

## Manual de instalación Maquinas virtuales desde QEMU

### 1. Instalar QEMU y KVM

En sistemas Linux, instala QEMU junto con KVM para mejor rendimiento.

```
sudo apt update  
sudo apt install qemu-kvm qemu virt-manager libvirt-daemon-system libvirt-clients bridge-utils
```

### 2. Verificar la instalación

Para comprobar que QEMU está instalado correctamente, ejecuta:

```
qemu-system-x86_64 --version  
  
kvm-ok
```

### 3. Descargar la ISO del sistema operativo

Descarga la imagen ISO del sistema que deseas instalar (por ejemplo, Ubuntu, Windows, etc.).

Ejemplo de descarga de Ubuntu:

```
wget https://releases.ubuntu.com/24.04/ubuntu-24.04-live-server-amd64.iso
```

De igual manera se pueden descargar directamente desde las paginas oficiales de los sistema oprativos a instalar:

- Windows: <https://www.microsoft.com/es-es/software-download/windows11>

## Descargar - Windows 11 Español (México)

64-bit Download

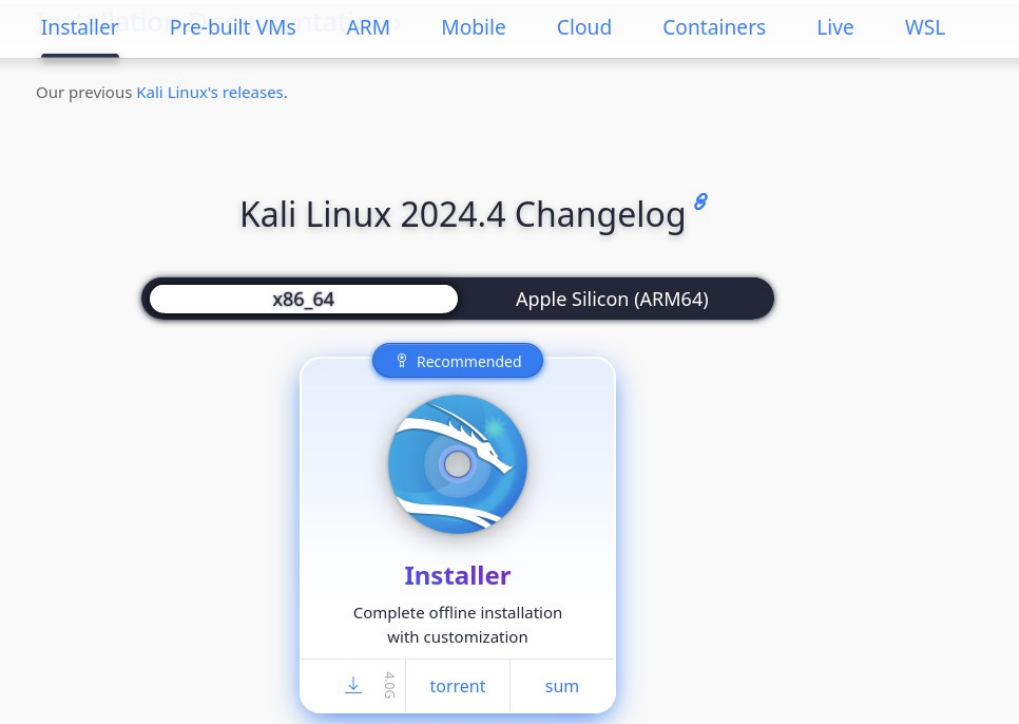
> Comprueba la descarga

Los enlaces son válidos durante 24 horas desde su creación.

Los enlaces expiran: 2025-03-17T00:49:21.7793006Z UTC

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- Kali Linux: <https://www.kali.org/get-kali/#kali-installer-images>



- Centos: <https://www.centos.org/download/>

The screenshot shows the CentOS Stream download page. At the top, there is a navigation bar with links: Download, About, Community, and Documentation. Below this is a "Table of Contents" section. The main heading is "CentOS Stream", followed by a description: "Continuously delivered distro that tracks just ahead of Red Hat Enterprise Linux (RHEL) development, positioned as a midstream between Fedora Linux and RHEL. For anyone interested in participating and collaborating in the RHEL ecosystem, CentOS Stream is your reliable platform for innovation." Below this is a "10" badge. The main content is a table with columns: Architecture, ISOs, RPMs, Cloud, Containers, and Vagrant. The table lists four architectures: x86\_64, ARM64 (aarch64), IBM Power (ppc64le), and IBM Z (s390x). Each architecture has links to Mirrors, Images, and Boxes. At the bottom, there is a "Documentation" link.

- Scientific Linux: [http://ftp.scientificlinux.org/linux/scientific/obsolete/7x/x86\\_64/iso/](http://ftp.scientificlinux.org/linux/scientific/obsolete/7x/x86_64/iso/)

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## Index of /linux/scientific/obsolete/7x/x86\_64/iso/

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### 4. Iniciar la máquina virtual e instalar el sistema

#### Explicación de los parámetros:

- enable-kvm: Habilita aceleración KVM (solo en Linux).
- m 4096: Asigna 4 GB de RAM.
- smp 2: Usa 2 núcleos de CPU.
- boot d: Arranca desde el CD-ROM (la ISO).
- drive file=ubuntu-disk.qcow2,format=qcow2: Especifica el disco virtual.
- cdrom ubuntu-24.04-live-server-amd64.iso: Monta la ISO para instalar el sistema.
- netdev user,id=n1 -device e1000,netdev=n1: Configura una red virtual.
- display default,show-cursor=on: Muestra la interfaz gráfica de la VM.

Bash:

```
qemu-system-x86_64 -enable-kvm -m 4096 -smp 2 -boot d \
-cdrom ubuntu-24.04-live-server-amd64.iso \
-netdev user,id=n1 -device e1000,netdev=n1 \
-display default,show-cursor=on
```

### 5. Instalar el sistema operativo

Cuando inicie la máquina virtual, sigue las instrucciones en pantalla para instalar el sistema en el disco virtual.

## **6. Opcional: Usar Virt-Manager (GUI)**

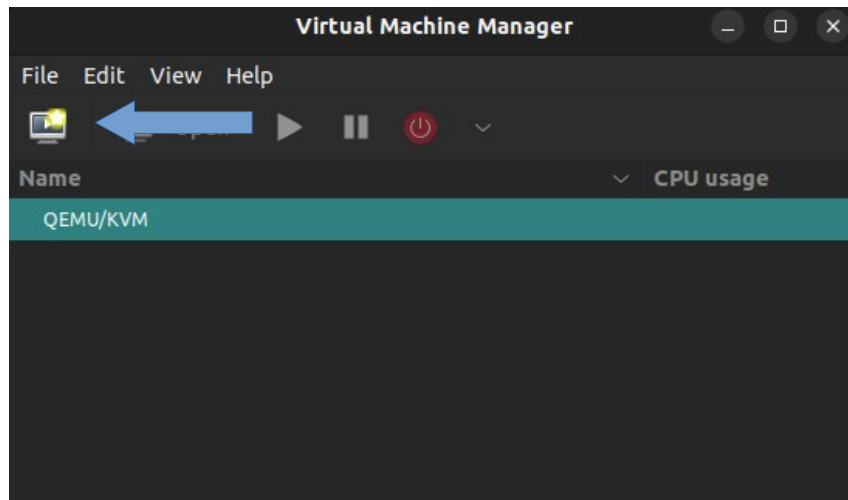
Si prefieres una interfaz gráfica, puedes usar **Virt-Manager** en Linux:

virt-manager

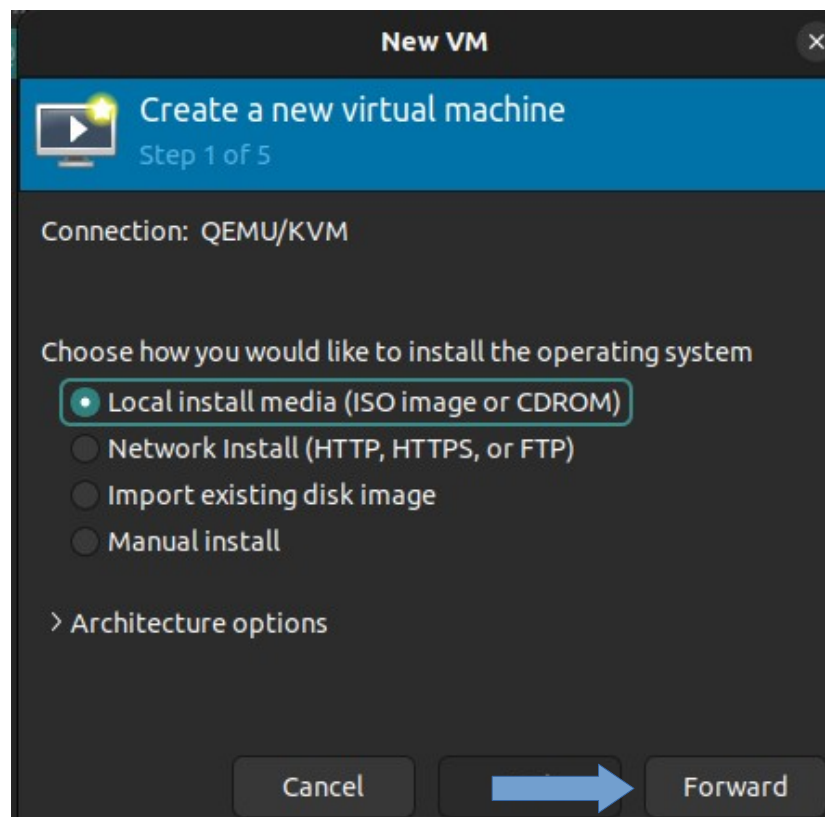
Crea una nueva VM y sigue los pasos en la interfaz.

