nic.br

Núcleo de Informação e Coordenação do Ponto BR

cgi.br

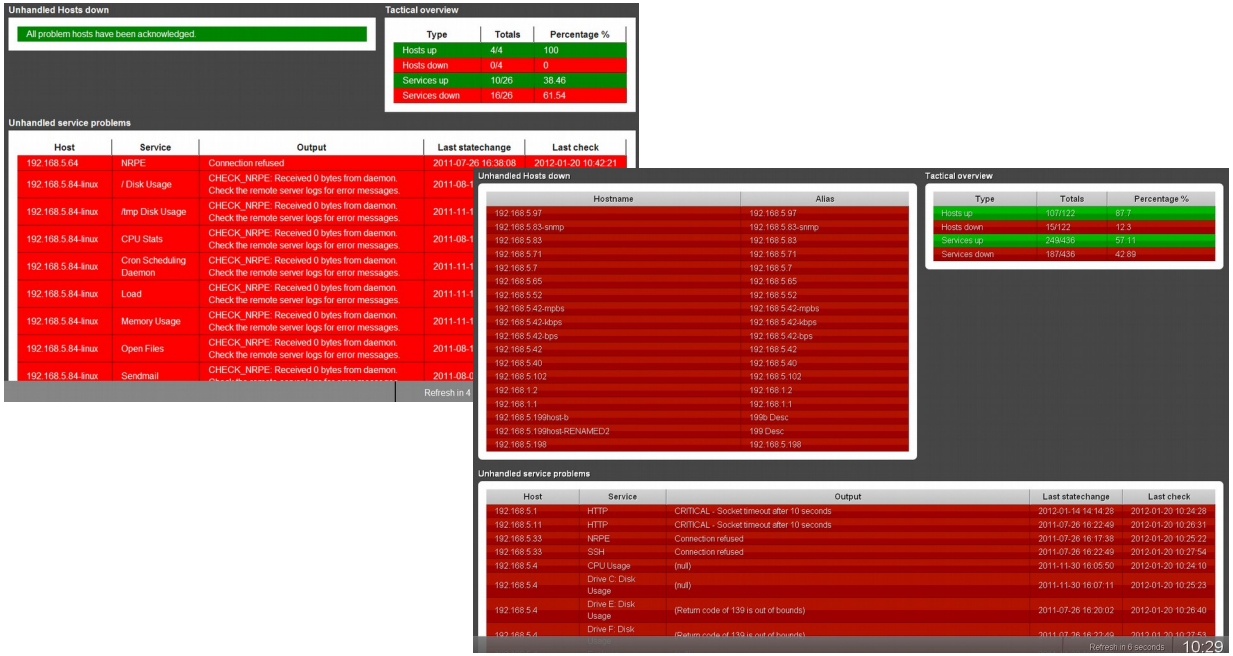
Comitê Gestor da Internet no Brasil

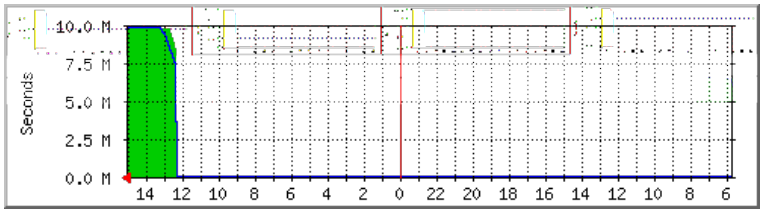
registro.br cert.br cetic.br ceptro.br ptt.br

