



Product Bulletin:

Microsoft Windows Server 2008 R2 and Hyper-V Support

Revision History

08 September 2009 - Initial version

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This bulletin informs NetApp sales and NetApp partners about new or changed NetApp® products or services.

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1. Summary

NetApp, Microsoft's 2009 Storage Solution Partner of the Year, continuing support for Microsoft® virtualization solutions, announces with this product bulletin support for Microsoft's latest release of Server 2008 R2 RTM with Hyper-V™ support. Microsoft announced the release to manufacturing (RTM) of this release on 22 July 2009.

2. What's New?

Some of the new capabilities and features released with Windows® Server 2008 R2 include (but are not limited to):

- Increased number of supported logical processors for Hyper-V
- Live migration with Hyper-V
- Quick storage migration with Hyper-V
- Networking enhancements for Hyper-V
 - o Virtual Machine (VM) Chimney (TCP offload)
 - o Virtual Machine Queue (VMQ)
 - o Jumbo Frame support with virtual switches and NICs
- Hot Add/Remove of storage (VHDs, pass-through disks)
- Cluster Shared Volumes (CSVs)
- Server Message Block (SMB) protocol version 2.1

Within 30 days of Microsoft's RTM, NetApp will have support for Server 2008 R2 RTM with:

- iSCSI protocol
- Fibre Channel (FC) protocol
- Fibre Channel over Ethernet (FCoE) protocol – Supported with Data ONTAP® 7.3.2
- SnapDrive® for Windows 6.1 and 6.1P2
- Server Message Block protocol (a.k.a. CIFS) – Support is only for SMB versions 1.0 and 2.0
- Windows Server 2008 R2 Domain Controllers

NOTE: SMB protocol support is relevant only to physical Windows machines with SMB client or virtual machines with SMB client running inside the child OS. To date, Microsoft does **not** support Hyper-V usage over any version of the SMB protocol.

NOTE: SnapDrive for Windows versions 6.1 and 6.1P2 are supported with Windows Server 2008 R2, but upgrading to SnapDrive for Windows 6.2 will be required to use new R2 functionality / features. Please refer to NetApp Worldwide NDA presentations for additional information about SnapDrive for Windows road maps.

Please refer to the NetApp Interoperability Matrix (IMT) for the latest support information, or watch for product bulletins for additional feature support.

Please refer to NetApp Worldwide NDA presentations for additional information about support road maps not covered in this document.

Also available for the Windows Server 2008 R2 RTM release are early access programs for the following:

- SnapManager® for Hyper-V version 1.0
- SnapDrive for Windows version 6.2
- ApplianceWatch™ for System Center Operations Manager (SCOM) 2007
- Microsoft Virtual Disk Service (VDS) version 1.1 hardware provider

3. Sales and Customer Ready Tools (Training, SE, Customer Presentations, Datasheets, Sales Guides)

SE and customer presentations, field guides, and other resources are available in the Microsoft Virtualization Binder on the NetApp Field Portal at https://fieldportal.netapp.com//myre_viewbinder.asp?id=511.

4. System Requirements

Please refer to the **NetApp Interoperability Matrix for the latest configurations supported at** <http://now.netapp.com/matrix/mtx/login.do>.

Please refer to the NetApp CIFS/SMB Compatibility Matrix for the latest support information at <http://now.netapp.com/NOW/knowledge/docs/olio/guides/ntsp.shtml>.

5. Product Information

NetApp posts support for iSCSI, FC, FCoE, and SMB protocols with Windows Server 2008 R2 RTM on the NetApp Interoperability Matrix Tool.

- NetApp will release FCoE target support with Data ONTAP 7.3.2. Currently there are no WHQL certifications available for FCoE from Microsoft. NetApp will continue to work with Microsoft and aggressively pursue WHQL certification when available from Microsoft.
- SMB protocol support is relevant only to physical Windows machines with SMB client or virtual machines with SMB client running inside the child OS. To date, Microsoft does **not** support Hyper-V usage over any version of the SMB protocol.

NetApp's Windows Host Utilities 5.2 supports Server 2008 R2 and is available for free download from the NOW™ (NetApp on the Web) software download (<http://now.netapp.com/NOW/cgi-bin/software>).

