

# IXPDB

LINX 101 – 21<sup>st</sup> May 2018

Bijal Sanghani



# 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



THE ELASTIC NETWORK

**ciena**

**NOKIA**

**JUNIPER**  
NETWORKS

**ARISTA**

**interxion**<sup>TM</sup>



**EQUINIX**

**Extreme**<sup>®</sup>  
Connect Beyond the Network

**Coriant**

**smartoptics**

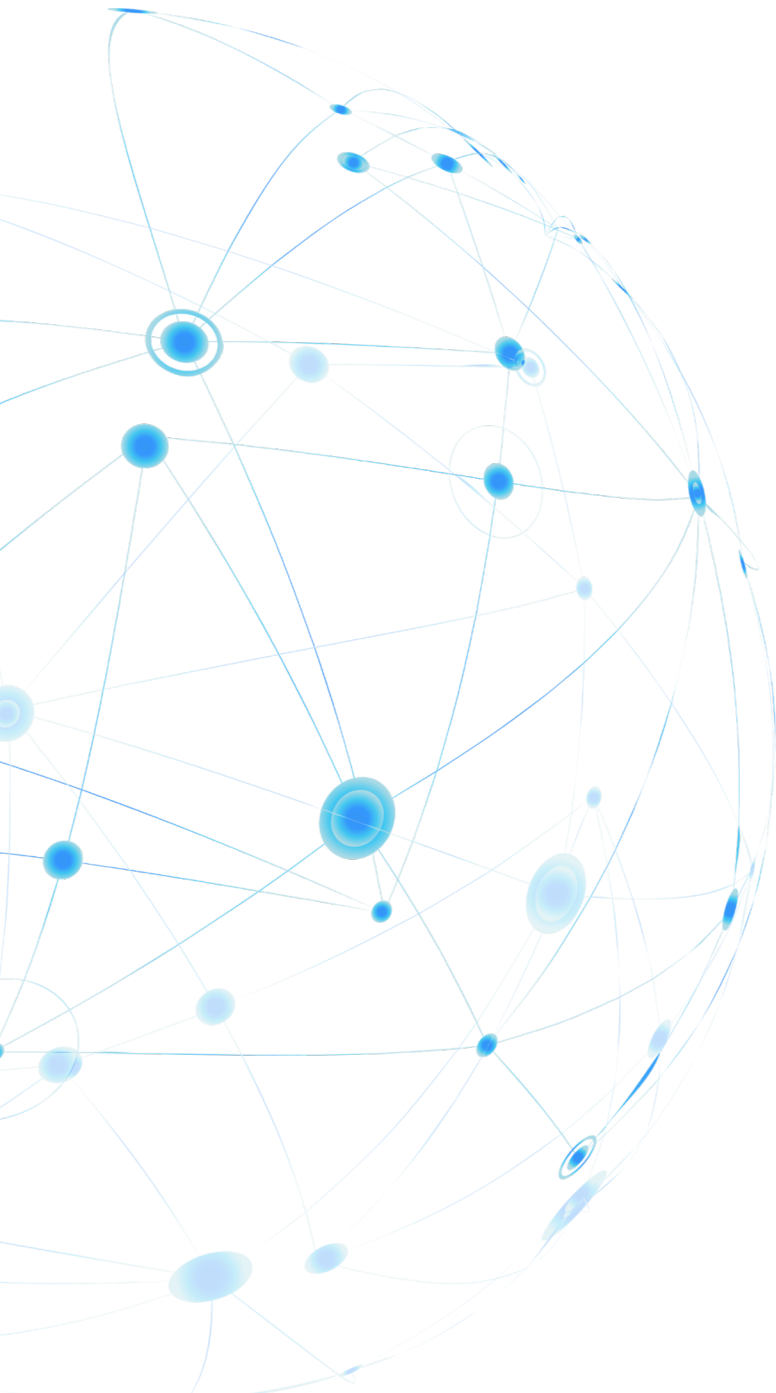
**euro-ix**



# Euro-IX Activities

- 2 Fora a year
  - 32<sup>nd</sup> in Galway hosted by INEX
  - 33<sup>rd</sup> 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 Board

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

AFIX – Nishal Goburdhan, JINX and Kyle Spencer, UIXP

APIX – Katsuyasu Toyama, JPNAP and Gavin Tweedie, Megaport

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

LAC-IX – Gabriel Adonaylo CABASE and Nico Scheper, AMS-IX

Caribbean



# IX-F History and Objectives

## History

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

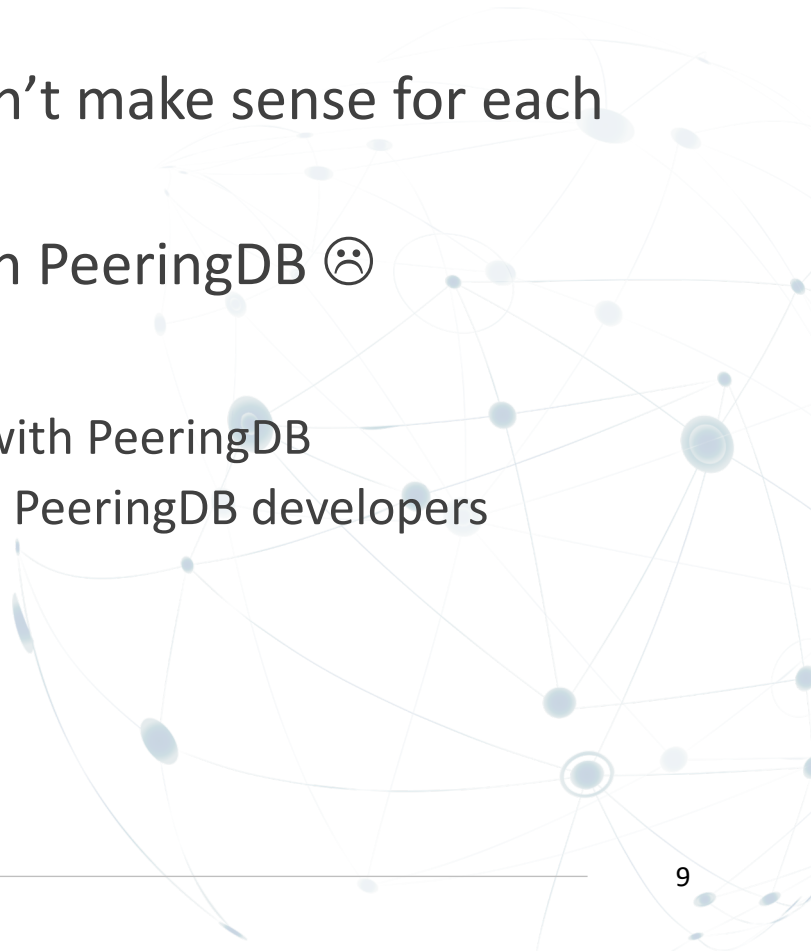
## Objectives

- 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 / API is live
- Looking to integration with other databases
- IXPs can pick what level of exposure they want
- IXPs 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](mailto: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!**

**euro-IX**