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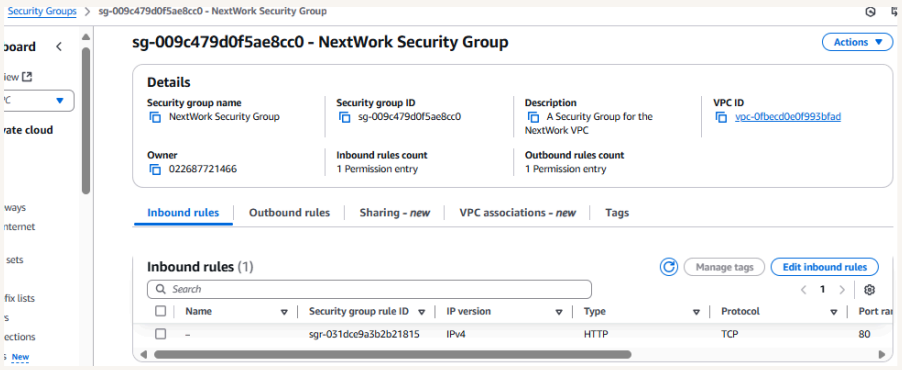
VPC Traffic Flow and Security

Russell Geisler



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Introducing Today's Project!

What is Amazon VPC?

Amazon VPC are used to secure and proect resources.

How I used Amazon VPC in this project

I built a VPC with a security group and network ACL to set rules to control traffic and routing tables to designate IP address ranges.

One thing I didn't expect in this project was...

I did not expect to get to get this in depth in building a secure VPC

This project took me...

I spent about an hour completing this project

Russell Geisler
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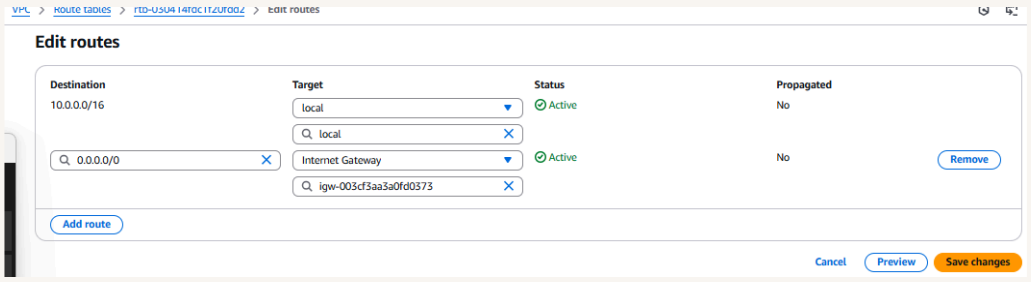
Route tables

The route table is a table of rules, called routes, that decide where the data in your network should go.

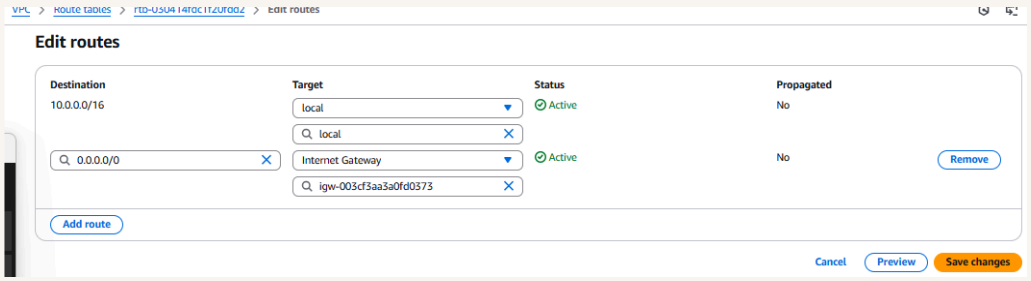
Route tables ae needed tomake a subnet public so internet-bound tarffic can reach the public internet



Route destination and target

Routes are defined by their destination and targets. A destination is the IP address range that traffic wants to get to. The target is the path the traffic will need to take.

The new routes destination is 0.0.0.0/0 and the target is the Internet Gateway



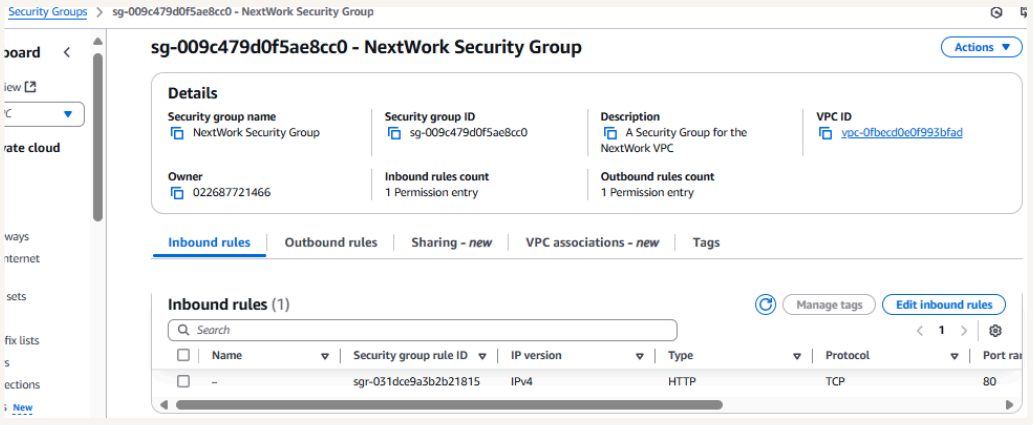
Security groups

Security groups check inbound and outbound traffic to and from a resource in the VPC.

Inbound vs Outbound rules

Inbound rules are rules for traffic coming into the VPC like visitor traffic. The inbound rule i created allows http traffic so all http traffic can access my resources

Outbound rules are for devices trying to access resoures outside of the VPC. This outbound rule currently allows all traffic



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Network ACLs

Network ACLs are access control lists that can allow or deny inbound and outbound traffic.

Security groups vs. network ACLs

Security groups define rules for inbound and outbound traffic to and from resources. Network ACLs are broader rules for the whole subnet

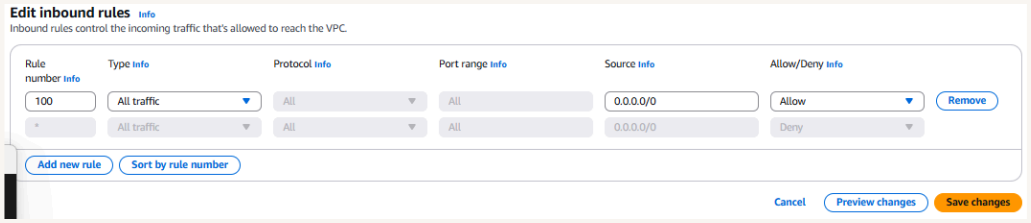
Russell Geisler
NextWork Student

Default vs Custom Network ACLs

Similar to security groups, network ACLs use inbound and outbound rules

By default, a network ACL will allow all network traffic inbound and outbound

A custom ACL will automatically deny all inbound and outbound traffic until rules are set



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