

DAY 1 ASSIGNMENTS

Deploy an ec2 instance and connecting to it.

EC2 > Instances > i-0d97f698433cb0d20 > Connect to instance

Connect to instance [Info](#)

Connect to your instance i-0d97f698433cb0d20 (Arun-linuxinst1) using any of these options

[EC2 Instance Connect](#) | [Session Manager](#) | [SSH client](#) | [EC2 Serial Console](#)

Instance ID
i-0d97f698433cb0d20 (Arun-linuxinst1)

Public IP address
54.159.201.122

User name

Connect using a custom user name, or use the default user name ec2-user for the AMI used to launch the instance.

Note: In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

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```
Last login: Thu Nov 25 07:43:54 2021 from ec2-18-206-107-26.compute-1.amazonaws.com

 _ | _ | _ )
 _ | ( _ /   Amazon Linux 2 AMI
 _ | \ _ | _ |

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-92-143 ~]$ ping www.google.com
PING www.google.com (142.250.65.68) 56(84) bytes of data.
64 bytes from iad23s91-in-f4.1e100.net (142.250.65.68): icmp_seq=1 ttl=109 time=0.927 ms
64 bytes from iad23s91-in-f4.1e100.net (142.250.65.68): icmp_seq=2 ttl=109 time=0.972 ms
64 bytes from iad23s91-in-f4.1e100.net (142.250.65.68): icmp_seq=3 ttl=109 time=0.958 ms
^C
--- www.google.com ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 0.927/0.952/0.972/0.031 ms
[ec2-user@ip-172-31-92-143 ~]$
```

i-0d97f698433cb0d20 (Arun-linuxinst1)

Public IPs: 54.159.201.122 Private IPs: 172.31.92.143

DAY 2 ASSIGNMENTS

1. Create a separate profile for two IAM user for programmatic access, one user with s3fullaccess , another one with Ec2fullaccess & verify.

Ec2full access user

Summary

Delete user ?

User ARN

arn:aws:iam::590852515231:user/aruniamEC2fa

Path

/

Creation time

2021-11-24 00:58 UTC+0530

Permissions

Groups

Tags

Security credentials

Access Advisor

▼ Permissions policies (1 policy applied)

Add permissions

Add inline policy

Policy name ▼	Policy type ▼	
Attached directly		
AmazonEC2FullAccess	AWS managed policy	

```
C:\Users\VC\.aws>aws s3 ls --profile aruniamEC2fa
An error occurred (AccessDenied) when calling the ListBuckets operation: Access Denied
```

```
C:\Users\VC\.aws>aws ec2 describe-instances --profile aruniamEC2fa
{
  "Reservations": [
    {
      "Groups": [],
      "Instances": [
        {
          "AmiLaunchIndex": 0,
          "ImageId": "ami-04902260ca3d33422",
          "InstanceId": "i-05f41564be0a577aa",
          "InstanceType": "t2.micro",
          "KeyName": "aravindakrishnan_keypair",
          "LaunchTime": "2021-11-24T06:05:05+00:00",
          "Monitoring": {
            "State": "disabled"
          },
          "Placement": {
```

S3fullaccess user

Summary

[Delete user](#)

User ARN `arn:aws:iam::590852515231:user:aruniams3fa`

Path `/`

Creation time 2021-11-24 01:05 UTC+0530

Permissions

Groups

Tags

Security credentials

Access Advisor

▼ Permissions policies (1 policy applied)

Add permissions

[+ Add inline policy](#)

Policy name ▼	Policy type ▼	
Attached directly		
▶ AmazonS3FullAccess	AWS managed policy	✕

```
C:\Users\VC\.aws>aws ec2 describe-instances --profile aruniams3fa
```

```
An error occurred (UnauthorizedOperation) when calling the DescribeInstances operation: You are not authorized to perform this operation.
```

