Virtual Machines

Our to do list:

Research…

- Scripting
- WMIC
- Python
- Bash
- Hyper-V
- Virtual Box

Set up VMs…

Goal:

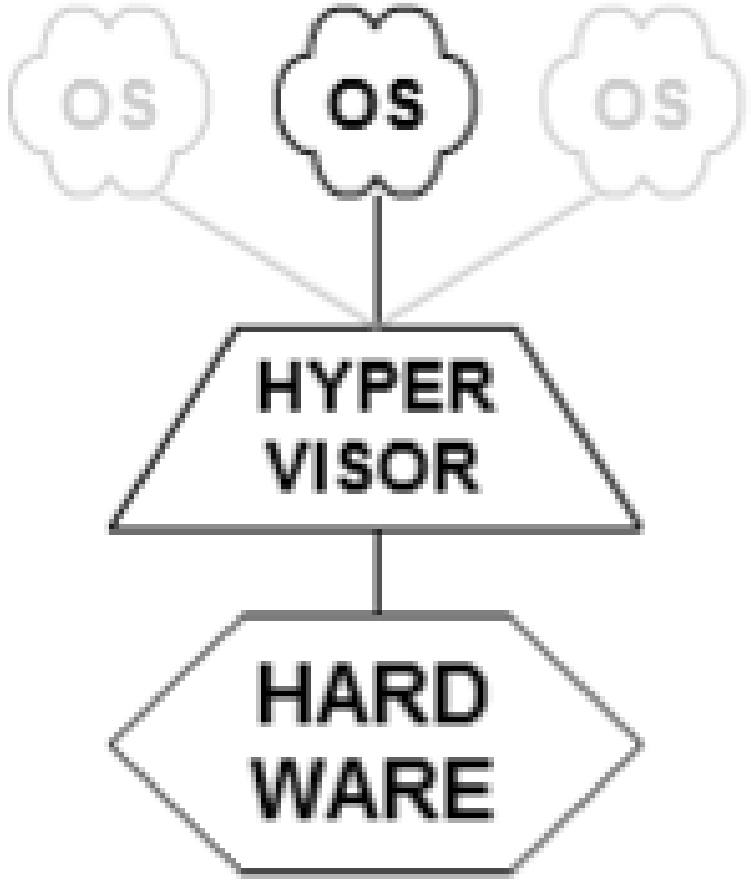
- To create three Virtual machines to test different scripts (commands)

Why:

- Eventually we want to create different commands to track who is on wifi or connected to EC-Auth

