RIPE NCC
RIPE NETWORK COORDINATION CENTRE

RIPE 86 Technical Report

Rob de Meester | RIPE 86 | 26 May 2023

Meet the Team

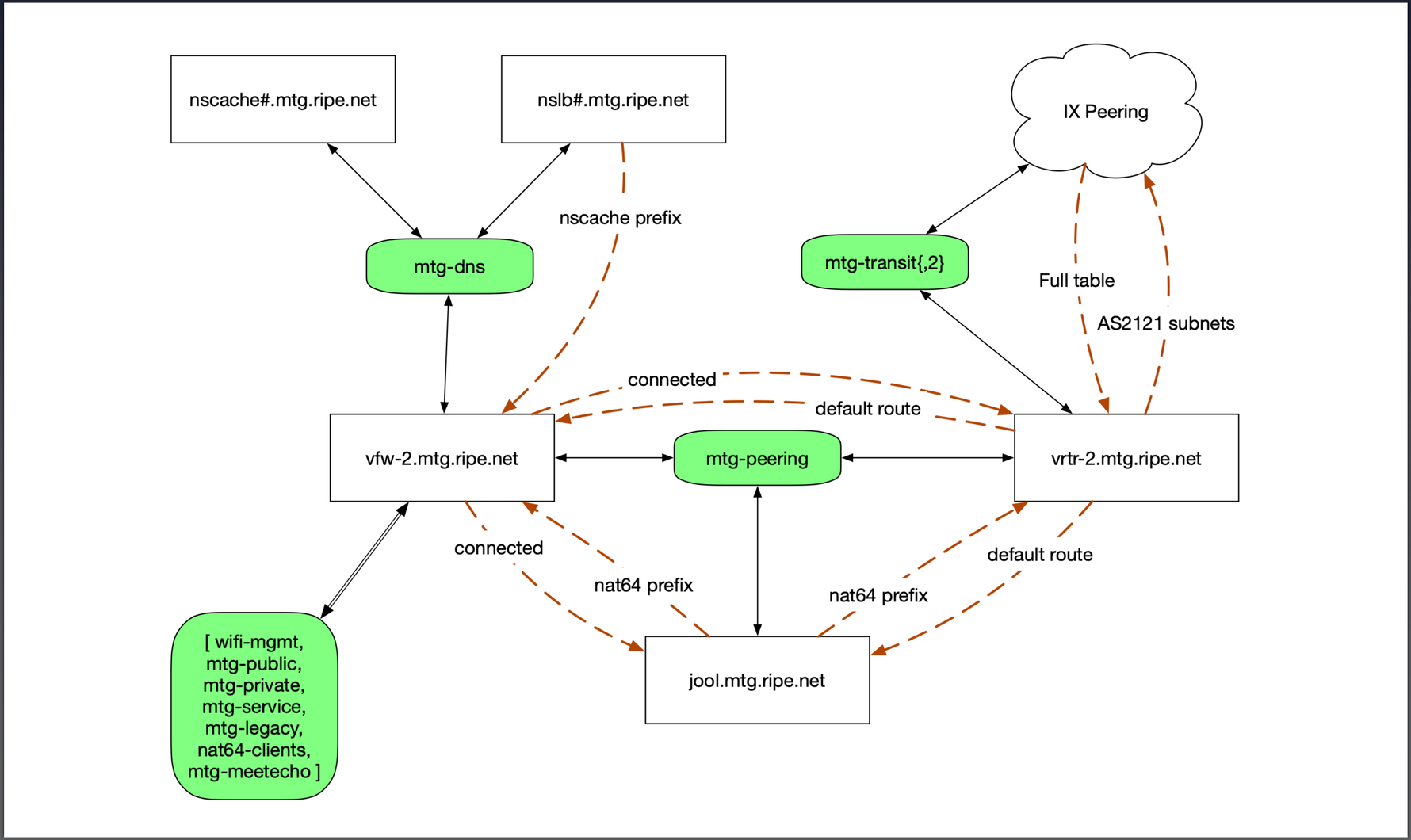
- Andrea di Menna
- Menno Schepers
- Marco van Tol
- Sjoerd Oostdijck
- Ihor Marhitych
- Ondřej Caletka
- Xavier Le Bris
- Rob de Meester

