

# INOC-DBA Hotline Phone System

aka. "The AS Number Phone"
Presentaion at RIPE 50

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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 dialednumber-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

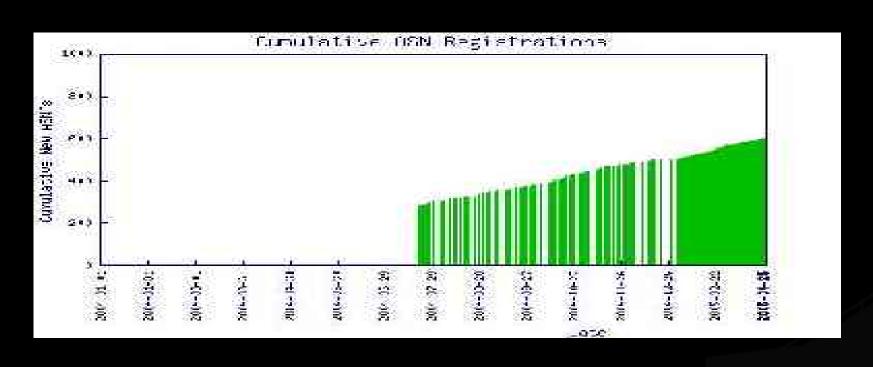


## What has not happened

- 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

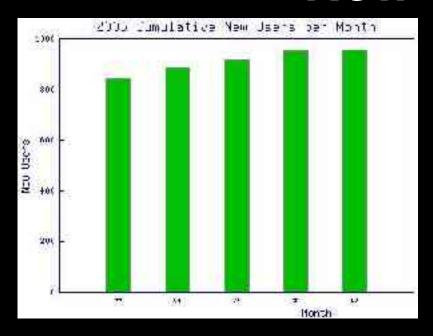


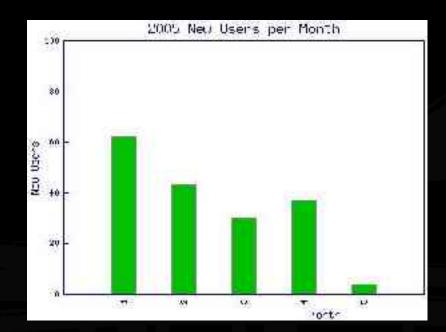
# **Cumulative ASN Registration**





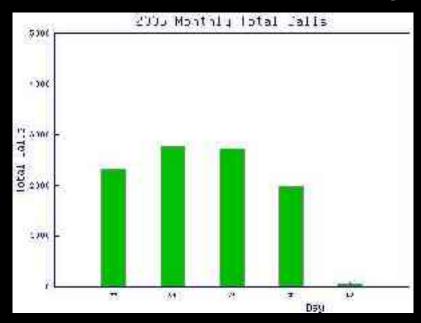
## **New Users**

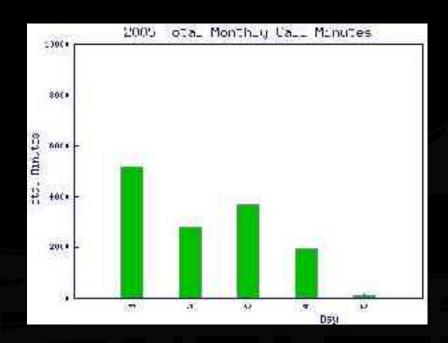






# **Monthly Total Calls**







#### 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.



## **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/

Exchanges		Carriers		<b>Associations</b>
LINX	SD-NAP			ARIN
PAIX	LAIIX	Sprint	SBC	APNIC
Equinix	NSP-IXP2	C&W	AOL/T-W	RIPE/NCC
AMS-IX	NOTA	Genuity	RCN	ICANN
MAEs	OIX	Verio/NTT	TDS	ISC



# Is it Difficult to Set Up?

