

AWS TASK 1

Main Objectives:

- ☀ Create a key pair
- ☀ Create a security group
- ☀ Launch an instance using the above created key pair and security group.
- ☀ Create an EBS volume of 1 GB.
- ☀ The final step is to attach the above created EBS volume to the instance

Creating key Pair

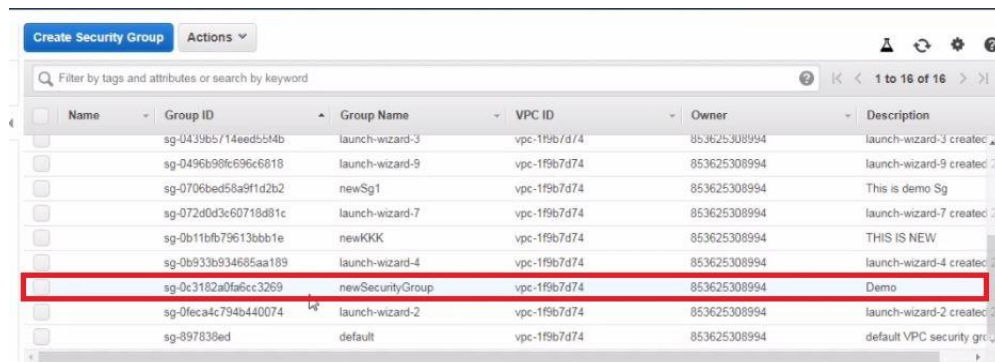
Command: `aws ec2 create-key-pair --key-name newpass`

```
C:\Users\Ashish>aws ec2 create-key-pair --key-name newpass
{
  "KeyFingerprint": "2c:f5:71:75:10:7c:b2:56:b9:ea:6c:5e:e7:7d:c7:95:aa:58:94:
e8",
  "KeyMaterial": "-----BEGIN RSA PRIVATE KEY-----\nMIIEpAIBAAKCAQEA
s2s0sDkfJnL
C8TG+tgBbzx9mqwma6fYU0RKFsIirJRtd09u1\nKFLAjrIXZGIIbq10kS7ZlFj+eA07/saBFuaGrTagr
oHe63Bvu8xLA8RJvFVvSKS2\nppgBV/C2tB3hTpoX0ms6kv1eg95bbNvgjLdsqPq6F8Eww5CsMmJE6Z7z
XHYSJL5tP\nwxUma9igzsbZpFLHMFgGBDyHcvS9/N/GNsqqjig+TpiuMwFX61abfrnDqLLzWI8+U\nxVT
wED0UeE3/i86MRduIrK3CgHavWQEhotv/V3tao+m5uSnzV6ScDxvO1L5v6t+d\nfoqGFkjPLLdNTIinu
KPuoqxqaLoU7QF8K+wkqQIDAQABAoIBADA8Kx8RTEmw4sfb\nnos14URZe98gvVfsw0ER4+U6J1xXTxKb
XTxCHJtN33eEB5ghyJfgsIzyZrFfxkRIO\nnpddlbyGVx89AhQDA6pkPdb9f/v7N7SwZM4jvYC56zSDL/
ZkwPDE0bsJB0zmc6Fre\nnQ37pg/L0EngmzKSs2ic0LCiFgU0i2MrG1Laeh7+CdQV6dXq50FDWE2tERRL
HiFZ5\nETpkJqT3+22ZZmnq+UpoahYEhgaxFCvhGJ81117jYrXB1npNkoNdeIJZphLb+8zX\nnr3EXBP1
6501KehCWY/FH1CK14mcfHPISuq8Z7pg7d83KyDmbTZ/uoVKE+ax+C15t\nnk5K9Yb0CgYEA2Fez0yS4p
Sj9IdpaN/qkL6t6Ra0SmqJ68Ux2Ss4mCd8fTPK+9Ld\nnrKWiSM56Eok6sTYMV5ZYiEBU7QE0GB8Y9Y8
P8fN4rppRVuSgyx0kuqYYj06LnhmR\nl1vn9e1eCI4fGT04DiTqC8hmIjdFgBbLKRvg6RbKkzXhFBmOKS
WIiH8CgYEA1E7I\nnCYo4NEgn807SynsLIS34XU8DuDOFmJXUyevExMab0s0Q1Ip5FkV/STxs07ACBdI
1\n17BMPPiUUQ4gCN7CN8EY3CKA1TEpiPjWUNLNOpocZEGwPVEoJ3t12vBAZYdT7015\nnvsZpkheLAM/
RT0mtw/VB6sTmk1nJovda5PZMVaccGyB2kwp+1+tsqwqBzJARig6e\nnCa8Tp5hbo50Zzjwut1j1pCF1g
C4xqdnQG18b4/3HVuqR4PtWrZGL6zRgNGrrrW9y\ndZvZkQsdPPpDuz5Ez11D6nAfan7egUjno88mU/u
BGZK40Bt8BFNR+E582z1zJg/y\nnYw0ecdAcxE0gQsGxglUMBQKBgQC8/90oUPmz4UBdRd41DtBbmzbsq
fiftI4Lxeag\nUuVL6UexJ9nrXIuympPwRUE7x28ARoo9gEbvS00YF21M+UkAHRkjZP4XEst206ACy\nnN
tcogiUgQzIHhAYBD/FdFF/fglD+JfIpmSvposfF0zt6AtUEC4PA4cQck43jg9y4\nn02I1JQKBgQCnCtPz
```

