



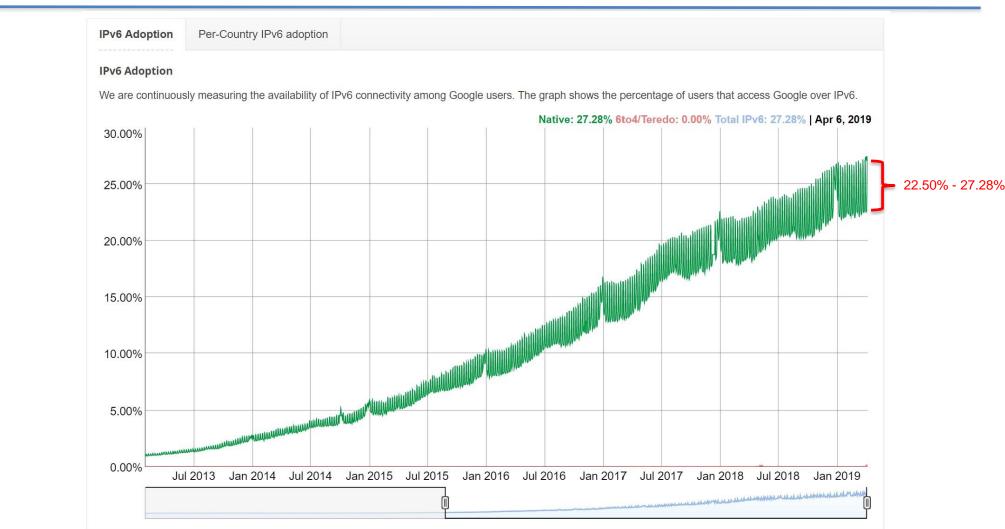
Psychology of IPv6

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IPV6 DEPLOYMENT IS ABOUT TECHNOLOGY, NO?



Global IPv6 Adoption



Source: Google IPv6 Statistics

IPV6 "PERSONALITIES"

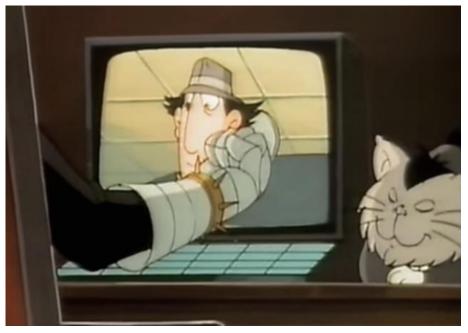
DISCLAIMER: My personal observations, not opinions of my employer or of UK IPv6 Council



1. IPv6 Haters & Trolls

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

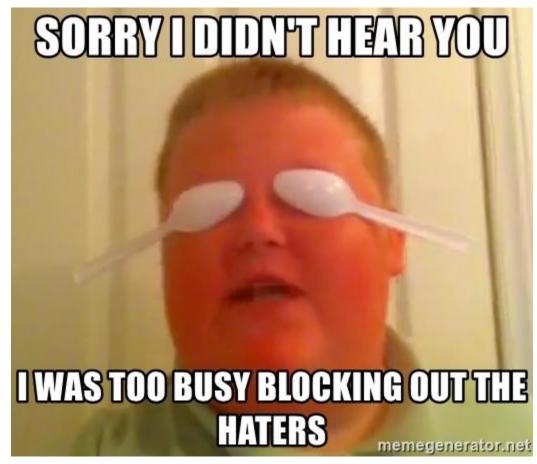
+ Keep us motivated



Source: reddit

I'll get you next time, Inspector Gadget!





Source: Memegenerator.net



2. IPv6 Deniers

- Living pre-2011
- Google IPv6 stats what?
- Missed both World IPv6 events
- Modern OS prefer IPv6
- Missed Apple AppStore IPv6only Announcement in 2015
- Fail to notice mobile data is IPv6-only

+ Can be convinced whenpresented with data and facts+ Help us sharpen our story



I'M JUST CHOOSY AS TO WHAT I

CHOOSE TO BELIEVE

Source: Make a Meme.org



3. 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 needed
- Lack introspection



+ Help us create roadmaps!



4. IPv6 Debaters

- Perfection vs. Reality
- Perfection vs. Iteration
- Focus them on a specific area with limited scope
- Suggest them to join IETF mailing lists ⁽²⁾

- + May be the best pilot users
- + Provide detailed feedback



Source: <u>Sayingimages.com</u>



5. IPv6 Enthusiasts & Supporters

- 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



6. 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 27% global adoption



6. 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!



WHY IPV6?



Remind me again, why IPv6?

Financial reasons – IPv4 price is growing

Block Size*	/24	/23	/22	/21	/20	/19	/18	/17	/16
Price/IP (USD)	26.00	23.00	20.00	20.00	19.50	19.50	19.00	19.50	19.00+ depending on quality

\$14.50/IP in August 2017

Source: IPv4 Market Group

- 1x IPv4 /16 = \$1,245,184 (minimum)

- The Internet is changing, and you CAN'T STOP it
 - IPv4 over IPv6-only Internet infrastructure (Comcast, 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 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



Thank you.



UK COUNCIL