Preparations

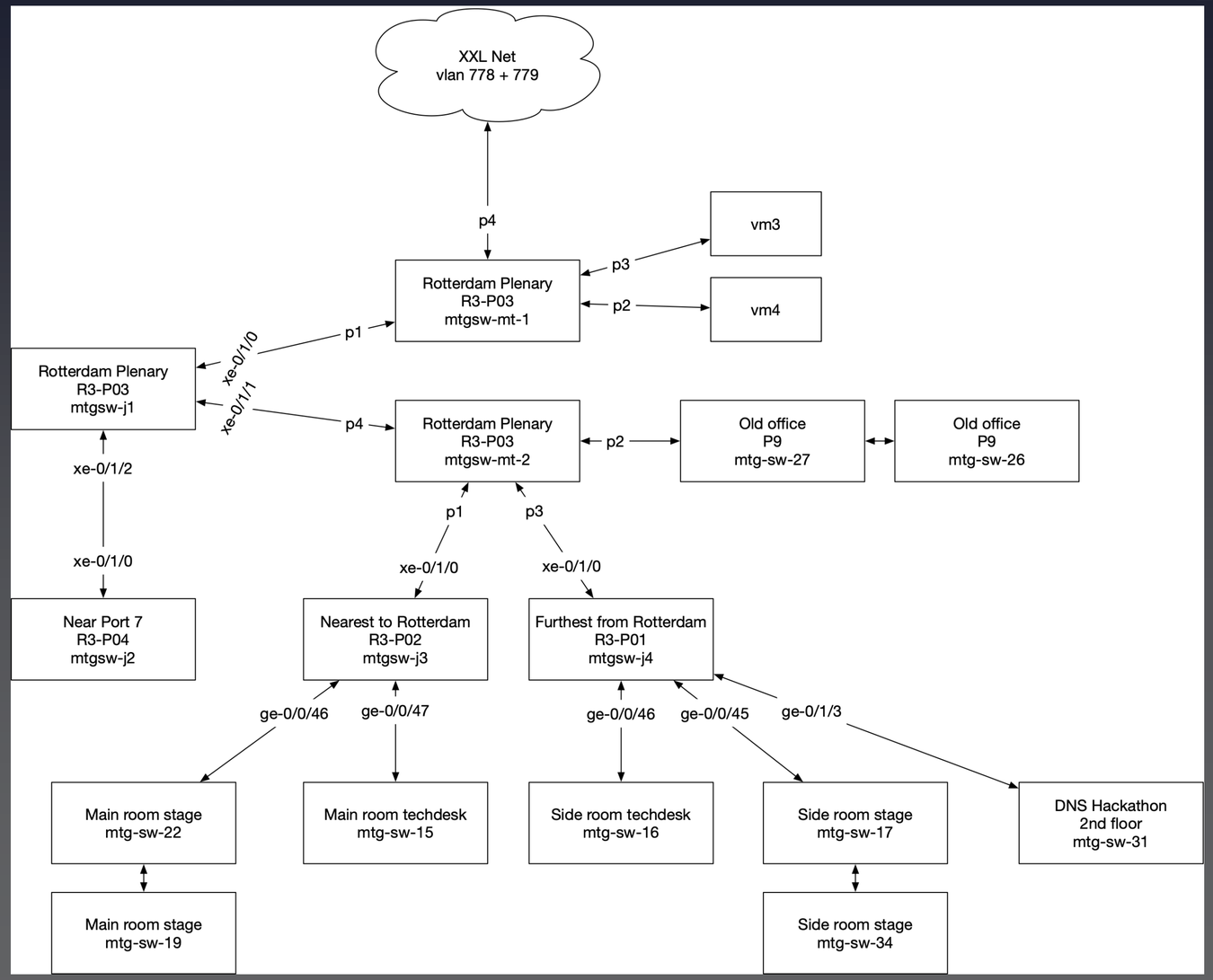
- 3 days to set up
- We brought:
  - 2 SuperMicro Servers (E300-9D-8CN8TP)
  - 50 Wi-Fi Access Points
  - 300 ethernet cables (colour coded, 1m to 30m)
  - 20 Raspberry Pis
  - 3 presentation kits
  - 190 power blocks (6-way power extension)
  - Lots of gaffer tape

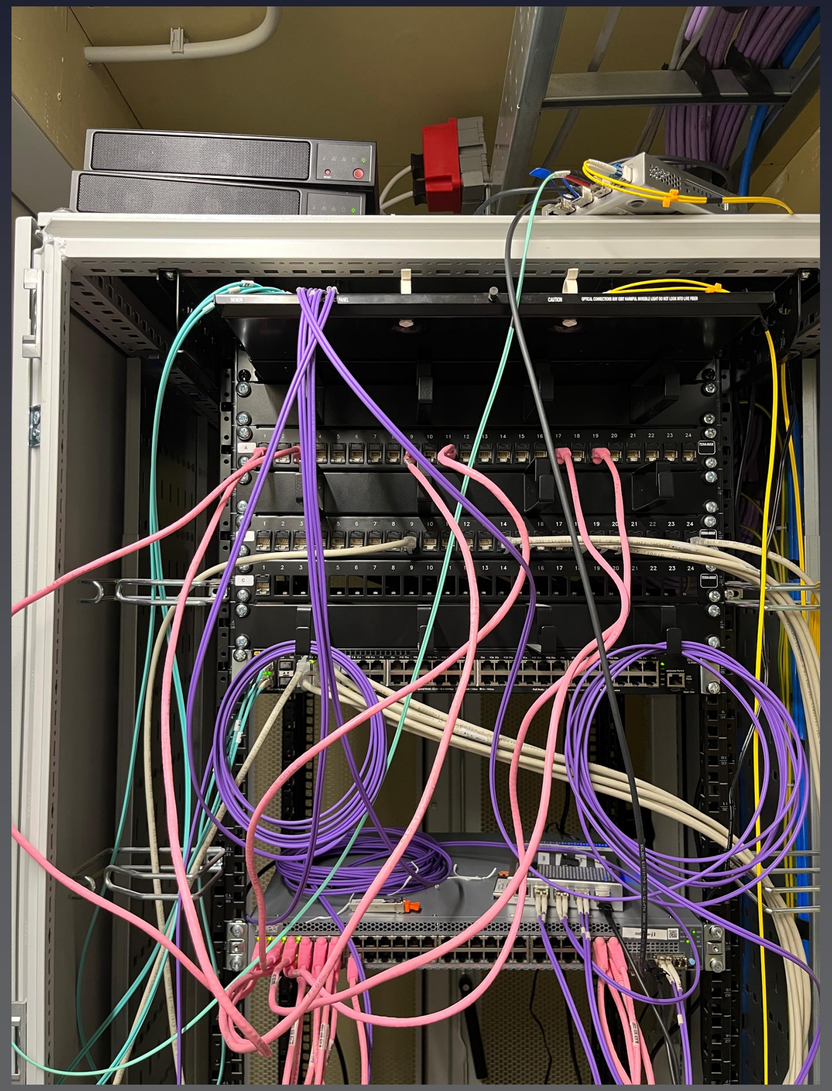
The Network

Logical Network Topology



Physical Network Topology





Wi-Fi Access Points

Wi-Fi Network

- Main network: 5 GHz-only, IPv6-mostly
- NAT64 network: 5 GHz-only, IPv6-only
- Legacy network: 5 GHz and 2.4 GHz, dual-stack

