

FileWave Appliances on an Apple Silicon macOS system

What

You may want to know how to load one of the Debian based FileWave Appliances for Server, Booster, or IVS so that you can test something, but your computer is an Apple Silicon Mac and so the x86 Appliances will not natively run on ARM based computers.

When/Why

Usually, this is for testing purposes. There does not appear to be an emulator that runs on Apple Silicon that also directly supports OVA files like the ones used by VMWare. UTM can emulate x86 hardware and has a tool to convert the hard disk to allow this as explained below.

How

Outline of the work

1. Download the OVA image from [Downloads](#)
2. Convert OVA to QCOW2 on your Mac
 - Install Homebrew to get the qemu conversion utility
 - Convert the hard disk image
3. Import the converted disk in to UTM
4. Launch

Download the OVA image from Downloads

This step is simple. Just go to the [Downloads](#) page. Go to the most recent version of FileWave, and then download the Debian Server, Booster or IVS image. At the time of writing this the IVS image is not yet published but will be with 15.3.0.

▼ Virtual Appliance Downloads

CentOS Linux:

VMware and VirtualBox (OVA) Server Appliance (md5: 7733c433cd6624e64955c1a1c2c827e0)


VMware and VirtualBox (OVA) Booster Appliance (md5: 16c6e5076b780d484baf8761ce17ddf2)

VMware and VirtualBox (OVA) Imaging Appliance (md5: 3c19d11f4b3742598a0fd3f4551e26db)

Debian Linux: It is preferred that you use this for a new server or booster. IVS is coming soon.

VMware and VirtualBox (OVA) Server Appliance (md5: c6f38b957e692c19e4934c98abf7fd32)

VMware and VirtualBox (OVA) Booster Appliance (md5: 3b05e55bd916cf99bf01ef790fbfedef)



Convert OVA to QCOW2 on your Mac

Extract the disk image included in ova with the command `tar -xvf`

```
tar -xvf FileWave_Server_Debian_15.2.1.ova
```

Once extracted you will have several files in the same folder as the OVA:

```
-rw-r--r--@ 1 jlevitsk  staff  2861168640 Dec 12 13:23 FileWave_Server_Debian-disk-0.vmdk
-rw-r--r--@ 1 jlevitsk  staff      8684 Dec 12 13:23 FileWave_Server_Debian-disk-1.nvram
-rw-r--r--@ 1 jlevitsk  staff      320 Dec 12 13:23 FileWave_Server_Debian.mf
-rw-r--r--@ 1 jlevitsk  staff    9185 Dec 12 13:23 FileWave_Server_Debian.ovf
-rw-r--r--@ 1 jlevitsk  staff  2861199360 Jan 12 09:47 FileWave_Server_Debian_15.2.1.ova
```

Install Homebrew to get the qemu conversion utility

If you've never used [Homebrew](#) before then this is an amazing tool you will come to love. Visit their website in case anything has changed but traditionally this command is what you'll want to install it. You will paste the entire line in to Terminal.app. They do now also have a PKG you can download from their [Homebrew's latest GitHub release](#) page.

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

Once Homebrew is installed you can install the qemu utilities with this command in Terminal.app:

```
brew install qemu
```

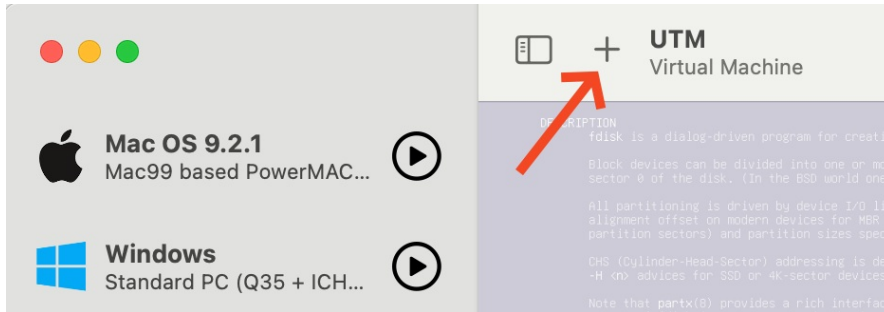
Convert the hard disk image

For the next step you'll use the `qemu-img` command to convert the VMDK disk image over to QCOW2 that is used by UTM. The below command is done in Terminal.app, and you should consider if the file name differs, but it will be the VMDK that you extracted in the earlier step using `tar` and then the QCOW2 file won't exist until after you do this conversion command.

