



RIPE 84 – Euro-IX Update

Bijal Sanghani - Euro-IX



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cira

 EQUINIX
WHERE OPPORTUNITY CONNECTS

 Extreme[®]
networks

 FLEXOPTIX

interxion[™]
A DIGITAL REALTY COMPANY

 Internet
Society

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NETWORKS

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 SOLID OPTICS
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 ribbon[®]

Membership Association of IXPs



Events

- Two Membership events per year hosted by our Members
- Workshops & hackathons
- Online/ virtual workshops



Services

- Reports
- Newsletters
- Mailing list
- IXP Benchmarking



Tools & Community Projects

- Internet eXchange Point Database – IXPDB
- Peering Toolbox
- Fellowship & Mentor-IX
- Route Server Large BGP Communities list
- A new IXP Film



DE-CIX Update

- Introduction of EVPN (rollout planned for Q3 globally)
- IX-API and Self-Service Portal: Work on specification of IX-APIv3 started, focus on Monitoring and Statistics
- AqabaIX powered by DE-CIX: Aqaba Digital Hub and DE-CIX partner to bring the a neutral Internet Exchange to Jordan

IX-API: The
statistics ju
pecificatio



DE-CIX Update

- IRAQ-IX powered by DE-CIX: This first neutral Internet Exchange is coming to Iraq.
- DE-CIX Phoenix is ready for service since March
- DE-CIX Frankfurt peaked at 11 Tbps, DE-CIX New York City topped 1Tbps of peak traffic



InterLAN Update

- 125 ASNs connected, daily peak traffic 380 Gbps
- blackholing solution implemented in Q1, 2022
- complete migration from Cisco to Arista in all POPs
- commitment to support community projects IXP Manager, PeeringDB and Global NOG Alliance



LU-CIX Update

To improve service quality & to aid in preventing blackhole situations, LU-CIX now recommends to its members to use BFD on peering sessions. On the route servers, BFD has been enabled in passive mode for all sessions.

Anybody interested in the topic is invited to join the BFD workshop at Euro-IX36 in Tampere, Finland.

At this workshop moderated by DE-CIX, LU-CIX will present their BFD implementation and a return of experience.

SOLAS – INEX photo competition



- For the worldwide peering community
- www.inex.ie/solas
- **Open for entries until 1st Sept**
- Community, fun... no need to be an expert photographer!
- Great prizes



Peering Toolbox

New tool for the Community



peering
:toolbox
peeringtoolbox.euro-ix.net

What is the Peering Toolbox?



By the Community

- Community focused Euro-IX project
- Organisations involved include LINX, NAPAfrica, Kentik, HEAnet



Aims

- Provide a learning structure and best practice information for new entrants into the interconnection community



Aims

- The toolbox will act as a reference/guide that IXPs and networks can point others to for best practice information and learn how meet the IXP and peers requirements

IXPDB Status



Leo Vegoda – Product Manager

Homepage Statistics - Live Data

IXPs by Connected ASNs

| Name | City | Country | Last updated | API | Traffic | MANRS | # of ASNs |
|-------------------------------|-------------------|---------|-------------------------|-----|---------|-------|-----------|
| IX.br Sao Paulo, SP (SP)) | São Paulo | BR | 2021-09-23 8:11:49 UTC | ✓ | ✗ | ✗ | 2413 |
| DE-CIX FRA (DE-CIX Frankfurt) | Frankfurt am Main | DE | 2022-04-20 18:08:58 UTC | ✓ | ✗ | ✓ | 1067 |

AM:

LIN:

EPI:

Newest IXPs in the Database

NAF:

EPI:

IX.b

Dat

IX.b

| Name | City | Country | Last updated | API | Traffic | MANRS | # of ASNs |
|------------------|-----------|---------|-------------------------|-----|---------|-------|-----------|
| Era-IX | Amsterdam | NL | 2022-04-20 14:12:06 UTC | ✗ | ✗ | ✗ | 0 |
| Namex Bari | Bari | IT | 2022-04-06 8:37:12 UTC | ✗ | ✗ | ✗ | 0 |
| AMS-IX Singapore | Singapore | SG | 2022-04-04 10:13:41 UTC | ✗ | ✗ | ✗ | 0 |
| AMS-IX Hyderabad | Hyderabad | IN | 2022-04-04 10:05:33 UTC | ✗ | ✗ | ✗ | 0 |
| DE-CIX Phoenix | Phoenix | US | 2022-04-20 18:08:55 UTC | ✗ | ✗ | ✓ | 0 |

