EonNAS® 5000 Series

Unified Storage Systems

Highlights

- Consolidate file (CIFS/SMB, NFS, AFP, HTTP, HTTPS, FTP) and block (iSCSI, FC) services for efficient utilization, management and protection
- 1GbE, 10GbE and Fibre Channel (FC) connectivity options
- Comprehensive software features at no additional costs
- Fault-tolerant hardware design; ZFS eliminates silent data corruption; snapshot, remote replication and pool mirror functions ensure enterprise-class data protection
- Deduplication removes duplicated data to maximize capacity utilization
- Thin provisioning optimizes capacity utilization and simplifies storage planning and monitoring
- Flexible capacity scaling (up to 240 drives) accommodates rapidly growing data
- Accelerate Read/Write operations by integrating low-latency SSDs to automatically and transparently enhance caching mechanism
- User-friendly web-based GUI for easy management

IT environments often include multiple storage infrastructures to accommodate various types of data and achieve different service levels. Scattered boxes for different configurations lead to poor utilization and complicated management.

The EonNAS 5000 Series features unified storage systems that enable enterprises to efficiently deal with file- and block-based applications. The systems provide extreme scalability, strong data protection and maximized resource utilization. To meet performance demand in different enterprise datacenter environments, the EonNAS 5000 Series offers 1GbE, 10GbE and Fibre Channel (FC) connectivity options.

Easy Consolidation

Infortrend's EonNAS 5000 Series offers a high-performance solution for consolidating datacenters. Combining file server and application storage in a single solution, the systems can simultaneously process data blocks transferred through SAN and support file sharing between different clients. With an easy startup wizard, users can quickly initialize the systems to serve applications, while improving IT efficiency. In addition, the systems provide comprehensive software features at no additional costs

High Data Availability

To keep applications up and running, the EonNAS 5000 systems are designed to operate with high data availability. Space-efficient snapshots serve as granular recovery points that enable users to quickly restore data in the event of human errors or virus attacks. Remote replication offers scheduled data replication within the same system, to another EonNAS system or to a third-party device via the rsync protocol. The pool mirror function supports real-time replication that keeps data in two different EonNAS systems synced at all times, ensuring that a standby system can seamlessly take over operations when the primary system goes down. In addition, ZFS offers end-to-end data integrity, eliminates silent data corruption and prevents data inconsistencies as a result of power outages. RAID technology adds another layer of protection.

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Optimal Resource Utilization

The deduplication feature on the EonNAS 5000 systems ensures that all duplicated data is removed, freeing up capacity that would be otherwise unnecessarily filled. Users can therefore optimize capacity utilization and save costs, as they can get much more mileage out of their initial storage acquisition. Thin provisioning optimizes capacity utilization by providing just-in-time capacity to applications when data is written. Besides lowering costs, thin provisioning simplifies capacity planning and utilization monitoring.

Flexible Scalability

"Scale as needed" flexibility allows users to accommodate tomorrow's applications while satisfying current needs. The EonNAS systems can connect with expansion enclosures to accommodate a maximum of 240 drives. To increase performance, EonNAS 5000 Series users can integrate up to six SSDs to automatically enhance caching operations and accelerate I/O processing.

Simplified Management

With a user-friendly web-based interface, users can centrally configure, monitor and maintain multiple EonNAS systems to optimize productivity. Management software enables users to monitor real-time system status and easily perform system tuning, accurate planning and quick troubleshooting. When abnormal events are detected, management software automatically notifies users so that pro-active measures can be taken to prevent downtime.

Software

Protocols

File level: CIFS/SMB, AFP, NFS, FTP, HTTP/HTTPS, iSCSI, SNMP, SMTP, NDMP, NTP, ICAP, FTPS, Secure FTP
Block level: iSCSI, Fibre Channel[1]

Client Operating System Support

Windows XP, Vista (32/64-bit), Windows 7 (32/64-bit), Windows 8, Mac OS X , Red Hat, SUSE, Solaris, HP-UX, AIX

Server Virtualization[2]

VMware vSphere 5, Citrix XenServer,
Windows Server 2008 / 2012 (incl. Hyper-V)

Server OS Support[2]

Windows Server 2003, Windows Server 2008 R2,
Windows Server 2012, Red Hat, SUSE, Sun Solaris, Mac OS X

File System

- Internal: ZFS
- External: FAT32, NTFS

Networking

- IPv6 support
- Fixed or dynamic IP address
- Dual Gigabit Ethernet with Jumbo Frame
- Port trunking/NIC teaming/Link aggregation (IEEE 802.3ad)
- DHCP Client
- MPIO, MC/S support

Security

- HTTPS connection
- Encrypted remote replication (rsync with 128-bit SSH)
- Encrypted Pool Mirror (IP-Sec)
- CHAP authentication for iSCSI volumes
- AES 256-bit Encryption

RAID and Volume Management

- RAID0/1/5/5 + Hot spare/6/6+ Hot spare/10/50/60
- Online and automatic RAID capacity expansion
- Deduplication: Inline, block-level
- Compression
- Thin provisioning (iSCSI volumes only)
- SPC-3 Persistent Reservation (iSCSI volumes only)
- ICAP-based anti-virus support

