

# What's five nines anyway?

## Building temporary networks

UKNOF 39

Tom Penrose

@topenrose

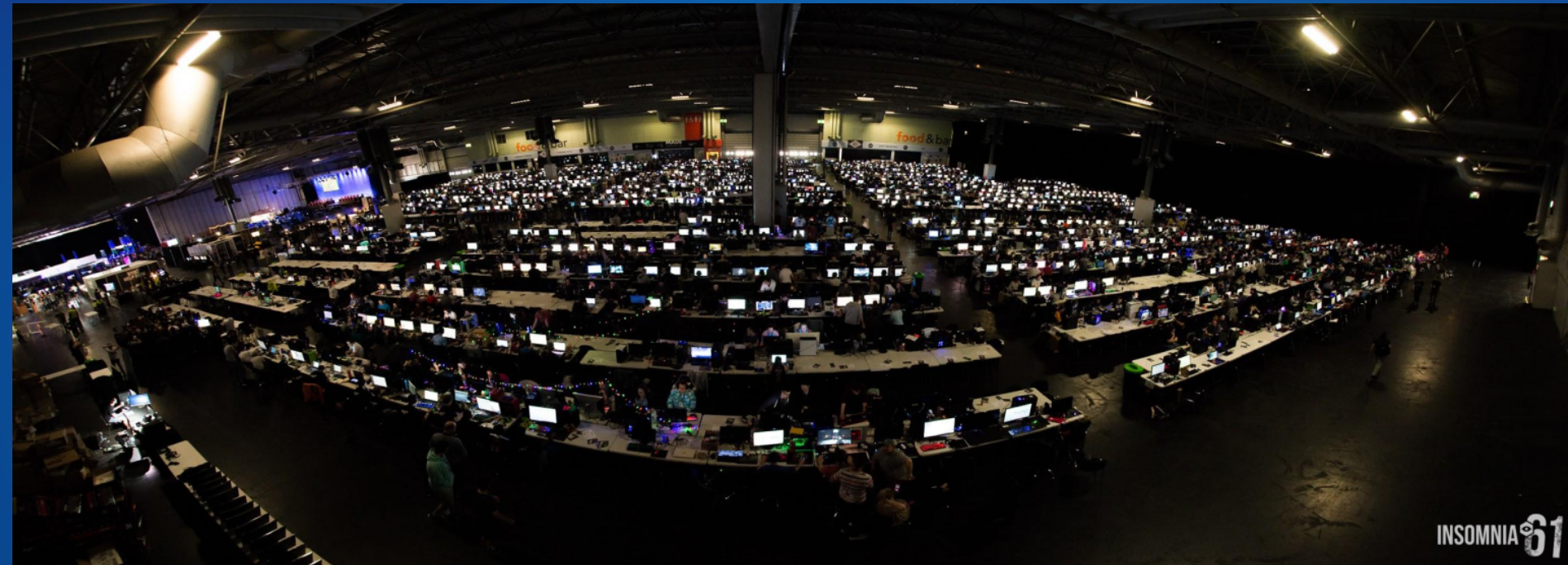
# Who am I?

