

Oracle Linux 8.4 as guest os on SUSE Linux Enterprise Server 15 SP3 (x86-64) KVM

SUSE ISV Engineering Team

Wu Chen



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Introduction

This document provides details for installing Oracle Linux as a guest os on SUSE Linux Enterprise Server 15 SP3 KVM. SUSE supports KVM full virtualization on AMD64/Intel 64 and Arm AArch64 hosts, and on IBM Z. Details are provided for Intel(x86-64) versions of both Oracle Linux and SUSE Linux Enterprise Server 15 SP3. If you encounter issues or have general questions, please post your query to suse-oracle@listx.novell.com.

Official Oracle product documentation is available at: <http://docs.oracle.com>.

Hardware Requirements

Requirement	Minimum
CPU	1-GHz CPU
Physical Memory	4 GB
Swap space	Approx. twice the size of RAM
Disk space in /tmp	4 GB
Disk space for software files	4 GB

Software Requirements

SUSE

- SUSE Linux Enterprise Server 15 SP3 GM (x86-64)
(<http://download.suse.de/install>)

Oracle

- Oracle Linux 8.4 (OracleLinux-R8-U4-x86_64-dvd.iso)
(<https://yum.oracle.com/oracle-linux-downloads.html>)

Testing machine information

Dell Laptop Precision 5530

CPU: 6 * Intel(R) Core(TM) i7-8850H CPU @ 2.60GHz

RAM: 32 GB

NIC: 2

Local HDD: 1TB + 512GB

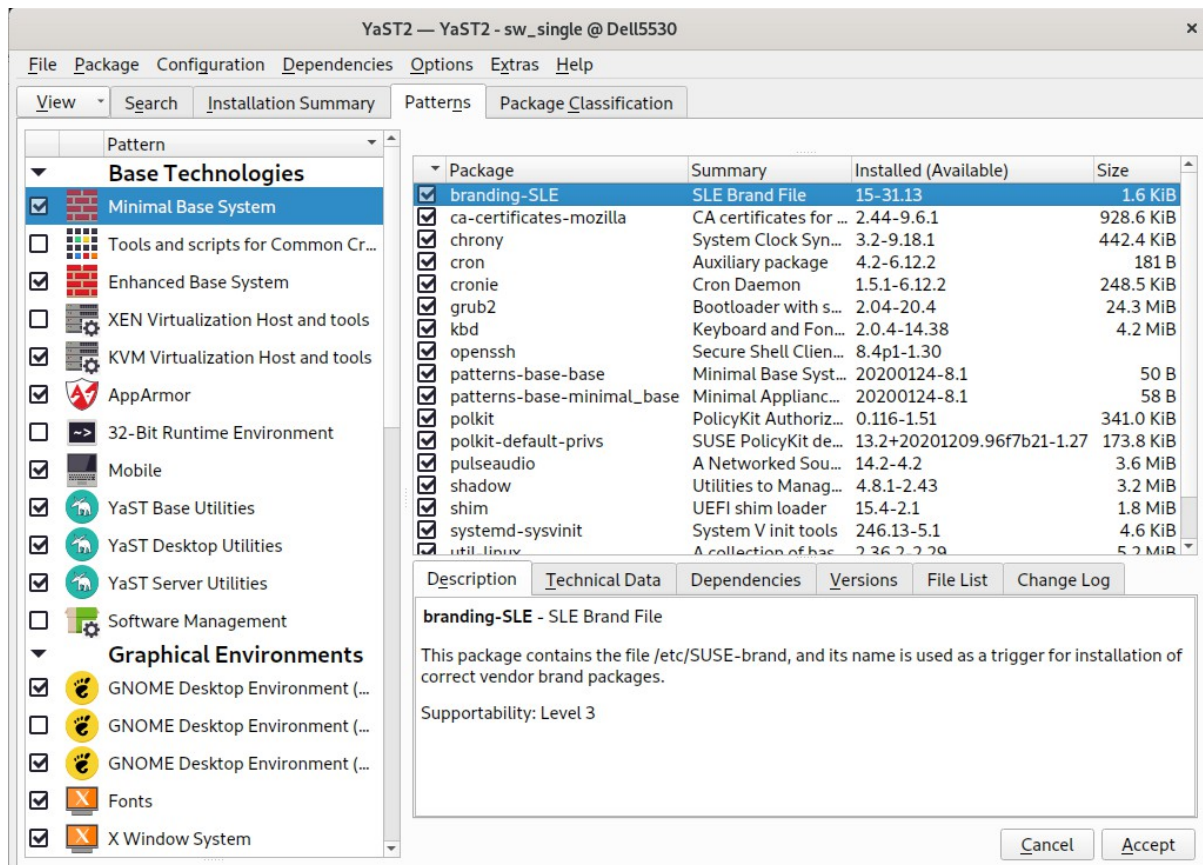
OS: SUSE Linux Enterprise Server 15 SP3 GM (x86-64) - Kernel version: 5.3.18-57-default

Setup

1. Installing SUSE Linux Enterprise Server 15 SP3 and KVM

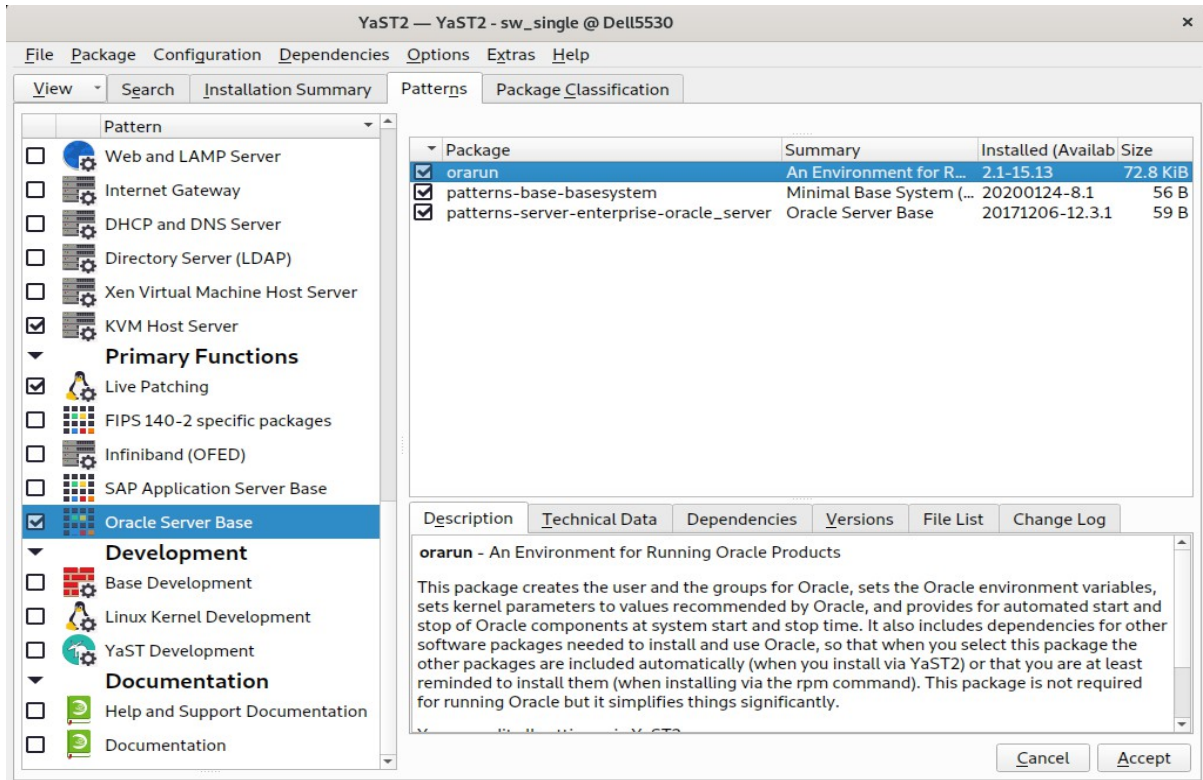
1-1. Install SUSE Linux Enterprise Server 15 SP3 on the testing machine. To do so, follow the instructions in the official SUSE Linux Enterprise Server documentation at: <https://www.suse.com/documentation/>.

Figure 1-1 Software Installed as shown below

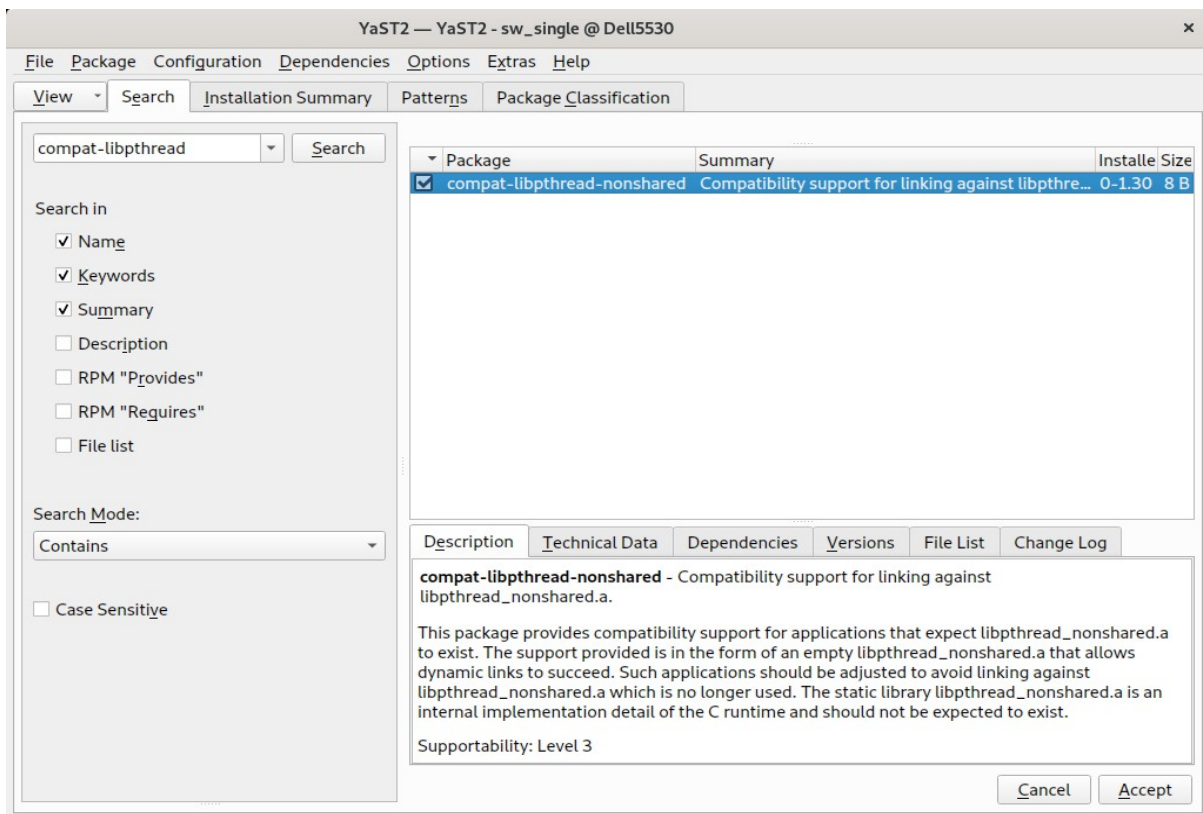


In Yast, select the patterns you need. Make sure you select the patterns and packages required to run Oracle products.

Figure 1-2 Software Installed as shown below



(Note: Please make sure that 'compat-libpthread-nonshared' is installed.)



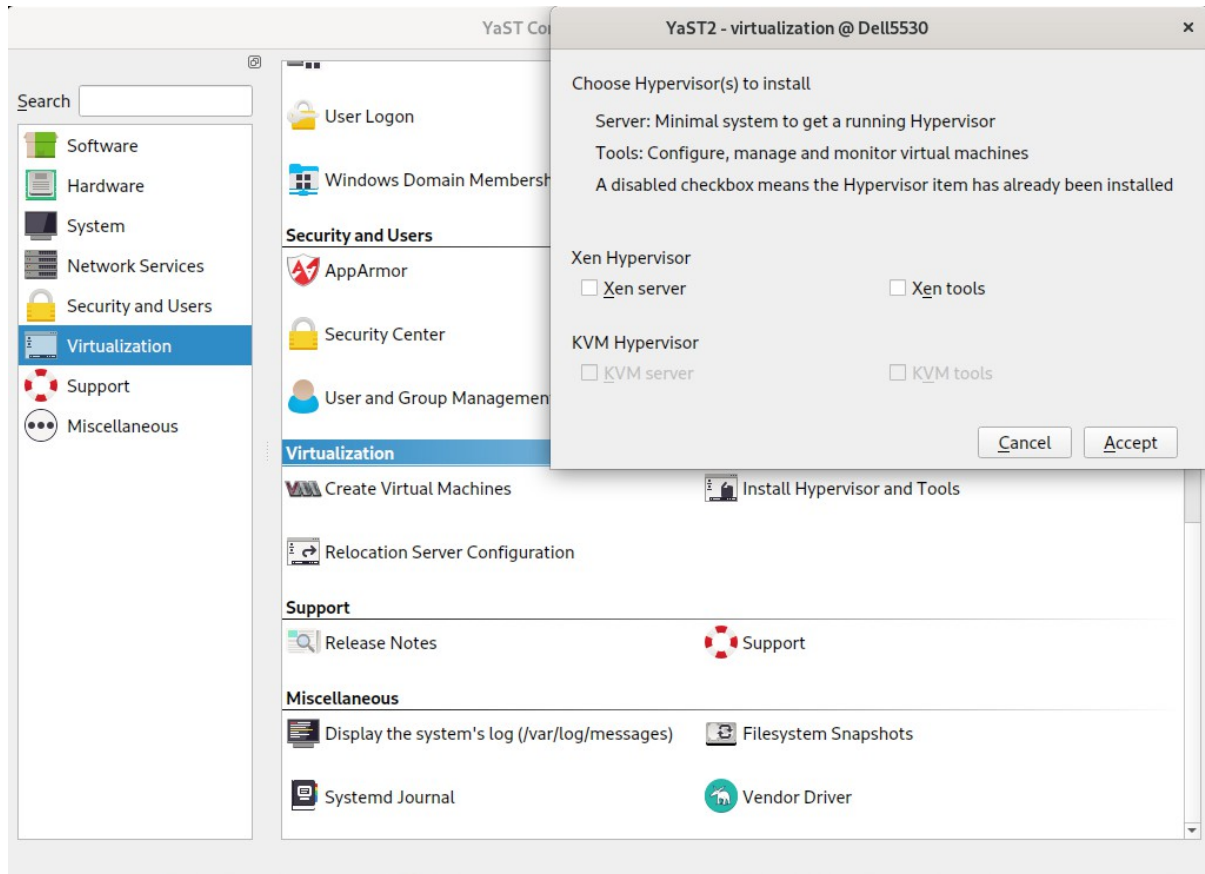
After the installation of SUSE Linux Enterprise Server, the following information about the operating system and the kernel version is displayed.

