



# Detect, investigate, and respond to security incidents

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# Agenda

Common challenges customers face

Amazon Web Services (AWS) services that can help

Review goals and objectives of the workshop

Let's get building



# Common challenges customers face

Developers want  
to build fast

Security is  
everyone's job

Developers don't  
want a lot of resistance

Mistakes happen,  
fix it quickly

AWS helps customers go  
fast and be secure



# AWS Trusted Advisor



# About AWS Trusted Advisor

HOME OF AWS BEST PRACTICES



AWS services

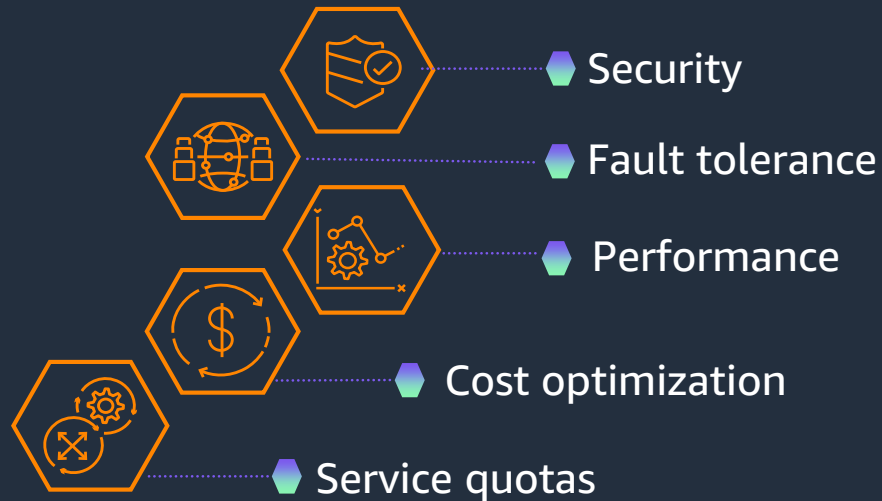


AWS technical field experts



Your AWS account team

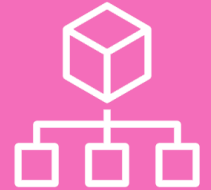
Auto-detected checks



Manual recommendations



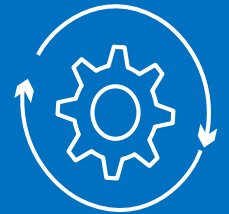
Alerts on deviation and good standing



Multi-account/  
AWS Organizations  
views



Prioritized and  
custom guidance

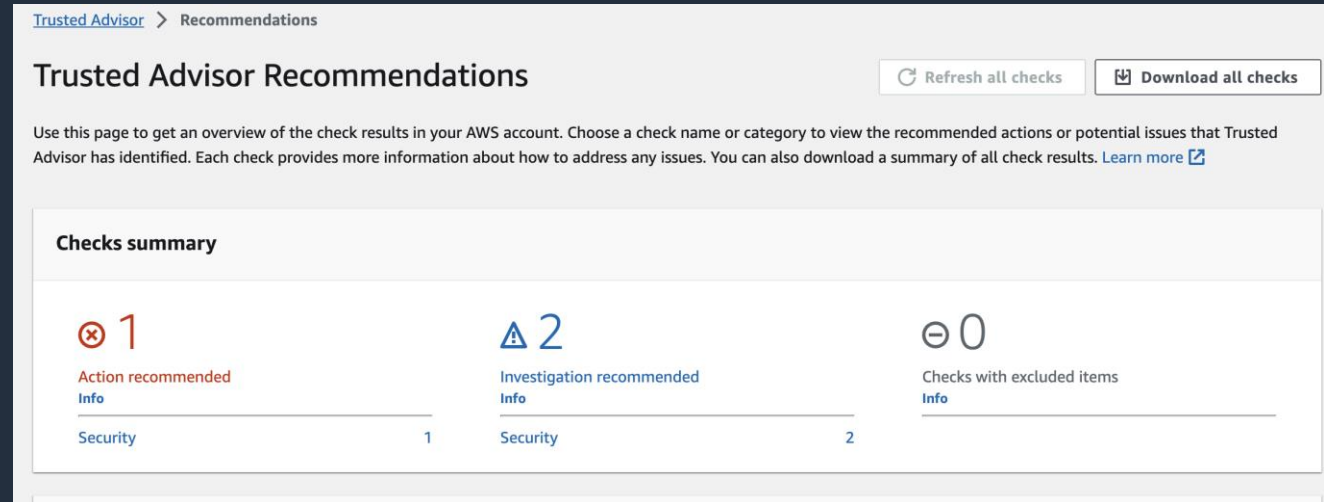


Closed-loop  
feedback tracking



# AWS Trusted Advisor – Core checks and recommendations (available at no cost)

- Amazon S3 bucket permissions
- Security groups – specific ports Unrestricted
- AWS IAM use
- MFA on root account
- Amazon Elastic Block Store (EBS) public snapshots
- Amazon RDS public snapshots
- Service limits



