



aws SUMMIT

INDIA | MAY 25, 2023

B M A R C 0 0 7

Empowering Mahindra Auto dealers using next-gen dealer management system

Sanjeev Trivedi

GM, Architecture & DevOps
Mahindra & Mahindra

Aparajithan Vaidyanathan

Principal Solutions Architect
AWS India



Agenda

- About Mahindra & Mahindra Automotive Division
- Dealer management system
- ✓ Overview
- ✓ Challenges
- ✓ Build or buy?
- ✓ Key tenets
- Solution architecture - Deep dive

About us

- M&M Automotive Division

- Part of Mahindra Group
- 58K plus vehicles sold in Feb'23

- M&M Automotive Digital Center

- Digital arm of Mahindra Auto
- Team of 100+ professional



AUTOMOTIVE

Mahindra Automotive is India's leading SUV player.



Dealer management system - Overview

Used by M&M's Automotive Dealers across the country.

Handles sales, service, spare-parts & financial accounting.

~2,000
Dealer
locations

~30,000
Active Users

~40,000
Auto Sales
pm

~25,000
Services
pd

~3,000
Peak
Concurrent
Sessions



Current challenges

- On-prem, monolithic system
- Bandwidth dependency
- Performance, downtime concerns
- Long turn-around time
- Limited capabilities



Build or buy?

- Unique processes mastered over the time
- High customization (\$\$)
- Limited & Expensive Support
- Intellectual Property Protection
- Inflexible release timelines



Key tenets

- Accelerate Go-To-Market
- Secure & Scalable
- Reliability & Resilience
- Observability & Monitoring
- Analytics & AI
- Optimized TCO
- Best practices from global teams



