VTrak E5000 Compatibility List

Version 1.03

Firmware 11.01.0000.01 Release Date: 08/22/2016

VTrak E5000 Systems Covered:

- **E5320 2U/24 , dual controller, 2.5" Drive Bays**
- **E5300 2U/12 , dual controller**
- **E5600 3U/16 , dual controller**
- **E5800 4U/24 , dual controller**

System Versions Covered:

- **Vtrak E5000 Firmware**– Version 11.01.0000.01 [Aug 19, 2016]

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Document History

Date	Editor	Revision	Comments
08/15/2016	F Londono	1.00	1. Initial list for VTrak E5x00 Compatibility
08/22/2016	R Brose	1.01	2. Changed FW Version, updating OS, Switch, hba
8/29/2016	R Brose	1.02	3. Corrected SFP data,Vmware ESXi, Window Server, Hyper-V, formatting.
8/30/2016	F Londono	1.03	4. Minor formatting adjustments

DEVICE COMPATIBILITY NOTE:

Basic compatibility between the 3rd party device and Promise device has been verified in typical configurations, unless otherwise stated.

DISCLAIMERS:

Only the versions available at time of testing have been verified, as listed. Corner cases may exist depending on user configuration etc. Individual 3rd party units may exhibit problems that did not show up in through the Promise test process. Published performance is not assured with configuration deviations.

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Hard Disk Drives

SAS

Vendor	Series	Model	Part Number	Firmware	Capacity	RPM	Interface	Form Factor	Format
HGST	Ultrastar He10	HUH721010AL5200	0F27352	A21D	10TB	7,200	12Gb/s SAS	3.5”	512e
	Ultrastar He8	HUH728080AL5200	0F23268	A907	8TB	7,200	12Gb/s SAS	3.5”	512e
		HUH728060AL5200	0F23270	A907	6TB	7,200	12Gb/s SAS	3.5”	512e
	Ultrastar 7K6000	HUS726060AL5210	0F22791	A907	6TB	7,200	12Gb/s SAS	3.5”	512e
		HUS726050AL5210	0F22793	A907	5TB	7,200	12Gb/s SAS	3.5”	512e
		HUS726040AL5210	0F22795	A907	4TB	7,200	12Gb/s SAS	3.5”	512e
		HUS726020AL5210	0F22799	A907	2TB	7,200	12Gb/s SAS	3.5”	512e
	Ultrastar C10K1800	HUC101812CSS200	0B28807	A904	1.2TB	10,000	12Gb/s SAS	2.5”	512n
		HUC101890CSS200	0B27976	A904	900GB	10,000	12Gb/s SAS	2.5”	512n
		HUC101860CSS200	0B28808	A904	600GB	10,000	12Gb/s SAS	2.5”	512n
		HUC101830CSS200	0B28810	A904	300GB	10,000	12Gb/s SAS	2.5”	512n
	Ultrastar C15K600	HUC156060CSS200	0B28953	A904	600GB	15,000	12Gb/s SAS	2.5”	512n
		HUC156045CSS200	0B28954	A904	450GB	15,000	12Gb/s SAS	2.5”	512n
		HUC156030CSS200	0B28955	A904	300GB	15,000	12Gb/s SAS	2.5”	512n
Seagate	Enterprise Capacity v5	ST4000NM0025	1V4207-002	N002	4TB	7,200	12Gb/s SAS	3.5”	512n
		ST3000NM0025	1V420N-002	N002	3TB	7,200	12Gb/s SAS	3.5”	512n
	Enterprise Capacity 3.5 v5 SED	ST4000NM0135	2AR207-002	NF02	4TB	7,200	12Gb/s SAS	3.5”	512n
	Enterprise Capacity v4	ST6000NM0034	1HT27Z-001	E005	6TB	7,200	12Gb/s SAS	3.5”	512e
		ST4000NM0034	1HT278-001	E005	4TB	7,200	12Gb/s SAS	3.5”	512e
		ST2000NM0034	1HT274-001	E005	2TB	7,200	12Gb/s SAS	3.5”	512e
	Enterprise Performance 10K	ST1200MM0088	1FF200-003	N003	1.2TB	10,000	12Gb/s SAS	2.5”	512n
		ST600MM0088	1FD200-004	N003	600GB	10,000	12Gb/s SAS	2.5”	512n
Toshiba	Enterprise Capacity (Tomcat-R)	MG04SCA60EE	HDEPF10GDA51	0901	6TB	7,200	12Gb/s SAS	3.5”	512e
		MG04SCA50EE	HDEPF11GDA51	0901	5TB	7,200	12Gb/s SAS	3.5”	512e
		MG04SCA40EE	HDEPF12GDA51	0901	4TB	7,200	12Gb/s SAS	3.5”	512e
		MG04SCA20EE	HDEPF14GDA51	0901	2TB	7,200	12Gb/s SAS	3.5”	512e

Note: **Drives with 4Kn formatting are not supported**

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Solid State Drives

SAS

The following drives have an SSD Trim Type of RZAT.