IXP Directory and Compare Tool

IXP ID, name, city or country

COMPARE

+

899

48 IX (4)

+

900

4IXP (4)

+

123

6NGIX (

+

699

A.IX (Ac

+

276

AAIX (A

+

893

ABQIX (

IXP COMPARISON

Home / IXPDB / IXP Directory / Providers Comparison

| | CATNIX (Catalunya Neutral Internet eXchange) | GIGAPIX (Gigabit Portuguese Internet Exchange) | VSIX Nap (VSIX) |
|--------------------------------|--|---|--|
| Maximum Transmission Unit, MTU | 9198 | - | 9000 |
| Speed 10M | - | - | - |
| Speed 100M | - | - | 100 EURO |
| Speed 1G | 200 € | - | 300 EURO |
| Speed 10G | 500 € | - | 700 EURO |
| Speed 40G | - | - | - |
| Speed 100G | 2900 € | - | 3500 EURO |
| Number of ASNs | 42 | 43 | 52 |
| Common ASNs | #1 Hurricane Electric | | |
| Unique ASNs | #30 10dencehispahard SL(CDMON) Acens Technologies S.A. ADAM ECOTECH S.A. Adamo Telecom Iberia S.A AireNetworks del Mediterraneo S.L.U. Alta Tecnologia en Comunicacions, S.L Altercom21, S.L Andorra Telecom Anella Cientifica Byfitel comunicaciones S.L Centre de Telecomunicacions i | #31 ALMOUROLTEC SERVICOS DE INFORMATICA E INTERNET LDA Anacom Angola Cables AR Telecom Associacao Porto Digital Be Artis Cloud Telecom | #51 3P System Acantho Airbeam Airgrid Asco TLC AsdAsd ASI srl Axera Comune di Padova Consortium GARR DB Network |

Metadata and dynamically filtered tables

No active filters

Information

Table

IM Analyze

Custom view

Exports

API

Filters

Search records...

Q

Type

NSP13

Cable/DSL/ISP12

Content5

Educational/Research1

Enterprise1

Route Server1

IXP Number (IX-F ID)

