

Cloud Solution Architect Lab

LAB 09 – EC2 Instance, IAM Roles, S3 Bucket

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GRAND ASSIGNMENT

Created EC2 Instance

The screenshot shows the AWS Management Console for the eu-north-1 region. The left sidebar contains navigation links for EC2 Dashboard, EC2 Global View, Events, Instances, Images, Elastic Block Store, and Network & Security. The main content area displays the 'Instances (1/1)' page with a table listing the instance 'Saad_EC2' (ID: i-0bc2d0755d1f39f3e) in a 'Running' state. Below the table, the 'Details' tab for this instance is expanded, showing the 'Instance summary' with fields for Instance ID, IPv6 address, Hostname type, Public IPv4 address (16.16.68.242), Private IPv4 addresses (172.31.21.241), Public IPv4 DNS, and Private IP DNS name.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4
Saad_EC2	i-0bc2d0755d1f39f3e	Running	t3.micro	Initializing	View alarms	eu-north-1a	ec2-16-16-

i-0bc2d0755d1f39f3e (Saad_EC2)

Instance summary

- Instance ID: i-0bc2d0755d1f39f3e (Saad_EC2)
- IPv6 address: -
- Hostname type: IP name: ip-172-31-21-241.eu-north-1.compute.internal
- Public IPv4 address: 16.16.68.242 | [open address](#)
- Private IPv4 addresses: 172.31.21.241
- Instance state: Running
- Public IPv4 DNS: ec2-16-16-68-242.eu-north-1.compute.amazonaws.com | [open address](#)
- Private IP DNS name (IPv4 only): ip-172-31-21-241.eu-north-1.compute.internal

Connected EC2 Instance

The screenshot shows the AWS CloudShell terminal interface. The terminal displays the Amazon Linux 2023 logo and the URL https://aws.amazon.com/linux/amazon-linux-2023. The user is logged in as ec2-user@ip-172-31-21-241. The terminal shows the command 'pwd' being executed, resulting in the output '/home/ec2-user'. Below the terminal output, the instance details for 'i-0bc2d0755d1f39f3e (Saad_EC2)' are displayed, including the Public IP (16.16.68.242) and Private IP (172.31.21.241).

```
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

[ec2-user@ip-172-31-21-241 ~]$ pwd
/home/ec2-user
[ec2-user@ip-172-31-21-241 ~]$
```

i-0bc2d0755d1f39f3e (Saad_EC2)

PublicIPs: 16.16.68.242 PrivateIPs: 172.31.21.241

Created IAM Role

The screenshot shows the AWS IAM console in the 'Roles' section. The left sidebar contains navigation links for Identity and Access Management (IAM), Access management, Access reports, and CloudShell. The main content area displays a list of roles. The 'Saad27' role is selected, and its details are shown below the list.

Role name	Trusted entities	Last activity
AWSServiceRoleForSupport	AWS Service: support (Service-Linker)	6 days ago
AWSServiceRoleForTrustedAdvisor	AWS Service: trustedadvisor (Service-Linker)	-
<input checked="" type="checkbox"/> Saad27	AWS Service: ec2	-

Roles (1/3) Info

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

Roles Anywhere Info

Authenticate your non AWS workloads and securely provide access to AWS services.

Access AWS from your non AWS workloads

Operate your non AWS workloads using the same authentication and authorization strategy that you use within AWS.

X.509 Standard

Use your own existing PKI infrastructure or use [AWS Certificate Manager Private Certificate Authority](#) to authenticate identities.

Temporary credentials

Use temporary credentials with ease and benefit from the enhanced security they provide.

Modified IAM Role for EC2 Instance

The screenshot shows the AWS IAM console in the 'Modify IAM role' section. The left sidebar contains navigation links for Identity and Access Management (IAM), Access management, Access reports, and CloudShell. The main content area displays the 'Modify IAM role' page for the 'Saad27' role.

Modify IAM role Info

Attach an IAM role to your instance.

Instance ID: [i-0bc2d0755d1f39f3e](#) (Saad_EC2)