Power Management

- Wake on LAN
- Network UPS with SNMP management
- HDD sleep mode
- Scheduled Power On/Off

Performance Scaling

- Read/Write acceleration with SSD [2]

Access Right Management

- User account management
- Group management
- Folder management
  - Folder and subfolder access control
- Folder quota
- Comprehensive access control action items
  - All Controls, Read, Read and Run, Write, Modify, List
- Support for Windows AD authentication
  - Domain users login via CIFS/ SMB, AFP, FTP, file explorer
- LDAP on Linux

Browser Support

- Internet Explorer, Firefox , Google Chrome

System Management

- Web-based GUI
- HTTP/HTTPS connections
- Email alerts
- SNMP
- System status monitoring
- Exportable event logs
- System settings backup and restore
- Disk roaming
- Time synchronization with the NTP server
- HDD S.M.A.R.T.

Data Protection

- ZFS end-to-end data integrity
  - Detects and automatically repairs data affected by silent data corruption
- Snapshot
  - Unlimited number
  - For both shared folders and iSCSI volumes
  - Scheduling at intervals as short as 10 mins.
  - Automatic snapshot copy pruning based on user-configured policy
- Remote replication
  - Rsync with 128-bit SSH encryption
- Pool mirror
  - Remote data mirroring
  - Real-time or scheduled
  - IPsec encryption
- ICAP-based anti-virus support
- W.O.R.M. (Write Once Read Many)

File Server

- Protocols: CIFS/SMB, AFP, NFS, FTP, HTTP/HTTPS
- Client operating system: Windows, Mac OS, Linux
- File/folder management by web browser

FTP Server

- Max. concurrent connection control
- Max. failed log-in attempt control

Backup Server

- Apple Time Machine support
- Windows Backup and Recovery support
- Remote replication
  - Rsync with 128-bit SSH encryption
- 3rd-party backup software support
  - Acronis Backup & Recovery™/ True Image Home
  - Symantec Backup Exec 2012
  - EMC Retrospect Backup & Recovery
  - Commvault Simpana
  - Veeam Backup & Replication
  - CA ARCserve® Backup

Multilingual Support[3]

- English
- Chinese (Traditional / Simplified)
- Japanese
- Russian
- German

[1] Fibre Channel on EonNAS 5120-3 only
[2] For the latest compatibility details, please contact our sales representatives.
[3] For the latest information about supported languages , please contact your Infortrend sales representative.

Technical Specifications

	EonNAS 5120	EonNAS 5120-1	EonNAS 5120-2	EonNAS 5120-3
ARCHITECTURE				
Processor	Intel® Xeon® Quad-Core			
Memory	12GB[1] or 24GB DDR3 ECC RAM			
Host Connectivity	Four (4) 1GbE ports	Eight (8) 1GbE ports	Four (4) 1GbE ports + Two (2) 10GbE ports	Four (4) 1GbE ports + Two (2) 8Gb/s FC ports
Storage Capacity Enclosure Connectivity	Two (2) 6Gb/s SAS 4x wide ports			
Configuration	Single Node			
Power Supplies	Two redundant 380W			
Form Factor[2]	1U, 19-inch rackmount			
Storage Capacity Enclosure[3]	EonStor DS S16S-J2000-S			
Controller	Single			
Connectivity	Two (2) 6Gb/s SAS 4x wide ports			
Drive Bays	16			
Supported Drives[4]	2.5" 10,000 RPM 6Gb/s SAS drives - 300GB, 450GB, 600GB or 900GB 3.5" 15,000 RPM 6Gb/s SAS drives - 300GB, 450GB or 600GB 3.5" 7,200 RPM 6Gb/s Nearline SAS drives - 1TB, 2TB or 3TB 3.5" 7,200 RPM 6Gb/s SATA drives - 2TB, 3TB or 4TB 3.5" 7,200 RPM 3Gb/s SATA drives - 500GB, 1TB, 1.5TB or 2TB			
Power Supplies	Two redundant 530W			
Form Factor[2]	3U, 19-inch rackmount			
Max. Drives	240			
TECHNICAL HIGHLIGHTS				
Performance Scaling[5]	Read/Write acceleration with up to six (6) SSDs per storage pool (max. 6 storage pools)			
SERVICE AND SUPPORT[6]				
Standard Service	3-year limited hardware warranty and 8x5 phone, web and email support			
Upgrade/Extension Options[7]	3-year replacement part dispatch on the next business day Advanced Service: 3-year 24x7 phone, email and web support + onsite diagnostics on the next business day Premium Service: 3-year 24x7 phone, email and web support + onsite diagnostics in four hours Two-year extended warranty option			

[1] Users can upgrade memory from 12GB to 24GB.
[2] For detailed dimensions, please refer to the Infortrend website.
[3] One (1) storage capacity enclosure is default included in EonNAS 5000 shipments; if users require more capacity, a maximum of fourteen (14) additional enclosures can be connected.
[4] For the latest compatibility details, please contact our sales representatives.
[5] Please refer to Infortrend sales representatives for details on availability and compatibility.
[6] All EonNAS systems are shipped with Standard Service.
[7] Options may vary by region.

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