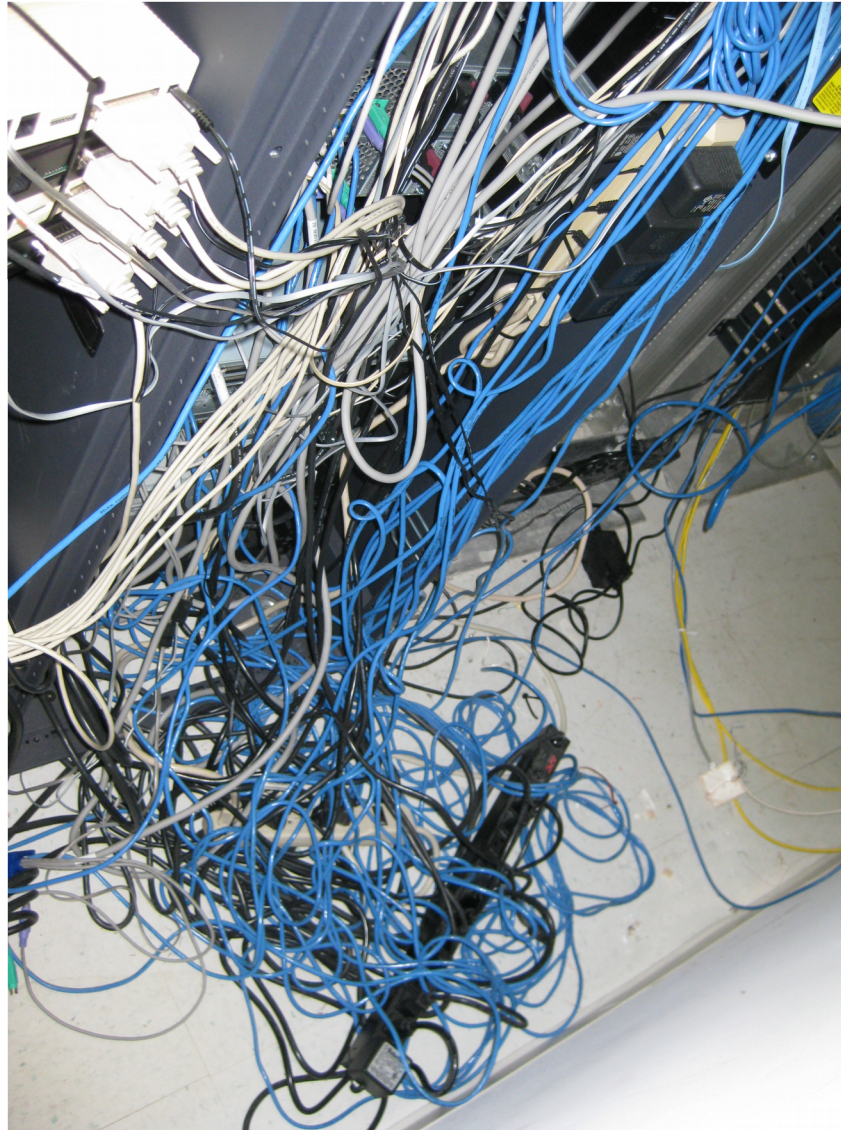


Networking - Untangling the mess.



