        Label Distribution Protocol (LDP) Internet Assigned Numbers Authority
                         (IANA) Considerations Update
                  draft-asati-pignataro-mpls-ldp-iana-01

Abstract

   This document augments the Internet Assigned Numbers Authority (IANA)
   considerations for the Label Distribution Protocol (LDP), for
   protocol fields that are Reserved in the LDP Specification but for
   which there are no IANA allocation policies.

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   This Internet-Draft is submitted in full conformance with the
   provisions of BCP 78 and BCP 79.

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1. Introduction

   LDP [RFC5036] specifies a number of Reserved fields in various
   protocol elements, without establishing an allocation policy for
   them. This document describes updates to the IANA Considerations for
   LDP, for the following LDP TLVs:

   o ATM Label TLV

   o Frame Relay Label TLV

   o Common Hello Parameters TLV

   o Common Session Parameters TLV

   o ATM Session Parameters TLV

   o Frame Relay Session Parameters TLV

   All Reserved bit-fields mentioned specifically in this document are
   set to zero on transmission and ignored on receipt, therefore
   protecting backwards compatibility.

2. IANA Considerations

   IANA is requested to add the Registration Procedures for the LDP
   fields as specified in the upcoming sections. All other LDP IANA
   Registration Procedures are to remain unmodified.

2.1. ATM Label TLV

   There are two Reserved bits in the ATM Label TLV (see Section 3.4.2.2
   of [RFC5036]). Allocations from these bits are made via IETF Review
   [RFC5226]. Previously, there was no rule for allocation of these
   bits.

2.2. Frame Relay Label TLV

   There are seven Reserved bits in the Frame Relay Label TLV (see
   Section 3.4.2.3 of [RFC5036]). Allocations from these bits are made
   via IETF Review [RFC5226]. Previously, there was no rule for
   allocation of these bits.

   Additionally, Section 3.4.2.3 of [RFC5036] also defines values 0 and
   2 for the "Len" field. "Len" values 1 and 3 are available for
   assignment via IETF Review [RFC5226]. Previously, there was no rule
   for allocation of these values.

2.3. Common Hello Parameters TLV

   There are fourteen Reserved bits in the Common Hello Parameters TLV
   (see Section 3.5.2 of [RFC5036]). Allocations from these bits are
   made via IETF Review [RFC5226]. Previously, there was no rule for
   allocation of these bits.

2.4. Common Session Parameters TLV

   There are six Reserved bits in the Common Session Parameters TLV (see
   Section 3.5.3 of [RFC5036]). Allocations from these bits are made
   via IETF Review [RFC5226]. Previously, there was no rule for
   allocation of these bits.

2.5. ATM Session Parameters TLV

   Within the ATM Session Parameters TLV, there are twenty five Reserved
   bits in the header, and eight Reserved bits in the ATM Label Range
   Component (see Section 3.5.3 of [RFC5036]). Allocations from these
   bits are made via IETF Review [RFC5226]. Previously, there was no
   rule for allocation of these bits.

2.6. Frame Relay Session Parameters TLV

   Within the Frame Relay Session Parameters TLV, there are twenty five
   Reserved bits in the header, and sixteen Reserved bits in the Frame
   Relay Label Range Component (see Section 3.5.3 of [RFC5036]).
   Allocations from these bits are made via IETF Review [RFC5226].
   Previously, there was no rule for allocation of these bits.

   Additionally, Section 3.5.3 of [RFC5036] also defines values 0 and 2
   for the "Len" field. "Len" values 1 and 3 are available for
   assignment via IETF Review [RFC5226]. Previously, there was no rule
   for allocation of these values. These values are common with those
   of Section 2.2.

3. Security Considerations

   This document does not modify the security properties for LDP.

4. Acknowledgments

   The authors wish to thank Adrian Farrel and Loa Andersson for their
   valuable comments.

5. Normative References

   [RFC5036]   Andersson, L., Minei, I., and B. Thomas, "LDP
               Specification", RFC 5036, October 2007.

   [RFC5226]   Narten, T. and H. Alvestrand, "Guidelines for Writing an
               IANA Considerations Section in RFCs", BCP 26, RFC 5226,
               May 2008.

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