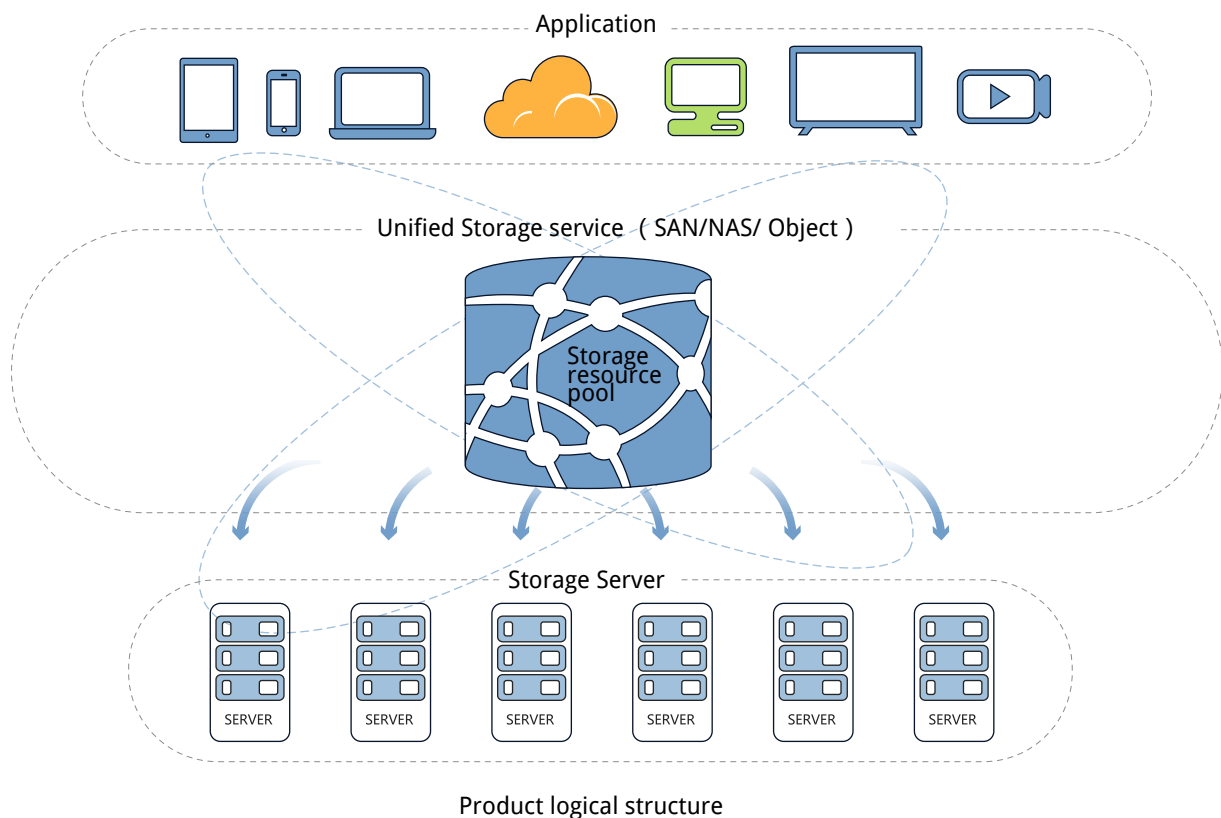


Megabric is a unified storage and can be widely used at Media, HPC, Data Center, Dotcom, Education and Enterprise. The traditional storage system has limited capacity and performance as well as not allowing linear scaling. The vertical device expansion can result in load imbalance and high cost. Obviously, this method can't meet today's storage requirement in terms of high capacity, high speed and agility which is essential for enterprise's business growth.

Megabric uses distributed file system (Megabric FS) to consolidate storage resource and provide the unified storage to external application. It supports the rich storage interface to meet the complicated requirement from enterprise IT like SAN, NAS and Object Storage.



Product features

Standard storage interface:

It provides the standard storage protocols like iSCSI, NFS, CIFS, FTP, HTTP etc.

Unified name space:

Consolidates the storage resource and provides the unified view of file. Application will always get the same file or data no matter using which kind of storage interface/protocol.

Business driven:

The elastic architecture can smoothly scale-out on both capacity and performance in order to meet business growth.

Data protection:

According to business requirement, Megabric provides rich data protection methods such as local RAID, copy replication and N+M protection.

