

1. Creating Instance on AWS.

Created a Instance of AWS and all Information about AWS

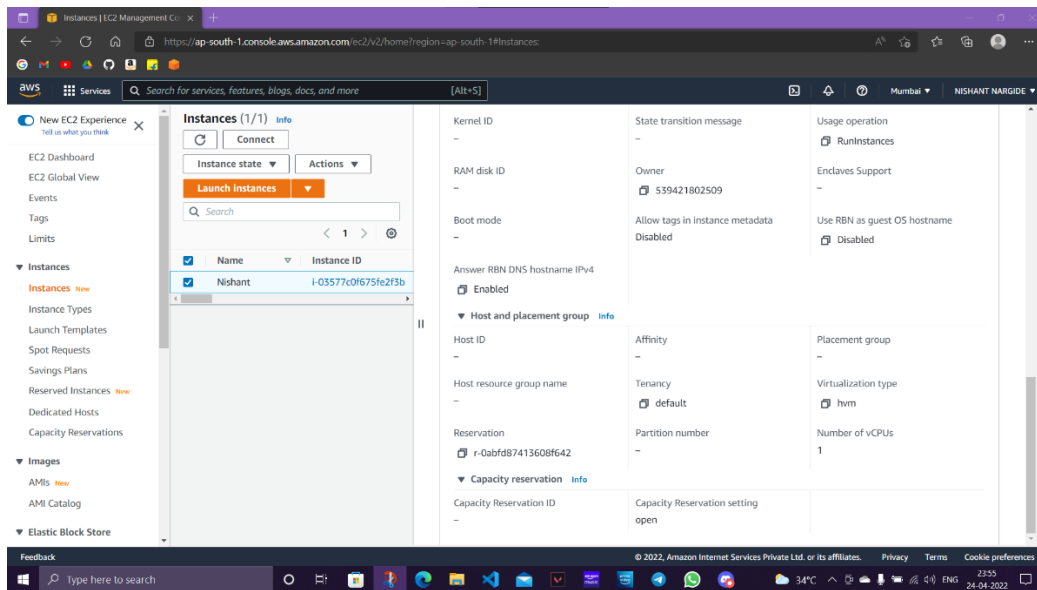
Example: ip address, port, private and public address, instance id etc.

The first screenshot shows the 'Instance: i-03577c0f675fe2f3b (Nishant)' page in the AWS Management Console. The instance is in the 'Running' state. Key details include:

- Instance ID: i-03577c0f675fe2f3b (Nishant)
- Public IPv4 address: 3.110.104.58
- Private IPv4 addresses: 172.31.3.194
- Instance state: Running
- Public IPv4 DNS: ec2-3-110-104-58.ap-south-1.compute.amazonaws.com
- Private IP DNS name (IPv4 only): ip-172-31-3-194.ap-south-1.compute.internal
- Instance type: t2.micro
- Auto Scaling Group name: -

The second screenshot shows the 'Instance details' page for the same instance. Key details include:

- Platform: Amazon Linux (Inferred)
- AMI ID: ami-0a3277f9e9146b74
- AMI name: amzn2-ami-kernel-5.10-hvm-2.0.20220419.0-x86_64-gp2
- Launch time: Sun Apr 24 2022 23:51:41 GMT+0530 (India Standard Time) (1 minute)
- AMI location: amazon/amzn2-ami-kernel-5.10-hvm-2.0.20220419.0-x86_64-gp2
- Stop-hibernate behavior: disabled
- State transition reason: -
- State transition message: -
- Owner: 539421802509



2. Opening the Amazon Linux Console and updating the all package.

Command: `sudo yum update -`

```
Total download size: 681 k
Is this ok [y/d/N]: y
Downloading packages:
Delta RPMs disabled because /usr/bin/applydelta not installed.
(1/2): libcurl-7.79.1-2.amzn2.0.1.x86_64.rpm | 321 kB 00:00:00
(2/2): curl-7.79.1-2.amzn2.0.1.x86_64.rpm | 359 kB 00:00:00
-----
Total | 681 kB 00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Updating : libcurl-7.79.1-2.amzn2.0.1.x86_64 1/4
  Updating : curl-7.79.1-2.amzn2.0.1.x86_64 2/4
  Cleanup : curl-7.79.1-1.amzn2.0.1.x86_64 3/4
  Cleanup : libcurl-7.79.1-1.amzn2.0.1.x86_64 4/4
  Verifying : libcurl-7.79.1-2.amzn2.0.1.x86_64 1/4
  Verifying : curl-7.79.1-2.amzn2.0.1.x86_64 2/4
  Verifying : libcurl-7.79.1-1.amzn2.0.1.x86_64 3/4
  Verifying : curl-7.79.1-1.amzn2.0.1.x86_64 4/4

Updated:
curl.x86_64 0:7.79.1-2.amzn2.0.1 libcurl.x86_64 0:7.79.1-2.amzn2.0.1

Complete!
[ec2-user@ip-172-31-11-31 ~]$
```

