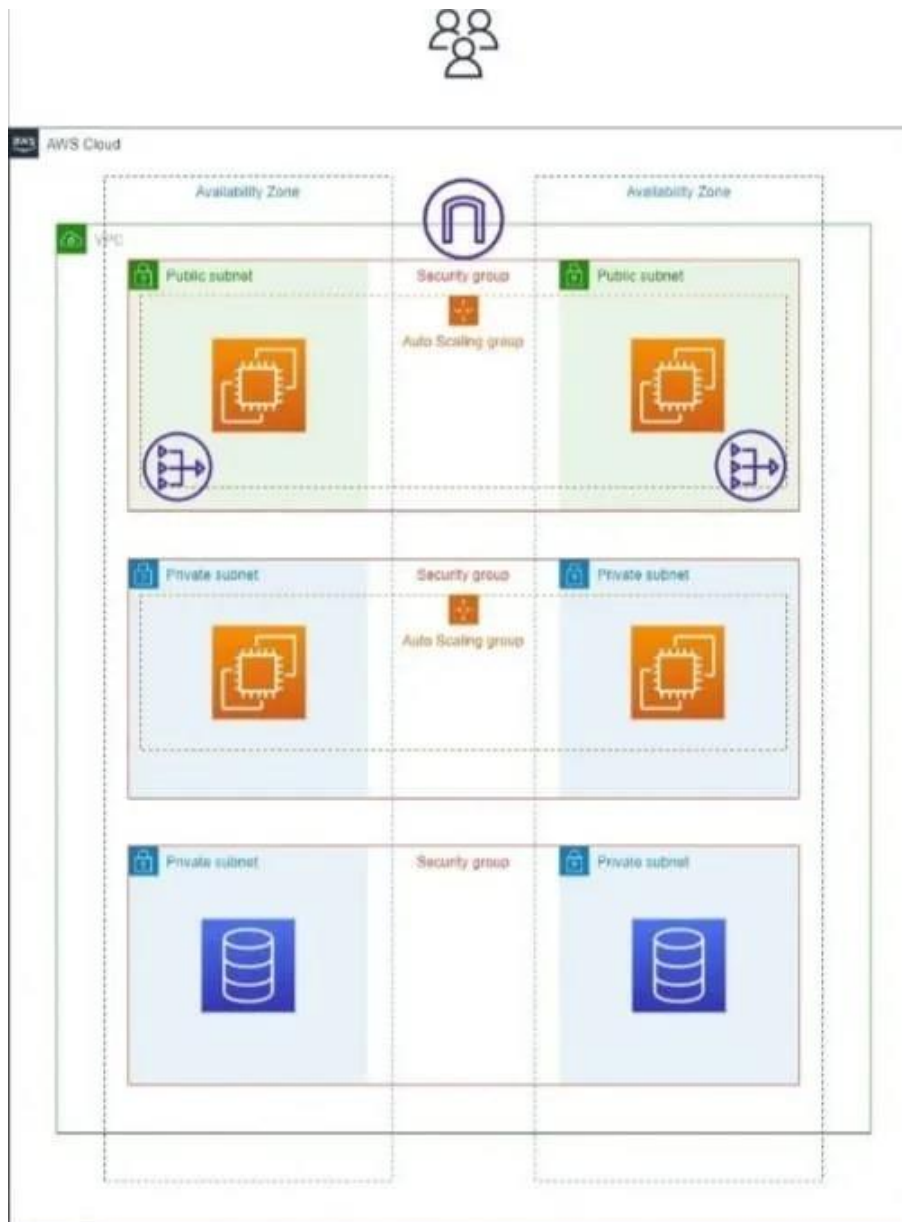# Three Tier Architecture

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Batch : 119(7AM)

Step 1: Create a VPC with 2 Public subnets and 4 private subnets across two availability zones.