IPv6-mostly Fine

- Ondřej wrote a RIPE Labs article* and presented at RIPE85
- ripemtg network uses Jool with 256 IPv4 addresses
- Had issues with some VOD-platforms at RIPE 85
- The Jool developer implemented **a new allocation strategy** over one weekend

- Cisco AnyConnect cannot connect

* https://labs.ripe.net/author/ondrej_caletka_1/deploying-ipv6-mostly-access-networks/

A Flashback to RIPE 66 (2013)

MARCO HOGEWONING: Marco, speaking as co-chair of the IPv6 Working Group, I have an observation, a question and a comment. The observation is these things seem to get really big these days, you pointed out there are 600 associations simultaneously on the network. When do you **expect to run out of IPv4 addresses**?

Right now **we have quite some IPv4 addresses**, we still have some to provide so that shouldn't be a problem for the next meetings. Does that answer your question?

MARCO HOGEWONING: Yes. For the comment, our Working Group participants expressed quite some interest in whether the **NCC should be able to operate an IPv6-only SSID** during the meetings, so please, let it be noted I would like to forward that request to the tech team to see if you can manage to set up an IPv6 only network just as a test in parallel to the regular one

IPv6-only Meeting Network

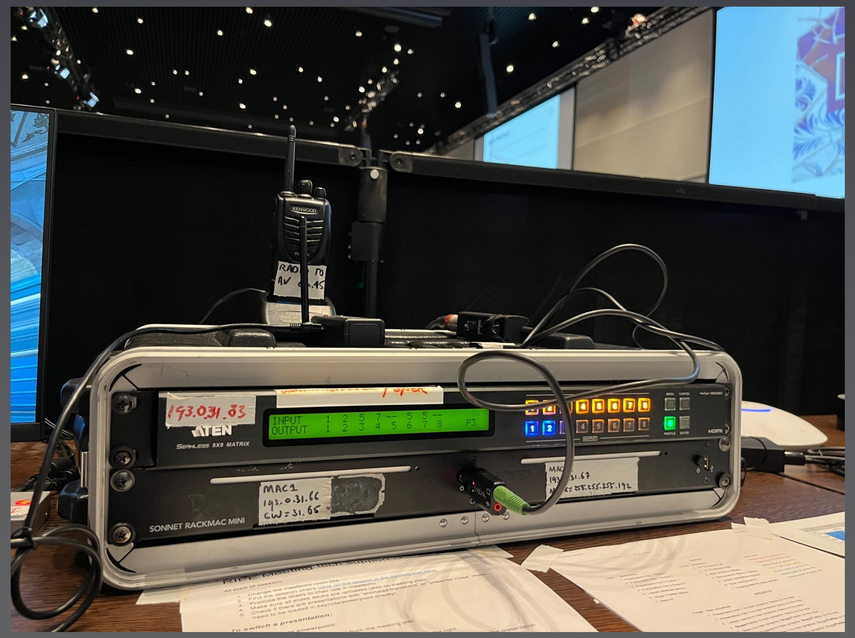
- Has been with us since RIPE 67, 2013
  - SSID: IPV6ONLYEXP, password: iknowbesteffort
  - Since RIPE 71 (2015), the SSID is ripemtg-nat64
- Now it is **part of the main meeting network**
  - A big majority of devices in the main network are not using IPv4
  - There is still **some IPv4 for legacy devices**

