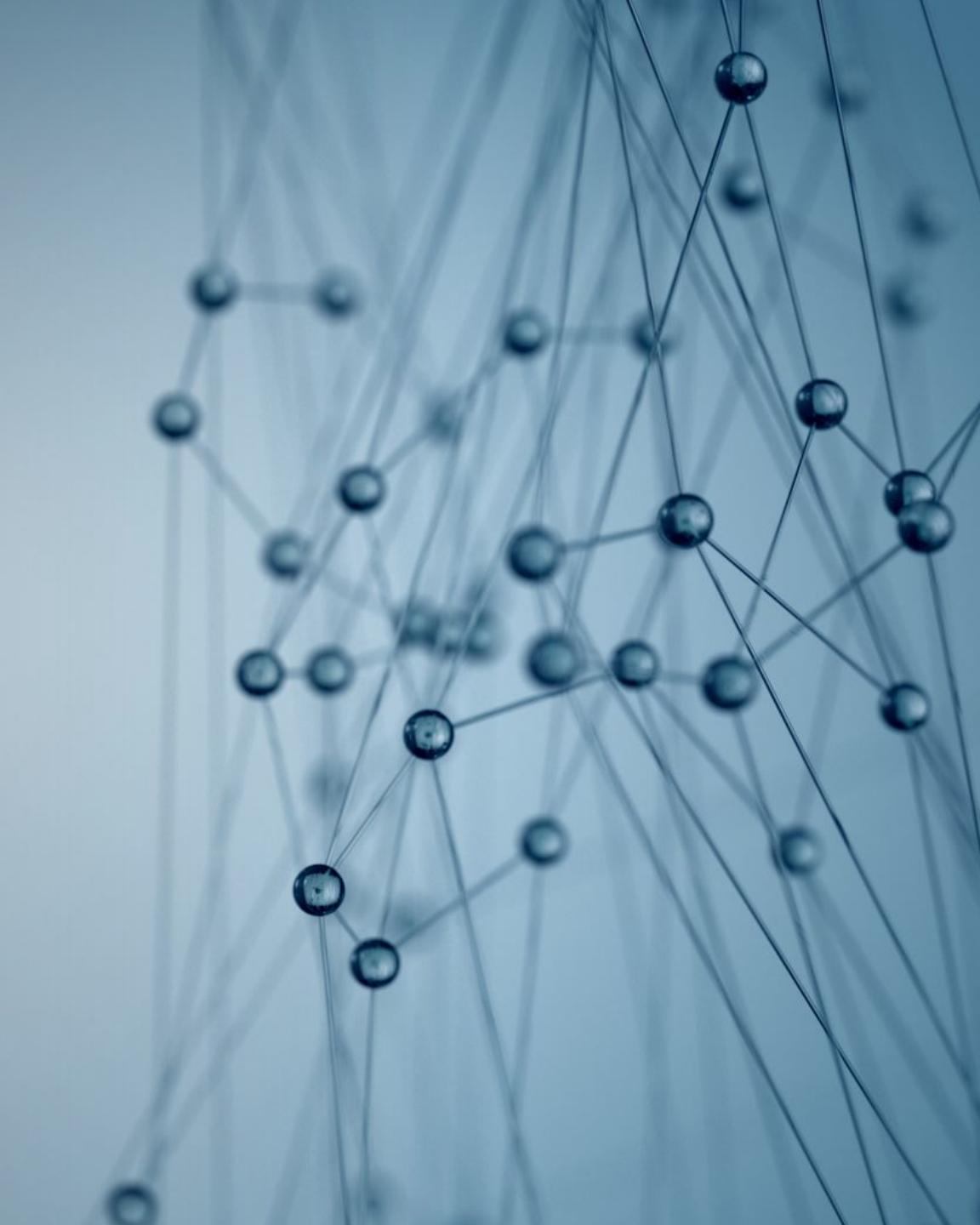


# PSYCHOLOGY OF IPV6

Veronika McKillop

INOG::v15

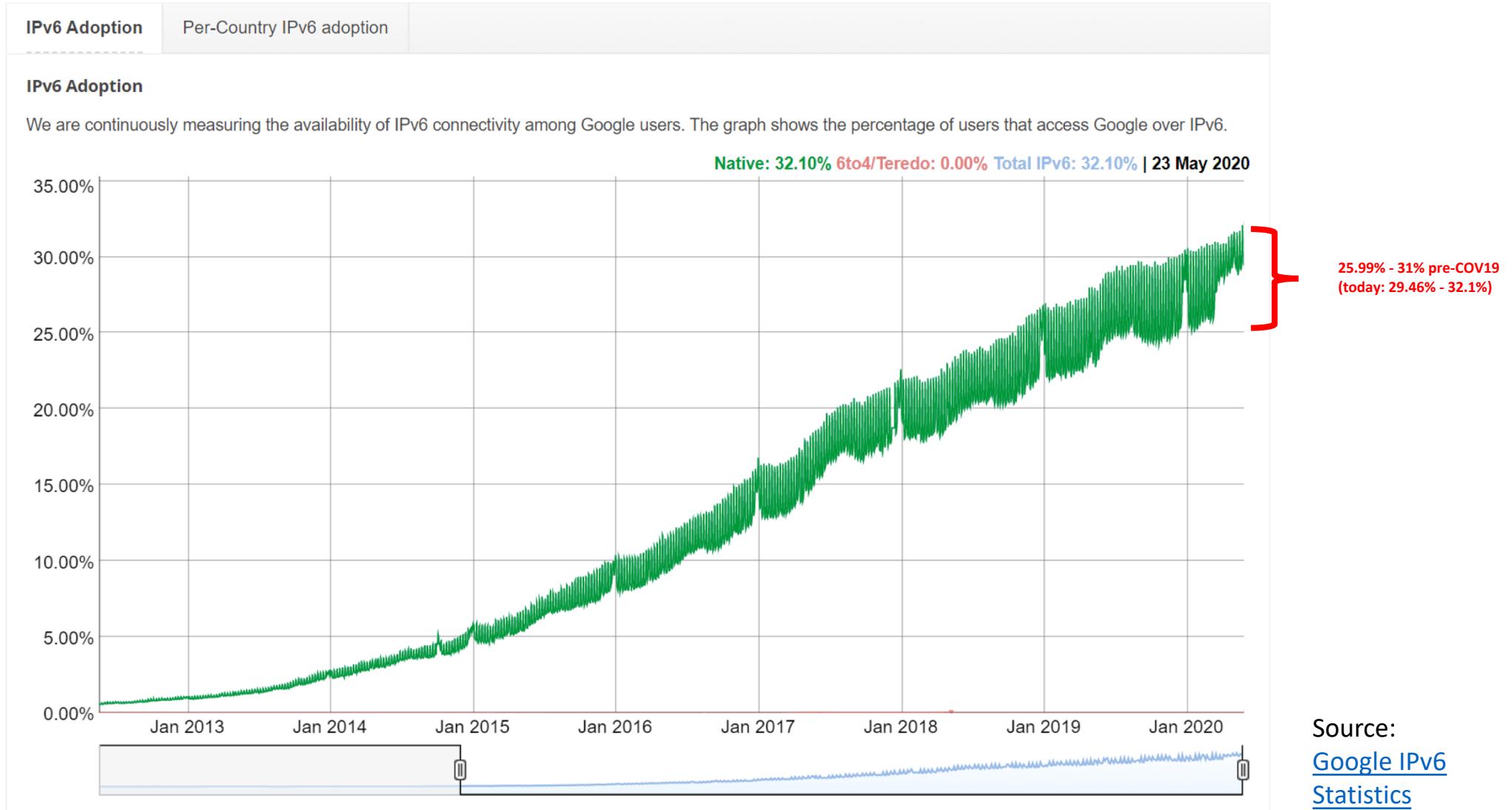