Figure 1-3 OS release information and kernel version

```
oracle@Dell5530:~> more /etc/os-release
NAME="SLES"
VERSION="15-SP3"
VERSION_ID="15.3"
PRETTY_NAME="SUSE Linux Enterprise Server 15 SP3"
ID="sles"
ID_LIKE="suse"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:15:sp3"
DOCUMENTATION_URL="https://documentation.suse.com/"
oracle@Dell5530:~> uname -a
Linux Dell5530 5.3.18-57-default #1 SMP Wed Apr 28 10:54:41 UTC 2021 (ba3c2e9/lp-5d9e8aa) x86_64 x86_64 x86_64 GNU/Linux
oracle@Dell5530:~> █
```

1-2. Installing KVM. Start YaST2 and choose **Virtualization** › **Install Hypervisor and Tools**. Select **KVM server** for a minimal installation of QEMU tools. Select **KVM tools** if a libvirt-based management stack is also desired. Confirm with **Accept**.

Figure 1-4 Installing KVM



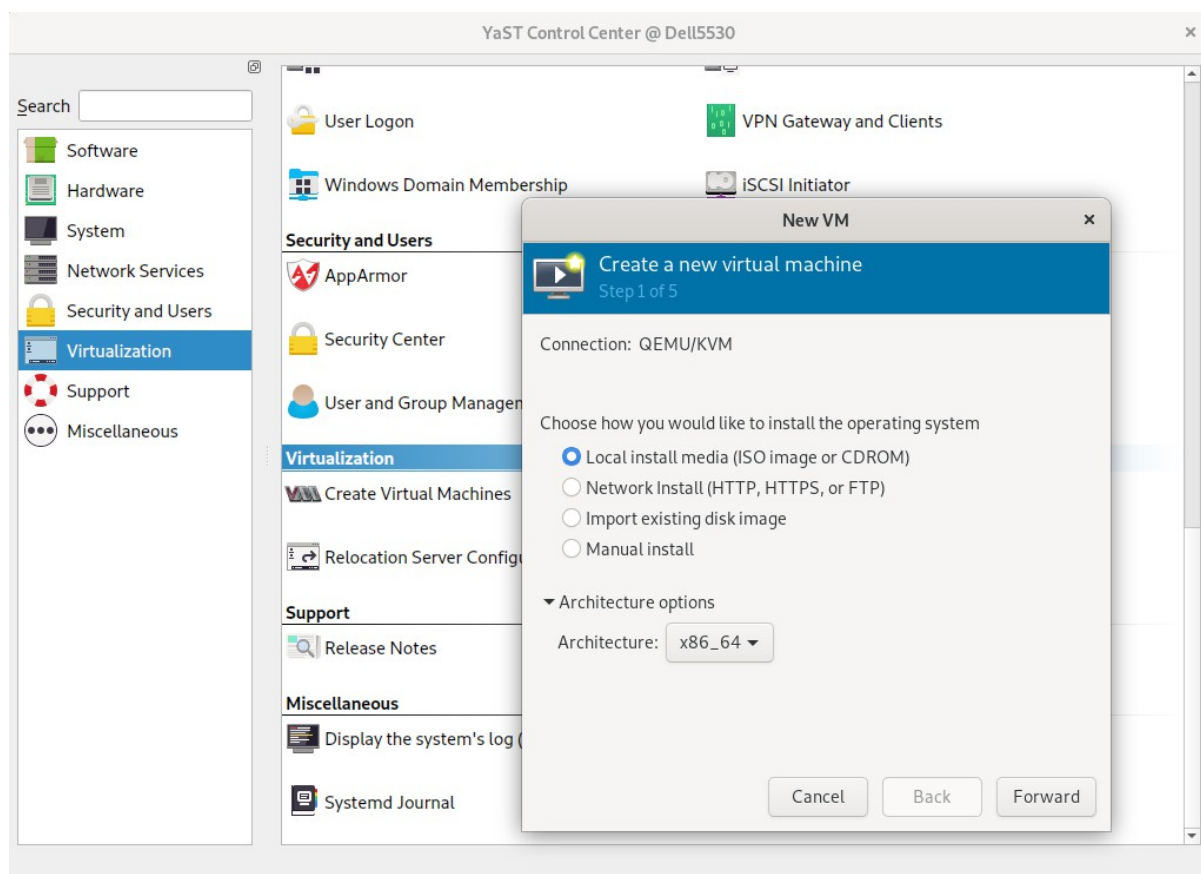
To enable normal networking for the VM Guest, using a network bridge is recommended. YaST offers to automatically configure a bridge on the VM Host Server. Agree to do so by choosing **Yes**, otherwise choose **No**. After the setup has been finished, you can start setting up VM Guests. Rebooting the VM Host Server is not required.

2. Guest Installation

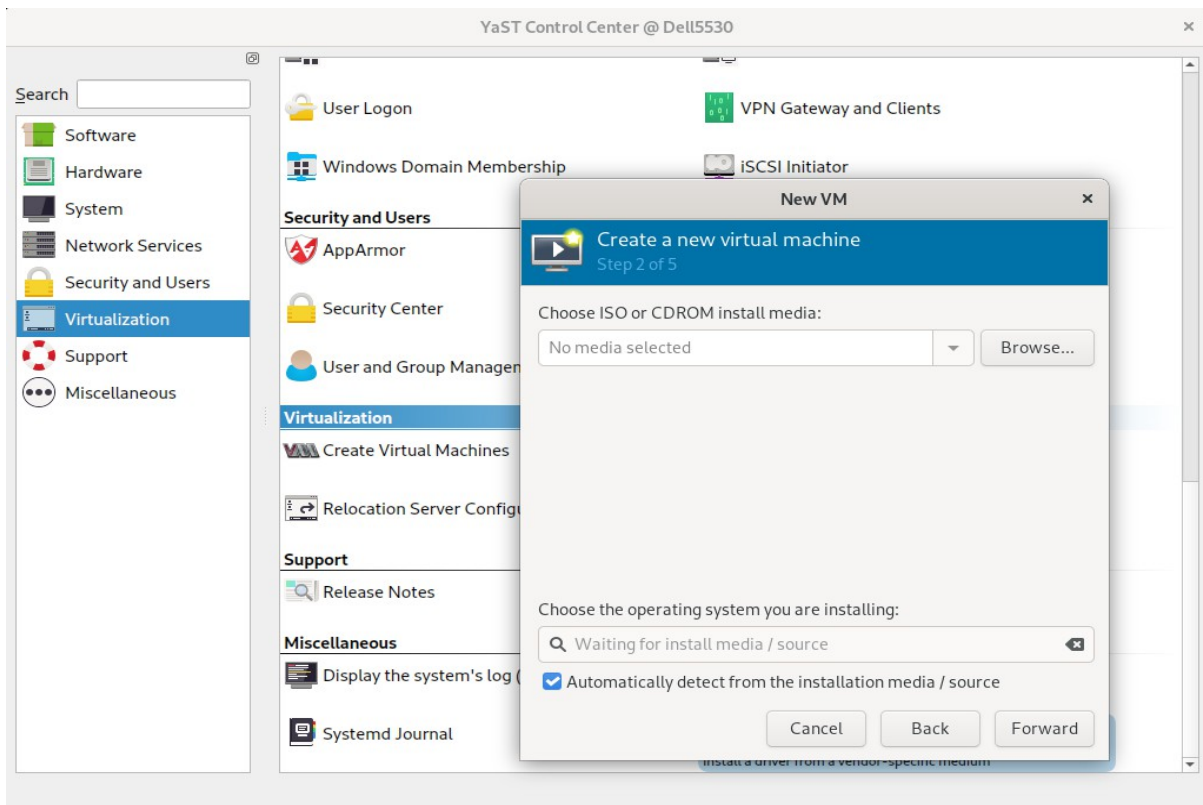
2-1. Download Oracle Linux 8.4(OracleLinux-R8-U4-x86_64-dvd.iso)
from:<https://yum.oracle.com/oracle-linux-downloads.html>.

2-2. Create a new virtual machine.

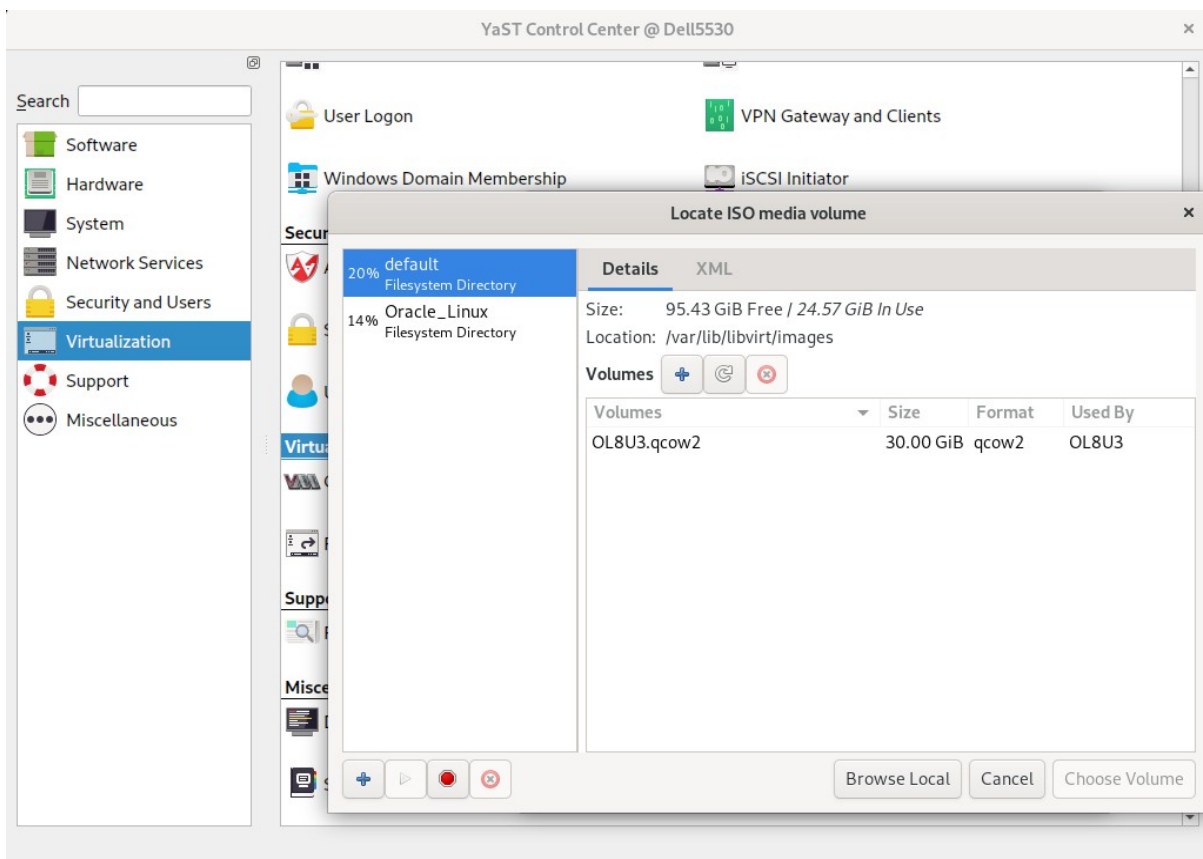
1). Start the **New VM** wizard from YAST then choose an installation source.



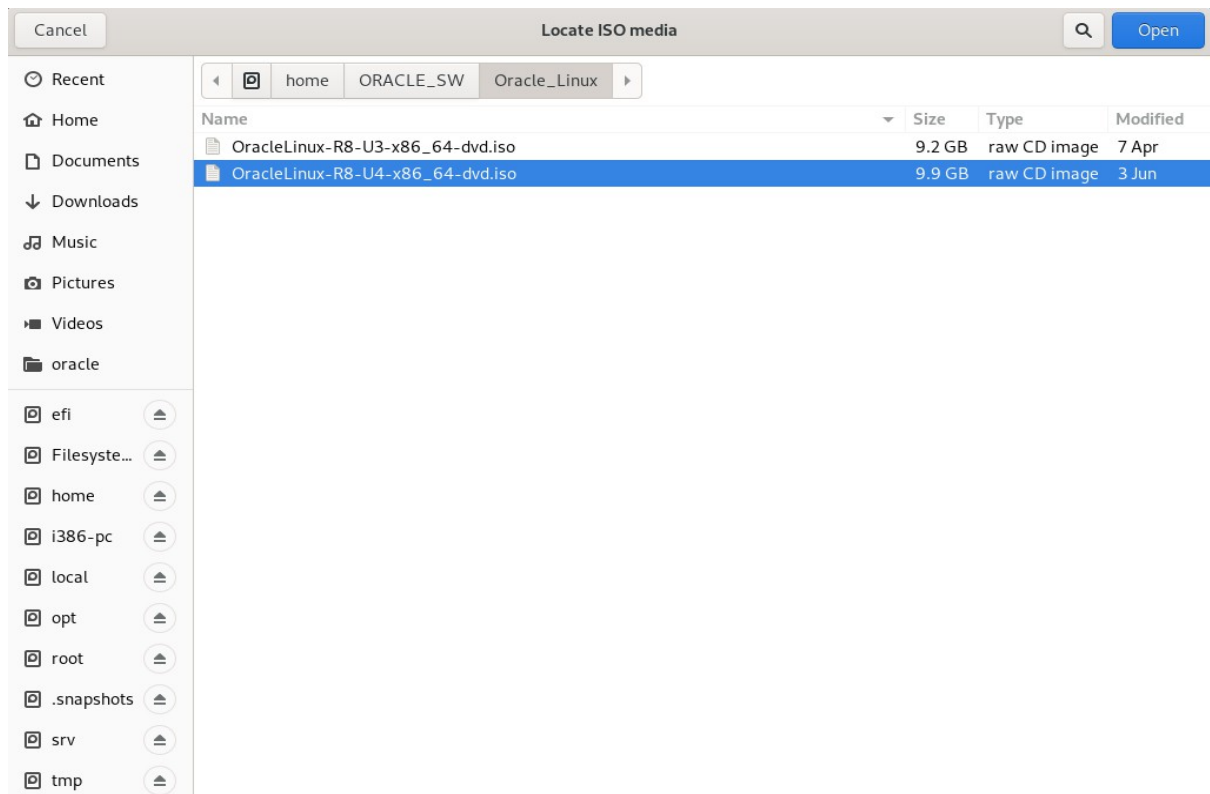
2). Choose Install media, click **Forward**.