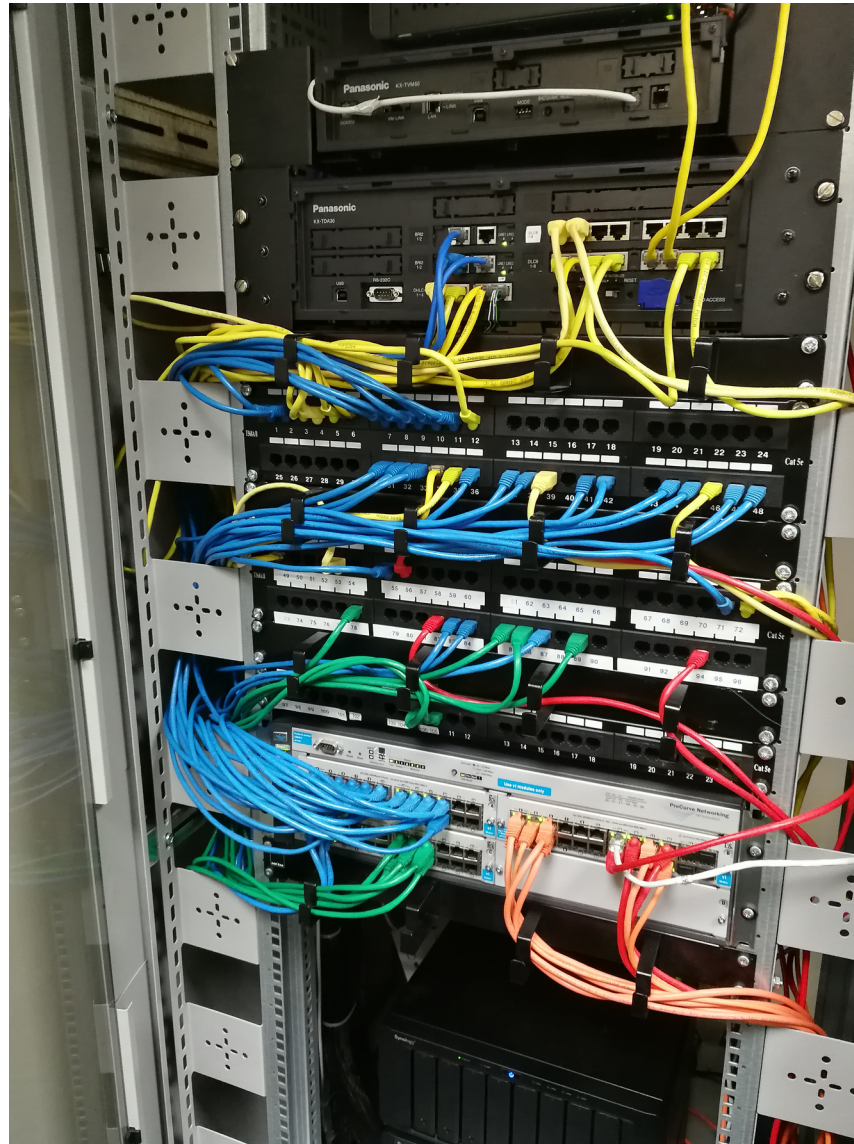
Chris Malton - Delta V Technologies

We've all been there...



Chad Davis - Flickr - CC-NC-ND -
<https://www.flickr.com/photos/tuxstorm/3669614655/in/photostream/>

This is much nicer



show mac-address-table

- Diagnosing an issue with a computer not getting any traffic to it.
- Start looking at switch configs
- Traced through the switchports and VLANs.
- Netgear switches

