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Installation process

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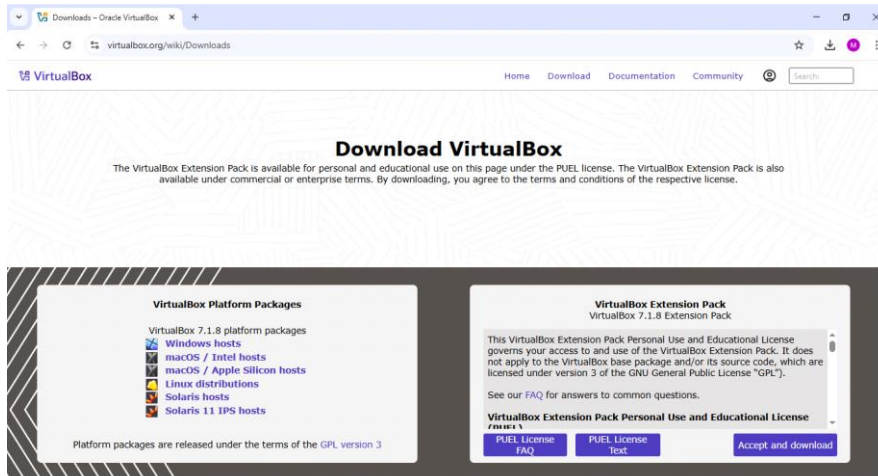
ID No: 1601988

Submitted to: Wendimu B.

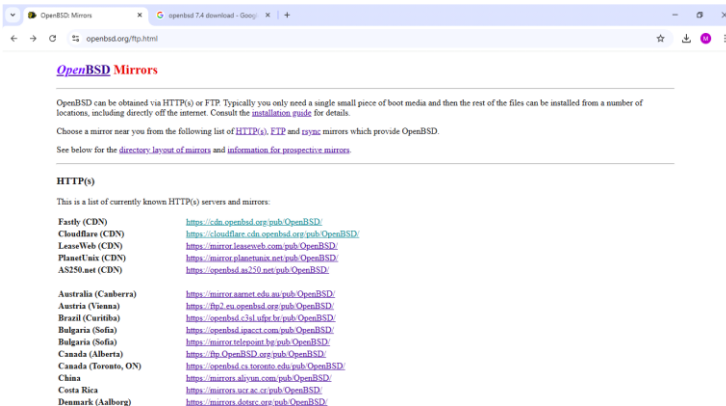
4. Installation Process

Step by step explanation

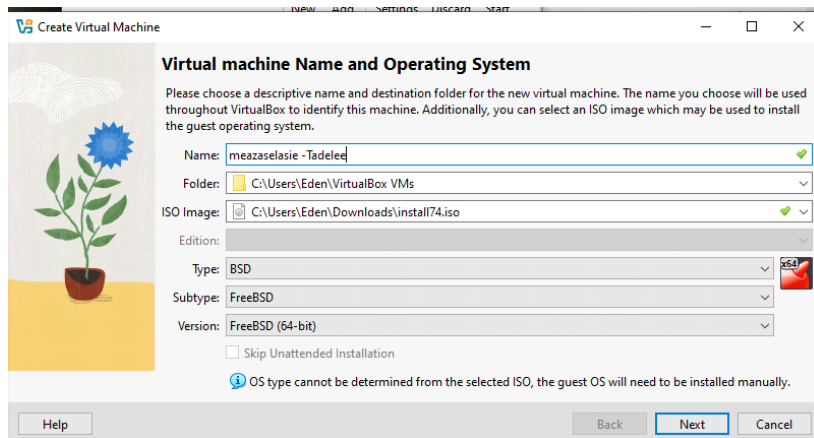
- First, I searched for Oracle Virtual Box and downloaded it from the official website.



- Then I downloaded the OpenBSD ISO from OpenBSD mirror.



- Once installed on my computer, I opened Virtual Box and created a virtual machine. I chose OpenBSD (64-bit) as the operating system and named the VM. I then mounted the ISO file to the virtual machine's optical drive from the VM settings.



- I started the virtual machine, and it booted into OpenBSD's text-based installer. The installer asked what I wanted to do I pressed i to start a fresh installation. I accepted the default keyboard layout since it matched my system. Then I entered a hostname of my choice for the system.

```
softraid0 at root
scsibus1 at softraid0: 256 targets
root on rd0a swap on rd0b dump on rd0b
WARNING: CHECK AND RESET THE DATE!
erase ^?, werase ^W, kill ^U, intr ^C, status ^T

Welcome to the OpenBSD/amd64 7.4 installation program.
(I)install, (U)pgrade, (A)utoinstall or (S)hell? I
At any prompt except password prompts you can escape to a shell by
typing '!'. Default answers are shown in []'s and are selected by
pressing RETURN. You can exit this program at any time by pressing
Control-C, but this can leave your system in an inconsistent state.

Choose your keyboard layout ('?' or 'L' for list) [default]
System hostname? (short form, e.g. 'foo') meaza
```