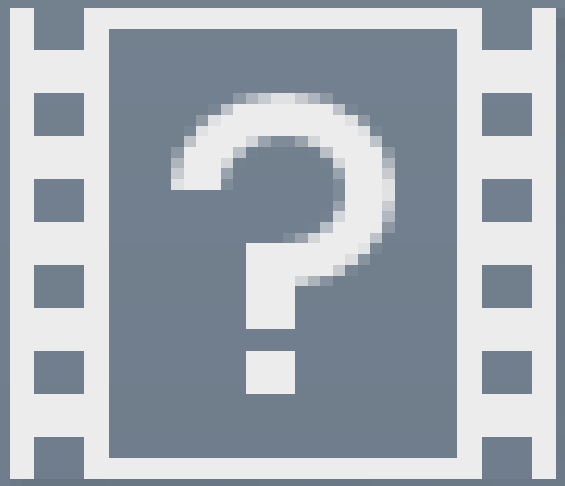
INOC-DBA

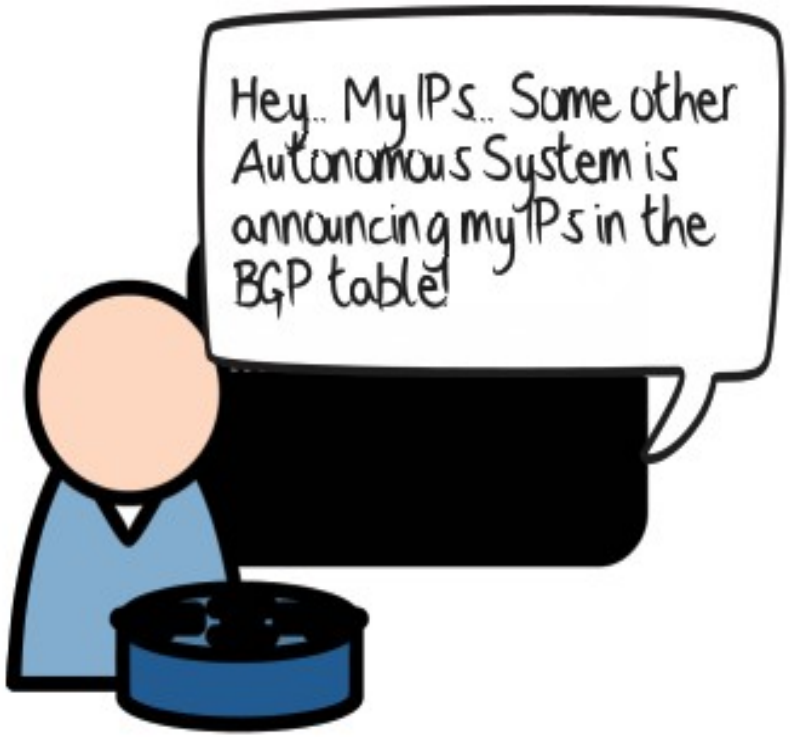
ceptro.br nic.br cgi.br

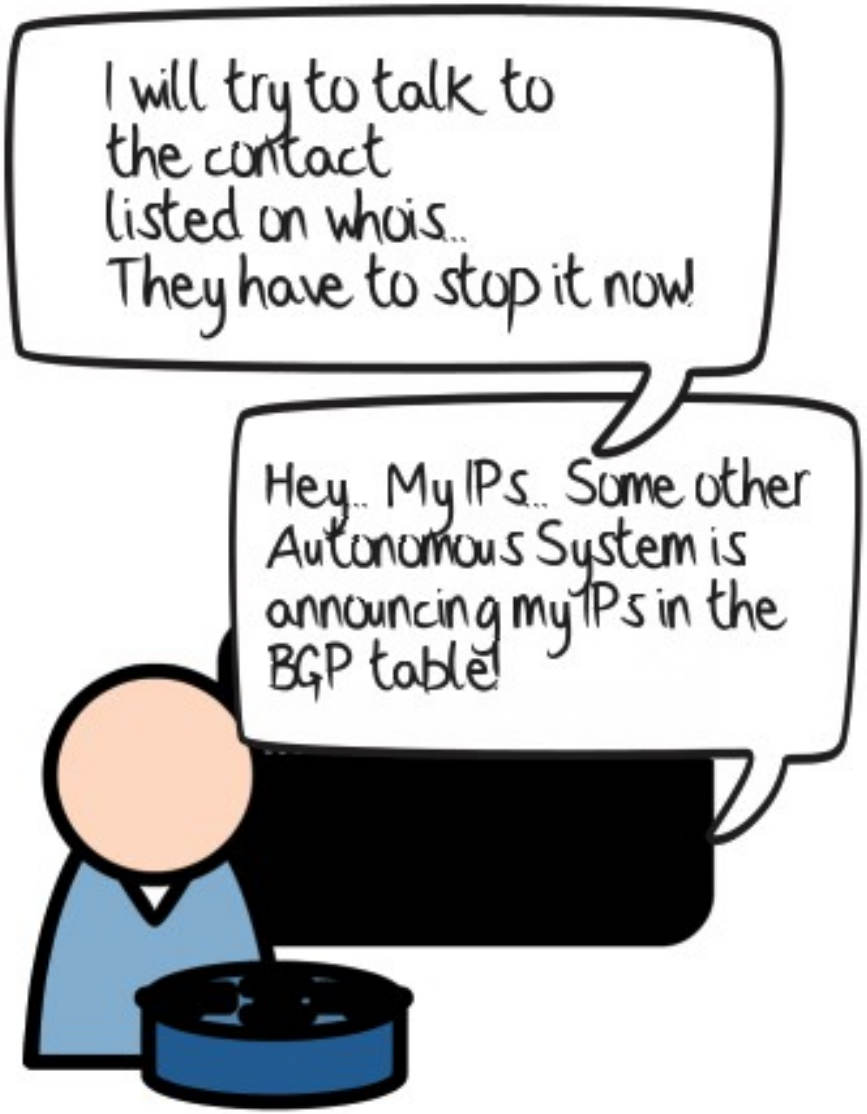
Chair goes round..
Chair goes round.

