

Overview

HP FlexFabric 5900v Virtual Switch Series

Models

HP FlexFabric Virtual Switch 5900v for VMware ESX 5.x E-LTU

JG814AAE

Key features

- Automated server virtualization and networking policy orchestration
- Simplified network policy management through the HP IMC VAN Connection Manager console
- VMware vCenter plug-in links network policy to applications, including vMotion
- Enables advanced data center access switch features on traffic to and from each virtual machine
- Scalable delivery of corporate network security and monitoring policies into virtual environments

Product overview

The HP FlexFabric 5900v Virtual Switch enables the network administrator to define and manage a database of application network policies via the HP Intelligent Management Center (IMC) Virtual Application Network (VAN) Connection Manager console. The system administrator links applications to these network policies via the VMware vCenter console, delivering an automated application policy provisioning solution.

HP FlexFabric Virtual Switch Orchestration (VSO) Software manages the communication among IMC, vCenter, and the 5900v virtual switch, providing a central control point for the physical and virtual network infrastructure.

The HP FlexFabric 5900v Virtual Switch replaces the VMware vSwitch, linking each virtual machine to the IEEE 802.1Qbg access switch (including the HP FlexFabric 5900, 6125XLG, and 11900 switches), where network policies are enforced. This enables robust VM traffic manageability, security enforcement, quality of service (QoS), and forwarding support in hardware. Server virtualization events, such as vMotion machine migrations, help eliminate the need for manual configuration of the network switching infrastructure.

Features and benefits

Management

- **IMC VAN Connection Manager**
maintains virtual machine VLAN assignments and Virtual Station Interface (VSI)-type databases containing access control list (ACL) and QoS templates to be provisioned by the access switch
- **VMware vCenter plug-in**
configures the VSO Virtual Control Engine (VCE) and binds port groups to the virtual machine, enabling the 5900v Virtual Switch to make the connection between the vNIC and the associated access switch VSI template

Data center optimized

- **IEEE 802.1Qbg Edge Virtual Bridging (EVB)**
supports the Virtual Ethernet Port Aggregator (VEPA) protocol, ensuring that all VM traffic is processed by the adjacent physical switch
- **Virtual Control Engine (VCE)**
provides the Virtual Switch Orchestration (VSO) function, based on an OpenFlow SDN engine, to deliver forwarding table entries to the Virtual Forwarding Engine (VFE)
- **Virtual Forwarding Engine (VFE)**
implements the Virtual Distributed Switch (VDS) data plane function, installed on each ESXi host via the vCenter plug-in

Overview

Layer 2 switching

- **VLAN support and tagging**
supports IEEE 802.1Q with 4,094 simultaneous VLAN IDs
- **Private VLAN (PVLAN)**
segregates traffic from multiple ports on the same VLAN, directing all traffic to a given uplink for enhanced security

Technical Specifications

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Notes	This product requires HP IMC 7.0 or later and VMware vCenter Server with ESXi versions 5.0 or 5.1 in order to operate.
Services	Refer to the HP website at: http://www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Accessories

**HP FlexFabric 5900v
Virtual Switch Series
accessories**

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HP FlexFabric Virtual Switch Orchestration Software for 5900v VMware ESX E-LTU

JG815AAE

To learn more, visit: <http://www.hp.com/networking>

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