## Tom Penrose



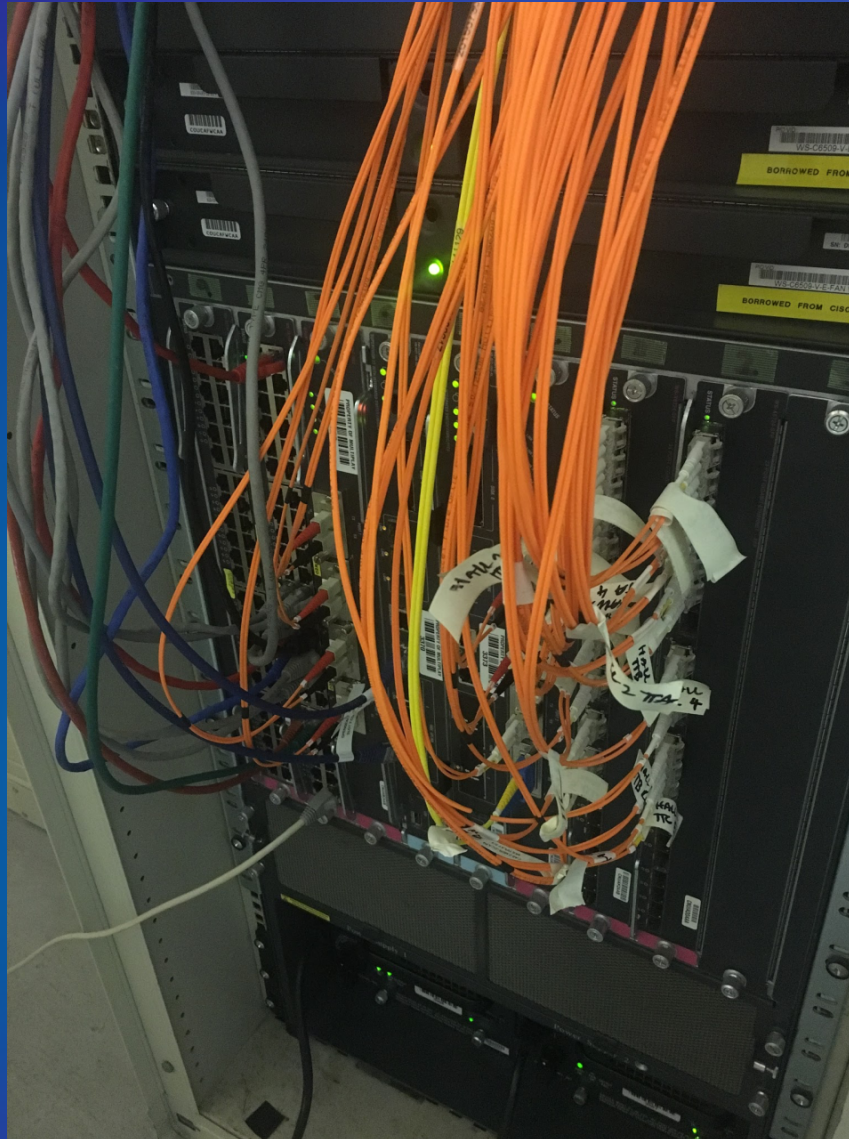


# What's Insomnia?



INSOMNIA 61

Yes, we still use 6500's - Will consider freebies.....





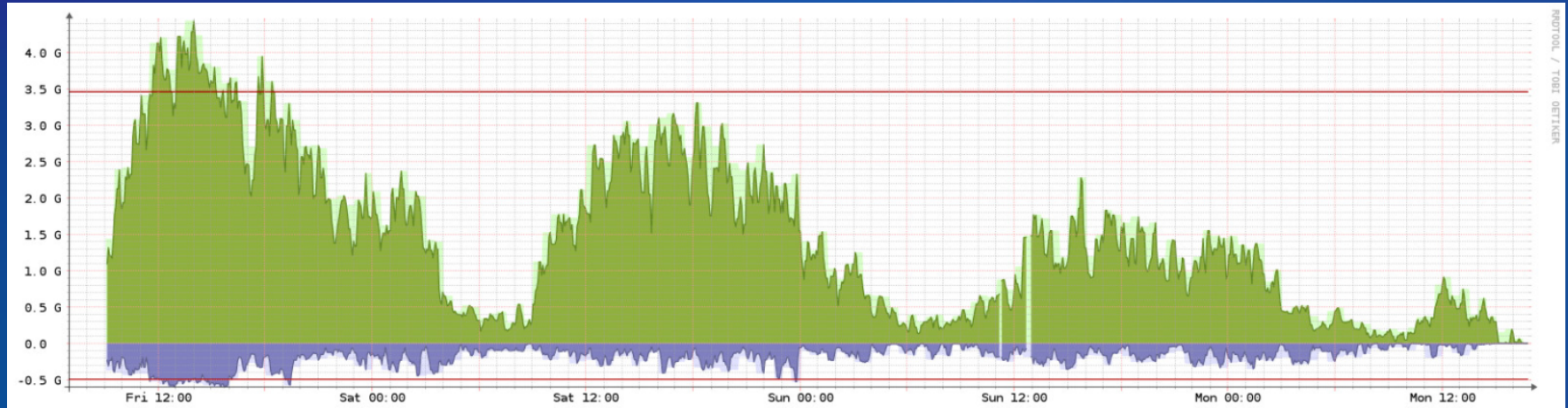
# Can I please have 10Gb/s for a week?!