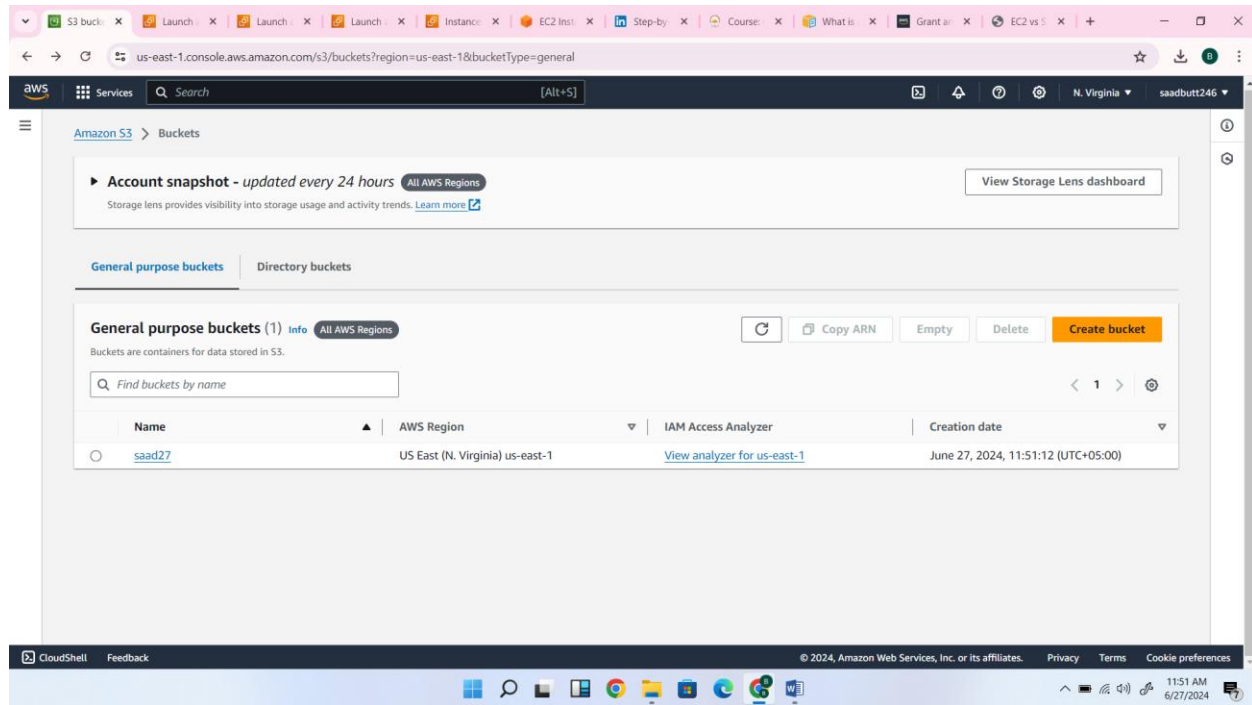
IAM role: Select an IAM role to attach to your instance or create a new role if you haven't created any. The role you select replaces any roles that are currently attached to your instance.

[Saad27](#)

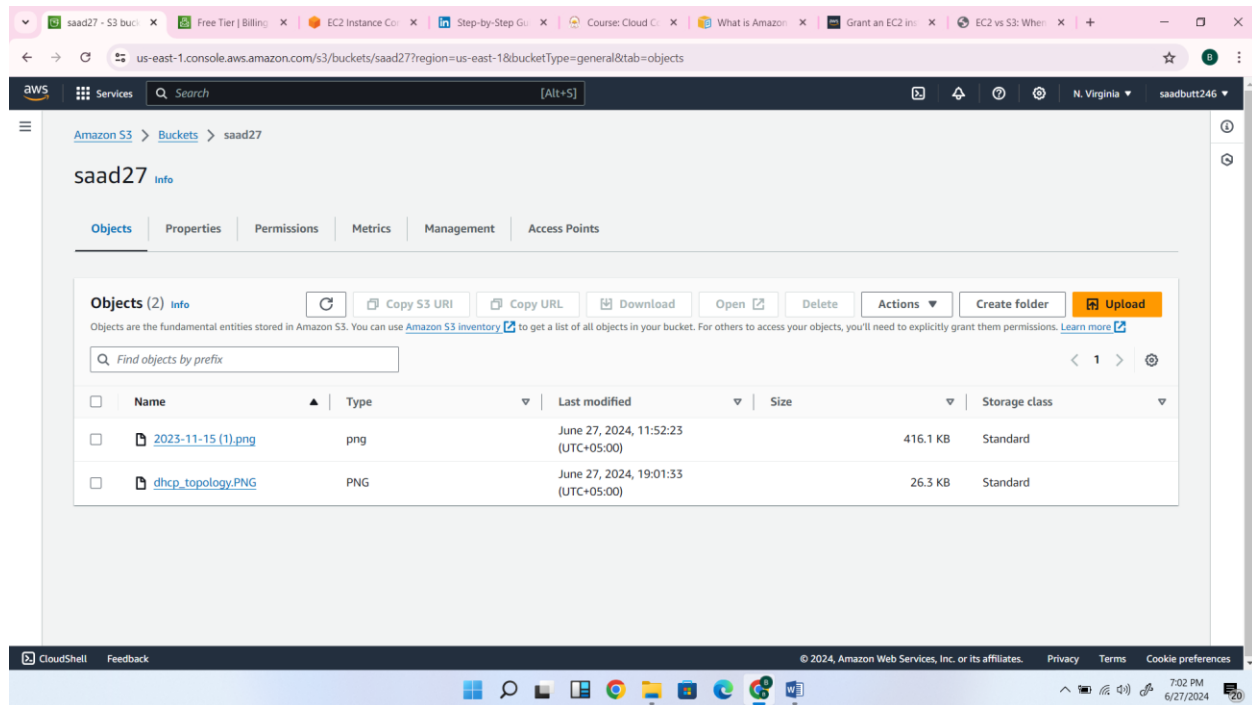
[Create new IAM role](#)