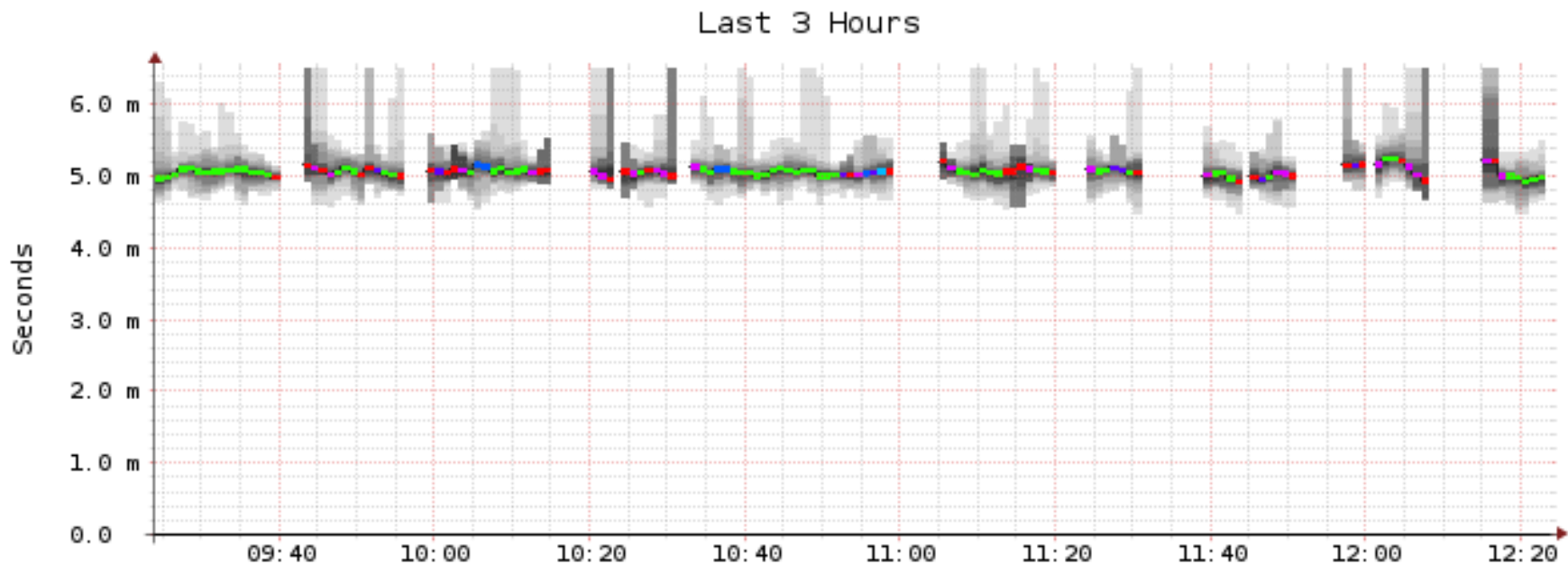
show mac-address-table

- Logged onto core switch, issued “show mac-address-table”
- and my terminal hung.
- <1 minute later, I get a phone call from the people on the site.
- ~5 minutes later, “Connection closed by remote host”

show mac-address-table

- Switch uptime was.... 2 minutes
- Last reload cause: Non-maskable interrupt

Multicast Fun



RROOTOL / TOBI OETIKER

median rtt: 5.1 ms avg 5.3 ms max 4.9 ms min 5.0 ms now 0.1 ms sd 82.9 am/s
packet loss: 42.19 % avg 100.00 % max 0.00 % min 0.00 % now
loss color: 0 1/20 2/20 3/20 4/20 10/20 19/20
probe: 20 IPv6-ICMP Echo Pings (56 Bytes) every 60s end: Wed Jan 3 12:23:43 2018

The bug: CSCsl02190

Cisco Bug: CSCsl02190 - ICMPv6 to all node multicast address fail .

Last Modified

Feb 02, 2017

Products (1)

Cisco IOS

Known Affected Releases

12.2(18)SXF 12.2(33)SRC

Description (partial)

Symptom:

Cat6000/7600 is silently ignoring ICMPv6 packet destined to FF02::1 when IPv6 multicast routing is disabled on the box. It also doesn't send Neighbor Solicitation packet or echo reply ICMPv6.

This happens with vlan interface, but doesn't happen with physical interface. It is seen with 12.2(18)SXF11 and 12.2(33)SRB2 so far.

Conditions:

ICMPv6 to ff02::1

The Road Traffic Accident



What happened?

- 08:30 on a Saturday morning – alarms go off for the circuit
- Check router availability on backup line – it's up.
- Logged fault out to carrier
- Cause: “Road Traffic Accident”

It's a bit broken!



It's a bit broken!



This is what we found!



This is what we found!



Light at the end of the fibre?

- It took a good few weeks to resolve this.
- 400m of new fibre
- Maybe a permit from the council (although we didn't think it was needed).
- A lot of “gentle persuasion” to get things moving.
- ... only for there to be a faulty fibre coupler in Docklands two weeks later affecting the same circuit.

Questions?

- Ask me now
- Email me: chris@deltav-tech.co.uk