ICT & Infra S3 S/NO week 5: Advanced AWS VPC

Date: Sep 2020
Version 1.0

Class: I3 CB01

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Introduction

S/NO: In this exercise you will learn how to create secure VPC peering. Learn how to create a secure access to the private VPC.

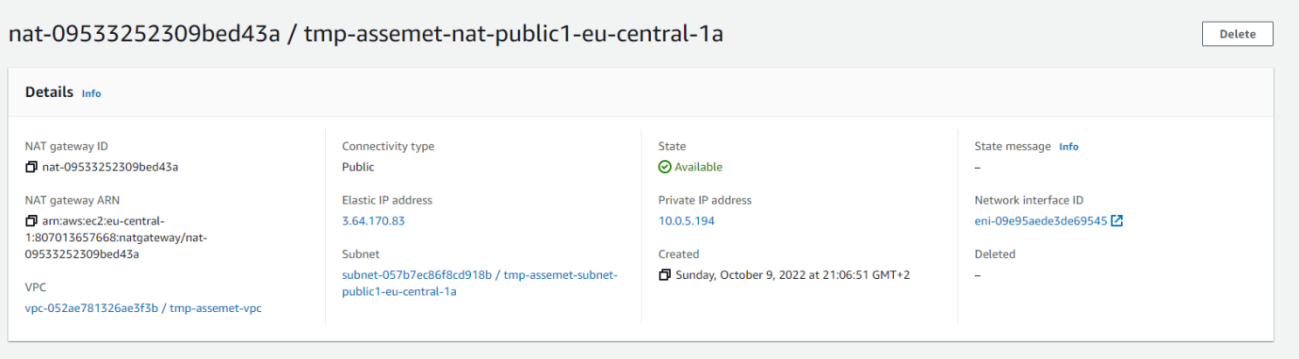
How to deliver your assignments?

Fill in this document with required information. Answer questions and upload the document to Canvas at most one week after the assignment is given.

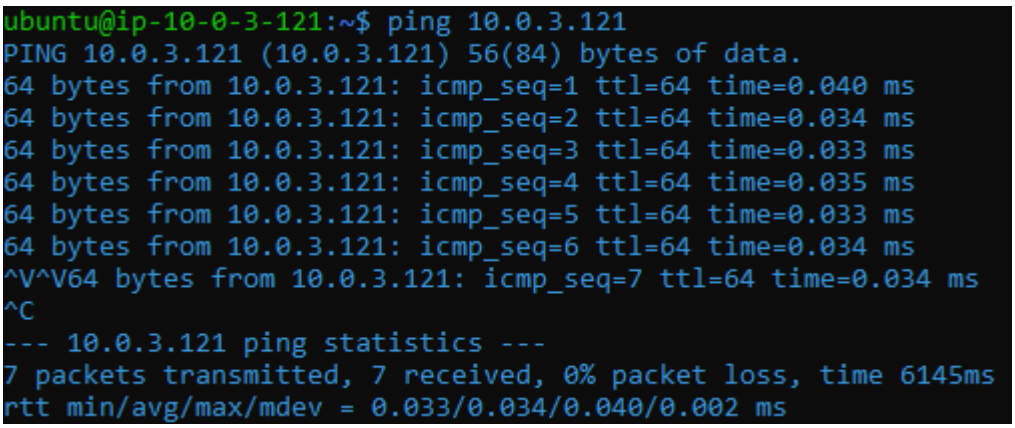
Assignment 1: VPC peering setup, secure implementation with NAT instance

- Fellow demos from the lecture. Create necessary entities / configurations in AWS.
- Demonstrate successful ping between web-vpc and db1 instances.
- Demonstrate successful ssh-access to db1 instance from nat instance.
- Demonstrate working sample web-application

First we created a new private subnet. We also created a NAT instance and we attached that to the private subnet to be accessible to the public subnet

