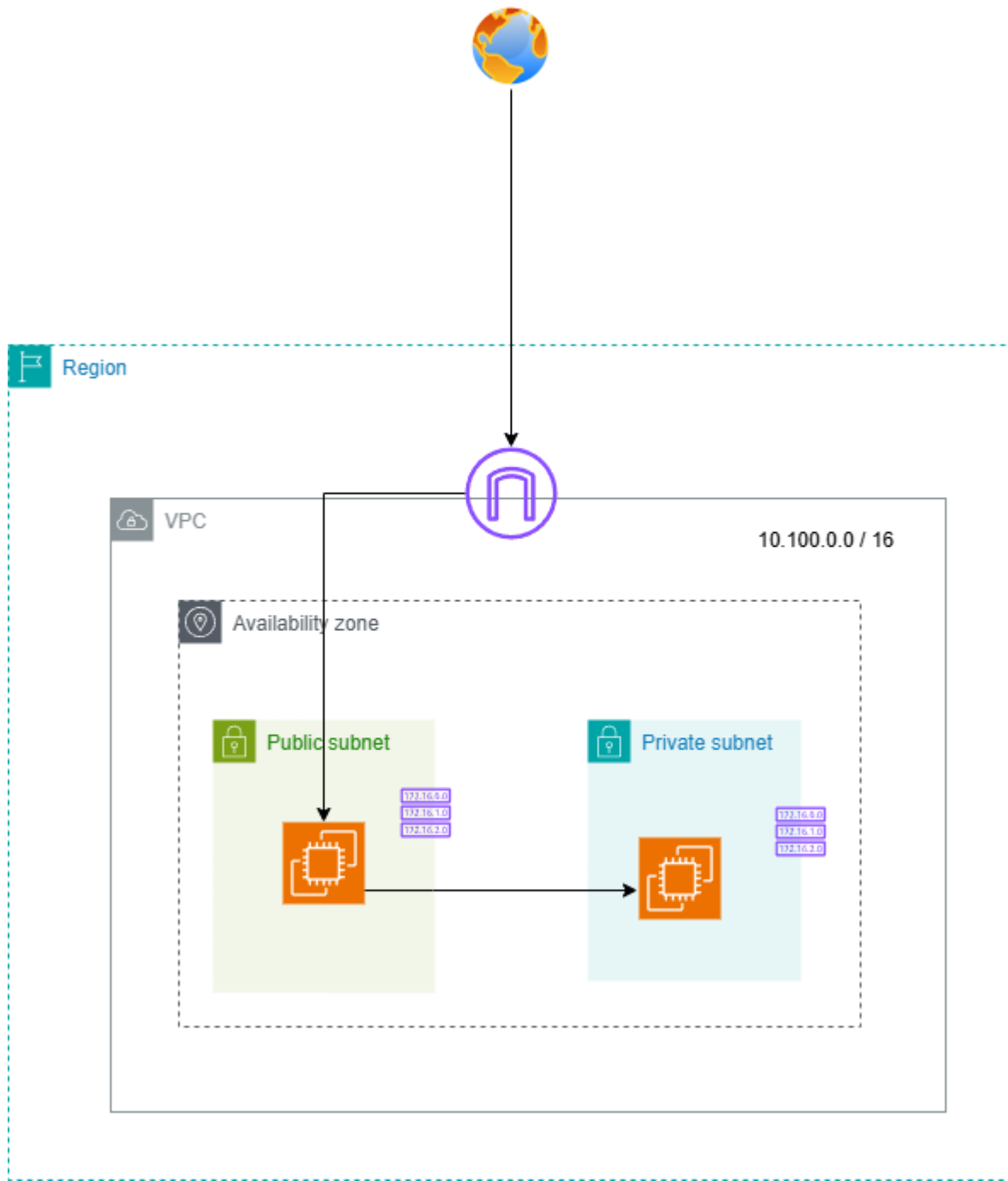


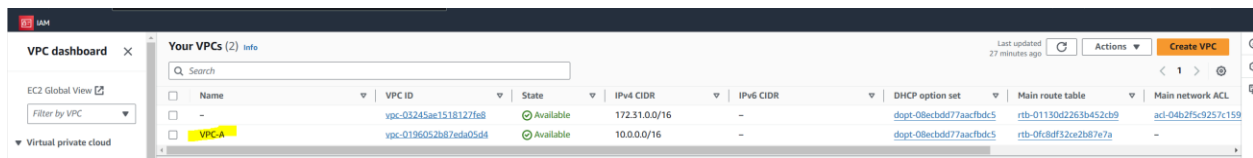
AWS Task-2

Set up a VPC with an Internet gateway, create a public subnet with 256 IP addresses, a private subnet with 256 IP addresses, make a route table connecting the Internet gateway and the subnets, and launch a Linux EC2 instance by using the above VPC and public subnet.



