

# Reservation for Private Use ASNs

draft-mitchell-idr-as-private-reservation-00

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# Purpose of Draft

- Provide Greatly Expanded Range of Private Use ASNs in “4 byte only” space
  - Current limit of 1023 ASNs is too small for many organizations
- Document both existing and new range in same document to prevent confusion
  - Clarify end of existing range – RFC 1930 does not match IANA current reservation
  - Update very old RFC 1930 (Guidelines for use/registration of ASNs) with a document just about the private use reservation

# Closed Issues

- Clarify (fix) end of existing range
  - In -01 plan to end both ranges one before last available number ( $2^{16}-2$ ,  $2^{32}-2$ ) based on list feedback
- Private Use Cases versus registering Public ASNs
  - don't plan on discussing today
    - Don't feel private ASN use cases require justification
      - many more private ASNs in use (overlapping) than public
      - private use cases exist with no Internet connectivity requirements
    - Fairly large administrative and some financial burden to use a routing protocol if public ASN always required
    - Feel free to continue debate on the list – don't think this time slot can do it justice

# Open Issues

- Range Size – proposed ~1M ASNs
  - Existing range was 1.56% of original 2 byte space
  - New range(s) proposed would represent .02% of 4 byte space
  - Most feedback was size big enough
    - some said too big (don't want people to have this many private ASNs as they may use them for inappropriate use cases)
    - some said too small (why not more, not much of total space, avoid updating range again)
  - Numbers to chew on – orders of magnitude
    - ~100K - physical servers quoted by some DC builders
    - ~37K - location for fast food chain
    - ~10-20K - number of ATMs for largest US banks

# Open Issues

- Range Structure – currently proposed was decimal boundary, meant to be easily visible in asplain notation (4294XXXXXX+)
  - Alternative proposal was easily visible in asdot and when troubleshooting code
    - 1111 1111 1111 XXXX XXXX XXXX XXXX XXXX aka 65520.0 – 65535.65534

Questions?