## INSTALACIÓN UTILIZANDO Virt Manager:

Paso 1. Escoger la creación de una nueva MV,

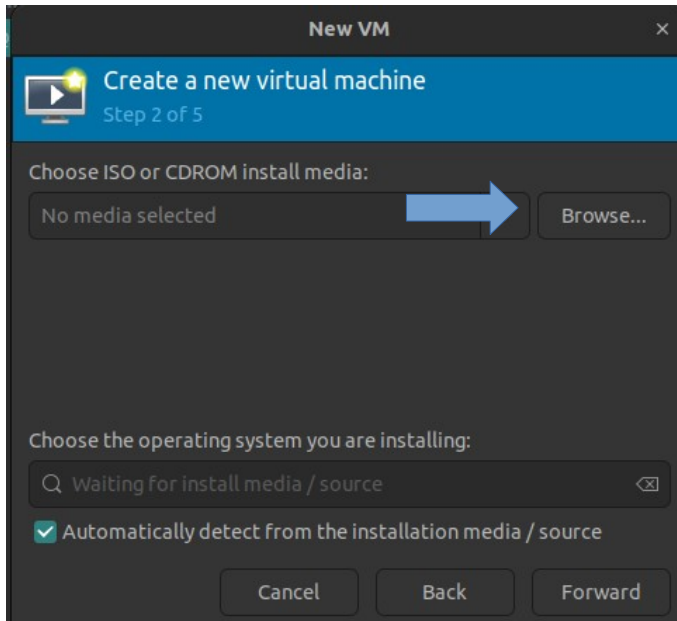


Paso 2 Comenzar a buscar el .iso del sistema operativo a instalar

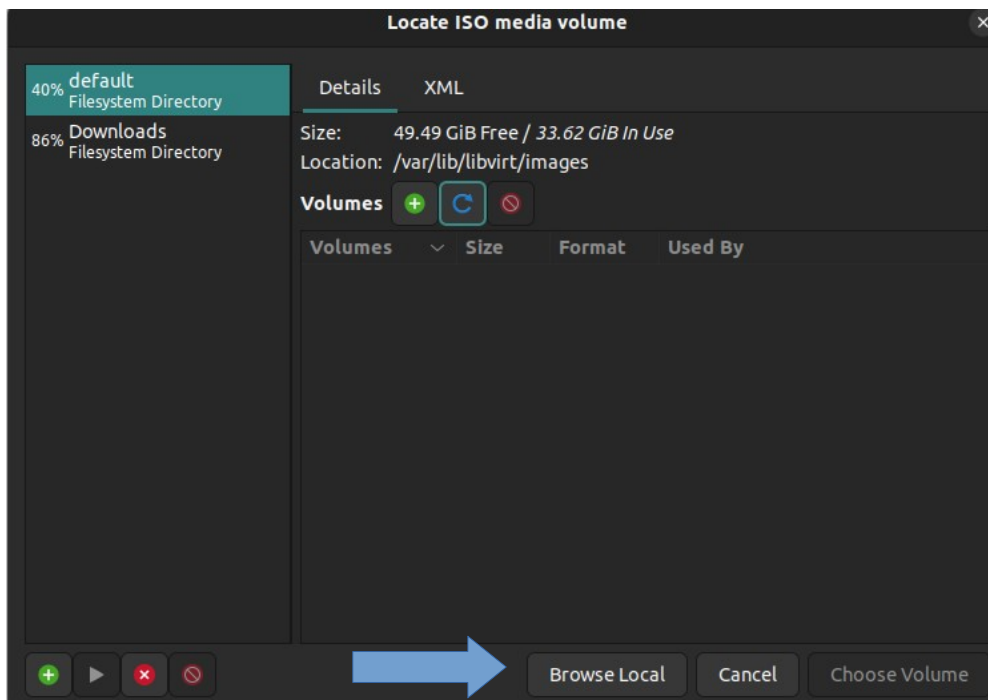


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Paso 3. Escoger el archivo desde “Browse”

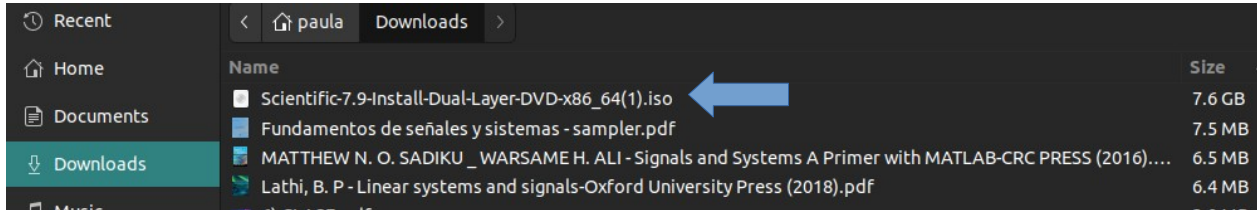


Paso 4. Buscar el archivo de manera local: “Browse Local”

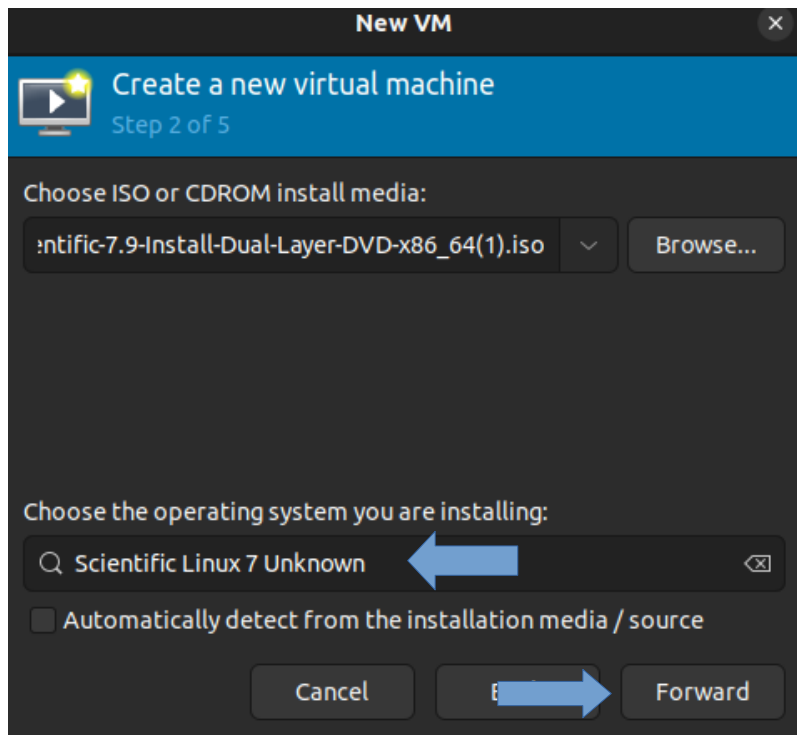


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Paso 5. Seleccionamos el archivo con extensión .iso



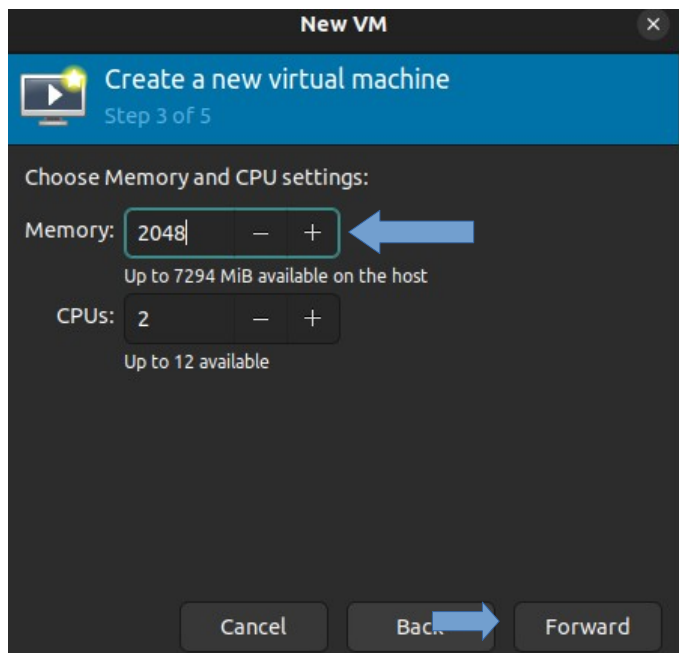
Paso 6. Si no se detecta el sistema operativo automaticamente, se debe buscar la version ,  
Continuamos con el proceso de instalación



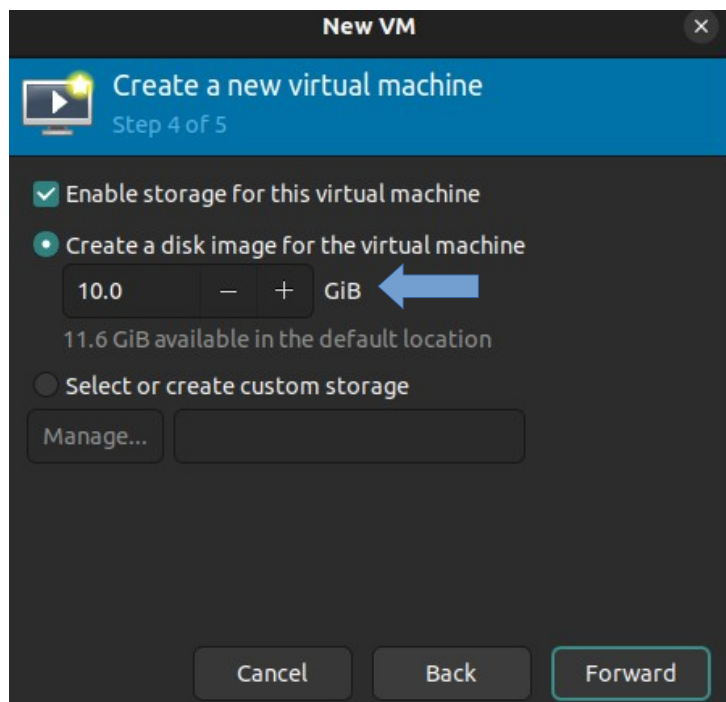
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Paso 7. Seleccionar la cantidad de memoria y procesadores (CPU) que vamos a asignarle a ese SO. Tener en cuenta la distribución de procesadores, si se van a utilizar varios VM al tiempo.

