



IBM System Storage N series – CIFS and NFS

Interoperability Matrix

Covering:

N3000 System Hardware	N3300 2859-(A10, A20), N3600 2862-(A10, A20)
N3700 System Hardware	N3700 2863-(A10, A20)
N5000 System Hardware	N5200 2864-(A10, A20, G10, G20), N5500 2865-(A10, A20, G10, G20) N5300 2869-(A10, A20, G10, G20), N5600 2868-(A10, A20, G10, G20)
N6000 System Hardware	N6040 2858-(A10, A20) or with Gateway Feature Code 9551 N6060 2858-(A12, A22) or with Gateway Feature Code 9551 N6070 2858-(A11, A21) or with Gateway Feature Code 9551
N7000 System Hardware	N7600 2866-(A10, A20, G10, G20), N7800 2867-(A10, A20, G10, G20) N7700 2866-(A11, A21, G11, G21), N7900 2867-(A11, A21, G11, G21)
N3000, N3700, N5000, N6000, N7000 Licensed Functions	2870-(591, 592, 621, 622, 631, 632, 641, 642, 651, 652, 661, 662, 671, 672, 681, 682, 691, 692)

Updated as of April 30, 2009
IBM System Storage
<http://www.storage.ibm.com>

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CIFS Interoperability

Microsoft Security Update Test Report

Regular tests of Microsoft Security Patches are conducted by deploying them on internal Windows-based networks and servers (both Windows 2000-based and Windows 2003-based servers) and into Windows XP and Windows 2000 clients.

Security Updates have been tested against various types of authentication, in addition to Microsoft-recommended test guidelines (when applicable).

This page is updated as soon as Microsoft Security Patches have been publicly released and testing of the changes is complete, which is typically once every month.

Note that this testing effort pertains specifically to usage of the CIFS protocol thru Network Attached Storage.

Microsoft Security Update April 2009	Data ONTAP Release Test Results			Comments
	7.1.3	7.2.6.1	7.3.1	
mskb:968557 (MS09-009)	Tested OK	Tested OK	Tested OK	Excel
mskb:960477 (MS09-010)	Tested OK	Tested OK	Tested OK	WordPad
mskb:961373 (MS09-011)	Not applicable	Not applicable	Not applicable	DirectShow
mskb:959454 (MS09-012)	Not applicable	Not applicable	Not applicable	Windows
mskb:960803 (MS09-013)	Tested OK	Tested OK	Tested OK	HTTP Services
mskb:963027 (MS09-014)	Tested OK	Tested OK	Tested OK	IE
mskb:959426 (MS09-015)	Not applicable	Not applicable	Not applicable	SearchPath
mskb:961759 (MS09-016)	Not applicable	Not applicable	Not applicable	ISA Server
Microsoft Security Update March 2009	Data ONTAP Release Test Results			Comments
	7.1.3	7.2.6.1	7.3.1	
mskb:958690 (MS09-006)	Not applicable	Not applicable	Not applicable	Windows Kernel
mskb:960225 (MS09-007)	Not applicable	Not applicable	Not applicable	Schannel
mskb:962238 (MS09-008)	Tested OK	Tested OK	Tested OK	DNS and WINS
Microsoft Security Update February 2009	Data ONTAP Release Test Results			Comments
	7.1.3	7.2.6.1	7.3.1	
mskb:961260 (MS09-002)	Tested OK	Tested OK	Tested OK	IE
mskb:959239 (MS09-003)	Not applicable	Not applicable	Not applicable	Microsoft Exchange
mskb:959420 (MS09-004)	Not applicable	Not applicable	Not applicable	SQL
mskb:957634 (MS09-005)	Not applicable	Not applicable	Not applicable	Office visio

