



# INNOVATE2018

## ONLINE CONFERENCE



# TechShift: Migrating and Replatforming Your Software on AWS (Level 200)

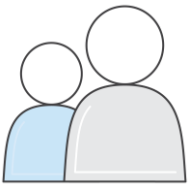
Sarathkumar Vancheeswaran, Migration Partner Solution Architect

# ISV Adoption of SaaS is growing

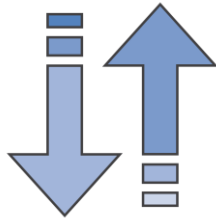
*“Virtually all enterprise software vendors are shifting to a SaaS-first innovation and delivery model.” - IDC (2017)*

*“By 2020 ... over half of all product revenues in CRM, commerce servers, ePurchasing, and other process apps will come from SaaS subscriptions” - Forrester 2016*

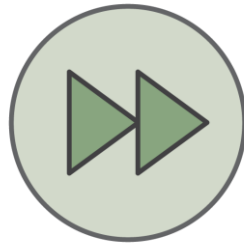
# ISV Adoption of SaaS is growing



Customer  
demand



Increased  
agility



Improved  
operational  
efficiency



Lower cost,  
increased  
margins



Expanded market  
and  
global reach

# SaaS on AWS: Transformation Strategies



**New product**  
Target a new market  
or segment and build  
your SaaS  
foundation



**Refactor**  
Migrate existing  
solution

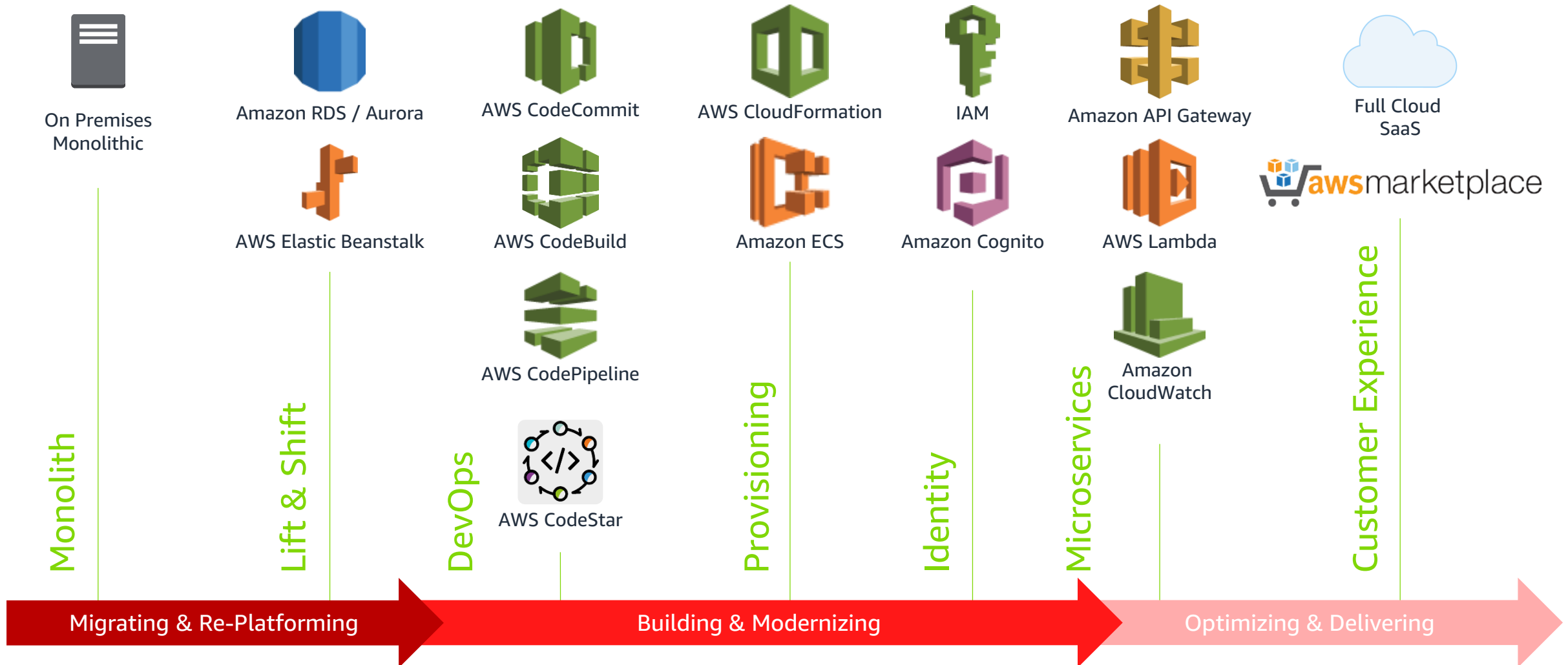


**Hybrid**  
Run data center and  
cloud in parallel

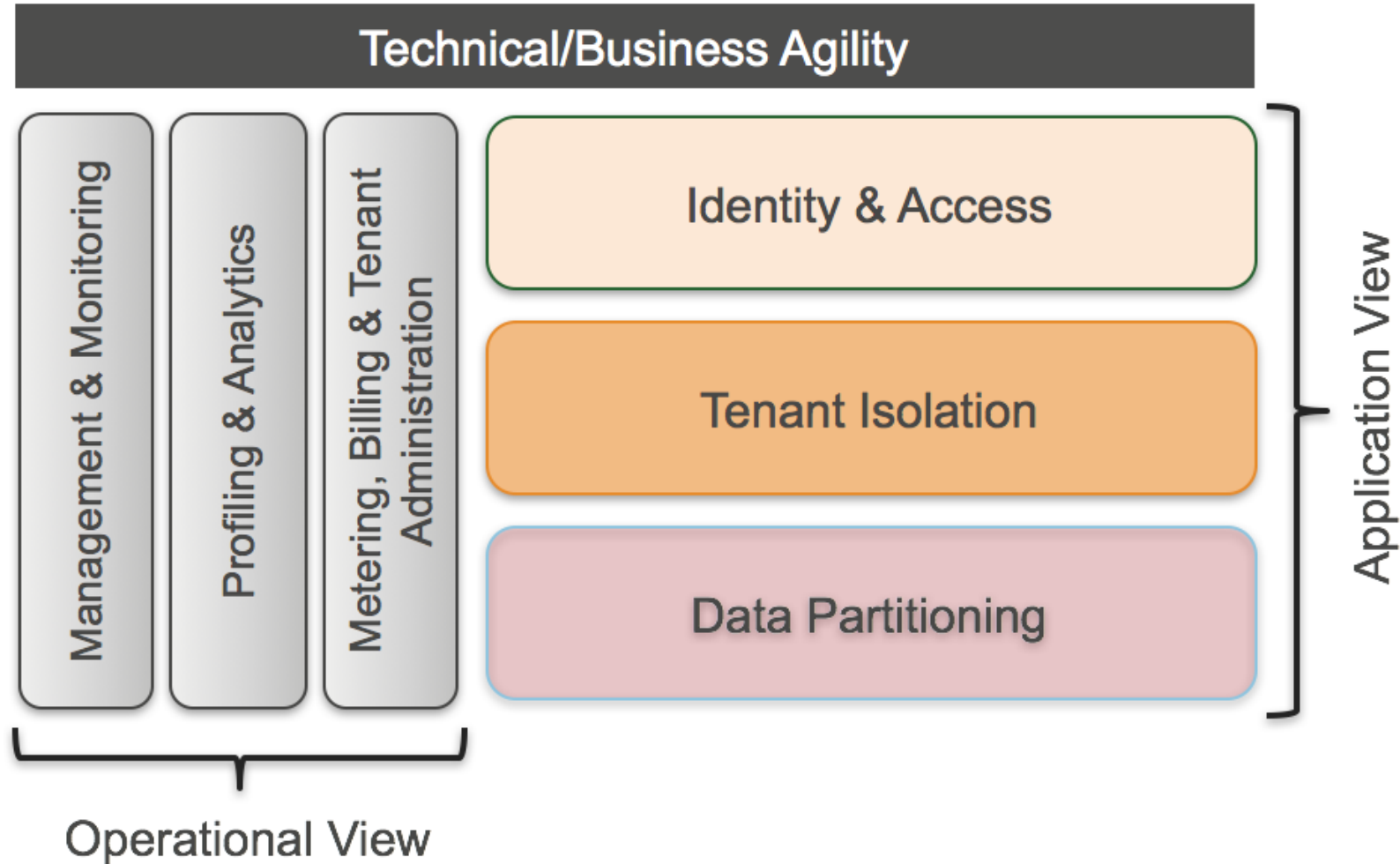


**Optimize**  
Update and simplify  
SaaS architecture for  
better performance

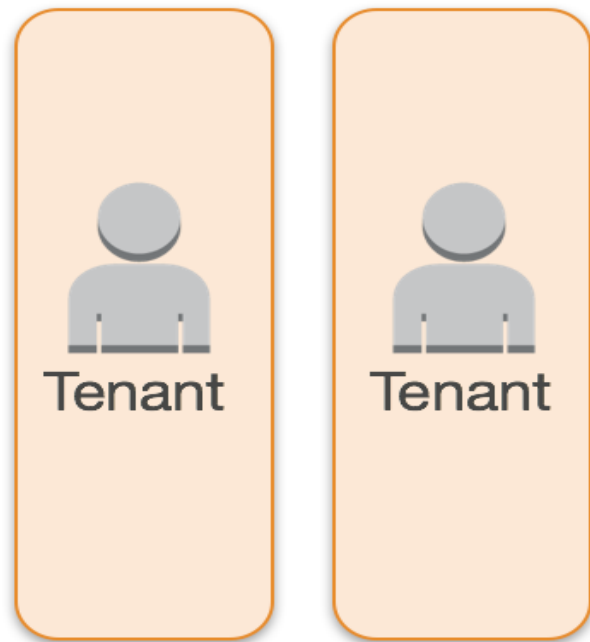
# Migration Journey with AWS



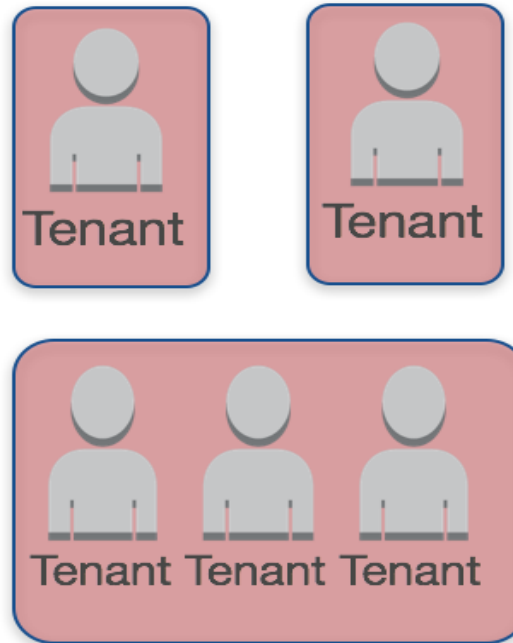
