BORSAT OS Setup Guide

Setup

BORSAT OS does not require an installation. A hard drive image has been provided with BORSAT OS setup and ready to go. Currently, the best way to use BORSAT OS is to create a virtual machine.

QEMU

Running BORSAT OS on QEMU is very easy to do. Reference the QEMU folder on the GitHub web site.

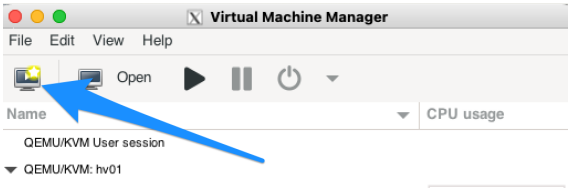
1. Download the **bos.img** image file.
2. Install QEMU as normal, make sure to install **qemu-system-x86_64**.
3. Referring to the QEMU folder on GitHub, create an executable script similar to below.
4. Then run the script.

```
#!/bin/bash
qemu-system-x86_64 -d cpu_reset -monitor stdio \
        -drive format=raw,file=bos.img \
        -m 512m \
        -device VGA \
        -netdev user,id=net0,hostfwd=tcp::2222-:22,hostfwd=tcp::8080-
:80,hostfwd=tcp::8989-:8989 \
        -device e1000,netdev=net0
```

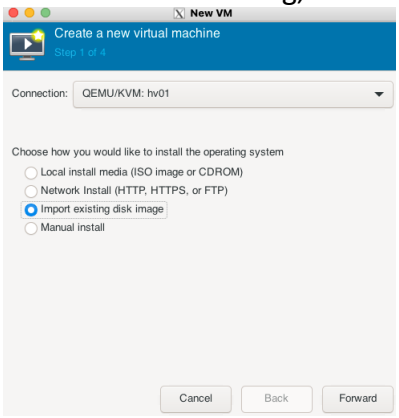
KVM

KVM is also supported. Rather than doing an install, you will import an existing image. These procedures assume you know where KVM image files are placed. For example, KVM on Ubuntu will place image files into /var/lib/libvirt/images/).

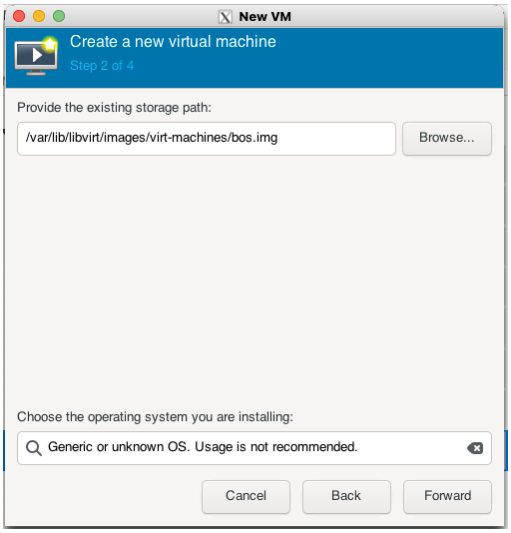
1. Download the bos.img file (raw flat file).
2. Place the file into the KVM images directory.
3. Run virt-manager.
4. Select 'Create a new virtual machine' from the tool bar.



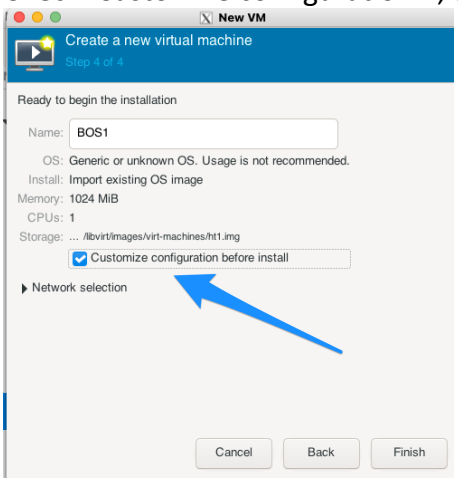
5. On the New VM dialog, select ‘Import existing disk image.’ Then click Forward.



