Monitoring Tools and Commands

1. Ping and Traceroute Commands

These commands help check connectivity between devices and determine the path taken by packets.

- Ping: Sends ICMP echo requests to check connectivity.
  Example:
  Router> ping <destination IP>
  Router> ping 192.168.1.1

- Traceroute: Displays the path packets take to reach the destination.
  Example:
  Router> traceroute <destination IP>
  Router> traceroute 192.168.1.1

2. Show Commands for Monitoring

- Show interface: Displays the status and traffic statistics of interfaces.
  Example:
  Router> show interface <interface>
  Router> show interface GigabitEthernet0/0

- Show IP route: Displays the routing table.
  Router> show ip route

- Show IP interface brief: Provides a summary of all interfaces, showing their IP addresses and status.
  Router> show ip interface brief

- Show running-config: Displays the current running configuration on the device.
  Router> show running-config

3. Switch-Specific Monitoring Commands

- Show MAC address-table: Displays the MAC address table.
  Switch> show mac address-table

- Show spanning-tree: Displays Spanning Tree Protocol (STP) information.
  Switch> show spanning-tree

- Show vlan brief: Displays VLANs configured on the switch.
  Switch> show vlan brief

4. Firewall-Specific Commands

- Show access-lists: Displays the configured access control lists (ACLs).
  ASA> show access-list

- Show connections: Shows the active connections through the firewall.
  ASA> show conn

- Show xlate: Displays the current NAT translations.
  ASA> show xlate

- Show interface: Shows the interface statistics and status.
  ASA> show interface

- Show run: Displays the current running configuration.
  ASA> show running-config