AWS Quick Start

Got Files? Deploy Your File Workloads Quickly & Easily with AWS

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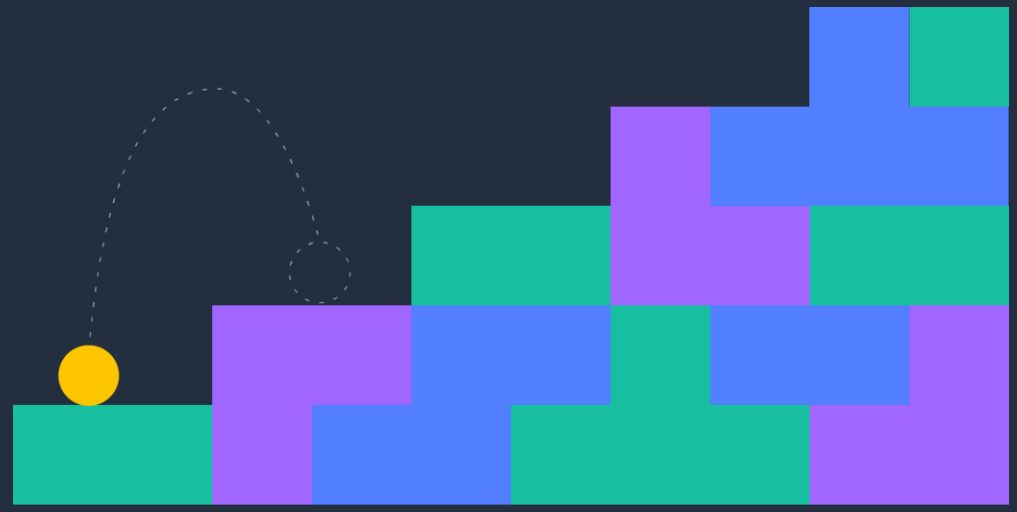


Considerations when moving file data

1. **Why** are you moving data storage to AWS?
2. **What** is the data you're moving?
3. **Where** is the data going – to which service/for what application & use case?
4. **When** do you need the data off your array/out of the DC/in AWS?
5. **How** much data? How much usable network capacity?

Why move? The pain of managing on-premises storage

Time

Cost

Complexity

Why move? The pain of managing on-premises storage

Time

- Long 3-6-month acquisition
- 30-90 day implementation

Why move? The pain of managing on-premises storage

Cost – hidden expenses

- Capex – high up-front capital investment
- Guesswork on how much storage you will need
- Guesswork on types of drives, mix of SSD/HDD
- Expensive add-on software for tiering, snapshotting, HA, DR
- Warranty renewals, EOL, migrations

Why move? The pain of managing on-premises storage

Complexity

- Specialized expertise
- Availability – need a second array and datacenter for HA
- Backup – dedicated backup arrays plus offsite copy
- Scalability – difficult to scale: time/cost to order more drives, upgrade controllers, EOL of array – all additional hidden costs

What? Files.

