NETWORK TRAFFIC ANALYSIS

Forensic Investigation Report

Case ID:	CASE-20260113-143925
Analyst:	Me
Evidence File:	2014-11-16-traffic-analysis-exercise.pcap
Report Generated:	2026-01-13T14:39:26

■ CONFIDENTIAL - FOR AUTHORIZED PERSONNEL ONLY ■

Executive Summary

Network traffic analysis was conducted on the provided PCAP file. The analysis identified 11 unique source IP addresses and 16 unique destination IP addresses. No significant suspicious activity was detected during the analysis.

Evidence Integrity Verification

✓ Evidence Hash Verified

Hash Algorithm	Hash Value
SHA-256	`0e3fac547536f773bf1a21180a2294a10be97e956f091d24e168f147ecf5fafd`
MD5	`41d34d07aa81f3cb5ee12315cc5c88a9`

File Size: 2,551,397 bytes
Verified: 2026-01-13T14:39:25.368612

Complete IP Address Inventory

Source IP Addresses

#	Source IP Address	Packet Count
1	37.200.69.143	1112
2	172.16.165.165	848
3	74.125.233.96	382
4	204.79.197.200	308
5	82.150.140.30	260
6	188.225.73.100	62
7	74.125.233.100	14
8	172.16.165.2	11
9	185.53.178.9	9
10	131.253.61.84	4

Destination IP Addresses

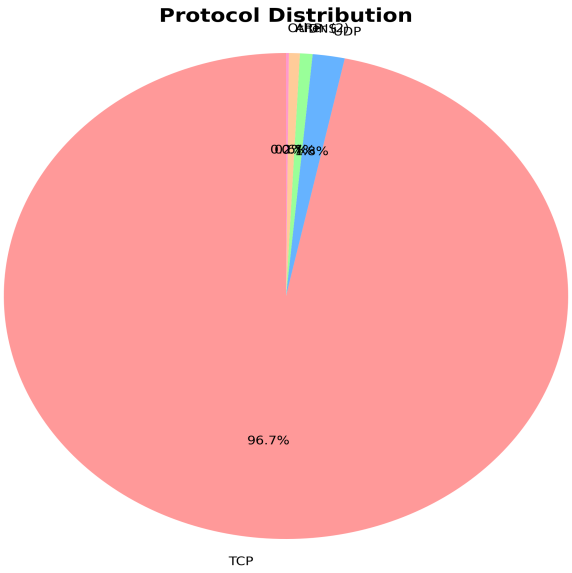
#	Destination IP Address	Packet Count
1	172.16.165.165	2164
2	37.200.69.143	419
3	74.125.233.96	173
4	82.150.140.30	140
5	188.225.73.100	33
6	172.16.165.2	32
7	74.125.233.100	11
8	204.79.197.200	10
9	185.53.178.9	8
10	224.0.0.252	6

Total Unique Source IPs: 11
Total Unique Destination IPs: 16

Protocol Distribution Analysis

Protocol	Packet Count	Percentage
TCP	2,951	96.66%
UDP	56	1.83%
DNS	22	0.72%
ARP	19	0.62%
Other (2)	5	0.16%

Protocol Distribution Chart



Suspicious Activity Analysis

✓ No suspicious activity detected.

CHAIN OF CUSTODY (CoC) FORM

Case Information

Case Title:	CASE-20260113-143925
Analyst:	Me
Case Description:	N/A
Date Started:	2026-01-13

Evidence Details

Evidence Type:	PCAP Network Capture File
File Name:	2014-11-16-traffic-analysis-exercise.pcap
File Size:	2,551,397 bytes
Evidence Source:	Digital Network Traffic Capture
Original Hash (SHA256):	`0e3fac547536f773bf1a21180a2294a10be97e956f091d24e168f147ecf5fafd`
Original Hash (MD5):	`41d34d07aa81f3cb5ee12315cc5c88a9`
Acquisition Date/Time:	2026-01-13T14:39:25

Storage & Integrity Information

Storage Location:	Local Evidence Repository
Backup Location:	Secure Backup System
Access Restriction:	Authorized Personnel Only
Final Hash Verification:	
Hash BEFORE Analysis:	`0e3fac547536f773bf1a21180a2294a10be97e956f091d24e168f147ecf5fafd`
Hash AFTER Analysis:	`0e3fac547536f773bf1a21180a2294a10be97e956f091d24e168f147ecf5fafd`
Integrity Status:	**MATCHED ✓**

Declaration:
I/We declare that the evidence was handled ethically and professionally. All procedures followed proper chain of custody protocols. Hash verification confirms evidence integrity has been maintained throughout the analysis.

Handling Log

No.	Date/Time	Handler Name	Action Taken	Purpose	Hash (Yes/No)	Verified
1	2026-01-13T14:39:25	Me	Evidence Acquired	PCAP file loaded for analysis. SHA256: 0e3fac54753	Yes	✓
2	2026-01-13T14:39:25	Me	Hash Calculated	SHA256 and MD5 hashes generated for integrity veri	Yes	✓
3	2026-01-13T14:39:25	Me	Analysis Started	Loaded 3053 packets for analysis	Yes	✓

Certification

Name	Signature	Date
Me		2026-01-13