

Seagate ClusterStor™ G200 with IBM® Spectrum Scale®



A New Choice for Unmatched Performance, Efficiency and Scale
from the Trusted Leader in HPC Storage

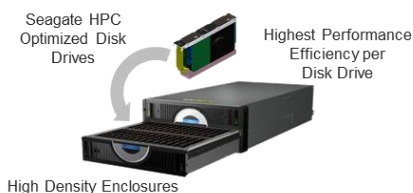


Engineered for productivity-critical HPC data-heavy applications, Seagate ClusterStor G200 with IBM® Spectrum Scale® software brings unmatched, performance efficiency, reliability and support for the IBM Spectrum Scale user community. The Seagate ClusterStor Engineered Solution stack with IBM Spectrum Scale solution features a unified modular architecture that integrates all of the IBM Spectrum Scale Network Shared Disk (NSD) user data and meta data functions into a single Seagate high-density disk enclosure with high-availability server pairs enabling the best in reliability, performance efficiency and scalability. Engineered at the rack level to eliminate single points of failure and providing high-availability with ease of deployment, Seagate's engineers have run rigorous component, system and manufacturing test cycles to validate the holistic solution, ensuring tight integration as well as superior quality, reliability and performance.

Assembled, configured and ready to deploy, the ClusterStor G200 engineered solution provides a superior out of the box solution experience that gets you to production capability quickly.

Seagate ClusterStor G200 with IBM Spectrum Scale brings users the benefits of ClusterStor's industry-leading performance, including ClusterStor's ability to reduce data center floor space, power, cooling and administrative costs. This enables customers to reach maximum sustained application performance at the lowest Total Cost of Ownership (TCO) possible. The ClusterStor solution provides a wide range of service and support options with a single source for end-to-end solution support from Seagate, the storage industry leader.

Scalable Storage Unit (SSU)



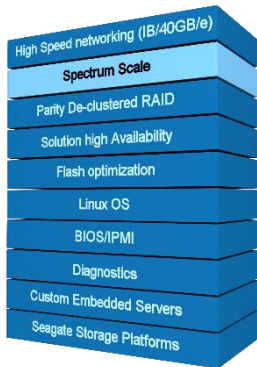
Seagate ClusterStor with IBM Spectrum Scale

- Seagate engineered software and hardware solution stack provides superior manageability, reliability and customer support
- Network Shared Disk and Meta Data function is consolidated into the high density storage enclosure providing high efficiency performance
- No single points of failure - enables high storage system level productivity
- ClusterStor GridRAID – Parity De-clustered RAID, enables faster disk re-build maximizing system productivity
- High Productivity Manageability – seamless integration, monitoring and reporting of key hardware and software telemetry elements to ensure high availability data access and performance
- Delivered pre-configured and tested, enables faster time to production and long term reliability
- Investment protection - can add to an existing Seagate ClusterStor IBM Spectrum Scale file system for performance and capacity enhancement
- Systems via disk to disk and disk to tape data mover enablement
- Consolidation for NFS and IBM Spectrum Scale compute clients
- ClusterStor HPC Drive – The industry's highest performance 3.5" drive that enhance the ability of GPFS to address a broad range of sequential, random and mixed customer workloads

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Seagate ClusterStor G200 with IBM Spectrum Scale Software delivers...

High-performance storage that's purpose-built to address the needs of commercial technical computing and enterprise data analytic applications

Robust, enterprise-ready features and management tools already proven in many commercial application environments

Seagate disk drives, disk enclosures, NSD servers, solution integration, system validation test and field support - Seagate is the only vendor to build and support the end to end solution for the IBM Spectrum Scale community

Simplified data management and integrated information lifecycle tools - capable of managing petabytes of data and billions of files to control soaring costs of exponential data growth

IBM Spectrum Scale native features – Seamless integration and support for all IBM Spectrum Scale v4.1 Standard Edition features including Information Life Cycle Management, Clustered NFS and productivity management

Seagate Services

Maximize Value by Bringing Seagate's Expertise to You



Professional Services

TIME TO VALUE
Strategic consulting, solution design, implementation and migration



Education Services

DEVELOP "IN HOUSE" EXPERTISE
Develop your team's skills and expertise to optimize your investment



Support Services

EXPERT HELP
Support from trusted experts, with SLAs that meet your critical business needs

Expert Consulting, Services and Support from Seagate and Our Certified Partners

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ClusterStor G200 Specifications	
General Information (1) (2) (3) and (4)	
Parallel File System Performance	Up to 63 GB/s bandwidth performance per 42RU height rack
File System Capacity (raw)	Up to 4,480 TB raw disk capacity per rack using 8TB SAS drives
Scale Storage Unit (SSU) for Spectrum Scale	Seagate 5U84 Storage Chassis Dual Network Shared Disks Servers, configured in a High Availability pair
# of SSUs	Up to 7 per rack
Network Shared Disks Servers (NSD)	Up to 14 per rack
Client Access	InfiniBand QDR or FDR, or Ethernet 10GE or 40GE
Client Software	IBM® Spectrum Scale® v3.5 or v4.1
File System	IBM® Spectrum Scale® v4.1 Standard Edition
Disk Drives	
SSU	Dual ported 6Gb/s SAS drives (4, 6, 8 TB Enterprise Capacity or ClusterStor HPC 4TB)
Solid State Disk (metadata management)	Dual ported SAS SSDs
Hot Swappable	4 or 8 SSDs, RAID 10; 80 or 76 HDDs, 3.5" HDDs, ClusterStor GridRAID
Dimensions	
Height	1,991 mm (78.4 in)
Width	600 mm (23.62 in)
Depth	1,200 mm (47.24 in)
Weight	1,168 Kg (2,575 lbs)
System Availability	
Hot Swappable	Disk Drives, Power Supplies, Fans, Power Cooling Modules, and Server Modules
Power	Redundant Power Supplies and Power Cooling Modules
Power Consumption	
7 SSU Rack Configuration	12.93 Kilowatts Nominal
Heat Dissipation	
7 SSU Rack Configuration	44,124 BTU Nominal
Altitude and Temperatures	
Operational Altitude	-30 to 3048m (-100 to 10,000ft)
Operational Temperature Range	5°C to 32°C
Temperature Variance	De-rated by 1°C/300m above 900m below the specified maximum temp.
Humidity	20% to 80% non-condensing
Warranty Information	
Hardware	1 Year
Software	90 Days
Environmental Standards	
<p>Disk enclosures 80 PLUS® Gold Certified power efficiency with adaptive cooling, or option for 90 PLUS® Platinum Certified power efficiency with adaptive cooling technology. Seagate is registered through BSI to the international standard for environmental management systems ISO 14001:2004 and holds certificates for each of its three manufacturing locations at Havant UK, Guadalajara Mexico and Seremban Malaysia.</p> <p>(1) Rack configuration attributes above provide a representative example. (2) Seagate's new software defined storage appliance, which combines ClusterStor with IBM Spectrum Scale, is expected to be available from Seagate's sales partners late in 2015. (3) 8TB, ClusterStor HPC Drive and Ethernet Client Access will be available in the first quarter of 2016. (4) ClusterStor Manger (GUI) support will be available in the first half of 2016.</p>	

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