

AWS
re:Invent

STG221

SFTP workflows for data lakes and enterprise applications

Smitha Sriram

Senior Product Manager
AWS Transfer
Amazon Web Services

Kapil Shardha

Solutions Architect
Amazon Web Services

Jonathan Ostrander

Lead Developer
FINRA

Agenda

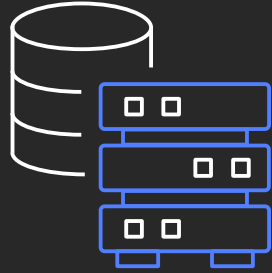
Service introduction, overview, and features

Demo #1

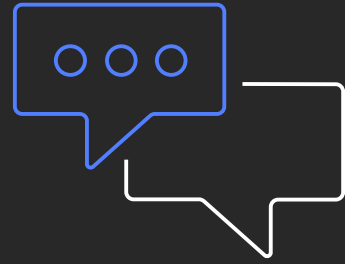
Demo #2

Q&A

Do you build any of the following?



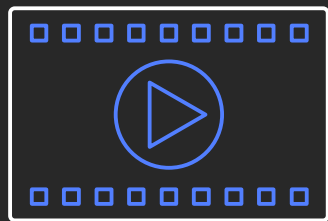
Data lakes and analytics platforms



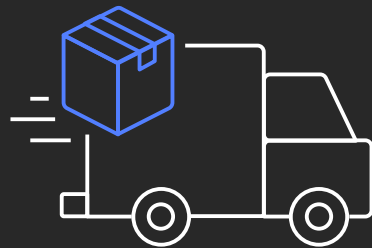
CRM applications for various business segments



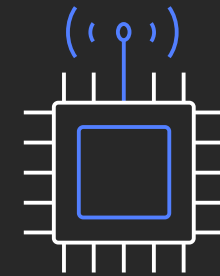
Subscription-based data products



Digital media content aggregation and distribution



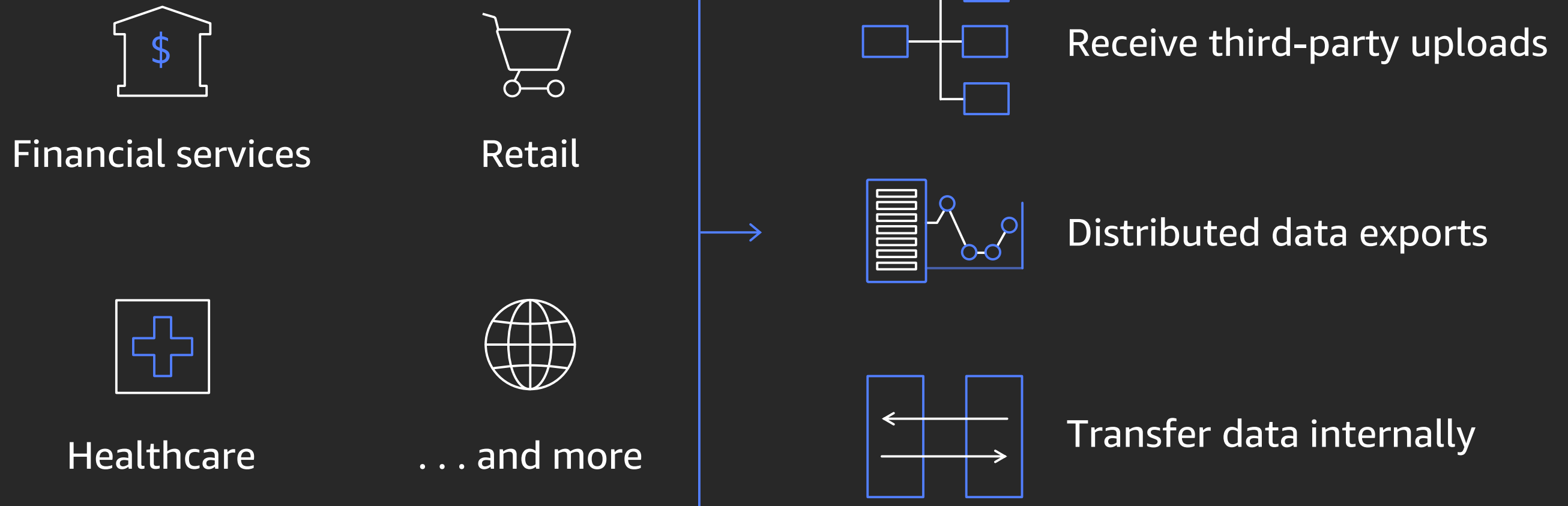
ERP and EDI systems for supply chain logistics



IoT services used in remote locations for monitoring

Then you probably use SFTP!

