Computational Neuroscience Virtual Machine

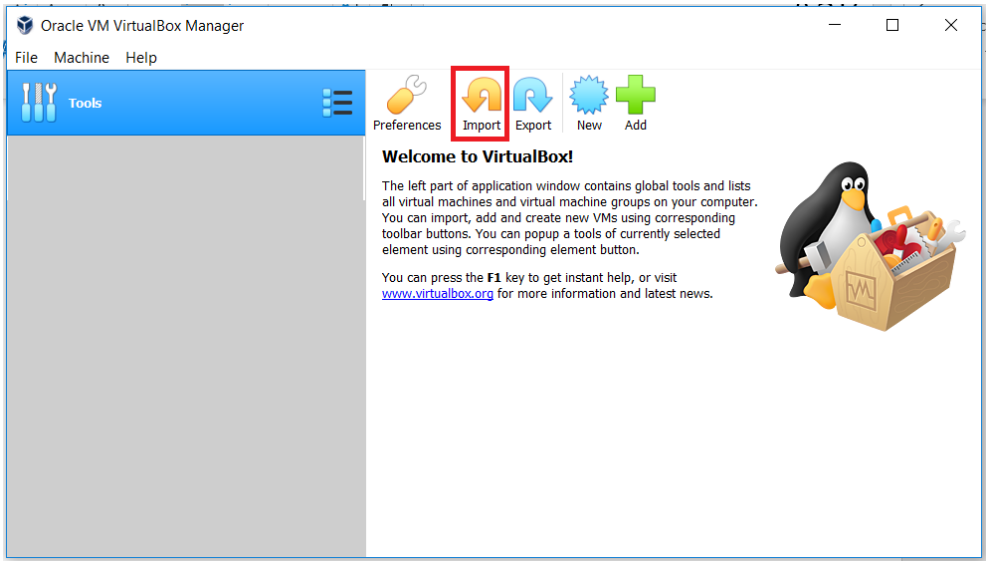
Initial Release: 4/1/2019 | Updates: 9/6/2019

Installation:

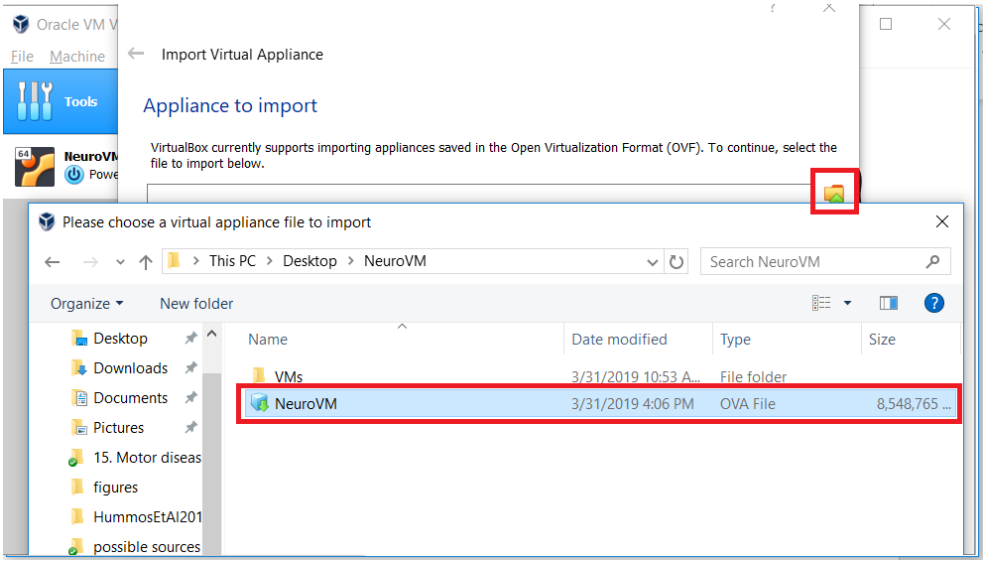
1. Download and install VirtualBox: (Windows, Mac OS and Linux installers available)
   https://www.virtualbox.org/wiki/Downloads

2. Download the CompNeuro Virtual Appliance provided by the Mizzou Neural Engineering Lab:
   https://drive.google.com/uc?id=1-9tUHcFvi5LpnII8ZdzsfV8ZObdEwAUl
   This file is 8.6GB and will take some time to download. The file may also be available via USB.

