Microsoft Hyper-V Network Virtualization decouples the customer's virtual networks from the physical network infrastructure, providing freedom for workload placements inside the datacenters. Next-generation, highly-scalable, HNV Gateway appliance family supports wide range of models, each of the models are specifically designed to meet the unique technical requirements of Network Virtualization.

Windows Server 2012

Key Benefits

- Enables easier moves for workloads from private clouds to a shared IaaS cloud
- Enables live migration across subnets
- Enables easier management of decoupled server and network administration
- NVGRE Hardware Task Offload for Improved Performance
- RSS Support for Effective and Efficient Network Load Scalability
- NVGRE-aware NIC Teaming For Up To 80GB Throughput
- High-Availability Option with "Cluster-in-a-Box"
- Native Integration with System Center Virtual Machine Manager
- Integrated Host-Based Firewall for Maximum Security

Microsoft Hyper-V Network Virtualization Appliance Platform

Hyper-V Network Virtualization provides "Virtual Networks" to virtual machines similar to how server virtualization (hypervisor) provides "virtual machines" to the operating system. Network virtualization decouples and isolates virtual networks from the physical network infrastructure and removes the constraints of VLAN and hierarchical IP address assignment from virtual machine provisioning.
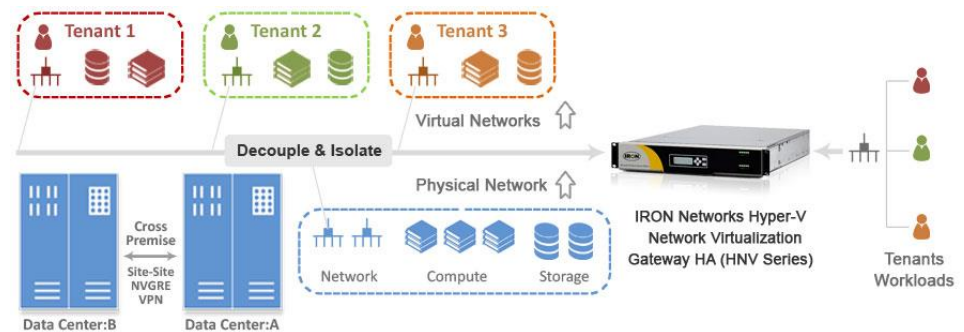
This flexibility makes it easy for customers to move workloads to IaaS clouds and efficient for hosters and datacenter administrators to manage their infrastructure, while maintaining the necessary multi-tenant isolation, security requirements, and supporting overlapping Virtual Machine IP addresses.

Private Cloud Deployment

The appliance platform is designed to support LAN network traffic between virtual network segments running on different Hyper-V hosts and traffic between Virtual Networks and Physical Networks.

- Simplifies layer-2 network, flat networks no VLANs
- Live migration across subnets without network re-configuration
- Enables green data centers by consolidating the workload
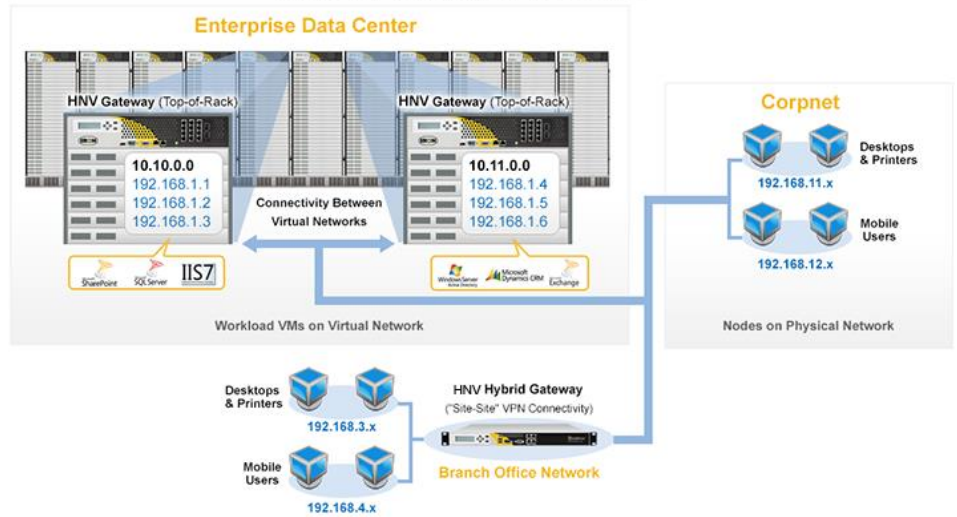
Hybrid Cloud Deployment

The appliance platform is designed to provide connectivity between private and public cloud data centers. Virtual Network segments can be extended seamlessly across a wide area network.