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Microsoft Security Update January 2009	Data ONTAP Release Test Results			Comments
	7.1.3	7.2.6.1	7.3.0	
mskb:958687 (MS09-001)	Tested OK	Tested OK	Tested OK	SMB
Microsoft Security Update December 2008	Data ONTAP Release Test Results			Comments
	7.1.3	7.2.5.1	7.3.0	
mskb:932349 (MS08-070)	Not applicable	Not applicable	Not applicable	Visual Basic
mskb:956802 (MS08-071)	Not applicable	Not applicable	Not applicable	GDI
mskb:957173 (MS08-072)	Tested OK	Tested OK	Tested OK	Word
mskb:958215 (MS08-073)	Tested OK	Tested OK	Tested OK	IE
mskb:959070 (MS08-074)	Tested OK	Tested OK	Tested OK	Excel
mskb:959349 (MS08-075)	Not applicable	Not applicable	Not applicable	Windows Search
mskb:959807 (MS08-076)	Not applicable	Not applicable	Not applicable	Windows Media
mskb:957175 (MS08-077)	Not applicable	Not applicable	Not applicable	SharePoint
mskb:960714 (MS08-078)	Tested OK	Tested OK	Tested OK	IE
Microsoft Security Update November 2008	Data ONTAP Release Test Results		Comments	
	7.1.3	7.3.0		
mskb:957097 (MS08-068)	Tested OK	Tested OK	SMB	
mskb:955218 (MS08-069)	Not applicable	Not applicable	XML	
Microsoft Security Update October 2008	Data ONTAP Release Test Results			Comments
	7.1.3	7.2.5.1	7.3.0	
mskb:957699 (MS08-056)	Tested OK	Tested OK	Tested OK	Server Service
mskb:956416 (MS08-057)	Not applicable	Not applicable	Not applicable	Ancillary Function Driver
mskb:956390 (MS08-058)	Not applicable	Not applicable	Not applicable	Message Queuing Service
mskb:956695 (MS08-059)	Not applicable	Not applicable	Not applicable	Virtual Address Descriptor
mskb:957280 (MS08-060)	Tested OK	Tested OK	Tested OK	SMB
mskb:954211 (MS08-061)	Not applicable	Not applicable	Not applicable	Internet Printing Service
mskb:953155 (MS08-062)	Not applicable	Not applicable	Not applicable	Windows Kernel
mskb:957095 (MS08-063)	Tested OK	Tested OK	Tested OK	Active Directory
mskb:956841 (MS08-064)	Not applicable	Not applicable	Not applicable	HIS
mskb:951071 (MS08-065)	Tested OK	Tested OK	Tested OK	IE
mskb:956803 (MS08-066)	Tested OK	Tested OK	Tested OK	Excel
mskb:958644 (MS08-067)	Not applicable	Not applicable	Not applicable	MS Office

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Microsoft Security Update September 2008	Data ONTAP Release Test Results			Comments
	7.1.2.1	7.2.4	7.3.0	
mskb:954593 (MS08-052)	Not applicable	Not applicable	Not applicable	GDI+
mskb:954156 (MS08-053)	Not applicable	Not applicable	Not applicable	Media Encoder
mskb:954154 (MS08-054)	Not applicable	Not applicable	Not applicable	Media Player
mskb:955047 (MS08-055)	Tested OK	Tested OK	Tested OK	MS Office

Microsoft Security Update August 2008	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.4	
mskb:955617 (MS08-041)	Not applicable	Not applicable	Access
mskb:955048 (MS08-042)	Tested OK	Tested OK	Word
mskb:954066 (MS08-043)	Tested OK	Tested OK	Excel
mskb:924090 (MS08-044)	Not applicable	Not applicable	Office Filters
mskb:953838 (MS08-045)	Tested OK	Tested OK	IE
mskb:952954 (MS08-046)	Not applicable	Not applicable	Windows Image Color Management
mskb:953733 (MS08-047)	Not applicable	Not applicable	IPSec
mskb:951066 (MS08-048)	Not applicable	Not applicable	Outlook
mskb:950974 (MS08-049)	Not applicable	Not applicable	Event System
mskb:955702 (MS08-050)	Not applicable	Not applicable	Windows Messenger
mskb:949785 (MS08-051)	Tested OK	Tested OK	PowerPoint
Microsoft Security Update July 2008	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.4	
mskb:953230 (MS08-037)	Tested OK	Tested OK	DNS
mskb:950582 (MS08-038)	Tested OK	Tested OK	Windows Explorer
mskb:953747 (MS08-039)	Not applicable	Not applicable	Outlook
mskb:941203 (MS08-040)	Not applicable	Not applicable	SQL
Microsoft Security Update June 2008	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.4	
mskb:951376 (MS08-030)	Not applicable	Not applicable	Bluetooth
mskb:950759 (MS08-031)	Tested OK	Tested OK	IE
mskb:950760 (MS08-032)	Not applicable	Not applicable	ActiveX

