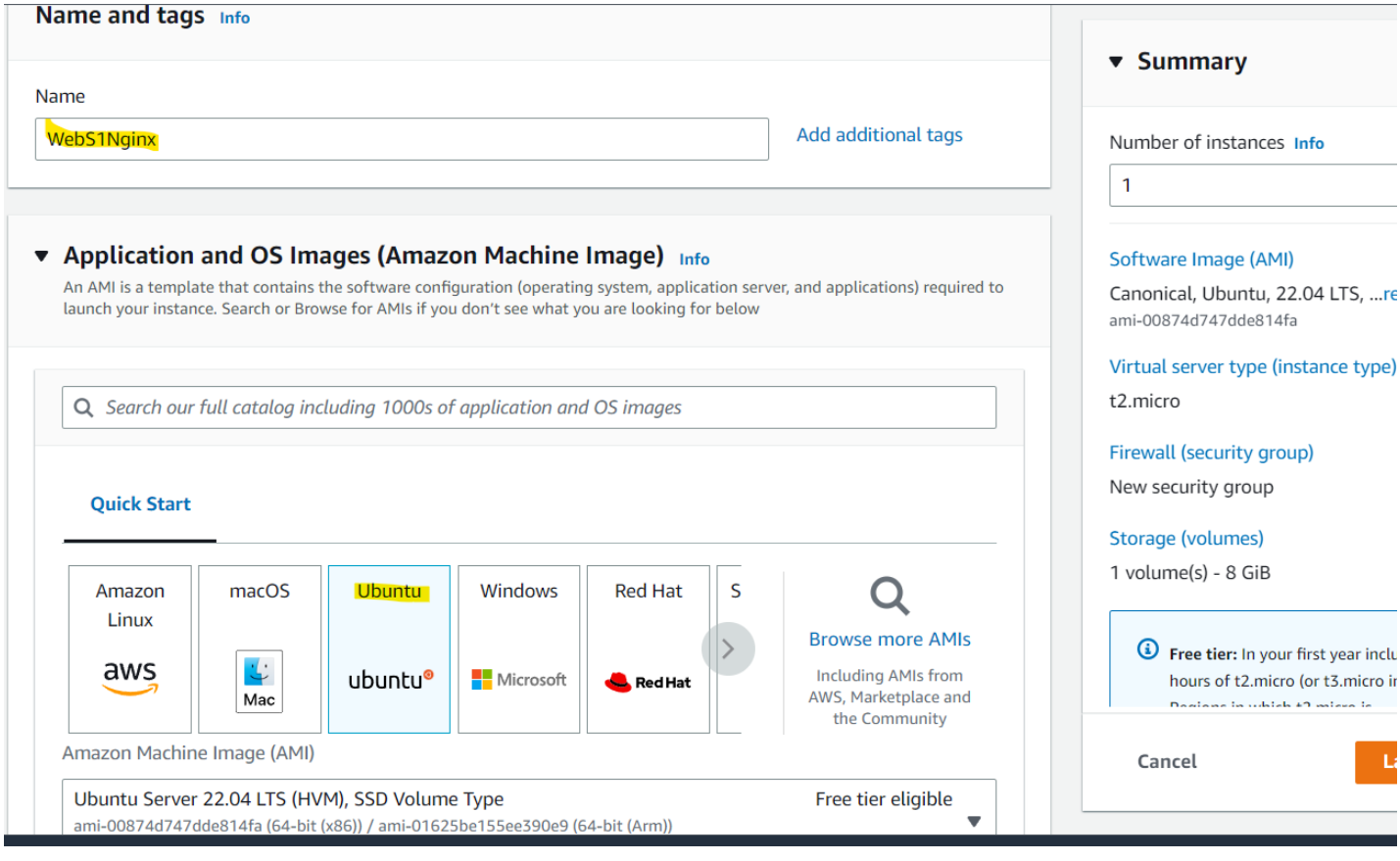
Module-2: EC2 Assignment - 1

You have been asked to:

1. Create an Instance in us-east-1 (N. Virginia) region with an Ubuntu OS and install Nginx for making them web servers

2. Change the default website with a hello world page



Create key pair

Key pairs allow you to connect to your instance securely.