# Insomnia61 Lancache

Hit ratio: ~670% (9TB Internet, ~60.5TB Cache)



# What about IP addresses?

NAT = Evil



# Please sir, I want some more?



<https://my.ripe.net/#/request>

<https://www.ripe.net/manage-ips-and-asns/resource-management/number-resources/request-a-temporary-assignment>



# PFSense



# Setup - Layer 1





# Getting kit in the right place





# BUILD!





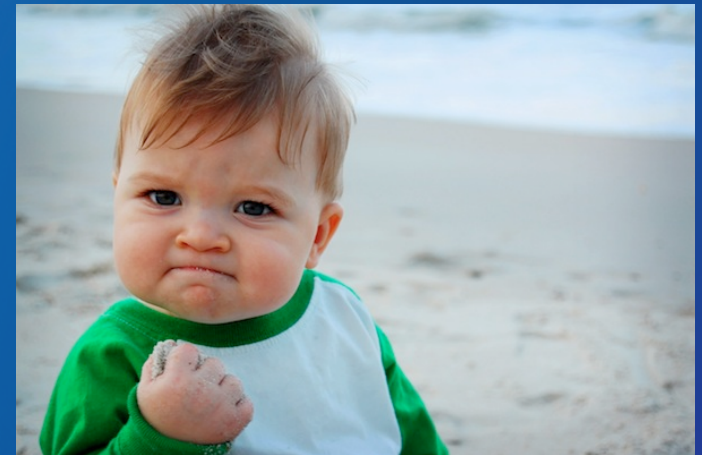
# AUTOLAN

```
Queried switch CORE-AG13-EON1 (10.10.1.14) and found port 5
Port 5 on switch CORE-AG13-EON1 -> switch CORE-AG15-EON2 (10.10.1.15). Following...
Switch at 10.10.1.15 appears to be an Extreme. Finding port for 00:04:96:34:a9:d8...
Queried switch CORE-AG15-EON2 (10.10.1.15) and found port 13
Port 13 on switch CORE-AG15-EON2 -> EON_L1-M22 (10.10.1.105) and should be configured
Running in FULL AUTO mode. Configuring switch
Creating static ARP entry for 00:04:96:34:a9:d8
Configuring 00:04:96:34:a9:d8 as EON_L1-M22 on 10.10.1.105
Config success!

Looking for 00:04:96:34:b4:f0 on Switch CORE-CR0-MER (10.10.1.1)
Switch at 10.10.1.1 appears to be a Cisco. Finding port for 00:04:96:34:b4:f0...
Port Po6 on switch CORE-CR0-MER -> switch CORE-AG13-EON1 (10.10.1.14). Following...
Switch at 10.10.1.14 appears to be an Extreme. Finding port for 00:04:96:34:b4:f0...
Queried switch CORE-AG13-EON1 (10.10.1.14) and found port 5
Port 5 on switch CORE-AG13-EON1 -> switch CORE-AG15-EON2 (10.10.1.15). Following...
Switch at 10.10.1.15 appears to be an Extreme. Finding port for 00:04:96:34:b4:f0...
Queried switch CORE-AG15-EON2 (10.10.1.15) and found port 11
Port 11 on switch CORE-AG15-EON2 -> EON_J1-K22 (10.10.1.104) and should be configured
