

Creating, Configuring and Interacting with a new cloud VM using AWS

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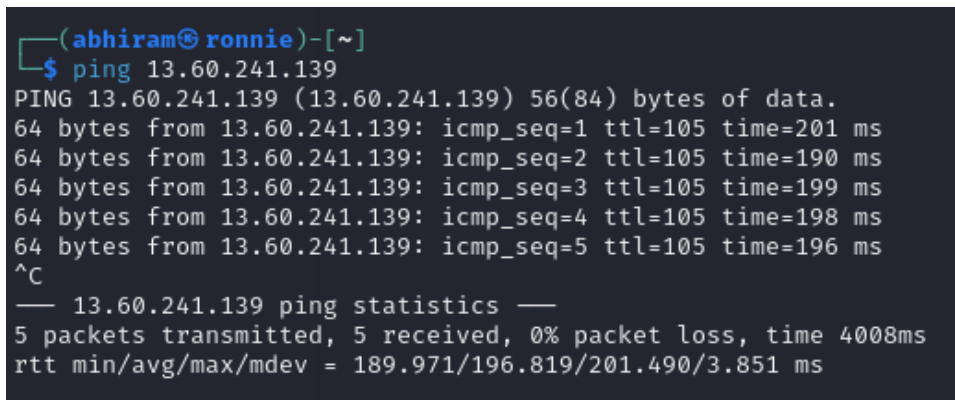
The steps involved in Creating and configuring a free cloud VM includes the following:

Creating and configuring a free Cloud VM using AWS

1. Log into AWS console using credentials.
2. Search EC2 and select the dashboard.
3. Click Launch Instance and configure the VM based on Free tier requirements.
4. Generate a key pair so as to login from ssh.
5. Then, after reviewing the settings, launch the instance.
6. Now, in the inbound rules' settings, only SSH is enabled. Hence, add ICMP v4 address rule such that we can ping the cloud VM.

The public IP of the VM obtained is **13.60.241.139**.

Ping Testing the VM instance



```
(abhiram@ronnie)-[~]
$ ping 13.60.241.139
PING 13.60.241.139 (13.60.241.139) 56(84) bytes of data.
64 bytes from 13.60.241.139: icmp_seq=1 ttl=105 time=201 ms
64 bytes from 13.60.241.139: icmp_seq=2 ttl=105 time=190 ms
64 bytes from 13.60.241.139: icmp_seq=3 ttl=105 time=199 ms
64 bytes from 13.60.241.139: icmp_seq=4 ttl=105 time=198 ms
64 bytes from 13.60.241.139: icmp_seq=5 ttl=105 time=196 ms
^C
— 13.60.241.139 ping statistics —
5 packets transmitted, 5 received, 0% packet loss, time 4008ms
rtt min/avg/max/mdev = 189.971/196.819/201.490/3.851 ms
```

Entering the VM instance using SSH

I was able to enter into ssh session of the VM using the following command:

```
sudo ssh -i Documents/cloudkey.pem ec2-user@13.60.241.139
```

```
(abhiram@ronnie)-[~]
$ sudo ssh -i Documents/cloudkey.pem ec2-user@13.60.241.139
The authenticity of host '13.60.241.139 (13.60.241.139)' can't be established.
ED25519 key fingerprint is SHA256:PeIbSVYPLnXqMkM3zRqweeAzeKhgyfBxYMHI09jrV8.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '13.60.241.139' (ED25519) to the list of known hosts.
```

```
#
~ ##### Amazon Linux 2023
~ \#####\
~ \###|
~ \#/\
~ /V-' → https://aws.amazon.com/linux/amazon-linux-2023
~ ~~~~~
~ .-.
~ _/_
~ /m/'
```

```
[ec2-user@ip-172-31-47-44 ~]$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
        inet 127.0.0.1/8 scope host lo
            valid_lft forever preferred_lft forever
        inet6 ::1/128 scope host noprefixroute
            valid_lft forever preferred_lft forever
2: ens5: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 9001 qdisc mq state UP group default qlen 1000
    link/ether 0a:48:51:b:41:23 brd ff:ff:ff:ff:ff:ff
        altname enp0s5
        altname eni-0000273215d6f8afc
        altname device-number-0.0
        inet 172.31.47.44/20 metric 512 brd 172.31.47.255 scope global dynamic ens5
            valid_lft 3393sec preferred_lft 3393sec
        inet6 fe80::848:51ff:fe1b:4123/64 scope link
            valid_lft forever preferred_lft forever
[ec2-user@ip-172-31-47-44 ~]$
```

Ip a command was also executed which displayed its private IPv4 and v6 addresses.

Ping Testing my public IP from VM instance

I was unable to ping my public IP. After I researched, and I found that there are certain limitations imposed by the ISP blocking the ICMP or ping packets.

```
— 152.58.203.139 ping statistics —
3 packets transmitted, 0 received, 100% packet loss, time 2084ms

[ec2-user@ip-172-31-47-44 ~]$ ping 152.58.203.139
PING 152.58.203.139 (152.58.203.139) 56(84) bytes of data.
```

After successfully interacting with the cloud VM, I successfully terminated the VM from the EC2 dashboard to ensure that it no longer incurs any charges.