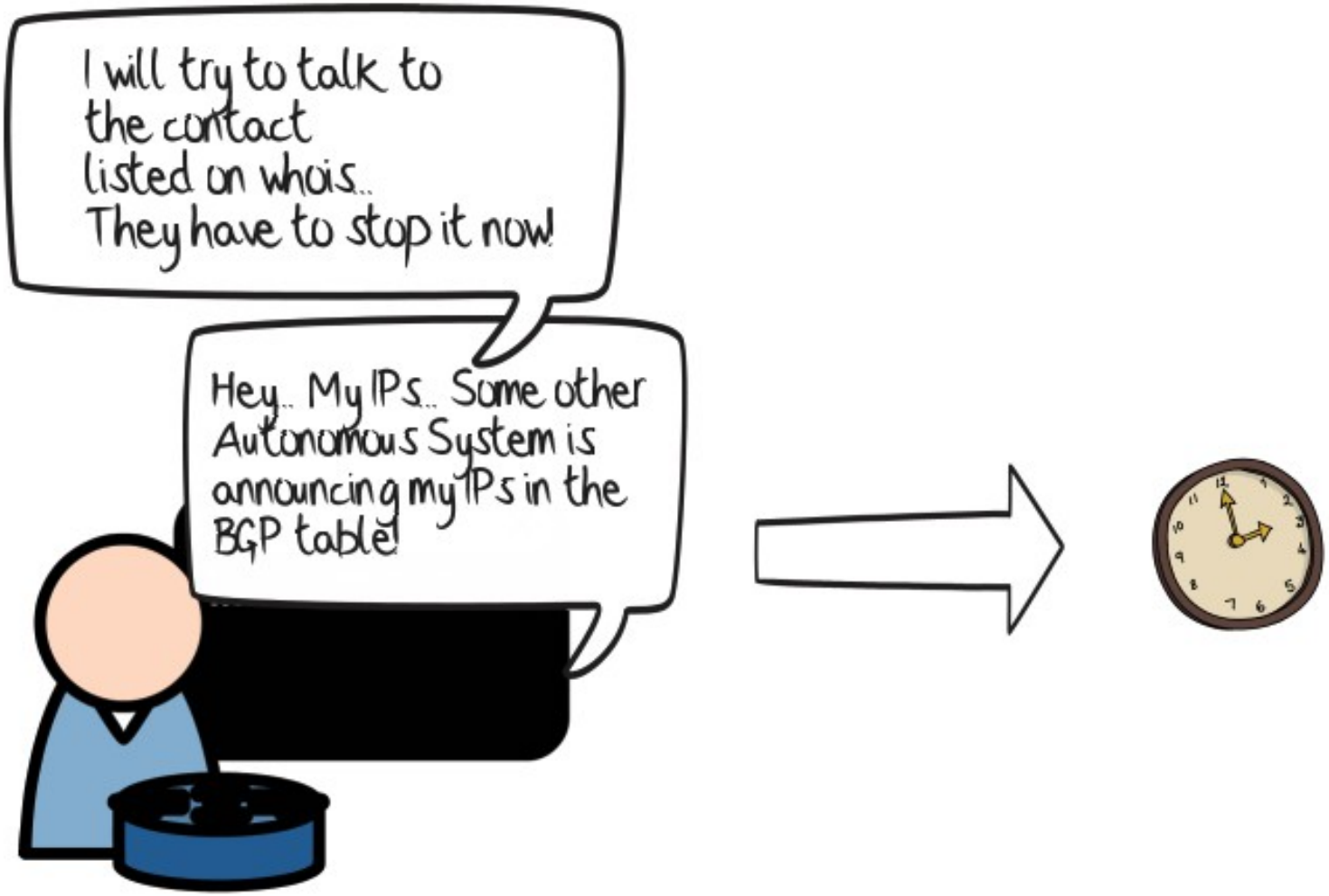

Unhandled Hosts down
All problem hosts have been acknowledged.
Tactical overview
Type Totals Percentage %
Hosts up 4/4 100
Hosts down 0/4 0
Services up 10/26 38.46
Services down 16/26 61.54
Unhandled service problems
Host Service Output Last statechange Last check
192.168.5.64 NRPE Connection refused 2011-07-26 16:38:08 2012-01-20 10:42:21
192.168.5.84-linux / Disk Usage CHECK_NRPE: Received 0 bytes from daemon. Check the remote server logs for error messages.
192.168.5.84-linux /tmp Disk Usage CHECK_NRPE: Received 0 bytes from daemon. Check the remote server logs for error messages.
192.168.5.84-linux CPU Stats CHECK_NRPE: Received 0 bytes from daemon. Check the remote server logs for error messages.
192.168.5.84-linux Cron Scheduling Daemon CHECK_NRPE: Received 0 bytes from daemon. Check the remote server logs for error messages.
192.168.5.84-linux Load CHECK_NRPE: Received 0 bytes from daemon. Check the remote server logs for error messages.
192.168.5.84-linux Memory Usage CHECK_NRPE: Received 0 bytes from daemon. Check the remote server logs for error messages.
192.168.5.84-linux Open Files CHECK_NRPE: Received 0 bytes from daemon. Check the remote server logs for error messages.
192.168.5.84-linux Sendmail CHECK_NRPE: Received 0 bytes from daemon.
Refresh in 4
Unhandled Hosts down
Hostname Alias
192.168.5.97 192.168.5.97
192.168.5.83-snmp 192.168.5.83-snmp
192.168.5.83 192.168.5.83
192.168.5.71 192.168.5.71
192.168.5.7 192.168.5.7
192.168.5.65 192.168.5.65
192.168.5.52 192.168.5.52
192.168.5.42-mpbs 192.168.5.42-mpbs
192.168.5.42-kbps 192.168.5.42-kbps
192.168.5.42-bps 192.168.5.42-bps
192.168.5.42 192.168.5.42
192.168.5.40 192.168.5.40
192.168.5.102 192.168.5.102
192.168.1.2 192.168.1.2
192.168.1.1 192.168.1.1
192.168.5.199host-b 199b Desc
192.168.5.199host-RENAMED2 199 Desc
192.168.5.198 192.168.5.198
Tactical overview
Type Totals Percentage %
Hosts up 107/122 87.7
Hosts down 15/122 12.3
Services up 249/436 57.11
Services down 187/436 42.89
Unhandled service problems
Host Service Output Last statechange Last check
192.168.5.1 HTTP CRITICAL - Socket timeout after 10 seconds 2012-01-14 14:14:28 2012-01-20 10:24:28
192.168.5.11 HTTP CRITICAL - Socket timeout after 10 seconds 2011-07-26 16:22:49 2012-01-20 10:26:31
192.168.5.33 NRPE Connection refused 2011-07-26 16:17:38 2012-01-20 10:25:22
192.168.5.33 SSH Connection refused 2011-07-26 16:22:49 2012-01-20 10:27:54
192.168.5.4 CPU Usage (null) 2011-11-30 16:05:50 2012-01-20 10:24:10
192.168.5.4 Drive C: Disk Usage (null) 2011-11-30 16:07:11 2012-01-20 10:25:23
192.168.5.4 Drive E: Disk Usage (Return code of 139 is out of bounds) 2011-07-26 16:20:02 2012-01-20 10:26:40
Refresh in 6 seconds
10:29

