
AWS
re:Invent

ARC204

Getting enterprises in the cloud: Cloud management with AWS

Natalia Girolamo
Technical Program Manager, AWS

AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Session agenda

What are the challenges for enterprises today?

Path forward for cloud management on AWS:

- AWS Well-Architected
- AWS Control Tower
- AWS Trusted Advisor
- AWS Cost Explorer



© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Balancing the needs of builders and central cloud IT

Builders: Stay agile



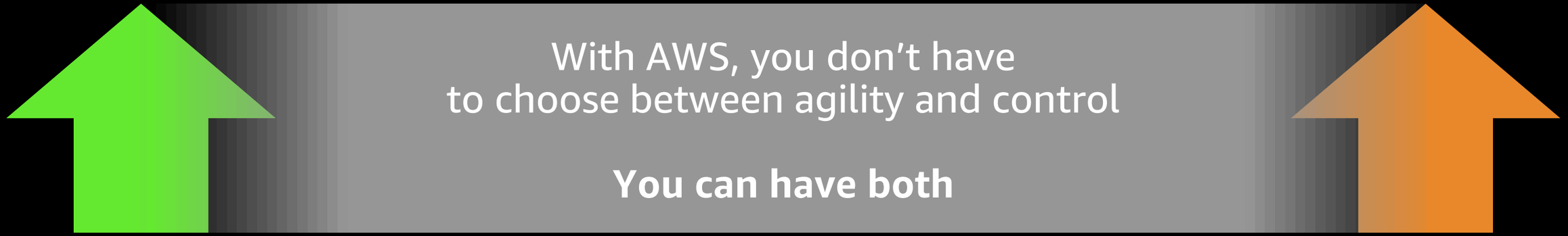
Innovate with the speed and agility of AWS

Cloud IT: Establish governance



Govern at scale with central controls

Business agility and governance control



Governance

Security

Compliance

Operations

Spend management

Agility

Self-service access

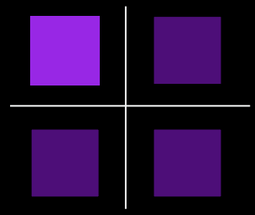
Experiment fast

Respond quickly
to change

Why one account isn’t enough



Many teams



Isolation



Billing

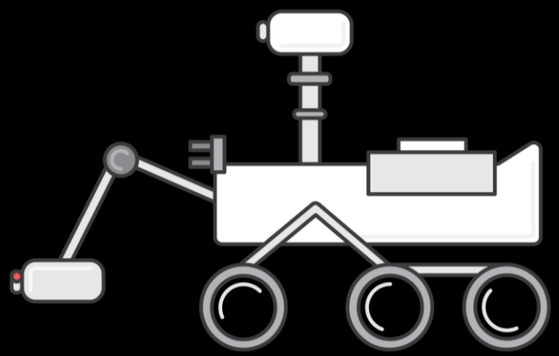


Security and compliance controls

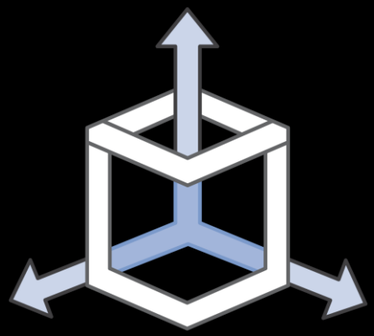


Business process

Goals



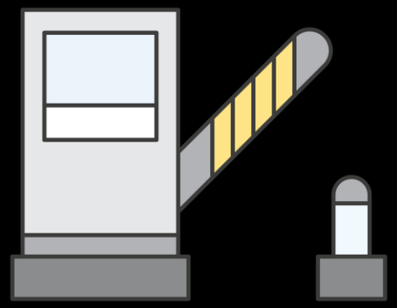
Automated



Scalable



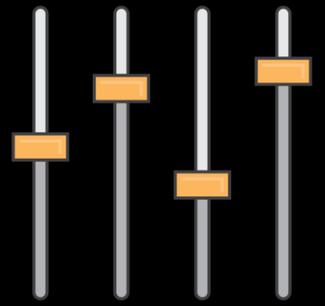
Self-service



Guardrails NOT blockers



Auditable



Flexible

So, where do I start?

