

IPv6 MIB Updates

IPv6 MIB Design Team
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MIBS Involved

- INET-ADDRESS-MIB
- TCP-MIB
- UDP-MIB
- IP-FORWARD-MIB
- IP-MIB

INET-ADDRESS-MIB

draft-ietf-ops-rfc2851-update-01.txt

- Relaxed restrictions on InetAddressType / InetAddress pairings

One InetAddressType may apply to multiple InetAddresses

- Added InetAddressPrefixLength
- Added InetPortNumber
- Added InetAutonomousSystemNumber
- To add: ScopeIdentifier?
(Current wording under InetAddressIPv6)

TCP-MIB

■ Changes from RFC 2012:

- Added HC counters

- Added per-connection counters

- Changed tcpConnTable (IP v4-only) to tcpConnectionTable (version-independent)

- Deprecated v4-only objects

■ Changes from draft-ops-rfc2012-update-00.txt:

- Added tcpCountersGroup for conformance

■ To change:

- Add row pointer to HOST-RESOURCES-MIB

- Add tcpListenerTable

- Fix counter definitions

■ Open Issues:

- v4/v6 address representation from application or network point of view?

- more per-connection state? (e.g. window size, queue length)

UDP-MIB

■ Changes from RFC 2013:

Changed udpTable (IPv4-only) to udpListenerTable
(version-independent)

Added HC counters

Deprecated v4-only objects

■ Plans:

Add row pointer to HOST-RESOURCES-MIB

Add udpConnectionTable

Add counters?

■ Open Issues:

v4/v6 address representation from application or network point of view?

IP-FORWARD-MIB

- Changes from RFC 2096:

- Changed ipCidrRouteTable (IPv4-only) to inetCidrRouteTable (version-independent)

- Added inetCidrRouteInstance to beginning of INDEX to handle scopes, DSCP, etc

- ▶ Q: How to share the meaning of a given instance value?

- Changes from draft-ops-rfc2096-update-00.txt:

- Added inetCidrRouteDiscards to replace ipRoutingDiscards.

IP-MIB

■ Changes from RFC 2011 / RFC 2465 / RFC 2466:

Added ipv4IfTable, with ipv4IfReasmMaxSize.

Included ipv6InterfaceTable

- ▶ Do we need ipv6InterfaceIdentifier / ipv6InterfaceIdentifierLength?
- ▶ Do we need ipv6InterfacePhysicalAddress?

Added per-interface stats (as in RFC 2465)

■ Changes from draft-ops-rfc2011-update-00.txt:

Added lots of counters to ipIfStats table, and

ipIfStatsDiscontinuityTime

Un-deprecated ipReasmTimeout.

IP-MIB Plans and Open Issues

■ Plans:

Update ICMP stats tables to have a single system-wide table and (perhaps) an additional per-interface table

- ▶ Simplifies indexing

Similarly update IP stats tables

■ Open Issues:

Lots more; see web page

Are per-interface statistics feasible?

- ▶ Some feedback says no

- ▶ The IF-MIB has layer 2 per-interface counters, what's the big difference with layer 3 per-interface counters?

For More Info

- <http://www.aciri.org/fenner/mibs/v6/>
Current working drafts
Extracted MIBs
- <http://www.aciri.org/fenner/mibs/v6/issues/>
(not quite) Current lists of design team issues

- We REALLY want your feedback!