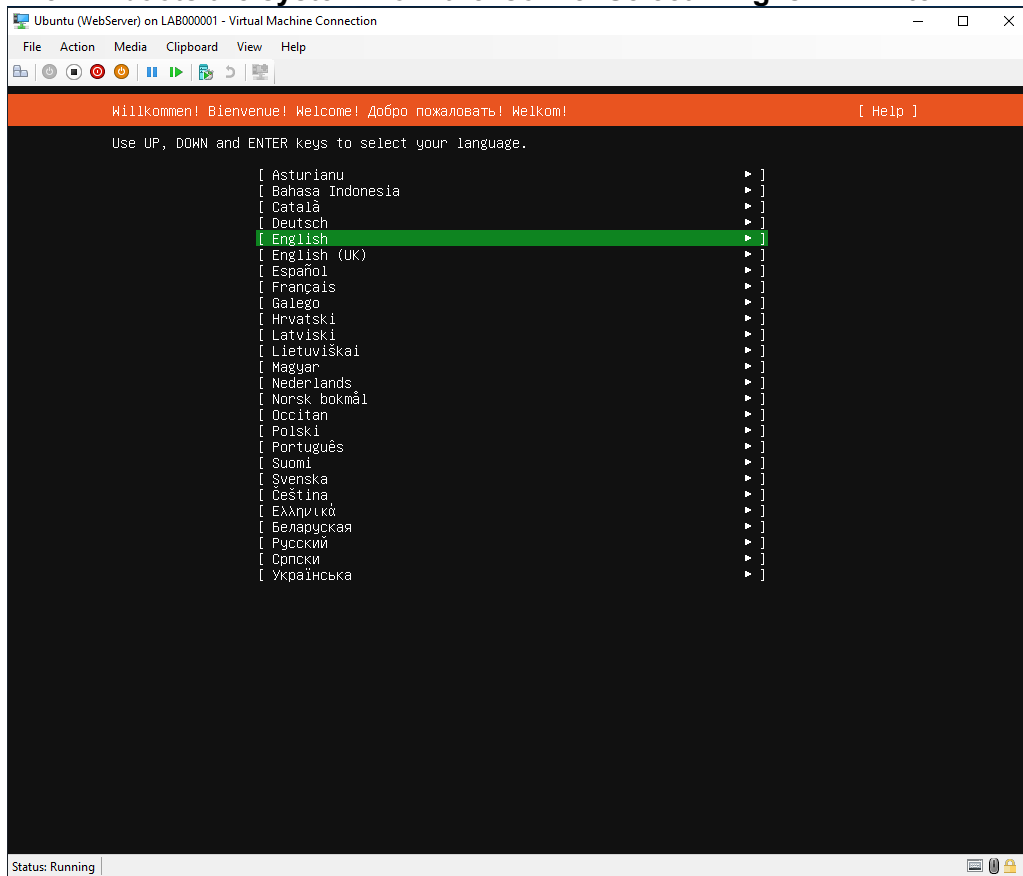
Right-click on **Ubuntu (Web Server) VM > Settings:**  
**Security > Disable Secure Boot > Apply > OK**



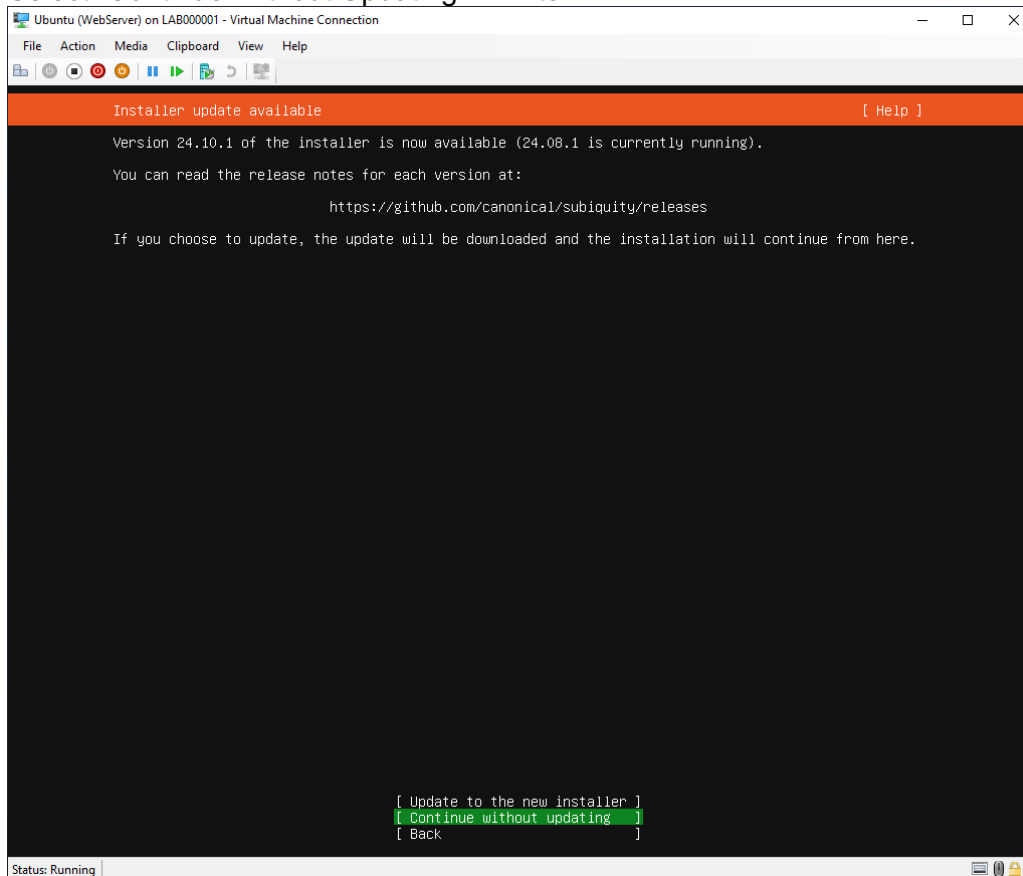
# Install and Configure Ubuntu 22.04

Right-click on **Ubuntu (WebServer)** > **Connect**

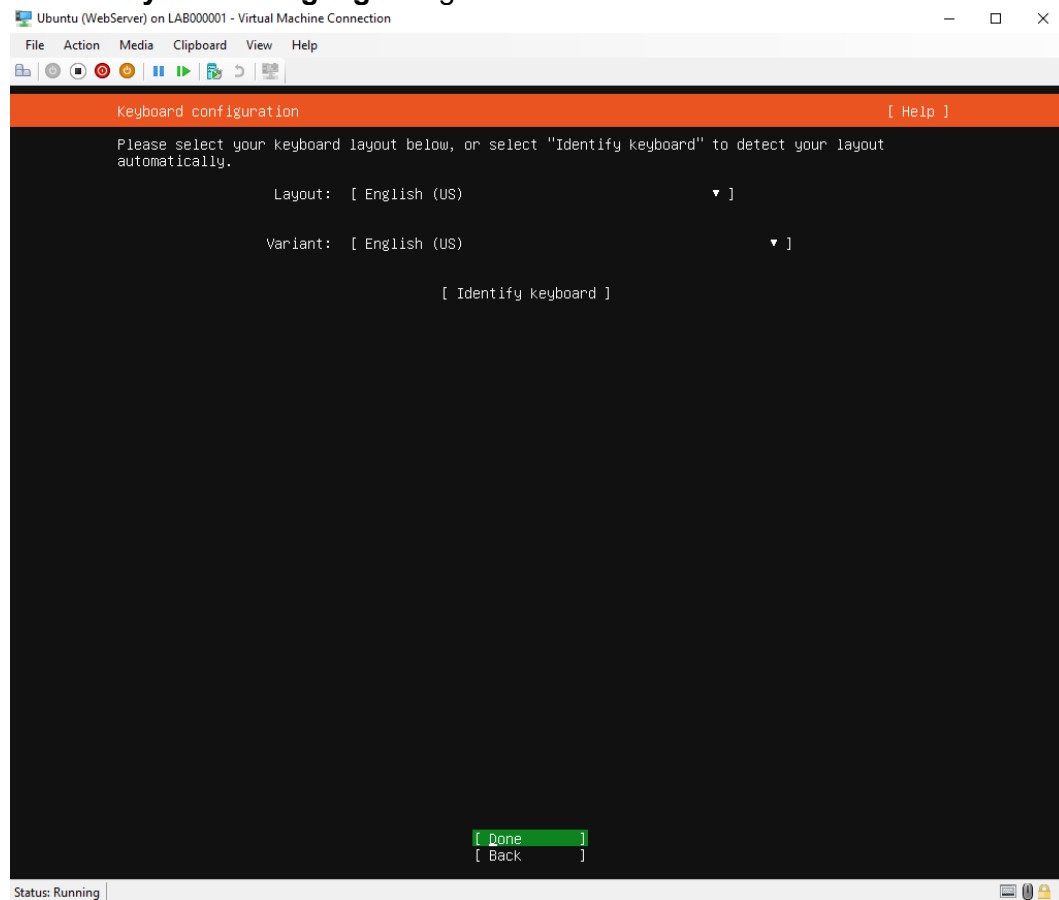
The VM boots the system from the iso file: Select **“English”** > **Enter**



