

NAS Filer

Tags: [nas filer](#)

With the current growth of operational data in all business areas, an effective storage solution becomes necessity. All sorts of data, including: documents, spreadsheets, multimedia, backups, etc., demand more and more storage space. Keeping such data on local hard drives becomes inefficient, insecure and increasingly difficult to manage. NAS (Network-attached storage) filers can overcome these challenges. This cross-platform storage solution is easy to deploy, secure and reliable. Moreover, it simplifies the backup process and allows distributing user's storage space more efficiently.

NAS filer, as a properly configured and tested set of hardware and software, shares a common file-system over the network. Such a set must handle user access permissions and provide support for most popular file sharing protocols including CIFS (Windows), NFS (Unix), FTP and HTTP.

Hardware

Solutions based on NAS filer are mostly used by small and medium enterprises (SME) – usually for storing data, sharing and backup. Such usage implies certain requirements like scalability, uninterrupted access to data, high performance and data security. General requirements for the set are listed below:

- Server platform with one quad-core CPU for high performance
- H/W RAID controller with support for RAID5 or RAID6 for data safety and good performance
- Large, enterprise-class SATA drives for high speed drive transfers and data reliability
- Multiple 1GbE interfaces for access from various sub-networks or link aggregation
- A large number of SATA/ATA/SAS drives for sufficient capacity
- Redundant power supply for system reliability

Software

The software dedicated to NAS filer should ensure continuous operation, allow the automation of processes and provide hassle-free operation. Ease of implementation and low cost are equally important. Here are the general requirements for software:

- Teaming/Bonding (including Adapter Fault Tolerance) supported
- Data (file) replication supported
- Windows Active Directory / Primary Domain Controller integration / LDAP supported
- User and group quota control and ACL supported
- SMB/CIFS, FTP, Secure FTP, HTTP, AFP, NFS network protocols supported
- Microsoft Windows, Linux, Unix, Mac OS X network clients supported
- SAS/SATA RAID controllers supported
- Built-in, SNMP Based Monitoring System and E-mail notification

We recommend using [Open-E DSS V7](#) as the management software for NAS filers' implementations. More information about requirements for various storage solutions (including NAS) can be found in the [system requirements](#) section.

Related content

Solutions

- [Centralized Data Storage Management - The Must-Have Solution](#)
- [NAS - effective storage solution for small business](#)

Blog posts

- [Backup it, lose it, restore it and stay calm – 10 basic rules for the wary](#)
- [RAID 5? RAID 6? Or other alternative?](#)
- [How does RAID 5 work? The Shortest and Easiest explanation ever!](#)
- [How to access your NAS share on Android device](#)

Case studies

- [Financial Services - VBRB Mangfalltal-Rosenheim eG \(German version\)*](#)
- [TEMA - NAS based Demonstration Center for Video Processing*](#)
- [Hochverfügbare NAS-Systeme zur Archivierung von Geodaten \(German version\)*](#)

Webinars

- [Working with MAC clients accessing files on Open-E DSS V7 with Windows ADS](#)
- [Copying NAS Shares and Files inside of Open-E DSS V7 without using the Network](#)
- [Data Replication with a Microsoft application](#)
- [Open-E DSS V7 Data Replication with a Linux OS](#)
- [Open-E DSS V7 Quickstart | German version](#)
- [Connect Open-E DSS V7 to a NIS Server](#)

*Content refers to Open-E DSS V6. [Open-E DSS V7](#) includes the features mentioned in this referral.