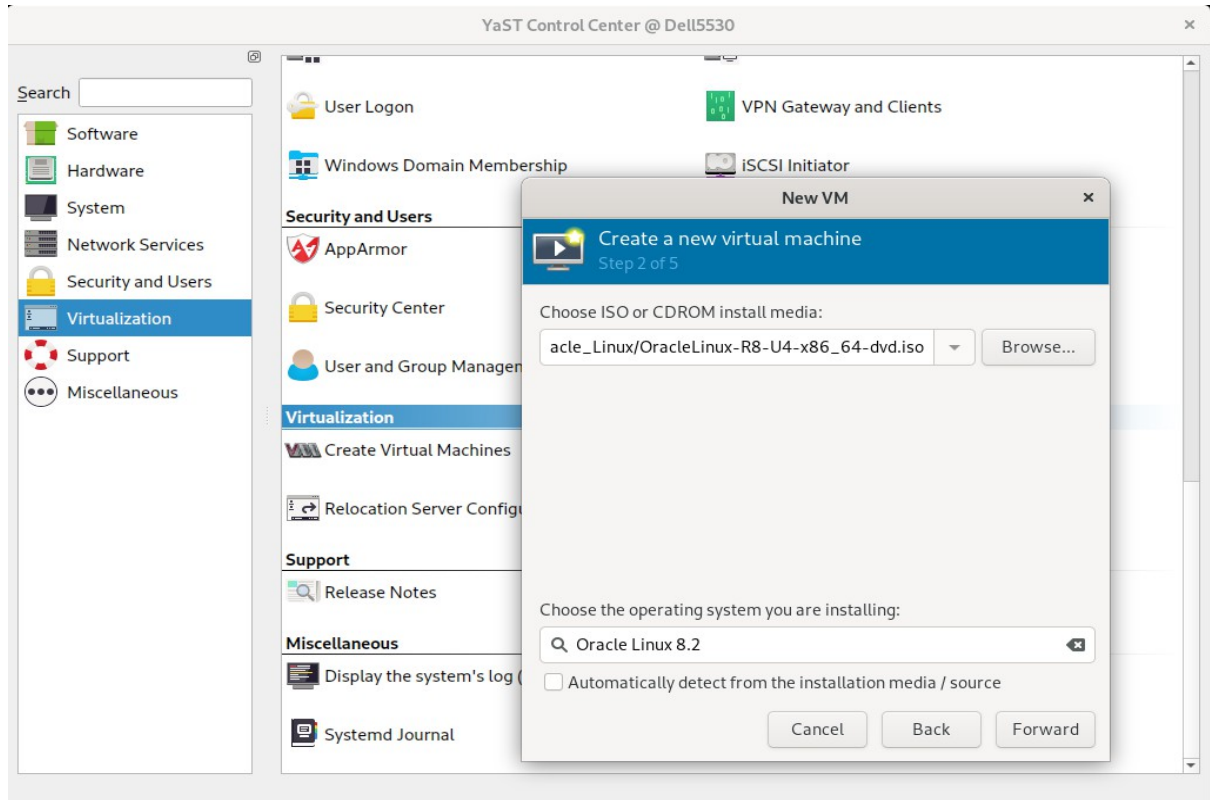
Select media volume, click **Browse Local**.



Specify the path on the VM Host Server to an ISO image containing the installation data.

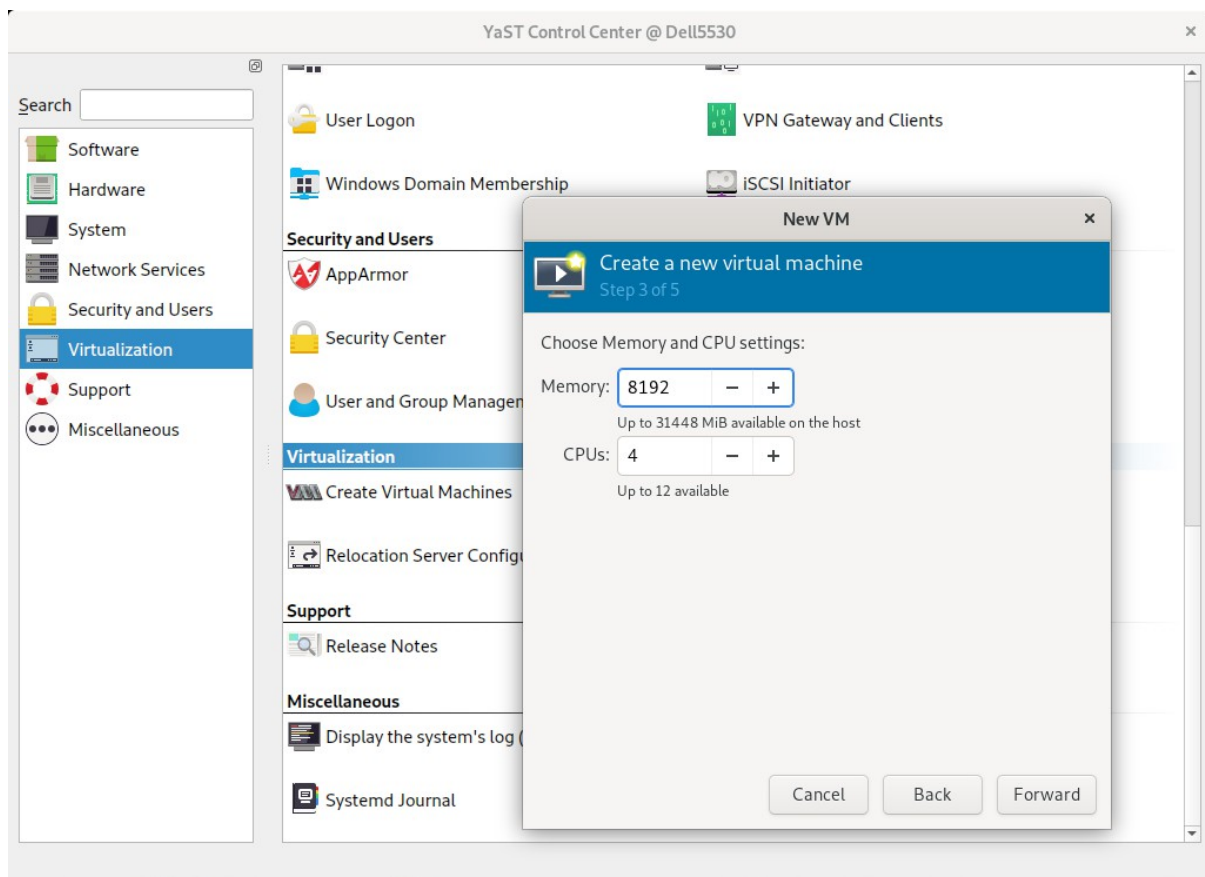


3). Choose install media and operating system you are installing.

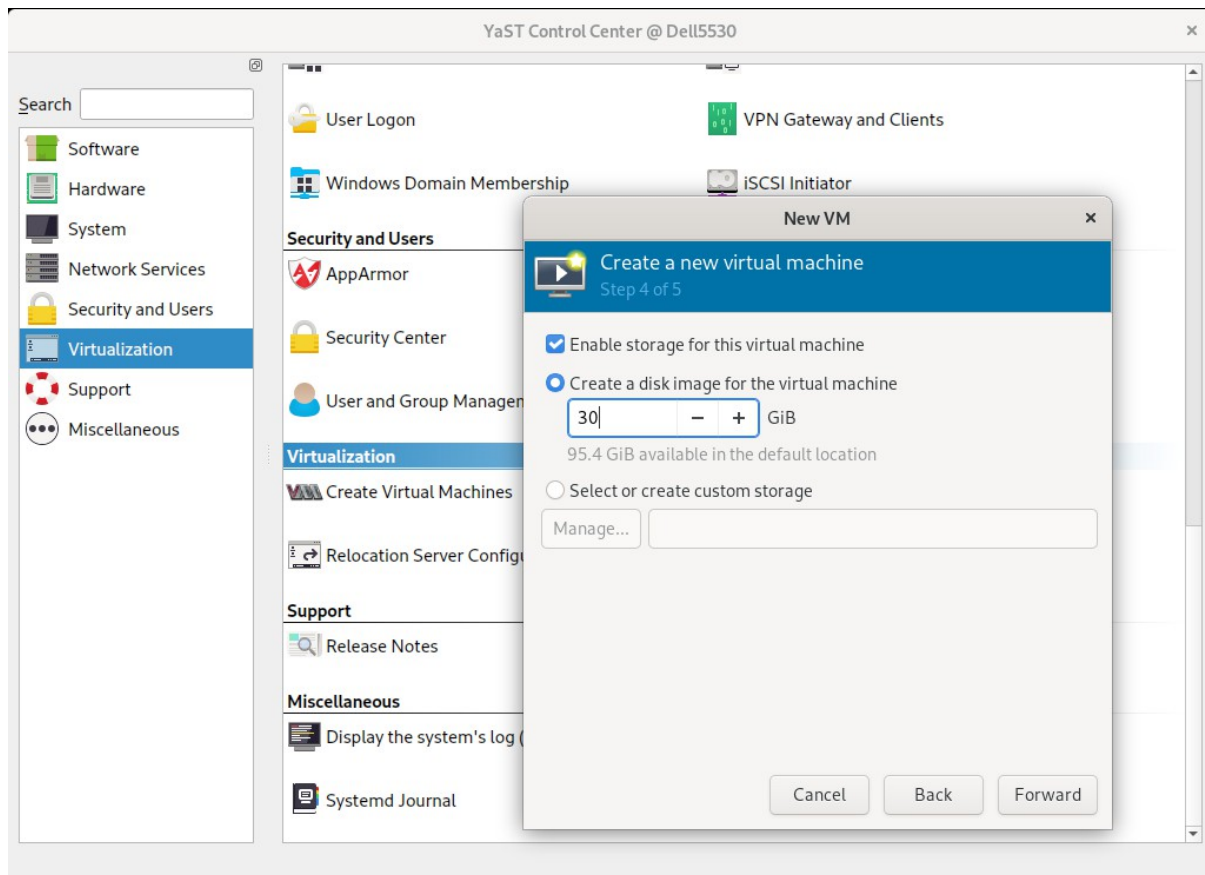


(Note: There is no Oracle Linux 8.4 in the options, select a distribution that is similar to the system you are installing.)

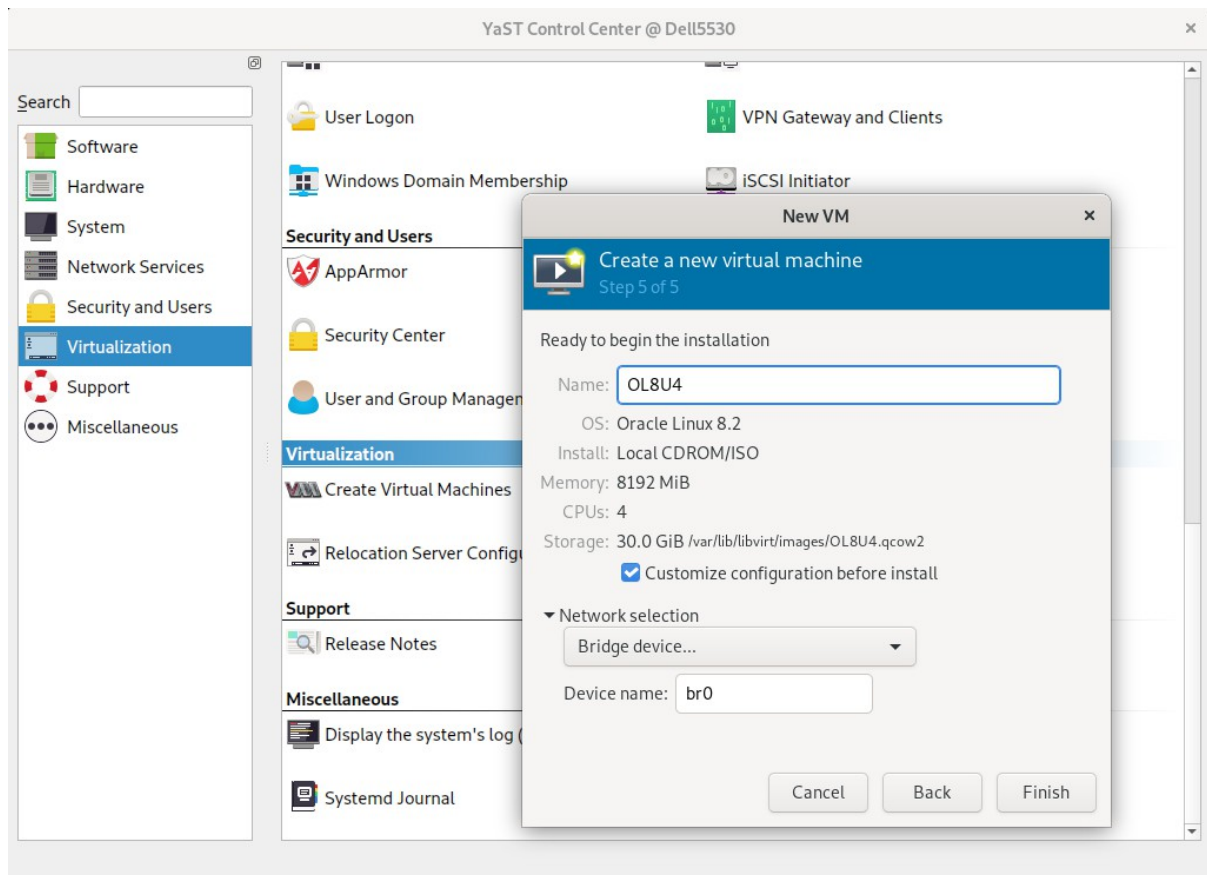
4). Choose Memory and CPU setting.



5). Create a disk image for the virtual machine.

