
AWS
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MGT308

# Rapid response to COVID19 with AWS Control Tower


Ervan D. Rodgers II
State Chief Information Officer
Assistant Director
Office of Information Technology

Tracy Romig
DAS Cloud Brokerage Manager
Office of Information Technology

Kaushik Mohanty
Business Development and Specialist Sales Leader
Amazon Web Services


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# Topics

Welcome to Ohio

Speed of government

Taking action

Agility and governance – **no** need for a trade-off

Reference material and call to action





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# Welcome to Ohio

State CIO Ervan Rogers talks about **Cloud Smart**




Optimize current IT investments

+

aws

Integrate emerging technology

Maximizing past expenditures

Implementing most efficient solution

Lowering operational costs

Cloud Smart

# Welcome to Ohio

## CCoE helps guide Cloud Smart strategy

1. Maintaining security posture
   - Established guardrails for OISP compliance
   - Automated remediation
2. Assisting agencies for the enterprise
   - Evaluating current workloads/app modernization – replatforming / refactoring / retiring
   - Developing new applications



# Welcome to Ohio

Responding to COVID-19 necessitated immediate solutions to service our citizens




**Evaluate, react, and implement**

Cloud Smart and AWS services provided a pathway

- Successful solutions
- Quick and safe
- Centrally monitored and managed

TeamOhio

# Speed of government

- Traditionally, infrastructure and application deployments in state government have not been described as speedy
- It is not atypical for state application solution to take months, especially if selected services require procurement

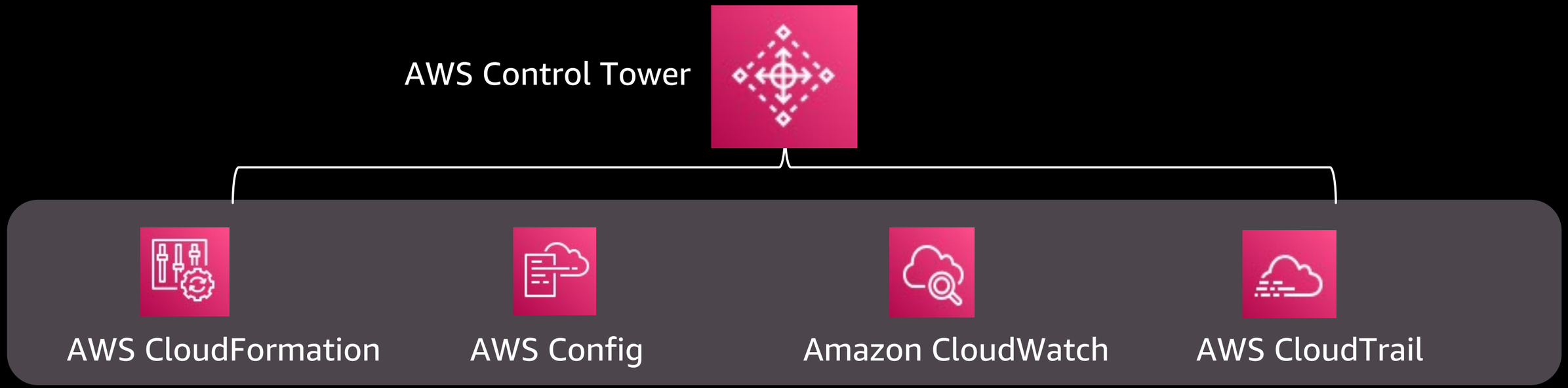
| Typical new application solution implementation | | | | |
|---|---|---|---|---|
| Planning | Design | Procurement? | Deploy | Testing |
| Identify and frame project requirements | Evaluating and architecting | Purchasing new services | Infrastructure and / or software | Monitor, control, optimize |
| 10 days = 14% | 10 days = 14% | 30 days = 42% | 15 days = 21% | 7 days = 10% |
| Total time taken = **72 days** | | | | |

# Speed of government

Increasing expertise at CCoE

Internal training | Engagements with TAMs and SMEs | Staff augmentation

Leveraging AWS services and tools



# Speed of government

Three separate areas demanded urgent solution responses to maintain continued critical services to Ohio citizens

