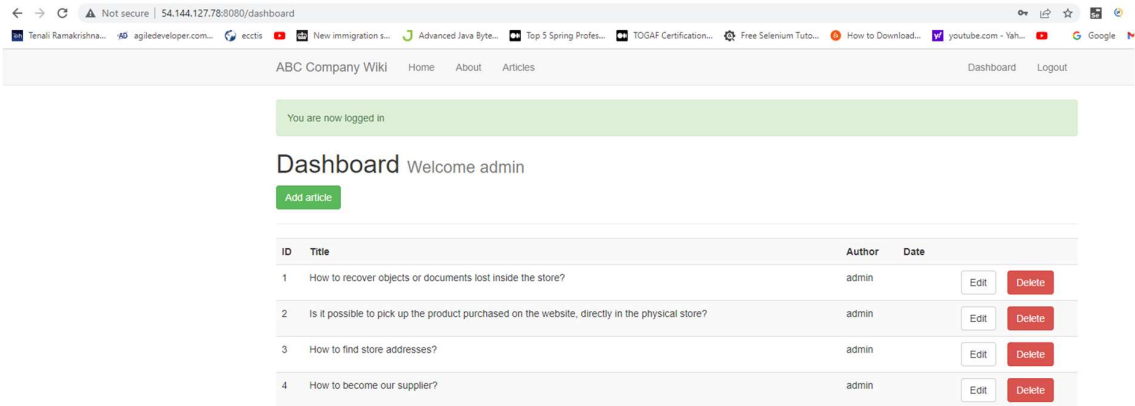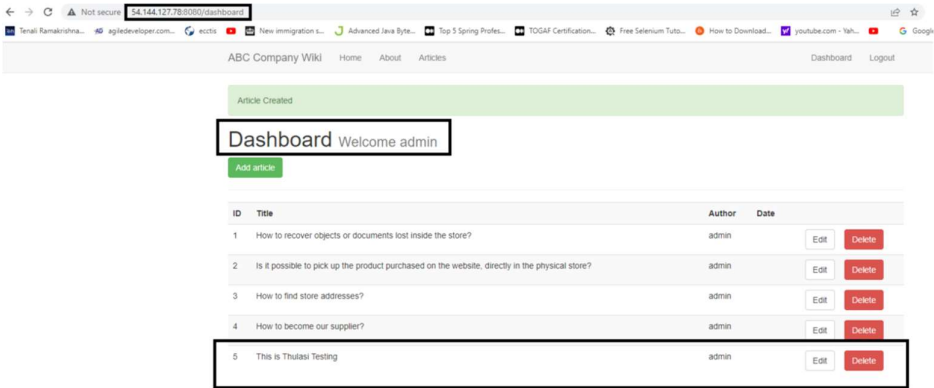# Migration of a Workload running in a Corporate Data Center to AWS using the Amazon EC2 and RDS service

```
ubuntu@ip-10-0-0-66:~$ cd wikiapp
ubuntu@ip-10-0-0-66:~/wikiapp$ python3 wiki.py
 * Serving Flask app 'wiki'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on all addresses (0.0.0.0)
 * Running on http://127.0.0.1:8080
 * Running on http://10.0.0.66:8080
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 151-376-939
49.205.99.249 - - [13/Sep/2022 17:54:22] "GET / HTTP/1.1" 200 -
49.205.99.249 - - [13/Sep/2022 17:54:23] "GET /favicon.ico HTTP/1.1" 404 -
49.205.99.249 - - [13/Sep/2022 17:54:27] "GET /register HTTP/1.1" 200 -
49.205.99.249 - - [13/Sep/2022 17:54:33] "GET / HTTP/1.1" 200 -
49.205.99.249 - - [13/Sep/2022 17:54:35] "GET /articles HTTP/1.1" 200 -
49.205.99.249 - - [13/Sep/2022 17:54:37] "GET /login HTTP/1.1" 200 -
49.205.99.249 - - [13/Sep/2022 17:55:21] "POST /login HTTP/1.1" 200 -
49.205.99.249 - - [13/Sep/2022 17:56:51] "POST /login HTTP/1.1" 302 -
49.205.99.249 - - [13/Sep/2022 17:56:51] "GET /dashboard HTTP/1.1" 200 -
49.205.99.249 - - [13/Sep/2022 17:57:37] "GET /add_article HTTP/1.1" 200 -
49.205.99.249 - - [13/Sep/2022 17:58:00] "POST /add_article HTTP/1.1" 302 -
49.205.99.249 - - [13/Sep/2022 17:58:00] "GET /dashboard HTTP/1.1" 200 -
```