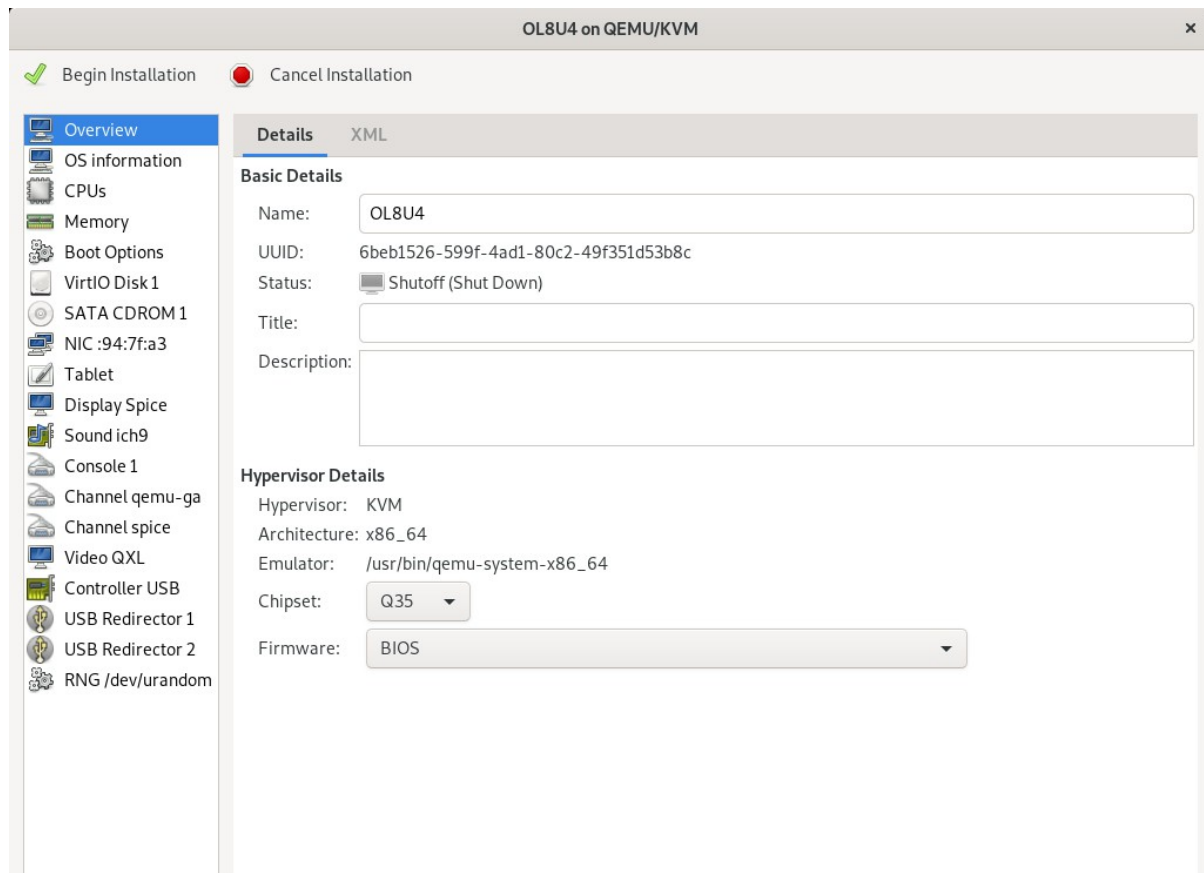


6). Ready to begin the installation.



Select **Customize configuration before install**, then click **Finish**.

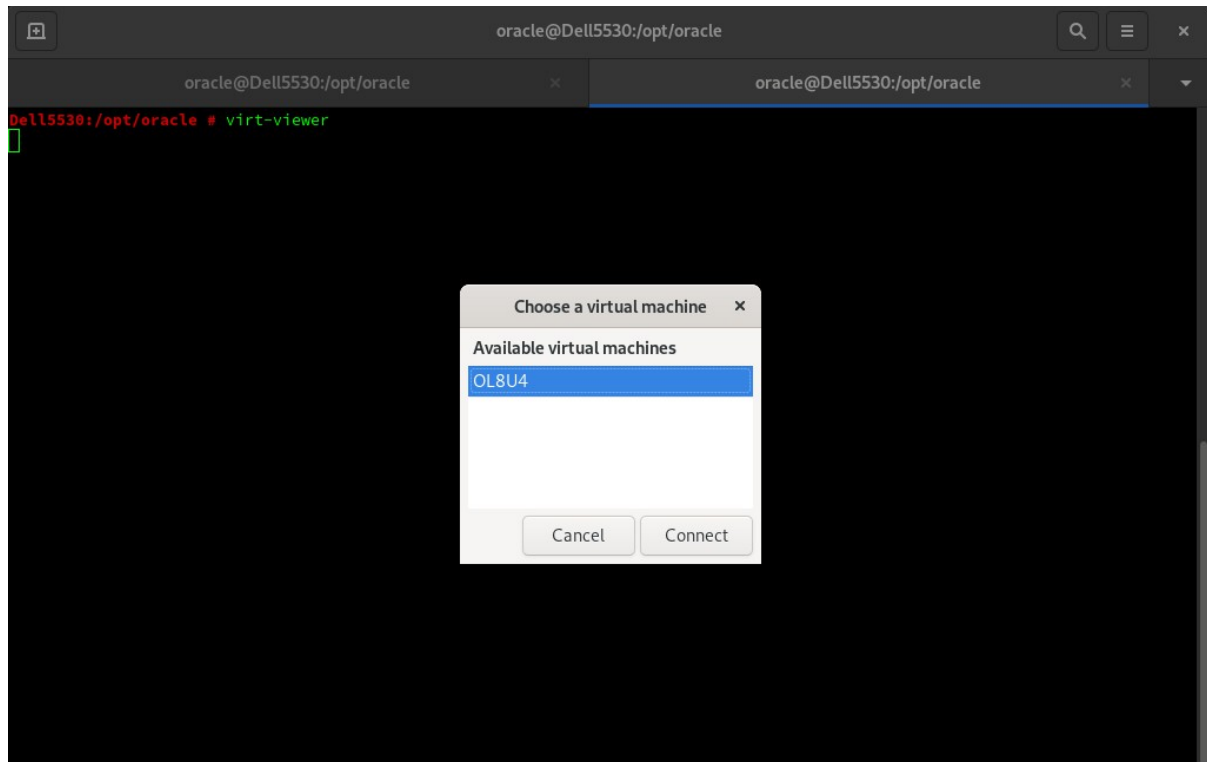
7). VM Guest configuration dialog as shown below.



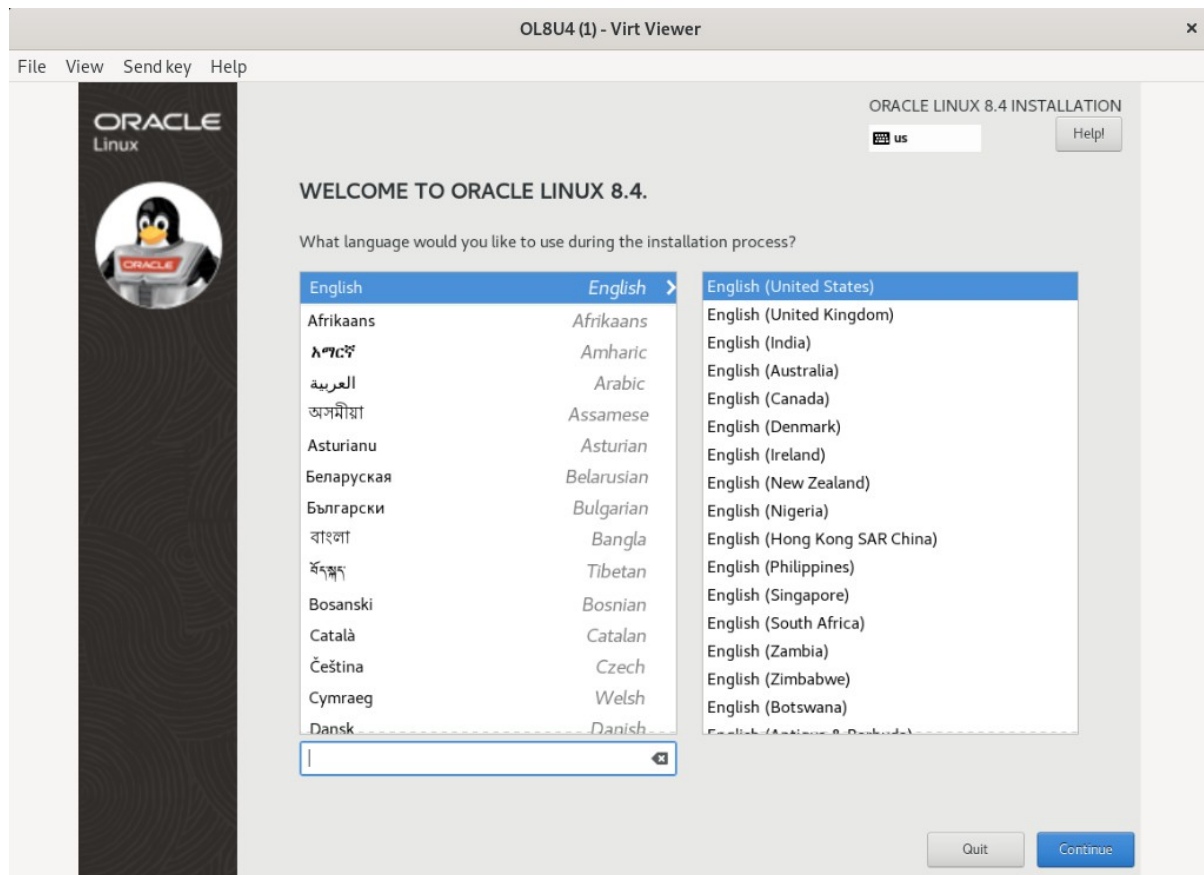
When you are done configuring, click **Begin Installation**.

2-3. Installing Oracle Linux.

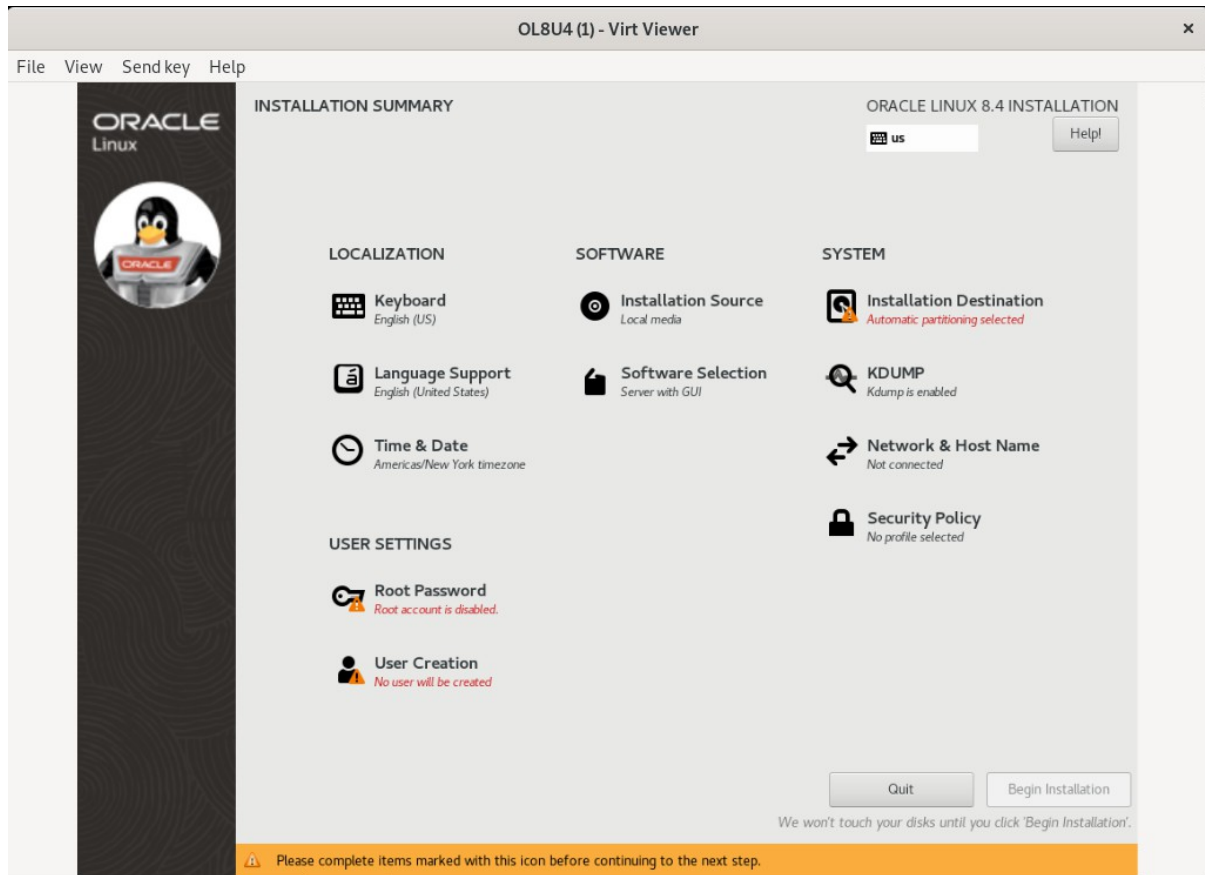
1). Opening a Graphical Console through virt-viewer.



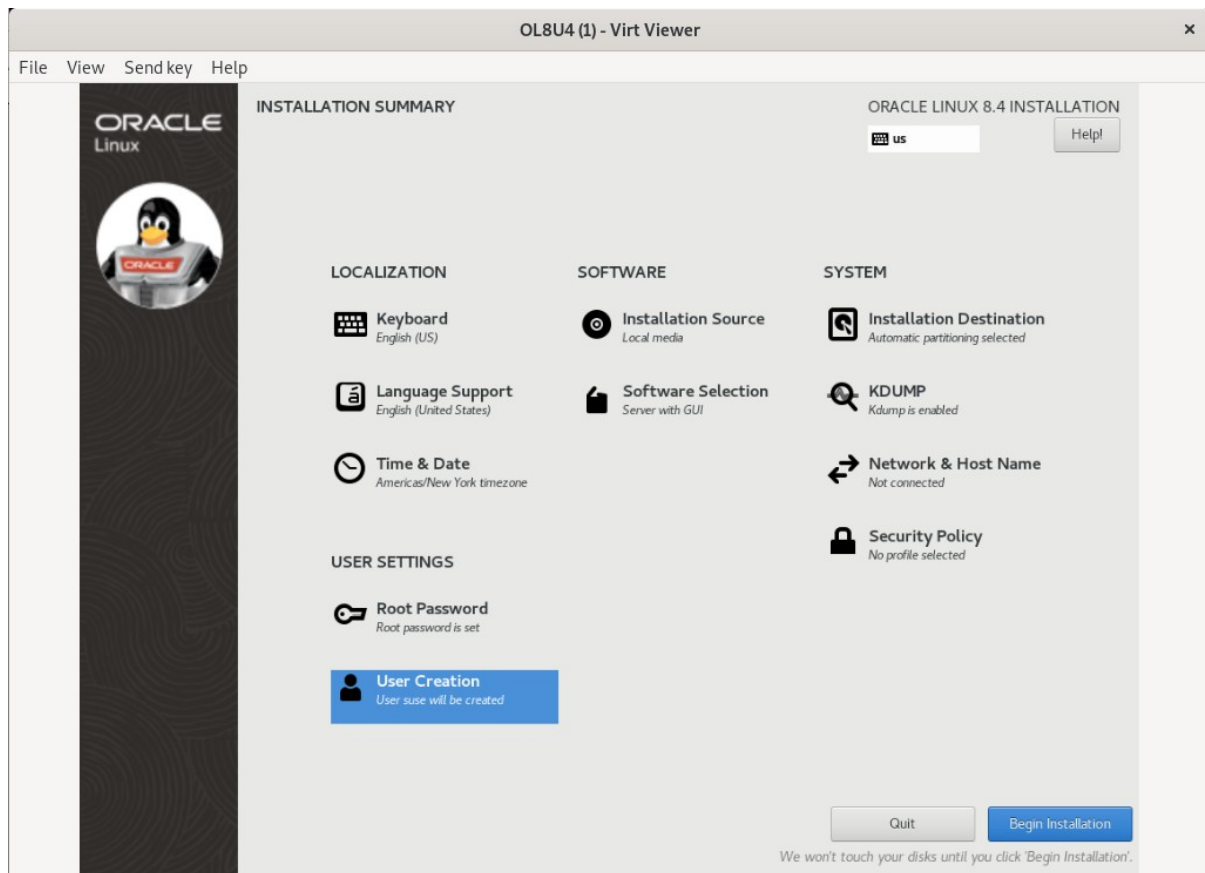
2). Installing Oracle Linux as guest os – Welcome Screen.



