

Network Working Group
Internet-Draft
Intended status: Standards Track
Expires: August 16, 2015

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February 12, 2015

**BGP Tunnel Encapsulation Attribute for UDP
draft-xu-softwire-encaps-udp-02**

Abstract

This document specifies a new Border Gateway Protocol (BGP) Tunnel Type of User Datagram Protocol (UDP) tunnels.

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[1.](#) Introduction

[RFC5512] specifies a method by which Border Gateway Protocol (BGP) speakers can signal tunnel encapsulation information to each other and accordingly it defines support for Generic Routing Encapsulation (GRE) [RFC2784], Layer Two Tunneling Protocol - Version 3 (L2TPv3) [RFC3931] and IP in IP [RFC2003] tunnel types. This document builds on [RFC5512] and defines support for the User Datagram Protocol (UDP) tunnel type which is applicable to the MPLS-in-UDP encapsulation [I-D.ietf-mpls-in-udp].

[1.1.](#) Requirements Language

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119 [RFC2119].

[2.](#) Terminology

This memo makes use of the terms defined in [RFC5512].

[3.](#) BGP Tunnel Type Code for UDP

To use either the Encapsulation Subsequent Address Family Identifier (SAFI) or the BGP Encapsulation Extended Community defined in [RFC5512] to signal the UDP tunnel type information across BGP speakers, a new Tunnel Type code (TBD) indicating the UDP tunnel type needs to be assigned by IANA. This document does not specify any UDP tunnel specific sub-TLV. Furthermore, the BGP Encapsulation Network Layer Reachability Information (NLRI) Format is not modified by this document.

4. Security Considerations

The security considerations mentioned in [[RFC5512](#)] is applicable to this new BGP Tunnel Type code for UDP tunnels as well. No new security risk is introduced by this new Tunnel Type code for UDP tunnels.

5. IANA Considerations

A new BGP Tunnel Type code indicating the UDP tunnel type needs to be assigned by IANA.

6. Contributors

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7. Acknowledgements

Thanks to

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