

Configuring Hyper-V Sandbox Environment

Microsoft supports integration of various server components on single hardware which helps to quickly setup a test environment and play with the functional features of them.

Below is my setup which I have configured which could be used as basic test Lab / Sandbox Environment

Infrastructure

Windows Server 2008 R2 server	=	x2
System center Virtual Machine Manager	=	x1
System Center Configuration Manager	=	x1
Microsoft Hyper-v Server	=	x1
Microsoft SQL Server 2008	=	x1
Storage - Local hard disk	=	250 GB - 500 GB
Windows 7 client operating system	=	x3 (virtual Machines)

Installation Procedure

Step1: Configure an Active directory domain with single forest , Default site and single domain

Step2: Configure Organizational Units under the active directory domain and add users and computer objects under the OU's

Step3: Create User level Group policies and Computer level group policies. For quicker assistance Users can leverage on Security baselines provided by Microsoft for windows 7 client , IE etc..

Step4: On a new hardware navigate to BIOS and enable VT (for Intel) and DEP (data execution prevention) . Plan for a dual processor --> quad Core (supports 8 logical processors without Hyper threading) Which would be ideal for lab environments

Step5: install windows server 2008 R2 (either standard or enterprise (versions would be useful for free Virtual machine guests licenses), join the Server to the domain, install windows server 2008 R2 SP1 and perform a restart of the server

Step6: Install the recommended windows updates and then Install Hyper-v server component

Step7: Configure the Hyper-v networking accordingly (Virtual switch configuration is dependent on requirement which can be done after Installation of Hyper-v server

Step8: Install System Center Virtual Machine Manager, for the lab setup I have installed all the components of SCVMM on same server (core components : SCVMM library , SCVMM database , SCVMM Server)

Note: SCVMM server strongly depends on Active directory

Step9: To manage Hyper-v server from SCVMM server, we need to select the appropriate Hyper-v server and perform administration

Step10: From SCVMM administrative console we can manage multiple Hyper-v servers / VMware ESX or ESXI servers

Step11: Create a Virtual machines with appropriate hardware and install Windows 7 operating system , join the clients to the domain