CIDR Police: Please Pull Over and Show Us Your BGP Announcements

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Premise

- We have the weekly CIDR reports that use peer pressure to keep try to keep people from abusing their announcements.
- Is that enough?
- Are there issues with clue, workload, skills, and other knowledge factors that effect the size of the table?
- Are people lazy, over worked, or just do not care?
- Q. Can true peer pressure dent the growth?
Technique

- Review the Weekly Top 20 list, analyze the change, then E-mail the contacts.
- E-mails point out the observation based on the top 20 list, offers assistance, and sometimes recommends remediation.
- Whitepapers, presentations, and other materials are created based on the interaction with the Top 20.
- E-mails sent out on a time available.
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CIDR results for 2001

- Feb 1, 2001: 95,787
- Dec 31, 2001: 104,932
- Barry+Hank cleanup efforts: 3,884
- CIDR table ends up 30% smaller than it would have been if we hadn’t sent out emails
- Total sent: 72 emails
The Bad Boys of 2001

- AS701 – UUnet
- AS4151 – USDA
- AS2686 – AT&T EME
- AS13999 – Megacable, Mexico
- AS4755 – VSNL, India
- AS9498 – Bharti, India
- AS724 – DLA, (.mil)
- AS577 – Bell Canada
- AS376 – RISQ, Canada
- AS12302 – Mobifon, Romania
The Good Boys of 2001

- AS1221 – Telstra (501 withdrawn)
- AS4293 – C&W (361 withdrawn)
- AS15412 – Flag Telecom (661 withdrawn)
- AS2551 – ICG (619 withdrawn)
CIDR results for 2002

- Jan 1, 2002: 104,852
- Dec 31, 2002: 117,450
- Barry+Hank cleanup efforts: 4,318
- CIDR table ends up 25% smaller than it would have been if we hadn’t sent out emails
- Total sent: 14 emails
The Bad Boys of 2002

- AS17557 – Pakistan Telecom
- AS852 – Telus
- AS18566 - Covad
The Good Boys of 2002

- AS8984 – Internet5 AB, Sweden (1069 withdrawn)
- AS209 – Qwest (1276 withdrawn)
- AS2548 – Allegiance Internet (1282 withdrawn)
2003

- 23 emails already sent – starting Dec 22
- Only 7 replied
- Only one has reduced their announcements: AS1580 – HQ 5th Signal Command
  - Reduced announcements by 302 prefixes!
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CIDR growth

CIDR without Barry and Hank: 7%
Total BGP Table Growth

Could growth slowdown be attributed to our emails?
Leakings of 2002

- “Friends” ISPs
  - Janice/Chandler or Phoebe
- 12 IP prefixes
  - Some RFC1918
  - Some unregistered
- 22 ASNs
  - Mostly RFC1930
  - 5 interesting cases
Leaky cases #1 & #2

- AS5050 leaking AS64511
  - “remove-private-as” not working since AS64511 is not a private ASN
  - Private ASNs start at AS64512!

- AS1221 leaking AS65000
  - Cisco IOS bugs CSCdy59660 & CSCdj19299
  - “remove-private-as” not working if as-path is more than 1 and created by as-path prepend
Leaky cases #3 & #4

- AS701 leaking AS5757
  - Not registered in ARIN
  - Lost allocation in 1995
  - Proof sitting on 8mm tape
  - ARIN’s stuck 😞

- AS1880 leaking AS1877
  - Peter Lothberg’s ASN
  - Paperwork lost in 1994 in RIPE
  - RIPE willing to re-register it
**Leaky case #5**

- IP range: 192.83.0.0 – 192.83.100.255
- Allocated to Sonera (Finland) in 1992
  - Sonera claims all of it
  - ARIN has records for only parts of this block
- Sonera claims paperwork lost by Internic
- Announced by AS5515
- ARIN involved
US Military Unilateralism – AS568

- Announcing prefixes not listed anywhere:
  - 132.0.0.0/10
  - 137.0.0.0/13
  - 158.0.0.0/13
  - 192.153.136.0/21
  - 192.172.0.0/19

- No record in ARIN or whois.nic.mil for the first block out of the aggregate (i.e. 132.0.0.0/16)

- No answer from anyone at AS 568.
What now?

- We will continue to send emails to CIDR leakers and non-aggregators.
- We ask that everyone do their share by checking their BGP setups.
- Will continue to develop materials to help communicate operational clue.
- Open for more volunteers to invest their time. Contact Hank or Barry.