27-aug-2021

1. Instance
2. 2) instance type
3. Rootvolume
4. Instance--------------------------------->volume--->/dev/sda------>this is root device
5. Ami--->amazonmachine image it is bootable snapshot using ami we can launch ec2 instance
6. Snapshot ---> it is backup of ec2-instance we can not launch a ec2-instance because of it is not containg os configuration files.
7. Sg(security group)
8. Inbound

Inbound means remote machine send a request to aws server

22 10.0.0.10(source ip address)---->open ---> means 22 req allow that meachine

Sg group no entry means deny only

40 10.0.0.10--->open ---> means 40 port number open on ec2 instance

Instance check in security group 40 req open source ip number or not it req send to to

40 port number

Not open deny the request

One machine wants to talk another machine need port number and send req to port number so we want ip address+port

In any machine having 0-65535 ports

1. Outbound

Outbound means EC2 machine send a request to ANOTHER MACHINE machine

WHY EC2 SEND REQ TO ANOTHER MACHINE

IN REAL-TIME ONE REQUEST WANTS TO COMPLTE NEED MULTIPLE SERVERS

IT IS 3 SYSTEMS IT WILL CALL 3 TIER ARCHITURE

IT IS 2 SYSTEMS 2-TIER ARCHIRTURE

CLIENT GIVE REQ TO HSBC.COM--🡪IT GO TO ----> SERVER1--------->SERVER2---> SERVER3

ONE REQ COMPLTING WORK NEED 3 SERVERS THAT IS 3-TIER ARCHITURE.

CLIENT GIVE REQ TO HSBC.COM--🡪IT GO TO ----> SERVER1--->SERVER2---> SERVER3-SERVER4

ONE REQ COMPLTING WORK NEED 4 SERVERS THAT IS 4-TIER ARCHITURE.

BECAUSE HOW THEY CREATED APPLICATION

443 10.0.0.10 443 req send to remote machine

80 10.2.2.01 ec2 send 80req to remote machine of destination ip

1. You mention sourceip you can give sourceip /32
2. You mention all ips means 0.0.0.0/0
3. Laptop ------------------sg------------------I1(25.30.3.12)

FROM LAPTOP I SEND A REQ TO I1 THEN I1 CHECKS THAT IP:PORT NUMBER IN SG ARE NOT THEN I1 SEND A REQ TO PARTICULAR IP

OTHER WISE DENY

I OPEN 22 PORT PARTCULAR IP THAT IP INSTANCE CHECKS IN SG IT WILL OPEN TAKE A REQ

1. SSH IS A PROTOCOL BY DEFAULT IT WILL SEND A REQ TO 22 PORT NUMBER
2. I want to ping req give to ec2 open ping type ALL-icmp-ip4 need to oenin sg otherwise not ping from laptop
3. Maximum 5 sg attached to 5.
4. It possible to detach root volume: it is not possible while instance running confdition

It ec2 stopped condition it is possible

1. It is not possible to copy volme from az1-to az2.
2. It is posiible to copy one region to another region snapshot: it is possible

Tasks:

1. Create sg1,allow below inbound rules
2. 22 anywhere
3. 80 23.90.90.
4. Create key-pair
5. Launch redhat linux ec2-instance , attach step1,sg,and step2 keypair

Note: use t2.micro

1. Create elastic ip attaché to ec2-instance.
2. Stop the instance,change instance type to t2.small
3. Start the instance
4. Remove existing sg & attaché default sg
5. Create 2 gb volume attaché ec2 –instance.
6. Terminate ec2-instance.
7. Relese eip.
8. Delete additional volume and keypair.