- Has the time come to **turn off the NAT64 network?**

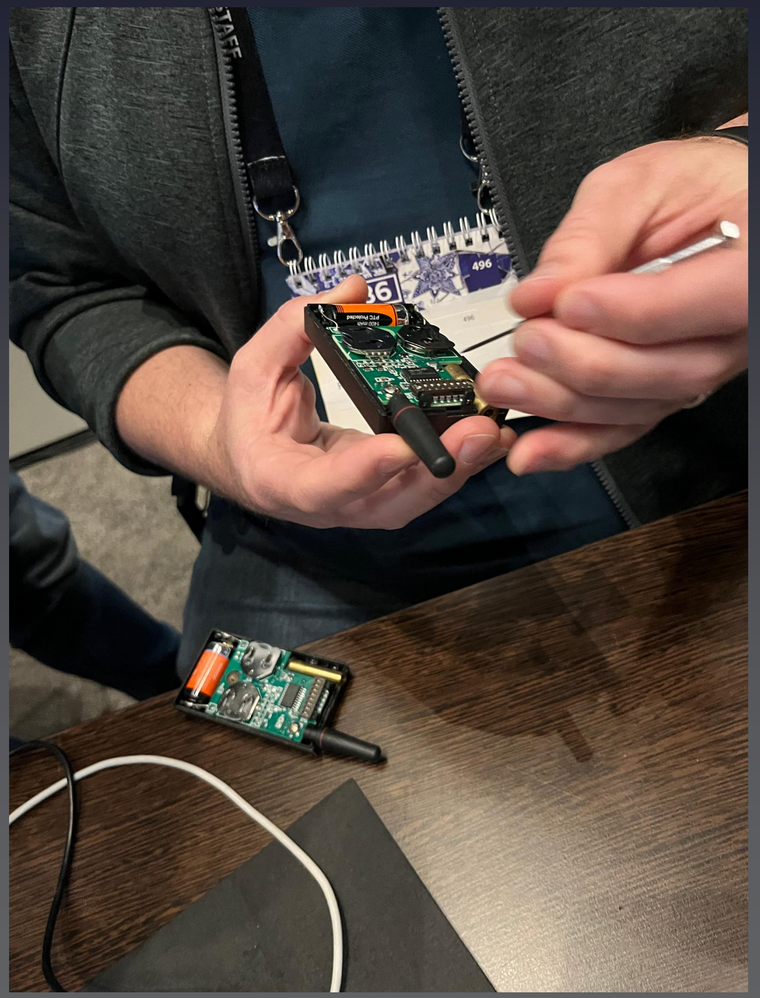
Presentation System

Presentation System

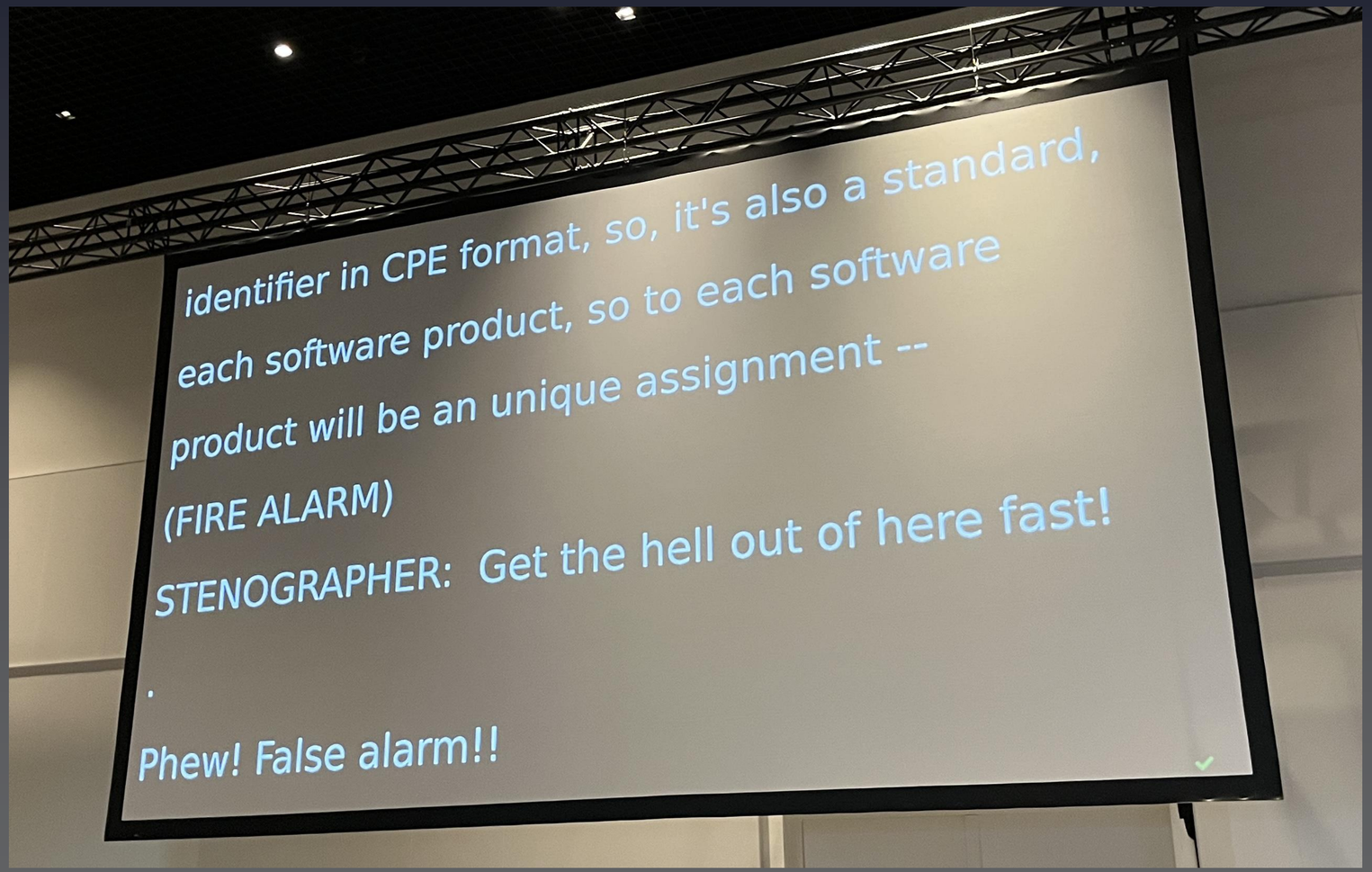
- Two MacMinis, ATEN HDMI Matrix switcher
- DSAN clicker, Limitimer console and clock
- HDMI grabber for Meetecho

