

Adaptec® Snap Server™ 520



Storage performance with flexible capacity expansion

The Adaptec Snap Server 520 combines best-in-class performance with optional capacity expansion that helps you maximize your storage budget. With legendary Snap Server ease of use and operation, an integrated suite of data protection software, and scalability to 26TB, it is ideal for any size company that needs cost-effective, yet scalable data storage for its growing business.

Best-in-class performance

The Snap Server 520 is built on a 64-bit system architecture with AMD Opteron™ technology and 512MB of memory for fast throughput. It provides cost-effective Serial ATA (SATA) disk drives and with GuardianOS™ software it beats the competition with the fastest random data access speeds.

Availability

The Snap Server 520 integrates availability features rarely found in a valuebased storage solution, including Ethernet teaming failover, (combining two Ethernet ports on a single address, which allows a path to fail without taking down the network), hot-swappable drives, and the ability to boot from any drive. Another rarely found feature is support for both four drives and dual power supplies in a 1U system.

High scalability

The Snap Server 520 easily grows as your data grows. Start with your choice of a 1TB or 2TB unit, and as needs change add up to four Adaptec SANbloc S50 JBOD arrays, to a maximum of 26TB. With Instant Capacity Expansion (I.C.E.) the new capacity is instantly available, without the traditional RAID reconfiguration downtime.

Block and file data storage

iSCSI target support built into the latest version of the award-winning GuardianOS platform allows you to store database, email, and other block data on the same server where you store file data. GuardianOS also provides automatic cross-platform file sharing, Unicode support, global hot spare support, and enhanced quota management.

Integrated data protection

The Snap Server 520 includes a complete suite of data protection software. It integrates a Workgroup Edition of BakBone NetVault Server, which includes a free upgrade to a 500GB Virtual Tape Library; CA eTrust Antivirus Software, and support for third-party backup agents. Optional Snap Enterprise Data Replicator software family provides advanced data protection, movement, and management for any business, while the optional S2S Synchronization v2 software provides basic replication. Optional StorAssure Personal Edition software provides automated, easy-to-use, client backup for desktop and laptop systems.

Centralized management

Simple installation and browser-based management make Snap Servers ideal for sites with little or no IT support staff. Snap Server Manager software consolidates the management of multiple units into a single console.

Product Highlights

- Best-in class price/performance
- Capacities ranging from 1TB to 26TB
- Instant Capacity Expansion™ (I.C.E.)
- Cross-platform support right out of the box
- Unified block and file support
- Hot-swappable disk drives
- Integrated CA eTrust Antivirus software
- Active Directory Service (ADS) Integration
- Integrated BakBone NetVault Software with an upgrade to a 500GB Virtual Tape Library
- Backup agent and NDMP agent support
- Snapshot technology
- Optional Snap EDR enterprise-class data replication, management, and protection
- Optional S2S Synchronization software
- Optional StorAssure Personal Edition client backup software

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Specifications

GuardianOS Specifications

Network Transport Protocols

- TCP/IP
- UDP/IP
- AppleTalk

Network File Protocols

- Microsoft Networks (CIFS/SMB)
- Linux/UNIX (NFS v2/3 over TCP & UDP)
- Apple (AFP v2/v3)
- Web (HTTP 1.1/HTTPS)
- File Transport Protocol (FTP)

Network Block Protocols iSCSI Target Support

Supports qualified iSCSI software and hardware initiators (see details below).

Supports Internet Storage Name Services (iSNS). Microsoft iSNS v3.0 Server has been qualified.

iSCSI Software Initiator Support

- Windows: Microsoft iSCSI Initiator v1.03, v1.04, v1.05, v1.06, v2.0
- Solaris: Cisco SN 5400 Series iSCSI Driver v3.3.5
- Linux: UNH-iSCSI Initiator v1.5.3
- UNIX: HP-UX 11.0
- NetWare: NetWare Initiator 6.5 SP1

iSCSI Hardware Initiator Support

- Adaptec 7211C (copper) HBA Intel PRO/1000T IP Storage Adapter v2.0, 2.1
- Alacritech SES1001 iSCSI Adapter

Network Client Types

- Windows: 98, Me, NT 4.0, 2000, 2003, XP
- Macintosh: OS 8.x, 9.x, 10.x
- UNIX: Solaris 7, 8, 9; HP-UX 11; AIX 4.3.3, 5.x
- Linux: Red Hat Linux 7.x, 8.x, 9.x

Server Emulation

- Windows 2000/2003
- Windows NT 4.0
- AppleShare
- NFS v2/3
- FTP

Automatic IP Address Assignment

Supports DHCP for automatic assignment of IP address

Network Security

- Microsoft Active Directory Service (ADS Member Server)
- Kerberos Authentication v5
- Windows NT Domain (member server)
- File and Folder Access Control List (ACL) Security for Users and Groups
- UNIX Network Information Service (NIS) Support
- UID/GID mapping between NFS & CIFS
- Secure Sockets Layer (SSL) v2/v3 128-bit Encryption
- Transport Layer Security (TLS) v1
- CHAP Authentication (iSCSI target level)

System Management

- CA eTrust Antivirus Software
- Browser-based User Interface for Remote Administration
- Snap Server Manager Client-based Setup Utility (platform-independent)
- SNMP (MIB II and Host Resource MIB)
- User Disk Space Quotas for Windows, Macintosh, and UNIX/Linux
- Group Disk Space Quotas for NIS Groups
- Environmental Monitoring
- Email Notification Alerts
- Network Time Protocol Support

RAID Options

The Snap Server 520 can be configured for enhanced performance or maximum file protection. Options include:

- RAID 5 (drive striping with parity): For each array, the size of one drive is reserved for parity. Provides the best combination of performance and data protection.
- RAID 1 (drive mirroring): One or more drives duplicate one drive for maximum data protection.
- RAID 0 (drive striping): Large virtual drive with data striped across all drives of the array to provide maximum performance with no loss in usable capacity.
- Global hot spare support
- Instant Capacity Expansion (I.C.E.) logically groups RAIDs for dynamic online scalability.
- RAID 1/5 background scanner constantly monitors for disk media errors and if it's possible to repair the error, automatically rewrites the "marginal" block.

