

IETF 55

IPv6 Working Group

IPv6 Node Requirements

draft-ietf-ipv6-node-requirements-02.txt

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Major Changes

- Some formatting stuff.
- Requirements language.
- Removal of many 'IP over x' documents.
- Many of the Mobile IPv6 requirements have been updated.

Requirement Language

- MUST ...
 - (always mandatory)
- MUST ... when X
 - (mandatory under condition X)
- SHOULD ...
 - (always highly recommended)
- SHOULD ... when X
 - (highly recommended when X, possible otherwise)
- MAY ...
 - (possible if you want to do it)

RFC 1981 - Path MTU Discovery ...

- Path MTU is MAY. Some folks have commented that it needs to be SHOULD.
- Comment:
 - 'We really shouldn't be encouraging the idea that it's an option except in very restricted circumstances.'

RFC 3041 - Privacy Extensions

- Do we want to discuss in what circumstances Privacy Extensions for Stateless Address Autoconfiguration in IPv6 are needed?
- Different Requirements for:
 - hosts
 - servers
 - mobile nodes
 - other
- Or is it sufficient to say (as the document currently says):
 - Privacy Extensions for Stateless Address Autoconfiguration [RFC-3041] MAY be supported.

MLD

- Change:
 - Multicast Listener Discovery [RFC-2710] MUST be supported by nodes supporting multicast applications. A primary IPv6 multicast application is Neighbor Discovery (all those solicited-node mcast addresses must be joined).
- To:
 - Multicast Listener Discovery [RFC-2710] MUST be supported by nodes supporting multicast applications or Neighbor Discovery.
- Change:
 - When MLDv2 [MLDv2] has been completed, it SHOULD take precedence over MLD.
- To
 - Nodes supporting source-specific multicast applications MUST support MLDv2.

Default Address Selection for IPv6

- Change:
 - The rules specified in the document are the only MUST to implement portion of the architecture. A node MUST belong to one site. There is no requirement that a node be able to belong to more than one.
- To:
 - The rules specified in the document are the only MUST to implement portion of the architecture. There is no requirement that a node be able to belong to more than one site.

IPv4 Support

- IPv6 nodes MAY support IPv4.
- Should this document consider the following cases:
 - Native IPv6 only
 - Native IPv6 with IPv4 supported only via tunneling over IPv6
 - Native IPv6 and native IPv4 both fully supported.
- and see if this places any requirements on this.

Mobile IP

- Mobile Node functionality MAY be supported.
- Route Optimization functionality SHOULD be supported for hosts.
- Route Optimization is not required for routers.
- Remove Home Agent functionality text – it is a subset of router functionality.

MIBs

- What do we want to do here?
- Only IP level MIBs SHOULD or MUST be supported.
 - Forwarding table MIB
 - IP MIB
 - Interfaces MIB
- Others may be supported as needed.
- If you implement another protocol, then you SHOULD or MUST implement the MIB. You MUST implement if you have an SNMP agent.
- RFC 1112 says nothing about MIBs.

Other

- Remove section on RFC2874 - DNS Extensions to Support IPv6 Address Aggregation and Renumbering

Discussions to Capture (at some point)

- Is there anything useful to capture at this point?
 - Flow Label
 - DNS discovery
 - SeND WG issues
 - ANYCAST
- Right now, there may not be anything needed to be captured.

Schedule

- Assumption is that this is a Standards Track document - RFC1122 is a standard.
- New draft planned by mid-January 2003
- Please send comments beforehand.
- Then see if this is ready for WG Last Call.

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