

Grandstream Networks, Inc.

GWN Wi-Fi Management

GWN Manager - Deploying a Virtual Machine from an
OVA file



Overview

GWN Manager is an enterprise-grade management platform for Grandstream devices. For private network deployment that requires high security, it's the ideal choice offering a flexible and scalable solution with an easy-to-use Web interface and simplified configuration and management with good performance. Supports real-time monitoring, alerts, statistics, reports, etc.

This guide describes the steps on how to deploy a GWN Manager Virtual Machine image from an OVA file using VMware Workstation, VMware vSphere, and VirtualBox on different platforms Windows, Ubuntu, and macOS.

OVA file extension is an Open Virtual Appliance file, also known as Open Virtualization Format (OVF), it's used by virtualization programs to store various files associated with a Virtual Machine (VM).

Note:

GWN Manager by default is configured to use 2 vCPUs, 4GB RAM, and 100GB of disk space for support of 200 devices and 2000 clients management. Customers may change these parameters in their virtual machine settings, but it's recommended at least to use the parameters listed for a better experience.

Prerequisite

Please download the GWN Manager OVA image from the link below and store it locally on your computer.

Link: [GWN Manager OVA format: 1.0.22.27](#)

VMware Workstation

Please download first the VMware Workstation from the link below:

VMware Workstation Player (free): <https://www.vmware.com/products/workstation-player.html>

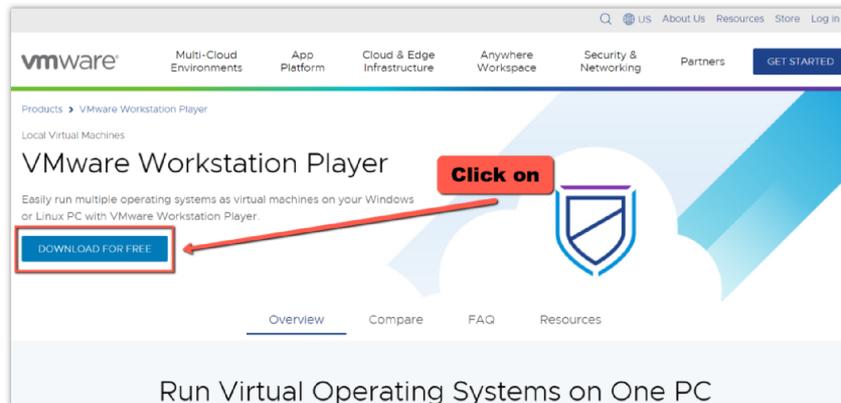


Figure 1: Download VMware Workstation

Deploying GWN Manager on Windows

For Windows, choose VMware Workstation Player for Windows 64-bit Operating Systems, and click on **“DOWNLOAD NOW”** then install it on your computer.