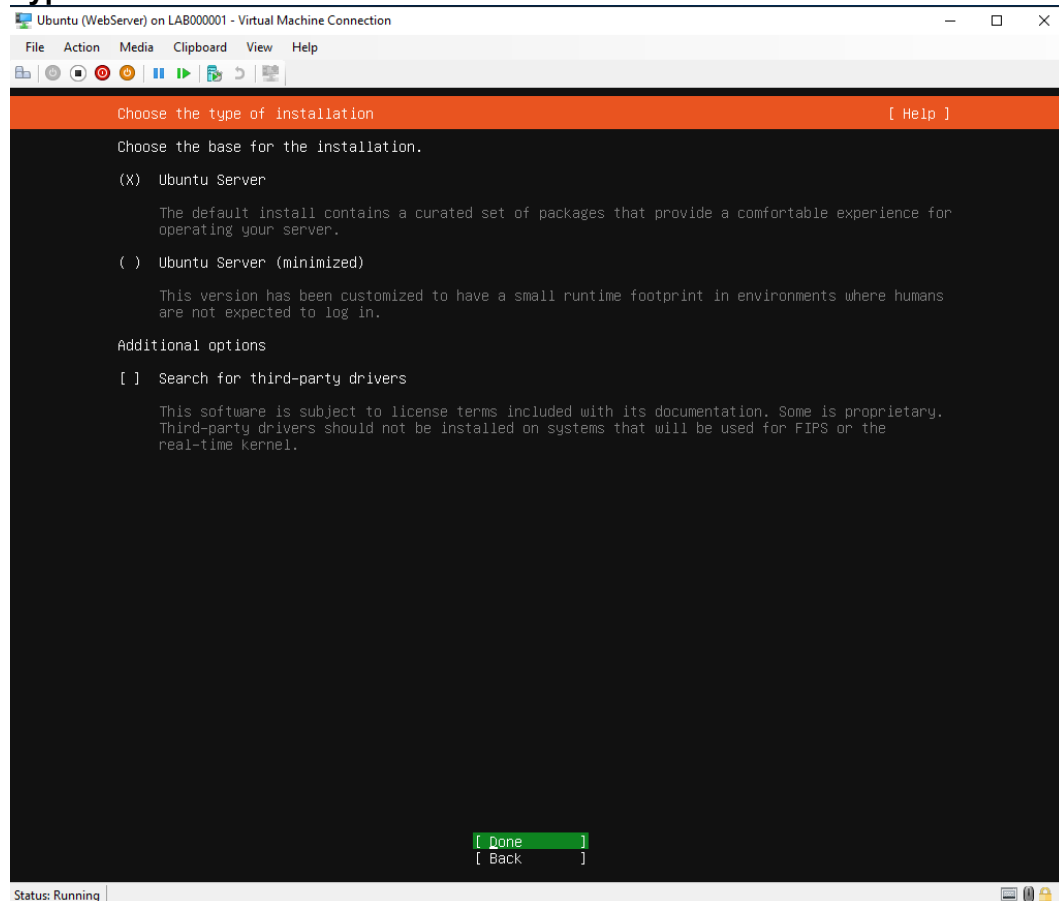
Select **“Continue Without Updating”** > **Enter**



## Select Keyboard Language: English > Done



## Type of Installation: Ubuntu Server > Done





## Network Configuration: [Type new IP or Select DHCP] > Done

Ubuntu (WebServer) on LAB000001 - Virtual Machine Connection

File Action Media Clipboard View Help

Network configuration [ Help ]

Configure at least one interface this server can use to talk to other machines, and which preferably provides sufficient access for updates.

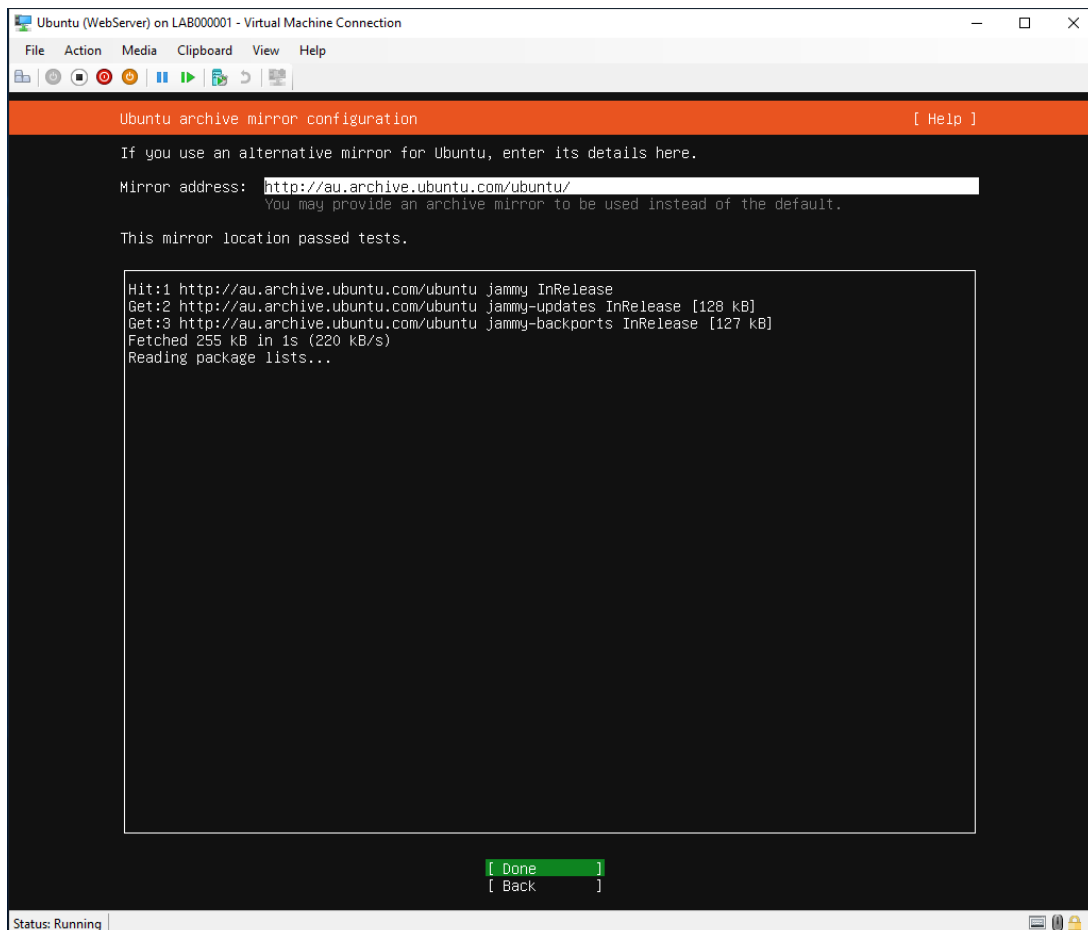
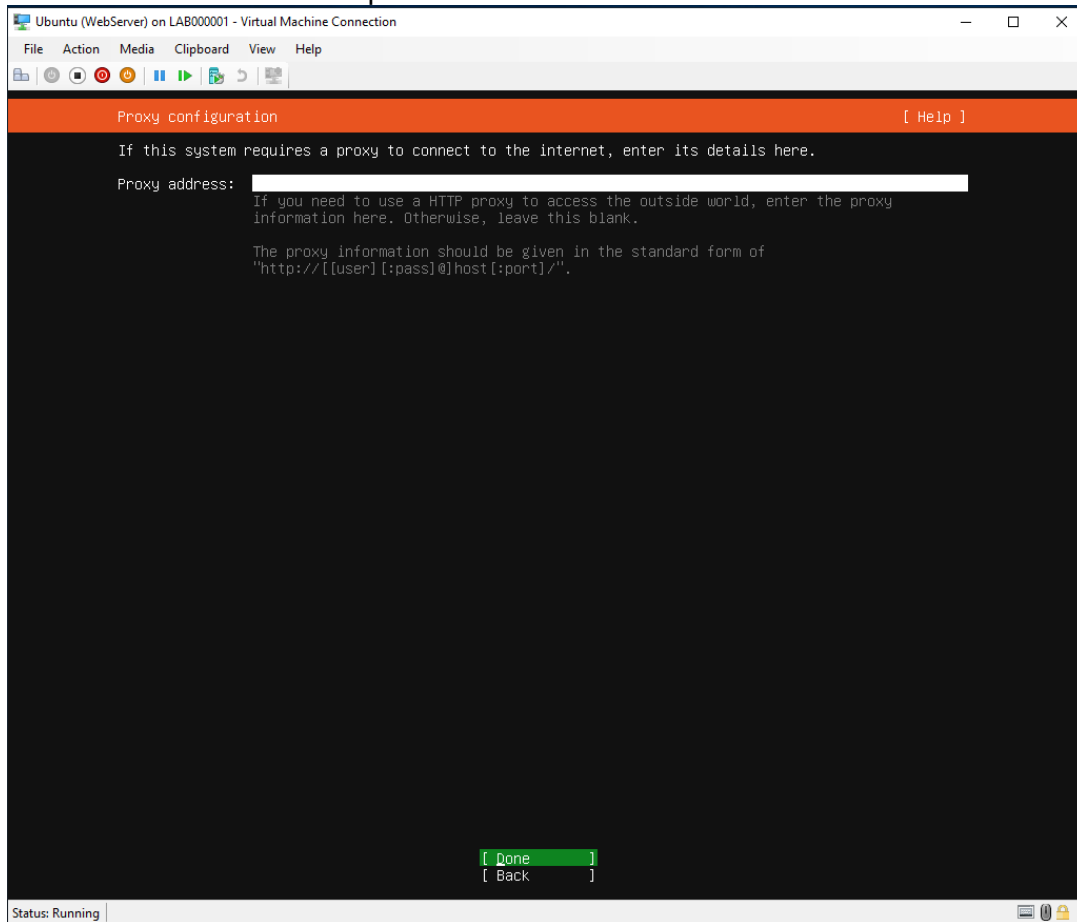
NAME	TYPE	NOTES
[ eth0	eth	- ▶ ]
DHCPv4	192.168.0.2/24	
	00:15:5d:00:05:0c / Unknown Vendor / Unknown Model	

