

Fusion: Debian 11.2 in Fusion for Apple Silicon

Technical Preview

NOTE: this process is based on *Tech Preview Tips and Techniques V7* (22-Apr-2022) compiled by @Technogeezer

Get the Debian ISO

Starting URL is...

<https://cdimage.debian.org/mirror/cdimage/archive/>

1. Select: [11.2.0/](#)
2. Select: [arm64/](#)
3. Select: [iso-dvd/](#)

Final URL for all related files is....

<https://cdimage.debian.org/mirror/cdimage/archive/11.2.0/arm64/iso-dvd/>

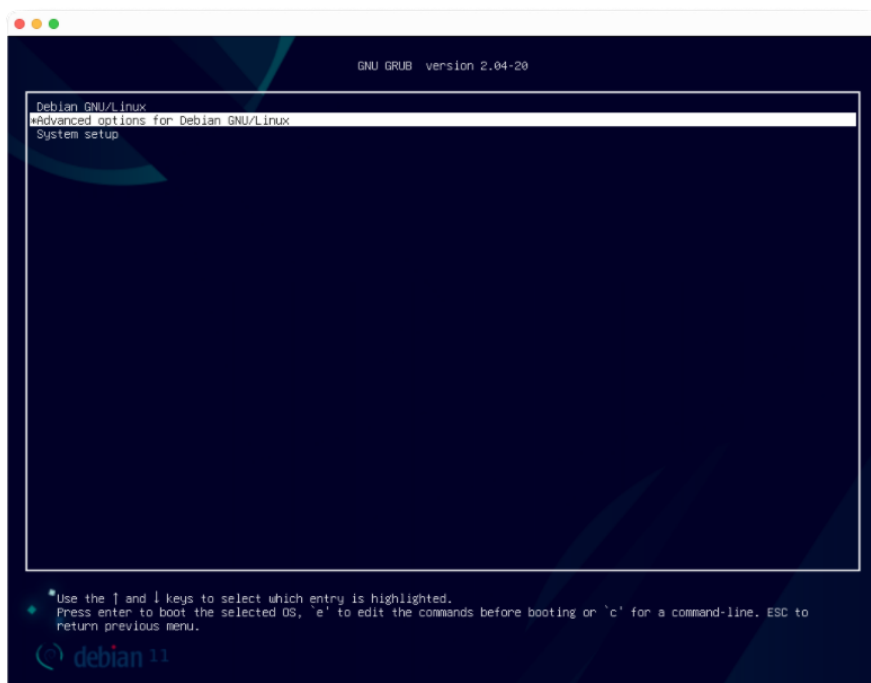
Download URL is...

[debian-11.2.0-arm64-DVD-1.iso](#)

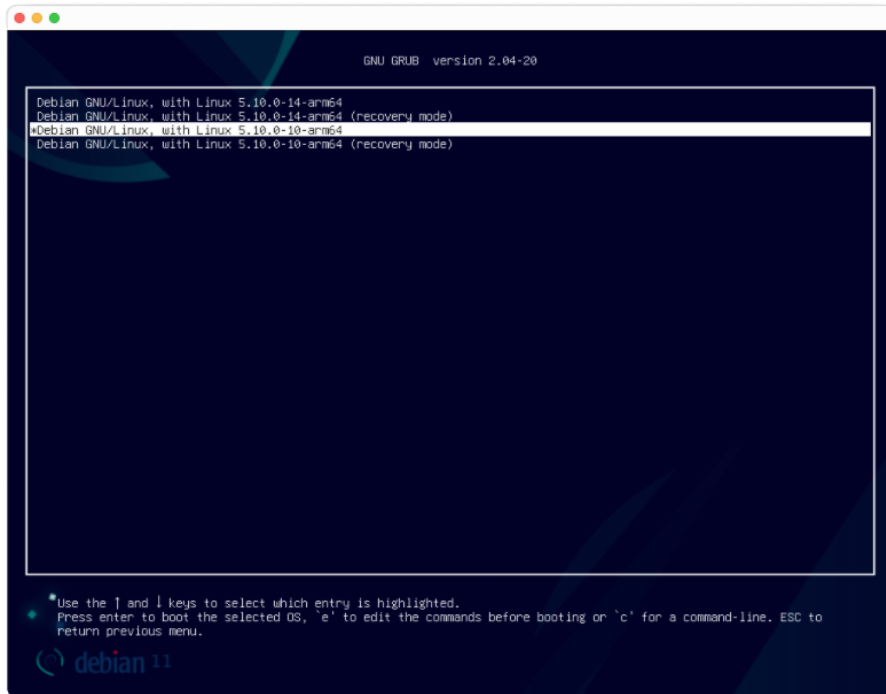
Install Debian

Go through normal install then on first boot...

Select ***Advanced options...**



Ignore the 5.10.0-14-arm64 kernel (**this will be removed later**) and select the 5.10.0-10-arm64 kernel. For some reason the 5.10.0-14-arm64 kernel hangs on **Loading initial ramdisk...**



Force GNOME to use Xorg (i.e. disable Wayland)

Wayland is known to cause issues. To force Xorg, do the following...

edit `/etc/gdm3/daemon.conf` and remove the comment from `#WaylandEnable=false`.

It will look like the following...

```
[daemon]
# Uncomment the line below to force the login screen to use Xorg
WaylandEnable=false
```

Reboot

Fix kernel situation

We need Debian Backports as a repository source. Add the following line to `/etc/apt/sources.list`:

```
deb http://deb.debian.org/debian bullseye-backports main contrib non-free
```

then run...

```
apt update
```

List available kernel images...

Run...

```
apt list | grep linux-image
```

This will return a long list, but we only need one...

```
.  
.   
.   
linux-image-5.15.0-0.bpo.3-arm64/bullseye-backports,now 5.15.15-2~bpo11+1  
arm64 [installed]  
.   
.   
.
```

Install the 5.15.0-0 kernel image as recommended...

```
apt-get install linux-image-5.15.0-0.bpo.3-arm64/bullseye-backports
```

Remove the pesky 5.10.0-14-arm64 image from grub

List the images installed by running...

```
dpkg --get-selections | grep linux-image
```

This will list the following...

```
ii linux-image-5.10.0-10-arm64          5.10.84-1  
arm64          Linux 5.10 for 64-bit ARMv8 machines (signed)  
ii linux-image-5.10.0-14-arm64        5.10.113-1  
arm64          Linux 5.10 for 64-bit ARMv8 machines (signed)  
ii linux-image-5.15.0-0.bpo.3-arm64    5.15.15-2~bpo11+1  
arm64          Linux 5.15 for 64-bit ARMv8 machines (signed)  
ii linux-image-arm64                  5.10.113-1  
arm64          Linux for 64-bit ARMv8 machines (meta-package)
```

Remove the 5.10.0-14 image...

```
apt-get --purge remove linux-image-5.10.0-14-arm64
```

Reboot

Install open-vm-tools

```
apt install open-vm-tools  
apt install open-vm-tools-desktop
```

Reboot

Add some color to bash

edit `/etc/bash.bashrc` and add the following...

```
# bash shell colors  
export LS_OPTIONS='--color=auto'  
eval "`dircolors`"  
alias ls='ls $LS_OPTIONS'  
  
# add /usr/sbin to path  
export PATH=$PATH:/usr/sbin
```