AWS **Well-Architected**

aws.amazon.com/well-architected/

- Build and deploy faster
- Lower or mitigate risks
- Make informed decisions
- Learn AWS best practices



You need a landing zone

- A configured, secure, scalable, multi-account (multiple resource containers) AWS environment based on AWS best practices
- A starting point for net new development and experimentation
- A starting point for migrating applications
- An environment that allows for iteration and extension over time

AWS Control Tower: Enabling day one with self-service



Enable



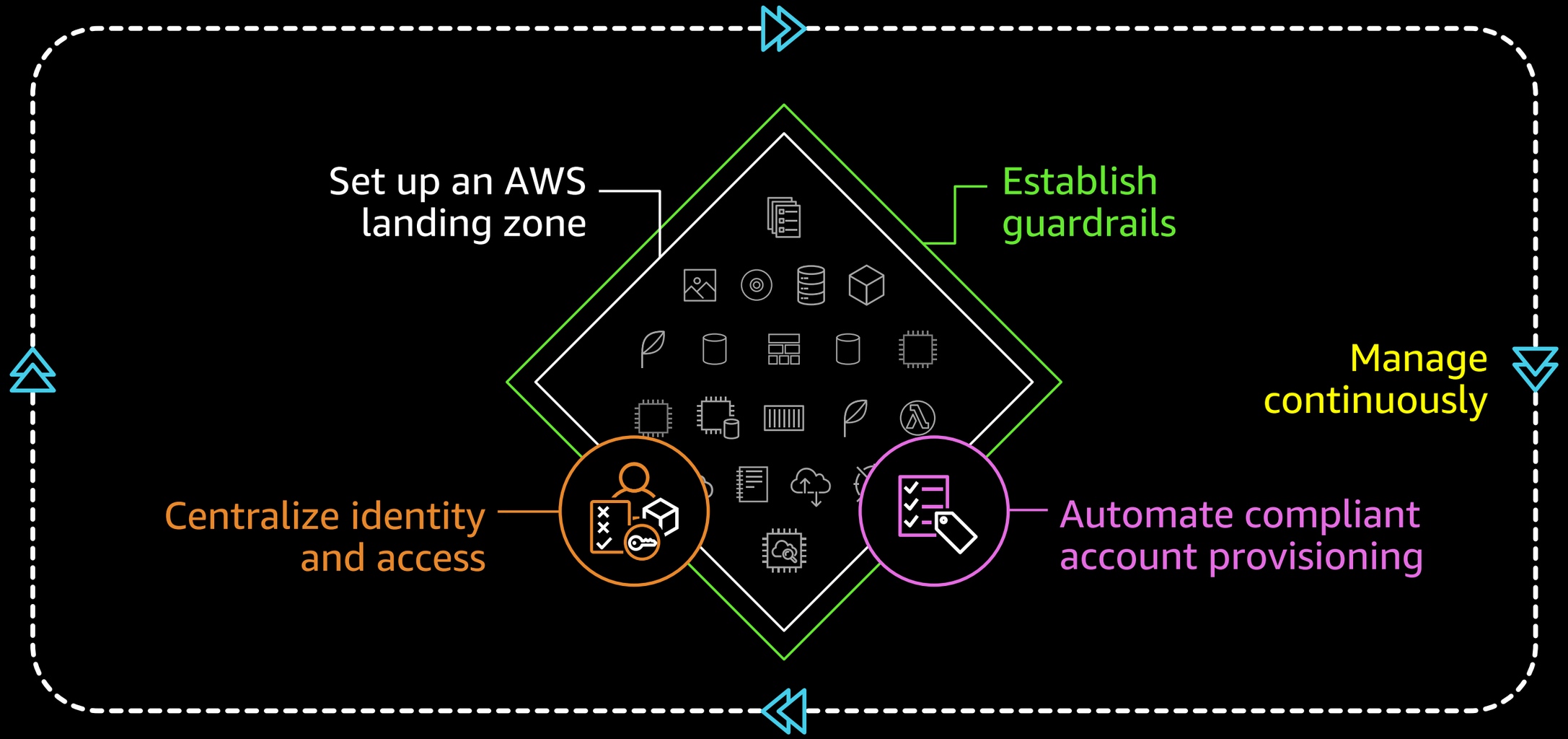
Provision



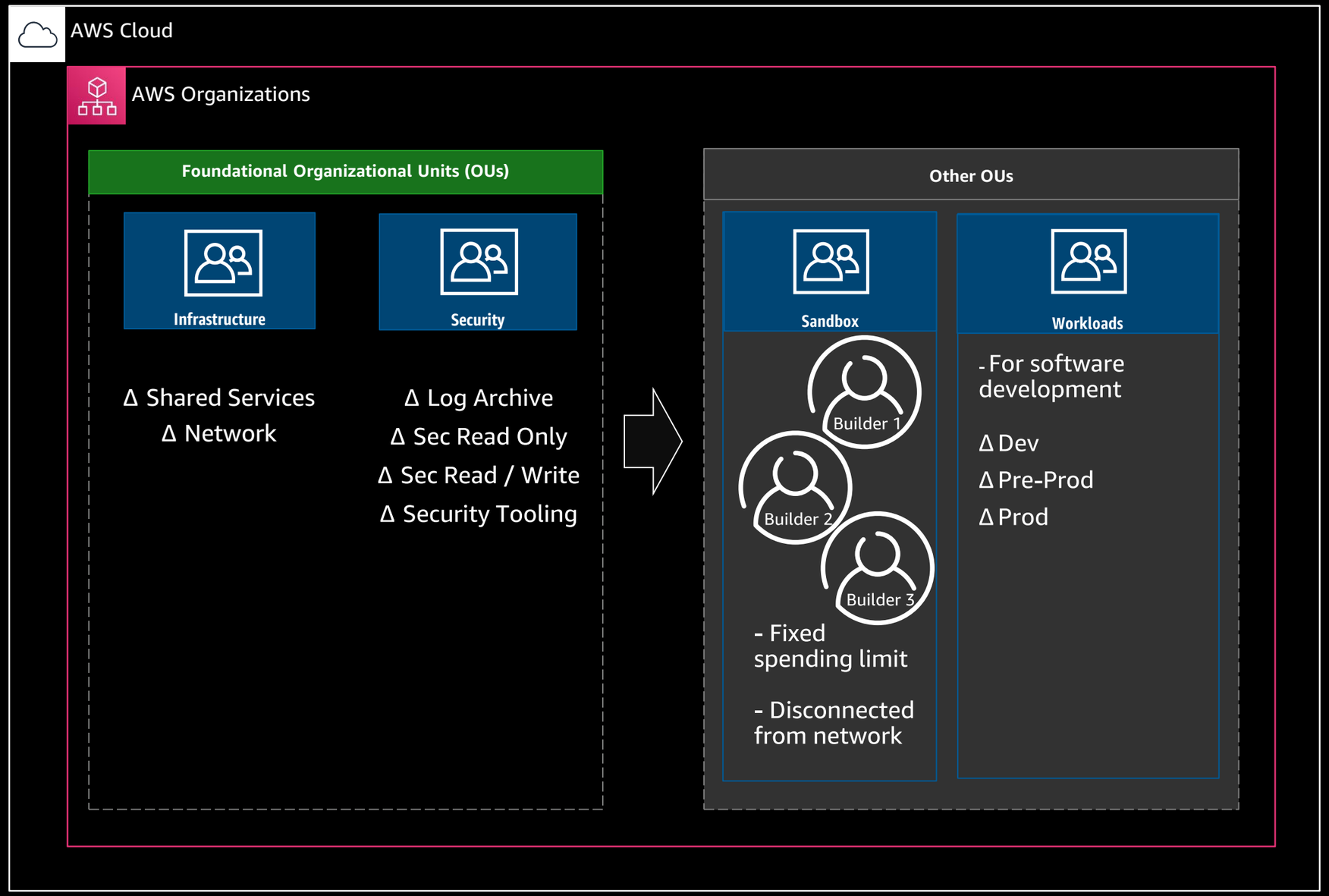
Operate

Business agility + governance control

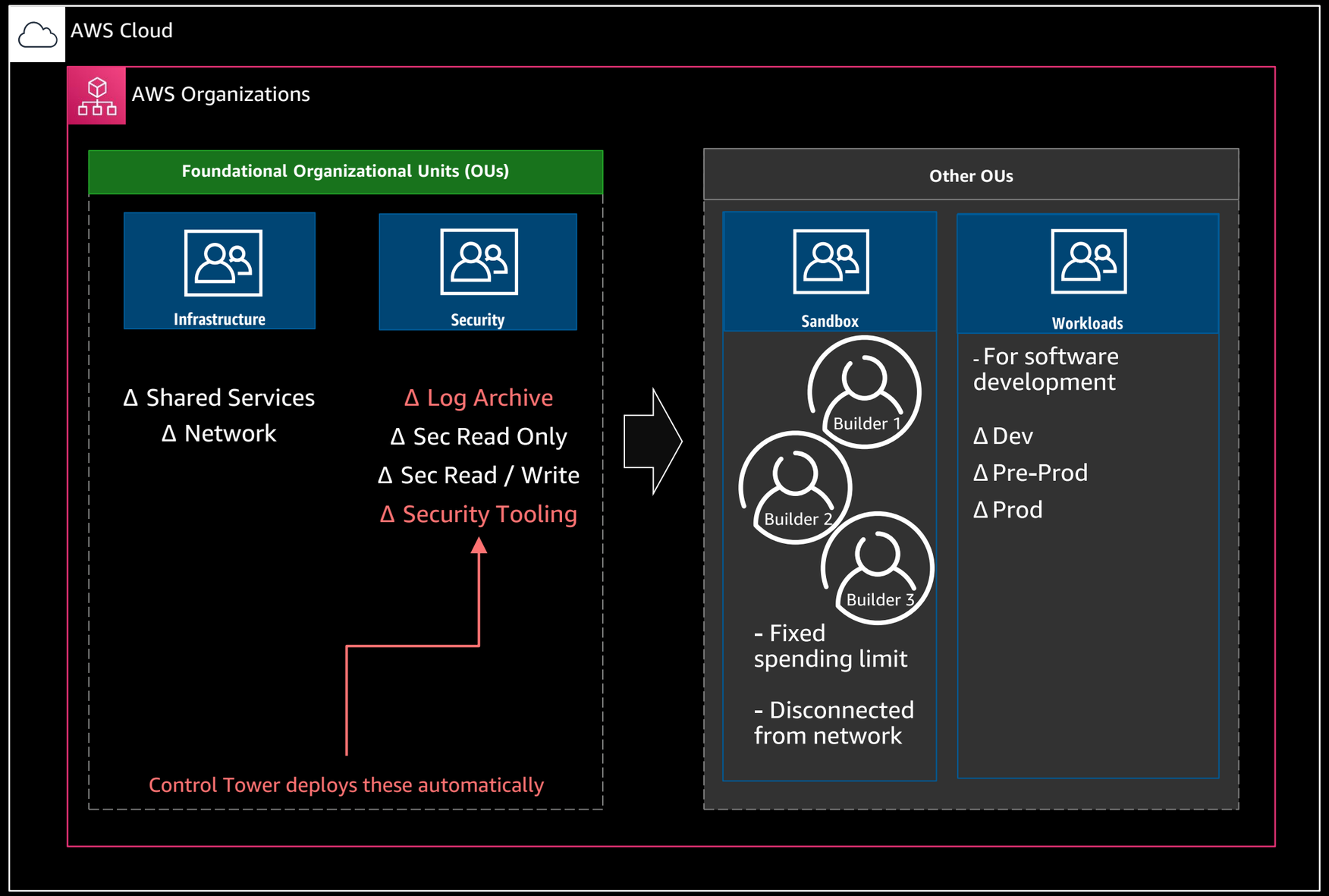
Enable governance



