

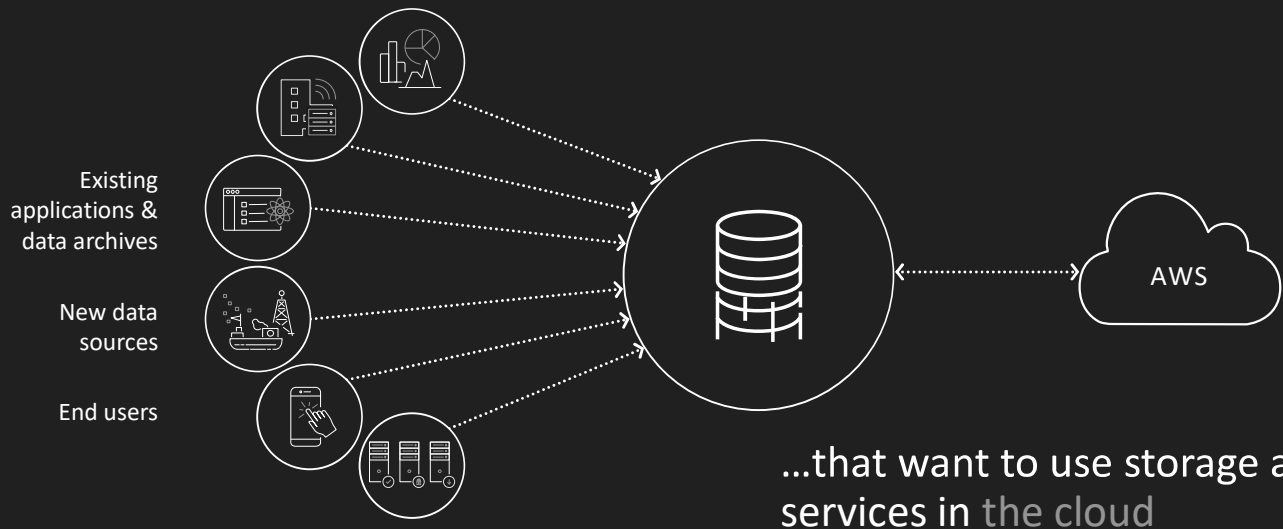


AWS Storage Gateway

Amazon S3 File Gateway: Store and access objects in Amazon S3 from NFS or SMB file data with local caching

The hybrid cloud model:

YOU HAVE ON-PREMISES DATA AND APPLICATIONS...



...that want to use storage and services in the cloud

Hybrid cloud storage challenges



On-premises



In-cloud.

I am running out of on premises storage capacity

...and need to use scalable, durable, and secure cloud storage

I want to run my existing applications without change (files, backups, archive)...

...but leverage the infinite scale of the cloud

I need low latency, on premises access to data in the cloud...

...while accessing the power of cloud compute and analytics

Compliance requires that I integrate with enterprise security and management tools...

...but I want to manage & monitor from a single pane of glass

Storage Gateway



Amazon S3 File Gateway

Native file access, SMB or NFS, to Amazon S3 for backups, archives, and ingest for data lakes



Amazon FSx File Gateway

Replace on-premises Windows file shares with efficient, low-latency Amazon FSx for Windows based group file shares and home directories



Tape Gateway

Replace physical tape infrastructure leveraging Amazon S3 archive tiers for long-term retention

