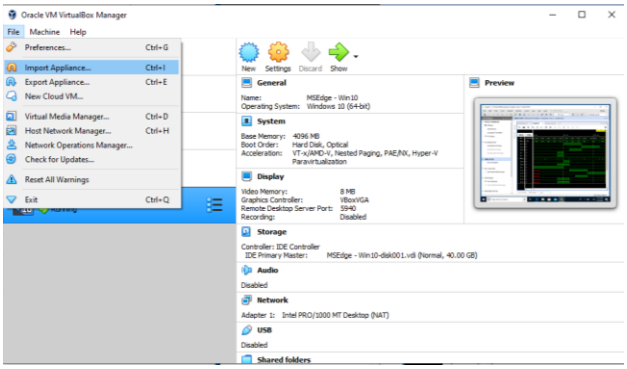
Windows Virtual Box Setup Instructions

Objective

To complete several courses in the ECE curriculum, students need to run Vivado at home. A separate procedure is available to install the free Vivado WebPack software, but there is no Mac version of Vivado. To work around this obstacle, this procedure will guide you through setting up a Windows 10 Virtual Machine (VM) that can be used to run Vivado. Creating a VM allows you to have a logically separate Windows PC that runs in a window on your Mac. We are utilizing a free 90-day evaluation Windows 10 VM image that is provided by Microsoft. Please follow the instructions below to set up your VM. Note that these instructions were done with a Windows 10 PC, as I do not have a Mac to test with. But theoretically, it should work the same. A VM uses the resources of your host PC, so it is possible you might need to downgrade some settings such as RAM if you do not have enough RAM to support the default settings of this VM image.

Procedure

1. In a web browser, go to https://www.virtualbox.org/
    a. Download and install VirtualBox
2. In a web browser, to https://developer.microsoft.com/en-us/microsoft-edge/tools/vms/
    a. Click on VIRTUALBOX to download a .ova file that works with Oracle VirtualBox
    b. Navigate to the downloaded file and extract it
3. Open Oracle VM VirtualBox
    a. Select File -> Import Appliance



    b. Browse and select MSEdge – Win10.ova
    c. On the 'Virtual Appliance' window, click 'Import'
        i. This will take a few minutes to complete
    d. Click on the new VM called 'MSEdge – Win10' on the left-hand side
    e. Click the Settings gear icon and the Settings menu will pop up
    f. On the left side, click 'Display', then change the Video Memory to 28MB (if your computer has at least twice this amount of video memory)
        i. This step will allow you to have a better resolution display in the VM.
    g. In the Settings menu, click on 'Shared Folders' and click on the 'Add' icon on the right-hand side (folder with a +)

        i. Use the ‘Folder Path’ dropdown to navigate to the directory where you are keeping your Verilog files
        ii. Click ‘Auto Mount’
        iii. Add a Mount Point where these files will be kept on the VM. My mount point is:
            1. H:
        iv. Click ‘OK’ in the ‘Add Share’ menu
    h. Click ‘OK’ in the ‘Settings’ menu
    i. Click ‘Start’ (green arrow) to boot up the VM
4. A VM window titled ‘MSEdge – Win10 – Oracle VM VirtualBox’ will open
    a. Once the VM is booted up, use the default username and password to log in:
        i. Username: IEUser
        ii. Password: Passw0rd!
            1. Please change your password once logging in for security
    b. You can maximize the VM window for more usability
    c. At this point, you can install Vivado with the Vivado HL WebPack instructions that have been provided.
    d. Once installed, run Vivado as you would normally.
        i. Use the mounted drive (H: in my case) that you set up earlier for your code. These files will be accessible on both the host computer and the VM.