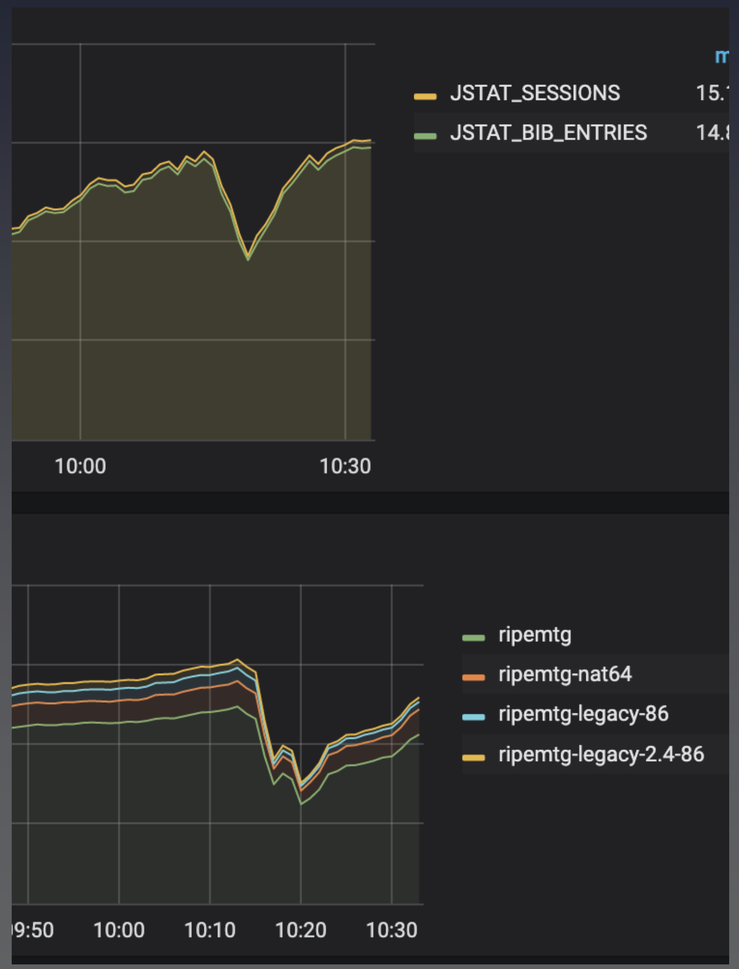


Something didn’t click on Wednesday



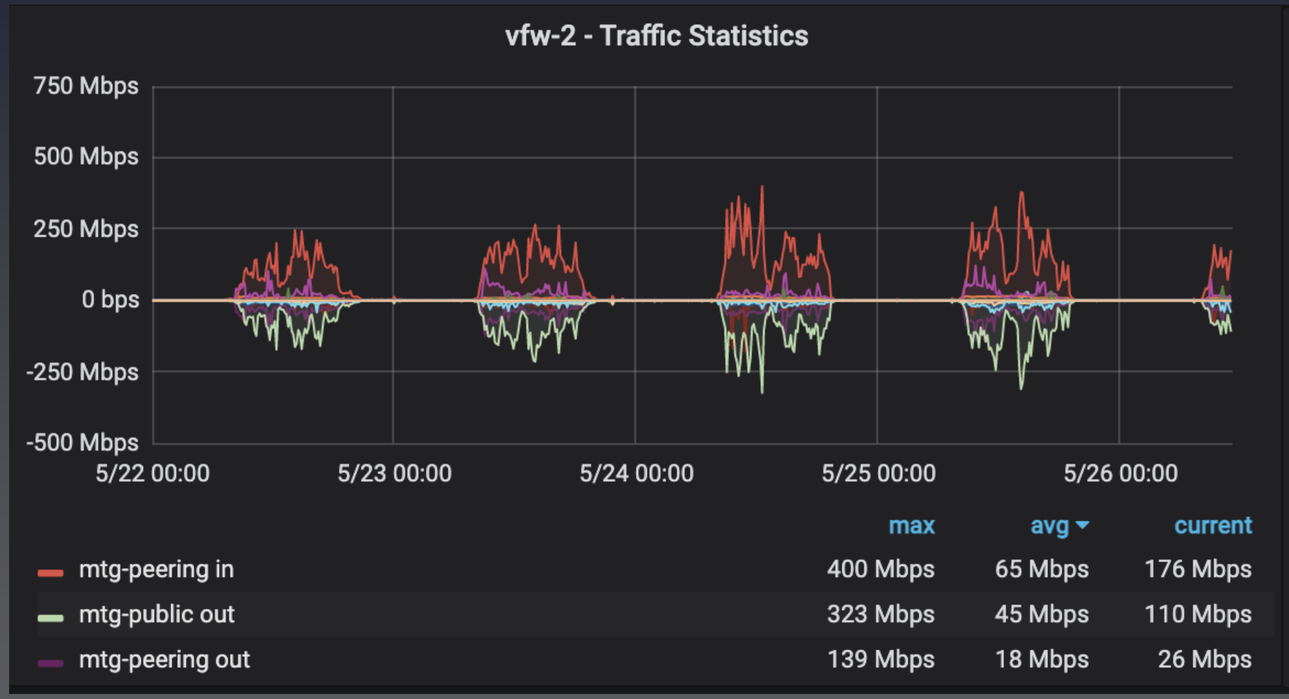
Towel Day: Don’t Panic!

