

**Codepoint Registry for The Flags Field in the Resource Reservation
Protocol Traffic Engineering (RSVP-TE) Session Attribute Object**

[draft-ietf-mpls-iana-rsvp-session-flags-01.txt](#)

Status of this Memo

By submitting this Internet-Draft, each author represents that any applicable patent or other IPR claims of which he or she is aware have been or will be disclosed, and any of which he or she becomes aware will be disclosed, in accordance with [Section 6 of BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF), its areas, and its working groups. Note that other groups may also distribute working documents as Internet-Drafts.

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."

The list of current Internet-Drafts can be accessed at
<http://www.ietf.org/lid-abstracts.html>

The list of Internet-Draft Shadow Directories can be accessed at
<http://www.ietf.org/shadow.html>.

Abstract

This document provides instructions to IANA for the creation of a new codepoint registry for the flags field in the Session Attribute object of the Resource Reservation Protocol Traffic Engineering (RSVP-TE) signaling messages used in Multiprotocol Label Switching (MPLS) and Generalized MPLS (GMPLS) signaling.

1. Introduction

The Resource Reservation Protocol (RSVP) [[RFC2205](#)] has been extended as Rsvp for Traffic Engineering (RSVP-TE) for use in Multiprotocol Label Switching (MPLS) signaling [[RFC3209](#)] and Generalized MPLS (GMPLS) [[RFC3473](#)].

[RFC3209] introduced a new signaling object, the Session Attribute object, that is carried on the RSVP Path message. The Session Attribute object contains an eight-bit field of flags.

The original specification of RSVP-TE assigned uses to three of these bit flags. Subsequent MPLS and GMPLS RFCs have assigned further flags.

There is a need for a codepoint registry to track the use of the bit flags in this field, to ensure that bits are not assigned more than once, and to define the procedures by which such bits may be assigned.

This document lists the current bit usage and provides information for IANA to create a new registry. This document does not define the uses of specific bits - definitive procedures for the use of the bits can be found in the referenced RFCs.

2. Existing Usage

2.1. RFC 3209

[RFC3209] defines the use of three bits as follows:

0x01 Local protection desired

0x02 Label recording desired

0x04 SE Style desired

2.2. RFC 4090

[RFC4090] defines the use of two bits as follows:

0x08 Bandwidth protection desired

0x10 Node protection desired

2.3. RFC 4736

[RFC4736] defines the use of one bit as follows:

0x20 Path re-evaluation request

3. Security Considerations

This informational document exists purely to create an IANA registry. Such registries help to protect the IETF process against Denial of Service attacks.

Otherwise there are no security considerations for this document.

4. IANA Considerations

IANA is requested to create a new codepoint registry as follows.

The new registry should be placed under the "RSVP-TE Parameters" branch of the tree.

The new registry should be termed "Session Attribute Object Flags."

Flags from this registry may only be assigned by IETF consensus [[RFC2434](#)].

The registry should reference the flags already defined as described in [section 2](#) of this document.

5. Acknowledgements

Thanks to JP Vasseur, Bill Fenner and Thomas Narten for reviewing this document.

6. References

6.1 Normative References

- [RFC2205] Braden, R., Zhang, L., Berson, S., Herzog, S. and S. Jamin, "Resource ReSerVation Protocol (RSVP) -- Version 1, Functional Specification", [RFC 2205](#), September 1997.
- [RFC2434] Narten, T. and H. Alvestrand, "Guidelines for Writing an IANA Considerations Section in RFCs", [BCP 26](#), [RFC 2434](#), October 1998.
- [RFC3209] Awduche, D., Berger, L., Gan, D., Li, T., Srinivasan, V. and G. Swallow, "RSVP-TE: Extensions to RSVP for LSP Tunnels", [RFC 3209](#), December 2001.
- [RFC3473] Berger, L., Editor, "Generalized Multi-Protocol Label Switching (GMPLS) Signaling - Resource ReserVation Protocol-Traffic Engineering (RSVP-TE) Extensions", [RFC 3473](#), January 2003.

6.2 Informative References

- [RFC4090] Pan, P., Swallow, G., and Atlas, A., "Fast Reroute Extensions to RSVP-TE for LSP Tunnels", [RFC 4090](#), May 2005.
- [RFC4736] Vasseur, JP., Ikejiri, Y., and Zhang, R., "Reoptimization of Multiprotocol Label Switching (MPLS) Traffic Engineering (TE) Loosely Routed Label Switched Path (LSP)", [RFC 4736](#), November 2006.

7. Author's Address

Adrian Farrel
Old Dog Consulting

Email: adrian@olddog.co.uk

8. Intellectual Property Consideration

The IETF takes no position regarding the validity or scope of any Intellectual Property Rights or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; nor does it represent that it has made any independent effort to identify any such rights. Information on the procedures with respect to rights in RFC documents can be found in [BCP 78](#) and [BCP 79](#).

Copies of IPR disclosures made to the IETF Secretariat and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this specification can be obtained from the IETF on-line IPR repository at <http://www.ietf.org/ipr>.

The IETF invites any interested party to bring to its attention any copyrights, patents or patent applications, or other proprietary rights that may cover technology that may be required to implement this standard. Please address the information to the IETF at ietf-ipr@ietf.org.

9. Full Copyright Statement

Copyright (C) The IETF Trust (2007).

This document is subject to the rights, licenses and restrictions contained in [BCP 78](#), and except as set forth therein, the authors retain all their rights.

This document and the information contained herein are provided on an "AS IS" basis and THE CONTRIBUTOR, THE ORGANIZATION HE/SHE REPRESENTS OR IS SPONSORED BY (IF ANY), THE INTERNET SOCIETY, THE IETF TRUST AND THE INTERNET ENGINEERING TASK FORCE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.