1. **Communication with Ohio citizens**

   Optimizing and expanding current state video feed to provide citizens daily information and direction

2. **State workforce efficiency**

   Directive for transition to work from home



3. **Unemployment support for affected citizens**

   Pandemic caused unprecedented level of unemployed Ohio citizens

# Taking action

GOVERNOR'S DAILY PRESS CONFERENCE




- Optimizing and expanding current governor's state live video feed to provide Ohio citizens daily information and direction to safeguard against COVID-19
- Transitioning from hundreds of viewers per day to over 80,000 per day
- Replacing some hardware, integrating existing video encoding equipment, and adding automated scalability with AWS Control Tower
- Additional AWS services: AWS Config, Amazon Simple Storage Service (Amazon S3), AWS CloudTrail, AWS Lambda, Amazon Simple Notification Service (Amazon SNS), Amazon Simple Queue Service (Amazon SQS), and Amazon CloudWatch

| Implementing AWS Elemental MediaLive and Amazon CloudFront | | | |
|---|---|---|---|
| Planning | Design | Deploy | Testing |
| **1 day** = 11% | **1 day** = 11% | **1 day** = 22% | **4 days** = 56% |
| Total time taken = 7 days | | | |

# Taking action

STATE EMPLOYEES TRANSITIONING TO WORK-FROM-HOME

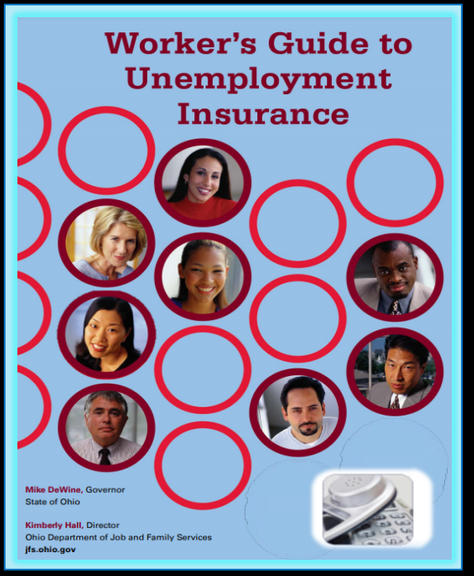
- Following governor's directive for qualifying staff to work remotely, as soon as possible
- Addressing immediate need for office access from personal devices
- Maintaining security posture and standard operational routines
- Experimentation and rapid deployment with no long-term commitment using AWS Control Tower



| Evaluating AWS WorkSpace solution in AWS GovCloud (US) | | | |
|---|---|---|---|
| Planning | Design | Deploy | Testing |
| 3 days = 33% | **2 days** = 22% | **2 days** = 22% | 5 days = 56% |
| Total time taken = 12 days | | | |

# Taking action

RESPONDING TO UNPRECEDENTED OHIO UNEMPLOYMENT LEVELS




- In April, Ohio recorded highest level of unemployment in its history – 16.8%
- JFS existing call center process was overwhelmed with requests for unemployment assistance
- State needed rapid deployment with no long-term commitment
- Using AWS Control Tower, we were able to design and deploy a connect instance in less than a week – has taken over 1 million customer calls per month