[ Create bond ▶ ]

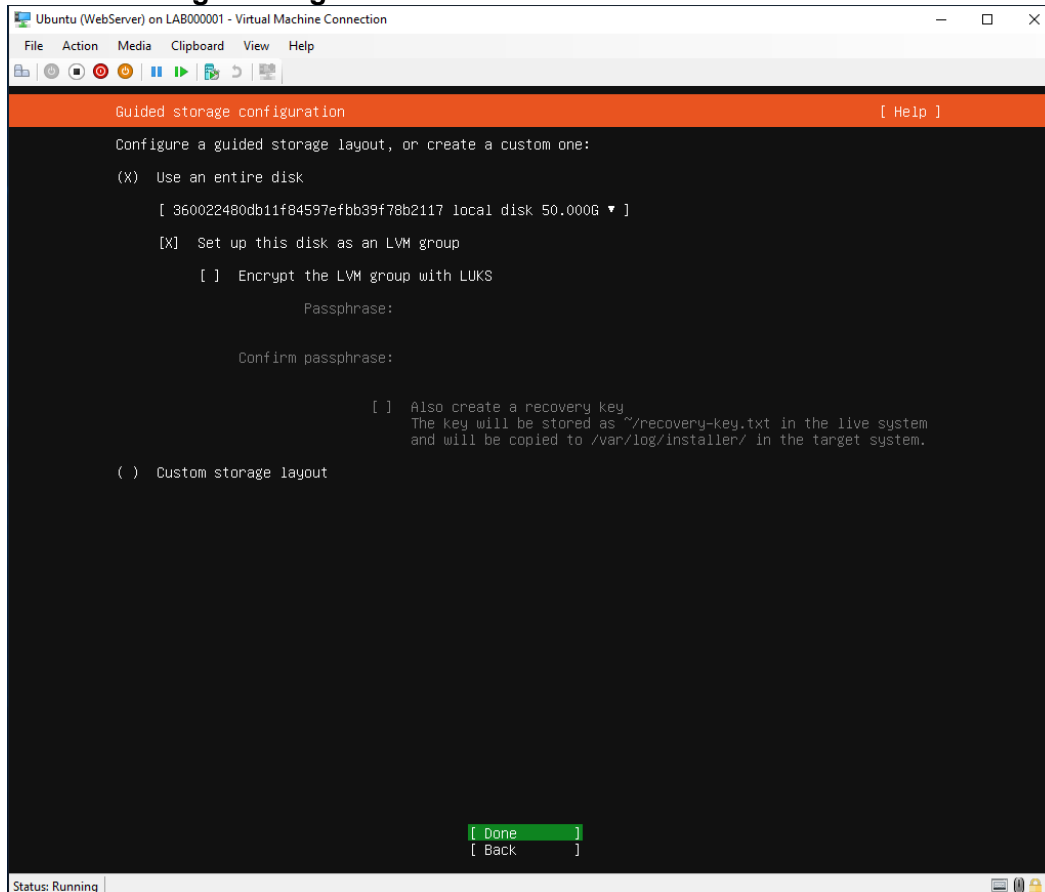
[ Done ]  
[ Back ]

