
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

STG 217

Best practices for selecting the right file system

David Stein

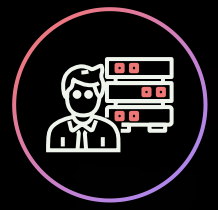
Principal Go To Market Specialist, File Storage
AWS

Christian Smith

Head of Worldwide Storage GTM, File Storage
AWS

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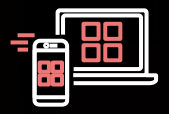
File workloads: broad spectrum



Storage & IT admins and app owners

Builders and data scientists





Enterprise IT applications



User shares



Line-of-business applications



Machine learning



SaaS applications



Software build environments



Backup and disaster recovery



Web serving and content management



Data science and analytics

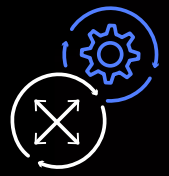


DevOps platforms

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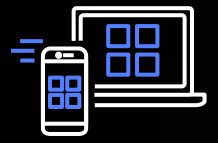
Why are customers moving to AWS?



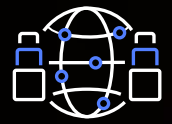
Elasticity



Functionality



Agility



Global infrastructure



Cost-optimized



Better ROI



Faster time to results

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Overview of AWS File System Services

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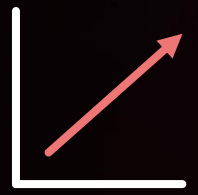
We’re razor-focused on providing the best solutions to serve usage patterns for file in the cloud



Network-attached storage

FSx

Amazon FSx



Virtually unlimited compute scale

FSx

Amazon FSx



Cloud-native apps and workflows



Amazon EFS

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FSx is the easiest path to run NAS in the cloud

1



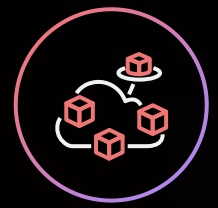
Migrate to like-for-like storage with the same capabilities and APIs

- Re-architect
- Re-invent
- Re-certify
- Re-train

NetApp ONTAP

Windows file server

ZFS or Linux-based file servers



Build and run NAS workloads leveraging the capabilities and performance of popular file systems

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Leverage virtually unlimited cloud compute scale

ACCELERATE TIME TO RESULTS FOR COMPUTE-HEAVY WORKLOADS

2

FSx Lustre

Accelerate
Massively scalable performance

Storage options
Optimized for price-performance

Seamless
Access data repositories

Amazon File Cache

Fast
Accelerate workloads

Agile
Use anywhere

Simplified
Unify datasets

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Easily share data in cloud-native apps and workflows

AMAZON EFS IS SERVERLESS, FULLY ELASTIC, AND VIRTUALLY UNLIMITED FILE STORAGE

Configuration-free
Highly available, durable, and secure, without any knobs

Fully elastic, no provisioning
Fully elastic storage with no need to provision capacity



Amazon EFS

Serverless, fully elastic file storage designed for builders

Accessible from virtually anywhere
Accessible from virtually all forms of AWS compute, containers, and serverless functions

Cost-optimized without any effort
Pay-as-you-go storage with cost-optimized features

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Choosing the right file system

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What is your existing storage?



