       **Definitions of Textual Conventions for the Management of the Fourth
                Version of Border Gateway Protocol (BGP-4)
                   draft-ietf-idr-bgp4-mibv2-tc-mib-03**

Abstract

   This memo defines a portion of the Management Information Base (MIB)
   which defines Textual Conventions for the management of BGP-4. The
   intent is that these textual conventions will be used in BGP-related
   MIB modules that would otherwise define their own representations.

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1. Introduction

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   which defines Textual Conventions for the management of BGP-4. The
   intent is that these textual conventions will be used in BGP-related
   MIB modules that would otherwise define their own representations.

   See the BGP-4 specification [RFC4271] and Multiprotocol Extensions
   for BGP-4 [RFC4760] for an introduction to the concepts these textual
   conventions cover.

2. The Internet-Standard Management Framework

   For a detailed overview of the documents that describe the current
   Internet-Standard Management Framework, please refer to section 7 of
   RFC 3410 [RFC3410].

   Managed objects are accessed via a virtual information store, termed
   the Management Information Base or MIB. MIB objects are generally
   accessed through the Simple Network Management Protocol (SNMP).
   Objects in the MIB are defined using the mechanisms defined in the
   Structure of Management Information (SMI). This memo specifies a MIB
   module that is compliant to the SMIv2, which is described in STD 58,
   RFC 2578 [RFC2578], STD 58, RFC 2579 [RFC2579] and STD 58, RFC 2580
   [RFC2580].

3. Definitions

```
 BGP4V2-TC-MIB DEFINITIONS ::= BEGIN

     IMPORTS
         mib-2, MODULE-IDENTITY FROM SNMPv2-SMI
         TEXTUAL-CONVENTION FROM SNMPv2-TC;

         bgp4V2TC MODULE-IDENTITY
             LAST-UPDATED "201101170000Z"
             ORGANIZATION "IETF IDR Working Group"
             CONTACT-INFO "E-mail:  idr@ietf.org"

             DESCRIPTION
                     "Textual conventions for BGP-4.

                      Copyright (C) The IETF Trust (2011).  This
                      version of this MIB module is part of RFC XXX;
                      see the RFC itself for full legal notices."
 -- RFC Editor - replace XXX with RFC number

             REVISION "201101170000Z"
```

```
            DESCRIPTION
                    "Initial version."
            ::= { mib-2 XXX }

    --
    -- Textual Conventions
    --

    Bgp4V2IdentifierTC ::= TEXTUAL-CONVENTION
        DISPLAY-HINT "1d."
        STATUS        current
        DESCRIPTION
            "The representation of a BGP Identifier.  BGP Identifiers
             are presented in the received network byte order.

             The BGP Identifier is displayed as if it is an IP address,
             even if it would be an illegal one."
        REFERENCE
            "RFC 4273, Section 4.2"
        SYNTAX OCTET STRING(SIZE (4))

    Bgp4V2AddressFamilyIdentifierTC ::= TEXTUAL-CONVENTION
        STATUS        current
        DESCRIPTION
            "The representation of a BGP AFI.  The value of this object
             should be restricted to be between the values of 0 and
             65535."
        REFERENCE
            "RFC 4760, Section 3"
        SYNTAX INTEGER {
                ipv4(1),
                ipv6(2)
            }

    Bgp4V2SubsequentAddressFamilyIdentifierTC ::= TEXTUAL-CONVENTION
        STATUS        current
        DESCRIPTION
            "The representation of a BGP SAFI"
        REFERENCE
            "RFC 4760, Section 3.  The value of this object should be
             restricted to be between the values of 0 and 255."
        SYNTAX INTEGER {
                unicast(1),
                multicast(2),
                mpls(4)
            }

   END
```

4. Security Considerations

   This module does not define any management objects. Instead, it
   defines a set of textual conventions which may be used by other
   modules which use the BGP-4 protocol to define management objects.
   Meaningful security considerations can only be written in the MIB
   modules that define management objects. Therefore, this document has
   no impact on the security of the Internet.

5. IANA Considerations

   IANA is requested to assign this MIB module an OID under mib-2.

6. References

6.1. Normative References

   [RFC2578] McCloghrie, K., Ed., Perkins, D., Ed., and J.
              Schoenwaelder, Ed., "Structure of Management Information
              Version 2 (SMIv2)", STD 58, RFC 2578, April 1999.

   [RFC2579] McCloghrie, K., Ed., Perkins, D., Ed., and J.
              Schoenwaelder, Ed., "Textual Conventions for SMIv2",
              STD 58, RFC 2579, April 1999.

   [RFC2580] McCloghrie, K., Perkins, D., and J. Schoenwaelder,
              "Conformance Statements for SMIv2", STD 58, RFC 2580,
              April 1999.

   [RFC4271] Rekhter, Y., Li, T., and S. Hares, "A Border Gateway
              Protocol 4 (BGP-4)", RFC 4271, January 2006.

   [RFC4760] Bates, T., Chandra, R., Katz, D., and Y. Rekhter,
              "Multiprotocol Extensions for BGP-4", RFC 4760,
              January 2007.

6.2. Informative References

   [RFC3410] Case, J., Mundy, R., Partain, D., and B. Stewart,
              "Introduction and Applicability Statements for Internet-
              Standard Management Framework", RFC 3410, December 2002.

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