aws

Accelerate cloud migration and app modernization with AWS Identity Services

Provide frictionless access and improve time to market for directory-aware workloads

Agenda

Cloud adoption – business drivers and approaches

Identity-centric security as one of the foundational elements

Enterprise customers dependency on Active Directory

AWS Managed Active Directory as a catalyst in cloud transformation journey

Customer use-cases

Demo – AWS Managed AD integration with different AWS services

Learn more through available resources

Business is growing

Accelerate innovation

Increase agility

Improve security

Cloud transformation is accelerating

Providing business benefits as seen across thousands of migrations

59%
of customers want to optimize existing use of cloud (cost savings)*

55%
Faster time to market for mature cloud adopters vs. on-premises**

31%
Average infrastructure cost savings

43%
Fewer security incidents per year

62%
IT staff productivity boost

3x
More features delivered per year

*Source: Flexera 2022 State of the Cloud Report
**Source: McKinsey Quarterly 2021
***Sources: IDC, Nucleus Research, AWS Analysis

There are many different business drivers

Digital transformation

Agility and staff productivity

Improved operational resilience, scalability, and security

Cost reduction

Going global quickly, M&A

IoT and AI/ML

Data center consolidation

Outsourcing changes EOL HW/SW

Both migrating and modernizing are important to fully realize the benefit of cloud

Legacy → Modernization → Innovation

Monolith

- Application
- Datastore
- Host
- Environment
- Infrastructure

Move to Cloud

1 Cloud Hosted

Move to Managed

2 Cloud Managed

Move to Cloud-Native

3 Cloud Native

Innovate

4 New Products, Customer Experience, Business Process

Business Value

| On-Premises | Infrastructure Services | Platform Services | Cloud-Native Services | Software Services |