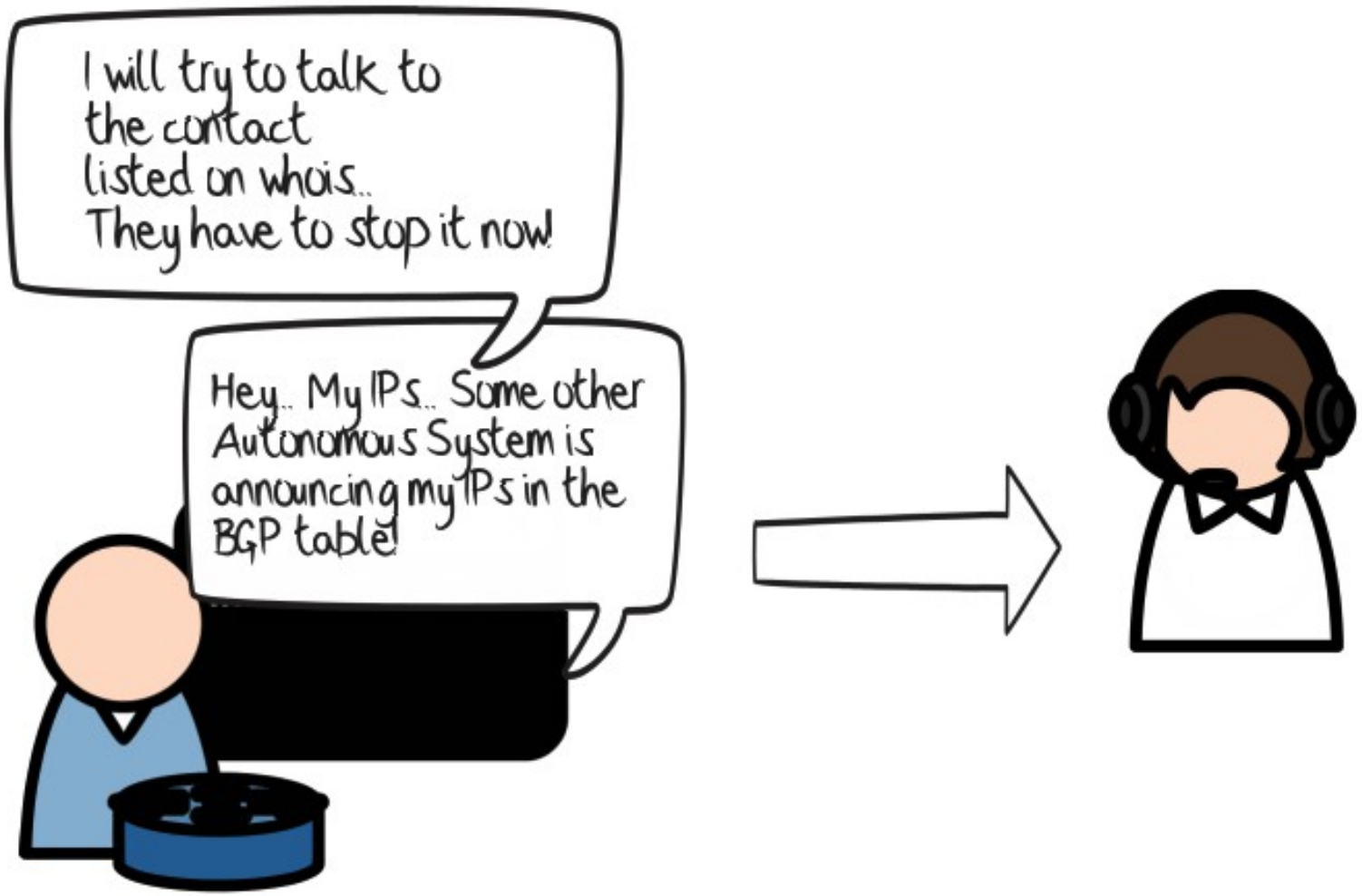

10.0 M
7.5 M
5.0 M
2.5 M
0.0 M
Seconds
14 12 10 8 6 4 2 0 22 20 18 16 14 12 10 8 6

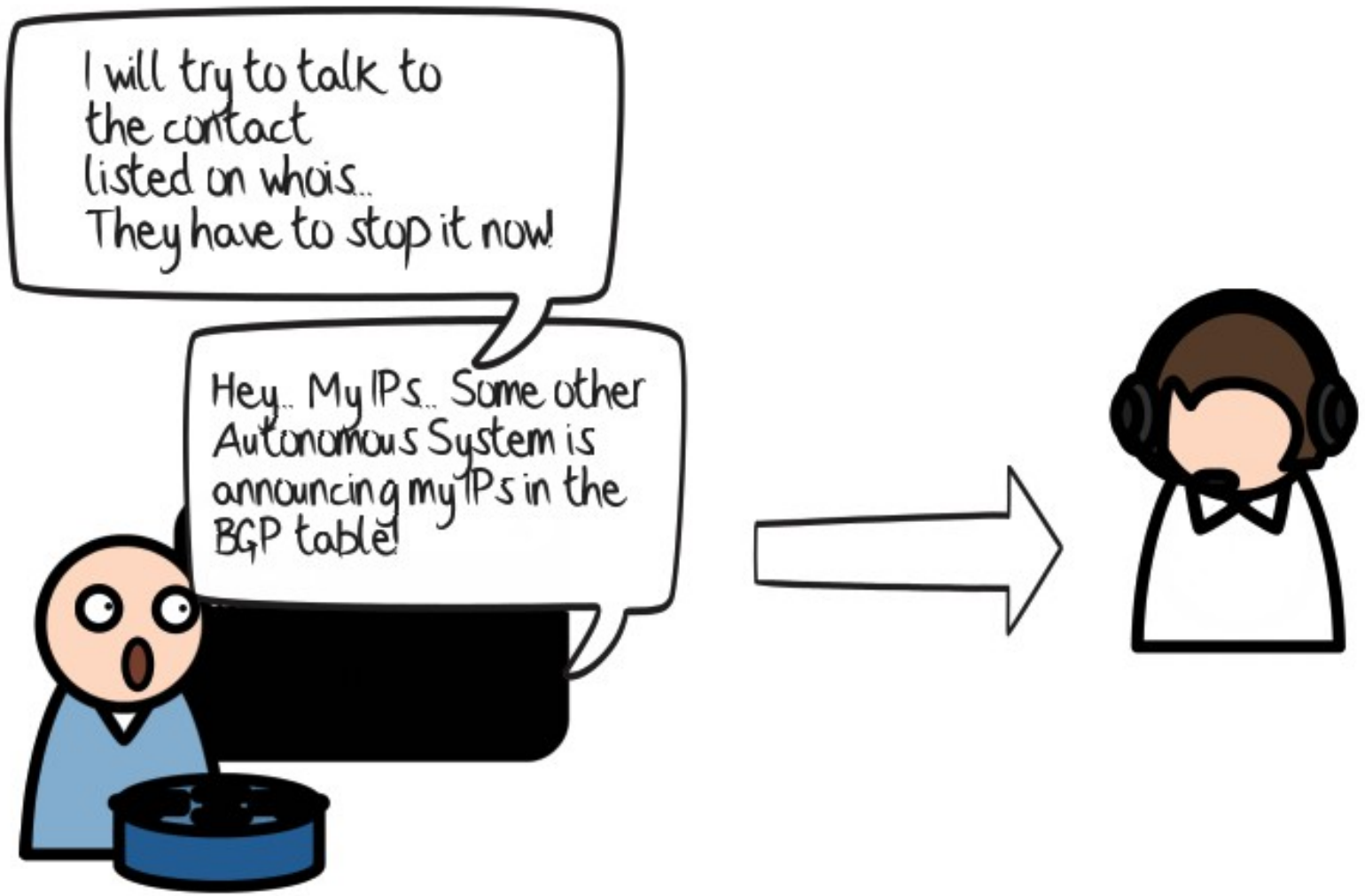


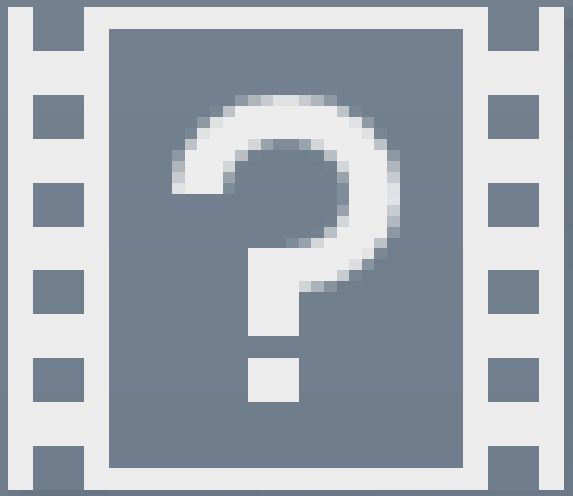

Hey... My IPs... Some other Autonomous System is announcing my IPs in the BGP table!