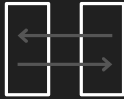


Volume Gateway

Block storage volumes with snapshots, AWS Backup integration, and cloud recovery

Storage Gateway – benefits

EASY ON-RAMP TO CLOUD BENEFITS



Standard protocols
No changes to existing apps



Local caching
Low-latency access to
frequently used data



Optimized data transfers
Minimized network traffic



Secure and compliant
FIPS, HIPAA, PCI, SOC*,
ISO**, and encryption



Cost-effective
Pay-as-you-go pricing



AWS-integrated
Management, monitoring, and
in-cloud workloads

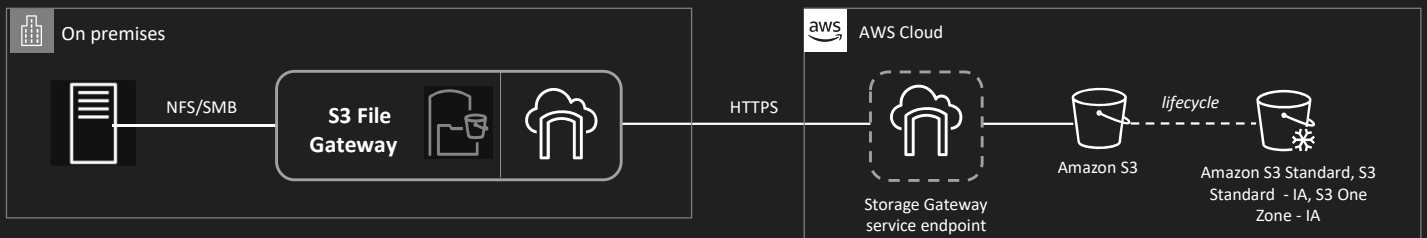


*SOC (1, 2, 3) **ISO (9001, 27001, 27017, 27018)

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Amazon S3 File Gateway

STORE AND ACCESS OBJECTS IN AMAZON S3 FROM FILE-BASED APPLICATIONS WITH LOCAL CACHING



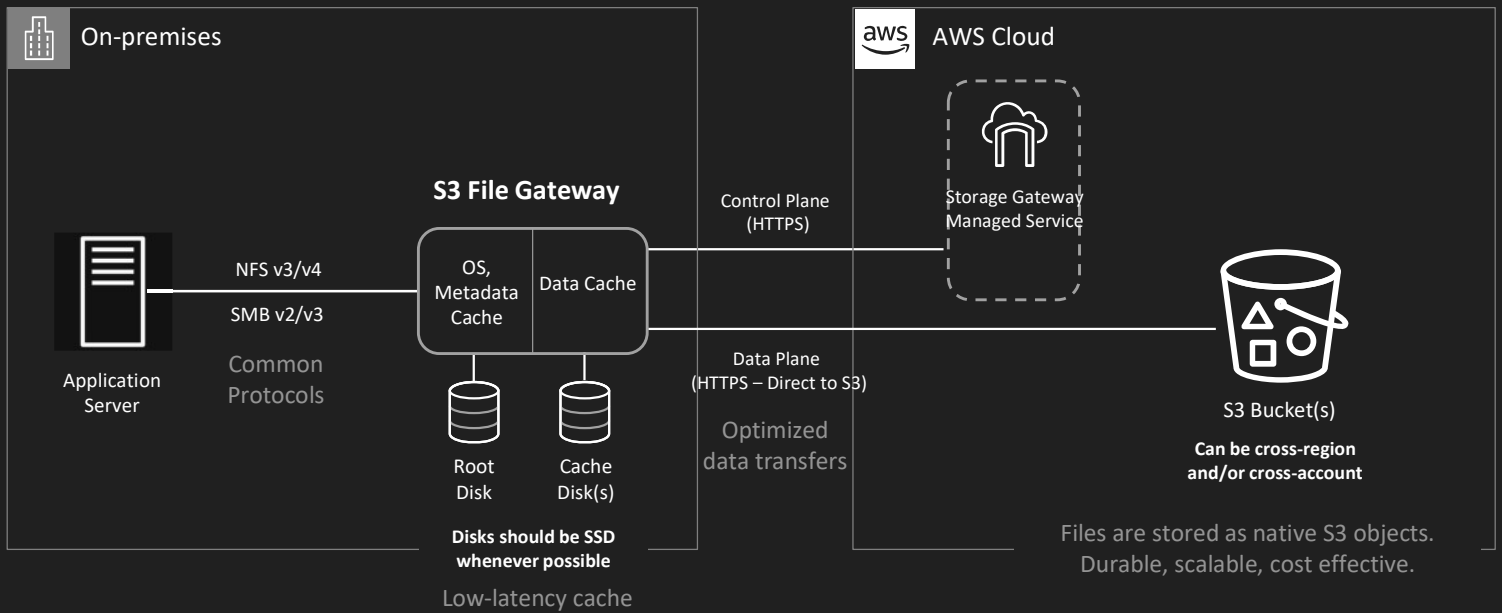
Use cases:

Repository for machine generated data such as

- Backups
- Archives
- Data Lakes

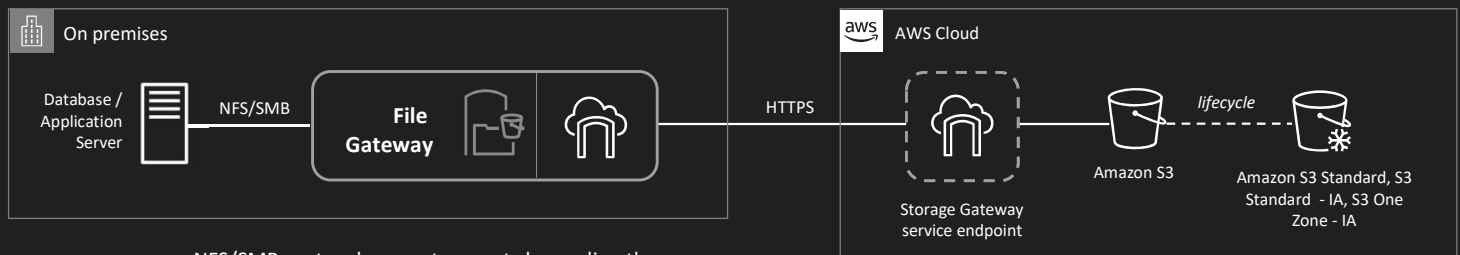
S3 File Gateway – How it works

S3 IS MANAGED BY THE CUSTOMER



Amazon S3 File Gateway for on-premises backup

MOVE DATABASE AND FILE BACKUPS INTO THE CLOUD AND FREE UP ON-PREMISES STORAGE CAPACITY



Features

NFS/SMB protocol support, mount shares directly on database and application servers

Files stored durably in Amazon S3, lifecycle to any S3 storage class

Local cache for accessing recent backups

Windows ACL support to control access to backup files

Bandwidth-optimized, only changes are transferred

Benefits

Reduce on-premises storage for backups

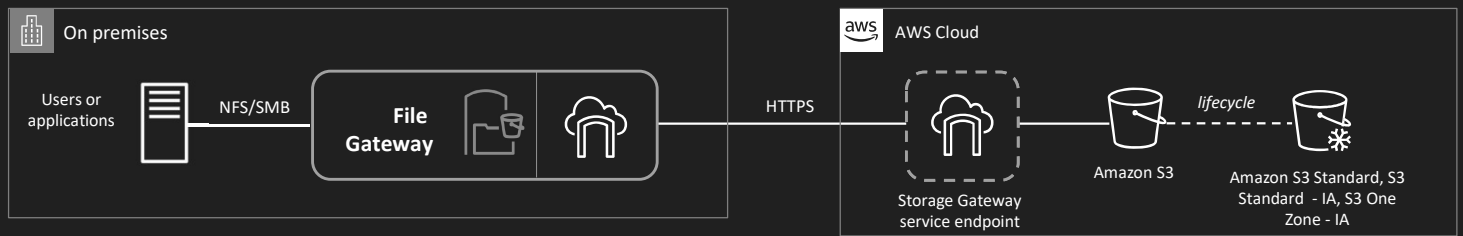
Easily integrates with SAP, SQL Server, Oracle, HDFS and other applications

Restore backups on-premises or in the cloud on EC2 or RDS



Amazon S3 File Gateway for archive

Move archives into the cloud and free up on-premises storage capacity



Features

- NFS/SMB protocol support, mount shares directly on client systems
- Files stored durably in Amazon S3, lifecycle to any S3 storage class
- Local cache for recently accessed files
- Windows ACL support to control access to archive files
- Bandwidth-optimized, only changes are transferred