Status: Running

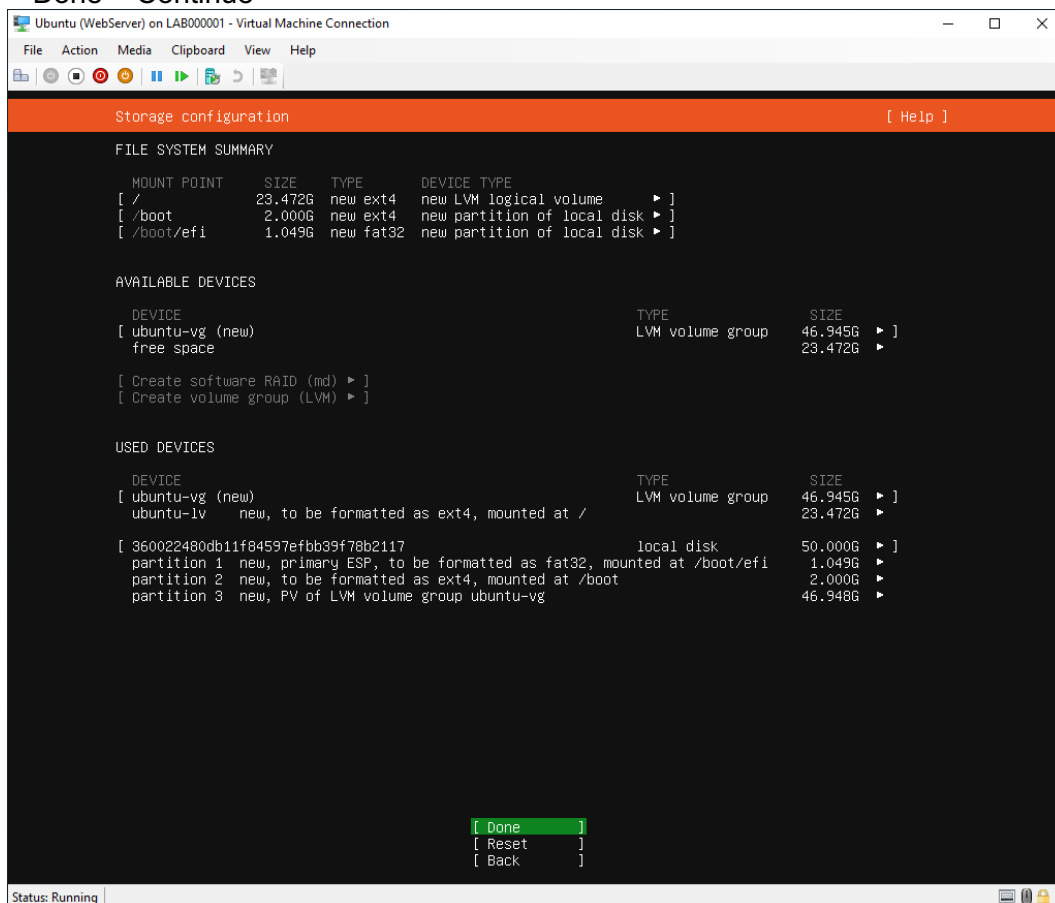
## Press Done for next few steps

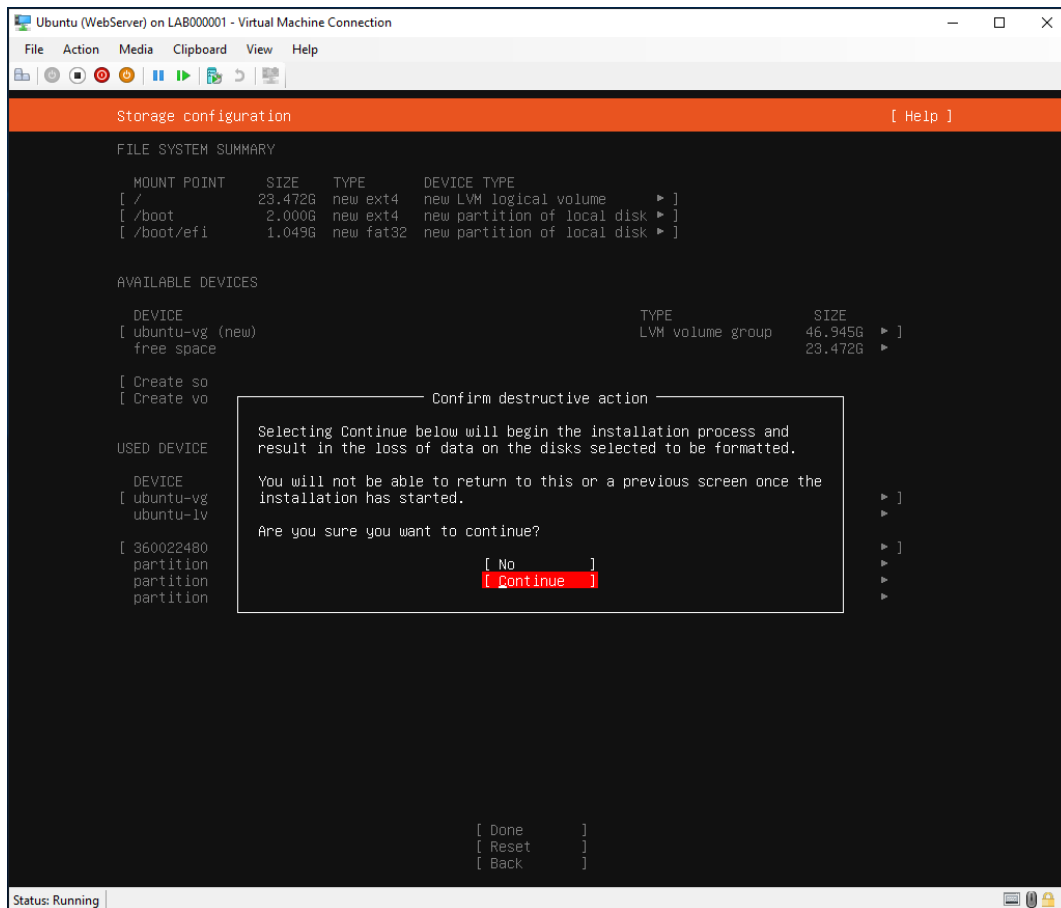


## Guided Storage Configuration: Select Use an entire disk > Done



## Storage Configuration: [choose vhd space that we first configured in hyper-v (50GB)] > Done > Continue

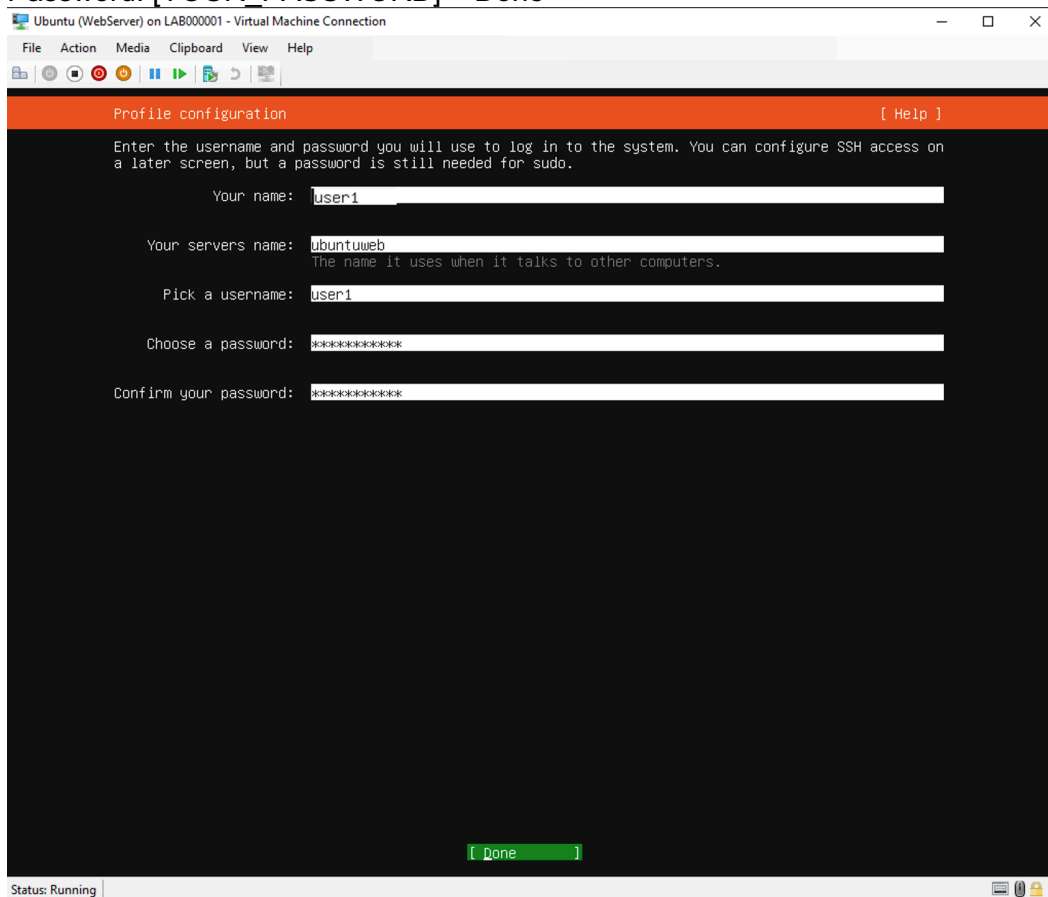




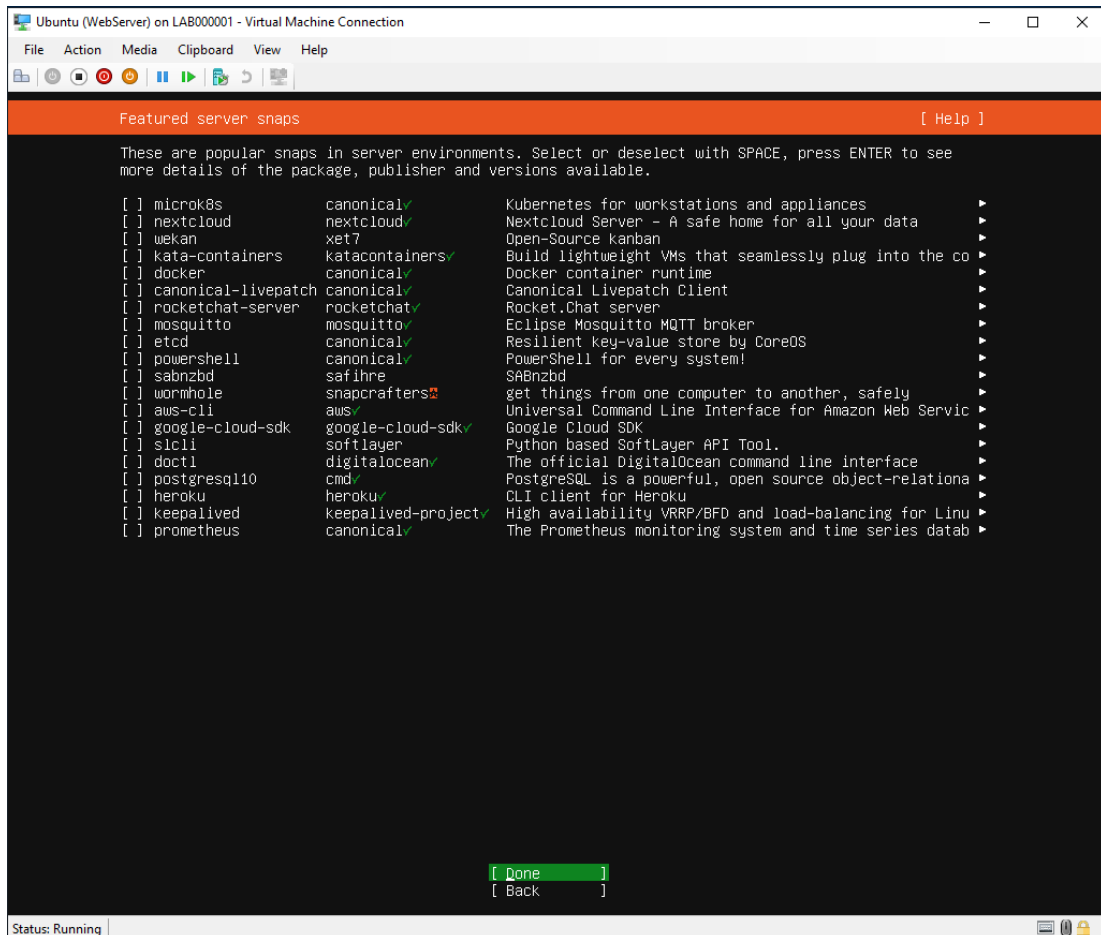
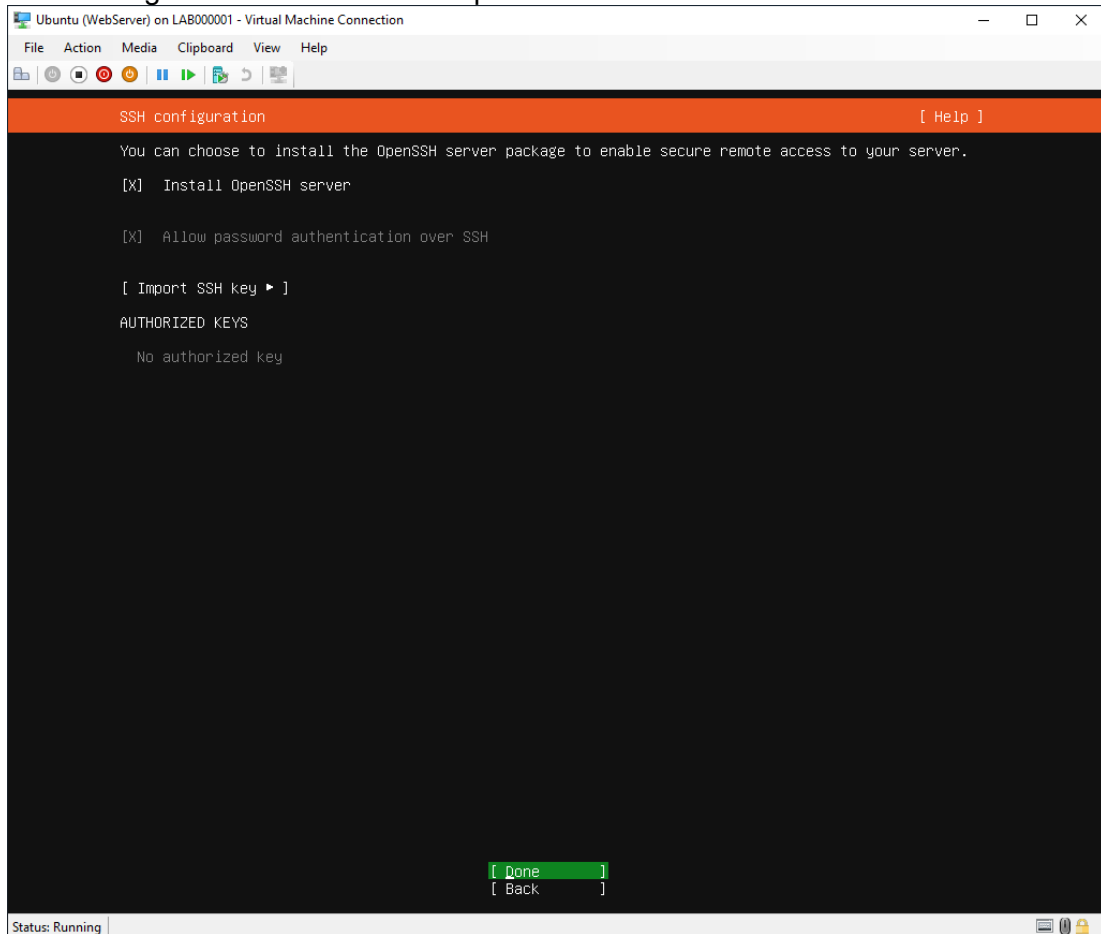
## Profile Configuration:

