Windows and Mac Users

You will need a laptop with at least **8GB RAM** and **25GB** of contiguous local storage.

Installation instructions:
- Please download and install **Oracle VM VirtualBox** management software to your training machine for your respective OS (Windows host or OS X host)

- Once installed, start the application and click on **File->Preferences…** to display the preferences. On the *General* pane, ensure that the "*Default Machine Folder*" points to a folder on the drive with the available free space. This is where VirtualBox will create/manage the files for VMs.

- A pre-configured Linux Ubuntu 16.04 LTS 64-bit VM has been created that you will copy to your local machine and import into your instance of VirtualBox that will be used for the training. Download the SERVIR-VIC Training OVA file from the following link: https://goo.gl/Mh9UZb

- Once VirtualBox is installed and configured, you can simply double-click on the local OVA file (or click on **File->Import Appliance** and browse to the OVA file) and the application will begin the import process to load the VM. Just take the default options. It may take up to 30 minutes to import the VM. When the import is complete, the "Ubuntu-VICTraining" VM should be listed in the VirtualBox pane.

Ubuntu-VICTraining Login Information:
- Username: SERVIR-VIC
- Password: servir1234!

Commented [Office1]: Virtual Box -> Preferences for macOS users

Linux Users

These installation instructions are for installing and building some of the required programs from source code on Linux OS needed for the SERVIR VIC Training. The following is a list of required open source software needed for compiling, setup, running, and post processing/visualization of the VIC model. To assist with the installation, an installation script has been provided. Software set up begins at step 1.

Required Software:
  i.   Linux OS (preferably Ubuntu 2.14 or greater)
  ii.   gfortran
  iii.   zlib
  iv.   curl
  v.   Java
  vi.   HDF5
  vii.   NetCDF4
  viii. Panoply
  ix.   QGIS (2.14 or greater)
  x.   Python 2.7
      x.i.   NumPy
      x.ii.   GDAL
      x.iii. SciPy
      x.iv.   XArray
      x.v.   xlrd
      x.vi.   pandas
      x.vii. matplotlib
      x.viii. PyProj
      x.ix.   netCDF4
      x.x.   Basemap
      x.xi.   RVIC

1. *Installing supporting programs:*

   - Open Terminal
   - Navigate to the "servir–vic–training/documents/installation" folder
   - Run the following command: `$ sudo bash linux_vic_training_install.sh`
     - Follow the installation instructions
     - When asked: "`Do you wish the installer to prepend the Miniconda3 install location to PATH in your /home/kmarkert/.bashrc ? [yes|no]`" type "yes"

2. *Installing visualization/GIS software:*

- Installing QGIS:
    - Run command: $ sudo apt-get install qgis python-qgis
    - Navigate to the "/etc/apt/" directory
    - Run command: $ sudo nano sources.list
    - Insert these three lines at the end of the file:
      ```
      deb http://qgis.org/ubuntugis xenial main
      deb-src http://qgis.org/ubuntugis xenial main
      deb http://ppa.launchpad.net/ubuntugis/ubuntugis-
      unstable/ubuntu xenial main
      ```
    - Close/save the file: "Ctrl-X", then enter "Y"
    - Run commands: $ sudo apt-get update
      ```
                     $ sudo apt-get upgrade
                      $ sudo apt-get install qgis
      ```

Congrats all of the programs have been successfully installed!

Commented [Office2]: Change keyword before main for each line depending on your Ubuntu version
Keywords are found at this website:
http://www.qgis.org/en/site/forusers/alldownloads.html#debian-ubuntu