

COMPUTING

Scale's **N05** StorageNode with ICS™ technology

Scale Computing's **N05 StorageNode** is the perfect combination of low price and high performance to serve your archiving, virtualization or small business storage needs.

N05 StorageNodes are designed with the same easy-to-use ICS features as the standard *S line* StorageNodes, but with less density. N05 StorageNodes allow you to purchase storage as you need it, use SAN and NAS in the same cluster at the same time, and control storage with a simple web-based user interface. Providing enterprise features at an affordable price, the N05 StorageNode is the ideal solution for any small business.



Appliance Specifications

HARDWARE	MANAGEMENT	
(2) 500GB SATA Drives	Web (SSL) for management	
Protocol Support: iSCSI, NFS, CIFS/SAMBA	Serial console for initial set-up only	
105w Start up, 70w Operating Power	PERFORMANCE / CAPACITY	
(2) GigE ports		(2) 500GB SATA drives @ 5400RPM
Form Factor: 1U Rack-mountable		150 MB/Sec throughput per (3) node clusters
Proven HPC file system		+50 MB/Sec throughput for each additional node
		N05 Model Capacity: .5 TB Usable (1TB Raw)



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Product Configurations

Scale N05 StorageNode = 1U Rack-mountable Unit, 2 GB Cache, 2 Gigabit Ethernet Ports (copper)	
N05 StorageNode	(2) 500GB Drives (5400 RPM SATA)
Storage Capacities	
N05 StorageNode5 TB Usable (1 TB Raw)
Minimum Configuration	
	3 Nodes
Technical Highlights	
Data Protection	· All data is mirrored and striped across the nodes in the cluster
High Availability	· All data is mirrored on at least 2 nodes. This provides continuous uptime if a drive, network port, power supply or even an entire node stops working
Scalability	· Up to 512 nodes per cluster, more than 2.2 Pbs per single file system
Compatibility	· Nodes of different sizes can all participate in the same cluster and be used at full capacity (Limitation: 1 node cannot be bigger than 50% of the total cluster capacity)
Storage Area Network Support	
SAN Protocols	· iSCSI
Max LUNs	· 255
Hosts Supported	· Any standards-compliant iSCSI Initiator
Security	· IP based access control, CHAP Authentication, CRC based connection encryption
High Availability	· Connections supported to multiple nodes using iSCSI multi-path to connect to the same target/LUN
Network Attached Storage Support	
NAS Protocols	· NFS, CIFS
SECURITY / NFS	· IP/Host based access control
SECURITY / CIFS	· ADS Authentication (Kerberos)
SECURITY / High Availability	· Virtual IP Addresses are used to serve NAS protocols. In the case of a node/Ethernet failure another node will pick up the down IP and continue communication with the client without losing connectivity
Snapshots	
System Snapshots	· True copy-on-write snapshots—instant security, low overhead Flexible snapshot and replication allocation—no need for dedicated snapshot volumes
Recovery	· Any LUN/Share from any historical snapshot can be restored as a working copy
Replication	
Efficiency	· Copies changes at a block level (minimizing time and bandwidth)
Consistency	· Copies point in time snapshots to target cluster
Recovery	· Any LUN/Share from any available historical snapshot can be restored on the target cluster as a working copy
Scheduling	· Replication can be scheduled as continuous, or in 5 min, 10 min, 15 min, 30 min, 1 hour, 2 hour, 4 hour, 6 hour, 8 hour, 12 hour or daily intervals
Multi-site	· Replication can be scheduled as a target or a source site for up to 15 other sites simultaneously
Management Interface	· Serial Console and Flash-based Administrative GUI over https
Notification Methods	· Email, Syslog
Support	· Administrator controlled access to the cluster by Scale Support via SSH
Upgrades	· Upgrades are applied in a rolling fashion to maintain uptime by only removing a single box at a time from the cluster