Creating Security-group

Command: `aws ec2 create-security-group --group-name newSecurityGroup --description "Demo" --vpc-id vpc-1f9b7d74`

```
C:\Users\Ashish>aws ec2 create-security-group --group-name newSecurityGroup --description "Demo" --vpc-id vpc-1f9b7d74
{"GroupId": "sg-0c3182a0fa6cc3269"}
```

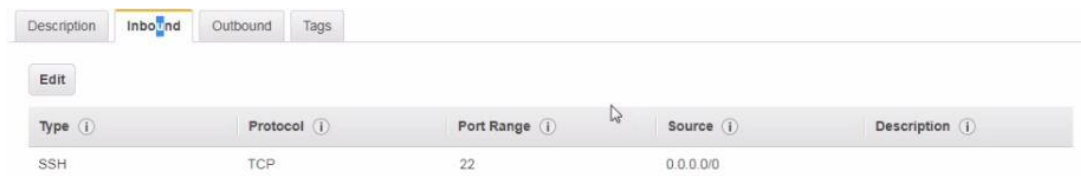


Name	Group ID	Group Name	VPC ID	Owner	Description
	sg-0439bb714eed5b14b	launch-wizard-3	vpc-1f9b7d74	853625308994	launch-wizard-3 created 2018-08-01 10:00:00
	sg-0496b98fc696c6818	launch-wizard-9	vpc-1f9b7d74	853625308994	launch-wizard-9 created 2018-08-01 10:00:00
	sg-0706bed58a9f1d2b2	newSg1	vpc-1f9b7d74	853625308994	This is demo Sg
	sg-072d0d3c60718d81c	launch-wizard-7	vpc-1f9b7d74	853625308994	launch-wizard-7 created 2018-08-01 10:00:00
	sg-0b11bf79613bbb1e	newKKK	vpc-1f9b7d74	853625308994	THIS IS NEW
	sg-0b533b34685aa189	launch-wizard-4	vpc-1f9b7d74	853625308994	launch-wizard-4 created 2018-08-01 10:00:00
	sg-0c3182a0fa6cc3269	newSecurityGroup	vpc-1f9b7d74	853625308994	Demo
	sg-0feca4c794b440074	launch-wizard-2	vpc-1f9b7d74	853625308994	launch-wizard-2 created 2018-08-01 10:00:00
	sg-897838ed	default	vpc-1f9b7d74	853625308994	default VPC security group

Assigning ingress rule to security-group

Command: `aws ec2 authorize-security-group-ingress --group-name newSecurityGroup --protocol tcp --port 22 --cidr 0.0.0.0/0`

```
C:\Users\Ashish>aws ec2 authorize-security-group-ingress --group-name newSecurityGroup --protocol tcp --port 22 --cidr 0.0.0.0/0
```



Type	Protocol	Port Range	Source	Description
SSH	TCP	22	0.0.0.0/0	

For Launching an instance using CLI

Command: `aws ec2 run-instances --image-id ami-0e306788ff2473ccb --instance-type t2.micro --security-group-ids {sg-015e9d81ee97c0ecb} --subnet-id subnet-b94d42d1 --count 1 --key-name newpass`

```
C:\Users\Ashish>aws ec2 run-instances --image-id ami-0e306788ff2473ccb --instance-type t2.micro --security-group-ids sg-0c3182a0fa6cc3269 --subnet-id subnet-b94d42d1 --count 1 --key-name newpass
```

