

Microsoft SQL Server on VMware Support and Licensing

Microsoft Virtualization Validation Program

This guide can be shared with customers and partners.

Executive Summary

The Microsoft Server Virtualization Validation Program (SVVP) provides VMware customers who run Windows Server and Microsoft applications with access to cooperative support from Microsoft and VMware. SVVP assures that VMware customers who virtualize supported Microsoft products will receive assistance through standard Microsoft support channels.

Microsoft's Server Virtualization Validation Program

enables VMware and other software providers to test and validate their virtualization software to run Windows Server 2008 and previous versions of Windows Server.

Microsoft offers cooperative technical support

under this program, to customers running Windows Server on validated, non-Microsoft server virtualization software.

Customers with support policies in place can receive cooperative technical support from Microsoft

if they are running Windows Server-based applications on VMware ESX 3.5 update 2 or later.

VMware offers an extra layer of protection

for customers, outside of Microsoft's Server Virtualization Validation Program, who work directly with VMware for support. We call this the *VMware Safety Net*. The additional protection is a part of the VMware Premier Support contract with Microsoft that enables VMware to escalate application issues on behalf of VMware customers rapidly and work directly with Microsoft engineers to expedite resolution. Use of the VMware Safety Net is at the discretion of the VMware support engineer.

Links/References

Microsoft SVVP

<http://www.windowsservercatalog.com/svvp.aspx>

Windows Server Catalog

[VMware products supported to run Microsoft Windows Server and Microsoft applications](#)

SQL Server System Requirements

SQL 2008 R2

<http://technet.microsoft.com/en-us/library/ms143506.aspx>

SQL 2008

[http://technet.microsoft.com/en-us/library/ms143506\(SQL.100\).aspx](http://technet.microsoft.com/en-us/library/ms143506(SQL.100).aspx)

SQL 2005

[http://technet.microsoft.com/en-us/library/ms143506\(SQL.90\).aspx](http://technet.microsoft.com/en-us/library/ms143506(SQL.90).aspx)

Microsoft Support Policies and Recommendations for SQL Servers in Hardware Virtualization Environments

<http://support.microsoft.com/kb/956893>

Microsoft Support Policy for Microsoft software running in non-Microsoft hardware virtualization software

<http://support.microsoft.com/?kbid=897615>

Customer FAQ

Q: I am a Microsoft Premier Support customer. What does SVVP mean for me?

A: Microsoft Premier customers are given support regardless of the product. SVVP does not add to the supportability of a Premier customer; rather, it provides assurance that the virtualization vendor has passed Microsoft's virtualization qualifications.

Q: Who gets support under this program?

A: Any VMware customer running Microsoft products in a supported configuration may engage Microsoft support through non-Premier support channels.

Q: Don't I already get support for products from all the third-party virtualization vendors listed by Microsoft on its SVVP program page?

(<http://www.windowsservercatalog.com/svvp/>)

A: No. The list of vendors that have agreed to participate in the program does not imply support for their products. Each vendor must separately test and validate its product or products to receive support. Microsoft provides a link from the [SVVP page](#) that lists the third-party hypervisors and configurations that have been validated.

Q: Microsoft states that I may have to reproduce my issue on physical hardware to obtain support—this is a primary concern for me.

A: VMware is not aware of any customer, non-Premier, Premier, or through use of the VMware Safety Net, that has been asked to reproduce an issue by redeploying on physical hardware.

Q: What versions of ESX/ESXi are currently supported?

A: Supported versions are ESX 3.5 update 2 or later. Earlier versions are not supported under SVVP due to the program's technical requirements.

Q: Does this change the support that I get from VMware?

A: No. You can access VMware support exactly as you have in the past.

Q: How does SVVP support work between Microsoft and VMware if Microsoft cannot solve the problem?

A: Our agreement with Microsoft provides for 24/7 joint technical engagement. The VMware Safety Net is a very effective option in these cases and has been used effectively in the past.

Q: Is SQL Server supported under SVVP?

A: Yes. SQL Server 2005 and later that meet the SQL Server system requirements (see links for specific versions under "SQL Server System Requirements") are supported under SVVP.

Q: Are there any requirements around storage design for my virtualized SQL Server solution?

A: VMFS on Fibre Channel, iSCSI, and network-attached storage is supported, as are physical and virtual-mode raw device mappings.

Q: Are features like database mirroring and failover clusters supported in a virtual environment?

A: Yes. VMware supports database mirrors and failover clusters. Detailed supported options are available on the *Microsoft Clustering on VMware vSphere: Guidelines for Supported Configurations* (http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=1037959)

Q: Are VMware features such as VMware vSphere® vMotion®, VMware vSphere High-Availability, VMware vSphere Distributed Resource Scheduling, and VMware vSphere® Fault Tolerance supported for virtualized SQL Servers?

A: Yes. All of these features are supported for both standalone and mirrored, virtualized SQL servers. Virtualized SQL Servers using the Microsoft Clustering Service must be configured per the *Microsoft Clustering on VMware vSphere: Guidelines for Supported Configurations* (http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=1037959)

Q: Is over-provisioning of the physical CPUs in an ESX host supported?

A: Yes. Physical servers have a fixed number of physical processors. VMware ESX® or VMware ESXi™ allows you to allocate up to eight virtual processors per virtual machine. Microsoft supports a maximum virtual to physical processor ratio of 2:1 for virtualized SQL Servers. For example, a physical server with two four-core processors contains eight processor cores. With this physical configuration you may allocate up to 16 virtual processors to all virtual machines located on this host.

Q: Can I snapshot my SQL Servers during patching and roll back to a previous snapshot if problems emerge?

A: Virtual machine snapshots are not application-aware and thus may restore an SQL Server database to an inconsistent state. Additionally, any changes made during the reverted snapshot period would be lost as transaction log files containing those changes would not exist. If a snapshot must be taken it is recommended that you dismount all databases and stop all SQL Server services, but Microsoft does not support this action.

Licensing Information

Licensing SQL Server on vSphere can be a complex topic with many variables to consider. You can find Microsoft guidance on licensing SQL Server on vSphere at the following links:

- [Microsoft SQL Server Licensing Guide](#)
- [SQL Server 2008 R2 Licensing Quick Reference Guide](#)

As always, questions regarding licensing of non-VMware products should be directed to the third-party sales representative.