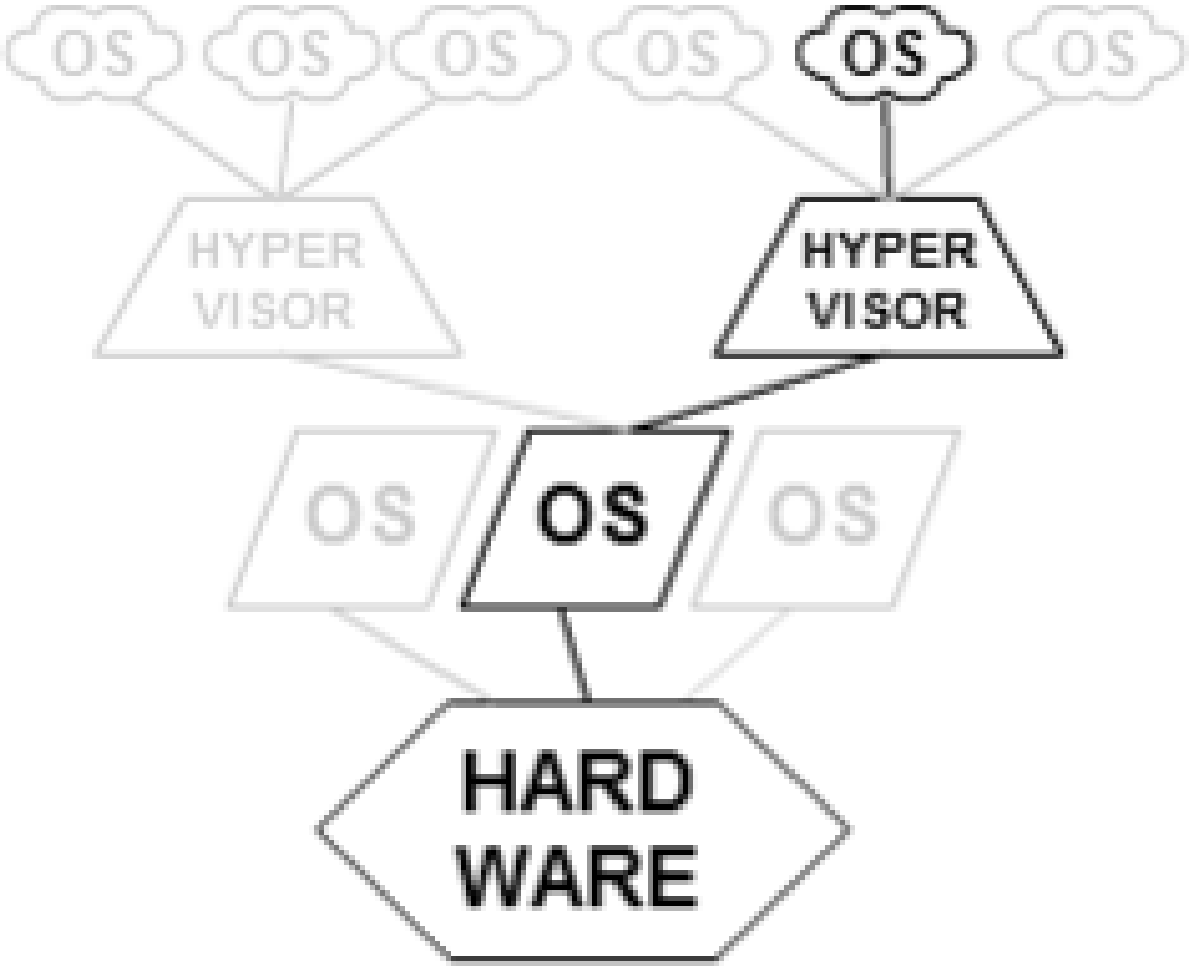
VM Setup - Windows

- HyperVisor: (virtual machine monitor) computer software that runs the virtual machine
- VirtualBox: essentially does the same thing as HyperVisor but is more compatible with different machines



