           Reserved Type, Length and Value (TLV) Codepoints in
                Intermediate System to Intermediate System

Status of this Memo

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Abstract

   This document describes implementation codepoints within Intermediate
   System to Intermediate System (IS-IS) used today by several ISPs for
   routing within their clouds. IS-IS is an interior gateway routing
   protocol developed originally by OSI and used with IP extensions as
   Interior Gateway Protocol (IGP). This document summarizes all Table,
   Length and Value (TLV) codepoints that are being used by the protocol
   and its pending extensions.

1. TLV Codepoints Reserved

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   Name                     Value  IIH   LSP   SNP   Status

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   Area Addresses              1   y     y     n     ISO 10589
   IIS Neighbors               2   n     y     n     ISO 10589
   ES Neighbors                3   n     y     n     ISO 10589
   Part. DIS                   4   n     y     n     ISO 10589
   Prefix Neighbors            5   n     y     n     ISO 10589
   IIS Neighbors               6   y     n     n     ISO 10589
   Padding                     8   y     n     n     ISO 10589
   LSP Entries                 9   n     n     y     ISO 10589
   Authentication             10   y     y     y     ISO 10589
   Opt. Checksum              12   y     n     y     IETF-draft
   LSPBufferSize              14   n     y     n     ISO 10589 Rev 2 Draft
   TE IIS Neigh.              22   n     y     n     IETF-draft
   DECnet Phase IV            42   y     n     n     DEC (ancient)
   Lucent Proprietary         66   n     y     n
   IP Int. Reach             128   n     y     n     RFC 1195
   Prot. Supported           129   y     y     n     RFC 1195
   IP Ext. Address           130   n     y     n     RFC 1195
   IDRPI                     131   n     y     y     RFC 1195
   IP Intf. Address          132   y     y     n     RFC 1195
   Illegal                   133   n     n     n     RFC 1195 (not used)
   Router ID                 134   n     y     n     IETF-draft
   TE IP. Reach              135   n     y     n     IETF-draft
   Dynamic Name              137   n     y     n     RFC 2763
   Nortel Proprietary        176   n     y     n
   Nortel Proprietary        177   n     y     n
   Restart TLV               211   y     n     n     IETF-draft
   MT-ISN                    222   n     y     n     IETF-draft
   M-Topologies              229   y     y     n     IETF-draft
   IPv6 Intf. Addr.          232   y     y     n     IETF-draft
   MT IP. Reach              235   n     y     n     IETF-draft
   IPv6 IP. Reach            236   n     y     n     IETF-draft
   MT IPv6 IP. Reach         237   n     y     n     IETF-draft
   P2P Adjacency State       240   y     n     n     IETF-draft
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2. Assignment Procedures

   This document is provided to avoid possible future conflicts in the
   assignment of TLV numbers. It does not constitute or represent any
   standard or authority assigning TLV numbers. TLV assignment happens
   on a shared, informational basis between the ISO, SIF and the IETF
   working groups. The core ISIS protocol is being specified in the ISO
   standards body, IP extensions to it however are products of the ISIS
   working group in IETF. Since ISO does not provide a numbering
   authority and IANA is only responsible for IP related coding points,
   no plausible central authority to assign TLV numbers exists as of
   today.

   This document will be periodically updated by newer versions in the
   fashion of [RP94] and successors. It may be replaced at any given
   point in time by some type of official registry.

   This document will not indicate specific documents using the
   codepoints, nor will it resolve the sub-TLV codepoints.

3. Acknowledgments

   Thanks to Les Ginsberg and others for pointing out details and
   improving this work.

4. Security Consideration

   ISIS security applies to the work presented. No specific security
   issues are being introduced.

5. References

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   [ISO90] ISO. Information Technology - Telecommunications and
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   [RP94]   Reynolds, J., "Assigned Numbers; RFC 1700 is Replaced by an
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7. Full Copyright Statement

Acknowledgement