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Class A Subnet Experiment

(net-39 experiment)

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Why

- IPV4 ALE is (currently) predicted at 2018 plusminus 8 years
- Prediction includes use of reserved class A address space [64.0.0.0 - 126.0.0.0]
- Reserved A's is 25% of the IPv4 address space!
- Expect to see chunks of class A's assigned (e.g. 64.1.2.0/22) instead of blocks of C's
- This might cause problems for equipment with outdated classful routing protocols
- Better start experimenting now!

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What

- Assign chunks of a class A network number to various parties
- Watch the routing table for unexpected behaviour
- Have a ping / traceroute 'party' to find problems
- Investigate / document / fix problems as they pop up
- Test overlapping announcements
- Experiment without affecting customers at this time
- Later: move 'well-known' servers to these nets (such as popular FTP servers) and see what happens

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How

- Net 39.0.0.0/8 temporary assigned to this experiment by IANA
- Two ways of assignment:
  - 39.<your-as & 0x7fff>.0/24
  - Special assignments by IANA have bit 23 of the address set (chunks of 39.128.0.0/9)
- Assignment is temporary until 951201

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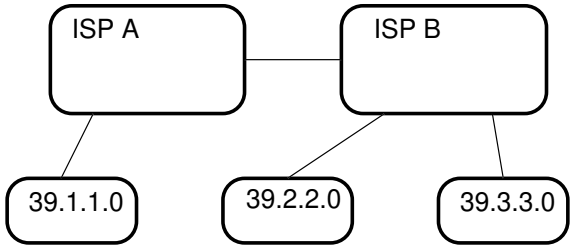
Example



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Ramblings

- "Blocks of C's" was downward compatible
- "Chunks of A's" could give problems
  - Classful multihomed customers loose
  - ISP's with classful IGP's & full routing loose
  - (are there still people using BGP-3 or EGP?)

Better get the word out now!

- Try classless in-addr.arpa zones???

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Logistics

- Base document is RFC1797
- Additional information in i-d IETF cidrd WG
  Geoff Huston (draft expired?)
- Mailing-list <exp39@isi.edu>
  (exp39-request@isi.edu)

Join the party now!