

2015 CIDER

Please review all instructions before beginning. The image is 2.4 GB and takes approximately 18 min to download on a high speed connection. We recommend downloading this image before arrival.

This image contains the following packages:

- ASPECT
- MELTS
- Visco2D
- GMT
- Paraview

Rayleigh Nusselt Number Animations (courtesy of Laurent Montesi): [2015_animations_lm.pptx](#) (187 MB, uploaded by Lorraine Hwang 2 years 8 months ago) (courtesy of Laurent Montesi)

Prerequisites for the CIDER 2015 Aspect Tutorial

Virtualbox

Please download and install virtualbox *BEFORE* the tutorial. You can download it from [VirtualBox downloads](#).

Use [these directions](#) to install VirtualBox.

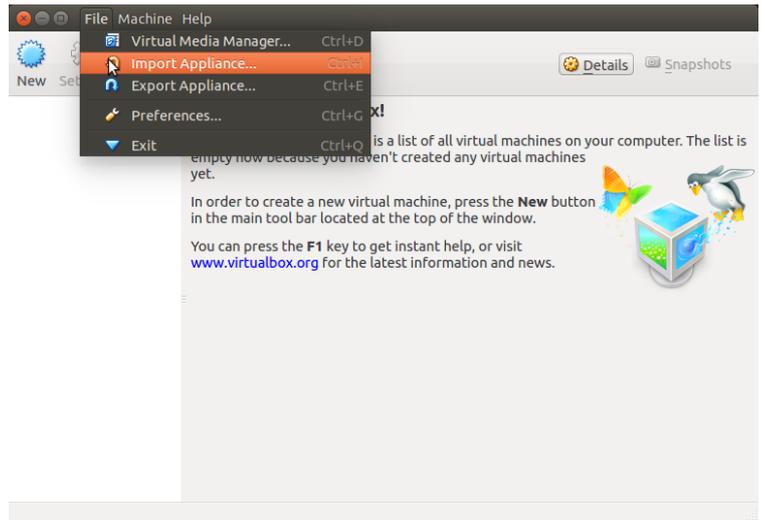
It is recommended that your computer have at least 3GB and preferably 4GB of memory as well as 10GB of free harddrive space to use the virtual machine.

Tutorial Image

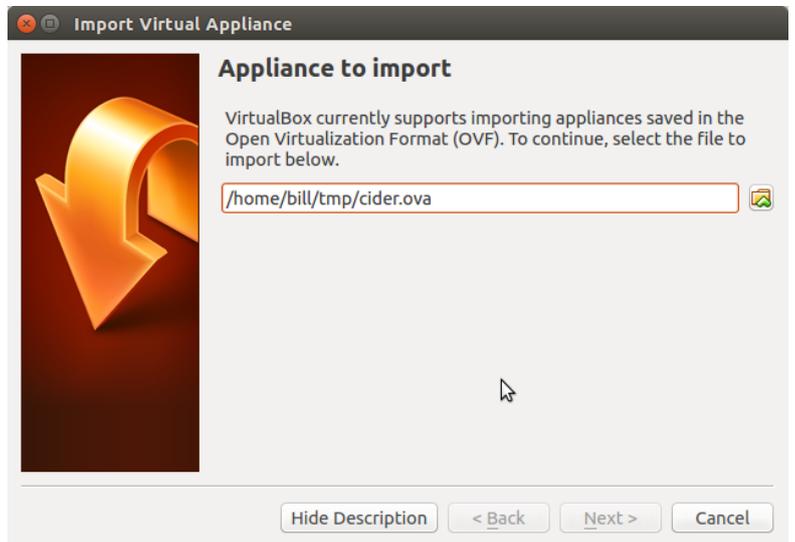
This VirtualBox Image is 2.4GB. Download it onto the laptop you are going to use for the tutorial.

Importing the CIDER tutorial image

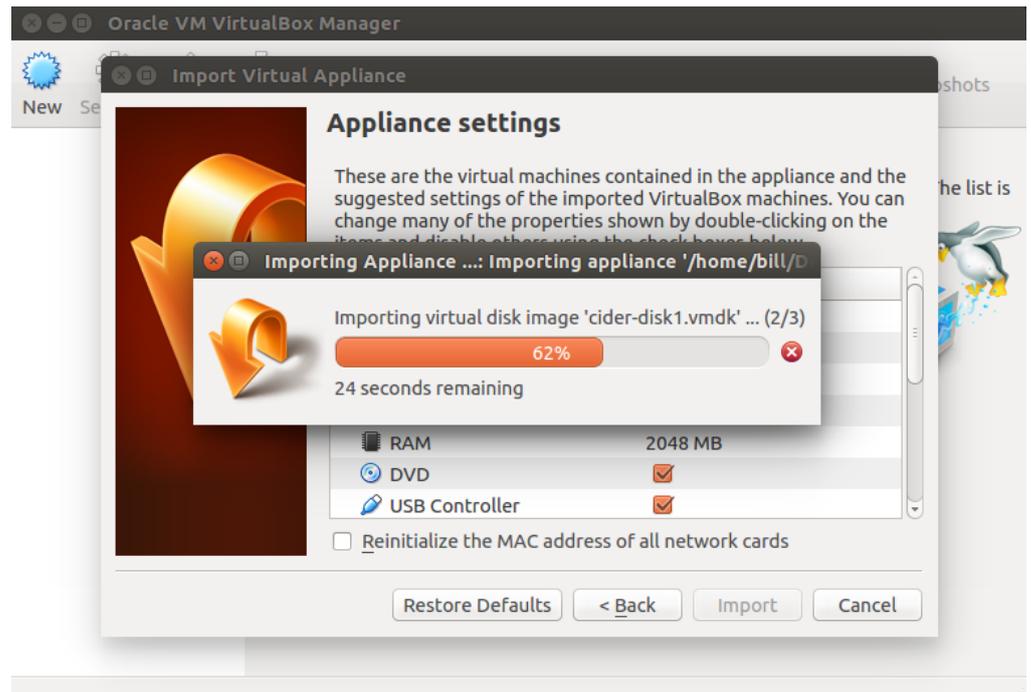
1. Run VirtualBox.
2. Select from the menu "Import appliance":