The screenshot displays the 'Trusted Advisor Recommendations' page in the AWS console. At the top, there are navigation links for 'Trusted Advisor' and 'Recommendations'. The main heading is 'Trusted Advisor Recommendations', followed by two buttons: 'Refresh all checks' and 'Download all checks'. A descriptive paragraph explains the purpose of the page. Below this is a 'Checks summary' section with three cards: 'Action recommended' (1 item, Security category), 'Investigation recommended' (2 items, Security category), and 'Checks with excluded items' (0 items). Each card includes an 'Info' link.

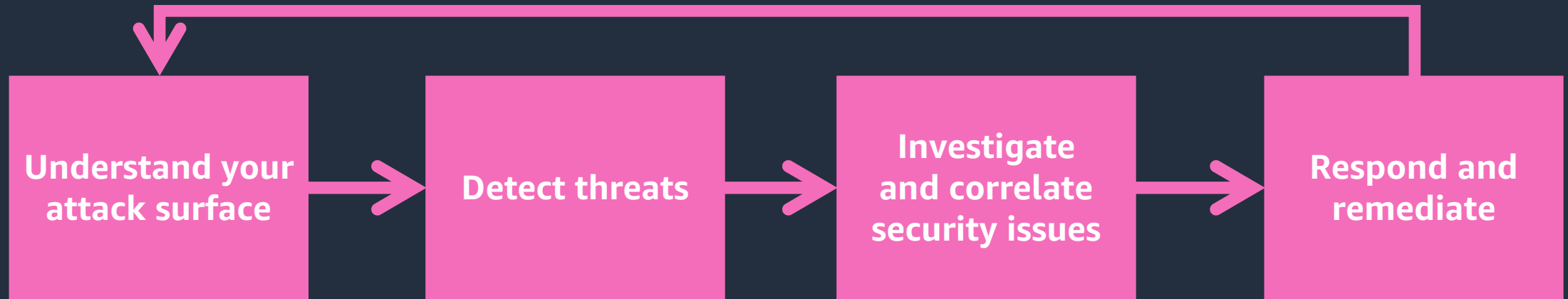
Category	Count
Action recommended	1
Investigation recommended	2
Checks with excluded items	0

# AWS security services



# Continuous security monitoring for AWS

Continuous improvement of your AWS security posture





# AWS security, identity, and compliance solutions



## Identity and Access Management

AWS Identity and Access Management (IAM)

AWS IAM Identity Center

AWS Organizations

AWS Directory Service

Amazon Cognito

AWS Resource Access Manager

Amazon Verified Permissions



## Detective controls

AWS Security Hub

Amazon GuardDuty

Amazon Security Lake

Amazon Inspector

Amazon CloudWatch

AWS Config

AWS CloudTrail

VPC Flow Logs

AWS IoT Device Defender



## Infrastructure protection

AWS Firewall Manager

AWS Network Firewall

AWS Shield

AWS WAF

Amazon VPC

AWS PrivateLink

AWS Systems Manager

AWS Verified Access



## Data protection

Amazon Macie

AWS Key Management Service (KMS)