Running in FULL AUTO mode. Configuring switch
Creating static ARP entry for 00:04:96:34:b4:f0
Configuring 00:04:96:34:b4:f0 as EON_J1-K22 on 10.10.1.104
Config success!

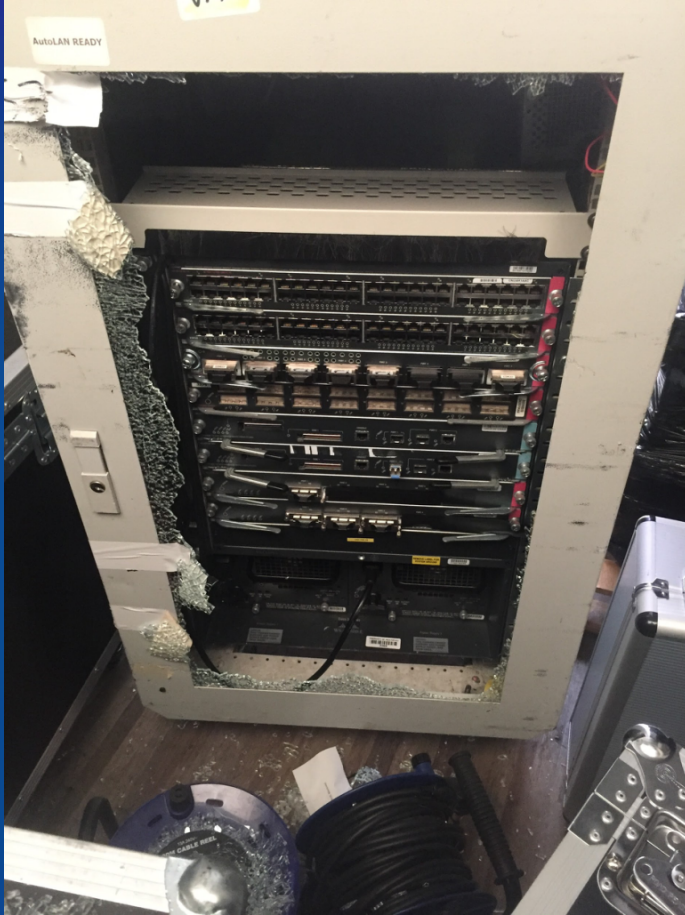
Looking for 00:04:96:34:aa:ab on Switch CORE-CR0-MER (10.10.1.1)
Switch at 10.10.1.1 appears to be a Cisco. Finding port for 00:04:96:34:aa:ab...
Port Po6 on switch CORE-CR0-MER -> switch CORE-AG13-EON1 (10.10.1.14). Following...
Switch at 10.10.1.14 appears to be an Extreme. Finding port for 00:04:96:34:aa:ab...
Queried switch CORE-AG13-EON1 (10.10.1.14) and found port 5
Port 5 on switch CORE-AG13-EON1 -> switch CORE-AG15-EON2 (10.10.1.15). Following...
Switch at 10.10.1.15 appears to be an Extreme. Finding port for 00:04:96:34:aa:ab...
Queried switch CORE-AG15-EON2 (10.10.1.15) and found port 31
Port 31 on switch CORE-AG15-EON2 -> EON_AE1-AF22 (10.10.1.114) and should be configured
Running in FULL AUTO mode. Configuring switch
Creating static ARP entry for 00:04:96:34:aa:ab
Configuring 00:04:96:34:aa:ab as EON_AE1-AF22 on 10.10.1.114
Config success!

Looking for 00:04:96:34:aa:70 on Switch CORE-CR0-MER (10.10.1.1)
Switch at 10.10.1.1 appears to be a Cisco. Finding port for 00:04:96:34:aa:70...
Port Po6 on switch CORE-CR0-MER -> switch CORE-AG13-EON1 (10.10.1.14). Following...
Switch at 10.10.1.14 appears to be an Extreme. Finding port for 00:04:96:34:aa:70...
Queried switch CORE-AG13-EON1 (10.10.1.14) and found port 5
Port 5 on switch CORE-AG13-EON1 -> switch CORE-AG15-EON2 (10.10.1.15). Following...
Switch at 10.10.1.15 appears to be an Extreme. Finding port for 00:04:96:34:aa:70...
```