High performance:

Megabrics uses SSD and RAM to accelerate I/O speed. The scale-out architecture doesn't have the bottleneck as traditional cluster architecture does. It fully utilizes all the nodes' capability to achieve greater performance.

Unified management

Consistent and convenient management portal

Built for cloud

Megabrics helps enterprise to build the cloud using the open and innovative technology.

Lower TCO

Megabrics decreases TCO via different methods: using high density node provides mass storage pool and performance; using N+M protection decreases the number of nodes without sacrificing data tolerance.

Rich storage function

Support storage quota management, snapshot, remote replication, WORM etc.

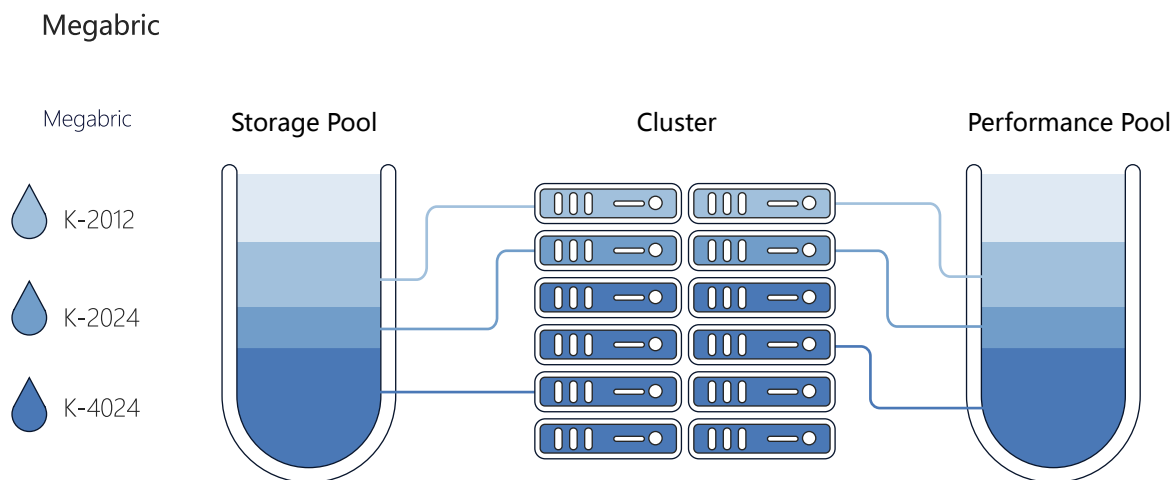
Inline upgrade and expansion

Megabrics storage system supports the transparent in-service upgrade and expansion without any service impact for customer business

Product function

Scale-out

Megabrics can easily scale out to achieve the desired capacity and performance. This process is fully transparent without having any interruption of service.



Megabrics supports elastic expansion with easy deployment and upgrade. Megabrics leverages the scale-out architecture. Each node equally provides storage service to external application. Customer can deploy only one node at beginning and add new node into the existing cluster without interrupting the service.

Data deduplication(optional)

The result of data deduplication is different on data's category. According to our test, it is highly recommend to apply this feature for data backup, VM application and database. This feature is configurable to meet the different scenario.

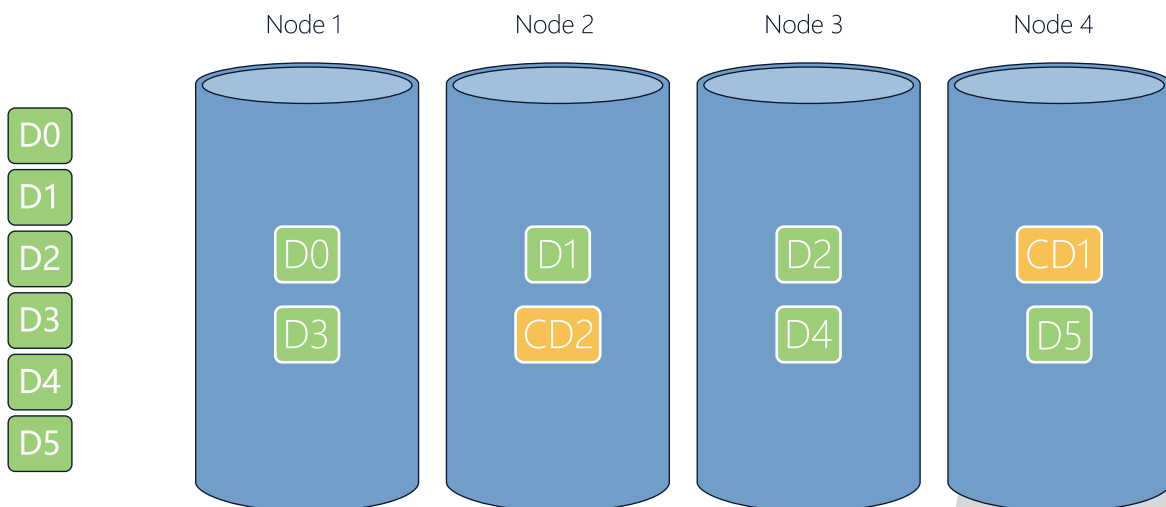
Within the same namespace, Megabrix' data deduplication can effectively free up disk space. Megabrix uses live data deduplication technology to remove the duplicated data as well as compressing the data in real-time, which can significantly improve the disk utilization as much as 2 to 35 times.

