



German Internet Exchange

## **EIX Working Group RIPE59 Lisbon**

# **Make yourself attractive for peering**

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## Making yourself attractive for peering



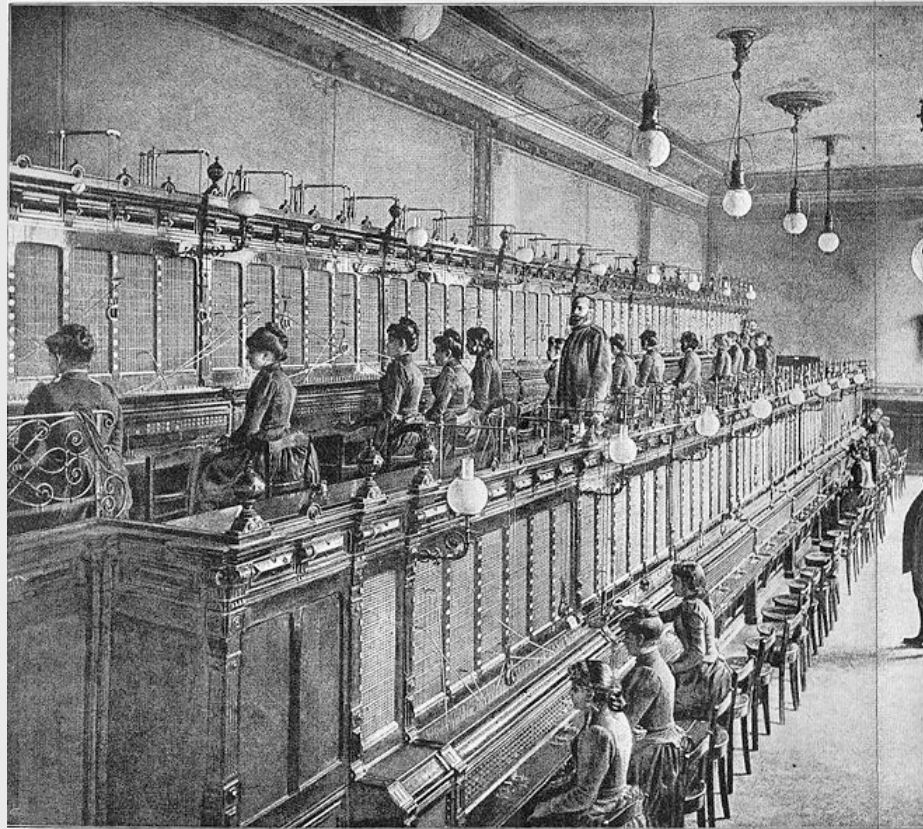
Goal:

- Increase your peering-success-rate

# Three Basic Rules

- Be available!
- Know your network!
- Be professional!

# Be reachable and available!



## Be reachable and available!

- Give your peers multiple ways to contact you
  - in case of problems with the peering itself
  - in case of a network attack
  - to announce maintenances
- Why not setup a special webpage for your peers?
  - Check <http://www.lambdanet.de/index.php?p=200&l=1>
  - ...in English!
  - Stating your peering policy and how to contact you
  - Another example: <http://www.corp.att.com/peering/>

## Your peers should be able to contact you 24/7

- by email
  - usually peering@.... is used
- by phone
  - The phone number you give your peers must be worldwide reachable
  - Make sure the person who picks up the phone knows what peering is
  - No robots which require a customer number!
  - No voice menu in only your local language!

## Publish your contact information

- You can use the RIPE whois-database:
  - You have an entry for your AS anyway
  - Keep it up to date and put in good contact information as well
  - For example a role object of your peering-team
- Use PeeringDB
  - THE place to publish peering information
  - Check <http://www.peeringdb.com>
  - Have a look!

## RIPE Object Example

- `whois -h whois.ripe.net AS5669`

```
aut-num:          AS5669
as-name:          VIA-NET-WORKS-AS
[...]
remarks:          -----
remarks:          Peering requests to: peering@psineteurope.com
remarks:          Network problems to: noc@vianetworks.com
remarks:          Corporate information : http://www.vianetworks.com/
remarks:          Network information : http://noc.vianw.net/
remarks:          -----
[...]
```

