

# Storage for CCTV

## Tags:

[storage performance](#)

Video monitoring has become a common aspect of our lives. It is widely used by companies and administrations for video surveillance, traffic control and the monitoring of industrial processes. Video monitoring implementation solutions may vary. Some of them require complicated network solutions or dedicated devices; others use a public network and work with common hardware. Despite the fact that they differ in underlying technology and appliance, all of them have something in common - the need for reliable and fast high-capacity storage.

Storage for video monitoring is a set of hardware and software dedicated to storing video records from various monitoring implementations. Such a solution must be reliable, all vulnerable parts should be redundant and the best use of available disk space must be assured. The set compatibility and stability must be extensively tested to avoid downtime and data corruption.

## Hardware

Storage solutions dedicated to video monitoring should meet certain hardware requirements. The most important for such implementations are stability and high capacity of storage. General requirements for the set are listed below:

- A server platform with one quad-core CPU for high performance
- H/W RAID controller with support for [RAID5](#) or [RAID6](#) for data safety and the best use of available storage
- Enterprise class SATA drives for high speed drive transfers and data reliability
- Multiple 1GbE NICs for independent connection to different networks
- A large number of SATA/ATA/SAS drives for large capacity
- Redundant power supply for system reliability

## Software

There are a few basic requirements that have to be fulfilled for almost every storage implementation for video monitoring. Ensuring continuous operation, efficiency and ease of use are essential. Also, automation and data security are the basic requirements. Here is the general software specification:

- Support for encrypted protocols and access control features like iSCSI CHAP and IP white lists for protection of important data.
- Support for various NAS and SAN protocols to ensure compatibility with a wide range of Network Video Recorders
- Support for SAS/SATA RAID Controllers for large capacity and data safety
- Built-in, SNMP Based Monitoring System and E-mail notification for system monitoring.
- Easy backup solution

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

## Related content

- [CCTV storage calculator](#)
- [RAID 5? RAID 6? Or other alternative?](#)
- [How does RAID 5 work? The Shortest and Easiest explanation ever!](#)