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ENOG 6, Kiev, October 2013
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Euro-IX,
An Association of Internet Exchanges

Euro-IX is an association of Internet Exchanges Points, promoting an open interchange of ideas and experiences, gained to mutual advantage of the membership, by offering fora, meetings, mailing lists and on-line resources. Euro-IX also gathers information on regulatory issues affecting member exchanges within the region and where appropriate from other jurisdictions that could potentially impact on the membership.

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Why does Euro-IX do this? For the good of the IXP community:

- 2 Forums a year
- Maintaining the Website, database and tools
- Mailing Lists
- Working Groups and Task Forces
- Close relationship with IEEE Ethernet Study Group
- Annual European IXP Report
- Twinning Program ***
- Other project, e.g., Euro 2012 CL with RIPE NCC
- Benchmarking
- Staff Exchange Programs

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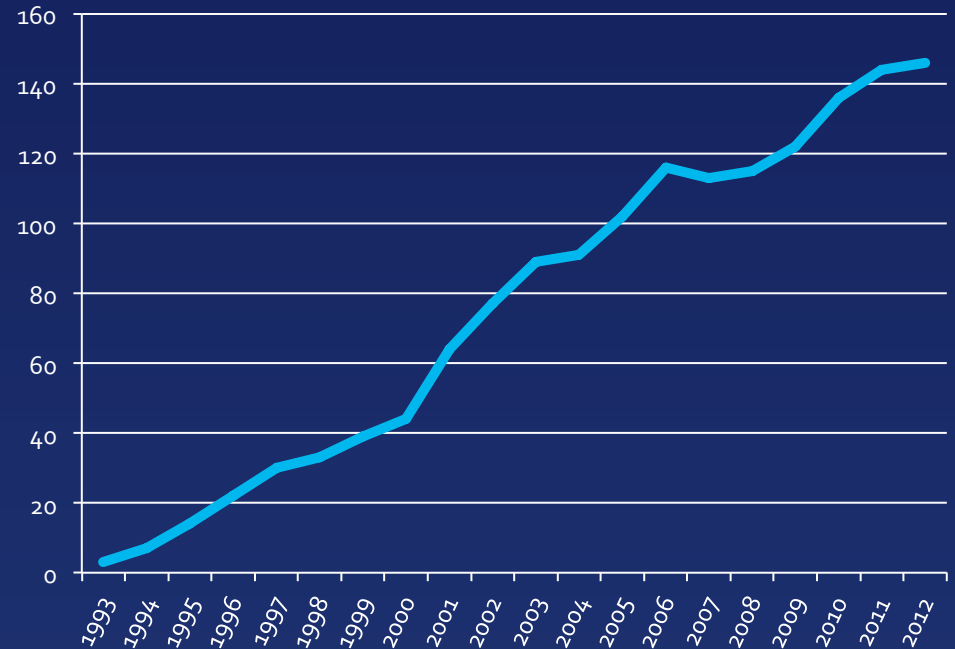
74 affiliated IXPs

- 49 IXPs in Europe (30 Countries) operating over 100 Internet exchanges
- 24 IXPs from the rest of the world
- Newest Members: TPIX (Poland), KOSIX (Kosovo), TunIXP (Tunisia), KINIX (Congo), UAE-IX (United Arabic Emirates), ZIXP (Zambia), OttIX (Canada), JINX (South Africa), TorIX (Canada), WAIX (Australia) and NAP Africa (South Africa)

11 affiliated patrons

- ADVA Optical Networking
- Alcatel-Lucent
- Brocade
- Cisco
- Extreme Networks
- Huawei

- Interxion
- Juniper Networks
- MRV
- Telecity
- Telehouse

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Growth of IXPS in the Euro-IX Region since 1993

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Meet the other Internet Exchange Point Associations (IXPAs)

- Africa – Af-IX – www.af-ix.net
- Asia Pacific – APIX – www.apix.asia
- Latin America – LAC-IX – www.lac-ix.org

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Meet the other Internet Exchange Point Associations (IXPAs)

