

Snap Server™ 18000



High-Performance Block and File Storage for Enterprise Data Management

The Adaptec® Snap Server 18000 redefines cost-effective enterprise storage with its high-powered performance, unified block and file storage architecture, centralized storage management, comprehensive data protection suite, advanced data availability, and instant, best-in-class, scalability. Ideal for primary and secondary storage with a wide range of applications, the 18000 simplifies the management of data distributed throughout the enterprise.

Unmatched Price/Performance

Advanced performance features, including dual Intel Xeon processors with Symmetric Multi-Processing (SMP) capabilities, Serial ATA (SATA) disk drives, 2GB of Double Data Rate (DDR) system memory and 512MB of battery-backed cache make the 18000 the fastest Snap Server ever. Combine this level of performance with an unbelievable price and it's easy to see that the 18000 delivers unbeatable value in its class.

Best-in-Class Scalability

Add SANbloc S50 JBOD expansion arrays to meet growing storage needs, up to a total capacity of 44TB. The unique Instant Capacity Expansion (I.C.E.) feature for on-demand scalability and provisioning allows for easily increasing storage space without the risk involved with time-consuming RAID reconfiguration.

Advanced Data Availability

RAID 5, hot-swappable SATA disk drives, redundant power and cooling, dual-Gigabit Ethernet ports, battery-backed nonvolatile memory (NVRAM), and UPS support maximize system and data availability. Optional replication software delivers advanced, asynchronous byte-level data replication ideal for nearline backup or offsite disaster recovery.

The feature-rich 18000 is also an ideal solution for common storage challenges.

Application Server Storage

The Snap Server 18000 supports the Microsoft iSCSI initiator making it ideal for storing Microsoft Exchange and SQL Server data. The 18000 also supports iSCSI initiators for Solaris and Linux and can easily be used for cost effective capacity expansion of existing servers. iSCSI removes the distance limitations associated with direct-attached storage (DAS) and leverages industry-standard Ethernet to eliminate the cost and complexity associated with Fibre Channel storage area networks (SANs).

Storage Consolidation

Consolidating storage allows enterprises to significantly increase return on investment (ROI) and reduce the total cost of ownership (TCO). By integrating iSCSI to offer simultaneous block and file storage on a single device, the Snap Server 18000 eliminates the need for disparate storage pools, simplifies data management, consolidates storage resources, and maximizes storage dollars.

Accelerated Backup

Reduce backup and restore times by backing up directly to the Snap Server 18000 and then archiving to tape. The native snapshot technology embedded in the GuardianOS provides consistent, point-in-time incremental backups that can be stored online to further reduce tape costs. Integrated BakBone NetVault software, backup agent support for VERITAS, CA, and Legato, and Network Data Management Protocol (NDMP) support provide the ultimate backup flexibility.

Key Features

Unified Block and File Storage with Industry-Standard iSCSI Support

Scalable from 2TB to 44TB

Dual Intel Xeon Processors

Battery-Backed NVRAM

Redundant Hardware Components

Snapshot Technology

Integrated CA eTrust Antivirus Software

Active Directory Service (ADS) Support

Embedded BakBone NetVault Software

NDMP Support

Optional Snap EDR Enterprise-Class Data Replication, Management, and Protection

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GuardianOS Specifications

<p>Network Transport Protocols</p> <ul style="list-style-type: none"> • TCP/IP • UDP/IP • AppleTalk <p>Network File Protocols</p> <ul style="list-style-type: none"> • Microsoft Networks (CIFS/SMB) • UNIX (NFS v2/3) • Apple (AFP 3.0) • Internet (HTTP 1.1) • File Transport Protocol (FTP) <p>Network Block Protocols</p> <p>iSCSI Target Support</p> <ul style="list-style-type: none"> • Snap Servers running GuardianOS v3 SP1 or higher <p>iSCSI Software Initiator Support</p> <ul style="list-style-type: none"> • Windows: Microsoft iSCSI Initiator v1.03, 1.04, 2.0 • Solaris: Cisco SN 5400 Series iSCSI Driver v3.3.5 • Linux: UNH-iSCSI Initiator v1.5.4 <p>iSCSI Hardware Initiator Support</p> <ul style="list-style-type: none"> • Adaptec 7211C (copper) iSCSI Adapter • Intel PRO/1000T IP Storage Adapter v2.0, 2.1 • Alacritech SES1001 iSCSI Adapter <p>Network Client Types</p> <ul style="list-style-type: none"> • Windows: 95, 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 <p>Server Emulation</p> <ul style="list-style-type: none"> • Windows 2000/2003 • Windows NT 4.0 • AppleShare 6.0 • NFS v2/3 • FTP <p>Automatic IP Address Assignment</p> <ul style="list-style-type: none"> • Supports DHCP for automatic assignment of IP address 	<p>Network Security</p> <ul style="list-style-type: none"> • CA eTrust Antivirus Software • Microsoft Active Directory Service (ADS Member Server) • Kerberos Authentication v5 • CHAP Authentication (iSCSI target level) • Microsoft Lightweight Directory Access Protocol (LDAP v3 client) • Windows NT Domain (member server) • UNIX Network Information Service (NIS) Support • File and Folder Access Control List (ACL) Security for Users and Groups • Secure Sockets Layer (SSL) v2/3 128-bit Encryption • Transport Layer Security (TLS) v1 <p>System Management</p> <ul style="list-style-type: none"> • Browser-based User Interface for Remote Administration • Snap Server Manager™ Client-based Setup Utility (platform-independent) • Secure Shell (SSH) for backup agent installation • SNMP (MIB II and Host Resource MIB) • User Disk Space Quotas for Windows, Macintosh, and UNIX/Linux • Group Disk Space Quotas for UNIX/Linux • Environmental Monitoring • Email Notification Alerts <p>RAID Options</p> <p>The Snap Server 18000 can be configured for enhanced performance or maximum file protection. Options include:</p> <ul style="list-style-type: none"> • 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. • 24 drives maximum per RAID • Global hot spare support • Instant Capacity Expansion (I.C.E.) logically groups RAIDs for dynamic online scalability • 16TB maximum per volume 	<p>Data Protection</p> <ul style="list-style-type: none"> • Snapshots: Snapshot technology enables immediate or scheduled point-in-time images of the file system. Supports up to 250 concurrent snapshots.¹ • Replication: Optional S2S v2 byte-level replication for cost-effective nearline backup and recovery. • Enterprise-Class Replication: Optional Snap EDR offers enhanced security, performance and management for demanding enterprise environments. • Local Backup: Integrated BakBone NetVault Workgroup Edition. • Network Backup: Supports VERITAS NetBackup/Backup Exec, CA BrightStor ARCserve/Enterprise, Legato NetWorker, BakBone NetVault, Microsoft Backup Software for Windows 95, 98, Me, NT, 2000, XP, and NDMP v3, v4. 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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¹ GuardianOS supports a maximum of 250 concurrent snapshots minus the number of active volumes.