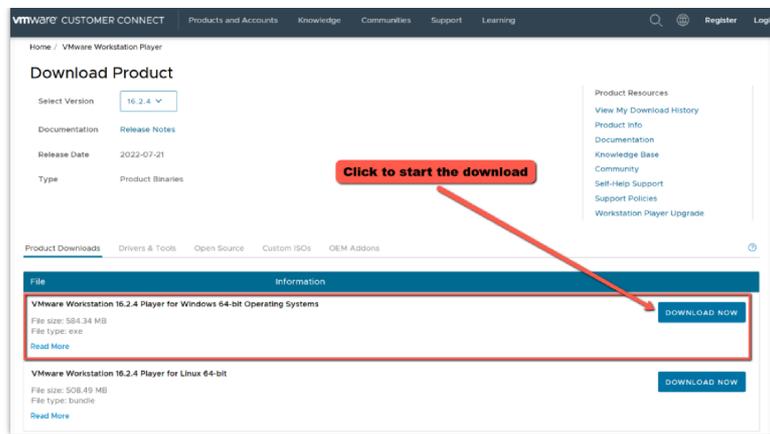


Figure 2: VMware Workstation Windows Version

1. Open VMware Workstation Player, **File > Open** to choose the OVA Image.

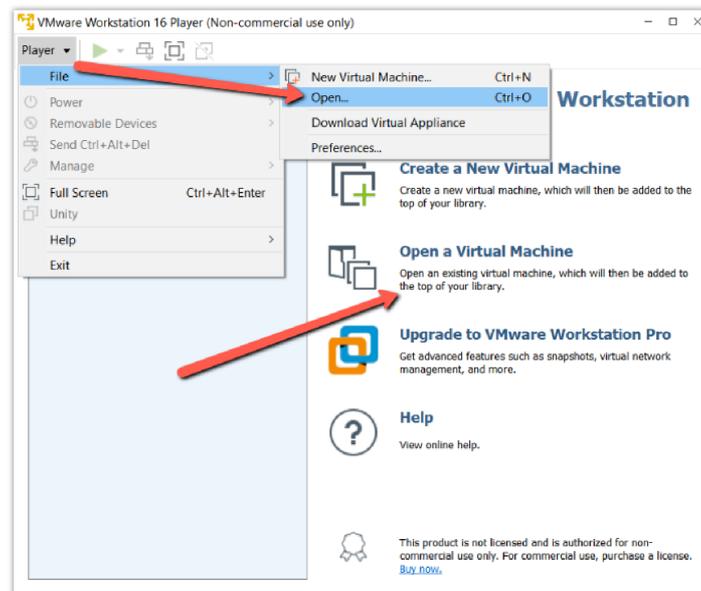


Figure 3: Open OVA file with VMware Workstation

2. Choose the OVA file that was downloaded previously.

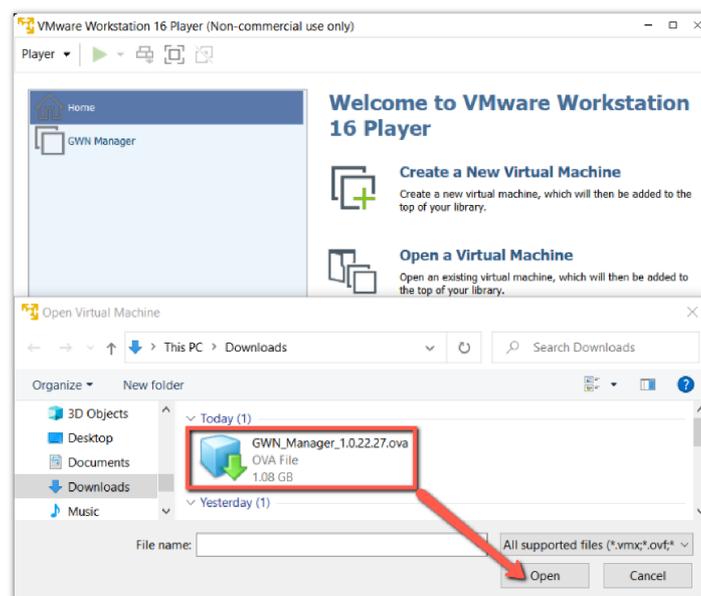


Figure 4: VMware Workstation Select OVA file

3. Specify a name for the new Virtual Machine and storage path, and click **Import**.

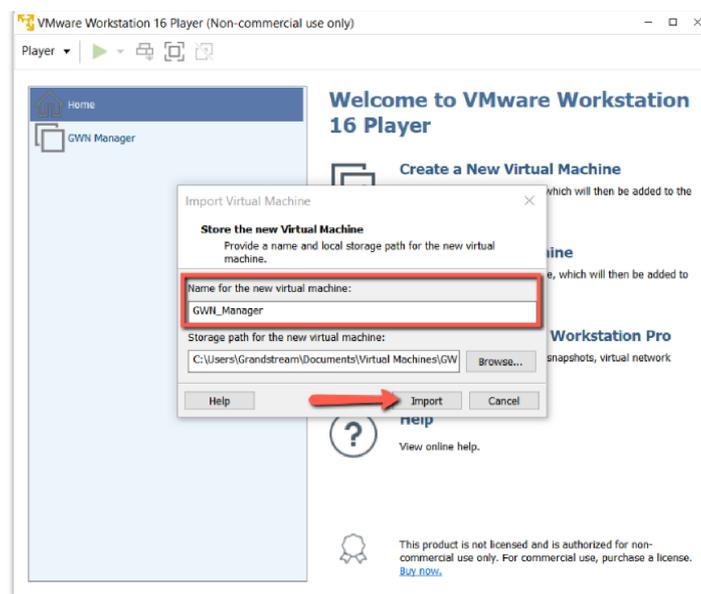


Figure 5: Import to VMware Workstation

4. Wait for the import to complete.

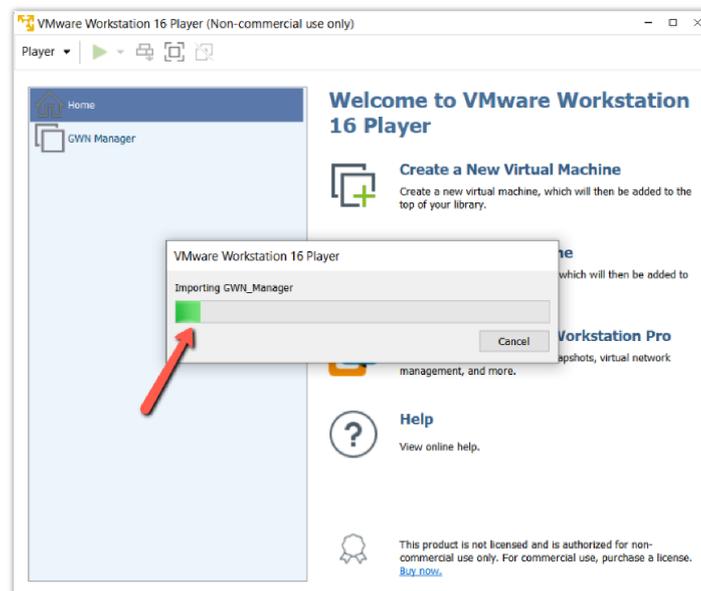


Figure 6: Importing GWN_Manager

5. Click on **“Edit virtual machine settings”** to change the configuration like RAM, CPU cores, Storage space, Network Adapter, etc.

Note:

It's recommended at least to use the default settings, the more hardware allocated for the virtual machine the better the performance.

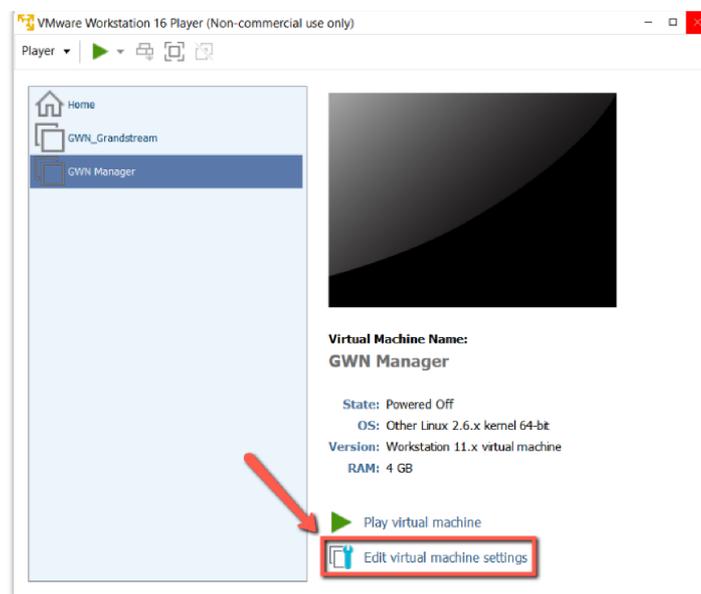


Figure 7: Edit virtual machine settings

6. If your computer has multiple network adapters, you can change the host network adapter(s) you want to bridge by clicking on **“Configure Adapters”**.