Enter the name of the key pair below. When prompted, store the private key in a secure and accessible location on your computer. **You will need it later to connect to your instance.** Learn more

Key pair name

myKP0902

The name can include upto 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

- (●) RSA
  RSA encrypted private and public key pair
- ( ) ED25519
  ED25519 encrypted private and public key pair (Not supported for Windows instances)

Private key file format

- (●) .pem
  For use with OpenSSH
- ( ) .ppk
  For use with PuTTY

Cancel | Create key pair

Network settings Info

VPC - *required* Info

vpc-0fab1c85235d6abf7 (default)
172.31.0.0/16

Subnet Info

No preference

Create new subnet

Auto-assign public IP Info

Enable

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

- (•) Create security group
- ( ) Select existing security group

Security group name - *required*

launch-wizard-1

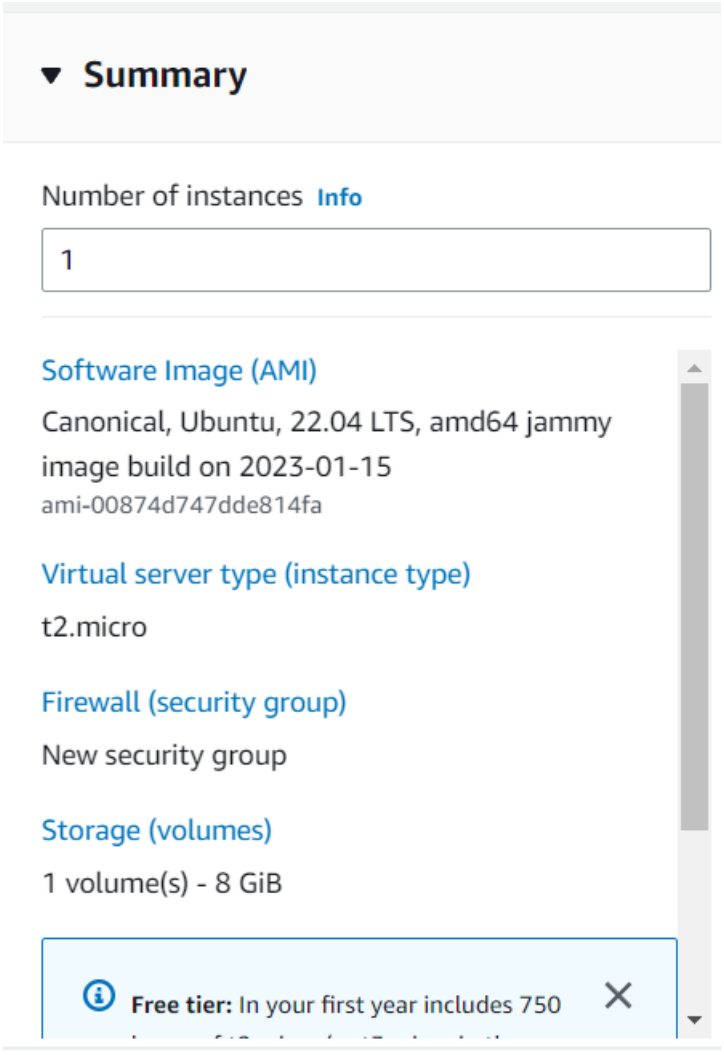
This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and ._-:/()#,@[]+=&;{}!$*

