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# TeliaSonera

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# The Peering Manager's Toolbox



Also Known As...

What you need to do a complete job!

TeliaSonera International Carrier

Peter Cohen / Amsterdam / 2005-03-04

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# You Need Different Kinds of Things for work

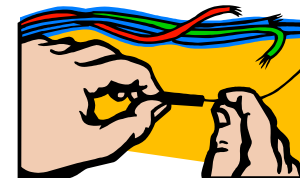
Data Storage...  
Records Keeping Tools

Philosophical/Intangibles...  
Where to meet + Intangible stuff like  
Luggage, Foreign Languages,  
Organizational Understanding



Results...  
Pre-Post Peering  
Analyzing Tools

Physical...  
Stuff like fibers, test  
kits, site access,  
etc...



# Data Storage...

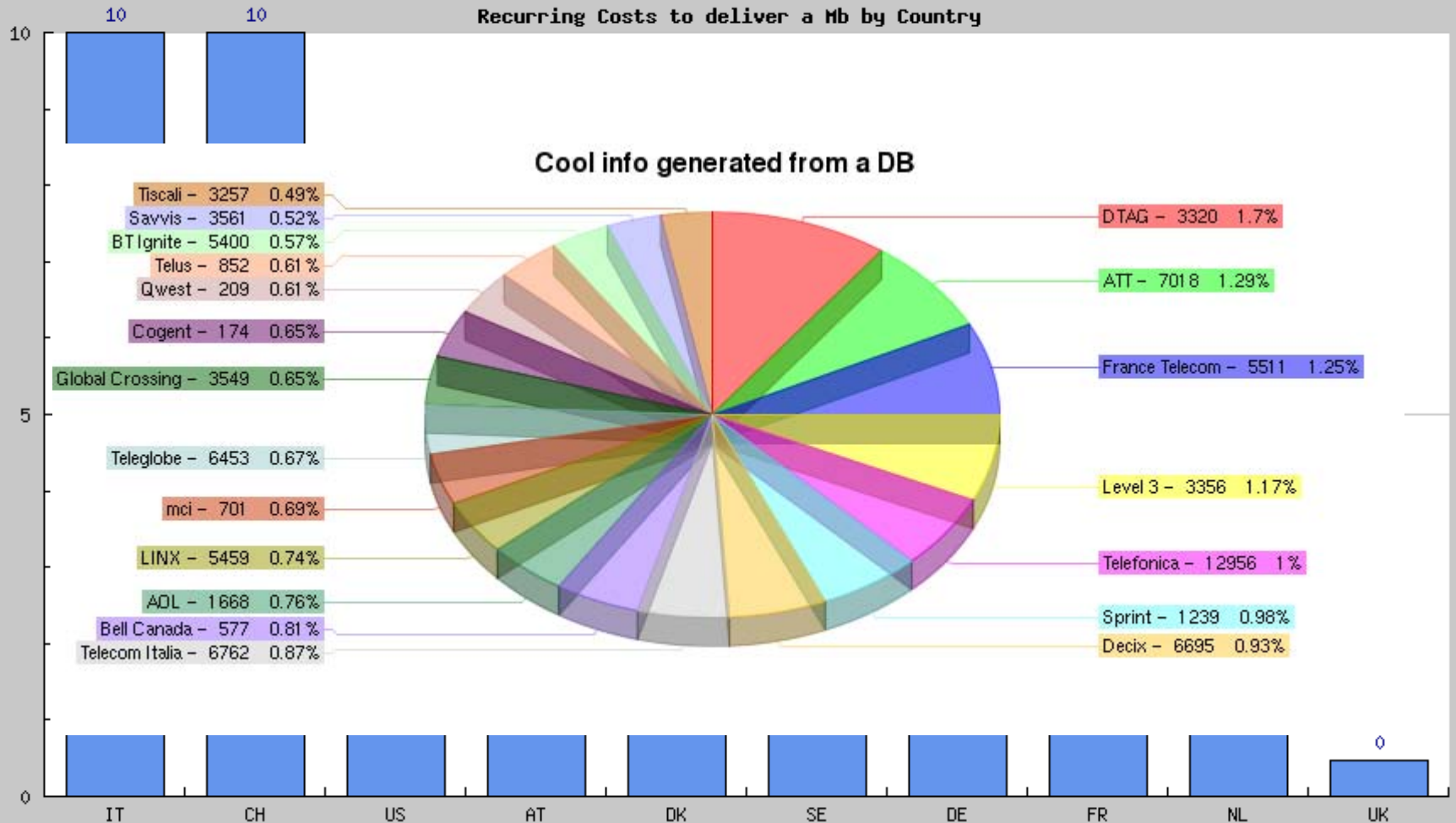
## The “infamous peering database”

