INOC-DBA

Hotline Phone System

aka. *"The AS Number Phone"*

NANOG 34 BoF

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What's it About?

- INOC-DBA: Inter-NOC Dial-by-ASN

- Global Voice-over-IP hotline phone system, directly interconnecting NOCs and SIRTs within carriers, ISPs, exchange points, and vendors.

How does it work?

- If you just dial an Autonomous System Number, it'll ring a predefined group of phones within that AS. (example: `42`)

- If you dial an ASN and an extension number, it'll ring the phones belonging to that person. (example: `42*WEW`)

- Also, well-known extensions for NOC, abuse, routing, SIRT, et cetera.

How does it work?

- SIP is similar to Dynamic DNS.
  - Pick up an address via DHCP or statically
  - Download config from preconfigured server
  - Register current IP address with a SIP Registry
  - Registry transfers IP address to SIP Proxies
  - When someone calls your phone, they do a dialed-number-to-IP-address lookup against the proxy
 - Then their phone contacts yours directly.

What is new since September

- The provisioning system has been updated
  - New user registration is largely automated
  - Some user GUI issues remain
    - User processes are not our priority
      - Assumption is INOC DBA users have more clue
  - SIP forwarding to sip:nnn@foo.bar now operational
    - People can now forward calls to their various SIP devices on other networks
 - New Documentation on the web

What has not happened

- Authentication
  - Each time we make up our mind more users request for delays
  - I think we'll wait for a while before we do mandatory authentication
- Automatic AS only dialing is not done
- Role accounts (but made easier to deal with call forwarding)
- Upgrade to newer software image for the 7960s

Cumulative ASN Registration
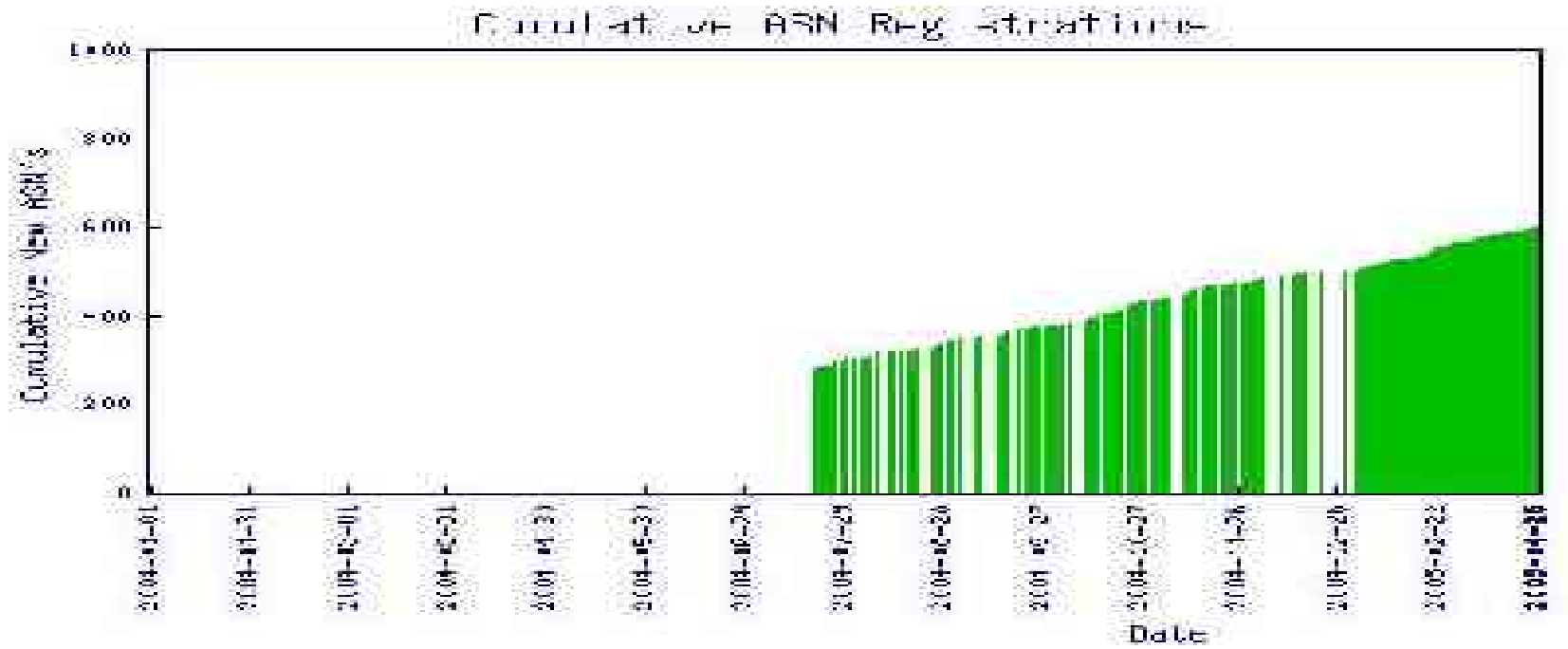
New Users
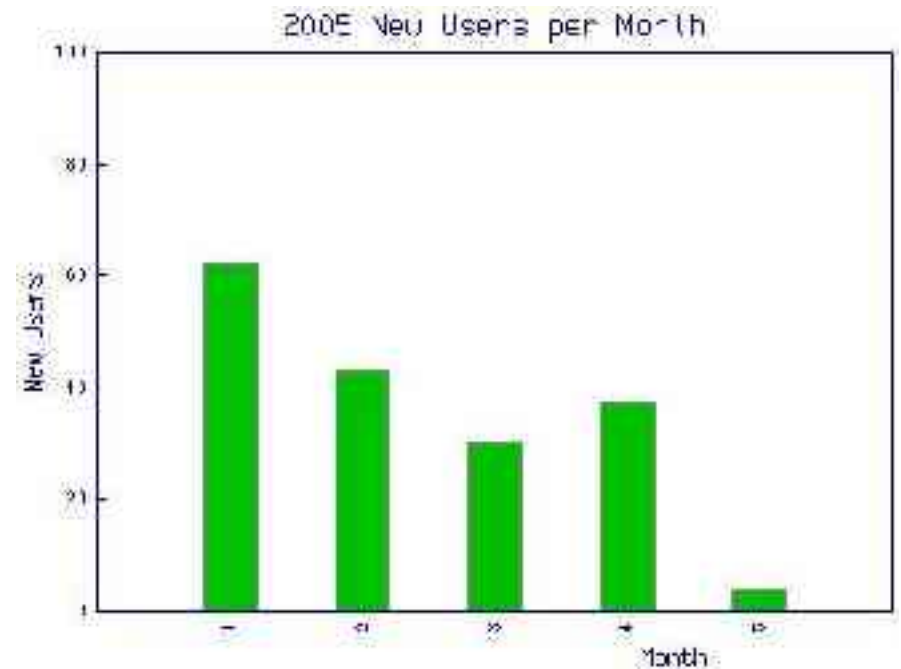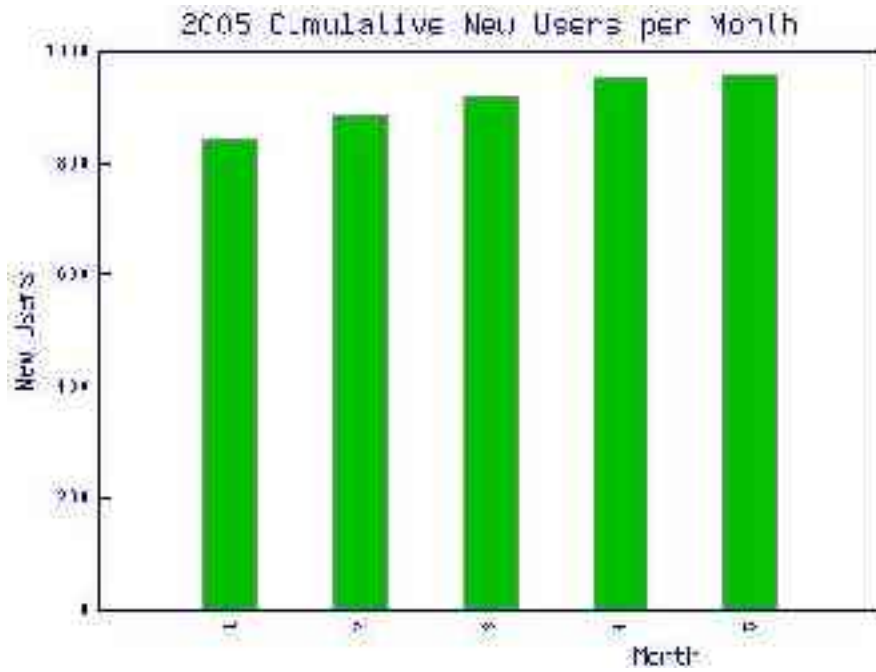
Monthly Total Calls