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mskb:951698 (MS08-033)	Not applicable	Not applicable	DirectX
mskb:948745 (MS08-034)	Tested OK	Tested OK	WINS
mskb:953235 (MS08-035)	Not applicable	Not applicable	Active Directory
mskb:950762 (MS08-036)	Not applicable	Not applicable	PGM
Microsoft Security Update May 2008	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.4	
mskb:951207 (MS08-026)	Tested OK	Tested OK	Word
mskb:951208 (MS08-027)	Not applicable	Not applicable	Publisher
mskb:950749 (MS08-028)	Not applicable	Not applicable	Jet Database Engine
mskb:952044 (MS08-029)	Not applicable	Not applicable	Malware Protection Engine
Microsoft Security Update April 2008	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.4	
mskb:950183 (MS08-018)	Not applicable	Not applicable	MS Project
mskb:949032 (MS08-019)	Not applicable	Not applicable	Visio
mskb:945553 (MS08-020)	Tested OK	Tested OK	DNS
mskb:948590 (MS08-021)	Not applicable	Not applicable	GDI
mskb:944338 (MS08-022)	Not applicable	Not applicable	VBScript and JScript
mskb:948881 (MS08-023)	Not applicable	Not applicable	ActiveX Kill Bits
mskb:947864 (MS08-024)	Tested OK	Tested OK	IE
mskb:941693 (MS08-025)	Not applicable	Not applicable	WIN 32
Microsoft Security Update March 2008	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.4	
mskb:949029 (MS08-014)	Not applicable	Not applicable	Excel
mskb:949031 (MS08-015)	Not applicable	Not applicable	Outlook
mskb:949030 (MS08-016)	Not applicable	Not applicable	MS Office
mskb:933103 (MS08-017)	Not applicable	Not applicable	MS Office Web
Microsoft Security Update February 2008	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.4	
mskb:946538 (MS08-003)	Tested OK	Tested OK	Active Directory
mskb:946456 (MS08-004)	Not applicable	Not applicable	TCP/IP
mskb:942831 (MS08-005)	Not applicable	Not applicable	IIS
mskb:942830 (MS08-006)	Not applicable	Not applicable	IIS
mskb:946026 (MS08-007)	Tested OK	Tested OK	WebDAV

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mskb:947890 (MS08-008)	Not applicable	Not applicable	OLE
mskb:947077 (MS08-009)	Tested OK	Tested OK	Word
mskb:944533 (MS08-010)	Tested OK	Tested OK	IE
mskb:947081 (MS08-011)	Not applicable	Not applicable	Microsoft Works
mskb:947085 (MS08-012)	Not applicable	Not applicable	Microsoft Office Publisher
mskb:947108 (MS08-013)	Not applicable	Not applicable	Microsoft Office
Microsoft Security Update January 2008	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.4	
mskb:941644 (MS08-001)	Tested OK	Tested OK	TCP/IP
mskb:943485 (MS08-002)	Tested OK	Tested OK	LSASS
Microsoft Security Update December 2007	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.3	
mskb:942615 (MS07-069)	Tested OK	Tested OK	Internet Explorer (IE)
mskb:941569 (MS07-068)	Tested OK	Tested OK	Windows Media File
mskb:944653 (MS07-067)	Not applicable	Not applicable	Macrovision Driver
mskb:943078 (MS07-066)	Tested OK	Tested OK	Windows Kernel
mskb:937894 (MS07-065)	Not applicable	Not applicable	Message Queuing
mskb:941568 (MS07-064)	Tested OK	Tested OK	DirectX
mskb:942624 (MS07-063)	Tested OK	Tested OK	SMBv2
Microsoft Security Update November 2007	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.3	
mskb:941672 (MS07-062)	Tested OK	Tested OK	Spoofing - DNS
mskb:943460 (MS07-061)	Tested OK	Tested OK	Remote Code Execution
Microsoft Security Update October 2007	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.3	
mskb:942695 (MS07-60)	Not applicable	Not applicable	Microsoft Word
mskb:942017 (MS07-59)	Not applicable	Not applicable	SharePoint Services
mskb:933729 (MS07-58)	Tested OK	Tested OK	Remote Procedure Call (RPC)
mskb:939653 (MS07-57)	Tested OK	Tested OK	Internet Explorer (IE)
mskb:941202 (MS07-56)	Not applicable	Not applicable	Outlook Express and Windows Mail
mskb:923810 (MS07-55)	Tested OK	Tested OK	Kodak Image Viewer