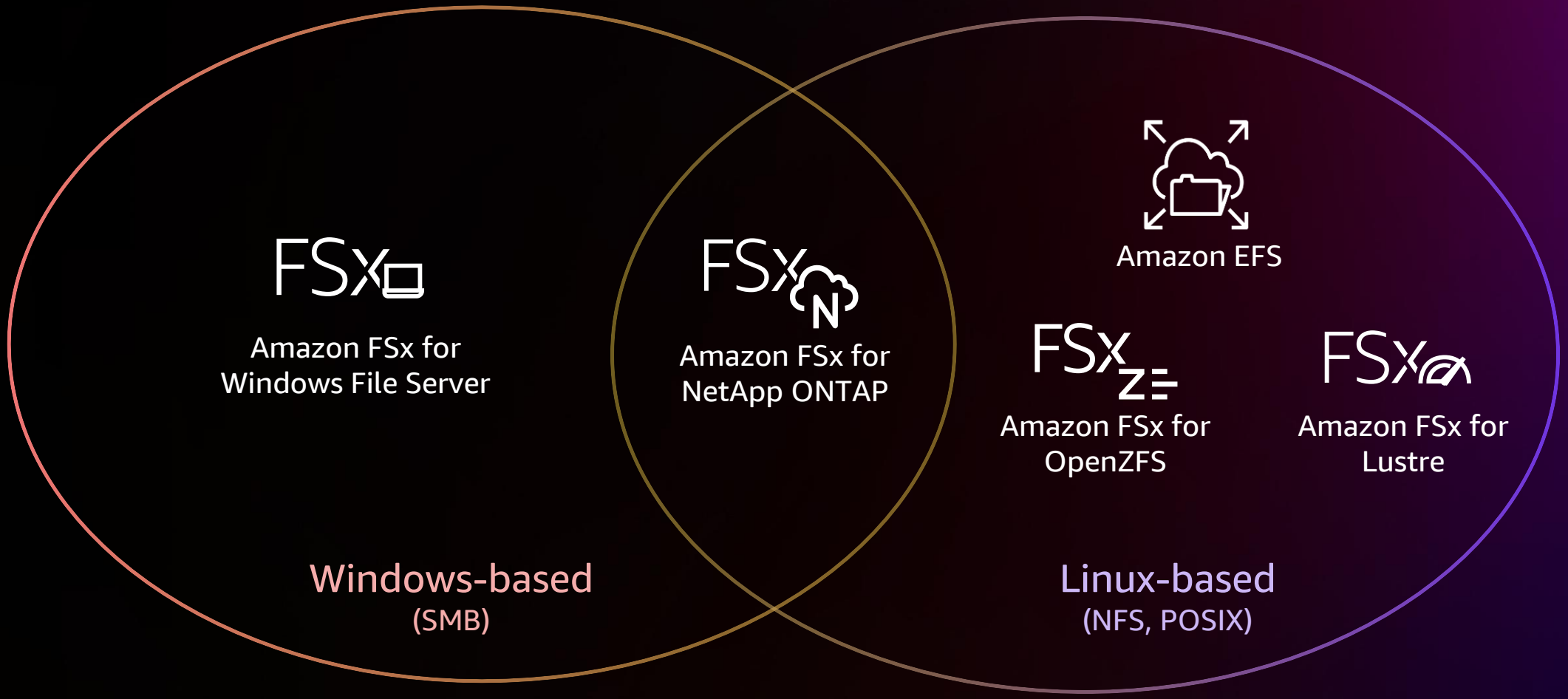
Migrate to AWS without re-inventing how you manage your data

NetApp ONTAP	Windows file server	ZFS or Linux-based file servers	Lustre & scale-out parallel file systems
FSx N	FSx	FSx Z	FSx

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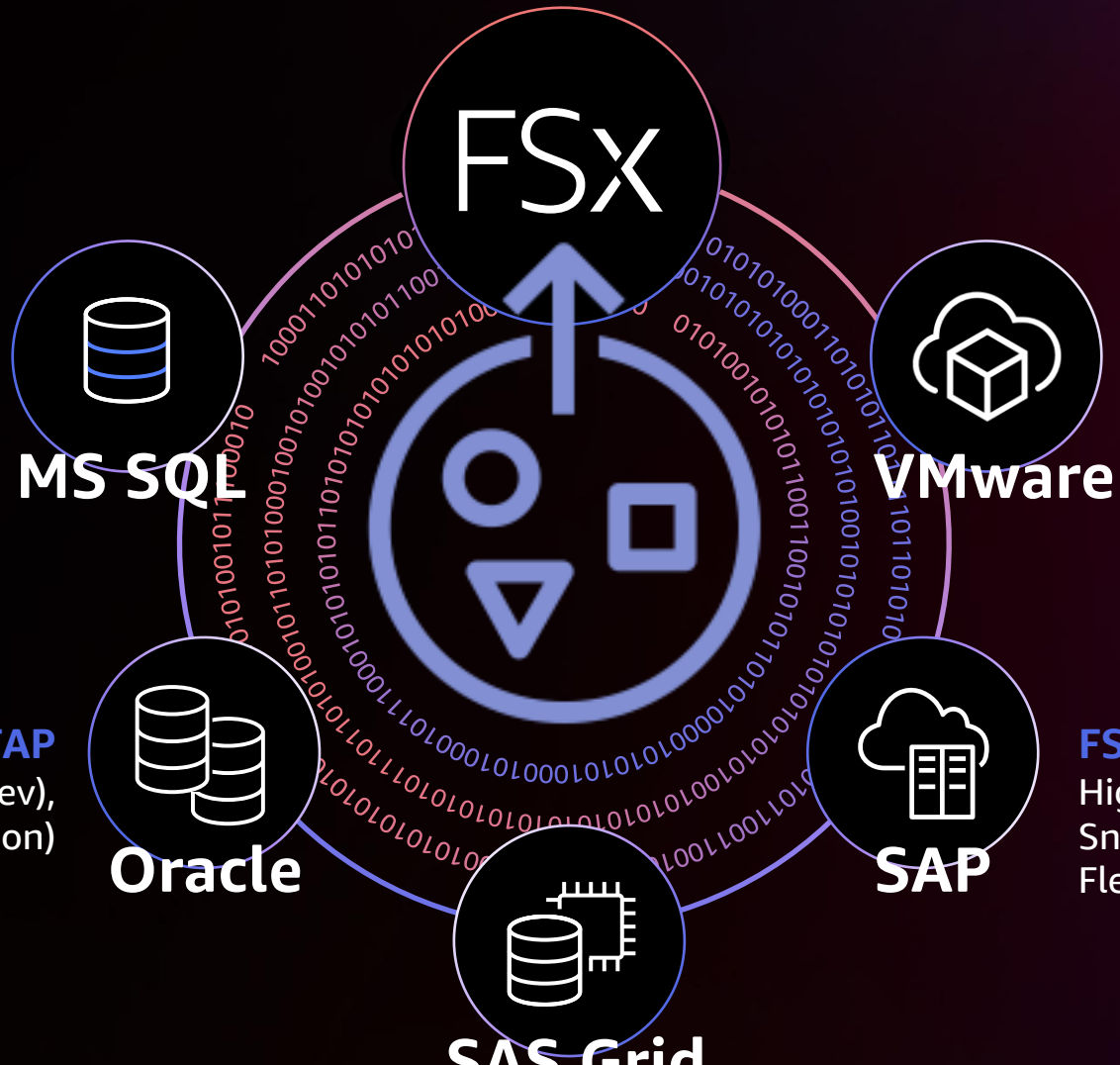
What is your file protocol?

