

Microsoft Hyper-V Server FAQ

Find answers to frequently asked questions about Microsoft Hyper-V Server.

Q: What is Hyper-V Server?

A: Microsoft Hyper-V Server 2008 is a stand-alone hypervisor-based server virtualization product that allows customers to virtualize workloads onto a single physical server. It provides a simplified, reliable and optimized virtualization solution that easily plugs into customers' existing IT infrastructure enabling them to improve server utilization and reduce costs.

Q: What are the key benefits of Microsoft Hyper-V Server?

A: Microsoft Hyper-V Server 2008 is a simplified and optimized stand-alone server virtualization product. It contains just the Windows hypervisor and other kernel components to support virtualization. Since Microsoft Hyper-V Server 2008 is built on the Windows hypervisor, it has an inherently more secure architecture with no third-party device drivers in it. It easily plugs into customers' IT existing environments leveraging their existing patching, provisioning, management and support tools and processes. ITPros can easily to leverage their existing knowledge and skills with Microsoft virtualization products, as well as the collective knowledge of the community, minimizing any learning curve.

Q: Will System Center Virtual Machine Manager Microsoft Hyper-V Server?

A: Yes, System Center Virtual Machine Manager will manage Microsoft Hyper-V Server.

Q: How do I install Microsoft Hyper-V Server 2008? Is it an application?

A: Microsoft Hyper-V Server is a stand-alone hypervisor-based server virtualization product that allows customers to virtualize multiple operating systems onto a single physical server. It provides a simplified, reliable and optimized virtualization solution that easily plugs into customers' existing IT infrastructure enabling them to improve server utilization and reduce costs.

Q: What processor architectures do you support?

A: Microsoft Hyper-V Server supports single and multi-core x64 processors. Microsoft Hyper-V Server requires 64-bit machines with AMD-V or Intel Virtualization Technology enabled processors. Hyper-V server does not support Itanium systems.

Q: How many guest OSES can I run?

A: The actual number of guest OSES will depend on the physical hardware and the characteristics of the different virtualized workloads. The maximum number of guest instances that can run on Microsoft Hyper-V Server is 192. Additionally, each guest OS must have a valid license.

Q: Which guest OSES will it support?

A: Microsoft Hyper-V Server will support all guest operating systems supported on Windows Server 2008 Hyper-V.

For a complete list of supported guest operating systems please see:

<http://support.microsoft.com/kb/954958>.

Q: What sorts of upgrades are permitted? Can I go from Microsoft Hyper-V Server to a full installation of Windows Server 2008? Will I be able to upgrade to a future version of Microsoft Hyper-V Server?

A: Microsoft Hyper-V Server is a separate stand-alone product. Customers cannot upgrade from a previous version of Windows Server to Microsoft Hyper-V Server. Customers cannot upgrade from Microsoft Hyper-V Server to Windows Server 2008 as they are different products. To migrate from a Microsoft Hyper-V Server environment to a Windows Server 2008 Hyper-V environment, export the virtual machines from Hyper-V Server, install Windows Server 2008 Enterprise Edition, enable the Hyper-V role and import the virtual machines.

Q: What is the price of Microsoft Hyper-V Server? Will it require CALs? Will it be available in all channels?

A: Microsoft Hyper-V Server will be available as a free download. CALs are only required for Windows Server and all Windows Server images that are virtualized, regardless of virtualization platform. No CALs are required for Microsoft Hyper-V Server.

Q: What is the difference between Hyper-V and Microsoft Hyper-V Server?

A: Hyper-V is the hypervisor-based virtualization feature of Windows Server 2008. Microsoft Hyper-V Server is the hypervisor-based server virtualization product that allows customers to consolidate workloads onto a single physical server.

Q: What is the feature set of Microsoft Hyper-V Server?

A: Microsoft Hyper-V Server is a stand-alone hypervisor-based server virtualization product that allows customers to virtualize workloads onto a single physical server. It provides a simplified, reliable and optimized virtualization solution that easily plugs into customers' existing IT infrastructure enabling them to improve server utilization and reduce costs. We will provide the complete feature set as we get closer to RTM.

Q: What are the system requirements for Microsoft Hyper-V Server 2008?

A: Read the system requirements for [Microsoft Hyper-V Server 2008](http://www.microsoft.com/servers/hyper-v-server/system-requirements.mspx)
<http://www.microsoft.com/servers/hyper-v-server/system-requirements.mspx>

Q: Can you describe the capabilities of Microsoft Hyper-V Server 2008 virtual machines?

A: Hyper-V Server virtual machines provide:

32-bit (x86) and 64-bit (x64) virtual machines

Up to 4 virtual processors per virtual machine

Total memory of all running virtual machines supported up to 31 GB.

Q: Are there any limitations to the number of processors and/or cores that Microsoft Hyper-V Server can utilize?

A: Hyper-V Server supports systems with up to 4 **processors** with 1, 2 or 4 cores.

Q: Are there any physical memory limitations to Microsoft Hyper-V Server?

A: Hyper-V Server supports up to 32 GB of physical memory.

Q: Does Microsoft Hyper-V Server require any special hardware drivers?

A: No. Microsoft Hyper-V Server uses standard Windows drivers. Microsoft Hyper-V Server shares some things in common with Windows Server 2008 with the Hyper-V role enabled including a common kernel and drivers.

Q: Are there any limits to the number of virtual machines Microsoft Hyper-V Server can run?