- Provides Multi-tenancy support with network isolation and overlapping IP addresses
- Supports Bring-Your-Own-IP (BYO-IP) IP adress migraiton
- Scales beyond 4000 VLANs

HNV Features Overview

- Systems Center VMM Management plug-in & advanced Network Virtualization management console
- High Availability, Cluster-in-Box options for zero downtime requirements
- NVGRE offloading hardware Site-to-Site VPN for Cross-Premises configurations
- Hardware designed to meet the performance requirements of large enterprise and large cloud providers.
- Network Interfaces Options:
  - Quad 10G RJ45
  - Quad 10G SFP+
  - Quad 40G QSPF
- Embedded ARRMS™ recovery system combined with advanced LCD functionality offers easy network setup and configuration, appliance image recovery, backup & restore
- Advance remote lights-out-management (LOM) manageability

Private Cloud Deployment Scenario
(Single Tenant, Multiple Business Units)

Hybrid Cloud Deployment Scenario
(Multi-Tenant, Multi-Site)
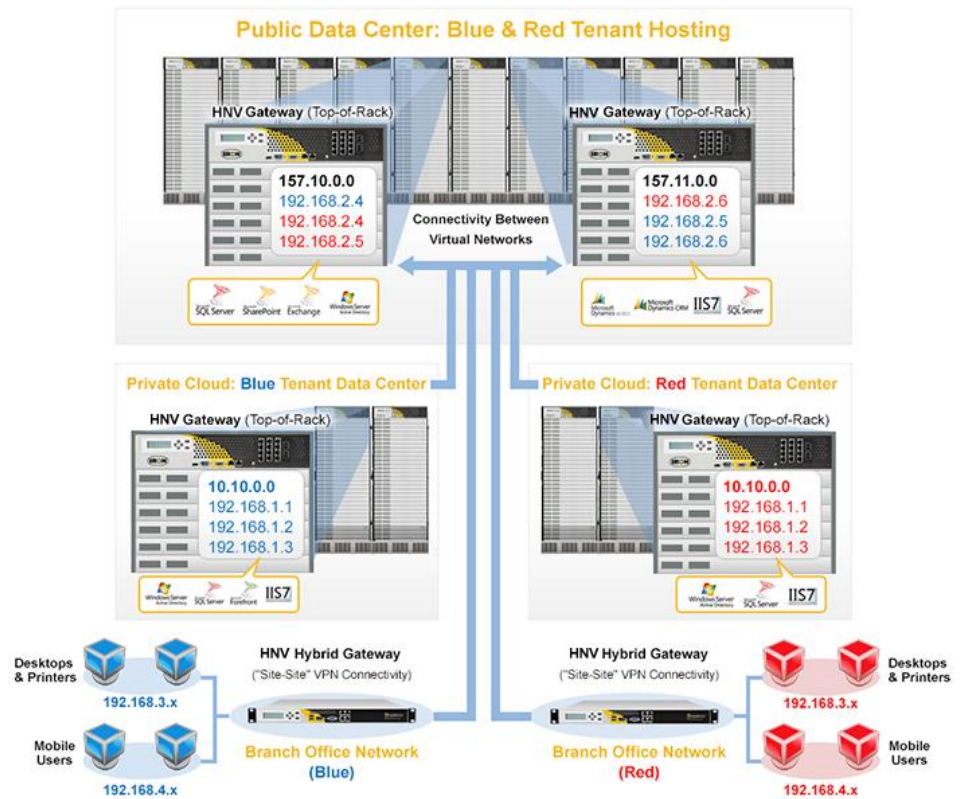
Windows Server 2012

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