

Maxta MxSP® Hyperconvergence Software

Software-defined hyperconverged storage for the virtual data center

Hypervisor-agnostic, VM-centric storage platform that eliminates complex storage arrays and delivers enterprise-class data services on commodity servers

Product Overview

Maxta MxSP® (Maxta Storage Platform) is an award-winning, software-defined hyperconverged storage solution that transforms standard x86 servers into a converged compute and storage infrastructure. MxSP eliminates the need for expensive and complex storage area networks (SANs) and storage arrays by aggregating server-side flash and spinning disks into a shared, distributed storage pool with enterprise-class data services. MxSP fully integrates with server virtualization at all levels — from user interface to data management — and supports all possible deployments of virtual data centers, including private, public and hybrid clouds.

Key Capabilities

- Hypervisor-agnostic architecture supporting VMware vSphere, KVM and OpenStack
- VM-level storage abstraction with per-VM policy management
- Scale-up and scale-out compute and storage independently on demand
- Unlimited zero-copy snapshots and clones (time, performance and capacity-efficient)
- Inline compression with configurable policies per virtual disk
- Floating master architecture eliminates network hops during VM migration
- Metro Storage Cluster and Rack Awareness for multi-site deployments
- MxInsight® integrated management via vSphere Web Client or OpenStack Horizon
- MxCloudConnect® for cloud-based monitoring, alerts and call-home
- REST APIs and CLI for automation and orchestration

Architecture Highlights

MxSP's innovative peer-to-peer architecture aggregates storage resources from multiple servers into a global namespace. The Maxta Distributed File System (MFS) delivers shared storage with enterprise-class services, eliminating split-brain conditions through synchronized operations across the cluster. The I/O path is optimized for hybrid storage with flash media used for intent log (MxIL), read cache and metadata acceleration (Metadev), while spinning disks provide cost-effective capacity.

Data Services

MxSP delivers comprehensive enterprise data services including zero-copy snapshots and clones managed at VM level (not storage level), application-consistent snapshots via VSS quiescing, inline compression during de-stage from

flash to HDD, strong checksums for silent data corruption prevention, automatic data rebalancing across nodes and disks, and multi-tenancy support for service provider environments.

Deployment Options

Maxta offers two deployment models: MxSP software-only licenses for maximum flexibility on existing x86 servers, and MaxDeploy® pre-validated hyperconverged appliances with partner hardware platforms including HP ProLiant, Dell PowerEdge, Lenovo ThinkServer, Cisco UCS, Supermicro, Intel and Quanta. Free perpetual licenses are available for evaluation with up to 24 TB capacity on three nodes.

Technical Specifications

Minimum cluster: 3 nodes. Maximum cluster: 32 nodes. Supported hypervisors: VMware vSphere 5.5 U2+, KVM, OpenStack Kilo+. Storage protocol: NFS v3 (VMware), local block (KVM/OpenStack). Flash support: PCIe NVMe, SATA/SAS SSD. Network: 1GbE minimum, 10GbE recommended (dedicated). Management: MxInsight web UI, vSphere plugin, CLI, REST API. Data services: snapshots, clones, compression, checksums, replication, rack awareness, metro cluster.

About Maxta

Maxta is redefining enterprise IT infrastructure through a groundbreaking approach to hyperconvergence that dramatically simplifies operations while delivering much greater agility and cost savings. Our award-winning MxSP® software and MaxDeploy® appliances offer unparalleled freedom of choice in servers, storage devices and server virtualization platforms. For more information, visit www.maxta.com.