VIRTUAL SWITCH



Virtual Switches	Create virtual switch
New virtual network switch My Virtual Switch	What type of virtual switch do you want to create?
Private virtual switch	External
Global Network Settings	Internal
MAC Address Range 00-15-5D-FE-0D-00 to 00-15-5D-F	
	Create Virtual Switch
	Creates a virtual switch that can be used only by the virtual machines that run on this physical computer.
When you create a s	witch you have a choice between, external, internal
or private To create	the virtual switch click on create virtual switch and give
The switch a name.	In this example the switch is called My Virtual Switch.
Now how do we mai	nage the Extensions.

Cancel

OK

Apply

Virtual Switches	Virtual Switch Properties
💏 New virtual network sw	
My Virtual Switch	Name:
Private virtual switch	My Virtual Switch
Global Network Setting	Notes:
MAC Address Range	
00-12-20-FE-0D-00 (0	-13-507
During switch cre	tion vou what do you want to connect this virtual switch to?
Have the choice of	enabling O Subrad actually
single/-root 1/0	tualization
	Microsoft Network Adapter Multiplexor Driver
	Allow management operating system to share this network adapter
	Enable single-root I/O virtualization (SR-IOV)
New feature in Se	er 2012.
Enabling this feat	re reduces
Input and output	verhead,
Which in turn wil	ncrease VLAN ID
Performance to t	e point Enable virtual LAN identification for management operating system
Where the VMs r	rformance
Is almost as good	s the system will use for all network communications through this network adapter. This
Dhysical maching	setting does not affect virtual machine networking.
	2
Addition to this t	e processing
Overhead of the	ost is Remove
Reduced.	
	SR-IOV can only be configured when the virtual switch is created. An external virtual switch with SR-IOV enabled cannot be converted to an internal or private switch.
	OK Cancel Apply

ile Action View Help	New virtual network switch	Switch extensions:
• 🔿 📶 🔟 🗖	Private virtual switch	Name Type
Hyper-V Manager	Extensions	Microsoft NDIS Capture Monitoring
WIN-6NQ842FMB9T	Global Network Settings MAC Address Range 00-15-5D-FE-0D-00 to 00-15-5D-F	Microsoft Windows Filtering Platform Filter
	Each switch has t	Move Down
	Is disabled by de	fault
		Details for selected extension:
		Microsoft NDIS Packet Capture Filter Driver
		OK Cancel Apply

BANDWIDTH – another new feature of Server 2012 allows you set the minimum Maximum bandwidth (Mbps) for the virtual network adapter. This can be Managed in the settings of the VM



ADVANCED FEATURES FOR VIRTUAL NETWORK ADAPTERS

New Virtual Machine	✓ < ▶ (2			
Hardware	^ Advanced	l Features —			
Minimum Add Hardware BIOS Boot from CD	MAC ad	dress namic			
512 MB Processor 1 Virtual processor		itic	- 00 - 00		
IDE Controller 0 Hard Drive New Virtual Machine. vbdx	MAC addres	ddress spoofing allow s in outgoing packets able MAC address sp	is virtual machines t to one that is not a oofing	to change the source MA assigned to them.	c
IDE Controller 1 DVD Drive None	DHCP gu	uard		unauthorized virtual ma	whines
SCSI Controller Provide Adapter Not connected	E Diferen	ding to be DHCP serv able DHCP guard	/ers,		
Hardware Acceleration Advanced Features COM 1 None COM 2 None	Router Router unauth	guard guard drops router a iorized virtual machin able router advertise	advertisement and les pretending to be ment guard	redirection messages fro routers.	m
Diskette Drive None Management	Port min Port min copying	roring irroring allows the net g incoming and outgo	twork traffic of a vi ing packets and for	rtual machine to be monit warding the copies to an	tored by nother
Name New Virtual Machine Integration Services All services offered	Virtual	machine configured f ng mode:	for monitoring.	¥	
Snapshot File Location C:\ProgramData\Microsoft\Win	NIC Tea You ca bandwi	ming n establish NIC Team idth and provide redu	ing in the guest ope undancy. This is use	erating system to aggreg eful if teaming is not conf	jate igured in

Two Features: DHCP Guard And Router Gurad.