

Nexus 1000V Portfolio: Spring '11 Public Webinar Series: Q&A

SESSION 4 (Technical Track): **Nexus 1000V Key Features Overview**

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This Q&A supports one session in a series of Webinars offered to our customers and partners in the spring of 2011. The session covered in this Q& A is highlighted in yellow below:

Track	Date	Session Title
Business	22-Mar	Nexus 1000V/1010 Overview and Update
Business	5-Apr	Virtual Network Services: Security (VSG), Appl. Acceleration (vWAAS), Monitoring (NAM)
Business	19-Apr	Virtual Security Gateway (VSG) Overview
Business	3-May	Journey to the Cloud w/ N1KV: vCloud Director & Long Distance vMotion
Business	17-May	Secure Virtual Desktop with Nexus 1000V & VSG
Technical	29-Mar	Nexus 1000V v1.4 New Features and Installation/Upgrade Overview
Technical	12-Apr	Nexus 1010 Deployment & Best Practices
Technical	26-Apr	Virtual Security Gateway Installation & Basic Configuration
Technical	10-May	Nexus 1000V Key Feature Overview
Technical	24-May	Nexus 1000V Troubleshooting

QUESTION	ANSWER
Is vPath enabled per Virtual Ethernet Module (VEM)?	No, vPath is enabled at the port-profile level by using the vn-service command.
How are port-profile access users tied with vCenter?	You can restrict which vCenter users or user groups have visibility into specific port groups on the N1KV.
Are there feature differences if you host the VSM on vCenter versus hosting it on the Nexus 1010 Virtual Services Appliance?	You get the same features whether the VSM is hosted on vCenter or hosted on the Nexus 1010. However, the Nexus 1010 allows you to manage network policies outside of vCenter. This makes it easier to achieve compliance and audit requirements, and it reduces administrative errors.
How granular can you get with user role permissions? For example, can I let all vCenter admins assign a profile but not edit the profile?	The vCenter admin cannot edit the port-groups (port-profiles) which are created via the Nexus 1000V.
Since vPath is deployed on the ESX host as part of VEM, can vPath become a bottleneck as we add more VMs to the host? Also, what is the implication of vPath service in a hung state?	Since compute is done on VSG and vPath is providing enforcement, it doesn't affect the overall performance of the VEM.
What is the best practice for a VSG? On a VM, on the Nexus 1010 appliance, or on a stand alone dedicated host?	It really depends on your workload environment. Putting the VSG on a dedicated host or the Nexus 1010 helps your capacity planning because you don't have to worry about VSG services consuming resources from your workload resources.
Can a VSG be a VM?	The VSG is a virtual appliance.
Is the ACL permanent, or only present for the duration of the session flow?	The entry in the vPath is temporary. It is removed by tracking the TCP flags or inactivity timers.
Is there a performance hit if the VSG is not on the same ESX host?	No, it is designed with distributed architecture in mind.
With CBWFQ policy, can I also cap certain traffic like vMotion?	Yes, there is a special class for vMotion traffic to classify.
If we are using N1KV with UCS, do we have the option to use the COS/QOS feature of the UCS architecture? How does N1KV COS play into such solution?	They are mutually exclusive.
If the BW is not used, can it be used by other classes?	The BW reservation only kicks in if there is network congestion, otherwise the BW is up for grabs.
Does the N1KV support User Based Rate Limiting?	No.

QUESTION	ANSWER
Can you assign a fixed BW, a minimum BW, or a combination of both?	The BW is fixed, but the BW reservation only kicks in if there is congestion, otherwise the BW is up for grabs.
Can you support 5 Gbps of traffic for the VM data VLAN on the same 10GB card?	You should be able to, but you have to observe the FCoE reservation.
Can L2 and L3 connections be configured on the same N1KV?	No, only one or the other.
Can VSMs and VEMs communicate across Data Centers or across MPLS via L3?	You should be able to as long as you connect IP to IP through a GRE tunnel.
How is the N1KV licensed?	The N1KV is sold on a per CPU basis.