

Network Working Group
Internet-Draft
Updates: [5586](#), [6374](#), [6378](#), [6427](#), [6428](#),
RFC-ietf-mpls-gach-adv,
RFC-ietf-mpls-tp-ethernet-addressing
(if approved)
Intended status: Standards Track
Expires: July 30, 2014

L. Andersson
Huawei
C. Pignataro
Cisco
January 26, 2014

Moving Generic Associated Channel (G-ACh) IANA Registries to a New
Registry

draft-ietf-mpls-moving-iana-registries-04

Abstract

[RFC 5586](#) generalized the applicability of the pseudowire Associated Channel Header (PW-ACh) into the Generic Associated Channel G-ACh. However, registries and allocations of G-ACh parameters had been distributed throughout different, sometimes unrelated, registries. This document coalesces these into a new "Generic Associated Channel (G-ACh) Parameters" registry under the "Multiprotocol Label Switching Architecture (MPLS)" heading. This document updates [RFC 5586](#).

This document also updates [RFC 6374](#), [RFC 6428](#), [RFC 6378](#), [RFC 6427](#), RFC-ietf-mpls-gach-adv, and RFC-ietf-mpls-tp-ethernet-addressing.

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 July 30, 2014.

Copyright Notice

Copyright (c) 2014 IETF Trust and the persons identified as the document authors. All rights reserved.

Internet-Draft

Creating G-ACh registries

January 2014

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	3
2.	IANA Considerations	3
2.1.	Creation of a New Generic Associated Channel (G-ACh) Parameters IANA Registry	3
2.2.	Renaming and Moving the Pseudowire Associated Channel Types Registry	4
2.3.	Consolidating G-ACh Registries	4
3.	RFC Updates	5
4.	Security Considerations	5
5.	Acknowledgements	5
6.	References	6
6.1.	Normative References	6
6.2.	Informative References	6
	Authors' Addresses	7

Internet-Draft

Creating G-ACh registries

January 2014

1. Introduction

[RFC 5586](#) generalized the PW-ACH into the G-ACh. However, registries and allocations of G-ACh namespaces had been distributed throughout different registries. This document coalesces these into a new "Generic Associated Channel (G-ACh) Parameters" registry in the "Multiprotocol Label Switching Architecture (MPLS)" name space. This reorganization achieves two purposes: it allocates the G-ACh registries in their natural place in the MPLS name space, and it is needed to get a single view of the G-ACh registries, to simplify future assignments, and to avoid potential conflicts. This is an update to RFC [RFC 5586](#) [[RFC5586](#)].

Further, the "Pseudowire Associated Channel Types" registry is renamed to "MPLS Generalized Associated Channel (G-ACh) Types (including Pseudowire Associated Channel Types)" to make its generalized status explicit, and is moved into the newly created registry.

Additionally, [RFC 6374](#) [[RFC6374](#)], [RFC 6428](#) [[RFC6428](#)], [RFC 6378](#) [[RFC6378](#)], [RFC 6427](#) [[RFC6427](#)], RFC-ietf-mpls-gach-adv [[I-D.ietf-mpls-gach-adv](#)], and RFC-ietf-mpls-tp-ethernet-addressing [[I-D.ietf-mpls-tp-ethernet-addressing](#)] specify allocations within the G-ACh that are now moved into the new registry.

With respect to where to find these IANA registries, the RFCs listed above are updated as indicated in [Section 3](#); however the registries themselves are not changed (with the exception of one being renamed). They are moved unchanged to the new registry.

Editor's note:

Need to fix the references to RFC-ietf-mpls-gach-adv and RFC-ietf-mpls-tp-ethernet-addressing

2. IANA Considerations

IANA is requested to add this document as a reference for any registry that is moved or renamed as a result of actions requested by this document.

IANA is also requested to replace all the relocated registries with pointers to the new URL or with a redirect.

