# RIPE 60 - EIX WG Prague

# Euro-IX Update

SERGE RADOVCIC
Euro-ix

RIPE 60 - Prague, Czech Republic - 05 May 2010

# What is Euro-IX?

- European Internet Exchange Association

- Formed in May 2001

- The association's aim is to further develop, strengthen and improve the Internet Exchange Point (IXP) community

- Via meetings, information repositories, mailing lists and other inter-IXP cooperation activities

# Euro-IX affiliates (1)

- 48 affiliated IXPs (operating 100+ IXPs)

  ▶ **Europe: 39**
  (operating 61 IXPs in 25 countries)

  ▶ **Africa, Asia and North America: 9**
  (operating 40 IXPs in 8 countries)

- 11 affiliated patrons:

  ▶ Layer 2 switch vendors, optical switch vendors, colocation operators....

# Euro-IX affiliates (2)

- Newest Euro-IX affiliates
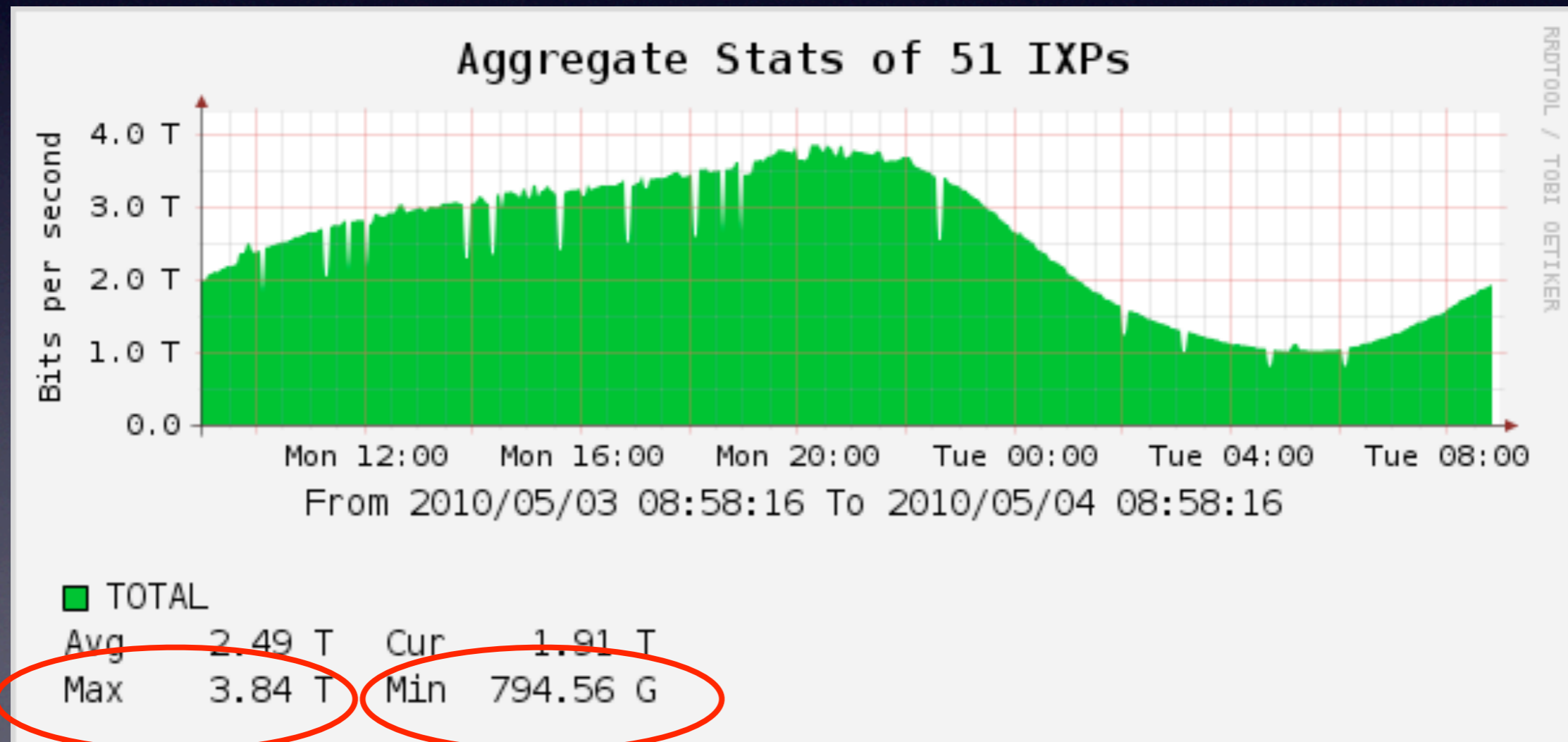  - IXPS:

    BIX.BG – Sofia

    SFINX – Paris

    Telx – U.S.A. (4 locations)

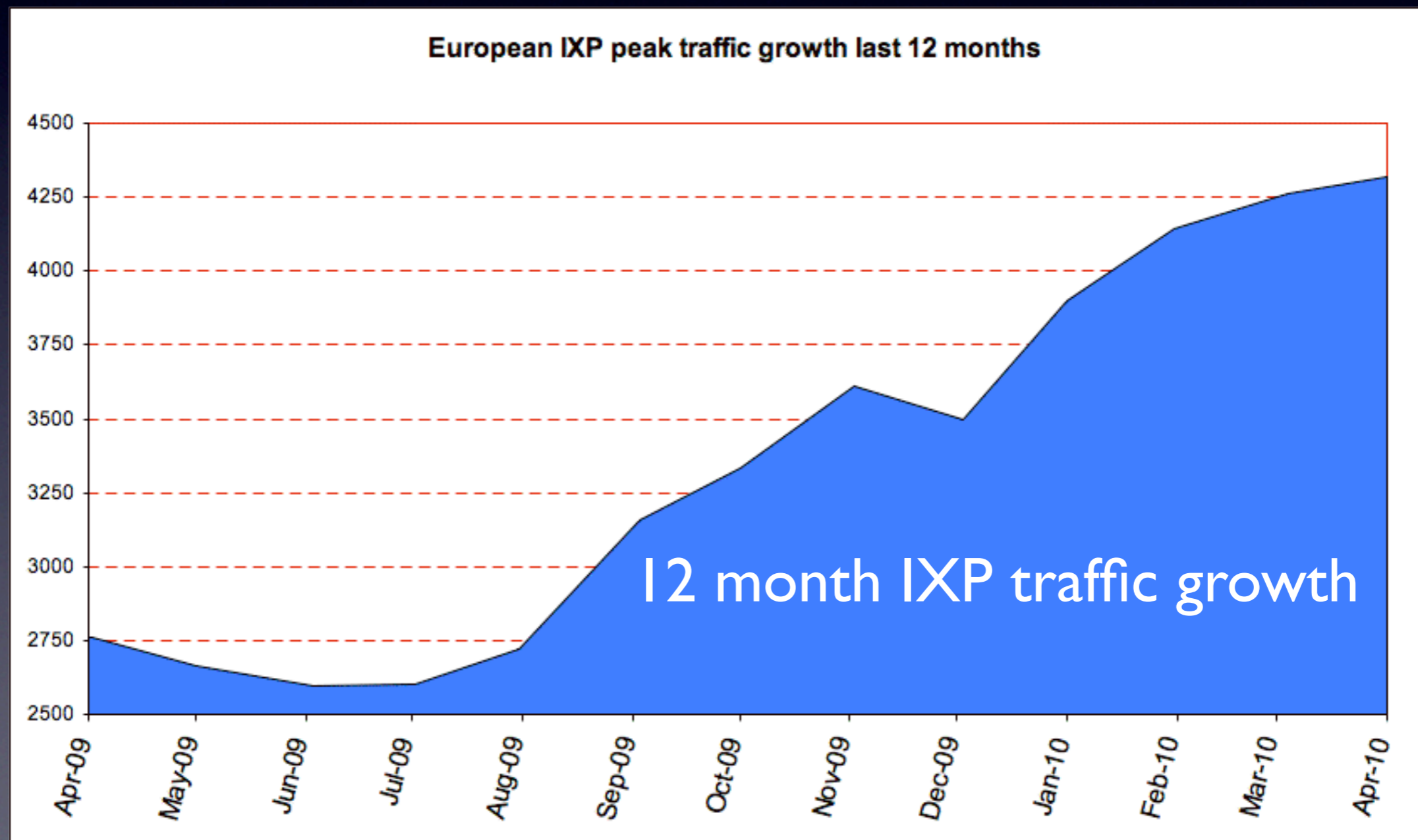  - Patrons:

    Arista, MRV and Transmode

# Euro-IX IXP traffic

- Real time European member statistics

- Makes up about 90% of all European IXP traffic
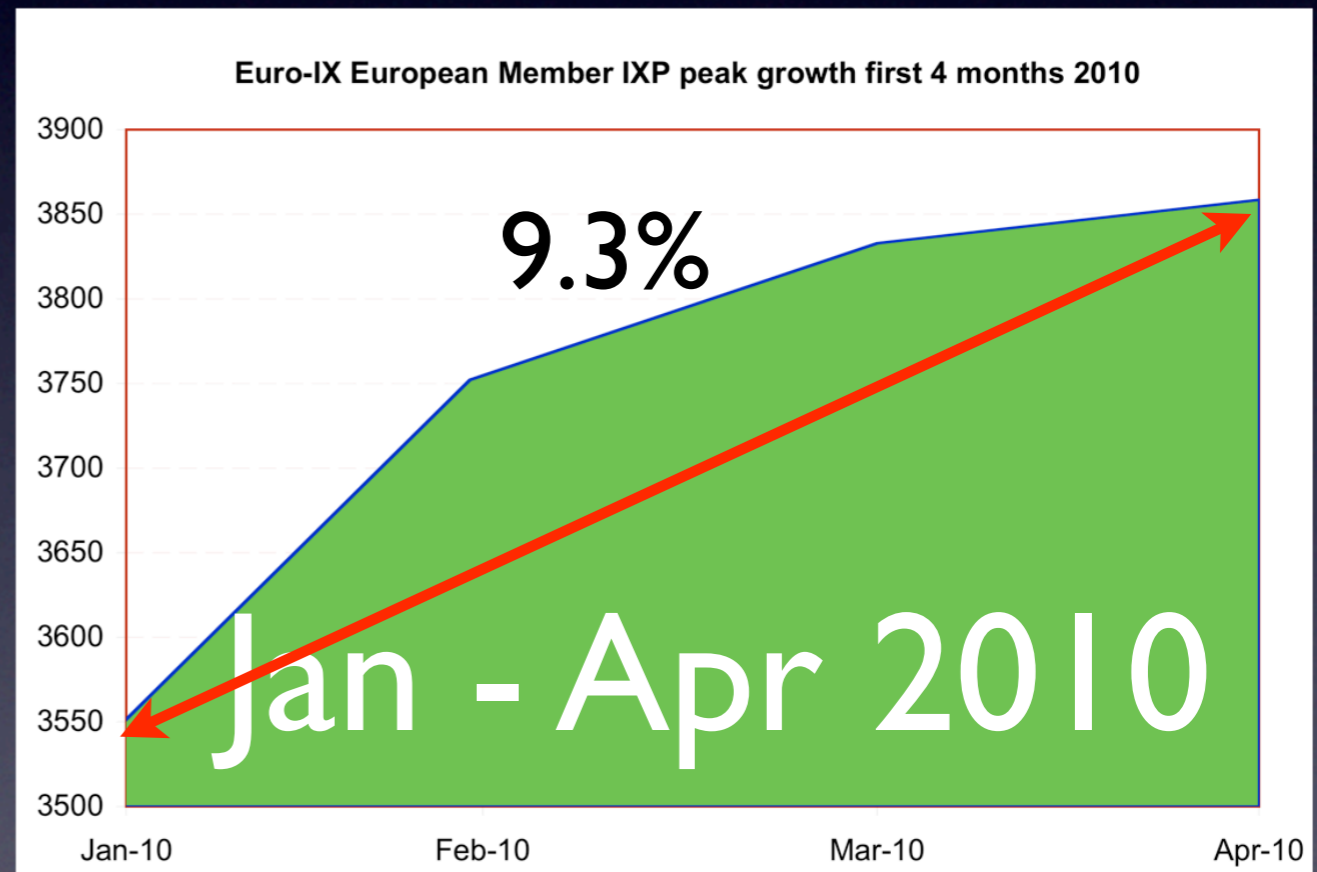
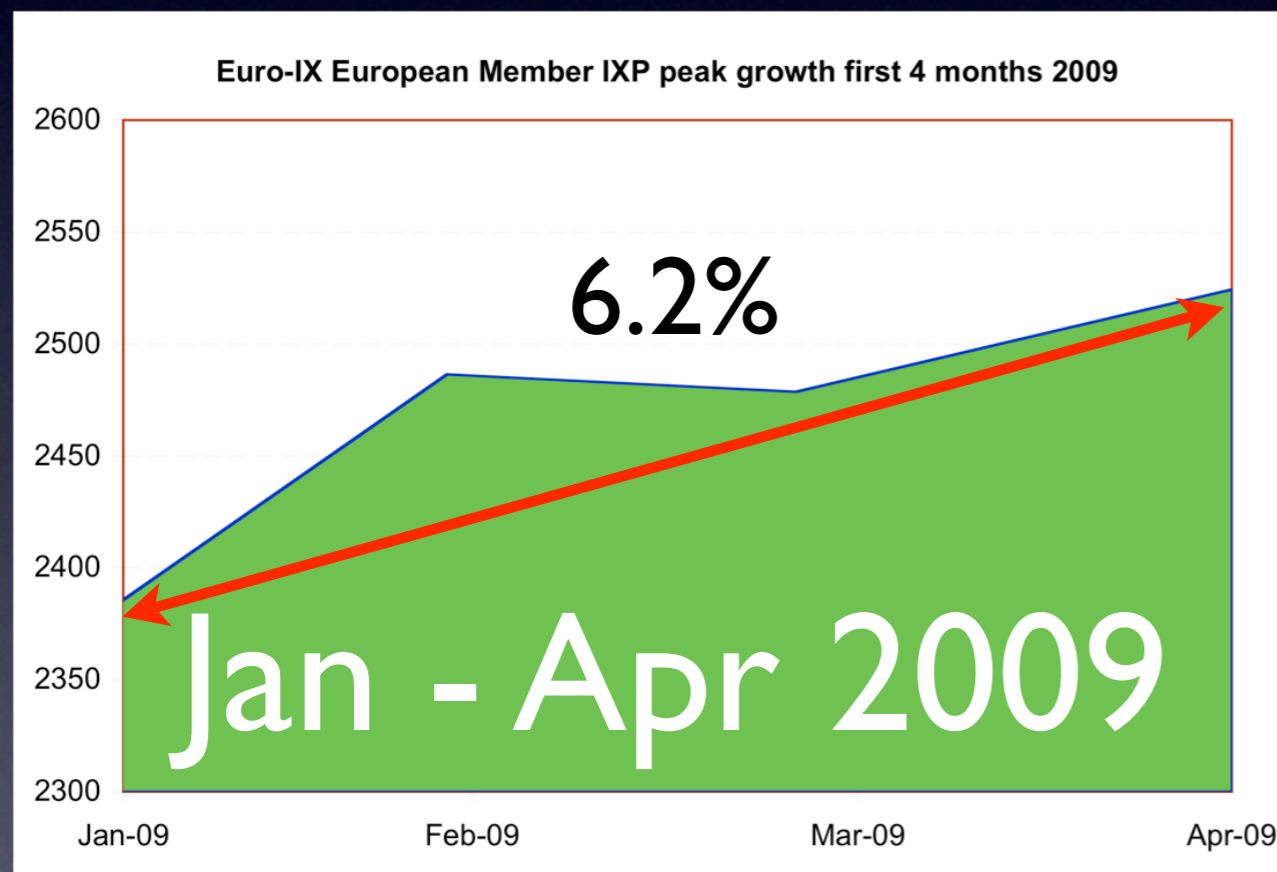- Weekday: Peak at 21:00 CEST; low at 05:45 CEST