Solution architecture - Deep-dive

Landing Zone

DevOps

Authentication

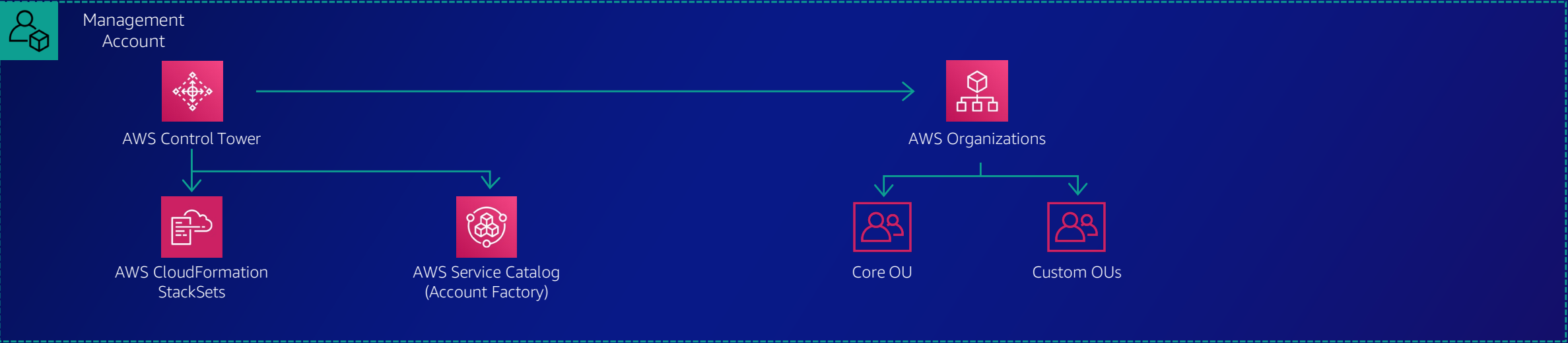
Integration

Data Migration

Solution
Architecture

DMS landing zone with AWS control tower

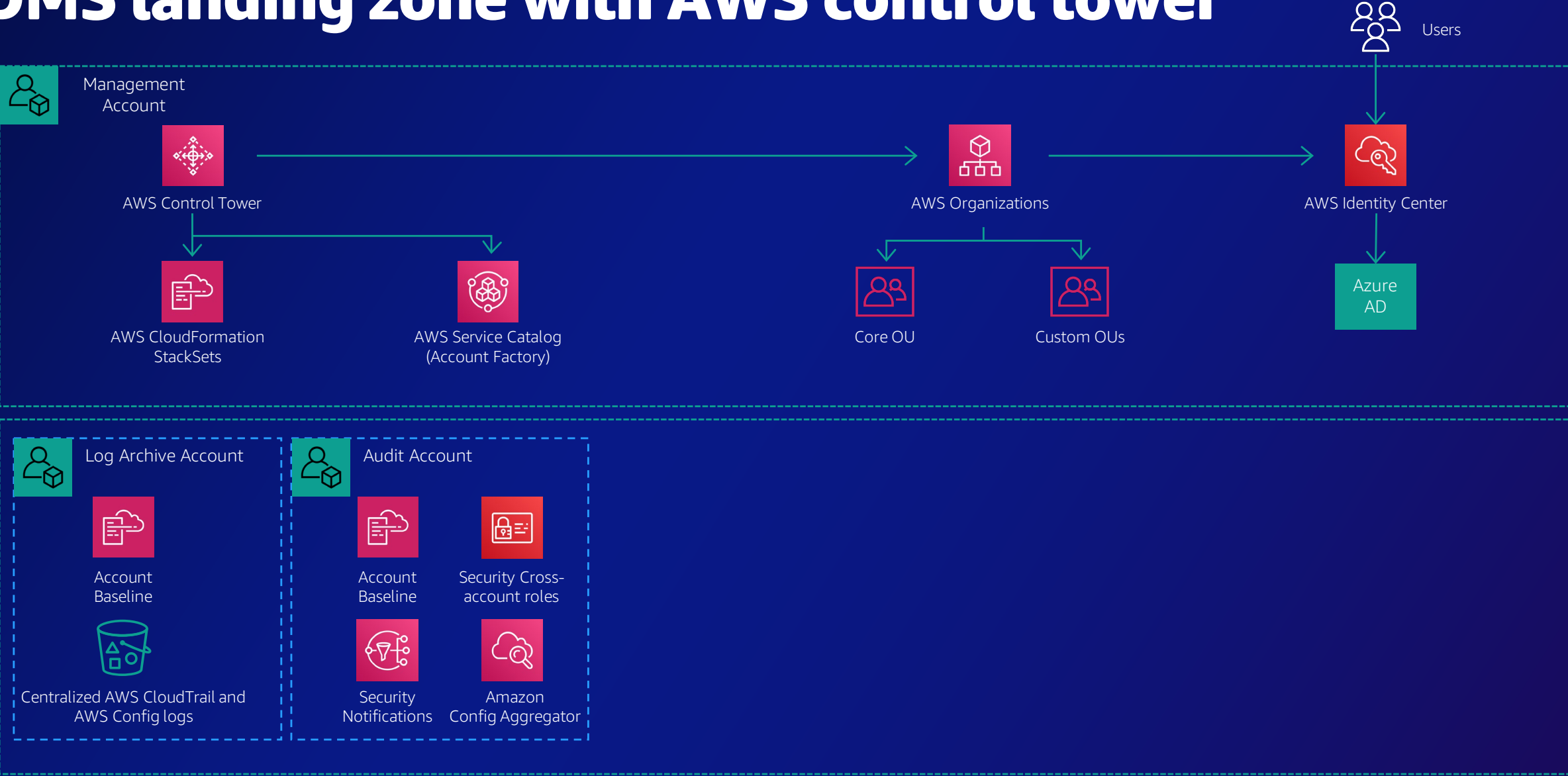
DMS landing zone with AWS control tower



