Packet Tracer 2.0.1.1. – Configure ASA Basic Settings and Firewall Using the CLI

Reflection:

1. What lesson can you get from implementing ASA Firewall?

Multiple levels of security are always vital to any system. With data being power in this day and age, it is important that we protect our networks and data no matter the size. ASA Firewall provides many security features and default security levels that can be considered top-notch.

2. What is meant by DMZ? What does it do? Is it necessary to have DMZ in your network?

DMZ stands for Demilitarized Zone. A DMZ Network is a perimeter network that protects and adds an extra layer of security to an organization's internal local-area network from untrusted traffic. They are an essential part of network security for both individual users and large organizations but with the introduction of the Cloud, DMZ has become unnecessary for the majority of IT environments but may still prove useful in certain situations.

3. What is the purpose of configuring DHCP, AAA, and SSH?

Configuring these allows a network a certain level of security. AAA in itself is a security framework that controls access to computer resources, enforces policies, and audits usage. SSH on the other hand allows for two end devices to communicate through a secure line and share data remotely. The automation of configuring devices on networks is provided by DHCP.

4. What does Static NAT do? What is its purpose?

The Static NAT maps network traffic from an external IP address to an internal IP address or network. It is a one-to-one mapping of a private IP address to a public IP address. The internal IP address must also be static.

5. What is an ACL? What does it do? How does ACL function?

ACL or access control lists are a collection of grant and deny conditions that provide security by blocking unauthorized users and allowing authorized users to access specific resources. ACLs are common in routers or firewalls.