29 May 2020





**IPV6 DEPLOYMENT IS ABOUT  
TECHNOLOGY, ISN'T IT?**

# The fact-check: Global IPv6 Adoption



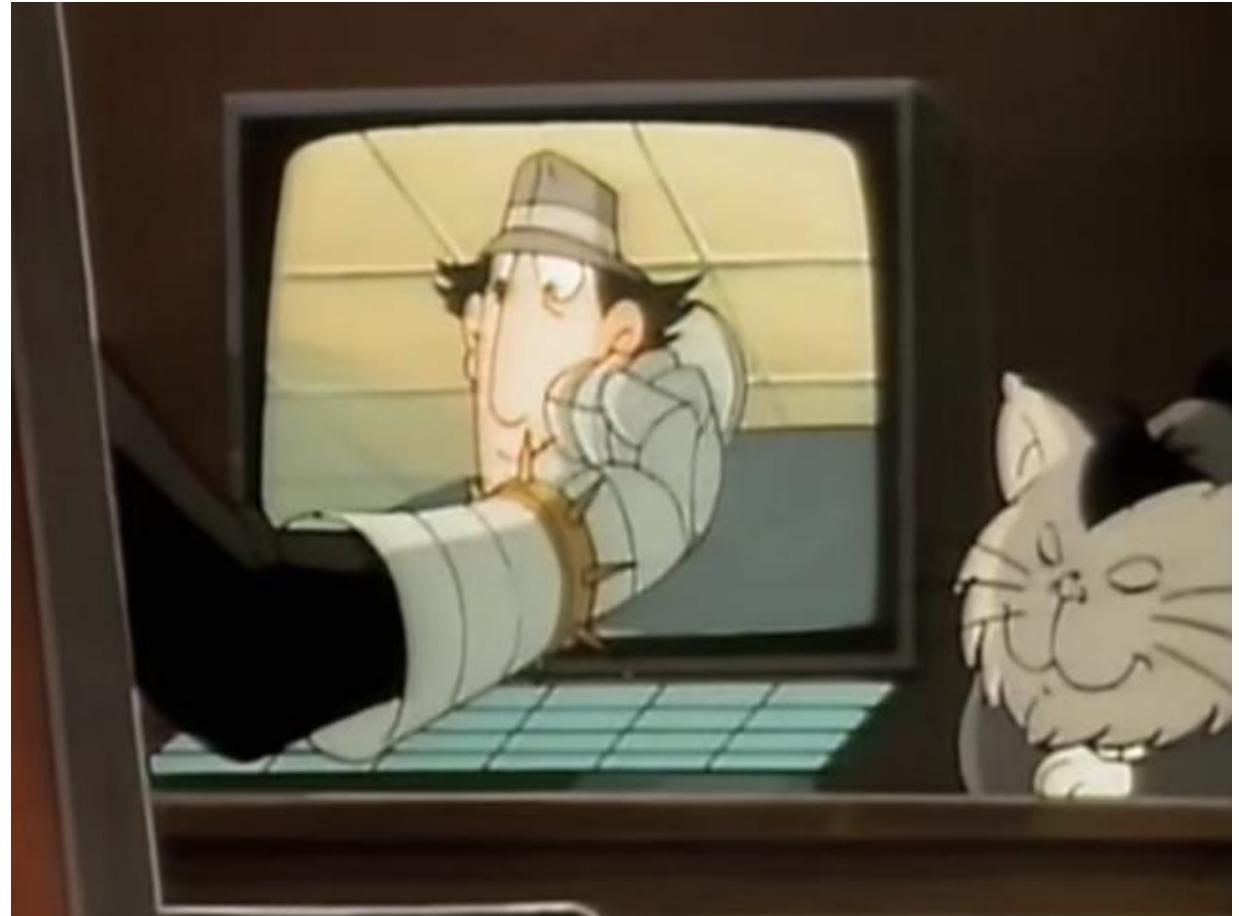
# **IPV6 PERSONALITIES**

DISCLAIMER: Based on my personal observations.

