SnapScale X2 Clustered NAS Storage

Network Attached Storage has fulfilled many of the traditional IT needs by providing affordable data retention with simple management, and compatibility across multiple platforms. With the convenience and simplicity of Network Attached Storage it is difficult to imagine a business environment today that is not utilizing NAS, however with the explosion of data and the importance of compliance and uptime; traditional scale-up NAS solutions are quickly reaching limits of capacity, redundancy and performance within dynamic IT storage environments.

The SnapScale X2 from Overland Storage is a clustered NAS solution that solves the problems of traditional storage by enabling organizations with rapid or unpredictable data growth to scale capacity and performance infinitely without adding management complexity. Built on Overland Storage RAINcloud OS technology, SnapScale eliminates islands of storage, enabling easy and affordable scaling without having to predict capacity in advance. Offering user selectable levels of data redundancy, SnapScale writes data across multiple nodes and drives simultaneously for instant protection and high availability. The SnapScale hardware architecture and "single pane of glass" management creates a consistent user experience while both managing the existing global namespace and scaling storage as needed, without additional layers of administration.

While the benefits of SnapScale may be clearly evident for large businesses with petabytes of storage, implementing scalable file serving can be just as important for businesses much earlier in their lifecycle that have yet to encounter serious scaling limitations. By investing in the SnapScale architecture up front, smaller organizations can assure that their file serving infrastructure will grow to meet future needs painlessly and cost-effectively, regardless of how rapidly performance and capacity requirements increase over time.



Infinite Scalability

Let SnapScale grow with your data. Scale storage by populating available drive-bays within individual nodes, or add additional nodes to increase capacity and improve performance by spreading the workload across the cluster. SnapScale will add any additional capacity from new nodes or drives automatically, ensuring proper configuration and load balancing for optimal performance. SnapScale also provides an intuitive, browser-based interface to manage an entire cluster from a single pane of glass, regardless of capacity. There are no limits to the number of nodes or drives in a SnapScale cluster, allowing growth without boundaries, all while remaining online with superior data protection.

Global Namespace

Reduce the amount of infrastructure required, and prevent islands of storage from forming on your network by consolidating file storage with SnapScale. Whether managing small amounts of storage or petabytes of storage, the management of the SnapScale global namespace remains a simple and consistent experience. Increase the size of your SnapScale global namespace as needed, saving time and reducing capital costs by preventing the over purchasing of storage capacity. Create storage volumes without limits in the global namespace to eliminate the need for manual provisioning, or manually control volume usage by creating adjustable quotas for different network applications or departments.

High Performance

Traditional storage is limited in performance by the fixed amount of network bandwidth in the single head unit architecture, which leads to congestion and throughput bottlenecks as user base grows. With SnapScale, network bottlenecks are no longer a problem, because adding new nodes not only increases the usable storage in the global namespace, but increases aggregate performance across the network by balancing user connections and spreading data out across the cluster. All types of files benefit from performance improvements as bandwidth, file I/O, processing power and capacity expand with each node. Simply add additional SnapScale nodes as needed to an existing cluster to accelerate application performance and to keep up with an ever expanding user base, without downtime or tedious data migration.

High Availability

Standalone NAS has many single points of failure. Data loss or interruption can occur if any crucial hardware or software components fail, even when protected by proven RAID technologies. Unlike RAID however, SnapScale is designed to protect data by tolerating not only the failure of multiple drives, but even the failure of entire nodes with no downtime or offline rebuilding. Utilizing two selectable levels of data redundancy, SnapScale nodes create identical copies of files automatically when data is written to the global namespace, making node or drive failure completely transparent to the storage user or network application, by maintaining data availability. Completely remove all single points of failure with a SnapScale cluster and protect your businesses most crucial data with complete redundancy and protection.



Features

- Expand capacity and performance infinitely
- Simple management of large storage capacities
- Remote replication between SnapScale clusters or Win/Linux/UNIX servers
- Automatic HA failover
- Add additional nodes or drives as needed
- Hot spares for automatic drive repair
- Flexible Volumes
- Snapshots
- Home Directories



99.999%

Specifications

specifications		
Form Factor	6U rackmount (2U X 3 minimum cluster size)	
System Scalability	24GB - 256PB	
Processor	Intel Quad Core 2.4GHz	
Drives Supported	2TB, 3TB NL-SAS (Minimum 4 drives per node)	
RAIN Levels	2x or 3x data redundancy	
Network Connectivity	4 x GbE per node(2 back-end and 2 front-end)	
Capabilities	Remote Management, Global Namespace, Flexible Volumes, Snapshots, Replication*, High Availability, High Performance	
Network File Protocols	Microsoft Networks SMB (1.0) / CIFS (NTLM); CIFS via Mac OS X; NFS v3, (UDP/TCP)	
	Individual Node	OV-SSN301001 Minimum 3 Node Cluster (24 Port Switches not included)
Physical/Mounting	Width: 17.17 in (436.1mm)	Width: 17.17 in (436.1mm)
	Height: 3.36 in. (85.3mm)	Height: 10.08 in. (30.24mm) (For rack mounting height dependent on rack & rack post spacing)
	Depth: 26.32 in (668.5mm)	Depth: 26.32 in (668.5mm)
	Weight With Drives: 51lbs (23.1 kg) fully populated	Weight With Drives: 153lbs (69.3 kg) fully populated
	Weight without Drives: 38.5 lbs (17.5 kg)	Weight without Drives: 115.5 lbs (52.5 kg)
Agency Approvals	cTUVus, CE, VCCI, FCC Class A	cTUVus, CE, VCCI, FCC Class A
Power	Power Rating: 350 W autoranging hot swappable modules (1+1) Redundant 100 - 240 VAC, 50 - 60 Hz 4 - 2 Amps	Power Rating: 1050W autoranging 3 hot swappable modules (1+1) Redundant 100 - 240 VAC, 50 - 60 Hz 12 - 6 Amps
	Input Current: Max 4A (RMS) @ 115VAC 2A (RMS) @ 240VAC	Input Current: Max 12A (RMS) @ 115VAC 6A (RMS) @ 240VAC
	Power Consumption: Idle 225W /2Amps (12 HDDs)	Power Consumption: Idle 675W /6Amps (12 HDDs)

Power Consumption: Peak 280W 2.5 Amps (12 HDDs)

Heat Dissipation 1370 BTU Heat Dissipation 4110 BTU Operating Environment: Temperature: 50F to 104F (10C to 40C); Humidity: 20% to 80% (non-condensing); Vibration: 5G at (10 - 300 Hz Random for 120 min. max duration); Shock: 6 pulses of 20G half sine for 2ms all axis both directions; Altitude: -1000 ft to 10,000 ft (-305m to 3,048m) **Environmental Limits**

> Non-Operating Environment: Temperature: 14F to 140F (-10C to 65C); Humidity: 5% to 95% (non-condensing); Vibration: 2G at 5 - 500Hz for 90 min. max duration; Shock: 6 pulses of 20G half sine for 2ms all axis both directions; Altitude: -100 ft to 35,000 ft (-305m to 10,688m)

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DATASHEET