# Typical SaaS Reference Architecture



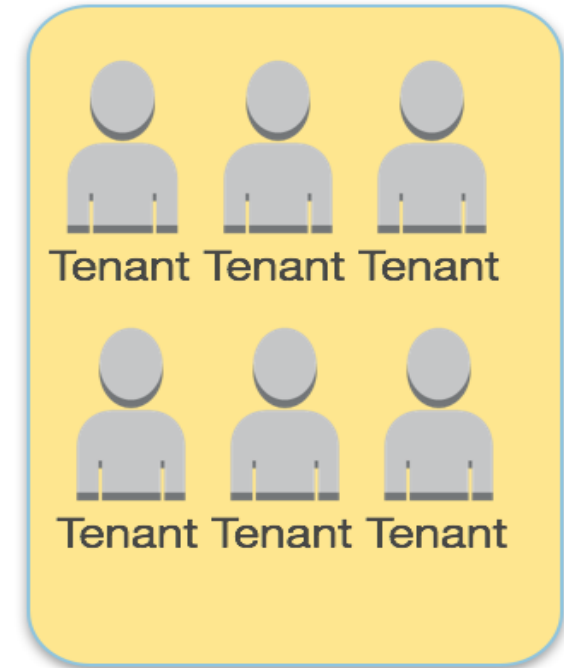
# SaaS... Platform Tenancy Options



Silo

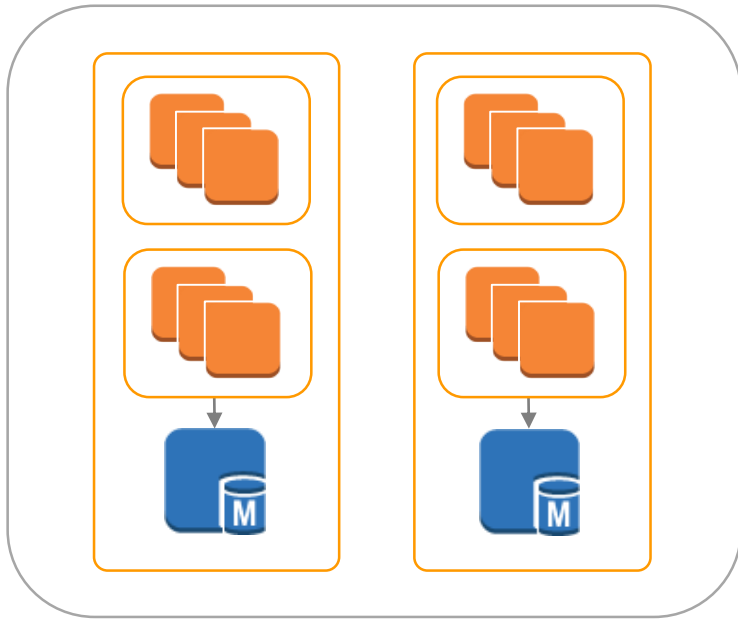


Bridge

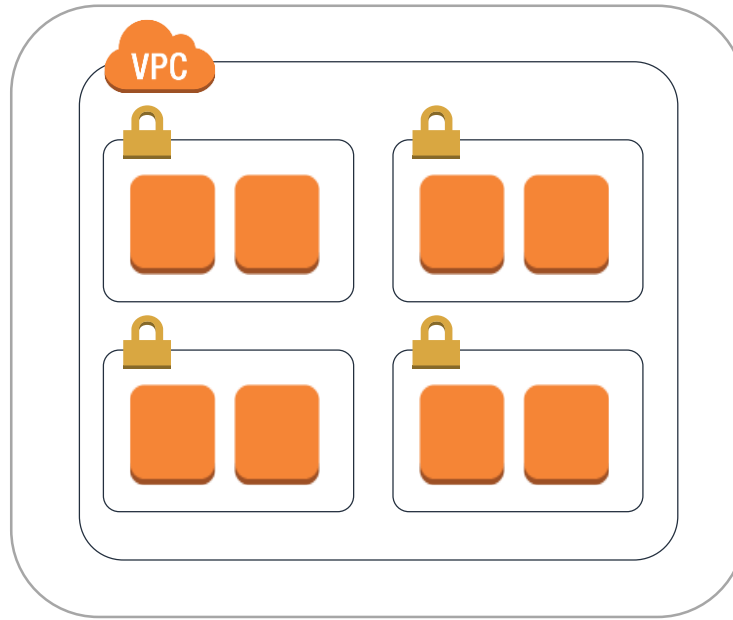


Pool

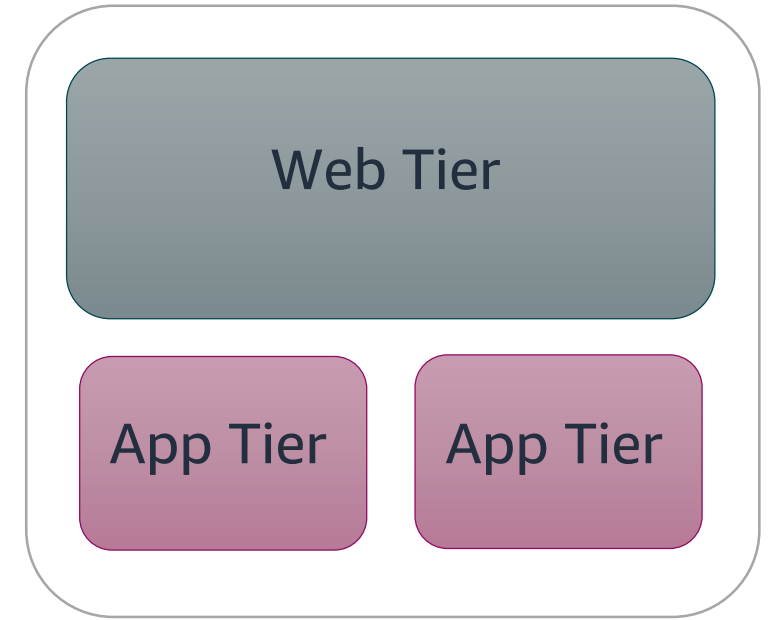
# Tenant Isolation & choosing AWS deployment model



Full Stack Isolation



Network Isolation



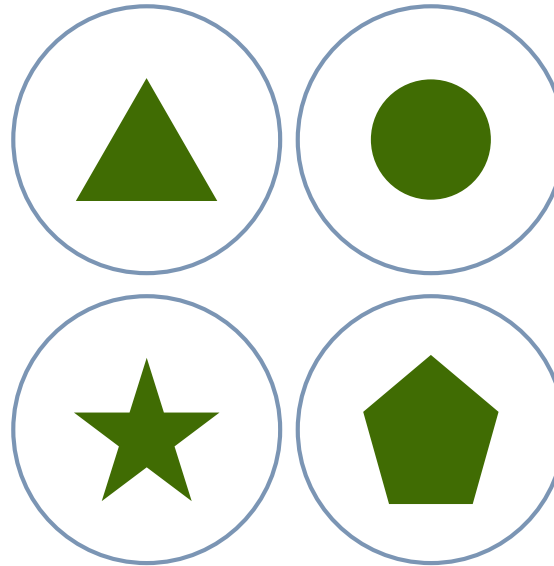
Layered Isolation



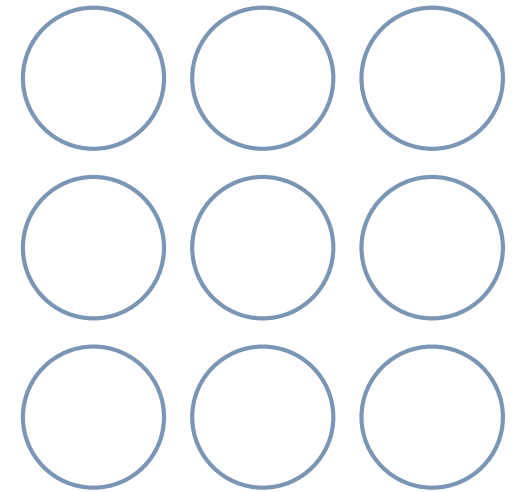
# Transforming Application – Minimally invasive approach



3 Tier App  
On Premises



SOA  
Hybrid  
Java



Microservices  
Cloud  
Polyglot

# Application Migration

PandaCRM is 3 tier Java Application.