\*La memoria RAM, debe ser multiplos de 1024Mb (1Gb), ej 4096 (4Gb)



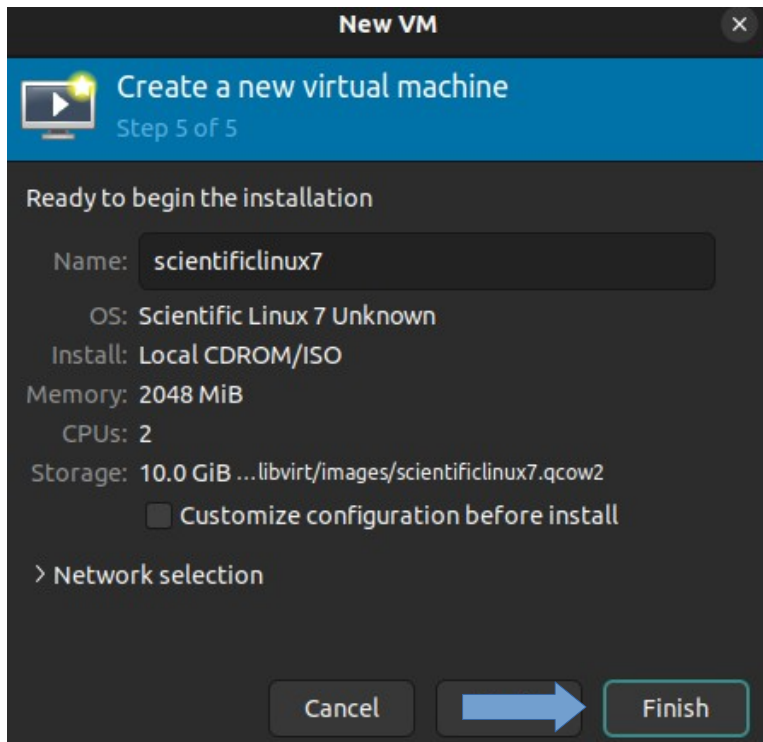
Paso 8. Seleccionar la cantidad de espacio que se le va a asignar en disco duro. Revisar recomendaciones del espacio requerido.



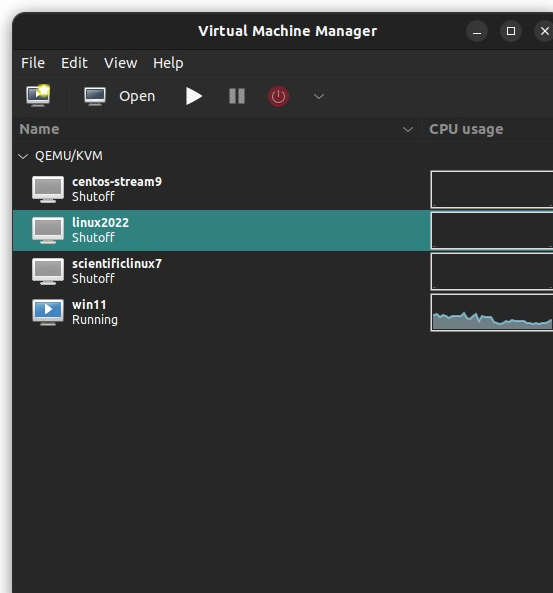


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Paso 9. Revisar que los parametros escogidos sean correctos, devolverse y corregir en caso de ser necesario para continuar con la instalación.



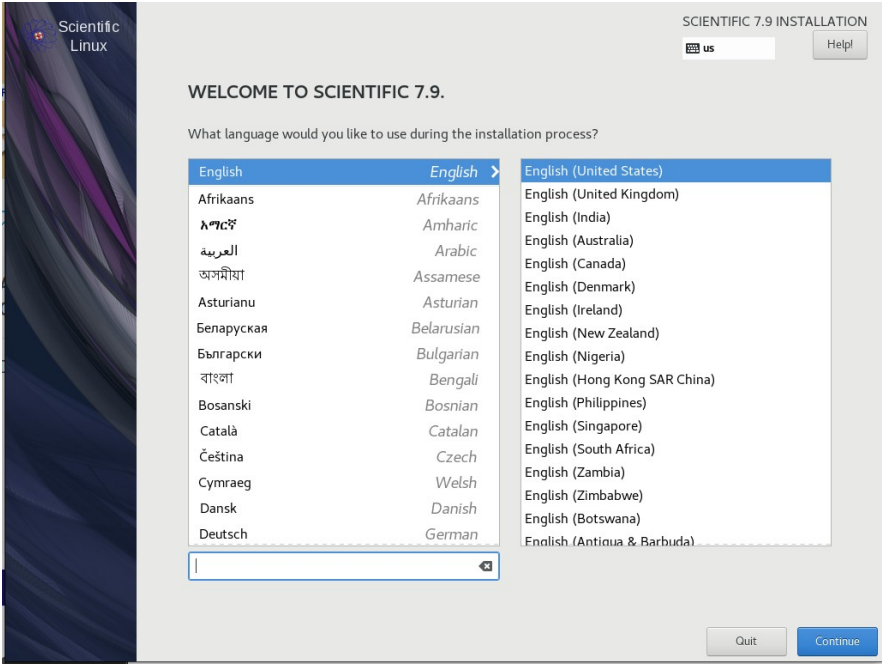
Paso10. Continuar con el proceso de instalación de cada OS desde QEMU



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SCIENTIFIC LINUX VER 7.9

```
amilly 17h model 96
[ 0.000000] Warning: AMD Processor - this hardware has not undergone upstream
testing.
[ 8.757824] dracut-pre-udev[336]: modprobe: ERROR: could not insert 'floppy':
No such device
[ OK ] Started Show Plymouth Boot Screen.
[ OK ] Started Forward Password Requests to Plymouth Directory Watch.
[ OK ] Reached target Paths.
[ OK ] Reached target Basic System.
[ OK ] Started Device-Mapper Multipath Device Controller.
Starting Open-iSCSI...
[ OK ] Started Open-iSCSI.
Starting dracut initqueue hook...
[ 10.074919] dracut-initqueue[746]: mount: /dev/sr0 is write-protected, mounting read-only
[ OK ] Started Show Plymouth Boot Screen.
[ OK ] Started Forward Password Requests to Plymouth Directory Watch.
[ OK ] Reached target Paths.
[ OK ] Reached target Basic System.
[ OK ] Started Device-Mapper Multipath Device Controller.
Starting Open-iSCSI...
[ OK ] Started Open-iSCSI.
Starting dracut initqueue hook...
[ 10.074919] dracut-initqueue[746]: mount: /dev/sr0 is write-protected, mounting read-only
[ OK ] Created slice system-checkiso.md5.slice.
Starting Media check on /dev/sr0...
/dev/sr0: 84717a5ec9c619e25c603e9d64c40fa0
Fragment sums: 75e89c46c8239aa983cdc6f1f3f616cf699767938b1ef82c42c29411c8a7
Fragment count: 20
Press [Esc] to abort check.
Checking: 002.0%_
```



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INSTALLATION DESTINATION

SCIENTIFIC 7.9 INSTALLATION

Done

us


Help

Device Selection

Select the device(s) you'd like to install to. They will be left untouched until you click on the main menu's "Begin Installation" button.

Local Standard Disks

10 GiB



Virtio Block Device

vda / 10 GiB free

Disks left unselected here will not be touched.

Specialized & Network Disks

Add a disk...

Disks left unselected here will not be touched.

Other Storage Options

Partitioning

☒ Automatically configure partitioning. ☐ I will configure partitioning.

☐ I would like to make additional space available.

Encryption

☐ Encrypt my data. You'll set a passphrase next.

[Full disk summary and boot loader...](#)

1 disk selected; 10 GiB capacity; 10 GiB free [Refresh...](#)

Scientific Linux


INSTALLATION SUMMARY

SCIENTIFIC 7.9 INSTALLATION


us

Help


LOCALIZATION

 DATE & TIME

Americas/New York timezone


 KEYBOARD

English (US)


 LANGUAGE SUPPORT

English (United States)


SOFTWARE

 CONTEXT

Network Not Connected


 INSTALLATION SOURCE

Local media


 SOFTWARE SELECTION

General purpose system


SYSTEM

 INSTALLATION DESTINATION


Automatic partitioning selected

 KDUMP

Kdump is enabled

 NETWORK & HOST NAME

Not connected

 SECURITY POLICY

No profile selected

Quit


Begin Installation

We won't touch your disks until you click 'Begin Installation'.

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CREATE USER SCIENTIFIC 7.9 INSTALLATION

Done  us Help

Full name Paula sandoval

User name psandoval

Tip: Keep your user name shorter than 32 characters and do not use spaces.

☒ Make this user administrator

☒ Require a password to use this account

Password


Confirm password

Fair


Advanced...


Scientific Linux

CONFIGURATION SCIENTIFIC 7.9 INSTALLATION

 us Help

USER SETTINGS

 **ROOT PASSWORD**  
Root password is not set

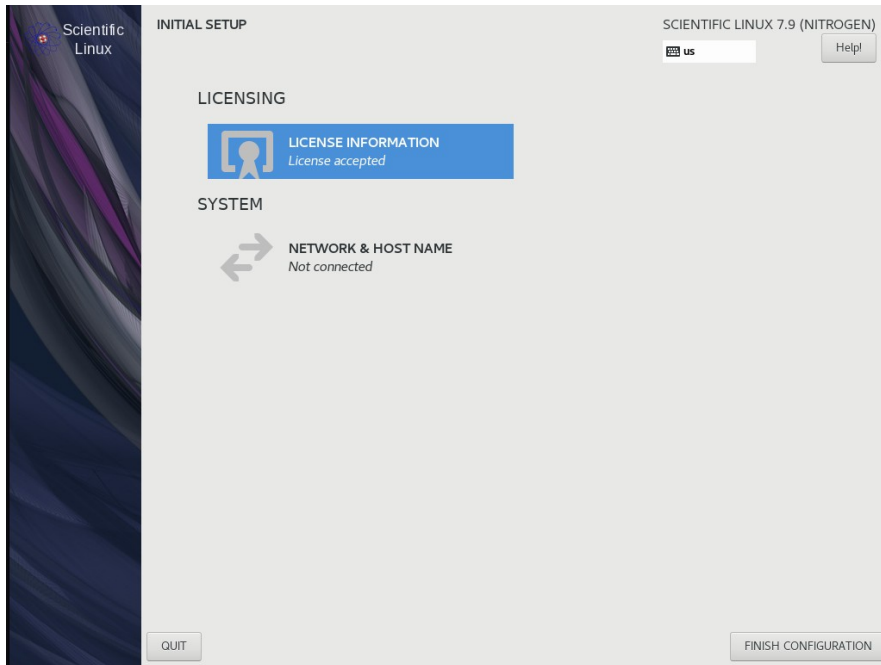
 **USER CREATION**  
Administrator psandoval will be created

Installing linux-firmware (357/1491)