```
C:\Users\VC\.aws>aws s3 ls --profile aruniams3fa
2021-11-25 20:31:46 abhishek-01-file
2021-11-24 21:47:26 abhishek-cloudtrail-logs-590852515231-710fbc78
2021-11-23 10:58:21 akbucket2311
2021-11-23 11:16:59 aravindakrishnan-db
2021-11-25 08:26:03 arul-s3traillogs
2021-11-24 22:47:24 arun-s3logs
2021-11-24 00:06:38 arunkumarec2s3trial
2021-11-25 07:42:15 av-s3tolog
2021-11-25 21:45:54 aws-cloudtrail-logs-590852515231-0e3e6a83
2021-10-12 17:27:04 aws-cloudtrail-logs-590852515231-12b44b23
2021-11-25 10:38:27 aws-cloudtrail-logs-590852515231-1c0153f1
2021-11-25 14:26:32 aws-cloudtrail-logs-590852515231-3bba6bd0
2021-11-24 21:23:21 aws-cloudtrail-logs-590852515231-7b6a02db
2021-10-12 17:30:25 aws-cloudtrail-logs-590852515231-93ab137a
2021-11-24 19:19:20 aws-cloudtrail-logs-590852515231-9ba77508
2021-11-25 07:23:20 aws-cloudtrail-logs-590852515231-d6660d9e
```

Create an IAM user with rights to access EC2 service only when MFA is configured by the user

Identity and Access Management (IAM)

Dashboard

Access management

User groups

Users

Roles

Policies

Identity providers

Account settings

Access reports

Access analyzer

Archive rules

Analysers

Settings

Credential report

Organization activity

Policies > Arunkumar-ec2onlyifmfalse

Summary

Policy ARN: arn:aws:iam::590852515231:policy/Arunkumar-ec2onlyifmfalse

Description

Permissions

Policy usage

Tags

Policy versions

Access Advisor

Policy summary

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "VisualEditor0",
      "Effect": "Allow",
      "Action": "ec2:*",
      "Resource": "*",
      "Condition": {
        "BoolIfExists": {
          "aws:MultiFactorAuthPresent": "true"
        }
      }
    }
  ]
}
```

Copy a file from linux Ec2 to s3 bucket

Amazon S3 > arunkumarec2s3trial

arunkumarec2s3trial

Objects

Properties

Permissions

Objects (2)

Objects are the fundamental entities stored in Amazon S3. You can upload and download objects, and you can manage their permissions. [Learn more](#)

