This script will retrieve details such as IP addresses, network interfaces, routing tables, DNS settings etc

#!/bin/bash

# Script to gather network settings information

# Output file

OUTPUT\_FILE="network\_info.txt"

# Create or clear the output file

> "$OUTPUT\_FILE"

echo "Gathering network information..." | tee -a "$OUTPUT\_FILE"

# Hostname

echo -e "\n--- Hostname ---" | tee -a "$OUTPUT\_FILE"

hostname | tee -a "$OUTPUT\_FILE"

# Network interfaces

echo -e "\n--- Network Interfaces ---" | tee -a "$OUTPUT\_FILE"

ifconfig -a | tee -a "$OUTPUT\_FILE"

# IP addresses (IPv4 and IPv6)

echo -e "\n--- IP Addresses ---" | tee -a "$OUTPUT\_FILE"

ip addr show | tee -a "$OUTPUT\_FILE"

# Routing table

echo -e "\n--- Routing Table ---" | tee -a "$OUTPUT\_FILE"

ip route show | tee -a "$OUTPUT\_FILE"

# DNS settings (resolv.conf)

echo -e "\n--- DNS Settings ---" | tee -a "$OUTPUT\_FILE"

cat /etc/resolv.conf | tee -a "$OUTPUT\_FILE"

# Network statistics

echo -e "\n--- Network Statistics ---" | tee -a "$OUTPUT\_FILE"

netstat -i | tee -a "$OUTPUT\_FILE"

# Active connections

echo -e "\n--- Active Connections ---" | tee -a "$OUTPUT\_FILE"

ss -tuln | tee -a "$OUTPUT\_FILE"

# Firewall rules (if iptables is installed)

if command -v iptables >/dev/null 2>&1; then

echo -e "\n--- Firewall Rules (iptables) ---" | tee -a "$OUTPUT\_FILE"

iptables -L -v -n | tee -a "$OUTPUT\_FILE"

else

echo -e "\n--- iptables is not installed ---" | tee -a "$OUTPUT\_FILE"

fi

echo "Network information gathered successfully. Check the file $OUTPUT\_FILE for details."

- Hostname: Retrieves the system's hostname.

- Network Interfaces: Shows detailed information about all network interfaces.

- IP Addresses: Lists all IP addresses assigned to the system.

- Routing Table: Displays the current routing table.

- DNS Settings: Shows the DNS servers configured in `/etc/resolv.conf`.

- Network Statistics:Provides statistics on network interfaces.

- Active Connections: Lists all active TCP/UDP connections and listening ports.

- Firewall Rules: Displays firewall rules if `iptables` is installed.

1. Make the script executable:

chmod +x network\_info.sh

```

2. Run the script:

./network\_info.sh

The script collects network information and writes it to `network\_info.txt` in the current directory.