SCIENTIFIC LINUX

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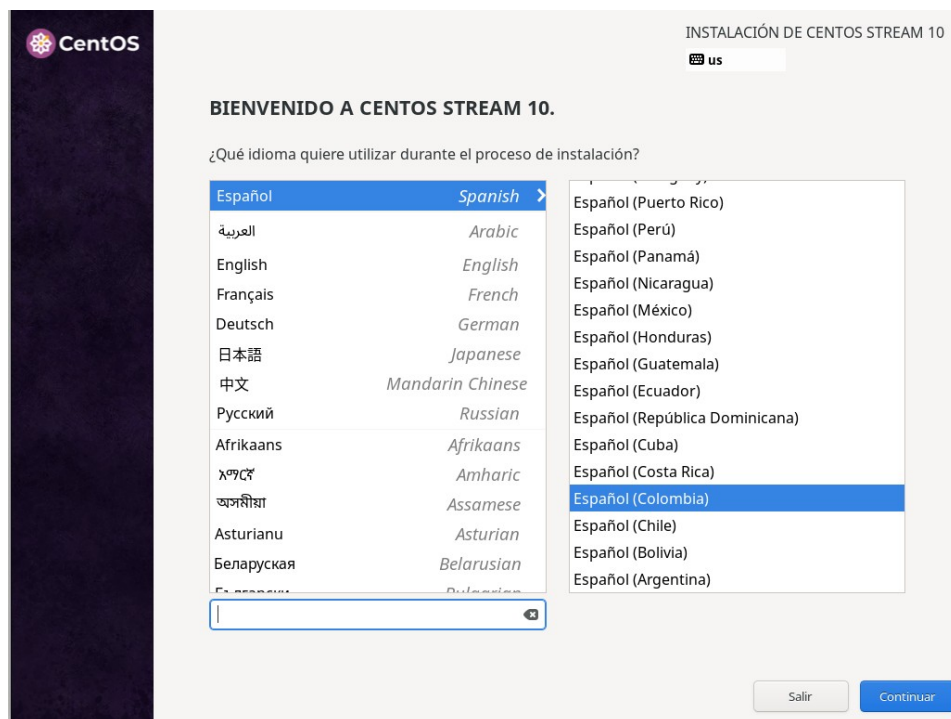
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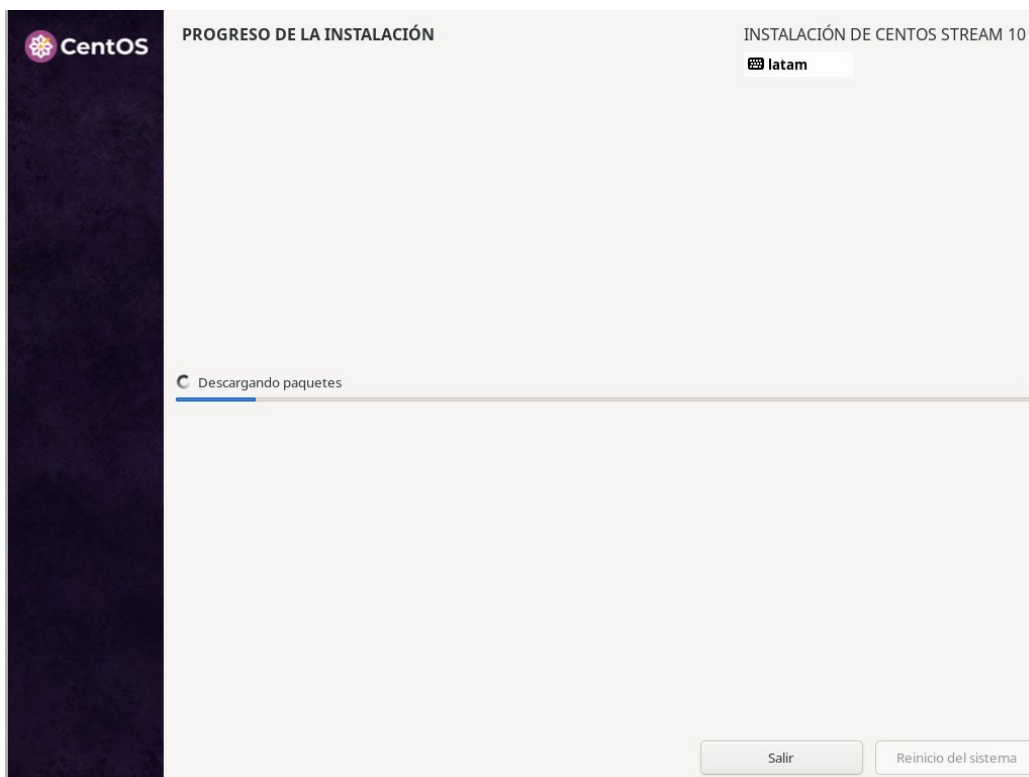
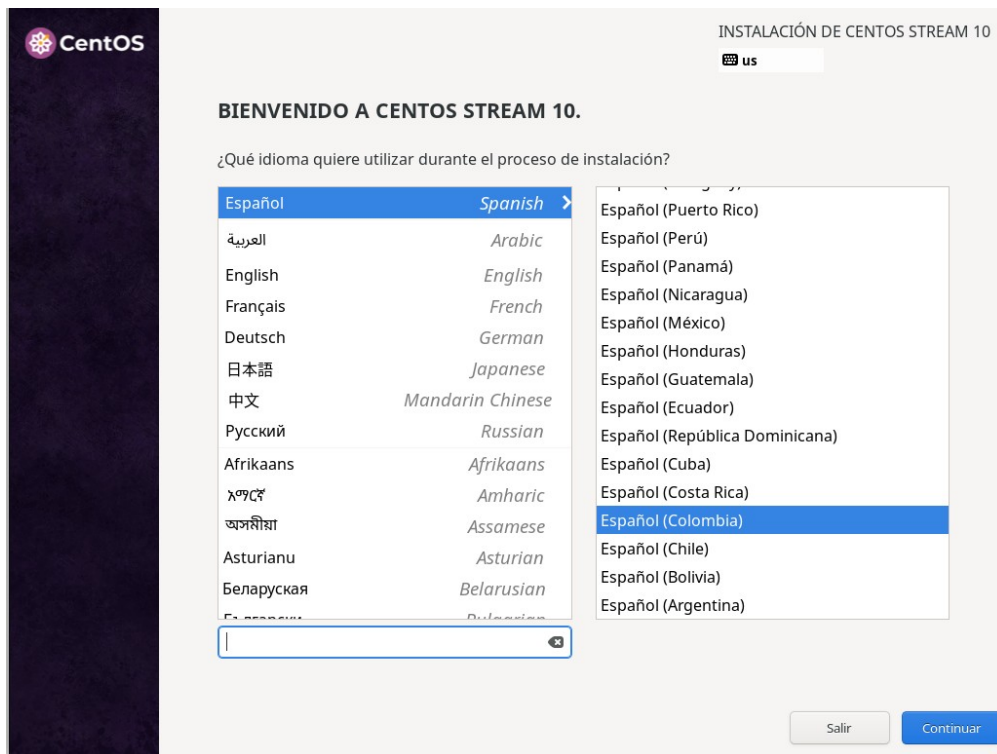
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### Centos 9



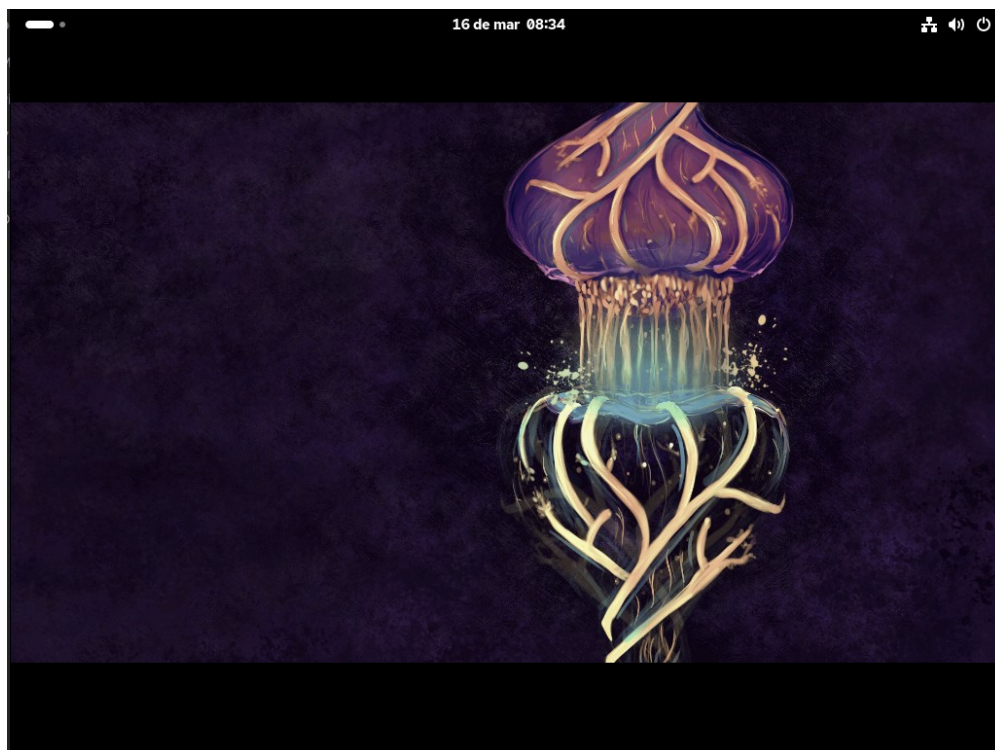
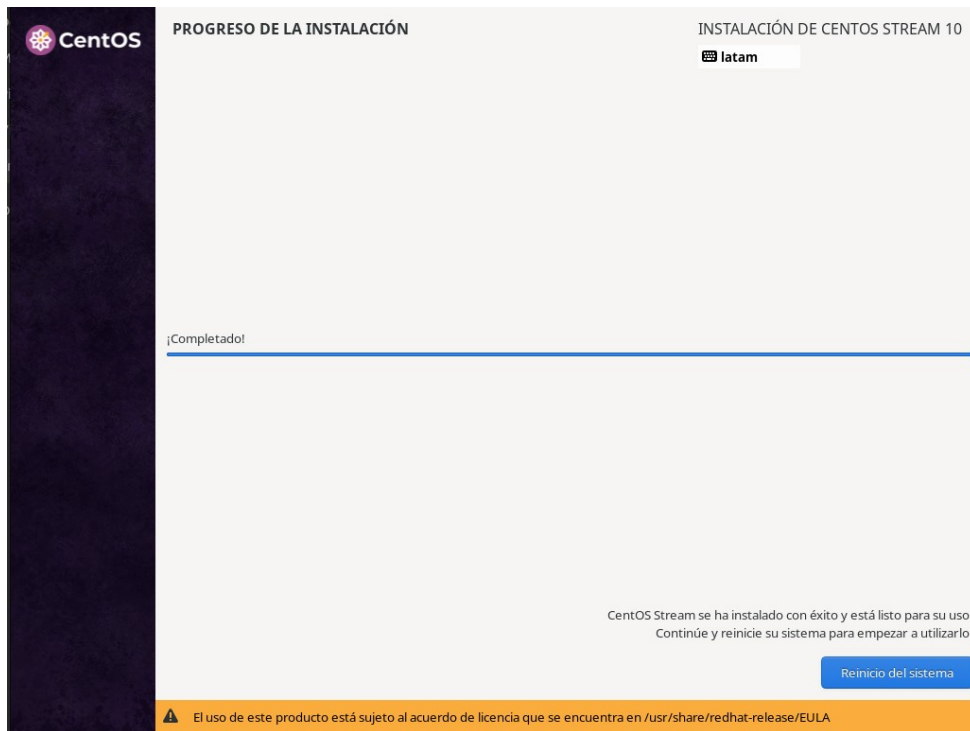
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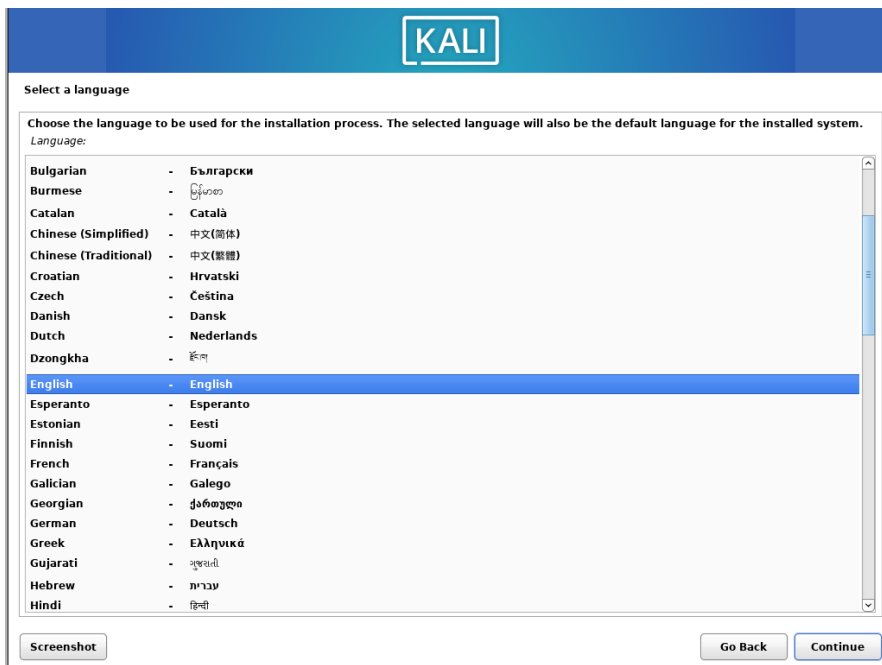