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Microsoft Security Update September 2007	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.3	
mskb:942099 (MS07-054)	Not applicable	Not applicable	Messenger
mskb:939778 (MS07-053)	Tested OK	Tested OK	Windows Services for UNIX
mskb:941522 (MS07-052)	Not applicable	Not applicable	Crystal Reports
mskb:938827 (MS07-051)	Tested OK	Tested OK	MS Agent
Microsoft Security Update August 2007	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.3	
mskb:938127 (MS07-050)	Tested OK	Tested OK	VML
mskb:937986 (MS07-049)	Not applicable	Not applicable	Virtual PC
mskb:938123 (MS07-048)	Not applicable	Not applicable	Gadgets
mskb:936782 (MS07-047)	Not applicable	Not applicable	WMP
mskb:938829 (MS07-046)	Tested OK	Tested OK	GDI
mskb:937143 (MS07-045)	Tested OK	Tested OK	IE
mskb:940965 (MS07-044)	Not applicable	Not applicable	Excel
mskb:921503 (MS07-043)	Tested OK	Tested OK	OLE
mskb:936227 (MS07-042)	Tested OK	Tested OK	XML
Microsoft Security Update July 2007	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.2	
mskb:939373 (MS07-041)	Not applicable	Not applicable	IIS
mskb:931212 (MS07-040)	Tested OK	Tested OK	.NET Framework
mskb:926122 (MS07-039)	Tested OK	Tested OK	AD
mskb:935807 (MS07-038)	Tested OK	Tested OK	Vista Firewall
mskb:936548 (MS07-037)	Not applicable	Not applicable	Publisher
mskb:936542 (MS07-036)	Not applicable	Not applicable	Excel
Microsoft Security Update June 2007	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.2	
mskb:935839 (MS07-035)	Tested OK	Tested OK	Win 32 API
mskb:929123 (MS07-034)	Not applicable	Not applicable	Outlook Express
mskb:933566 (MS07-033)	Tested OK	Tested OK	IE
mskb:931213 (MS07-032)	Tested OK	Tested OK	Vista
mskb:935840 (MS07-031)	Tested OK	Tested OK	Schannel
mskb:935840 (MS07-032)	Not applicable	Not applicable	Visio

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Microsoft Security Update May 2007	Data ONTAP Release Test Results		Comments
	7.1.2.1	7.2.2	
mskb:935966 (MS07-029)	Tested OK	Tested OK	DNS
mskb:931906 (MS07-028)	Not applicable	Not applicable	Capicom
mskb:931768 (MS07-027)	Tested OK	Tested OK	IE
mskb:931832 (MS07-026)	Not applicable	Not applicable	Exchange
mskb:934873 (MS07-025)	Not applicable	Not applicable	Office
mskb:934232 (MS07-024)	Not applicable	Not applicable	Word
mskb:934233 (MS07-023)	Not applicable	Not applicable	Excel
Microsoft Security Update April 2007	Data ONTAP Release Test Results		Comments
	7.1.1	7.2.2	
mskb:931784 (MS07-022)	Tested OK	Tested OK	Kernel
mskb:930178 (MS07-021)	Tested OK	Tested OK	CSRSS
mskb:932168 (MS07-020)	Tested OK	Tested OK	Agent
mskb:931261 (MS07-019)	Not applicable	Not applicable	UPnP
mskb:925939 (MS07-018)	Not applicable	Not applicable	CMS
mskb:925902 (MS07-017)	Tested OK	Tested OK	GDI
Microsoft Security Update March 2007	Data ONTAP Release Test Results		Comments
	7.1.1	7.2.2	
			Microsoft did not have a security update release for IBM this month.
Microsoft Security Update February 2007	Data ONTAP Release Test Results		Comments
	7.1.1	7.2.1	
mskb:928090 (MS07-016)	Tested OK	Tested OK	Internet Explorer
mskb:932554 (MS07-015)	Not applicable	Not applicable	Office
mskb:929434 (MS07-014)	Not applicable	Not applicable	Word
mskb:918118 (MS07-013)	Not applicable	Not applicable	RichEdit
mskb:924667 (MS07-012)	Tested OK	Tested OK	MFC
mskb:926436 (MS07-011)	Not applicable	Not applicable	OLE Dialog
mskb:932135 (MS07-010)	Tested OK	Tested OK	Malware Protection Engine
mskb:927779 (MS07-009)	Tested OK	Tested OK	Data Access Components
mskb:928843 (MS07-008)	Tested OK	Tested OK	HTML Help
mskb:927802 (MS07-007)	Tested OK	Tested OK	Image Acquisition Service