**Buckets (1)** Info
Buckets are containers for data stored in S3. Learn more

Create bucket · Delete · Empty · Copy ARN

| Name | AWS Region | Access | Creation date |
|---|---|---|---|
| my-app-01-s3-bucket-01 | US East (N. Virginia) us-east-1 | Objects can be public | September 13, 2022, 23:07:23 (UTC+05:30) |

**Objects (2)**
Objects are the fundamental entities stored in Amazon S3. You can use Amazon S3 inventory to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. Learn more

Copy S3 URI · Copy URL · Download · Open · Delete · Actions · Create folder · Upload

| Name | Type | Last modified | Size | Storage class |
|---|---|---|---|---|
| dump-en.sql | sql | September 13, 2022, 23:08:15 (UTC+05:30) | 3.6 KB | Standard |
| wikiapp-en.zip | zip | September 13, 2022, 23:09:30 (UTC+05:30) | 9.5 KB | Standard |

## vpc-035b75ce48cdeda98 / vpc-prod-1

Actions ▼

**Details** Info

| | | | |
|---|---|---|---|
| VPC ID | State | DNS hostnames | DNS resolution |
| vpc-035b75ce48cdeda98 | ⊘ Available | Disabled | Enabled |
| Tenancy | DHCP option set | Main route table | Main network ACL |
| Default | dopt-0767d34d6ea1cfcb3 | rtb-0e7f3fdf45e425660 | acl-0448598173420a171 |
| Default VPC | IPv4 CIDR | IPv6 pool | IPv6 CIDR (Network border group) |
| No | 10.   .0/16 | – | – |
| Route 53 Resolver DNS Firewall rule groups | Owner ID | | |
| – | 476505616044 | | |

## igw-0293fe8b0f1f30eb4 / igw-prod-1

Actions ▼

**Details** Info

| Internet gateway ID | State | VPC ID | Owner |
|---|---|---|---|
| igw-0293fe8b0f1f30eb4 | ⊘ Attached | vpc-035b75ce48cdeda98 | vpc-prod-1 | 476505616044 |

## rtb-025a220eaf3bfd86d

Actions ▼

ⓘ You can now check network connectivity with Reachability Analyzer

Run Reachability Analyzer  ✕

### Details Info

| | | | |
|---|---|---|---|
| Route table ID | Main | Explicit subnet associations | Edge associations |
| 🗗 rtb-025a220eaf3bfd86d | 🗗 Yes | – | – |
| VPC | Owner ID | | |
| vpc-0a4ae0af92c7d633c | 🗗 476505616044 | | |

| Routes | Subnet associations | Edge associations | Route propagation | Tags |

### Routes (2)

Edit routes

🔍 Filter routes    Both ▼    < 1 >  ⚙

| Destination ▽ | Target ▽ | Status ▽ | Propagated ▽ |
|---|---|---|---|
| 0.0.0.0/0 | igw-0bbe34d22219a4599 | ⊘ Active | No |
| 172.   0/16 | local | ⊘ Active | No |

---

### Subnets (3) Info

↻  Actions ▼  **Create subnet**

🔍 Filter subnets

< 1 >  ⚙

search: vpc-prod-1 ✕    Clear filters

| | Name ▽ | Subnet ID ▽ | State ▽ | VPC ▽ | IPv4 CIDR ▽ | IPv6 CIDR ▽ | Available IPv4 addresses ▽ |
|---|---|---|---|---|---|---|---|
| ☐ | vpc-prod-1-pub-1 (Public) | subnet-052ba4ca46774d231 | ⊘ Available | vpc-035b75ce48cdeda98 \| vpc... | 10.  0/24 | – | 250 |
| ☐ | vpc-prod-1-pvt-1 (Private) | subnet-062d1568bf2872736 | ⊘ Available | vpc-035b75ce48cdeda98 \| vpc... | 10.  0/24 | – | 250 |
| ☐ | vpc-prod-1-pvt-2 (Private) | subnet-0f6d0ff0710d958b4 | ⊘ Available | vpc-035b75ce48cdeda98 \| vpc... | 10.  .0/24 | – | 251 |

---

### Instance summary for i-0607db4eb522daf87 (aws-us-e1-app-01) Info

Updated less than a minute ago

↻  Connect  Instance state ▼  Actions ▼

| | | |
|---|---|---|
| Instance ID | Public IPv4 address | Private IPv4 addresses |
| 🗗 i-0607db4eb522daf87 (aws-us-e1-app-01) | 🗗 54.  .78 \| open address 🔗 | 🗗 10. |
| IPv6 address | Instance state | Public IPv4 DNS |
| – | ⊘ Running | – |
| Hostname type | Private IP DNS name (IPv4 only) | |
| IP name: ip-10-0-0-66.ec2.internal | 🗗 ip-10-0-0-66.ec2.internal | |
| Answer private resource DNS name | Instance type | Elastic IP addresses |
| IPv4 (A) | t2.micro | – |
| Auto-assigned IP address | VPC ID | AWS Compute Optimizer finding |
| 🗗 54.  .78 [Public IP] | 🗗 vpc-035b75ce48cdeda98 (vpc-prod-1) 🔗 | ⓘ Opt-in to AWS Compute Optimizer for recommendations. \| Learn more 🔗 |
| IAM Role | Subnet ID | Auto Scaling Group name |
| – | 🗗 subnet-052ba4ca46774d231 (vpc-prod-1-pub-1 (Public)) 🔗 | – |