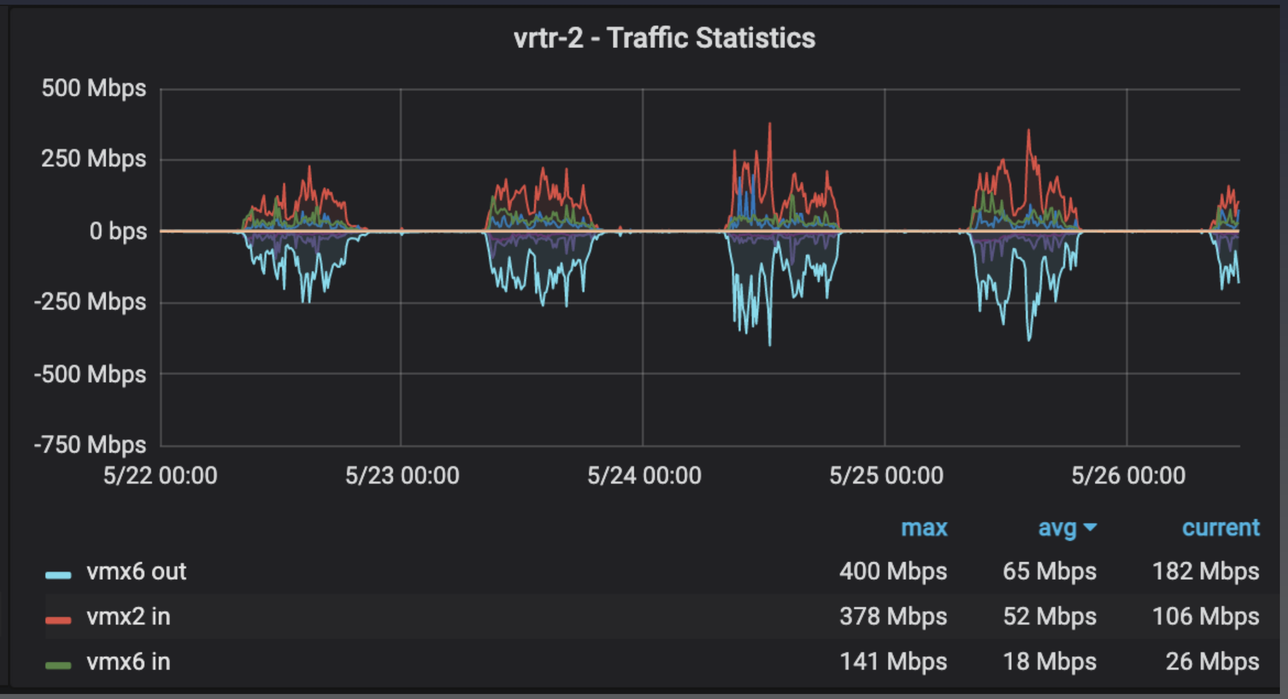




Statistics

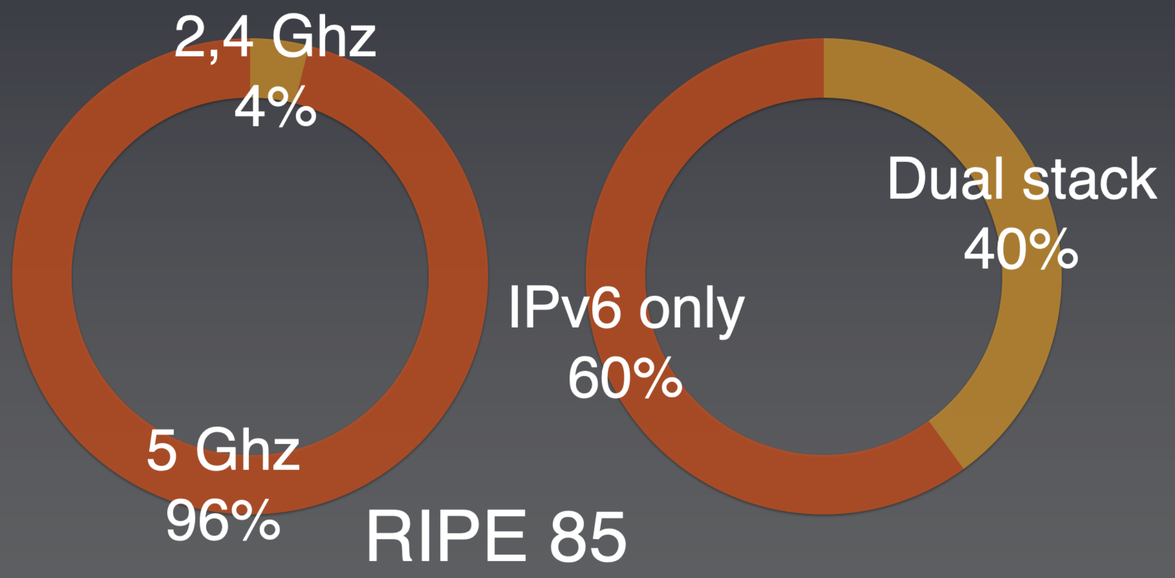
Network Graphs

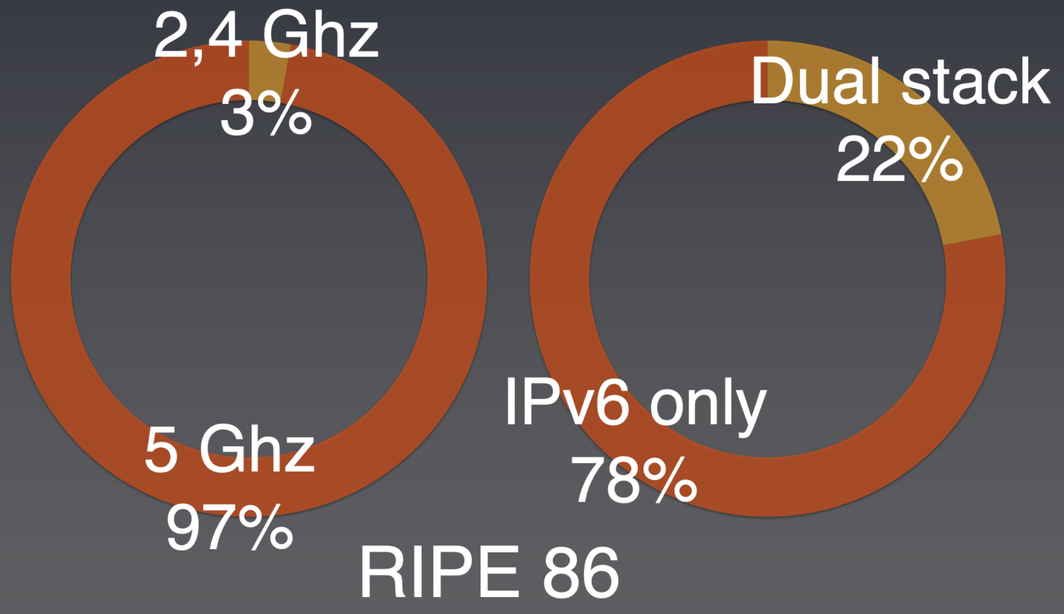




Wi-Fi statistics

- Increase of IPv6-only, due to older devices being replaced
- 2.4 Ghz usage is almost non-existent





