

Ubuntu 22.04 – Part 2

Desktop Installation.

Waikato Linux Users Group
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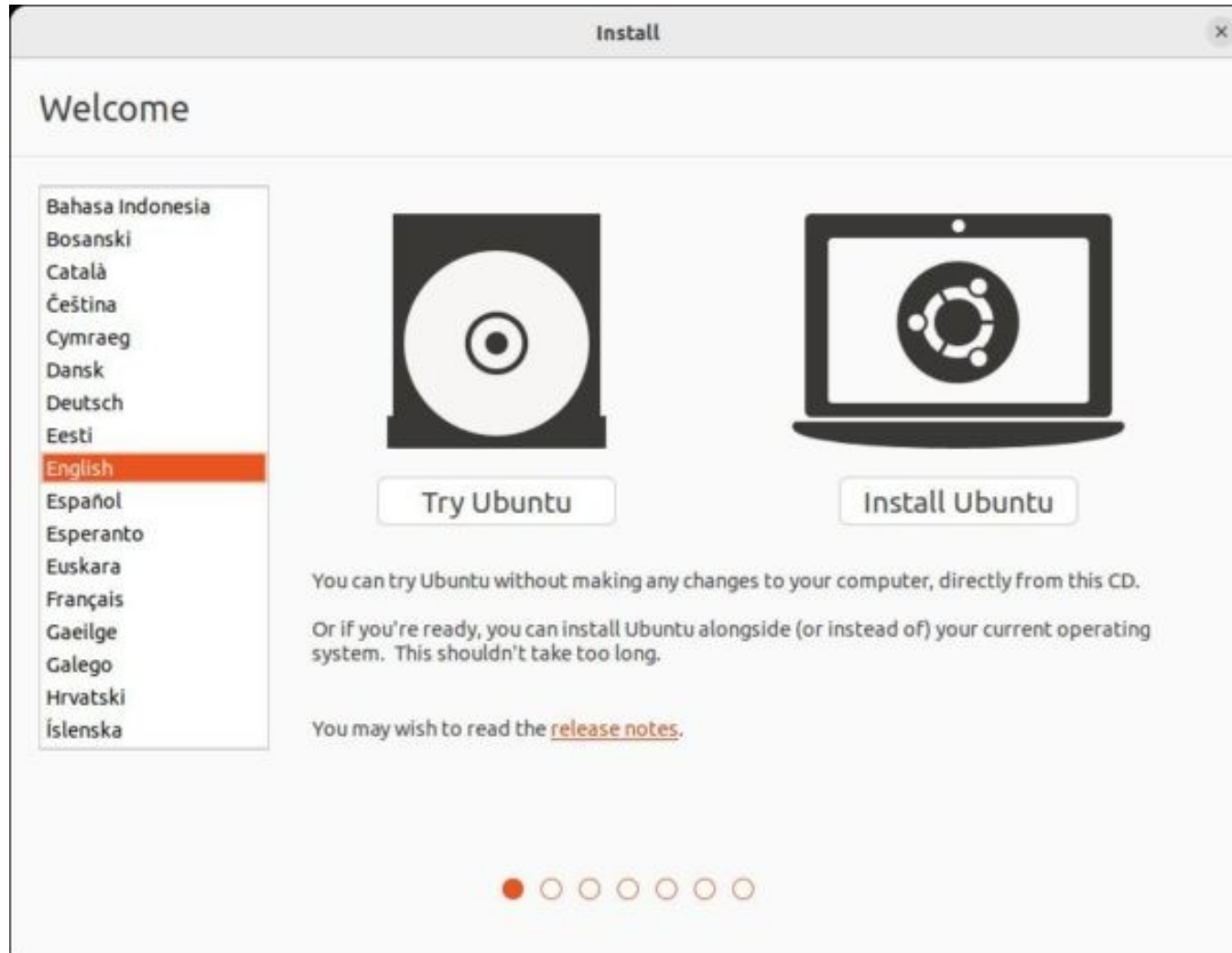
PC firmware Boot Menu.

