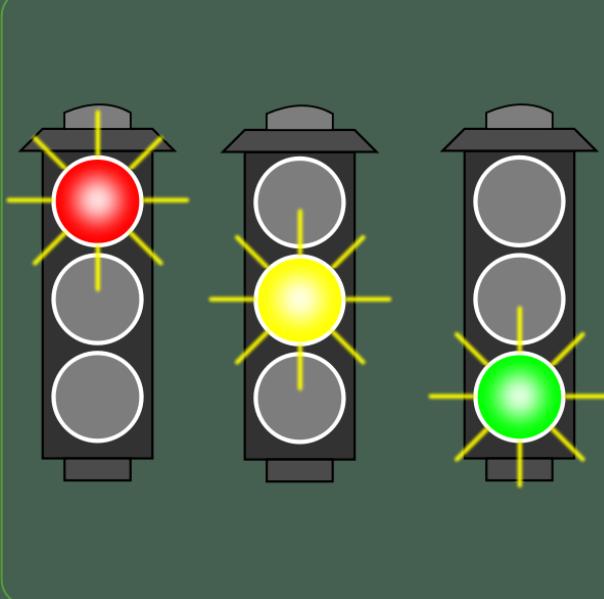


Route Tables & NAT Gateways

Directing Traffic

Route Tables



- Route traffic within your VPC, subnet, CIDR range, IGW
- When you create a VPC you get a 'Main' route table by default
- By default 'Main' **doesn't** allow traffic to/from the internet
- You can create an additional route table for your public routes/subnet
- Every subnet gets an associated route table (defaults to main, so don't put your public routes in main)