Step1

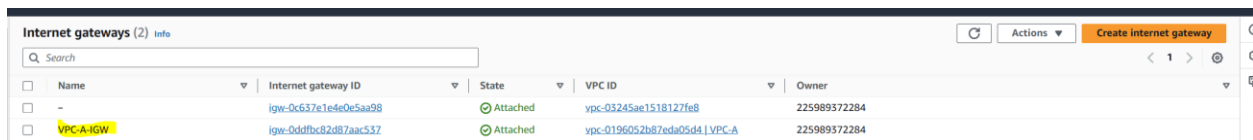
Create VPC



| Name | VPC ID | State | IPv4 CIDR | IPv6 CIDR | DHCP option set | Main route table | Main network ACL |
|-------|-----------------------|-----------|---------------|-----------|-------------------------|-----------------------|---------------------|
| - | vpc-03245ae1518127fe8 | Available | 172.31.0.0/16 | - | dopt-08ecbdcf77aacfbdc5 | rtb-01130d2263b452cb9 | acl-04b2f5c9257c159 |
| VPC-A | vpc-0196052b87eda05d4 | Available | 10.0.0.0/16 | - | dopt-08ecbdcf77aacfbdc5 | rtb-0fc8df52ae2b87e7a | - |

Step2

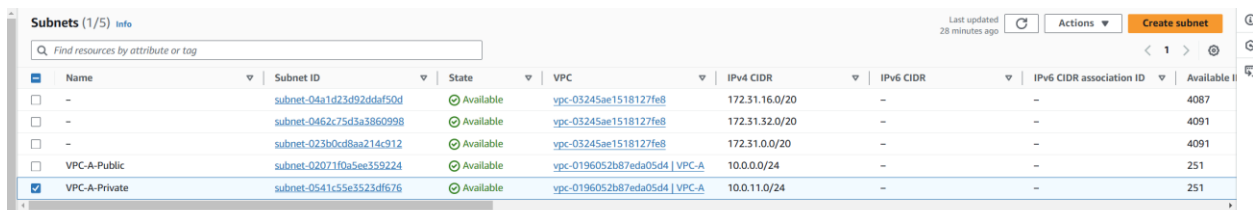
Create internet gateway and attached it to VPC



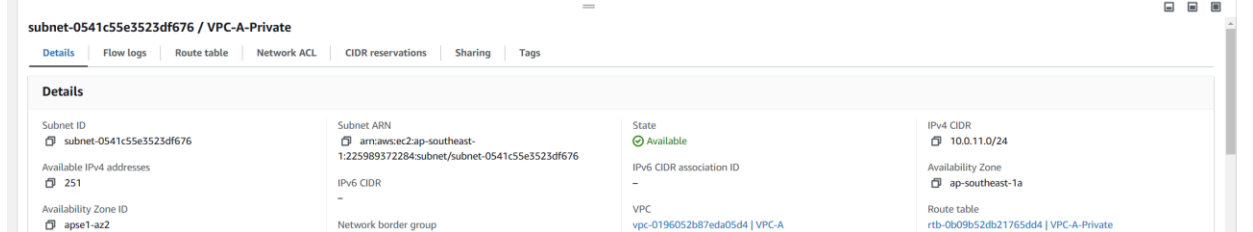
| Name | Internet gateway ID | State | VPC ID | Owner |
|-----------|-----------------------|----------|-------------------------------|--------------|
| - | igw-0c637e1e4e0e5aa98 | Attached | vpc-03245ae1518127fe8 | 225989372284 |
| VPC-A-IGW | igw-0ddfbcb2d87aac537 | Attached | vpc-0196052b87eda05d4 VPC-A | 225989372284 |

