**Virtualization & Hyper-V**

* Having Hyper-V servers but not using System center is worthless.

Type 1: - Having a server/hardware/box – Hypervisor layer – Instances.

Type 2: - Having a hardware – Operating System – Hypervisor Layer – Instances.

* We need Management Software to operate this Hypervization Layer on Type 1.
* Active Directory server to authenticate or access.
* As per requirement the instances will transfer automatically to another server if the present server is heavily loaded or damaged or any issue arise.
* Type 2 Hypervisors-- Oracle has VirtualBox, Microsoft has Virtual PC,
* Be careful when Memory allocating in Type 2 Hypervization, because the memory allocated to one instance is specific for that instance only, it can’t be shared with any other instance or at least with the main system.
* Even be careful about networking, let say different instances with different networking stuff, it will get little messed up sometimes.
* Operating system Add-ons are supposed to be installed to run it little better.
* There are appliances, switches, routers online ready to try for practices—VMware provide them.
* And there are conversion software’s available to backup your old servers to put into Hypervisor layer.
* Centrally shared storage (vSAN) for Cyclical nature

**Steps to Install Hyper-V 2012 on Windows10 Servers**

1. There is no such thing as Installing Hyper-V as it has been in-built in the software itself from Windows8. So, we must enable it, to use it. And it only works with 64bit versions only and not on Windows Home versions (basically normal system has Home).

And they do need SLAT (Second Level Address Translation) most recent pc’s have.

1. There are three ways to enable Hyper-V, using Control Panel, using Power Shell and using DISM. Easiest way is to using Control Panel.
2. Go to Windows Features settings from Windows search bar and enable Hyper-V and Hyper-V Manager.

(OR)

Go to Windows PowerShell and enter “Enable-WindowsOptionalFeature -Online -FeatureName:Microsoft-Hyper-V -All” to enable Hyper-V on your server.