USB stick option to boot UEFI or Legacy version of Ubuntu

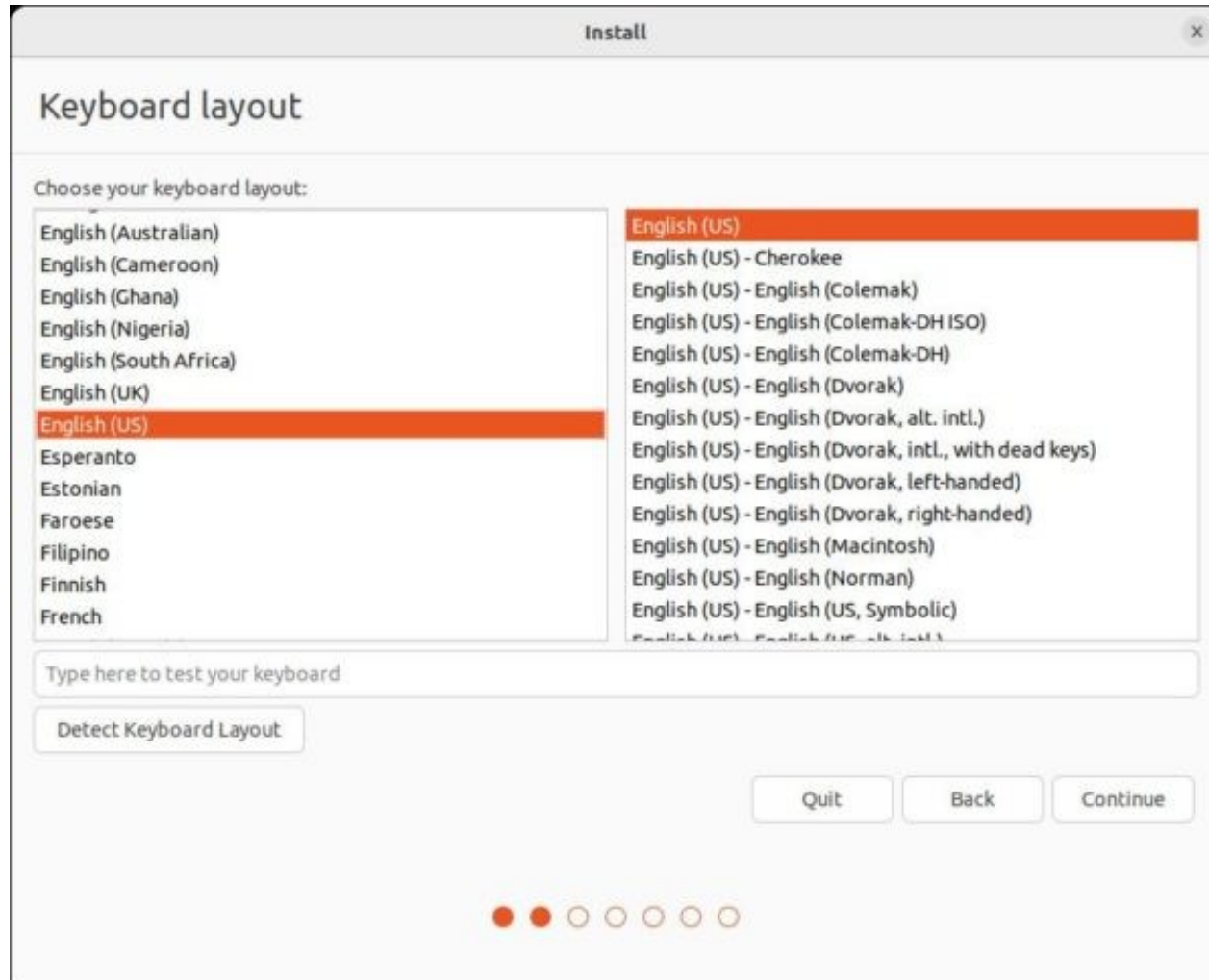
Grub Menu



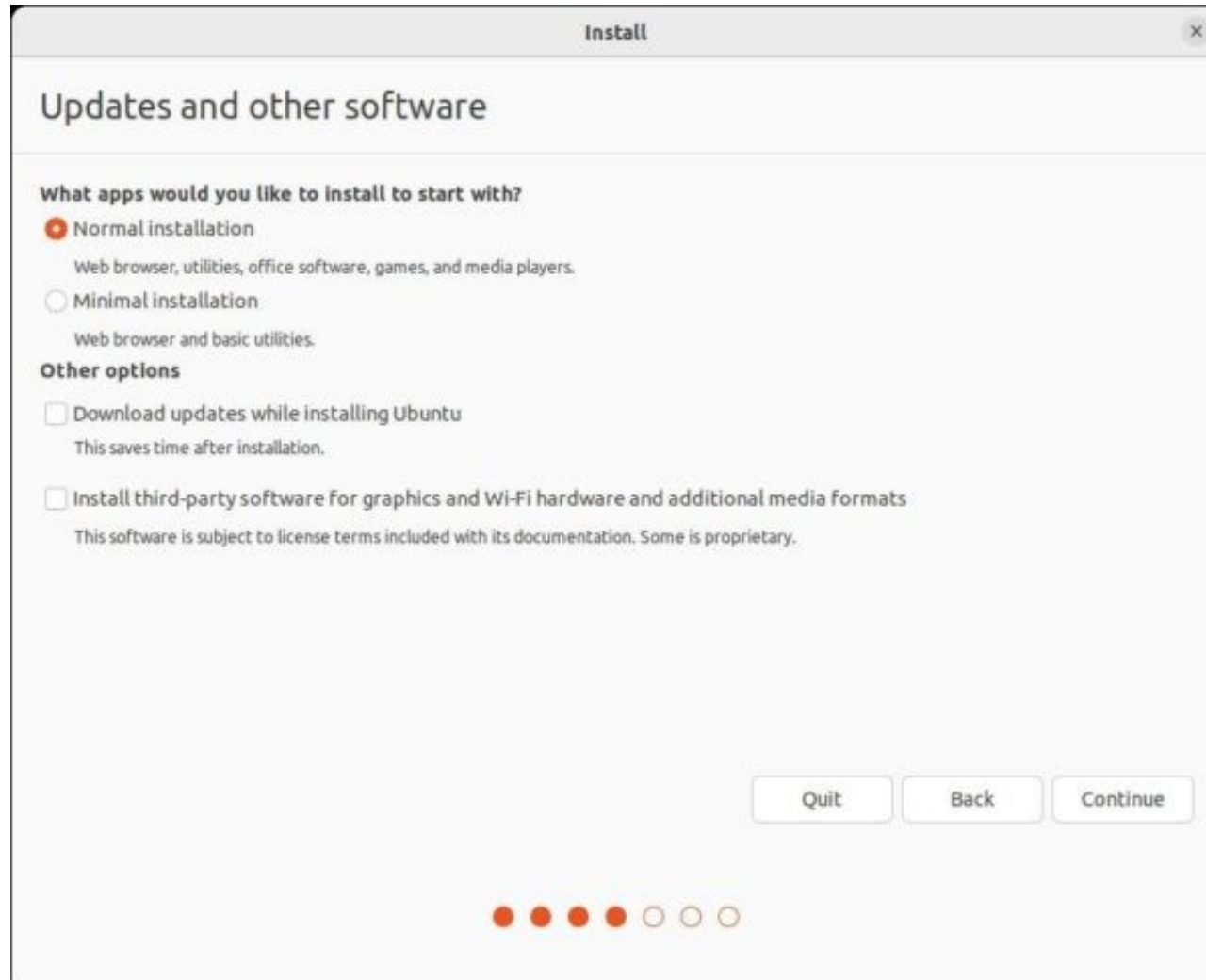
Try / Install?



Keyboard?



Normal / Minimal? Download Updates? Install 3rd party software?



The image shows a screenshot of the Ubuntu installer window titled "Install". The window is titled "Updates and other software". It contains the following options:

What apps would you like to install to start with?

