



# TIME NAVIGATOR

Hardware Compatibility Guide  
for Time Navigator  
August 2019



# Automated Library Management

## Drive Support <sup>1</sup>

This guide shows library and drive support with Time Navigator 4.6.3 (unless specified otherwise).

**Caution:** the information below is valid for drives only. The compatibility between the libraries and the operating system is displayed in the “Library Support” table. You need to check both the “Drive Support” and the “Library Support” tables. To ensure support of the backup hardware, the library itself and each kind of drive it uses must be supported by the operating system(s) of the servers(s) it will be connected to.

**Disclaimer:** the information about drive support hereafter is strictly related to the hardware manufacturers. No support can be assumed for any OEM version that might exist.

	= available (certified)
	= available (supported)

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<sup>1</sup> WORM technology is not supported except those indicated in the Worm table

## TABLE OF CONTENTS

Automated Library Management .....	2
<b>Drive Support</b> .....	4
<b>Library Support</b> .....	7
<b>Virtual Tape Library / Disk Storage Array</b> .....	10
<b>Silo Support, Library Manager</b> .....	12
<b>Content Address Storage</b> .....	12
<b>Legacy – Drive Support</b> .....	13
<b>Legacy – Library Support</b> .....	15

## Drive Support

Technology	Model	Connection	Worm	HP UX	IBM AIX	SUN Solaris	Linux <sup>2</sup>	macOS	Windows
Disk Drive	Atempo Disk Drive Connection	SCSI		●	●	●	●		●
		FC		●	●	●	●		●
9840 StorageTek	9840A	SCSI		●	●	●	●		●
	9840B	FC		●	●	●	●		●
	9840C, 9840D	FC		●	●	●	●		●
9940 StorageTek	9940A	SCSI		●	●	●			●
	9940B	FC		●	●	●	●		●
T10000 StorageTek	T10000-A	FC		●	●	●	●		●
T10000 StorageTek	T10000-B, T10000-C	FC		○	○	○	○		●
T10000 StorageTek	T10000-D	FC		○	○	●	●		●
DAT	HP StorageWorks 160, 320, 72, 40	SAS		○	○	○	●		●
DDS	DDS-2, DDS-3, DDS-4, DDS-5	SCSI		●	●	●	●		●
DLT	Quantum DLT-V4	SCSI		●	●	●	●	●	●
	VS80 Benchmark DLT-1	SCSI		●	●	●	●		●
	HP VS80, VS160	SCSI		●	●	●	●		●
	SuperDLT firmware v36 or later	SCSI		●	●	●	●		●
		Ethernet		●	●	●	●		●
	SuperDLT 320	SCSI		●	●	●	●	●	●
	SuperDLT 600	SCSI		●	●	●	●		●
		FC		○	○	○	○		○
DLT-S4	SCSI		●	●	●	●	●	●	
		FC		○	○	○	○	○	
DTF-2	Sony DTF-2	SCSI		●	●	●	●		●
DVD	DVD-RAM	SCSI							●

<sup>2</sup> IBM drivers for Linux not supported

Technology	Model	Connection	Worm	HP UX	IBM AIX	SUN Solaris	Linux <sup>3</sup>	macOS	Windows
IBM	IBM 3590 B1A and E1A	SCSI			●				
	IBM 3592 J1A	FC	●	●	●	●	●	●	●
	IBM TS1120, TS1130	FC	●	●	●	●	●	●	●
	IBM TS1140	FC	●	○	○	○	●	●	●
	IBM TS1150	FC	●	○	○	○	●		●
LTO HPE	HP LTO-5 Ultrium 3280 FH	SAS	●	○	○	●	●	○	●
		FC	●	○	●	○	●	○	●
	HP LTO-5 Ultrium 3000 HH	SAS	●	○	○	●	●	○	●
		FC	●	○	○	○	○	○	○
	HP LTO-6 Ultrium 6250, 6650	SAS	●	○	○	○	●	○	●
		FC	●	●	●	●	●	●	●
	HPE LTO-7 Ultrium 15750, 15000	SAS	●	●	●	●	●	●	●
		FC	●	●	●	●	●	●	●
HPE LTO-8	SAS	●	●	●	●	●	●	●	
	FC	●	●	●	●	●	●	●	
LTO IBM	IBM LTO-5 HH / FH	SAS	●	○	●	●	●	○	●
		FC	●	○	○	○	○	○	○
	IBM LTO-6 HH / FH IBM LTO-7 Ultrium	SAS	●	○	○	○	●	●	●
		FC	●	○	○	○	●	●	●
	IBM LTO-8 Ultrium	SAS	●	○	○	○	●	●	●
FC		●	○	○	○	●	●	●	
LTO Quantum	Quantum LTO-5	SAS	●	○			○	●	○
		FC	●	○	○	○	○	○	○
	Quantum LTO-6	FC	●	○	○	○	●	●	●
		SAS	●	○	○	○	○	○	○
	Quantum LTO-7	SAS	●	○	○	○	●	●	●
		FC	●	○	○	○	●	●	●
Quantum LTO-8	SAS	●	○	○	○	●	●	●	
	FC	●	○	○	○	●	●	●	
LTO Seagate	Seagate LTO-1 Ultrium	SCSI		●	●	●	●		●

