



CHAPTER 5

iSCSI Interoperability

This chapter lists iSCSI drivers and TCP Offload Engine (TOE) cards tested by Cisco's Solution-Interoperability Engineering group (iLAB).

- [EMC](#)
- [IBM](#)
- [HDS](#)
- [HP](#)
- [ADTX](#)



Note

Minimum iSCSI driver version required for supporting Cisco's feature modes on Cisco SAN-OS Release 2.1(1b) and later are as follows:

- Store-and-forward forwarding mode—There is no restriction.
- Cut-through forwarding mode—There is no restriction.
- Pass-through forwarding mode:
 - Cisco iSCSI driver version 4.2.1 for Windows 2000 and 2003
 - Microsoft Windows 2000 and 2003 iSCSI driver version 2.0

EMC

Table 5-1 MDS iSCSI Feature Support

IPS Advanced Features	Supported	Switch Fabric, IPS-8, IPS-4, MSP-14/2
Proxy mode initiator	Yes	MDS 9500, 9216, MDS9216i 1.3(3), 1.3(4a), 2.0(1b), 2.1(2b), 2.12(d), 3.0(2a), 3.1(2), 3.2(1a), 3.2(2c), 3.2(3a), 3.3(1c), 4.1(1b)
Transparent mode initiator	Yes	
Transparent IP failover (VRRP)	Yes	
CHAP authentication	Yes	
Transparent target failover	No	
Virtual target LUN mapping	Yes	

Table 5-2 Linux Drivers (Only 32-bit CPU Support)

EMC Storage Types	RedHat AS, Enterprise 3.6.2, 3.6.3 2.4 kernel	SUSE Enterprise 10
DMX	Yes	Yes
All Cx family	Yes	Yes

Table 5-3 OSM Drivers

	HP: HPUX 11i	IBM: AIX 5.2	Solaris 8/9/10	
EMC Storage Types	B.11.11.03a	1.1	3.3.5/ 3.3.6/11.11	Multipath Support
DMX	No	No	No	No
All Cx family	No	No	No	No

Table 5-4 Microsoft Drivers

EMC Storage Types	Windows 2000 2.0	Windows 2003 2.0	Multipath Support
DMX	Yes	Yes	Power Path
All Cx family	Yes	Yes	Power Path

IBM

Table 5-5 MDS iSCSI Feature Support

IPS Advanced Features	Supported	Switch Fabric, IPS-8, IPS-4, MSP-14/2
Proxy mode initiator	Yes	MDS 9500, MDS 9216, MDS 9216i 1.3(2a), 1.3(4a), 2.0(1b), 2.1(1b), 2.1(2b), 3.0(2a), 3.0(3), 3.1(2a), 3.2(1a), 3.2(2c), 3.2(3a), 3.3(1c)
Transparent mode initiator	Yes	
Transparent IP failover (VRRP)	Yes	
CHAP authentication	Yes	
Transparent target failover	Yes	
Virtual target LUN mapping	Yes	

Table 5-6 Linux Drivers (Only 32-bit CPU Support)

IBM Storage Types	RH Linux RH 2.4 kernel (AS3) 3.4.2/3.6.2/3.6.3
ESS 2105-800	Yes
ESS 2105-F20	Yes
DS8000, 4000	Yes

Table 5-7 OSM Drivers

IBM Storage Types	HP: HPUX 11i	IBM: AIX 5.2 / 5.3	Solaris 8&9/10	Multipath Support
	B.11.11.03e, B.11.23.03c	5.2.0.75/5.3.0.50	3.3.5/1.0/ 11.10.0	
ESS 2105-800	Yes	Yes	Yes	No
ESS 2105-F20	Yes	Yes	Yes	No
DS 8x00, 4x00	No	No	Yes	No

Table 5-8 Microsoft Drivers

IBM Storage Types	Windows 2000	Windows 2003	Multipath Support
	2.0x	2.0x	
ESS 2105-800	Yes	Yes	No
ESS 2105-F20	Yes	Yes	No
DS 8x00, 4x00	Yes	Yes	No

Table 5-9 IBM SAN Volume Controller (SVC)

IBM Storage Types	Windows 2000	Windows 2003	Linux RH 7.3, 2.1, 3.0	Heterogeneous SAN Switch Support	Multipath Support
	1.06	1.06	3.6.2		
ESS 2105-800	Yes	Yes	Yes	Brocade and McDATA	No
ESS 2105-F20	Yes	Yes	Yes		No
DS 8x00, 4x00	Yes	Yes	Yes	Inter-VSAN Routing (IVR) is supported	No