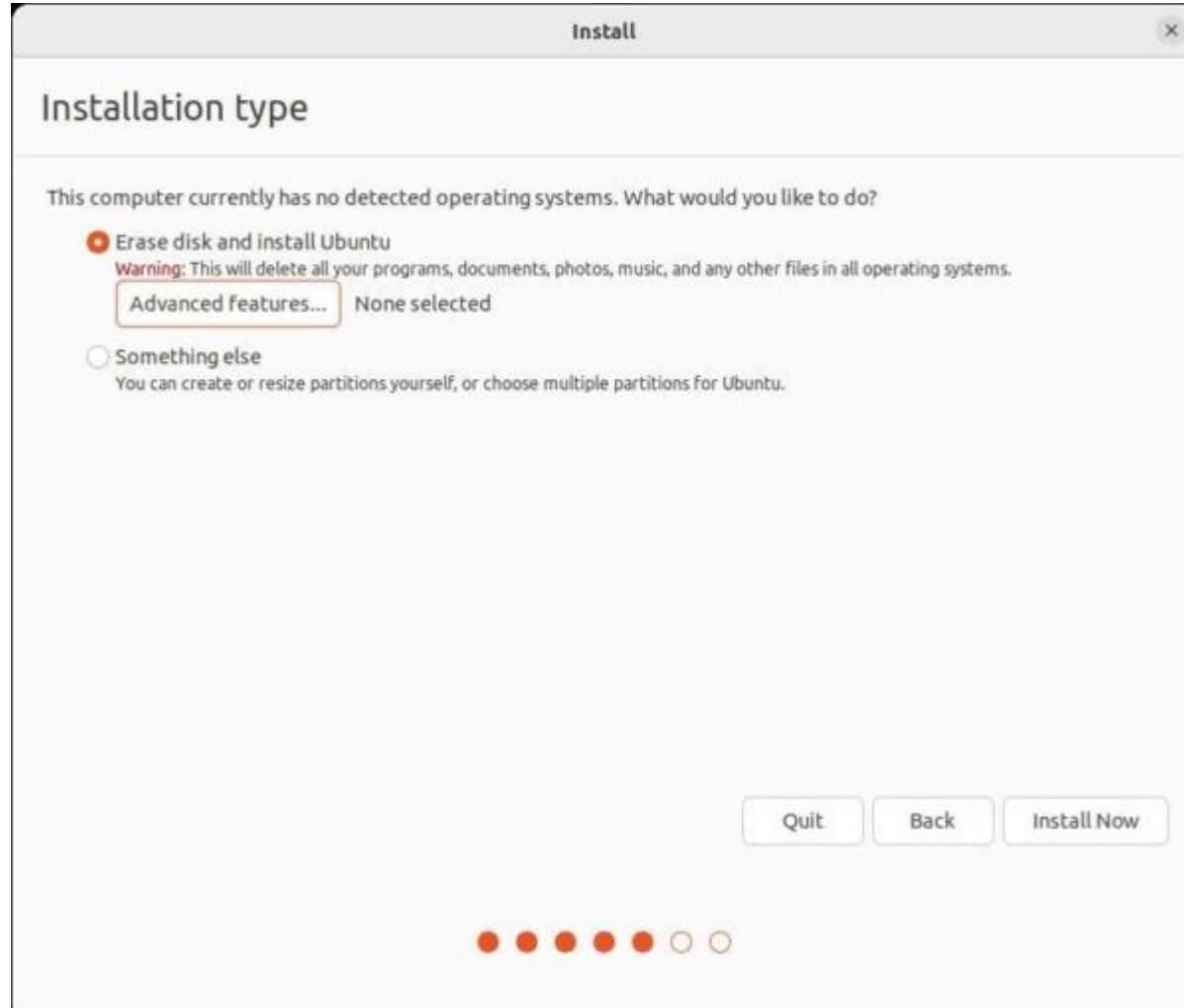
- ☒ Normal installation
Web browser, utilities, office software, games, and media players.
- ☐ Minimal installation
Web browser and basic utilities.

Other options

- ☐ Download updates while installing Ubuntu
This saves time after installation.
- ☐ Install third-party software for graphics and Wi-Fi hardware and additional media formats
This software is subject to license terms included with its documentation. Some is proprietary.

At the bottom right, there are three buttons: "Quit", "Back", and "Continue". At the bottom center, there is a progress indicator consisting of seven circles, with the first four being filled and the last three being empty.

Installation type?



Something Else.

If you choose “Something else” in the previous screen. It will bring you into the partition table.

Create the following partitions using the free disk spaces (or remove and re-use unused spaces):

EFI – 100 ~ 500 MB. (optional for old legacy BIOS without secure boot)

Swap area – as large as RAM (optional if you have large RAM. And, a swap-file can take the job after installation)

/boot Ext4 partition – 500 ~ 1000MB (optional, but required for LVM or disk encryption)

Ext4 mounted at “/” – 20GB + the bigger the better (required)

Something Else. Partitions: /boot, EFI, Ext4, Swap

Create partition

Size: —

For the new partition: ☒ Primary
☐ Logical

For the new partition: ☒ Beginning of this space
☐ End of this space

Use as:

Mount point:

Create partition

Size: —

For the new partition: ☒ Primary
☐ Logical

For the new partition: ☒ Beginning of this space
☐ End of this space

Use as:

Create partition

Size: —

For the new partition: ☒ Primary
☐ Logical

For the new partition: ☒ Beginning of this space
☐ End of this space

Use as:

Mount point:

Create partition

Size: —

For the new partition: ☒ Primary
☐ Logical

For the new partition: ☒ Beginning of this space
☐ End of this space

Use as:

Install

Partition type

Legend: sda1 (ext4) 298.6 MB, sda2 (linux-swaps) 4.1 GB, sda3 (ext4) 1.0 GB, sda4 (ext4) 21.4 GB, free space 1.3 MB

Type	Mount point	Format?	Size	Used	System
efi		<input type="checkbox"/>	1 MB		
swap		<input type="checkbox"/>	298 MB	unknown	
ext4	/boot	<input checked="" type="checkbox"/>	4095 MB	unknown	
ext4	/	<input checked="" type="checkbox"/>	1000 MB	unknown	
ext4	/	<input checked="" type="checkbox"/>	21446 MB	unknown	