A: Microsoft Hyper-V Server can run up to 128 virtual machines or as many will fit within 32 GB of memory whichever comes first.

Q: Does Microsoft Hyper-V Server use the new driver enlightened architecture (VSP/VSC/VMbus) for high performance I/O?

A: Yes.

Q: Does Microsoft Hyper-V Server use a parent partition like Windows Server 2008 with the Hyper-V role enabled?

A: Yes. Microsoft Hyper-V Server shares some things in common with Windows Server 2008 with the Hyper-V role enabled including a common kernel and drivers.

Q: What guest operating systems does Microsoft Hyper-V Server support?

A: Microsoft Hyper-V Server and Windows Server 2008 with Hyper-V both support the same guest operating systems.

Q: Why types of physical storage do Microsoft Hyper-V Server support?

A: Hyper-V offers flexible storage support such as:

Direct Attach Storage (DAS): SATA, eSATA, PATA, SAS, SCSI, USB, Firewire

Storage Area Networks (SANs): iSCSI, Fiber Channel, SAS

Network Attached Storage (NAS)

Q: Are virtual machines created with Microsoft Hyper-V Server compatible with virtual machines created with Windows Server 2008 Hyper-V?

A: Yes.

Q: Does Microsoft Hyper-V Server include Live Backup support through Volume Shadow Services?

A: Yes, Hyper-V Server includes support for Live Backup when used with a suitable backup solution such as System Center Data Protection Manager.

Q: Does Microsoft Hyper-V Server include virtual machine snapshots?

A: Yes.

Q: Does Microsoft Hyper-V Server include any local UI?

A: Hyper-V Server includes a minimal, easy to use command-line based UI for system configuration. This allows a user to easily configure system settings such as:

- Changing the computer name
- Joining the server to a domain
- Configuring DHCP/Static IP Address Settings
- Enabling Remote Desktop

...and have a Hyper-V Server setup in minutes.

Q: Can you create virtual machines and manage them locally?

A: Virtual machine creation, configuration and management are accomplished remotely.

Q: How do you manage Microsoft Hyper-V Server?

A: Hyper-V Server can be managed in a number of ways:

- Remotely from Windows Server 2008 (x86/x64) using the Hyper-V Manager MMC
- Remotely from Windows Vista SP1 (x86 /x64) using the Hyper-V Manager MMC
- Remotely from System Center Virtual Machine Manager

Additionally, Hyper-V Server includes a WMI interface for remote management extensibility. The WMI interfaces are detailed here: [http://msdn2.microsoft.com/en-us/library/cc136992\(VS.85\).aspx](http://msdn2.microsoft.com/en-us/library/cc136992(VS.85).aspx).

Q: Can you use PowerShell locally with Microsoft Hyper-V Server?

A: No. PowerShell is not included with Microsoft Hyper-V Server. However, if you use System Center Virtual Machine Manager you can use PowerShell remotely to manage a Microsoft Hyper-V Server.

Q: Does Microsoft Hyper-V Server include high availability (failover clustering) capabilities for unplanned downtime?

A: No. If high availability is a customer requirement, then we recommend using Windows Server 2008 Enterprise or Datacenter Editions which include integrated failover clustering support.

Q: I deployed Microsoft Hyper-V Server and would like to move to Windows Server 2008 with Hyper-V because I'd like to use Failover Clustering and Quick Migration capabilities. How do I do this?

A: Simply export the virtual machines from Hyper-V Server, install Windows Server 2008 Enterprise Edition, enable the Hyper-V role and import the virtual machines.

Q: How does Microsoft Hyper-V Server compare to VMware 3i? Are there any features that Hyper-V Server has that VMware 3i doesn't?

A: Microsoft Hyper-V Server and both VMware 3i are both single purpose virtualization solutions. Microsoft Hyper-V Server offers additional capabilities beyond the competition such as:

BitLocker support. Hyper-V Server can take advantage of BitLocker technology to encrypt a Hyper-V Server so that even if a Hyper-V Server is stolen and the hard disks are removed, the data is still safe because it's encrypted. This is particularly useful for branch offices or environments where physical security is a concern.

Live Backup support. Hyper-V Server includes native support for Volume Shadow Services so that it can provide Live Backup of running virtual machines without downtime.

Extensive Server and flexible hardware support. Microsoft Hyper-V Server is compatible with a wide variety of server hardware and driver support for newer peripherals such as 10 Gb/E.

Q: Does Microsoft Hyper-V Server require Client Access Licenses (CALs)?

A: No.

Q: Can I run applications in the Microsoft Hyper-V Server parent partition?

A: No. The Microsoft Hyper-V Server parent partition is specifically for system management.

Q: What distribution channels will Microsoft Hyper-V Server be available in?

A: Hyper-V Server will be available in Retail, Volume Licensing and OEM channels.

Q: Does Microsoft Hyper-V Server require a special OEM Pre-installation Kit (OPK)?

A: No. Hyper-V Server doesn't require a special OPK.

Q: Does Microsoft Hyper-V Server require a product key?

A: No.

Q: Is it possible to “upgrade” a Microsoft Hyper-V Server to Windows Server 2008?

A: No. Microsoft Hyper-V Server and Windows Server 2008 are different products. To migrate from a Microsoft Hyper-V Server environment to a Windows Server 2008 Hyper-V environment, export the virtual machines from Hyper-V Server, install Windows Server 2008 Enterprise Edition, enable the Hyper-V role and import the virtual machines.

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