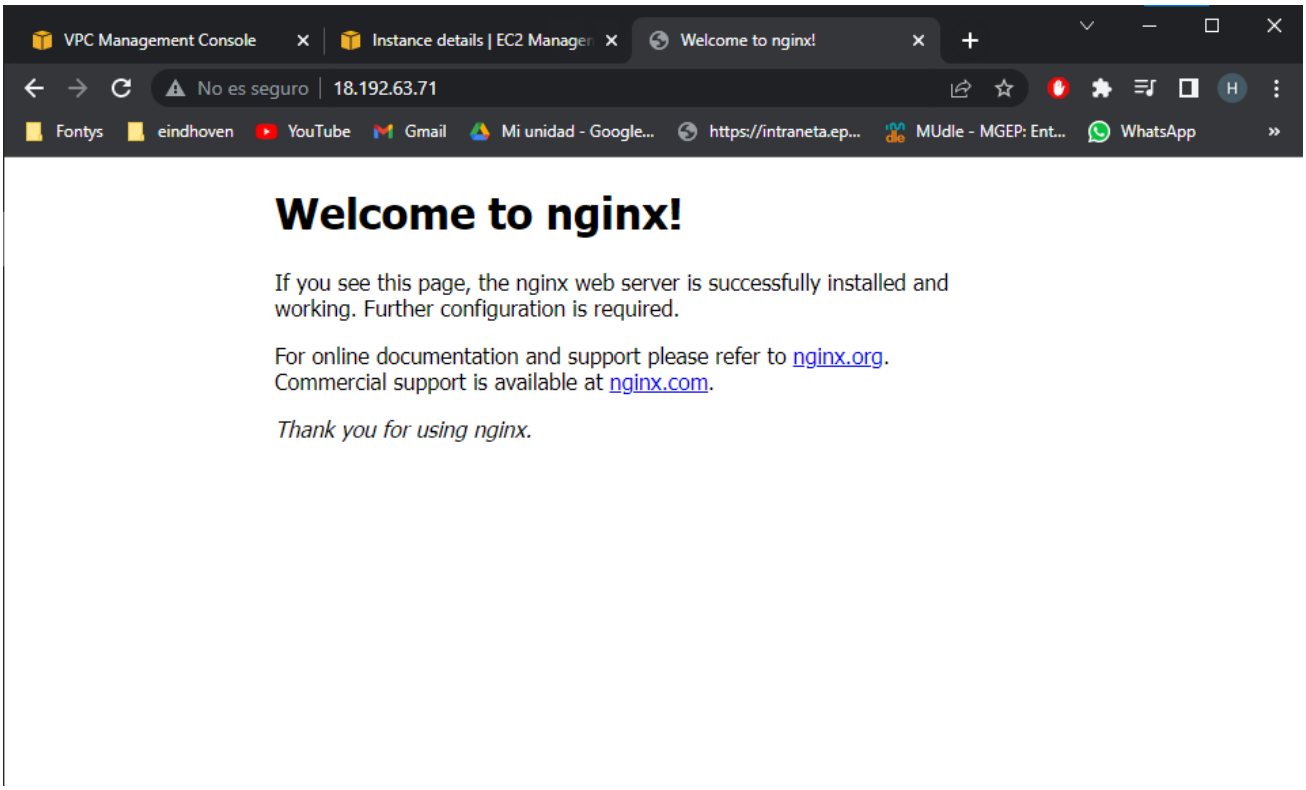


We also enabled the traffic to get a successful ping



```
Welcome to Ubuntu 20.04.5 LTS (GNU/Linux 5.15.0-1019-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Sun Oct  9 19:31:46 UTC 2022

  System load:  0.0               Processes:             98
  Usage of /:   19.9% of 7.57GB   Users logged in:       0
  Memory usage: 23%               IPv4 address for eth0: 10.0.3.121
  Swap usage:   0%


0 updates can be applied immediately.


The list of available updates is more than a week old.
To check for new updates run: sudo apt update
New release '22.04.1 LTS' available.
Run 'do-release-upgrade' to upgrade to it.


Last login: Sun Oct  9 19:24:55 2022 from 109.175.184.34
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-0-3-121:~$
```

To enable the SSH we had to give the public key of the SSH to connect to the database



Everything is running successfully

Assignment 2: VPC peering use, secure design with NAT instance for your case-study

- Brainstorm with your case-study group mates where you can apply VPC peering or/and secure design with NAT instance for accessing the private VPC instances.

It can be used to connect both clouds we are using for our case study (for redundancy) so that they can communicate