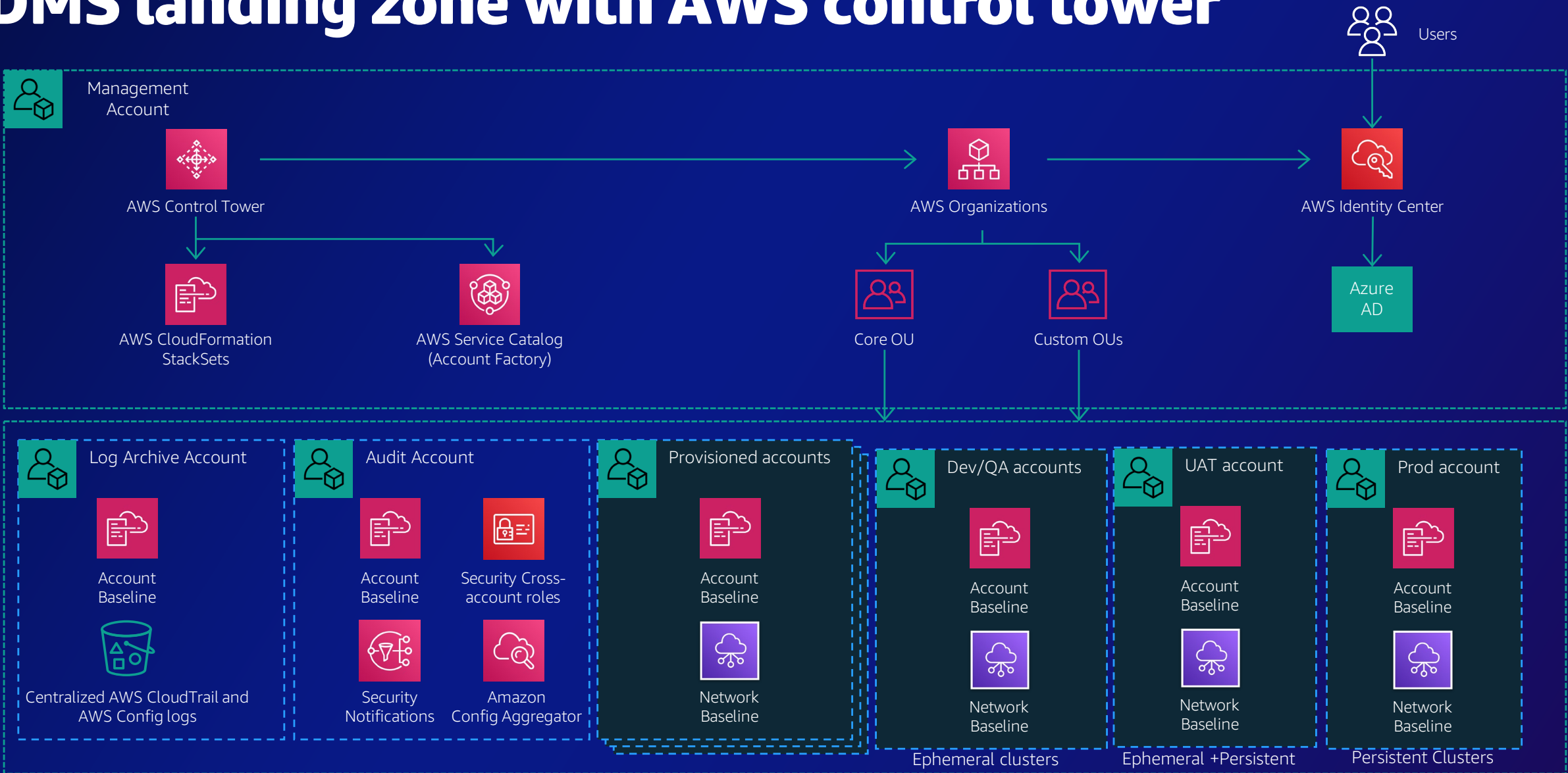
DMS landing zone with AWS control tower



DMS landing zone with AWS control tower



DMS landing zone with AWS control tower



Authentication scenarios

1

Dealership User

2

Corporate User

3

3rd Party Systems