I will try to talk to the contact listed on whois... They have to stop it now!
Hey... My IPs... Some other Autonomous System is announcing my IPs in the BGP table!

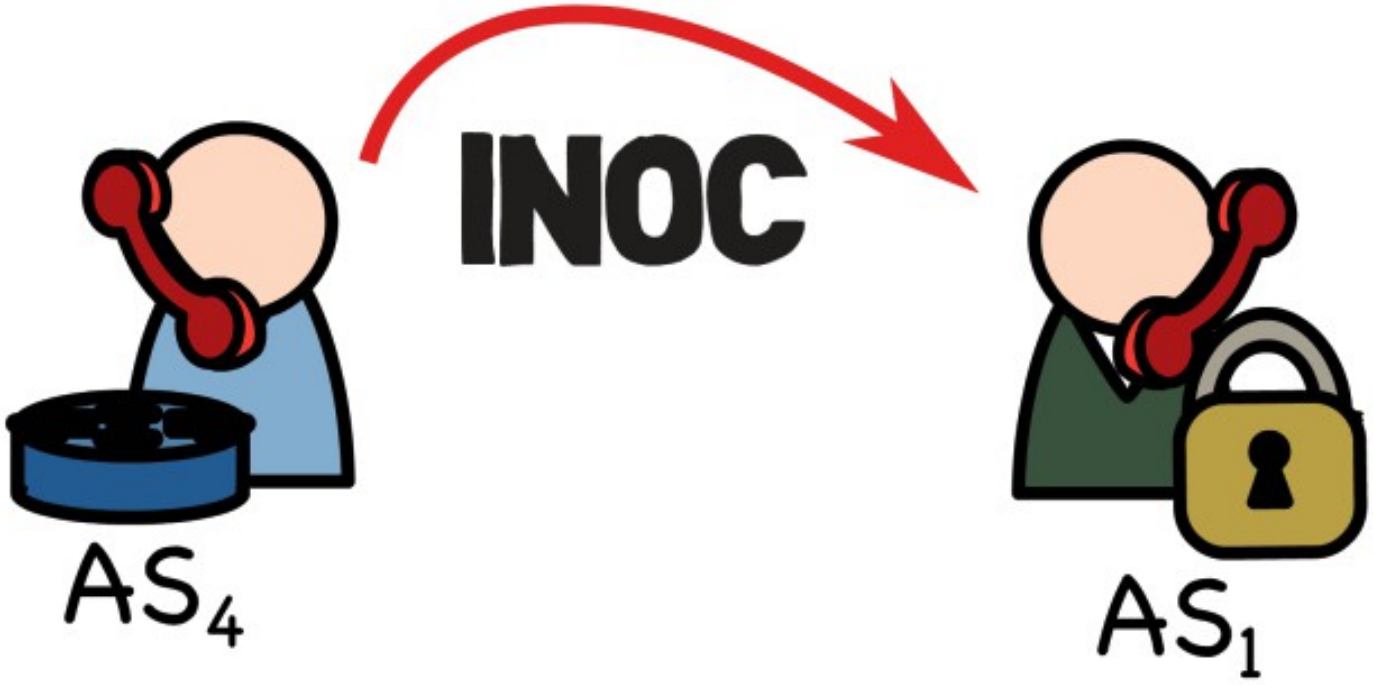

I will try to talk to the contact listed on whois.. They have to stop it now!
Hey.. My IPs.. Some other Autonomous System is announcing my IPs in the BGP table!


I will try to talk to the contact listed on whois..
They have to stop it now!
Hey.. My IPs.. Some other Autonomous System is announcing my IPs in the BGP table!


I will try to talk to the contact listed on whois... They have to stop it now!
Hey.. My IPs... Some other Autonomous System is announcing my IPs in the BGP table!



NA NA NA
NA
Sim, comissário...
Batman!!
NA NA
NA


INOC
AS4
AS1

INOC-DBA

INTER-NETWORK OPERATION CENTER

DIAL BY AUTONOMOUS SYSTEM NUMBER
HOTLINE PHONE SYSTEM

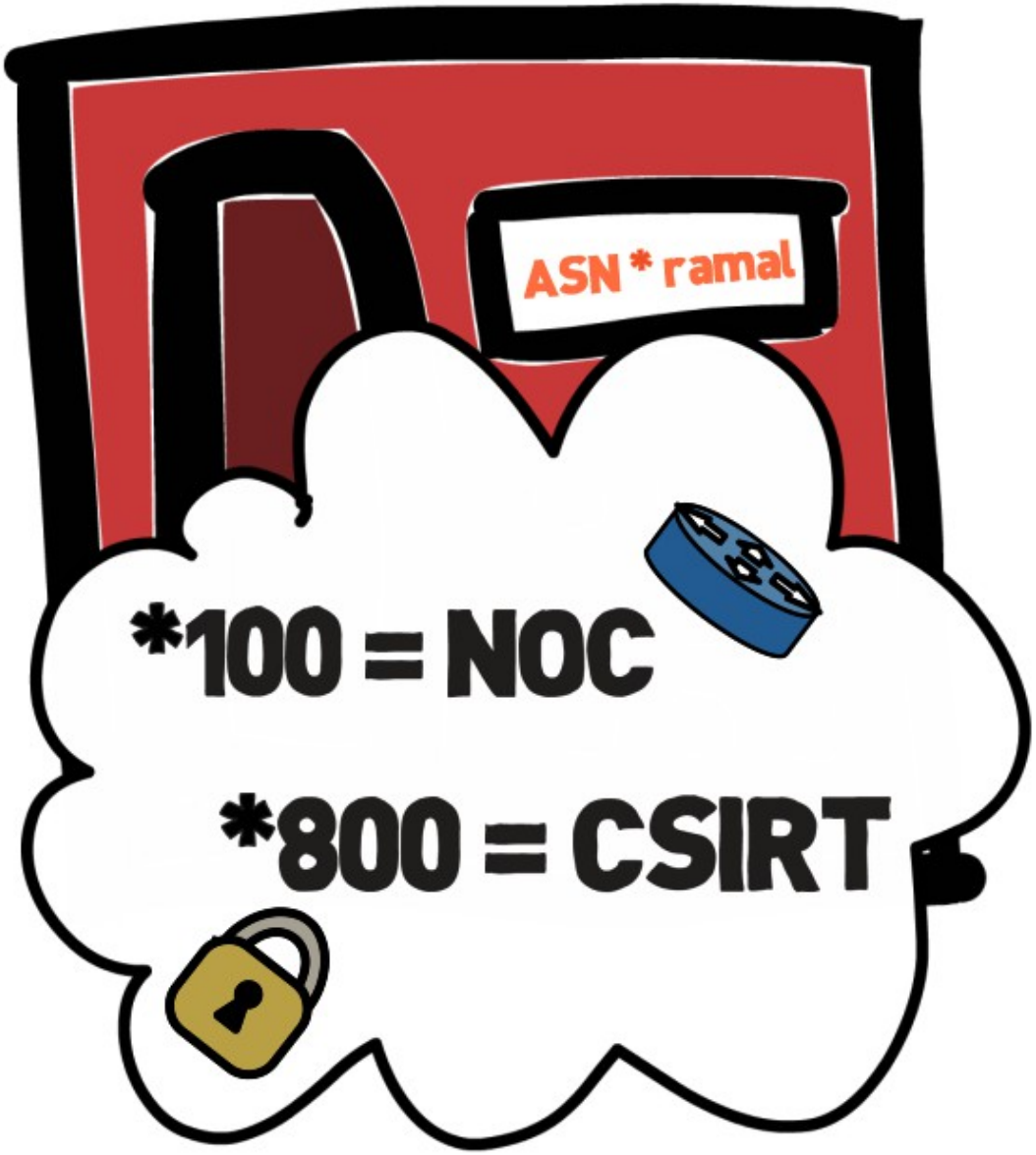
Autonomous System number (ASN) → identification of the network in the global BGP routing