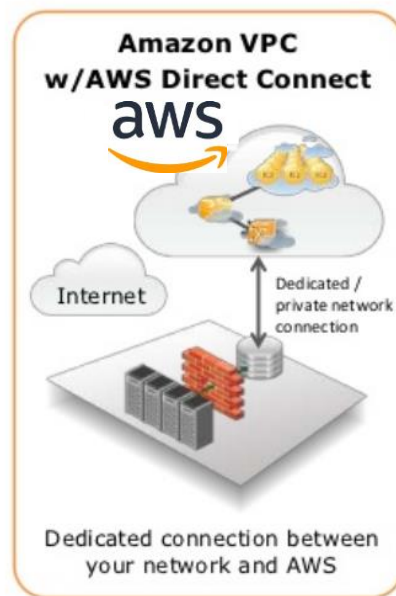
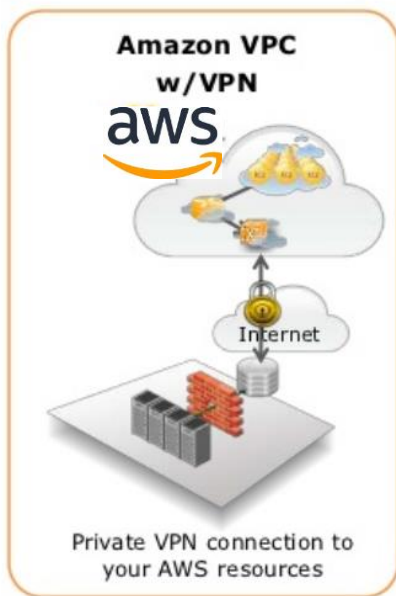
- Migration strategy : Re-Host (Like for Like)
- Two options for the Landing Zone Design:-
  - ❑ **OPTION 1:** Migrate to SELF managed services.
  - ❑ **OPTION 2:** Migrate to AWS managed services.



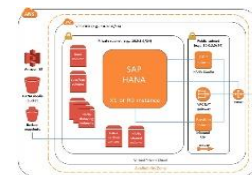
# Lets follow a 3 Step process...



# Step 1: Setup Landing Zone



VPN or AWS Direct Connect?



Landing Zone



Security & Compliance



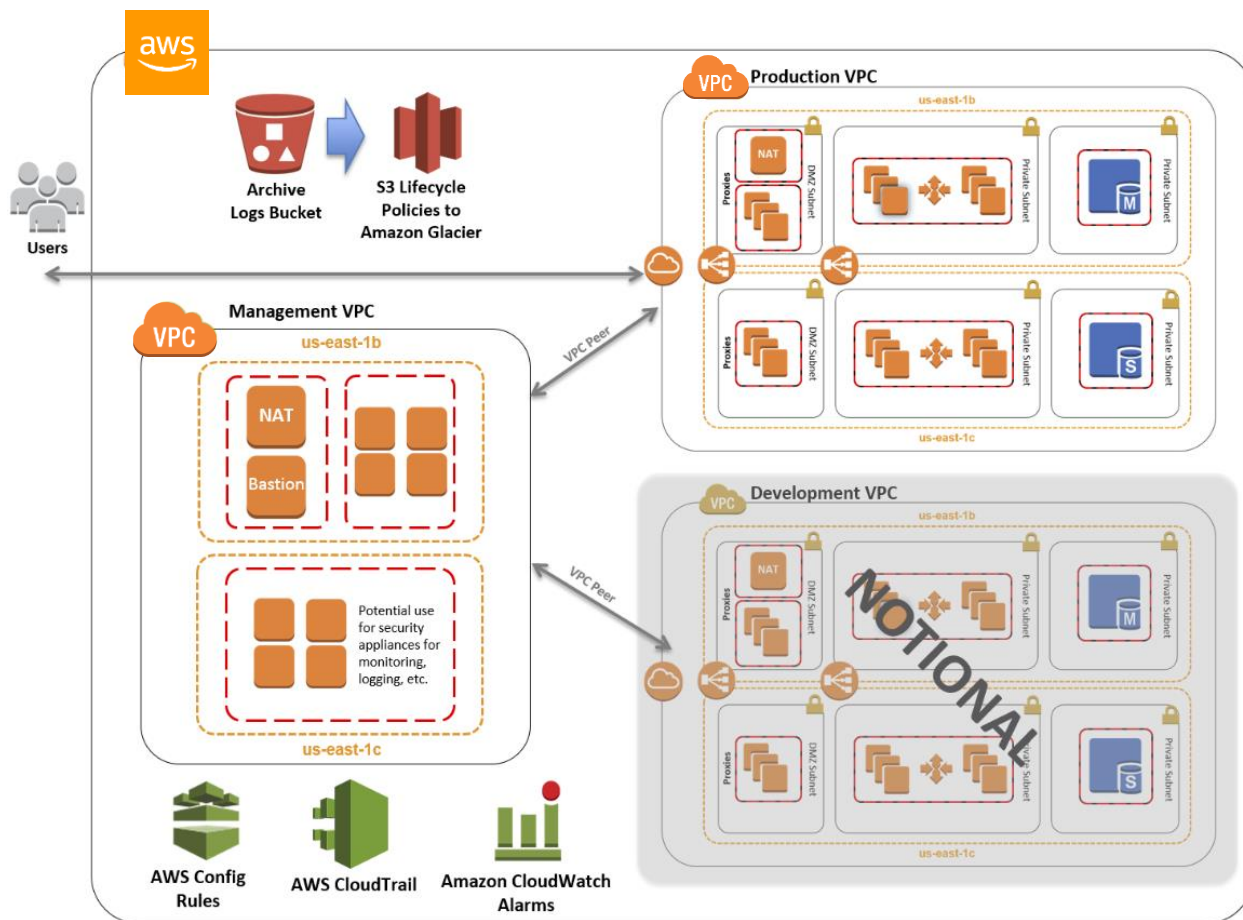
Operating Model



Governance

# AWS Quick Starts

## Standardized Architecture for NIST on AWS



## AWS Multiple Account Security Strategy

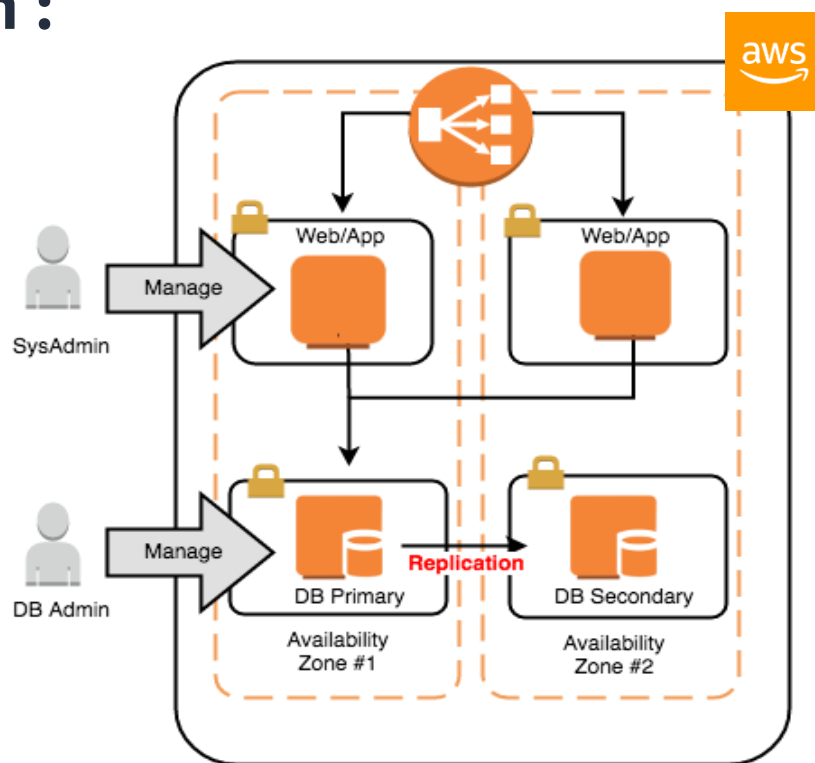
## AWS re:Invent 2017 sessions :