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### Kali Linux



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KALI

### Configure the network

The domain name is the part of your Internet address to the right of your host name. It is often something that ends in .com, .net, .edu, or .org. If you are setting up a home network, you can make something up, but make sure you use the same domain name on all your computers.

Domain name:

Screenshot

Go Back

Continue

KALI

### Partition disks

The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results.

If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.

Partitioning method:

Guided - use entire disk

Guided - use entire disk and set up LVM

Guided - use entire disk and set up encrypted LVM

Manual

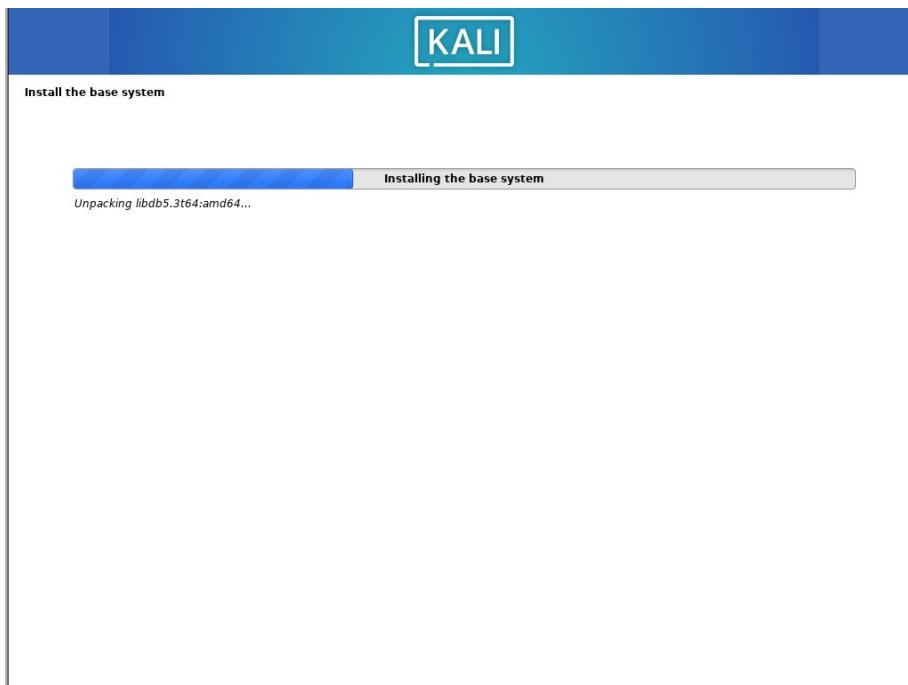
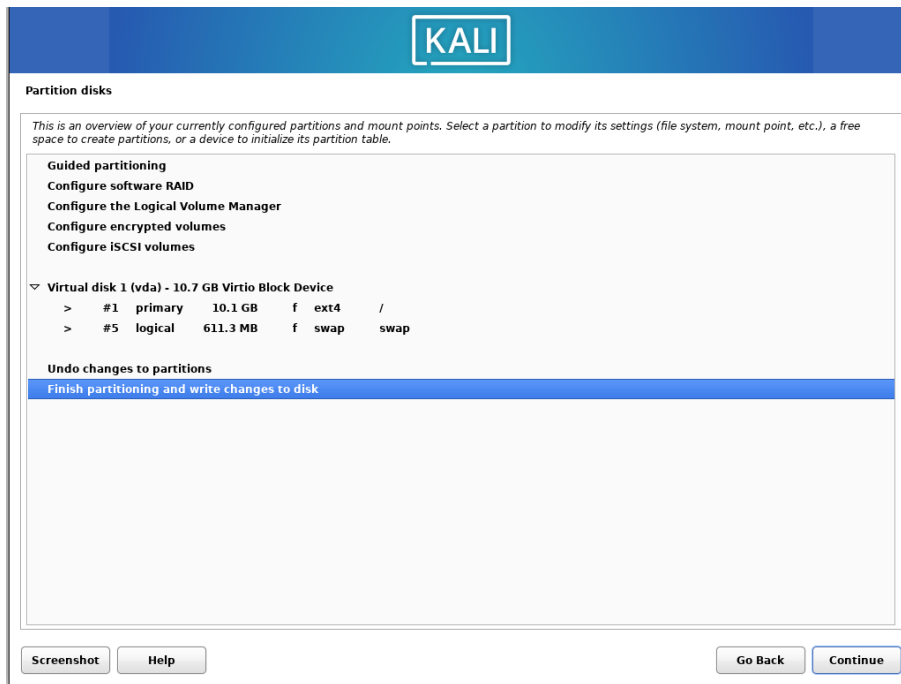
Screenshot