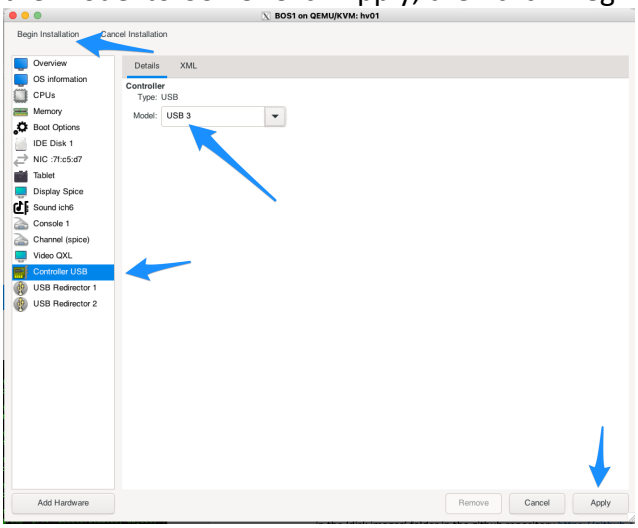
6. In the ‘Provide the existing storage path’ text box, type in the directory path to the bos.img file. You can also use the Browse button to manually select the file.
7. In the ‘Choose the operating system …’, enter Generic or unknown OS.
8. Click Forward.



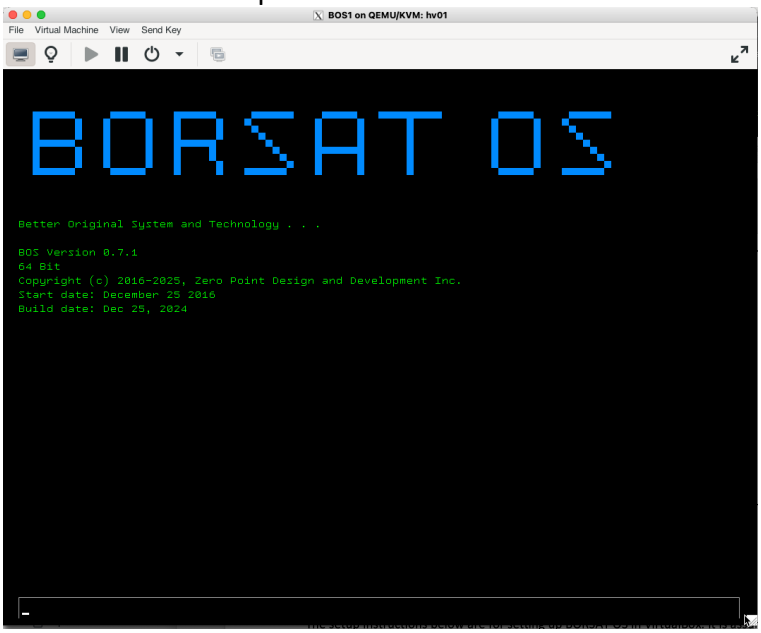
9. Accept the default for Memory (1024) and CPU (1), click Forward.
10. Enter a name for the OS; BOS1.
11. Check ‘Customize configuration..’, then click Finish.



12. On the configuration screen, select ‘Controller USB’ on the left hand side. Then change the Model to USB 3. Click Apply, then click ‘Begin Installation.’



13. A few seconds later, the operating system will load up. You might need to resize the screen to see the input box at the box.



14. Done.

VirtualBox

The setup instructions below are for setting up BORSAT OS in VirtualBox. It is assumed that VirtualBox is already installed and working properly.

1. Download the BORSAT OS hard drive image file to a local folder. The image file is located in the ‘disk images’ folder in the github repository https://github.com/ZPDD/BORSAT OS/tree/main/disk%20images

2. Launch VirtualBox and create a new VM.
3. In the new VM dialog use the following:
    a. Name: BORSAT OS is an example name, use whatever name is appropriate.
    b. Machine Folder: You can use the default location.
    c. Type: set to ‘Other.’
    d. Version: set to ‘Other/Unknown (64-bit)’
    e. Memory size: set to 512MB
    f. Hard disk: set to ‘Do not add a virtual hard disk’

