

### **Guided Notes**

I am excited that you are on the journey to get your AWS Certified Cloud Practitioner certification. This guided outline is meant to complement the video course. Here are a few tips to help you get the most out of these resources:

- 1. Print this out before you start the video course.
- 2. Follow along with the course and fill out areas in this document as you watch the course. You'll notice that the module names in the course are the bold headings here in these notes. In addition, clips in the module have their titles in this document too. Not all clips have notes.
- 3. Review your notes against the completed notes that can be found in the exercise files.
- 4. Keep this document after you finish the course as a part of the materials you will use to study for the exam.

Remember, this course is just the first step in your journey to achieve this certification. Follow along with the remainder of courses in this path, and then register for the exam.

Don't forget to reach out on <u>Twitter</u> and <u>LinkedIn</u> to let me know how you are doing along the way.



# Interacting with AWS

## **Learning Outcomes**

- Interaction Methods
  - o AWS Console
    - You should know what use cases would be best to be done within the AWS console
    - Know how to login to the console
  - o AWS Command Line Interface (CLI)
    - You should know when it would make sense to leverage the CLI
    - Know where to find the installation instructions for your platform
  - AWS Software Development Kit (SDK)
    - Know when the use of the SDK makes sense

### Links You'll Need

- AWS Console
- AWS CLI Installation Instructions
- AWS SDK's

## Methods of Interacting with AWS

Three methods of interacting with AWS services:	
1.	-
2	_
3	_
The AWS Management Console is a	and
based interface for interacting with most all of the 150	)+ AWS services. All major browsers and
mobile operating systems are supported.	

David Tucker



The AWS SDK is supported in the following languages:			
Kotlin	Rust	Swift	

## Using the AWS CLI

Generating an access key:

Generating an access key is not required to use the AWS CloudShell, but it is required if you want to use the CLI on your machine outside of the browser.

- 1. Log into the AWS Console.
- 2. Select your username in the top bar and select My Security Credentials in the dropdown menu.
- 3. Next, select the Access Keys option.
- 4. Select the option to Create New Access Key (if this is a root account, you should delete these when you are done with them)
- 5. Download your key file

You can launch the AWS CloudShell using the icon in the top bar:





### Scenarios

The following scenarios are presented in the course as a way to explore your understanding of the module. Include your answer here in this outline, as well as your notes on the solution to each scenario.

#### **SCENARIO 1**

- Roger's company runs several production workloads in AWS
- They have a new web application that manages digital assets for marketing
- They need to automatically create a user account in Amazon Cognito on sign-up
- They want this step seamlessly integrated into the application
- Which interaction method would Roger's company use for this?

What's Your Answer:	
Why did you pick this answer:	
If you didn't get this one right, what insight did you gain from the explanation:	

#### **SCENARIO 2**

- Eliza's company is considering transitioning to AWS
- They want to leverage Amazon Relational Database Service
- Eliza wants to test out a single database on the service
- What interaction method would Eliza use for this use case?

|--|

where you still have questions:





Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:
SCENARIO 3
<ul> <li>Jennifer's company is a startup</li> <li>They created a social network for entrepreneurs with a web and mobile app</li> <li>Jennifer has a set of tasks she needs to run on AWS each day to generate reports</li> <li>What interaction method would Jennifer use for this use case?</li> </ul>
What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:
Module Wrap Up

Take a minute to write down any areas from this module that you don't fully understand or



# **Compute Services**

## **Learning Outcomes**

- Understand the three different compute services that we introduced in this module:
  - o Amazon EC2
    - Be able to define EC2 and what it does
    - Know what instance types are for EC2 and what capabilities they cover
    - Know when to use the different purchase types for EC2
    - Understand what an AMI is and what it provides to an EC2 instance
  - o AWS Elastic Beanstalk
    - Be able to explain what Elastic Beanstalk is and how it differs from EC2
    - Know the different capabilities that are included with the service
  - AWS Lambda
    - Be able to define Lambda and explain how it differs from both EC2 and Elastic Beanstalk
    - Understand how you are charged for Lambda usage
    - Note that Lambda is the core of a serverless approach