Boot loader installation:

ATA VBOX HARDISK (28.8 GB)

Progress: ● ● ● ● ● ○ ○

Examples of partition combinations:

EFI + Ext4 mounted at “/”

EFI + Swap + Ext4 mounted at “/”

EFI + Ext4 mounted at “/” + separated “/boot” partition

EFI + Swap + Ext4 mounted at “/” + separated “/boot” partition

Ext4 mounted at “/” (for legacy boot only)

Ext4 mounted at “/” + separated “/boot” partition (for legacy boot only)

Swap + Ext4 mounted at “/” (for legacy boot only)

Swap + Ext4 mounted at “/” + separated “/boot” partition (for legacy boot only)

EFI + Ext4 mounted at “/” (Encrypted) + separated “/boot” partition (no swap and /boot is required)

<https://ubuntuhandbook.org/index.php/2022/04/install-ubuntu-2204-step-by-step/>

Encrypted Partition

Create partition

Size:

26912

–

+

MB

Type for the new partition:

☒ Primary

☐ Logical

Location for the new partition:

☒ Beginning of this space

☐ End of this space

Use as:

physical volume for encryption ▾

Choose a security key:

●●●●●●●●

Ⓚ

Fair password

Confirm the security key:

●●●●●●●●

✓

☒ Enable recovery key:

A recovery key is generated and will be temporarily saved on the live system. You can select an alternate location. Save this file and keep it in a safe place elsewhere before rebooting.

Recovery key:

●●●●●●●●●●●●●●●●●●●●

Ⓚ

Good password

Confirm recovery key:

●●●●●●●●●●●●●●●●●●●●

✓

Location:

/home/ubuntu/recovery.key

⬇

Warning:

If you lose this security key, all data will be lost. If you need to, write down your key and keep it in a safe place elsewhere.

For more security:

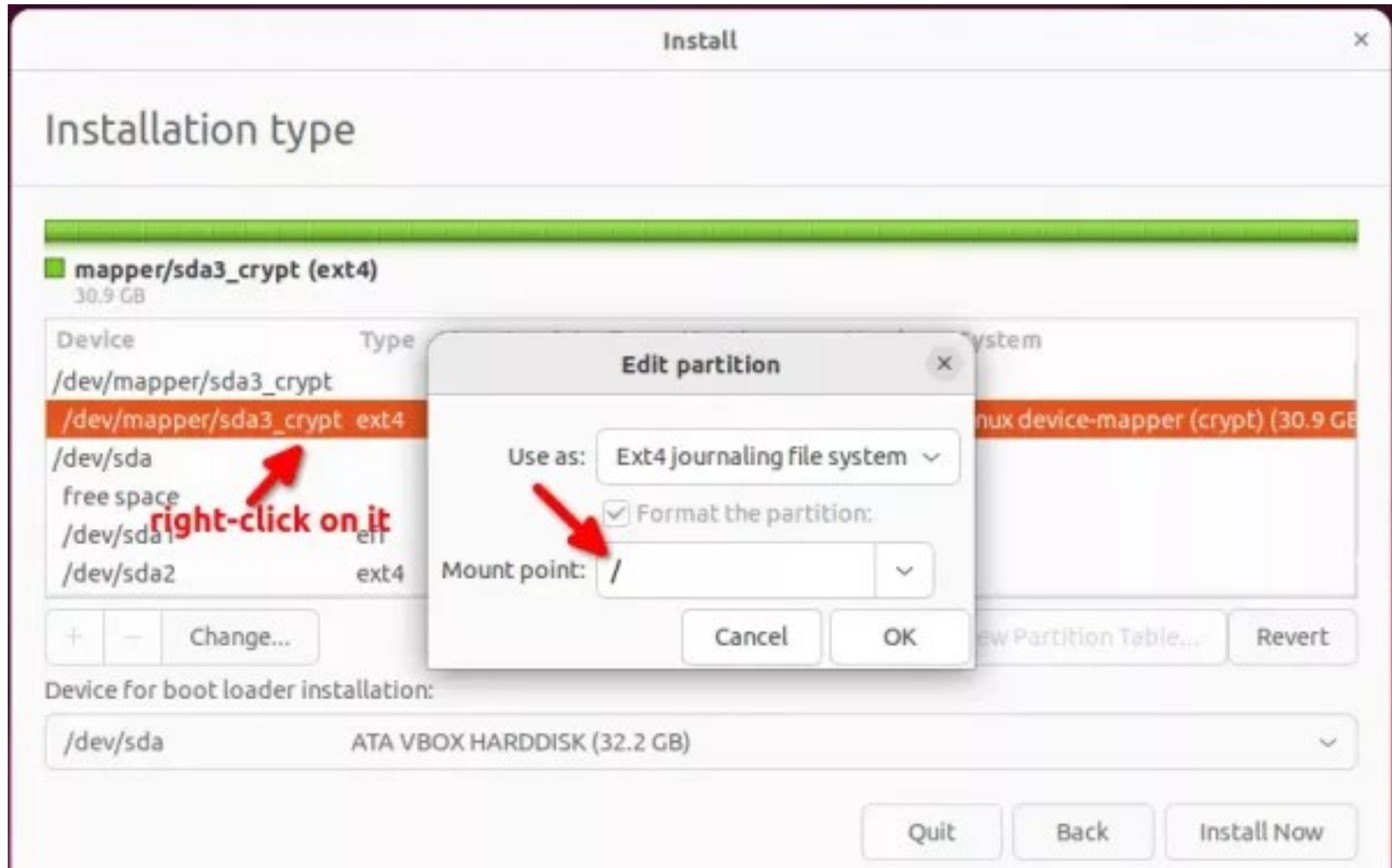
☒ Overwrite empty disk space

The installation may take much longer.

Cancel

OK

Adding Mount point for Encrypted partition



Setup Account

Install

Who are you?