<sup>3</sup> IBM drivers for Linux not supported

Technology	Model	Connection	Worm	HP UX	IBM AIX	SUN Solaris	Linux <sup>4</sup>	macOS	Windows
LTO Tandberg	Tandberg LTO-5, 6, 7, 8	SAS	●	○	○	○	●	○	●
		FC	●	●	●	●	●	●	●
Magneto-Optical <sup>5</sup>	Magneto-Optical 2.6GB	SCSI		●	●	●			●
	Magneto-Optical 5.2GB	SCSI		●	●	●			●
	Magneto-Optical 9.1GB	SCSI			●	●			●
	Sony F551	SCSI		●	●	●			●
	Sony F561 9.1GB	SCSI			●	●			●
Mammoth	Exabyte Mammoth	SCSI			●	●	●		●
	Exabyte Mammoth 2	SCSI		●	●	●	●	●	●
		FC				●	●	●	
UDO	Plasmon UDO, UDO-2	SCSI	●	●	●	●			●

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<sup>4</sup> IBM drivers for Linux not supported

<sup>5</sup> Support only robotized or automatic double-face

## Library Support

**Caution:** the information below is valid for libraries only. The compatibility between the drives and the operating system is displayed in the “Drive Support” table.

You need to check both the “Drive Support” and the “Library Support” tables. To ensure support of the backup hardware, the library itself and each kind of drive it uses must be supported by the operating system(s) of the servers(s) it will be connected to.

**Disclaimer:** the information about library support hereafter is strictly related to the hardware manufacturers. No support can be assumed for any OEM version that might exist.

Manufacturer	Model	HP UX	IBM AIX <sup>6 7</sup>	SUN Solaris	Linux	macOS	Windows
Dell	120T, 122T, 124T, 128T	●	●	●	●	●	●
	130T, 132T, 136T, 160T	●	●	●	●	●	●
	ML6000 Series, ML3	●	●	●	●	●	●
	TL2000, TL 4000	●	●	●	●	●	●
EMC	ML3	●	●	●	●	●	●
Fujitsu	ETERNUS LT 20/40/60 S2 Series	●	●	●	●	●	●
	LT60, 160, 260	●	●	●	●	●	●
	FibreCAT TX24, TX48	●	●	●	●	●	●
Grau Data Storage	Infinistore <small>(Library Sharing Module not supported)</small>	●	●	●	●	●	●
	ITL Series	●	●	●	●	●	●
HPE	1/8 & 1/8 G2	●	●	●	●	●	●
	EML/ESL E-Series	●	●	●	●	●	●
	ESL G3 Series	●	●	●	●	●	●
	MSL 2024/3040/4048/8048/8096, 5000, 6000, MSL 6480	●	●	●	●	●	●
IBM	7331, 7332		●		●	●	
	7337 DLT Library	●	●	●	●	●	●
	MP 3570, 3575		●	●			●
	TS2900, TS3100, TS3200, TS3310, TS3500, TS4500	●	●	●	●	●	●
	3581, 3582, 3583, 3584, 3600 R20, 3623LX, 4560	●	●	●	●	●	●