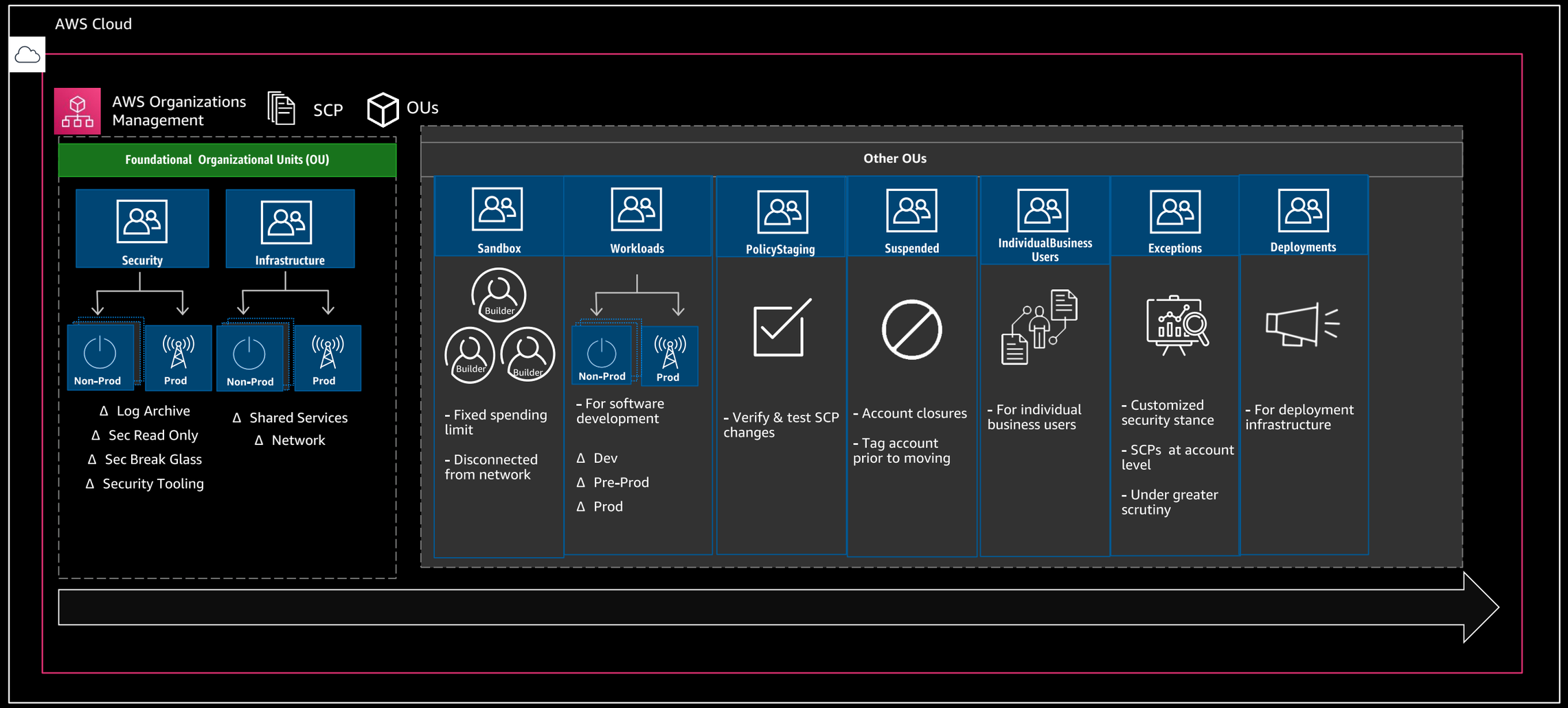
Starter AWS multi-account framework



Starter AWS multi-account framework

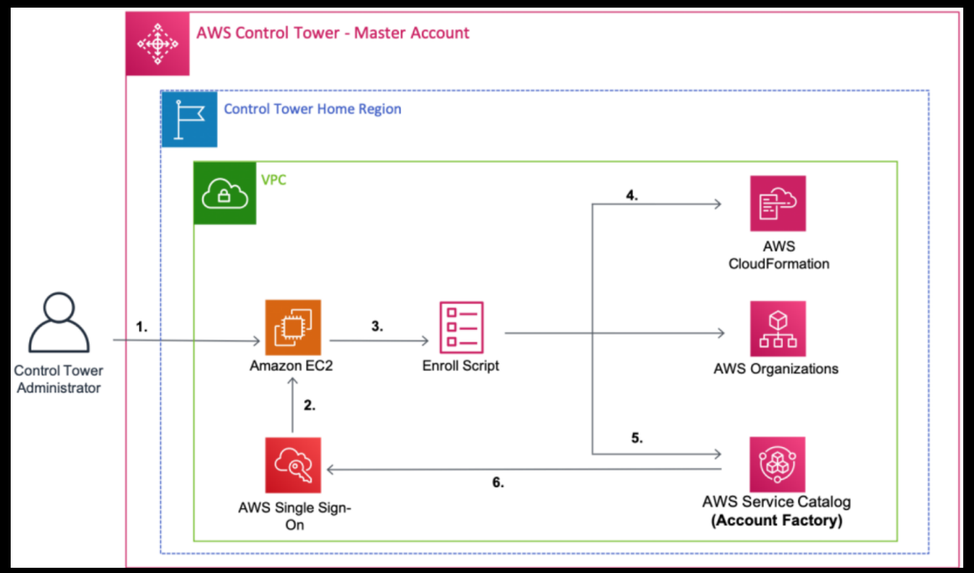


AWS multi-account framework



Can I use AWS Control Tower with existing environments?

