



EMC Simple Support Matrix

EMC Unified VNXe Series

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These tables list E-Lab™ qualified specific versions or ranges for EMC® Unified VNXe® 3300/3150/3100.

Table 1 lists the minimum versions needed for VNXe operating environment v2.3.1 for new feature support.

Table 2 lists the minimum versions needed for VNXe applications.

Table 3 lists Web browser support for Unisphere v1.5.

Table 4 lists capacity limits.

Table 5 lists replication limits.

Table 6 and Table 7 describe what types and how many 2U DAEs can be used in either a dual SP VNXe 3100 platform or in a single SP VNXe 3100 platform.

Table 8 and Table 9 describe what types and how many 2U DAEs can be used in either a dual SP VNXe 3150 platform or in a single SP VNXe 3150 platform.

Table 10 provides a matrix describing how many DAEs can be used in a VNXe 3300 platform.

Table 1 VNXe operating environment v2.3.1 minimum for new feature support

Platform Support	Path Management		Management Software		HostCluster Software	Protocols		
	PowerPath®	Native MPIO	Native LVM	Veritas VxVM	Native Cluster	CIFS ^c	NFS v2, v3 ^c	iSCSI ^c
AIX 5300-09-01-0847								
AIX 6100-02-01-1141			Y				Y	Y
AIX 7100-00-03-1150								
Citrix XenServer 5.6, 5.5, 5.0, 6.0		Y	Y				Y	Y
HP-UX 11iv1 (11.11)								
HP-UX 11iv2 (11.23)	5.2		Y				Y	Y
HP-UX 11iv3 (11.31)								
Linux AX 3 SP 3	5.5	Y	Y				Y	Y
Linux AX 4.0	5.6							
Linux RHEL 5.6	5.5							
Linux RHEL 6.0	5.6							
Linux SLES 11 SP 1	5.5							
MAC OS X 10.8 ^d						Y		
Microsoft Windows 2003 SP2	5.3.1 - 5.5	Y ^a	Y		Y ^b	Y		Y
Microsoft Windows 2008 SP1								
Microsoft Windows 2008 R2								
Solaris 10, 11	5.5	Y	Y	5.1			Y	Y
Solaris (x86) 10, 11								
VMware ESX/ESXi 4.0 (vSphere)	PP/VE 5.4, 5.4 SP2	Y	N/A	N/A	Y		Y	Y
VMware ESX/ESXi 4.1 (vSphere)	PP/VE 5.4 SP2							
VMware ESXi 5.0	PP/VE 5.7							
Legend: Blank = Not supported Y = Supported N/A = Not applicable	Footnotes: a. Microsoft Support — Search EMC support knowledgebase article for settings. www.emc.com/vnxesupport . b. Cluster is supported with single path only. On Windows 2008 and Windows 2008 R2, only a single session between the host and the VNXe array is supported. c. PowerPath and Native MPIO support applies only to storage provided via the iSCSI protocol. CIFS and NFS do not use the multipath failover software on a server that contains storage provided via CIFS, NFS, and iSCSI protocols. d. MAC OS X 10.8 is supported for CIFS client connectivity in switched environments only. Advanced services (e.g., Replication, snaps, etc.) are not supported. Note: The <i>EMC Support Matrix</i> indicates which operating systems (OS) have been tested. Support for other operating systems are strictly based on generic protocol support by the native OS. Note: Direct host-attach configurations are not supported.							

Listed below are the versions of application software tested and supported by VNXe.

OS platform support can be found on the vendors' website.