Widely used protocol across various industries globally



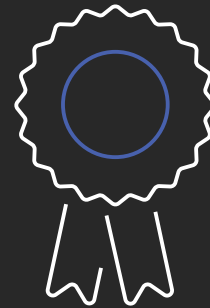
... and you've come to the right session!

AWS Transfer for SFTP

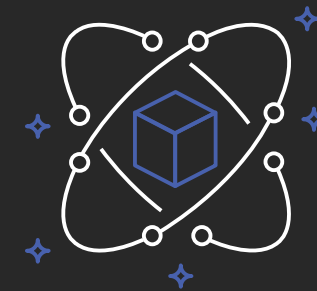
Fully managed SFTP service enabling transfer of data into Amazon S3



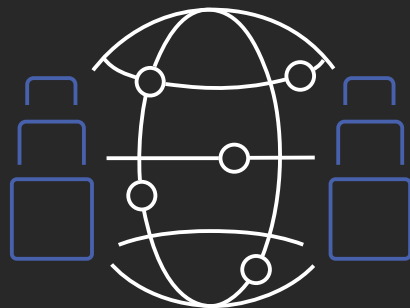
Seamless migration
of existing SFTP workflows



Secure and compliant



Native integration
with AWS services



Fully managed in AWS



Cost-effective



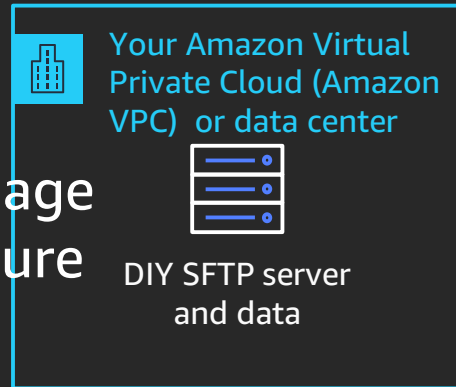
Simple

Launched at re:Invent 2018, available in 16 commercial regions

How it works



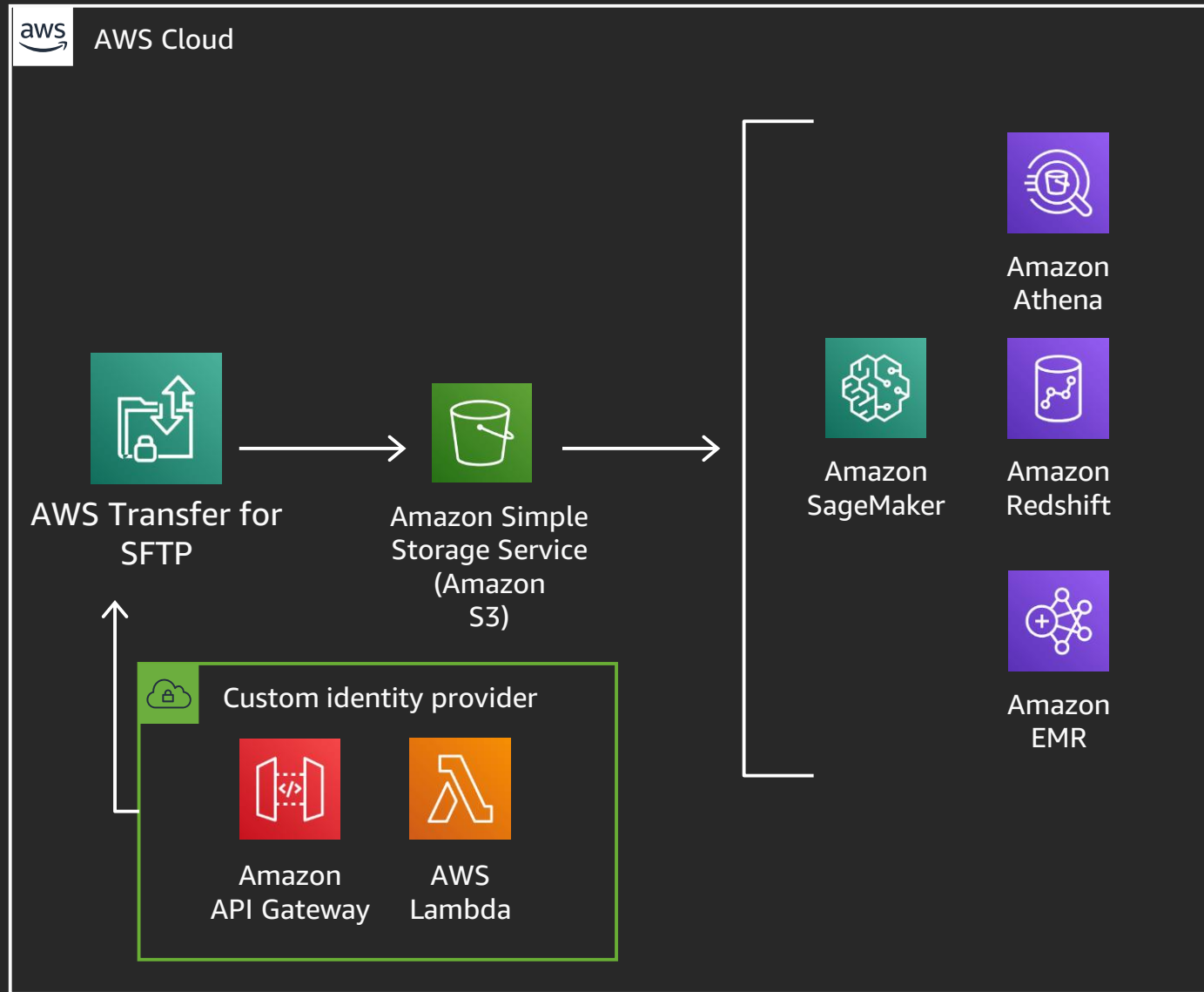
No need to manage SFTP infrastructure



SFTP users



No changes to end-user credentials, firewall configurations, or scripts



Modernize your workflow using cloud native services

Thank you!



BELONG



Support for seamless migration



At launch (re:Invent 2018)

- ✓ Integrate existing identity providers (Microsoft AD, LDAP, or in-house built) for end-user credentials
- ✓ Route existing SFTP domain to service endpoint using Amazon Route 53
- ✓ Support standard SFTP clients

2019

