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2KE20CS032

Assignment 37

Understood. To follow the provided instructions and create the files/directory using the same name and case as provided in the task steps, please provide me with the specific names and case instructions for the files/directory you want to create.

AWS

Assignment:4 Install packages without internet access on Private instances

Steps to create VPC Endpoint for Amazon S3

1. Navigate to VPC dashboard and click End point option
2. Click on 'create endpoint'
3. Provide name of to your end-point
4. Navigate to services and search 's3' and then select the option which is a Gateway Type

Endpoint settings

Name tag - optional
Creates a tag with a key of 'Name' and a value that you specify.
my-endpoint-01

Service category
Select the service category

☒ AWS services
Services provided by Amazon

☐ PrivateLink Ready partner services
Services with an AWS Service Ready designation

☐ AWS Marketplace services
Services that you've purchased through AWS Marketplace

☐ EC2 Instance Connect Endpoint
An elastic network interface that allow you to connect to resources in a private subnet

☐ Other endpoint services
Find services shared with you by service name

Services (1/2)

Search

Service Name = com.amazonaws.ap-south-1.s3 Clear filters

Service Name	Owner	Type
<input checked="" type="radio"/> com.amazonaws.ap-south-1.s3	amazon	Gateway
<input type="radio"/> com.amazonaws.ap-south-1.s3	amazon	Interface

5. Select the VPC that you have created
6. Click on Create endpoint
7. Endpoint will be created now

Name	VPC endpoint ID	VPC ID	Service name	Endpoint type	Status
<input checked="" type="checkbox"/> my-endpoint-01	vpce-068059c75c8fe50f3	vpc-0e190ca43b317839f my-vpc-01	com.amazonaws.ap-south-1.s3	Gateway	✓

8. Click on the endpoint and navigate to Route Tables tab

9. Now click on Manage Route tables,

10. Make a check on the private Route table you have created for private subnet and click on modify route tables

VPC dashboard
EC2 Global View
Filter by VPC:
Select a VPC

Virtual private cloud
Your VPCs
Subnets
Route tables
Internet gateways
Egress-only internet gateways
DHCP option sets
Elastic IPs
Managed prefix lists
Endpoints
Endpoint services
NAT gateways
Peering connections

Security
Network ACLs
Security groups

DNS firewall
Rule groups

VPC > Route tables > rtb-0436625d82ff9f091

rtb-0436625d82ff9f091 / private_rt-02

Actions

Details info

Route table ID
rtb-0436625d82ff9f091

Main
No

Explicit subnet associations
subnet-01e1b5812ebecfe9 / private-02

Edge associations
-

VPC
vpc-0e190ca43b317839f | my-vpc-01

Owner ID
405819896469

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Filter routes

Both Edit routes

Destination	Target	Status	Propagated
0.0.0.0/0	igw-00bd56a6499d96195	Active	No
10.0.0.0/16	local	Active	No

11. Once you done, login to your private instance and verify whether you are able to install packages

```
ec2-user@ip-10-0-4-113.ap-south-1.compute.internal ~ (3.95s)
sudo yum install htop
Last metadata expiration check: 20:44:17 ago on Mon Nov 6 18:40:13 2023.
Dependencies resolved.
=====
Package                Architecture          Version               Repository            Size
=====
Installing:
htop                    x86_64                3.2.1-87.amzn2023.0.3 amazonlinux            183 k
=====
Transaction Summary
Install 1 Package

Total download size: 183 k
Installed size: 432 k
Is this ok [y/N]: y
Downloading Packages:
htop-3.2.1-87.amzn2023.0.3.x86_64.rpm                                1.8 MB/s | 183 kB  00:00
-----
Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing                :
  Installing               : htop-3.2.1-87.amzn2023.0.3.x86_64
  Running scriptlet        : htop-3.2.1-87.amzn2023.0.3.x86_64
  Verifying                : htop-3.2.1-87.amzn2023.0.3.x86_64
-----
WARNING:
A newer release of "Amazon Linux" is available.

Available Versions:
```

