

SnapServer[®] NAS GuardianOS[™] 6.5 Compatibility Guide May 2011

SnapServer NAS Compatibility Guide

Table of Contents

1	Introduction	3
2	Supported SnapServer NAS Systems	3
3	Client Compatibility	3
3.1	Recommended Active Concurrent Users	3
3.2	Microsoft Windows	4
3.3	Apple MAC OS	4
3.4	Linux	4
3.5	UNIX.....	4
4	iSCSI Hardware and 3 rd Party Initiator Support	4
5	Virtualization	6
5.1	VMware	6
5.2	Microsoft	6
5.3	Citrix	6
6	Web Browser Compatibility	6
7	Data Protection Application Compatibility.....	7
7.1	Overland Storage Solutions	7
7.2	Third Party Solutions	7
8	Tape Drive and Library Compatibility	7
8.1	Tape Connectivity	8

SnapServer NAS Compatibility Guide

1 Introduction

This document provides SnapServer® NAS compatibility information for SnapServer NAS systems running GuardianOS™ 6.5. It is intended as a quick reference for information contained in the SnapServer NAS Administration Guide.

For full compatibility information on GuardianOS 6.5 and previous versions of GuardianOS, please refer to the SnapServer NAS Administration guide for the specific version.

2 Supported SnapServer NAS Systems

GuardianOS 6.5 is supported on the following SnapServer NAS systems:

- SnapServer N2000 (with up to 5 SnapDisk™ E2000)
- SnapServer 650 (with up to 7 Snap Expansion S50)
- SnapServer 620 (with up to 7 Snap Expansion S50)
- SnapServer 550 (with up to 7 Snap Expansion S50)
- SnapServer 520 (with up to 7 Snap Expansion S50)
- SnapServer 510
- SnapServer 410
- SnapServer 210
- SnapServer 110

3 Client Compatibility

SnapServer NAS systems support a broad range of network protocols to allow many different operating systems access to shared data. Below is a list of supported operating systems that can read and write data to a network share hosted on a SnapServer NAS system.

3.1 Recommended Active Concurrent Users

SnapServer System	Recommended Active Concurrent Users
SnapServer 110	50
SnapServer 210	50
SnapServer 410	75
SnapServer 620 SATA	225
SnapServer 620 SAS	250
SnapServer 650	300
SnapServer N2000 DT SATA	450
SnapServer N2000 ENT SATA	480
SnapServer N2000 SAS	550

SnapServer NAS Compatibility Guide

3.2 Microsoft Windows

Compatibility with a Microsoft Base Operating System indicates that Overland Storage will support any variation of that Microsoft Base Operating System whose Mainstream Support or Extended Support Coverage has not yet been retired by Microsoft (as indicated at: <http://support.microsoft.com/lifecycle/search/>)

Microsoft Base Operating System	File Protocols			Authentication	Block Protocols	
	CIFS/SMB	NFS	AFP	Domain Member Support	iSCSI Initiator Support ¹	VSS/VDS Client Support
Windows 2000	Yes	N/A	N/A	Yes	Yes	No
Windows Server 2003	Yes	N/A	N/A	Yes	Yes	VSS
Windows Server 2003 R2	Yes	N/A	N/A	Yes	Yes	VSS/VDS
Windows Server 2008	Yes	N/A	N/A	Yes	Yes	VSS/VDS
Windows Server 2008 R2	Yes	N/A	N/A	Yes	Yes	VSS/VDS
Windows Server 2008 R2 SP1	Yes	N/A	N/A	Yes ²	Yes	VSS/VDS
Windows Home Server	Yes	N/A	N/A	N/A	No	No
Windows XP	Yes	N/A	N/A	N/A	Yes	N/A
Windows Vista	Yes	N/A	N/A	N/A	Yes	VDS
Windows 7	Yes	N/A	N/A	N/A	Yes	No

3.3 Apple MAC OS

Apple Base Operating System	File Protocols			Block Protocols	
	CIFS/SMB	NFS	AFP	iSCSI Initiator Support ¹	VSS/VDS Client Support
Mac OS X (10.4; 10.5; 10.6)	Yes	No	Yes	No ³	No

3.4 Linux

Base Operating System	File Protocols			Block Protocols
	CIFS/SMB	NFS	AFP	iSCSI Initiator Support ¹
Red Hat Linux 9.0	N/A	Yes	N/A	No
Red Hat Enterprise Linux (RHEL) 4.x; 5.x	N/A	Yes	N/A	Yes
Fedora Project	N/A	Yes	N/A	No
Novell SuSE Linux Enterprise Server (SLES) 10.x; 11.x	N/A	Yes	N/A	Yes

3.5 UNIX

Base Operating System	File Protocols			Block Protocols
	CIFS/SMB	NFS	AFP	iSCSI Initiator Support ¹
Oracle Solaris 10	N/A	Yes	N/A	Yes
Hewlett-Packard HP-UX 11	N/A	Yes	N/A	No
IBM AIX 5.3; 6	N/A	Yes	N/A	No

4 iSCSI Hardware and 3rd Party Initiator Support

In addition to the built-in iSCSI Software Initiator support indicated in Section 3 above, Overland Storage has also tested the following iSCSI Initiators:

¹ "Yes" indicates support for built in software initiators.

