RIPE-554bis

The saga of updating it…

Who are we?

- The authors of RIPE-501, RIPE-554 and RIPE-554bis

– Jan Žorž	RIPE	501	554	554bis
– Sander Steffann	RIPE	501	554	554bis
– Merike Käo	RIPE		554	554bis
– Tim Chown	RIPE			554bis
– Tim Winters	RIPE			554bis

What is RIPE 554?

- Guidance when procuring IPv6 capable equipment and software for enterprises

- A document of the RIPE IPv6 Working Group

- It is/was quite successful:

  - Used by enterprises and governments all over the world

  - Part of government procurement rules in several countries

  - Some vendors secretly admitted it became their IPv6 roadmap

Basic changes

- There are always typos and bad grammar to fix

- Updated RFC references to current versions

- Add fundamental RFCs like "IPv6 over Ethernet"

- References to SeND removed

- Removed BOUNDv6 as it doesn't exist anymore

- The following slides show the highlights

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Changes for hosts

- Added some requirements:

  - Handling of overlapping fragments

  - Atomic fragments considered harmful

  - Stable opaque addresses for SLAAC and DHCP

- RDNSS (DNS options in RA) support became mandatory

- Mobile IPv6 became optional

Changes for enterprise/ISP switches

- Added some mandatory DHCPv6 relay options

- Added SAVI for DHCPv6 as optional

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Changes for routers

- Added RDNSS (DNS options in RA) support

- Added "don't assume /64"

- Added some optional DHCPv6 relay options

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Changes for CPEs

- Add mandatory simple security capabilities

Changes for mobile devices

- We removed the whole section!

- We now only consider their WiFi interfaces
  - Which makes them normal hosts

- 3GPP related standards are out of scope
  - We don't have the expertise to track this
  - There are better documents for these requirements

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Changes for load balancers

- Replace X-Forwarded-For: with standard Forwarded:

Changes for software

- Expanded the minimum requirements, like

  - Allow all valid addresses in input

  - Use recommended notation in output

  - DNS resolving must support AAAA

  - Connections must support IPv6 (sockets etc)

  - When connecting use default address selection
    or Happy Eyeballs 2

- Make it explicit that this list is not exhaustive!

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Link to the draft

- https://docs.google.com/document/d/10HsfHDOIhUPIvGk9WP0azJilsMVzQ49RsqWfnbNtcel/

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Consensus?

- RIPE554 is **very** outdated by now (nearly 10 years old) and we need to publish an updated version a.s.a.p.

- There were suggestions to expand the scope and add new categories - but we suggest to handle those separately.

- Consensus on publishing the current draft as RIPE document?

- Should we have a look every 2 years if all the RFCs are still valid and do the refresh cycle?

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Questions?