Username: [YOUR\_USERNAME]

Password: [YOUR\_PASSWORD] > Done



## SSH Configuration: Select “Install OpenSSH server” > Done



```
configuring mount: mount-2
configuring mount: mount-1
configuring mount: mount-0
executing curtin install extract step
curtin command install
writing install sources to disk
running 'curtin extract'
curtin command extract
  acquiring and extracting image from cp:///tmp/tmpfio1j33f/mount
configuring keyboard
curtin command in-target
executing curtin install curthooks step
curtin command install
configuring installed system
running 'curtin curthooks'
curtin command curthooks
  configuring apt
  configuring apt
installing missing packages
Installing packages on target system: ['efibootmgr', 'grub-efi-amd64',
'grub-efi-amd64-signed', 'shim-signed']
configuring iSCSI service
configuring RAID (mdadm) service
configuring NVMe over TCP
installing kernel
setting up swap
apply networking config
writing etc/fstab
configuring multipath
updating packages on target system
configuring pollinate user-agent on target
updating initramfs configuration
configuring target system bootloader
installing grub to target devices
copying metadata from /cdrom
final system configuration
calculating extra packages to install
installing openssh-server
retrieving openssh-server
curtin command system-install
unpacking openssh-server /
```

[ View full log ]

Status: Running

Wait for the installation to complete > Reboot Now

```
  acquiring and extracting image from cp:///tmp/tmpfio1j33f/mount
  configuring keyboard
  curtin command in-target
executing curtin install curthooks step
curtin command install
configuring installed system
running 'curtin curthooks'
curtin command curthooks
  configuring apt
  configuring apt
installing missing packages
Installing packages on target system: ['efibootmgr', 'grub-efi-amd64',
'grub-efi-amd64-signed', 'shim-signed']
configuring iSCSI service
configuring RAID (mdadm) service
configuring NVMe over TCP
installing kernel
setting up swap
apply networking config
writing etc/fstab
configuring multipath
updating packages on target system
configuring pollinate user-agent on target
updating initramfs configuration
configuring target system bootloader
installing grub to target devices
copying metadata from /cdrom
final system configuration
calculating extra packages to install
installing openssh-server
retrieving openssh-server
curtin command system-install
unpacking openssh-server
curtin command system-install
configuring cloud-init
downloading and installing security updates
curtin command in-target
restoring apt configuration
curtin command in-target
subiquity/Late/run:
```

[ View full log ]  
[ Reboot Now ]

Status: Running

After Reboot,  
ubuntuweb login: [YOUR\_USERNAME]  
Password: [YOUR\_PASSWORD]

```
-----BEGIN SSH HOST KEY KEYS-----
ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBLS0NqMPOhga16kWF1uYg20Kvz14lp/LuCAVc8Io4tWibwToBw9uMNQc
eHF98UCH9NBsELGGsfKoc8Nc72eVU8= root@ubuntuweb
ssh-ed25519 AAAAC3NzaC1lZD01IINTESAAAAID5LAV1ptCmfzBM/HLMIIncdPDzBXuG6W1ylc1MB/IRV root@ubuntuweb
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQgOC2KRn7JUDJPM0TDx2d03cxoQbol16Ckd+HnDbNg02g21UkAfyrb2yxVkfQESb8LBPfMudw79WJM2W0B7VqXg8vnrZkh
4T22K/H1hJVdgdwfr2WZSrb11Uzr9Kk4hm4SG82S8spvJghec8R7su/HFFraRn9B110LQp132xP/HEG1EnmKC9bJMCqWoHxu1e7aV4UaCkroP5m/wAQLB1U5IrQuUIc
B2ALUumIfzyIQeqicVIXMRLpryXMQBz11uwiGAZLNjptOKesJ2V8a1G+9da2E52dCBFIsm5fhSyax0A/u19ar1AJEBfPyr/cCZH7qs5w93TfdsXX1JwqJgagAcr2FT
E0odYpquf9FskZLF6zprB2nBPmYuIh34uc2nx86zwnTFoVgMNIwR3CJ5+KIXDSgyY6UH3mkec10YBTMshnIqryDKuyE9J6e0zphL2ennFzTDz5QWuqznkaN055Jr5Lv
CEo+24CHUNE2Cu2Qaiux9SKILpKcd17ntxpVI8= root@ubuntuweb
-----END SSH HOST KEY KEYS-----
[ 13.599991] cloud-init[1371]: Cloud-init v. 24.2-0ubuntu1~22.04.1 finished at Tue, 08 Apr 2025 09:36:21 +0000. DataSource Dat
aSourceNone. Up 13.59 seconds
user1
Password:
Welcome to Ubuntu 22.04.5 LTS (GNU/Linux 5.15.0-136-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Tue Apr  8 09:37:31 AM UTC 2025

System load:  0.1               Processes:           93
Usage of /:   56.0% of 7.50GB   Users logged in:    0
Memory usage: 15%              IPv4 address for eth0: 172.18.54.52
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

52 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

user1@ubuntuweb:~$
```

To install GUI,  
**sudo apt update && sudo apt install ubuntu-desktop -y**

```
user1@ubuntuweb:~$ sudo apt update && sudo apt install ubuntu-desktop -y
```

```
Ubuntu (WebServer) on LAB000001 - Virtual Machine Connection
File Action Media Clipboard View Help

Setting up gnome-shell-extension-appindicator (42-2~fakesync1) ...
Setting up ubuntu-session (42.0-1ubuntu2) ...
Setting up gdm3 (42.0-1ubuntu7.22.04.4) ...

Creating config file /etc/gdm3/greeter.dconf-defaults with new version
update-alternatives: using /etc/pam.d/gdm-smartcard-sssd-exclusive to provide /etc/pam.d/gdm-smartcard (gdm-smartcard) in auto mode
gdm.service is not active, cannot reload.
invoke-rc.d: initscript gdm3, action "reload" failed.
Setting up gnome-todo (3.28.1-6ubuntu1) ...
Setting up update-notifier (3.192.54.8) ...
Setting up gnome-shell-extension-desktop-icons-ng (43-2ubuntu1) ...
Setting up network-manager-gnome (1.24.0-1ubuntu3) ...
Setting up update-manager (1:22.04.21) ...
Setting up gnome-shell-extension-ubuntu-dock (72~ubuntu5.22.04.3) ...
Setting up ubuntu-desktop-minimal (1.481.4) ...
Setting up ubuntu-desktop (1.481.4) ...
Processing triggers for sgml-base (1.30) ...
Setting up sgml-data (2.0.11+nmu1) ...
Processing triggers for sgml-base (1.30) ...
Setting up docbook-xml (4.5-11) ...
Processing triggers for dictionaries-common (1.28.14) ...
aspell-autobuildhash: processing: en [en-common].
aspell-autobuildhash: processing: en [en-variant_0].
aspell-autobuildhash: processing: en [en-variant_1].
aspell-autobuildhash: processing: en [en-variant_2].
aspell-autobuildhash: processing: en [en-w_accents-only].
aspell-autobuildhash: processing: en [en-wo_accents-only].
aspell-autobuildhash: processing: en [en_AU-variant_0].
aspell-autobuildhash: processing: en [en_AU-variant_1].
aspell-autobuildhash: processing: en [en_AU-w_accents-only].
aspell-autobuildhash: processing: en [en_AU-wo_accents-only].
aspell-autobuildhash: processing: en [en_CA-variant_0].
aspell-autobuildhash: processing: en [en_CA-variant_1].
aspell-autobuildhash: processing: en [en_CA-w_accents-only].
aspell-autobuildhash: processing: en [en_CA-wo_accents-only].
aspell-autobuildhash: processing: en [en_GB-ise-w_accents-only].
aspell-autobuildhash: processing: en [en_GB-ise-wo_accents-only].
aspell-autobuildhash: processing: en [en_GB-ize-w_accents-only].
aspell-autobuildhash: processing: en [en_GB-ize-wo_accents-only].
aspell-autobuildhash: processing: en [en_GB-variant_0].
aspell-autobuildhash: processing: en [en_GB-variant_1].
aspell-autobuildhash: processing: en [en_US-w_accents-only].
aspell-autobuildhash: processing: en [en_US-wo_accents-only].
Processing triggers for initramfs-tools (0.140ubuntu13.4) ...
update-initramfs: Generating /boot/initrd.img-5.15.0-135-generic

Progress: [ 99%] [#####...]
Status: Running
```