Retire or Retain

EC2 / VPC

Security, Identity and Compliance

RDS / ECS

Fargate / Lambda / DynamoDB

Customer Engineering

Migrating and modernizing to cloud native services

SECURING USER ACCESS
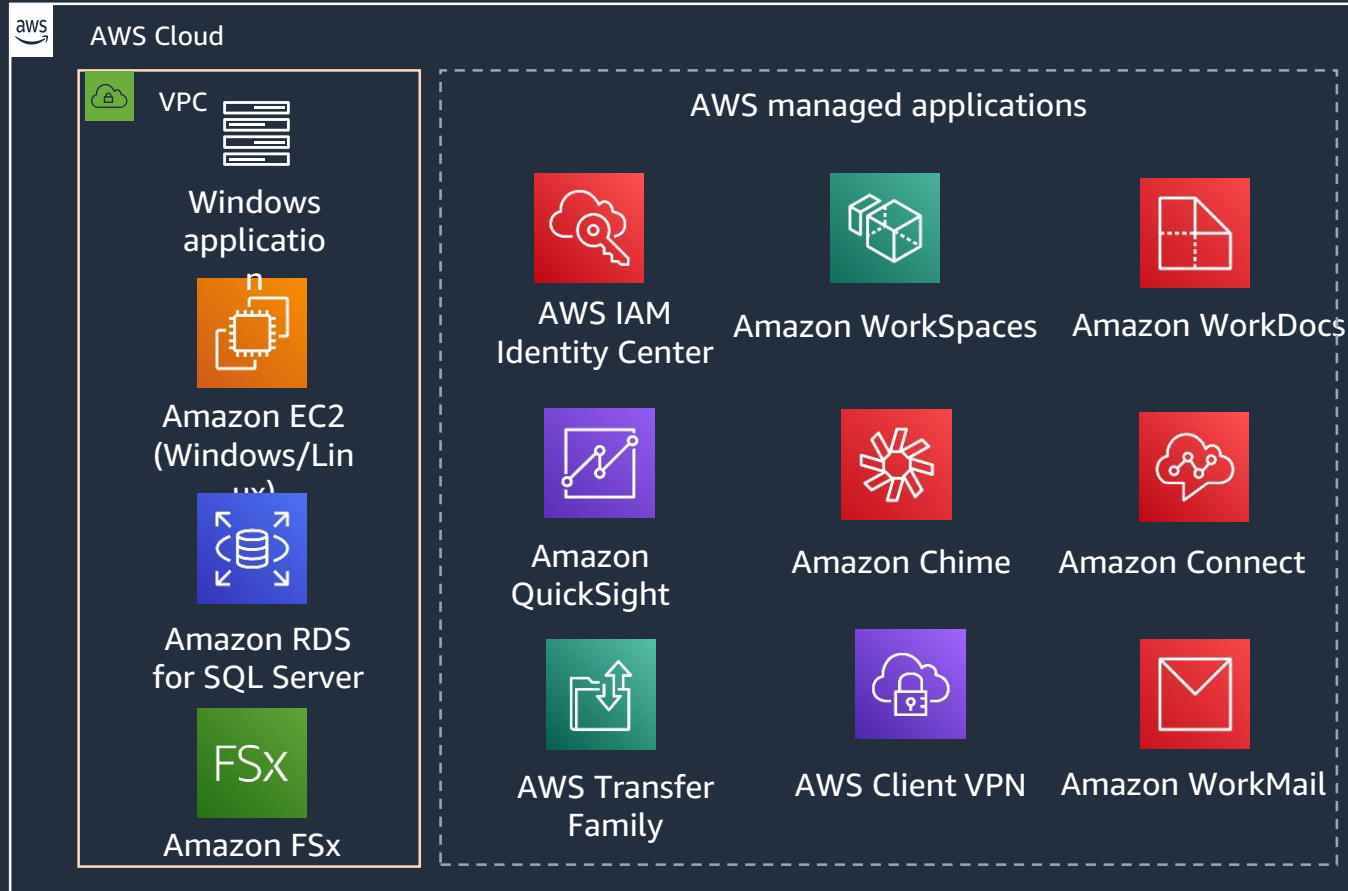
Modernizing identity store
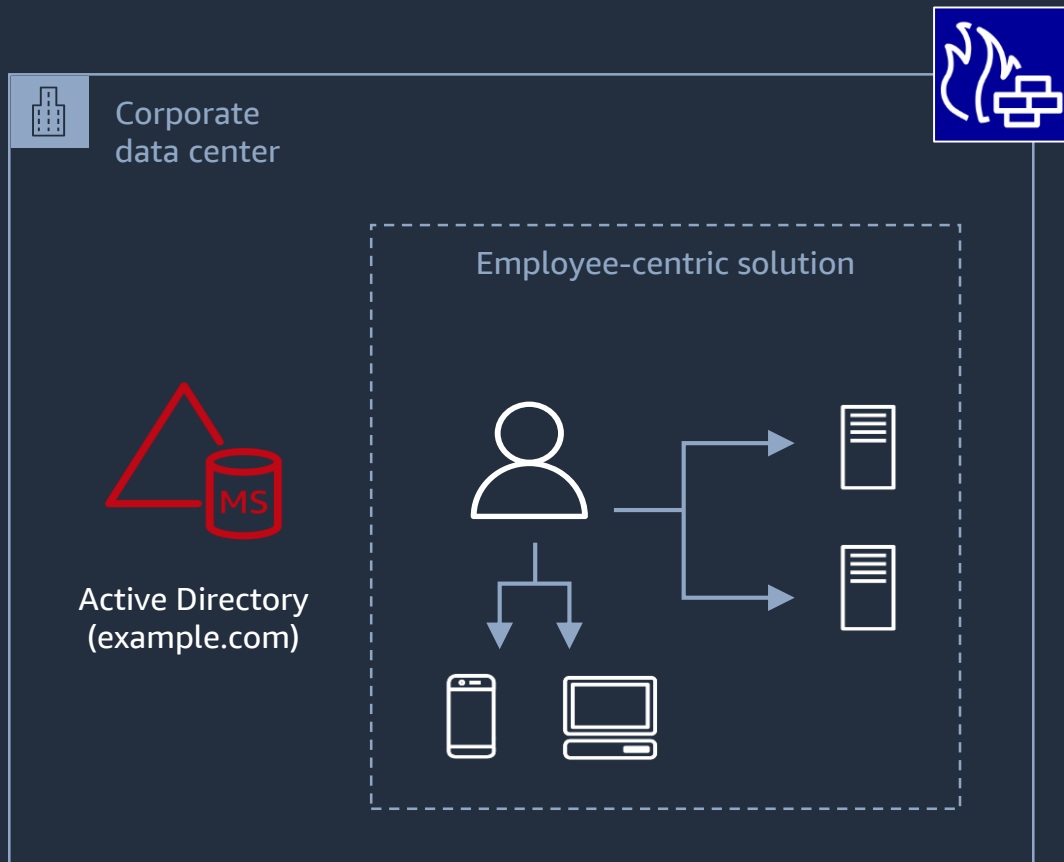
Lift-and-shift migrations