### Links You'll Need

- Amazon EC2
- AWS Elastic Beanstalk
- AWS Lambda
- AWS Elastic Beanstalk Sample Applications

### Amazon EC2 Overview

	is a web service that provides resizable
compute capacity in the cloud. It is designed to	make web-scale computing easier for
developers." - Amazon Web Services	





The four concepts that we	need to know to launch an EC2 instance are:
1.	
2.	
3.	
4.	
The instance type defines t	he, memory, and
The two root device types f	or an EC2 instance are:
	- Ephemeral storage that is physically attached to the host the
virtual server is running on	
	- Persistent storage that exists separately from the host the
virtual server is running on	r ersistent storage that exists separately from the riost the
5	
Amazon EC2 Purch	ase Types
Amazon EC2 Purchase Opt	ions
1	- You pay by the second for the instances that are
launched	

David Tucker



2.		You purchase discount EC2 instance types in
	advance for 1 or 3 years. This als	so provides a capacity reservation for the selected
	instance type.	
3.		You commit to a level of usage for EC2, Fargate, or
	Lambda for a 1 or 3 year period	at a discount. This does not reserve capacity.
4.		You can leverage unused EC2 capacity in a region fo
	a large discount.	
5.		You purchase the capacity for a dedicated physical
	server.	
Reserv	ved Instance Cost Models:	
		Entire cost for the 1 or 3 year period is paid
upfror	nt	
		Part of 1 or 3 year cost is paid upfront along with a
reduc	ed monthly cost	
		No upfront payment is made, but there will be a
reduc	ed monthly cost	

# Launching EC2 Instances

- 1. Log into the AWS Console.
- 2. Open the EC2 service dashboard (search for EC2 in the 'Search' input).
- 3. Select the **Launch Instance** option.
- 4. Enter the name of the instance you will be launching.
- 5. Use the **Amazon Linux 2 AMI**, which will likely be pre-selected for you.

David Tucker



- 6. Be sure that the **t2.micro** instance type is selected (it should be selected by default).
- 7. Next, you will need to select a Key Pair. If you don't have one, you can create one by pressing the **Create a New Key Pair** link.
- 8. Next, you will need to adjust the **Network settings** for the instance. For the **Allow SSH traffic from**, select the **My IP** option. Also, be sure the **Allow HTTP traffic from the Internet** option is selected.
- 9. Leave the storage settings with their default values.
- 10. Scroll down to **Advanced Details** and open these settings. In the **User data** field, enter the text included below these instructions.
- 11. Press the **Launch instance** button.
- 12. Once the instance launch has been successfully initiated, click on the ID link for the instance (it will start with "i-" followed by a collection of numbers and letters).
- 13. Once the instance has transitioned from pending to running, copy the public DNS into your browser. You should see the test page in your browser. Be sure to use http and not https to open the hostname.
- 14. Finally, back in the AWS console select the instance and then navigate to **Instance State**. Select **Terminate**. Confirm your decision.

User Data:

#!/bin/bash
yum install httpd -y
systemctl enable httpd
systemctl start httpd

### **AWS Elastic Beanstalk Overview**

Elastic Beanstalk is a	as a service solution on AWS.

# Note the Supported Application Platforms for Elastic Beanstalk:

## Launching an App on Elastic Beanstalk

- 1. Navigate to the Elastic Beanstalk Tutorials and Samples page. Select a sample application to download to your local machine.
- 2. Log into the AWS console and navigate to the Elastic Beanstalk service page.
- 3. If you see the "Welcome to AWS Elastic Beanstalk" screen, select Create Application.

David Tucker

AWS.