Table 2 Applications minimum supported revisions for new feature support

Exchange	Exchange 2010	MS Exchange Compatibility Matrix
	Exchange 2007 SP1 (standard/enterprise)	
	Exchange 2003 (standard/enterprise)	
CommVault	CommVault Simpana ^a v8.0 SP4 and v9.0	CommVault Compatibility Matrix
EMC	EMCNetWorker ^v 7.4,v7.4.1,v7.5,v7.6andv8.0	EMC Product: Compatibility Matrix
	EMC NetWorker FastStart ^a v7.4 SP3	
	Data Domain ^b v5.0, 5.1 and v5.2	
	Avamar v6.0 and v6.1	EMC [®] Avamar [®] Compatibility Matrix
Symantec	Symantec Backup Exec ^a v2010 R2, 2012	Backup Exec 2012 Compatibility Matrix
	SymantecNetBackup ^a v6.0,v6.5,v7.0,v7.1and 7.5	Symantec NetBackup Compatibility Matrix
IBM	IBM TSM v6.2.2	IBM TSM Compatibility Matrix
EMC	Replication Manager v5.3.23	EMC Product: Compatibility Matrix
	NAS Replication	<ul style="list-style-type: none"> Supported VNXe to VNXe, VNX or Celerra (DART 6.0+) iSCSI (RMv5.3.2) Replication—Supported VNXe to VNXe, VNX or Celerra (DART 6.0+) RPQ required for VNX for DART iSCSI Support.
	Anti-virus Server Integration	<ul style="list-style-type: none"> Symantec SAV for NAS 5.1, 5.2, 5.2.7.53, 5.2.8 Symantec Protection Engine 7.0 McAfee VirusScan 8.5i Patch2, 8.7i, 8.7i_3 Computer Associates Trust r8, r8.1 Sophos Anti-Virus v3.82, 5x and 6x family, v7.0.2, v7.3, v7.5, v7.6, v9.x, v10.x Kaspersky Anti-Virus for Windows v6.0 or later Trend Micro ServerProtect 5.5.8 Symantec Endpoint Protection 11.04, 11.06, 12.1MU1, 12.1MU2. F-Secure E-mail and Server Security 9.20 with F-Secure hotfix FSESS920-900 F-Secure Server Security 9.20 with F-Secure hotfix FSSS920-900
	FLR (File Level Retention) Toolkit	Windows XP, Vista, Win7, server 2K3, server 2K8 and Win8
Legend: Blank = Not supported Y = Supported N/A = Not applicable	Footnotes: a. NDMP three-way support only. b. NDMP Tape Server only.	

Table 3 Web Browser support for Unisphere v1.5

Web Browser	Version
Adobe Flash Player	v9 or later
Google Chrome	v9 or later
Microsoft Internet Explorer	v7, v8
Mozilla Firefox	v3.6 or later

Table 4 Capacity limits

Capacity limits	VNXe 3100 Single SP/ Dual SP	VNXe 3150 Single SP/ Dual SP	VNXe 3300
Number of Hosts	128 / 256	128 / 256	512
Snapshots per Virtual Disk ^a	1000	1000	1000
Maximum number of Shared Folders + Snapshots of Shared Folders + iSCSI Virtual Disks per SP ^e	200 / 600	200 / 600	800
Maximum iSCSI Virtual Disks	128 / 256 ^b	128 / 256 ^b	512 ^c
Maximum iSCSI Virtual Disk Size (LUN)	Min = 1 GB Max = 1.999 TB	Min = 1 GB Max = 1.999 TB	Min = 1 GB Max = 1.999 TB
Maximum number of iSCSI initiators	128 / 256	128 / 256	512
Maximum number of Storage Servers ^e	12	12	12
Shared Folder Size	Min = 1 GB Max = 15.999 TB	Min = 1 GB Max = 15.999 TB	Min = 1 GB Max = 15.999 TB
VMWare NFS Folder Size	Min = 10 GB Max = 15.999 TB	Min = 10 GB Max = 15.999 TB	Min = 10 GB Max = 15.999 TB
Snapshots per Shared Folder	96	96	96
NAS Shared Folders (System Limit)	128 / 256 ^b	128 / 256 ^b	512 ^c
NAS Shared Folders + VMWare NFS Snapshots (System Limit) <i>*Single SP numbers are based on 3 shared folders + maximum snaps. Limit will vary with configuration.</i>	197*/512	197*/512	512
Number of CIFS Shares	150 / 300	150 / 300	500
Number of NFS Exports	150 / 300	150 / 300	500
Number of Unix/Windows Users	150 / 300	150 / 300	1000
Maximum Number of Open Files	200,000	200,000	200,000
Maximum Number of Files per Directory	500,000	500,000	500,000
Maximum subdirectories per Directory	65,000	65,000	65,000
Number of NFS Connections	20,000	20,000	20,000
Number of CIFS Connections	20,000	20,000	20,000
Maximum Raw Capacity	144 TB / 288 TB	144 TB / 288 TB	384 TB
Maximum User Configurable Capacity	72 TB / 144 TB	72 TB / 144 TB	192 TB
300 GB, 600 GB SAS 15K RPM 900 GB SAS 10K RPM	Y	Y	Y ^d
1 TB, 2 TB, 3 TB NL SAS 7200 RPM	Y	Y	Y
100 GB, 200 GB Flash		Y	Y ^d
Legend: Blank = Not supported Y = Supported	Footnotes: a. The maximum number of vdisk snapshots per system is 1,000. b. Recommended as 128 per SP. c. Recommended as 256 per SP. d. NEBS versions of these drives are also available for the VNXe 3300. e. Total max count includes all Shared Folders, Shared Folders Snaps (including internal snaps that are automatically created by Replication; two per Shared Folder), VMWare data stores, Hyper-V data stores, Exchange storage resources, and Generic iSCSI storage. This number does not include iSCSI snapshots. If the maximum number per SP is exceeded, upgrade will fail with instructions to reduce the total number of these objects.		