- ✓ Import your existing server's host key
- ✓ Elastic IP support using Network Load Balancer
- ✓ Logical directories to map Amazon S3 bucket paths to end-user visible paths

Same **clients, credentials,**
and **hostname**



Same **server identity**
and **scripts**

Support for security and compliance




At launch (re:Invent 2018)

2019

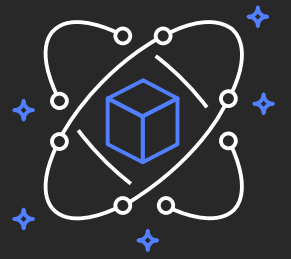


- ✓ Encryption at rest options such as SSE-S3 or SSE-KMS
- ✓ Server activity tracking in Amazon CloudWatch and AWS CloudTrail

- ✓ SOC 1,2,3 compliant 
- ✓ Support for VPC endpoints (AWS PrivateLink) and AWS CloudFormation
- ✓ Amazon CloudWatch logging enhancements
- ✓ **Source IP logging new!**

Use AWS SFTP for your **regulated workloads**

Support for native AWS integrations



At launch (re:Invent 2018)

- ✓ Data stored in Amazon S3 bucket
- ✓ Amazon S3 events for automated post-upload processing
- ✓ AWS Identity and Access Management (IAM) for access control
- ✓ Amazon API Gateway and AWS Lambda for identity provider integration

2019

- ✓ VPC endpoints (AWS PrivateLink) support
- ✓ AWS CloudFormation templates
- ✓ **Tag-based access control new!**