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Meet the other Internet Exchange Point Associations (IXPAs)
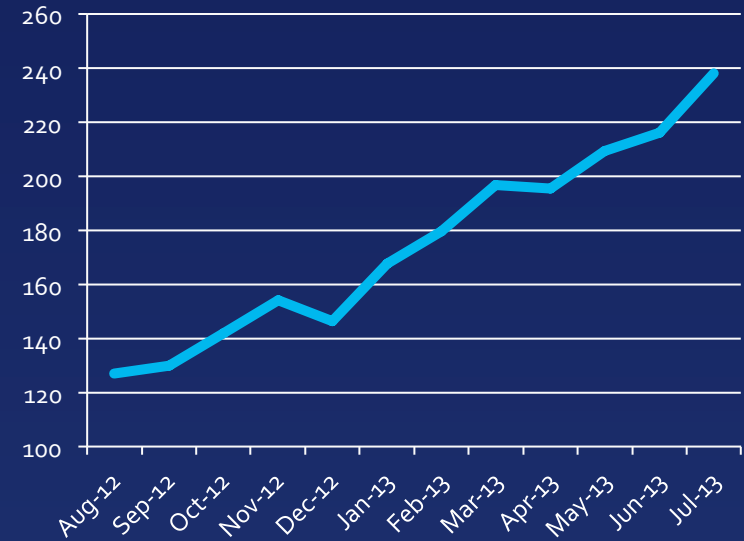
- MOU signed to form the Internet Exchange Point Federation (IX-F) in November 2012

- Idea to have a Global IXP DB

- Set standards

- Automate Data Collection from all IXPs

- Plans to collaborate with PeeringDB

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IXPs in Euro-IX Region – Europe

163 KNOWN IXPs IN THE EURO-IX REGION
48 of 66 COUNTRIES have IXPs
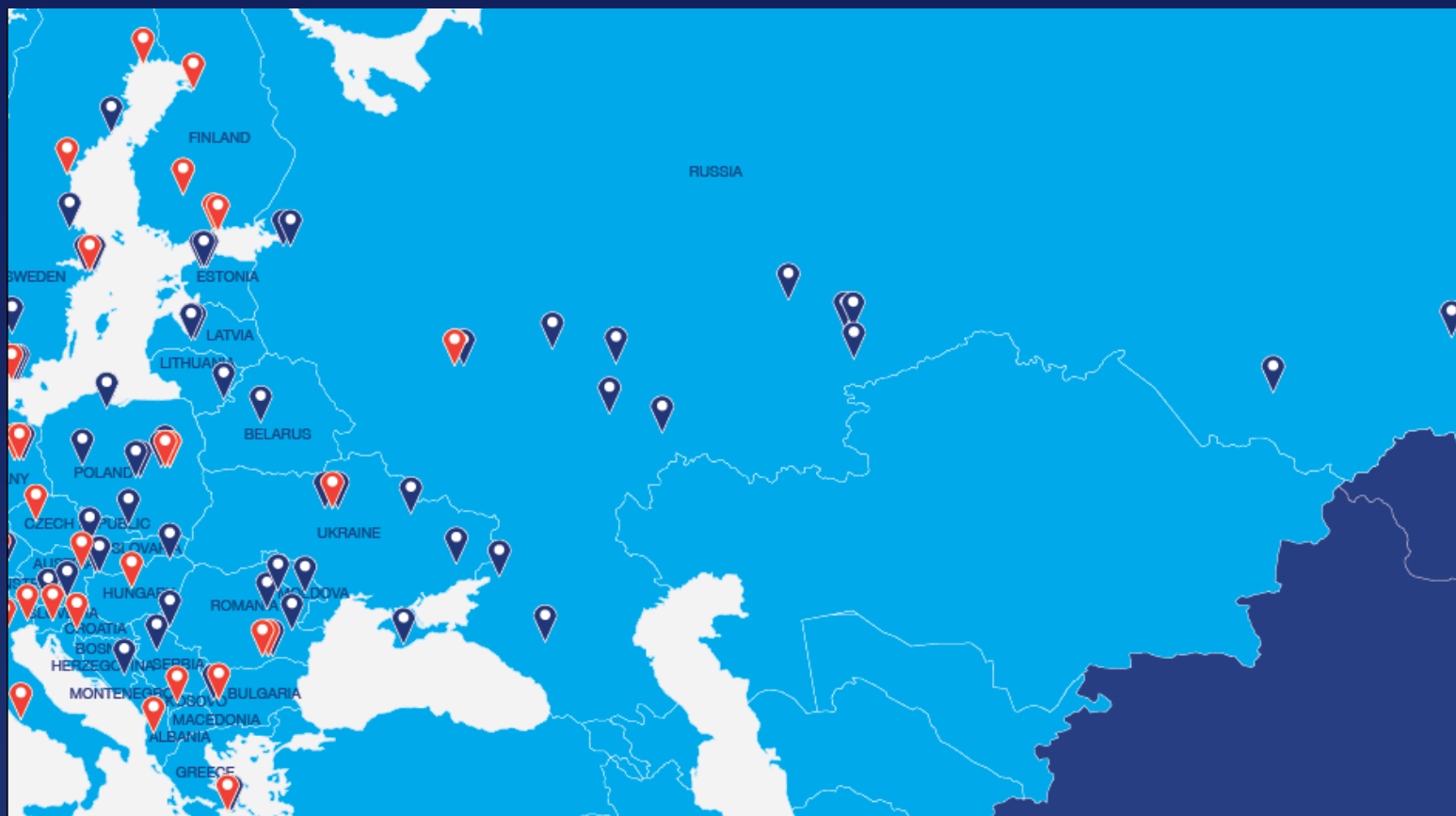**124** CITIES have IXPs in the Euro-IX region

Known Euro-IX Region Traffic Growth from a 12 period in Gbps (over public peering LAN)

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IXPs in Euro-IX Region – Cont.

