Host: Windows 10 Home (Intel i7)

Guest: Windows7 Ultimate

# Things Working

* Created **.qcow2** file to install guest OS (**command*:*** qemu-img create -f qcow2 win7.qcow2 30G)
* Installed Windows 7 in that image file (**command**: qemu-system-x86\_64 -accel whpx,kernel-irqchip=off -boot d -cdrom win7.iso -m 4096 -hda win7.qcow2)
* Start the guest VM (**command**: qemu-system-x86\_64 -accel whpx,kernel-irqchip=off -boot d -cdrom win7.iso -m 4096 -net nic,model=virtio -hda win7.qcow2 -vga std -boot strict=on)
* Able to install VirtIO drivers within the running guest VM (so that we can connect qemu guest from the host)
* Able to start guest VM (**command**: qemu-system-x86\_64 -boot d -m 4096 -hda win7.qcow2 -name emvigo -monitor telnet::45454,server,nowait) with **–monitor** parameter and connected to guest via telnet (**command**: telnet localhost 45454) and able to run monitor commands via telnet
* Able to start guest VM (**command**: qemu-system-x86\_64 -boot d -m 4096 -hda win7.qcow2 -name emvigo -qmp telnet::45454,server,nowait) with **-qmp** parameter and connected to guest via telnet (**command**: telnet localhost 45454) and able to run qmp commands via telnet

# Things tried but not working

* Tried setting up networking between guest & host (**command**: qemu-system-x86\_64 -boot d -m 4096 -hda win7.qcow2 -name emvigo -netdev user,id=n0 -device rtl8139,netdev=n0). Internet connection is working inside guest but could not connect to guest from host
* Tried starting guest with TCP and able to start the guest (**command**: qemu-system-x86\_64 -boot d -m 4096 -hda win7.qcow2 -name emvigo -no-hpet -no-reboot -device e1000,netdev=user.0 -netdev user,id=user.0,hostfwd=tcp::2222-:22) without any error in console but could not connect to guest with that TCP port using SSH or telnet
* Able to install virtIO drivers inside guest for using qemu guest agent but could not able to use guest agent from host

Challenges

* Proper documentation for Windows is not available. Mostly 95% of the documentation or information available on internet is regarding Linux only
* Create a proper network between guest & host to use qemu guest agent and connect guest agent from host to control guest
* Connect guest via TCP from host to control guest