- 4. In the screen that follows, give your application a name and select the platform (it will need to be the same platform as the sample application you downloaded).
- 5. Select the option to upload your code, and then upload the zip file you downloaded that contains your sample application.
- 6. Select the option to Create application.
- 7. Wait for the application and then navigate to the URL near the top of the page.
- 8. After viewing the application, navigate back to the console and select **Actions Terminate Environment.**

AWS Lambda Overview		
u	lets you run code without	or
serve	rs. You pay only for the compute t	ime you consume. You
can run code for virtually any type o	fapplication or backend service -	all with zero
administration." - Amazon Web Serv	vices	
AWS Lambda is the primary service	for	architectures.
Container Services		
u	are packages of software that o	contain all of the
necessary elements to run in any en	vironment	virtualize the
operating system and run anywhere	e, from a private data center to the	e public cloud or even
on a developer's personal laptop." - 0	Google	
	requires no prerequisite knowl	edge of containers or
infrastructure.		

\_\_ - ideal for organizations looking to run Kubernetes on

David Tucker



	full-featured container orchestration solution that
natively integrates with many AWS s	services.
	serverless compute engine that reduces what you
have to maintain. It works with both	and



### Scenarios

The following scenarios are presented in the course as a way to explore your understanding of the module. Include your answer here in this outline, as well as your notes on the solution to each scenario.

#### **SCENARIO 1**

- Sylvia's company is in the process of moving multiple workloads into AWS
- One workload is an application that will be leveraged for at least 5 more years
- The organization is looking to be as cost efficient as possible for its EC2 usage
- What EC2 purchase option should be chosen for this application?

What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:

### **SCENARIO 2**

- Edward is looking to deploy his PHP web application to a virtual server
- He doesn't have experience managing EC2 instances on AWS
- He needs the ability to scale this application to meet user demand
- What is the best compute option for Edward based on these criteria?

What's Your Answer		
What's Your Answer		





Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:
SCENARIO 3
<ul> <li>Cindy's company is transitioning to the cloud for its data processing workloads</li> <li>These workloads happen daily and can start or stop without a problem</li> <li>This workload will be leveraged for at least one year</li> <li>What EC2 purchase option would be the most cost-efficient choice?</li> </ul>
What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:

# Module Wrap Up

Take a minute to write down any areas from this module that you don't fully understand or where you still have questions:



# **Content and Network Delivery Services**

## **Learning Outcomes**

- Be able to explain the purpose of each of the following services:
  - o Amazon Route 53
  - Amazon Virtual Private Cloud (VPC)
  - o AWS Direct Connect
  - Amazon API Gateway
  - Amazon CloudFront
  - Elastic Load Balancing
- Be able to explain the differences between two cloud scaling approaches:
  - Vertical Scaling (scale up)
  - Horizontal Scaling (scale out)

## Helpful Links

- Amazon Route 53
- Amazon VPC
- AWS Direct Connect
- Amazon API Gateway
- Amazon CloudFront
- Elastic Load Balancing

### Amazon VPC and Direct Connect

/rite the definition for Amazon Virtual Private Cloud (VPC):
- A cloud service solution that makes it easy to establish a
edicated network connection from your data center to AWS.

### Amazon Route 53





Amazon Route 53 is a _ selection).		service (meaning it does not require region
Elastic Load Bala	ncing	
Distributes traffic across	s multiple	
Integrates with		, and
Types of load balancers:	:	
1.		
2.		
3.		
Types of Scaling:		
with additional resource		up" your instance type to a larger instance type
demand of your applica		out" and add additional instances to handle the
Amazon CloudFr	ont and API G	ateway
CloudFront utilizes AWS	S	
Supports both	and	content

David Tucker



is a fully managed API management service.	
AWS Global Accelerator	
The AWS Global Accelerator is a networking service that can route your traffic through the	
AWSt	0
improve performance.	



### Scenarios

The following scenarios are presented in the course as a way to explore your understanding of the module. Include your answer here in this outline, as well as your notes on the solution to each scenario.

#### **SCENARIO 1**

- Jane's company maintains two corporate data centers
- They want their data centers to work alongside AWS for specific workloads
- She is wondering if there is a way to have a persistent connection to AWS
- What service from AWS would you recommend her company implement?

What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:

### **SCENARIO 2**

- Tim's company serves content through their site to users around the globe
- They are looking to optimize performance to users around the world
- They want to leverage a Content Delivery Network (CDN)
- Which service would enable optimized performance globally for their content?