<sup>6</sup> SAS connection is not supported on IBM AIX

<sup>7</sup> AIX platform supports up to 8 library devices

		HP UX	IBM AIX 8.9	SUN Solaris	Linux	macOS	Windows
Manufacturer	Model						
NEC	T40A / T40A2 T16A / T16A2	●	●	●	●	●	●
	LL009F	●	●	●	●	●	●
Overland Tandberg	NEOs 200s, 400s NEOs 2000, 4000, 8000 NEOs 2000e, 4000e, 8000e NEOs T24, T48, NEOs StorageLoader NEOxl 60, 80	●	●	●	●	●	●
Qualstar	RLS 8350, 8500, 8560, 85120 TLS XLS 8161100 Q24, Q40, Q80	●	●	●	●	●	●
Quantum	2500(xt)/4500, 2700(xt)/4700	●	●	●	●	●	●
	DLT Stor			●	●	●	●
	SuperLoader, SuperLoader 3	●	●	●	●	●	●
	ValueLoader	●	●	●	●	●	●
	DX30	●	●	●	●	●	●
	PX500 Series, PX720	●	●	●	●	●	●
	Scalar i3, i6	●	●	●	●	●	●
	Scalar 50, i40 /i80, i500, i2000, i6000	●	●	●	●	●	●
Quantum   ADIC	1200	●	●	●	●	●	
	FastStor, FastStor 2	●	●	●	●	●	●
	Scalar 24 <sup>10</sup> , 100, 218, 220, 458, 480, 1000,	●	●	●	●	●	●
	Scalar 10K	●	●	●	●	●	●
	VLS 4, 8	●	●	●	●	●	
Quantum   ATL	Quantum   ATL 2640	●	●	●	●	●	●
	Quantum   ATL 4/52	●	●	●	●	●	●
	Quantum   ATL 7/100	●	●	●	●	●	●
	M1500, M2500	●	●	●	●	●	●
	P 1000, P2000, P3000, P4000, P7000	●	●	●	●	●	●
	PowerStor L200, L500, P Series	●	●	●	●	●	●

<sup>8</sup> SAS connection is not supported on IBM AIX

<sup>9</sup> AIX platform supports up to 8 library devices

<sup>10</sup> iScsi supported.



Manufacturer	Model	HP UX	IBM AIX <sup>11</sup> <sub>12</sub>	SUN Solaris	Linux	macOS	Windows
Sony	152, 304	●	●	●	●	●	●
	TSL-A500, TSL-S9000, TSL-S11000	●	●	●	●	●	●
	LIB81, LIB-D81, LIB162	●	●	●	●	●	●
	Petasite	●	●	●	●	●	●
SpectraLogic <sup>13</sup>	Spectra 2K, 10K, 20K, 64K	●	●	●	●	●	●
	Spectra T24/ T50 / T50e	●	●	●	●	●	●
	Spectra T120, T200, T380, T680, T950, T-Finity	●	●	●	●	●	●
Oracle StorageTek	9310 ACSLS required	See ACSLS compatibility					
	9710, 9714, 9730, 9738, 9740	●	●	●	●	●	●
	L20, L40, L80, L180, L700, L700e, L1400M	●	●	●	●	●	●
	L5500 ACSLS required	See ACSLS compatibility					
	SL24, SL48, SL150, SL50, SL3000 SL4000 <sup>14</sup>	●	●	●	●		●
	SL8500 ACSLS required	See ACSLS compatibility					
	StorageTek C2, C4	●	●	●	●	●	●
Overland Tandberg <sub>15</sub>	RDX QuikStation				●		●

<sup>11</sup> SAS connection is not supported on IBM AIX

<sup>12</sup> AIX platform supports up to 8 library devices

<sup>13</sup> Library Partition SpectraLogic feature is not supported with 20k and 64K libraries.

<sup>14</sup> Supports ADI bridging.

<sup>15</sup> Requires Full Barcode reinitialization after library reboot.

## Virtual Tape Library / Disk Storage Array

Manufacturer	Model	HP UX	IBM AIX	SUN Solaris	Linux	Windows	macOS
Amazon	AWS Storage Gateway				○	○	
ADIC	Pathlight VX	●	●	●	●	●	
Copan	Revolution 220	●	●	●	●	●	●
Dell	DR4000				●	●	
Diligent Technologies	ProtectTIER & VTF Open					●	
EMC	DL210		●	●	●	●	●
	DL300 & 700 Series	●		●		●	
	DL1500 / DL3000	●	●	●	●	●	●
	DL4000, DL6000 Series	●	●	●	●	●	
EMC Data Domain	DD160 / DD160 / DD2500 / DD4200 / DD4500 / DD500 DD600 / DD800 / DD990 / DD7200	●	●	●	●	●	●
ExaStore	Exanet				●	●	
FalconStor	VTL	●	●	●	●	●	●
Fujitsu	ETERNUS CS High End <i>(formerly CentricStor)</i>	●	●	●	●	●	
	ETERNUS CS800	●	●	●	●	●	●
Hitachi Data Systems	HDS ProtecTIER, HDS ProtecTIER VTL 500M / 1000E / 1000L					●	
	HDS VTF Open					●	
HPE	HP D2D	●	●	●	●	●	●
	StoreOnce VSA (Gen 4) StoreOnce 3620, StoreOnce 3640 StoreOnce 5200/5250, StoreOnce 5650				○	●	
	HP VLS 6000 / 9000	●	●	●	●	●	●
IBM	TS7650 ProtecTIER	●	●	●	●	●	
NetApp	Cloud Backup (formerly AltaVault)				○	○	
NEC	HYDRAsTOR				●	●	
Network Appliance	NearStore VTL	●	●	●	●	●	●
	VTL 300, 700, 1400	●	●	●	●	●	●
Nexsan	SataBeast				●	●	