## IPv6 Haters & Trolls

- Positive messaging not acceptable
- They always find something broken
- “Excuse factory”
- Limited understanding

+ Keep us motivated



Source: [reddit](#)

I'll get you next time, Inspector Gadget!!

**SORRY I DIDN'T HEAR YOU**

A close-up photograph of a man's face. He has a white plastic spoon balanced on his right eye. His expression is neutral to slightly weary. The background is a plain, light-colored wall.

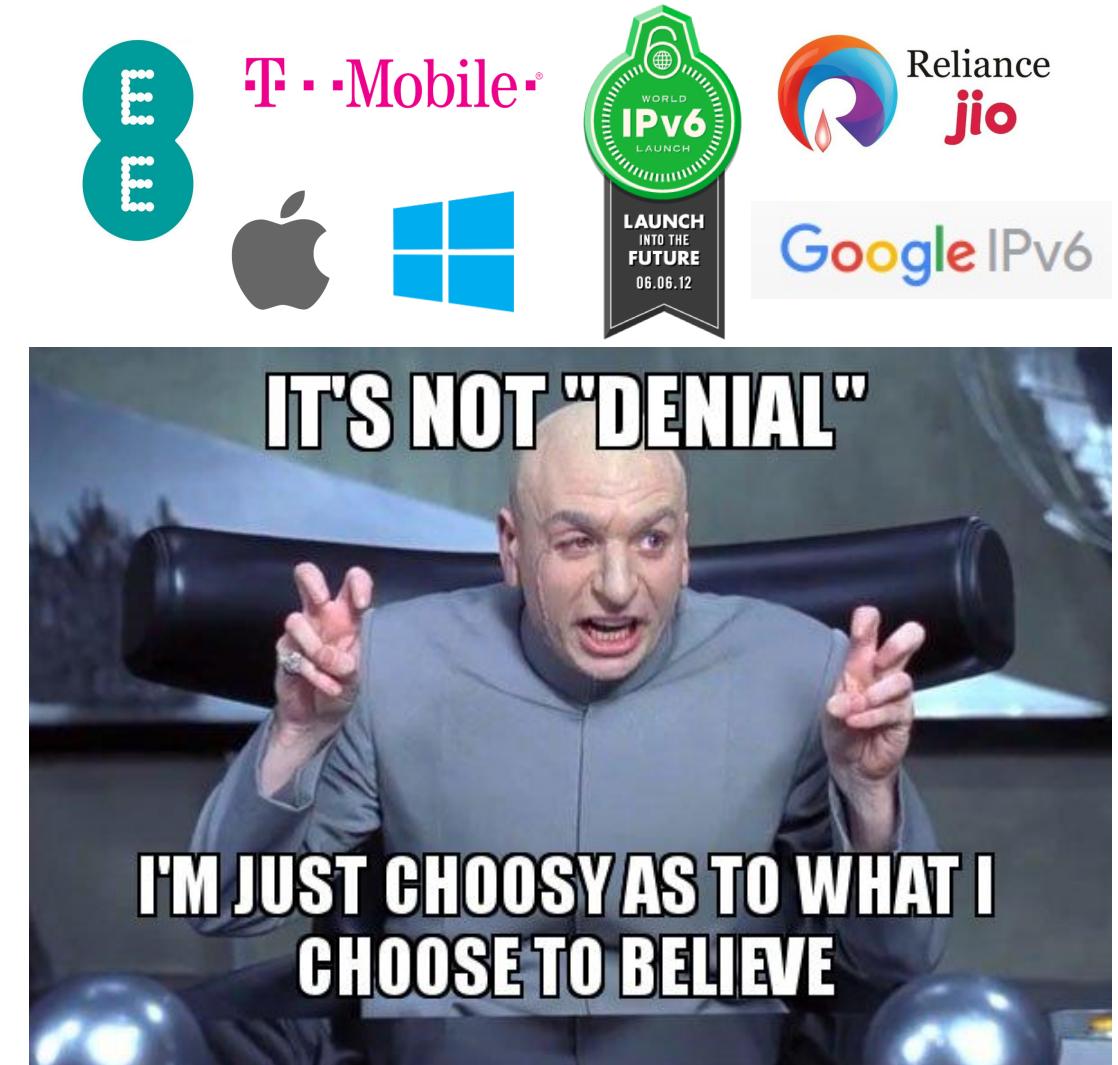
**I WAS TOO BUSY BLOCKING OUT THE  
HATERS**