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IXPs in Euro-IX Region – Eastern Europe

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IXPs in Euro-IX Region – Eastern Europe

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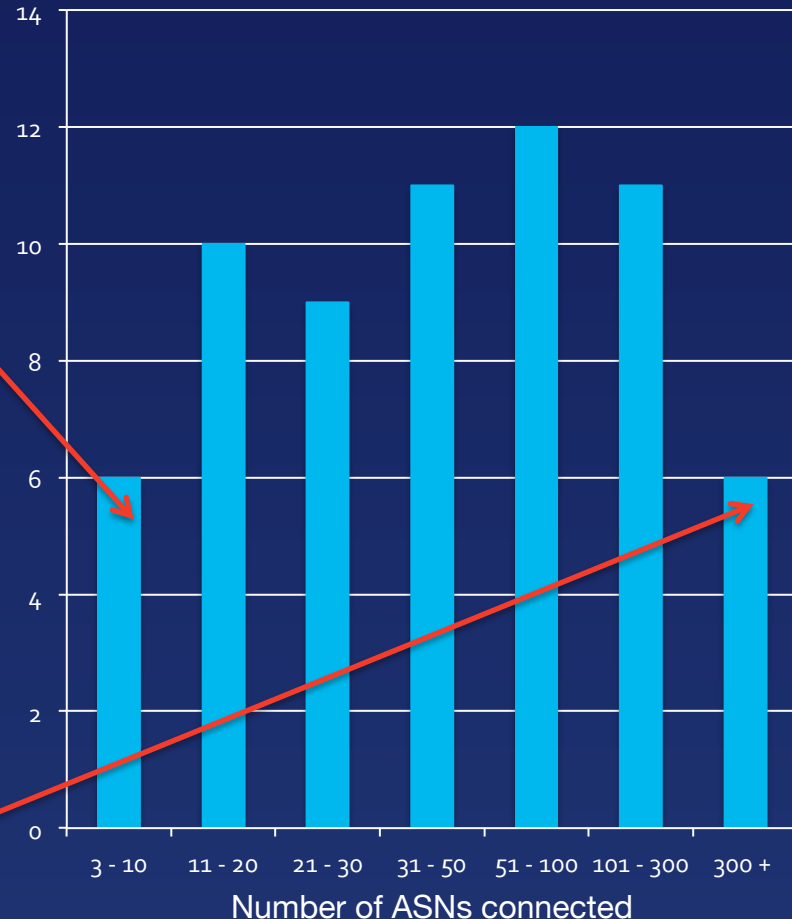# Range of Euro-IX IXPs with a given range of ASNs connected

3-10 ASNs connected -
KINIX (Congo), TunIXP (Tunisia)

11-20 ASNs connected -
TREX (Finland), NPIX (Nepal),
OTTIX (Canada), GNIX (Netherlands)

20-100 ASNs connected –
NAMEX (Italy), INEX (Ireland),
Netnod (Sweden), JPNAP (Japan), NIX.CZ
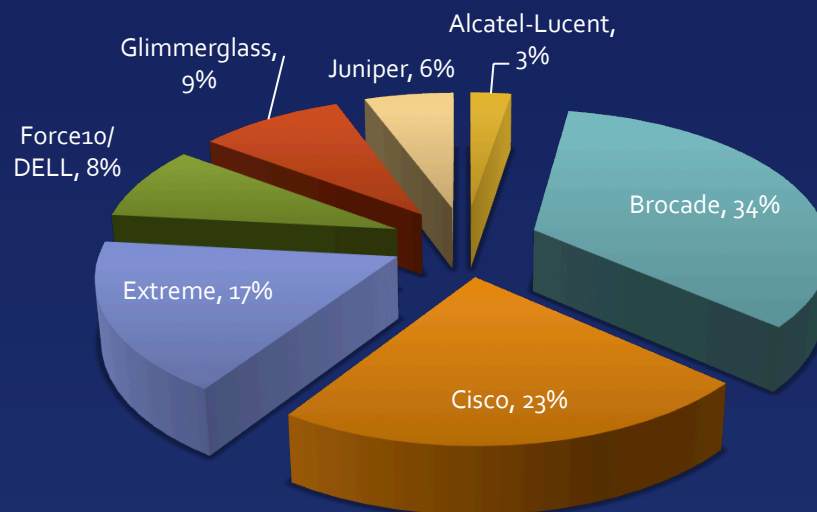(Czech Republic), LyonIX (France)

