

# Housekeeping for Virtual Machines

- David Buck, February 2020

The Server Administration cluster requires students to implement and operate virtual machines created in three hyper visors – vmWorkstation, HyperV and VirtualBox.

This housekeeping document will also benefit students in other clusters such as the Tech Support cluster.

## A. Considerations.

1. Students should first create a new sub folder on their external hard disk drive for every new VM that they create.
2. The VM's relating to different hyper visors should not be mixed in together or used concurrently on their external drives..
3. The underpinning file structures are not compatible between the different hypervisors.
4. Students need to maximise their in-class time and use BaseVMs and snapshot technology appropriately.
5. The housekeeping structure in this document allows students to move VM's between classrooms and take them home for more work.
6. VM's should be copied into a backup folder at home – space permitting.
7. Treat the BaseVM folders as read only and copy as required into subsequent weeks.
8. Configure the hard disk configuration in the Hyper visor appropriately when creating new VM's – the Windows 10 hard drive can be 15GB not 60Gb in size when installing onto an external hard drive.

## B. Suggested file structure on the External Hard Drive.

### 1. Vm Workstation

vmWorkstation

BaseVm-WS

PC1-Win10

PC2-Win7

Server1-2012

Week 2

PC3-Win10

Week 3 ...etc ..

## 2. Microsoft HyperV

### HyperV

BaseVm-HV

PC4-Win10

PC5-Win7

Server3-2012

Week 2

PC6-Win10

Week 3 ...etc ..

## 3. Oracle VirtualBox

### VirtualBox

BaseVm-VB

PC9-Win10

PC10-Win7

Server6-2012

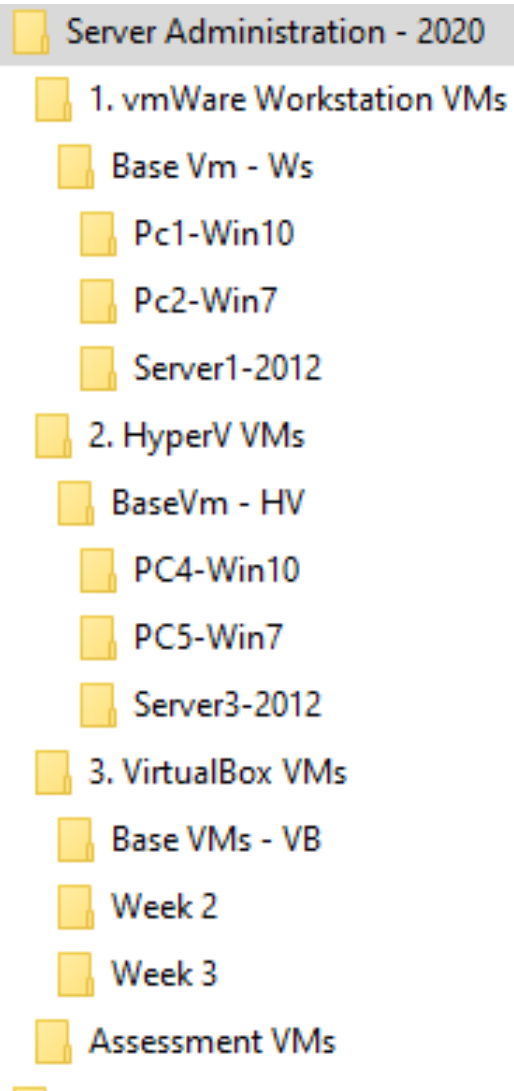
Week 2

PC8-Win10

Week 3 ...etc ..

... and so on as required...

C. Example of suggested file structure.



Appropriate management of VMs has direct industry relevance and students will save time in the long run over the duration of the course.