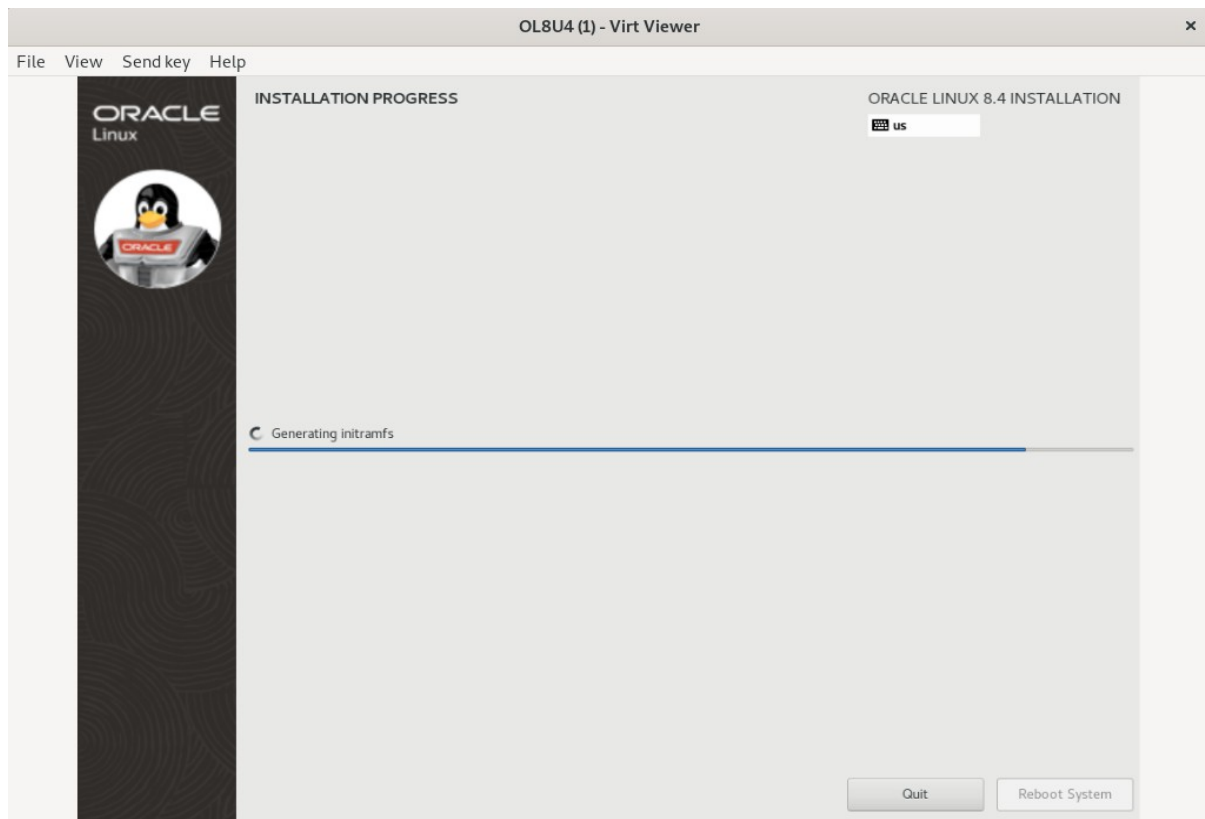
3). Installation summary.



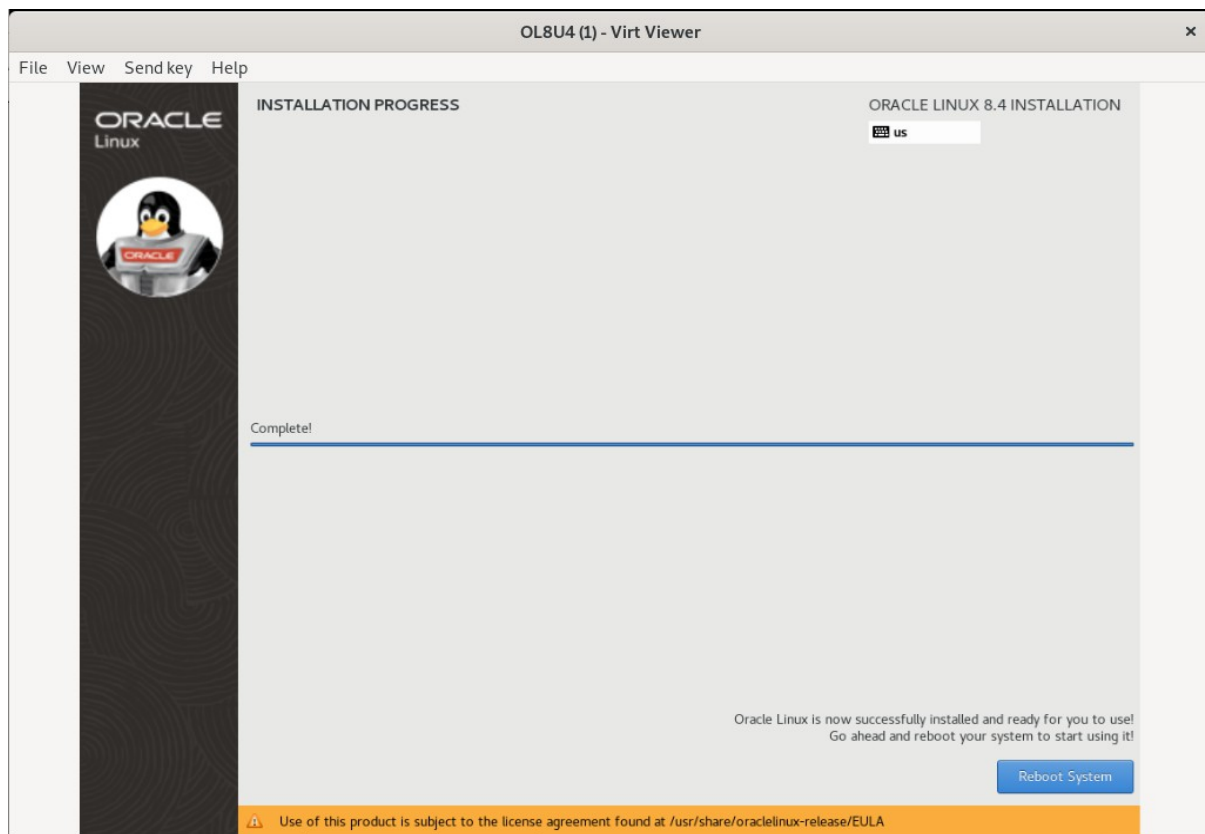
Selecting any of the menu options opens additional screens for configuring the options. As a minimum, you must visit the options with a warning icon next to them. However, going through all the options is recommended so that you can see the various configuration settings that are available for the installation. You can change the installation configuration options as much as you like. The installation does not begin until you click **Begin Installation**. As you visit the configuration options, pay attention to any warning messages that are displayed at the bottom of the screen



4). Installation Progress

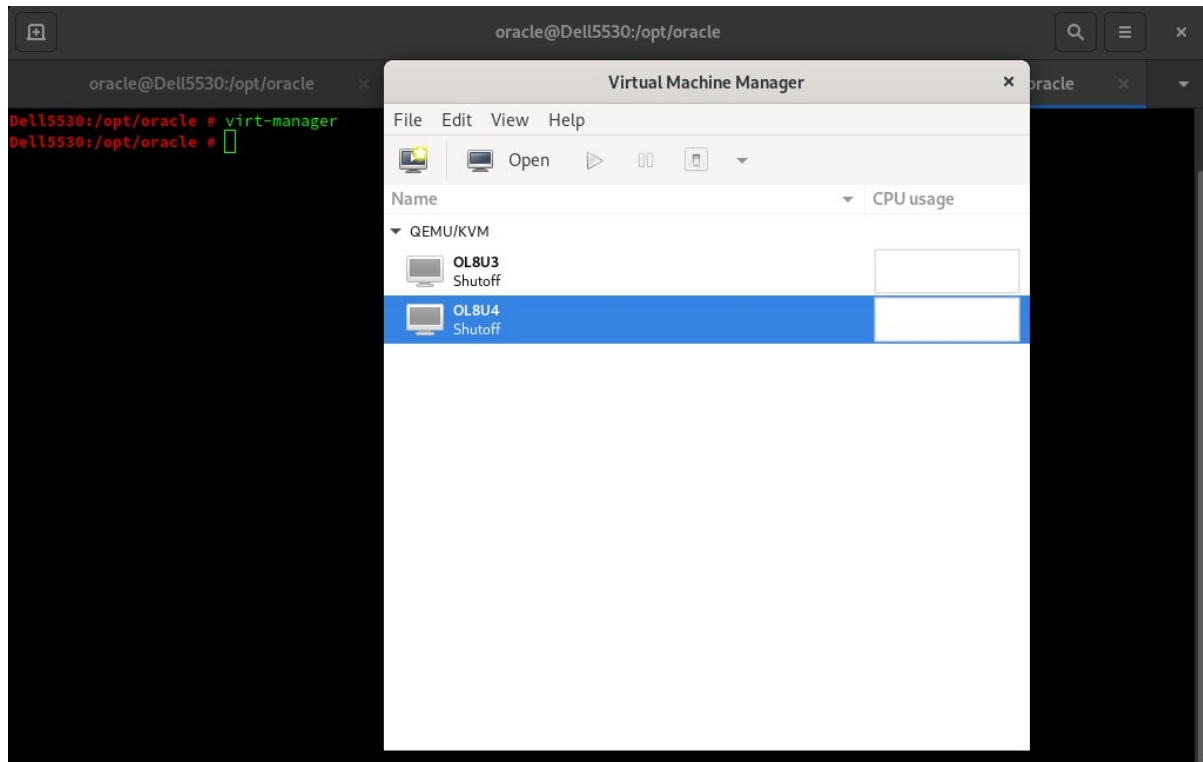


Wait for the installation to complete and click **Reboot System**.

