

RFC 2893 Update

<draft-ietf-ngtrans-mech-v2-01.txt>

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Old major changes from RFC 2893

- Removed automatic tunnels
 - Not used; superceeded by different tunneling schemes
- Removed IPv4-compatible addresses
 - Were only used with automatic tunnels
- Removed default configured tunnel using anycast
 - Was used together with automatic tunnels
- Removed source address selection
 - Refer to IPv6 default address selection document

Additional Changes

- Rewrote reference to diffserv and ECN
- Changed A6 to AAAA
- Stated that IPv4 source may be administratively specified

MTU issues

- Optional dynamic tunnel interface MTU
 - Encapsulator uses IPv4 PMTU discovery
 - Capped at 4400 bytes
- Small fixed tunnel interface MTU
 - 1280 bytes
- Allow encapsulators and decapsulators to configure larger MTU
- Decapsulators must support reassembly of IPv4

MTU implications

- Decapsulators must support reassembly of IPv4 of at least
 - 1280+20 – for senders that use static tunnel MTU
 - Max(interface MTU) for senders that use dynamic
 - Thus 4400 number could be larger

Open Issues (1/2)

- Should we drop the mention of unidirectional tunneling?
- Is 1280 a reasonable MTU for encapsulators without dynamic tunnel MTU discovery?
- Is 4400 a reasonable cap on dynamic tunnel MTU discovery?
 - Doesn't seem necessary to have a limit – unless decapsulators have large physical interface MTU
- Are there other concerns about reassembly buffer size?

Open Issues (2/2)

- IPv6 native addresses include IPv4-mapped as currently defined.
 - Is this an issue that needs to be dealt with?
 - The term "IPv6-native" is only used once in the document.
- Email comment about ingress filtering
 - Need to see if this is just a clarification about the assumptions in the document

Next steps?

- Do the edits to which we agree
- Re-issue with draft-ietf-v6ops- name?
- Is there an implementation report for all options and features of the protocol?