

**We don't need IPv6**

Originally the title was

“We don’t need IPv6”

Including the “”

# We don't need IPv6

- I hereby suggest that we
  - should use more NAT (NATs are good, NATs provide security)
  - Use 240/4 address space
  - IPv6 is just too complicated

**Just kidding!**

# /me

- I'm using IPv6 for about 3.500 days
- finished first big IPv6 project around June 6<sup>th</sup> 2012

# June 6<sup>th</sup> 2012?

- 2<sup>nd</sup> World IPv6 Day
- Back then we had discussion about when the majority of systems on the Internet would be reachable via IPv6
- I think 2018 was among the answers

# So why this talk in 2018?

Sometime ago on [twitter](#):

tfw can't deploy directly from GitHub to IPv6-only servers because GitHub of all places doesn't have IPv6

# Can we build LFS on an IPv6 only host? (I)

```
> wget http://www.linuxfromscratch.org/lfs/view/stable/wget-list
```

```
...
```

```
Resolving www.linuxfromscratch.org (...)
```

```
2600:3c01::f03c:91ff:fe70:25e8, 192.155.86.174
```

```
Connecting to www.linuxfromscratch.org (...)
```

```
2600:3c01::f03c:91ff:fe70:25e8|:80... failed: Connection refused.
```

```
Connecting to www.linuxfromscratch.org (...)|
```

```
192.155.86.174|:80... failed: Network is unreachable.
```

# Can we build LFS on an IPv6 only host? (I)

- Some scp, cut, sort later I came up with a list of **32 unique URLs**
- Using curl and some shell I ended up with a list of **18 unique URLs** not supporting IPv6
- After some more sorting I started to ask why
- You might want to open <https://ipv6bingo.com/> for the rest of the talk

# Answers (I)

- “It's mostly in our sysadmins' hands, though has at least made some progress lately! “ - launchpad
- “I'm afraid we're not able to discuss our roadmap publicly, but I will go ahead and add a +1 for this feature to our internal feature request list :)” - github

# Answers (II)

- “When/if there appear ipv6-only networks that have trouble reaching sourceware.org, this issue may become ripe. Until then, it seems like a non-problem” - sourcemaster
- “The hosting provider I use still doesn't support IPv6. I have mentioned about it to them in a feedback questionnaire they made a few years ago. I have no plans to change the hosting provider.” - tukaani.org

# Answers (III)

- “IPv6 support is on our roadmap. However, we have no firm ETA at this time. We recognize that IPv6 support is increasingly important, ... “ - sourceforge
- “Last year we deployed a new set of servers that among other features will provide full IPv6 support to all our services. We are currently in the process of migrating virtual machines into the new servers, and upgrading their software.” - gnu.org

# Checking CentOS

- I tried the same test for CentOS using the “homepage” in the rpm spec
  - ~ 1000 unique URLs
  - ~ 750 not reachable via IPv6 (~50 NXDOMAIN)

Needs some further testing and I will not ask them all about IPv6 support

# Asking more Questions

- Hotel and Airport Wireless Network Operators
  - “Nobody asked before”
  - “We don’t have any plans for this”
  - “Now that you are asking we may think about it”
  - “From our last 5.000.000 customers you are the 2<sup>nd</sup> to ask. .... We’ll start rolling out IPv6 in July”

# IPv6 and customers

- Project -2:
  - If you wanted to get some people angry you just had mention “IPv6”
- Project -1:
  - Everybody busy moving to the cloud, network IPv6 ready for years, seems you don’t need IPv6 for a large Internet portal
- current Project:
  - IPv6 is one of things I’m working on

# As a small content provider

- blog.quux.de only has AAAA record – people are telling me that I might have forgotten the A record
- Running a wiki and a mailing list for some nerds
  - Asked if I can make the the wiki host IPv6 only
  - Will ask again in 20years

# Conclusion...

- Most people are aware of IPv6
  - Some people don't care
  - Some people choose to ignore the problem
- Some people haven't notice / have forgotten that IPv4 addresses are scarce
- It's still a long way to go
- When nobody asks about IPv6 nobody sees a demand for it

# Idea

- Set up a website and coordinate the asking part

# Save the date: June 6<sup>th</sup> 2018

- World IPv6 Launch, 6th Launchiversary
- <https://madofo.github.io/v6launch/>