

Storage for CLOUD

Cloud computing as a way of delivering services over the network becomes more and more popular. Cloud architecture should ensure high availability, scalability and data safety for services operating within its environment. To prepare an effective cloud platform, providers must apply a set of carefully selected components and technologies. Without a doubt, the most important element here is storage.

Storage for cloud must meet the highest standards of quality. Among other criteria, stable operation, satisfying performance and continuous availability are priorities for such solutions.

Hardware

Storage for cloud implementations should be able to serve many users at the same time with satisfactory performance. High availability, data safety and large amount of space are a must. Here are the general requirements for hardware:

- Server platform with two quad- or six-cores CPUs for high performance
- H/W RAID controller with support for RAID 5 or RAID 6 for data safety
- SAS/SATA drives for high speed drive transfers and reliability
- 10GbE NICs or minimum one quad port 1GbE NIC for high speed network connection
- A large number of drive trays for large capacity or external storage enclosure support

Software

The software has to be field proven and easy to use. It must guarantee the security and integrity of data even in case of hardware failure. At least, it should offer a number of features to allow efficient storage management. Storage for Cloud requires software that offers:

- Support for iSCSI Target share for easy management
- Automatic Failover for high availability (Active-Active)
- Support for SAS/SATA RAID Controllers for good performance, large capacity and data safety
- Support for 10 GbE NICs or bonding for efficient network connectivity

We recommend using [Open-E DSS V7](#) as a solution supporting [storage](#) for cloud implementations.