- routing problems
- security incidents
- peering agreements

...

CSIRTs

NOCs


ASN * ramal
*100 = NOC
*800 = CSIRT

Inter NOC – Dial by ASN

INOC-DBA

INOC-DBA (**I**nter-**N**etwork **O**perations **C**enter **D**ial **B**y **A**SN) is a hotline phone system created and operated by Packet Clearing House in 2002.

Inter NOC – Dial by ASN

INOC-DBA

The INOC-DBA provides a direct and private way of communication between the **Network Operations Centers** and **Security Incident Response Teams** of the Autonomous Systems.

In other words... Is a communication shortcut to the people who can solve your problem.

Inter NOC – Dial by ASN

INOC-DBA

- The heart of the INOC-DBA is the IETF-standard **SIP protocol** (RFC 3261), an open VoIP standard that has broad support.

Inter NOC – Dial by ASN

INOC-DBA

SIP Protocol

- Act over TCP and UDP 5060 ports to negotiate sessions.
- Media exchanged via RTP protocol (RFC 1889) in a pair of UDP ports. In our case, between UDP 10000 and UDP 20000.
- **Some problems with NAT.**

Inter NOC – Dial by ASN

INOC-DBA

HOW IT WORKS

Every INOC phone number is a composition of the AS Number with some choosen extension of three number, linked by the asterisk digit.

ASN*Extension

Inter NOC – Dial by ASN

INOC-DBA

HOW IT WORKS

In order to simplify even more the communication, some standard extensions were stablished:

- **ASN*100 - NOC**
- **ASN*800 - CSIRT**

Inter NOC – Dial by ASN

INOC-DBA-BR

Supported by CGI.br and NIC.br, since 2005:

- independent server in Brazil
- Integrated (*) with PCH's INOC-DBA system
- NIC.br lended VoIP phones for ASs when it was necessary.

Inter NOC – Dial by ASN

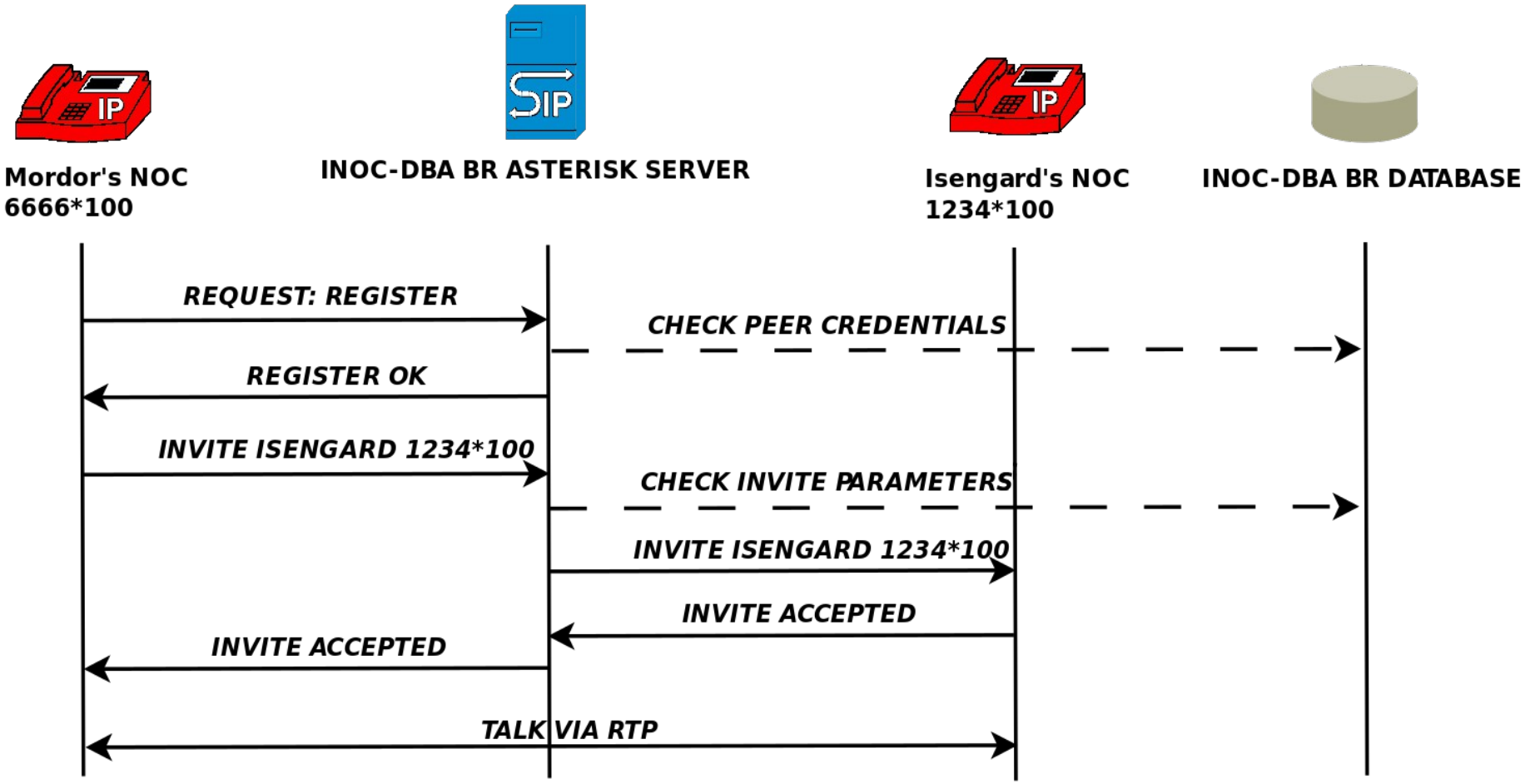
INOC-DBA-BR

Asterisk

(open source software PABX)