What's Your Answer:	





Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:
SCENARIO 3
<ul> <li>Ellen's company has an internal application that runs on an EC2 server</li> <li>Currently there is downtime as demand is greater than capacity for the server</li> <li>Ellen is trying to decide if she should use bigger servers or more servers</li> <li>Which scaling approach would you recommend and what services should they use?</li> </ul>
What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:
Module Wrap Up

Take a minute to write down any areas from this module that you don't fully understand or where you still have questions:



# File Storage Services

## **Learning Outcomes**

- Be able to explain the core features of Amazon S3
  - o Different storage classes
  - Multiple availability zone (durability)
  - URL file access
  - Lifecycle policies
  - o S3 Transfer Acceleration
- Be able to identify when S3 Glacier or S3 Glacier Deep Archive would be a good choice
- Know the differences between the two EC2 storage options:
  - Elastic Block Store (EBS)
  - Elastic File Store (EFS)
- Understand when the data transfer services should be leveraged
  - o AWS Snowball
  - o AWS Snowmobile

### Helpful Links

- Amazon S3
- Amazon S3 Glacier
- Amazon Elastic Block Store (EBS)
- Amazon Elastic File System (EFS)
- AWS Snowball
- AWS Snowmobile

### Amazon S3 Overview

#### **S3 Non-Archival Storage Classes**

Storage Class	Description
	the default storage class and is for frequently accessed data
	will move your data to the correct storage class based on usage
	for infrequently accessed data with the



standard resilience
is for infrequently access data that is only stored in one AZ

\_\_\_\_\_ is a feature that can be enabled per bucket that allows for

optimized uploading of data using the AWS Edge Locations as a part of Amazon CloudFront.

### Hosting a Website on Amazon S3

- 1. Log into the AWS Console, and select the S3 service.
- 2. Click the **Create Bucket** button.
- 3. In the dialog, give the bucket a unique name.
- 4. For Object Ownership, select **ACLs enabled**.
- 5. Deselect the option to **Block all Public Access** under the Block Public Access settings for this bucket category. Once the warning appears you will need to click the checkbox in the acknowledgement. Click **Next**.
- 6. Under Default Encryption, select Enable.
- 7. Press the **Create Bucket** button.
- 8. Next, click on the newly created bucket in the list.
- 9. Next, click the **Upload** button. From the dialog, click the **Add Files** button.
- 10. Select the files from the exercise files. Click Next.
- 11. Press the **Upload** button.
- 12. Select the ps-logo.jpg file from the list. Attempt to navigate to the Object URL for this image.
- 13. Navigate back to the console and click on the image in the list. Click the permissions option to edit the permissions.
- 14. Press the **Edit** button and then click the option to enable **Read** access for **Everyone**.
- 15. Confirm the warning by selecting the checkbox.
- 16. Press the **Save changes** button.
- 17. Reload the image URL, and it should load without issue.
- 18. Back in the console, navigate to the bucket and then select the Properties tab.
- 19. From the properties tab, select scroll to Static Website Hosting and select the **Edit** button.
- 20. Next, select the option to **Enable** this feature. Enter index.html for the index document. Click **Save.**
- 21. Navigate to the URL for the static website hosting option. You will see that it is forbidden.
- 22. Next, navigate back to the console and select the index.html file. Update the permissions just as you did for the image.
- 23. Next, navigate back to the static website hosting URL. The site should now work.

David Tucker



## Amazon S3 Glacier

Amazon S3 supports \_\_\_\_\_\_ storage with S3 Glacier, which provides three different storage classes differentiated by cost and retrieval time.