M-2

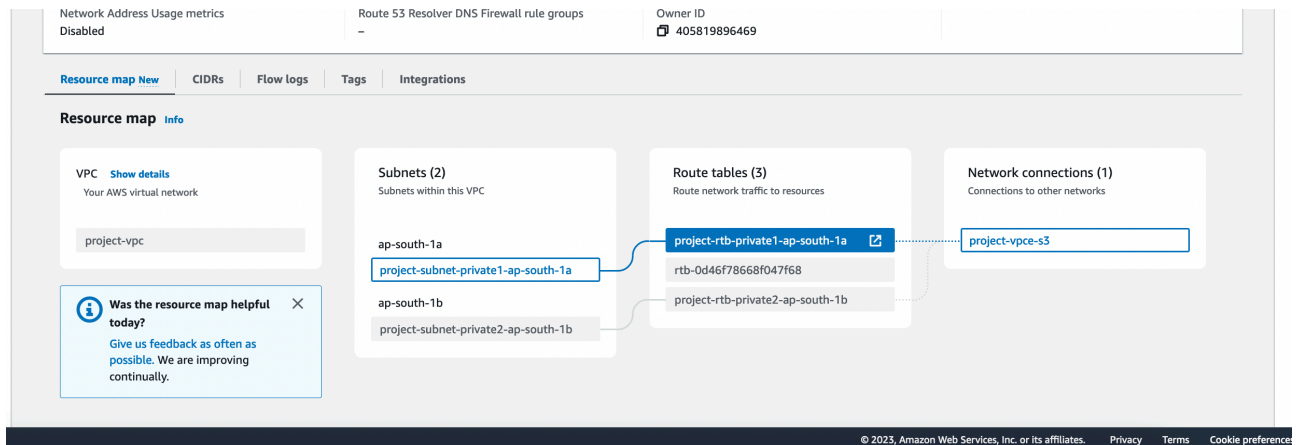
References:

Docx to refer :: 1 <https://aws.amazon.com/blogs/compute/secure-connectivity-from-public-to-private-introducing-ec2-instance-connect-endpoint-june-13-2023/>

Video : <https://www.youtube.com/watch?v=CN-Y3uqC44&list=PPSV>

Docx to refer :: 2 <https://bobbyhadz.com/blog/aws-cli-could-not-connect-to-endpoint-url>

Docx to refer :: 2 <https://docs.aws.amazon.com/cli/latest/userguide/cli-authentication-user.html#cli-authentication-user-create>



EC2 > Instances > i-0f4c9d54a2a7d69e0		
Instance summary for i-0f4c9d54a2a7d69e0 (my-test) Info		
Updated less than a minute ago		
Instance ID i-0f4c9d54a2a7d69e0 (my-test)	Public IPv4 address -	Private IPv4 addresses 10.0.146.96
IPv6 address -	Instance state Running	Public IPv4 DNS -
Hostname type IP name: ip-10-0-146-96.ap-south-1.compute.internal	Private IP DNS name (IPv4 only) ip-10-0-146-96.ap-south-1.compute.internal	Elastic IP addresses -
Answer private resource DNS name -	Instance type t2.micro	AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more
Auto-assigned IP address -	VPC ID vpc-006f7f751f903aabf (project-vpc)	Auto Scaling Group name -
IAM Role -	Subnet ID subnet-02b4f902e82c572bd (project-subnet-private2-ap-south-1b)	
IMDSv2 Required		
Details	Security	Networking
	Storage	Status checks
	Monitoring	Tags

```

[ec2-user@ip-10-0-130-20 ~]$ client_loop: send disconnect: Broken pipe
kartikhegadi@Kartiks-MacBook-Air aws.02 % aws ec2-instance-connect ssh --instance-id i-0f4c9d54a2a7d69e0
The authenticity of host '10.0.146.96 (<no hostip for proxy command>)' can't be established.
ED25519 key fingerprint is SHA256:QlXoaT9eTTzcM/GLTrdNx9/mrPVecmBDw8wWo0dLfS4.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.0.146.96' (ED25519) to the list of known hosts.
Last login: Fri Nov 10 15:14:23 2023 from ip-10-0-142-226.ap-south-1.compute.internal

#
##### Amazon Linux 2
#####\
#####| AL2 End of Life is 2025-06-30.
#####|
#####| \#/
#####| V~' '->
#####|
#####| A newer version of Amazon Linux is available!
#####|
#####| Amazon Linux 2023, GA and supported until 2028-03-15.
#####| https://aws.amazon.com/linux/amazon-linux-2023/

[ec2-user@ip-10-0-146-96 ~]$ ping google.com
PING google.com (142.250.183.110) 56(84) bytes of data.

^[[A^Z
[1]+  Stopped                  ping google.com

```

```

[ec2-user@ip-10-0-146-96 ~]$ ping google.com
PING google.com (142.250.183.110) 56(84) bytes of data.

^[[A^Z
[1]+  Stopped                  ping google.com
[ec2-user@ip-10-0-146-96 ~]$ curl google.com
^Z
[2]+  Stopped                  curl google.com
[ec2-user@ip-10-0-146-96 ~]$ yum install htop
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
You need to be root to perform this command.
[ec2-user@ip-10-0-146-96 ~]$ sudo yum install htop
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
---> Package htop.x86_64 0:2.0.2-1.amzn2.0.2 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                Arch             Version           Repository        Size
=====
Installing:
 htop                  x86_64           2.0.2-1.amzn2.0.2 amzn2-core        98 k

Transaction Summary
=====
Install 1 Package

Total download size: 98 k
Installed size: 207 k

```