Data Protection

- Snapshots: Snapshot technology enables immediate or scheduled point-in-time images of the file system.
- Enterprise-Class Replication: Optional Snap EDR simplifies cross-platform management and protection of distributed data.
- Replication: Optional S2S Synchronization v2 for Snap Server data availability.
- Local Backup: Integrated BakBone Netvault WorkGroup Edition.
- Network Backup: Includes an upgrade to a 500GB VTL for disk-to-disk backup. Supports VERITAS NetBackup/Backup Exec, CA BrightStor ARCserve/Enterprise, Legato NetWorker, BakBone Netvault, and Microsoft Backup Software for Windows 98, Me, NT, 2000, 2003, XP. Compatible with Dantz Retrospect for Macintosh.
- UPS Support: APC brand UPS with Network Management Cards are supported for graceful system shutdown.

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Specifications

<p>Snap Server 520 Specifications</p> <p>Physical</p> <ul style="list-style-type: none"> • Width: 17.2 in (436.8 mm) • Height: 1.75 in (44.45 mm) 1U • Depth: 27.0 in (685.8 mm) • Weight: 40.0 lbs (18.2 kg) <p>Mounting</p> <p>Custom 19" rackmount slide rails included</p> <p>Agency Certifications</p> <p>UL, cUL, CE, FCC Class A, Nemko, TuV</p> <p>Processor</p> <p>AMD Opteron processor, with 1MB L2 cache and 1000MHz HyperTransport™</p> <p>Memory</p> <ul style="list-style-type: none"> • 512MB DDR 1 400 ECC RAM standard • 4 DIMM sockets supporting up to 4GB DDR 1 400 ECC RAM <p>Drive Configuration</p> <ul style="list-style-type: none"> • 4 x 250GB 7200 RPM hot-swappable SATA drives (1TB raw capacity) • 4 x 500GB 7200 RPM hot-swappable SATA drives (2TB raw capacity) <p>Standard LCD Display</p> <p>Backlit, 2 line, 16 character with system ID, IP address</p> <p>Network Interface</p> <ul style="list-style-type: none"> • Dual-Gigabit Ethernet Ports (autosensing 10/100/1000Base-T, dual RJ-45 network connections) • Support for stand-alone, failover, and load-balancing modes 	<p>Expansion Array Interface</p> <ul style="list-style-type: none"> • Requires optional Serial Attached SCSI host bus adapter for expansion • Supports up to 4 SANblocc S50 JBOD expansion arrays <p>PCI-X Expansion Card Support</p> <p>Supports two PCI-X expansion cards: one half-height and one full-height</p> <p>Local Backup Interface</p> <p>Ultra320 SCSI 68-pin VHDCI (integrated)</p> <p>Power</p> <ul style="list-style-type: none"> • Power Supply: Single 400W supply; add a second hot-swappable 400W power supply for redundant failover • Power Rating: 400W 100-240 VAC, 50-60Hz, autosensing • Input Current: 3.4A peak for 115VAC, 1.7A peak for 230VAC • Power Consumption: 390W peak • Heat Dissipation: 1057 BTUs/hr avg. <p>Environmental Limits, Operating</p> <ul style="list-style-type: none"> • Temperature: 50° F to 95° F, (10° C to 35° C) • Non-Condensing Humidity: 20% to 80% • Vibration: .01G at 10-300Hz random for up to 120 minutes • Shock: 6 pulses of 33G for up to 2ms • Altitude: 0 ft to 10,000 ft (0 m to 3,048 m) <p>Environmental Limits, Non-operating</p> <ul style="list-style-type: none"> • Temperature 14° F to 149° F, (-10° C to 65° C) • Non-Condensing Humidity: 5% to 95% • Vibration: 2G at 5-500Hz for up to 90 minutes • Altitude: 0 ft to 35,000 ft (0 m to 10,668 m) 	<p>Worldwide Warranty</p> <p>Snap Server hardware and software are backed by world-class service and support to protect your investment from downtime. With Adaptec services, you have complete peace of mind. Standard services with the Snap Server include:</p> <ul style="list-style-type: none"> • Three-year limited hardware warranty • 90-day software support <p>Optional Support Programs</p> <p>Today's mission-critical environments require maximum uptime and rapid resolution should problems arise. Adaptec provides a comprehensive suite of service and support upgrade options created to help you protect your business operations. Providing additional levels of technical service and support, Adaptec services extends the standard protection packages already included with all Adaptec products, including the market-leading Snap Server products. From extending your warranty phone support to complete onsite support for same day recovery, you can select the level of support that best fits your business and resource requirements.</p> <p>For more information about Adaptec services, please contact your distributor. Or, call Adaptec at 1-800-442-7274 or visit us online at: http://www.adaptec.com/target/servicereg.html</p>
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