Vendor	Series	Model	Part Number	Interface	Capacity	Firmware	Form Factor	Type
Micron	S650DC	MTFDJAL3T2MBS	MTFDJAL3T2MBS-2AN1ZAB	12Gb/s SAS	3200GB	M013	2.5"	MLC
		MTFDJAL1T6MBS	MTFDJAL1T6MBS-2AN1ZAB	12Gb/s SAS	1600GB	M013	2.5"	MLC
		MTFDJAK800MBS	MTFDJAK800MBS-2AN1ZAB	12Gb/s SAS	800GB	M013	2.5"	MLC
		MTFDJAK400MBS	MTFDJAK400MBS-2AN1ZAB	12Gb/s SAS	400GB	M013	2.5"	MLC
	S630DC	MTFDJAL3T8MBT	MTFDJAL3T8MBT-2AN1ZAB	12Gb/s SAS	3840GB	M013	2.5"	MLC
		MTFDJAL3T2MBT	MTFDJAL3T2MBT-2AN1ZAB	12Gb/s SAS	3200GB	M013	2.5"	MLC
		MTFDJAL1T9MBT	MTFDJAL1T9MBT-2AN1ZAB	12Gb/s SAS	1920GB	M013	2.5"	MLC
		MTFDJAL1T6MBT	MTFDJAL1T6MBT-2AN1ZAB	12Gb/s SAS	1600GB	M013	2.5"	MLC
		MTFDJAK960MBT	MTFDJAK960MBT-2AN1ZAB	12Gb/s SAS	960GB	M013	2.5"	MLC
		MTFDJAK800MBT	MTFDJAK800MBT-2AN1ZAB	12Gb/s SAS	800GB	M013	2.5"	MLC
		MTFDJAK480MBT	MTFDJAK480MBT-2AN1ZAB	12Gb/s SAS	480GB	M013	2.5"	MLC
		MTFDJAK400MBT	MTFDJAK400MBT-2AN1ZAB	12Gb/s SAS	400GB	M013	2.5"	MLC
	S610DC	MTFDJAL3T8MBU	MTFDJAL3T8MBU-2AN1ZAB	12Gb/s SAS	3840GB	M013	2.5"	MLC
		MTFDJAL1T9MBU	MTFDJAL1T9MBU-2AN1ZAB	12Gb/s SAS	1920GB	M013	2.5"	MLC

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Operating Systems

Supported Operating Environments			
Vendor	**Core Platform**	**Type**	**Notes**
Microsoft	Windows Server 2008 R2 SP1	x64	ALUA support with PerfectPath v4.1.0.11
	Windows Server 2012 R2	x64	ALUA support with PerfectPath v4.1.0.11
	Hyper-V Windows Server 2012 R2*	x64	ALUA support with PerfectPath v4.1.0.11
Apple Mac	OS X 10.9	x64	LUN Affinity/ALUA natively supported.
	OS X 10.10	x64	LUN Affinity/ALUA natively supported.
	OS X 10.11	x64	LUN Affinity/ALUA natively supported.
RedHat	RHEL 6.7(2.6.32-573)	x64	ALUA support with Promise MPIO v0.0.0.12
	RHEL 7.2 (3.10.0-327)	x64	ALUA support with Promise MPIO v0.0.0.12
SUSE	SLES 11 sp2 Not Yet Tested	x64	ALUA support with Promise MPIO v0.0.0.9
	SLES 11 sp3 Not yet tested	x64	ALUA support with Promise MPIO v0.0.0.9
VMware	ESXi Server v6.0**	x64	LUN Affinity/ALUA natively supported

*In Test
**VMware Certification under way

Fibre Channel Switches and SFPs

Switches

Fibre Channel Switches				
Vendor	**Model**	**Ports**	**Firmware**	**Full test this release**
Brocade	Brocade 6505	24x16Gb	V7.4.1a	
	Brocade 6510	40x16Gb	V7.4.1a	x
Cisco	MDS 9148s (BIOS 2.1.17)	48x16Gb	V6.2(13b)	x
	MDS 9148 (BIOS 1.0.19)	48x8Gb	V6.2(13b)	x
QLogic	SANbox 5802V	20x8Gb	v8.0.14.13.00	x

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SFP's

16G SFP Interoperability Matrix (Shortwave)		
Vendor	**Model**	**Description**
Avago	AFBR-57F5PZ	Digital Diagnostic SFP, 850 nm, 14.025/8.5/4.25 GBd Low Voltage (3.3 V) - 85°C
	AFBR-57F5MZ	Digital Diagnostic SFP, 850 nm, 14.025/8.5/4.25 GBd Low Voltage (3.3 V) - 85°C
Finisar	FTLF8529P3BCV	Digital Diagnostic SFP, 850 nm, 14.025/8.5/4.25 GBd Low Voltage (3.3 V) - 70°C