Modernize directly into the cloud

Enterprises are still dependent on Active Directory (AD)

EVEN THOUGH AD WAS NOT DESIGNED FOR ANYWHERE COMPUTING

| Domain Services	Certificate Services	Federation Services	Rights Management Services	Workforce identity management
Provides LDAP, Kerberos and NTLM authentication for domain joined users & devices	On-premises, cost-effective Public Key Infrastructure (PKI) service	Single Sign-On through Active Directory Federation Services (ADFS)	file-level protection, encryption and rights to documents	Generalized LDAP service for application authentication, authorization

AWS Directory Service provide scalable, secure and reliable options for cloud migration journey

FOCUSING ON BUSINESS INNOVATION INSTEAD OF MAINTAINING TECHNOLOGY

AD Connector

- Redirect authentication requests from AWS to on-premises Active Directory

- No AD credential caching in the cloud

- Supports one instance per AWS account

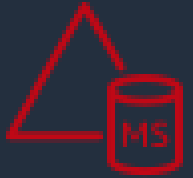- Highly available across 2 Availability Zones by default
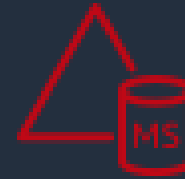
AWS Managed AD

- Microsoft 2019 Active Directory delivered as a managed service

- Host AD users and groups or connect to on-premises AD

- One instance supports multiple AWS accounts

- Highly-Available with multi-region replication capabilities

AWS Managed Microsoft AD
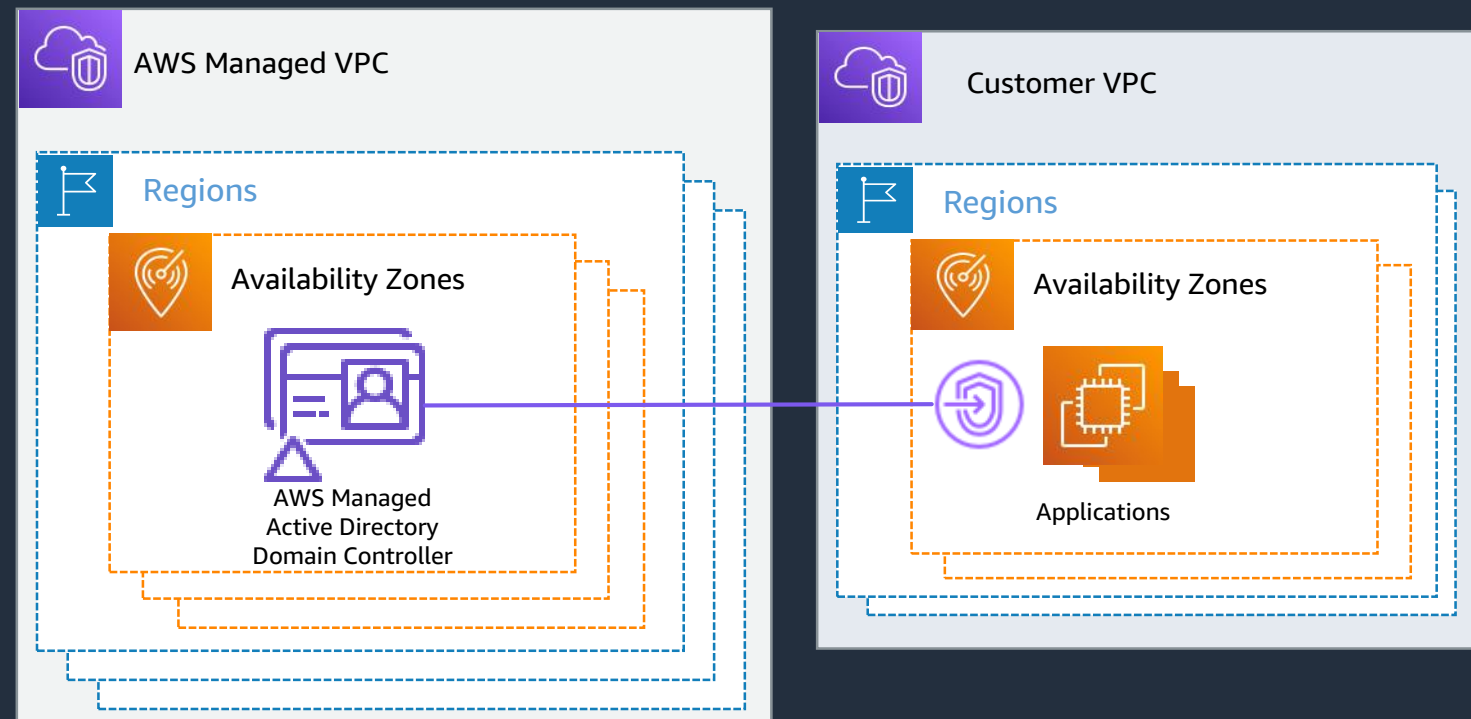
Fully Managed service for Windows Active Directory