Copy S3 URI

Copy S3 object

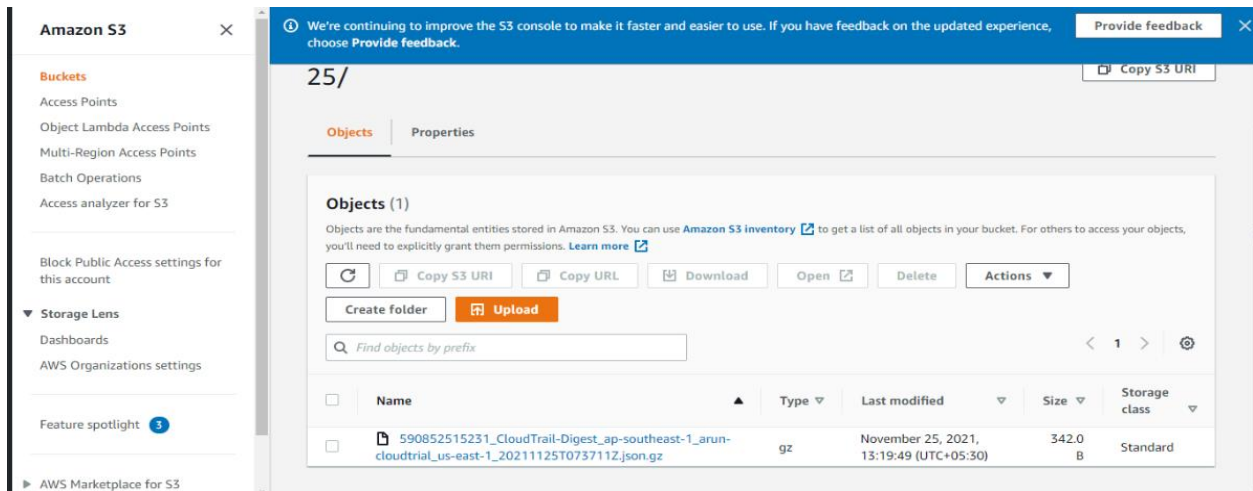
Find objects by prefix

Name	Size	Created	Storage class
amohandas@presio.com@pscg-training key pair.pem	1.6 KB	November 25, 2021, 13:08:21 (UTC+05:30)	Standard
demoec2s3.txt	22.0 B	November 24, 2021, 00:07:46 (UTC+05:30)	Standard

```
ec2-user@ip-172-31-92-143:~$ aws s3 cp s3://arunkumarec2s3trial/demoec2s3.txt .
download: s3://arunkumarec2s3trial/demoec2s3.txt to ./demoec2s3.txt
ec2-user@ip-172-31-92-143:~$ ls
demoec2s3.txt
ec2-user@ip-172-31-92-143:~$
```

DAY 3 ASSIGNMENTS

ASSIGNMENT 1



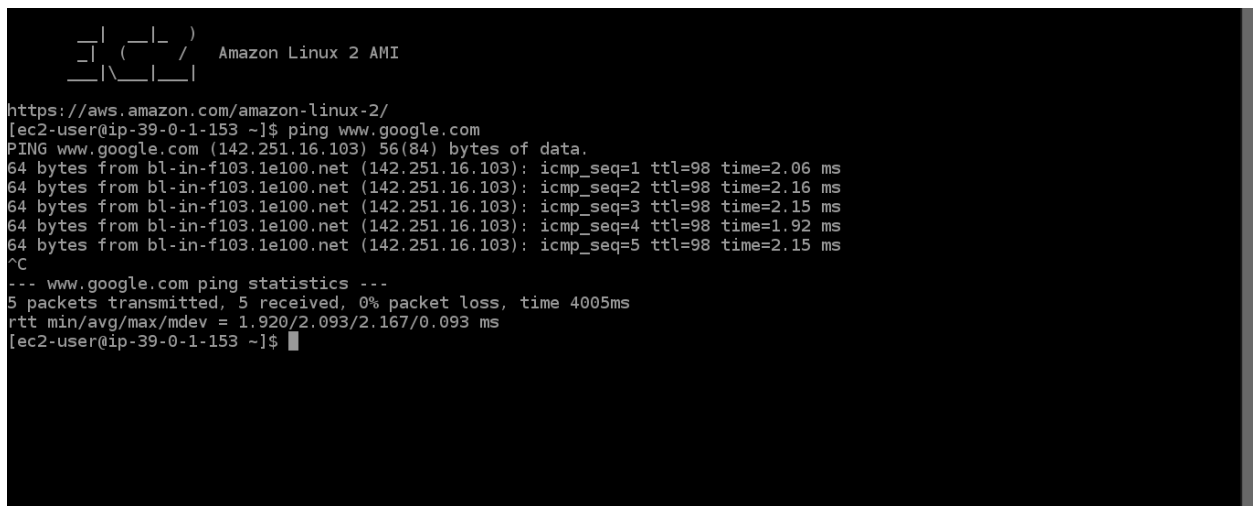
ASSIGNMENT 2

WEB INSTANCE AND DB INSTANCE CREATION

The screenshot shows the AWS Management Console 'Instances' page. It displays a list of two EC2 instances. The first instance is named 'demoarun-we...' and the second is 'demoarun-dbs...'. Both are in the 'Running' state and are t2.micro instances. The table includes columns for Name, Instance ID, Instance state, Instance type, Status check, Alarm status, and Availability Zone.