Region-mumbai,

Vpc-192.0.0.0/16 ,

	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP o
☐	–	vpc-0145f7287388d94ad	⊘ Available	100.0.0.0/16	–	dopt-04
☐	3tirevpc	vpc-02f804cb49a8b5fd7	⊘ Available	192.0.0.0/16	–	dopt-04
☐	–	vpc-0585e8738d0d3f0a9	⊘ Available	172.31.0.0/16	–	dopt-04
☐	–	vpc-0ecada81256536c39	⊘ Available	200.0.0.0/16	–	dopt-04

Az-----   **Ap-south-1a**   **ap-sout**

Public subnet ipv4---192.0.0.0/24   192.0.1.0/24

Private subnet ipv4—192.0.2.0/24   192.0.3.0/24

Rds-private sub ipv4-192.0.10.0/24   192.0.11.0/24

	Name	Subnet ID	State	VPC	IPv4 CIDR
☐	rds-1az	subnet-0149d9b2246ccb9f8	⊘ Available	vpc-02f804cb49a8b5fd7	3tire...	192.0.10.0/24
☐	rds-3	subnet-0ae1eaf3f4e6602fb	⊘ Available	vpc-02f804cb49a8b5fd7	3tire...	192.0.22.0/24
☐	public-2az	subnet-017f2b700361b599f	⊘ Available	vpc-02f804cb49a8b5fd7	3tire...	192.0.1.0/24
☐	pravite-1az	subnet-0dafc98ad6d9661f6	⊘ Available	vpc-02f804cb49a8b5fd7	3tire...	192.0.2.0/24
☐	public-1az	subnet-046c5d8ce5f598026	⊘ Available	vpc-02f804cb49a8b5fd7	3tire...	192.0.0.0/24
☐	rds-2az	subnet-01d13b22a223a87ad	⊘ Available	vpc-02f804cb49a8b5fd7	3tire...	192.0.11.0/24
☐	–	subnet-0d2cdda966f3ff68b	⊘ Available	vpc-0585e8738d0d3f0a9	172.31.16.0/20
☐	–	subnet-08c013eb4f848da94	⊘ Available	vpc-0585e8738d0d3f0a9	172.31.32.0/20
☐	pravite-2az	subnet-0b7b87fa97bfea467	⊘ Available	vpc-02f804cb49a8b5fd7	3tire...	192.0.3.0/24
☐	–	subnet-0b9f749403caddc5b	⊘ Available	vpc-0585e8738d0d3f0a9	172.31.0.0/20

Step2.now create igw,and attach the vpc:

	Name	Internet gateway ID	State	VPC ID	Owner
☐	3tire-igw	igw-042d20617564e2dc6	⊘ Attached	vpc-02f804cb49a8b5fd7	3tirevpc	590184042478
☐	–	igw-09e8829540a91cfe0	⊘ Attached	vpc-0585e8738d0d3f0a9	590184042478

Step 3.create route table each subnet.

Route tables (10) Info

Actions ▼ Create route table

Find resources by attribute or tag

⟨ 1 ⟩

	Name	Route table ID	Explicit subnet associ...	Edge associations	Main	VPC
☐	praviteroutetable-1az	rtb-0fa47332804ffe025	subnet-0dafc98ad6d966...	–	No	vpc-02f804cb49a8b5fd7 |
☐	rds-2az	rtb-08aa65fed8899f3d7	subnet-01d13b22a223a8...	–	No	vpc-02f804cb49a8b5fd7 |
☐	rdsroutetable-1az	rtb-09f0491bc3cbdf96c	subnet-0149d9b2246ccb...	–	No	vpc-02f804cb49a8b5fd7 |
☐	–	rtb-00d620809fe2a3668	–	–	Yes	vpc-0ecada81256536c39
☐	public-2az	rtb-0fa05f210f26f4f1a	subnet-017f2b700361b5...	–	No	vpc-02f804cb49a8b5fd7 |
☐	publicroutetable-1az	rtb-09308d573203283a9	subnet-046c5d8ce5f598...	–	No	vpc-02f804cb49a8b5fd7 |
☐	pravite-2az	rtb-0c0a8ad486b765139	subnet-0b7b87fa97bfea4...	–	No	vpc-02f804cb49a8b5fd7 |
☐	–	rtb-067c47fb28a14b3f7	–	–	Yes	vpc-0585e8738d0d3f0a9
☐	–	rtb-0b8587c3f8fda1d24	–	–	Yes	vpc-0145f7287388d94ad
☐	–	rtb-058abc384c4d363a4	–	–	Yes	vpc-02f804cb49a8b5fd7 |

After create route table,association their subnets.