Existing AWS Accounts



Existing AWS Organizations



AWS Control Tower

AWS Organizations

Summary of AWS Control Tower features



Automate landing zone with best practices



Guardrails for governance



Account factory for account provisioning



Integrated identity and access management (IAM)

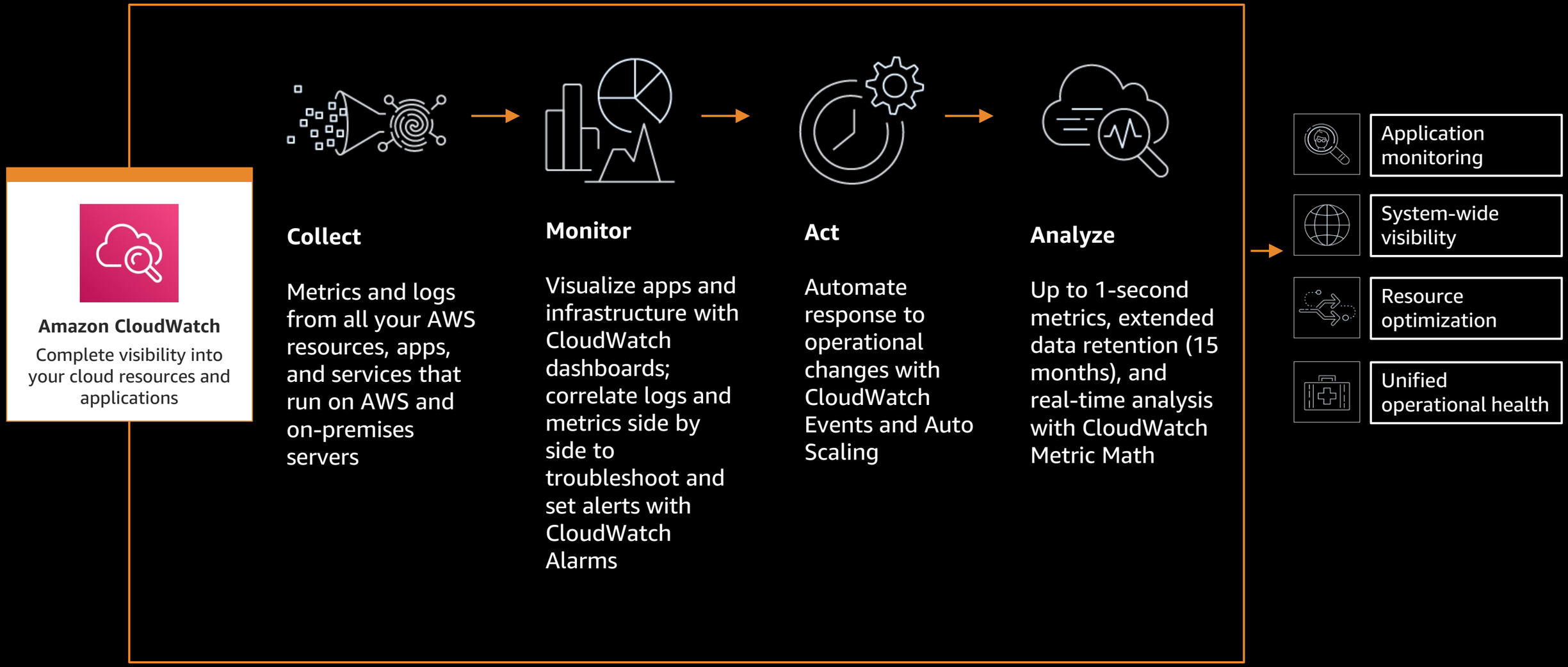


Auto-set logs archiving and audit access for account monitoring

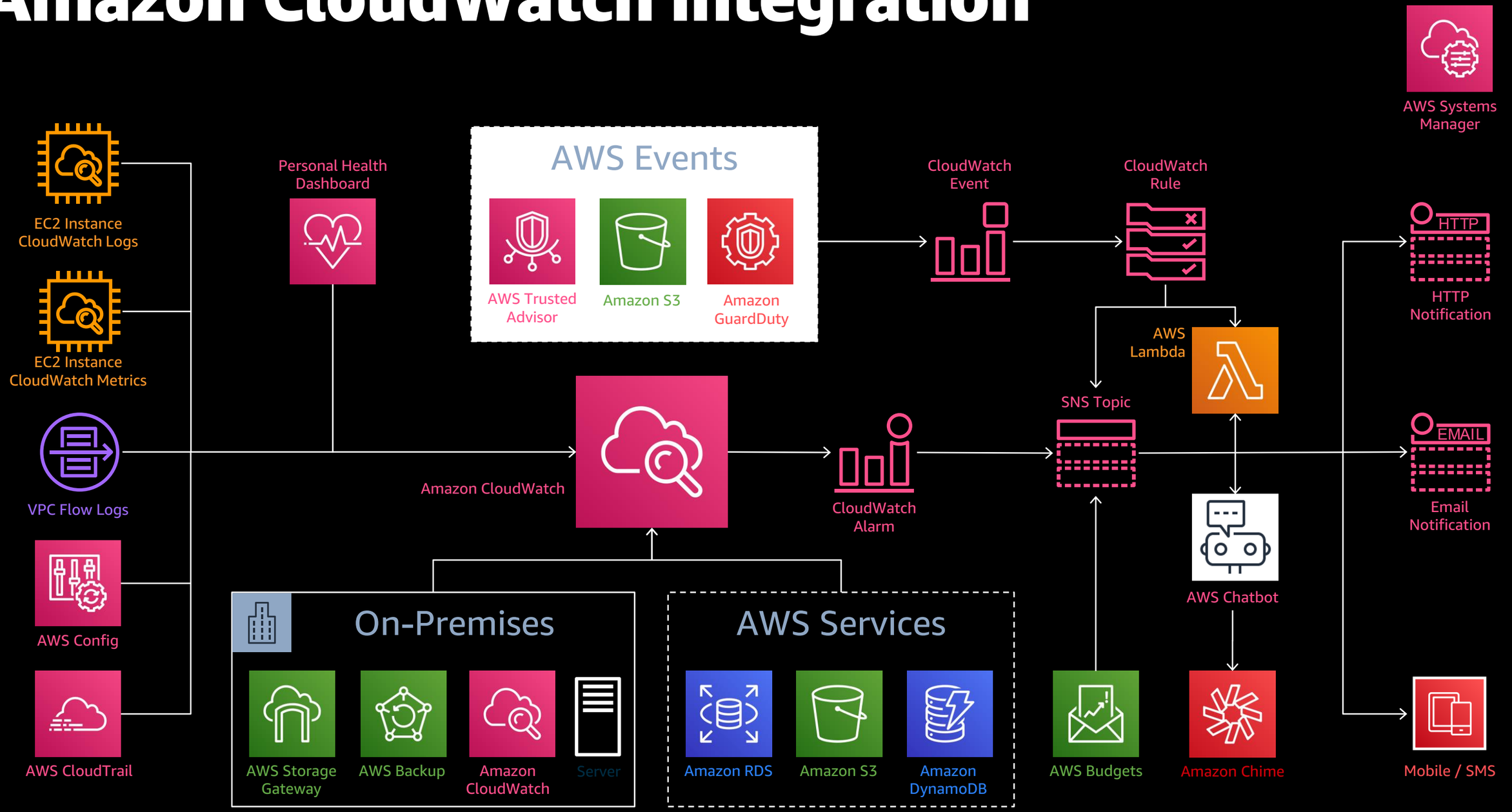


Management dashboard for visibility

But wait, how can I secure and automate my AWS environment?



Amazon CloudWatch integration



Using the collected data



AWS Trusted Advisor

Recommendations on:

Cost optimization
Performance
Security
Fault tolerance
Service limits

Trusted Advisor check levels

- Green – no problems detected
- Amber – investigation recommended
- Red – action recommended

Amazon S3 bucket permissions
Security groups
AWS IAM use
Multi-factor auth on root account
Amazon EBS public snapshots
Amazon RDS public snapshots
Service limits

AWS Trusted Advisor

- Taking away the heavy lifting of monitoring best practices
- Trusted Advisor provides best practices (or checks)



- Green – no problems detected
- Amber – investigation recommended
- Red – action recommended

What about costs?

