

RFC8504-bis

IPv6 Node Requirements

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IPv6 Node Requirements - time for a -bis

Widely cited BCP document capturing IPv6 requirements for nodes

Provides a reference for requirements drawn from RFCs from many WGs

Previous versions: RFC 4294 (2006), RFC 6434 (2011), RFC 8504 (2019)

So we're due a new version

Support for progressing a -bis previously indicated by 6man chairs

Many IPv6-related RFCs published since 2019, and some very interesting drafts in progress (e.g., DHCP-PD per host, IPv6 Mostly, ...)

WG input needed!

We have posted a -00, with just very minor (non semantic) changes

See <https://datatracker.ietf.org/doc/draft-clw-6man-rfc8504-bis/>

The -bis process includes:

- Addition of text related to new RFCs
- Changes in requirement levels (MAY / SHOULD / MUST)
- Removal of obsolete text or material due to new RFCs or practices
- Consideration of areas to include, and where emphasis should lie

Your input is very important to help steer the authors (as editors)

New RFCs

Brian's 6book project helps here, see:

<https://github.com/becarpenter/book6/blob/main/20.%20Further%20Reading/RFC%20bibliography.md>

New (RFC numbers >8504, may not be precise definition of “new”):

- 38 standards track
- 14 informational
- 1 BCP
- 4 experimental

Initial review of these documents is underway. If RFCs are missing from the list, you can edit book6 :)

Need to decide how / if to include current drafts - these may be published as we progress 8504-bis

Note we previously discussed a “living RFC” for Node Requirements, but that's not happened (yet)

Other examples of potential changes

Add?

- New texts on IPv6 EH processing and limits, and hop-by-hop option processing
- Stub networks (snac), and IoT-related requirements
- IPv6 Segment Routing
- IPv6 options for In-situ operations, administration and management (IOAM)
- SLAAC and flash renumbering
- Operational security considerations for IPv6 networks
- DHCP-PD per device/client
- IPv6-mostly model

Remove?

- Mobile IPv6
- SeND
- What else?

What about DHCPv4 Option 108 - is it an IPv6 node requirement?

Comments?