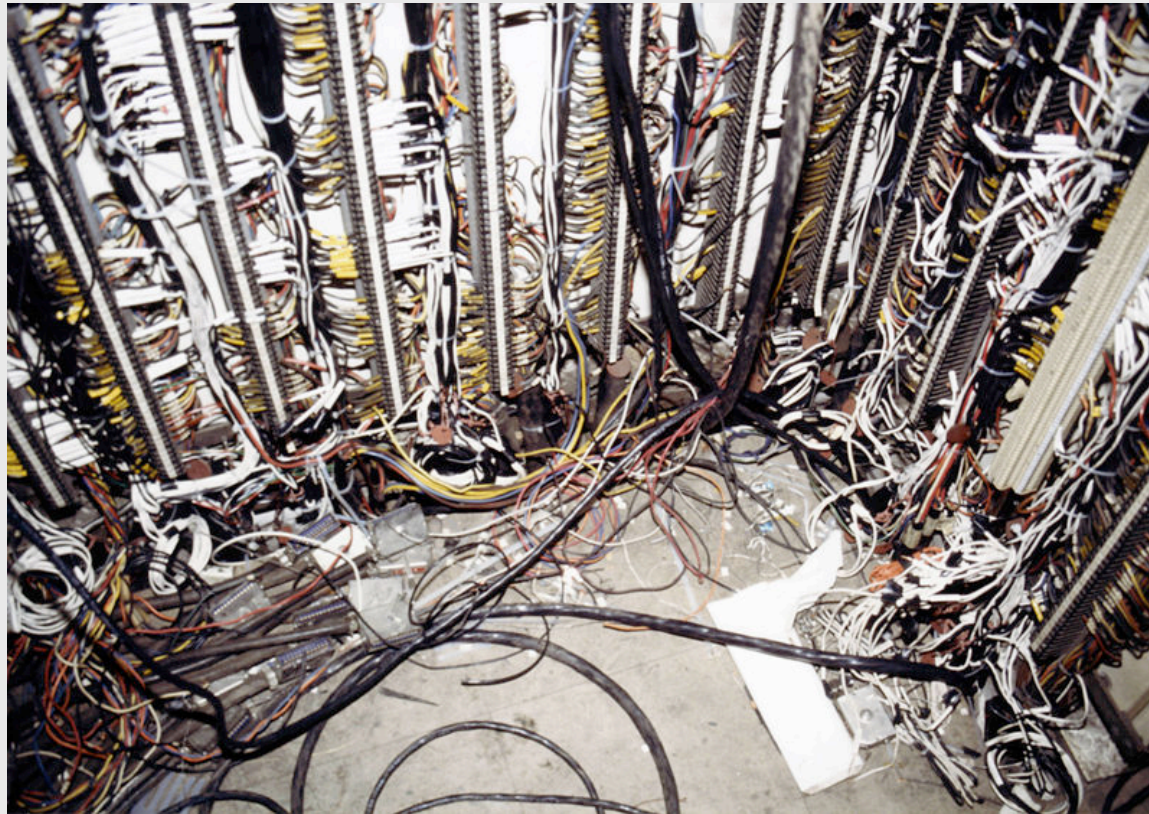
- Good: all relevant information is there
- Bad: its hopelessly outdated
- Conclusion: Published contact information has to be kept up to date



## Publish your contact information (2)

- Make sure the Internet Exchanges where you peer have your contact information too
- Most exchanges publish an operational contact list of all its customers
- For example DE-CIX:
  - Customer list with AS numbers and links to RIPE in the public area
  - Detailed operational contact list including 24/7 NOC phone numbers in the “customers only” area
  - Customers can use an online form to update their entry.

# Know your network



# Know your network

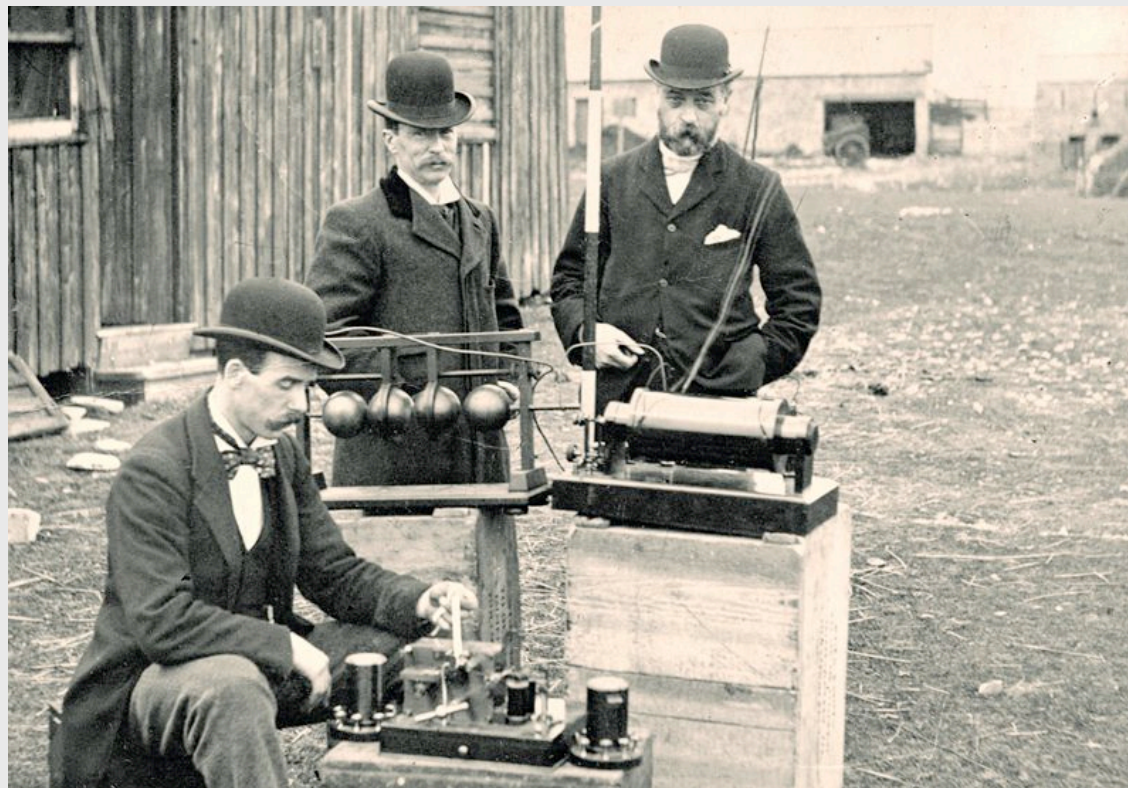
- Would you peer with this network?