AWS FILE STORAGE AVAILABLE FOR SMB, NFS, OR MULTIPROTOCOL DATA ACCESS



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Do you have specific application needs?



FSx for ONTAP
FSx for Windows
Shared storage for SQL Always On availability groups (AG) and Failover Cluster Instance (FCI)

FSx for ONTAP
Scale storage independently of compute, FlexClone and SnapMirror features

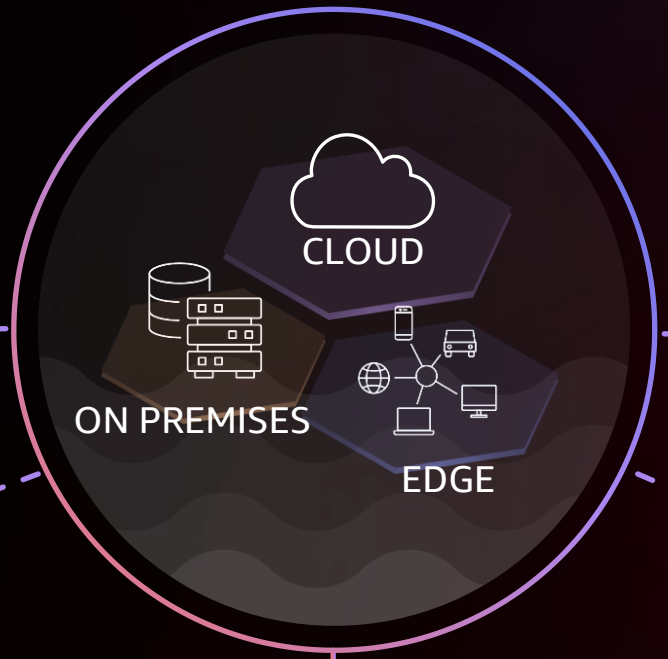
FSx for ONTAP
Snapshots, FlexClone (test/dev), SnapMirror (replication)

FSx for ONTAP
High performance shared storage, Snapshot, SnapMirror, and FlexClone features

FSx for Lustre
High throughput performance

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Do you have specific enterprise feature needs?



Elastic, backup, intelligent tiering, encryption, replication

Snapshots, backups, dedupe, caching, file access auditing

Scale-out performance, Amazon S3 integration, compression

Snapshots, compression, thin provisioning, cloning

Multi-protocol, data tiering, snapshots, backups, cloning, dedupe, compression, caching, third-party antivirus and Varonis

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What’s your line-of-business application?

By industry



Financial services –
Modeling and analytics



Life sciences –
Genome analysis and imaging



Media and entertainment –
Post-production



Automotive –
ECU simulations and
object detection



Semiconductor –
Electronic design
automation



Energy –
Seismic data processing

By application area



Big data analytics –
SAS grid



Machine learning –
Model training



High-performance
computing

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