Stats also available online

- https://www.pch.net/inoc-dba/user/stats/index.html

- Further stats on end to end call quality is now available, but graphical interpretation not yet available.

Future activities

- To support NAT or not is still a question
  - Still an open question

- SIP Anycast
  - We are not yet anywhere close to implementing this, simply because we cannot make it work.

  - Inputs are appreciated. We use SER as our SIP Proxy.

Current Issues

- Supporting new varieties of Phones

  - I don't have physical access to all varieties of phones..

- Routing Outage combined with the PAIX Switch outage took the server offline often in the past week. We are looking at creating a fall-back server. Most phone I have seen support a primary and secondary SIP Proxy.

New Ideas

- Make the conferencing facility available for those who have authentication enabled

- Create a one-way path for authentication, i.e, if anyone has previously used authentication, deny them service without authentication

- Auto Dial back number

How to Participate

- ## With your own phones:

  We need your contact info and ASNs.
  http://www.pch.net/inoc-dba/ has 'New User' section

- ## With phones from us:

  We need your contact and shipping address, ASNs, and extension number.

  But frankly, it's a long wait.

Questions / Open Mike

More Information

> **General information:**

http://www.pch.net/inoc-dba/

> **Mailing-list archive:**

http://www.pch.net/resources/discussion/inoc-dba/archive/

> **Who's participating:**

http://www.pch.net/inoc-dba/directory/

Major Deployments
‡ Netnod – All IX participants get Phones
‡ WAIA – All IX participants / WAIA Members get Phones
‡ .BR – All LIRs of the Brazilian Registry get a Phone
‡

Is it Difficult to Set Up?