

Scality RING7

Scality tackles enterprise cloud security anxieties with distributed multi-site cloud storage, file and object versioning, data location control, geo-distribution, and replication to AWS S3. Welcome to the secure cloud era.

Storage that Motivates Digital Business Scality RING7 brings peace-of-mind to security-focused organizations once leery of using the public cloud. They can now leverage its vast scalability benefits and be confident that essential data will be preserved, securely encrypted, disaster proof, and highly available. Scality RING7 significantly enriches Scality's distributed scale-out file system, allowing concurrent user access across sites and parallel writers to increase throughput. It also seamlessly unites the disparate worlds of file and object data, enabling users to access the same data from file or object protocols.

Unsurpassed Cloud Flexibility Scality RING7 is the seventh generation of Scality RING object storage, which is now implemented at more than 150 petabyte-scale customers around the world. This release features data encryption, Write Once Read Many (WORM) change control, data-restorative versioning, extended location control for data sovereignty, and geo-replication for disaster recovery.

Scality RING software deploys on any x86 server meaning systems stay current, leveraging up-to-the-minute hardware innovation. Data is protected with policy-based replication, erasure coding, and geo-distribution, achieving 14X9s of durability. Cross-region replication to Scality RING and AWS S3, and native file and object support means Scality RING7 provides unsurpassed storage flexibility at up to 90 percent lower TCO than legacy storage.

The Safe Cloud Storage Era Since the advent of the cloud, concerns about security, availability, data sovereignty, and secure access control have been paramount. Security-focused enterprises struggle daily with adequately safeguarding digital assets and customer privacy and thus could not trust their most prized data to the uncertainty of the public cloud. Scality RING7 alleviates these concerns with a new era of safe cloud storage for the most security conscious organizations, placing Scality at the forefront of ironclad cloud security.

THREAT	SCALITY RING7 FEATURE	BENEFIT
Ransomware	File/Object versioning, Volume Protect	Maintain prior versions from before the ransomware impact. Lock access to data so ransomware cannot impact.
Disaster-driven shut down	Asynchronous Replication for Files and Objects	Provide redundant copies of data across different datacenters—for both files and objects.
Customer Privacy Violation	Secure Access Control Lists and Identity and Access Management Interfaces	Secure data access integrated in with your corporate AD system
Internal or External based data hacking	Secure data encryption	Object Data encryption at rest. Store data with strong, industry standard cryptographic algorithms so that data, even stolen, is useless to hackers.
Data Sovereignty non-compliance	Location Control	Limit Object Data to specific RINGs located in different regions

Highlights

HIGHLIGHTS

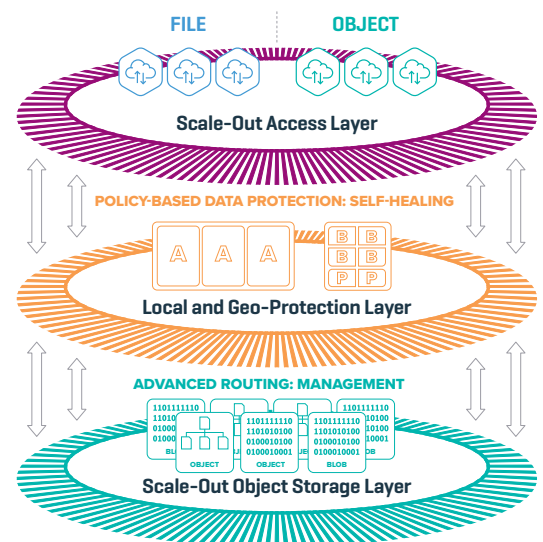
- Software-defined
- Scale-out file and object storage
- No single point of failure
- Policy-based data protection and self-healing

Distributed File System Advancements

- Versioning for change tracking
- Write Once Read Many (WORM) change control with volume protection
- Asynchronous geo-replication for disaster recovery
- Efficient large file replication with smart delta based change tracking
- Concurrent multi-site file access

Distributed Object Advancements

- Versioning for change tracking
- Write Once Read Many (WORM) change control with versioning
- Multi-use replication to secondary site or AWS S3; with fully S3-compatible API
- Location control for data sovereignty
- Geo-replication for disaster recovery
- Object encryption for ironclad security
- Simple Multi-tenant management Interface for secure access control



Scality RING Architecture

SPECIFICATION	DESCRIPTION
AWS S3 Object Specifications	<ul style="list-style-type: none"> Compatible API — AWS IAM, AWS Signature v4 and v2 HMAC authentication schemes, SAML 2.0-compatible Identity Providers for Single Sign-On with Active Directory S3 bucket versioning API S3 cross-region replication API (asynchronous bucket replication between S3 deployments on a WAN) S3 bucket tagging API Bucket location control and support for multiple Scality RINGs under one S3 deployment IAM GUI for point-n-click user and group management Metadata scale-out for deployments with 1000's of buckets Enhanced utilization API: user and service-level metrics, support for versioning metrics
File Specifications	<ul style="list-style-type: none"> Fully parallel, scale-out with POSIX- style file system New cache for shared folder view Integrated load balancer for NFS and SMB connectors Volume quotas and space reporting File undelete (Recycle Bin) Volume protection Asynchronous metadata and data replication NFS v3 (Supports full scale-out, load balancer, quotas) SMB 2/3 Linux FUSE (supports data compatibility with REST) iCAS Compliance (NFS, SMB, SOAP-based interfaces with certifications including SEC 17a-4)
Policy-based Data Protection with Native Multi-Site Capabilities	<ul style="list-style-type: none"> Replication up to six copies (object level replicas) Erasur coding to reduce overhead for large objects Single or Multi-RING sync and replication at the object level
Self-Healing	<ul style="list-style-type: none"> Distributed self-healing processes to resolve disk and server failures Replacement of failed disks as scheduled process Data integrity assurance through integral CRC checksums
Scale-Out Storage with Advanced Routing	<ul style="list-style-type: none"> Scales to exabyte capacities for trillions of objects as a single system with guaranteed response and continuous availability at scale
Storage Features	<ul style="list-style-type: none"> Scalable peer-to-peer architecture, with full system level redundancy Integrated Scale-Out File-System (SOFS) with POSIX semantics Unique native distributed database – full scale-out support of object key values, file system metadata, and POSIX methods Unlimited namespace and virtually unlimited object capacity No size limit on objects (including multi-part upload for S3 REST API)

“Scality is driving home security, data preservation, and versioning features to help make security-conscious organizations comfortable with storing their most fundamental data in the cloud.”
— IDC Research



ALWAYS ON



PETABYTE-SCALE



ENTERPRIZE CLOUD-READY



LOW TCO

Trusted Scality Storage A recognized leader by IDC and Gartner, Scality stores more than 800 billion objects for more than 500 million end-users. Thanks to native support for directory integration, traditional file applications, and hundreds of certified

AWS S3 applications, Scality RING seamlessly integrates into any data center. Global 2000 Enterprises in the media and entertainment, finance, government, backup-and-archive, file sync-and-share, and ISP markets commit their data to Scality storage.

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