AWS CloudHSM

AWS Certificate Manager

AWS Private CA

AWS Secrets Manager

AWS VPN

Server-Side Encryption



## Incident response

Amazon Detective

Amazon EventBridge

AWS Backup

AWS Security Hub

AWS Elastic Disaster Recovery



## Compliance

AWS Artifact

AWS Audit Manager

# Threat detection, monitoring, and response



## Security monitoring and threat detection



Integrated with AWS workloads in an AWS account, along with identities and network activity



### Amazon GuardDuty

Detect threats and anomalous behavior



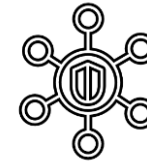
### Amazon Macie

Discover sensitive data



### Amazon Inspector

Detect vulnerabilities



### AWS Security Hub

Centralize security alerts



### Amazon Detective

Investigate events and findings

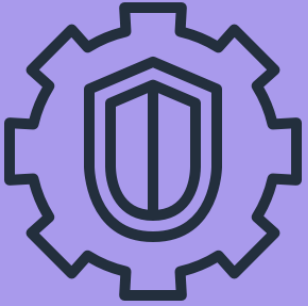


### Amazon Security Lake

Normalize & analyze security data



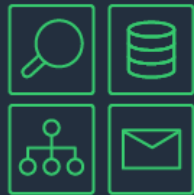
# What is Amazon GuardDuty?



Amazon GuardDuty is a threat detection service that uses **machine learning**, anomaly detection, and **integrated threat intelligence** to identify and prioritize potential threats



One-step  
activation



Continuous  
monitoring of  
AWS accounts  
and resources



Global coverage  
with regional  
results



Detect known  
and unknown  
threats



Enterprise-wide  
consolidation  
and  
management

# Your tasks today

Three modules – as you progress, it gets deeper into the AWS services

By default, common instructions are hidden but you can expand sections as needed

No need to rush finishing all modules, the core objective is to learn and understand

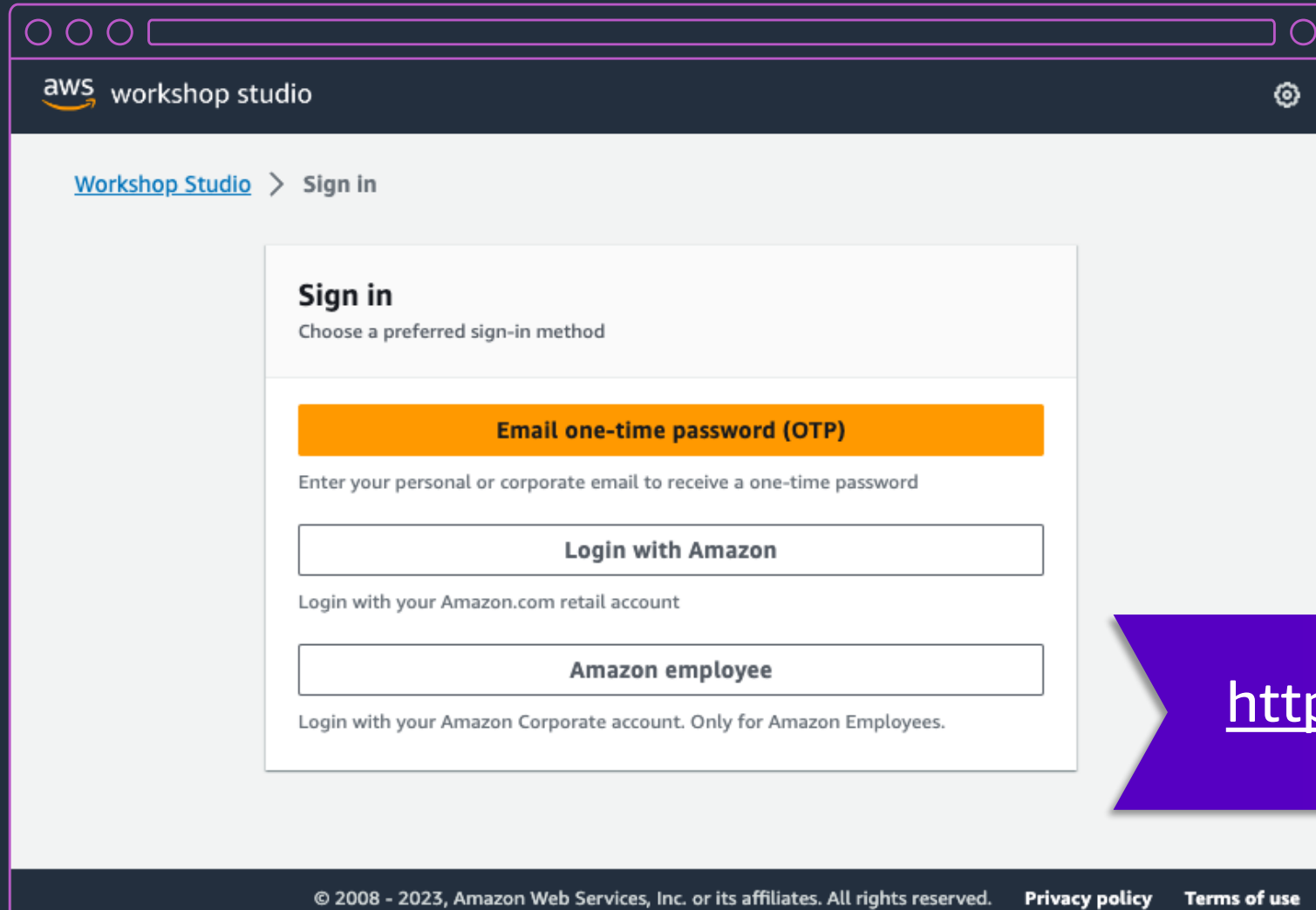
If you need us, raise your hand or just call upon us