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mskb:928255 (MS07-006)	Tested OK	Tested OK	Windows Shell
mskb:923723 (MS07-005)	Not applicable	Not applicable	Interactive Training
Microsoft Security Update January 2007	Data ONTAP Release Test Results		Comments
	7.1.1.1	7.2.1	
mskb:929969 (MS07-004)	Tested OK	Tested OK	Vector Markup Language
mskb:925938 (MS07-003)	Not applicable	Not applicable	Outlook
mskb:927198 (MS07-002)	Not applicable	Not applicable	Excel
mskb:921585 (MS07-001)	Not applicable	Not applicable	Office 2003 Brazilian
Microsoft Security Update December 2006	Data ONTAP Release Test Results		Comments
	7.1.1.1	7.2.1	
mskb:923689 (MS06-078)	Not applicable	Not applicable	Windows Media
mskb:926121 (MS06-077)	Tested OK	Tested OK	Remote Install Service
mskb:923694 (MS06-076)	Not applicable	Not applicable	Outlook Express
mskb:926255 (MS06-075)	Tested OK	Tested OK	Manifest
mskb:926247 (MS06-074)	Tested OK	Tested OK	SNMP
mskb:925674 (MS06-073)	Not applicable	Not applicable	Visual Studio
mskb:925454 (MS06-072)	Tested OK	Tested OK	Internet Explorer
Microsoft Security Update November 2006	Data ONTAP Release Test Results		Comment
	7.1.1.1	7.2.1	
mskb:928088 (MS06-071)	Tested OK	Tested OK	XML Core Services
mskb:924270 (MS06-070)	Not applicable	Not applicable	Workstation Service
mskb:923789 (MS06-069)	Not applicable	Not applicable	Adobe Flash Player
mskb:920213 (MS06-068)	Tested OK	Tested OK	MS Agent
mskb:922760 (MS06-067)	Tested OK	Tested OK	Internet Explorer
mskb:923980 (MS06-066)	Not applicable	Not applicable	Client Service for NetWare
Microsoft Security Update October 2006	Data ONTAP Release Test Results		Comments
	7.1.1	7.2	
mskb:924496 (MS06-065)	Tested OK	Tested OK	Object Packager
mskb:922819 (MS06-064)	Tested OK	Tested OK	TCPIP
mskb:923414 (MS06-063)	Tested OK	Tested OK	Server Service
mskb:923414 (MS06-062)	Not applicable	Not applicable	Office
mskb:923414 (MS06-061)	Tested OK	Tested OK	XML
mskb:923414 (MS06-060)	Not applicable	Not applicable	Word

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mskb:923414 (MS06-059)	Not applicable	Not applicable	Excel
mskb:923414 (MS06-058)	Not applicable	Not applicable	PowerPoint
mskb:923414 (MS06-057)	Tested OK	Tested OK	Explorer
mskb:923414 (MS06-056)	Tested OK	Tested OK	ASP.NET
mskb:923414 (MS06-055)	Tested OK	Tested OK	VML
mskb:923414 (MS06-054)	Not applicable	Not applicable	Publisher
mskb:923414 (MS06-053)	Tested OK	Tested OK	Indexing Service
Microsoft Security Update September 2006	Data ONTAP Release Test Results		Comments
	7.1.1	7.2	
mskb:920685 (MS06-053)	Tested OK	Tested OK	Indexing Service
mskb:922582	Tested OK	Tested OK	Windows Update

Microsoft Security Update August 2006	Data ONTAP Release Test Results	Comments
	7.1.1	
mskb:921883 (MS06-051)	Tested OK	Windows Kernel
mskb:921883 (MS06-050)	Not applicable	Hyperlink
mskb:921883 (MS06-049)	Tested OK	Windows Kernel
mskb:921883 (MS06-048)	Not applicable	MS Office
mskb:921883 (MS06-047)	Not applicable	Visual Basic
mskb:921883 (MS06-046)	Not applicable	Html Help
mskb:921883 (MS06-045)	Tested OK	Windows Explorer
mskb:921883 (MS06-044)	Tested OK	MMC
mskb:921883 (MS06-043)	Not applicable	MHTML Parsing
mskb:921883 (MS06-042)	Tested OK	Internet Explorer
mskb:921883 (MS06-041)	Tested OK	DNS Resolution
mskb:921883 (MS06-040)	Tested OK	Server Service