Reboot system:  
sudo reboot

```
Ubuntu (WebServer) on LAB000001 - Virtual Machine Connection
File Action Media Clipboard View Help

Processing triggers for sgml-base (1.30) ...
Setting up sgml-data (2.0.11+nmu1) ...
Processing triggers for sgml-base (1.30) ...
Setting up docbook-xml (4.5-11) ...
Processing triggers for dictionaries-common (1.28.14) ...
aspell-autobuildhash: processing: en [en-common].
aspell-autobuildhash: processing: en [en-variant_0].
aspell-autobuildhash: processing: en [en-variant_1].
aspell-autobuildhash: processing: en [en-variant_2].
aspell-autobuildhash: processing: en [en-w_accents-only].
aspell-autobuildhash: processing: en [en-wo_accents-only].
aspell-autobuildhash: processing: en [en_AU-variant_0].
aspell-autobuildhash: processing: en [en_AU-variant_1].
aspell-autobuildhash: processing: en [en_AU-w_accents-only].
aspell-autobuildhash: processing: en [en_AU-wo_accents-only].
aspell-autobuildhash: processing: en [en_CA-variant_0].
aspell-autobuildhash: processing: en [en_CA-variant_1].
aspell-autobuildhash: processing: en [en_CA-w_accents-only].
aspell-autobuildhash: processing: en [en_CA-wo_accents-only].
aspell-autobuildhash: processing: en [en_GB-ise-w_accents-only].
aspell-autobuildhash: processing: en [en_GB-ise-wo_accents-only].
aspell-autobuildhash: processing: en [en_GB-ize-w_accents-only].
aspell-autobuildhash: processing: en [en_GB-ize-wo_accents-only].
aspell-autobuildhash: processing: en [en_GB-variant_0].
aspell-autobuildhash: processing: en [en_GB-variant_1].
aspell-autobuildhash: processing: en [en_US-w_accents-only].
aspell-autobuildhash: processing: en [en_US-wo_accents-only].
Processing triggers for initramfs-tools (0.140ubuntu13.4) ...
update-initramfs: Generating /boot/initrd.img-5.15.0-135-generic
Processing triggers for libgdk-pixbuf-2.0-0:amd64 (2.42.8+dfsg-1ubuntu0.3) ...
Processing triggers for libc-bin (2.35-0ubuntu3.9) ...
Processing triggers for dbus (1.12.20-2ubuntu4.1) ...
Processing triggers for ufw (0.36.1-4ubuntu0.1) ...
Processing triggers for rsyslog (0.40.3-1ubuntu2) ...
Processing triggers for sgml-base (1.30) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

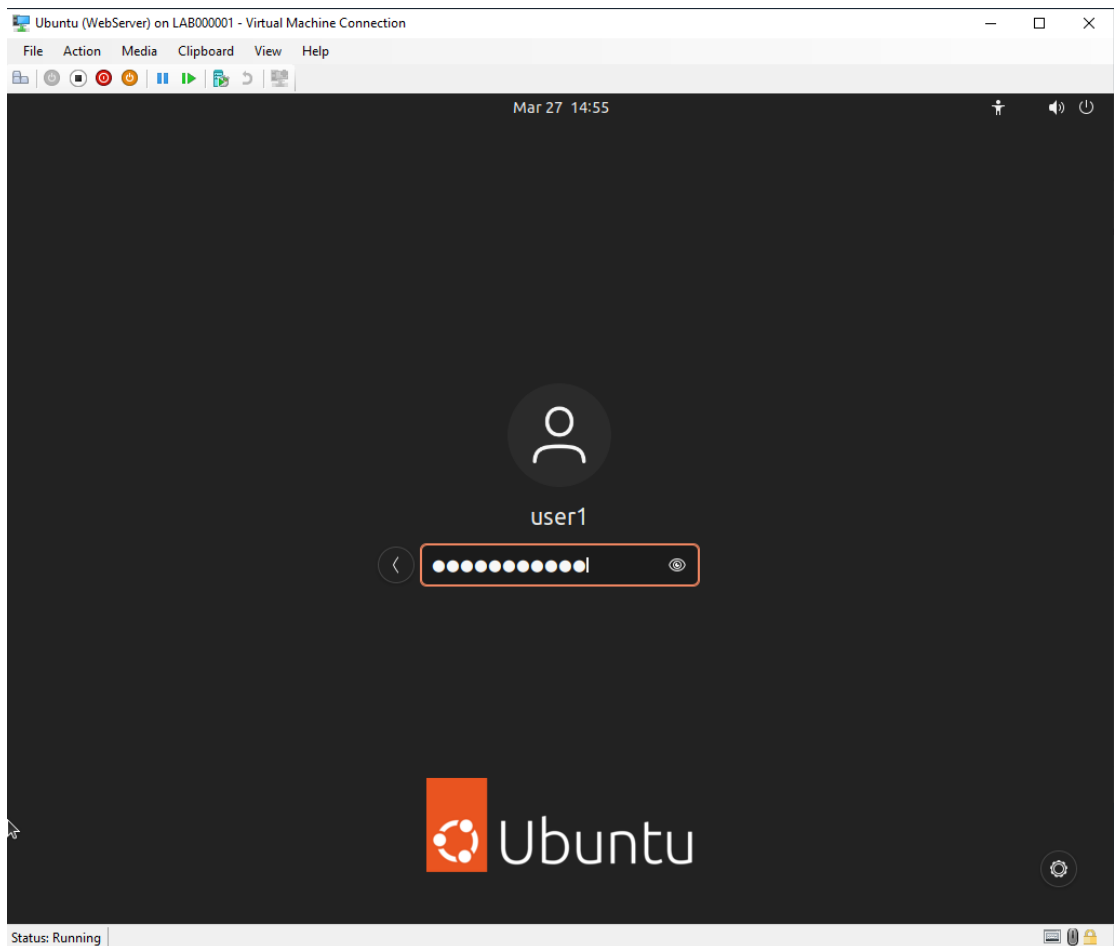
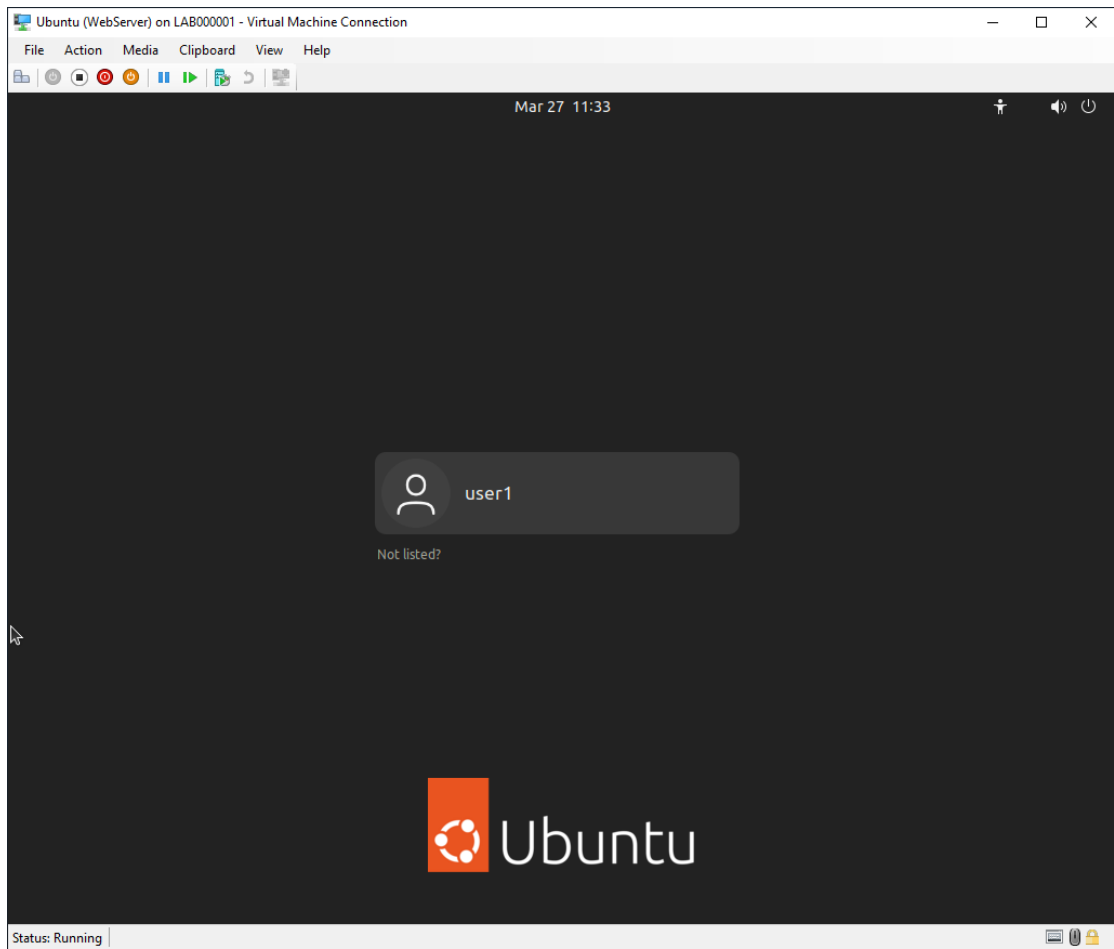
No services need to be restarted.

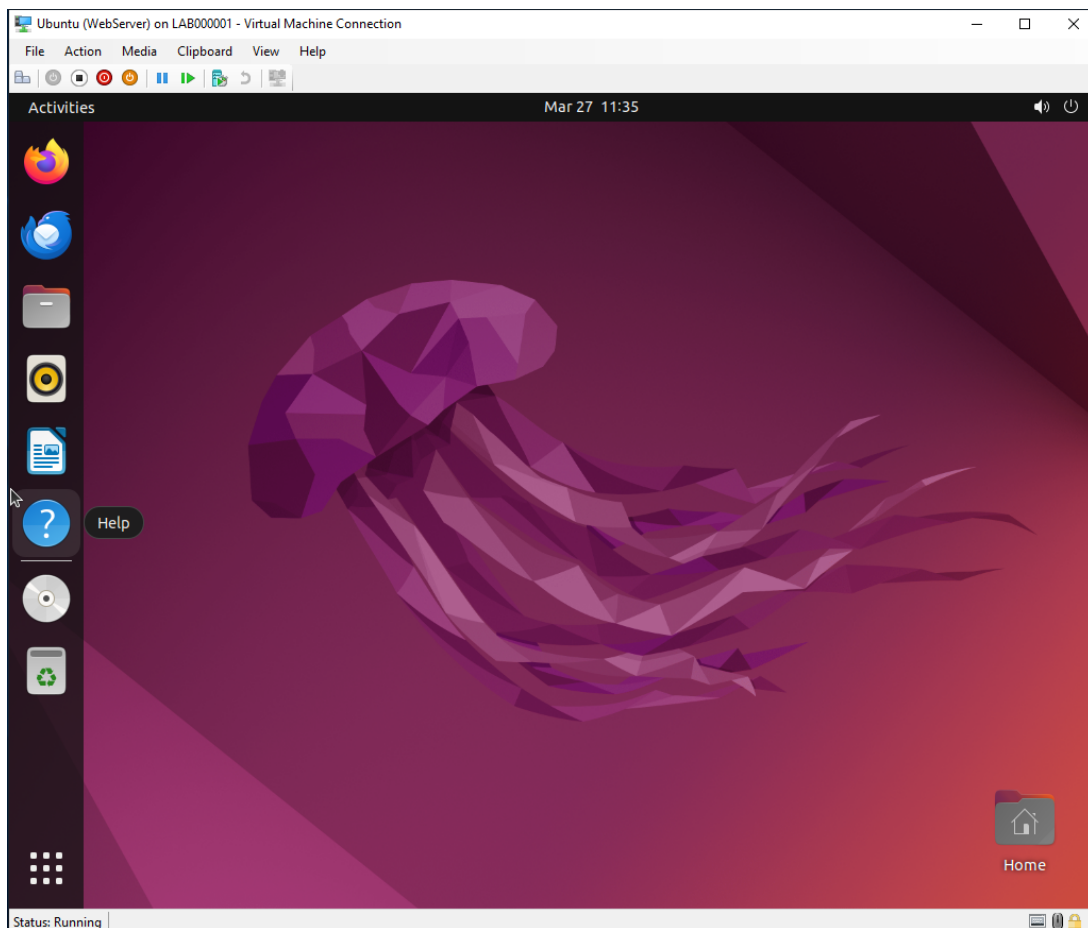
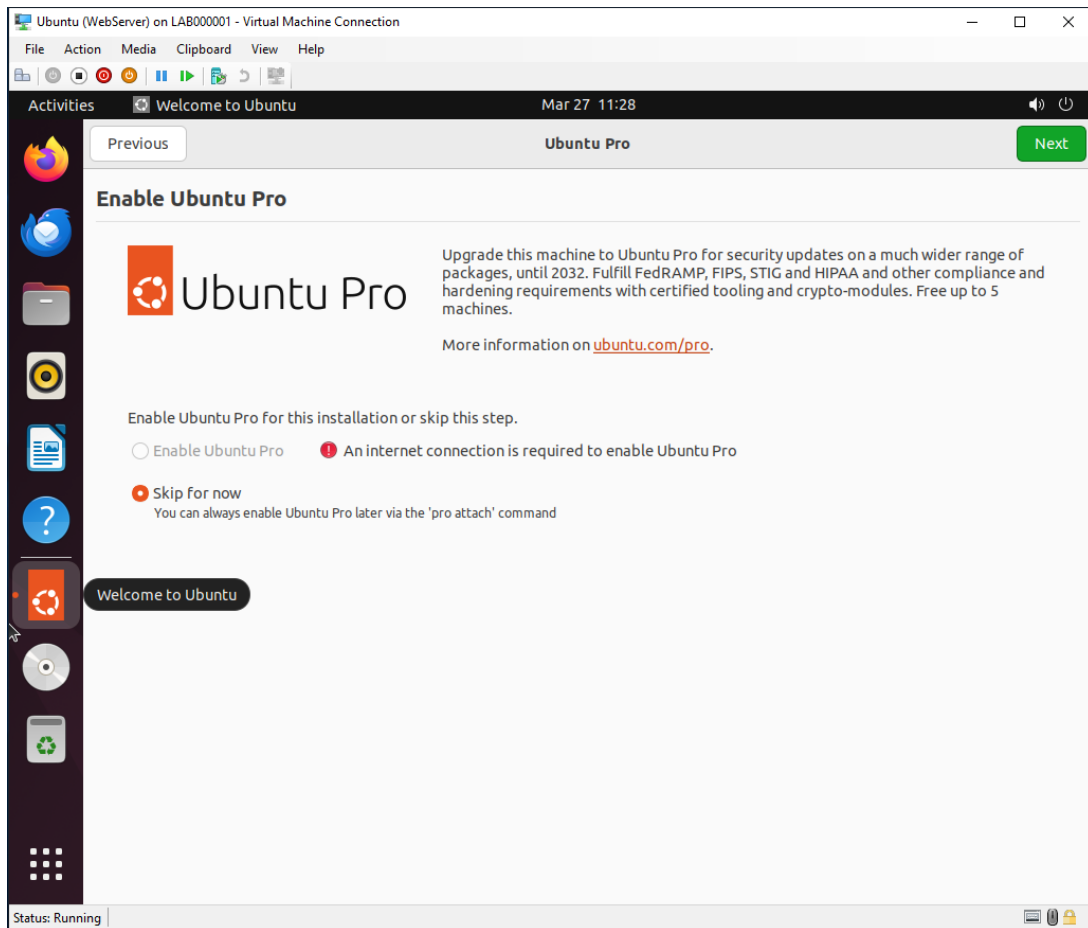
No containers need to be restarted.

No user sessions are running outdated binaries.

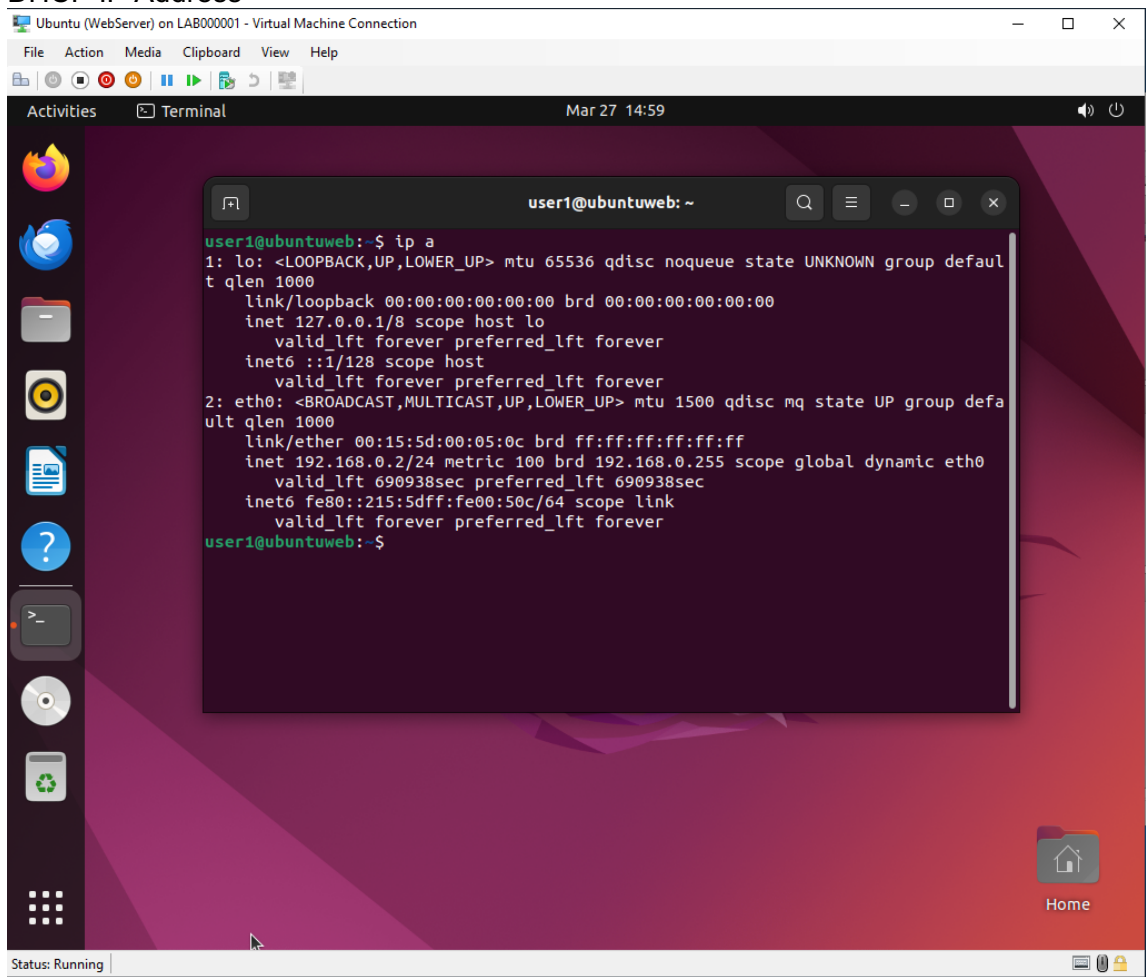
No VM guests are running outdated hypervisor (qemu) binaries on this host.
user@ubuntuweb:~$ sudo reboot
Status: Running
```