Easily **use AWS services** for a rich set of functionality

FINRA use case for logical directories on Amazon S3

Traffic metrics

FINRA facilitates an average of

225,500

SFTP file upload/download actions daily in AWS



FINRA is dedicated to investor protection and market integrity by regulating

3,700

securities firms and

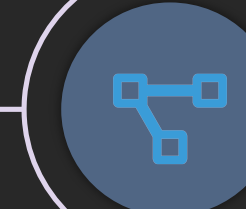
630k+

brokers

FINRA is highly available, operating

24/7

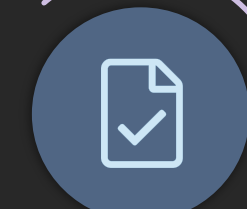
for firm file submissions via AWS SFTP



FINRA supports

2,200+

daily SFTP customers



FINRA receives average file sizes of

50 MB

and peak file sizes of

100 GB

via SFTP in AWS

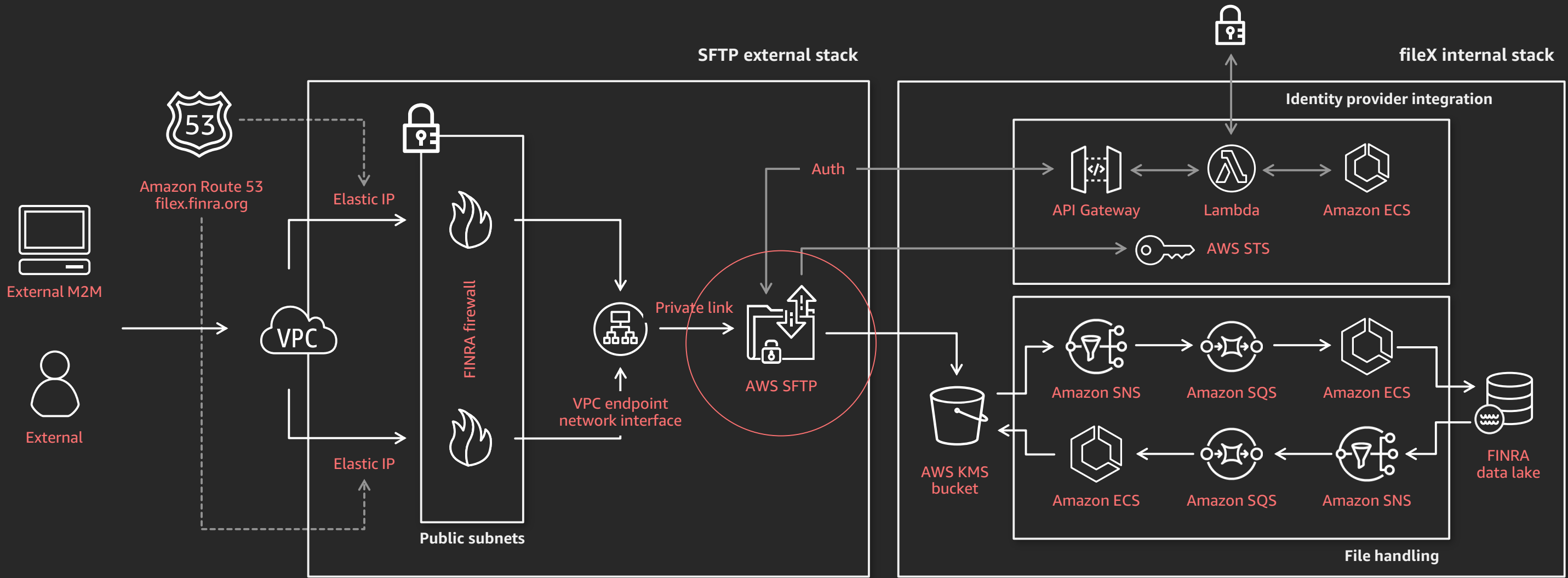


FINRA receives approximately

1 Terabyte

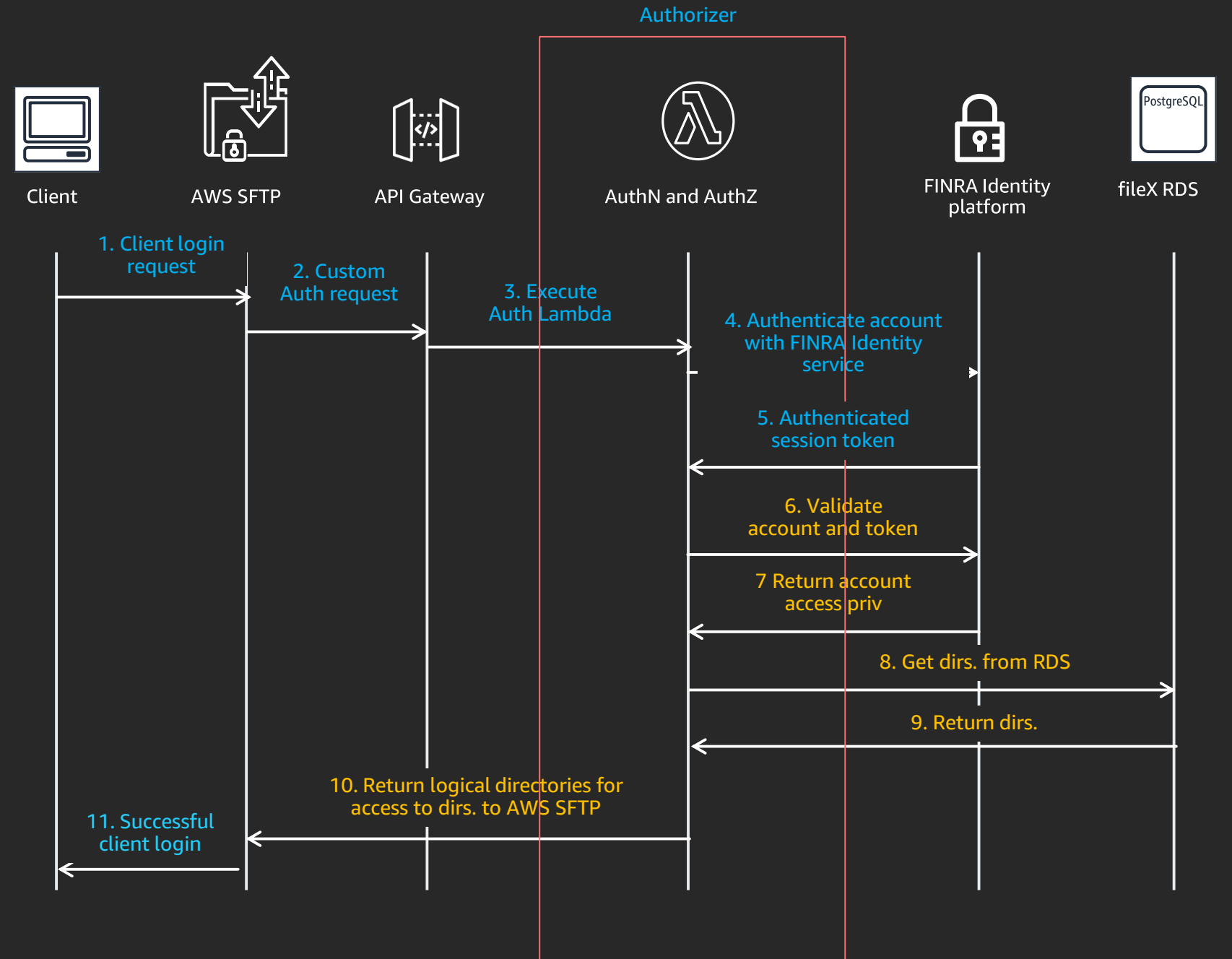
of files via SFTP daily

SFTP architecture

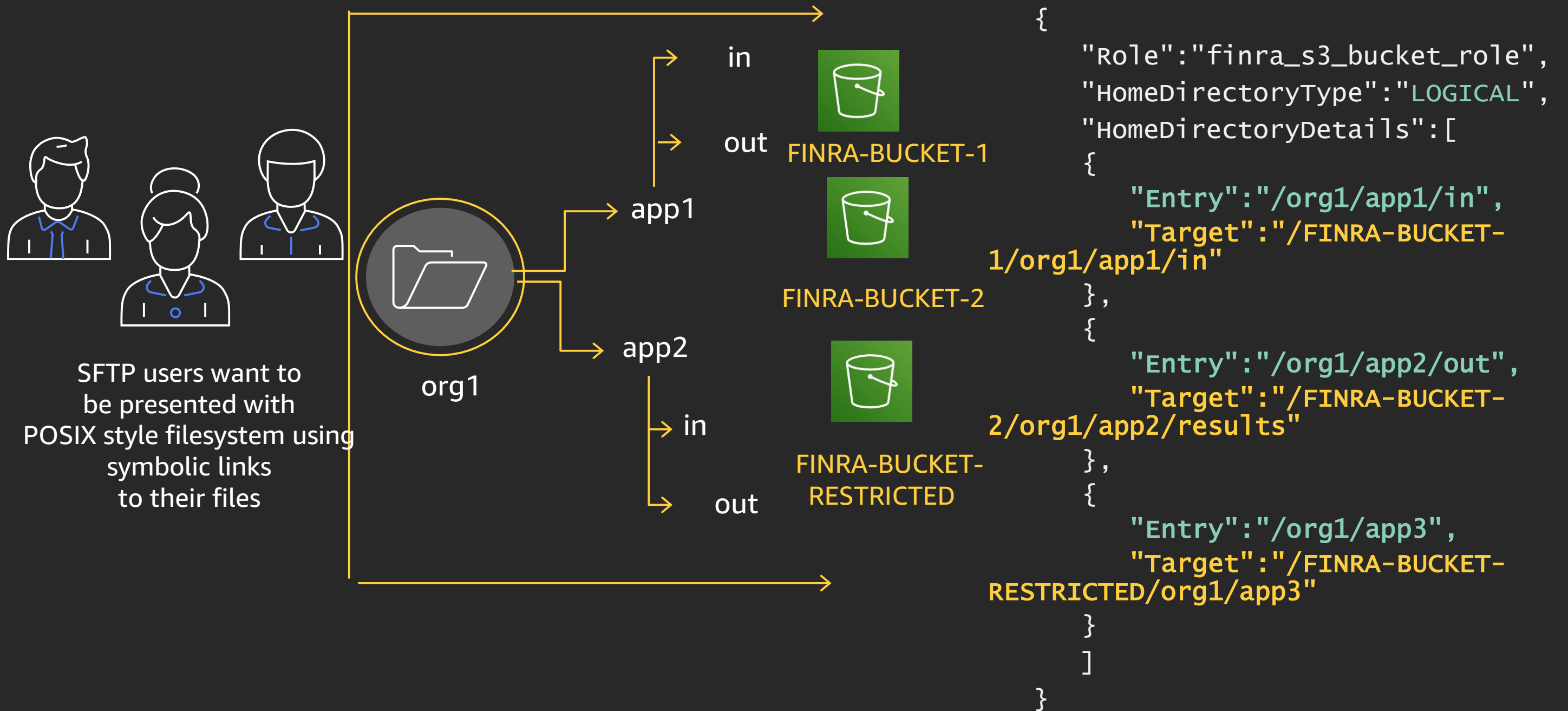


Custom identity provider integration

- Custom Auth using FINRA's Identity platform
- Supports complex access model
 - Single user
 - Multi user with shared spaces
 - Master user
 - Service provider (on behalf of)
- Real-time permissions



End user scripts with file paths



Demo

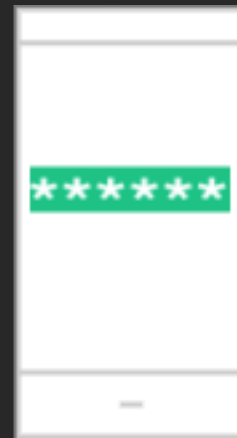
Multi-factor authentication

Multi-factor authentication (MFA)



A login form with a user icon at the top. Below it, the text "User Name:" is followed by a text input field containing "johndoe". Below that, the text "Password:" is followed by a password input field containing seven asterisks.

