EMC UNITY VSA

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

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 is 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.

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

The UnityVSA software is available today and can be downloaded from www.emc.com. Users can download and utilize the UnityVSA Community Edition at not cost to evaluate and experience the ease-of-use and numerous advanced features of Unity.

SPECIFICATIONS

Required Specifications

VIRTUAL REQUIREMENTS:

- Storage Processors (SPs): 1
- SP Memory (GB): 12
- Cores per SP: 2

PHYSICAL SERVER REQUIREMENTS

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

System Limits and Support

Supported Pool LUNs: 64

Maximum LUN Size: 16TB

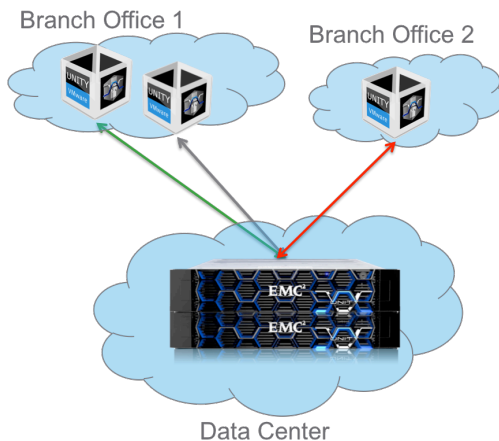Maximum File System Size: 50TB

Maximum File Systems: 32

Maximum Usable Capacity: 50TB

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:

- Community Edition – up to 4TBs, no cost software downloadable on http://www.emc.com
- Professional Edition – also downloadable on www.emc.com with yearly subscription for enhanced support via purchased licenses. 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:
    - o Software and systems related support
    - o Access to online support resources
    - o EMC Secure Remote Support (ESRS)

Connectivity

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

Protocols Supported

CIFS (SMB1, SMB2, and SMB3), NFSv3, NFSv4, NFSv4.1, 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, 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
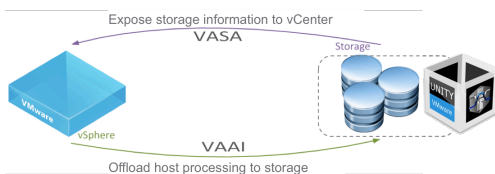
Supports Microsoft DFS as Leaf node or Root Server

LDAP signing for Windows

Access Base Enumeration (ABE) for SMB protocol access

VMware Integration

VMware vStorage APIs for 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 www.emc.com.

UnityVSA Professional Edition is additionally supported by EMC Online Support resources.