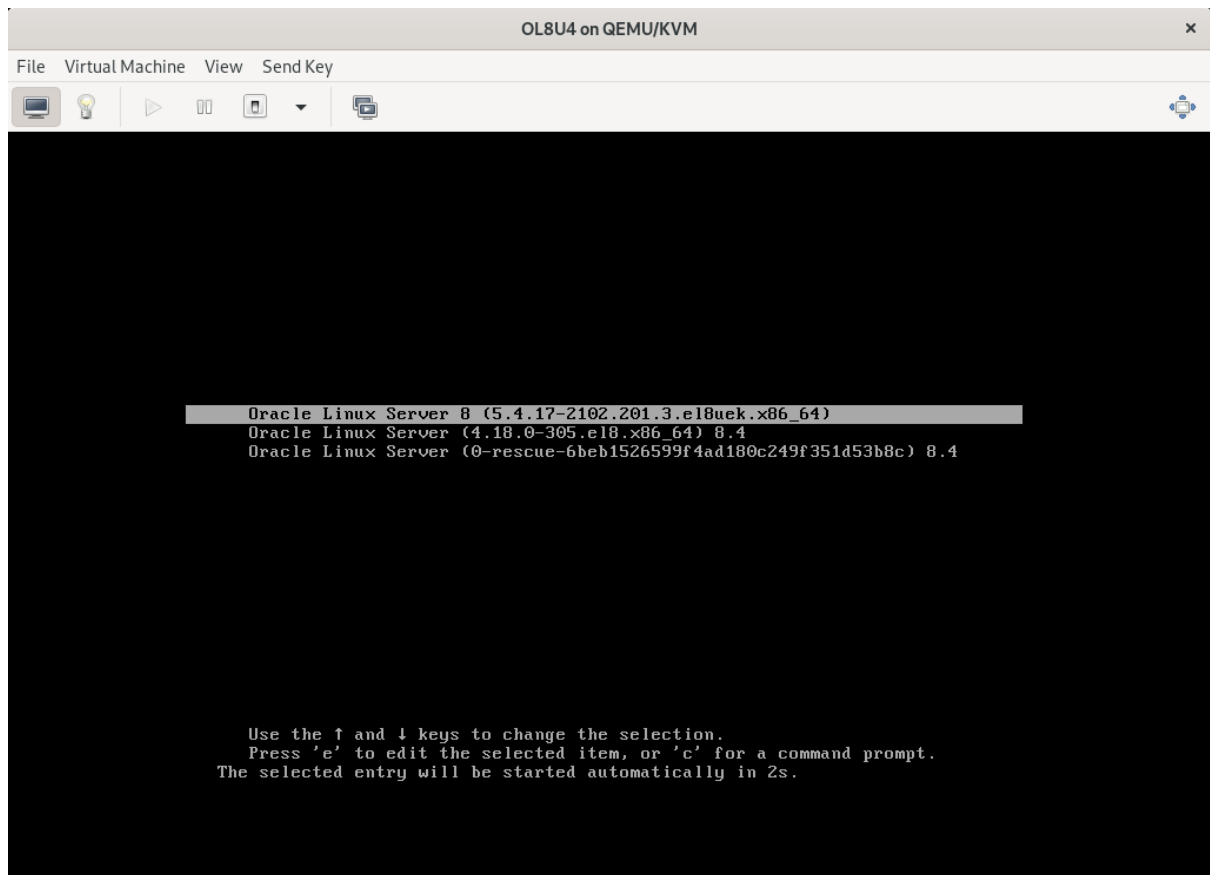


2-4. Connect to the virtual machine and log in to Guest OS - Oracle Linux 8.4

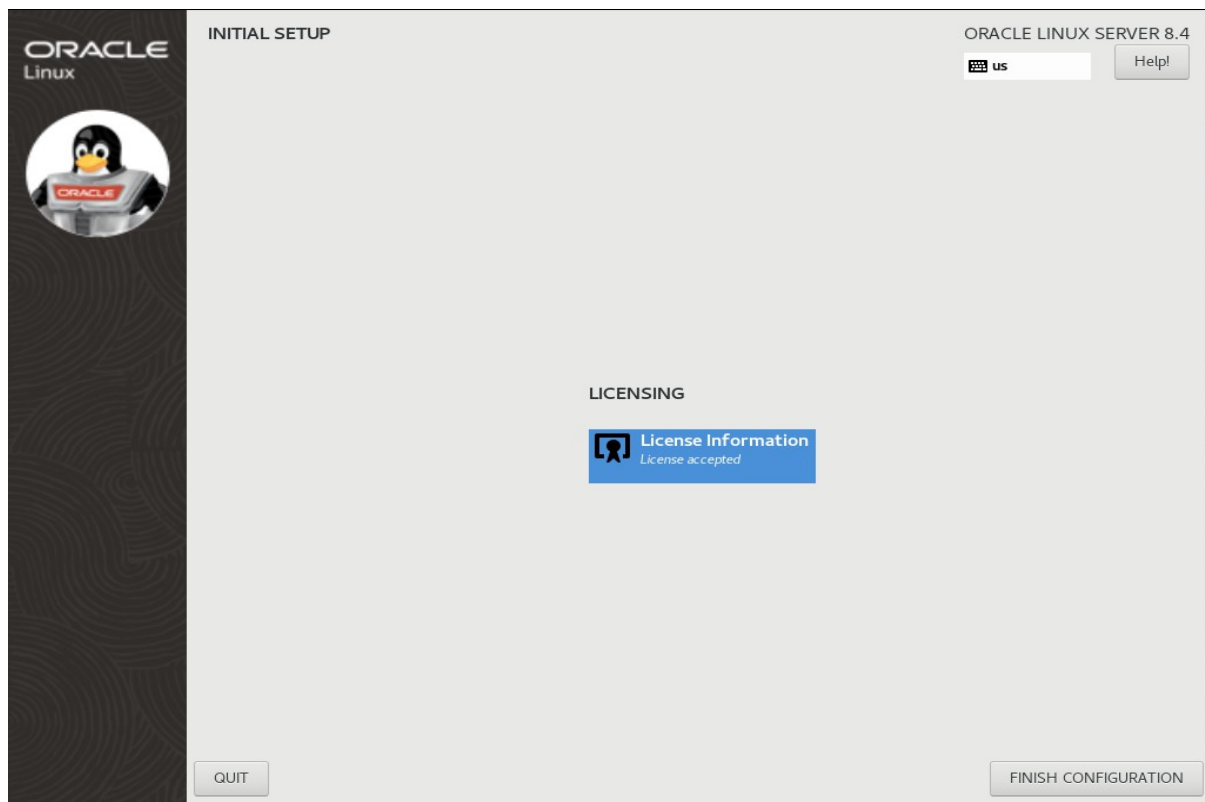
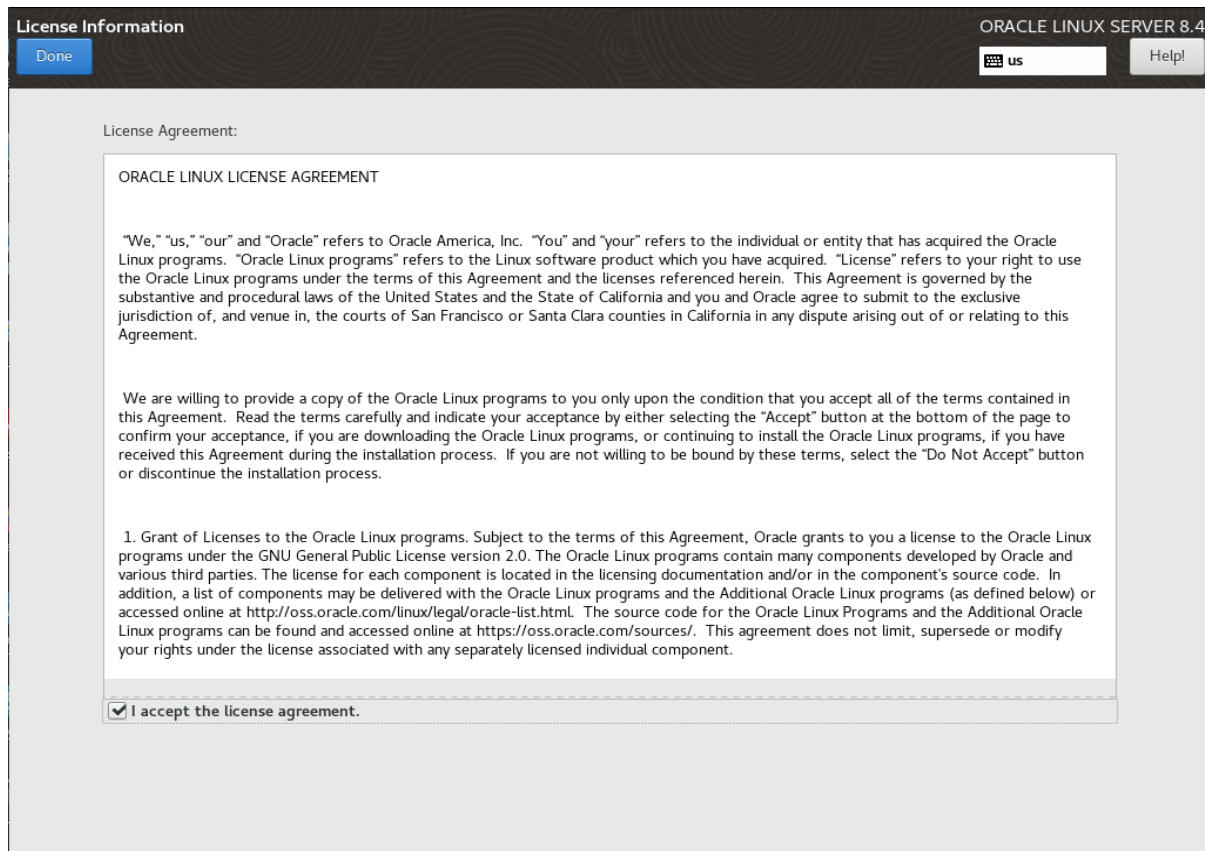
1). Opening a Graphical Console through Virtual Machine Manager.



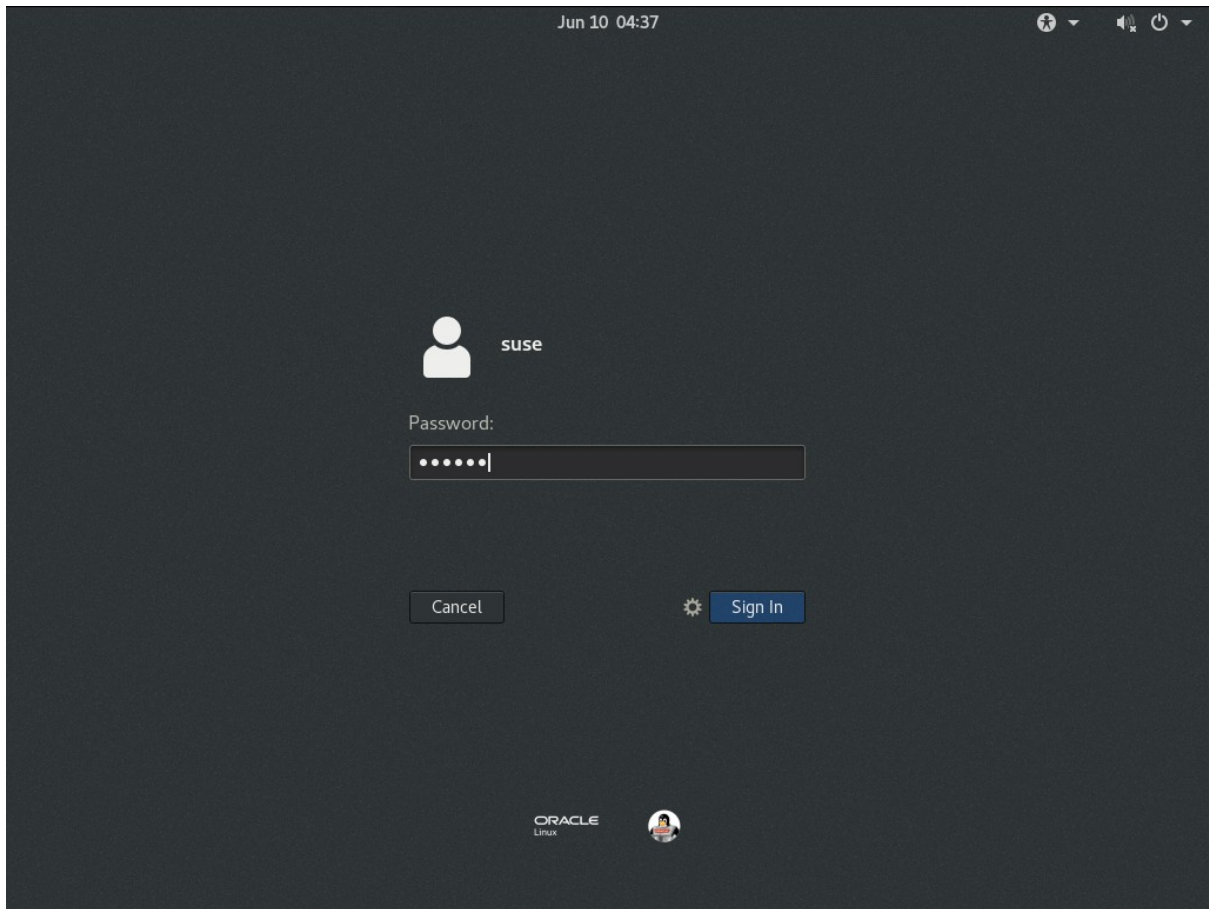
2). Running VM guest.



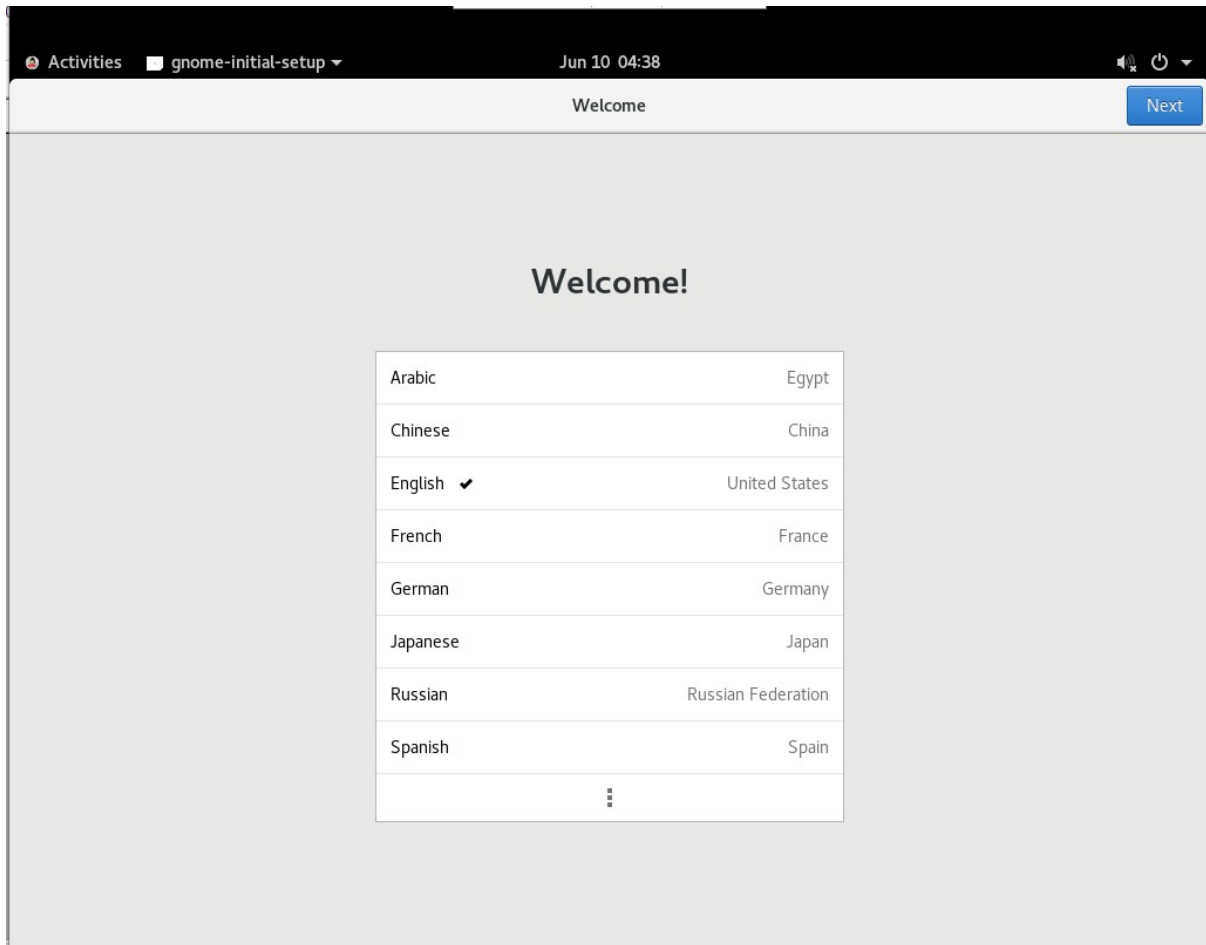
3). Initial Setup Screen. Depending on your software selection, the system might prompt you to accept the license at the end of the system reboot. Click License Information and accept the license.