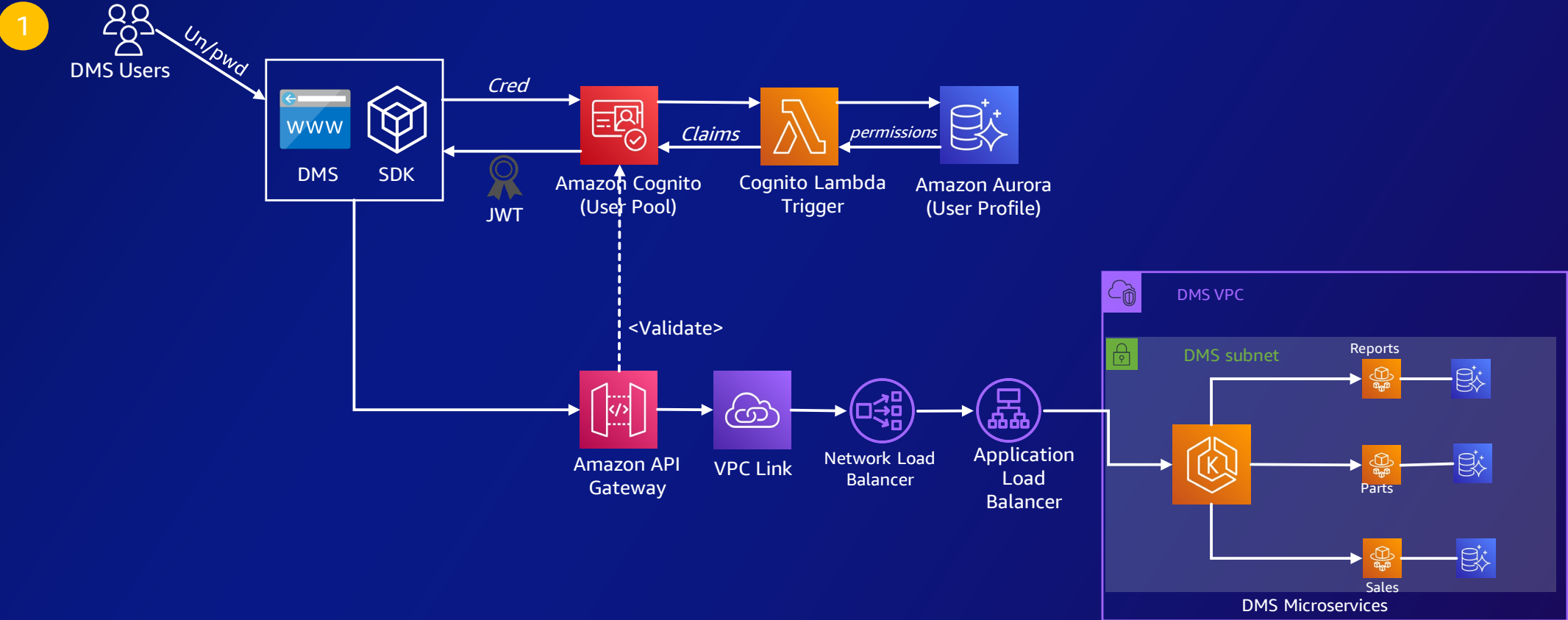
4

Microservices

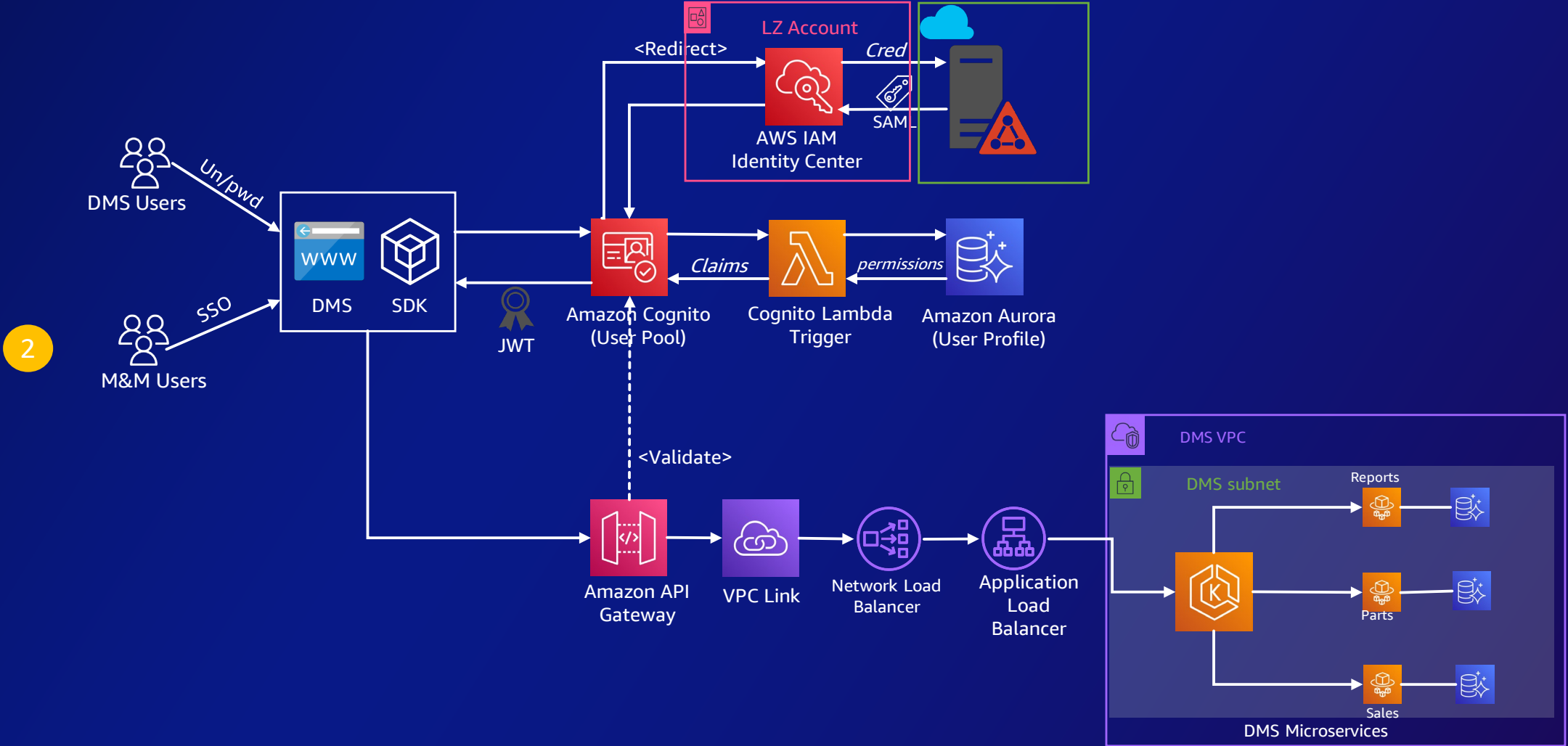
5

PowerBI

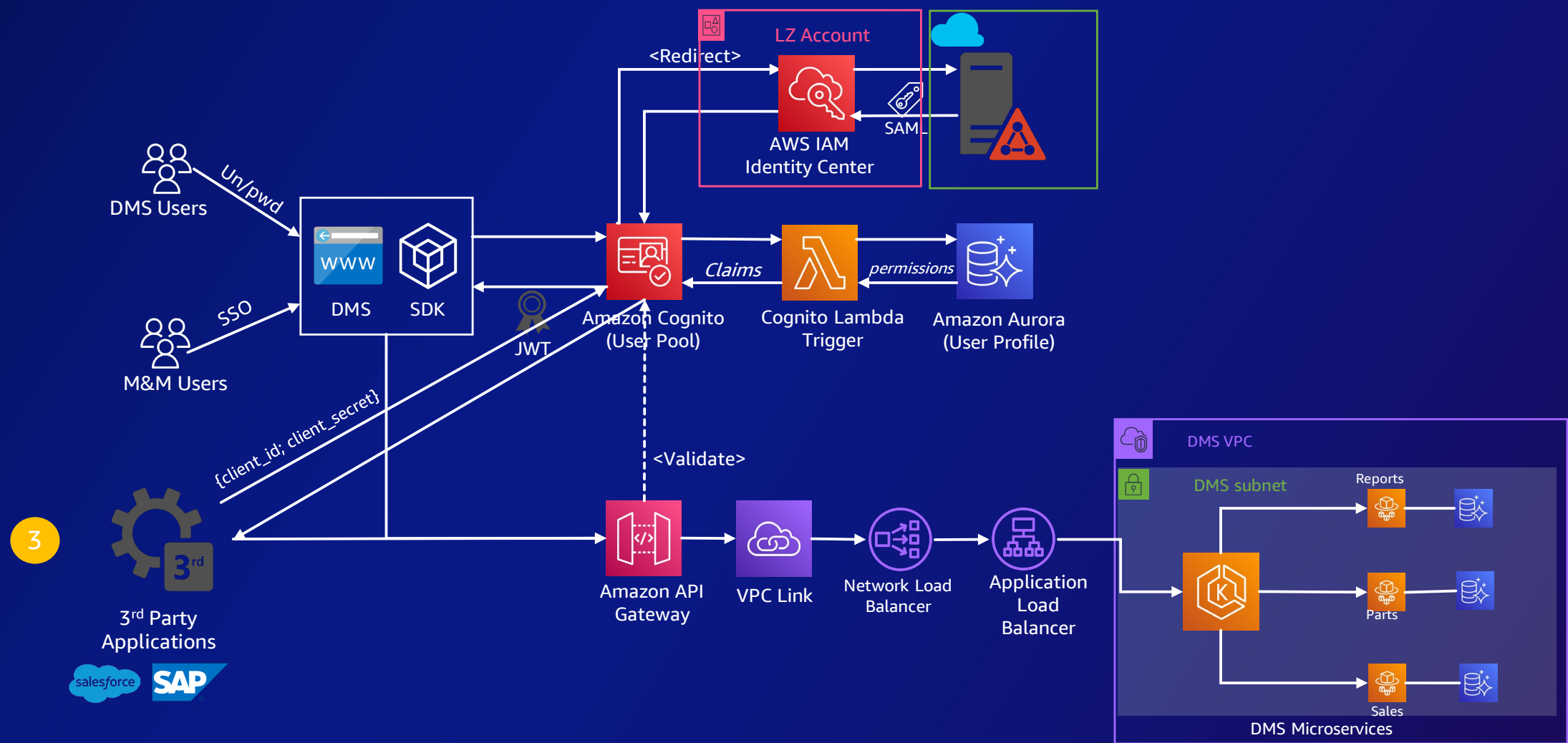
Authentication flows



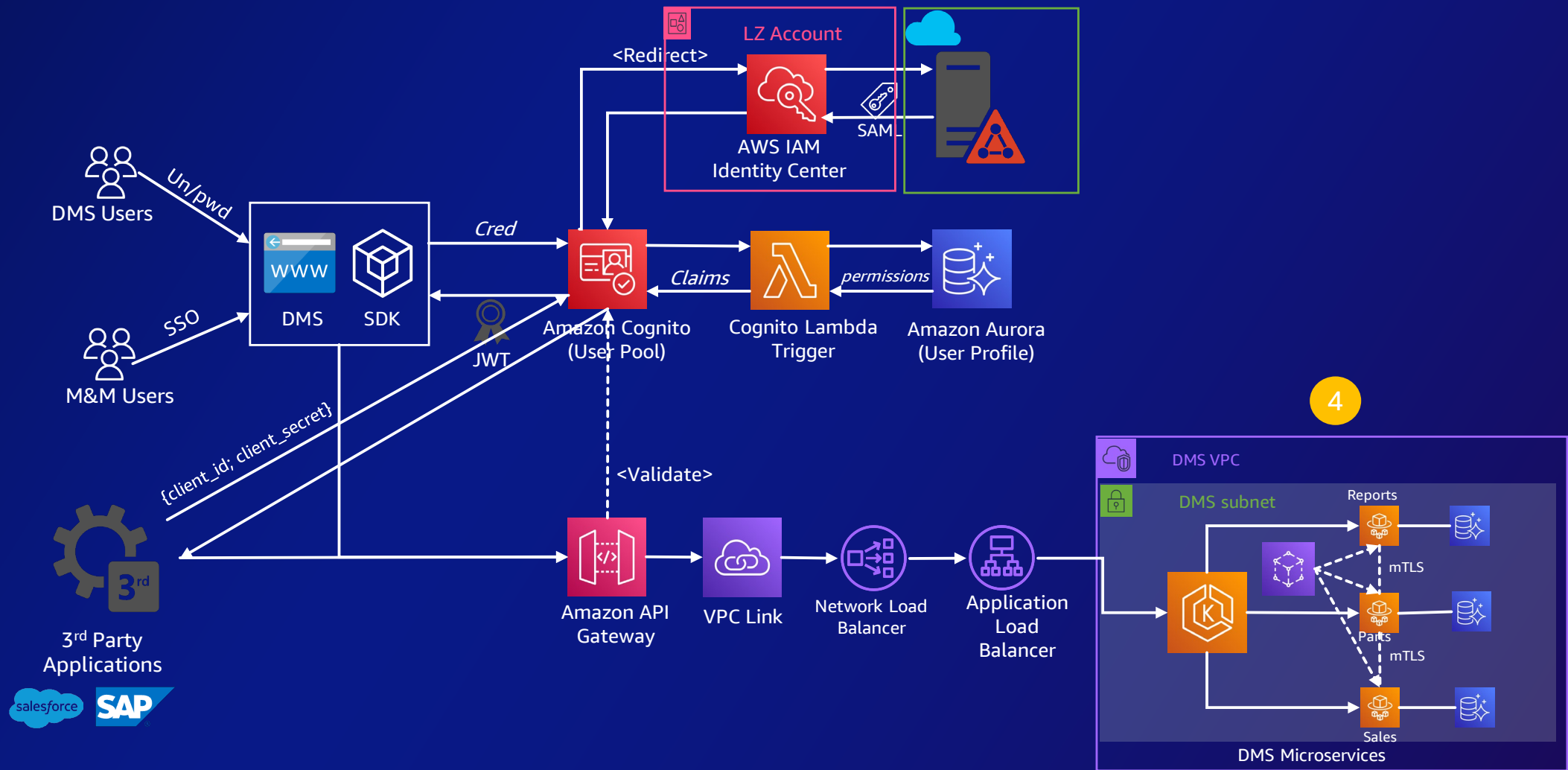
Authentication flows



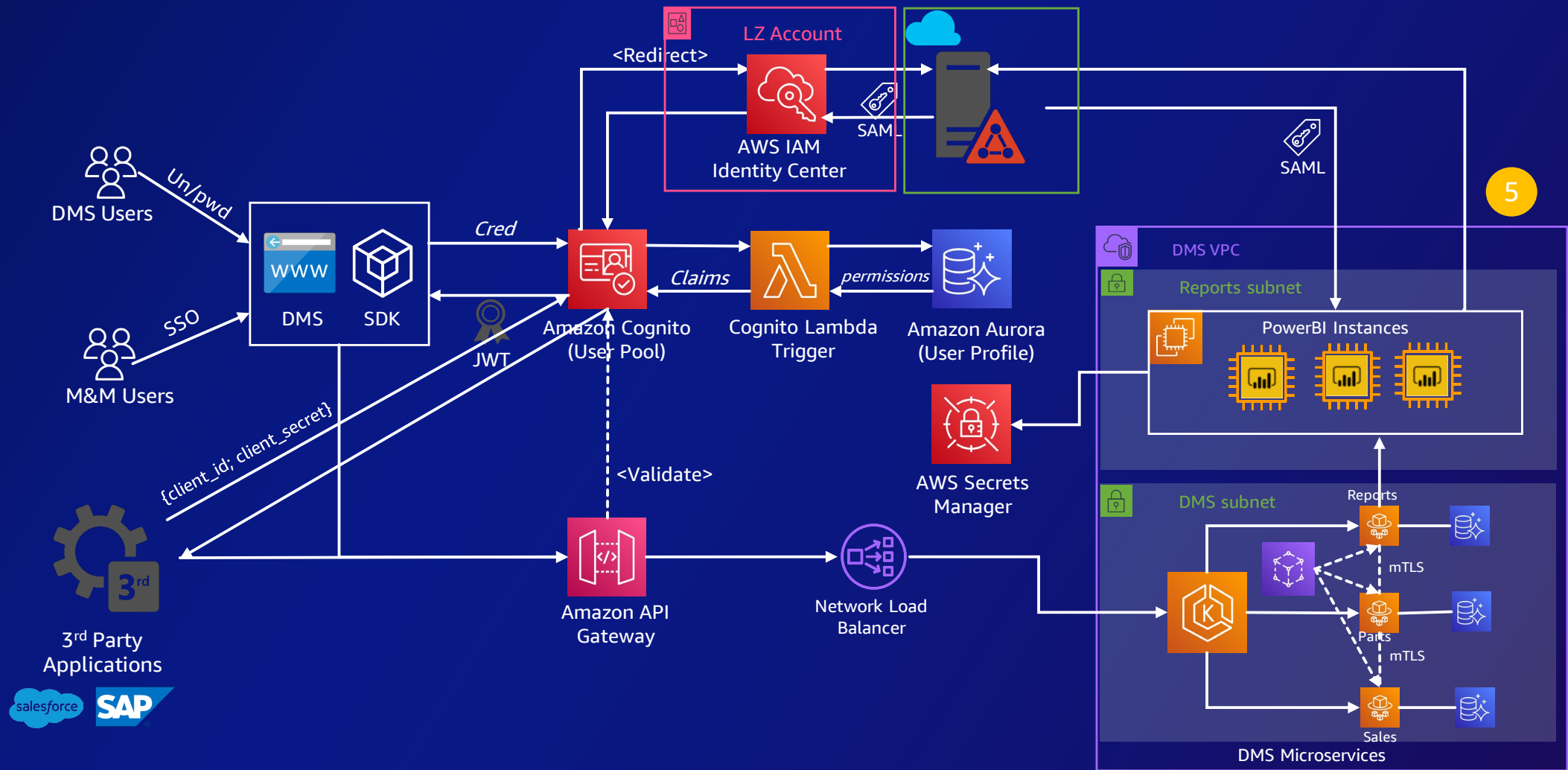