memegenerator.net

Source: [Memegenerator.net](https://memegenerator.net)

# IPv6 Deniers

- Living pre-2011
  - Missed both World IPv6 events
  - [Google stats](#) what?
  - Missed Apple AppStore IPv6-only Announcement in 2015
  - Fail to notice mobile data is IPv6-only
  - Can be convinced when presented with data and facts
- + Can be convinced when presented with data and facts
- + Help us sharpen our story



Source: [Make a Meme.org](http://Make a Meme.org)

## IPv6 Pretenders

- “Of course IPv6 is important, but don’t ask me to do any work”
- Passive resistance is hard work
- Never reject openly but also don’t take any action to help
- Management decision
- Lack introspection

+ Help us create roadmaps!



## IPv6 Debaters

- Perfection vs. Reality
  - Perfection vs. Iteration
  - Focus them on a specific area with limited scope
  - Suggest to join IETF mailing lists  
😊
- 
- + Maybe the best pilot users
  - + Provide detailed feedback



Source: [Sayingimages.com](http://Sayingimages.com)

## IPv6 Enthusiasts

- Your allies!
- Not necessarily network engineers
- Know that IPv6 is important
- Take opportunities
- Provide valuable feedback
- Convince the unconvinced

+ Make us enjoy our work!



Source: [Make a Meme.org](https://makeameme.org)

# IPv6 Heroes

- Worked on IPv6 since the first RFC
- Organised World IPv6 Day & World IPv6 Launch
- Devoted to educate
- Harass vendors
- Convince management
- Always ask “What about IPv6?”
- Move us all forward
- Battled years of resistance
- Got us to 32% global adoption

# IPv6 Heroes



Source: [Batman on Film](#)

People of focus, commitment  
and sheer f\*\*\*ing will!

## IPv6 “Jack of All Trades”

- Breath vs. depth
- Communication is key
- “Encourage” vendors
- Somebody should do it... anybody could do it!!
- Now it's **your** turn!



Source [Guitarmachine.com](http://Guitarmachine.com)



# **WHY IPV6?**

# Remind me, why should I care?

- RIRs runout is real (RIPE in November 2019) – NO MORE IPv4! 😢... 😊
- Financial reasons – IPv4 price is growing

Block Size*	/24	/23	/22	/21	/20	/19	/18	/17	/16
Price/IP (USD)	30.00	26.00	22.00	20.00	20.00	20.00	20.00	20.00	21.00

Source: [IPv4 Market Group](#)

\$14.50/IP in August 2017

- 1x IPv4 /16 = **\$1,376,256** (minimum)
- The Internet is changing, and you CAN'T STOP it
  - IPv4 over IPv6-only Internet infrastructure (EE, Three UK, T-Mobile US, Charter Communications, Free, Reliance JIO and others)
  - Deploying IPv6 maintains good user experience on IPv4aaS Internet

# Summary

- IPv6 is as human as anything, we work with people
  - Remember the six types, make allies
- Successful deployment requires BOTH engineering and political (management) angles
  - Bottom up approach rarely succeeds in something that does not have an obvious business justification (unless you actually have one)
- There was not a better time to start then NOW
  - Dual stack is (almost) “business as usual” in both infrastructure and client OS today
  - The prize has shifted to IPv6-only
- [RIPE NCC Educa::IPv6-only](#) on 8 June 2020

Thank you & deploy IPv6! 😊