VTrak A-Class Compatibility List

Supports A-Class SR3.3 Product Release FW 1.16.0000.00

Date of Release: 01/19/2017

VTrak A-Class Systems Covered:

- **VTrak A3800fSL** – 4U/24 FC, single controller
- **VTrak A3800fDM** – 4U/24 FC, dual controller

VTrakStorage Nodes covered:

- **VTrak E630f** – 3U/16-bay 8Gb Fibre to 6Gbs SAS/SATA RAID System
- **VTrak E830f** – 4U/24-bay 8Gbs Fibre to 6Gbs SAS/SATA RAID System

VTrakExpansion Systems covered

- **VTrak J630s** – 3U/16-bay 6Gbs SAS to 6Gbs SAS/SATA Expansion JBOD System
- **VTrak J830s** – 4U/24-bay 6Gbs SAS to 6Gbs SAS/SATA Expansion JBOD System
- **VTrak J930s** – 4U/60-bay 6Gbs SAS to 6Gbs SASExpansion JBOD System

System Versions Covered:

- **VTrak A-ClassBootloader** – Version 0.19.0000.38 [Aug 15, 2014]
- **VTrak A-Class Firmware** - Version 1.16.0000.00 [Jan 18, 2017]
- **VTrak A-Class Software** - Version 1.16.0000.00 [Jan 18, 2017]
- **VTrak Ex30 Bootloader** – Version 0.19.0000.37 [Jan23, 2014]
- **VTrak Ex30 Firmware** – Version 10.17.2270.00 [Nov 5, 2015]
- **VTrak Ex30 Software** – Version 10.17.2270.00 Nov 5, 2015]
- **VTrak E5000 Firmware** – Version 11.01.0000.67 [Dec 17, 2016]

- **6Gbs VTrak Jx30s Firmware** – Version 6.14.0000.05 [Apr 6, 2014]
- **6Gbs J930 Firmware** – Version 5.06.0000.09 [June 01, 2012]
- **Windows PerfectPath MPIO DSM** – Version 4.01.0000.11
- **Linux PerfectPath MPIO DSM** – Version 0.00.0000.12

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Document History

Date	Editor	Revision	Deviation
01/19/2017	F. Londono	1.00	Initial version for VTrak A-Class SR3.3 Compatibility
01/19/2017	R. Brose	1.01	Updated OS, SAN Clients, Added E5000 Nodes,

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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Promise SANClient Packages Supported

OS Client	Package Version Number
VTrak Mac Client Package	1.4.2 – 51616
VTrak Windows Client Package	1.4.2 - 48729
VTrak Linux Client Package	1.4.2 - 51151

Promise Expansion subsystems Supported

Vendor	Platform	Type
Promise	VTrak J630s	3U/16-bay 6Gbs SAS
	VTrak J830s	4U/24-bay 6Gbs SAS
	VTrak J930s	4U/60-bay 6Gbs SAS
	VTrak J5320s*	2U/24 JBOD 12Gbs SAS to 12Gbs SAS/6Gbs SATA, 2.5” Drive Bays
	VTrak J5300s*	2U/12 JBOD 12Gbs SAS to 12Gbs SAS/6Gbs SATA
	VTrak J5600s*	3U/16 JBOD 12Gbs SAS to 12Gbs SAS/6Gbs SATA
	VTrak J5800s*	4U/24 JBOD 12Gbs SAS to 12Gbs SAS/6Gbs SATA

*Connection to the AClass A3x00 and EX30 is at 6Gbs

- The Auto configuration wizard only supports the J630s, J830s, J5600s and J5800s JBODs