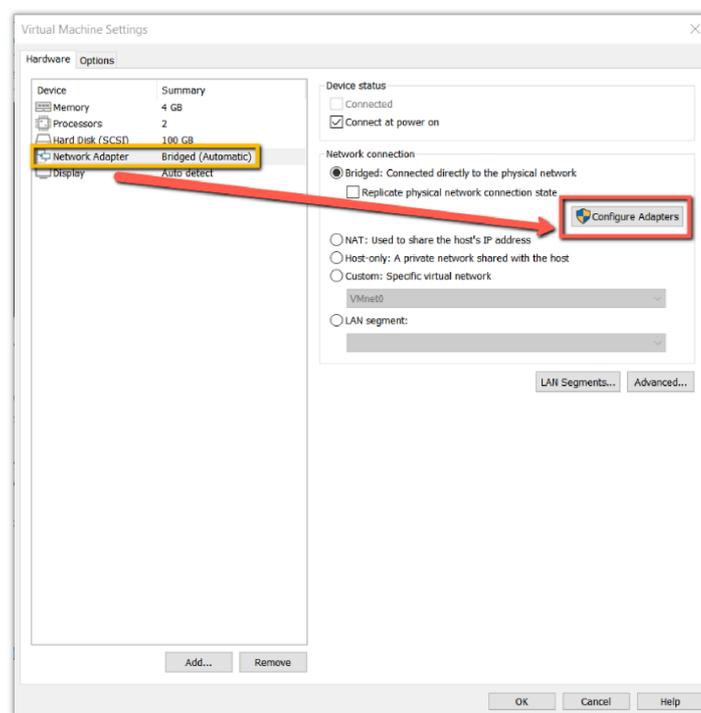


Figure 8: Configure Adapters

Note:

If your computer has only one network adapter, please skip this step.

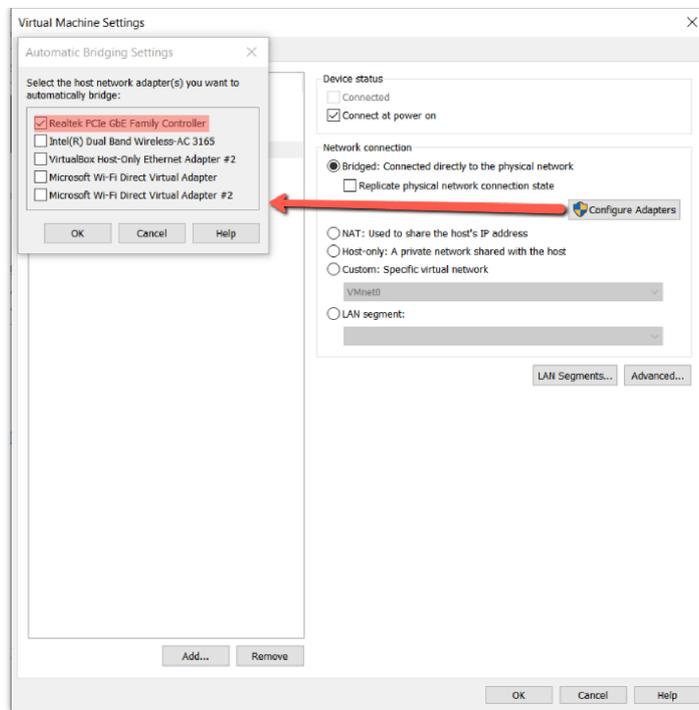


Figure 9: Bridging Settings

7. Start up the newly created Virtual Machine by clicking on "Play virtual machine".

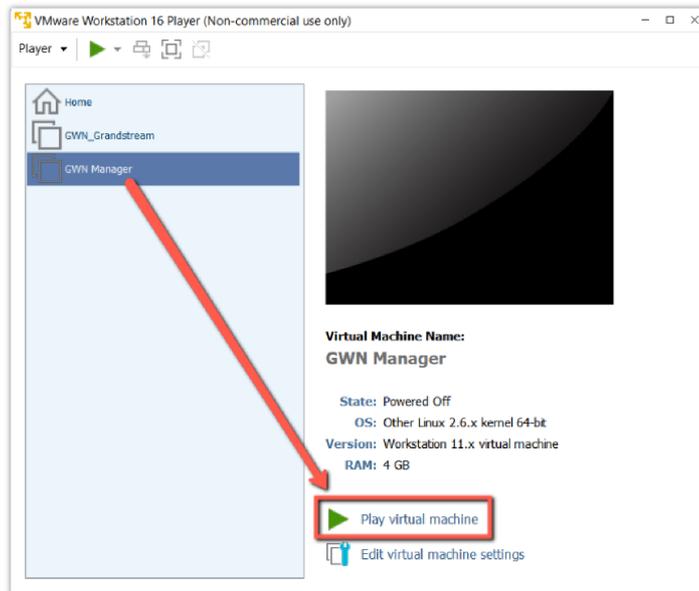


Figure 10: Play virtual machine

8. Log in with the username and password which is shown on the VM console.

Note:

By default, the login name is "gwn" and the login password is "GWN_Manager".

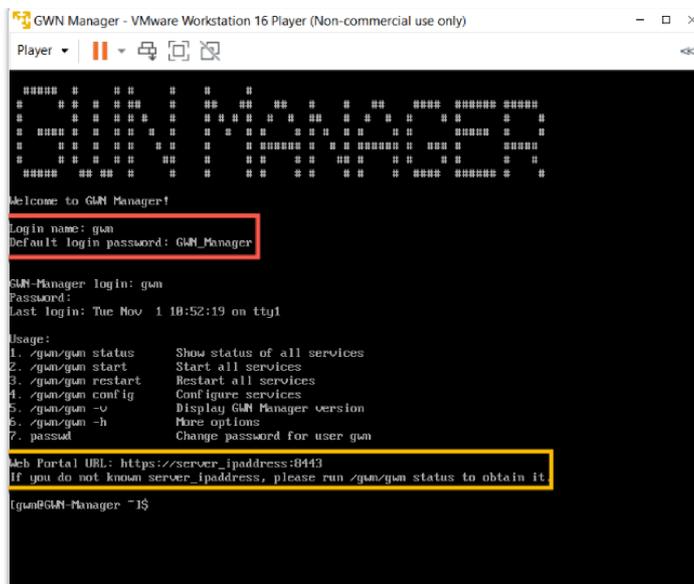


Figure 11: GWN Manager VM start page

9. Type `/gwn/gwn status` on the virtual machine console to check the **Access URL** and monitor if all the processes are in a running state.