3. Installing the docker.

Command: `sudo yum install -y docker`

```
Updated:
curl.x86_64 0:7.79.1-2.amzn2.0.1 libcurl.x86_64 0:7.79.1-2.amzn2.0.1

Complete!
[ec2-user@ip-172-31-11-31 ~]$ sudo yum install -y docker
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package docker.x86_64 0:20.10.13-2.amzn2 will be installed
--> Processing Dependency: runc >= 1.0.0 for package: docker-20.10.13-2.amzn2.x86_64
--> Processing Dependency: libcgrouper >= 0.40.rc1-5.15 for package: docker-20.10.13-2.amzn2.x86_64
--> Processing Dependency: containerd >= 1.3.2 for package: docker-20.10.13-2.amzn2.x86_64
--> Processing Dependency: pigz for package: docker-20.10.13-2.amzn2.x86_64
--> Running transaction check
--> Package containerd.x86_64 0:1.4.13-2.amzn2.0.1 will be installed
--> Package libcgrouper.x86_64 0:0.41-21.amzn2 will be installed
--> Package pigz.x86_64 0:2.3.4-1.amzn2.0.1 will be installed
--> Package runc.x86_64 0:1.0.3-2.amzn2 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package Arch Version Repository Size
=====
Installing:
docker x86_64 20.10.13-2.amzn2 amzn2extra-docker 40 M
=====
```

```

(4/5): docker-20.10.13-2.amzn2.x86_64.rpm | 40 MB 00:00:01
(5/5): runc-1.0.3-2.amzn2.x86_64.rpm | 3.0 MB 00:00:00
-----
Total | 64 MB/s | 67 MB 00:00:01
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : runc-1.0.3-2.amzn2.x86_64 1/5
  Installing : containerd-1.4.13-2.amzn2.0.1.x86_64 2/5
  Installing : libcgrouper-0.41-21.amzn2.x86_64 3/5
  Installing : pigz-2.3.4-1.amzn2.0.1.x86_64 4/5
  Installing : docker-20.10.13-2.amzn2.x86_64 5/5
  Verifying : containerd-1.4.13-2.amzn2.0.1.x86_64 1/5
  Verifying : pigz-2.3.4-1.amzn2.0.1.x86_64 2/5
  Verifying : runc-1.0.3-2.amzn2.x86_64 3/5
  Verifying : libcgrouper-0.41-21.amzn2.x86_64 4/5
  Verifying : docker-20.10.13-2.amzn2.x86_64 5/5

Installed:
  docker.x86_64 0:20.10.13-2.amzn2

Dependency Installed:
  containerd.x86_64 0:1.4.13-2.amzn2.0.1 libcgrouper.x86_64 0:0.41-21.amzn2 pigz.x86_64 0:2.3.4-1.amzn2.0.1 runc.x86_64 0:1.0.3-2.amzn2

Complete!
[ec2-user@ip-172-31-11-31 ~]$ █

```

4. Starting the Docker

Command: `sudo service docker start`

```

Installing : pigz-2.3.4-1.amzn2.0.1.x86_64 4/5
Installing : docker-20.10.13-2.amzn2.x86_64 5/5
Verifying : containerd-1.4.13-2.amzn2.0.1.x86_64 1/5
Verifying : pigz-2.3.4-1.amzn2.0.1.x86_64 2/5
Verifying : runc-1.0.3-2.amzn2.x86_64 3/5
Verifying : libcgrouper-0.41-21.amzn2.x86_64 4/5
Verifying : docker-20.10.13-2.amzn2.x86_64 5/5

Installed:
  docker.x86_64 0:20.10.13-2.amzn2

Dependency Installed:
  containerd.x86_64 0:1.4.13-2.amzn2.0.1 libcgrouper.x86_64 0:0.41-21.amzn2 pigz.x86_64 0:2.3.4-1.amzn2.0.1 runc.x86_64 0:1.0.3-2.amzn2

Complete!
[ec2-user@ip-172-31-11-31 ~]$ sudo service docker start
Redirecting to /bin/systemctl start docker.service
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$
[ec2-user@ip-172-31-11-31 ~]$

```

5.Command: `docker run --help`

```

Run a command in a new container
[ec2-user@ip-172-31-11-31 ~]$ docker run --help
Usage: docker run [OPTIONS] IMAGE [COMMAND] [ARG...]

Run a command in a new container

Options:
  --add-host list          Add a custom host-to-IP mapping (host:ip)
  -a, --attach list        Attach to STDIN, STDOUT or STDERR
  --blkio-weight uint16     Block IO (relative weight), between 10 and 1000, or 0 to disable (default 0)
  --blkio-weight-device list Block IO weight (relative device weight) (default [])
  --cap-add list           Add Linux capabilities
  --cap-drop list          Drop Linux capabilities
  --cgroup-parent string    Optional parent cgroup for the container
  --cgroupns string         Cgroup namespace to use (host|private)
                           'host': Run the container in the Docker host's cgroup namespace
                           'private': Run the container in its own private cgroup namespace
                           '' : Use the cgroup namespace as configured by the
                               default-cgroupns-mode option on the daemon (default)
  --cidfile string          Write the container ID to the file
  --cpu-period int          Limit CPU CFS (Completely Fair Scheduler) period
  --cpu-quota int           Limit CPU CFS (Completely Fair Scheduler) quota
  --cpu-rt-period int       Limit CPU real-time period in microseconds
  --cpu-rt-runtime int      Limit CPU real-time runtime in microseconds
  -c, --cpu-shares int      CPU shares (relative weight)

```