

About BlueArc

BlueArc is a leading provider of high performance unified network storage systems to enterprise markets, as well as data intensive markets, such as electronic discovery, entertainment, federal government, higher education, Internet services, oil and gas and life sciences.

Our products support both network attached storage, or NAS, and storage area network, or SAN, services on a converged network storage platform.

We enable companies to expand the ways they explore, discover, research, create, process and innovate in data-intensive environments.

Our products replace complex and performance-limited products with high performance, scalable and easy to use systems capable of handling the most data intensive applications and environments.

Further, we believe that our energy efficient design and our products' ability to consolidate legacy storage infrastructures, dramatically increases storage utilization rates and reduces our customers' total cost of ownership.



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Mercury Network Storage System

BlueArc's Next Generation Hybrid-Core Platform

HIGHLIGHTS

- Massive computing parallelism delivers the performance to support multiple, varied applications
- Scales up to 8PB usable capacity, a 256TB file system, and thousands of concurrent users
- Clusters up to four nodes with Cluster Namespace to enable horizontal scalability
- Concurrent support for iSCSI, NFS and CIFS eliminates storage silos
- Dynamic, policy-based data migration and caching simplify management of infrequently accessed data
- Optimized metadata management
- Integration with many legacy third-party network attached storage devices protects prior investment
- Support for multiple, best-in-class storage options for varied workloads

The BlueArc Mercury™ Server is a next generation network storage platform that consolidates multiple applications and simplifies storage management for businesses with mid-range storage requirements—without compromising performance and scalability. Its open architecture excels across a variety of application environments, including general purpose file systems, database, messaging and online fixed content.

The Mercury platform leverages a hybrid-core architecture that delivers the highest performance available in mid-range systems. Employing field programmable gate arrays (FPGAs) and traditional multi-core processors, this architecture separates data movement and management processes that normally compete for system resources. Data is transferred between logical blocks in a point-to-point fashion, preventing conflicts or bottlenecks and ensuring consistently high performance. The hybrid-core architecture works in combination with BlueArc's advanced data management services and an integrated Storage Ecosystem to deliver an optimized storage solution.

Mercury's unique hardware accelerated file system delivers tremendous system performance while multiple levels of virtualization overcome the complexities of large scale file system management and data availability. BlueArc's Cluster Namespace, or file system virtualization is a global namespace that integrates all elements to provide a single logical view of data regardless of where it resides in physical storage. Mercury also provides a common, policy based management environment allowing administrators to reduce infrastructure costs by automatically placing data on the most cost-effective tier of storage without compromising accessibility. The Mercury Storage Ecosystem supports a wide variety of storage arrays and media, allowing organizations to create an optimal, tiered storage environment, including high-performance online, moderate performance nearline, and infrequently accessed archival data.

Mercury Series

| MERCURY 50/55 | | MERCURY 100/110 | |
|-----------------------------|----------|-----------------------------|----------------------|
| System Class | Midrange | System Class | Performance Midrange |
| NFS Throughput (IOzone) | 700 MB/s | NFS Throughput (IOzone) | 1100 MB/s |
| Max Total Storage Capacity | 4PB | Max Total Storage Capacity | 8PB |
| Max Number of Cluster Nodes | 2 | Max Number of Cluster Nodes | 4 |

Hardware Specifications

LAN INTERFACE

| | |
|----------------------------------|-----|
| Number of 1 GbE Ports (Copper) | 6 |
| Number of 10 GbE Ports (Optical) | 2 |
| Dual 1GbE/ 10 GbE Connectivity | Yes |
| Link Aggregation (Like Ports) | Yes |

STORAGE SUBSYSTEM INTERFACE

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|-------------------------|---------|
| Number of FC Ports | 4 |
| FC Port Speed | 4 Gbps |
| Aggregate FC Throughput | 16 Gbps |

CLUSTERING

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|-------------------|-------------------------------|
| Interfaces | 2 x 10 GbE (Active/Active) |
| High Availability | True Active-Active Clustering |
| Optional Licenses | Cluster Namespace, Clustering |

PRIVATE MANAGEMENT NETWORK

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|------------------------|------------|
| Number of Native Ports | 2 x 1GbE |
| Number of Switch Ports | 5 x 100MbE |

INTERNAL STORAGE

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|--|-----------|
| Number of Internal Hard Drives (OS Only, not data storage) | 2 |
| Type of Internal Hard Drives | 2.5" SATA |

DIMENSIONS

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|-------------------|------------------|
| Height | 3U, 5.1" (130mm) |
| Width | 17.2" (437mm) |
| Depth | 27" (685mm) |
| Weight (Racked) | 55 lbs (25 Kg) |
| Weight (shipping) | 60 lbs (27.2 Kg) |