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Snap Server 18000 Specifications

<p>Physical</p> <ul style="list-style-type: none"> Width: 17.3 in. (439.4 mm) Height: 3.5 in. (88.9 mm), 2U Depth: 26.5 in. (673 mm) Weight: 70 lbs. (31.75 kg) <p>Agency Certifications</p> <ul style="list-style-type: none"> UL, cUL, CE, FCC Class A, C-Tick, Nemko, TuV <p>Processor</p> <ul style="list-style-type: none"> Dual 3.06GHz Intel Xeon Processors with Symmetric Multi-Processing (SMP) Premium configuration: 1MB L2 cache; Standard configuration: 512KB L2 cache 533 MHz front-side system bus <p>ECC Memory</p> <ul style="list-style-type: none"> 2GB PC2100 DDR SDRAM running at 266MHz <p>Nonvolatile Memory</p> <ul style="list-style-type: none"> 512MB Battery-backed NVRAM <p>Drive Configuration</p> <ul style="list-style-type: none"> 2TB: Eight (8) 250GB hot-swappable Serial ATA (SATA) drives with 2TB raw capacity Preconfigured as a RAID 5 array 	<p>Network Interface</p> <ul style="list-style-type: none"> Dual-Gigabit Ethernet ports (autosensing 10/100/1000) Support for stand-alone, failover and load-balancing modes <p>Expansion Array Interface</p> <ul style="list-style-type: none"> Optional single port Fibre Channel Host Bus Adapter (auto-negotiating 1Gb/2Gb per sec) <p>Local Tape Backup Interface</p> <ul style="list-style-type: none"> Dual-channel Ultra320 SCSI 68-pin VHDCI <p>Available PCI-X Expansion Slots</p> <ul style="list-style-type: none"> One (1) full-height 64-Bit/133MHz Three (3) half-height 64-Bit/133MHz <p>Power</p> <ul style="list-style-type: none"> Power Supplies: Dual 500W (hot-swappable) Power Rating: 100-240 VAC, 47-63 Hz, autosensing Input Current: 3.2A (RMS) for 115 VAC, 1.6A (RMS) for 230 VAC Power Consumption: 370W (steady state) 500W (maximum) <p>Heat Dissipation</p> <ul style="list-style-type: none"> 1262 BTUs/hr 	<p>IT Power Systems</p> <p>The Snap Server 18000 is also designed for IT power systems with phase-to-phase voltage 230 V</p> <p>Predicted Reliability</p> <p>Calculated from Bellcore Reliability Prediction Procedure TR-322, Issue 6</p> <ul style="list-style-type: none"> System MTBF (raw): 18,675 Hrs System MTBF (redundant): 107,312 Hrs² <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: 15% to 90% Vibration: .01G at 10-300Hz random for up to 120 minutes Shock: 6 pulses of 33G for up to 2 ms Altitude: -50 ft to 10,000 ft (-16 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 60° 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)
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2 Factors out redundant (N+1) components including disk drives, power supplies and cooling fans.

Models	Part Number
Snap Server 18000 2TB	5325301662
Accessories	
Snap EDR (Enterprise Data Replicator)	5325301862
Spares Kit (Contains hard drive, power supply and cooling fan)	5325301835
Spare 18000 Hard Drive	5325301680
Spare 18000 Power Supply	5325301685
Spare 18000 Fan	5325301687
SANbloc S50 JBOD	
SANbloc S50 1TB (4 x 250GB SATA drives)	2220900
SANbloc S50 2TB (4 x 500GB SATA drives)	2221000
SANbloc S50 3TB (12 x 250GB SATA drives)	2225000
SANbloc S50 6TB (12 x 500GB SATA drives)	2225100
SANbloc S50 1.2TB (4 x 300GB SAS drives)	2221100
SANbloc S50 3.6TB (12 x 300GB SAS drives)	2225200

Snap Server™ 18000

Worldwide Warranty

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 18000 include:

- Three-year limited hardware warranty, with first-year Next-Business-Day onsite parts and labor, upon completed registration. Onsite warranty subject to regional availability; check with your local Adaptec sales team.

Optional Support Programs

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.

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>

Important Support Notes

- *Adaptec will NOT provide support until the service contract has been registered*
- *Upon registration, Adaptec requires a 15 business day activation period*
- *Service coverage may be prorated depending on when the service contract is registered within one year from the product purchase date*
- *Adaptec reserves the right to perform Service Quality Assurance for new service purchases when the product purchase date is more than six months in the past or for existing service contracts that have lapsed for more than 30 days*



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