- Multi codec and multi VoIP protocol support.
- Voicemail and conference room.
- URA and queues support.

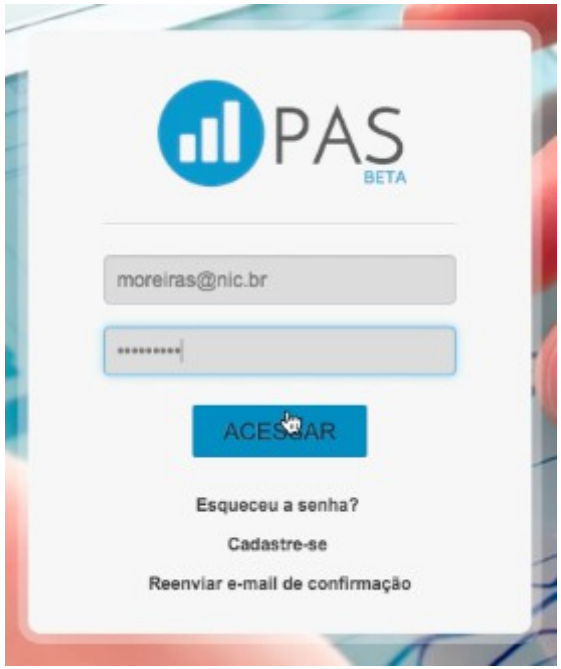
Inter NOC – Dial by ASN
INOC-DBA-BR



Inter NOC – Dial by ASN
INOC-DBA-BR

Inter NOC – Dial by ASN

INOC-DBA-BR



1 – Create account in PAS (Autonomous System Portal)

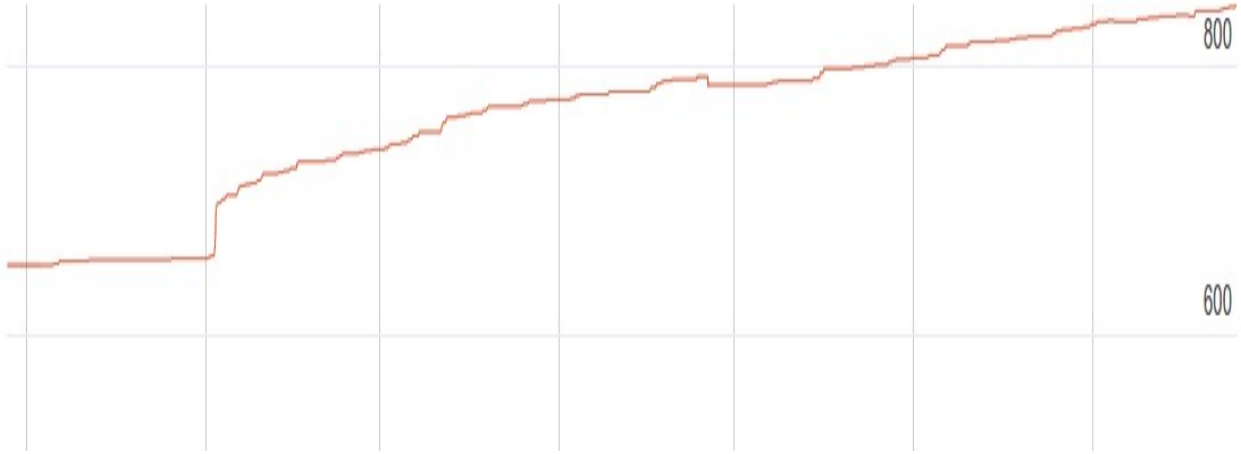
2 – Associate your AS

3 – Create INOC-DBA extension

- Steps 2 and 3 require approval from whois contacts (e-mail)