1. ARC325\_Managing Multiple AWS Accounts at Scale
2. Architecting Security and Governance Across a Multi-Account Strategy (SID331)

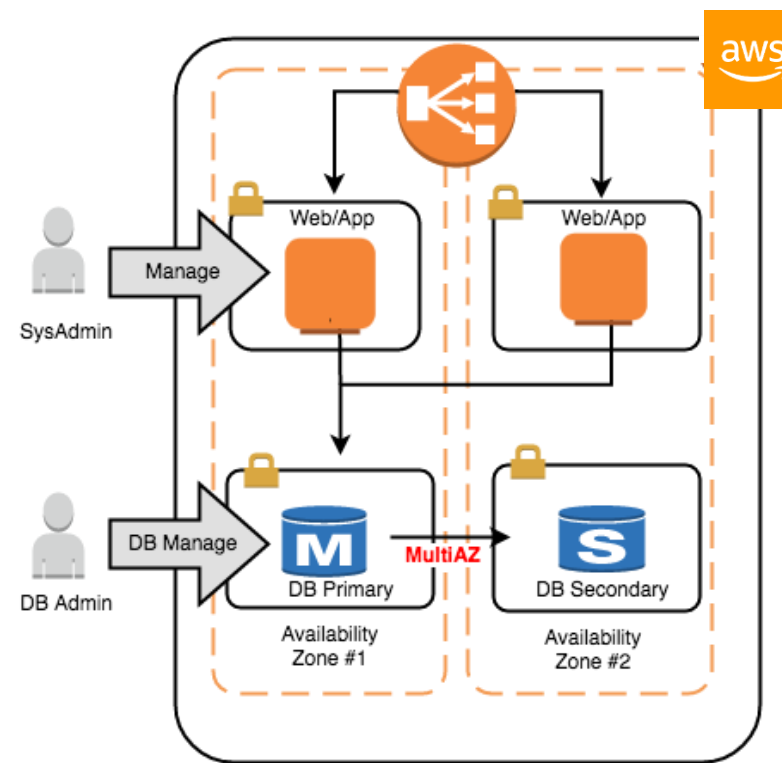
# Step 2: Migrate to SELF Managed Services

