

SNAZ™ S4-400

MULTIFUNCTION NETWORK ATTACHED APPLIANCE

Affordable NAS Filer

The S4-400 is a compact and extremely cost effective NAS (Network Attached Storage) filer that incorporates many of the advanced features found in the more scalable S12-400. The S4-400 is based on a slim 1U enclosure that accommodates up to four high capacity SATA II disk drives, providing 750GB or 1.5TB of usable RAID-5 storage.

The small footprint of the S4-400 conceals an impressive Intel 3.4GHz Pentium4 processor coupled with either 1GB or 2GB of fast DDR II cache. This onboard horsepower delivers excellent file serving performance that supports a large number of concurrent users and enables a fully integrated backup server capability.

Compelling NAS Architecture

Existing File Servers are typically the oldest and highest maintenance systems within the organisation. They often have small capacities and slow performance, making it highly attractive for consolidation into a NAS filer that offers superior performance and reliability. Convenient and easy to manage, the S4-400 is the ideal cost-effective NAS solution for efficient file access in departmental and small business environments.



Integrated BakBone NetVault Backup Server including Virtual Tape Library

BakBone NetVault Workgroup v7.4 comes standard with the S4-400 including a software license for tape automation with up to 4 tape drives and 12 slots. The award winning NetVault software can be used to backup the S4-400 and can also serve as a flexible departmental backup solution for five heterogeneous servers or workstations. This backup capability can be extended to 10 clients and expanded to a tape library with 60 slots through BakBone license upgrades.

The powerful NetVault "Disk-to-Disk" backup feature streams the selected data to a virtual tape storage pool within the SNAZ disk storage. "Staging" the backup into the VTL (Virtual Tape Library) is much faster than to a physical tape device, significantly shortening the required backup window. It also enables the migration or duplication to tape to be carried out during off-peak hours. The SNAZ S4-400 is pre-licensed with up to 100GB of VTL capacity, which can be easily expanded with the purchase of additional licenses that allow up to the full S4 system capacity.

Robust Data Protection Features

Plasmon's SNAZ product family of proven NAS filers incorporate optimised hardware running SNAZ OS v4, a dedicated and resilient Linux-based operating system with integrated BakBone backup software. Advanced data protection features include Snapshot for quick recovery of accidentally deleted files, Replication which can be used as part of a second-site disaster recovery plan to protect Volumes, folders or individual files, and UPS support that provides graceful shutdown in the event of power disruption.

Simple Deployment and Management

Easy to integrate, the SNAZ hardware is pre-configured and delivered ready for use. The start-up Server Configuration Wizard is accessed through a standard web browser and guides the user through the initial basic setup including the creation of the first Volume. SNAZ Manager provides intuitive configuration to create storage volumes and corresponding shares with convenient integration into a Windows Active Directory domain or using the SNAZ Local Access Control (ACLs). Advanced space management features include the ability to expand storage volumes without user access interruption, avoiding "out of disk space" disruption, and quota allocations to control disk space consumption for individual users.

All SNAZ products are backed by a full three-year hardware and software warranty that includes free first year on-site service.

S4-400 Key NAS Features

- Cost-effective file serving for Windows and Linux/Unix users
- Cross-platform file delivery via FTP
- Integrated BakBone Backup Server with VTL support
- Fast dual Gbit Ethernet client connection
- Flexible 750GB or 1.5TB RAID-5 capacity configurations
- On-line storage volume expansion
- Dedicated, and reliable Linux NAS operating system
- Convenient remote management via web browser
- Fast Snapshot capture and convenient file level restore
- 1 year free on-site service included in 3 year warranty covered by Kodak Service¹

Free 1 Year On-site Service¹



| SNAZ Family | S4-400 | S12-400 |
|--------------------------|-----------------|-----------------|
| Max Network Connections | 1 x dual Gb NIC | 2 x dual Gb NIC |
| Enclosure | 1U | 2U |
| Max number of drives | 4 | 12 |
| Max usable capacity | 1.5TB | 4TB |
| Capacity expansion | N/A | Yes - 12TB |
| Integrated backup | Yes | Yes |
| Hot spare support | No | Yes |
| Redundant Power Supplies | No | Yes |

