

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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- ▶ My problem: I don't understand what's so hard about it

# On October 3rd I send an e-mail

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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?”

Some ideas:

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- 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.

## And there are other problems

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And lots more:

- ▶ <https://meta.stackoverflow.com/questions/348223/stack-overflow-not-reachable-via-ipv6>
- ▶ [https://www.campusmanagement.tu-berlin.de/menue/dienste/kommunikation\\_internet/ip\\_adressendns/faqs/parameter/en/](https://www.campusmanagement.tu-berlin.de/menue/dienste/kommunikation_internet/ip_adressendns/faqs/parameter/en/)
- ▶ <https://ipv6excuses.com/>

## Back in 2012

“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  $\geq$  100€?”

## A couple of years ago (I)

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## A couple of years ago (I)

- ▶ At a workshop: “What ever you do make sure that the hard- and 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?”

# Today

- ▶ 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.

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



# The End



(Thanks to Constanze Dietrich, @WeddingTrash)

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

37

150



**Jens Link**

@QuuxBerlin

Replying to [@AS36459](#)

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