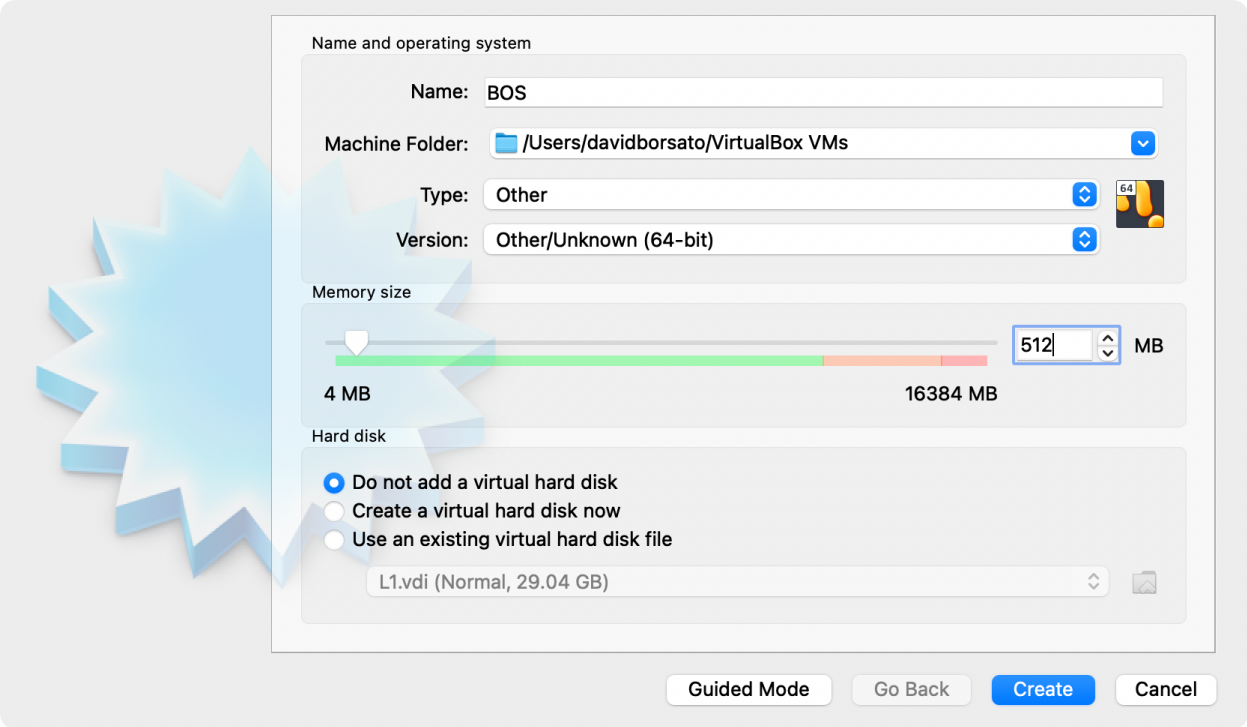
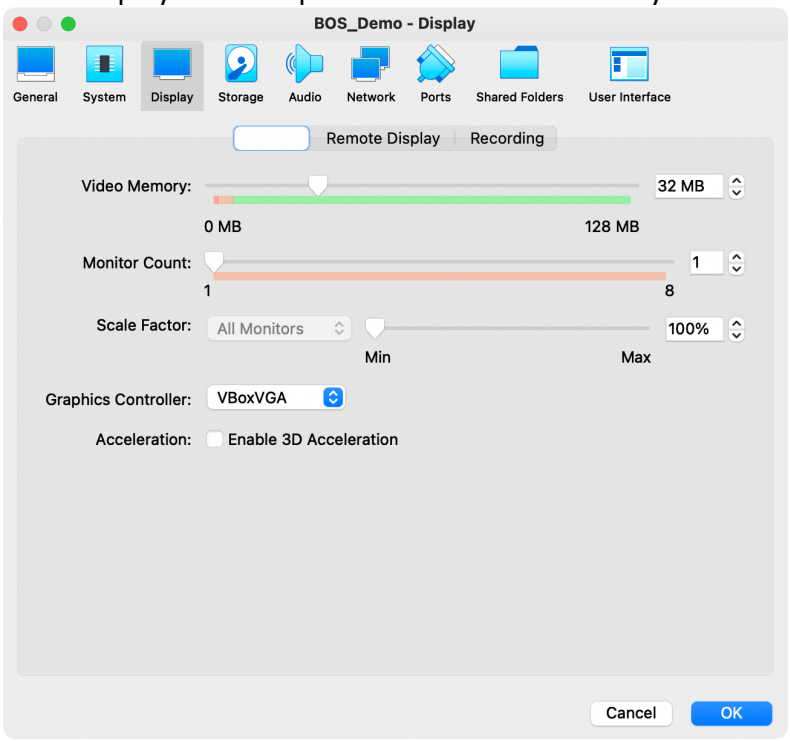


