

THE PROMISE OF HYPERCONVERGENCE FOR EVERYONE

Simple - Agile - Scalable - Efficient - Unified



VSKube, unlocks the full potential of infrastructure hyperconvergence

VSKube is a new generation of Hyperconverged Systems, optimized for small and medium enterprises, that scales exceptionally well for large data centers as well. For your company's IT infrastructure to keep pace with your business cycles, you need systems that support fast, responsive development processes.

The VSKube hyperconverged system from Promise allows you to unlock the full potential of infrastructure hyperconvergence and adapt IT to the needs of your workloads.

VSKube uses a software-defined approach, combining tightly-coupled software-defined compute, storage, and networking in the form of hyperconverged nodes. Together with a centralized single pane of glass management system, VSKView, these technologies deliver a pre-integrated and adaptable cluster with a unified pool of resources that you can quickly deploy, adapt, scale, and manage.

VSKube is the hyperconverged infrastructure operating software that:

- Provides an extremely economical infrastructure to run virtual machine-based applications
- Effortlessly scales out as demand for either or both compute and storage capacity surge
- Manages growth while allowing IT to run smoothly

Simplified deployment and unified management

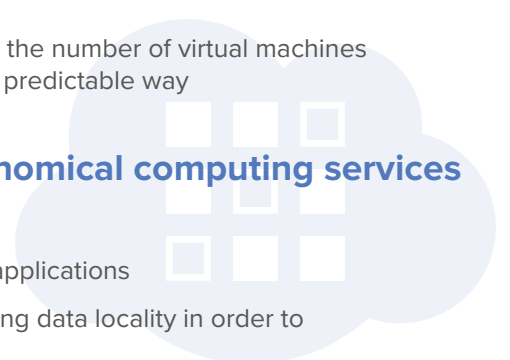
- Fast and simple deployment from a single pane of glass management interface. Centralized management system, VSKView, provides an easy and unified management interface for daily IT operations
- Script-based orchestration - makes complex deployment a breeze
- Utility to support workload migration from physical Windows servers to alleviate the pains of manual migration at deployment time

Highly scalable and predictable IT infrastructure

- Scales extremely well, allowing you to plan your IT infrastructure growth in a predictable manner
- Scale-out: Minimum deployment starts from one node, scales one node at a time, up to 32 nodes per cluster. Multiple appliance models allow you to deploy for compute-intensive, storage-intensive, as well as compute-storage-balanced mixed workloads. This granularity allows for superb cost savings by scaling out with customized mix of appliances
- Linear predictability: As nodes are added to the VSK hyperconverged cluster, the number of virtual machines and/or storage capacity that can be supported on the cluster grows in a linear predictable way

Compute virtualization - agile, highly available, and economical computing services

- Fully integrated with KVM hypervisor without extra license cost
- Full integration of VMs and virtual networking eases deployment of multi-tier applications
- VM migration with or without service shut down are supported while maintaining data locality in order to maintain operation at high performance level
- Supports VM-based snapshots to protect VM's system volume as well as data volumes associated with VM



Server SAN storage, improved availability, scalability, manageability, performance, and capacity utilization

- VSKyCube converged server SAN storage enables a true “application-driven, software-defined” storage architecture. Allows storage usage to be defined and allocated at application deployment time as requested. Furthermore, specific storage attributes such as performance levels, protection options, others can be specified by individual application.
- VSKyCube converged server SAN storage offers performance improvements and better storage capacity utilization by SSD caching, thin-provisioning, tiering, and dynamic volume expansion.
- Data protection: In addition to local RAID protection, VSKyCube converged server SAN offers another layer of protection with RAID5-fashion data striping across nodes (RAIN). Can be specified by applications at deployment time.
- High resilience and availability: VSKyCube converged server SAN automatically detects partial failure conditions at block, disk, and node levels, and triggers a healing process without stopping availability of the storage.
- Deployment and scaling: Volume expansion as well as physical storage resource expansion are made easy by a simple point-and-click interface, while maintaining storage service.

Why hyperconvergence?

- Consolidates IT resources - deploy and scale virtualization in your IT infrastructure
- Operationalizes "Multi-modal IT"— support the deployment of new enterprise technologies in your data center without remodeling or refreshing other resources already at work in your production environment
- Complements Enterprise IT - Hyperconvergence improves areas where enterprise IT that have traditionally been weak, such as single-point-of-contact for technical support, resolving interoperability issues, implementing pay-as-you-grow cost model for Remote Office/Branch Office (ROBO)

Appliance Models

Integrating software-defined compute, storage, and networking in a single box, VSKyCube offers multiple appliance models for the administrator to deploy for compute-intensive, storage-intensive, as well as compute-storage-balanced mixed workloads. Compute and/or storage capacity can be easily scaled out by demand, by adding one or multiple appliances to the cluster.

	VSKy c100	VSKy i100	VSKy i200	VSKy s200	VSKy s410	VSKy s420
Rack Units	1U, 1-node	1U, 1-node	2U, 4-node	2U, 1-node	4U, 1-node	4U, 2-node
Compute/ per node	2 x Intel Xeon® E5-2630v3, 2.4 GHz (8 core)	2 x Intel Xeon® E5-2630v3, 2.4 GHz (8 core)	2 x Intel Xeon® E5-2630v3, 2.4 GHz (8 core)	2 x Intel Xeon® E5-2630v3, 2.4 GHz (8 core)	2 x Intel Xeon® E5-2630v3, 2.4 GHz (8 core)	2 x Intel Xeon® E5-2630v3, 2.4 GHz (8 core)
Memory/ per node	256 GB	256 GB	256 GB	256 GB	256 GB	256 GB
Networking/ per node	Dual-port 10 GBASET or 10G SFP+	Dual-port 10 GBASET or 10G SFP+	Dual-port 10 GBASET or 10G SFP+	Dual-port 10 GBASET or 10G SFP+	Dual-port 10 GBASET or 10G SFP+	Dual-port 10 GBASET or 10G SFP+
Storage/ per node	3 x 4TB 3.5" NL SAS HDD	7 x 1.2TB 2.5" SAS HDD	5 x 1.2TB 2.5" SAS HDD	3 x 4TB 3.5" NL SAS HDD + 8 x 4TB 3.5" SATA HDD	3 x 1.2TB 2.5" SAS HDD + 67 x 6TB 3.5" SATA/NL SAS HDD	3 x 1.2TB 2.5" SAS HDD + 32 x 6TB 3.5" SATA/NL SAS HDD
Caching	1 x 480 GB SSD	1 x 480 GB SSD	1 x 480 GB SSD	1 x 480 GB SSD	2 x 480 GB SSD	2 x 480 GB SSD
Optimized for	Compute intensive	Compute/Storage (balanced)	Compute/Storage (balanced)	Storage intensive	Storage intensive	Storage intensive

* Hardware specifications may differ, depending on customer order preference

