Don't let IPv4 die

RIPE 79 - October 2019

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Please allow me to introduce myself

 Freelance Consultant
 Linux, IPv6, networking, automation, ...



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- Project time: 3 month, not full time
- My problem: I don't understand whats so hard about it

On October 3rd I send an e-mail

J

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I was not alone. Wolfgang Zenker is also send a mail starting a discussion.

There were questions

Eric V. asked:

"what did you drink this lunch time?"

IPvX

Some ideas:

- It MUST have NAT
- It MUST have Classes
- It MUST have DHCP
- It MUST have ARP
- It should be possible to drop ICMP with same impact as in IPv4
- It MUST only have numbers and dots "."
- There should be absolutely no reasons to use "[]" in URLs

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Not my ideas. Just put together what people told me over the years how the successor to IPv4 should look like.

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- Vendor training "You'll only need to know about IPv6 to get more then 90% of the test score."
- Security check lists with "you have to turn IPv6 off" \ And lots more:
- https://meta.stackoverflow.com/questions/348223/stack-overflow-notreachable-via-ipv6
- https://www.campusmanagement.tu-berlin.de/menue/dienste/ kommunikation_internet/ip_adressendns/faqs/parameter/en/
- https://ipv6excuses.com/

"When will the majority of the systems in the Internet be IPv6 only?"

A question we talked about around 2012. IIRC 2025 was among the answers.

Better question for today: "When will an IPv4 address cost >= 100€?"

A couple of years ago (I)

At a workshop: "What ever you do make sure that the hardand software you buy supports IPv6"

A couple of years ago (I)

- At a workshop: "What ever you do make sure that the hardand software you buy supports IPv6"
- A year later "Well we just bought \$software which does not support IPv6"

A couple of years ago (II)

Discussion with the SE from \$vendor: "Your using IPv6 in production?"

People are still building / designing IPv4 only Software, Hardware, Networks, ...

Today

- People are still building / designing IPv4 only Software, Hardware, Networks, ...
- If they do support IPv6 it often looks like they are not testing it

Who is to blame?

Probably you.

Who is to blame?

Probably you. At least if you have not been thrown out of the window several times.



The End



Don't let IPv4 die

One very last thing



 GitHub Network Ops @AS36459 · May 1
 ✓

 A bunch of us from GitHub will be at #RIPE78 Reykjavik. Why don't you come badger us about IPv6?
 ✓

 16
 13 37
 ⑦
 150
 ①

 Jens Link
 ✓
 ✓
 ✓

Replying to @AS36459

@QuuxBerlin

You'll be probably just waiting for somebody on the stage to complain about github not having IPv6 and then press the big red button and deploy it. ;-)

3:07 PM · May 1, 2019 · Twitter Web Client

Let's discuss