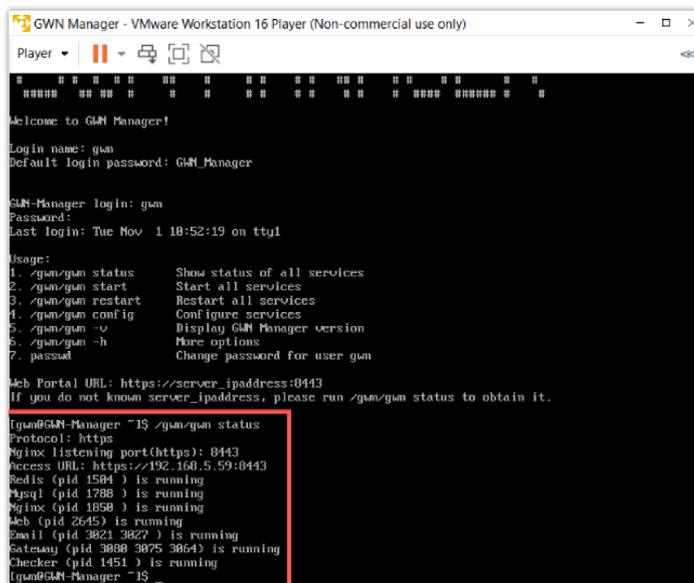


Figure 12: GWN Manager Status

10. Make sure all the processes are in a running state, open a browser and input the Access URL.

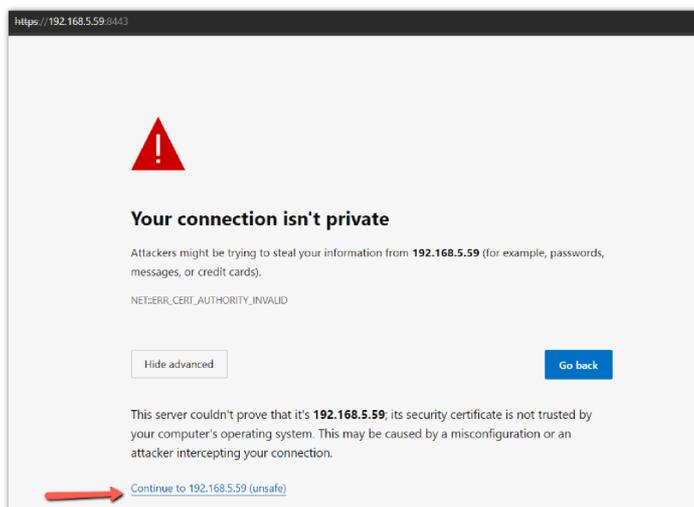


Figure 13: Access from the Browser

11. Finally, the Simplified Setup wizard will navigate the admin through the minimal steps required to fully configure GWN Manager.

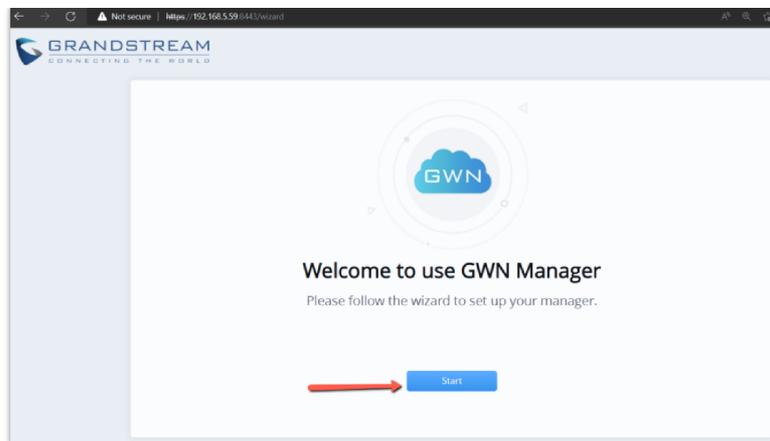


Figure 14: GWN Manager First page

Deploying GWN Manager on Ubuntu (VMware Workstation)

For Ubuntu, choose VMware Workstation Player for Linux 64-bit, and click on **“DOWNLOAD NOW”**.

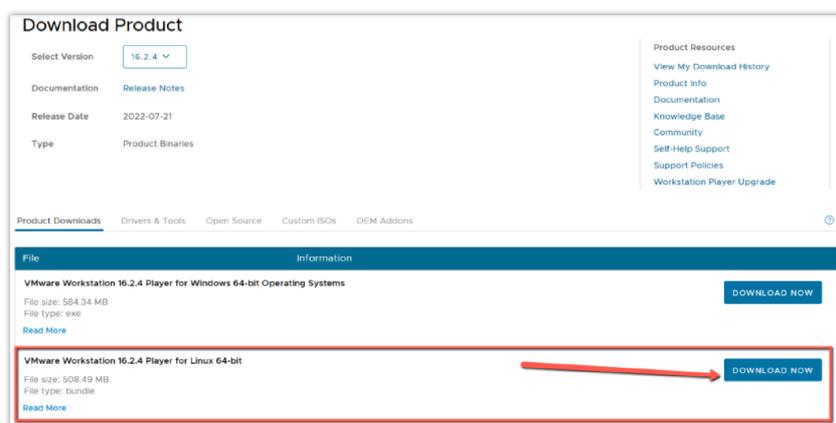


Figure 15: Download Ubuntu VMware Workstation

1. Give execute privileges to the .bundle file and execute it with root privileges and input **“yes”**.

```
chmod 755 [bundle file name]
```

```
sudo ./[bundle file name]
```



Figure 16: File privileges

2. After the installation is completed, it will pop up a window **“Welcome to VMware Player”**.

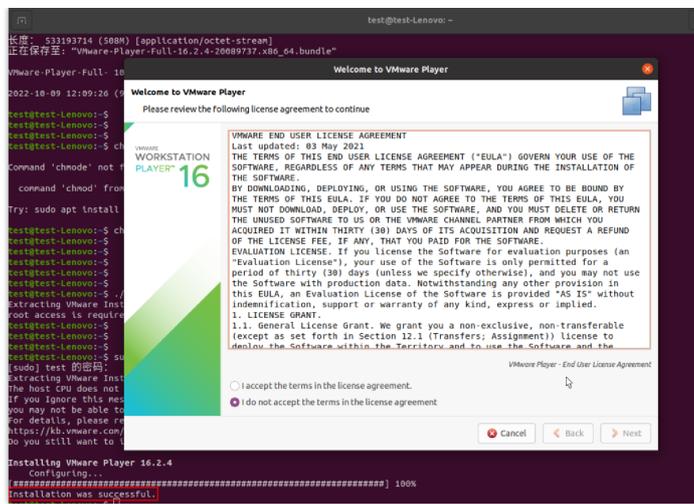


Figure 17: Ubuntu VMware Workstation

Please refer to “Deploying GWN Manager on Windows” above for the rest of the steps.

VMware vSphere

Deploying GWN Manager on VMware ESXi

Please download vSphere from the link below and install it.

