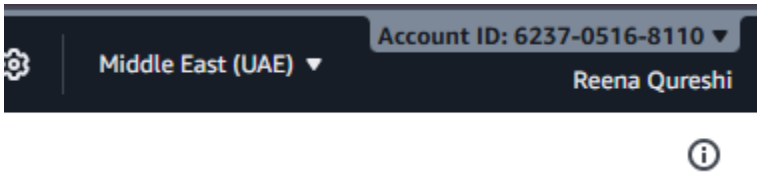


Name : Reena Qureshi  
Reg No: 2023-BSE-052  
Section: V-B

## LAB 8

### Task 1 — Create an AWS account and enable UAE (me-central-1)



### Task 2 — Create IAM Admin and Lab8User with console access

Open IAM via Console search (Alt+S → "IAM").

Create the Admin user: IAM → Users → Create user. Fill:

**User details**

**User name**

Admin

The user name can have up to 64 characters. Valid characters: A-Z, a-z, 0-9, and + = , . @ \_ - (hyphen)

☒ **Provide user access to the AWS Management Console - optional**  
In addition to console access, users with `SignInLocalDevelopmentAccess` permissions can use the same console credentials for programmatic access without the need for access keys.

**Console password**

☐ **Autogenerated password**  
You can view the password after you create the user.

☒ **Custom password**  
Enter a custom password for the user.

\*\*\*\*\*

- Must be at least 8 characters long
- Must include at least three of the following mix of character types: uppercase letters (A-Z), lowercase letters (a-z), numbers (0-9), and symbols ! @ # \$ % ^ & \* ( ) \_ + -

☐ Show password

☒ **Users must create a new password at next sign-in - Recommended**  
Users automatically get the `IAMUserChangePassword` policy to allow them to change their own password.

**①** If you are creating programmatic access through access keys or service-specific credentials for AWS CodeCommit or Amazon Keyspaces, you can create this IAM user. [Learn more](#)

# Attach policies directly → AdministratorAccess

☐ Add user to group  
Add user to an existing group, or create a new group. We recommend using groups to manage user permissions by job function.

☐ Copy permissions  
Copy all group memberships, attached managed policies, and inline policies from an existing user.

☒ Attach policies directly  
Attach a managed policy directly to a user. As a best practice, we recommend attaching policies to a group instead. Then, add the user to the appropriate group.

Permissions policies (1/1434)

Search

Filter by Type

All types

< 1 2 3 4 5 6 7 ... 72 >

Create policy

Choose one or more policies to attach to your new user.

	Policy name	Type	Attached entities
<input type="checkbox"/>	<a href="#">AccessAnalyzerServiceRolePolicy</a>	AWS managed	0
<input checked="" type="checkbox"/>	<a href="#">AdministratorAccess</a>	AWS managed - job function	0
<input type="checkbox"/>	<a href="#">AdministratorAccess-Amplify</a>	AWS managed	0

## Review and create

Review your choices. After you create the user, you can view and download the autogenerated password, if enabled.

### User details

User name  
Admin

Console password type  
Custom password

Require password reset  
Yes

### Permissions summary

< 1 >

Name	Type	Used as
<a href="#">AdministratorAccess</a>	AWS managed - job function	Permissions policy
<a href="#">IAMUserChangePassword</a>	AWS managed	Permissions policy

### Tags - optional

Tags are key-value pairs you can add to AWS resources to help identify, organize, or search for resources. Choose any tags you want to associate with this user.

No tags associated with the resource.

[Add new tag](#)

You can add up to 50 more tags.

[Cancel](#)

[Previous](#)

[Create user](#)

[Alt+F5]

Global

### User created successfully

You can view and download the user's password and email instructions for signing in to the AWS Management Console.

