

# UNITY VSA

An Affordable Software-Defined Storage Solution



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

Dell EMC UnityVSA™ (Unity™ Virtual Storage Appliance) allows the advanced unified storage and data management features of the Unity family to be easily deployed on a VMware ESXi server, enabling customers to implement an affordable software-defined solution. Benefits of this approach are a low acquisition cost option for hardware consolidation, multi-tenant storage instances, remote/branch office storage environment and easier to build/maintain/destroy environment for staging and testing.

With all-inclusive software, the UnityVSA allows you to:

- Set up for NAS or SAN in just a few minutes using the Unisphere wizards
- Allow VMware administrators to manage storage from within VMware vCenter™
- Protect data locally with unified point-in-time snapshots
- Replicate data remotely to other instances of UnityVSA or to other Unity purpose-built storage arrays
- Optimize performance, efficiency, and simplify storage management with automated-tiering through EMC Fully-Automated Storage Tiering Virtual Pools (FAST VP)
- Administrate the storage array using the same HTML-5 based Unisphere as Unity purpose-built storage arrays.
- Provide advanced file services to block storage for your customers



## SPECIFICATIONS

### System Requirements

Physical Server Requirements:

- Processor: Xeon E5 Series Dual Core CPU 64-bit x86 Intel 2GHz+ (SSE4.2 or greater)
- Memory: 16GB (ESXi 5.5), 18GB (ESXi 6.0), or 20 GB (ESXi 6.5)
- RAID Controller: 512MB NV cache and battery backed (recommended)
- Network: 1GbE or 10GbE
- Drive Types: Agnostic

#### Virtual Requirements:

- Storage Processors: 1
- CPUs: 2
- Memory : 12 GB
- Network (Mgmt): 1 x 1GbE or 10GbE
- Network (Data): 4 x 1GbE or 10GbE

## SYSTEM LIMITS AND SUPPORT

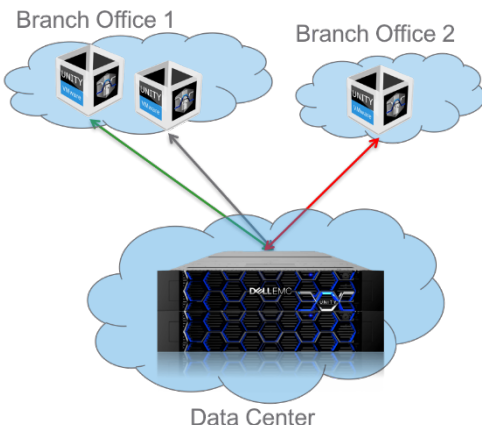
- Maximum Usable Capacity: 50TB
- Supported Pool LUNs: 64
- Maximum LUN Size: 16TB
- Maximum vDisks: 16
- Maximum File System Size: 50TB
- Maximum NAS Servers 16
- Maximum File Systems: 32

## UNITYVSA SOFTWARE

UnityVSA Base Software Package is all-inclusive. The software package contains the standard integrated management and monitoring of all aspects of UnityVSA including the Operating Environment, NAS and SAN protocols (as listed below), Unisphere Management with integrated support, FAST VP Auto-Tiering, thin provisioning, Unified Snapshots for NAS and SAN, and Unified Replication for NAS and SAN. Also included is the 64-bit file system with file system shrink functionality for space reclamation, VMDK cloning, multi-protocol support, and quotas.

UnityVSA offers this software in two flavors:

- Professional Edition – with yearly subscription via a purchased license. The Professional Edition is available for purchase in 3 different supported options: 10TB, 25TB, and 50TB versions. It is a seamless upgrade from a low capacity point to a higher capacity point. The subscription includes:
  - Software and systems related support
  - EMC Enhanced Services
  - EMC Secure Remote Support (ESRS)
- Community Edition – up to 4TBs, no cost software downloadable at <http://www.emc.com/products-solutions/trial-software-download/unity-vsa.htm>



## CONNECTIVITY

UnityVSA provides flexible NAS or SAN connectivity options through Ethernet and supports a wide range of protocols including SMB (SMB1, SMB2, and SMB3), NFSv3, NFSv4, NFSv4.1, FTP, SFTP and iSCSI.

## PROTOCOLS SUPPORTED

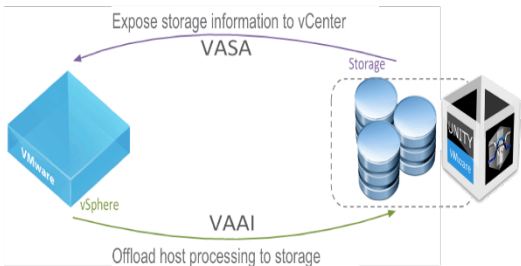
- SMB (SMB1, SMB2, and SMB3), NFSv3, NFSv4, NFSv4.1, FTP, SFTP, iSCSI
- Network Lock Manager (NLM) v3, v4
- Routing Information Protocol (RIP) v1-v2
- Simple Network Management Protocol (SNMP)
- Network Data Management Protocol (NDMP) v1-v4
- Address Resolution Protocol (ARP)
- Internet Control Message Protocol (ICMP)
- Simple Network Time Protocol (SNTP)
- Lightweight Directory Access Protocol (LDAP)

## CLIENT OPERATING SYSTEM SUPPORT

- Apple MAC O/S 10.8 or greater
- 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 (base interoperability only)
- Microsoft Windows 7, Microsoft Windows 8, Vista
- Novell SUSE Enterprise Linux
- Oracle Linux
- RedHat Enterprise Linux
- Solaris 10 x86, Solaris SPARC
- Solaris 11 and 11.1 supported, SPARC & x86
- VMware ESXi 5.x, 6.x

## CLIENT CONNECTIVITY FACILITIES

- File access by NFS, SMB protocols
- Block access by iSCSI
- Link Aggregation (IEEE 802.3ad) – File access only
- 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

VVols support for VM-granular data services and Storage Policy Based Management (SPBM).

VMware vStorage APIs for Storage Integration (VAAI) for File and Block, improves performance by leveraging more efficient, array-based operations.

vStorage APIs for Storage Awareness (VASA) provides storage awareness for VMware administrators.

## SUPPORT

UnityVSA Community Edition support is provided via the UnityVSA Community webpage which can be found on <http://www.emc.com/products-solutions/trial-software-download/unity-vsa.htm>

UnityVSA Professional Edition comes with EMC Enhanced Services



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