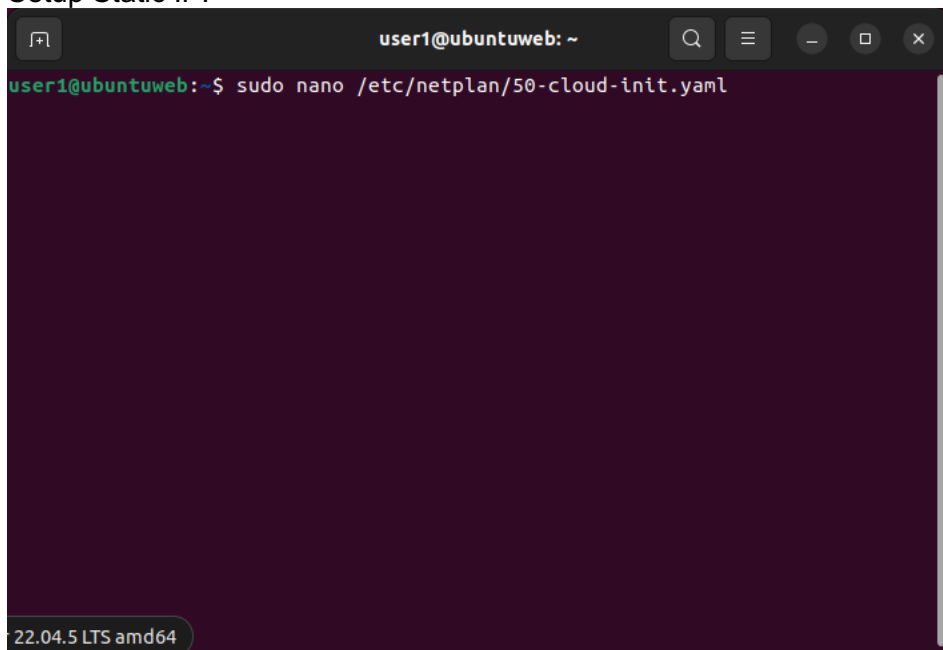
## Setting up Static IP Address: DHCP IP Address



