IDR Group
Internet-Draft
Updates: 7752 (if approved)
Intended status: Standards Track
Expires: May 6, 2020

A. Farrel
Old Dog Consulting

November 3, 2019

Updates to the Allocation Policy for the Border Gateway Protocol - Link State (BGP-LS) Parameters Registries
draft-farrel-idr-bgp-ls-registry-03

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 6, 2020.

Copyright Notice

Copyright (c) 2019 IETF Trust and the persons identified as the document authors. All rights reserved.

This document is subject to BCP 78 and the IETF Trust's Legal Provisions Relating to IETF Documents (https://trustee.ietf.org/license-info) in effect on the date of

publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

1. Introduction 2
2. IANA Considerations 3
2.1. Guidance for Designated Experts 3
3. Security Considerations 4
4. Acknowledgements 4
5. Normative References 4
Author's Address 4

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:

- BGP-LS NLRI-Types
- BGP-LS Node Descriptor, Link Descriptor, Prefix Descriptor, and Attribute TLVs
- BGP-LS Protocol-IDs
- 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