Manufacturer	Model	HP UX	IBM AIX	SUN Solaris	Linux	Windows	macOS
Quadstor <sup>16</sup>	VTL				●	●	
Quantum	DX30 / DX100	●	●	●	●	●	
	DX3000, DX5000	●	●	●	●	●	●
	DXi4700 DXi2500/3500/ DXi4800 DXi5500/6500/7500 DXi6700/6701/6702 DXi6802 DXi6900 DXi8500 2TB DXi9000	●	●	●	●	●	
	S2100	●	●	●	●	●	●
SGI/Copan	Revolution 220	●	●	●	●	●	●
	300M, 400M Native MAID	●	●	●	●	●	●
	300T, 400T TX VTL	●	●	●	●	●	●
Spectra Logic	v80, v160, v320, vX (nTier 500, 700)	●	●	●	●	●	●
Oracle StorageTek	VTL Plus	●	●	●	●	●	●
	VTL Prime	●	●	●	●	●	●

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<sup>16</sup> SIDF format is supported with VTL deduplication

## Silo Support, Library Manager

		HP UX	IBM AIX	SUN Solaris	Linux	Windows
Manufacturer	Model					
Oracle StorageTek	ACSL 7.1, 7.2, 8.0	●	●	●	●	●
	ACSL 7.3, 8.1	○	○	○	○	○
	ACSL 8.2			●	●	●
	ACSL 8.3, ACSL 8.4		●		●	●
	Library Station (LS)	●	●	●	●	
	Lib-Attach 1.4.2, 1.4.3	○	○	○		○

## Content Address Storage

		HP UX	IBM AIX	SUN Solaris	Linux	Windows
Manufacturer	Model					
EMC	Centera	●	●	●	●	●

## Legacy – Drive Support

Technology	Model	Connection	Worm	HP UX	IBM AIX	SUN Solaris	Linux <sup>17</sup>	macOS	Windows
Magneto-Optical18	Magneto-Optical 2.6GB	SCSI		4.6	4.6	4.6			4.6
	Magneto-Optical 5.2GB	SCSI		4.6	4.6	4.6			4.6
	Magneto-Optical 9.1GB	SCSI			4.6	4.6			4.6
	Sony F551	SCSI		4.6	4.6	4.6			4.6
	Sony F561 9.1GB	SCSI			4.6	4.6			4.6
Mammoth	Exabyte Mammoth	SCSI			4.6	4.6	4.6		4.6
	Exabyte Mammoth 2	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
		FC				4.6	4.6	4.6	
UDO	Plasmon UDO, UDO-2	SCSI	4.6	4.6	4.6	4.6			4.6
AIT	AIT-1	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
	AIT-2	SCSI		4.6 HP-UX 11 only	4.6	4.6	4.6	4.6	4.6
	AIT-3	SCSI	4.6	4.6	4.6	4.6	4.6	4.6	4.6
	AIT-4	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
		FC			4.6	4.6	4.6	4.6	4.6
	AIT-5	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
		FC			4.6	4.6	4.6	4.6	4.6
	S-AIT	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
		FC			4.6	4.6	4.6	4.6	4.6
	Sony AIT1, AIT2, AITE Turbo	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
DLT	DLT 4000	SCSI		4.6	4.6	4.6	4.6		4.6
	DLT 7000	SCSI		4.6	4.6	4.6	4.6		4.6
		Ethernet		4.6	4.6	4.6	4.6		4.6
	DLT 8000	SCSI		4.6	4.6	4.6	4.6	4.6	4.6