Your name: Jj

✓


Your computer's name: Jammy

✓

The name it uses when it talks to other computers.

Pick a username: 

✓

Choose a password: ●●●●●●●● 

Fair password

Confirm your password: ●●●●●●●●

✓

☐ Log in automatically

☒ Require my password to log in

☐ Use Active Directory

You'll enter domain and other details in the next step.

Back


Continue

● ● ● ● ● ● ●

Location – Time Zone.

Install

Where are you?

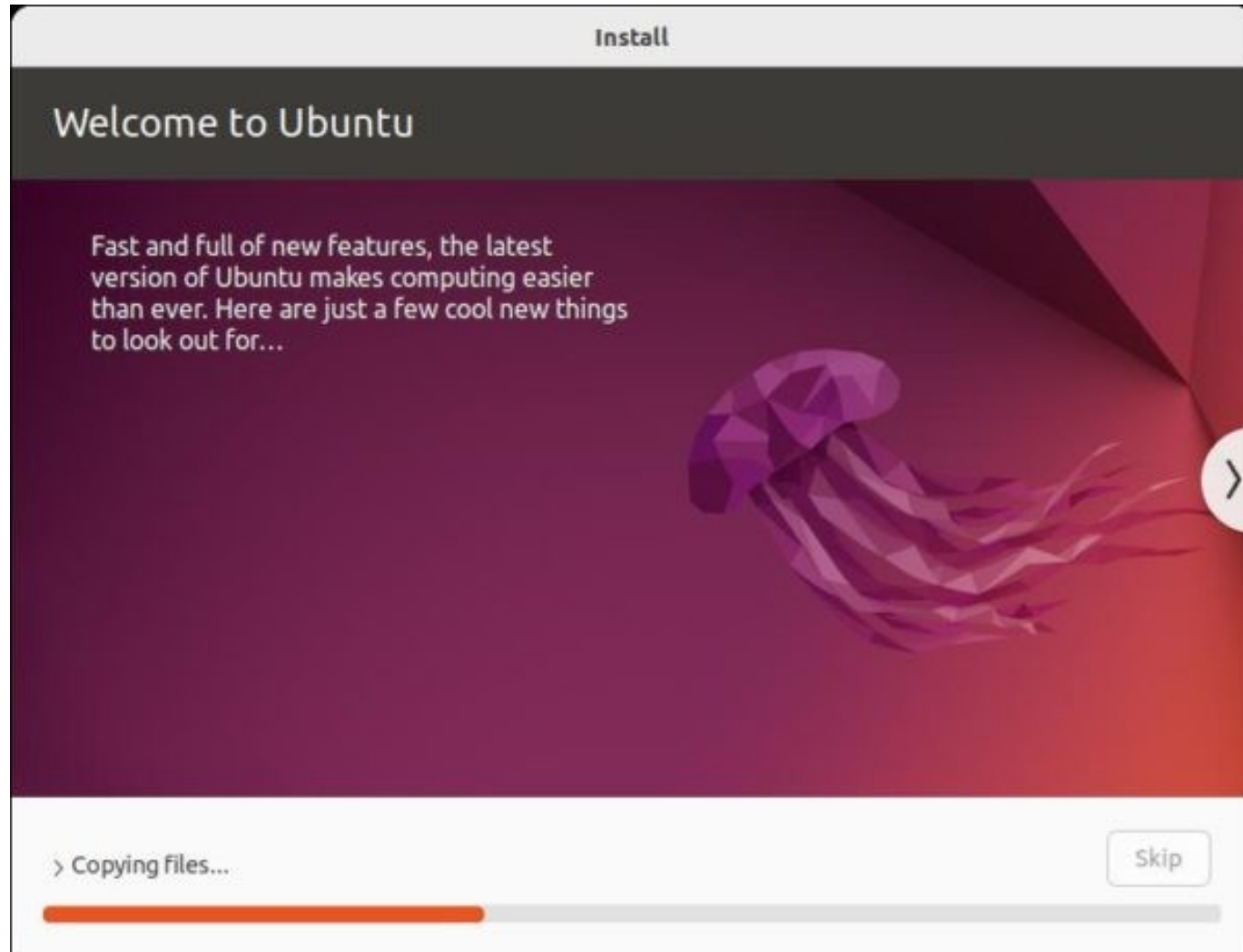


Boise

Back

Continue

Slide show while installation proceeds.



On completing installation:

- `reboot.` (Remove USB stick)
- `sudo apt update`
- `sudo apt dist-upgrade`
- `reboot`

