BGP Registries by IDR and other BGP WGs
draft-hares-idr-bgp-registries-00.txt

Abstract

The BGP Registries at IANA were set-up as one of the earliest IANA registries. Over time, the registries have become denoted as requiring "standards action", "early allocation", "FCFS (first-come, first server)", "vendor specific", and "IETF review". This draft proposes that certain BGP registries that are labelled "standards action", "early allocation", or "IETF Review" add to these registration actions a "Expert Review. It also proposes that the chairs of BGP Protocol related WG groups be part of the review team. The intent is that these chairs will be responsible to bring questionable allocations to their workings attention.

The BGP relate working groups are currently the IDR, BESS, SIDROPS, and GROW, but other working groups like SPRING might be added.

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 http://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 September 14, 2017.

Copyright Notice

Copyright (c) 2017 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 (http://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. BGP Registries to Change Registration Process on .................. 2
3. Security Considerations ............................................. 4
4. IANA Considerations ................................................ 5
5. Acknowledgements ................................................... 5
6. Normative References ............................................... 5
Author’s Address ....................................................... 7

1. Introduction

During 2016, several BGP attributes were squatted upon causing operational problems during the early deployment of large communities [RFC8092]. Due these problems, [RFC8093] deprecated the use of 5 attribute numbers.

To avoid this problem in the future, it is helpful to increase pace of early-allocations process and to coordinate the review of key BGP registries. This document proposes to augment existing registration process for BGP registries with Expert review.

This draft proposes that certain BGP registries that are labelled "standards action", "early allocation", or "IETF Review" add to these registration actions a "Expert Review. It also recommends that the chairs of BGP Protocol related WG groups be part of the review team.

2. BGP Registries to Change Registration Process on

This document proposes the IETF BGP registries in Table 1 below to require their curent registration policy plus Expert Review. It recommends that the chairs of the BGP related working groups (e.g. IDR, Bess, SIDROPS, GROW) be a part of this review team. The IESG can define which working groups are BGP working groups, but it is important to get the chairs of the Working Groups that originate or maintain the drafts in Table 1 as part of the review team.
If no BGP WG groups remain, the IESG may select designated experts to fulfill this role.

ER = Expert Review

Table 1 - Registries with changes

<table>
<thead>
<tr>
<th>BGP registry</th>
<th>Registration</th>
<th>reference</th>
<th>Add ER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Types</td>
<td>Standards Action</td>
<td>RFC4271</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Path Attributes</td>
<td>Standards Action</td>
<td>RFC4271</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Error (notification) codes</td>
<td>Standards Action</td>
<td>RFC4271</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Error Subcodes</td>
<td>Standards Action</td>
<td>RFC4271</td>
<td>yes</td>
</tr>
<tr>
<td>Open Message Error subcodes</td>
<td>Standards Action</td>
<td>RFC4271</td>
<td>yes</td>
</tr>
<tr>
<td>Update Message Error subcodes</td>
<td>Standards Action</td>
<td>RFC4271</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Finite State Machine Error subcodes</td>
<td>Standards Action</td>
<td>RFC6608</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Cease NOTIFICATION message subcodes</td>
<td>Standards Action</td>
<td>RFC4486</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Route Refresh Message Error subcodes</td>
<td>Standards Action</td>
<td>RFC7313</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Outbound Route Filtering (ORF) Types</td>
<td>Standards Action</td>
<td>RFC5291</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Open Optional Parameter types</td>
<td>IETF Review</td>
<td>RFC5492</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Tunnel Encapsulation Attribute Sub-TLVS</td>
<td>Standards Action</td>
<td>RFC5512</td>
<td>yes</td>
</tr>
<tr>
<td>BGP AIGP Attribute</td>
<td>Standards Action</td>
<td>RFC7311</td>
<td>Yes</td>
</tr>
<tr>
<td>Registry Type</td>
<td>Standards Action</td>
<td>RFC Reference</td>
<td>Designation</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>BGP Tunnel Encapsulation Attribute Sub-TLVS</td>
<td>Standards Action</td>
<td>RFC5512</td>
<td>yes</td>
</tr>
<tr>
<td>BGP AIGP Attribute</td>
<td>Standards Action</td>
<td>RFC7311</td>
<td>Yes</td>
</tr>
<tr>
<td>Route Refresh Subcodes</td>
<td>Standards Action (1-127)</td>
<td>RFC7313</td>
<td>Yes</td>
</tr>
<tr>
<td>P-Multicast Service Interface Tunnel (PMSI) Tunnel Types</td>
<td>IETF Review</td>
<td>RFC7385</td>
<td>Yes</td>
</tr>
<tr>
<td>P-Multicast Service Interface Tunnel (PMSI) Attribute Flags</td>
<td>Standards Action</td>
<td>RFC7385</td>
<td>Yes</td>
</tr>
<tr>
<td>BGP MCAST-VPN Route Types</td>
<td>Standards Action</td>
<td>RFC7441</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The registries in Table 2 have Expert Review. This document requests that IANA increase their designated expert pool by adding the pool of chairs in BGP related Working Groups (E.g. IDR, BESS, SIDROPS, GROW).

ER = Expert Review

Table 2 - Registries with Expert Review

<table>
<thead>
<tr>
<th>Registry Type</th>
<th>Registration</th>
<th>RFC Reference</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BGP Layer 2 Encapsulation Types</td>
<td>Expert Review (0-127)</td>
<td>RFC6624</td>
<td>yes</td>
</tr>
<tr>
<td>BGP Layer 2 TLV Types</td>
<td>Expert Review</td>
<td>RFC6624</td>
<td>yes</td>
</tr>
</tbody>
</table>

3. Security Considerations

Administrative process - Not applicable.
4. IANA Considerations

For all of the BGP registries or portions of BGP Registries listed in table 1 append "Designated reviewers" to the registration process.

This document requests the IESG nominate the chairs of the current BGP related working groups which manage the following base protocols that established the registries:

[RFC4271],
[RFC4486],
[RFC5291],
[RFC5492],
[RFC5512],
[RFC6608],
[RFC6624],
[RFC7311],
[RFC7313],
[RFC7385],
[RFC7441],

5. Acknowledgements

The authors would like to thank Alavaro Retana, John Scudder, Jeff Haas, Job Snider, and members of the IDR and Grow working groups for the active discussion at IETF 97 and post-IETF 97 that inspired this draft.

6. Normative References


Author’s Address

Susan Hares
Huawei
7453 Hickory Hill
Saline, MI  48176
USA

Email: shares@ndzh.com