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# The Peering Database

## Mbs of capacity by Tier 1 or Tier 2

Recurring Costs to deliver a Mb by Country



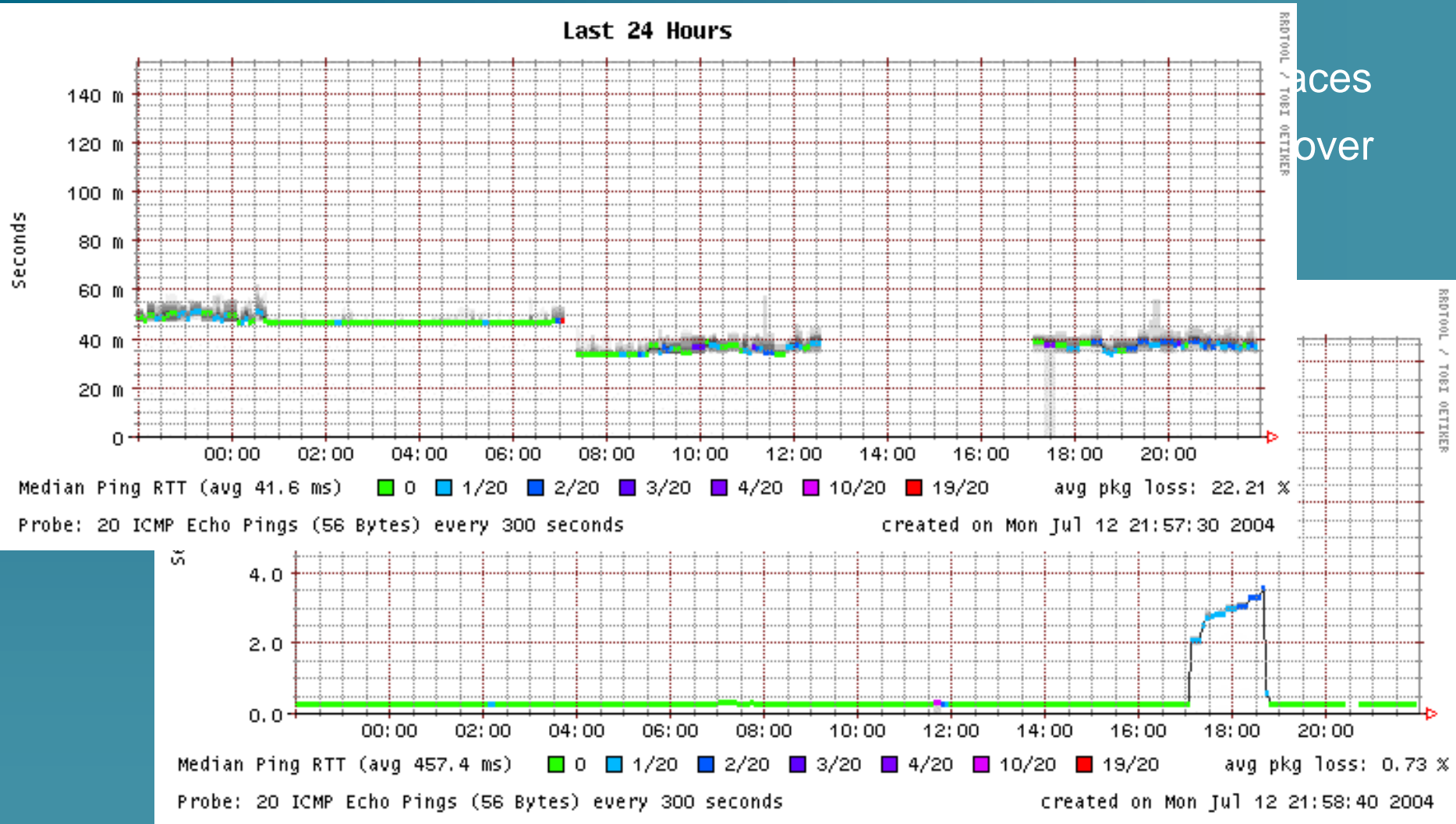
# Results...

## Smokeping, Netflow, Renesys

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# Smokeping

aces  
over



# Netflow/Commercial Traffic Analyzer

Telia Traffic Flows Data System - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Folders Search Favorites

Links news Peer x's Telia tools travel web-php-mysql 1299clik Goog PeerQ Phone POPguid quik-stats POM Yahoo!

## Telia Traffic Flows Data System

- [Top 100 Flows](#)
- [Top 100 Source AS Numbers](#)
- [Top 100 Destination AS Numbers](#)
- [Total Traffic by Interface](#)

Enter an AS number:

Show:

**Router Name**    **Router Location**    **Description**

<a href="#">nyk-bb1.telia.net</a>	New York City	Juniper Core Router
<a href="#">nyk-bb2.telia.net</a>	New York City	Juniper Core Router

**Data Set**

era

Internet

• Where is your traffic going?

• How many Mbs are going there? Worth peering?

• Can go either home grown or commercial on this, make your own decisions!