# Let's build ...



# Step 1: Sign in using your preferred method



The screenshot shows a web browser window with the address bar empty. The page title is "aws workshop studio". Below the title, there is a breadcrumb trail: "Workshop Studio > Sign in". The main content area is titled "Sign in" with the subtitle "Choose a preferred sign-in method". There are three sign-in options, each in a white box with a black border:

- Email one-time password (OTP)**: This option is highlighted with an orange background. Below the title, it says "Enter your personal or corporate email to receive a one-time password".
- Login with Amazon**: Below the title, it says "Login with your Amazon.com retail account".
- Amazon employee**: Below the title, it says "Login with your Amazon Corporate account. Only for Amazon Employees."

At the bottom of the page, there is a footer with the text "© 2008 - 2023, Amazon Web Services, Inc. or its affiliates. All rights reserved." followed by links for "Privacy policy" and "Terms of use".

<https://catalog.workshops.aws/join>



# Step 2: Enter the event access code

aws workshop studio

Workshop Studio > Join event

Step 1  
Enter event access code

Step 2  
Review and join

Enter event access code

Event access code

A 12 digit code that was given to you for this event

abcd-012345-ef

Cancel

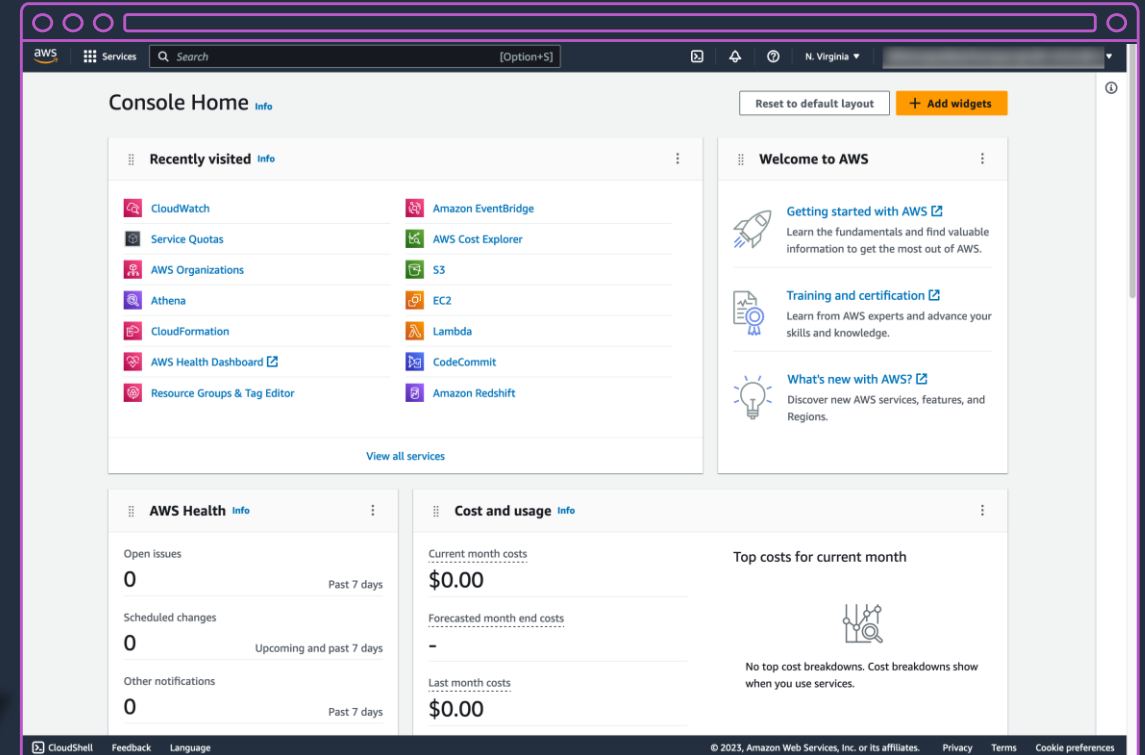
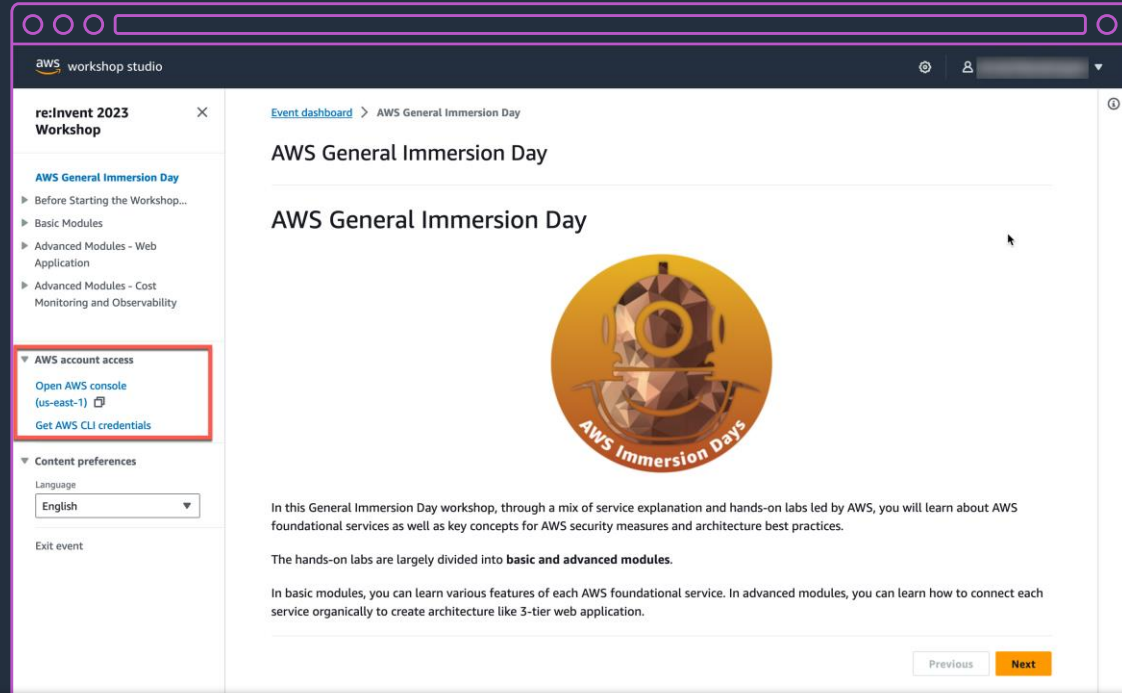
Next

239e-07c8c8-ca

<https://catalog.workshops.aws/join>



# Step 3: Access AWS account



Access the AWS Management Console or generate AWS CLI credentials as needed





# Please Provide Your Feedback



Step 1: Select Security, Governance and Resilience

Step 2: Select Detect, investigate and respond to security scenarios



# Thank you!

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