TYPE 1

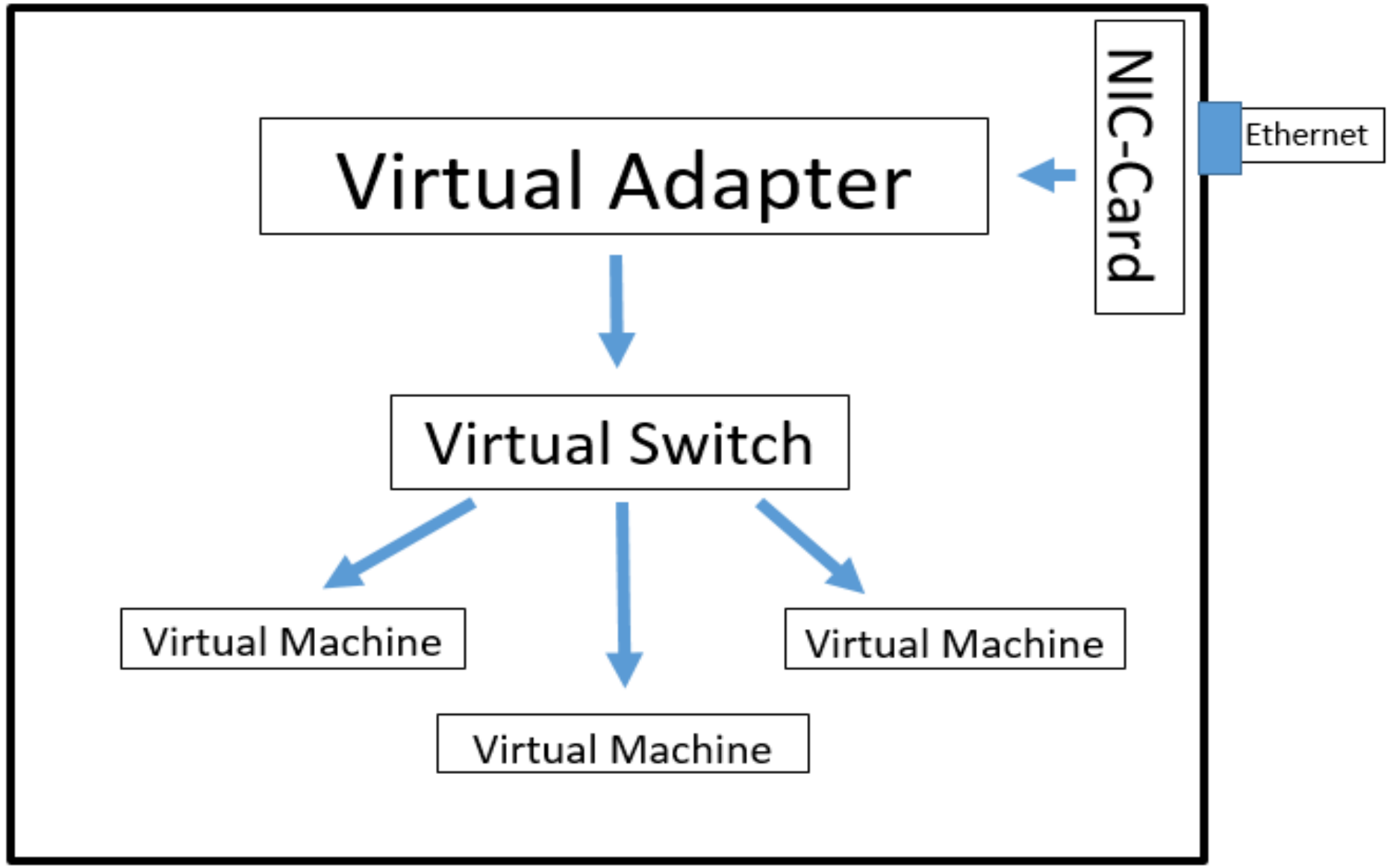
native
(bare metal)



TYPE 2

hosted

HOST PC


NIC-Card
Ethernet
Virtual Adapter
Virtual Switch
Virtual Machine
Virtual Machine
Virtual Machine

End Goal:

Scripting:

- Batch: a text file that contains commands (.bat or .cmd)

Command Prompt:

- This is where we use different batch scripts in our computer
- Everyone can pull is up now!
- Type in “color\”

To do:

- **Turn on Virtualization:**
- Go to System Setup (aka BIOS) and turn on Virtualization
  - The menus in system setup will be different according to manufacturer and model
  - On MOST Lenovo systems, the virtualization settings are under "Advanced", enable:
    - Intel® Hyper Threading (Intel® Virtualization Technology)
    - VT-d
    - TXT
    - For this project this is where I found these features
      - System Settings/Security/Virtualization
        - Intel® Virtualization Technology
        - VT-d
      - System Settings/Security/Security Chip
        - Intel® TXT Feature

To do:

- **Turn on Hyper-V:**
- Go to Control Panel / Programs and Features
- On the left, select "Turn Windows features on or off"
- Go down the list to "Hyper-V" and select it.
  - Windows will then add the Hyper-V binaries - this could take a minute or two.
  - After installing, Windows will ask you to reboot the computer.
- One the computer reboots, go to the start menu and navigate to Windows Administrative Tools / Hyper-V Manager

Remoting in…