Microsoft Security Update June 2006	Data ONTAP Release Test Results	Comments
	7.1	
mskb:917736 (MS06-032)	Tested OK	TCP/IP
mskb:917736 (MS06-031)	Tested OK	RPC

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mskb:917736 (MS06-030)	Requires Microsoft fix KB937450	SMB
mskb:917736 (MS06-029)	Not Applicable	Exchange (OWA)
mskb:917736 (MS06-028)	Not Applicable	PowerPoint
mskb:917736 (MS06-027)	Not Applicable	MS Word
mskb:917736 (MS06-026)	Not Applicable	Graphics Rendering
mskb:917736 (MS06-025)	Tested OK	Routing and Remote Access
mskb:917736 (MS06-024)	Not Applicable	Windows Media Player
mskb:917736 (MS06-023)	Not Applicable	Microsoft JScript
mskb:917736 (MS06-022)	Not Applicable	ART Image Rendering
mskb:917736 (MS06-021)	Tested OK	Internet Explorer
Microsoft Security Update May 2006	Data ONTAP Release Test Results	Comments
	7.1	
mskb:913580 (MS06-020)	Not Applicable	Macromedia Flash Player
mskb:913580 (MS06-019)	Not Applicable	Microsoft Exchange
mskb:913580 (MS06-018)	Tested OK	MSDTC Issue
Microsoft Security Update April 2006	Data ONTAP Release Test Results	Comments
	7.1	
mskb:917627 (MS06-017)	Not Applicable	Front Page Server Extensions
mskb:911567 (MS06-016)	Not Applicable	Outlook Express
mskb:908531 (MS06-015)	Tested OK	Windows Shell
mskb:911562 (MS06-014)	Tested OK	MDAC
mskb:912812 (MS06-013)	Tested OK	Internet Explorer
Microsoft Security Update March 2006	Data ONTAP Release Test Results	Comments
	7.1	
mskb:905413 (MS06-012))	Tested OK	MS Office
mskb:901190 (MS06-011)	Tested OK	Service DACL
Microsoft Security Update February 2006	Data ONTAP Release Test Results	Comments
	7.1	
mskb:889167 (MS06-010)	Tested OK	PowerPoint

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mskb:901190 (MS06-009)	Not Applicable	KoreanInputMethod
mskb:911927 (MS06-008)	Tested OK	WebClientService
mskb:913446 (MS06-007)	Tested OK	Tcp/Ip
mskb:911564 (MS06-006)	Not Applicable	Media Player
mskb:911565 (MS06-005)	Not Applicable	MSN Messenger
mskb:910620 (MS06-004)	Tested OK	IE

Legend

Tested OK	No issues were found on the tested release.
Defect Report	Issues found - Click on the link in the "Comments" column to read the Defect Report details.
Not Applicable	The update is not applicable to the listed Data ONTAP Release.

Data ONTAP and Microsoft Windows Service Packs

This page is intended to be an informational guide for IBM N series customers who are evaluating deployment of new Microsoft Windows Service Packs.

The following Microsoft Windows Service Packs have been tested with IBM N series Filers and meet interoperability requirements in our test environment. This matrix should not be interpreted as an endorsement that a given Microsoft Windows Service Pack is bug-free or should be deployed in your environment. Any issues that were discovered during testing will be listed at the bottom of this page.

Since we cannot fully test every possible configuration, we closely monitor Microsoft Windows Service Pack related issues that arise in the field. This web page will be updated with new issues as they become known.

Note that this testing effort pertains specifically to usage of the CIFS* protocol through Network Attached Storage.

* - also referred to as Windows File Services and Windows Networking on some Data ONTAP documentation.

Microsoft Windows Domain Controller Configuration

Windows Version + Service Pack	2008 SP1 (32 & 64 bit)	2003 SP2 (32 & 64 bit)	2003 R2 SP2 32 bit	2000 SP4 32 bit
Data ONTAP 7.3.1	X	X	X	X
Data ONTAP 7.2.6.1	X	X	X	X
Data ONTAP 7.1.3	X	X		X

More Information Regarding Other Data ONTAP versions:

- Data ONTAP versions 7.2.3 and 7.1.2.1 will not support Windows 2008 as a Domain Controller.