8G SFP Interoperability Matrix (Shortwave)		
Vendor	**Model**	**Description**
Avago	AFBR-57D7APZ	Digital Diagnostic SFP, 850 nm, 8.5/4.25/2.125 GBd Low Voltage (3.3 V) - 85°C
Finisar	FTLF8528P2BCV	Digital Diagnostic SFP, 850 nm, 8.5/4.25/2.125 GBd Low Voltage (3.3 V) - 70°C
	FTLF8528P2BNV	Digital Diagnostic SFP, 850 nm, 8.5/4.25/2.125 GBd Low Voltage (3.3 V) - 85°C
	FTLF8528P3BCV	Digital Diagnostic SFP, 850 nm, Tri-Rate 2.125/4.25/8.5 Gb/s Fibre Channel (3.3 V), Extended Temperature, -5C to70°C
	FTLF8528P3BNV	Digital Diagnostic SFP, 850 nm, Tri-Rate 2.125/4.25/8.5 Gb/s Fibre Channel (3.3 V), Commercial Temperature, -5C to 85°C

16 Gb Fibre Channel Host Bus Adapters

Vendor	Model	BIOS	Firmware	Linux 6.7, 7.2	Windows 2012 R2, 2008 R2	Mac
Brocade	BR-1860	v3.2.3.0	v3.2.6.0	3.2.6.0	v3.2.6.0	N/A
Emulex	LightPulse LPe16002B-M6	11.1.38.56	11.1.38.61	11.1.38.64	11.0.247.0-5	N/A
Qlogic	QLE2672-CK	3.32	8.03.01	8.07.00.27.0-K2	9.1.17.21	N/A
ATTO	Celerity FC162E (16G)	02/28/13	06..01.00	1.40	1.30	2.0.0
Promise	SANLink2 – Thunderbolt to 16G FC		1.1.65.30	N/A	N/A	1.2.9

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8 Gb Fibre Channel Host Bus Adapters

Vendor	Model	BIOS	Firmware	Fcode	Linux 6.7, 7.2	Windows 2012 R2, 2008 R2	Mac
Brocade	FC425	v3.2.6.0	v3.2.6.0		3.2.6.0	v3.2.6.0	NA
	FC825	v3.2.6.0	v3.2.6.0		3.2.6.0	v3.2.6.0	NA
Emulex	LightPulse LPe12000	5.03a0	2.01A11	3.10a6		10.4.246.0	NA
	LightPulse LPe12002	5.03a0	2.01A11	3.10a6		11.0.247.0-5	NA
	LightPulse LPe12004	5.03a0	2.01A11	3.10a6		10.4.246.0	NA
	LightPulse LPe1250	2.12a11	2.01A11	3.10a6		10.0.720.0	NA
	LightPulse LPe11000	2.12a11	2.01A11	3.10a6		10.0.720.0	NA
	LightPulse LPe11002	2.12a12	2.82A3	3.10a6		10.0.720.0	NA
	LightPulse LPe11004	2.12a11	2.01A11	3.10a6		10.0.720.0	NA
	LightPulse LPe1150	2.12a11	2.01A11	3.10a6		10.0.720.0	NA
Qlogic	SANblade QLE2562	3.29	802.00		8.07.00.18.06.0	9.1.17.21	NA
	SANblade QLE2564	3.29	802.00		8.07.00.18.06.0	9.1.17.21	NA
LSI	LSI7204EP	2.02.06	1.3.20.0	1.00.49		N/A	1.05.06.00
	LSI7404EP	2.02.06	1.3.20.0	1.00.49		N/A	1.05.06.00
ATTO	Celerity FC162E (16G)	02/28/13	06.01.00		1.40	1.30	1.40
ATTO	Celerity FC84EN	02/28/13	06.01.00		1.90	1.80	2.40
	Celerity FC82EN	02/28/13	06.01.00		1.90	1.90	2.40
	Celerity FC42ES	3.25	3.35			1.70	2.35
Promise	SANLink2		1.1.58.0				1.2.9

SAS Cables

Promise PN	Vendor	Vendor PN	Description
G51130261000009	JPC	P3602U701000-2	External min SAS to External min SAS 8644 to 8644 12G 1M
G51130263000001	JPC	P3602U703000-1	External min SAS to External min SAS 8644 to 8644 12G 3M
G51130361000017	FCI	10117771-2010HLF	Mini SAS HD 4X 36P To Mini SAS 2.1 26P.1M
G51130363000000	FCI	10117771-3030HLF	Mini SAS HD 4X 36P To Mini SAS 2.1 26P.3M

Cables are tested for compatibility with Promise hardware only and are not tested to full electrical and mechanical specifications.

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