

## All-Flash High-Performance SAN/NAS Solutions for Virtualization & OLTP

All-flash configurations are designed to deliver maximum IOPS and throughput for mission critical workloads and applications including server virtualization, VDI, and high load OLTP/database use cases.

### Performance Range

300K/150K R/W IOPS per Storage Pool based on 20x SSD in RAID10

### Appliance Configuration

Cisco UCS S3260 with two M5 servers, each containing:

- QuantaStor v4 Enterprise Edition
- Cisco UCS S3260 M5 Server
- 2x Intel Xeon Gold 5122 Processors
- 192GB RAM (8x 32GB RDIMM)
- 2x 480GB SATA 6G Read Intensive SFF (boot)
- 1x Cisco Modular RAID Controller with 2GB FBWC (boot)
- Cisco 12Gb SAS HBA
- 2x Dual-port 10/25/40/50GbE Ethernet Adapters
- 2x Dual-port Qlogic 16Gb FC Adapters (optional)

### Storage Grid Configuration

- Minimum 1x appliances (Each S3260 with two M5 servers, 2 nodes)
- Maximum 32x appliances (Each S3260 with two M5 servers, 64 nodes)

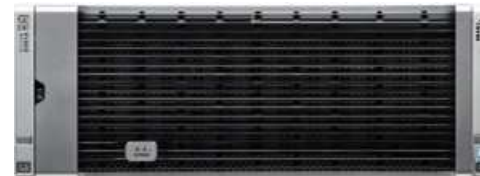
### Storage Enclosure Configuration

- Select SAS Read Intensive or Mixed-use SSDs
- Storage enclosures may be partially populated.

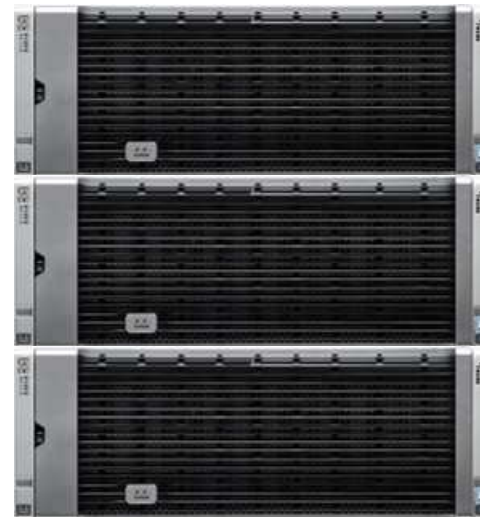
### Configuration Notes

- Storage grid scales to 32x controller pairs (32x S3260 appliances total)
- Storage grids may span sites and use different hardware configurations
- Recommend RAID10 or RAIDZ1 (2d+1p) layout for maximum IOPS
- NIST 800-53, CJIS, HIPAA Compliant
- VMware Certified (iSCSI, FC, NFS) & VAAI Certified
- FIPS 140-2 option available Q3/2018
- Encryption, compression, high-availability, remote-replication included
- Call-home via PagerDuty, Email, SNMP and Slack channel

### All-Flash Performance



Cisco UCS S3260 M5 servers



Storage grids expand by adding additional servers. Grids can span sites and can present global namespaces for simplified NAS access.



Unified web management interface is accessible from all appliances.



Cisco based hardware platform

## Hybrid Performance SAN/NAS Solutions for Virtualization & OLTP

Using a combination of HDD with SSD for read and write performance acceleration, QuantaStor hybrid SAN/NAS configurations are ideal for a broad spectrum of general application workloads and use cases including OLTP, VDI and server virtualization.

### Hybrid Performance Range

15K – 30K IOPS per Storage Pool  
2GB – 3GB/sec read/write sequential per Storage Pool

### Appliance Configuration

Cisco UCS S3260 with two M5 servers, each containing:

- QuantaStor v4 Enterprise Edition
- Cisco UCS S3260 M5 Server
- 2x Intel Xeon Gold 5118 Processors
- 384GB RAM (8x 32GB RDIMM)
- 2x 480GB SATA 6G Read Intensive SFF (boot)
- 1x Cisco Modular RAID Controller with 2GB FBWC (boot)
- Cisco 12Gb SAS HBA
- 2x Dual-port 10/25/40/50GbE Ethernet Adapters
- 2x Dual-port Qlogic 16Gb FC Adapters (optional)

### Storage Grid Configuration

- Minimum 1x appliances (Each S3260 with two M5 servers, 2 nodes)
- Maximum 32x appliances (Each S3260 with two M5 servers, 64 nodes)

### Storage Enclosure Configuration

- 4x 800GB SAS Mixed-use SSDs write acceleration (2x per Storage Pool)
- Storage enclosures may be partially populated.

