

# Extension of Link Bandwidth Extended Community

`draft-li-idr-link-bandwidth-ext-01`

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IETF113, Mar 2022

Vienna

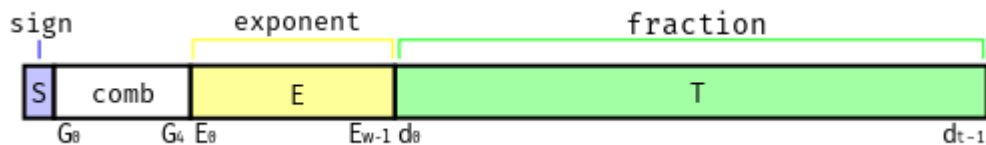
# Review of IETF 112 Issues

- Too many unit definitions

Remove unit definitions. Use the same unit as [I-D.ietf-idr-link-bandwidth], bytes per second.

- Decimal32[IEEE 754-2008]

which is also too complex.



Decimal32 provides two coding schemes, decimal coding scheme and binary coding scheme.

These two coding schemes can be said to be completely different. Besides, the coding of the combined part is also difficult to understand.

- May use 64-bits unsigned integer

A feasible direction.

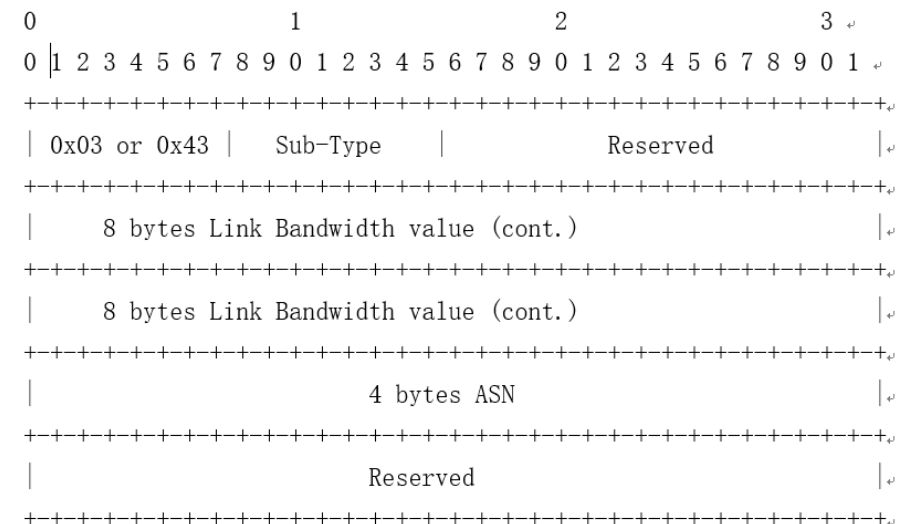
# Considerations on Ext-Community Attributes of Link Bandwidth

- A number of ways considered, to extend the link bandwidth extended community attributes
  - New coding scheme, the same unit
    - Use the unsigned integer in bytes/s.
    - The bandwidth value range is limited. (4 Gbps Max)
  - New coding scheme, new unit in Mbps.
    - Use the unsigned integer in Mbit/s.
    - The bandwidth precision was unacceptable.

# Proposed Extensions to BGP Link Bandwidth

- A new type of IPv6 Address Specific Extended Community(RFC5701) attribute that is considered to represent 64-bits link bandwidth.

- **Type high:** 0x03 or 0x43 are recommended, refer to RFC4360
- **Type low:** TBD
- **Value:** an unsigned integer in 8 octets



More comments and discussion welcomed

Thank you!