Table 5 Replication limits

Replication	VNXe 3100 Single SP/ Dual SP	VNXe 3150 Single SP/ Dual SP	VNXe 3300
Maximum number of Replication Sessions	16 / 32	16 / 32	64
VNXe replicated to VNXe	Y	Y	Y
VNXe replicated to VNX ^a	Y	Y	Y
VNXe replicated to Celerra (DART 6.0+)	Y	Y	Y
VNX replicated to VNXe ^{a, b}	Y	Y	Y
Celerra (DART 6.0+) replicated to VNXe ^b	Y	Y	Y

Table 5 Replication limits

Replication	VNXe 3100 Single SP/ Dual SP	VNXe 3150 Single SP/ Dual SP	VNXe 3300
Legend: Blank = Not supported Y = Supported	Footnotes: Requires the Remote Protection Pack and the Application Protection Pack for all iSCSI LUN replications. a. Requires an RPQ if the replication target is a VNX. CIFS and NFS do not require RPQ. b. VDM, FLR-C, Multi-protocol Filesystems, NFSv4, File Mover, and Local Quotas are not supported on VNXe.		

In Table 6 through Table 10, the letter X in the matrix indicates that there is no 2U DAE available (supported) beyond that point. The **Total** column in shows the total number of disks available (supported) using a combination of the 2U DPE and the 2U DAE for that particular configuration.

Table 6 VNXe 3100 DPE and DAE configuration rules for dual SP configuration

VNXe 3100 Dual SP platform								
DPE	DAE1	DAE2	DAE3	DAE4	DAE5	DAE6	DAE7	Total
12	12	12	12	12	12	12	12	96
12	12	12	12	12	12	25	X	97
12	12	12	12	12	25	12	X	97
12	12	12	12	25	25	X	X	98
12	12	12	12	25	12	12	X	97
12	12	12	25	25	12	X	X	98
12	12	25	25	25	X	X	X	99
12	25	25	25	12	X	X	X	99

Table 7 VNXe 3100 DPE and DAE configuration rules for single SP configuration

VNXe 3100 Single SP platform								
DPE	DAE1	DAE2	DAE3	DAE4	DAE5	DAE6	DAE7	Total
12	12	12	12	X	X	X	X	48
12	12	25	X	X	X	X	X	49
12	25	12	X	X	X	X	X	49

Table 8 VNXe 3150 DPE and DAE configuration rules for dual SP configuration

VNXe 3150 Dual SP platform								
DPE	DAE1	DAE2	DAE3	DAE4	DAE5	DAE6	DAE7	Total
12	12	12	12	12	12	12	12	96
12	12	12	12	12	12	25	X	97
12	12	12	12	12	25	12	X	97
12	12	12	12	25	25	X	X	98
12	12	12	12	25	12	12	X	97
12	12	12	25	25	12	X	X	98
12	12	25	25	25	X	X	X	99
12	25	25	25	12	X	X	X	99
25	25	25	25	X	X	X	X	100
25	25	25	12	12	X	X	X	99
25	25	12	12	12	12	X	X	98
25	12	12	12	12	12	12	X	97
25	12	12	12	12	25	X	X	98

Table 9 VNXe 3150 DPE and DAE configuration rules for single SP configuration

VNXe 3150 Single SP platform								
DPE	DAE1	DAE2	DAE3	DAE4	DAE5	DAE6	DAE7	Total
12	12	12	12	X	X	X	X	48
12	12	25	X	X	X	X	X	49
12	25	12	X	X	X	X	X	49
25	25	X	X	X	X	X	X	50
25	12	12	X	X	X	X	X	49

Table 10 provides a matrix describing how many DAEs can be used in a VNXe 3300 platform.

Table 10 VNXe 3300 DPE and DAE configuration rules for the VNXe 3300 platform

DPE	DAE1	DAE2	DAE3	DAE4	DAE5	DAE6	DAE7	Total
15	15	15	15	15	15	15	15	120
15	15	15	15	15	15	15	25	130
15	15	15	15	15	15	25	25	140
15	15	15	15	15	25	25	25	150
15	15	15	15	25	25	25	15	150
15	15	15	25	25	25	25	X	145
15	15	25	25	25	25	15	X	145
15	25	25	25	25	25	X	X	140
25	25	25	25	25	25	X	X	150
25	25	25	25	25	15	X	X	140
25	25	25	25	15	15	15	X	145
25	25	25	15	15	15	15	15	150