IPv6 reluctant devices and applications

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IPv6 reluctance

An application might not use available IPv6 connectivity because:

- Content is not available over IPv6
- Device/Operating system is not IPv6 capable
- Application is not IPv6 capable
- Content is referenced using IPv4 literals

Operator advantages to IPv6 traffic

For most ISPs, when they have IPv6 enabled their network, it's beneficial to have as much traffic as possible use IPv6 because:

- Typically IPv6 doesn't traverse operator CGN/firewall box (save on latency and capex/opex)
- End goal is to not have to support IPv4 (operational complexity)

Devices/Applications and IPv6 support

There is the concern that a certain class of devices/applications will never get IPv6 support. This includes for instance:

- ”Smart TVs” and STB (Set-top boxes) and applications running on these
- Older smartphones with applications not being updated
- Computers with older operating systems and older versions of applications

“Long tail”, devices have 10 year life times without software updates

The ask to MAPRG

Is it possible to identify/measure the before mentioned classes of devices/apps

- A device that resides on an IPv6 enabled LAN, but device does not use IPv6
- A device that resides on an IPv6 enabled LAN, the OS supports IPv6, but the application doesn’t support IPv6