Using 127-bit IPv6 Prefixes on Inter-Router Links

draft-ietf-6man-prefixlen-p2p-00.txt

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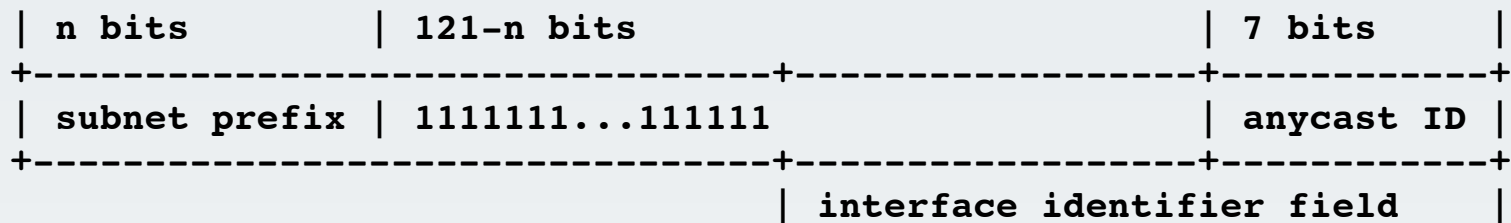Yoshinobu Matsuzaki, IIJ
Lorenzo Colitti, Google
Thomas Narten, IBM Corporation

Update on "6.Recommendation" 1/2

- Routers MUST support the assignment of /127 prefixes on point-to-point inter-router links.

- When assigning and using any /127 prefixes, the following considerations apply.

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Update on "6.Recommendation" 2/2

a)   Addresses with all zeros in the rightmost 64 bits
      SHOULD NOT be assigned as unicast addresses, to
      avoid colliding with the Subnet-Router anycast address.
      [RFC4291]

b)   Addresses in which the rightmost 64 bits are assigned the
      highest 128 values SHOULD NOT be used as unicast
      addresses, to avoid colliding with Reserved Subnet
      Anycast Addresses. [RFC2526]

```
| n bits         | 121-n bits                    | 7 bits     |
+-------------------------------+-------------------+------------+
| subnet prefix | 1111111...111111                | anycast ID |
+-------------------------------+-------------------+------------+
                                | interface identifier field    |
```

                        --- 2. Format of Reserved Subnet Anycast Address – RFC2526

Ready for last call ?

Whether the allowed prefix is limited to /127
or anything longer than /64?