Authentication flows



Authentication flows



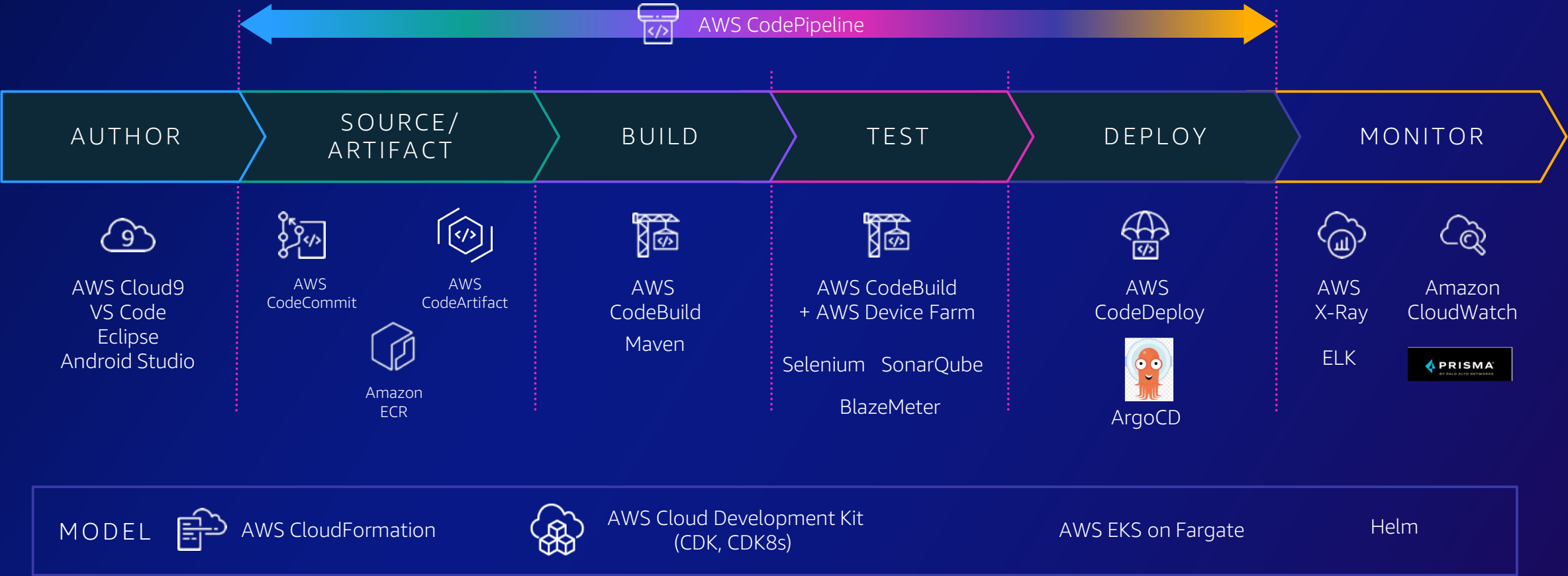
Authentication flows



DevOps - Motivation



DevOps



Integration scenarios

1

DMS 1.0

2

Sales Force

3

SAP

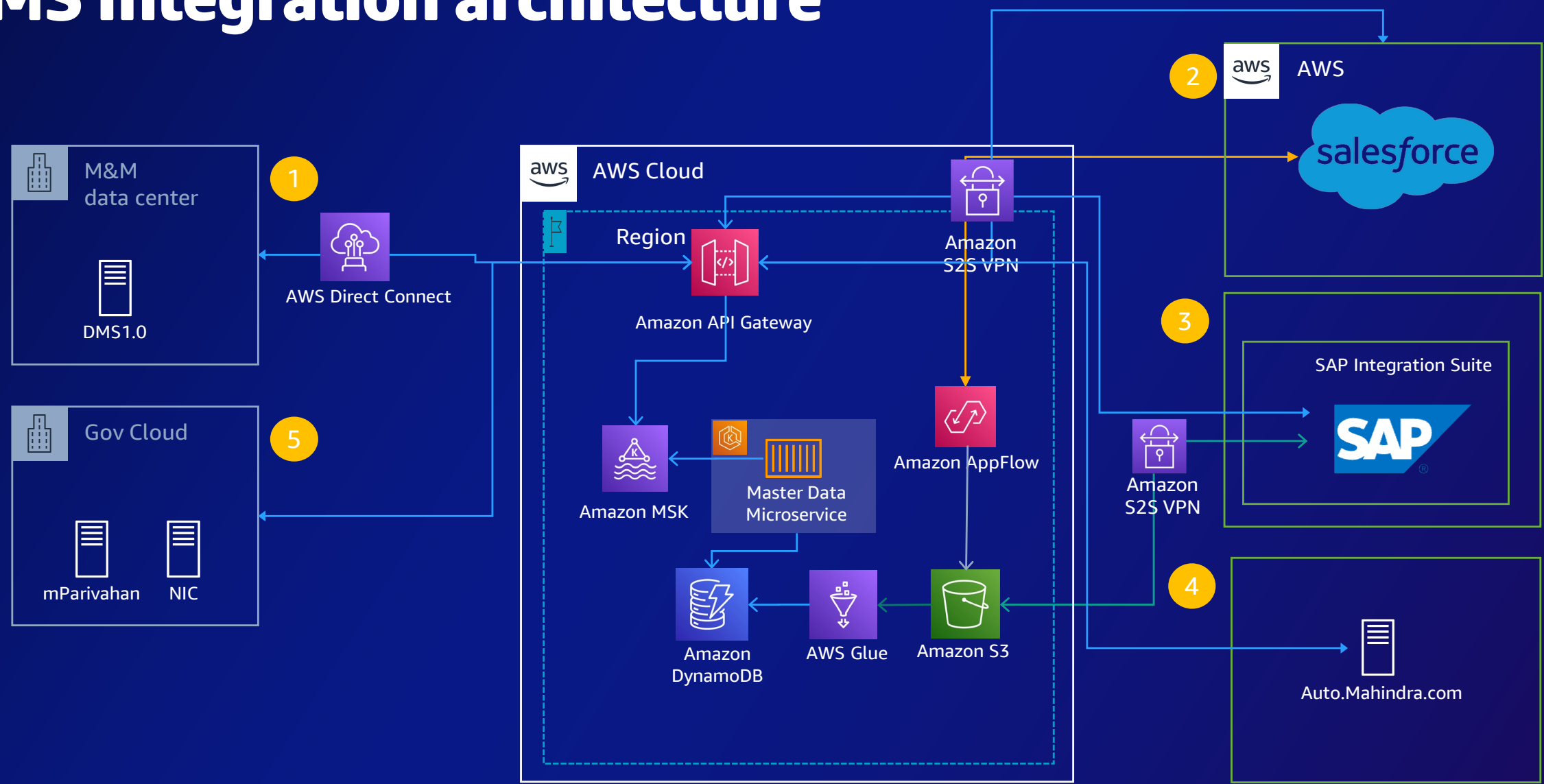
4

M&M Auto Portal

5

Gov Portal