[Cancel](#) [Update IAM role](#)

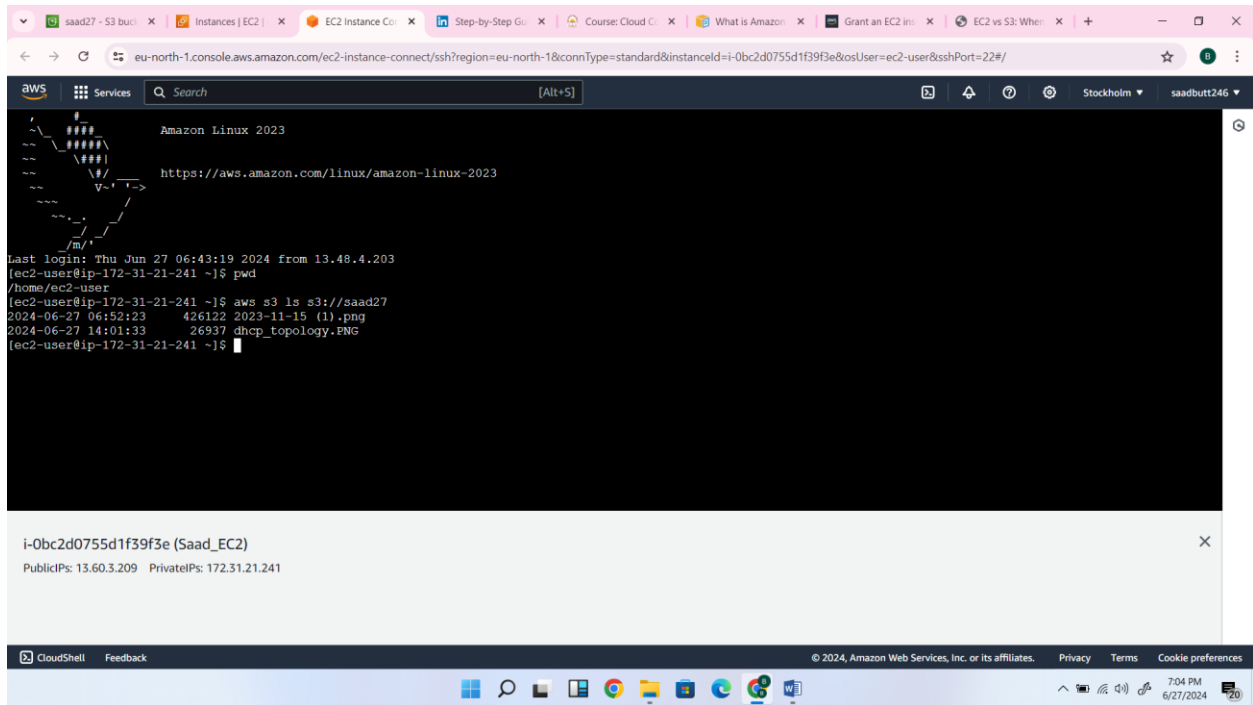
Created S3 Bucket



Uploaded 2 Images into S3 Bucket



Ran command 'aws s3 ls s3://saad27', which shows the images in S3 Bucket



The screenshot displays an AWS CloudShell terminal window. The terminal output shows the AWS CLI command being executed and the resulting list of files in the S3 bucket 'saad27'. The files listed are '2023-11-15 (1).png' and 'dhcp_topology.PNG'. The terminal also shows the user's login history and the current directory path.

```
Amazon Linux 2023
https://aws.amazon.com/linux/amazon-linux-2023

Last login: Thu Jun 27 06:43:19 2024 from 13.48.4.203
[ec2-user@ip-172-31-21-241 ~]$ pwd
/home/ec2-user
[ec2-user@ip-172-31-21-241 ~]$ aws s3 ls s3://saad27
2024-06-27 06:52:23      426122 2023-11-15 (1).png
2024-06-27 14:01:33      26937 dhcp_topology.PNG
[ec2-user@ip-172-31-21-241 ~]$
```

i-0bc2d0755d1f39f3e (Saad_EC2)
PublicIPs: 13.60.3.209 PrivateIPs: 172.31.21.241

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