Step3

Create Subnet



| Name | Subnet ID | State | VPC | IPv4 CIDR | IPv6 CIDR | IPv6 CIDR association ID | Available IP addresses |
|---------------|--------------------------|-----------|-------------------------------|----------------|-----------|--------------------------|------------------------|
| - | subnet-04a1d23d92ddaf50d | Available | vpc-03245ae1518127fe8 | 172.31.16.0/20 | - | - | 4087 |
| - | subnet-0462c75d3a3860998 | Available | vpc-03245ae1518127fe8 | 172.31.32.0/20 | - | - | 4091 |
| - | subnet-023b0cd8aa214c912 | Available | vpc-03245ae1518127fe8 | 172.31.0.0/20 | - | - | 4091 |
| VPC-A-Public | subnet-02071f0a5ee359224 | Available | vpc-0196052b87eda05d4 VPC-A | 10.0.0.0/24 | - | - | 251 |
| VPC-A-Private | subnet-0541c55e3523df676 | Available | vpc-0196052b87eda05d4 VPC-A | 10.0.11.0/24 | - | - | 251 |



| subnet-0541c55e3523df676 / VPC-A-Private | | | |
|--|---|--------------------------------------|--|
| Details | | | |
| Subnet ID subnet-0541c55e3523df676 | Subnet ARN arn:aws:ec2:ap-southeast-1:225989372284:subnet/subnet-0541c55e3523df676 | State Available | IPv4 CIDR 10.0.11.0/24 |
| Available IPv4 addresses 251 | IPv6 CIDR - | IPv6 CIDR association ID - | Availability Zone ap-southeast-1a |
| Availability Zone ID apse1-az2 | Network border group - | VPC vpc-0196052b87eda05d4 VPC-A | Route table rtb-0b09b52db21765dd4 VPC-A-Private |

Step4

Create route table for public and associate with public subnet

Create route table for private and associate with private subnet

| | | | | | | | |
|-------------------------------------|---------------|-----------------------|--------------------------|---|----|-------------------------------|--------------|
| <input checked="" type="checkbox"/> | VPC-A-Public | rtb-040c1650c57c9cd08 | subnet-02071f0a5ee359... | - | No | vpc-0196052b87eda05d4 VPC-A | 225989372284 |
| <input type="checkbox"/> | VPC-A-Private | rtb-0b09b52db21765dd4 | subnet-0541c55e3523df... | - | No | vpc-0196052b87eda05d4 VPC-A | 225989372284 |

rtb-040c1650c57c9cd08 / VPC-A-Public

Details

Routes

Subnet associations

Edge associations

Route propagation

Tags

Explicit subnet associations (1)

Find subnet association

< 1 >

| Name | Subnet ID | IPv4 CIDR | IPv6 CIDR |
|--------------|--------------------------|-------------|-----------|
| VPC-A-Public | subnet-02071f0a5ee359224 | 10.0.0.0/24 | - |

Route tables (1/4)

Last updated 31 minutes ago

Actions

Create route table

Find resources by attribute or tag

< 1 >

| | Name | Route table ID | Explicit subnet associ... | Edge associations | Main | VPC | Owner ID |
|-------------------------------------|---------------|-----------------------|---------------------------|-------------------|------|-------------------------------|--------------|
| <input type="checkbox"/> | - | rtb-01130d2263b452cb9 | - | - | Yes | vpc-03245ae1518127fe8 | 225989372284 |
| <input type="checkbox"/> | - | rtb-0fc8df32ce2b87e7a | - | - | Yes | vpc-0196052b87eda05d4 VPC-A | 225989372284 |
| <input type="checkbox"/> | VPC-A-Public | rtb-040c1650c57c9cd08 | subnet-02071f0a5ee359... | - | No | vpc-0196052b87eda05d4 VPC-A | 225989372284 |
| <input checked="" type="checkbox"/> | VPC-A-Private | rtb-0b09b52db21765dd4 | subnet-0541c55e3523df... | - | No | vpc-0196052b87eda05d4 VPC-A | 225989372284 |

rtb-0b09b52db21765dd4 / VPC-A-Private

Details

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (1)

Filter routes

Both

Edit routes

< 1 >

| Destination | Target | Status | Propagated |
|-------------|--------|--------|------------|
| 10.0.0.0/16 | local | Active | No |

