



euro-IX

IXPDB

RIPE 76 - 16 May 2018

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Association of IXPs

78 affiliated members

- 54 IXPs in the Euro-IX region, 49 countries, operating over 100 peering LANs
- 24 IXPs from the rest of the world
- Newest members:
 - Digital Realty (USA, EU)
 - SAIX (Saudi Arabia)
 - CRIX (Cost Rica)





Euro-IX Patrons



THE ELASTIC NETWORK

ciena

NOKIA

JUNIPER
NETWORKS

ARISTA

interxionTM



EQUINIX

Extreme[®]
Connect Beyond the Network

Coriant

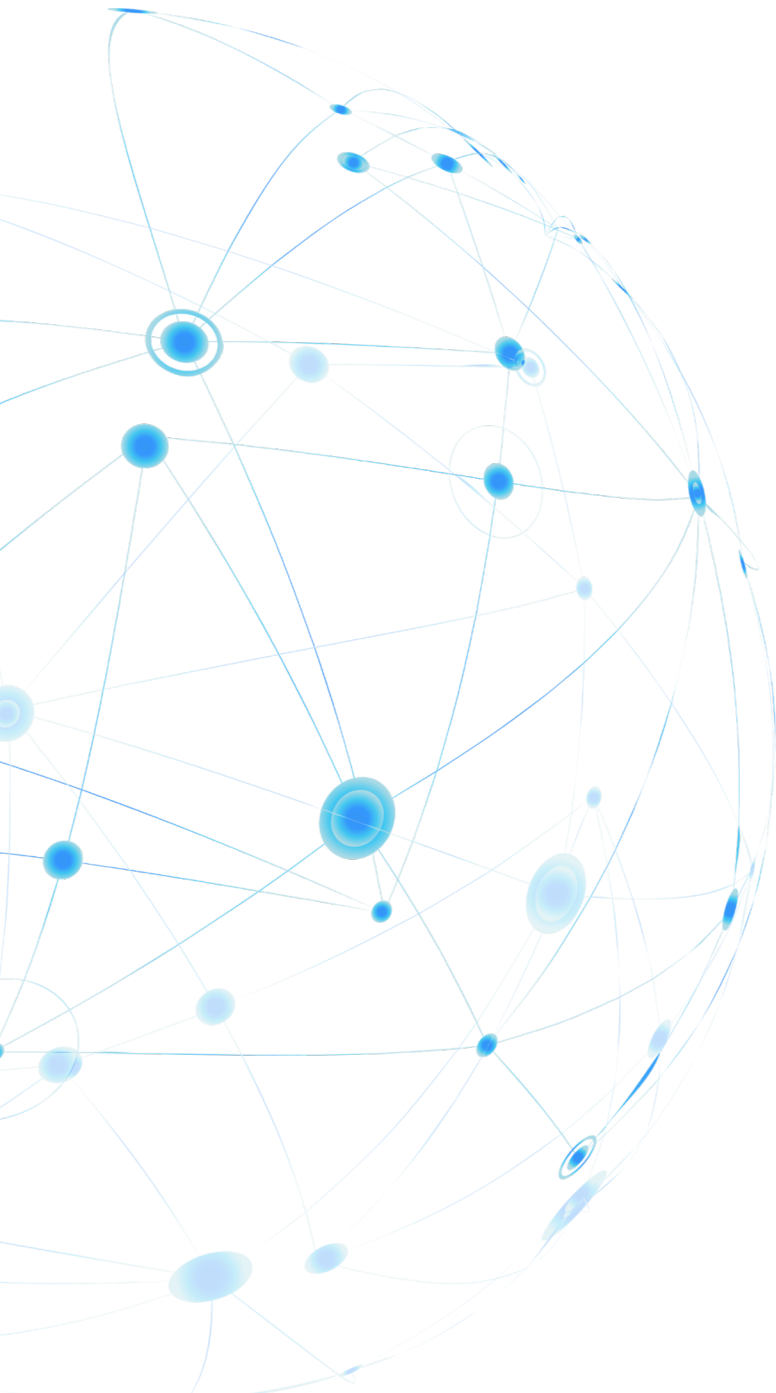
smartoptics

euro-ix



Euro-IX Activities

- 2 Fora a year
 - 32nd in Galway hosted by INEX
 - 33rd in Venice hosted by NAMEX, TOP-IX and VSIX (November 2018)
- Website and Database
- Fellowship and Mentor-IX Program
- Mailing lists – for members and non-members
- Reports – Benchmarking, traffic, hardware, Route Servers
- Newsletters - <https://www.euro-ix.net/en/communications/newsletters/>
- Route Server large BGP communities list: <https://www.euro-ix.net/en/forixps/large-bgp-communities/>
- Social media
 - Twitter @euroix
 - Facebook fb.me/maineuroix
 - Youtube youtube.com/channel/UCFyucVRAAMzxyJlsxnGwsjw



IXPDB an IX-F Project





Introduction to the Internet eXchange Federation

IX-F is an organisation for coordinating the efforts of Internet eXchange Points Associations (IXPAs).

