

CONFIGURE AND CONNECT MYSQL DB INSTANCE WITH WEB SERVER (COURSE END PROJECT)

Created VPC

VPC > Your VPCs > vpc-0dd0cd8415cd37952

vpc-0dd0cd8415cd37952 / ak-vpcproj

Actions ▼

Details Info

VPC ID vpc-0dd0cd8415cd37952	State Available	DNS hostnames Disabled	DNS resolution Enabled
Tenancy Default	DHCP options set dopt-08d0e18f38952b12e	Main route table rtb-0e13ce2fc6bf77a2c	Main network ACL acl-0e5d1516598334ba2
Default VPC No	IPv4 CIDR 23.0.0.0/16	IPv6 pool -	IPv6 CIDR (Network border group) -
Route 53 Resolver DNS Firewall rule groups -	Owner ID 590852515231		

Created private and public subnets

VPC > Subnets > subnet-0f5e78126e3604bef

subnet-0f5e78126e3604bef / ak-pubsubproj

Actions ▼

Details

Subnet ID subnet-0f5e78126e3604bef	Subnet ARN arn:aws:ec2:us-east-1:590852515231:subnet/subnet-0f5e78126e3604bef	State Available	IPv4 CIDR 23.0.1.0/24
Available IPv4 addresses 247	IPv6 CIDR -	Availability Zone us-east-1a	Availability Zone ID use1-az6
Network border group us-east-1	VPC vpc-0dd0cd8415cd37952 ak-vpcproj	Route table rtb-0e98b46eb8020e2fe ak-pubrtproj	Network ACL acl-0e5d1516598334ba2
Default subnet No	Auto-assign public IPv4 address No	Auto-assign IPv6 address No	Auto-assign customer-owned IPv4 address No
Customer-owned IPv4 pool -	Outpost ID -	IPv4 CIDR reservations -	IPv6 CIDR reservations -
IPv6-only No		Resource name DNS A record	Resource name DNS AAAA record

VPC > Subnets > subnet-0a36e99fcd2499c61

subnet-0a36e99fcd2499c61 / ak-privsubproj

Actions ▼

Details

Subnet ID subnet-0a36e99fcd2499c61	Subnet ARN arn:aws:ec2:us-east-1:590852515231:subnet/subnet-0a36e99fcd2499c61	State Available	IPv4 CIDR 23.0.2.0/24
Available IPv4 addresses 249	IPv6 CIDR -	Availability Zone us-east-1b	Availability Zone ID use1-az1
Network border group us-east-1	VPC vpc-0dd0cd8415cd37952 ak-vpcproj	Route table rtb-02dfd1d00f988a10f ak-privrtproj	Network ACL acl-0e5d1516598334ba2
Default subnet No	Auto-assign public IPv4 address No	Auto-assign IPv6 address No	Auto-assign customer-owned IPv4 address No
Customer-owned IPv4 pool -	Outpost ID -	IPv4 CIDR reservations -	IPv6 CIDR reservations -
IPv6-only No		Resource name DNS A record	Resource name DNS AAAA record

Respective Route tables

Route tables (10) Info							Refresh Actions		Create route table	Help
<input type="text" value="Filter route tables"/>							< 1 > Settings			
search: proj search: ak Clear filters										
<input type="checkbox"/>	<u>ak-privrtproj</u>	rtb-02dfd1d00f988a10f	subnet-0a36e99fcd249...	-	No	vpc-0dd0cd8415cd				
<input type="checkbox"/>	-	rtb-01e9e4164f13be85b	-	-	Yes	vpc-0044b1ddab82				
<input type="checkbox"/>	nagarajan-proj-privrt	rtb-0c4ce246f95239676	subnet-082914a6de6b9...	-	No	vpc-02264c274f6d				
<input type="checkbox"/>	<u>ak-pubrtproj</u>	rtb-0e98b46eb8020e2fe	subnet-0f5e78126e360...	-	No	vpc-0dd0cd8415cd				

WEB SERVER

Instance summary for i-061e6ca45e224919e (AK-PROJWEBSERVER.) Info		
Updated less than a minute ago		
Refresh Connect Instance state Actions		
Instance ID i-061e6ca45e224919e (AK-PROJWEBSERVER.)	Public IPv4 address 174.129.54.151 open address	Private IPv4 addresses 23.0.1.124
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type IP name: ip-23-0-1-124.ec2.internal	Private IP DNS name (IPv4 only) ip-23-0-1-124.ec2.internal	Answer private resource DNS name IPv4 (A)
Instance type t2.micro	Elastic IP addresses -	VPC ID vpc-0dd0cd8415cd37952 (ak-vpcproj)
AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more	IAM Role -	Subnet ID subnet-0f5e78126e3604bef (ak-pubsubproj)

RDS

Amazon RDS ×		arun-databaseproj-1 Modify Actions	
Dashboard Databases Query Editor Performance insights Snapshots Automated backups Reserved instances Proxies Subnet groups Parameter groups Option groups Custom Availability Zones Custom engine versions Events		Summary	
DB identifier arun-databaseproj-1		CPU <div><div></div>3.47%</div>	Status Available
Role Instance		Current activity <div><div></div>1 Connections</div>	Class db.t3.micro
		Engine MySQL Community	Region & AZ us-east-1b
		Connectivity & security Monitoring Logs & events Configuration Maintenance & backups Tags	
		Connectivity & security	
Endpoint & port Endpoint arun-databaseproj-1.cq174vfsoqja.us-east-1.rds.amazonaws.com		Networking Availability Zone us-east-1b VPC	Security VPC security groups ak-sgproj (sg-02d7e5b7a263f2820) Active

PHP Code for connecting with database

```
Added to
[ec2-user@ip-23-0-1-124 html]$ cat config.php
<?php
/**
 * using mysqli_connect for database connection
 */

$databaseHost = 'arun-databaseproj-1.cql74vfsoqja.us-east-1.rds.amazonaws.com';
$databaseName = 'crud_db';
$databaseUsername = 'arunkumar';
$databasePassword = 'arunkumar';

$mysqli = mysqli_connect($databaseHost, $databaseUsername, $databasePassword, $databaseName);
?>
```

Logging into RDS DB

(Initially no entries)

```
[ec2-user@ip-23-0-1-124 html]$ mysql -h arun-databaseproj-1.cql74vfsoqja.us-east-1.rds.amazonaws.com -u arunkumar -P 3306 -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 60
Server version: 8.0.23 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]> create database IF NOT EXISTS crud_db;
Query OK, 1 row affected (0.01 sec)

MySQL [(none)]> use crud_db;
Database changed
MySQL [crud_db]> CREATE TABLE IF NOT EXISTS users (
->   `id` int(11) NOT NULL auto_increment,
->   `name` varchar(100),
->   `email` varchar(100),
->   `mobile` varchar(15),
->   PRIMARY KEY (`id`)
-> );
Query OK, 0 rows affected, 1 warning (0.03 sec)

MySQL [crud_db]> SELECT * FROM users;
Empty set (0.01 sec)
```

Adding entry via web server instance's public ip

← → 🔍 Not secure | 174.129.54.151/index.php

[Add New User](#)

Name	Mobile	Email	Update
arun	hi	gmarun2000	Edit Delete

Verifying entry in RDS DB

```
MySQL [crud_db]> SELECT * FROM users;
+----+-----+-----+-----+
| id | name | email      | mobile |
+----+-----+-----+-----+
|  1 | arun | gmarun2000 | hi     |
+----+-----+-----+-----+
1 row in set (0.00 sec)
```