Go Back

Continue

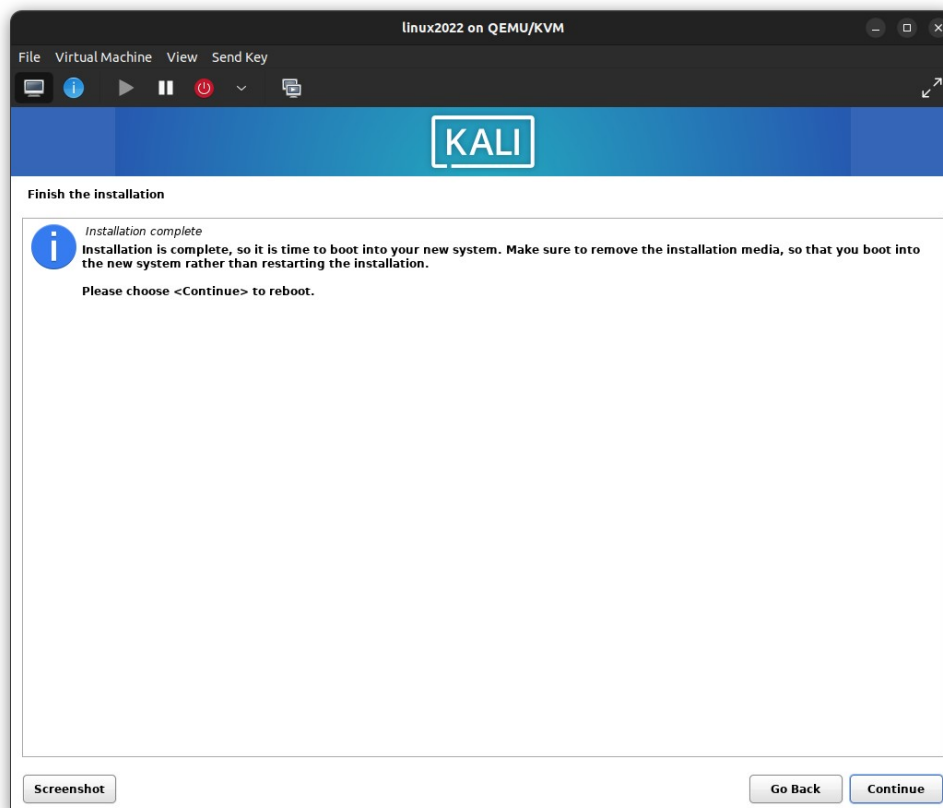
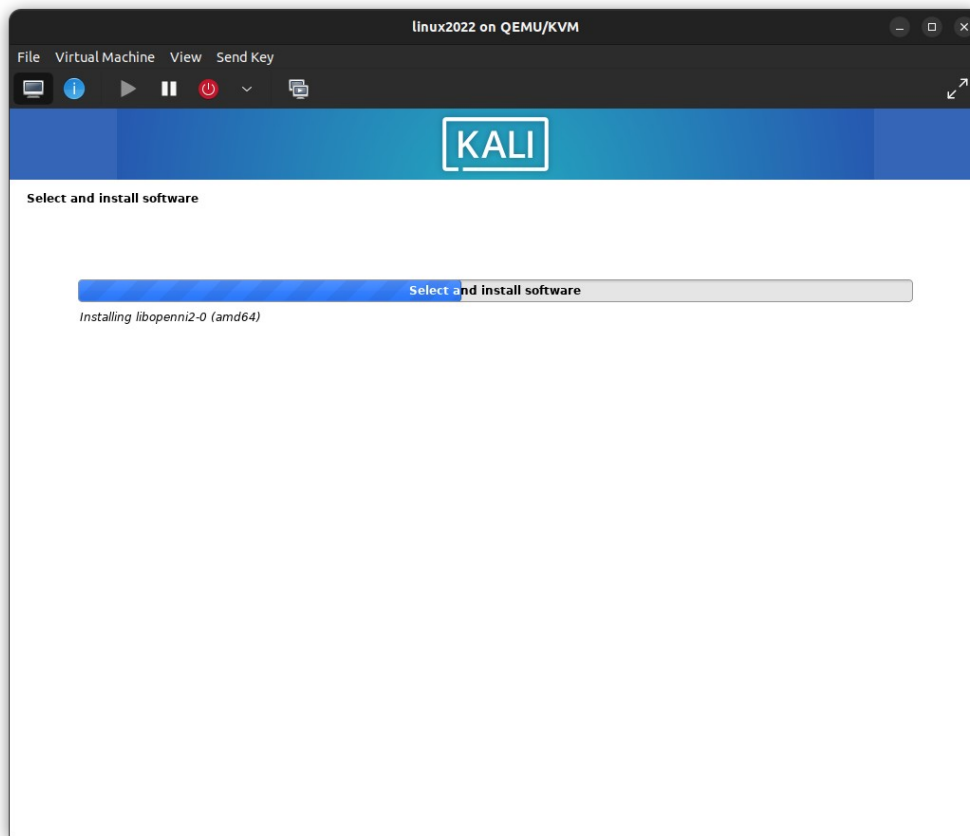
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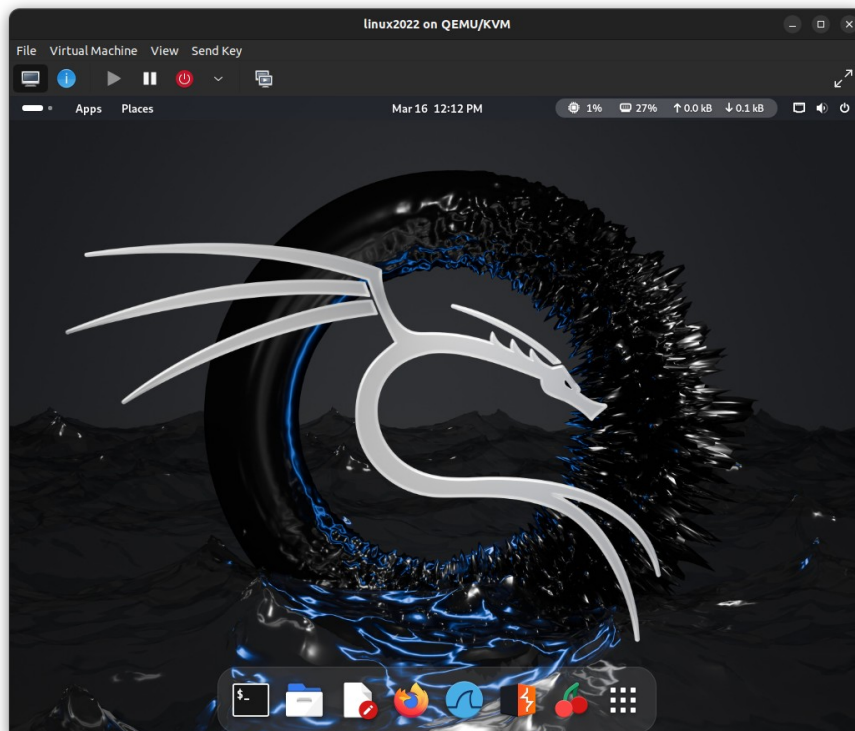
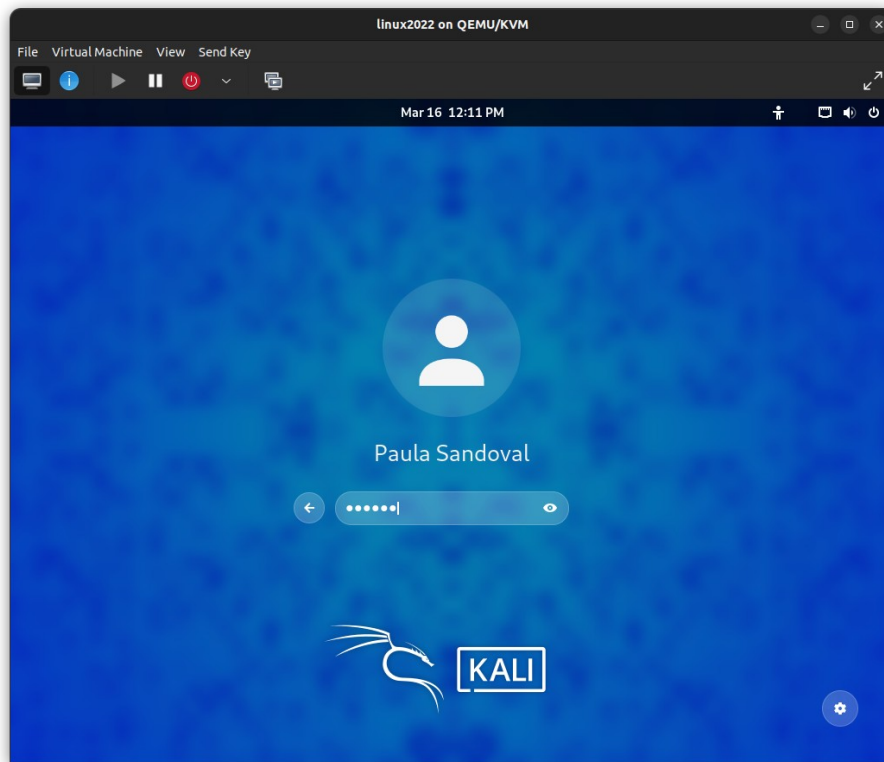
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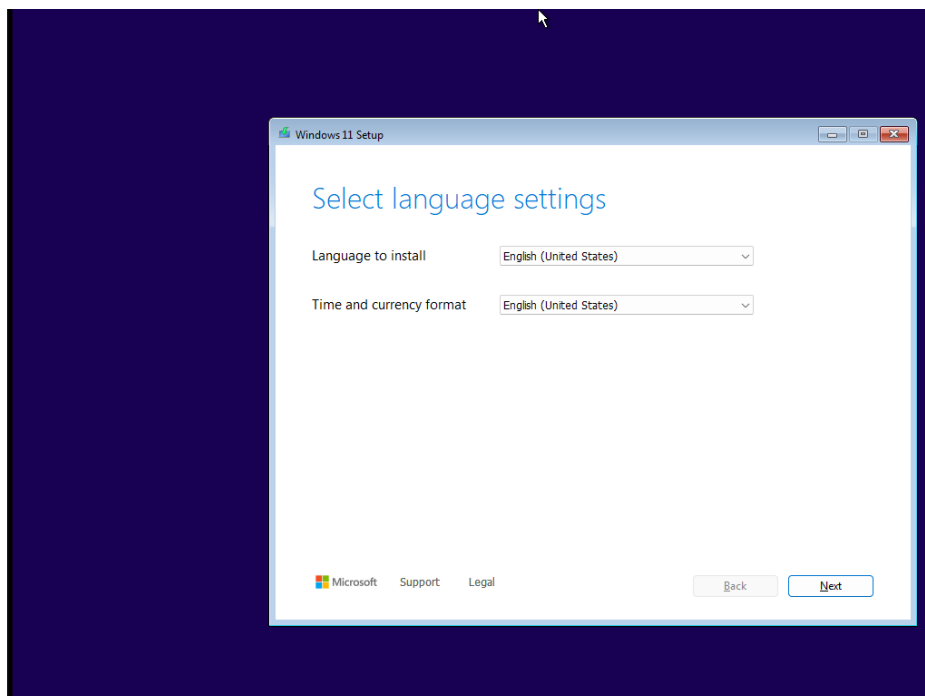
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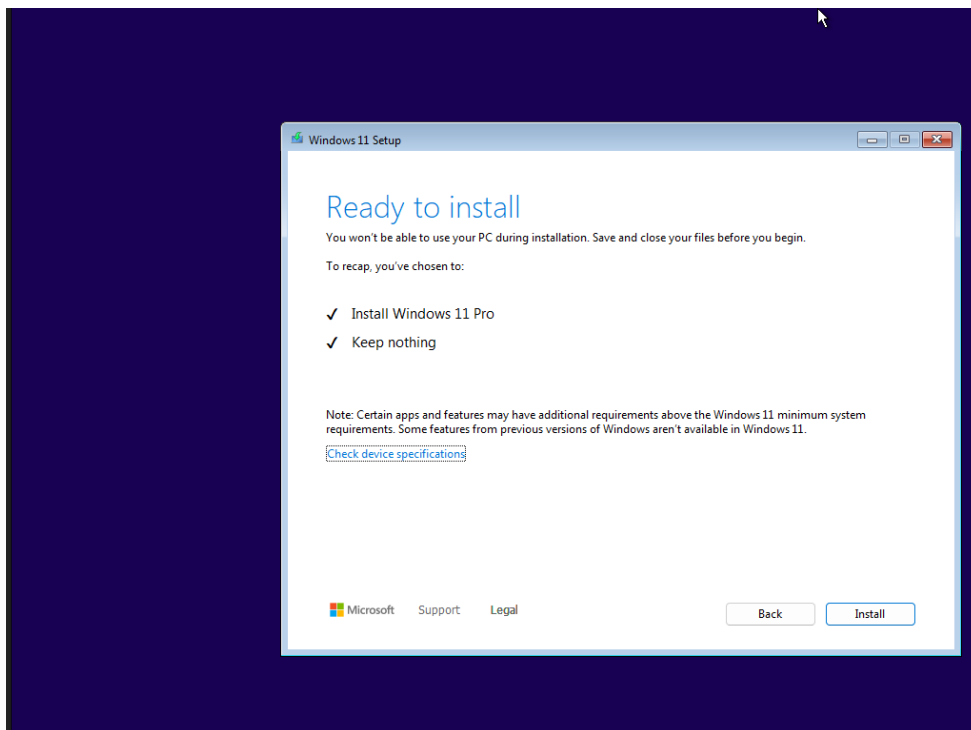
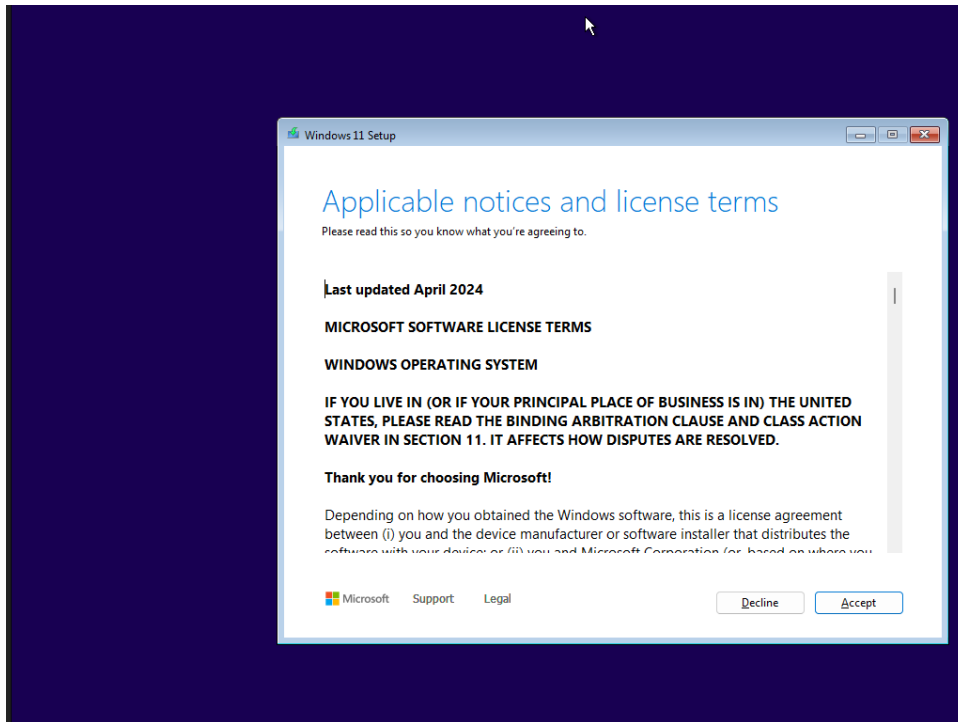
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### Windows 11

