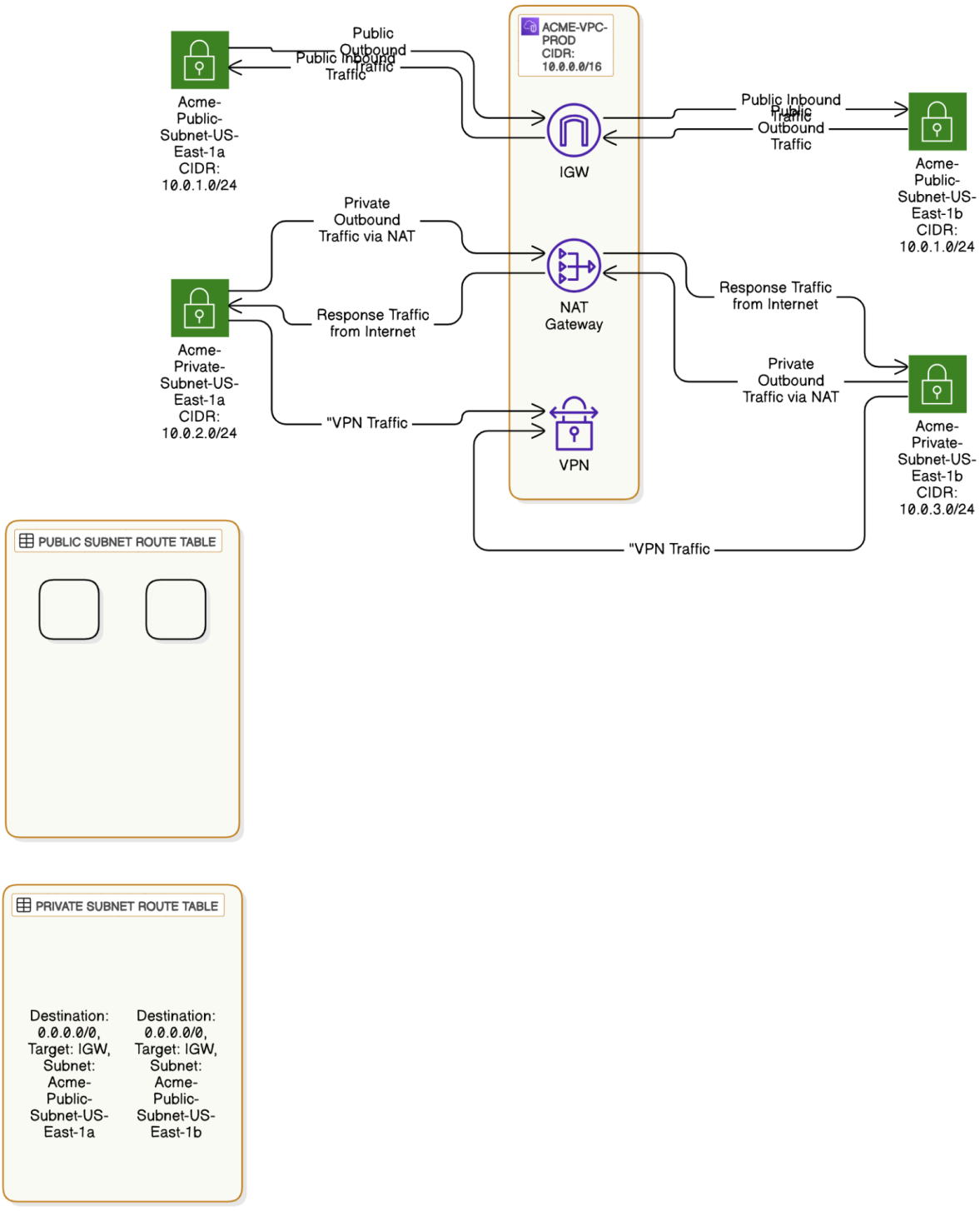
Diagram 1: VPC Diagram

This diagram should show the overall structure of the VPC, its CIDR block, and the location of its associated components.



- **Shape:** A large rectangle representing the VPC.
- **Label:** "Acme-VPC-Prod" (or your chosen name) and its CIDR block (e.g., 10.0.0.0/16). You might also include the IPv6 CIDR block.
- **Internal Components:** Show the placement of the Internet Gateway (IGW), NAT Gateway(s), and any other VPC components like VPN connections (if used). These are usually represented by distinct icons within the VPC rectangle.

Diagram 2: Subnet Diagram

This diagram should detail the subnets within the VPC, their CIDR blocks, and their association with Availability Zones (AZs) and routing tables. Create separate diagrams for public and private subnets for clarity.

Diagram 2a: Public Subnets

- **Shape:** Rectangles within the VPC boundary (from Diagram 1).
- **Label:** "Acme-Public-Subnet-AF-South-1a" (and others, reflecting AZs). Include CIDR block (e.g., 10.0.1.0/24).
- **Connections:** A clear line connecting each public subnet to the Internet Gateway (IGW) in the VPC.
- **Availability Zone:** Indicate the Availability Zone (e.g., af-south-1a, af-south-1b).

Diagram 2b: Private Subnets

- **Shape:** Rectangles within the VPC boundary.
- **Label:** "Acme-Private-Subnet-AF-South-1a," "Acme-Private-Subnet-AF-South-1b," etc., including their CIDR blocks (e.g., 10.0.2.0/24, 10.0.3.0/24).
- **Connections:** Show a line connecting each private subnet to the NAT Gateway (and possibly to an on-premises network via a VPN connection, if applicable). Do *not* show a direct connection to the IGW.
- **Availability Zone:** Indicate the Availability Zone.

Diagram 3: Routing Table Diagram

This diagram displays the routing tables, showing how traffic is directed within the VPC. Create separate diagrams for each routing table for clarity (public and private).

Diagram 3a: Public Subnet Route Table

- **Shape:** A table with columns for "Destination," "Target," and "Subnet."
- **Rows:**
    - Row 1: Destination: 0.0.0.0/0, Target: Internet Gateway (IGW), Subnet: Acme-Public-Subnet-AF-South-1a (and others if you have multiple public subnets)
    - Row 2 (and more if needed): Other specific route entries (e.g., for on-premises network, VPN).

-

Diagram 3b: Private Subnet Route Table

- **Shape:** A table, similar to the public subnet route table.
- **Rows:**
    - Row 1: Destination: 0.0.0.0/0, Target: NAT Gateway, Subnet: Acme-Private-Subnet-AF-South-1a (and others).
    - Row 2 (and more if needed): Other specific route entries (e.g., for on-premises network, VPN or internal subnets).
-

Important Considerations:

- **Use of Symbols:** Use standard network diagramming symbols (e.g., rectangles for subnets, clouds for the internet, gateways as specific icons).
- **Clear Labeling:** Clearly label all components, CIDR blocks, and routing table entries.
- **Connections:** Use arrows to show the flow of traffic.
- **Multiple Diagrams:** Separate diagrams are recommended for easier understanding.
- **Accuracy:** Ensure the information matches the actual configuration of your VPC.

By following these steps, you can create comprehensive network diagrams that clearly illustrate your VPC, subnet, and routing configurations.