[View user](#)

### Users (1) Info

An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

[Refresh](#)

[Delete](#)

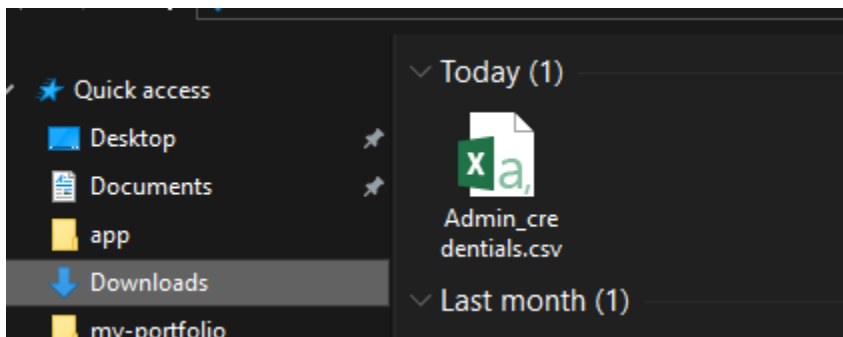
[Create](#)

Search

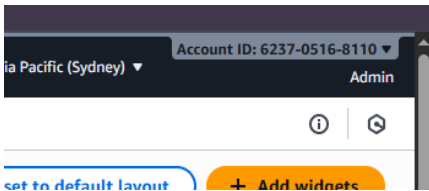
< 1

<input type="checkbox"/>	User name	Path	Groups	Last activity	MFA	Password age	Console last sign-in	Access key ID	Active key age	Access key last used
<input type="checkbox"/>	<a href="#">Admin</a>	/	0	-	-	Now	-	-	-	-

Download the Admin .csv and show its presence on your Windows host (do not display the password text):



Sign out of root, then sign in using the Admin account (use the signin URL from the .csv). Capture after successful Admin login:



**While logged in as Admin, create Lab8User:**

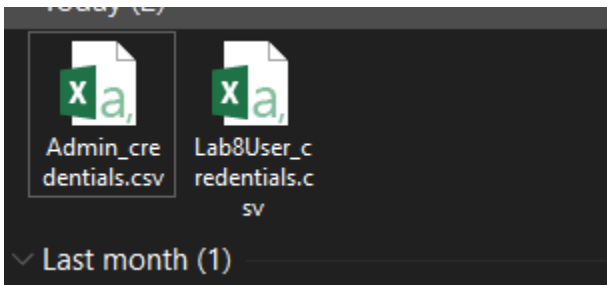
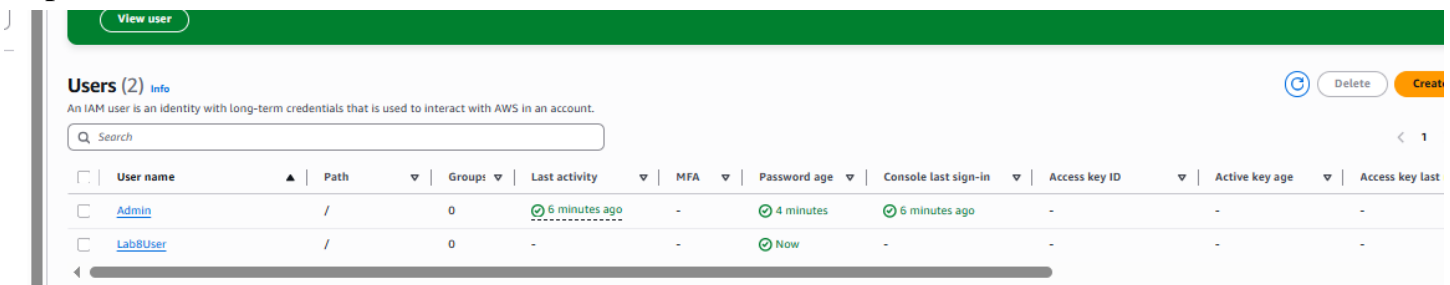
IAM → Users → Create user

Username: Lab8User

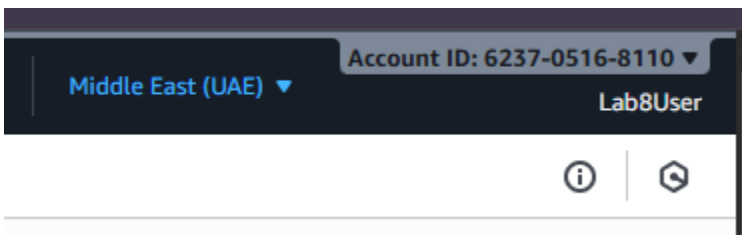
**Provide user access to the AWS Management Console**

Attach AdministratorAccess policy

Capture the create-user success screen:



Logout Admin and login as Lab8User (use the Lab8User signin URL and credentials). Capture after login:



**Task 3 — Inspect VPC resources (in UAE me-central-1)**

View VPCs list.

