

# Draft-ietf-v6ops-design-choices

Philip Matthews (presenter)

Victor Kuarsingh

92<sup>nd</sup> IETF, Dallas

# What?

- Some routing-related design choices that come up when designing IPv6 and Dual-Stack.
- For each design choice discussed, presents the options and their pros and cons.

# Coverage

## *Interfaces*

- Mix IPv4 and IPv6 on same interface?
- Use only link-local addresses on interfaces?

## *Static Routes*

- Use link-local next-hop in a static route?

## *IGPs*

- What should I use for an IGP in my dual-stack network?

## *BGP*

- What routes should I transport over IPv4? Over IPv6?
- Should I use global or link-local endpoint addresses?

Plus some general discussion on LLAs and separation of v4 and v6.

# Changes -03 to -06

1. Narrowed scope to routing-related design choices.
  - Was always the de-facto scope, but now explicit in doc.
2. Added security considerations.
  - Just pointers to existing RFCs discussing security of topics covered in body.
3. Many small changes to improve document flow.

# The “unnumbered” question

- Mark Smith objected to our use of “unnumbered” to describe an interface with only link-local address.
- Spawned long thread on the mailing list.

# Possible terms ...

*WANTED: A short term to describe an interface (or link) that has only link-local address(es).*

Some choices (taken from the thread):

1. “unnumbered interface”
2. “link-local-only interface”
3. “administratively unnumbered interface”
4. “locally-numbered interface”
5. “link-numbered interface”
6. “administratively link-local only interface”