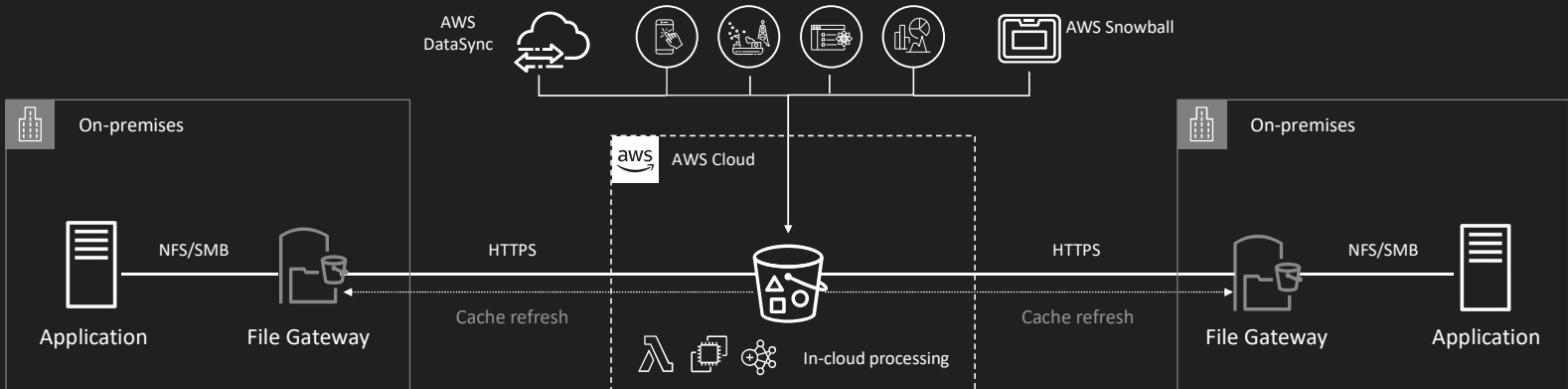
Benefits

- Cost optimization
- Reducing on-premises capacity
- Data protection with S3 Versioning, S3 Object Lock and S3 Replication



Amazon S3 File Gateway for building data lakes

INGEST AND ACCESS FILES QUICKLY FROM DISTRIBUTED LOCATIONS AND SCALE CAPACITY AS NEEDED



Features

- Generate data in-cloud or ingest from on-premises
- Fully-managed gateway cache provides low-latency access to data
- Up to 64 TB of cache per gateway and automated cache refresh at 5 min intervals
- Option to access files using the S3 API

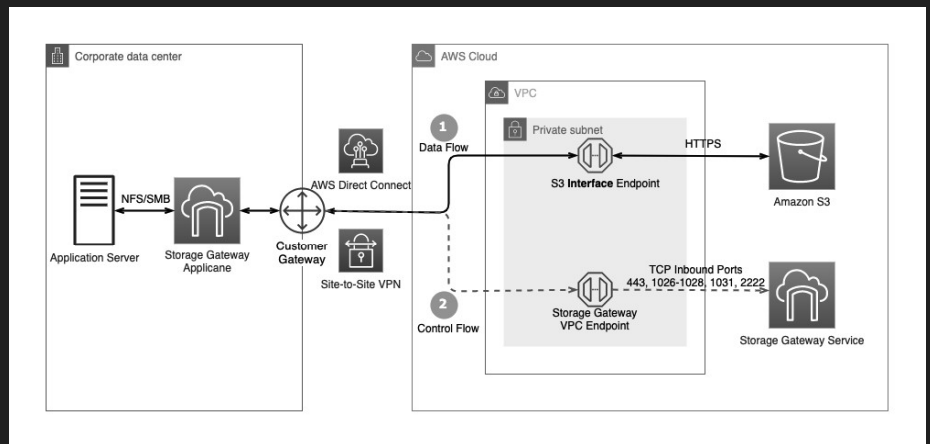
Benefits

- Access cloud storage from any on-premises location
- Process data in the cloud and refresh gateway cache for up-to-date results
- Data stored cost-effectively and centrally in the cloud