Inter NOC – Dial by ASN

INOC-DBA-BR



845 users

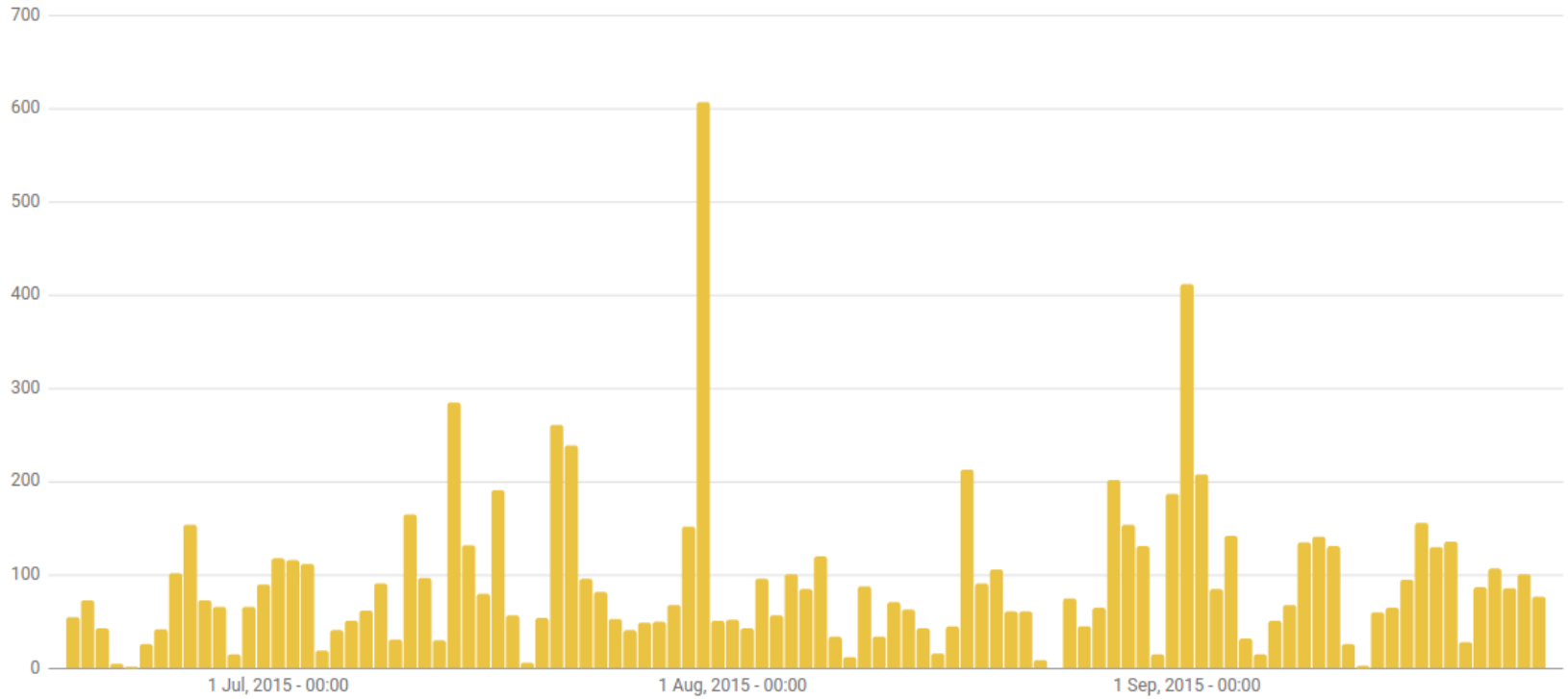
607 - distinct Autonomous Systems

578 - *100 extensions

80 - *800 extensions

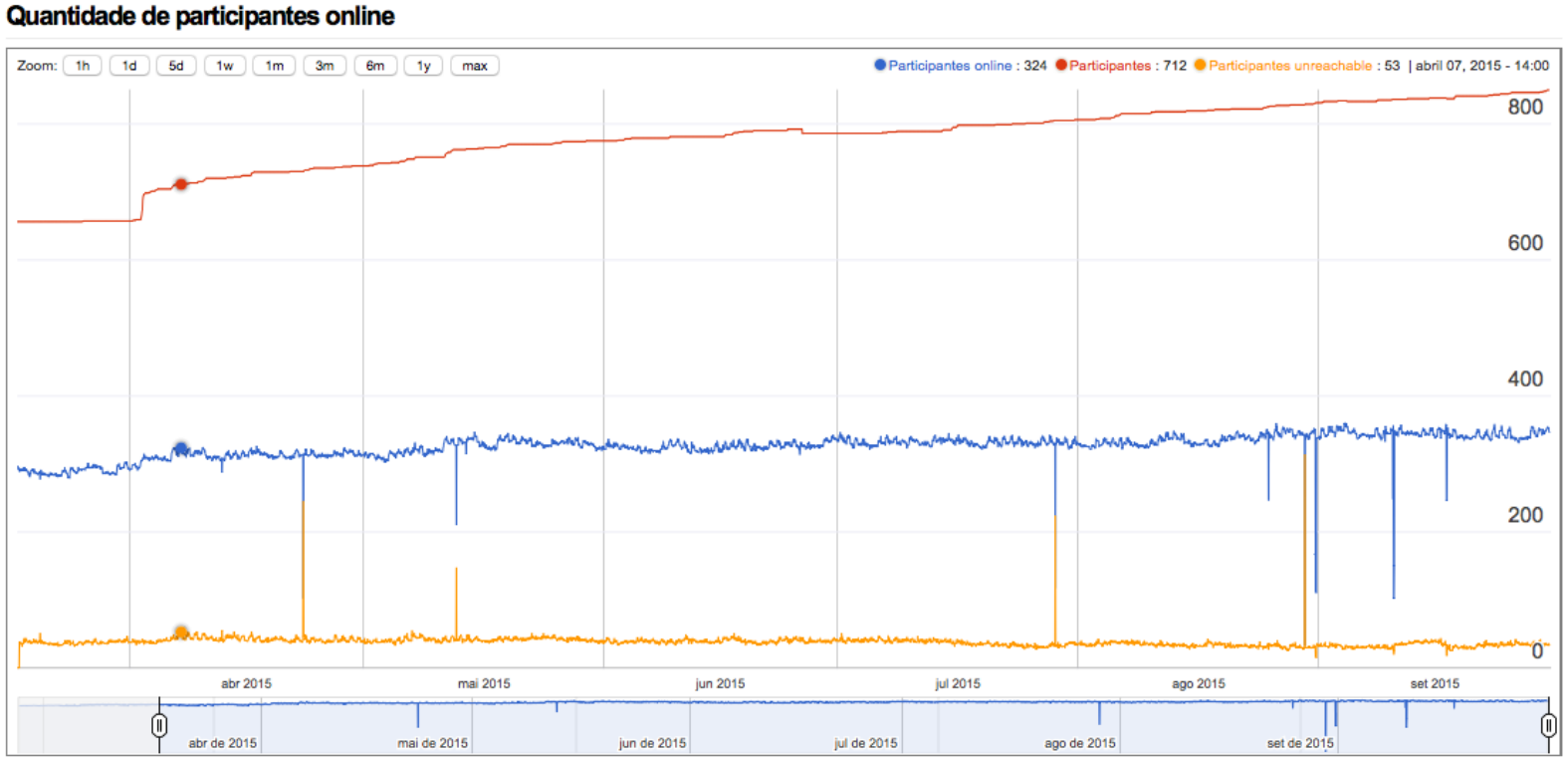
Inter NOC – Dial by ASN
INOC-DBA-BR

- 69 calls/day



Inter NOC – Dial by ASN
INOC-DBA-BR

- Problems...



Inter NOC – Dial by ASN
INOC-DBA-BR

Questions…

- What do you think? Should we try it in the LAC region?
- How we solve the problem with whois contacts?
- Should we do something else to improve communication between our NOCs and CSIRTs? Maybe an AS-Whats-App? AS-Telegram?

https://inoc-dba-web.pch.net/inoc-dba/
http://inoc.nic.br

Obrigado

www.ceptro.br

moreiras@nic.br

@moreiras

01 de novembro de 2015

nic.br cgi.br

www.nic.br | www.cgi.br