2.1. Creation of a New Generic Associated Channel (G-ACh) Parameters IANA Registry

IANA is requested to create a new "Generic Associated Channel (G-ACh)

Parameters" registry under the "Multiprotocol Label Switching Architecture (MPLS)" heading. This is the common registry that will include all the registries being moved in Sections [2.2](#) and [2.3](#).

2.2. Renaming and Moving the Pseudowire Associated Channel Types Registry

This document renames the "Pseudowire Associated Channel Types" registry [[IANA-PWE3](#)] into "MPLS Generalized Associated Channel (G-ACh) Types (including Pseudowire Associated Channel Types)". This registry is moved and included as the first registry in the "Generic Associated Channel (G-ACh) Parameters" registry created in [Section 2.1](#) because any additional registries are dependent upon the Associated Channel Header Type.

At the time of publishing this document and moving the registry, the following RFCs have G-ACh Types allocated: [[I-D.ietf-mpls-gach-adv](#)], [[RFC4385](#)], [[RFC5586](#)], [[RFC5718](#)], [[RFC5885](#)], [[RFC6374](#)], [[RFC6378](#)], [[RFC6426](#)], [[RFC6427](#)], [[RFC6428](#)], [[RFC6435](#)], [[RFC6478](#)], and [[RFC6671](#)].

2.3. Consolidating G-ACh Registries

This document further updates the following RFCs by moving the G-ACh related registries to the common "MPLS Generic Associated Channel (G-ACh) Parameters" registry created in [Section 2.1](#):

- o From the PWE Parameters Registry [[IANA-PWE3](#)]:
 - * MPLS Generalized Associated Channel (G-ACh) Types [[RFC5586](#)]

- * G-ACh Advertisement Protocol Application Registry [[I-D.ietf-mpls-gach-adv](#)]
- * G-ACh Advertisement Protocol TLV Registry [[I-D.ietf-mpls-gach-adv](#)]
- * G-ACh Advertisement Protocol: Ethernet Interface Parameters [[I-D.ietf-mpls-tp-ethernet-addressing](#)]
- * CC/CV MEP-ID TLV Registry [[RFC6428](#)]
- o From the MPLS LSP Ping Parameters Registry [[IANA-LSP-Ping](#)]:
 - * Measurement Timestamp Type [[RFC6374](#)]
 - * Loss/Delay Measurement Control Code: Query Codes [[RFC6374](#)]

- * Loss/Delay Measurement Control Code: Response Codes [[RFC6374](#)]
- * MPLS Loss/Delay Measurement TLV Object [[RFC6374](#)]
- o From the MPLS OAM Parameters Registry [[IANA-MPLS-OAM](#)]:
 - * MPLS Fault OAM Message Type Registry [[RFC6427](#)]
 - * MPLS Fault OAM Flag Registry [[RFC6427](#)]
 - * MPLS Fault OAM TLV Registry [[RFC6427](#)]
 - * MPLS PSC Request Registry [[RFC6378](#)]
 - * MPLS PSC TLV Registry [[RFC6378](#)]

Note that all the sub-registries in [[IANA-MPLS-OAM](#)] are moved from "Multiprotocol Label Switching (MPLS) Operations, Administration, and Management (OAM) Parameters" registry. The IANA is therefore requested to remove the "MPLS OAM" registry.

3. RFC Updates

This document updates [[RFC5586](#)] renaming the "Pseudowire Associated Channel Types" [[IANA-PWE3](#)] into "MPLS Generalized Associated Channel (G-ACh) Types (including Pseudowire Associated Channel Types)".

This document also updates the following RFCs by moving the G-ACh related registries to a common "MPLS Generic Associated Channel (G-ACh) Parameters" registry: [RFC 6374](#), [RFC 6428](#), [RFC 6378](#), [RFC 6427](#), RFC-ietf-mpls-gach-adv, and RFC-ietf-mpls-tp-ethernet-addressing.

All the registries listed above are moved without any changes to their content. The reason to move them is to create on single place where it is possible to find all the G-ACh parameters.

4. Security Considerations

The IANA instructions in this document do not directly introduce any new security issues.

5. Acknowledgements

The authors want to thank Amanda Barber and Scott Bradner for review and valuable comments.

