Association of IXPs

81 affiliated members

- 57 IXPs in the Euro-IX region, 49 countries, operating over 100 peering LANs

- 24 IXPs from the rest of the world

- Newest members:
  - SAIX (Saudi Arabia)
  - CRIX (Cost Rica)
Euro-IX Patrons

- ECI
- Ciena
- Nokia
- Interxion
- Juniper Networks
- Arista
- Equinix
- Extreme
- Coriant
- Smartoptics
Euro-IX Activities

• 2 Fora a year
  • 32\textsuperscript{nd} in Galway hosted by INEX
  • 33\textsuperscript{rd} 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:

• AFIIX – 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
The IX-F Board consists of two representatives from each IXPA:

AFIX  Nishal Goburdhan, JINX
      Kyle Spencer, UIXP

APIX  Katsuyasu Toyama, JPNAP
      Gavin Tweedie, Megaport

Euro-IX Andy Davidson, Asteroid
       Ondrej Filip, NIX.CZ

LAC-IX Ariel Graizer, CABASE
      Nico Scheper, AMS-IX Caribbean
IX-F History and Objectives

History
- MoU signed between APIX, Euro-IX and LAC-IX in 2012
- AFIIX 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 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 its 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 directly from the IXPs own databases
- 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
- 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](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 its exposure.

- IXPs publish this data publicly, privately and via other systems like IXP Manager and Asteroid.

- The IXPDB publishes a single API.

- IXPAs holding workshops to support IXPs.

  By the end of June we’ll have 110 IXP exports working!
IXPDB – Where are we?

• Database / API is live
• Looking to 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
• Geo-location and maps – now available
• Aggregated vendor data at IXPs and participants – now available
• Compare IXP function
• Aggregated traffic data – 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 Russian, English, Italian, German, French, Spanish, Portuguese, Arabic, Mandarin, Romanian and Greek subtitles.