Hyper-V Setup Lab 3

Hyper-V Installation

1. Make sure you are able to run via the ExecutionPolicy
   1. In PowerShell, as Admin, run:

      `PS> Get-ExecutionPolicy`

      Hopefully you see `RemoteSigned`, that'll be sufficient

2. Let's enable the OptionalFeature
   1. `PS> Enable-WindowsOptionalFeature -Online -FeatureName Microsoft-Hyper-V -All -NoRestart`

```
PS C:\Windows\System32> Enable-WindowsOptionalFeature -Online -FeatureName Microsoft-Hyper-V -All -NoRestart
WARNING: Restart is suppressed because NoRestart is specified.


Path          :
Online        : True
RestartNeeded : True
```

Hyper-V Installation

3. Does not install management tools (hypervisor only)

    1. `PS> Install-WindowsFeature RSAT-Hyper-V-Tools -IncludeAllSubFeature`

4. Any chance we want to do a cluster? If so, we need things for that too…

    1. `PS> Install-WindowsFeature RSAT-Clustering -IncludeAllSubFeature`

5. Perhaps we want to allow multiple paths to file storage

    1. `PS> Install-WindowsFeature Multipath-IO`

6. Now let's let this all take effect…
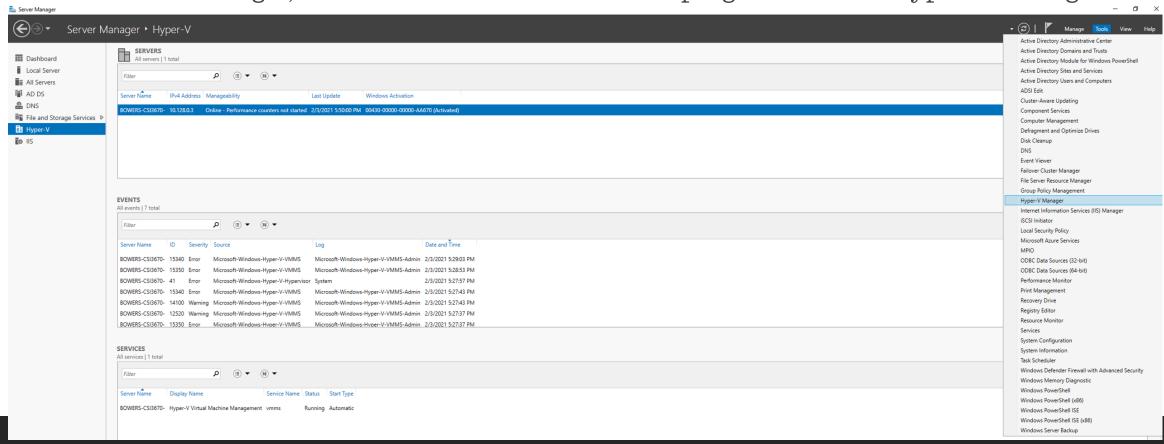
    1. `PS> Restart-Computer`

Hyper-V installation

Let's look up what we can do now...