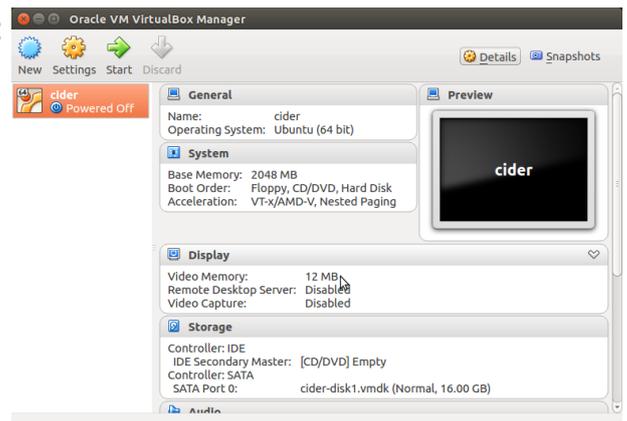
3. Select the downloaded cider.ova image:



4. Select Next and Import:



5. Click on start (the green arrow) to launch the image:



g the Image

age should autologin, but if needed the username is cig and the password is cig. The image does not any connections from the network. Sudo apt-get install to install ubuntu packages.

ed Folders

l folders allow easy movement of files between your operating system (host) and the CIDER virtual e (guest). These instructions will help you set up a shared folder.

is important to have a folder on your host already created, as VirtualBox's interface does not support creation.

ne VirtualBox application, highlight the CIDER virtual machine, and open its settings (in the top-bar

Settings or by clicking the gear icon). In the list of tabs, select *Shared Folders*. Right-click *Machine* and select *Add Shared Folder*.

pop-up, click on the arrow next to *Folder Path* and select *Other....* This should pop up a file navigator. Click on the folder you want to share and select your folder on your host machine. Be sure to also check the *Auto-Mount* option, and hit

the power button to start the CIDER virtual machine. Let it boot up, then open a terminal (Ctrl+Alt+T) and type in:

```
sudo apt-get update && sudo apt-get install dkms
```

Wait for it to finish.

Click on the CD icon in VirtualBox's topbar and select *Devices ? Insert Guest Additions CD Image....* A window may pop up to run the CD. Close or Cancel that window, and, back in the terminal, type:

```
cd /media/cig/VBOXADDITIONS_4.3.28_100309
```

then

```
sudo ./VboxLinuxAdditions.run
```

After the command to complete, then poweroff and restart the virtual machine. You should now have a working connection between your computer and the CIDER virtual machine. The guest folder will be at `/sf_<your host folder name>`.

Optional: If you want the guest shared folder to appear on, for example, the desktop, open a terminal and run the following command (replacing the brackets with your folder name):

```
sudo mount -t vboxsf /media/sf_<your host folder name> ~/Desktop
```

Troubleshooting

VirtualBox VT-x/AMD-V Error

When starting the CIDER VM, you see a pop-up similar to:

“**VirtualBox – Error:** VT-x/AMD-V hardware acceleration is not available on your system. Certain guests... require this feature and will fail to boot without it.

Close VM Copy Continue”

Likely, this means that you do not have hardware support for virtual machines enabled in your BIOS (or on the motherboard). To enable it, you will need to edit your BIOS settings.

Entering your BIOS interface requires holding down a button while your computer starts up (i.e. if your computer is already on, you will have to restart it). Usually, while your computer is starting, there will be a prompt to press a key to enter the BIOS, though if your computer boots quickly, it may be hard to read. Some common keys to hold down are: Esc, Del, F10, F12, and Enter. If you have trouble accessing the BIOS, try looking on the manufacturer’s website for instructions.

When you are in the BIOS settings, you should look for the virtualization setting, sometimes called *Virtualization*, *Intel Virtual Technology*, or something similar. Try looking under a *Security* or *Advanced Options* menu. If you are able to find the setting, make sure it is set to enabled. Then save & exit, and restart your computer. You should now be able to run the virtual machine with VirtualBox.