

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, analysis 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.**



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 EMEA**
- **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- **AS1221 – Telstra (501 withdrawn)**
- **AS4293 – C&W (361 withdrawn)**
- **AS15412 – Flag Telecom (661 withdrawn)**
- **AS2551 – ICG (619 withdrawn)**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- **AS8984 – Internet5 AB, Sweden (1069 withdrawn)**
- **AS209 – Qwest (1276 withdrawn)**
- **AS2548 – Allegiance Internet (1282 withdrawn)**

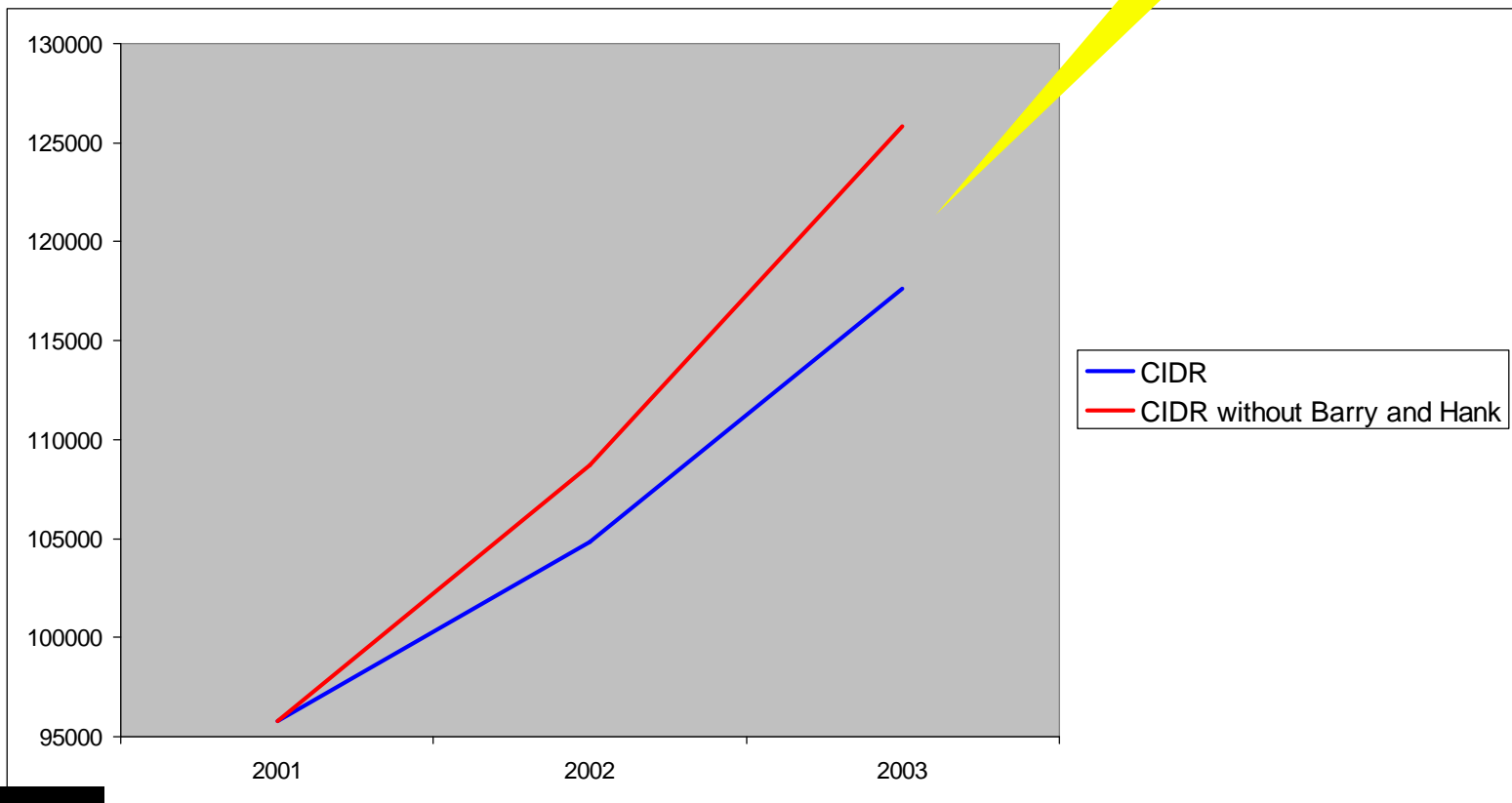


2003

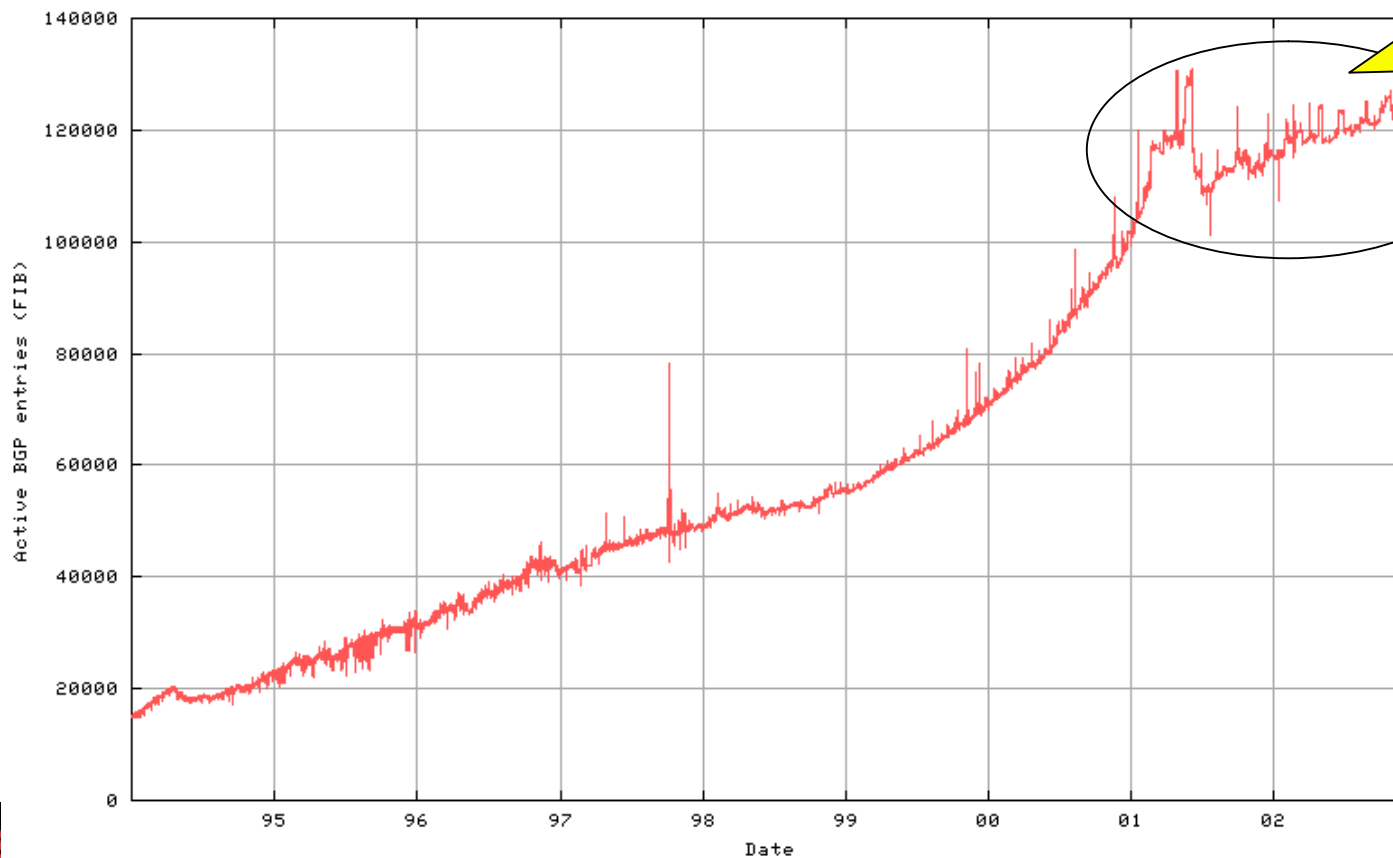
- **23 emails already sent – starting Dec 22**
- **Only 7 replied**
- **Only one has reduced their announcements:
AS1580 – HQ 5th Signal Command**
 - **Reduced announcements by 302 prefixes!**



CIDR growth



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.**