Route tables (1/4) info

Last updated 32 minutes ago

Actions

Create route table

Find resources by attribute or tag

| | Name | Route table ID | Explicit subnet associ... | Edge associations | Main | VPC | Owner ID |
|-------------------------------------|---------------|-----------------------|---------------------------|-------------------|------|-------------------------------|--------------|
| <input type="checkbox"/> | - | rtb-01130d2263b452cb9 | - | - | Yes | vpc-03245ae1518127fe8 | 225989372284 |
| <input type="checkbox"/> | - | rtb-0fc8df32ce2b87e7a | - | - | Yes | vpc-0196052b87eda05d4 VPC-A | 225989372284 |
| <input checked="" type="checkbox"/> | VPC-A-Public | rtb-040c1650c57c9cd08 | subnet-02071f0a5ee359... | - | No | vpc-0196052b87eda05d4 VPC-A | 225989372284 |
| <input type="checkbox"/> | VPC-A-Private | rtb-0b09b52db21765dd4 | subnet-0541c55e3523df... | - | No | vpc-0196052b87eda05d4 VPC-A | 225989372284 |

rtb-040c1650c57c9cd08 / VPC-A-Public

Details

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Both

Edit routes

Filter routes

| Destination | Target | Status | Propagated |
|-------------|------------------------|--------|------------|
| 0.0.0.0/0 | igw-0ddfbfc82d87aac537 | Active | No |
| 10.0.0.0/16 | local | Active | No |

Route tables (1/4) info

Last updated 33 minutes ago

Actions

Create route table

Find resources by attribute or tag

| | Name | Route table ID | Explicit subnet associ... | Edge associations | Main | VPC | Owner ID |
|-------------------------------------|---------------|-----------------------|---------------------------|-------------------|------|-------------------------------|--------------|
| <input type="checkbox"/> | - | rtb-01130d2263b452cb9 | - | - | Yes | vpc-03245ae1518127fe8 | 225989372284 |
| <input type="checkbox"/> | - | rtb-0fc8df32ce2b87e7a | - | - | Yes | vpc-0196052b87eda05d4 VPC-A | 225989372284 |
| <input type="checkbox"/> | VPC-A-Public | rtb-040c1650c57c9cd08 | subnet-02071f0a5ee359... | - | No | vpc-0196052b87eda05d4 VPC-A | 225989372284 |
| <input checked="" type="checkbox"/> | VPC-A-Private | rtb-0b09b52db21765dd4 | subnet-0541c55e3523df... | - | No | vpc-0196052b87eda05d4 VPC-A | 225989372284 |

rtb-0b09b52db21765dd4 / VPC-A-Private

Details

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (1)

Both

Edit routes

Filter routes

| Destination | Target | Status | Propagated |
|-------------|--------|--------|------------|
| 10.0.0.0/16 | local | Active | No |

EC2 instance with public address

The screenshot shows the AWS Management Console 'Instances' page. A single EC2 instance, 'EC2-A', is listed with ID 'i-0755d9b6ab810c2c6'. It is in a 'Running' state, using a 't2.micro' instance type, and is located in the 'ap-southeast-1a' availability zone. A public IPv4 address of '13.212.232.175' is assigned to the instance. Below the table, the 'Details' tab for this instance is selected, showing the instance ID, public IPv4 address, and private IPv4 address.

| Name | Instance ID | Instance state | Instance type | Status check | Alarm status | Availability Zone | Public IPv4 DNS | Public IPv4 ... | Elastic IP |
|-------|---------------------|----------------|---------------|--------------|---------------|-------------------|-----------------|-----------------|------------|
| EC2-A | i-0755d9b6ab810c2c6 | Running | t2.micro | Initializing | View alarms + | ap-southeast-1a | - | 13.212.232.175 | - |

i-0755d9b6ab810c2c6 (EC2-A)

Details | Status and alarms | Monitoring | Security | Networking | Storage | Tags

▼ Instance summary info

| | | |
|------------------------------------|--|--------------------------------------|
| Instance ID i-0755d9b6ab810c2c6 | Public IPv4 address 13.212.232.175 open address | Private IPv4 addresses 10.0.0.185 |
|------------------------------------|--|--------------------------------------|

```
ec2-user@ip-10-0-0-185:~  
[ec2-user@ip-10-0-0-185 ~]$ exit  
logout  
Connection to 13.212.232.175 closed.  
PS C:\Users\smoorthy7\Downloads> ssh -i demo.pem ec2-user@13.212.232.175  
Register this system with Red Hat Insights: insights-client --register  
Create an account or view all your systems at https://red.ht/insights-dashboard  
Last login: Thu Nov 7 04:54:22 2024 from 118.100.151.226  
[ec2-user@ip-10-0-0-185 ~]$
```