Maxta Storage Platform for VMware vSphere

Enterprise Storage Redefined

✓ Eliminate Storage Arrays and Storage Networking

✓ Dramatically simplify IT by eliminating Storage Management

✓ Provide VM-centric Enterprise-class Data Services

✓ Optimize for flash performance and hard disk capacity

✓ Enable compute/storage convergence on standard servers maximizing capital and operational savings while realizing the Software-Defined Data Center vision

Maxta Storage Platform Essentials and Enterprise for VMware vSphere

Introduction

Maxta Storage Platform (MxSP) is a ground breaking, highly resilient, scalable distributed Software-Defined VM Storage platform that enables IT to fully realize the vision of the virtual data center. The innovative, peer-to-peer architecture aggregates storage resources from multiple VMware vSphere cluster servers, assimilates a global namespace and delivers all storage functionality. The storage resources can be any combination of magnetic disk drives and flash technology. The aggregated storage is presented as a single shared Maxta datastore to the VMware vSphere cluster. Maxta enables the convergence of applications VMs, VMware vSphere, and storage on standard servers thereby eliminating the need for storage arrays and realizing the Software-Defined Data Center vision. Additionally, the Maxta datastore can co-exist with datastores from other storage systems providing investment protection.
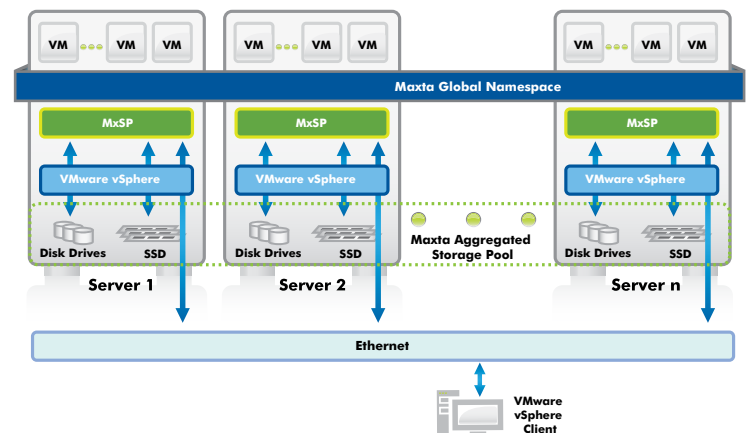
Simplicity is in the DNA

MxSP dramatically simplifies IT by eliminating the need for storage provisioning and storage management. The Maxta datastore and all data services such as local and remote replication, snapshots and zero-copy clones are configured and managed from the VMware vSphere Client at VM granularity. This simplification eliminates the day-to-day tasks of storage management and enables administrators to focus on managing applications and VMs.

The revolutionary MxSP eliminates single point of failure by delivering best-in-class data resiliency and high availability leveraging strong checksums and data replication for all stored data. Maxta datastore seamlessly supports all VMware features like vMotion, Storage vMotion, HA and DRS. MxSP highly efficient Snapshot improves data protection and data recoverability.

VMs can be instantly provisioned by utilizing MxSP's Zero-Copy Clones and leveraging VM templates, thus improving VM agility. MxSP's implementation of consistency groups for both snapshots and remote replication enables comprehensive recoverability for applications that span multiple VMs.

Cost-efficiency without Compromises

MxSP enables significant capital savings by converging compute and storage resources on standard commodity servers, without compromising features, performance or scalability. This provides considerable up-front savings and even greater savings on upgrades. In addition, MxSP leverages capacity optimization technologies such as thin provisioning, in-line compression, and in-line deduplication to increase storage efficiency and reduce storage expenses. As a result of eliminating the need for storage arrays, MxSP also enables significant reduction in power, cooling, and floor space. By significantly simplifying IT, increasing IT efficiency, and enabling administrators to focus on managing applications and VMs, MxSP enables dramatic reduction in operating expenses.

Linear Scalability

The versatile architecture of MxSP provides the ability to scale capacity and performance independently on-demand without having to over-provision resources. This flexibility enables the servers to either have access to Maxta datastore and contribute storage to it ("Converged Compute/Storage Servers") or have access to Maxta datastore without contributing storage to it ("Compute Only Servers"). A Compute Only Server can be upgraded to a Converged Compute/Storage Servers by:

A) Changing the Server role definition (if the Compute Only Server meets the hardware requirements of a Converged Compute/Storage Server) or
B) Changing the Server role definition and upgrading the server (if the Compute Only Server does not meet the hardware requirements of a ConvergedCompute/Storage Server)

An MxSP Essentials configuration can be upgraded to MxSP Enterprise configuration non-disruptively as well.

MxSP Product Specifications

Components	Essentials	Enterprise
Total Number of Servers	3	3+
Minimum number of Converged Compute / Storage Servers[1]	2	2
Converged Compute / Storage Server[2] specification		
Processors per Server	2xDual-Core 2.00 GHz or faster	2xDual-Core 2.00 GHz or faster
Memory (RAM) per Server	32GB or higher	32GB or higher
Disk Drives / Capacity	7.2K RPM SATA Drives or higher / 50GB or higher	7.2K RPM SATA Drives or higher / 50GB or higher
Solid State Drives / Capacity	Consumer grade MLC (cMLC) or better / 60GB or higher	Consumer grade MLC (cMLC) or better / 60GB or higher
Network Connections per Server	Dedicated or Shared – 1 GigE port or higher	Dedicated or Shared – 1 GigE port or higher
Compute Only Server[2] specification		
Processors	1xDual-Core 2.00 GHz or faster	1xDual-Core 2.00 GHz or faster
Memory (RAM)	8GB or higher	8GB or higher
Disk Drives	7.2K RPM SATA Drives or higher / 50GB or higher	7.2K RPM SATA Drives or higher / 50GB or higher
Network Connections per Server	Dedicated 1 GigE port or Shared 10 GigE port or higher	Dedicated 1 GigE port or Shared 10 GigE port or higher
Maxta Software		
Snapshots, Zero-Copy Clones, Local Replication, Capacity Optimization (Thin Provisioning, Compression, Deduplication)	Included	Included
Consistency Groups	Included for Snapshot only	Included
Remote Replication	Not Included	Purchased separately
Hypervisor		
VMware vSphere	Version 5.0 update 1 or later	Version 5.0 update 1 or later
VMware vCenter Server	Version 5.0 update 1 or later	Version 5.0 update 1 or later
Licensing Model	• Optimized for VMware vSphere Essentials Kit Cost Structure • Supports all licensing models of VMware vSphere and vSphere with Operations Management	Supports all licensing models of VMware vSphere and vSphere with Operations Management
Networking		
Private Local Area Network between the nodes	VLAN or Switch	VLAN or Switch

Note: (1) A minimum of two Converged Compute/Storage Servers is required for high availability
(2) Hardware has to be listed in VMware Hardware Compatibility List (HCL)