- I left the default interface (network) at em0, ran autoconf for both IPv4 and IPv6, and the system configured DNS automatically.

```
Choose your keyboard layout ('?' or 'L' for list) [default]
System hostname? (short form, e.g. 'foo') meaza

Available network interfaces are: em0 vlan0.
Network interface to configure? (name, lladdr, '?' or 'done') [em0] ?
Available network interfaces are: em0 vlan0.
em0: lladdr 08:00:27:dd:9b:ba
Network interface to configure? (name, lladdr, '?' or 'done') [em0]
IPv4 address for em0? (or 'autoconf' or 'none') [autoconf]
IPv6 address for em0? (or 'autoconf' or 'none') [none] autoconf
Available network interfaces are: em0 vlan0.
Network interface to configure? (name, lladdr, '?' or 'done') [done]
Using DNS domainname my.domain
Using DNS nameservers at 10.0.2.3
```

- Then I set a root password for admin access. I chose not to allow SSH login for root, for security reasons.

```
Password for root account? (will not echo)
Password for root account? (again)
Start sshd(8) by default? [yes] no
Do you expect to run the X Window System? [yes] yes
Do you want the X Window System to be started by xenodm(1)? [no] yes
Setup a user? (enter a lower-case loginname, or 'no') [no]
```

- When asked if I wanted to start the X Window System with xenodm, I selected yes to enable a graphical login screen. Then, I was prompted to create a user account. I entered meazaselasie as the username and typed my full name as meazaselasie tadele. I set a password for the user

account by entering it twice. After that, I confirmed the timezone as Africa/Addis_Ababa.

```
Do you expect to run the X Window System? [yes] yes
Do you want the X Window System to be started by xenodm(1)? [no] yes
Setup a user? (enter a lower-case loginname, or 'no') [no] meazaselasie
Full name for user meazaselasie? [meazaselasie] meazaselasie tadele
Password for user meazaselasie? (will not echo)
Password for user meazaselasie? (again)
What timezone are you in? ('?' for list) [Africa/Addis_Ababa]

Available disks are: wd0.
Which disk is the root disk? ('?' for details) [wd0] ?
    wd0: UBOX HARDDISK (16.0G)
Available disks are: wd0.
Which disk is the root disk? ('?' for details) [wd0]
Encrypt the root disk with a passphrase? [no] yes

Configuring the crypto chunk wd0...

No valid MBR or GPT.
Use (W)hole disk MBR, whole disk (G)PT or (E)dit? [whole]
Setting OpenBSD MBR partition to whole wd0...done.
New passphrase: _
```

The installer showed that wd0 was the available disk, and I selected it as the root disk. I chose to encrypt the root disk with a passphrase for security. Since no valid MBR or GPT was found, I selected to use the whole disk with MBR. Then, I entered a new passphrase to finish setting up the encryption.

- The pre-selected system sets from the ISO were installed by the installer, e.g., `bsd`, `base74.tgz`, `comp74.tgz`, etc.

```
/dev/sd0h (0569335437ee3fa0.h) on /mnt/usr/local type ffs (rw, asynchronous, local, nodev)
/dev/sd0j (0569335437ee3fa0.j) on /mnt/usr/obj type ffs (rw, asynchronous, local, nodev, nosuid)
/dev/sd0i (0569335437ee3fa0.i) on /mnt/usr/src type ffs (rw, asynchronous, local, nodev, nosuid)
/dev/sd0e (0569335437ee3fa0.e) on /mnt/var type ffs (rw, asynchronous, local, nodev, nosuid)

Let's install the sets!
Location of sets? (cd0 disk http nfs or 'done') [cd0]
Pathname to the sets? (or 'done') [/7.4/amd64]

Select sets by entering a set name, a file name pattern or 'all'. De-select sets by prepending a '-', e.g.: '-game*'. Selected sets are labelled '[X]'.
[X] bsd [X] comp74.tgz [X] xbase74.tgz [X] xserv74.tgz
[X] bsd.rd [X] man74.tgz [X] xshare74.tgz
[X] base74.tgz [X] game74.tgz [X] xfont74.tgz
Set name(s)? (or 'abort' or 'done') [done]
Directory does not contain SHA256.sig. Continue without verification? [no] yes
Installing bsd 100% |*****| 24750 KB 00:00
Installing bsd.rd 100% |*****| 4550 KB 00:00
Installing base74.tgz 100% |*****| 368 MB 00:00
Extracting etc.tgz 100% |*****| 257 KB 00:00
Installing comp74.tgz 0% | | 0 --:-- ETA
```

- Once installation finished, the installer asked to reboot the system. I rebooted the virtual machine, and it started from the virtual hard drive. The OpenBSD login prompt appeared, showing that the installation was successful.



Conclusion

The installation of OpenBSD was successfully done in Virtual Box. The installation involved easy system configuration, user creation, and system set installation. It gave an appropriate idea about installing OpenBSD and booting it online. As a whole, it was an easy but informative process.