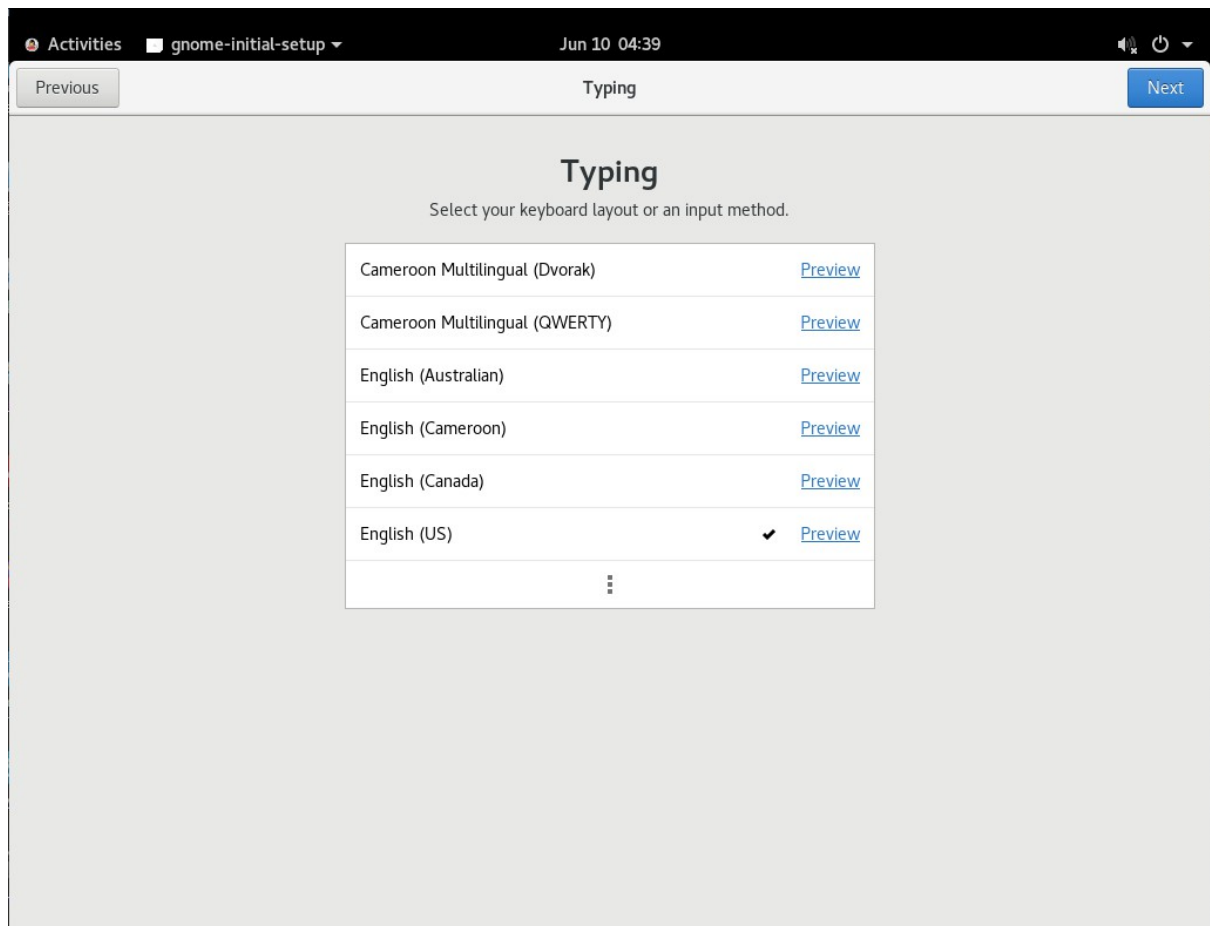
4). Login Sscreen.



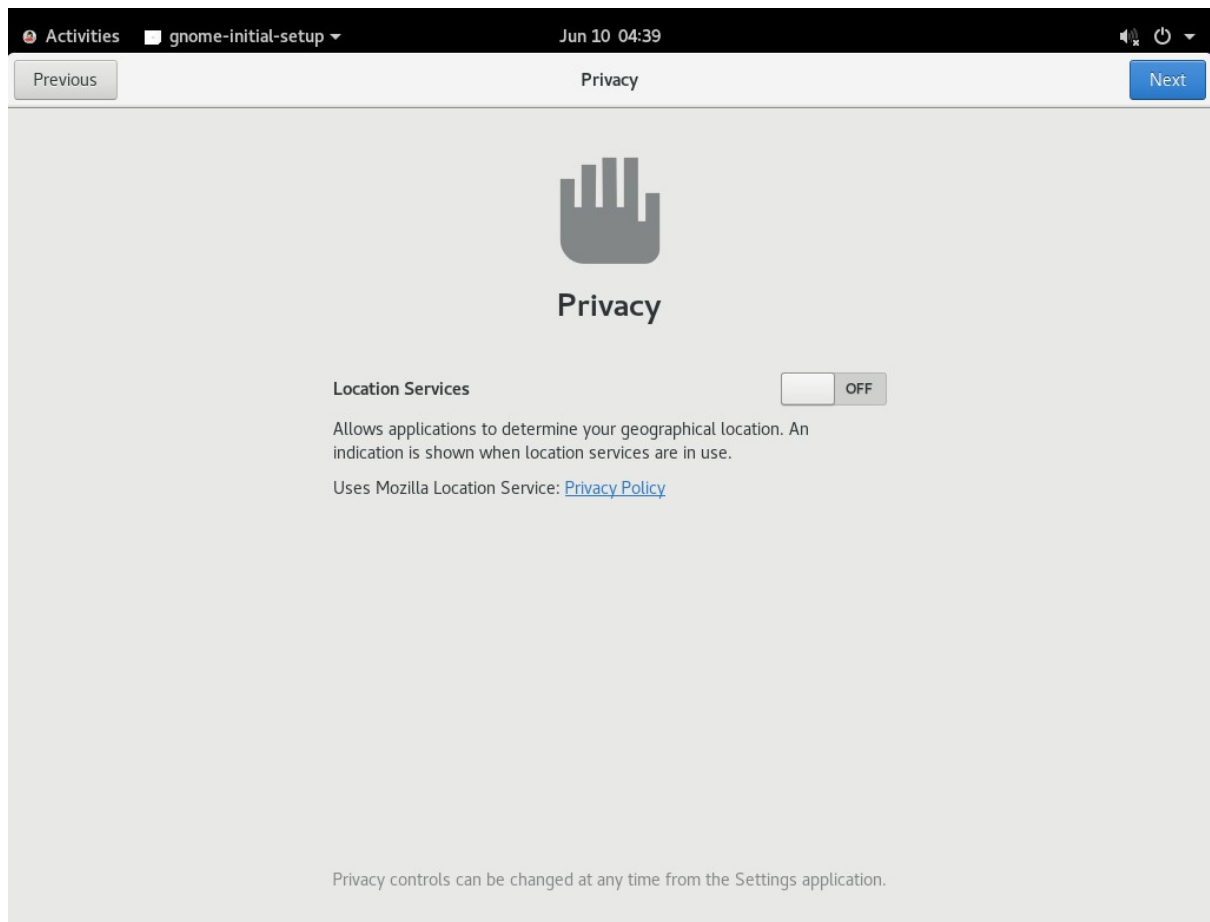
5). Language Selection.



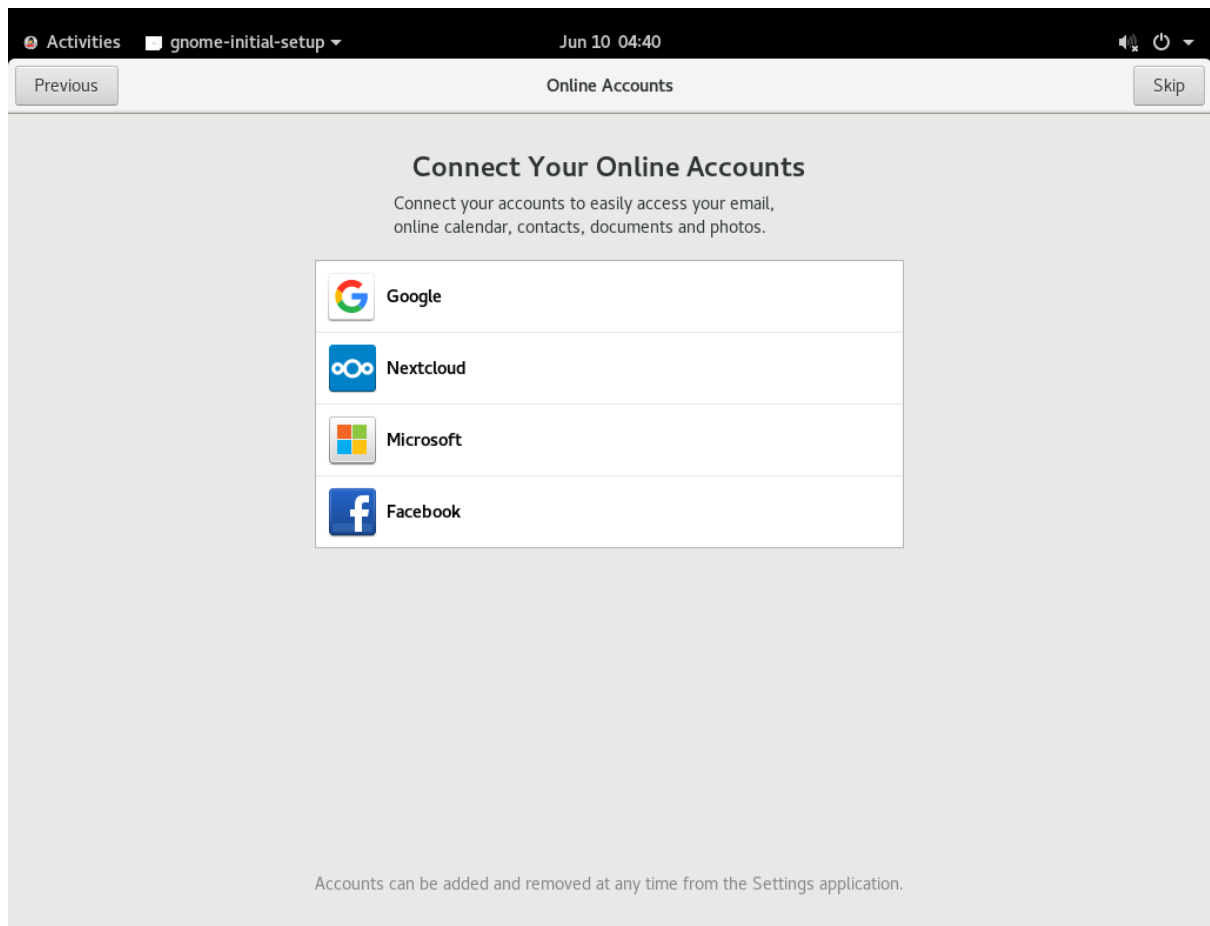
6). Typing Screen.



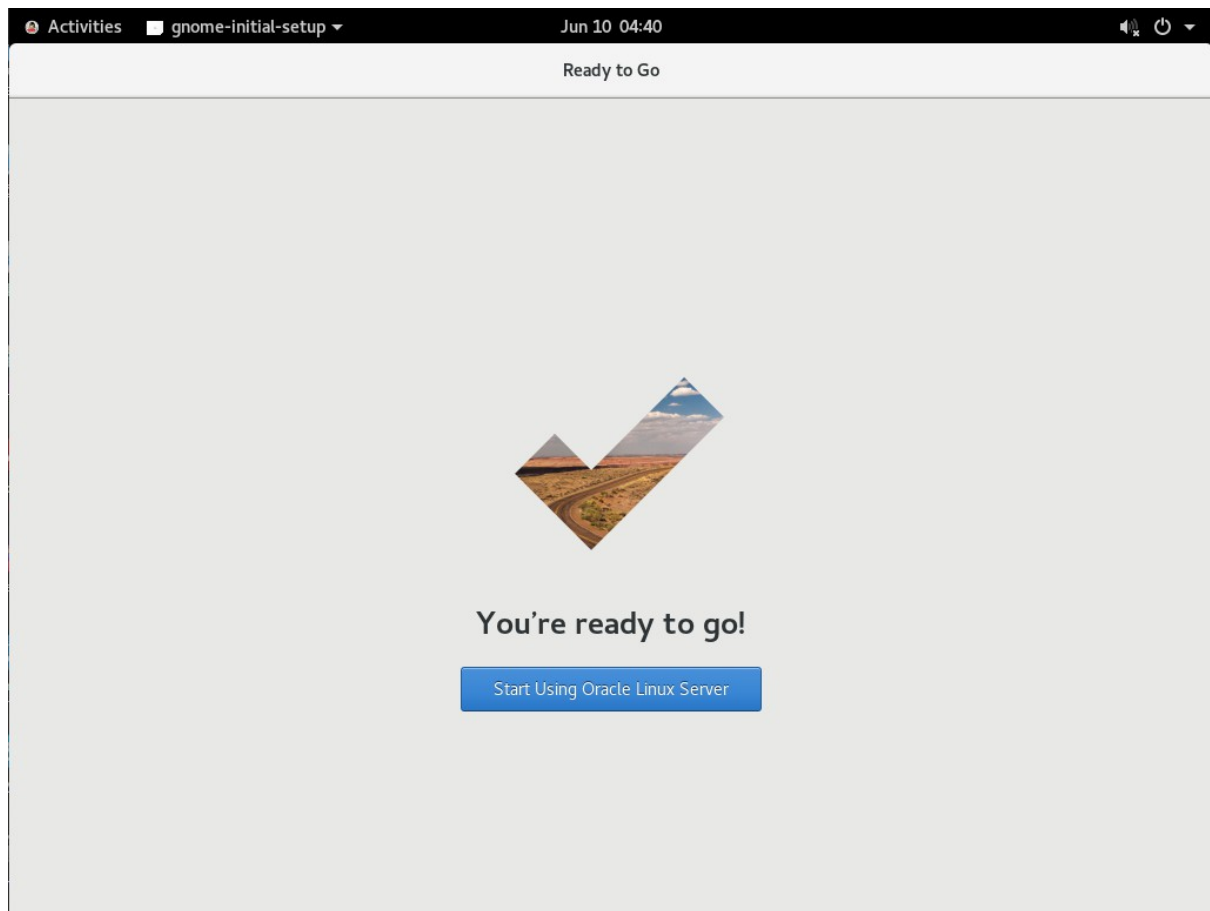
7). Privacy Screen.