Aggregate Stats of 51 IXPs

From 2010/05/03 08:58:16 To 2010/05/04 08:58:16

TOTAL
Avg    2.49 T    Cur    1.91 T
Max    3.84 T    Min    794.56 G

# European IXP traffic

- Combined European IXP peak traffic has risen from:
  - 2.759 Tbps end April '09 to *4.316 Tbps* end April '10
  - 1.557 Tbps or 56% increase in the past 12 months

**European IXP peak traffic growth last 12 months**

12 month IXP traffic growth

# Begin 2009 versus 2010 IXP traffic

- The increase in peak traffic from the end of January 2009 to the end of April 2009 was **6.2%**

- In 2010 this increase was **9.3%**



Euro-IX European Member IXP peak growth first 4 months 2009

6.2%

Jan - Apr 2009

Euro-IX European Member IXP peak growth first 4 months 2010

9.3%

Jan - Apr 2010

# IXP participants

| | Total IXP participants | Unique ASNs | Present at > one IXP | >1 % of total |
|---|---|---|---|---|
| Europe | 5.438 | 2.998 | 885 | 16.3% |
| Asia-Pac | 1.108 | 640 | 212 | 19.1% |
| N. America | 2.021 | 839 | 304 | 15.0% |
| S. America | 274 | 158 | 37 | 13.5% |
| Africa | 200 | 112 | 3 | 1.5% |
| Global | 9.041 | 4.475 | 1.387 | 15.3% |

Data captured from the Euro–IX ASN database on the 03rd of May 2010

# Euro-IX ASN DB

## Search the Euro-IX ASN Database

Enter an ASN, IXP or organisation name:

Query `AS2686`

[Search]

Your search returned 18 results

| Organisation | AS number | IXP |
|---|---|---|
| AT&T Global Network Services Hellas | 2686 | AIX |
| AT&T Global Network Services | 2686 | AMS-IX |
| AT&T Global Network | 2686 | BIX |
| AT&T | 2686 | BNIX |
| AT&T EMEA | 2686 | CIXP |
| AT&T GNS Deutschland | 2686 | DE-CIX |
| AT&T | 2686 | Equinix |
| AT&T GNS | 2686 | ESPANIX |
| AT&T Global Network Services Oy | 2686 | FICIX |
| AT&T GNS | 2686 | LINX |
| AT&T Global Network Services | 2686 | MIX |
| AT&T | 2686 | Netnod |
| AT&T Global Network Services | 2686 | NIX |
| AT&T CR | 2686 | NIX.CZ |
| AT&T GNS - EMEA | 2686 | PARIX |
| AT&T GLOBAL NETWORK SERVICES | 2686 | SFINX |
| AT&T | 2686 | TOP-IX |
| AT&T | 2686 | VIX |

## Search the Euro-IX ASN Database

Enter an ASN, IXP or organisation name:

Query `KPN`

[Search]

Your search returned 21 results

| Organisation | AS number | IXP |
|---|---|---|
| KPN EuroRings B.V. | 286 | DE-CIX |
| KPN Eurorings | 286 | VIX |
| KPN Global Carrier Services | N/A | AMS-IX |
| KPN International | 286 | LONAP |
| KPN Mobile The Netherlands B.V. | 64595 | AMS-IX |
| KPN Telecom | 286 | LINX |
| KPN Telecom B.V. (ISP Infrastructuur) | 8737 | AMS-IX |
| KPN Wholesale Service & Op. | 286 | AMS-IX |
| KPN Nederland | 1136 | BNIX |
| KPNQwest Italia | 5602 | MIX |
| KPN | 1136 | PARIX |
| KPN Eurorings | 286 | FreeIX |
| KPN Eurorings | 286 | INXS |
| KPN Eurorings | 286 | INXS |
| KPN Eurorings | 286 | N-IX |
| KPN Eurorings | 286 | NL-IX |
| KPN TELECOM BV | 286 | SFINX |
| KPN Telecom | 286 | NDIX |

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# Euro-IX ASN Filter - New!!

# Euro-IX ASN tools



ASN tools

All tools are reachable from the right hand side of the home page: **www.euro-ix.net**

# Euro-IX News (1)

- 16th Euro-IX Forum - Brussels 19/20 April

  ▸ Low attendance due to flight disruptions

- 17th Euro-IX Forum - Oslo 27/28 September

  ▸ The host will be NIX

- Euro-IX is now looking to have a more active relationship with other IXP associations around the globe (i.e. NAPLA and APIX)

# Euro-IX News (2)

- "IXP news" RSS - currently 12 IXPs involved

- Newest entries in Euro-IX ASN DB via RSS
  - ▸ Handy for peering coordinators!

- Euro-IX Film competition: *The Internet Revealed*
  - ▸ *Version 2.0 released after feedback from RIPE 59*
  - ▸ www.euro-ix.net/film/

# European Internet Exchange Association

http://www.euro-ix.net

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