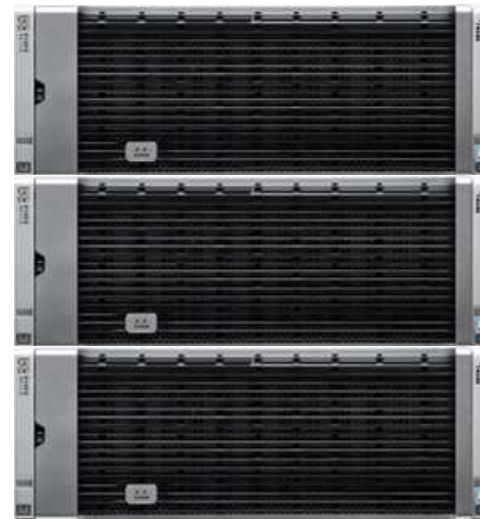
### Configuration Notes

- Storage grid scales to 32x controller pairs (32x S3260 appliances total)
- Storage grids may span sites and use different hardware configurations
- Recommend RAID10 or RAIDZ1 (2d+1p) layout for maximum IOPS
- NIST 800-53, CJIS, HIPAA Compliant
- VMware Certified (iSCSI, FC, NFS) & VAAI Certified
- FIPS 140-2 option available Q3/2018
- Encryption, compression, high-availability, remote-replication included
- Call-home via PagerDuty, Email, SNMP and Slack channel

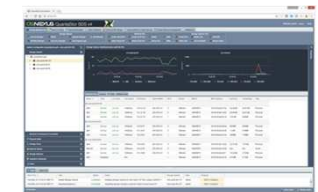
### Hybrid Performance & Capacity



Cisco UCS S3260 M5 servers



Storage grids expand by adding additional servers. Grids can span sites and can present global namespaces for simplified NAS access.



Unified web management interface is accessible from all appliances.



Cisco based hardware platform

## S3/SWIFT Object Storage for Biotech, Energy, Media & CDN Workloads

Using a combination of HDD with SSD for improved read and write performance acceleration QuantaStor scale-out object storage configurations are ideal for a broad spectrum object storage workloads. Object storage configurations can start with as few as three appliances and scale to sixty-four appliances in a single grid enabling organizations to easily scale on demand with zero downtime.

### Hybrid Performance Range

15K – 30K IOPS per Storage Pool

2GB – 3GB/sec read/write sequential per Storage Pool

### Appliance Configuration

3x to 64x QuantaStor SDS Appliances, each containing:

- QuantaStor SDS Enterprise Edition
- 1x or 2x Cisco UCS S3260 M5 Servers per enclosure
- 2x Intel Xeon Gold 6126 Processors
- 384GB RAM (8x 32GB RDIMM)
- 2x 480GB SATA 6G Read Intensive SFF (boot)
- 1x Cisco Modular RAID Controller with 2GB FBWC (boot)
- Cisco 12Gb SAS HBA
- 2x Dual-port 10/25/40/50GbE Ethernet Adapters
- 2x Dual-port Qlogic 16Gb FC Adapters (optional)

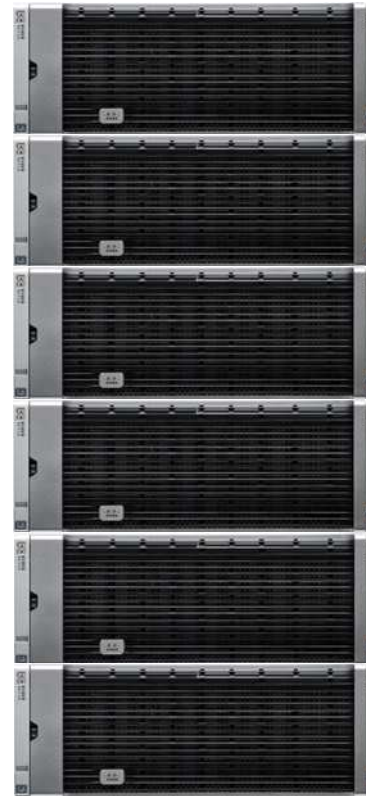
### Storage Grid Configuration

- Minimum 3x servers/appliances
- Maximum 64x servers/appliances

### Configuration Notes

- Usable capacity depends replica count or erasure coding selection. 66% usable is a good estimation guideline (4k+2m).
- Separate front-end and back-end networks are recommended but not required.
- Compression & AES 256 bit encryption included
- SMB/NFS gateway access included
- Integrates with Ceph Luminous, see documentation for S3 API coverage
- Automatable via extensive QuantaStor REST APIs & multi-platform QS CLI
- NIST 800-53, CJIS, HIPAA Compliant
- FIPS 140-2 option available Q3/2018
- Call-home via PagerDuty, Email, SNMP, Slack

### Hybrid Performance & Capacity



Cisco UCS S3260 M5 Servers  
(up to 720TB each)



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