Your VPCs

VPCs | VPC encryption controls - new

Your VPCs (1) Info

Last updated 1 minute ago

Actions

Create VPC

Find VPCs by attribute or tag

< 1 >

<input type="checkbox"/>	Name	VPC ID	State	Encryption c...	Encryption control ...	Bl
<input type="checkbox"/>	-	<a href="#">vpc-04a44d49b9440a0d6</a>	Available	-	-	

Select a VPC above

View Subnets list. Capture

<input type="checkbox"/>	Name	Subnet ID	State	VPC	Block Public.
<input type="checkbox"/>	-	<a href="#">subnet-036b24d524a4a8b41</a>	Available	<a href="#">vpc-04a44d49b9440a0d6</a>	Off
<input type="checkbox"/>	-	<a href="#">subnet-01a6b802f642a6c6f</a>	Available	<a href="#">vpc-04a44d49b9440a0d6</a>	Off
<input type="checkbox"/>	-	<a href="#">subnet-055e50e87b27fd1b0</a>	Available	<a href="#">vpc-04a44d49b9440a0d6</a>	Off

View Route Tables list.

Route tables (1) [Info](#) Last updated 2 minutes ago [Actions](#) [Create route table](#)

Find route tables by attribute or tag

<input type="checkbox"/>	Name	Route table ID	Explicit subnet associ...	Edge associations	Main
<input type="checkbox"/>	-	<a href="#">rtb-06b58d9a83772335f</a>	-	-	Yes

View Network ACLs list.

Network ACLs (1) [Info](#) [Actions](#) [Create network ACL](#)

Find Network ACLs by attribute or tag

<input type="checkbox"/>	Name	Network ACL ID	Associated with	Default	VPC ID
<input type="checkbox"/>	-	<a href="#">acl-0d2a88a318b05ec9c</a>	3 Subnets	Yes	<a href="#">vpc-04a44d49b9440a0d6</a>

Task 3 summary (combine evidence):

me-central-1.console.aws.amazon.com/vpcconsole/home?region=me-central-1#Home:

Reena Qureshi | Por... Reena Qureshi | Por... General | Project co...

aws Search [Alt+S] Middle East (UAE) Account ID: 6237-0516-8110 Lab8User

**VPC dashboard**

AWS Global View [L](#)

Filter by VPC: [▼](#)

**Virtual private cloud**

- Your VPCs
- Subnets
- Route tables
- Internet gateways
- Egress-only Internet gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- Endpoints

[Create VPC](#) [Launch EC2 Instances](#)

Note: Your Instances will launch in the Middle East region.

**Resources by Region** [Refresh Resources](#)

You are using the following Amazon VPC resources

<a href="#">VPCs</a> <a href="#">▶ See all regions</a>	<a href="#">NAT Gateways</a> <a href="#">▶ See all regions</a>
<a href="#">Subnets</a> <a href="#">▶ See all regions</a>	<a href="#">VPC Peering Connections</a> <a href="#">▶ See all regions</a>
<a href="#">Route Tables</a> <a href="#">▶ See all regions</a>	<a href="#">Network ACLs</a> <a href="#">▶ See all regions</a>

UAE 1 UAE 0 UAE 3 UAE 0 UAE 1 UAE 1

**Service Health**  
[View complete service health details](#)

**Settings**  
[Block Public Access](#)  
[Zones](#)  
[Console Experiments](#)

**Additional Information**  
[VPC Documentation](#)  
[All VPC Resources](#)

## Task 4 — Launch EC2, SSH, install Docker & Docker Compose, deploy Gitea

### Launch instance

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

Launch instance ▼

Migrate a server ↗

Note: Your instances will launch in the Middle East (UAE) Region

### Service health

AWS Health Dashboard

**Region**  
Middle East (UAE)

**Status**  
✔ This service is operational

### Zones

### Name and tags Info

**Name**

Lab8Machine

Add additional tags

### ▼ Application and OS Images (Amazon Machine Image) Info

An AMI contains the operating system, application server, and applications for your instance. If you don't see a suitable AMI below, use the search field or choose **Browse more AMIs**.