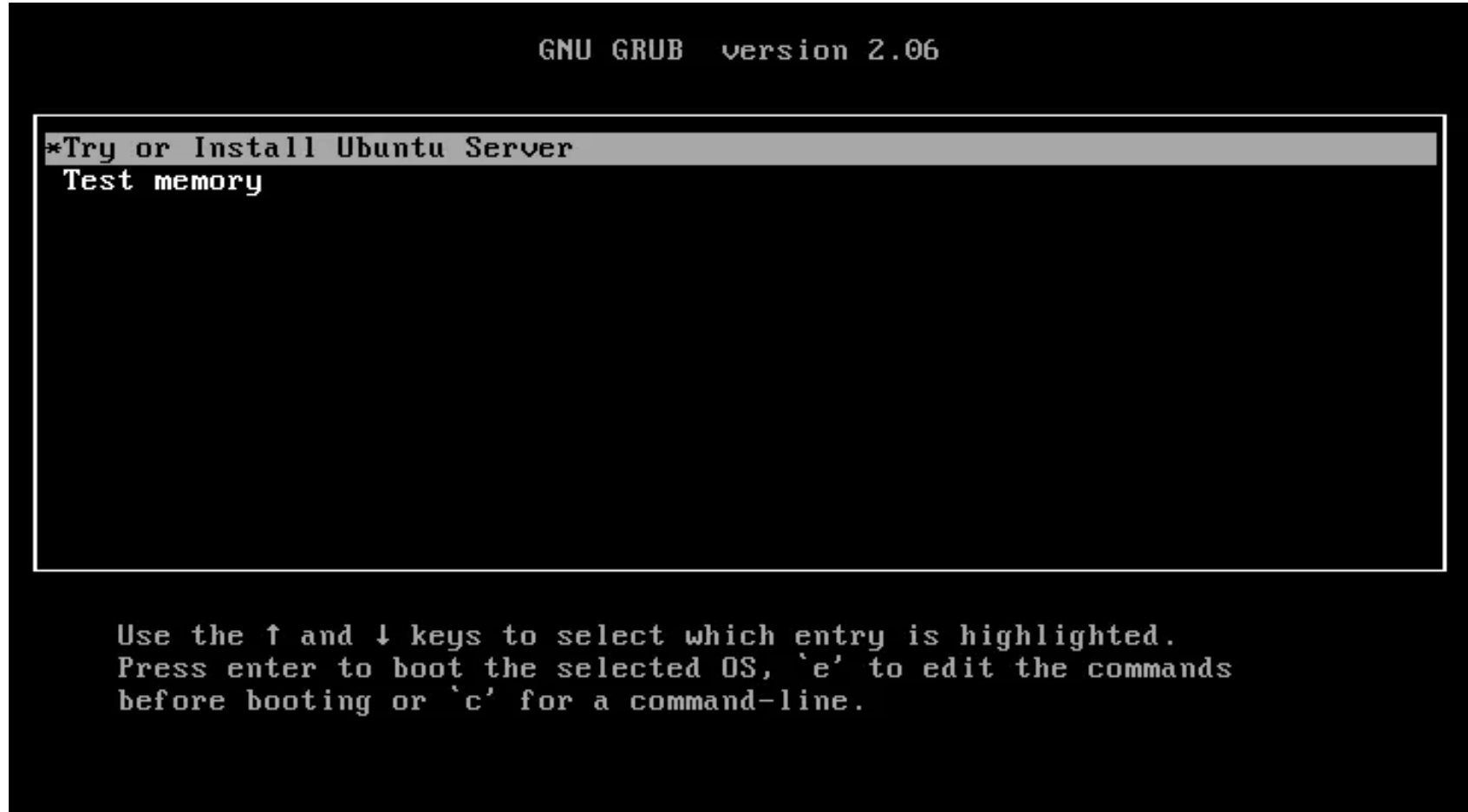
Ubuntu 22.04 Part 2

Server Installation.

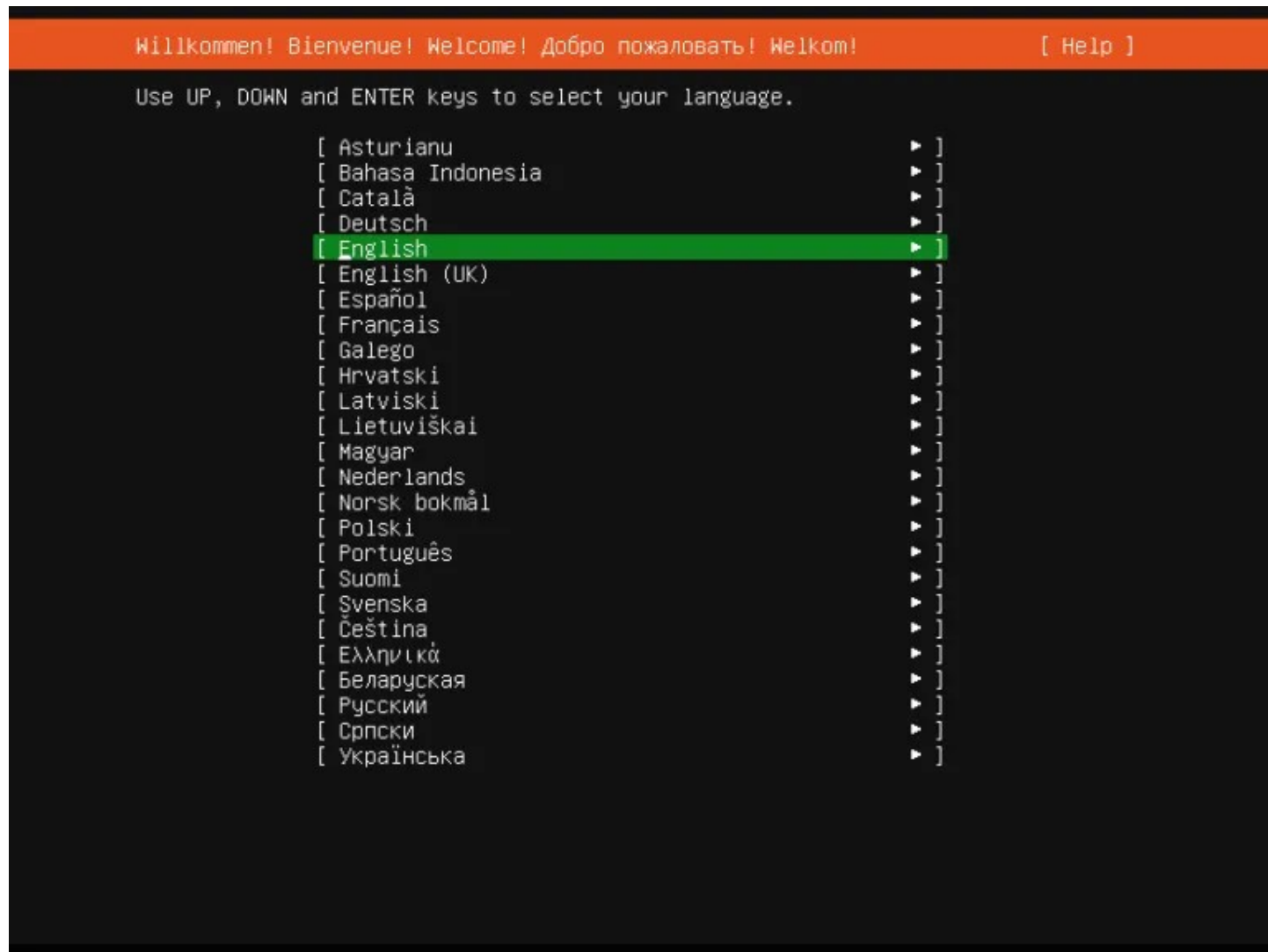
From firmware menu, Boot USB stick with Ubuntu Server image:

<https://www.linuxtechi.com/install-ubuntu-server-22-04-step-by-step/>

On completing installation:



Language



Keyboard

Keyboard configuration [Help]

Please select your keyboard layout below, or select "Identify keyboard" to detect your layout automatically.