S3 Glacier	S3 Glacier	S3 Glacier
Faster Retrieval Higher Cost		Slower Retrieval Lower Cost
AWS recommendsassets, or user-generated content		medical images, news media
AWS recommends offsite data storage needs.	for	backup, disaster recovery, and
AWS recommends		

David Tucker



# Elastic Block Store

Amazon Elastic Block Store (EBS) is	storage designed to be
connected to a single	instance that can scale to support
of data and s	supports multiple volume types based on need

David Tucker



Please fill in the following table related to EBS volume types:

Volume Type Name	Description
General Purpose SSD	
	high performance volume for low latency applications
	is designed for frequently accessed data
Cold HDD	

# Elastic File System

Amazon Elastic File System (EFS) is a fu	ılly managed	file system
designed to support	workloads.	
Amazon FSx for		is a fully managed native
Windows file system.		

## Data Transfer with AWS Snowball

Please fill in the following table related to data transfer services on AWS:





AWS Snowball	AWS Snowmobile
Designed for large-scale data transfer	
	Supports exabyte scale transfer
Physical device is delivered by AWS	
	AWS will load data into S3 when the container is received at an AWS location



### Scenarios

The following scenarios are presented in the course as a way to explore your understanding of the module. Include your answer here in this outline, as well as your notes on the solution to each scenario.

#### **SCENARIO 1**

- Elaine launched a site that offers daily tutorials for developers
- She uses S3 to store the assets needed per tutorial
- These assets are very popular within the week the tutorial is launched
- After this initial week, these assets are rarely accessed
- How could Elaine reduce her S3 costs while maintaining durability?

What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:

#### **SCENARIO 2**

- Esteban works for a social networking company and they are moving to AWS
- They have 2 PB of user-generated content that they need to migrate
- Esteban is trying to determine if there is a faster than uploading over the internet
- Would there be another approach you would recommend for Esteban's company?

What's Your Answer:
---------------------





Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:
SCENARIO 3
<ul> <li>Emily works for a company that produces a messaging app</li> <li>She is looking for a shared file system between 8 different Linux EC2 instances</li> <li>The file system would need to support roughly 1 PB of data</li> <li>What approach would you recommend for Emily?</li> </ul>
What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:

Module Wrap Up

Take a minute to write down any areas from this module that you don't fully understand or where you still have questions:



## **Database Services and Utilities**

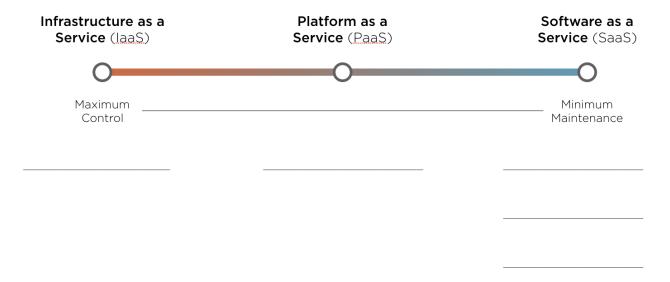
### **Learning Outcomes**

- Be able to define the following database services:
  - o Amazon Relational Database Service (RDS)
    - Understand what the Amazon Aurora database engine is within RDS
  - o Amazon DynamoDB
  - Amazon Elasticache
- Be able to define the following data warehousing services and know when they would be used
  - o Amazon Redshift and Redshift Spectrum
- Know when someone would leverage the AWS Database Migration Service

## Helpful Links

- Amazon RDS
- Amazon Aurora
- Amazon DynamoDB
- Amazon Redshift and Redshift Spectrum
- Amazon Elasticache
- AWS Database Migration Service

### Overview



David Tucker



## Amazon Relational Database Service

Amazon RDS is a fully managed service for	databases.
Supported Amazon RDS Platforms:	
1.	
2.	
3.	
4.	
5.	
6.	
"is a My	/SQL and PostgreSQL-compatible
relational database built for the cloud, that combines the	performance and availability of
traditional enterprise databases with the simplicity and co	ost-effectiveness of open-source
databases." - Amazon Web Services	
Amazon DynamoDB Overview	
Amazon DynamoDB is a fully managed	database service.
"DynamoDB can handle more than	requests per day
and can support peaks of more than	requests per
second." - Amazon Web Services	



### Amazon Elasticache & Redshift

Amazon Elastic	cache is an in-memory data store that supports the	
and	engines.	