🔍 Search our full catalog including 1000s of application and OS images

#### Quick Start

Amazon Linux

Ubuntu

Windows

Red Hat

SUSE Linux

Debian

⋮

Browse

## Instance type

t3.micro

Family: t3 2 vCPU 1 GiB Memory Current generation: true

On-Demand Ubuntu Pro base pricing: 0.016 USD per Hour

On-Demand Linux base pricing: 0.0125 USD per Hour

On-Demand RHEL base pricing: 0.0413 USD per Hour

On-Demand SUSE base pricing: 0.0125 USD per Hour

On-Demand Windows base pricing: 0.0217 USD per Hour

☐ All generations

[Compare instance ty](#)

Additional costs apply for AMIs with pre-installed software

## ▼ Key pair (login) [Info](#)

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required

Connect to your instance. It is recommended that you create one or select an existing one.

☒ Create new key pair ☐ Proceed without key pair

**Key pair name**  
Key pairs allow you to connect to your instance securely.  
Lab8Key  
The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

**Key pair type**  
☐ RSA  
RSA encrypted private and public key pair  
☒ ED25519  
ED25519 encrypted private and public key pair

**Private key file format**  
☒ .pem  
For use with OpenSSH  
☐ .ppk  
For use with PuTTY

When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. [Learn more](#)

**Summary**  
Number of instances | [Info](#)  
1  
Software Image (AMI)  
Amazon Linux 2023 AMI 2023.9.2...[read more](#)  
ami-05524d5658fc35b6  
Virtual server type (instance type)  
t3.micro  
Firewall (security group)  
New security group  
Storage (volumes)  
1 volume(s) - 8 GiB  
[Cancel](#) [Launch instance](#) [Preview code](#)

After launch, EC2 Instances list showing Lab8Machine in "running" state and public IPv4 visible.

i-053fedbb1ef70e556 (Lab8Machine)			
<b>Instance ID</b> i-053fedbb1ef70e556		<b>Public IPv4 address</b> 3.28.199.134   <a href="#">open address</a>	
<b>IPv6 address</b> -		<b>Instance state</b> Running	
<b>Hostname type</b> IP name: ip-172-31-9-125.me-central-1.compute.internal		<b>Private IP DNS name (IPv4 only)</b> ip-172-31-9-125.me-central-1.compute.internal	
<b>Answer private resource DNS name</b> IPv4 (A)		<b>Instance type</b> t3.micro	
		<b>Private IPv4 addresses</b> 172.31.9.125	
		<b>Public DNS</b> ec2-3-28-199-134.me-central-1.compute.amazonaws.com <a href="#">address</a>	
		<b>Elastic IP addresses</b> -	



[illegible]

### Verified Compose.yml:

```
[ec2-user@ip-172-31-9-125 ~]$ ls -l
total 8
-rw-r--r--. 1 root root 7125 Dec 11 14:26 compose.yaml
[ec2-user@ip-172-31-9-125 ~]$
```

```
[ec2-user@ip-172-31-9-125 ~]$ groups
ec2-user adm wheel systemd-journal docker
[ec2-user@ip-172-31-9-125 ~]$
```

```
name: ec2-user_gitea_postgres
[ec2-user@ip-172-31-9-125 ~]$ docker compose up -d
WARN[0000] /home/ec2-user/compose.yaml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
[+] up 23/23
  Image postgres:alpine Pulled
  Image gitea/gitea:latest Pulled
  Network ec2-user_webnet Created
  Volume ec2-user_gitea_data Created
  Volume ec2-user_gitea_postgres Created
  Container gitea Created
  Container gitea_db Created
[ec2-user@ip-172-31-9-125 ~]$
```

Edit the security group Lab8SecurityGroup inbound rules in the EC2 console: add Custom TCP rule port 3000 source 0.0.0.0/0 and save. Capture the inbound rules after saving

aws [Search] [Alt+S] Ask Amazon Q Middle East (UAE) Account ID: 6237-051

EC2 > Security Groups > sg-007976612c11bc3b0 - launch-wizard-1

### sg-007976612c11bc3b0 - launch-wizard-1

**Details**

<b>Security group name</b> launch-wizard-1	<b>Security group ID</b> sg-007976612c11bc3b0	<b>Description</b> launch-wizard-1 created 2025-12-11T13:55:32.000Z	<b>VPC ID</b> vpc-04a44d49b9440a0d6
<b>Owner</b> 623705168110	<b>Inbound rules count</b> 2 Permission entries	<b>Outbound rules count</b> 1 Permission entry	

