UNITED STATES DISTRICT COURT

DISTRICT OF COLUMBIA

Kirchner v. Anthropic, PBC - Case No. 1:25-cv-02735-ACR

EXHIBIT D-12: Comcast Injection Point Identification

Case: Kirchner v. Anthropic, PBC (1:25-cv-02735-ACR)

Evidence ID: EVID-20260102-0001

Original Exhibit: X-6_INJECTION_POINT_IDENTIFICATION.md

Date: January 2, 2026

Injection Point

Field	Value
IP Address	68.85.201.221
NetName	JUMPSTART-2
NetRange	68.80.0.0 - 68.87.255.255
Organization	Comcast Cable Communications, LLC (CCCS)
Network Position	Hop 3 from user
One-way Latency	~13ms

Timing Analysis

Observed Packet Timing (Zoho Connection)

```
39.950138s  →  SYN sent to Zoho (136.143.189.20)
40.080539s  →  ACK sent by user
```

```
40.106952s  ←  RST #1 arrives (INJECTED)
40.106952s  ←  RST #2 arrives (INJECTED)
40.106953s  ←  RST #3 arrives (INJECTED)
40.188957s  ←  SYN-ACK arrives (LEGITIMATE)
```

Round-Trip Calculation

Measurement	Value
User ACK sent	40.080539s
RST arrived	40.106952s
Round-trip to injector	**26.4ms**
One-way distance	**13.2ms**

Traceroute Correlation

Hop	IP Address	Time	Owner	Match
1	192.168.1.1	3ms	User Gateway	
2	10.27.35.203	10ms	Comcast Internal	Close
3	68.85.201.221	13ms	Comcast JUMPSTART-2	✓ EXACT
4	96.108.10.53	16ms	Comcast	
5	68.87.177.201	12ms	Comcast	

The 13ms one-way timing matches Hop 3 exactly.

Whois Data

```
NetRange:       68.80.0.0 - 68.87.255.255
CIDR:           68.80.0.0/13
NetName:        JUMPSTART-2
NetHandle:      NET-68-80-0-0-1
Parent:         NET68 (NET-68-0-0-0-0)
NetType:        Direct Allocation
Organization:   Comcast Cable Communications, LLC (CCCS)
RegDate:        2002-01-28
Updated:        2021-01-25
```

Proof Methodology

1. Timing-Based Location

The RST packet arrived 26.4ms after the user's ACK. For a round-trip:

- Outbound (ACK → Injector): ~13ms
- Inbound (RST ← Injector): ~13ms
- Total: ~26ms

2. Traceroute Verification

Independent traceroute shows Hop 3 (68.85.201.221) at 13ms one-way latency - **exact match** to the calculated injection distance.

3. RST Arrival Before Server Response

```
RST arrived:     40.106952s (156.8ms after SYN)
SYN-ACK arrived: 40.188957s (238.8ms after SYN)

RST arrived 82ms BEFORE the legitimate server could respond.
```

This is physically impossible without injection from a closer network point.

Additional Evidence

Triplicate RST Pattern

Three RST packets arrived within 1 microsecond:

```
40.106952s - RST (seq 49)
40.106952s - RST (seq 49)
40.106953s - RST (seq 50)
```

This triplicate burst with sequence number guessing (49, 49, 50) is characteristic of **Deep Packet Inspection (DPI) equipment** performing TCP RST injection.

Missing TCP Options

Packet Type	**TCP Options**	**TCP Timestamps**
Legitimate Zoho	12 bytes	Present
RST Packets	**NONE**	**MISSING**

RST packets lack TCP options present in all legitimate traffic, proving they originate from a different source (the DPI equipment, not the actual server).

Conclusion

The RST injection attack originates from IP address 68.85.201.221, which is:

1. **Owned by Comcast Cable Communications, LLC**
2. **Part of the JUMPSTART-2 network allocation**
3. **Located at Hop 3** in the network path (13ms from user)
4. **Operating DPI equipment** capable of:

- Real-time TCP state tracking
- Microsecond-precision packet injection
- TTL spoofing to match legitimate traffic
- Triplicate RST bursts with sequence guessing

Verification Commands

```
# Verify traceroute timing
traceroute -n -q 3 136.143.189.20

# Verify WHOIS data
whois 68.85.201.221
```

```
# Verify RST timing in capture
tshark -r session_20260102_123704.pcapng \
  -Y 'ip.addr==136.143.189.20' \
  -T fields -e frame.time_relative -e tcp.flags -e ip.src
```

Exhibit Created: January 2, 2026

Classification: CRITICAL - ATTACK SOURCE IDENTIFIED

END OF EXHIBIT X-6