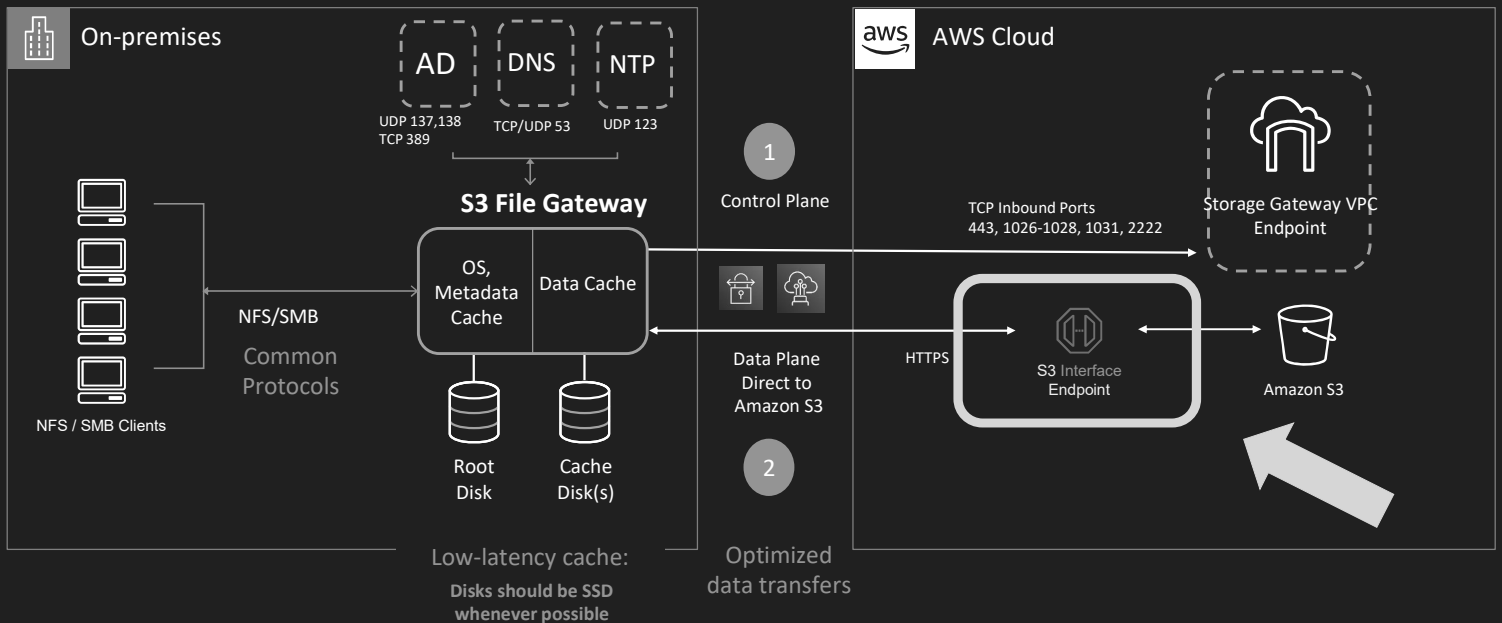


Endpoint Types

- Storage Gateway Endpoints
 - Public
 - Public with FIPS enabled
 - VPC
- S3 Endpoints
 - Public
 - Public with FIPS enabled
 - VPC with S3 PrivateLink (S3 Interface and S3 Gateway)
- **Note* Access points and Access point aliases are now supported*



Connect S3 File Gateway using AWS PrivateLink for Amazon S3





Amazon S3 File Gateway

- Connect using NFS v3/v4 or SMB v2/v3 protocols
- Files stored as native S3 objects
- Metadata is preserved as object user metadata
- Object-level encryption with SSE-S3 or SSE-KMS
- Fully managed local cache
- Read-through, write-back, LRU managed
- Notifications through Amazon CloudWatch (e.g., upload complete)
- Optimized data transfers
- Uploads only sends changes, downloads retrieve file parts needed
- Automated cache refresh
- Optimizes content distribution workloads
- Performance
Client writes at up to 4 Gbps