- Single tenant domain (single forest, single domain)
- Highly available across multi-AZ, multi-region
- Default 2x domain controllers, can scale out per Region

AWS responsibility

- Deployment
- Patch
- Monitor
- Snapshot/Restore

Customer responsibility

- Administer users, groups, GPOs, etc.
- Password policies
- Trust relationships

AWS Managed VPC

Regions

Availability Zones

AWS Managed
Active Directory
Domain Controller

Customer VPC

Regions

Availability Zones

Applications

AWS Directory Service fulfils industry standard compliance requirements

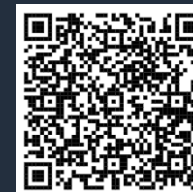SOC 2 Type II
Audit Report

ISO 27001:2013

FedRAMP Moderate
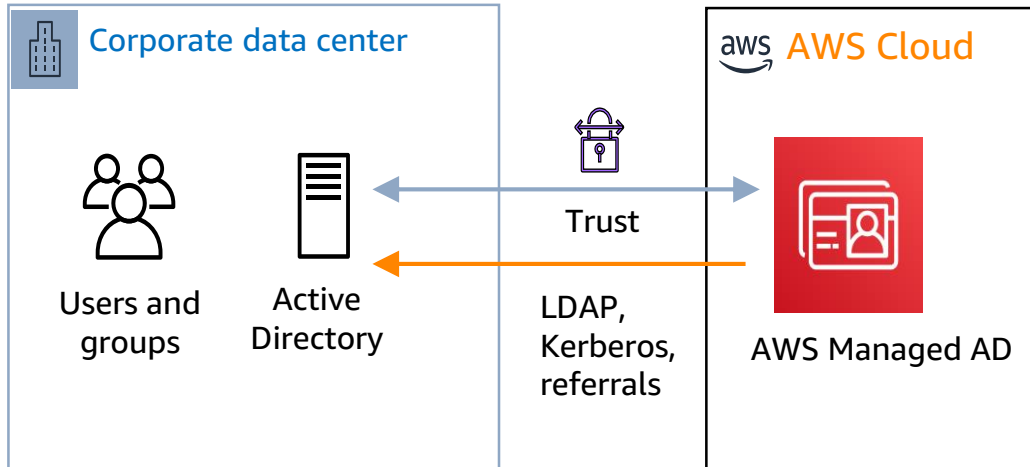FedRAMP High

PCI DSS version 3.2 at
Service Provider Level 1

Health Insurance Portability and
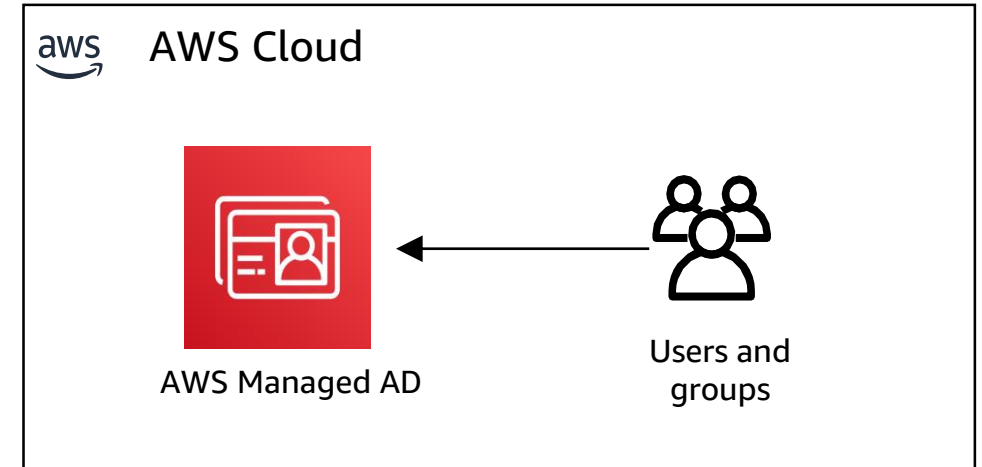Accountability Act (HIPAA)
compliance

AWS Services in Scope by Compliance

AWS Managed AD: Migrate and Modernize

AWS Managed AD with on-premise AD trust

Standalone AWS Managed AD

- Integrate with your existing enterprise AD with one-way or two trust relationships

- Use AWS Managed AD to manage sub-set of enterprise identities to eventually migrate off of on-prem AD at your own pace

- Migrate from your existing on-prem / self-managed AD to AWS Managed AD to gain operational efficiencies

- Migrate identities to/from divestiture/acquisitions to AWS Managed AD for streamlined access and infrastructure consolidation

- Empower dev teams to innovate and build quickly by setting up ephemeral non-production environments
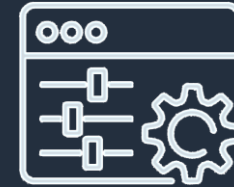
Key Features of AWS Managed Microsoft AD

Actual Microsoft AD 2019

Trust support with on-premises AD to avoid synchronizing passwords

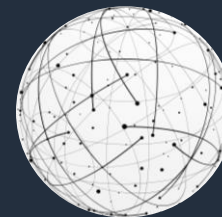**Configurable directory settings based on your InfoSec policies**

Manage users, groups, group policies for standalone Managed AD

Seamless domain join for your EC2 instances

Support multiple accounts and VPCs

Multi-region replication support including GCR

AWS-managed infrastructure

Customers are using AWS Managed AD for variety of use-cases

Quickly adopt AWS services

Quickly integrate Amazon EC2 and Amazon RDS instances to their domain for user access across

Detailed Case Study

Scale across multiple regions

Integrated Managed AD for global enterprise to manage cross-account access and enable enterprise services