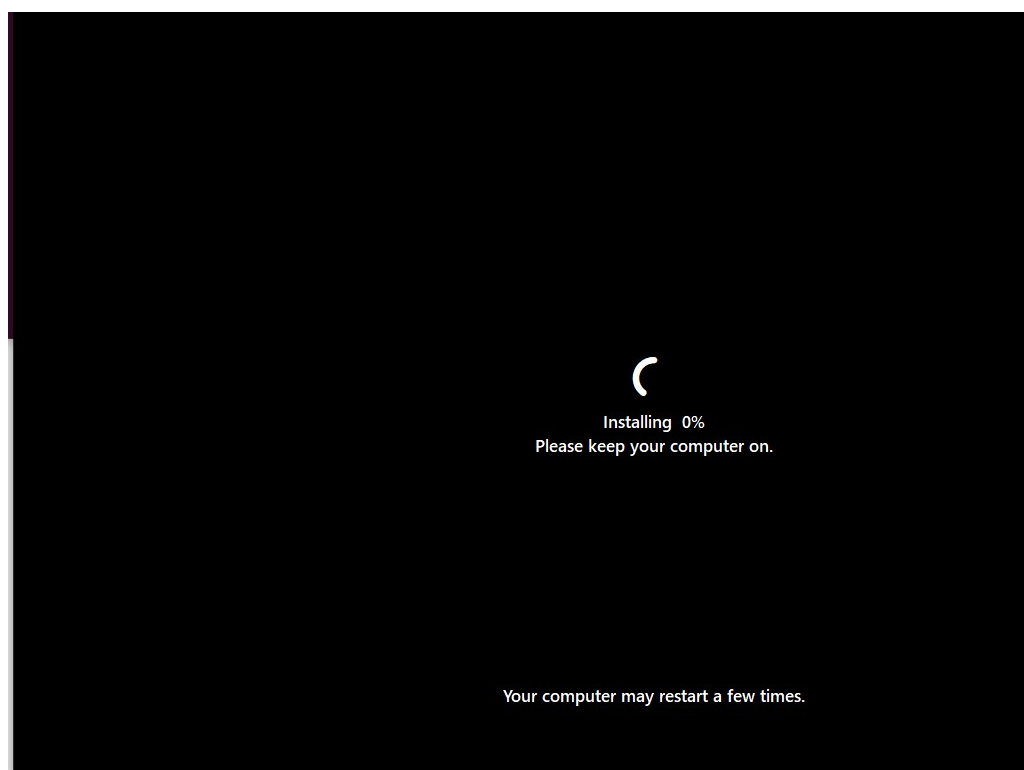
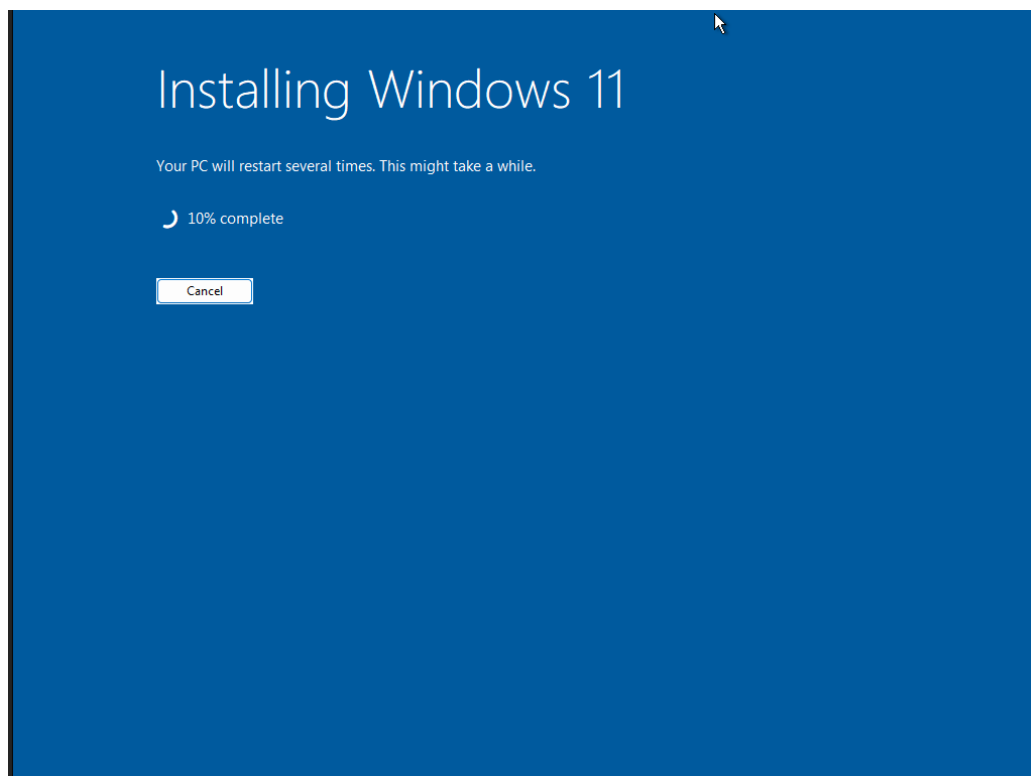