2002	2003	2004	2005	2006
May	June	July	August	
8	9	10	11	12
13	14	15	16	17



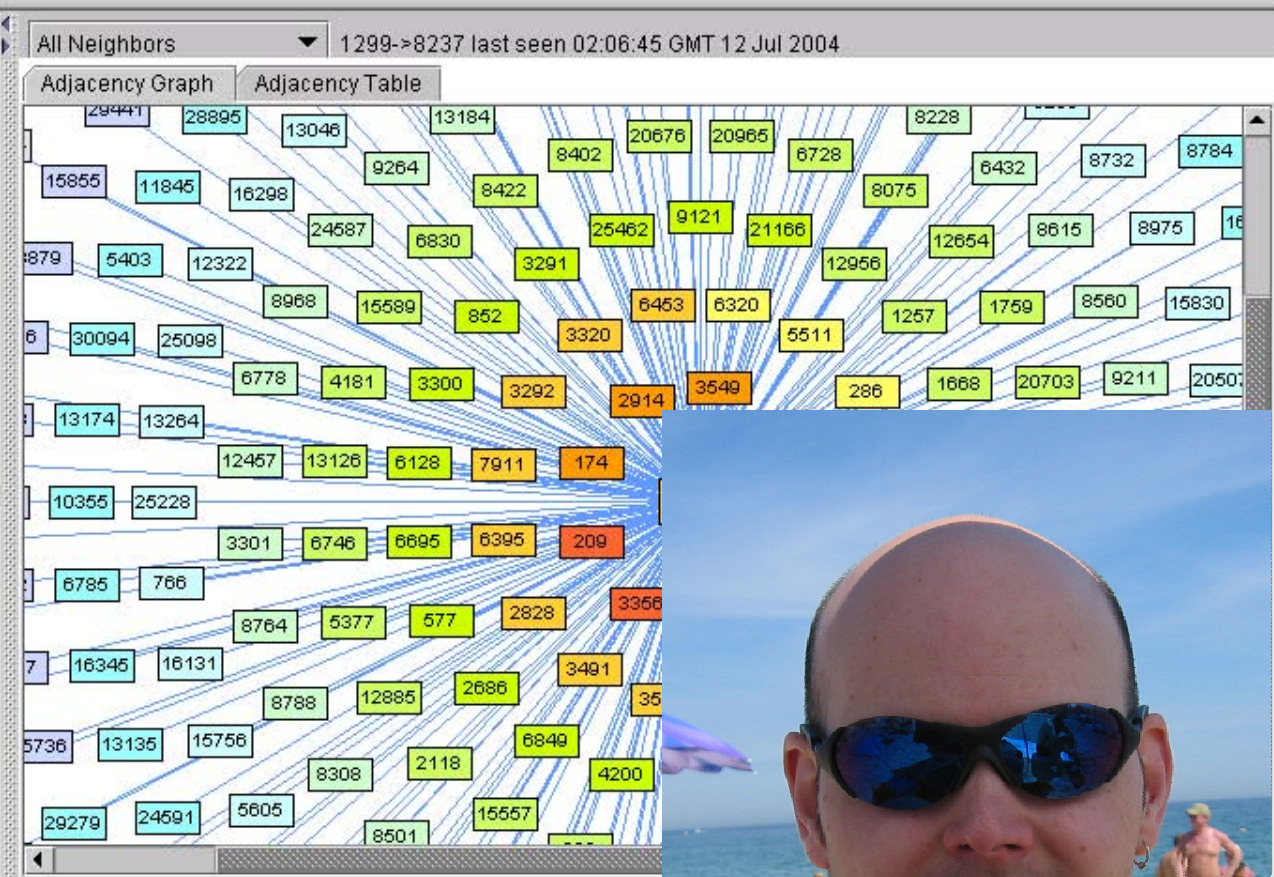
Start: Sun 11 Jul 12:42:36 GMT      Range: 1.0 day      Res: 300seconds

Zoom In      Zoom Out

**Autonomous System:** AS 1299 (TeliaNet Global Network)

**In route registry?** no

**Observed Neighbors:** (displayed at right based on data collected between Sun Jun 13 and Mon Jul 12)



22 Originated Prefixes

neighbors	1	<4	<8	<16	<32	<64
colors						

Show Routing Messages

No requests

Refresh every 5 minute



**Physical...**

**Hardware/external software & Access Stuff**

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# Hardware/external software & Access Stuff

- Fiber Patches, both Single Mode and Multimode
- Loopback patches/kit
- Fiber Cleaner
- Light meter
- Console cable(s)

- Router Access
  - Is the session up?
- Peering Exchanges: User/password info
  - Meetings, new members, etc...
- Remote access
  - Company Email, routers, vpn, etc...
- Internal ordering systems/provisioning rights/powers
  - TOMS, TWD, INCA, VaGINA, etc...

**Philosophical/Intangibles...**

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# Philosophical/Intangibles...

- Good luggage
- Frequent Flyer/Rental/Hotel memberships
- Public Speaking Experience
- Foreign Languages
- Powerpoint/Visio/Excel/etc...
- Clean Shave & a Haircut ?
- Telephone – don't be afraid of picking it up!
- Sales Engineering...
- Industry Event/Tradeshaw experience /Ripe/Peering Forum/Nanog, aka.. “The Martin Levy Test”

# Questions ?

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