4.now create 4 instances with assign scecurity group,

2 public instances,and 2 private instances and there named assigned as

1-az-public instance,   1-az-private instance
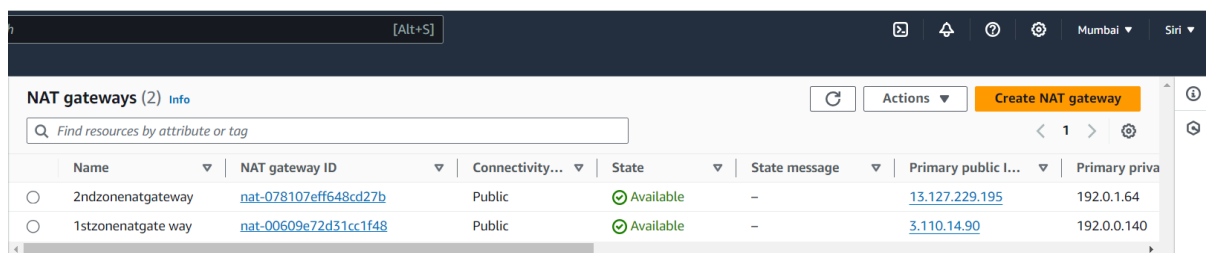
2-az-public instance,   2-az-private instance

Instances (7) Info

Connect Instance state ▼ Actions ▼ **Launch instances** ▼

Find Instance by attribute or tag (case-sensitive)

All states ▼

⟨ 1 ⟩

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
☐		i-00406d4d958deac08	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passed	View alarms +	ap-south-1b	–
☐	pubilc2az	i-0b4031d26ad6088d0	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passed	View alarms +	ap-south-1b	–
☐	pravite2az	i-0452f1eecbfff936a	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passed	View alarms +	ap-south-1b	–
☐		i-0696afca9c1f18759	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passed	View alarms +	ap-south-1a	–
☐	publicins1	i-0f461eafc9daff176	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passed	View alarms +	ap-south-1a	–
☐		i-0d1d0f18c489516c2	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passed	View alarms +	ap-south-1a	–
☐	pravite1az	i-04348f6d752d4f17b	⊘ Running ⊕ ⊖	t2.micro	⊘ 2/2 checks passed	View alarms +	ap-south-1a	–

Security Groups (5) Info

Actions ▼ Export security groups to CSV ▼ **Create security group**

Find resources by attribute or tag

⟨ 1 ⟩

	Name	Security group ID	Security group name	VPC ID	Description
☐	–	sg-0684df9b064fba0dd	3tiresecuritygroup	vpc-02f804cb49a8b5fd7	launch-wizard-1
☐	–	sg-076db8f31e5badd58	default	vpc-0ecada81256536c39	default VPC sec
☐	–	sg-0efcd834db9004c1a	default	vpc-0145f7287388d94ad	default VPC sec
☐	–	sg-0e597a2696d2eddde	default	vpc-02f804cb49a8b5fd7	default VPC sec
☐	–	sg-0ecfb96b312b790c7	default	vpc-0585e8738d0d3f0a9	default VPC sec

And launch the instances,and install nginx,and check the communication in private subnet.but there is no communication in public subnet to private subnet.atleast we want one way communucation.

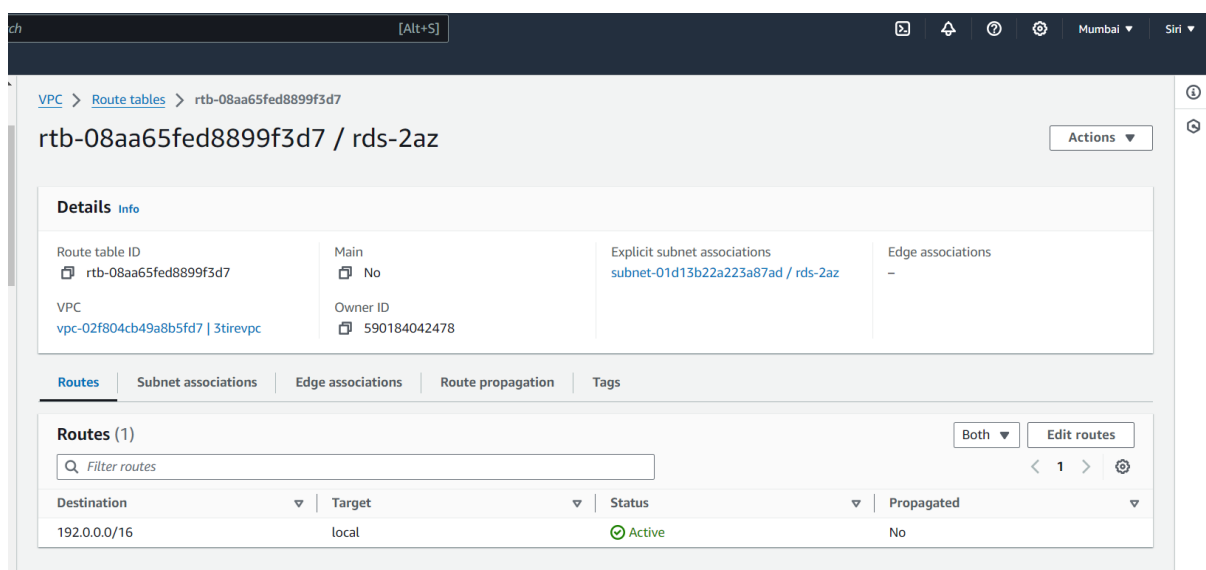atleast one way communication purpas we create a nat gate way.in two different azs