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Operating Systems

Vendor	Platform	Type	Client Package	Multipath
Microsoft	Windows Server 2008 R2 SP1	x64	VTrakFS Client 1.4.2	PerfectPath 4.1.0.11
	Windows 7 SP1	x64	VTrakFS Client 1.4.2	Included in Client
	Windows 8	x64	VTrakFS Client 1.4.2	Included in Client
	Windows 10	X64	VTrakFS Client 1.4.2	Included in Client
	Windows Server 2012	x64	VTrakFS Client 1.4.2	PerfectPath 4.1.0.11
Apple	OS X 10.10 (10.10.5)	x64	VTrakFS Client 1.4.2	Included in OS
	OS X 10.11 (10.11.4, 10.11.6)	x64	VTrakFS Client 1.4.2	Included in OS
	OS X 10.12 (10.12, 10.12.1)	x64	VTrakFS Client 1.4.2	Included in OS
Linux	Redhat RHEL 6.6 (kernel 2.6.32-504 x86_64)	x64	VTrakFS Client 1.4.2	PerfectPath 0.0.0.12
	Redhat RHEL 6.7 (kernel 2.6.32-573 x86_64)	x64	VTrakFS Client 1.4.2	PerfectPath 0.0.0.12
	SUSE 11 SP3 (kernel 3.0.101-0.47.52-default x86_64)	x64	VTrakFS Client 1.4.2	PerfectPath 0.0.0.12

*Fully Supported but not HCK certified

Promise Ex30 RAID subsystems tested as Storage Nodes to the A-Class SAN.

Vendor	Platform	Type	Supported Firmware
Promise	VTrak E630f	3U/16-bay 6Gbs SAS HDD	**10.17.2270.00 or higher**
	VTrak E830f	4U/24-bay 6Gbs SAS HDD	**10.17.2270.00 or higher**
	VTrak E5320f	2U/24-bay 12Gbs SAS/6Gbs SATA, 2.5" Drive Bays	**11.1.0000.67 or higher**
	VTrak E5300f	2U/12-bay 12Gbs SAS/6Gbs SATA	**11.1.0000.67 or higher**
	VTrak E5600f	3U/16-bay 12Gbs SAS/6Gbs SATA	**11.1.0000.67 or higher**
	VTrak E5800f	4U/24-bay 12Gbs SAS/6Gbs SATA	**11.1.0000.67 or higher**

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Directory Services: Active Directory (AD) and Open Directory (OD)

Directory Services		
Product	**Version Supported**	**Version Tested**
Active Directory	Microsoft Windows Server 2012 R2	Standard Version 6.3.9600 Build 9600
	Microsoft Windows Server 2008 R2	Enterprise Version 6.1.7601 Service Pack 1 Build 7601
Open Directory	Mac Server App 10.8	Version 2.0.21

Fibre Channel Host Bus Adapters

Qualified with Current Build

Vendor	Model	BIOS	Firmware	Fcode	Windows	Macintosh
Brocade	BR-825	v3.2.7.0	V3.2.6.0	NA	v3.2.6.0	NA
Emulex	LightPulse Lpe-12002-E	11.1.38.56	2.01A11	3.10a6	11.0.247.0-5	NA
Qlogic	SANblade QLE2562	3.32	8.03.01	NA	9.1.17.21	NA
ATTO	Celerity FC-82EN	02/28/13	06.01.0	NA	1.90	2.00
Promise	SANLink2	NA	1.1.65.30	NA	NA	2.0.6

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Qualified with Previous Build

Vendor	Model	BIOS	Firmware	Fcode	Linux	Windows	Macintosh
Brocade	FC425	v3.0.1.0	v3.2.4.0		v3.2.4.0	v3.2.4.0	NA
	FC825	v3.2.7.0	v3.2.6.0		v3.2.5.1	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		10.4.246.0	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	2.82A4	3.10a6	10.6.1.44.21	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	3.24			8.07.00.18.06.0(RHEL)		NA
	SANblade QLE2564	3.24	7.04.00 7.04.00		8.07.00.18.11.3k(SLES11 SP3)	9.1.13.20 9.1.13.20	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 FC84EN	02/28/13	06..01.00		1.90	1.80	2.40
	Celerity FC82EN	02/28/13	06.01.00		1.90	1.80	2.40
	Celerity FC42ES	3.25	3.35			1.70	2.35
Promise	SANLink2		1.1.0.58				1.2.5