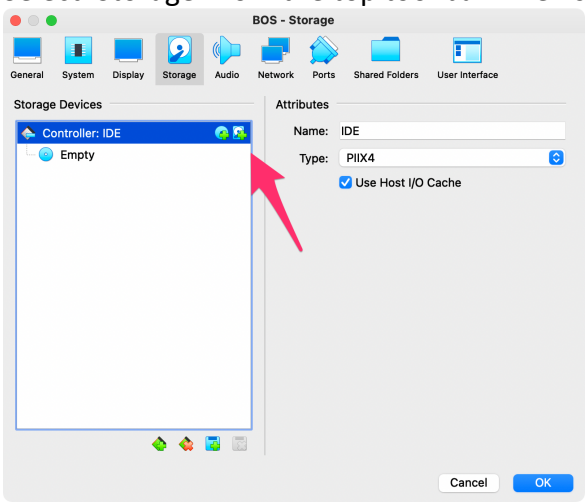
Figure 1 - New VM Dialog in Expert Mode

4. Click Create.
5. At the main VirtualBox screen, right click on the newly created VM and select ‘Settings’

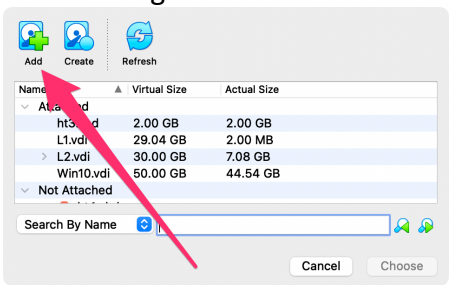
6. Click ‘Display’ at the top and set the video memory to 32MB.



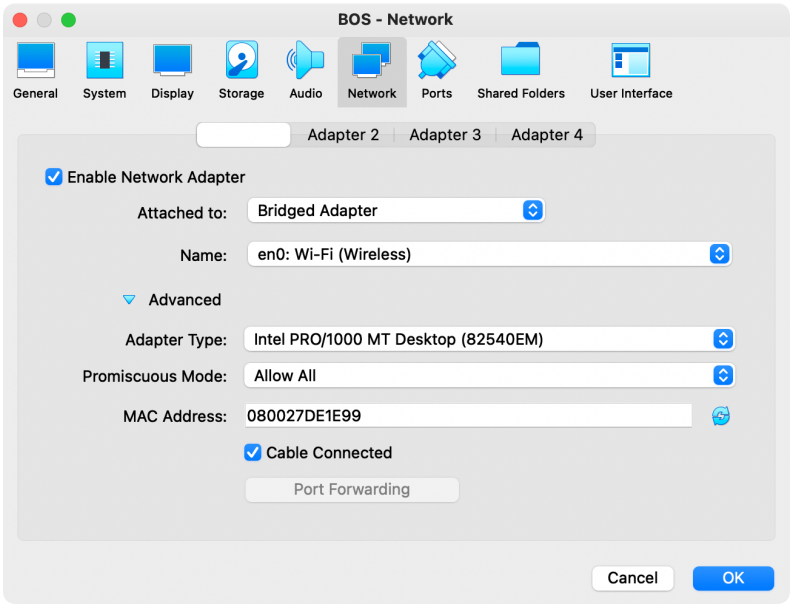
7. Select ‘Storage’ from the top tool bar. Then select ‘Add hard drive’ to the IDE controller.



8. At the add drive dialog, select ‘Add’ at the top toolbar and navigate to the BORSAT OS.vhd image file that was downloaded in step 1.



9. Once the hard drive image is selected, click ‘Network’ from the top toolbar.
10. Set the following:
    a. Enable Network Adapter: Should be checked.
    b. Attach to: Bridged Adapter
    c. Name: In most cases leaving this to the default will be fine. However, a NIC can be specified.
    d. Expand ‘Advanced’
    e. Adaptor Type: set to Intel PRO/1000 MT Desktop
    f. Promiscuous Mode: set to Allow All



11. Click OK. This will update the new VM.
12. At the main VirtualBox screen, double click the new VM to launch the OS.