Layout: [English (US) ▼]

Variant: [English (US) ▼]

[Identify keyboard]

[Done]
[Back]

Server Base?

Choose type of install [Help]

Choose the base for the installation.

☒ (X)

 Ubuntu Server
The default install contains a curated set of packages that provide a comfortable experience for operating your server.

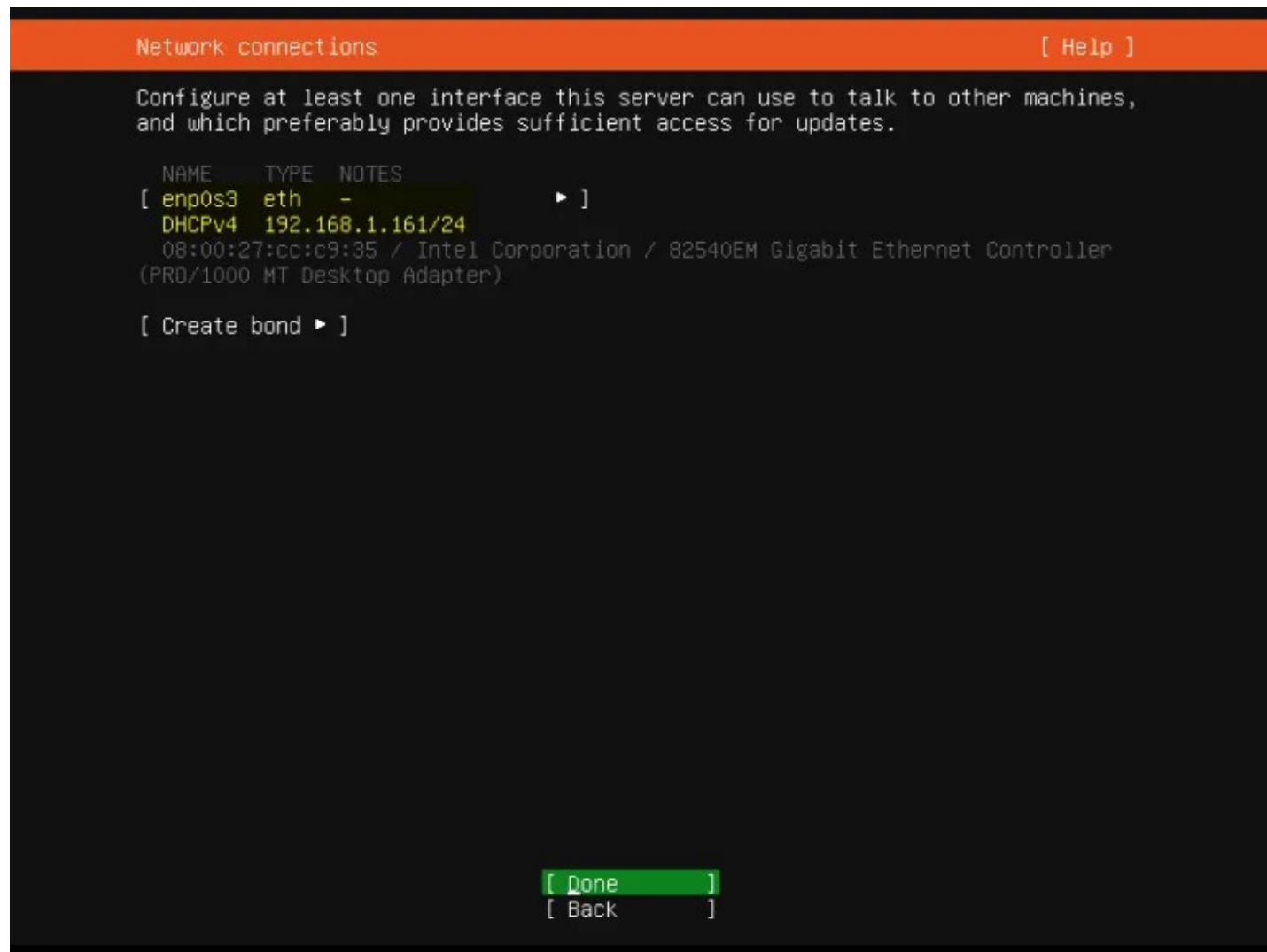
☐ ()

 Ubuntu Server (minimized)
This version has been customized to have a small runtime footprint in environments where humans are not expected to log in.

[Done]

[Back]

Network



Proxy

Configure proxy [Help]

If this system requires a proxy to connect to the internet, enter its details here.

Proxy address:

If you need to use a HTTP proxy to access the outside world, enter the proxy information here. Otherwise, leave this blank.

The proxy information should be given in the standard form of "http://[[user] [:pass]@]host[:port]/".

[Done]

[Back]

Mirror

Configure Ubuntu archive mirror [Help]

If you use an alternative mirror for Ubuntu, enter its details here.

Mirror address:

You may provide an archive mirror that will be used instead of the default.