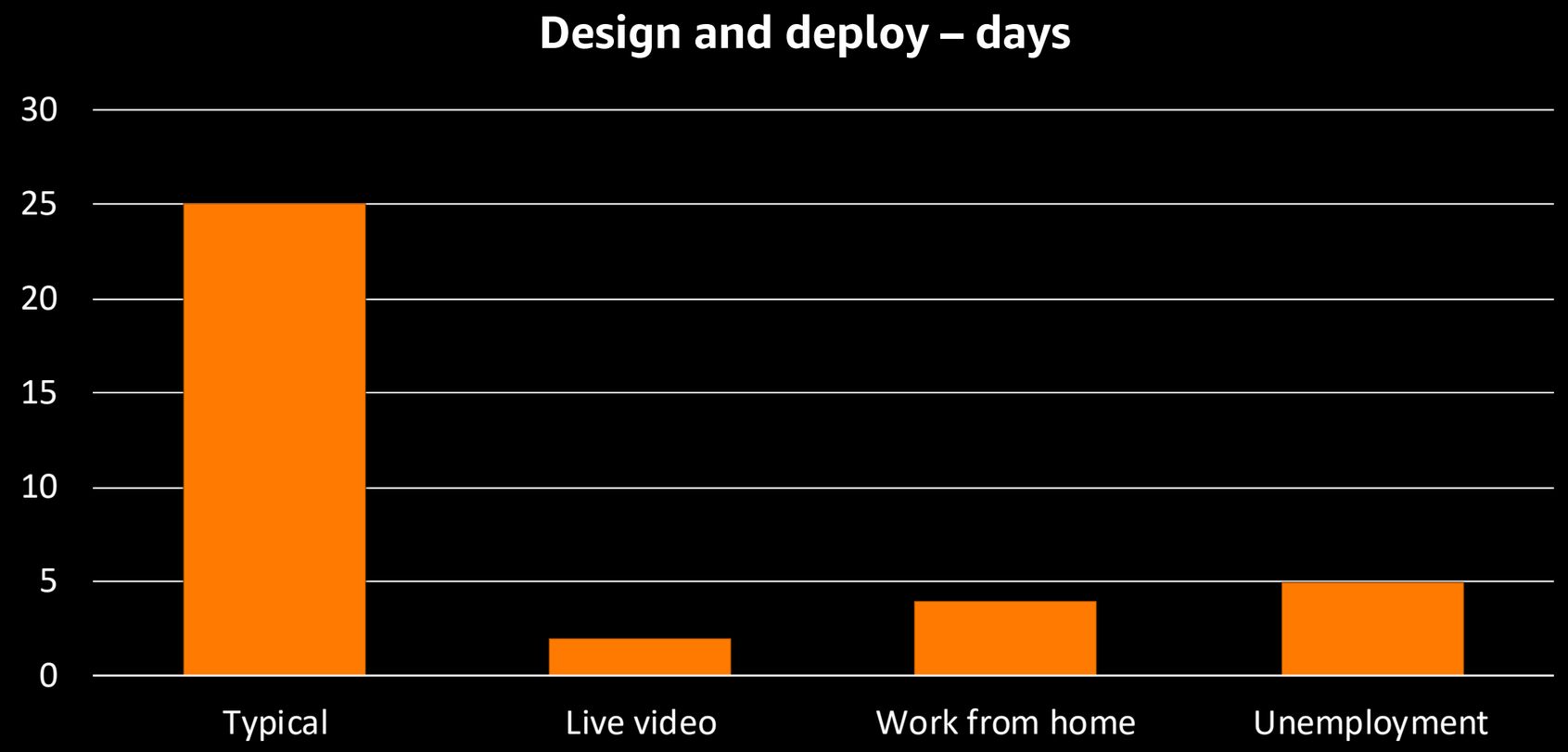
| Implementing Amazon Connect | | | |
|---|---|---|---|
| Planning | Design | Deploy | Testing |
| 4 days = 27% | **2 days** = 13% | **3 days** = 20% | 6 days = 38% |
| Total time taken = 15 **days** | | | |

# Summary

As an enterprise, we were able to move with heightened agility – not what you might expect from government

Deployed three crucial solutions in less than **5 days**

Key part of framework was using AWS Control Tower



# Reflection




## Stay engaged

- Initially used AWS Landing Zone
- Control Tower advanced to fit our needs
- Complimented the Enterprise strategy
- Focused agility and security