Membership includes:

- AFIX – African Internet eXchange Point Association
- APIX – Asia Internet eXchange Point Association
- Euro-IX – European Internet eXchange Point Association
- LAC-IX – Latin America & Caribbean Internet eXchange Point Association

Collectively these IXPAs represent over 145 IXPs across
6 continents



IX-F History and Objectives

History

- MoU signed between APIX, Euro-IX and LAC-IX in 2012
- AFIX joined in 2014

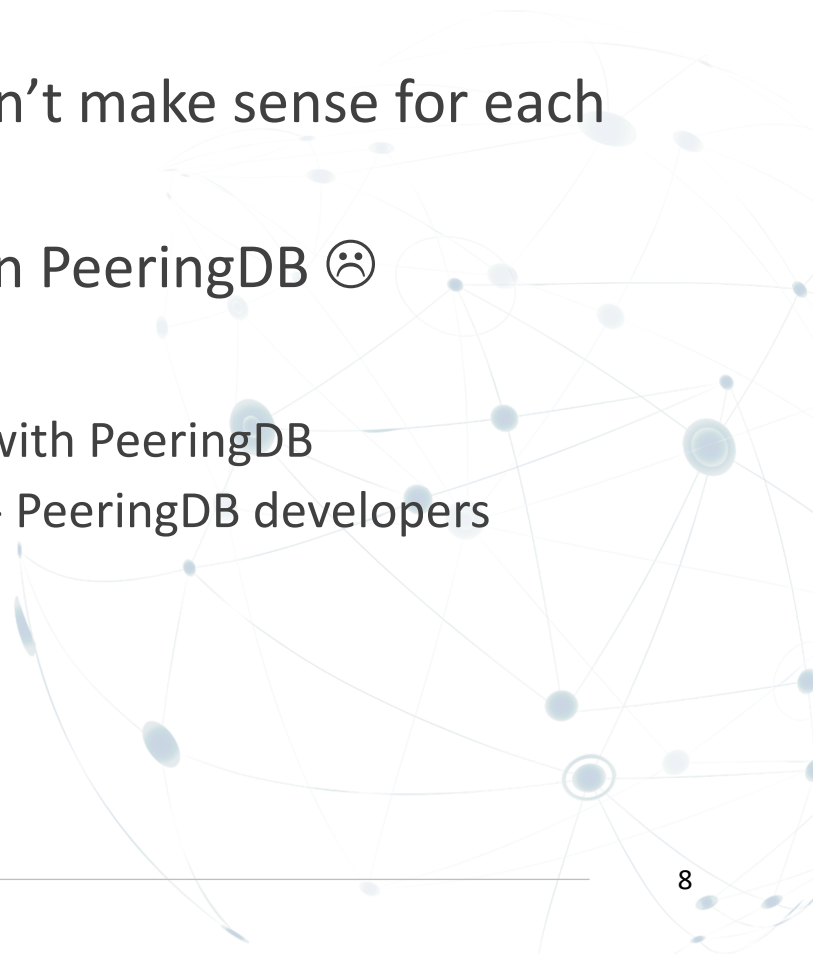
Objectives

- Address increasing policy and regulatory issues around the world
- Facilitate interaction between IXPs to address shared challenges and goals
- Provide a central resource for IXP related data, research and BCPs



IXPDB – History

- IXPDB is new only by name, the “Euro-IX database” existed since 2001 when Euro-IX started
- With the formation of the IX-F it didn’t make sense for each IXPA to have it’s own database
- IXPs had no control over their data in PeeringDB ☹️
- IX-F committed to build the IXPDB
 - 2014 Hackathon in Sheffield together with PeeringDB
 - Initial development contracted to 20c - PeeringDB developers
 - Now contracted to NIX.CZ





IXPDB - Background

- A single repository for IXP data
 - Data on members (ASN, IPs, etc.)
 - IXP related data such as switch information
- IXPDB provides authoritative data
 - Published from the IXPs own databases such as IXP Manager
- Various databases could be used to verify and validate data against IXPDB
 - Send notification where discrepancies were seen
- Other databases could use the IXPDB as a sub-set
 - Initial agreement with PeeringDB that they could use the data as well
- The IXPDB is complimentary to other databases and has scope to further improve data quality to benefit the community.



IXPDB – How does it work?

- The IX-F JSON Schema export is an agreed and standardized JSON schema which allows IXPs to make their member lists and other data available:

<https://github.com/euro-ix/json-schemas>

- The IX-F export allows the individual IXP to be the source of data about their own IXP and it's exposure
- IXPs publish this data publicly, privately and via other systems like IXP Manager ❤️
- The IXPDB will publish a single API
- IXPA's holding workshops to support IXPs.

By the end of June we'll have 110 IXP exports working!



IXPDB – Where are we?

- Database is live
- Ready to do integration with other databases
- IXPs can pick what level of exposure they want
- IXPAs can approve and create new IXPs
 - So can other admins
- Last updated field allows users to see when data was last updated
- Aggregated vendor data at IXPs available now
- Aggregated data on vendors connected to IXP – coming soon!
- Aggregated traffic data – coming soon!
- Geo-location and maps - coming soon!



IX-F - IXPDB

- Website: <http://ixpdb.net> (work in progress)
- Mailing list for users:
<https://lists.euro-ix.net/mailman/listinfo/ixpdb>
- API is available - <https://api.ixpdb.net>
- If you think this is good work, like we do, fund us 😊

secretariat@ix-f.net



Euro-IX Video



Short video about IXPs, available now in English, Italian, German, French, Spanish, Portuguese, Arabic, Mandarin, Russian, Romanian and Greek subtitles.



Thank You!

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