

Dell™ Model TL24iSCSIxSAS 1Gb iSCSI to SAS™ bridge Support Matrix

This document provides information about the supported software and hardware versions for the Dell model TL2000\TL4000 1Gb iSCSI to SAS bridge solution.

NOTE: For the latest firmware releases and product documentation, see the Downloads sections of support.dell.com.

Dell™ Model TL24iSCSIxSAS 1Gb iSCSI to SAS™ Bridge Rules

Networking and Connectivity Rules

- A dedicated IP SAN is highly recommended for iSCSI data transmission. Management traffic can be isolated or added to existing networks
- Hosts can connect to an iSCSI Tape library using a Layer 2 (switched) or Layer 3 (routed) network
- When a switch or router is present, a 10/100 NIC can be used on the host server for iSCSI data transmission since the connection to the storage array is through the switch or router*
- The iSCSI I/O port connection to the TL2000\TL4000 iSCSI Bridge must be 1000Mb copper (RJ45). The link rate of 10/100Mb is not supported. When using multiple (NICs) in the same server, it is recommended that different subnets be used
- iSCSI HBAs are not supported with the TL2000\TL4000 iSCSI bridge
- Dell recommends that you enable your switch Spanning Tree setting to Port Fast ** when using the TL2000\TL4000 iSCSI bridge
- Ethernet switch ports that are connected to Server Host ports and TL2000\TL4000 iSCSI controller iSCSI ports should be set to Port Fast
- IPv6 is not supported

*This configuration is *not recommended*.

** Port Fast: The Port Fast setting allows switch ports to be in a faster forwarding state, allowing network traffic iSCSI login sessions to be established with minimum wait time.

Statement of Support

When the TL2000\TL4000 iSCSI solution is intended to protect a virtual environment Dell Technical Support will refer users to the respective Virtual Operating System provider specification. Support will also reference the Data Protection software "Virtual Host" option as the recommended method to protect the virtual environment. The "Virtual Host" option consists of a data agent that resides in the host virtual server. In the case of VMware, the virtual agent is installed on the proxy computer used to communicate with the virtual OS interface. This configuration allows the Backup application virtual agent to communicate with the host and leverage the host OS tools. The proxy server handles the data transfer to Tape.

Supported Operating Systems

- Microsoft Windows Server 2003 32-bit Standard and Enterprise SP1 or higher
- Microsoft Windows Server 2003 Standard and Enterprise x64 Edition SP1 or higher
- Microsoft Windows Server 2008 32 bit Standard and Enterprise SP1 or higher

- Microsoft Windows Server 2008 x64 Standard and Enterprise* SP1 or higher
- Microsoft Windows Server 2008 R2
- Red Hat Enterprise Linux 4 with Update 4 or higher (AS, ES, WS), 32 bit and 64 bit (2.6 kernel)
- Red Hat Enterprise Linux 5 update 1 (AS, ESWS), 32 bit and 64 bit (2.6 kernel)
- Red Hat Enterprise Linux 6
- SUSE Linux Enterprise Server 9 x64 Service Pack 3, Service Pack 4
- SUSE Linux Enterprise Server 10 x64 Service Pack 1
- SUSE Linux Enterprise Server 11

*Hot Fix KB943545 required (provides required storport driver update)

Supported iSCSI Initiators

Supported iSCSI Initiators (Only Software Initiators are supported)

- Microsoft iSCSI Initiator 2.06 (available from www.microsoft.com)
- Microsoft Windows Server 2008 - embedded iSCSI Initiator 32 bit and 64 bit
- Red Hat Enterprise Linux 4 Update 4 or higher, 32 bit and 64 bit (2.6 kernel) shipping version `iscsi_sfnet-4.0.1.11.3e-1dkms.noarch.rpm`
- Red Hat Enterprise Linux 5 Update 1 or higher (AS, ES, WS), 32 bit and 64 bit (2.6 kernel) shipping version
- Red Hat Enterprise Linux 6 - embedded iSCSI Initiator
- SUSE Linux Enterprise Server 9 service pack 3 or higher, with Intel® EM64T (2.6 kernel) `scsi_mod-sles9sp3-1dkms.noarch.rpm`, `iscsi-88.31.2_sles9sp3-1dkms.noarch.rpm`
- SUSE Linux Enterprise Server 10 Service Pack 1 or higher, with Intel EM64T (2.6 kernel) shipment version
- SUSE Linux Enterprise Server 11 - embedded iSCSI Initiator
- Microsoft Windows Server 2008 R2 - embedded iSCSI Initiator

Supported Network Components

Ethernet Controllers

Any industry standard 10/100/1000 Ethernet controller which conforms to IEEE 802.3ab, 802.3ac, or 802.3u should interoperate with the TL2000\TL4000 iSCSI Bridge. To maximize available bandwidth to the TL2000\TL4000 iSCSI controller, 1000 Mb/s controllers for I/O paths and 100 Mb/s controllers for out-of-band management paths are highly recommended.

Ensure your host server has the latest driver for the network device and is set up according to the iSCSI bridge requirements to ensure proper performance. Review your network device documentation

Ethernet Switches

Any industry standard 100/1000 managed or unmanaged Ethernet switch should interoperate with the TL2000\TL4000 iSCSI controller. To maximize available bandwidth to the TL2000\TL4000 iSCSI controller, 1000 Mb/s switches for I/O paths and 100 Mb/s switches for out-of-band management paths are recommended

Dell PowerConnect 2216

Dell PowerConnect 2224

Dell PowerConnect 2324

Dell PowerConnect 2708

Dell PowerConnect 2716

Dell PowerConnect 2724

Dell PowerConnect 3424

Dell PowerConnect 3424P
Dell PowerConnect 3448
Dell PowerConnect 3448P
Dell PowerConnect 5324
Dell PowerConnect 6024
Dell PowerConnect 6224
Dell PowerConnect 6248

Host Server Support

The TL2000\TL4000 iSCSI Bridge should interoperate with any industry standard servers. For non-Dell servers to connect to the TL2000\TL4000 iSCSI bridge they must be running a supported iSCSI initiator, operating system, and network components.

PowerVault support

The Dell™ Model TL24iSCSIxSAS 1Gb iSCSI to SAS™ bridge is only supported in Dell PowerVault TL2000 and Dell PowerVault TL4000 tape libraries with SAS LTO drives installed.

Your iSCSI bridge requires the following Dell PowerVault TL2000/TL4000 firmware for proper operation:

TL2000/TL4000 Firmware: 6.60 or higher
LTO3 Half Height SAS drive: 73P9 or higher
LTO4 Full Height SAS drive: 8371 or higher
LTO4 Half Height SAS drive: 89B1 or higher
LTO5 SAS drive: A422 or higher

Supported TL2000\TL4000 iSCSI to SAS Bridge Firmware

A00 version v1.00.02 Release number R201081
A01 version v1.00.04 Release number R218211
A02 version v1.00.05 Release number R269212
A03 version v1.02.01 Release number R310015

Supported Backup Applications

The Dell™ Model TL24iSCSIxSAS 1Gb iSCSI to SAS™ bridge is fully compatible with the Dell PowerVault TL2000\TL4000 backup applications.

Note: In some instances a patch might be required for your application.

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