DMS Integration architecture



LEGEND

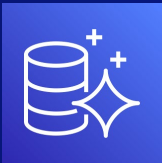
 Batch integration with DMS 2.0

 Amazon AppFlow based Integration

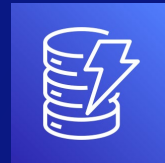
 API Integration with DMS 2.0



Data migration architecture



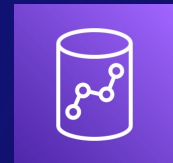
Amazon Aurora



Amazon DynamoDB

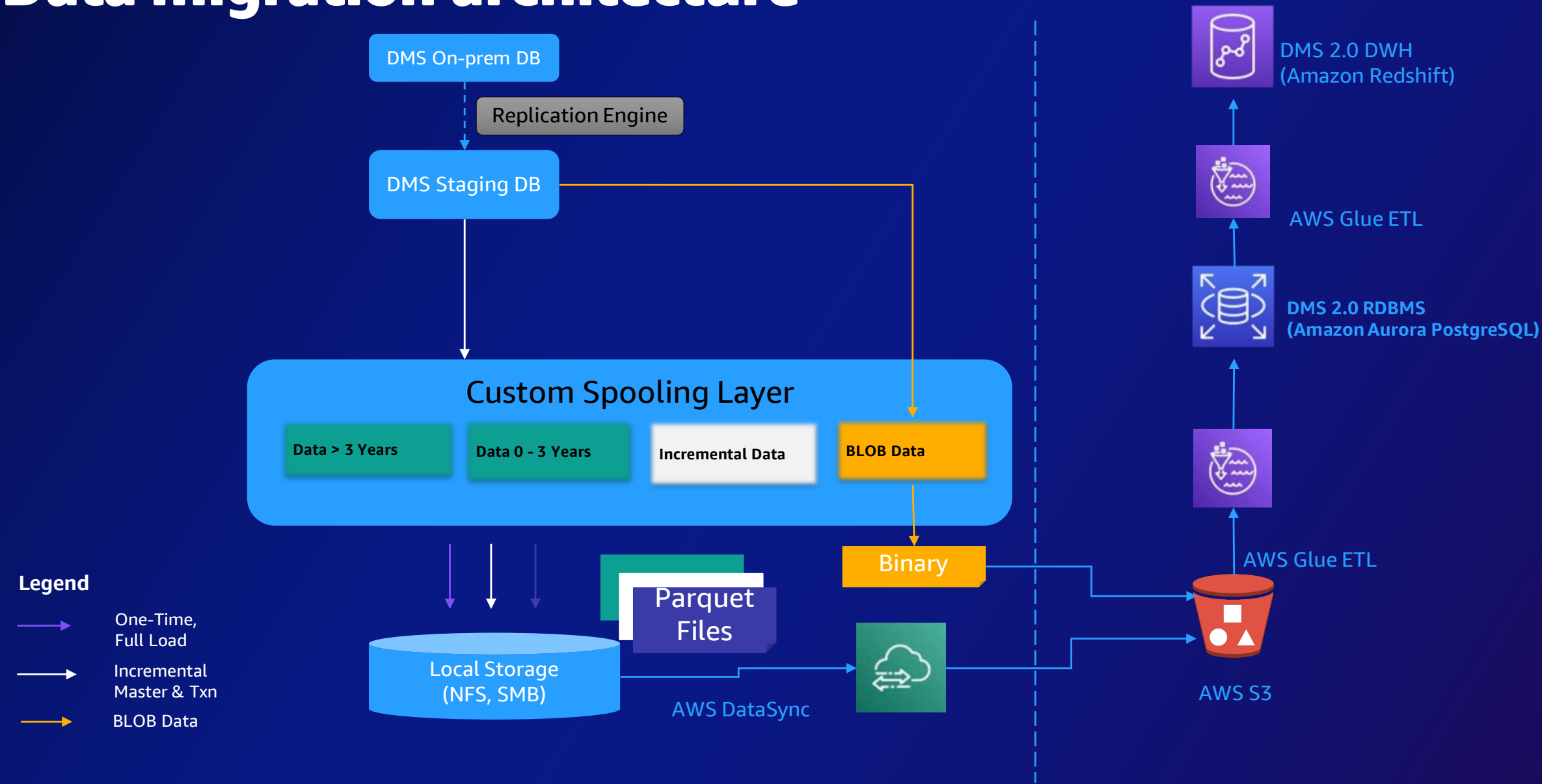


Data Warehouse

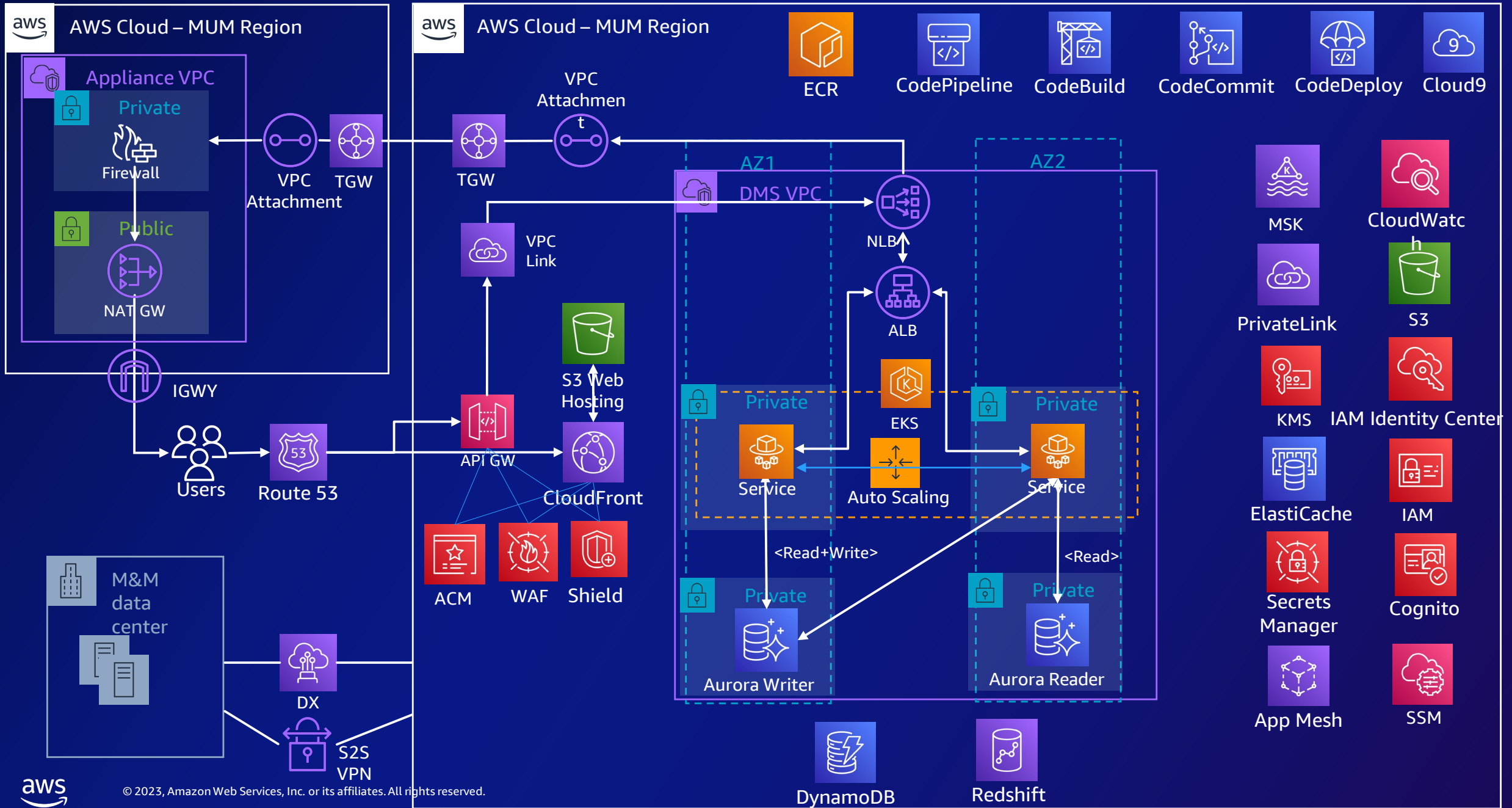


Amazon Redshift

Data migration architecture



Solution architecture – Putting it together



Conclusion

- Motivation
- Expected challenges

skillbuilder.aws 

Your time is now

Build in-demand cloud skills *your way*

Thank you!

Sanjeev Trivedi
GM, Architecture & DevOps
Mahindra & Mahindra

Aparajithan Vaidyanathan
Principal Solutions Architect
AWS India



Please complete the
session survey