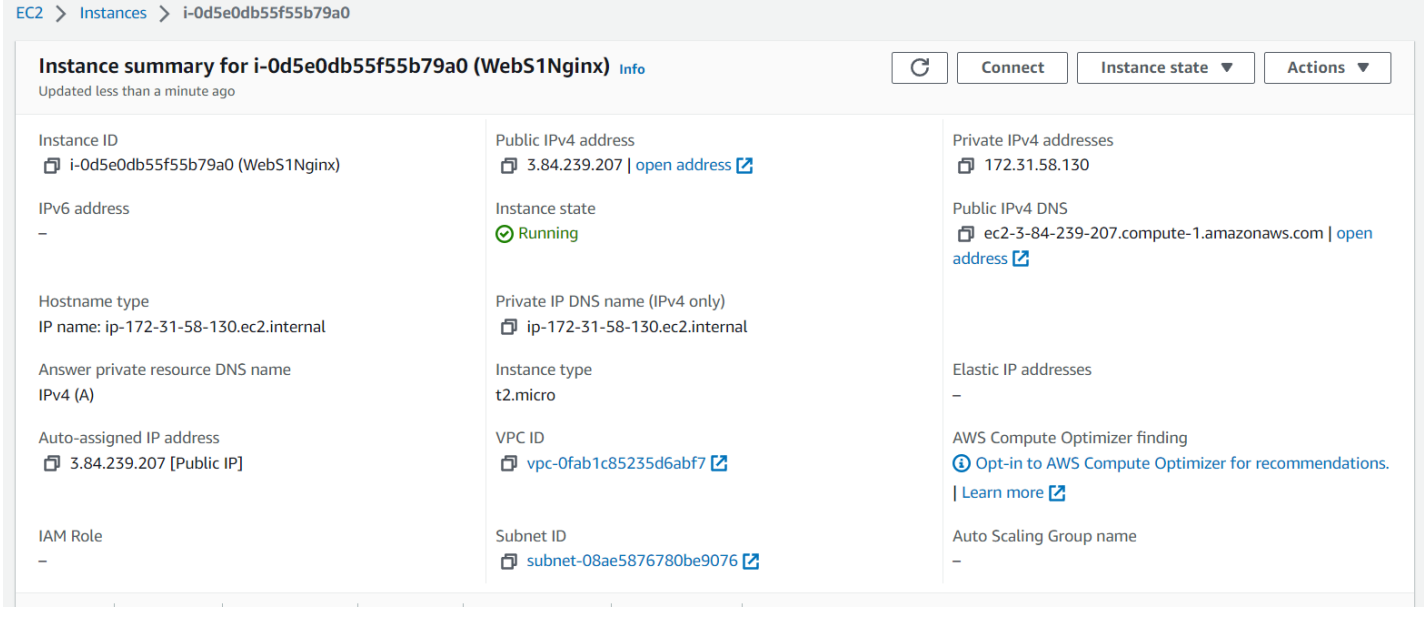
Description - *required* Info

launch-wizard-1 created 2023-02-09T12:51:39.054Z

Inbound security groups rules

Security group rule 1 (TCP, 22, 0.0.0.0/0) Remove


Summary
Number of instances Info
1
Software Image (AMI)
Canonical, Ubuntu, 22.04 LTS, amd64 jammy image build on 2023-01-15
ami-00874d747dde814fa
Virtual server type (instance type)
t2.micro
Firewall (security group)
New security group
Storage (volumes)
1 volume(s) - 8 GiB
Free tier: In your first year includes 750


EC2 > Instances > i-0d5e0db55f55b79a0
Instance summary for i-0d5e0db55f55b79a0 (WebS1Nginx) Info
Updated less than a minute ago
Connect
Instance state
Actions
Instance ID
i-0d5e0db55f55b79a0 (WebS1Nginx)
Public IPv4 address
3.84.239.207 | open address
Private IPv4 addresses
172.31.58.130
IPv6 address
–
Instance state
Running
Public IPv4 DNS
ec2-3-84-239-207.compute-1.amazonaws.com | open address
Hostname type
IP name: ip-172-31-58-130.ec2.internal
Private IP DNS name (IPv4 only)
ip-172-31-58-130.ec2.internal
Answer private resource DNS name
IPv4 (A)
Instance type
t2.micro
Elastic IP addresses
–
Auto-assigned IP address
3.84.239.207 [Public IP]
VPC ID
vpc-0fab1c85235d6abf7
AWS Compute Optimizer finding
Opt-in to AWS Compute Optimizer for recommendations. | Learn more
IAM Role
–
Subnet ID
subnet-08ae5876780be9076
Auto Scaling Group name
–

```
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [622 kB]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [130 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [8104 B]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [550 kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [84.7 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 c-n-f Metadata [556 B]
Get:37 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [639 kB]
Get:38 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [87.9 kB]
Get:39 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [11.3 kB]
Get:40 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [4960 B]
Get:41 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [996 B]
Get:42 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [240 B]
Fetched 25.7 MB in 4s (6379 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
33 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-58-130:~$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu jammy-security InRelease
Reading package lists... Done
ubuntu@ip-172-31-58-130:~$
```

