

INOC-DBA

Hotline Phone System

RIPE 49 BoF

Presentation edited after the BoF to reflect key discussions

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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.

Any Problems So Far?

- CPE network environment:
 - NAT and firewall traversal
 - Unusual DHCP server options
- Nothing a little static configuration can't overcome.

Unexpected Benefits

- QoS is completely unnecessary.
- Sound quality far exceeds that of the PSTN, even under the worst conditions.
- Latency seems less annoying when it's not accompanied by degraded sound.

Is it Difficult to Set Up?

- Not really.

Is it Difficult to Set Up?



Phone Deployment & Use

394 Unique ASNs

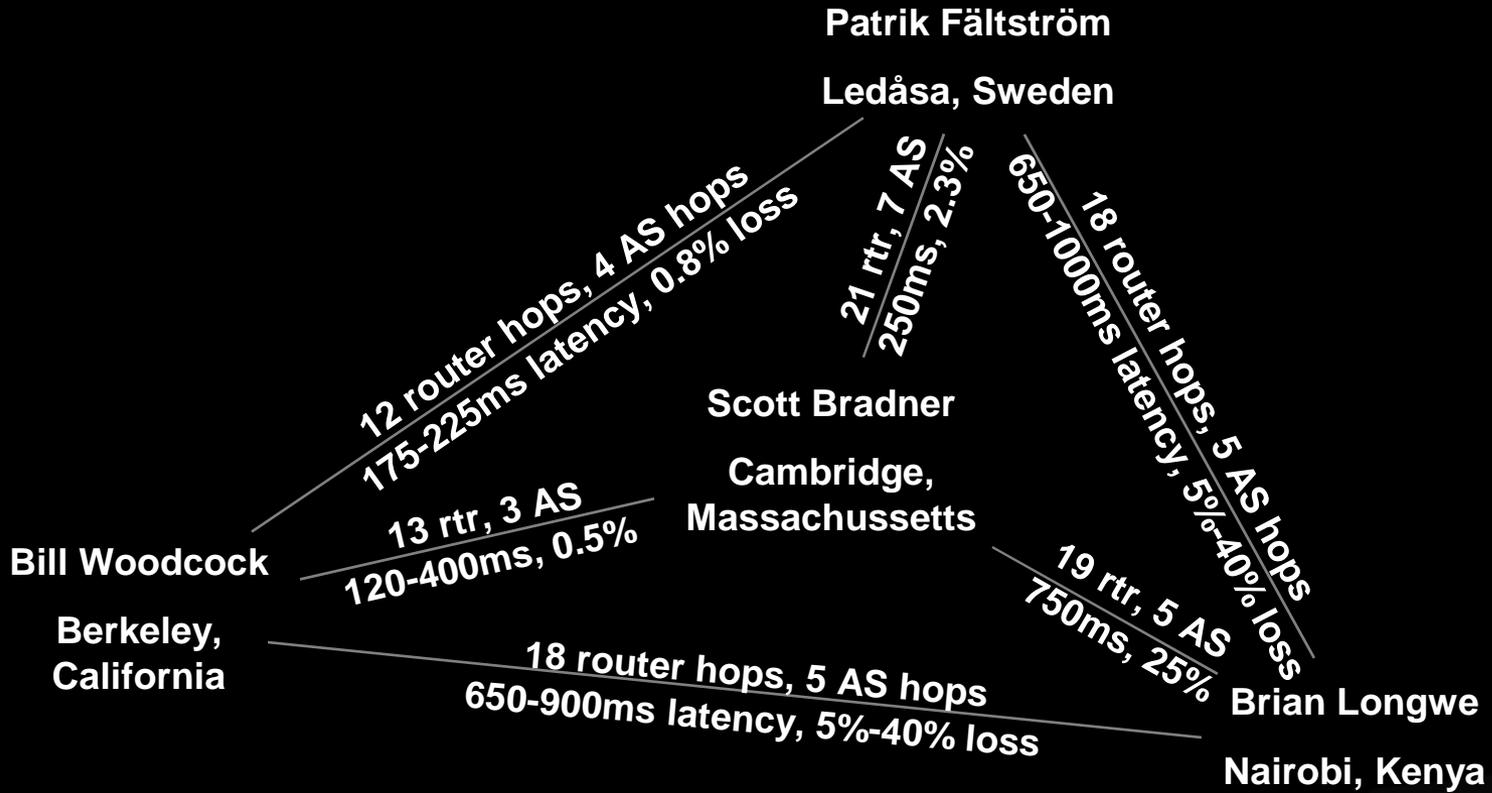
Mostly 7960s, Grandstreams, and Asterisks

For a period of last 8 months, we didn't have any call analysis but in average 5 users added every week. Often blasts of users after operator group meetings.

Major deployments – Netnod, Swinog, Brazilian NIC, Western Australian Internet Association.

News

- Authentication System up and running since early August
- Self Provisioning system launched
- Conference bridge successfully tested, but not yet implemented publicly
 - Note : For the conference bridging to work properly, we need to have all users migrated to authentication
- 500+ users on the db, but lots are not 24x7 available
- Asterisks seems to be a popular gateway to the inoc-dba.



Future activities

- NAT or not to NAT
- Preserving dilution, SIP peering not acceptable with main stream networks like fwd.
- xml directory accessible on phone – *done last week*
- Server side config provisioning for more phones, FAQ for Asterisks users.
- SIP Anycast

How to Participate

- **With your own phones:**
We need your MAC address, contact info, ASNs, and extension number.
- **With phones from us:** *loooong waiting period
We need your contact and shipping address, ASNs, and extension number.
- A lot of SIP phones are now available. Two WiFi SIP phones demonstrated in the room.

Common Question

- What is my MAC address range ?
 - This will be automated, but for now suggest using 'ASNnnnnnnnnnn' with linear increment
- My password doesn't seem to work?
 - No solution – write to operator..
- Is authentication going to be mandatory
 - Discussion
- What does the different error message means?
 - SIP Documentation. but we will put up a FAQ in a month or so.

Main Discussions

- The website needs to be updated with relevant information. It seems PCH staffers know a lot more than what's on the web.
- Need to mail people about new functionality in the system.
- Authentication to be made compulsory a week after the next NANOG. Before that we'll send in increasing frequency e-mails to those who have not migrated.
- Spending operator cycles on NAT related issues shouldn't be a priority.
- Generally agreed that AS dialing without any extensions should be mandatory
- Feedback on the new interface
 - More documentation and better FAQ
 - Option to e-mail configuration changes to the users
 - The phone re-boot feature be made optional.
 - Easier way to setup ROLE Accounts

Possible new stuffs

- Call forwarding features
- conference bridging features
- pre-defined extensions
- website updates, a better FAQ
- more phones.. when available.
- Greying out of unreachabeable entries in the directory.

More Information

➤ General information:

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

<https://www.pch.net/inoc-auth> --- for authentication interface

➤ Mailing-list archive:

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

➤ Who's participating:

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

Exchanges

LINX

PAIX

Equinix

AMS-IX

MAEs

SD-NAP

LAIX

NSP-IXP2

NOTA

OIX

Carriers

UUnet

Sprint

C&W

Genuity

Verio/NTT

AT&T

SBC

AOL/T-W

RCN

TDS

Associations

ARIN

APNIC

RIPE/NCC

ICANN

ISC