101-300 ASNs connected -
UA-IX (Ukraine), SWISS-IX (Switzerland),
VIX (Vienna), Terremark (USA)

300+ ASNs connected –
AMS-IX (Netherlands), DE-CIX (Germany) ,
LINX (UK), MSK-IX (Moscow) & PTT.br (Brazil)
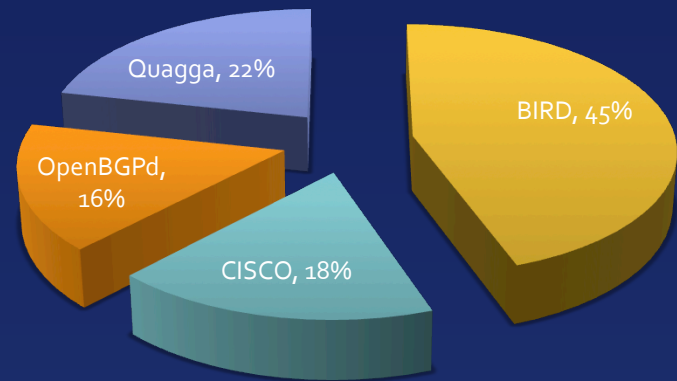
Number of ASNs connected

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Market share of vendors among EU IXPs within the Euro-IX Membership (%)

Alcatel-Lucent – DE-CIX

Brocade – AMS-IX, VIX, JPIX

CISCO – LONAP, NIX.CZ, MSK-IX

Extreme – PLIX, MSK-IX, LINX

DELL (Force10) – BCIX

Juniper – LINX, VSIX

Glimmerglass, 9%
Juniper, 6%
Alcatel-Lucent, 3%
Force10/DELL, 8%
Brocade, 34%
Extreme, 17%
Cisco, 23%

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Route server daemons in use within the Euro-IX Membership (%)

BIRD – LINX, France-IX, NIX.CZ, VIX

CISCO - AMS-IX, MSK-IX, UA-IX

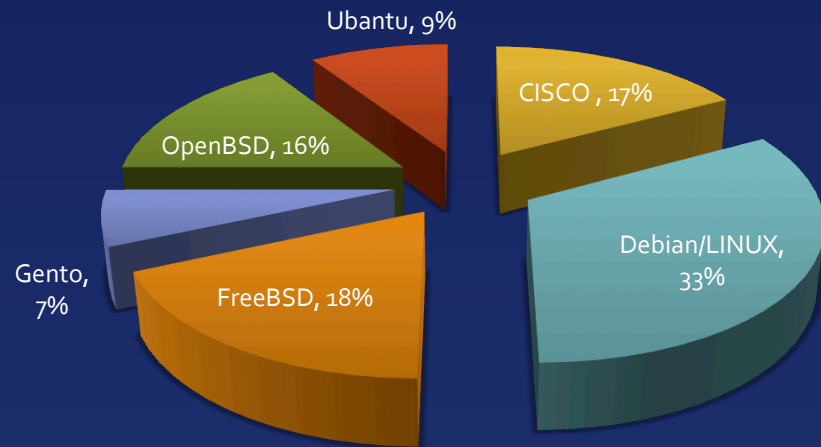OpenBGPD - BCIX, SWISS-IX, NL-ix

Quagga – PTT.br, JPNAP, ECIX

Pie chart:
- BIRD, 45%
- Quagga, 22%
- CISCO, 18%
- OpenBGPd, 16%

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Route server operating systems in use within the Euro-IX Membership (%)

Debian/LINUX – AMS-IX, TelX, DE-CIX

CISCO IOS – BIX, UA-IX

FreeBSD – NIZ.CZ, PLIX, LyonIX

Ubuntu – PTT.br, ECIX

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The Internet Revealed
A film about IXPs

Internet Revealed: A film about IXPs

internet exchange

0:00 / 5:24

Now available in English, French , Turkish, Spanish, Romanian , Portuguese, German and Arab. Check out the Euro-IX Youtube channel: http://www.youtube.com/user/TheEuroIX

 … and more languages to come!

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Links and References

https://www.euro-ix.net/news-and-events

https://www.euro-ix.net/tools

https://www.euro-ix.net/home

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Thank You!

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