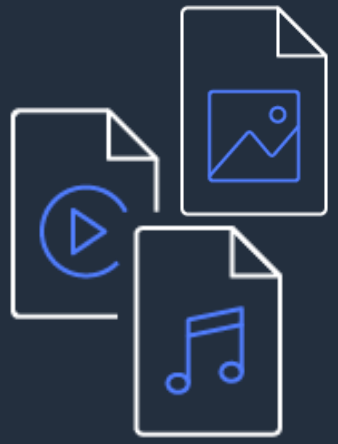
Everyone has files

Always growing…
never shrinking

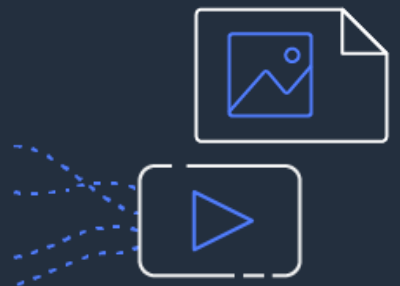
What? File data

Also referred to as unstructured data

Productivity Apps
Word processing
Spreadsheets
Presentations



Media Files
Digital photos
Audio files
Video files



Digital Security
Surveillance photos
Surveillance videos

Machine Generated
Satellite images
Weather data
Seismic imagery
Atmospheric data

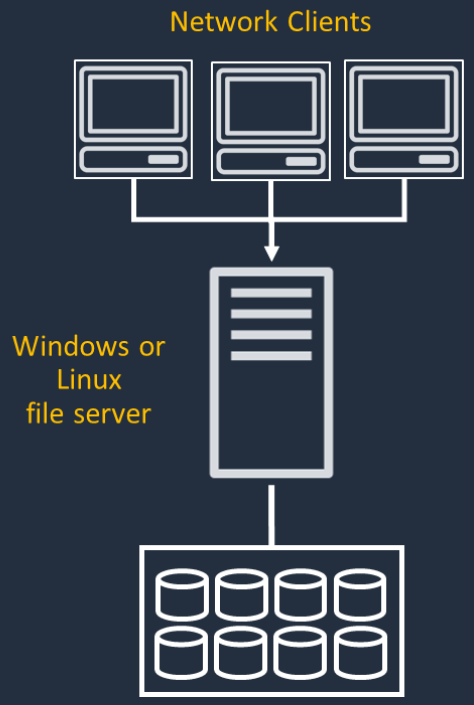
Sensor Data
Oceanographic
Weather
Traffic

Development Data
Code with CI/CD
Log files

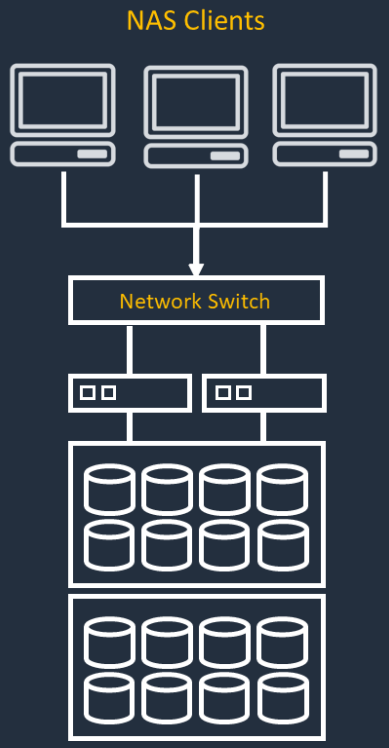
What? File data sources

DAS

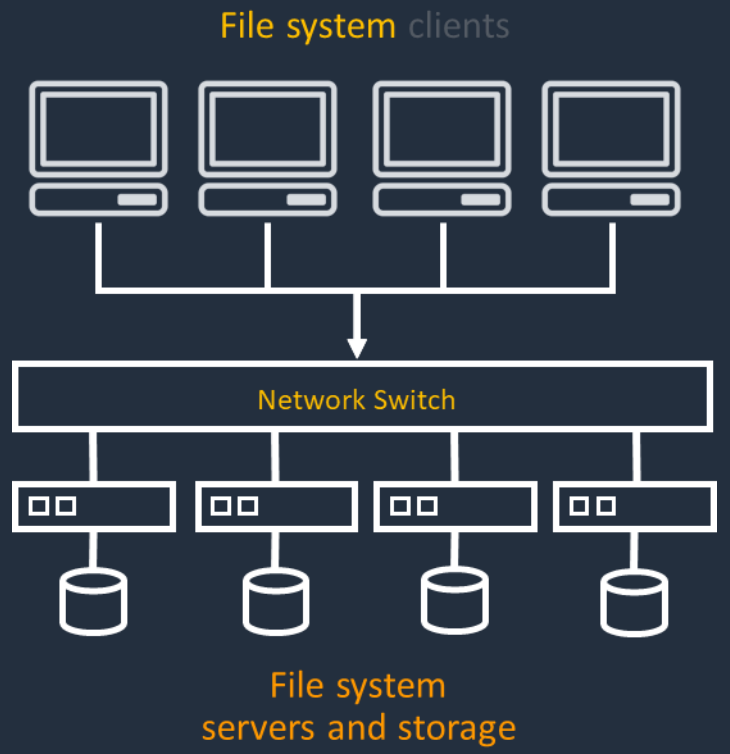
File Server



NAS



Scale-out NAS or Parallel File systems



Where? Storage portfolio breadth and depth

File Storage

Amazon EFS

Amazon FSx for Windows

Amazon FSx for Lustre

Object Storage

Amazon S3

Amazon Glacier

Block Storage

Amazon EBS

Backup

AWS Backup

Hybrid

AWS Storage Gateway Family

Transport & Edge

AWS DataSync

AWS Transfer for SFTP

AWS Snow* Family

Where? Amazon Elastic File System (EFS)

Storage for Linux-based applications

Key Workloads: Enterprise applications, web serving, content management, in-cloud database backups, container storage, test and development, media workflows

What OS and Protocol is being used?