**AWS Services :** Only Amazon EC2 or Amazon EC2 and Amazon RDS

**Design :**



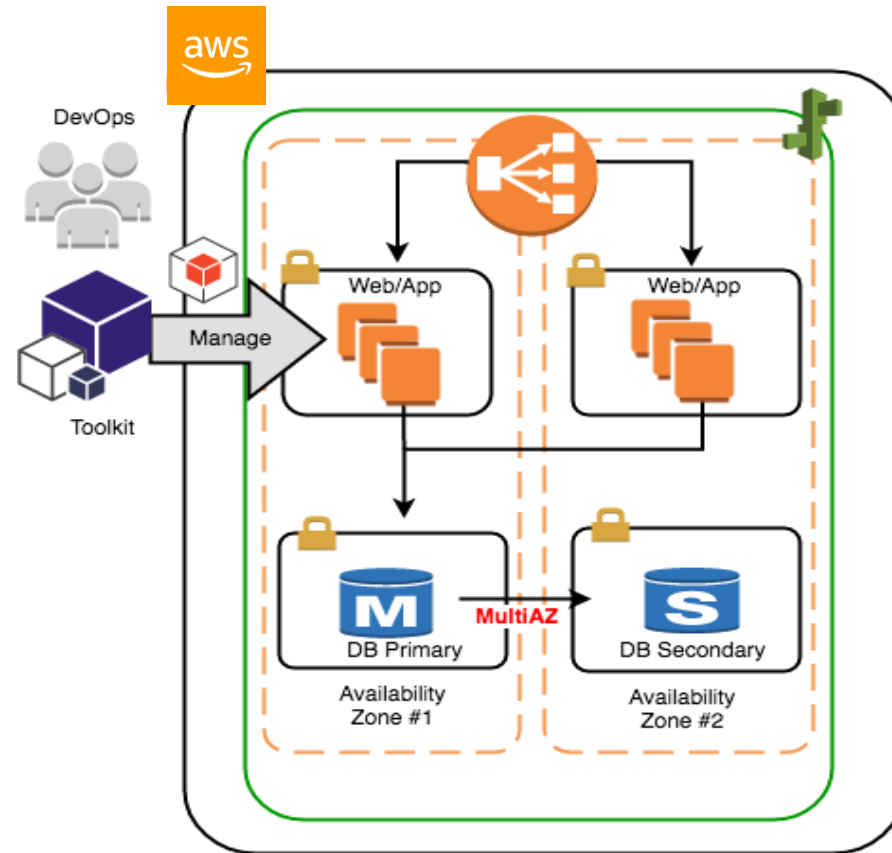
**Only EC2 Architecture**



**EC2 and RDS Architecture**

# Step 2: Migrate to AWS Managed Services

**AWS Services :** AWS Elastic Beanstalk, Elastic Load Balancer (ELB), Amazon RDS  
**Design :**



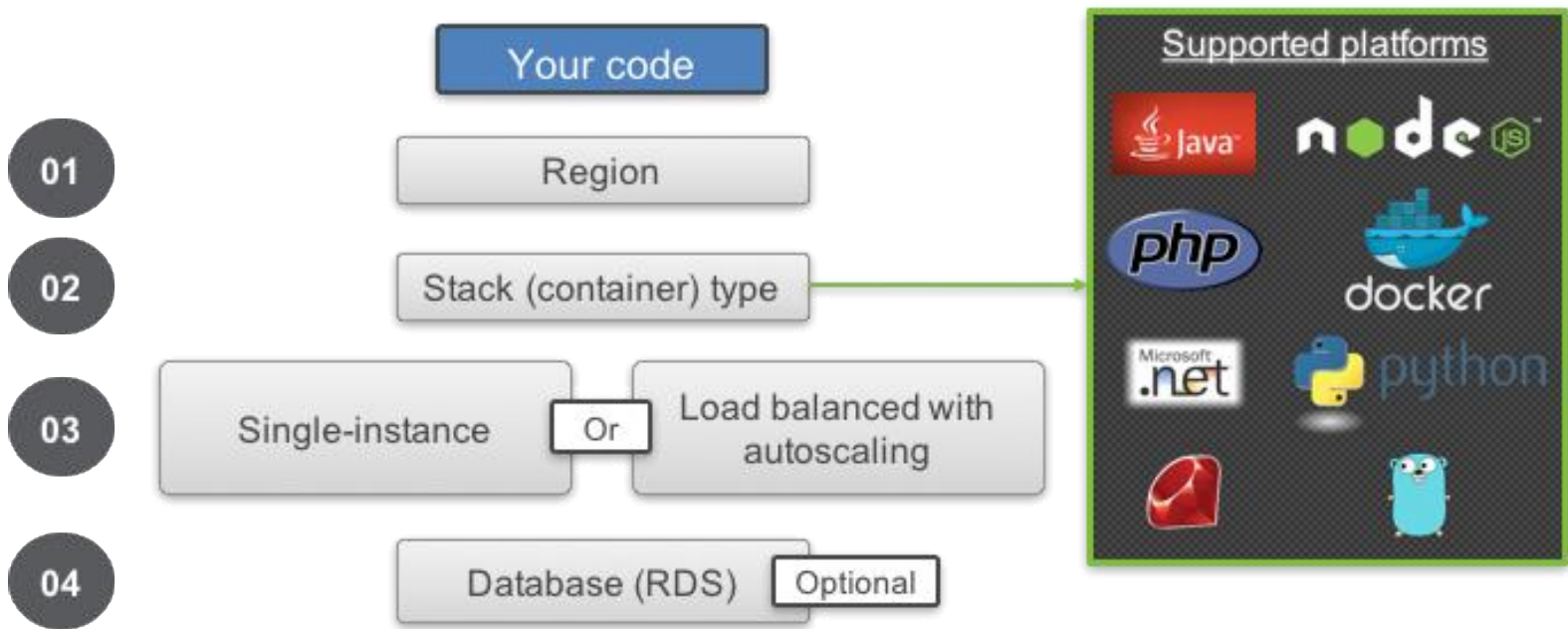
# Step 2: Migrate to AWS Managed Services

## Stack Provisioning Options

DASHBOARD  
API  
CLI  
AWS CloudFormation



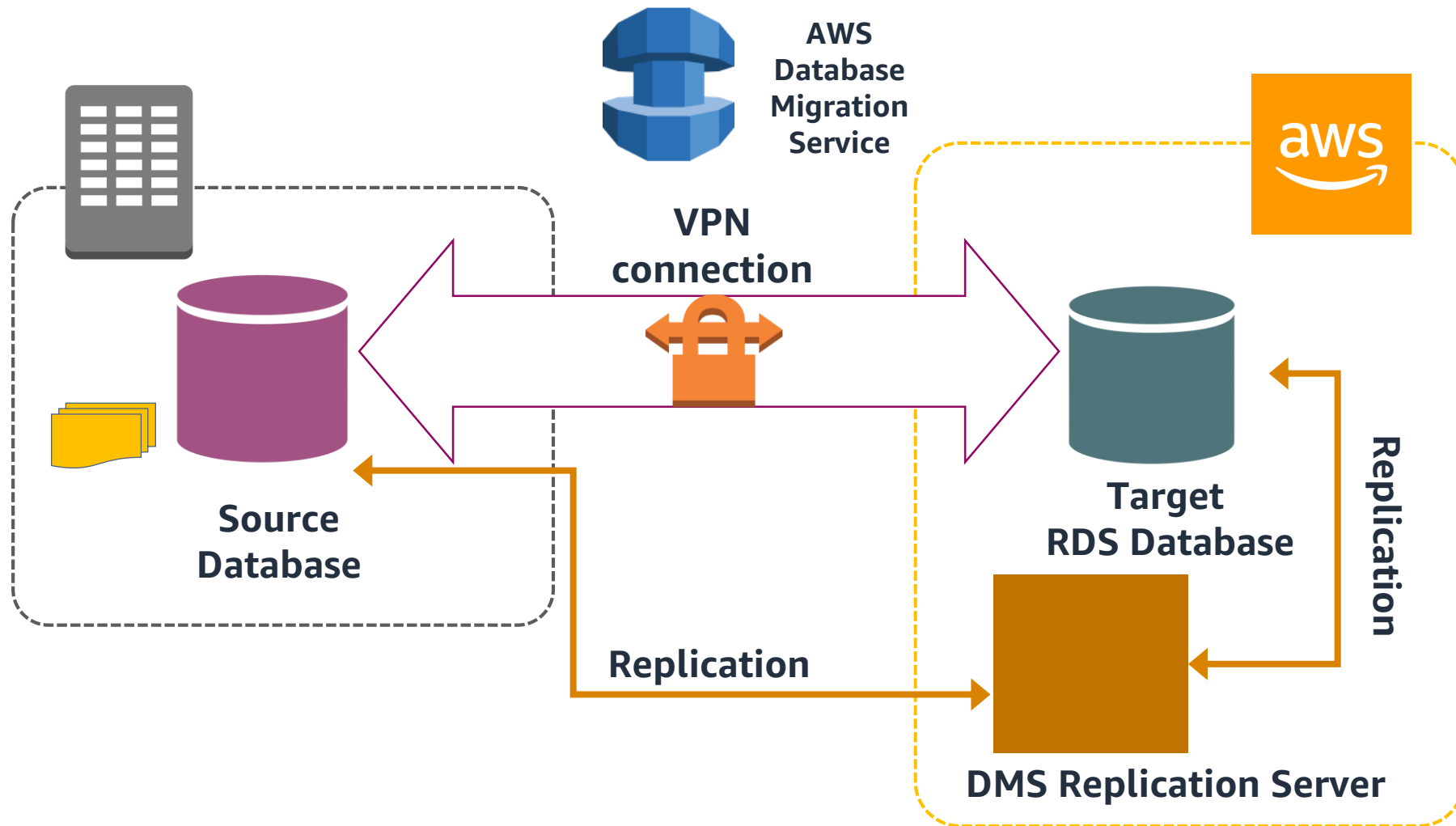
## Required information to build a stack on AWS Elastic Beanstalk