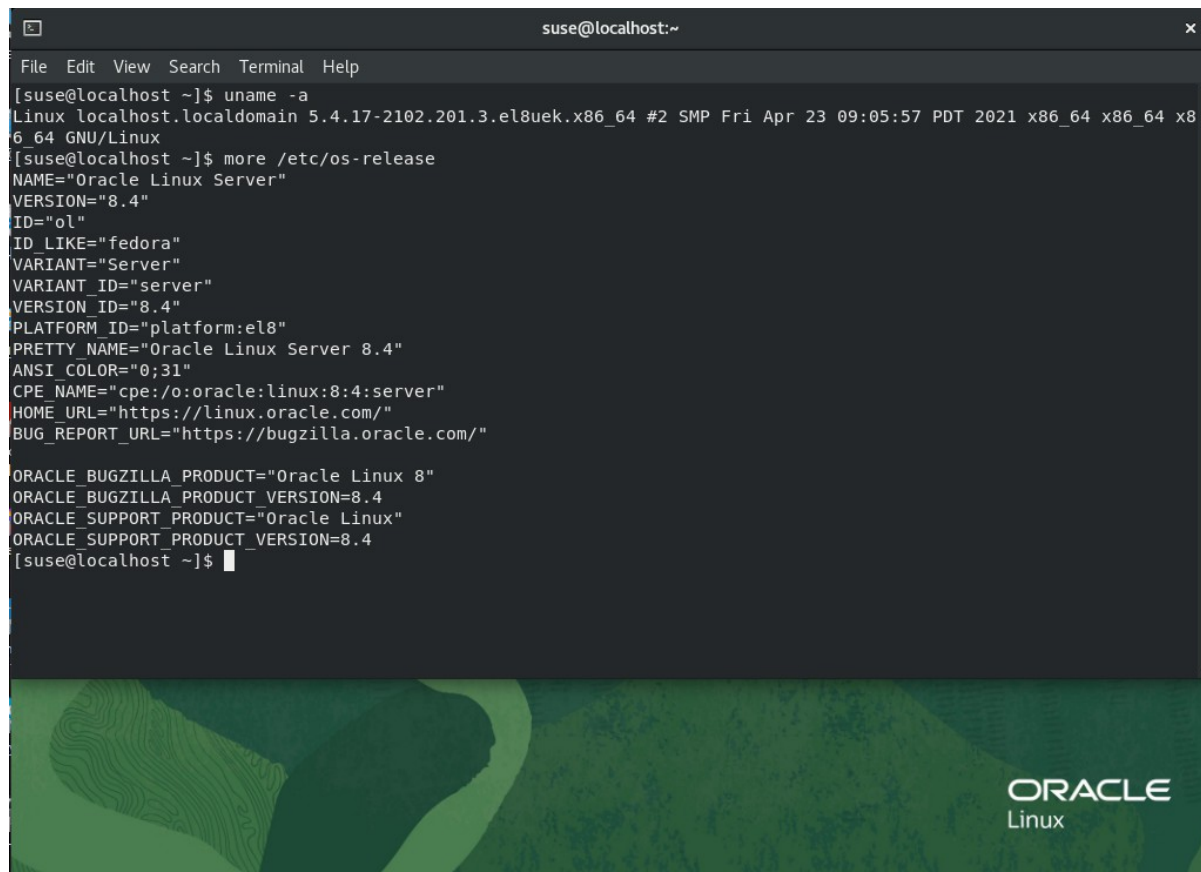
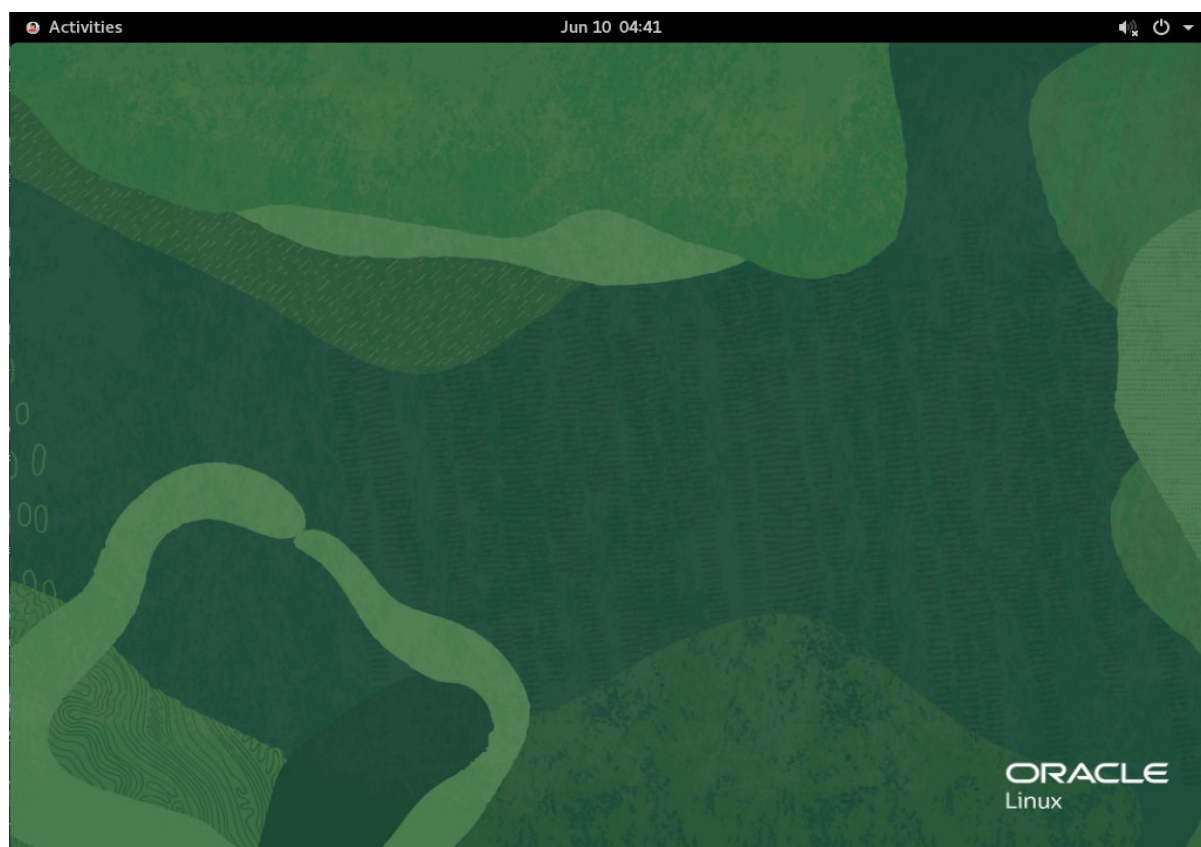
8). Online Accounts Screen.



9). Ready to Go Screen.



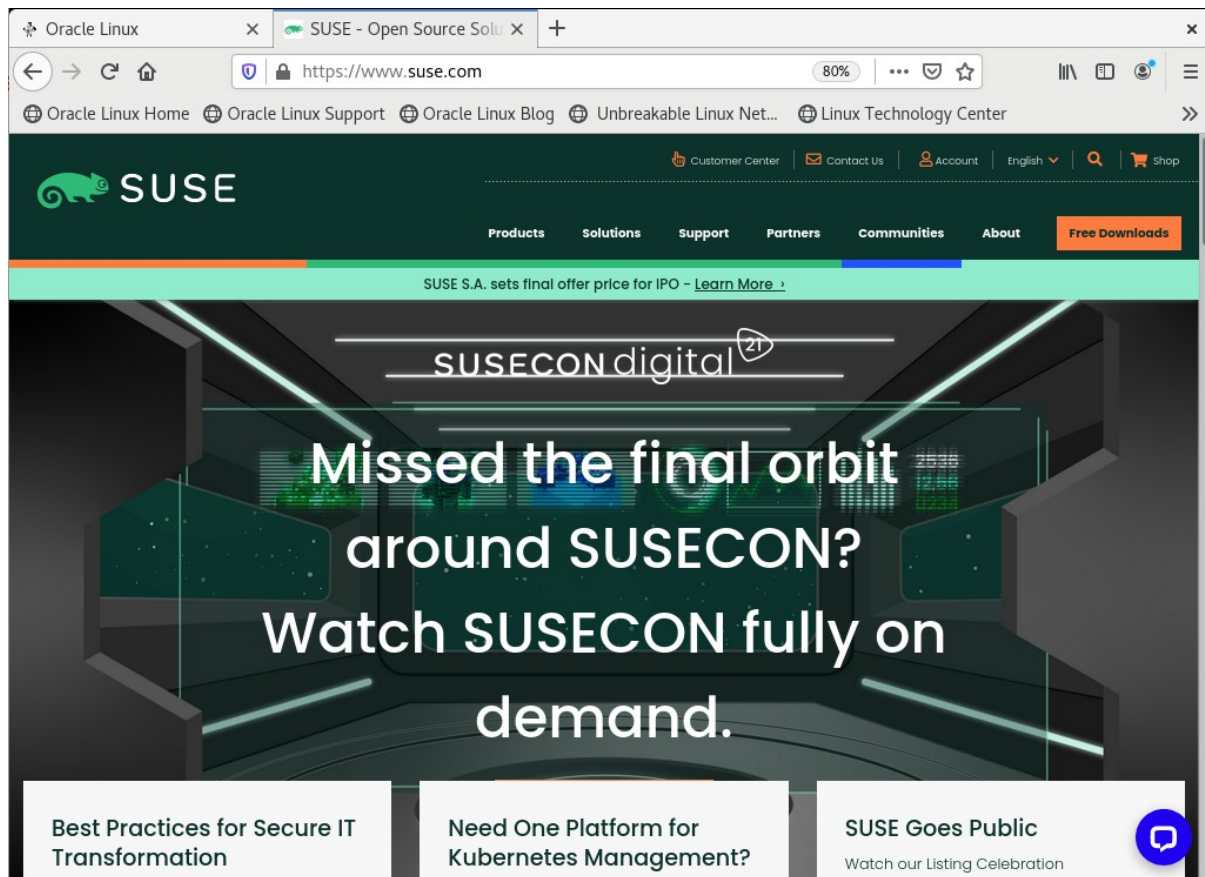
10). Start the GUI, then check the OS release information and kernel version.

A screenshot of a terminal window titled 'suse@localhost:~'. The terminal shows the following commands and output:

```
[suse@localhost ~]$ uname -a
Linux localhost.localdomain 5.4.17-2102.201.3.el8uek.x86_64 #2 SMP Fri Apr 23 09:05:57 PDT 2021 x86_64 x86_64 x86_64 GNU/Linux
[suse@localhost ~]$ more /etc/os-release
NAME="Oracle Linux Server"
VERSION="8.4"
ID="ol"
ID_LIKE="fedora"
VARIANT="Server"
VARIANT_ID="server"
VERSION_ID="8.4"
PLATFORM_ID="platform:el8"
PRETTY_NAME="Oracle Linux Server 8.4"
ANSI_COLOR="0;31"
CPE_NAME="cpe:/o:oracle:linux:8:4:server"
HOME_URL="https://linux.oracle.com/"
BUG_REPORT_URL="https://bugzilla.oracle.com/"

ORACLE_BUGZILLA_PRODUCT="Oracle Linux 8"
ORACLE_BUGZILLA_PRODUCT_VERSION=8.4
ORACLE_SUPPORT_PRODUCT="Oracle Linux"
ORACLE_SUPPORT_PRODUCT_VERSION=8.4
[suse@localhost ~]$
```

11). Open a browser and visit an external website.



12). Start the monitor to view the system resources.

Process Name	User	% CPU	ID	Memory	Disk read tota	Disk write tot	Disk read	Disk write	Priority
at-spi2-registryd	suse	0	6409	1.1 MiB	N/A	N/A	N/A	N/A	Normal
at-spi-bus-launcher	suse	0	6401	3.1 MiB	N/A	N/A	N/A	N/A	Normal
bash	suse	0	7349	2.1 MiB	4.6 MiB	20.0 KiB	N/A	N/A	Normal
dbus-daemon	suse	0	6267	1.6 MiB	N/A	N/A	N/A	N/A	Normal
dbus-daemon	suse	0	6406	668.0 KiB	N/A	N/A	N/A	N/A	Normal
dconf-service	suse	0	6465	944.0 KiB	N/A	116.0 KiB	N/A	N/A	Normal
evolution-addressbook-factory	suse	0	6666	4.3 MiB	620.0 KiB	N/A	N/A	N/A	Normal
evolution-addressbook-factory-	suse	0	6719	4.5 MiB	20.0 KiB	128.0 KiB	N/A	N/A	Normal
evolution-calendar-factory	suse	0	6548	4.3 MiB	512.0 KiB	N/A	N/A	N/A	Normal
evolution-calendar-factory-subp	suse	0	6599	6.2 MiB	20.0 KiB	4.0 KiB	N/A	N/A	Normal
evolution-source-registry	suse	0	6460	4.3 MiB	1.7 MiB	4.0 KiB	N/A	N/A	Normal
file:/// Content	suse	0	8578	21.9 MiB	584.0 KiB	N/A	N/A	N/A	Normal
firefox	suse	0	8499	116.6 MiB	84.0 KiB	27.3 MiB	N/A	N/A	Normal
gdm-wayland-session	suse	0	6259	1.6 MiB	N/A	N/A	N/A	N/A	Normal
gnome-control-center-search-p	suse	0	8820	4.9 MiB	56.0 KiB	N/A	N/A	N/A	Normal
gnome-keyring-daemon	suse	0	6250	1.2 MiB	N/A	N/A	N/A	N/A	Normal
gnome-session-binary	suse	0	6270	4.8 MiB	76.8 MiB	1.1 MiB	N/A	N/A	Normal
gnome-shell	suse	1	6348	171.7 MiB	200.9 MiB	62.4 MiB	N/A	1.3 KiB/s	Normal
gnome-shell-calendar-server	suse	0	6454	3.1 MiB	26.0 MiB	N/A	N/A	N/A	Normal
gnome-software	suse	0	6722	67.7 MiB	13.3 MiB	2.3 MiB	N/A	N/A	Normal
gnome-system-monitor	suse	0	8920	21.4 MiB	7.7 MiB	N/A	N/A	N/A	Normal
gnome-terminal-server	suse	0	7344	10.5 MiB	1.1 MiB	N/A	N/A	N/A	Normal
goa-daemon	suse	0	6470	8.5 MiB	40.2 MiB	N/A	N/A	N/A	Normal
goa-identity-service	suse	0	6485	2.0 MiB	160.0 KiB	N/A	N/A	N/A	Normal
gsd-a11y-settings	suse	0	6576	980.0 KiB	N/A	N/A	N/A	N/A	Normal





Device	Directory	Type	Total	Available	Used	Percentage
/dev/mapper /	/	xfs	27.9 GB	22.9 GB	5.0 GB	18%
/dev/vda1 /boot	/boot	xfs	1.1 GB	744.5 MB	318.7 MB	29%

Thanks for selecting **SUSE Linux Enterprise Server** as your Linux platform of choice!