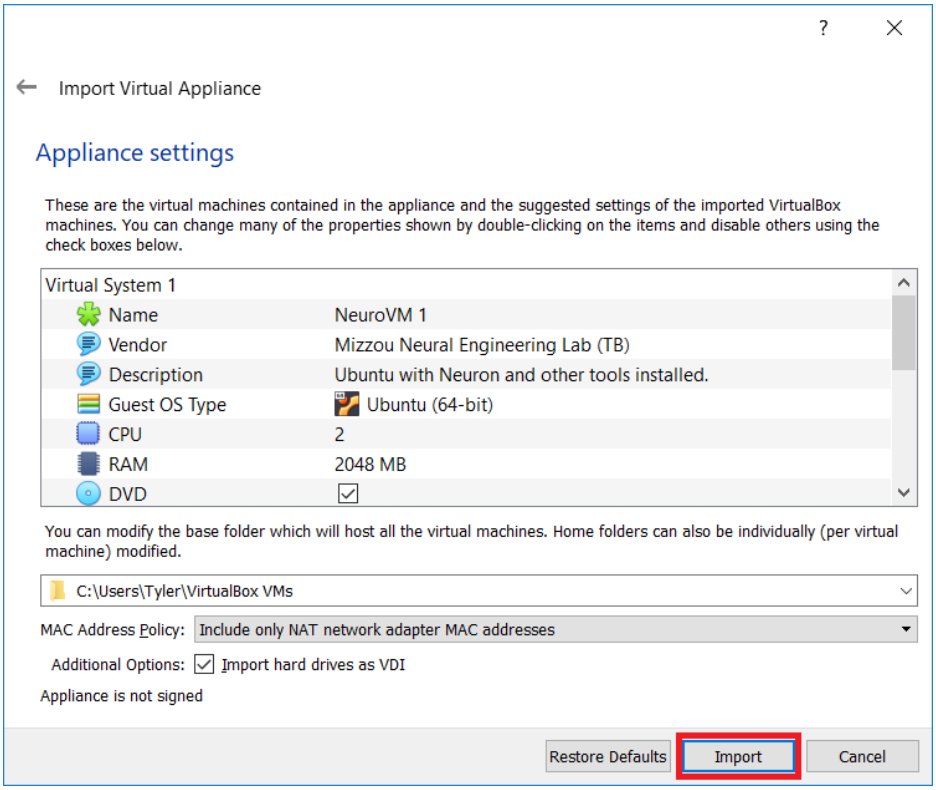
3. Import the appliance in VirtualBox



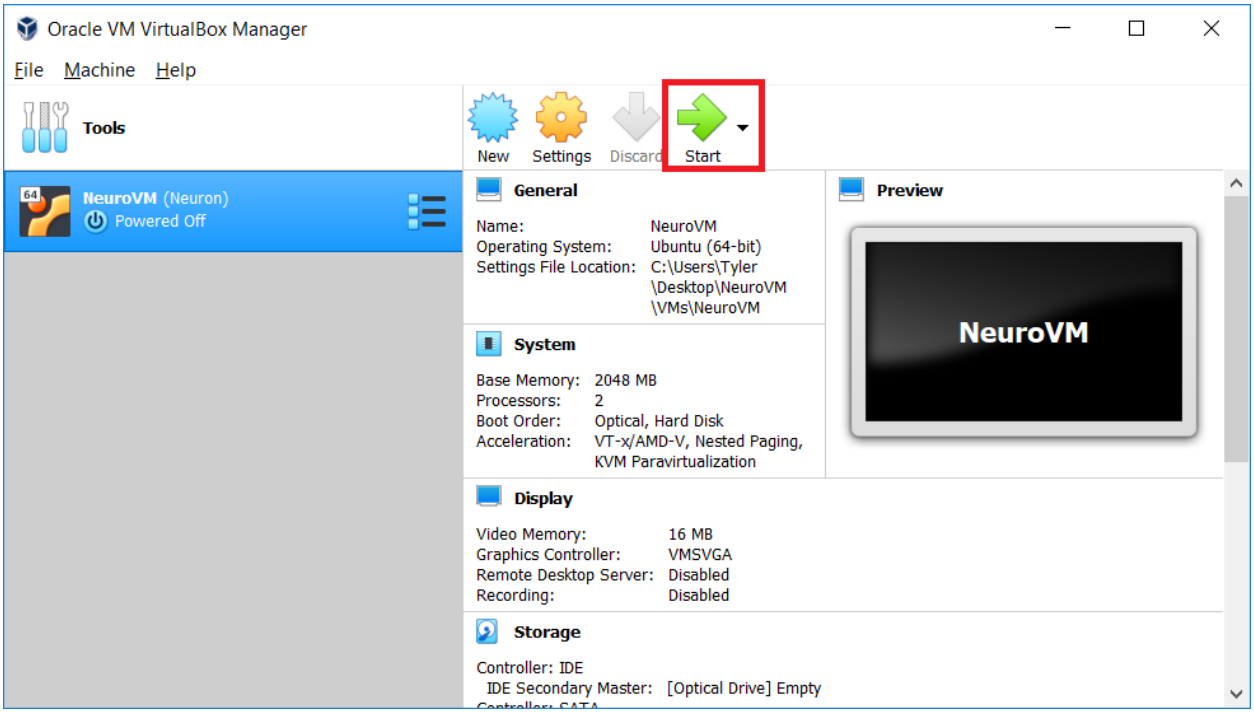
4. Select the downloaded NeuroVM ova file.



5. Change settings if needed (increase memory, etc.). This process may take several minutes.



6. Start the VM and you're ready to go!



Usage

Ubuntu 18.04LTS is installed

Username: mizzou

Password: mizzou

The system should automatically log you in, password will only be required when installing additional software. VirtualBox tools are available, transferring files from the host system can be done through drag and drop.

Software provided:

Neuron 7.7 (with IV and MPI) https://www.neuron.yale.edu/neuron/

Anaconda 3 https://www.anaconda.com/distribution/

Nest http://www.nest-simulator.org/

BMTK (Sept '19 updates) https://github.com/Alleninstitute/bmtk

SimAgentMPI https://tylerbanks.net/SimAgentMPI/

BMTools https://github.com/tjbanks/bmtools

VSCode https://code.visualstudio.com/

Running Neuron

nrniv, nrngui, nrnivmodl are all available from the terminal.

Navigate to the directory with your model and run from there.