Erasure Code

Megabrix supports erasure coding such as N+M model to protect the data for example, in 4-node, 3+1 cluster, the data will be written as below:

1. The data will be divided into 6 pieces from D0 to D5
2. Erasure code CD1 will be calculated based on the first three data pieces. Similarly CD2 will be calculated based on the last three data pieces
3. Ensure the residence of first 3 data pieces plus CD1 and last 3 data pieces plus CD2 will happen on different physical nodes.

Data will be automatically stored on different nodes :



EC(Erasure Code) technology illustrated as :

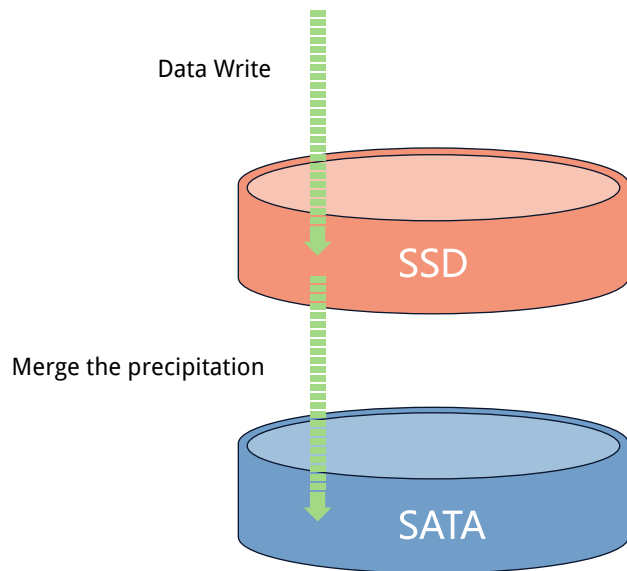
In the above working mode, if data block is corrupted, application can still retrieve the completed data via computing the correct data through relevant data pieces plus erasure code. The corruption of erasure code will not impact the proper data retrieve.

Storage Classification

Megabrix supports storage classification. This approach makes the faster SSD to handle random I/O operations primarily in order to improve overall I/O performance.

Megabrix supports two ways of storage classification: migration and caching. In migration mode, there is only one copy of data in either SSD or HDD. If data becomes 'cold', system moves the data from SSD to larger HDD. In caching mode, data is always stored in HDD and there is no I/O overhead caused by migration.

Cold data will be automatically moved to cost-effective sata storage . When it becomes hot , Megabrics will pull it back to the flash drive again.



Intelligent Data Acceleration hierarchy technology

Advantages:

Great price-performance ratio

Megabrics provides the great price-performance ratio and expertise to help customers lower the total cost. We believe that every single byte matters.

High performance

Megabrics can meet different performance requirements for the various scenario, from database to VM, even the complicated combination architecture.

Storage efficiency

Megabrics provides the advanced real-time data deduplication and compression along with simplified configuration technology to improve the disk efficiency and increase the ROI significantly.

Simplified management

Management module provides the simplicity for both configuration and daily maintenance tasks which significantly ease the maintenance costs and efforts.

Data protection

According to business requirement, Megabrics provides rich data protection mechanisms, such as single-node RAID, the replication of multiple copies, Erasure Coding in cluster, to ensure data safety.