SnapDrive for Windows 6.1 and 6.1P2 supports Server 2008 R2 RTM, but only with existing Server 2008 features supported at this time. An upgrade to SnapDrive for Windows 6.2 will be required to use new R2 functionality / features.

NetApp FAS and V-Series are WHQL certified and listed in the Windows Server Catalog of tested products, available at <http://www.windowsservercatalog.com>.

Also coming soon for the Windows Server 2008 R2 RTM release are early access programs for the following:

- SnapManager for Hyper-V version 1.0 – New product introduction, will support Server 2008 R2 new features. Requires SnapDrive for Windows 6.2.
- SnapDrive for Windows version 6.2 - This version will add support for Server 2008 R2's new features. Required by SnapManager for Hyper-V 1.0. Please refer to NetApp Worldwide NDA presentations for additional information about SnapDrive for Windows road maps.
- ApplianceWatch for System Center Operations Manager (SCOM) 2007 – Integrates Data ONTAP into Microsoft System Center.
- Microsoft Virtual Disk Service (VDS) version 1.1 hardware provider – Utilized by System Center Virtual Machine Manager (SCVMM) to interface with Data ONTAP.

These Early Access products will be made available for free download from NetApp Communities –

http://communities.netapp.com/community/products_and_solutions/beta_programs. Registration and a valid NOW account user ID will be required for the Early Access program.

Additional support for Server 2008 R2 from other products is planned. Please refer to the IMT or the Product Bulletins Web site (<https://fieldportal.netapp.com/search.asp?keywr=PB&sortby=ldate&showThumbs=true&dataType=138>) for the latest support information.

Downloading

To download shipping software go to [NOW Download Software](#).

Product Availability

Please refer to WW-NDA road map presentations for product availability of items not covered in this document.

Please refer to the NetApp Communities for availability of Early Access products.

6. Regulatory Compliance

Products need to be validated against the NetApp Safety/EMI Regulatory Compliance List prior to order submission. This is required to ensure that products are being sold only in the countries in which NetApp has received regulatory compliance certification. This information can be found in the Field Portal by searching under "Compliance, Policies and Procedures" or following the links below:

- [RoHS Compliance](#)
- [Safety/EMI Regulatory Compliance \(XLS\)](#)
- [WEEE Compliance](#)

7. Warranty and Service

Standard software warranty and services apply for shipping products.

8. Additional Information

Microsoft references:

- Microsoft PressPass - <http://www.microsoft.com/Presspass/press/2009/jul09/07-22Windows7RTMPR.aspx>
- Windows Server 2008 R2 Resources - <http://www.microsoft.com/windowsserver2008/en/us/R2-resources.aspx>
- Windows Hyper-V FAQ - <http://download.microsoft.com/download/F/2/1/F2146213-4AC0-4C50-B69A-12428FF0B077/Windows%20Server%202008%20R2%20Hyper-V%20RC%20Public%20%20FAQ.doc>
- Windows Server 2008 R2 Failover Cluster Configuration Program – <http://www.microsoft.com/windowsserver2008/en/us/failover-clustering-program-overview.aspx>
- Microsoft Virtualization Partners: NetApp – <http://www.microsoft.com/virtualization/partners/partner-profile-netapp.aspx>
- Microsoft Virtualization Team Blog "Windows Server 2008 R2 & Hyper-V Server 2008 RTM!!!!" - <http://blogs.technet.com/virtualization/archive/2009/07/22/windows-server-2008-r2-hyper-v-server-2008-r2-rtm.aspx>
- Microsoft Blog and Video Series on Hyper-V R2 and NetApp Storage - <http://blogs.technet.com/mattmcspirit/archive/2009/06/16/virtualboytv-com-hyper-v-and->

NetApp references:

- [TR-3701] NetApp and Microsoft Virtualization: Making Integrated Server and Virtualization a Reality - <http://www.netapp.com/us/library/technical-reports/tr-3701.html>
- [TR-3702] NetApp and Microsoft Virtualization Storage Best Practices - <http://www.netapp.com/us/library/technical-reports/tr-3702.html>
- [TR-3733] Microsoft Virtualization Deployment Guide - <http://www.netapp.com/us/library/technical-reports/tr-3733.html>

Contact Information: Please contact your NetApp sales or channel partner representative with questions concerning this bulletin.