Launch Instance Connect Actions

Filter by tags and attributes or search by keyword

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
SlaveNode1	i-00cf6e4a7dddf365d	t2.micro	ap-south-1a	stopped		None	
MasterNode	i-0bba3a7b9921efd93	t2.micro	ap-south-1a	stopped		None	
Client	i-0820e4cded939105d	t2.micro	ap-south-1a	stopped		None	
SlaveNode2	i-0af32eddbaabe4a4b	t2.micro	ap-south-1a	stopped		None	
	i-06d7f1f9f3d016ed0	t2.micro	ap-south-1a	stopped		None	
	i-010315ad83c1e7839	t2.micro	ap-south-1a	running	Initializing	None	ec2-13-235-114-61.ap-...
	i-0d8291a063a7584...	t2.micro	ap-south-1a	terminated		None	

Command for creating EBS volume

Command: `aws ec2 create-volume --size 1 --volume-type gp2 --availability-zone ap-south-1a`

```
C:\Users\Ashish> aws ec2 create-volume --size 1 --volume-type gp2 --availability-zone ap-south-1a
```

Create Volume Actions

Filter by tags and attributes or search by keyword

Name	Volume ID	Size	Volume Type	IOPS	Snapshot	Created	Availability Zone	State
	vol-0049cc7...	1 GiB	gp2	100		October 11, 2020 at...	ap-south-1a	available
	vol-0f275e4d...	8 GiB	gp2	100	snap-027b63b...	October 11, 2020 at...	ap-south-1a	in-use
	vol-0979404...	8 GiB	gp2	100	snap-027b63b...	October 11, 2020 at...	ap-south-1a	in-use
client	vol-0770a4a...	8 GiB	gp2	100	snap-027b63b...	October 2, 2020 at ...	ap-south-1a	in-use
	vol-0fe04c88...	8 GiB	gp2	100	snap-027b63b...	October 2, 2020 at ...	ap-south-1a	in-use
	vol-05e3ba9...	8 GiB	gp2	100	snap-027b63b...	October 1, 2020 at ...	ap-south-1a	in-use
Nodeaaaaaa	vol-0df7efae...	8 GiB	gp2	100	snap-027b63b...	October 1, 2020 at ...	ap-south-1a	in-use
nwwwww	vol-0177d50...	8 GiB	gp2	100	snap-027b63b...	October 1, 2020 at ...	ap-south-1a	in-use

Command for Attaching EBS volume to Running instance

Command: `aws ec2 attach-volume --volume-id vol-080008bd824adc663 --instance-id i-0d8291a063a758488 --device /dev/sdf`

```
C:\Users\Ashish>aws ec2 attach-volume --volume-id vol-0049cc7ae9bc44306 --instance-id i-010315ad83c1e7839 --device /dev/sdf
```

Platform details	Linux/UNIX	network interfaces	eniz
Usage operation	RunInstances	IAM role	-
Source/dest. check	True	Key pair name	newpass
T2/T3 Unlimited	-	Owner	853625308994
EBS-optimized	False	Launch time	October 11, 2020 at 11:23:47 PM UTC+5:30 (less than one hour)
Root device type	ebs	Termination protection	-
Root device	/dev/xvda	Lifecycle	normal
Block devices	/dev/xvda <u>/dev/xvdf</u>	Monitoring	basic
	tg	Alarm status	-

FINAL OUTPUT

```

ap-south-1.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-010315ad83c1e7839
Last login: Sun Oct 11 17:58:41 2020 from ec2-13-233-177-0.ap-south-1.compute.amazonaws.com

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                Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
2 package(s) needed for security, out of 13 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-43-200 ~]$ sudo su
[root@ip-172-31-43-200 ec2-user]# fdisk -l

```

```

https://aws.amazon.com/amazon-linux-2/
2 package(s) needed for security, out of 13 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-43-200 ~]$ sudo su
[root@ip-172-31-43-200 ec2-user]# fdisk -l
Disk /dev/xvda: 8 GiB, 8589934592 bytes, 16777216 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: 66B3909F-969E-4FD1-901C-CEE3A9974A83

Device        Start      End  Sectors  Size Type
/dev/xvda1    4096 16777182 16773087   8G Linux filesystem
/dev/xvda128  2048    4095     2048   1M BIOS boot

Partition table entries are not in disk order.

Disk /dev/xvdf: 1 GiB, 1073741824 bytes, 2097152 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
[root@ip-172-31-43-200 ec2-user]#

```

Thanks For Watching :)