☒ Done
☐ Back

Storage

Guided storage configuration [Help]

Configure a guided storage layout, or create a custom one:

☒ Use an entire disk

[VBOX_HARDDISK_VB53ea0d35-5c8b98a2 local disk 40.000G ▼]

☒ Set up this disk as an LVM group

☐ Encrypt the LVM group with LUKS

Passphrase:

Confirm passphrase:

☐ Custom storage layout

[Done]
[Back]

Storage

Storage configuration [Help]

FILE SYSTEM SUMMARY

MOUNT POINT	SIZE	TYPE	DEVICE	TYPE
[/	18.996G	new ext4	new LVM logical volume	▶]
[/boot	2.000G	new ext4	new partition of local disk	▶]

AVAILABLE DEVICES

DEVICE	TYPE	SIZE
[ubuntu-vg (new)	LVM volume group	37.996G ▶]
free space		19.000G ▶
[Create software RAID (md) ▶]		
[Create volume group (LVM) ▶]		

USED DEVICES

DEVICE	TYPE	SIZE
[ubuntu-vg (new)	LVM volume group	37.996G ▶]
ubuntu-lv	new, to be formatted as ext4, mounted at /	18.996G ▶
[VBOX_HARDDISK_VB53ea0d35-5c8b98a2		
partition 1	new, BIOS grub spacer	1.000M ▶
partition 2	new, to be formatted as ext4, mounted at /boot	2.000G ▶
partition 3	new, PV of LVM volume group ubuntu-vg	37.997G ▶

[Done]

[Reset]

[Back]

Storage

Storage configuration [Help]

FILE SYSTEM SUMMARY

MOUNT POINT	SIZE	TYPE	DEVICE TYPE
[/	18.996G	new ext4	new LVM logical volume ▶]
[/boot	2.000G	new ext4	new partition of local disk ▶]

AVAILABLE DEVICES

Confirm destructive action

Selecting Continue below will begin the installation process and result in the loss of data on the disks selected to be formatted.

You will not be able to return to this or a previous screen once the installation has started.

Are you sure you want to continue?

[No]
[Continue]

partition 2 new, to be formatted as ext4, mounted at /boot 2.000G ▶
partition 3 new, PV of LVM volume group ubuntu-vg 37.997G ▶

[Done]
[Reset]
[Back]

Profile / Account

Profile setup [Help]

Enter the username and password you will use to log in to the system. You can configure SSH access on the next screen but a password is still needed for sudo.

Your name:

Your server's name:
The name it uses when it talks to other computers.

Pick a username:

Choose a password:

Confirm your password:

[Done]

SSH

SSH Setup [Help]

You can choose to install the OpenSSH server package to enable secure remote access to your server.

☒ Install OpenSSH server

Import SSH identity: [No ▼]
You can import your SSH keys from GitHub or Launchpad.

Import Username:

☒ Allow password authentication over SSH

[Done]
[Back]

Server Snaps

Featured Server Snaps

[Help]

These are popular snaps in server environments. Select or deselect with SPACE, press ENTER to see more details of the package, publisher and versions available.

[]	microk8s	Kubernetes for workstations and appliances	▶
[]	nextcloud	Nextcloud Server - A safe home for all your data	▶
[]	wekan	The open-source kanban	▶
[]	kata-containers	Build lightweight VMs that seamlessly plug into the c	▶
[]	docker	Docker container runtime	▶
[]	canonical-livepatch	Canonical Livepatch Client	▶
[]	rocketchat-server	Rocket.Chat server	▶
[]	mosquitto	Eclipse Mosquitto MQTT broker	▶
[]	etcd	Resilient key-value store by CoreOS	▶
[]	powershell	PowerShell for every system!	▶
[]	stress-ng	tool to load and stress a computer	▶
[]	sabnzbd	SABnzbd	▶
[]	wormhole	get things from one computer to another, safely	▶
[]	aws-cli	Universal Command Line Interface for Amazon Web Servi	▶
[]	google-cloud-sdk	Google Cloud SDK	▶
[]	slcli	Python based SoftLayer API Tool.	▶
[]	doctl	The official DigitalOcean command line interface	▶
[]	conjure-up	Package runtime for conjure-up spells	▶
[]	postgresql10	PostgreSQL is a powerful, open source object-relation	▶
[]	heroku	CLI client for Heroku	▶
[]	keepalived	High availability VRRP/BFD and load-balancing for Lin	▶
[]	prometheus	The Prometheus monitoring system and time series data	▶
[]	juju	Juju - a model-driven operator lifecycle manager for	▶

[Done]

[Back]

Copying and Installation completed

```
Install complete! [ Help ]
```

```
running 'mount --bind /cdrom /target/cdrom'
running 'curtin curthooks'
  curtin command curthooks
    configuring apt
    configuring apt
    installing missing packages
    configuring iscsi service
    configuring raid (mdadm) service
    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
  finalizing installation
    running 'curtin hook'
      curtin command hook
    executing late commands
  final system configuration
    configuring cloud-init
    calculating extra packages to install
    installing openssh-server
    curtin command system-install
    downloading and installing security updates
    curtin command in-target |
```

```
[ View full log ]
[ Cancel update and reboot ]
```

Reboot

Install complete!

[Help]

```
    configuring apt configuring apt
    installing missing packages
    configuring iscsi service
    configuring raid (mdadm) service
    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
  finalizing installation
    running 'curtin hook'
      curtin command hook
    executing late commands
final system configuration
  configuring cloud-init
  calculating extra packages to install
  installing openssh-server
    curtin command system-install
  downloading and installing security updates
    curtin command in-target
  restoring apt configuration
    curtin command in-target
subiquity/Late/run
```

[View full log]

[Reboot Now]

Login

```
-----END SSH HOST KEY KEYS-----
[ 20.491431] cloud-init[1396]: Cloud-init v. 22.1-14-g2e17a0d6-0ubuntu1~22.04.5 finished at Sun, 0
8 May 2022 06:19:28 +0000. Datasource DataSourceNone. Up 20.48 seconds
[ 20.492614] cloud-init[1396]: 2022-05-08 06:19:28,467 - cc_final_message.py[WARNING]: Used fallback
datasource

ubuntu-server-22-04 login: linuxtechi
Password:
Welcome to Ubuntu 22.04 LTS (GNU/Linux 5.15.0-27-generic x86_64)

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

System information as of Sun May  8 06:19:52 AM UTC 2022

System load:  0.595703125      Processes:            117
Usage of /:   24.6% of 18.53GB  Users logged in:     0
Memory usage: 11%              IPv4 address for enp0s3: 192.168.1.161
Swap usage:   0%

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

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.

linuxtechi@ubuntu-server-22-04:~$ _
```

End