Updates to the Allocation Policy for the Border Gateway Protocol - Link
                State (BGP-LS) Parameters Registries
                  draft-ietf-idr-bgp-ls-registry-00

Abstract

   RFC 7752 defines Border Gateway Protocol - Link State (BGP-LS). IANA
   created a registry consistent with that document called the "Border
   Gateway Protocol - Link State (BGP-LS) Parameters Registry" with a
   number of sub-registries. The allocation policy applied by IANA for
   those policies is "Specification Required" as defined in RFC 8126.

   This document updates RFC 7752 by changing the allocation policy for
   all of the registries to "Expert Review" and by updating the guidance
   to the Designated Experts.

Status of This Memo

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

   Internet-Drafts are working documents of the Internet Engineering
   Task Force (IETF). Note that other groups may also distribute
   working documents as Internet-Drafts. The list of current Internet-
   Drafts is at https://datatracker.ietf.org/drafts/current/.

   Internet-Drafts are draft documents valid for a maximum of six months
   and may be updated, replaced, or obsoleted by other documents at any
   time. It is inappropriate to use Internet-Drafts as reference
   material or to cite them other than as "work in progress."

   This Internet-Draft will expire on May 22, 2020.

Table of Contents

1. Introduction

   Border Gateway Protocol - Link State (BGP-LS) [RFC7752] requested
   IANA to create a registry consistent called the "Border Gateway
   Protocol - Link State (BGP-LS) Parameters Registry" with a number of
   sub-registries. The allocation policy applied by IANA for those
   policies is "Specification Required" as defined in [RFC8126].

   The "Specification Required" policy requires evaluation of any
   assignment request by a "Designated Expert" and guidelines for any
   such experts are given in section 5.1 of [RFC7752]. In addition,
   this policy requires "the values and their meanings must be
   documented in a permanent and readily available public specification,
   in sufficient detail so that interoperability between independent
   implementations is possible" [RFC8126]. Further, the intention
   behind "permanent and readily available" is that "a document can
   reasonably be expected to be findable and retrievable long after IANA
   assignment of the requested value" [RFC8126].

   It is often considered that it is the responsibility of the
   Designated Expert to make a determination as to whether a
   specification meets the requirement to be permanent and readily
   publicly available. A degree of contention arises in this case
   because Internet-Drafts are now permanently archived in the IETF&s
   tools archive, yet each such document is marked with a piece of
   boilerplate text as follows that brings doubt about its suitability
   as a permanent record:

      Internet-Drafts are draft documents valid for a maximum of six
      months and may be updated, replaced, or obsoleted by other
      documents at any time. It is inappropriate to use Internet-Drafts

as reference material or to cite them other than as "work in progress."

Another allocation policy called "Expert Review" is defined in [RFC8126]. This policy also requires Expert Review, but has no requirement for a formal document.

All reviews by Designated Experts are guided by advice given in the document that defined the registry and set the allocation policy.

This document updates RFC 7752 by changing the allocation policy for all of the registries to "Expert Review" and updating the guidance to the Designated Experts.

2. IANA Considerations

IANA maintains a registry called the "Border Gateway Protocol - Link State (BGP-LS) Parameters Registry". This registry contains four sub-registries:

o BGP-LS NLRI-Types

o BGP-LS Node Descriptor, Link Descriptor, Prefix Descriptor, and Attribute TLVs

o BGP-LS Protocol-IDs

o BGP-LS Well-Known Instance-IDs

IANA is requested to change the assignment policy for each of these registries to "Expert Review".

2.1. Guidance for Designated Experts

Section 5.1 of [RFC7752] gives guidance to Designated Experts. This section replaces that guidance.

In all cases of review by the Designated Expert (DE) described here, the DE is expected to check the clarity of purpose and use of the requested code points. Additionally, the DE must verify that any request for one of these code points has been made available for review and comment within the IETF: the DE will post the request to the IDR Working Gorup mailing list (or a successor mailing list designated by the IESG). If the request comes from within the IETF, it should be documented in an Internet-Draft. Lastly, the DE must ensure that any other request for a code point does not conflict with work that is active or already published within the IETF.

3. Security Considerations

The security consideration of [RFC7752] still apply.

Note that the change to the expert review guidelines make the
registry and the Designated Experts slightly more vulnerable to
denial of service attacks through excessive and bogus requests for
code points. It is expected that the registry cannot be effectively
attacked because the Designated Experts would, themselves, fall to
any such attack first. Designated Experts are expected to report to
the IDR working group chairs and responsible Area Director if they
believe an attack to be in progress, and should immediately halt all
requests for allocation. This may temporarily block all legitimate
risks until mitigations have been put in place.

This change in allocation policy should not have any effect on the
integrity of BGP-LS since there is no change to the review
requirements for the work that underlies the request.

4. Acknowledgements

This work is based on the IANA considerations section of [RFC7752].
The author thanks the people who worked on that document.

The author would like to be able to thank John Scudder for suggesting
the need for this document.

Thanks to John Scudder, Donald Eastlake, and Ketan Talaulikar for
review, comments, and discussion.

5. Normative References

[RFC7752]   Gredler, H., Ed., Medved, J., Previdi, S., Farrel, A., and
            S. Ray, "North-Bound Distribution of Link-State and
            Traffic Engineering (TE) Information Using BGP", RFC 7752,
            DOI 10.17487/RFC7752, March 2016,
            <https://www.rfc-editor.org/info/rfc7752>.

[RFC8126]   Cotton, M., Leiba, B., and T. Narten, "Guidelines for
            Writing an IANA Considerations Section in RFCs", BCP 26,
            RFC 8126, DOI 10.17487/RFC8126, June 2017,
            <https://www.rfc-editor.org/info/rfc8126>.

Author's Address

   Adrian Farrel
   Old Dog Consulting

   Email: adrian@olddog.co.uk