Detailed Case Study

Provide frictionless access

Secure log in process using AWS Directory Service to enable scalable, cost-effective Desktop Virtualization Service using Amazon WorkSpaces
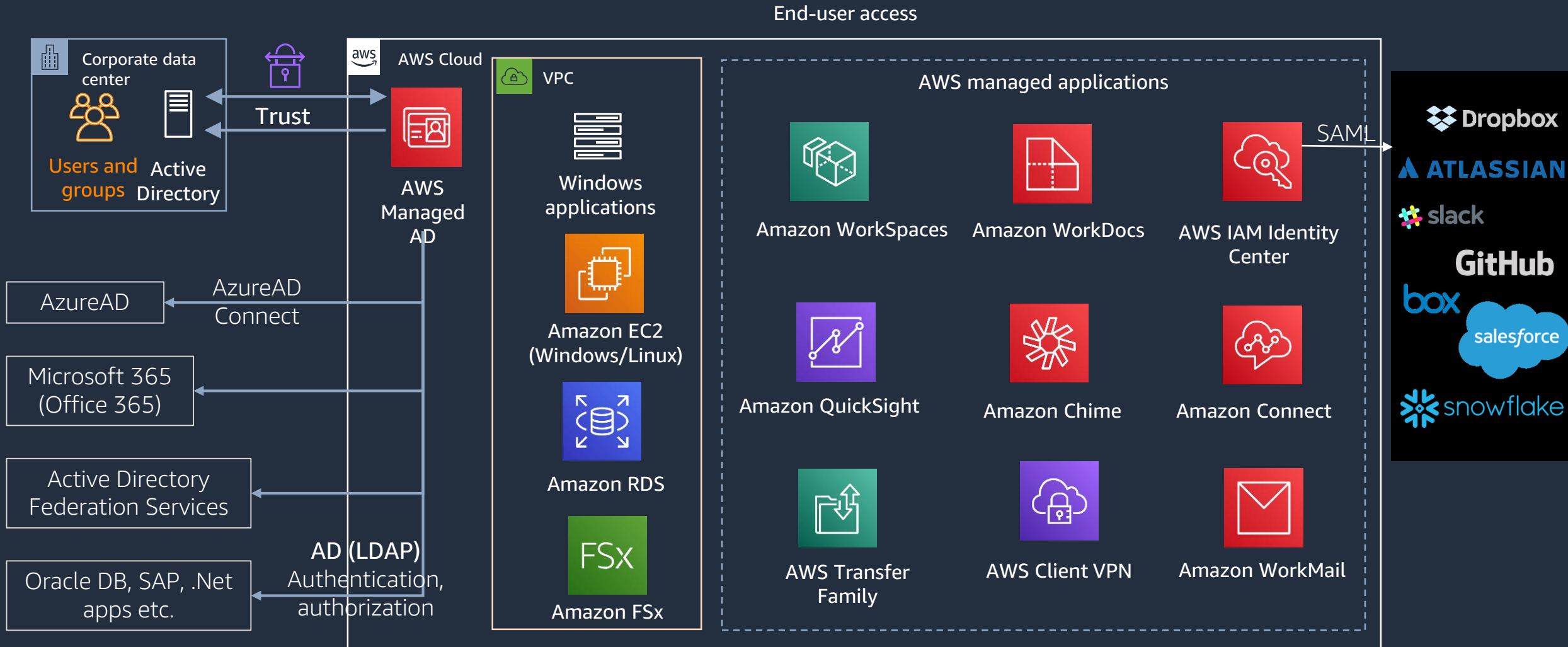
Detailed Case Study

aws

Customer use-cases

DXC Technologies

aws

Application integration

End-user access

Corporate data center

Users and groups

Active Directory

Trust

AWS Cloud

AWS Managed AD

VPC

Windows applications

Amazon EC2 (Windows/Linux)

Amazon RDS

Amazon FSx

AzureAD

AzureAD Connect

Microsoft 365 (Office 365)

Active Directory Federation Services

Oracle DB, SAP, .Net apps etc.

AD (LDAP) Authentication, authorization

AWS managed applications

Amazon WorkSpaces

Amazon WorkDocs

AWS IAM Identity Center

Amazon QuickSight

Amazon Chime

Amazon Connect

AWS Transfer Family

AWS Client VPN

Amazon WorkMail

SAML

Dropbox

ATLASSIAN

slack

GitHub

box

salesforce

snowflake

Integration use-cases

Demo

aws
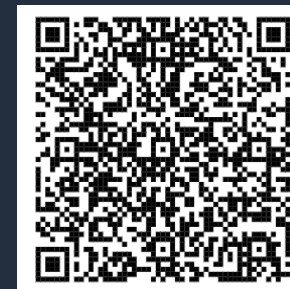
Get started with AWS Directory Service

AWS Directory Service

AWS Managed Microsoft AD

Learn more about AD Trusts

Immersion Day

Quick Start for AD

AWS Workshop for AD

Thank you!