VMware vSphere: <https://customerconnect.vmware.com/en/evalcenter?p=vsphere-eval-7>

1. Login to your VMware ESXi Web UI, and click **Create/Register VM**.

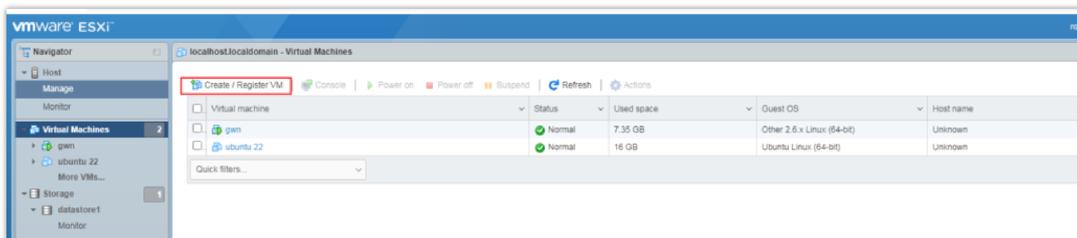


Figure 18: VMware ESXi

2. Select the second option “Deploy a virtual machine from an OVF or OVA file”, and click **NEXT**.

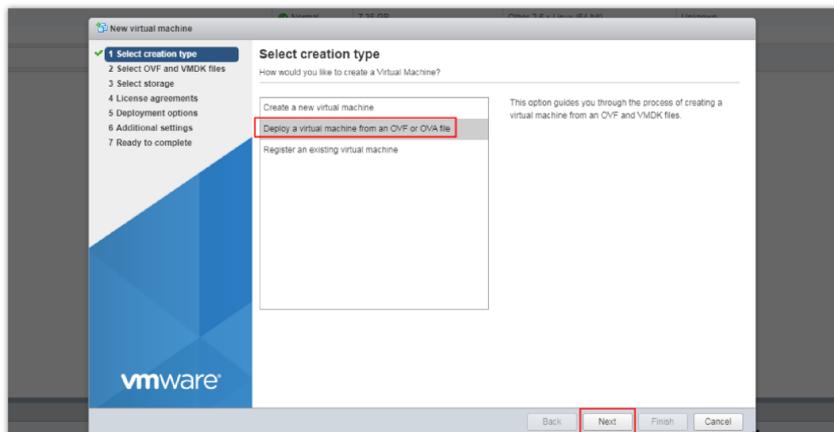


Figure 19: VMware vSphere select creation type

3. Specify a name for the newly created virtual machine and import the OVA file which was downloaded previously.

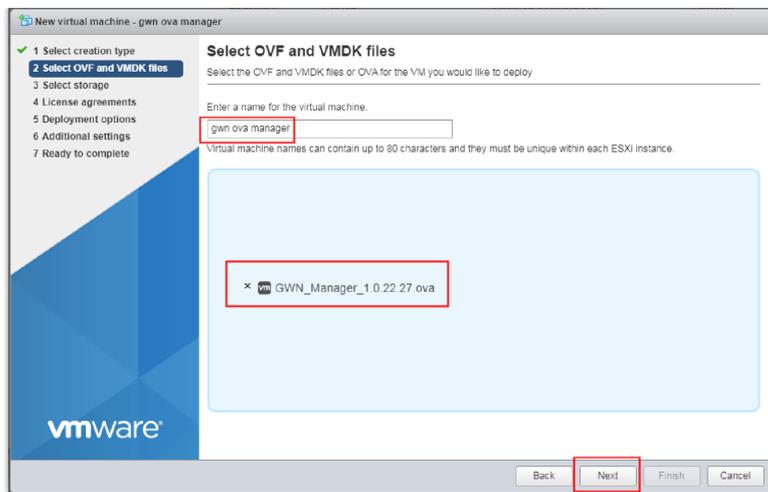


Figure 20: Selected OVA file

4. Select the storage type and datastore, and click **Next**.

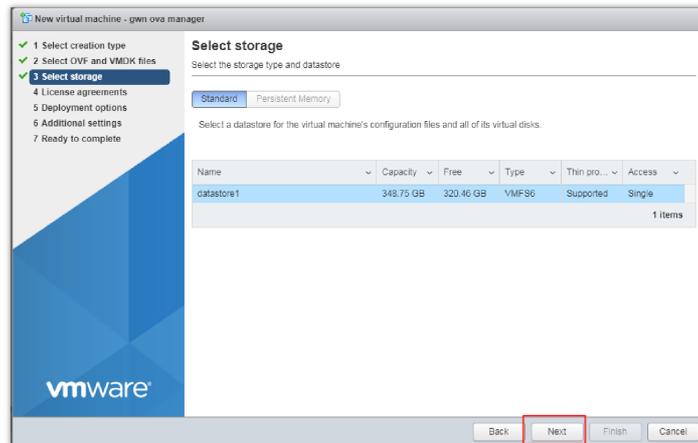


Figure 21: Select Storage

5. Select deployment options, and click **Next**.

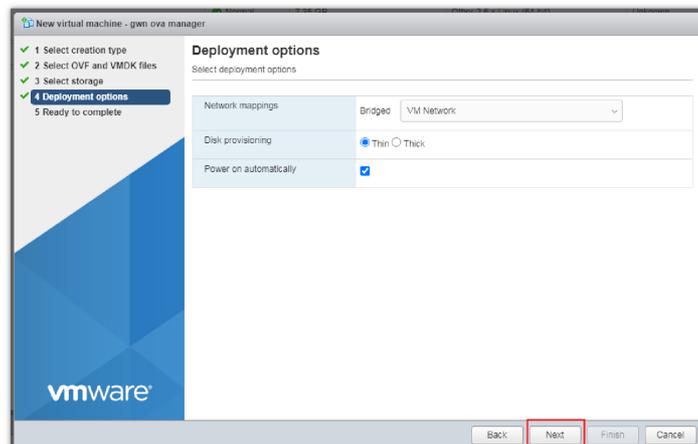


Figure 22: Deployment options

6. Review your settings selection, and click **Finish**.

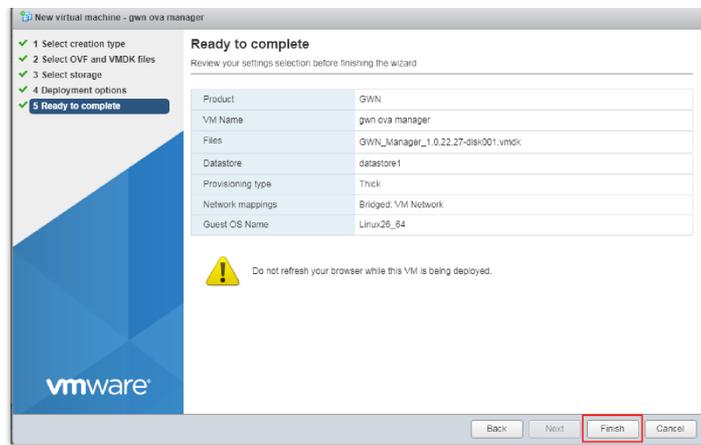