Step 5.create a nat gate way.

After we create nat gate way,we edit route tables in edit routs in private subnets in diff azs.

5.now create auto scalling group,and assign two public subnets and two private subnets in different az.

Autoscalling process:target group,
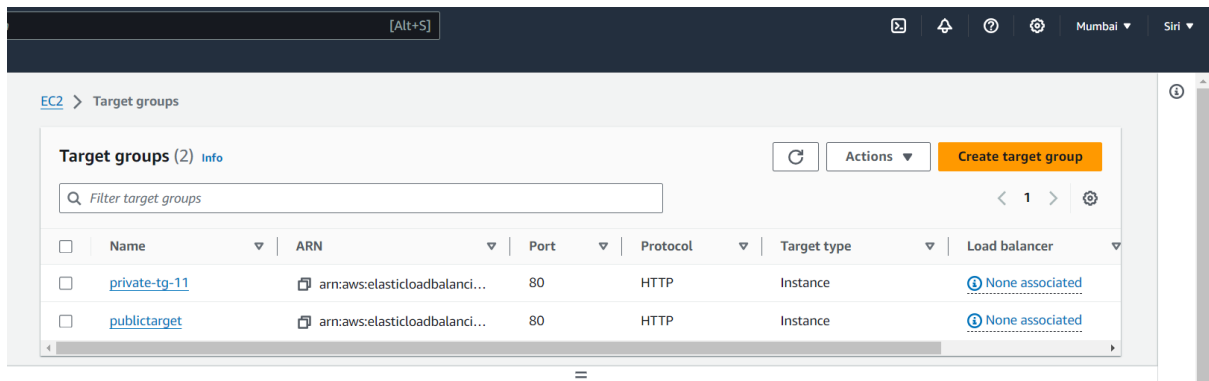
Autoscalling group
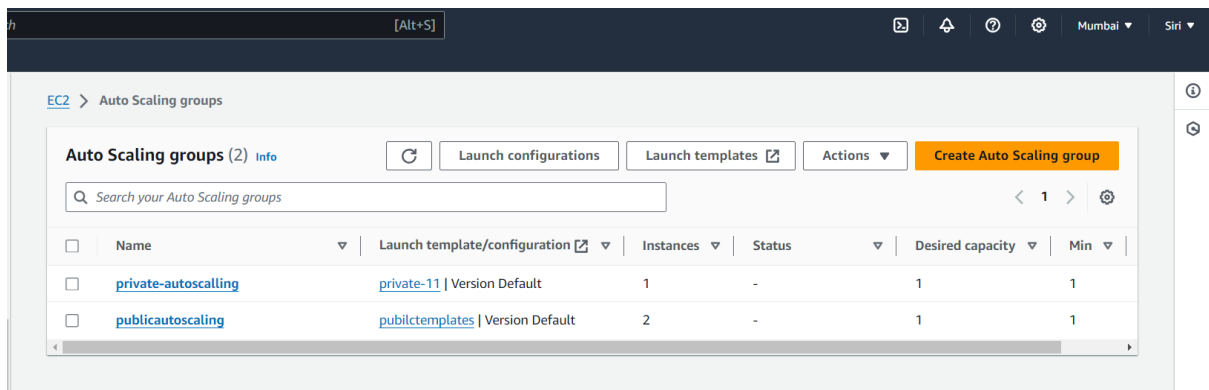
6.now create a rds in two subnets in 2 diff az.

Now create a data base subnet group, and create rds in there subnets with any one engine .its rds connect on only vpc connection.