Linux

NFSv4.x

Where is the data coming from?

Local file system

File server

NAS filer

Clustered or Scale-out file system

How can the migrated data be accessed?

Direct Connect

VPN

Multi-VPC

Multi-account

Where? Amazon FSx for Windows File Server

Storage for Windows-based business applications

Key Workloads: Home directories, .NET applications, content management, software development environments, media workflows

What OS and Protocol is being used?

Windows Server 2008, 2012, 2016

Windows 7, 8, 10

SMB 2.0

SMB 3.x

Where is the data coming from?

Local Windows file system

Windows file server

NAS filer

How will the migrated data be accessed?

Direct Connect

VPN

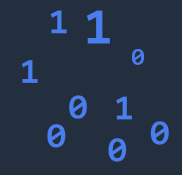
Single-AZ

Multi-AZ via DFS-R

Where? AWS Storage Gateway

Hybrid cloud service enabling on-premises apps to seamlessly use AWS storage

Standard storage protocols



Fully managed cache

Optimized data transfer

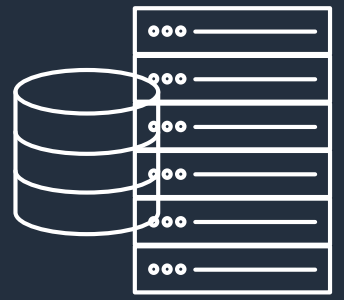
AWS integrated

Where? Hybrid file storage: File Gateway and Volume Gateway

File Gateway

Store and access objects in Amazon S3

Volume Gateway + File Server



Block storage and file systems on-premises

Where? Hybrid storage w/ Amazon S3 & File Gateway

Store files as objects in S3 and access via standard file protocols

Key Workloads: File backup, hybrid workflows, active archive, content distribution

What OS and Protocol is being used?

Windows

Linux

NFSv3, NFSv4.1

SMB2, SMB3

Where is the data coming from?

Local file system

File server

NAS filer

How will the migrated data be accessed?

On-premises

Remote location or branch office

In AWS

How? Options for Data Transfer

AWS
Direct Connect

Amazon
Kinesis
Firehose

Amazon Kinesis
Data Streams

Amazon Kinesis
Video Streams

Amazon S3
Transfer
Acceleration

AWS
Storage
Gateway

AWS
Snowball

AWS
Snowball Edge
Storage Optimized

AWS
Snowball Edge
Compute
Optimized

AWS
Snowmobile

AWS
DataSync

AWS
Transfer
for SFTP

How? Options for File Data Transfer

AWS Direct Connect

Amazon Kinesis Firehose

Amazon Kinesis Data Streams

Amazon Kinesis Video Streams

Amazon S3 Transfer Acceleration

AWS Storage Gateway

AWS Snowball

AWS Snowball Edge Storage Optimized

AWS Snowball Edge Compute Optimized

AWS Snowmobile

AWS DataSync

AWS Transfer for SFTP

How? AWS DataSync

Online transfer service that simplifies, automates, and accelerates moving data between on-premises storage and AWS

Fast data transfer

Easy to use

Secure and reliable

Cloud integrated

Cost-effective

Combines the speed and reliability of network acceleration software with the cost-effectiveness of open source tools

How? AWS Transfer for SFTP

Fully-managed service enabling transfer of data over SFTP, and stored in Amazon S3