i-0d5e0db55f55b79a0 (WebS1Nginx)

PublicIPs: 3.84.239.207 PrivateIPs: 172.31.58.130

Installing nginx

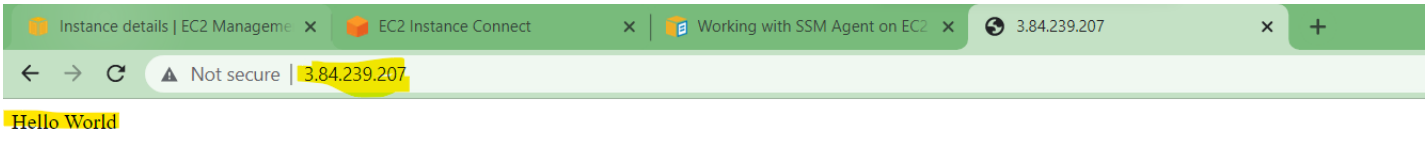
Command: sudo apt-get install nginx

```
Reading package lists... Done
ubuntu@ip-172-31-58-130:~$ sudo apt-get install nginx
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  fontconfig-config fonts-dejavu-core libdeflate0 libfontconfig1 libgd3 libjbig0 libjpeg-turbo8 libjpeg8 libnginx-mod-http-geoip2 libnginx-mod-http-image-f
  libnginx-mod-http-xslt-filter libnginx-mod-mail libnginx-mod-stream libnginx-mod-stream-geoip2 libtiff5 libwebp7 libxpm4 nginx-common nginx-core
Suggested packages:
  libgd-tools fcgiwrap nginx-doc ssl-cert
The following NEW packages will be installed:
  fontconfig-config fonts-dejavu-core libdeflate0 libfontconfig1 libgd3 libjbig0 libjpeg-turbo8 libjpeg8 libnginx-mod-http-geoip2 libnginx-mod-http-image-f
  libnginx-mod-http-xslt-filter libnginx-mod-mail libnginx-mod-stream libnginx-mod-stream-geoip2 libtiff5 libwebp7 libxpm4 nginx nginx-common nginx-core
0 upgraded, 20 newly installed, 0 to remove and 33 not upgraded.
Need to get 2689 kB of archives.
After this operation, 8335 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 fonts-dejavu-core all 2.37-2build1 [1041 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 fontconfig-config all 2.13.1-4.2ubuntu5 [29.1 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libdeflate0 amd64 1.10-2 [70.9 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libfontconfig1 amd64 2.13.1-4.2ubuntu5 [131 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 libjpeg-turbo8 amd64 2.1.2-0ubuntu1 [134 kB]
```

Viewing Hello world:

```
root@ip-172-31-58-130:~# cd /var/www/html/
root@ip-172-31-58-130:/var/www/html# vi index.html
root@ip-172-31-58-130:/var/www/html# ls
index.html  index.nginx-debian.html
root@ip-172-31-58-130:/var/www/html# ls -ltr
total 8
-rw-r--r-- 1 root root 612 Feb  9 13:10 index.nginx-debian.html
-rw-r--r-- 1 root root  12 Feb  9 13:27 index.html
root@ip-172-31-58-130:/var/www/html# cat index.html
Hello World
root@ip-172-31-58-130:/var/www/html#
```

Webpage:



Hello World