Enter the service name based on the description:

Service	Description
	Data warehousing solution that supports petabytes of data
	Service that enables querying exabytes of data stored in S3

### Additional Database Services









MongoDB compatible database

Managed graph database service Redis compatible in-memory database

Serverless time series database service



### Scenarios

The following scenarios are presented in the course as a way to explore your understanding of the module. Include your answer here in this outline, as well as your notes on the solution to each scenario.

#### **SCENARIO 1**

- Jennifer is an IT executive in a financial services company
- They are transitioning their data warehouse to AWS for analysis
- The data warehouse would need to support up to 2 PB of data
- Which approach would you recommend for Jennifer?

What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:

#### **SCENARIO 2**

- Sam is a DevOps engineer at a tech company
- Sam needs to launch a MySQL database for a new web application
- They need to have direct access to the virtual server that MySQL is running on
- What approach would you recommend for Sam's company?

	Wł	nat'	s You	ır A	nswer:								
--	----	------	-------	------	--------	--	--	--	--	--	--	--	--





Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:
SCENARIO 3
<ul> <li>Frank is the CTO at a gaming company</li> <li>They are trying to determine how to store real-time user analytics</li> <li>They need low latency and the ability to scale to handle up to 1 million players</li> <li>Frank wants to minimize the amount of time it takes to maintain the database</li> <li>Which AWS approach would you recommend for Frank?</li> </ul>
What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:

David Tucker



# Module Wrap Up

Take a minute to write down any areas from this module that you don't fully understand or where you still have questions:



# **App Integration Services**

## **Learning Outcomes**

- Be able to define the AWS messaging services but also know the differences in how they work
  - Amazon Simple Queue Service (SQS)
    - Know the two types of queues and how they are different
    - Be able to explain how SQS can enable fault tolerance
  - Amazon Simple Notification Service (SNS)
- Understand the purpose of AWS Step Functions and how they are defined

## Helpful Links

- Amazon Simple Queue Service (SQS)
- Amazon Simple Notification Service (SNS)
- AWS Step Functions

## **AWS Messaging Services**

Fill in the service in the table based on the description:

Service	Description
	Fully managed pub/sub messaging service
	Fully managed message queue service

Within Amazon SNS, messages are orga	nized according to	·
Within Amazon SQS, messages are orga	nized into	There are
two types of these. They are	and	

David Tucker



AWS Step Functions	
	enables orchestration of workflows through a fully
managed service.	
With AWS Step Functions, you a	re charged per
Within AWS Step Functions, wor	kflows are defined using



### Scenarios

The following scenarios are presented in the course as a way to explore your understanding of the module. Include your answer here in this outline, as well as your notes on the solution to each scenario.

#### **SCENARIO 1**

- Ruth started a non-profit that assigns volunteers to opportunities
- Recently their database server went down, and users were unable to signup
- While the situation is better, there is still some downtime expected in the future
- She wants to explore an AWS service that could prevent lost user signups
- What service would you recommend to Ruth?

What's Your Answer:
Why did you pick this answer:
with did you pick this answer.
If you didn't get this one right, what insight did you gain from the explanation:

#### **SCENARIO 2**

- Jessi created a list of onboarding steps for new customers for their new app
- These steps detail integrations with their CRM, emails to the user, and analytics
- Jessi is worried about the time it will take to build all of this from scratch
- Is there an AWS service that can help with this approach?

What's Your Answer:	





Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:
SCENARIO 3
<ul> <li>Roger's company is an eCommerce company building a custom platform</li> <li>They are still adding new functionality</li> <li>He wants aspects of the platform to listen for events like orders and refunds</li> <li>They don't yet know all of the elements that would need to respond to events</li> <li>Is there a service that would allow current and future parts of the platform to listen for these events?</li> </ul>
What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:

David Tucker



# Module Wrap Up

Take a minute to write down any areas from this module that you don't fully understand or where you still have questions:



# **Management and Governance Services**

## **Learning Outcomes**

- Understand the benefit of AWS CloudTrail
  - Know where CloudTrail logs can be stored
- Know what services can help you monitor your AWS infrastructure
  - Amazon CloudWatch
  - AWS Config
- Be able to explain the purpose of AWS Systems Manager
- Be able to explain the value of launching infrastructure with AWS CloudFormation
- Be able to explain the purpose of AWS Control Tower

### Helpful Links

- AWS CloudTrail
- Amazon CloudWatch
- AWS Config
- AWS Systems Manager
- AWS CloudFormation
- AWS Control Tower
- AWS OpsWorks

### AWS CloudTrail

ш	_ provides event history of your AW	'S account activity,
including actions taken through t	he AWS Management Console, AW	S SDKs, command line
tools, and other AWS services." - A	mazon Web Services	
CloudTrail inserts an audit trail in a	an	_ or into
·		



# Amazon CloudWatch and AWS Config

Fill in the following table by entering the service name based on the description:

Service	Description
	Provides metrics, logs, and alarms for infrastructure
	Continually evaluates infrastructure against a set of rules
	Provides operational data and automation across infrastructure
allows for custom dash	aboards based on collected metrics

allows fo	or custom dashboards based on collected metrics	5.
и	continuously monitors and records your AWS	resource
configurations and allows you to	o automate the evaluation of recorded configura	tions against
desired configurations." - Amaz	on Web Services	
AWS Config provides specific		with rules
for specific compliance standar	ds.	
AWS Systems Manage	er	
	provides multiple tools that make it easier to ma	anage vour
AWS infrastructure.		

David Tucker



AWS CloudFormation	
is a managed service for provision	ning infrastructure based on
templates. The templates can be written in	or
is a feature that enables you tinfrastructure after it was launched by CloudFormation.	to find changes in your
AWS OpsWorks	
"AWS OpsWorks is a	service that
	nd'
AWS Organizations and Control Tower	
AWS Control Tower - A service to create a	environment on AWS
that follows the recommended best practices in operational	efficiency, security, and
governance. It provides a way to create new AWS accounts b	pased on

David Tucker



### Scenarios

The following scenarios are presented in the course as a way to explore your understanding of the module. Include your answer here in this outline, as well as your notes on the solution to each scenario.

#### **SCENARIO 1**

- Elliott is an operations engineer at a financial services company
- He recently discovered that someone had disabled a security setting on a server
- He is concerned that events like this might go unnoticed until a breach
- Which service would allow the organization to continually track configuration of infrastructure?

What's Your Answer:	
Why did you pick this answer:	
If you didn't get this one right, what insight did you gain from the explanation:	

#### **SCENARIO 2**

- James is the lead architect at a SaaS company
- They will be launching a new application that includes several components
- He is looking to minimize manual work required when creating infrastructure
- What service would enable James to automate much of this effort?

What's Your Answer:
---------------------





Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:
SCENARIO 3
<ul> <li>Candace is the CTO at a manufacturing company</li> <li>A cloud server needed to support their manufacturing process was deleted</li> <li>They want to make sure the follow up with the person who deleted this instance</li> <li>Which service could show the individual that deleted this specific server?</li> </ul>
What's Your Answer:
Why did you pick this answer:
If you didn't get this one right, what insight did you gain from the explanation:

# Module Wrap Up

Take a minute to write down any areas from this module that you don't fully understand or where you still have questions:



# **Next Steps**

Complete all of the courses in this path to prepare for your AWS Certified Cloud Practitioner exam. In the last course of this path, we will include steps for registering, studying, and taking the exam.

### Stay in Touch

If you have questions along the way, feel free to reach out to **David Tucker** on Twitter (<u>@\_davidtucker\_</u>) or through <u>his website</u>. Also, feel free to connect on <u>LinkedIn</u>.

### For More Information

As a part of creating this course, the following resources from Amazon Web Services were referenced. If you want to learn more, feel free to go check out these resources directly:

- AWS Services
- Amazon EC2
- AWS Lambda
- Amazon Aurora
- Amazon DynamoDB
- AWS Config