AWS Cost Explorer



Cost Explorer is a self-service tool



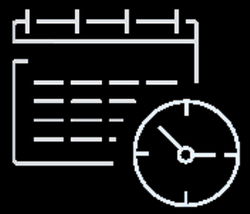
One-time fees and subscription charges (RIs / Support) are separate from usage



All charges and prices are in US Dollars

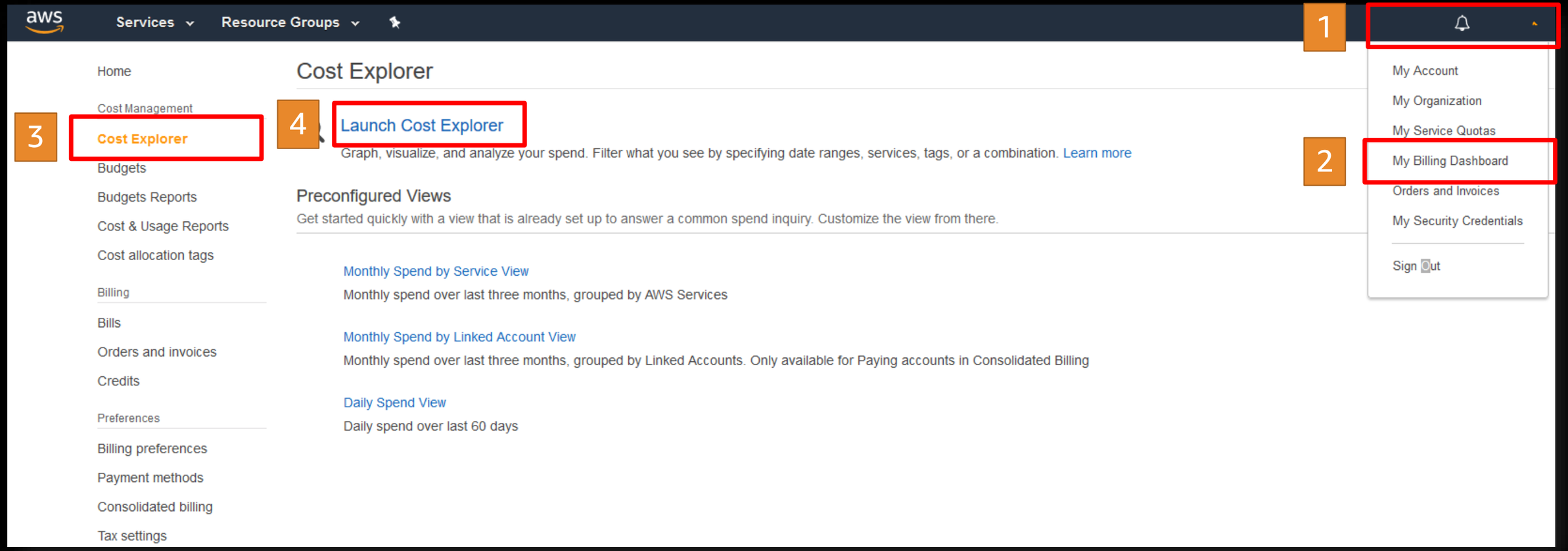


Current monthly charges are *estimated*



Dates shown are based on Coordinated Universal Time (UTC)

How to access Cost Explorer



Sign in to the AWS Management Console and open the Billing and Cost Management console at console.aws.amazon.com/billing/

If you forget everything, remember this …



1. Foundational

Well-Architected

Management account

Set up AWS Control Tower

Log archiving account

AWS single sign-on

Costs: Cloud Explorer, AWS Budgets and TAGs

Trusted Advisor



2. Network

Network design



3. Security

GuardDuty at the security account and enable on others

AWS Security Hub

AWS WAF



4. Automation

New products on Service Catalog

Deployment pipeline on Service Catalog products

Automate scripts to handle switch on and off in the environment

OK, let’s do it

Well-Architected Labs
wellarchitectedlabs.com

AWS Control Tower labs
tinyurl.com/yxdnf2mt

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

How-to (management & governance)
tinyurl.com/y3yeohkm

Labs Trusted Advisor
tinyurl.com/y5ggzog9

Thank you!



AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.



Please complete the session survey

AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.