# Step 3: Database Migration

Use AWS Database Migration Service (DMS) to migrate the database (data) for Panda CPM



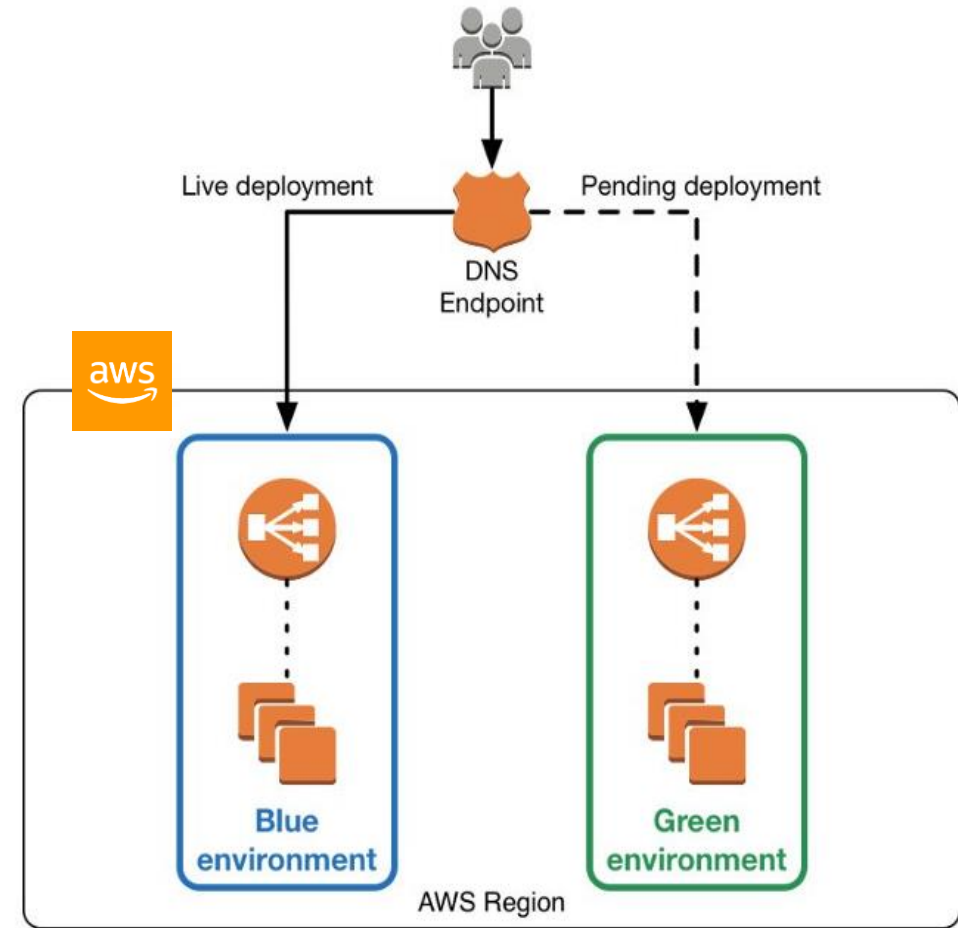
# Before going Live: Integration & Validation

Integration

Validation



AWS Elastic  
Beanstalk

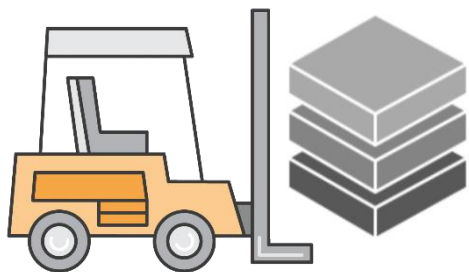


# Summary...

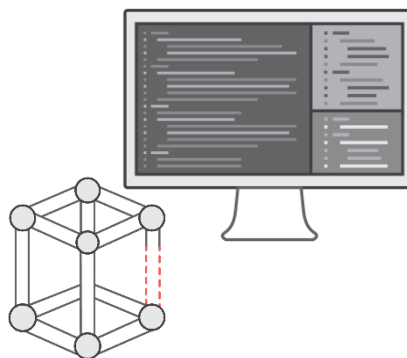


**Migrating &  
Platforming**

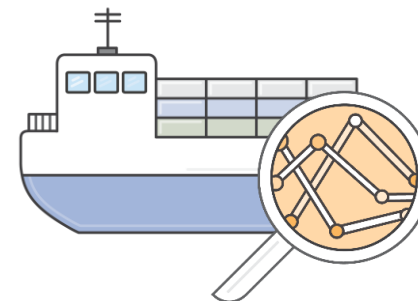
# Next Steps ...