Figure 23: Ready to complete

7. Wait for the import to be completed.

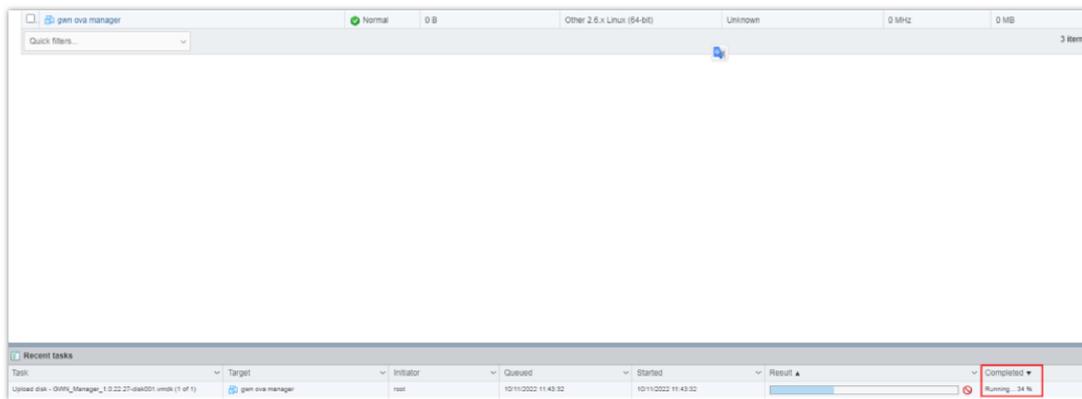


Figure 24: vSphere Importing

8. Select the GWN Manager virtual machine, and click **Power on** to start up GWN Manager.

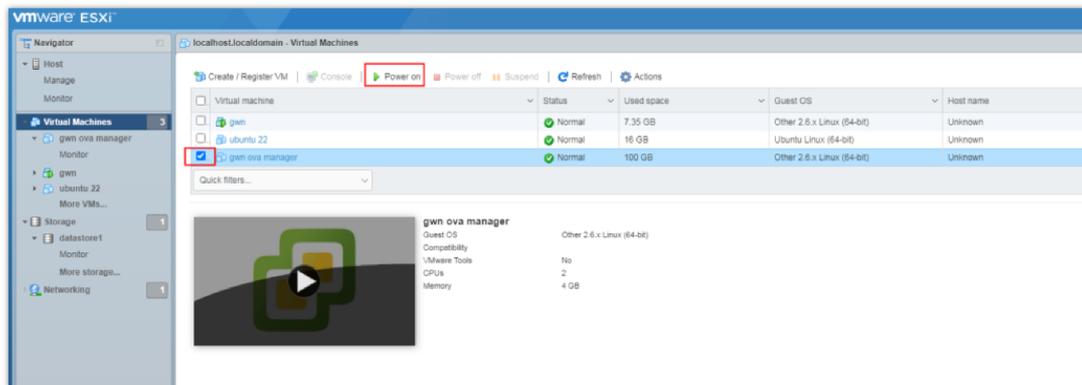


Figure 25: VMWare ESXi Power on

Please refer to "Deploying GWN Manager on Windows" above for the rest of the steps.

VirtualBox

Deploying GWN Manager on Ubuntu (VirtualBox)

Please download VirtualBox from **Ubuntu Software**.

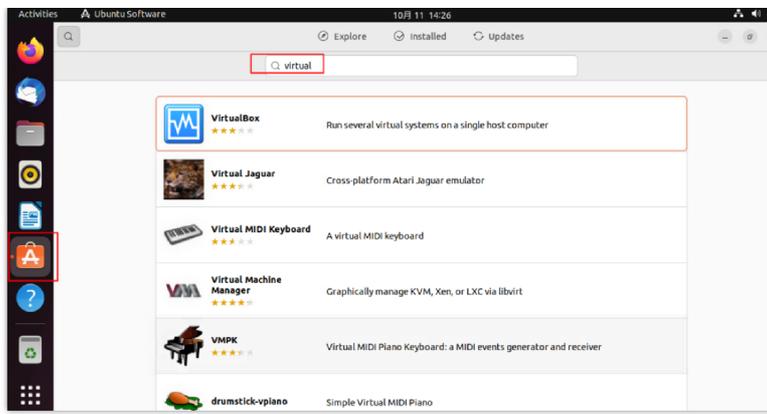


Figure 26: Ubuntu Software

You can also download it directly from VirtualBox's official site, the link is below:

VirtualBox : https://www.virtualbox.org/wiki/Linux_Downloads



Figure 27: VirtualBox Official Site

For manual installation please follow the steps below:

1. Get the VirtualBox deb package:

```
wget https://download.virtualbox.org/virtualbox/6.1.38/virtualbox-6.1_6.1.38-153438~Ubuntu~jammy_amd64.deb
```