POWER AND COOLING

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|----------------------------|---|
| Number of Cooling Fans | 3 (M50/100)/ 2 (M55/110) hot-swappable |
| Number of Power Supplies | 2 load-sharing, hot-swappable |
| Voltage Range | 100 to 240 VAC |
| Amperage (Average / Max) | 110 VAC - 2.3A / 2.8A 208 VAC - 1.2A / 1.5A 230 VAC - 1.1A / 1.4A |
| Power Supply Rating | 450W |
| Average Power Usage | 250W |
| Average Thermal (BTU / hr) | 853 |
| Max Power Usage | 310W |
| Max Thermal (BTU / hr) | 1057 |
| NVRAM Battery | 1 hot-swappable |
| NVRAM Recovery Window | 72 hours |

REGULATORY COMPLIANCE

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|--------|--|
| RoHS | <ul style="list-style-type: none"> RoHS 6 China RoHS Labelled |
| Safety | <ul style="list-style-type: none"> EU: EN60950-1, Low Voltage 2006/95/EC Canada: CSA 60950-1 US: UL 60950-1 |
| EMC | <ul style="list-style-type: none"> EU: EN55022 class A, EN55024, EN61000 US: FCC Part 15 Subpart B, class A Japan: VCCI class A |

FILE SYSTEM SPECIFICATIONS

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|--------------------------------------|---|
| File system | SiliconFS, BlueArc Hardware Accelerated File System |
| Max File System Size | 256 TB |
| Number of File Systems per Namespace | 128 |
| Number of Directory Entries | 16 million |
| Number of Snapshots per File System | 1024 |
| Number of Virtual Volumes | 10,000 |
| Number of Virtual Servers | 64 |
| Number of IP Addresses | 256 |

STORAGE SPECIFICATIONS

| | |
|-------------------------------------|---|
| Hard Disk Drives | Tiered Storage Supported with Solid State Disk (SSD), Fibre Channel (FC), Serial ATA (SATA), and Serial Attached SCSI (SAS) |
| BlueArc Storage Arrays | <ul style="list-style-type: none"> • RS12: Dual hardware-based FC RAID controllers in a 12 drive enclosure for SSD, SAS and Nearline SAS drives |
| Hitachi Data Systems Storage Arrays | <ul style="list-style-type: none"> • HDS Adaptable Modular Storage - WMS 100, AMS 200, 500, 1000, 2100, 2300, 2500 • HDS Universal Storage Platform - USP/NSC and USP-V/USP-VM |
| Data Direct Networks Storage Arrays | <ul style="list-style-type: none"> • S2A6620: Dual hardware-based FC-RAID with SAS and SATA disk drives in a 4U 60 drive enclosure. • S2A9900: Dense Archive solution scaling from 300 to 1200 SATA drives in one to two racks. |

SOFTWARE SPECIFICATIONS

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|--------------------------------------|---|
| Network File System Protocol Support | <ul style="list-style-type: none"> • Common Internet File System (CIFS) • Network Files System (NFS) - v2, v3, v4 • iSCSI |
| Network Transport Protocols | <ul style="list-style-type: none"> • NDMP v2, v3, and v4 • File Transfer Protocol (FTP) • Ethernet • TCP/IP and UDP |
| Management Protocols | HTTP, SSL, SSH, SNMP v1 and v2c, NIS, DNS, WINS, NTP, Email Alerts |

SYSTEM MANAGEMENT SOFTWARE

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|-------------------------------|---|
| Management Interfaces | <ul style="list-style-type: none"> • GUI based: web browser accessible • CLI-based: Telnet, Serial • Scripting for automated management |
| Hardware Management Includes: | <ul style="list-style-type: none"> • Mercury Storage Servers • RAID Controllers • Disk Subsystems • Fibre Channel Switches • Enhanced Systems & Performance Monitoring |
| Management Access Control | <ul style="list-style-type: none"> • User/Password authentication • Management port definition • Management access method • Access Control Lists (ACL's) • NIS, Active Directory, and LDAP |

SOFTWARE FEATURES

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|--------------------|--|
| Standard Features: | <ul style="list-style-type: none"> • SiliconFS, BlueArc Hardware Accelerated File System • Network File System Protocol Support • Centralized Management • Optimized metadata management • Snapshots & Quick Restore • Virtual Servers • Virtual Volumes • Virtual Storage Pools • Storage Balancing • Quotas - volume, group or user • NDMP (LAN-free backup) • Anti-Virus Support • RAID 1, 10, 5, 6 protection |
| | <ul style="list-style-type: none"> • Data Migrator • Dynamic Read Caching • Active-Active Clustering • Global Namespace • Replication • File System Rollback from Snapshot • Virtual Server Migration • Secure Virtual Servers |