

# Network Traffic Analysis Report

## Network Summary

Subnet: 192.168.29.0/24

Capture Duration: 1 minute

Primary Protocols: UDP, ARP, IGMPv3, ICMPv6

## Protocol Analysis

### UDP Traffic

Source IP	Destination IP	Port	Purpose
192.168.29.152	8.8.8.8	53	DNS Query
192.168.29.171	224.0.0.251	5353	mDNS

### ARP Activity

- 192.168.29.152 → Broadcast (Who has 192.168.29.1?)
- 192.168.29.1 → 192.168.29.152 (ARP Reply)

### IGMPv3 Multicast

Membership reports detected from:

192.168.29.152

192.168.29.171

(Possible video streaming or local service discovery)

### ICMPv6 Traffic

Type	Source	Destination
Neighbor Solicitation	fe80::[local]	ff02::1:ff00:1
Router Advertisement	fe80::[router]	ff02::1

## Detected Network Devices

192.168.29.1 (Gateway)

192.168.29.152

192.168.29.171

224.0.0.251 (mDNS)

ff02::1 (IPv6 All-Nodes)

## Key Observations

- Standard ARP traffic for local network resolution
- Active multicast participation (IGMPv3) suggesting media services
- IPv6 neighbor discovery and router advertisements
- DNS queries to external resolver (8.8.8.8)