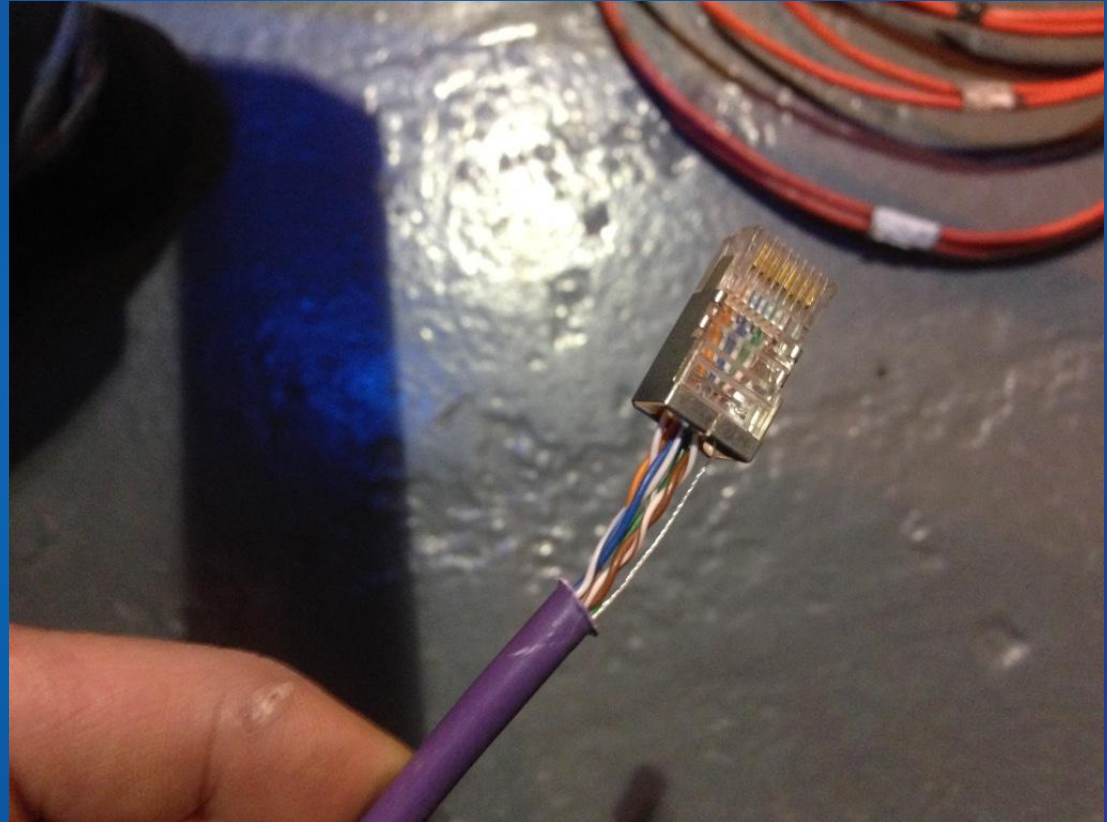
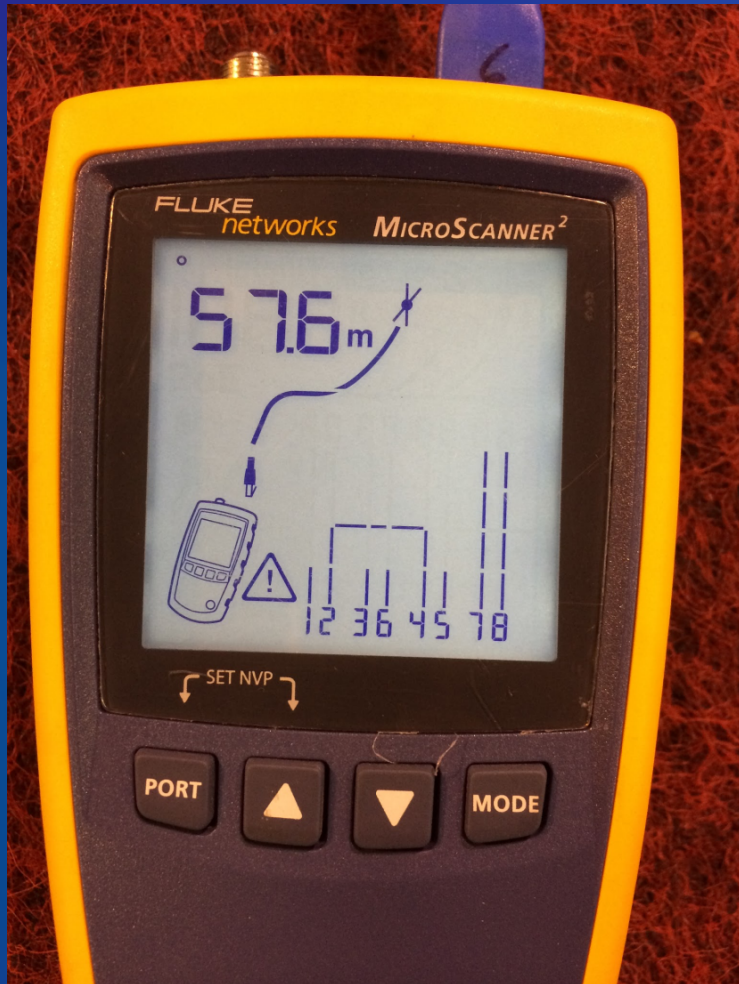


