

EMC vVNX

IT organizations are increasingly looking to software-defined storage solutions to provide agility and flexibility to their operational and development environments.

With vVNX Community Edition, EMC is offering customers the ability to easily create test and development suites using a virtual instance of VNX unified storage, without the requirement for dedicated storage platforms.



New vVNX software provides the unified storage and data management features of VNX, and is available today for download and installation in VMware environments. The vVNX software is easily deployed on a VMware ESX server, and provides the NAS and SAN storage protocols and data services familiar to VNX users. Users can create test and development environments based on VNX storage without a dedicated system and stand up multiple virtual VNX instances cost effectively, using standard server hardware.

- Setup for NAS or SAN in minutes using the Unisphere wizards.
- Allow VMware administrators to manage storage from within VMware vCenter™.
- Reduce capacity requirements by up to 50% via thin provisioning and file deduplication.
- Optimize performance and simplify storage management with FAST VP automated tiering.

With the flexibility of software-defined storage, users can test features such as data protection and disaster recovery without the need for multiple VNX systems.

The vVNX software is available today and can be downloaded from www.emc.com. Users can utilize the software free of charge to evaluate its capabilities, as well as to experience the ease-of-use and numerous advanced features of the VNX.

Specifications

EMC ² vVNX	
Protocols	
Storage Management	
Data Services	
Storage Pools	
VMware Hypervisor	
X86 Server	
RAID Controller	
SSD or HDD Drives	
Customer Provided ESX Server	

REQUIRED SPECIFICATIONS

VIRTUAL REQUIREMENTS

- **Storage Processors (SPs)** 1
- **Virtual Processor Cores** 2 (2 GHz+)
- **Virtual Memory** 12 GB

PHYSICAL SERVER REQUIREMENTS

- **Processor** Quad/Dual Core CPU 64 bit x86 Intel 2GHz+
- **RAID Controller** Required (RAID Card with 512MB Cache recommended)
- **Drive Types** Agnostic
- **Embedded I/O Ports** 2 x 1GbE/2 x 10GbE

SYSTEM LIMITS AND SUPPORT

Supported Pool LUNs	Up to 10
Maximum LUN Size	4 TB
Maximum FS Size	3.9 TB
Maximum Useable Capacity	4 TB
Maximum File Systems	32

vVNX COMMUNITY EDITION SOFTWARE

vVNX offers support for a variety of advanced storage features.

vVNX Base Software Package – Standard integrated management and monitoring of all aspects of vVNX including the Operating Environment 3.1.2, all protocols (as listed above), Unisphere Management with integrated support, Unisphere Central, Unified Snapshots, Remote Protection – Native Asynchronous Block Replication, FAST VP, File Deduplication & Compression, Thin Provisioning, File Level retention.

- Also included is an optional 64-bit File System - for use with VMware VMDK over NFS. The 64-bit file system allows a user to extend and shrink both thick and thin datastores.

CONNECTIVITY

vVNX provides flexible NAS or SAN connectivity options through Ethernet and supports a wide range of protocols including CIFS (SMB 1, SMB 2 and SMB 3), NFSv3, and iSCSI.

PROTOCOLS SUPPORTED

CIFS (SMB 1, SMB 2 and SMB 3), NFSv3, iSCSI

Network Lock Manager (NLM) v3, v4

Routing Information Protocol (RIP) v1-v2

Simple Network Management Protocol (SNMP)

Network Data Management Protocol (NDMP) v1-v4

Address Resolution Protocol (ARP)

Internet Control Message Protocol (ICMP)

Simple Network Time Protocol (SNTP)

Lightweight Directory Access Protocol (LDAP)

CLIENT OPERATING SYSTEM SUPPORT

Apple MAC O/S 10.8 or greater

Citrix XenServer 6.1

HP-UX

IBM AIX

IBM VIOS 2.2, 2.3

Microsoft Windows Server 2008, Windows Server 2008 R2+

Windows Server 2012, Windows Server 2012 R2*

Microsoft Windows 7, Microsoft Windows 8 and Vista

Microsoft Hyper-V

Novell Suse Enterprise Linux

Oracle Linux

RedHat Enterprise Linux

Solaris 10 x86, Solaris 10 Sparc
Solaris 11 and 11.1 supported, SPARC & x86
VMware® ESXi5.x®
* Base interoperability only.

CLIENT CONNECTIVITY FACILITIES

File access by NFS, CIFS protocols
Block access by iSCSI
Link Aggregation (IEEE 802.3ad) – File access only
Failsafe networking
Virtual LAN (IEEE 802.1q)
Network Status Monitor (NSM) v1
Portmapper v2
Network Information Service (NIS) client
Supports Microsoft DFS as Leaf node or Root Server
LDAP signing for Windows
Access Base Enumeration (ABE) for SMB protocol access

VMWARE INTEGRATION

VMware vStorage APIs for Array Integration (VAAI) for File and Block: improves performance by leveraging more efficient, array-based operations VASA
vStorage APIs for Storage Awareness (VASA); provides storage awareness for VMware administrators



store.emc.com

SUPPORT

vVNX support is provided via the vVNX Community webpage which can be found on www.emc.com

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, [contact](#) your local representative or authorized reseller—or visit the [EMC Store](#)

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