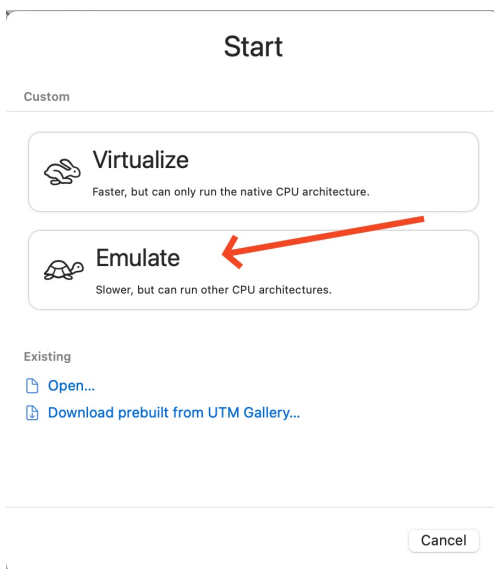
```
qemu-img convert -O qcow2 FileWave_Server_Debian-disk-0.vmdk FileWave_Server_Debian-disk-0.qcow2
```

Import the converted disk in to UTM

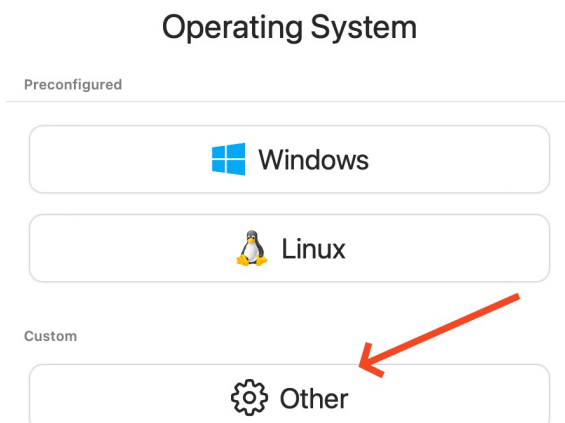
1. Press the + button in the upper left corner.



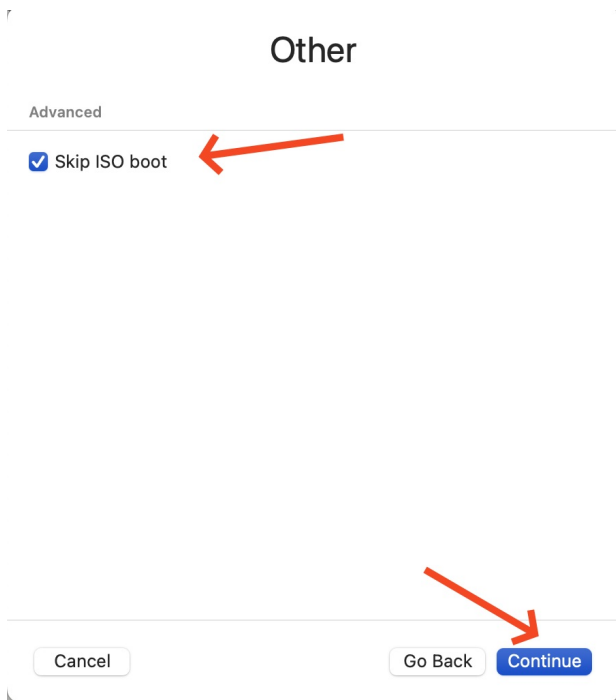
2. Select Emulate



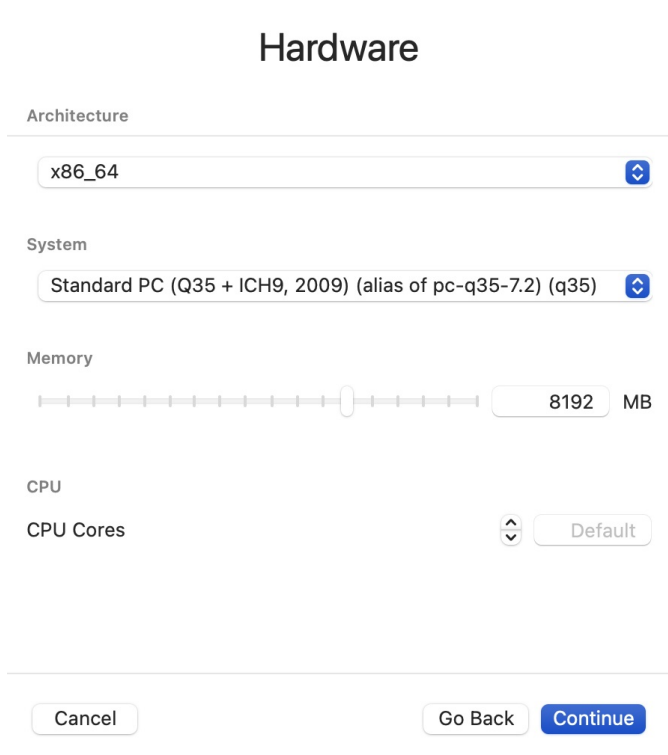
3. Select Other



4. Check Skip ISO boot and then click Continue



5. On this step the most important thing is to pick x86_64 for the Architecture and to ensure you have at least 8192Mb of RAM.