AWS Control Tower

# Business agility and governance control

With AWS Service Catalog, you don’t have to choose between agility and control

**You can have both**

## Governance

Security

Compliance

Operations

Spend management



AWS Control Tower

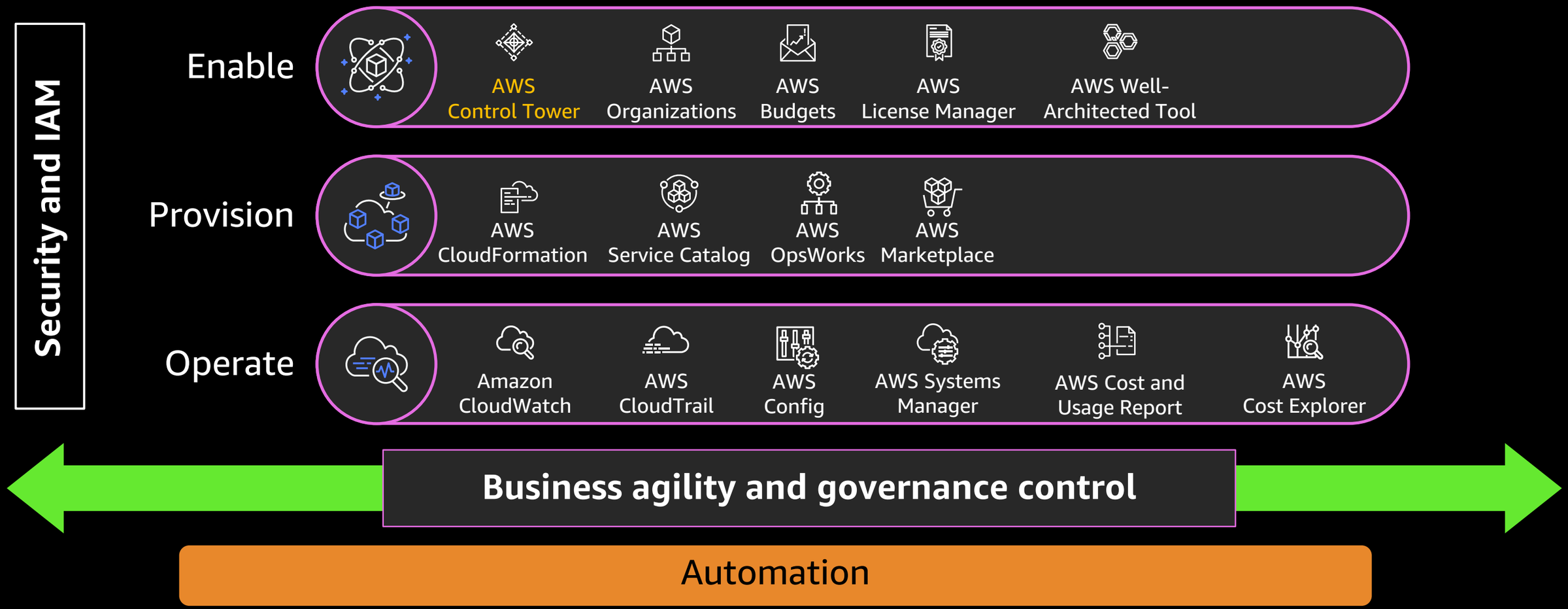
## Agility

Self-service access

Experiment fast

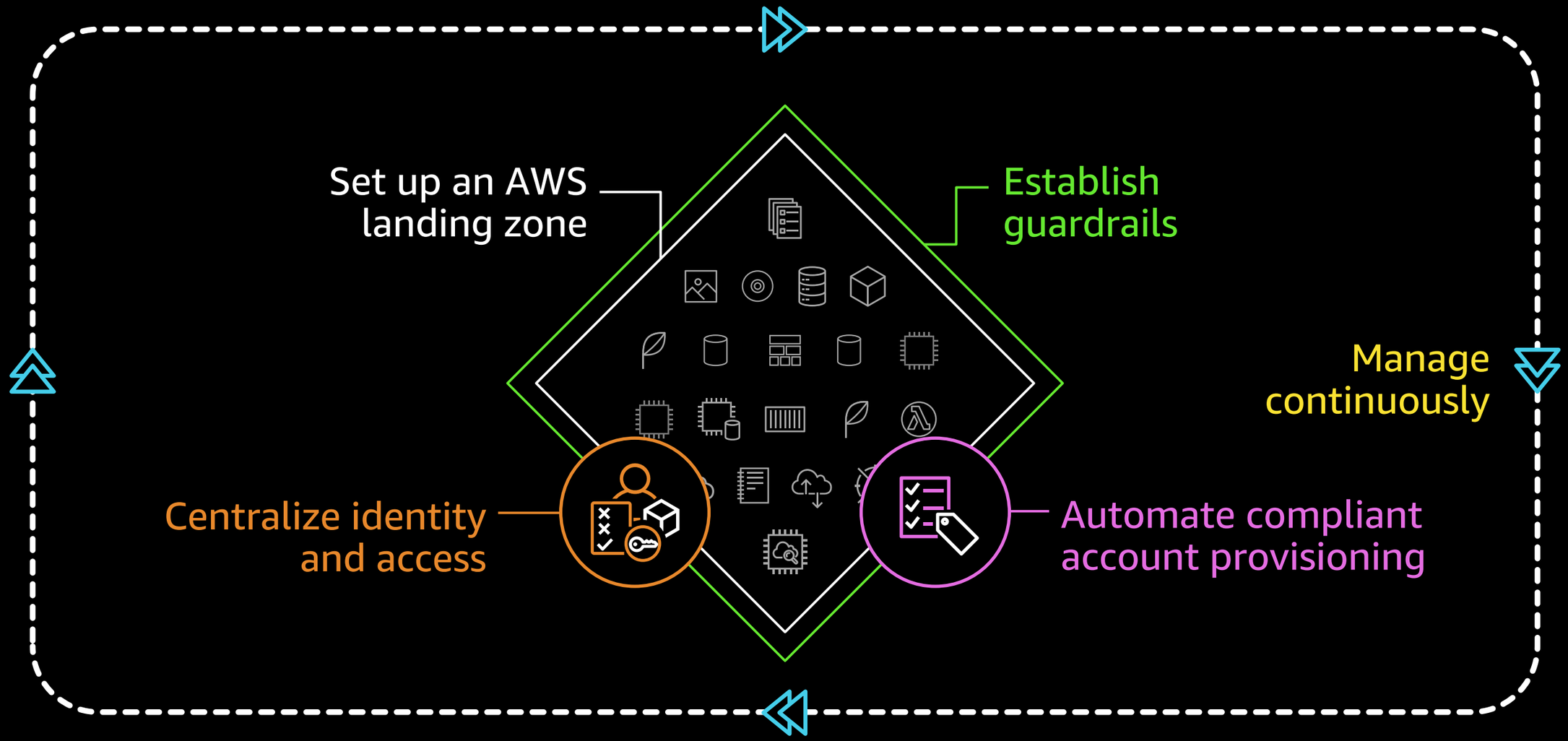
Respond quickly to change

# AWS management and governance services

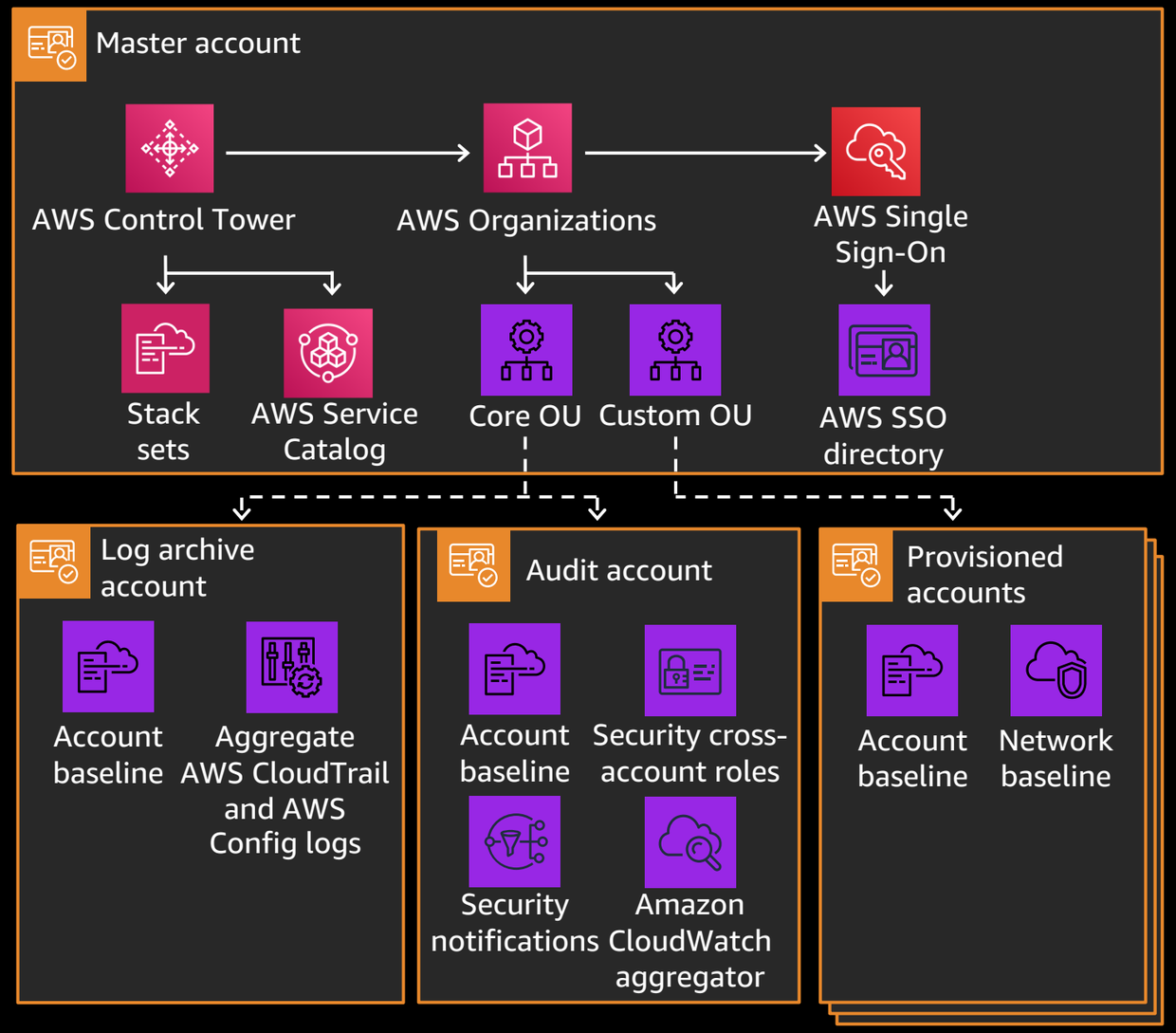


# Enable governance

Enable



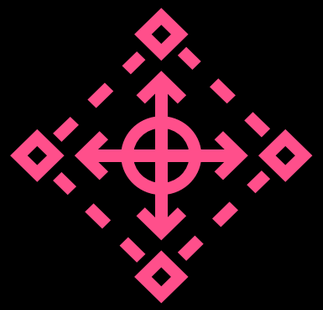
# Enable governance with AWS Control Tower




- landing zone - a preconfigured, secure, scalable, multi-account AWS environment based on best practice blueprints
- Multi-account management using AWS Organizations
- Identity and federated access management using AWS SSO