Seamless migration of existing workflows

Fully managed in AWS

Enterprise ready

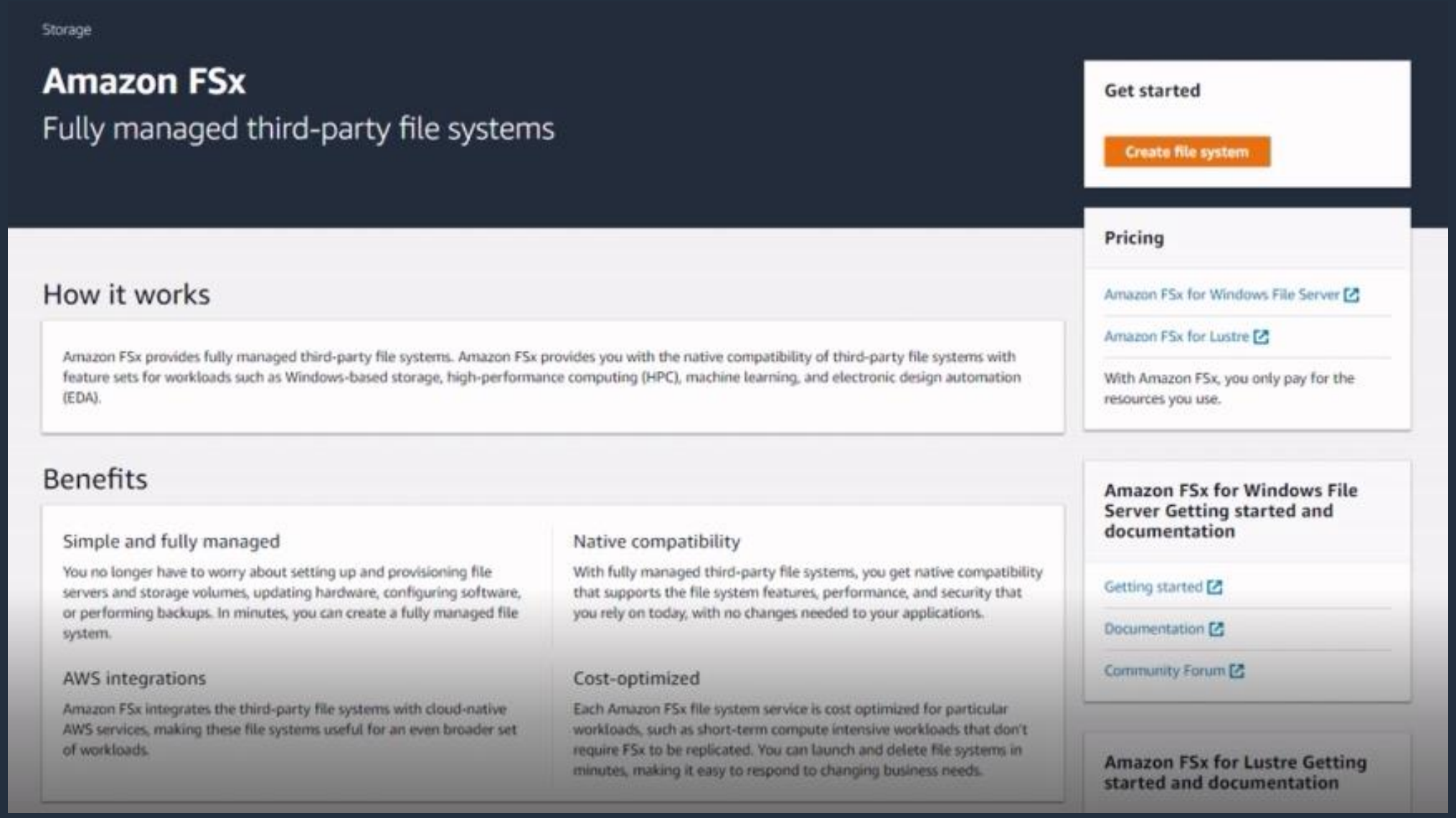
Native integration with AWS services

Cost-effective

Simple to use

Demo

Amazon FSx for Windows



Summary

- On-premises storage continues to grow
- AWS storage portfolio is growing
- The customer may think of storage as
  - DAS, NAS, SAN
  - Backup/DR, Home directories, Enterprise Apps
  - Application-specific data
- There are many enterprise file-based workloads that can be migrated today
- For Linux-based applications, use EFS
- For Windows-based business applications, use FSx for Windows File Server
- To store data in S3 and access via standard file protocols, use File Gateway

aws

Thank You for Attending AWS Quick Start

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