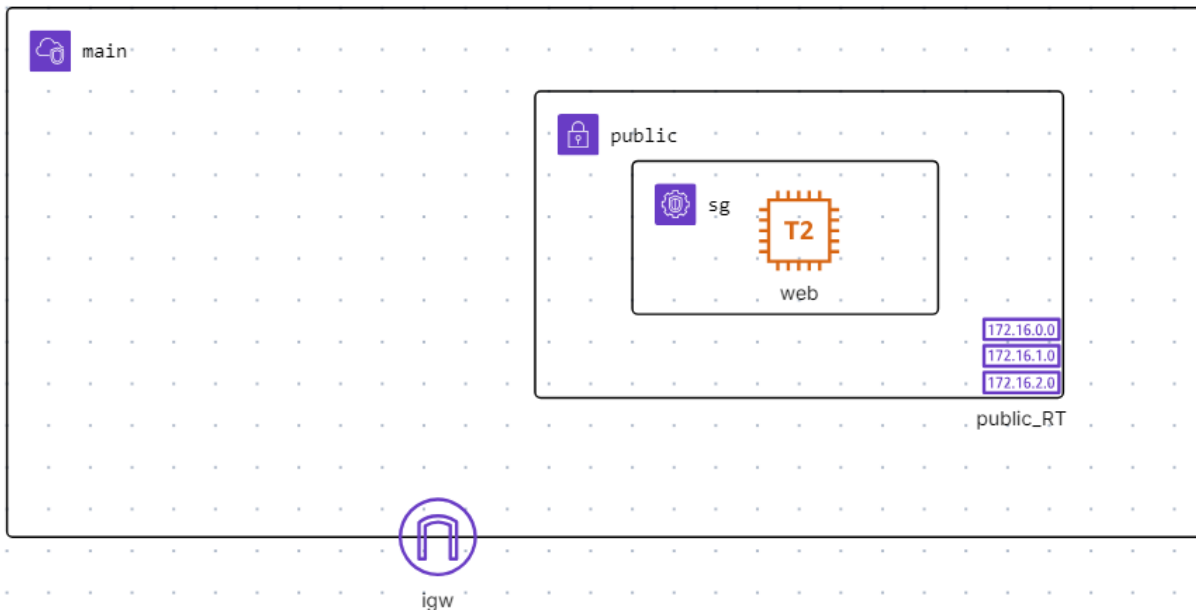# EC2 with SG


```hcl
resource "aws_vpc" "main" {
  cidr_block= "10.0.0.0/16"
  tags = {
    Name= "main"
  }
}

resource "aws_subnet" "public" {
  vpc_id= aws_vpc.main.id
  cidr_block = "10.0.1.0/24"
  availability_zone = "us-east-1a"
  tags = {
    Name= "public-subnet"
  }
}

resource "aws_internet_gateway" "igw" {
  vpc_id= aws_vpc.main.id
  tags = {
    Name= "igw"
  }
}
```

```
resource "aws_route_table" "public_RT" {
  vpc_id= aws_vpc.main.id
  route {
    cidr_block="0.0.0.0/0"
    gateway_id= aws_internet_gateway.igw.id
  }
}

resource "aws_route_table_association" "public_RT_ASSOC" {
  subnet_id= aws_subnet.public.id
  route_table_id= aws_route_table.public_RT.id
}
```

```
resource "aws_security_group" "sg" {
  name= "sg"
  vpc_id= aws_vpc.main.id

  ingress {
    from_port= 22
    to_port= 22
    protocol= "tcp"
    cidr_blocks= ["0.0.0.0/0"]
  }
  ingress {
    from_port= 80
    to_port= 80
    protocol= "tcp"
    cidr_blocks= ["0.0.0.0/0"]
  }
  egress {
    from_port= 0
    to_port= 0
    protocol= "-1"
    cidr_blocks= ["0.0.0.0/0"]
  }
}

resource "aws_instance" "web" {
  ami = "ami-0c02fb55956c7d316"
  instance_type = "t2.micro"
  subnet_id = aws_subnet.public.id
  vpc_security_group_ids = [aws_security_group.sg.id]
}
```

Your VPCs (2) Info

	Name		VPC ID		State
☐	main	▽	vpc-0cc62f0a5fbf540b7	▽	⊘ Available

Subnets (1) Info

	Name		Subnet ID		State
☐	public-subnet	▽	subnet-038ca412b31d6a8b6	▽	⊘ Available

Internet gateways (1) Info

	Name		Internet gateway ID		State
☐	igw	▽	igw-0cbecc4b7e406bf99	▽	⊘ Attached

Route tables (1/4) Info

	Name		Route table ID		Explicit subnet associ...	
☐	bhvhv	▽	rtb-0e23f06e5792893da	▽	–	▽
☑	–		rtb-04b96aec94ac6c95b		subnet-038ca412b31d6a...	
☐	–		rtb-080d5b50fdcfc6b2b		–	
☐	–		rtb-0b7ca0ca4e8e85f8d		–	

Details | Routes | Subnet associations | Edge associations | Route propagation | Tags

Routes (2)

Destination		Target		Status
0.0.0.0/0	▽	igw-0cbecc4b7e406bf99	▽	⊘ Active
10.0.0.0/16		local		⊘ Active

rtb-04b96aec94ac6c95b

Details | **Routes** | **Subnet associations** | **Edge associations** | **Route propagation** | **Tags**

Explicit subnet associations (1)

🔍 Find subnet association

Name	▽	Subnet ID	▽	IPv4 CIDR
public-subnet		subnet-038ca412b31d6a8b6		10.0.1.0/24

Security Groups (3) Info

🔄 **Actions ▼**

🔍 Find resources by attribute or tag

☐	Name	▽	Security group ID	▽	Security group name
☐	–		sg-05a297a612ebc22c6		default
☐	–		sg-014dd003e3126367a		default
☐	–		sg-0a4fe9b168b3fbe3c		sg

Instances (1) Info

Last updated
less than a minute ago 🔄

🔍 Find Instance by attribute or tag (case-sensitive)

☐	Name ✏	▽	Instance ID		Instance state	▽	Instance type
☐			i-0a55dbbd7ad0556a5		⊘ Running 🔍 🔍		t2.micro