| Details | Security | Networking | Storage | Status checks | Monitoring | Tags |

▼ Instance details Info

| | | |
|---|---|---|
| Platform | AMI ID | Monitoring |
| 🗗 Ubuntu (Inferred) | ami-052efd3df9dad4825 | disabled |
| Platform details | AMI name | Termination protection |
| 🗗 Linux/UNIX | 🗗 ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20220609 | Disabled |
| Stop protection | Launch time | AMI location |
| Disabled | 🗗 Tue Sep 13 2022 20:54:06 GMT+0530 (India Standard Time) (about 3 hours) | 🗗 amazon/ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20220609 |
| Instance auto-recovery | Lifecycle | Stop-hibernate behavior |
| Default | normal | disabled |

Security groups
📋 sg-022e94313e070790c (aws-us-e1-app-01-sg)

▼ **Inbound rules**

🔍 *Filter rules*

| Security group rule ID | Port range | Protocol | Source | Security groups |
|---|---|---|---|---|
| sgr-0e10359cacb759ab7 | 8080 | TCP | 0.0.0.0/0 | aws-us-e1-app-01-sg |
| sgr-061c6133b8d8b328e | 22 | TCP | 0.0.0.0/0 | aws-us-e1-app-01-sg |

▼ **Outbound rules**

🔍 *Filter rules*

| Security group rule ID | Port range | Protocol | Destination | Security groups |
|---|---|---|---|---|
| sgr-015d1e92caa4fdccc | All | All | 0.0.0.0/0 | aws-us-e1-app-01-sg |

RDS > Databases > aws-us-e1-db-01

# aws-us-e1-db-01

Modify   Actions ▼

## Summary

| DB identifier | CPU | Status | Class |
|---|---|---|---|
| aws-us-e1-db-01 | ▭ 4.43% | ⊘ Available | db.t2.micro |
| Role | Current activity | Engine | Region & AZ |
| Instance | ▭ 0 Connections | MySQL Community | us-east-1a |

**Connectivity & security**   Monitoring   Logs & events   Configuration   Maintenance & backups   Tags

### Connectivity & security

| Endpoint & port | Networking | Security |
|---|---|---|
| Endpoint | Availability Zone | VPC security groups |
| aws-us-e1-...........us-east-1.rds.amazonaws.com | us-east-1a | sec-group-db-01 (sg-070f8428948d19078) |
| | | ⊘ Active |
| Port | VPC | Public accessibility |
| 3306 | vpc-prod-1 (vpc-035b75ce48cdeda98) | No |
| | Subnet group | Certificate authority |
| | default-vpc-035b75ce48cdeda98 | rds-ca-2019 |
| | Subnets | Certificate authority date |
| | subnet-0f6d0ff0710d958b4 | August 22, 2024, 22:38 (UTC+05:30) |
| | subnet-062d1568bf2872736 | |
| | subnet-052ba4ca46774d231 | |

EC2 > Security Groups > sg-070f8428948d19078 - sec-group-db-01

# sg-070f8428948d19078 - sec-group-db-01

Actions ▼

## Details

| Security group name | Security group ID | Description | VPC ID |
|---|---|---|---|
| sec-group-db-01 | sg-070f8428948d19078 | Created by RDS management console | vpc-035b75ce48cdeda98 ↗ |

| Owner | Inbound rules count | Outbound rules count |
|---|---|---|
| 476505616044 | 1 Permission entry | 1 Permission entry |

**Inbound rules**   Outbound rules   Tags

ⓘ You can now check network connectivity with Reachability Analyzer         Run Reachability Analyzer   ✕

### Inbound rules (1/1)

Manage tags   Edit inbound rules

🔍 Filter security group rules

‹ 1 ›  ⚙

| ☑ | Name ▽ | Security group rule... ▽ | IP version ▽ | Type ▽ | Protocol ▽ | Port range ▽ | Source ▽ | Description ▽ |
|---|---|---|---|---|---|---|---|---|
| ☑ | – | sgr-08051a85c40a840... | IPv4 | MYSQL/Aurora | TCP | 3306 | 10 .0/24 | – |