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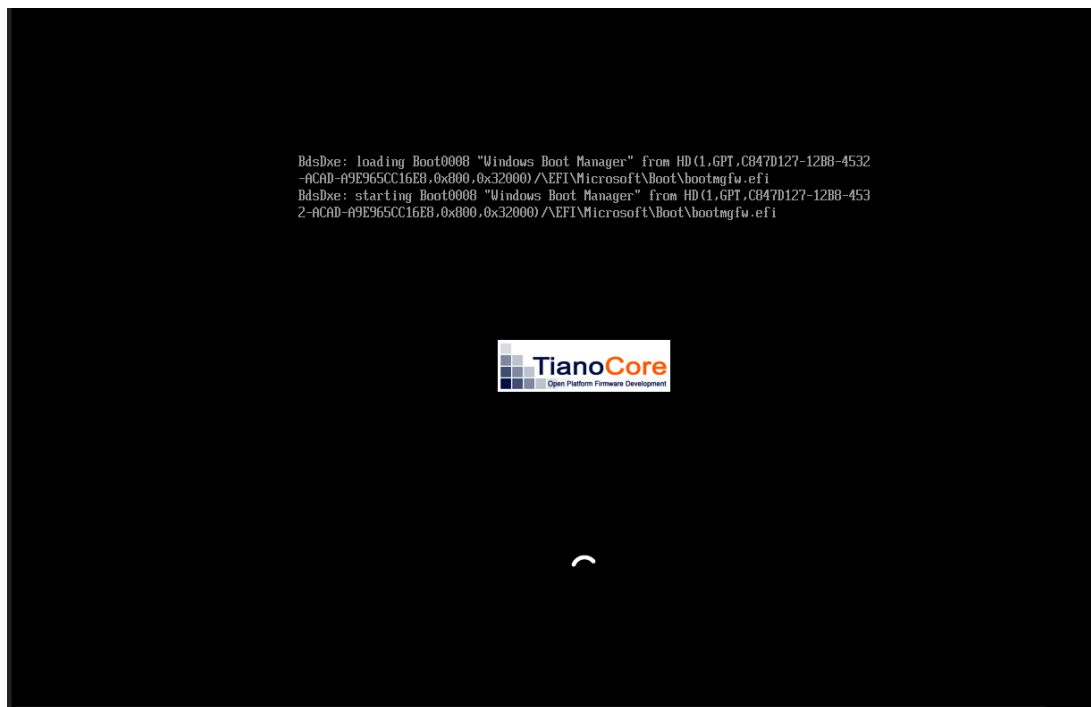
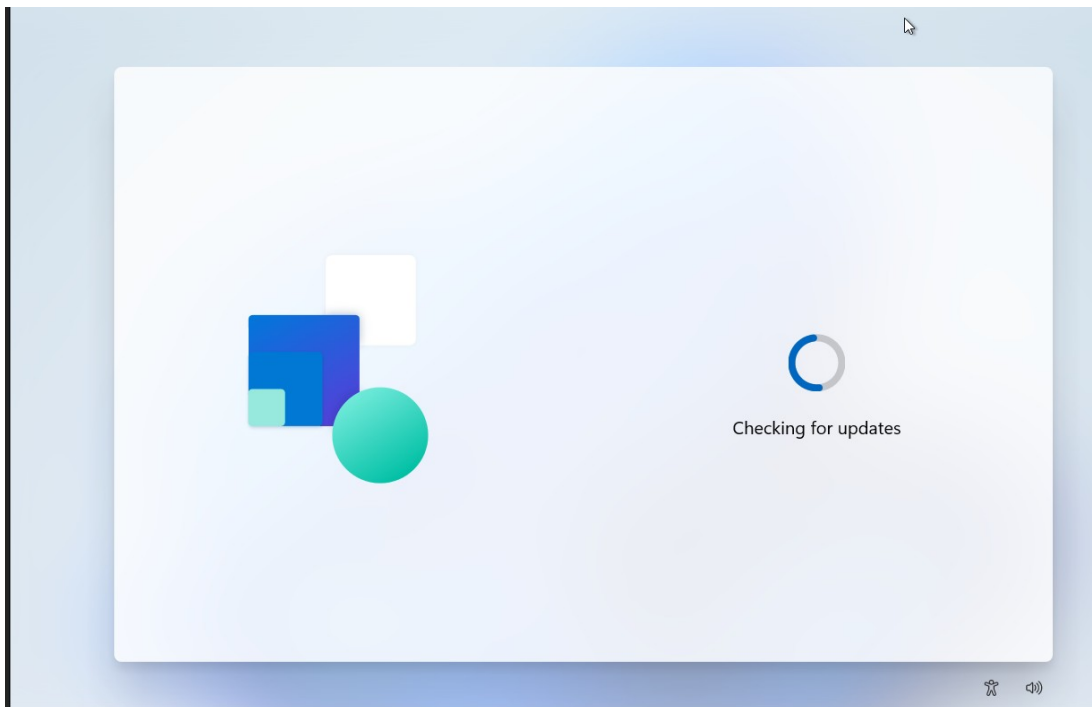
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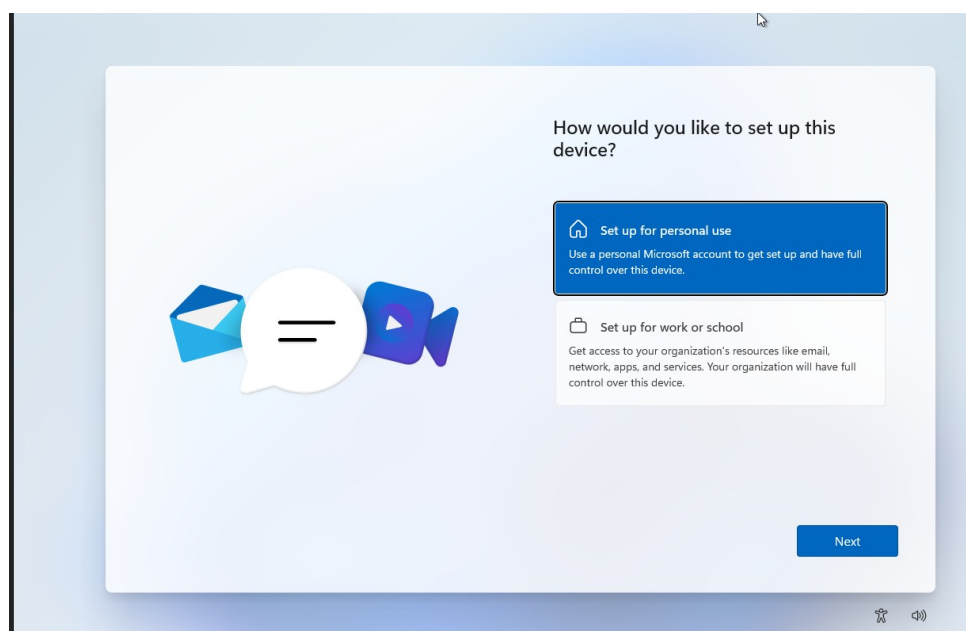
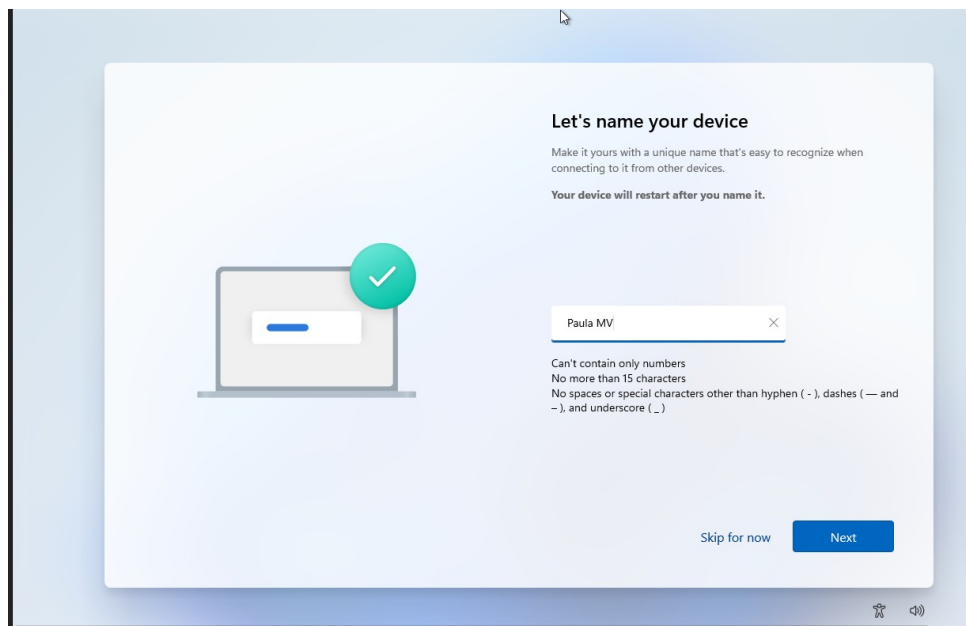
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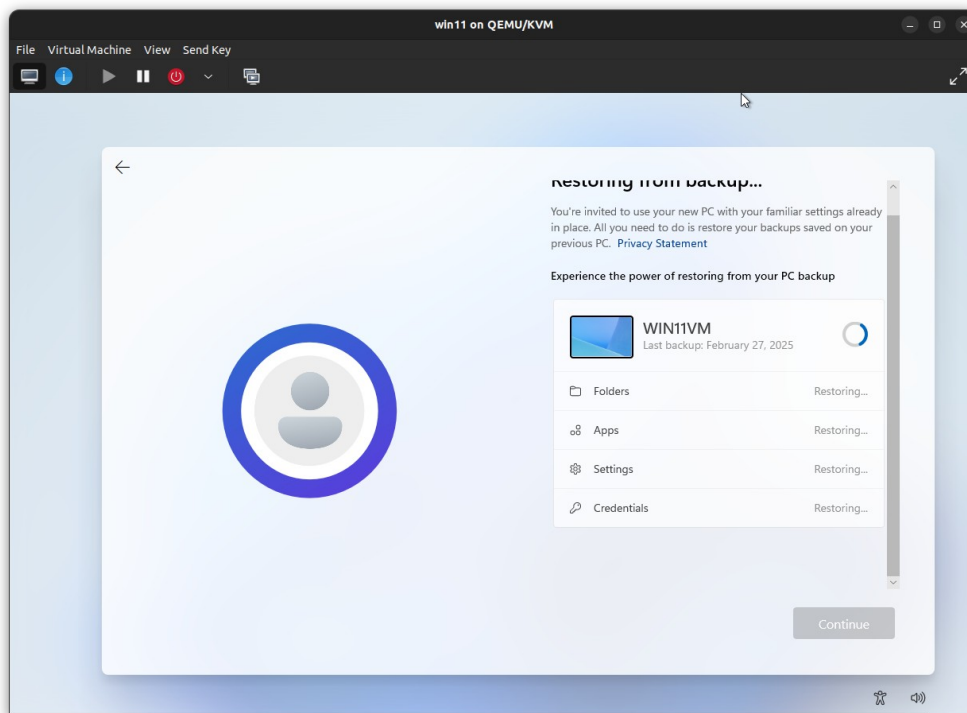
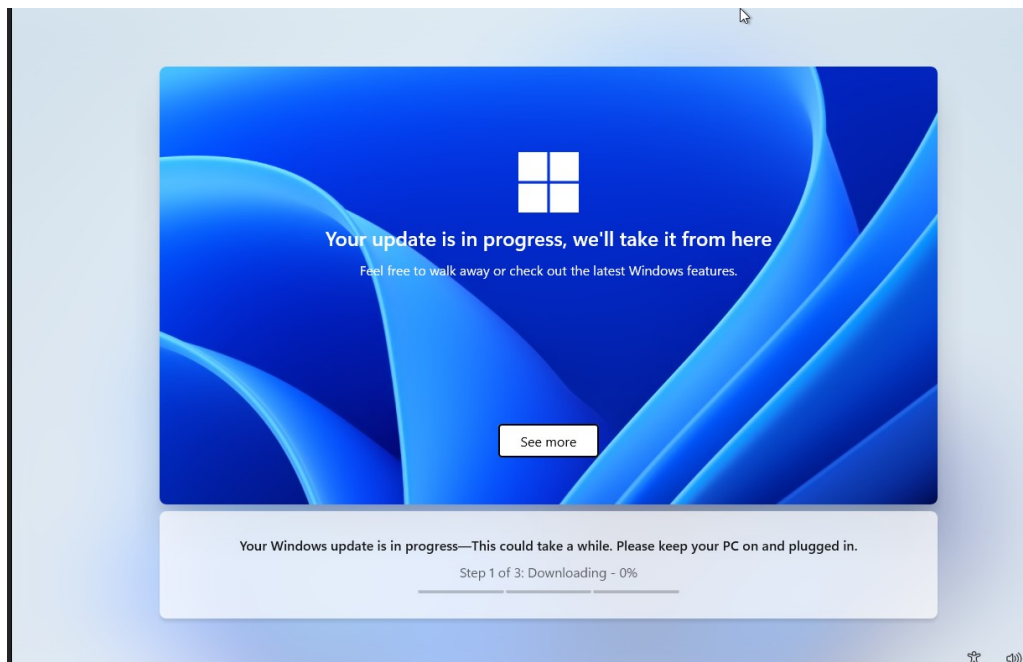
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