**Inbound rules** | Outbound rules | Sharing | VPC associations | Tags

**Inbound rules (2)** Manage tags Edit inbound ru

<input type="checkbox"/>	Name	Security group rule ID	IP version	Type	Protocol	Port range	Source
<input type="checkbox"/>	-	sgr-0381846209fd71a6	IPv4	Custom TCP	TCP	3000	0.0.0.0/0
<input type="checkbox"/>	-	sgr-024943661d63ad67c	IPv4	SSH	TCP	22	0.0.0.0/0

Open Gitea in your browser

### Initial Configuration

If you run Gitea inside Docker, please read the [documentation](#) before changing any settings.

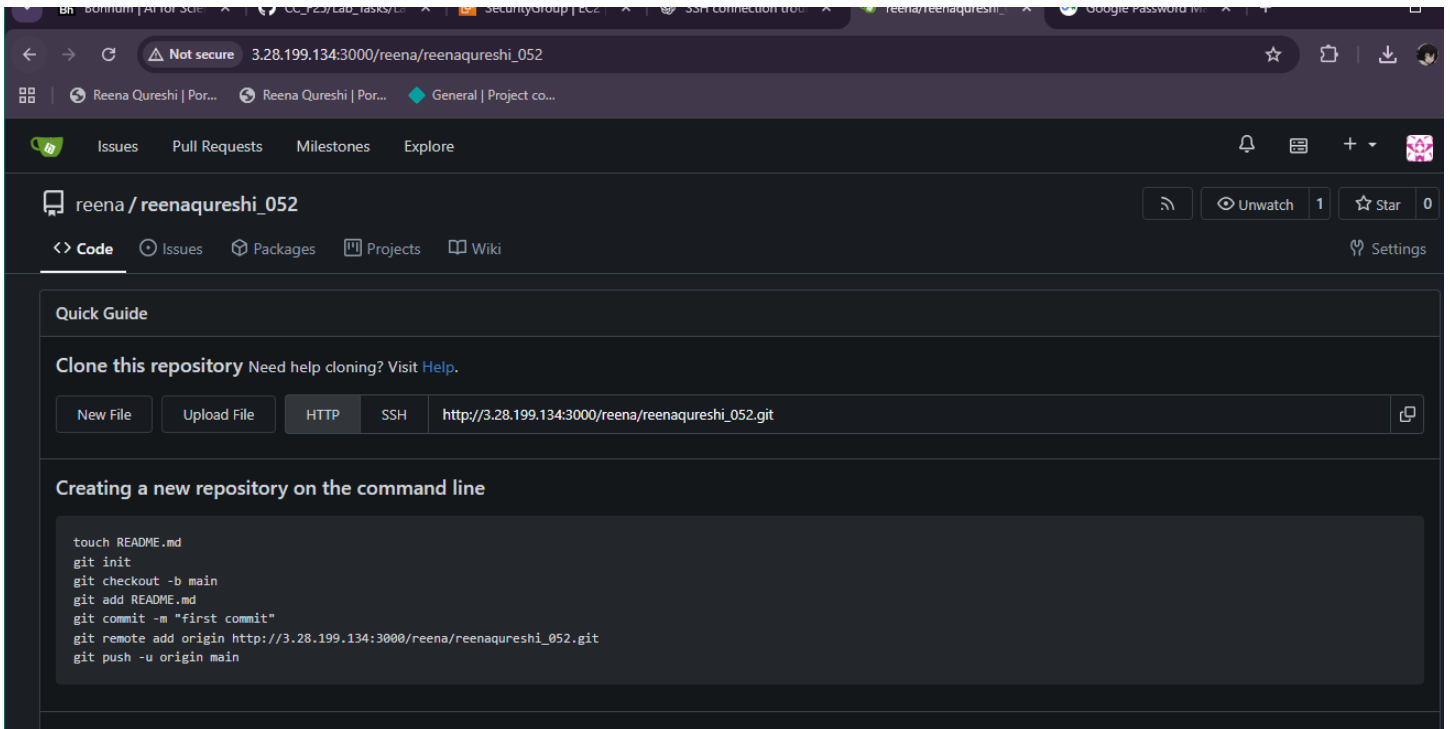
#### Database Settings

Gitea requires MySQL, PostgreSQL, MSSQL, SQLite3 or TiDB (MySQL protocol).