Microsoft Windows Client Configuration

Windows + Service Packs	2008 SP1 (32 & 64 bit)	Vista SP1 32 bit	Vista SP1 64 bit	2003 R2 SP2 32 bit	2003 SP2 (32 & 64 bit)	XP SP3 32 bit	XP SP2 64 bit	2000 SP4 32 bit
Data ONTAP 7.3.1	X	X	X	X	X	X	X	X
Data ONTAP 7.2.6.1	X	X	X	X	X	X	X	X
Data ONTAP 7.1.3	X	X		X				

More Information Regarding Other Data ONTAP versions:

- Data ONTAP versions 7.2.3 and 7.1.2.1 will not support Windows 2008 as a Client.

Known Issues:

- CACLS.EXE command from Windows 2008/Vista will fail to retrieve ACL if the DACL has zero ACEs
- cifs setup fails 1 out of ~20 times with AUTH: Error from DC while setting filer password
- Virus scanner failing to register to the filer in 7.1.3

Anti Virus Certification Matrix

AV Partners	Partner stated support		Last Data ONTAP and AV Version tested	
	AV Version	Data ONTAP Version	AV Version	Data ONTAP Version
Symantec	Anti Virus 5.2	7.1 and above	Anti Virus 5.2	7.3.1
McAfee*	VirusScan for Storage 1.0	7.1 and above	VirusScan for storage 1.0	7.3.1
Trend Micro	Server Protect SPNF 5.62	7.1 and above	Server Protect SPNF 5.62	7.3.1
CA	AntiVirus for the Enterprise r8.1	7.1 and above	AntiVirus for the Enterprise r8.1	7.3.1
Sophos**	Anti Virus for NetApp Storage Systems 1.0.1	7.1 and above	Anti Virus for NetApp Storage Systems 1.0.1	7.3.1

***McAfee** : This product is an add-on for storage to their core product, McAfee VirusScan Enterprise 8.7i. You have to install this first and then the storage version.

****Sophos** : This product is an add-on for storage to their core product, Sophos Endpoint Security and Control 8.0. You have to install this first and then the storage version.

Microsoft Windows Server 2008 and Vista Interoperability

As of March 4, 2008, interoperability testing of Microsoft Windows Server 2008 and Vista SP1 with Data ONTAP Windows File Services (CIFS) was completed with the following Data ONTAP version(s):

- Data ONTAP 7.2.4
- Data ONTAP 7.1.3, 7.2.5.1 and 7.3.0 are supported.

Known Issues

- None

Mac OS/X Interoperability

Mac OS/X and Data ONTAP Version	Version 10.5.6 (Leopard)	Version 10.4.11 (Tiger)
Data ONTAP 7.3.1	X	X
Data ONTAP 7.3.0		X
Data ONTAP 7.2.4		X
Data ONTAP 7.2.3		X

Known Issues

- Cannot mount a cifs share when auth method used is plain-text password
- Unable to get/set ACLs on dir/file from a CIFS share in MAC OS env. with 'chmod'
- DFS is not supported with native SMB client stack
- SMB mount of a dir inside share mounts the share instead of dir on Tiger
- Behavior of Tiger is unlike Leopard (expected) with ABE enabled cifs share
- Unable to get byte range lock on a file sitting on CIFS share Mac OS X

NFS Interoperability

Usage of NFS V2, V3 and V4 over UDP or TCP is supported on any platform that supports the industry standard NFS protocol.

Data ONTAP 7.3 release addresses some important NFSv4 issues. The enhancements in the 7.3 release focus on the stability of the NFSv4 protocol. Therefore you are advised to run NFSv4 with Data ONTAP 7.2.x releases in test environments only. For production environments, use NFSv4 with Data ONTAP 7.3.

Data ONTAP and NFS Clients

This information is intended to be an informational guide for IBM N series customers who are evaluating deployment of NFS variants.

The following UNIX flavors and NFS features have been tested with IBM N series filers and meet interoperability requirements in our test environment.

A list of issues discovered during testing can be found at the bottom of this page. This matrix will be updated with new issues as they become known.

Note that this testing effort pertains specifically to usage of the NFS* protocol through Network Attached Storage. (* - also referred to as UNIX File Services.)