**Migrating &  
Platforming**



**Building &  
Modernizing**



**Optimizing &  
Delivering**

# Management & Monitoring

## Application Services

Catalog  
Service

Ratings  
Service

Cart  
Service

Tax  
Service

Tenant Context



AWS Config



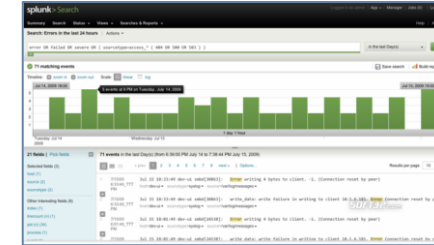
Amazon  
CloudWatch



AWS CloudTrail



Amazon S3



Splunk



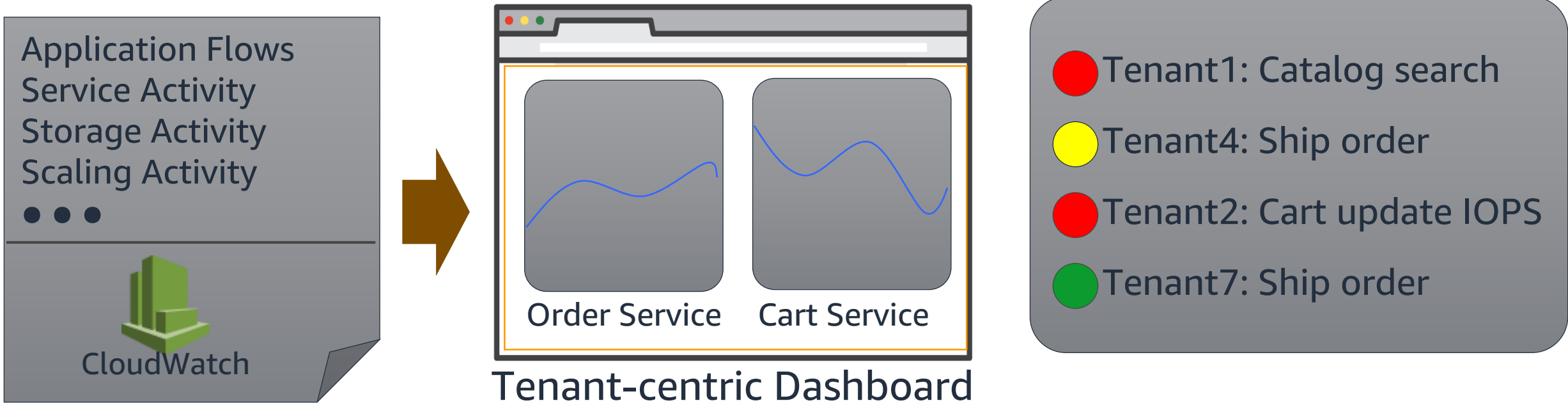
Sumo Logic



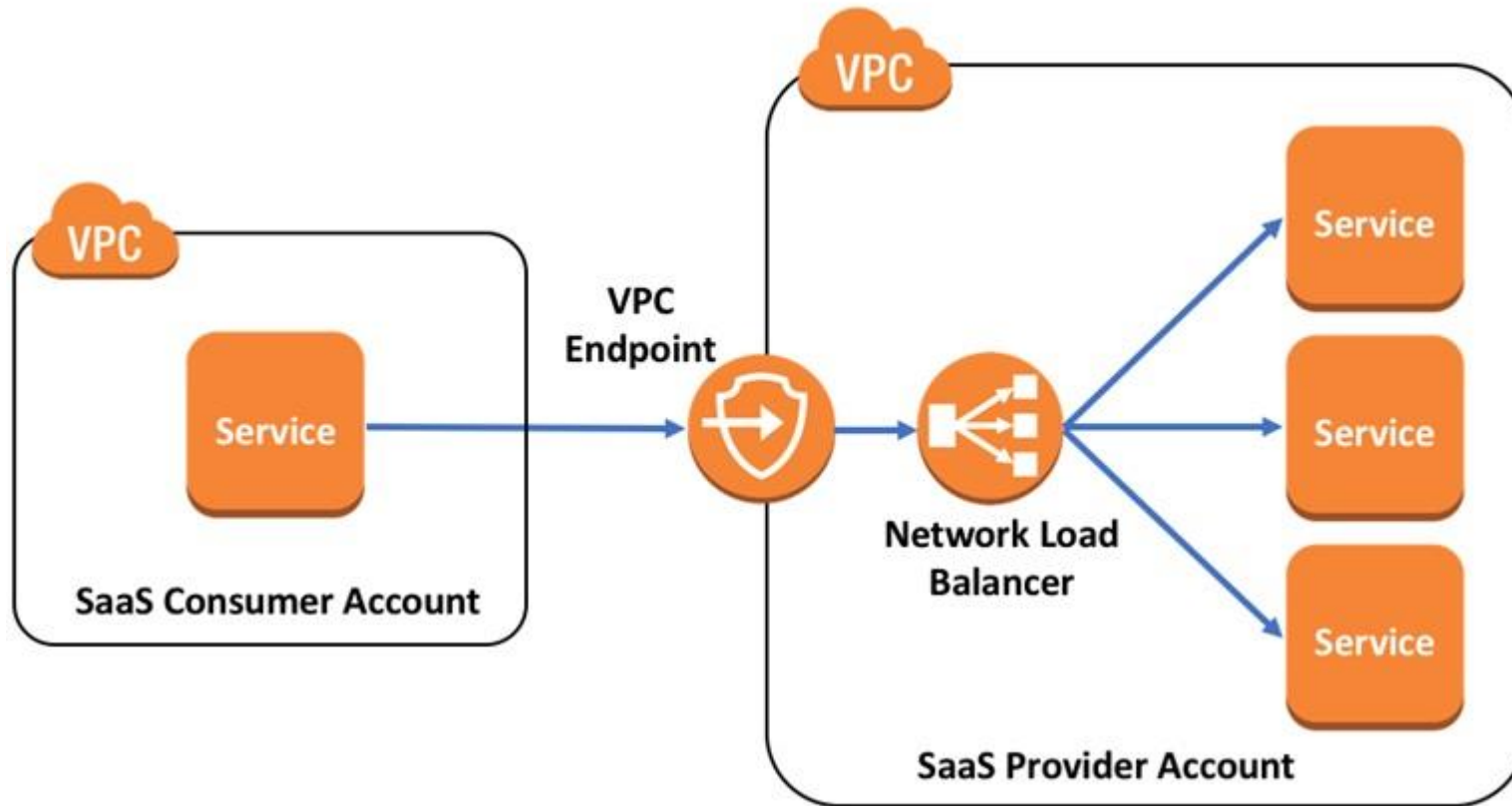
Kibana

# Capturing Tenant Level Metrics

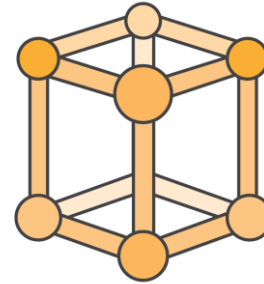
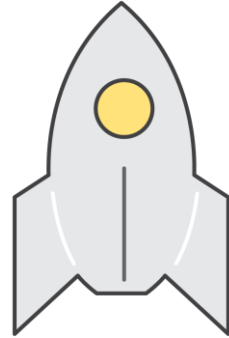
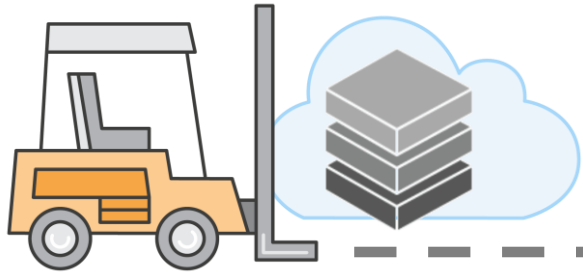
## Tenant-Level Metrics



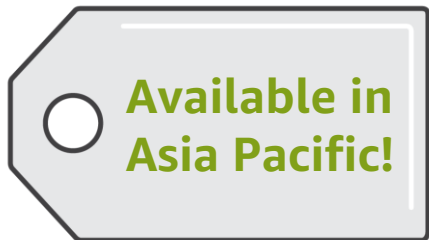
# Enabling New SaaS Strategies with AWS PrivateLink



# Announcing TechShift Accelerator



**TECHSHIFT**



**Accelerate**  
migration of your  
software to cloud-  
native service

**Differentiate** from  
competition by  
offering premium  
features/services  
through AWS  
advanced service  
integrations

**Broaden** customer reach  
through AWS resources  
– field, partners, AWS  
Quick Starts, AWS  
Marketplace, APN  
Programs, marketing  
events

Speak to your Partner Development Representative



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