

# 1 Shared Folders

A shared folder is a way that you can transfer files between the host computer and your virtual machine. In general, what you do is tell the VM software (VirtualBox or VMware) that you want to set up a shared folder and then you need to tell the virtual machine (guest OS) that it is there and link it up. As with anything on virtual machines, there may be troubleshooting on a case by case basis. I have included fixes for the things I have encountered but if you get stuck please feel free to stop by my office and we can work through it together.

In general, you should be careful with shared folders, this will allow you to save and delete files on your host system from your VM. If you delete a file on the host through the VM, the file will not be sent to the trash on either the host or the VM.

## 2 VirtualBox

1. Start up VirtualBox but do not start the VM yet.
2. Go to the VM properties and select Shared Folders.
3. Click on the folder with a + sign icon on the right.
4. At this point a dialog will open.
  - (a) In the Folder Path box, put in the folder path of the folder you want to share. Inside the VM, the shared folder will be linked to this physical folder.
  - (b) In the Folder Name box put in the name of the folder you want to use. It can be anything you want, I would keep it at a single word like Share or PC or Mac.
  - (c) Make sure the Read-only check box is unchecked and that the Auto-mount check box is checked.
5. Click OK and start up the VM.
6. When the VM is started open the Caja file manager and look on the left at the Places. You should see a place that is the Folder Name but with `sf_` in front of it. Click on this place and then you should see the contents of that folder on your host machine.

**Note:** You may get a permission error when you select the place, if so this is usually caused by not being in the right group. Open the terminal and run the command,

```
sudo usermod -aG vboxsf $(whoami)
```

Restart the VM and see if you now have access.

### 3 VMware

VMWare is a little more involved. The current version of open-vm-tools has a bug in it that must be patched first.

1. Start up the VM.
2. Open the terminal, cd into the Downloads directory.
3. Run the following three commands,

```
sudo git clone https://github.com/rasa/vmware-tools-patches.git
cd vmware-tools-patches
./patched-open-vm-tools.sh
```

4. At this point you can delete the vmware-tools-patches directory that was created in your Downloads directory.
5. Shut down the VM.
6. Open VMWare Workstation and go in to edit the properties for the VM.
7. Click the Options tab and select Shared Folders.
8. Select Always enabled.
9. Click on Add.
10. In the Name box put the name of the folder you want to use in the VM. It can be anything you want, I would keep it at a single word like Share or PC or Mac.
11. In the Host Path box, put in the folder path of the folder you want to share. Inside the VM, the shared folder will be linked to this physical folder.
12. Make sure that Enabled is checked and that Read-only is unchecked. Click OK.
13. Start up the VM.
14. First we will make sure that the VM is seeing the shared folder, sometimes this is a problem. Open the terminal and run the command;

```
vmware-hgfsclient
```

It should return the Name you used in setting up the shared folder. If you do not see the name then the VM is not seeing the shared folder, if this happens please stop by my office and bring your laptop so we can work on it together.

15. If the VM is seeing the shared folder all we need to do is “link” it. This is not really necessary but it makes it more convenient for you. Run the command,

```
ln -s /mnt/hgfs/<Name>/ ~/
```

where <Name> is the name you used in setting up the shared folder. For example, if you used the name PC then the command would be,

```
ln -s /mnt/hgfs/PC/ ~/
```

This will place another directory in your home directory with the name <Name>.

16. Open up Caja and click on the directory <Name>. You should see the contents of that folder on your host machine.

**Note:** You may get a permission error when you select the place, if so this is usually caused by not being in the right group. Open the terminal and run the command,

```
sudo usermod -aG vboxsf $(whoami)
```

Restart the VM and see if you now have access.