LucidLink & Scality

EXTENDING OBJECT STORAGE BEYOND BACKUP AND ARCHIVE

By combining Scality RING object storage with LucidLink Filespaces, organizations gain a high-performance file service for use in distributed workloads.

- High-performance file access to object storage
- Reduce infrastructure costs
- Stream data, on-demand
- Improve scalability and data durability
- Sophisticated policy based Snapshots

High-performance file access to object storage

LucidLink FIlespaces provides a file interface to object storage, streaming data, securely, from any cloud, eliminating the need to download and synchronize. Both users and applications can connect to the same single namespace with highly scalable and affordable Scality object storage, consumed as a local file system layer.

Infrastructure costs

Object Storage provides a cost-effective, scalable and easily managed storage solution. Solutions like Scality, enable organizations to take advantage of the technology without taking on a massive infrastructure commitment. Scality RING stores data efficiently and reliably, while reducing costs by as much as 90% over legacy systems.

Stream data, on-demand

LucidLink presents files as if they are stored locally, yet streams only the data that is needed, as it is required, using our distributed, log-structured design. Servers and applications have instant access to huge sets of data without consuming local storage even over long distances.

Scalability and data durability

Scality easily delivers additional storage capacity as needed, which in turn, minimizes the likelihood of incurring additional costs, overprovisioning or missing out on critical opportunities because businesses are waiting on storage resources.

Sophisticated Snapshots

LucidLink is a log-structured file system that retains every write as a new object which means that the entire file system can be instantly reverted to any point in time the user defines without incurring performance or capacity penalties.

Technology Trends

As organizations move toward a complete digital transformation, they aim to adopt storage technologies that are agile, easy to manage, scalable and cost-efficient. Data is the new basis of competitive advantage.
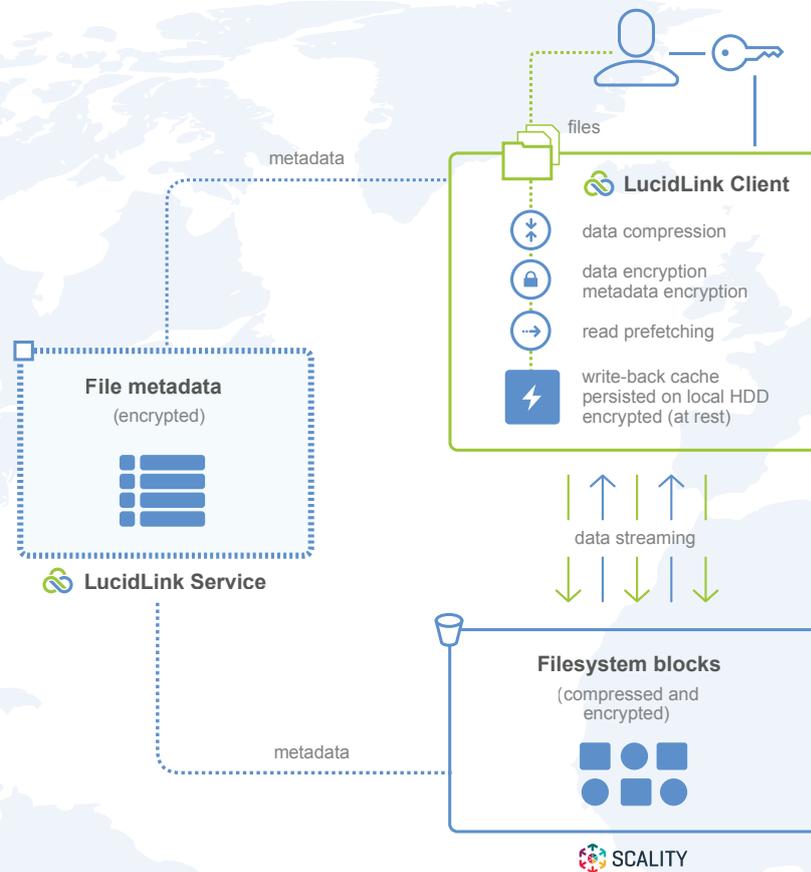
As cloud resources are increasingly adopted, workloads run in a distributed manner from the edge, data center, and cloud locations, demanding instant access to data in more places than ever before. However, unlike compute, data is not easy to move around. LucidLink solves this problem by providing file-level access to object storage while targeting latency issues created by distance.

LucidLink & Scality

The LucidLink Scality solution enables users and applications to securely access files from scalable object storage for distributed workloads that require high-performance.

Scality RING on-prem object storage capabilities are designed to expand use cases for data-heavy workloads with the ability to scale up as usage expands.

LucidLink provides high-performance file access to this object storage extending its usefulness to server production workloads. Utilizing concepts from distributed databases and cloud gateways, LucidLink created a cloud-native file system on top of object storage.

files

metadata

LucidLink Client

data compression

data encryption
metadata encryption

read prefetching

write-back cache
persisted on local HDD
encrypted (at rest)

File metadata
(encrypted)

LucidLink Service

data streaming

metadata

Filesystem blocks
(compressed and
encrypted)

SCALITY

Use Cases

Active Archive

Converge archive and retrieval into a single solution. Data stored in massively scalable and cost-effective object storage is instantly available to any device with the LucidLink client installed. It is ideal for use cases requiring quick access to random files in large data sets.

File Server Extension

The LucidLink Scality solution offers the ability to extend on-prem distributed file shares, network shares, legacy filers and Network Attached Storage (NAS), to object storage. Keep your server and network infrastructure in place and simply extend the disk to object storage.

Remote Access from Anywhere

LucidLink provides seamless access to data in a single global namespace available anywhere. Organizations with remote workloads can quickly connect to big files and data sets allowing secure, high-performance access.