Example

Destination

Defines WHAT traffic

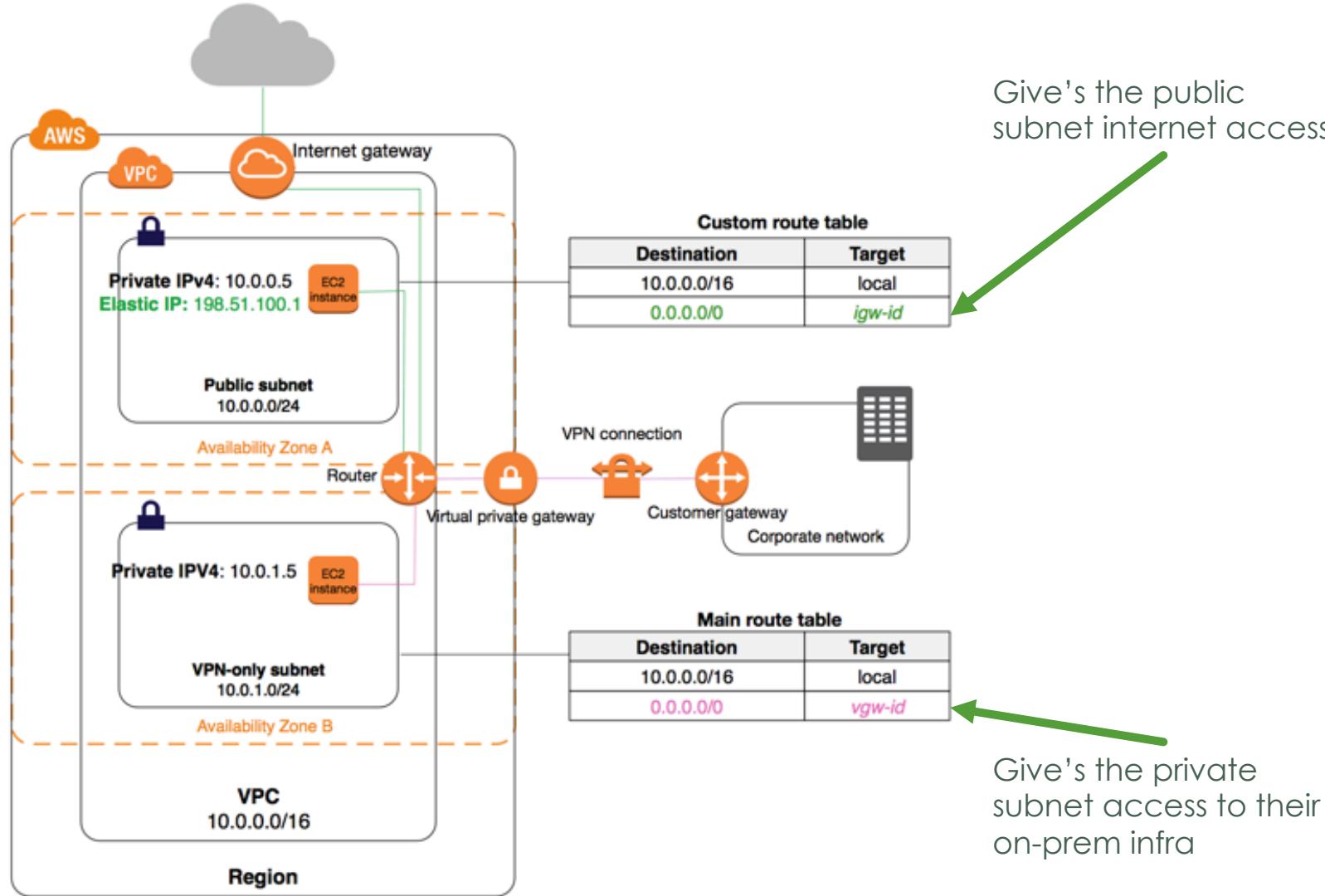
Target

Defines WHERE traffic can travel via

Destination	Target
0.0.0.0/0	igw-12345678901234567

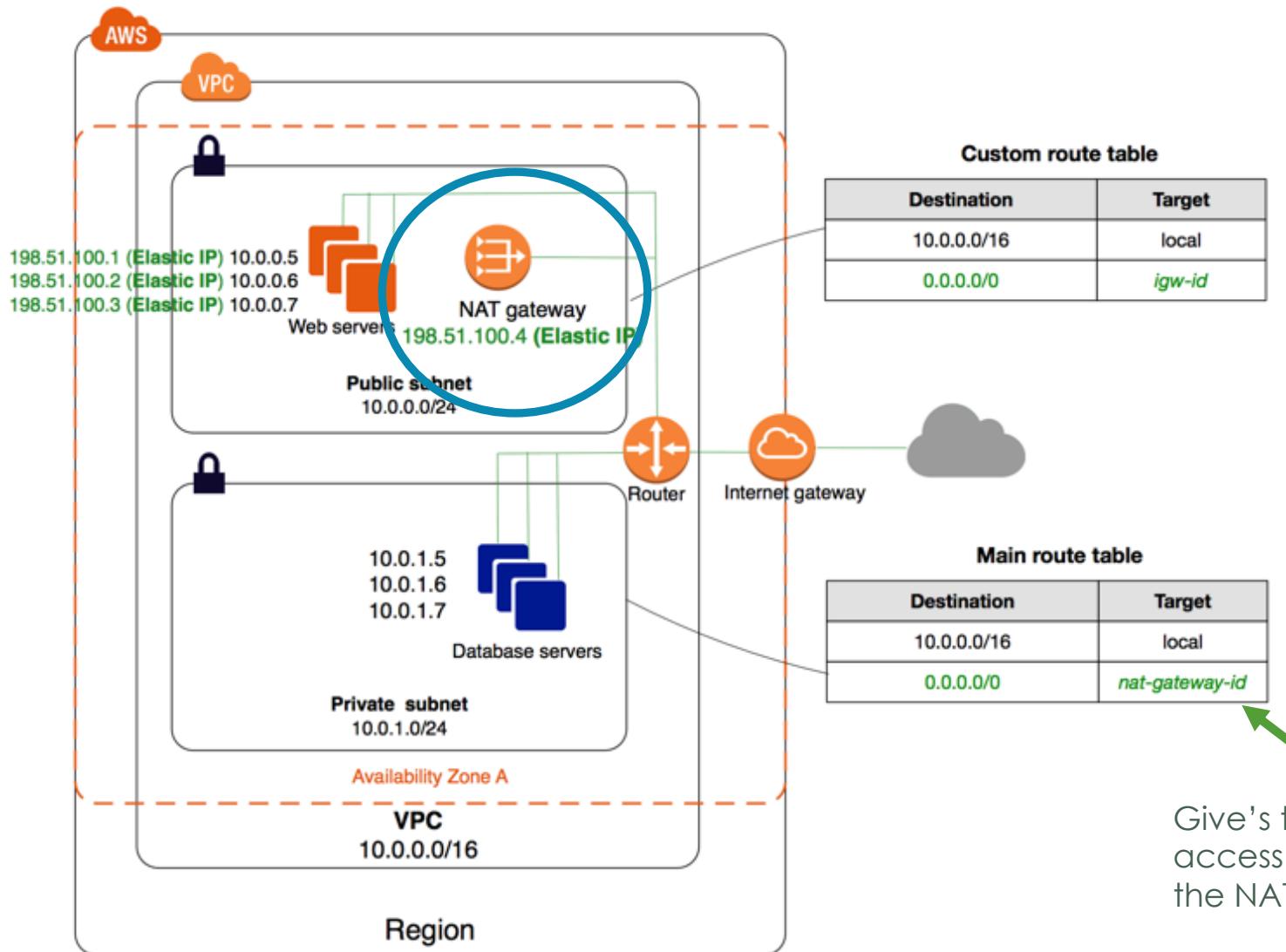
Destination	Target
0.0.0.0/0	<i>nat-gateway-id</i>

0.0.0.0/0 represents all routes not already defined



NATGW

- Network Address Translation – translates private IP's to IP's that the internet can understand
- Managed by AWS
- Sits in the **Public** subnet with an EIP (Elastic IP) or a public IP



Give's the private subnet access to the internet via the NATGW

What are we creating today?

- Your Public Subnets routes internet traffic via your Internet Gateway (**Public** Route Table)
- Your Private Subnets routes internet traffic via your NAT Gateway, which then forwards traffic out the Internet Gateway (Main/Default or **Private** Route Table)

Activity!

Using the format 'Destination' and 'Target' what do we need to add to our Route Tables? Here are the routes we need to allow.

1. Your Public Subnet enables internet traffic via your Internet Gateway
 2. Your Private Subnet enables internet traffic via your NAT Gateway (*which then forwards traffic out the Internet Gateway*)
- 🌶️ Hot Tip: feel free to draw up any diagrams that might help or Google it if you need to 😊

Private Route Table

Public Route Table