Fibre Channel Switches and SFPs

Fibre Channel Switches			
Vendor	**Model**	**Ports**	**Firmware**
Brocade	Brocade 300**	24x8Gb	V7.3.1
	Brocade 5100	40x8Gb	V7.3.1
	Brocade 6510	40x16Gb	V7.3.1
	Brocade 8000	24x10Gb FCoE 8x8Gb FC	V7.1.2b
	Brocade VDX6740	48 FCoE/16Gb FC	5.0.1
Cisco	MDS 9148 (BIOS 1.0.19)	48x8Gb	V6.2(3)
	MDS 9124*	24x8Gb	V6.2(3)
	NEXUS 5010	20x10Gb FCoE/iSCSI6x8Gb FC	V5.2(1)N1(2a)
Qlogic	SANbox 5802V	20x8Gb	v8.0.14.13.00
	SANbox 9000 - 8Gb blade	32-128x8Gb	v7.8.0.18.00

*Model MDS 9124 compatibility is derived from MDS 9148 testing with v6.2

** Leave the Brocade 300 speed set to “Auto” when the topology is set to “L- Port”. Set the Target side speed to match either 4G or 8G if the topology is set to “NL-Port”.

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SFPs

SFP Interoperability Matrix (Shortwave)		
Vendor	**Model**	**Description**
Apple	4Gb SFP to SFP	2.9M 4Gb SFP Copper Cable (Qlogic 4Gb and 8Gb only)
Avago	AFBR-57D7APZ	Digital Diagnostic SFP, 850 nm, 8.5/4.25/2.125 GBd Low Voltage (3.3 V) - 85°C
Brocade	57-1000012-01	Brocade 8Gb Shortwave SFP
Cisco	DS-SFP-FC8G-SW	Cisco 8Gb Shortwave SFP
Finisar	FTLF8528P2BCV	Digital Diagnostic SFP, 850 nm, 8.5/4.25/2.125 GBd Low Voltage (3.3 V) - 70°C
Finisar	FTLF8528P2BNV	Digital Diagnostic SFP, 850 nm, 8.5/4.25/2.125 GBd Low Voltage (3.3 V) - 85°C
Finisar	FTLF8524P2BNL	Digital Diagnostic SFP, 850 nm, 4.25/2.125 GBd Low Voltage (3.3 V) - 70°C
Finisar	FTLF8524P2BNV	Digital Diagnostic SFP, 850 nm, 4.25/2.125 GBd Low Voltage (3.3 V) - 85°C

SAS Cables

Promise PN	Vendor	Vendor PN	Round Cable.200cm.6Pin.DB9/F=>RJ11.Black
G51130261000008	Jess Link	P1600TE01000-A	GP1100.CABLE.external Mini-SAS key 1/2/4/6 to external Mini-SAS cable key 1/2/4/6.1M.26Pin.Universal key.JPC:P1600TE01000-A