6. References

6.1. Normative References

[I-D.ietf-mpls-gach-adv]

Frost, D., Bryant, S., and M. Bocci, "MPLS Generic Associated Channel (G-ACh) Advertisement Protocol", [draft-ietf-mpls-gach-adv-08](#) (work in progress), June 2013.

[I-D.ietf-mpls-tp-ethernet-addressing]

Frost, D., Bryant, S., and M. Bocci, "MPLS-TP Next-Hop Ethernet Addressing", [draft-ietf-mpls-tp-ethernet-addressing-08](#) (work in progress), July 2013.

- [RFC5586] Bocci, M., Vigoureux, M., and S. Bryant, "MPLS Generic Associated Channel", [RFC 5586](#), June 2009.
- [RFC6374] Frost, D. and S. Bryant, "Packet Loss and Delay Measurement for MPLS Networks", [RFC 6374](#), September 2011.
- [RFC6378] Weingarten, Y., Bryant, S., Osborne, E., Sprecher, N., and A. Fulignoli, "MPLS Transport Profile (MPLS-TP) Linear Protection", [RFC 6378](#), October 2011.
- [RFC6427] Swallow, G., Fulignoli, A., Vigoureux, M., Boutros, S., and D. Ward, "MPLS Fault Management Operations, Administration, and Maintenance (OAM)", [RFC 6427](#), November 2011.
- [RFC6428] Allan, D., Swallow Ed. , G., and J. Drake Ed. , "Proactive Connectivity Verification, Continuity Check, and Remote Defect Indication for the MPLS Transport Profile", [RFC 6428](#), November 2011.

[6.2.](#) Informative References

[IANA-LSP-Ping]
Internet Assigned Numbers Authority, "Multi-Protocol Label Switching (MPLS) Label Switched Paths (LSPs) Ping Parameters",
<<http://www.iana.org/assignments/mpls-lsp-ping-parameters>>.

[IANA-MPLS-OAM]
Internet Assigned Numbers Authority, "Multiprotocol Label Switching (MPLS) Operations, Administration, and Management (OAM) Parameters",

<<http://www.iana.org/assignments/mpls-oam-parameters>>.

[IANA-PWE3]
Internet Assigned Numbers Authority, "Pseudowire Name Spaces (PWE3)",
<<http://www.iana.org/assignments/pwe3-parameters>>.

[RFC4385] Bryant, S., Swallow, G., Martini, L., and D. McPherson,

"Pseudowire Emulation Edge-to-Edge (PWE3) Control Word for Use over an MPLS PSN", [RFC 4385](#), February 2006.

- [RFC5718] Beller, D. and A. Farrel, "An In-Band Data Communication Network For the MPLS Transport Profile", [RFC 5718](#), January 2010.
- [RFC5885] Nadeau, T. and C. Pignataro, "Bidirectional Forwarding Detection (BFD) for the Pseudowire Virtual Circuit Connectivity Verification (VCCV)", [RFC 5885](#), June 2010.
- [RFC6426] Gray, E., Bahadur, N., Boutros, S., and R. Aggarwal, "MPLS On-Demand Connectivity Verification and Route Tracing", [RFC 6426](#), November 2011.
- [RFC6435] Boutros, S., Sivabalan, S., Aggarwal, R., Vigoureux, M., and X. Dai, "MPLS Transport Profile Lock Instruct and Loopback Functions", [RFC 6435](#), November 2011.
- [RFC6478] Martini, L., Swallow, G., Heron, G., and M. Bocci, "Pseudowire Status for Static Pseudowires", [RFC 6478](#), May 2012.
- [RFC6671] Betts, M., "Allocation of a Generic Associated Channel Type for ITU-T MPLS Transport Profile Operation, Maintenance, and Administration (MPLS-TP OAM)", [RFC 6671](#), November 2012.

Authors' Addresses

Loa Andersson
Huawei

Email: loa@mail01.huawei.com

Cisco Systems, Inc.

Email: cpignata@cisco.com