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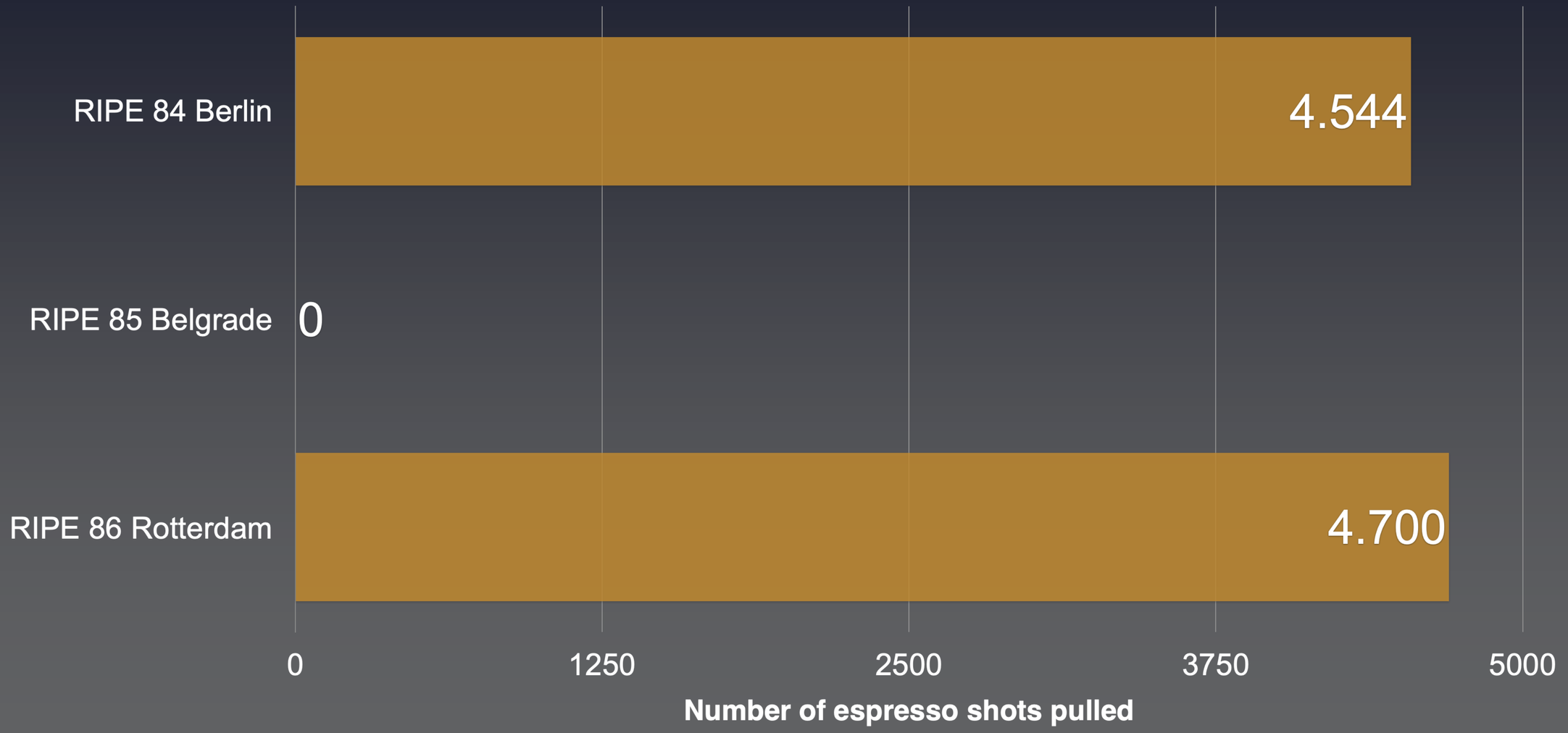
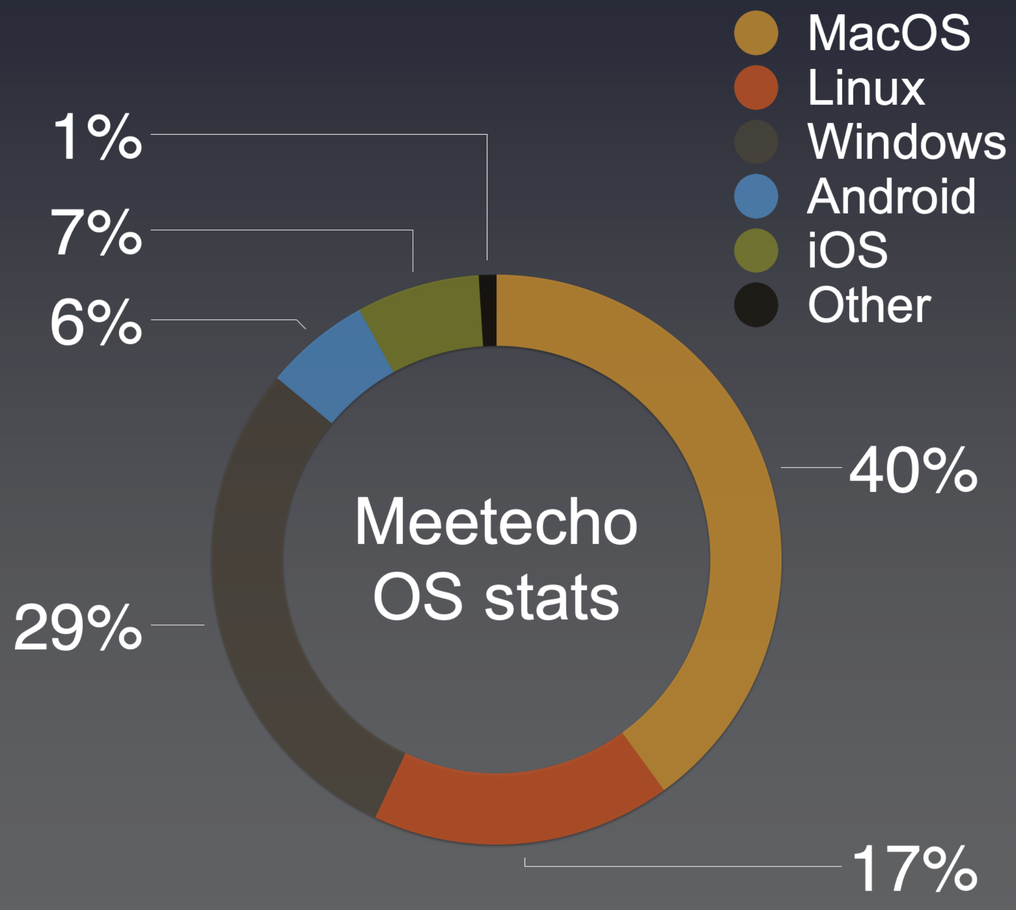
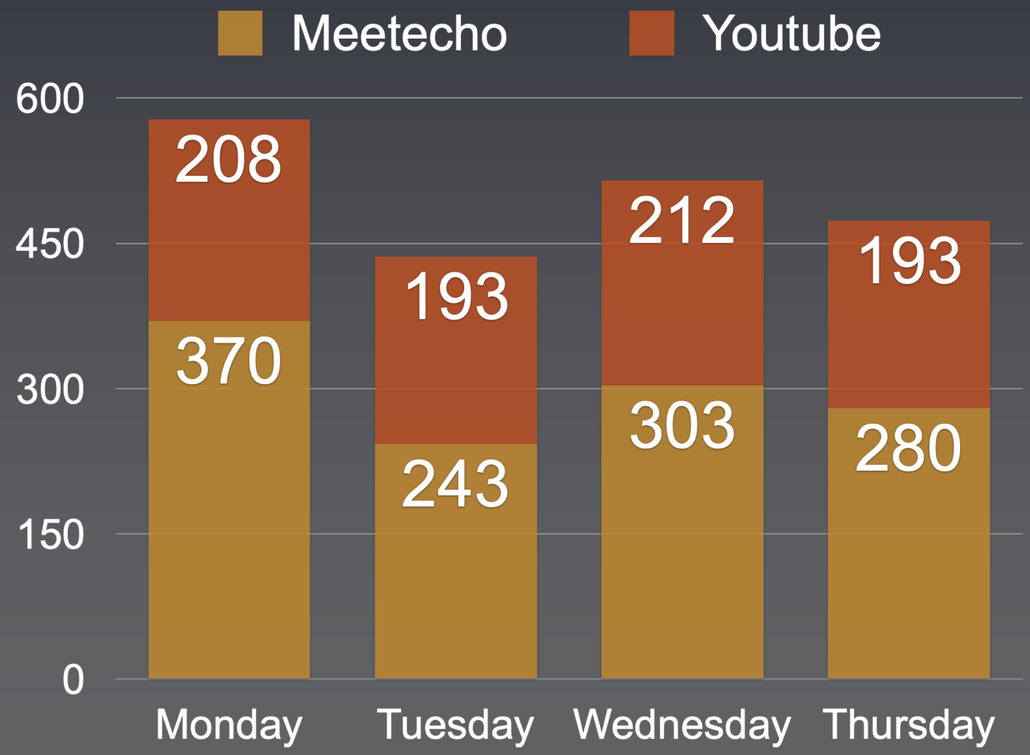


Online Participation



- 49,31% joined Meetecho over IPv6



Web Team

- Ihor Marhitych
- Marita Phelan
- Frantisek Holop
- Tommaso Amici
- Jura Zakarija

Meetecho Team

- Tobia Castaldi
- Alessandro Toppi

Steno Team

- Aoife Downes
- Mary McKeon
- Tina Kealy
- Anna Papa Murphy

Questions

opsmtg@ripe.net

https://ripe86.ripe.net/feedback/