² GuardianOS 6.5.023 is required to support Domain joins with Windows Server 2008 R2 SP1

³ For iSCSI Initiator support in MAC OS X environments, please refer to Section 4 below.

SnapServer NAS Compatibility Guide

- The following QLogic Adapter *iSCSI Initiators* have been tested in Microsoft Windows, Linux, VMware ESX and Citrix XenServer environments and *Boot from iSCSI* has been tested in Windows and Linux environments and found to be compatible with GuardianOS 6.5 iSCSI Targets:
 - QLA4050
 - QLA4050c
 - QLA4052c
- For Apple MAC environments, Small Tree Communications abcSAN iSCSI initiator has been tested with Apple MAC OS X 10.5.

SnapServer NAS Compatibility Guide

5 Virtualization

5.1 VMware

	File Protocols	Block Protocols
Base Operating System	NFS	iSCSI Initiator
VMware ESXi 4.1 (vSphere) Virtual disk (VMDK) support	Yes	Yes

5.2 Microsoft

	File Protocols	Block Protocols
Base Operating System	NFS	iSCSI Initiator
Windows Server 2008 HyperV Virtual Hard Disk (VHD) support	No	Yes
Windows Server 2008 R2 HyperV Virtual Hard Disk (VHD) support	No	Yes

5.3 Citrix

	File Protocols	Block Protocols
Base Operating System	NFS	iSCSI Initiator
XenServer 5.6 Virtual Disk Storage support	Yes	Yes

6 Web Browser Compatibility

SnapServer NAS systems can be directly managed from anywhere around the world using a web browser. Shared files can also be downloaded from a SnapServer NAS system using a browser through the HTTP protocol. Below is a list of compatible web browsers.

Web Browser	Operating Systems	Manage a SnapServer	Download Shared Files from a SnapServer
Microsoft Internet Explorer 7	Windows	Yes	Yes
Microsoft Internet Explorer 8	Windows	Yes	Yes
Microsoft Internet Explorer 9	Windows	Yes	Yes
Mozilla Firefox 3.6	Windows; Mac OS X; Linux	Yes	Yes
Apple Safari 5	Mac OS X	Yes	Yes
Google Chrome 9	Windows; Mac OS X; Linux	Yes	Yes

SnapServer NAS Compatibility Guide

7 Data Protection Application Compatibility

SnapServer NAS systems support a broad range of data protection solutions. Below is a list of supported environments to protect data on a SnapServer NAS system as well as use a SnapServer NAS system as a backup destination.

7.1 Overland Storage Solutions

Data Protection Software	Backup all GuardianOS file/folder Permissions and Metadata
Snap Enterprise Data Replicator™ (Snap EDR) 7.2	Yes

7.2 Third Party Solutions

Data Protection Software	Backup to tape drive / library attached to SnapServer NAS system	Backup SnapServer NAS system by installing a client agent on GuardianOS	Backup SnapServer NAS system over CIFS/SMB, NFS, or AFP	SnapServer NAS system as a backup destination over CIFS/SMB, NFS, or AFP
BakBone NetVault: Backup 8.2	Yes	Yes	Yes	Yes
Symantec Backup Exec 2010	Yes	Yes	No	Yes
Symantec Backup Exec 10d; 11d; 12d	No	Yes	No	Yes
Symantec Backup Exec 12.5	Yes	Yes	No	Yes
Symantec NetBackup 6.5	No	Yes	No	No
CA ARCserve 11.5; 12.0	No	Yes	Yes	Yes
EMC NetWorker 7.3; 7.4	No	Yes	No	No

8 Tape Drive and Library Compatibility

GuardianOS 6.5 supports tape drives and libraries attached via Parallel SCSI, USB or SAS⁴.

If using BakBone NetVault: Backup SmartClients refer to BakBone's supported drives and supported libraries documents at http://www.bakbone.com/support/product_documentation/default.asp for a complete list of supported tape drives and libraries,

If using Symantec Backup Exec Remote Media Agent for Linux 12.5 on GuardianOS refer to Symantec's supported drives and supported libraries documents at ftp://exftpp.symantec.com/pub/support/products/Backup_Exec_for_WindowsNT/306831.pdf

⁴ On SnapServer N2000 systems, up to 2 SAS Tape drives connected to the built-in SAS expander on the SnapServer N2000 or to the last SnapDisk E2000 connected to the SnapServer N2000.

SnapServer NAS Compatibility Guide

8.1 Tape Connectivity

The SnapServer N2000 supports tape connectivity⁵ through any of the following interfaces:

- SnapServer SCSI Card (Available as an option for the SnapServer N2000)
- Built-in USB connection
- Built-in SAS connection (either attached to the SnapServer N2000 system or to the last SnapServer Expansion E2000 connected to the SnapServer N2000)

SnapServer 650, 620, 550, 520, 510 and 410 models support tape connectivity through any of the following interfaces:

- SnapServer SCSI Card
(Standard on SnapServer 650, 620 SAS, and 550 models, available as an option for the SnapServer 520, 510 and 410 models)
- Built-in USB connection

SnapServer 210 and 110 models support tape connectivity through the following interfaces:

- Built-in USB connection

⁵ While GuardianOS and SnapServers provide physical tape connectivity, the 3rd party backup application or agent is responsible for and **tape library** control over the interface. Therefore, the compatibility of tape drives **and** libraries must be cross referenced with the appropriate 3rd party backup vendor as well.