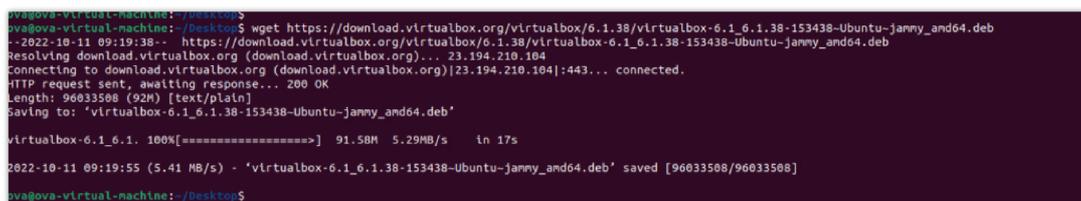


Figure 28: VirtualBox deb package

2. Install the VirtualBox deb:

```
sudo dpkg -i virtualbox-6.1_6.1.38-153438~Ubuntu~jammy_amd64.deb
```

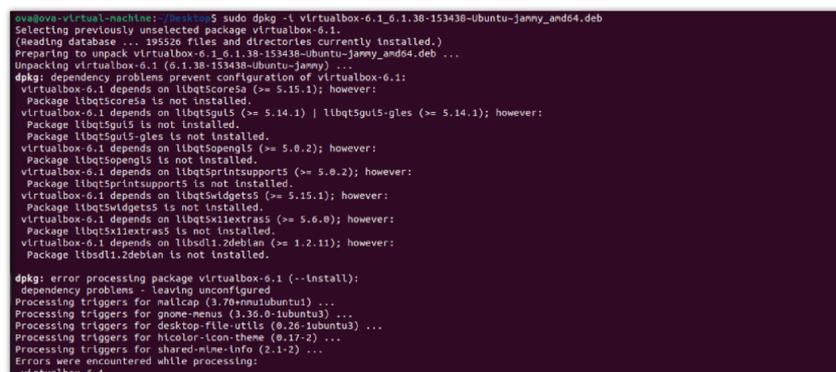


Figure 29: Installing Package

3. Running "apt -fix-broken install"

```
sudo apt --fix-broken install
```

```
ova@ova-virtual-machine:~/Desktop$ sudo apt --fix-broken install
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Correcting dependencies... Done
The following package was automatically installed and is no longer required:
  systemd-hwe-hwdb
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  libdouble-conversion3 libmd4c0 libpcre2-16-0 libqt5core5a libqt5dbus5
  libqt5gui5 libqt5network5 libqt5opengl5 libqt5printsupport5 libqt5svg5
  libqt5widgets5 libqt5xml5 libx11-xcb1 libx11-xcb-dev libx11-xcb1
  libxcb-xinput0 qt5-gtk-platformtheme qttranslations5-l10n
Suggested packages:
  qt5-image-formats-plugins qtwayland5
The following NEW packages will be installed:
  libdouble-conversion3 libmd4c0 libpcre2-16-0 libqt5core5a libqt5dbus5
  libqt5gui5 libqt5network5 libqt5opengl5 libqt5printsupport5 libqt5svg5
  libqt5widgets5 libqt5xml5 libx11-xcb1 libx11-xcb-dev libx11-xcb1
  libxcb-xinput0 qt5-gtk-platformtheme qttranslations5-l10n
0 upgraded, 17 newly installed, 0 to remove and 196 not upgraded.
1 not fully installed or removed.
Need to get 12.4 MB of archives.
After this operation, 49.8 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

Figure 30: Installing VirtualBox

4. Once the installation is complete, the VirtualBox icon will be shown in the application drawer.

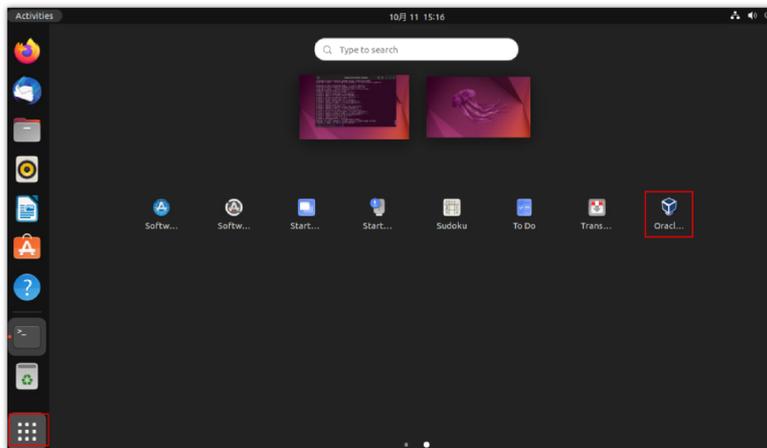


Figure 31: Ubuntu Application drawer