The screenshot shows a terminal window titled "user1@ubuntuweb: ~" with the command `ip a` executed. The output displays network interface details for `lo` and `eth0`. The `lo` interface has a static IP of `127.0.0.1`. The `eth0` interface is configured with a dynamic IP of `192.168.0.2`. The terminal window is part of a desktop environment with a sidebar on the left and a top bar showing "Activities" and "Terminal".

```
user1@ubuntuweb:~$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen 1000
    link/ether 00:15:5d:00:05:0c brd ff:ff:ff:ff:ff:ff
    inet 192.168.0.2/24 metric 100 brd 192.168.0.255 scope global dynamic eth0
        valid_lft 690938sec preferred_lft 690938sec
    inet6 fe80::215:5dff:fe00:50c/64 scope link
        valid_lft forever preferred_lft forever
user1@ubuntuweb:~$
```

## Setup Static IP:



The screenshot shows a terminal window titled "user1@ubuntuweb: ~" with the command `sudo nano /etc/netplan/50-cloud-init.yaml` entered. The terminal window is part of a desktop environment with a sidebar on the left and a top bar showing "Activities" and "Terminal".

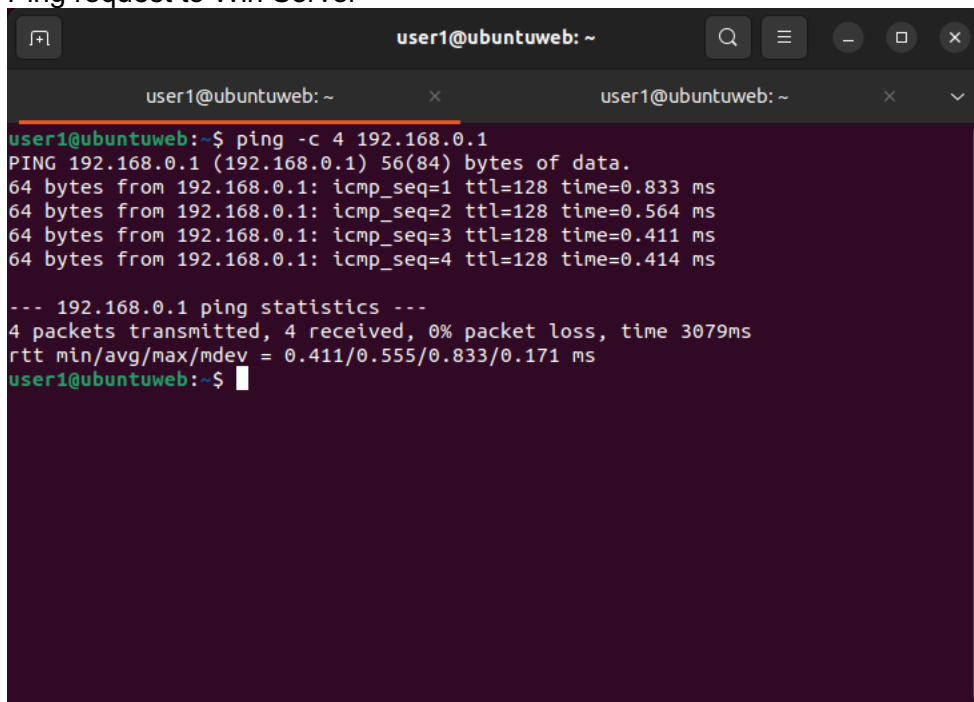
```
user1@ubuntuweb:~$ sudo nano /etc/netplan/50-cloud-init.yaml
```

```
user1@ubuntuweb: ~  
GNU nano 6.2 /etc/netplan/50-cloud-init.yaml *  
# This file is generated from information provided by the datasource. Changes  
# to it will not persist across an instance reboot. To disable cloud-init's  
# network configuration capabilities, write a file  
# /etc/cloud/cloud.cfg.d/99-disable-network-config.cfg with the following:  
# network: {config: disabled}  
network:  
  ethernets:  
    eth0:  
      dhcp4: no  
      addresses:  
        - 192.168.1.2/24  
      routes:  
        - to: 0.0.0.0/0  
          via: 192.168.0.100  
      nameservers:  
        addresses:  
          - 8.8.8.8  
          - 8.8.4.4  
      version: 2  
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location  
^X Exit      ^R Read File ^N Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

```
user1@ubuntuweb: ~  
user1@ubuntuweb:~$ sudo netplan apply
```

```
user1@ubuntuweb: ~  
user1@ubuntuweb:~$ ip a  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000  
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00  
    inet 127.0.0.1/8 scope host lo  
        valid_lft forever preferred_lft forever  
    inet6 ::1/128 scope host  
        valid_lft forever preferred_lft forever  
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen 1000  
    link/ether 00:15:5d:00:05:0c brd ff:ff:ff:ff:ff:ff  
    inet 192.168.0.3/24 brd 192.168.0.255 scope global eth0  
        valid_lft forever preferred_lft forever  
    inet6 fe80::215:5dff:fe00:50c/64 scope link  
        valid_lft forever preferred_lft forever  
user1@ubuntuweb:~$
```

Test Connection:  
Ping request to Win Server



```
user1@ubuntuweb: ~  
user1@ubuntuweb: ~  
user1@ubuntuweb:~$ ping -c 4 192.168.0.1  
PING 192.168.0.1 (192.168.0.1) 56(84) bytes of data.  
64 bytes from 192.168.0.1: icmp_seq=1 ttl=128 time=0.833 ms  
64 bytes from 192.168.0.1: icmp_seq=2 ttl=128 time=0.564 ms  
64 bytes from 192.168.0.1: icmp_seq=3 ttl=128 time=0.411 ms  
64 bytes from 192.168.0.1: icmp_seq=4 ttl=128 time=0.414 ms  
  
--- 192.168.0.1 ping statistics ---  
4 packets transmitted, 4 received, 0% packet loss, time 3079ms  
rtt min/avg/max/mdev = 0.411/0.555/0.833/0.171 ms  
user1@ubuntuweb:~$
```