Large BGP Community
draft-heitz-idr-large-community-00

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Benefits

• Today’s RFC1997 communities are 4 octets each. 2 for ASN and 2 to indicate the action.

• With 4 octets for the ASN, it is mapped one to one to your actual globally unique assigned ASN. Clean name space! No more 23456.

• With 8 octets for the action, you can easily create opaque action code points: you have room for a “target” and an “action”

Examples:

• “2914:199036:303” (In NTT: prepend 3 times to 32-bit AS 199036)
  • (currently not possible with NTT’s standard BGP Communities)

• ”2914:65535:3000” (In NTT: lower local preference in region X)
  • Currently done by putting private ASNs in the Global Administrator Field (65530:3000) – potential for clashes
Format

• Each community is 8 octets long.
• They are grouped by context ASN under a header inside a wide community BGP attribute.
This header from Wide Communities.

Length determines how many communities.
Textual Representation

• Each community is represented as a:b:c
• a, b and c are each a non-negative decimal integer
  • a – ASN
  • b – Opaque 1
  • c – Opaque 2
Example

• (2914:1:2), (2914:3:4), (2914:5:6), (3356:7:8)
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