# Sometimes it goes wrong :(

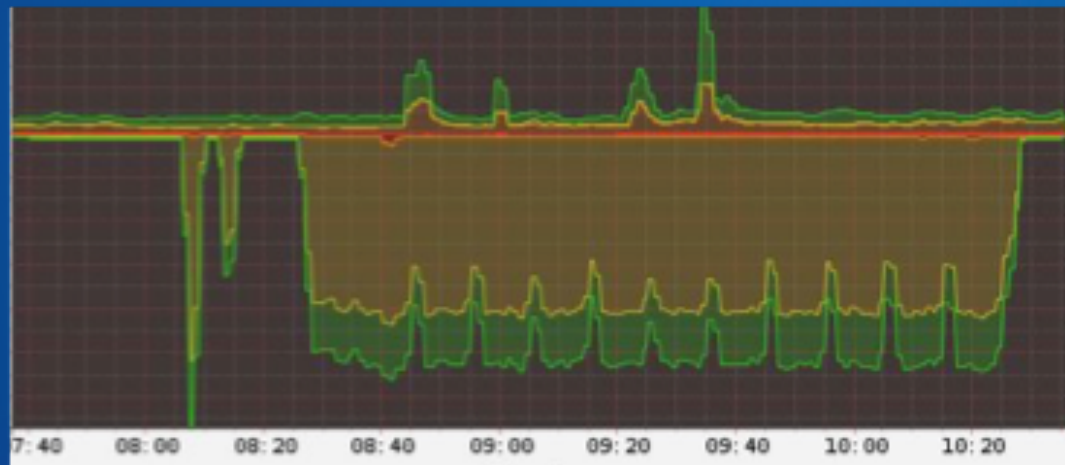




Yep, That'll do gig.



# When it goes wrong...





# When it goes wrong...





# Fibre!





# Temporary Installs





# Nearly done.



FIN



Um, yes...I have a question