Notes

1. Service and warranty terms are limited to specific geographic territories in EMEA. Contact Plasmon for full details.

SNAZ™ S4-400 Specifications

| NETWORK CONNECTION | |
|---|---|
| Network Transport Protocols | TCP / IP |
| Network File Protocols | Heterogenous Microsoft Networks and Apple using CIFS/SMB + Linux / Unix using NFS v2 / v3 over TCP/IP FTP (File Transfer Protocol) |
| NETWORK SERVICES | |
| Services | Windows 2003 / 2000 / NT 4.0, NFS v2 / v3, FTP (File Transfert Protocol), (S)FTP |
| Shares supported | Combination of up to 40 NFS, CIFS/SMB, FTP shares supported |
| NETWORK CLIENTS SUPPORTED | |
| Microsoft + Apple + Unix / Linux | Windows XP, 2003, 2000, NT4.0, Me, 98 + Linux + Macintosh OS X TCP / IP + Solaris and HP-UX and AIX |
| Connections | Up to 200 concurrent NFS / CIFS / FTP connections |
| NETWORK INTERFACE | |
| Host Network Connection | Dual Gigabit Ethernet auto-sensing 10 / 100 / 1000Base-T RJ45 |
| Ethernet Port Configuration | Configurable for Stand Alone or Bonded for Load Balancing on Reads or Auto Failover |
| IP Address | Supports DHCP for automatic assignment of IP address or fixed IP address + DNS |
| IP Discovery | Dynamically allocated IP address discovery utility - FindSNAZ |
| SECURITY | |
| Microsoft | Windows Active Directory Service (ADS) member server + Windows NT Domain member server Kerberos authentication v5 |
| Unix / Local | Local File and Folder Access Control List (ACL) security for Users and Groups |
| User population | Up to 10,000 active directory users / up to 1,000 locally managed users |
| DATA PROTECTION | |
| Integrated Backup Software suite | BakBone NetVault v7.4.0 supporting wide range of tape drives and automation with up to 4 tape drives and 12 slots |
| SNAZ System Configuration Backup | System config bundled and saved to off-SNAZ location |
| UPS Support | APC Smart-UPS Serial Interface for graceful SNAZ shutdown |
| Snapshot | Immediate or scheduled point-in-time image of entire volume / file system with file level roll-back - up to 4 concurrent snapshots retained |
| Replication | Synchronise and replicate directories and / or files between SNAZ systems via TCP / IP connection |
| SNAZ SYSTEM HARDWARE | |
| SNAZ CPU | Intel Pentium4 651 3.4GHz with 2MB L2 cache and 800MHz Front Side System Bus |
| SNAZ Cache Memory | 4 DIMM slots with 1GB DDR II ECC SDRAM cache with 250GB drives / 2GB with 500GB drives |
| SNAZ Operating System / OS Update | SNAZ OS v4.02 - Plasmon's dedicated NAS Operating System / Update using OS patch via FTP download or HTTP upload |
| OS Device | Full OS and configuration on mirrored RAID disks + Maintenance Mode on flash memory |
| Power | S4-400 Single 400W Power Supply |
| Tape Interface | Ultra 320 SCSI HD68 for Tape drive or Tape Library/Autoloader |
| Expansion Unit Interface | Not available on S4-400 (expansion available with S12-400) |
| STORAGE CONFIGURATION | |
| Maximum Usable Capacity | S4-400 up to 1-5TB with 500GB drives |
| Hot swap disk drive bays | S4-400 up to 4 bays |
| Disk Drives | SATA II 250GB / 500GB 7,200rpm |
| RAID Levels | RAID-5 standard and configurable with RAID-0 and RAID-1 |
| Volume Manager | Dynamic Volume Expansion and Pooling of RAIDs |
| Hot Spare Disk Drive | Configuration option (not shipped as standard) |
| Backup Server | BakBone NetVault Workgroup v7.4.0 supporting 5 Client Servers / 4 Tape Drives / 12 slots |
| Disk to Disk | 100GB VTLS (Virtual Tape Library) + expansion options available |
| ADMINISTRATION | |
| Remote Administration Interface | Web Browser to SNAZ Manager via any Ethernet port including browsing file attributes |
| Quota | Configurable for each User with soft threshold and hard limit |
| Administrative Security | "Full" or "View Only" Administrator |
| Alert Notification | SNMP and SMTP / email |
| ELECTRICAL AND ENVIRONMENTAL | |
| Universal A/C Input | 90 VAC - 264 VAC (47 - 63Hz) auto-sensing |
| Operating / Non Operating Temperature | 10°C to 40°C (50°F to 104°F) / -30°C to 60°C (-22°F to 140°F) |
| Relative Humidity - Operating & Non-operating | Non-condensing 10% - 90% |
| DIMENSIONS | |
| Enclosure Dimensions H x W x D | S4-400(1U) 4.4 x 44.3 x 50.8 (cm) 1.75 x 17.5 x 20.0 (inches) |
| Actual Weight | 10.7Kg / 23.5lbs (excluding disks) 13.5Kg / 30lbs (incl. 4 disks) |
| Shipping Dimensions H x W x D | 38 x 57 x 79 (cm) 15 x 22.5 x 31 (inches) |
| Actual Shipping Weight | 23.2Kg / 51lbs (incl. 4 disks) |
| AGENCY | |
| Safety | CE, UL 60950-1, CSA 22.2, EN 60950, IEC 60950-1:2001 |
| Emissions / Immunity | EN 55022 Class A, FCC Class A CFR47 Part 15 / EN 55024, EN 61000-3-2, EN 61000-3-3 |
| Quality | ISO 9001:2001 |
| RoHS | Complies with RoHS EU Directive 2002/ 95/EC |



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