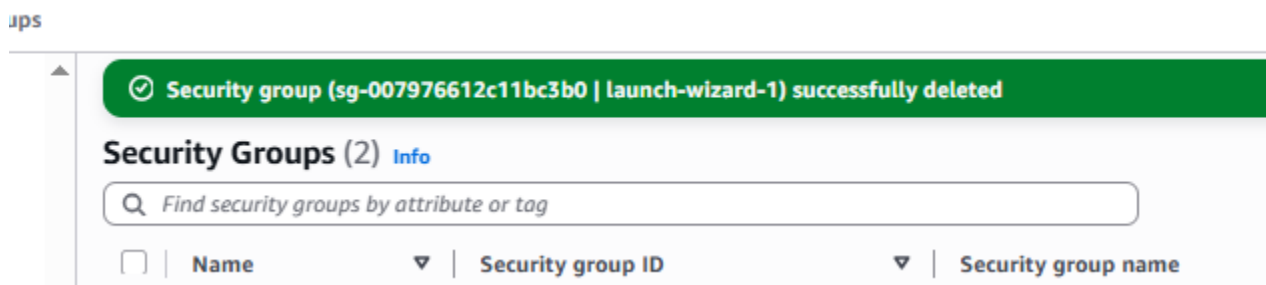
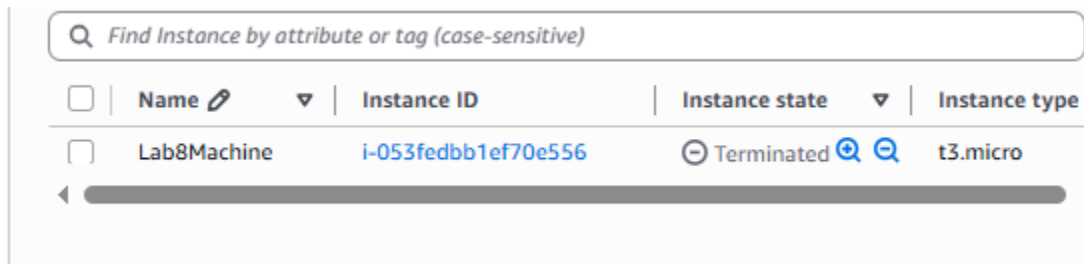
Database Type *	PostgreSQL
Host *	db:5432
Username *	gitea
Password *	.....
Database Name *	gitea
SSL *	Disable
Schema	

Leave blank for database default ("public").

Complete initial Gitea setup (create admin user, create a repo) and capture Gitea showing the created repository



Cleanup — Remove resources to avoid charges



### key pairs

: Store

ger

## Security

IS

✔ Successfully deleted 1 key pairs

### Key pairs [Info](#)

 Find Key Pair by attribute or tag

Name



Type



Created



## Fingerprint

No key pairs to display

SS

4)

✔ User "Lab8User" deleted.

### Users (1/2) [Info](#)

An IAM user is an identity with long-term credentials that is used to interact with AWS in an account.

Search

## AWS Resource Groups

## ▼ Resources

Create Resource Group

### Saved Resource Groups

## Settings

### ▼ Tagging

Tag Editor

## Tag Policies

## MANAGEMENT TOOLS

## Resource Groups

Find and group your AWS resources by using queries.

You can create unlimited, single-region groups in your account, use your groups to view group-related insights, and automate tasks on group resources. Groups can be based on resource types and tag queries, or AWS CloudFormation stacks.

## Start to use Resource Groups

Find and group your AWS resources.

Create a resource group

## How it works

Find AWS resources in a selected region.

Create a group based on tag queries or an AWS CloudFormation stack.

View resource group specific insights.

### More resources

Documentation