6. The size of storage won't matter because we will be deleting it later.

Storage

Size

Specify the size of the drive where data will be stored into.

64 GB

Cancel

Go Back

Continue

7. The Shared Directory is not something I've been using. This is up to you but may need some drivers installed for it to work.

Shared Directory

Shared Directory Path

Path

Clear

Browse...

☐ Share is read only

Optionally select a directory to make accessible inside the VM. Note that support for shared directories varies by the guest operating system and may require additional guest drivers to be installed. See UTM support pages for more details.

Cancel

Go Back

Continue

8. Give the VM a name and check the Open VM settings box. Click Save to pick up the VM Setting screen. If you forget to check the box for this to appear then you can right-click the VM and pick Settings to access the same screen.

Summary

Name

☒ Open VM Settings

Engine

☐ Use Virtualization

Architecture

System

RAM

CPU

Storage

Operating System

☒ Skip Boot Image

☐ Share Directory

9. You need to uncheck UEFI Boot or the appliance will not boot until you do.

Information System **QEMU** Input Sharing

Devices

Display Network Sound

+ New...


Drives

IDE Drive New...

Logging

☐ Debug Logging

Tweaks

☐ UEFI Boot 

☒ RNG Device

☐ Balloon Device

☐ Use Hypervisor

☐ Use local time for base clock

☐ Force PS/2 controller

These are advanced settings affecting QEMU which should be kept default unless you are running into issues.

QEMU Machine Properties

This is appended to the -machine argument.

QEMU Arguments

10. Delete the existing IDE Drive.

Information System QEMU Input Sharing

Devices

Display Network Sound

+ New...

Drives

IDE Drive New...

☐ Removable Drive


Name

☐ Read Only?

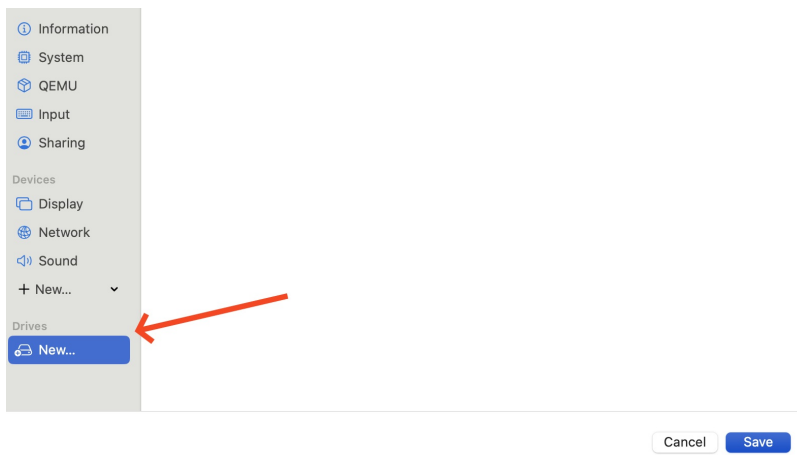
Image Type

Interface

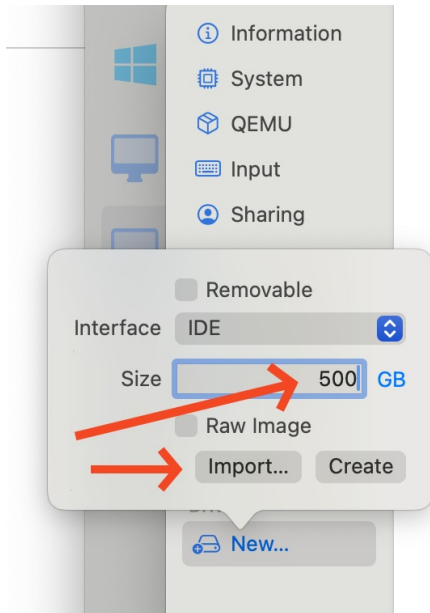
Size



11. Click New... to make a new drive. This is where we will import the QCOW2 file.



12. When you clicked New... you should put 500 GB for the size and then click Import...



13. Browse to the QCOW2 file from the conversion step and select it. Now you can pick Save on the Settings page to finish.

Launch

You'll now have the virtual machine listed and if you pick the play button to start it up it should boot up fully.

✓ Once booted you can login as root / filewave and then you can change the root password or use [Webmin](#) to change it.

Related Content

- [UTM | Virtual machines for Mac \(getutm.app\)](#)
- [Homebrew — The Missing Package Manager for macOS \(or Linux\)](#)
- [Convert ova to qcow2 and start it with UTM | by Simo | Medium](#) (The source for this article)

🔄Revision #2

★Created 12 January 2024 16:10:07 by Josh Levitsky

✎Updated 12 January 2024 17:05:38 by Josh Levitsky