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input type="checkbox"/>	demoarun-we...	i-01e6b070832eb75d0	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a
<input type="checkbox"/>	demoarun-dbs...	i-08819e4d5e945a9d4	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b

WEB INSTANCE IS CONNECTING TO INTERNET VIA INTERNET GATEWAY



i-01e6b070832eb75d0 (demoarun-webinstance)

Public IPs: 54.162.19.17 Private IPs: 39.0.1.153

ACCESSING PRIVATE DB INSTANCE FROM WEB INSTANCE VIA PUTTY

```
[ec2-user@ip-39-0-1-153 ~]$ chmod 400 dbkey.pem
[ec2-user@ip-39-0-1-153 ~]$ ssh -i dbkey.pem ec2-user@39.0.2.187
The authenticity of host '39.0.2.187 (39.0.2.187)' can't be established.
ECDSA key fingerprint is SHA256:xMRtuHliAt62Kvs4e4fhSZD2xnkv5z4V9HFhr5J9kVc.
ECDSA key fingerprint is MD5:7d:28:cd:ff:45:b3:6c:a0:54:7a:7a:9e:e3:b1:15:36.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '39.0.2.187' (ECDSA) to the list of known hosts.

  _ | _ | _ )
  _ | ( _ /   Amazon Linux 2 AMI
 __| \__|__|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-39-0-2-187 ~]$ ping www.google.com
PING www.google.com (142.250.188.36) 56(84) bytes of data.
^C
--- www.google.com ping statistics ---
3 packets transmitted, 0 received, 100% packet loss, time 204lms
```

DAY 4 ASSIGNMENTS

Creating peer network

VPC > Peering connections > pcx-088fc927299578d05

pcx-088fc927299578d05 / arun-av-peeringvpc1

Actions ▾

Details Info

Requester owner ID 590852515231	Accepter owner ID 590852515231	Peering connection ID pcx-088fc927299578d05
Requester VPC vpc-05351b8c390d846b7 / arunvpc2	Accepter VPC vpc-0ea30607972282fcb / VPC-AV	Status Active
Requester CIDRs 29.0.0.0/16	Accepter CIDRs 27.0.0.0/16	Expiration time -
Requester Region N. Virginia (us-east-1)	Accepter Region N. Virginia (us-east-1)	

Route tables Info

This VPC peering connection is referenced in a route in the following route tables.

< 1 > ⚙

Route table ID ▾	VPC ID ▾	Main ▾	Associated with ▾
rtb-03c3ad48107eaca21 / arun-rt2	vpc-05351b8c390d846b7 / arunvpc2	No	subnet-01746cac7efebb3d7
rtb-00ad2e98ccb75f5a9 / arun-privrt2	vpc-05351b8c390d846b7 / arunvpc2	No	subnet-00d681c88f2a3dfa4
rtb-085c14daa9ae09040 / PubRT-AV	vpc-0ea30607972282fcb / VPC-AV	No	subnet-0e6caaf9c4d843137
rtb-0805b4fe7d17393f8 / PrivRT-AV	vpc-0ea30607972282fcb / VPC-AV	No	subnet-0c010f05ecbf1320a

```
ec2-user@ip-27-0-3-202:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
Last login: Thu Nov 25 04:39:38 2021 from 182.74.247.226  
  
_ | _ | _ )  
_ | ( _ | /   Amazon Linux 2 AMI  
_ | \ _ | _ |  
  
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-29-0-1-103 ~]$ ls  
dbkey.pem  varsnkey.pem  
[ec2-user@ip-29-0-1-103 ~]$ ssh -i varsnkey.pem ec2-user@27.0.3.202  
Last login: Thu Nov 25 04:42:42 2021 from 29.0.1.103  
  
_ | _ | _ )  
_ | ( _ | /   Amazon Linux 2 AMI  
_ | \ _ | _ |  
  
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-27-0-3-202 ~]$
```