<sup>17</sup> IBM drivers for Linux not supported

<sup>18</sup> Support only robotized or automatic double-face

				HP UX	IBM AIX	SUN Solaris	Linux <sup>19</sup>	macOS	Windows
Technology	Model	Connection	Worm						
LTO HPE	HP LTO-1 Ultrium 215/230/232	SCSI / FC		4.6	4.6	4.6	4.6	4.6	4.6
	HP LTO-2 Ultrium 448/460	SCSI / FC		4.6	4.6	4.6	4.6		4.6
	HP LTO-2 Ultrium 448	SAS		4.6	4.6	4.6	4.6		4.6
	HP LTO-3 Ultrium 920 / 960 / 960 4GB	SCSI / FC	4.6	4.6	4.6	4.6	4.6	4.6	4.6
	HP LTO-3 Ultrium 920	SAS	4.6	4.6	4.6	4.6	4.6		4.6
	HP LTO-4 Ultrium 1760	SCSI	4.6	4.6	4.6	4.6	4.6	4.6	4.6
		SAS	4.6	4.6	4.6	4.6	4.6		4.6
		FC		4.6	4.6	4.6	4.6	4.6	4.6
	HP LTO-4 Ultrium 1840	SCSI	4.6	4.6	4.6	4.6	4.6	4.6	4.6
		SAS	4.6	4.6	4.6	4.6	4.6		4.6
		FC	4.6	4.6	4.6	4.6	4.6	4.6	4.6
LTO IBM	IBM LTO-1 Ultrium, IBM LTO-2 Ultrium	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
		FC		4.6	4.6	4.6	4.6		4.6
	IBM LTO-3 Ultrium	SCSI	4.6	4.6	4.6	4.6	4.6	4.6	4.6
		FC	4.6	4.6	4.6	4.6	4.6	4.6	4.6
		SAS		4.6	4.6	4.6	4.6		4.6
	IBM LTO-4 Ultrium	SCSI	4.6	4.6	4.6	4.6	4.6	4.6	4.6
		FC	4.6	4.6	4.6	4.6	4.6	4.6	4.6
		SAS	4.6	4.6	4.6	4.6	4.6		4.6
LTO Quantum	Quantum LTO-2	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
	Quantum LTO-3	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
	Quantum LTO-3, LTO-4	SAS	4.6	4.6	4.6	4.6	4.6		4.6
	Quantum LTO-4	SCSI		4.6	4.6	4.6	4.6	4.6	4.6
LTO Seagate	Seagate LTO-1 Ultrium	SCSI		4.6	4.6	4.6	4.6		4.6

<sup>19</sup> IBM drivers for Linux not supported

## Legacy – Library Support

Manufacturer	Model	HP UX	IBM AIX <sup>20</sup> <sub>21</sub>	SUN Solaris	Linux	macOS	Windows
BDT Solutions	Autoloader Thinstor FlexStor, FlexStor II	●	●	●	●	●	●
Breece Hill	Q16, Q2.15, Q40, Q47, Q4.30/50, Q6.100, Q7	●	●	●	●	●	●
Compaq	SSL 2000 Series	●	●	●	●	●	●
	MSL 5000 series	●	●	●	●	●	●
	TL 810 / 812, TL 820 / 822, TL 881 / 891	●	●	●	●	●	●
	TL 895				●	●	●
	TZ 875 / TZ 885				●	●	●
	TZ 877 / TZ 887	●		●	●	●	●
	TLS 10000	●	●	●	●	●	●
	Autoloader DAT 20/40	●	●	●	●	●	●
	SuperLoader 1280	●	●	●	●	●	●
Ecrix	AutoPak 15 / 30	●	●	●	●	●	●
Exabyte	230 D, 690 D	●	●	●	●	●	●
	Exb 10 E / 10 H / 10 I	●	●	●	●	●	●
	Exb 17D, 18D, 110, 210, 215, 218, 220, 221, 430, 440, 480, 608	●	●	●	●	●	●
	Exb EZ17, X80, X200	●	●	●	●	●	●
	Autopak, Magnum 1x7	●	●	●	●	●	●
	Magnum 8x143 <sup>22</sup> , 224, 448	●	●	●	●	●	●
	VXA2, VXA3 Packetloader 1x10 1U	●	●	●	●	● <sup>23</sup>	●
M4 Data	MagFile	●	●	●	●	●	●

<sup>20</sup> SAS connection is not supported on IBM AIX

<sup>21</sup> AIX platform supports up to 8 library devices

<sup>22</sup> Library Partition is supported

<sup>23</sup> Firewire supported

Plasmon	MP – Series, MP-Subsystem		●	●			●
	M-Series	●	●	●			●
	G-Series, Gx-Series	●	●	●	●	●	●
	LTO 10.1, 21.2, 100.6	●	●	●	●	●	●
Seagate	Scorpion Autoloader	●	●	●	●	●	●
	Viper 2000	●	●	●	●	●	●