1st factor
(what you
know)

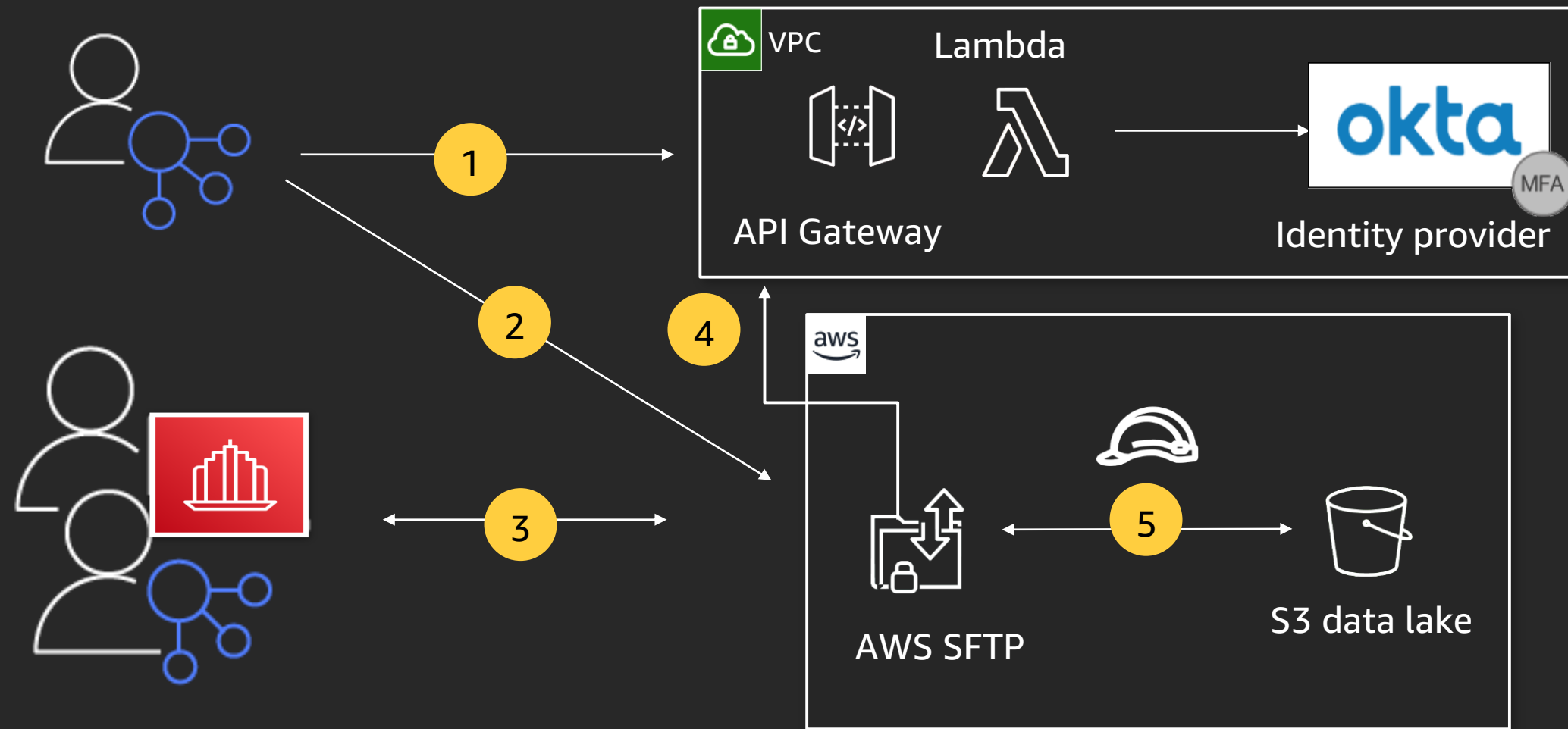


2nd factor
(what you
have)



Secure access

Using OKTA as custom IdP with MFA



Okta for password authentication

Set up an API Gateway and Lambda for identity provider access → APIG URL supplied during SFTP server creation → End users/apps login providing credentials and MFA token → API Gateway and Lambda are invoked to authenticate → Response from API Gateway used to authorize S3 access

Demo

Related sessions

STG204

Get your data to AWS: How to choose and use data migration services

STG206

Stop managing SFTP servers today

STG333

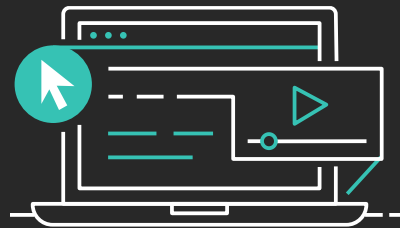
Migrate and modernize SFTP file transfer workflows with AWS

STG316

Get hands-on & learn best practices for AWS data migrations

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- AWS Storage Gateway
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