

Lab Assignment 1

Steps to create free instance on Amazon EC2:

1. Go to <http://aws.amazon.com/ec2/> ([Links to an external site.](#))
2. Now create an account on AWS.
3. In creating this account, you need to give your credit credentials.
4. Also, they will verify the credentials given by you, through a message or a phone call.
5. Now after creating the account go to the services and then click on EC2 under compute category.
6. Now after clicking on EC2 select Launch Instance on the page.
7. Now you will have to select the Amazon Machine Image.
8. Once you launch the instance and select the AMI it will go through certain status checks, two status checks to be precise.
9. Also while creating your instance you need to create your key pair for your instance and download that file.
10. Now to connect this instance you will need PUTTY and PUTTYGEN for windows user.
11. Now in PUTTY give your host name and public dns name of the instance.
12. Now the key pair file which you downloaded during creating your instance, import that in PUTTYGEN and create an .ppk file.
13. This .ppk file will be given in the PUTTY so that it gets the proper key for your instance.
14. Now click on open to open the console and write the commands, as you are connected to your instance now.

Using Commands:

1. **uname -a:** It is used to provide information of our instance, such as when it is created, opened, ip_address, etc.
2. **whoami:** It is used to provide the user name of the instance. In this case it is ec2-user.
3. **df -h:** It is used to provide information about the filesystem, where the temporary files are mounted etc.
4. **ifconfig -a:** It is used to provide configuration of our machine that we have created on AWS.
5. **netstat:** It is used to provide information about the network status for our instance.

Below are the screenshots of the above command results:

The screenshot shows a Dell laptop screen with a terminal window open. The terminal displays several system status commands:

- `Using username "ec2-user".`
- `Authenticating with public key "imported-openssh-key"`
- `Amazon Linux AMI`
- `https://aws.amazon.com/amazon-linux-ami/2016.09-release-notes/`
- `4 package(s) needed for security, out of 8 available`
- `Run "sudo yum update" to apply all updates.`
- `[ec2-user@ip-172-31-10-235 ~]$ uname -a`
- `Linux ip-172-31-10-235 4.4.41-36.55.amzn1.x86_64 #1 SMP Wed Jan 18 01:03:26 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux`
- `[ec2-user@ip-172-31-10-235 ~]$ whoami`
- `ec2-user`
- `[ec2-user@ip-172-31-10-235 ~]$ df -h`
- `-bash: df-h: command not found`
- `[ec2-user@ip-172-31-10-235 ~]$ ls df -h`
- | Filesystem | Size | Used | Avail | Use% | Mounted on |
|------------|------|------|-------|------|------------|
| devtmpfs | 498M | 56K | 488M | 1% | /dev |
| tmpfs | 498M | 0 | 498M | 0% | /dev/shm |
| /dev/xvda1 | 7.8G | 984M | 6.7G | 13% | / |
- `[ec2-user@ip-172-31-10-235 ~]$ ifconfig -a`
- | Link encap | Type | inet
addr | Broadcast | Mask | inet
netmask | inet
addr | Broadcast | Mask |
|------------|------|-----------------------------|-----------------------------|---|---|--------------|-----------|---------------|
| Ethernet | eth0 | fe80::fe80:91ff:fe82:687/64 | fe80::fe80:91ff:fe82:687/64 | ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff | ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff | 127.0.0.1 | 127.0.0.1 | 255.255.255.0 |
- `[ec2-user@ip-172-31-10-235 ~]$ netstat`
- | Proto | Recv-Q | Send-Q | Local Address | Foreign Address | Stat |
|---|--------|--------|---------------|-----------------|------|
| Active Internet connections (w/o servers) | | | | | |
- `[ec2-user@ip-172-31-10-235 ~]$ netstat`
- | Proto | Recv-Q | Send-Q | Local Address | Foreign Address | Stat |
|---|--------|--------|---------------|-----------------|------|
| Active Internet connections (w/o servers) | | | | | |
- `[ec2-user@ip-172-31-10-235 ~]$ netstat`
- | Proto | Recv-Q | Send-Q | Local Address | Foreign Address | Stat |
|--|--------|--------|-----------------------------|-----------------------------|---------------------------------------|
| tcp | 0 | 304 | ip-172-31-10-235.us-wes:ssh | host-155-246-141-44.d:58427 | ESTA
BLISHED |
| Active UNIX domain sockets (w/o servers) | | | | | |
| Proto | refcnt | Flags | Type | State | I-Node Path |
| unix | 10 | [] | DGRAM | 944 | /dev/log |
| unix | 3 | [] | STREAM | CONNECTED | 11393 |
| unix | 3 | [] | STREAM | CONNECTED | 11392 |
| unix | 2 | [] | DGRAM | 11388 | |
| unix | 3 | [] | STREAM | CONNECTED | 10069 /var/run/dbus/system_bus_socket |
| unix | 2 | [] | DGRAM | 11100 | |
| unix | 3 | [] | STREAM | CONNECTED | 10068 |
| unix | 3 | [] | DGRAM | 8330 | |
| unix | 2 | [] | DGRAM | 10649 | |
| unix | 22 | [] | DGRAM | 10690 | |
| unix | 2 | [] | DGRAM | 10694 | |
| unix | 2 | [] | DGRAM | 9960 | |
| unix | 2 | [] | DGRAM | 10059 | |
| unix | 3 | [] | STREAM | CONNECTED | 10064 |
| unix | 3 | [] | STREAM | CONNECTED | 10063 |
- `[ec2-user@ip-172-31-10-235 ~]$`