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

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Hard Disk Drives

SAS Drives

VTrak A-Class Hard Drive Compatibility List							
Vendor	**Family**	**Model**	**Part Number**	**Firmware**	**Capacity**	**RPM**	**Interface**
HGST	**Ultrastar He8**	HUH728080AL5200	OF23268	A7J0	8TB	7,200	12Gb/s SAS
		HUH728060AL5200	OF23270	A7J0	6TB	7,200	12Gb/s SAS
	Ultrastar He6	HUS726060ALS640	0F18370	1EN	6TB	7,200	6Gb/s SAS
	Ultrastar 7K6000	HUS726060AL5210	0F22791	A519	6TB	7,200	12Gb/s SAS
		HUS726050AL5210	0F22793	A519	5TB	7,200	12Gb/s SAS
		HUS726040AL5210	0F22795	A519	4TB	7,200	12Gb/s SAS
		HUS726020AL5210	0F22799	A519	2TB	7,200	12Gb/s SAS
	Ultrastar 7K4000	HUS724040ALS640	HIT0B26885	A280	4000GB	7,200	6Gb/s SAS
		HUS724030ALS640	HIT0B26886	A280	3000GB	7,200	6Gb/s SAS
		HUS724020ALS640	HIT0B26887	A280	2000GB	7,200	6Gb/s SAS
Western Digital	**WD RE SAS**	WD4001FYYG	WD4001FYYG-01SL3W0	VR07	4000GB	7,200	6Gb/s SAS
		WD3001FYYG	WD3001FYYG-01SL39Pbt4vFfW0	VR07	3000GB	7,200	6Gb/s SAS
		WD3001FYYG	WD2001FYYG-01SL3W0	VR07	2000GB	7,200	6Gb/s SAS
		WD3001FYYG	WD1009Pbt4vFf1FYYG-01SL3W0	VR07	1000GB	7,200	6Gb/s SAS
Toshiba	**Tomcat +**	MG04SC60EE	HDEPF10GEA51	102	6TB	7,200	12Gb/s SAS
		MG04SC50EE	HDEPF11GEA51	102	5TB	7,200	12Gb/s SAS
		MG04SC40EE	HDEPF12GEA51	102	4TB	7,200	12Gb/s SAS
		MG04SC20EE	HDEPF14GEA51	102	2TB	7,200	12Gb/s SAS
	Harrier	MG03SCA400	MG03SCA400	108	4000GB	7,200	6Gb/s SAS
		MG03SCA300	MG03SCA300	108	3000GB	7,200	6Gb/s SAS
		MG03SCA200	MG03SCA200	108	2000GB	7,200	6Gb/s SAS
		MG03SCA100	MG03SCA100	108	1000GB	7,200	6Gb/s SAS
	Tomcat	MG04SCA500E	HDEPE10GEA51	102	5TB	7,200	6Gb/s SAS
		MG04SCA400E	HDEPE11GEA51	102	4TB	7,200	6Gb/s SAS
		MG04SCA300E	HDEPE12GEA51	102	3TB	7,200	6Gb/s SAS
		MG04SCA200E	HDEPE13GEA51	102	2TB	7,200	6Gb/s SAS

This list only indicated drives supported on the VTrak A-Class. For the list of supported drives on Storage Nodes attached to VTrak A-Class, please refer to the latestE-Class Compatibility List.

Promise qualified drives will be the only supported drives for the VTrak A-Class systems. The support requirements will be derived from the drive part numbers listed above and not necessarily by the model number. Using unqualified disk drives with the system may appear to work but cannot be guaranteed for the service life.

*12G/s SAS drives (SAS3) require a 12G SAS dongle board to be added (available from Promise Technology)

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Promise Validated Browsers for VTrak A-Class

Validated Web Browsers for A-Class WebPAM PROe	
Product	**Version**
Internet Explorer	8.0.7601.17514, 9.0.8112.16421, 11
Safari for Mac	7.0,6.0.5, 7.0.5, 9.0.1
Safari for Windows	5.1
Mozilla Firefox for Windows	27.0, 31.0, 32.0.3,33.0.2, 41.0, 42.0, 43.0
Mozilla Firefox for RHEL	10.0.12, 27.0, 31.0
Mozilla Firefox for SLES 11.1	10.0, 27.0

UPS Appliances

UPS Support*	HW Rev.	APC OS	APP. Module SW
§**APC Smart-UPS 1500VA - North America**	667.18.D	v3.6.1	v3.5.8
§**APC Smart-UPS 2200VA - North America**	667.18.D	v3.6.1	v3.5.8
§**APC Smart-UPS 3000VA - North America**	667.18.D	v3.6.1	v3.5.8

*Tested with Ex30 Initial Release. Smart-UPS 1200VA validated with AClass SR3.1 release.

USB Flash Drives (OPAS Service Port)

Vendor**	Family	MFG Part Number	Capacity
HP	v125w	P-FD4GBHP125-EF	4GB
Pretec	i-Disk	Q3U04G	4GB

♠ End of Report ♠

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