○ PS> Get-Command – Module Hyper-V


```
PS C:\Windows\System32> Get-command -module hyper-v

CommandType     Name                                              Version    Source
-----------     ----                                              -------    ------
Cmdlet          Add-VMAssignableDevice                            2.0.0.0    Hyper-V
Cmdlet          Add-VMDvdDrive                                    2.0.0.0    Hyper-V
Cmdlet          Add-VMFibreChannelHba                             2.0.0.0    Hyper-V
Cmdlet          Add-VMGpuPartitionAdapter                         2.0.0.0    Hyper-V
Cmdlet          Add-VMGroupMember                                 2.0.0.0    Hyper-V
Cmdlet          Add-VMHardDiskDrive                               2.0.0.0    Hyper-V
Cmdlet          Add-VMHostAssignableDevice                        2.0.0.0    Hyper-V
Cmdlet          Add-VMKeyStorageDrive                             2.0.0.0    Hyper-V
Cmdlet          Add-VMMigrationNetwork                            2.0.0.0    Hyper-V
Cmdlet          Add-VMNetworkAdapter                              2.0.0.0    Hyper-V
Cmdlet          Add-VMNetworkAdapterAcl                           2.0.0.0    Hyper-V
Cmdlet          Add-VMNetworkAdapterExtendedAcl                   2.0.0.0    Hyper-V
Cmdlet          Add-VMNetworkAdapterRoutingDomainMapping          2.0.0.0    Hyper-V
Cmdlet          Add-VMPmemController                              2.0.0.0    Hyper-V
Cmdlet          Add-VMRemoteFx3dVideoAdapter                      2.0.0.0    Hyper-V
Cmdlet          Add-VMScsiController                              2.0.0.0    Hyper-V
Cmdlet          Add-VMStoragePath                                 2.0.0.0    Hyper-V
Cmdlet          Add-VMSwitch                                      2.0.0.0    Hyper-V
Cmdlet          Add-VMSwitchExtensionPortFeature                  2.0.0.0    Hyper-V
Cmdlet          Add-VMSwitchExtensionSwitchFeature                2.0.0.0    Hyper-V
Cmdlet          Add-VMSwitchTeamMember                            2.0.0.0    Hyper-V
Cmdlet          Checkpoint-VM                                     2.0.0.0    Hyper-V
Cmdlet          Compare-VM                                        2.0.0.0    Hyper-V
Cmdlet          Complete-VMFailover                               2.0.0.0    Hyper-V
Cmdlet          Connect-VMNetworkAdapter                          2.0.0.0    Hyper-V
Cmdlet          Connect-VMSan                                     2.0.0.0    Hyper-V
Cmdlet          Convert-VHD                                       2.0.0.0    Hyper-V
Cmdlet          Copy-VMFile                                       2.0.0.0    Hyper-V
Cmdlet          Debug-VM                                          2.0.0.0    Hyper-V
Cmdlet          Disable-VMConsoleSupport                          2.0.0.0    Hyper-V
Cmdlet          Disable-VMEventing                                2.0.0.0    Hyper-V
Cmdlet          Disable-VMIntegrationService                      2.0.0.0    Hyper-V
Cmdlet          Disable-VMMigration                               2.0.0.0    Hyper-V
Cmdlet          Disable-VMRemoteFXPhysicalVideoAdapter            2.0.0.0    Hyper-V
Cmdlet          Disable-VMResourceMetering                        2.0.0.0    Hyper-V
Cmdlet          Disable-VMSwitchExtension                         2.0.0.0    Hyper-V
Cmdlet          Disable-VMTPM                                     2.0.0.0    Hyper-V
```
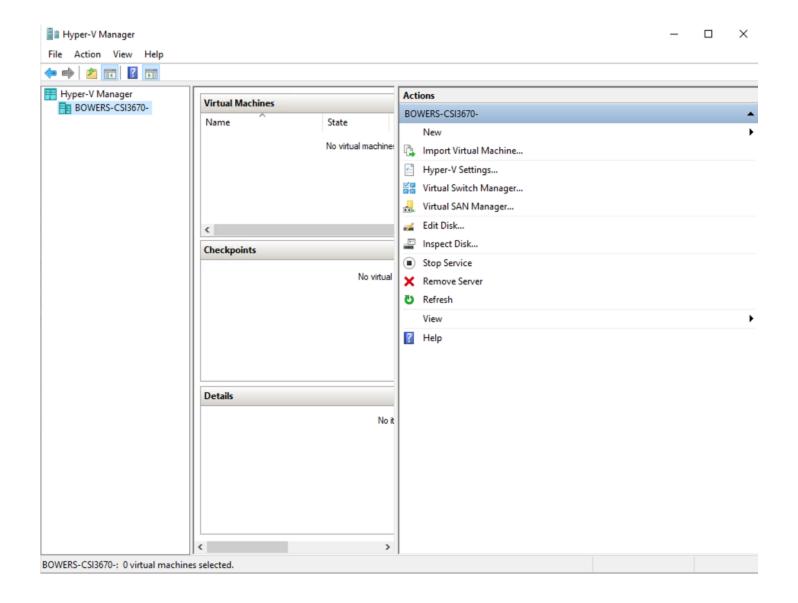
Hyper-V installation

In Server Manager, click on the Tools menu in the top right and select Hyper-V Manager.

Hyper-V installation

In Hyper-V Manager, click on server in left pane

Click New → Virtual Machine

Hyper-V removal

Simply unroll commands (run the opposite in reverse order)

- PS> Remove-WindowsFeature Multipath-IO
- PS> Remove-WindowsFeature RSAT-Clustering
- PS> Remove-WindowsFeature RSAT-Hyper-V-Tools
- PS> Disable-WindowsOptionalFeature -Online -FeatureName Microsoft-Hyper-V
- PS> Restart-Computer
  - The Disable-WindowsOptionalFeature step may ask you to restart the computer first, if so, type y and hit Enter and skip the Restart-Computer step