DATA ONTAP 7.3.1						
NFS version	Feature	Sun Solaris 10 Update 3	RHEL-5.2	Fedora Core-7 (Kernel 2.6.19rc2)	IBM AIX V5.3	HP-UX V 11 v3
NFSv2	Exports	√	√	x	√	√
	v2 Ops	√	√	x	√	√
	Locking	√	√	x	√	√
	Kerberos	√	√	x	√	x
NFSv3	Exports	√	√	x	√	√
	v3 Ops	√	√	x	√	√
	Locking	√	√	x	√	√
	Kerberos	√	√	x	√	x
NFSv4	Exports	√	√	x	√	x
	Locking	√	√	x	√	x
	Kerberos	√	√	x	√	x
	ACLs	√	√	x	√	x
	Delegations	√	√	x	√	x
	Pseudo-FS	x(1)	√	x	√	x
	Internationalization	√	√	x	-	x
	Named Attributes	√	x(2)	x	x(3)	x

Legend

√	TESTED AND SUPPORTED ON DATA ONTAP 7.3.1 AND CLIENT
x	NOT TESTED
-	NOT SUPPORTED DUE TO A CLIENT ISSUE

Notes from Testing Matrix

- (1) Solaris bug, workaround available - [Solaris Bug](#)
- (2) Linux VFS lacks functionality to implement NFSv4 named attributes - [LINUX Bug](#)
- (3) AIX 5.3 does not support NFSv4 named attributes

Note on Support

This matrix support includes Data ONTAP 7.3 only.

ALL Data ONTAP releases support ALL versions NFS clients compliant with:

- RFC 1094 (NFSv2)
- RFC 1813 (NFSv3)
- RFC 2203 (RPCSEC_GSS)
- RFC 2623 (NFSv2 & NFSv3 Security)
- RFC 3530 (NFSv4)

Note on Test Environment

Tests include standard suites like Connectathon and PYNFS.

Test suites developed in-house include synthetic clients to emulate real world scenarios.

More Information Regarding to NFS clients

The following are the NFS client variants with kernels supported:

- RHEL-5 Distribution with Kernel 2.6.18-8.el5
- Fedora Core -7 with kernel 2.6.19rc2
- Solaris 10 s10s_u2wos_09a SPARC
- IBM AIX 5.3

Known Issues

- Linux client RHEL-5 is not sending proper callback delegation
- Pseudo-FS is not supported on Solaris 10
- Solaris client reboots if the mounted volume has filename of more than 255 bytes
- Linux and Solaris doesn't support 256 characters file name
- Linux client allows when acl specifies deny (Kernel 2.6.18)
- Linux client doesn't allow file deletion (Kernel 2.6.18-8.1.3.el5)

Kerberos Compatibility Matrix

This page is intended to be an informational guide for Network Appliance customers who are evaluating deployment of Kerberos.

The following UNIX flavors and Kerberos have been tested with Network Appliance Filers and meet interoperability requirements in our test environment. Any issues that were discovered during testing will be listed at the bottom of this page. Since we cannot fully test every possible configuration, we closely

IBM System Storage N series CIFS and NFS Interoperability Matrix

monitor related issues that arise in the field. This web page will be updated with new issues as they become know.

Note that this testing effort pertains specifically to usage of the NFS* protocol through Network Attached Storage. (* - also referred to as UNIX File Services.)

Data ONTAP 7.3.1			
KDC SERVER	KDC CLIENTS		
	RHEL 5 Kernel 2.6.18-8.el5	IBM AIX 5.3	Sun SOLARIS 5.10 Update-2
SUN SOLARIS 5.10 Update 3	√	√	√
IBM AIX 5.3	x	x	x
RHEL 5.2 Kernel 2.6.18-92.EL5	√	√	√
AD KDC -Windows 2003 Server	√	x	√
HEIMDAL KDC -Ubuntu 8.10 Kernel 2.6.27-7	√	x	√

Legend

√	TESTED AND SUPPORTED ON DATA ONTAP 7.3 AND CLIENT
x	NOT TESTED

More Information Regarding to Kerberos

Data ONTAP version 7.3.1 has been tested for Kerberos over NFS versions 2, 3 and 4 with security types krb5, krb5i and krb5p

Data ONTAP version 7.3.1 supports encryption types des-cbc-crc and des-cbc-md5



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