- Centralized log archive using AWS CloudTrail and AWS Config
- Cross-account audit access using AWS SSO and AWS IAM
- End user account provisioning through AWS Service Catalog
- Centralized monitoring and notifications using Amazon CloudWatch and Amazon SNS

# Partner Solutions

**Implementation**



AWS Control Tower

**Identity and Network**

onelogin

aviatrix

**Security**

ALERT LOGIC

CROWDSTRIKE

tenable

TREND MICRO

**Monitoring and Insights**

Check Point SOFTWARE TECHNOLOGIES LTD.

logz.io

New Relic

splunk

sumo logic

[Marketplace Solutions with AWS Control Tower]

# How to get started




Management & Governance AWS Blog

AWS Organizations website

AWS Control Tower Getting Started

AWS Well-Architected website

AWS Control Tower labs: https://controltower.aws-management.tools/

Customer Immersion Day material : https://dev.immersionday.com/control-tower/

AWS Control Tower blogs

- Guardrail mitigation: **https://tinyurl.com/y56dsalz**
- Self-service provisioning: **https://tinyurl.com/y3fk3fpk**
- Using AWS Config conformance packs for AWS Control Tower guardrail modeling: **https://tinyurl.com/CTModeler**
- Migrating workloads with AWS Control Tower and CloudEndure: **https://tinyurl.com/CTMigrate**

Getting started (re:Inforce 2019): **https://tinyurl.com/y2gtzf9c**

How-to videos (management and governance): **https://tinyurl.com/y3yeohkm**

# Way forward

- Avail of Activation Days and Immersion Days
- AM and SA to be your 1st point of contact
- Provide feedback to AWS



AWS Control Tower

# Thank you!



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