|                |  |   |   |   |
|----------------|--|---|---|---|
| *> .0.0.0/16   |  | 0 | 0 | i |
| *> .0.13.0/24  |  | 0 | 0 | ? |
| *> .0.16.0/21  |  | 0 | 0 | ? |
| *> .0.24.0/24  |  | 0 | 0 | ? |
| *> .0.30.0/24  |  | 0 | 0 | ? |
| *> .0.33.0/24  |  | 0 | 0 | ? |
| *> .0.35.0/24  |  | 0 | 0 | ? |
| *> .0.72.0/21  |  | 0 | 0 | ? |
| *> .0.156.0/24 |  | 0 | 0 | ? |
| *> .0.168.0/21 |  | 0 | 0 | ? |
| *> .0.196.0/24 |  | 0 | 0 | i |
| *> .0.208.0/20 |  | 0 | 0 | i |
| *> .0.212.0/22 |  | 0 | 0 | i |
| *> .0.236.0/24 |  | 0 | 0 | i |
| *> .0.248.0/24 |  | 0 | 0 | i |

# Know your network

- Make sure your BGP announcements are always “clean”
  - Aggregate!
  - Make sure your peers know how many prefixes to expect
  - Do not announce anything smaller than /24 into the global routing table
- Know who your “special” customers are
  - Internet cafés
  - “Marketing” agencies ( ““ intentional)
  - Gambling sites

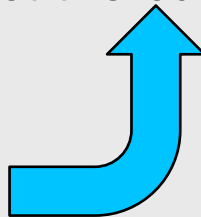
# Be professional



## Be professional

- A peer contacts you because from one of your customers an attack against him originates.  
Make your choice:
  - “Go away. The customer pays me and you do not.”
  - “I will contact the customer and make sure the attack stops“

Correct choice



## Be professional

- Document your peerings
  - in your AS-Object in the RIPE-Database
- Keep your peers up to date
  - Announce relevant maintenances
    - in English
    - in an email with an useful subject, **not** in an attachment
    - if you give a timeframe, include local time **and UTC**
    - Note which AS, ports, etc. are affected
  - Don't be too verbose or everything gets ignored
  - Do **not** announce every new prefix you are advertising – but **do** document your networks in the RIPE-Database

## Be professional

- If you have an open peering policy, stop listening
  
- If you have a restricted peering policy:
  - Respond to **every** request for peering.
  - Have a business process on how to approve peerings
  - **Publish** the process and follow it. Every time.
  - If you deny someone peering, be polite, professional and explain which criteria they did not meet
  - If they improve to meet your criteria, give them peering.



# Be professional – Peering Contracts

- Some companies require a written contract for peering... usually those with a large legal department.
- For you legal guys listening or reading the slides:  
I do not give any legal advise here!
- A peering contract is not a bad thing, but
  - It does not protect you from being depeered
  - It complicates setting up new peerings (in case you WANT new peerings)
  - I have never experienced that the legal folks approved any peering contract without changes.
- If someone asks you to sign their peering contract, why not...
  - ask them to sign yours (if you have one, this shifts the workload to **their** legal department)
  - ask them to setup the peering now, because your legal department is so slow responding (all legal departments are)

**Thanks !**

**Questions??**

EIX-WG Homepage:

<http://www.ripe.net/ripe/wg/eix/index.html>

Mailinglist:

<http://www.ripe.net/mailman/listinfo/eix-wg>