5. Open the VirtualBox, Click **Import**.



Figure 32: VirtualBox import VM

6. Before starting up the virtual machine, it's recommended to enable "Hardware Clock in UTC Time" by clicking on **Setting**.

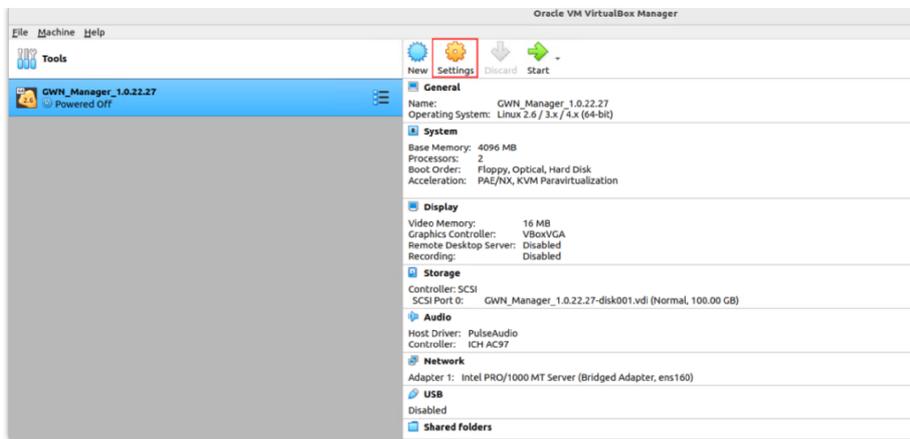


Figure 33: VirtualBox – Settings

Click on **System** then check “**Hardware Clock in UTC Time**”.

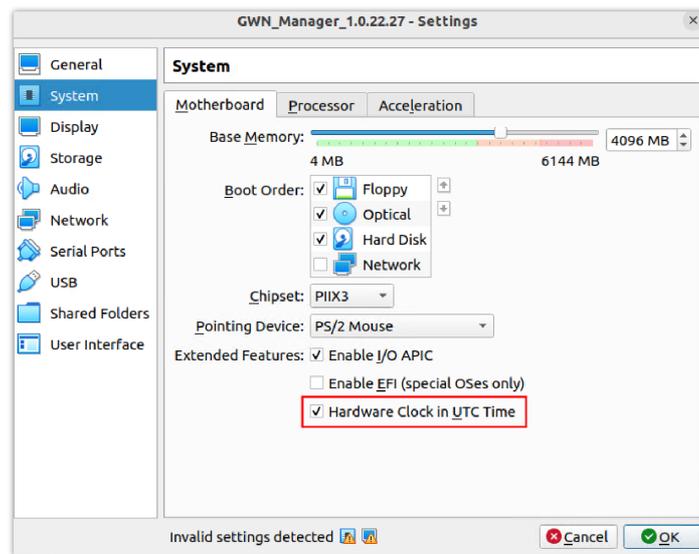


Figure 34: Hardware Clock in UTC Time

Hardware Clock in UTC Time is disabled by default in VirtualBox, to avoid some abnormal errors it's very recommended to enable it.

Please refer to “**Deploying GWN Manager on Windows**” above for the rest of the steps.

Deploying GWN Manager on macOS

Please download the VirtualBox for MacOS from the link below:

MacOS VirtualBox: <https://www.virtualbox.org/wiki/Downloads>



Figure 35: VirtualBox MacOS Download

1. Open the downloaded “dmg” file.

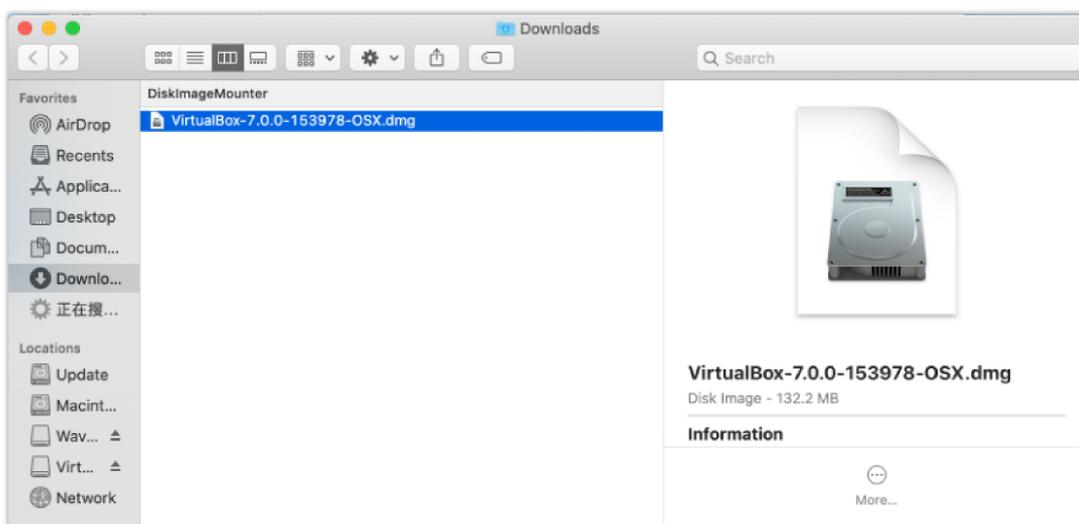


Figure 36: MacOS dmg file

2. When the pop-up below appears, click on the “VirtualBox.pkg” icon.

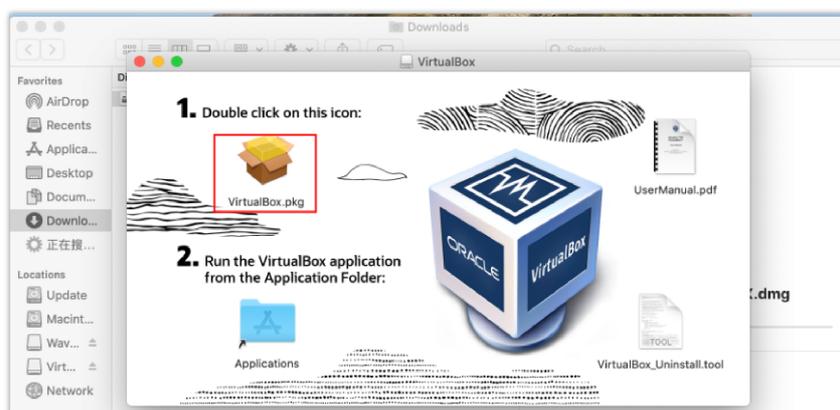


Figure 37: VirtualBox MacOS Package

3. On the new pop-up window, click **Continue**.

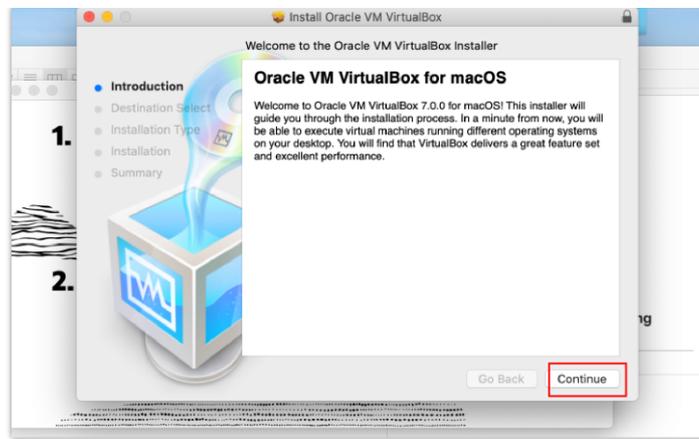


Figure 38: VirtualBox Installer

4. Run the **VirtualBox** application from the application folder.

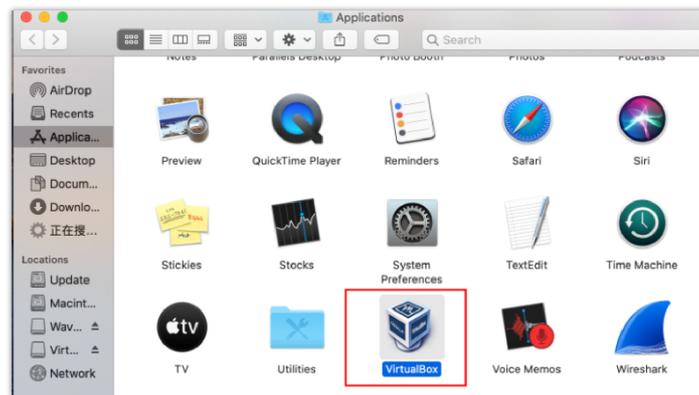


Figure 39: MacOS Applications Folder

5. VirtualBox manager interface will show up.



Figure 40: VirtualBox GUI interface on macOS

Please enable “**Hardware Clock in UTC Time**” by clicking on “**Preferences** → **System**”.

Please refer to “**Deploying GWN Manager on Windows**” above for the rest of the steps.

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VirtualBox is a trademark of **Oracle**.