HDS

Table 5-10 MDS iSCSI Feature Support

IPS Advanced Features	Supported	Switch Fabric, IPS-8, IPS-4, MSP-14/2
Proxy mode initiator	Yes	MDS 9513, MDS 9500, 9216, 9216i 1.3(3c), 1.3(4a), 2.0(1b), 2.1(1b), 2.1(2b), 2.1(2d), 2.1(2e), 3.0(1), 3.0(2a), 3.0(3), 3.1(2), 3.2(1a), 3.2(2c), 3.3(1a), 3.3(1c), 4.1(1b)
Transparent mode initiator	Yes	
Transparent IP failover (VRRP)	Yes	
CHAP authentication	Yes	
Transparent target failover	Yes	
Virtual target LUN mapping	Yes	

Table 5-11 Linux Drivers (Only 32-bit CPU Support)

HDS Storage Types	RH Linux AS, Enterprise 4.0 kernel 2.6
Lightning 9900v, 9900	Yes
TagmaStore USP V	Yes
TagmaStore USP	Yes
Thunder 9500v, AMS 500	Yes
Thunder 9200	No

Table 5-12 OSM Drivers

HDS Storage Types	HP: HP-UX 11iv2 B.11.23.03e	IBM: AIX 5.2/5.3 1.0	Solaris 8/9/10 3.3.5/1.0	Novell: Netware 6.0/6.5 1.0.3/4	Multipath Support
Lightning 9900v, 9900	Yes	Yes	Yes	Yes	No
Thunder 9500v, AMS 500	Yes	Yes	Yes	Yes	No
TagmaStore USP	Yes	Yes	Yes	Yes	No
TagmaStore USP V	Yes	Yes	Yes	Yes	No

Table 5-13 Microsoft Drivers

HDS Storage Types	Windows 2000 1.06/2.0	Windows 2003 1.06/2.0	Multipath Support
Lightning 9970v, 9900,	Yes	Yes	No
Thunder 9500v, AMS 500	Yes	Yes	No
TagmaStore USP, USP V	Yes	Yes	No

HP

Table 5-14 MDS iSCSI Feature Support

IPS Advanced Features	Supported	Switch Fabric, IPS-8, IPS-4, MSP-14/2
Proxy mode initiator	Yes	MDS 9513, 9509, 9216, 9216i 1.2(1b), 1.3(4a), 2.0(1b), 2.1(1b), 2.1(2d), 3.0(1), 3.0(3), 3.1(2a), 3.2(1a), 3.2(2c), 3.2(3), 3.3(1a), 3.3(1c), 4.1(1b)
Transparent mode initiator	Yes	
Transparent IP failover (VRRP)	Yes	
CHAP authentication	Yes	
Transparent target failover	Yes	
Virtual target LUN mapping	Yes	

Table 5-15 Cisco Drivers (Only 32-bit CPU Support)

	Linux SUSE	Linux RH AS, Enterprise
HP Storage Types	8, 10	3.6.0.2
XP12000, XP1024, XP48		Yes
EVA 3000, EVA 5000		Yes
MA8000 (HSG80)		Yes

Table 5-16 OSM Drivers

	HP HPUX 11i, 11.23	Novell Netware 6.5 SP2	IBM AIX 5.2, 5.3	Solaris 8/9/10	Multipath Support
HP Storage Types	11i-v1, 11.23.03d	1.0.3	1.0	3.3.6	
XP Family	Yes	Yes	No	Yes	No
EVA GL & XL Family	No	Yes	No	Yes	No
MA8000 (HSG80)	No	Yes	No	Yes	No

Table 5-17 Microsoft Drivers

	Windows 2000	Windows 2003	
HP Storage Types	2.01 and prior	2.01 and prior	Multipath Support
XP Family	Yes	Yes	Yes (2.00+)
EVA GL & XL Family	Yes	Yes	Yes (2.00+)
MA8000 (HSG80)	Yes	Yes	Yes (2.00+)

ADTX

Table 5-18 MDS iSCSI Feature Support

IPS Advanced Features	Supported	Switch Fabric, IPS-8, IPS-4, MSP-14/2
Proxy mode initiator	Yes	MDS 9500, 9216, MDS9216i 2.0(2b), 2.1(1b), 2.1(1b), 2.1(2b)
Transparent mode initiator	Yes	
Transparent IP failover (VRRP)	Yes	
CHAP authentication	Yes	
Transparent target failover	Yes	
Virtual target LUN mapping	Yes	

Table 5-19 Microsoft Drivers

Storage Types	Windows 2000	Windows 2003	Multipath Support
	1.06	1.06	
ArrayMasStor L	Yes	Yes	No