71321

10614

Vendor

Cisco Systems, Inc10

Juniper Networks5

Vmware, Inc.2

Arista Networks1

Extreme Networks, Inc.1

Intel Corporate1

> More

| | ASN | CC | Name | Type | IXP Number (IX-F ID) | MAC | Vendor | IPv4 | IPv6 | MANRS1 | MANRS2 | MANRS3 | MANR |
|----|--------|----|-------------------------------|----------------------|----------------------|-------------------|------------------------|---------------|-----------------------------|--------|--------|--------|------|
| 1 | 2603 | DK | NORDUnet | Educational/Research | 106 | 44:4c:a8:74:43:6b | Arista Networks | 192.121.80.74 | 2001:7f8:3e:0:a500:0:2603:2 | YES | YES | YES | YES |
| 2 | 39351 | SE | 31173 Services AB | NSP | 713 | 4c:71:0d:24:b0:67 | Cisco Systems, Inc | 185.1.88.36 | 2001:7f8:b0:0:0:3:1173:1 | NO | NO | NO | NO |
| 3 | 39651 | SE | Com Hem AB | Cable/DSL/ISP | 713 | 84:78:ac:4d:90:a1 | Cisco Systems, Inc | 185.1.88.24 | 2001:7f8:b0:0:0:3:9651:1 | YES | YES | YES | YES |
| 4 | 3399 | SE | Obenetwork AB | NSP | 713 | a4:4c:11:2c:d5:fc | Cisco Systems, Inc | 185.1.88.30 | 2001:7f8:b0:0:0:0:3399:1 | NO | NO | NO | NO |
| 5 | 8896 | NO | Xfiber AS | NSP | 713 | 00:a7:42:45:66:eb | Cisco Systems, Inc | 185.1.88.23 | 2001:7f8:b0:0:0:0:8896:1 | NO | NO | NO | NO |
| 6 | 42708 | SE | GleSYS AB | NSP | 713 | 00:bc:60:5f:14:d9 | Cisco Systems, Inc | 185.1.88.45 | 2001:7f8:b0:0:0:4:2708:2 | NO | NO | NO | NO |
| 7 | 62183 | SE | NC in Scandinavia AB | NSP | 713 | 10:8c:cf:17:ba:8a | Cisco Systems, Inc | 185.1.88.32 | 2001:7f8:b0:0:0:6:2183:1 | NO | NO | NO | NO |
| 8 | 201983 | SE | Ansluten Hosting i Sverige AB | Cable/DSL/ISP | 713 | b0:aa:77:82:3f:40 | Cisco Systems, Inc | 185.1.88.43 | 2001:7f8:b0:0:0:20:1983:1 | NO | NO | NO | NO |
| 9 | 44034 | SE | Hi3G Access AB | Cable/DSL/ISP | 713 | 84:78:ac:6a:60:86 | Cisco Systems, Inc | 185.1.88.41 | 2001:7f8:b0:0:0:4:4034:1 | NO | NO | NO | NO |
| 10 | 49362 | DK | DSV A/S | Enterprise | 713 | 00:2a:10:c3:e7:06 | Cisco Systems, Inc | 185.1.88.21 | 2001:7f8:b0:0:0:4:9362:1 | NO | NO | NO | NO |
| 11 | 50304 | NO | Blix Solutions AS | NSP | 713 | 00:8a:96:c8:18:50 | Cisco Systems, Inc | 185.1.88.27 | 2001:7f8:b0:0:0:5:0304:1 | NO | NO | NO | NO |
| 12 | 6939 | US | Hurricane Electric | NSP | 713 | d8:84:66:ea:79:15 | Extreme Networks, Inc. | 185.1.88.46 | 2001:7f8:b0:0:0:0:6939:1 | NO | NO | NO | NO |
| 13 | 42541 | DK | Fiberby ApS | Cable/DSL/ISP | 713 | 00:1b:21:bf:37:64 | Intel Corporate | 185.1.88.19 | 2001:7f8:b0:0:0:4:2541:1 | NO | NO | NO | NO |
| 14 | 49544 | NL | i3D.net | NSP | 713 | 3c:8c:93:4e:30:0e | Juniper Networks | 185.1.88.17 | 2001:7f8:b0:0:0:4:9544:1 | NO | NO | NO | NO |
| 15 | 13335 | US | Cloudflare | Content | 713 | 30:7c:5e:ec:6e:a6 | Juniper Networks | 185.1.88.20 | 2001:7f8:b0:0:0:1:3335:1 | NO | NO | NO | NO |
| 16 | 33891 | DE | Core-Backbone GmbH | NSP | 713 | 4c:16:fc:cb:2d:da | Juniper Networks | 185.1.88.35 | 2001:7f8:b0:0:0:3:3891:1 | NO | NO | NO | NO |
| 17 | 32934 | US | Meta | Content | 713 | d4:04:ff:d8:34:09 | Juniper Networks | 185.1.88.38 | 2001:7f8:b0:0:0:3:2934:2 | NO | NO | NO | NO |
| 18 | 205206 | DK | Netsite A/S | Content | 713 | 2c:21:31:3f:0f:11 | Juniper Networks | 185.1.88.26 | 2001:7f8:b0:0:0:20:5206:1 | NO | NO | NO | NO |
| 19 | 51519 | SE | Bahnflow AB | NSP | 713 | 00:0c:29:0d:00:38 | Vmware, Inc. | 185.1.88.44 | 2001:7f8:b0:0:0:5:1519:1 | NO | NO | NO | NO |
| 20 | 202687 | SE | Mainloop Anycast DNS | Content | 713 | 00:50:56:a3:85:c5 | Vmware, Inc. | 185.1.88.28 | 2001:7f8:b0:0:0:20:2687:1 | NO | NO | NO | NO |
| 21 | 60876 | DK | Gigabit ApS | Cable/DSL/ISP | 713 | cc:1a:fa:e2:bb:20 | Zte Corporation | 185.1.88.29 | 2001:7f8:b0:0:0:6:0876:1 | NO | NO | NO | NO |
| 22 | 12552 | SE | GlobalConnect Group | NSP | 106 | | | | | NO | NO | NO | NO |

CC

ISO 3166 Country Code

Name (identifier)

cc

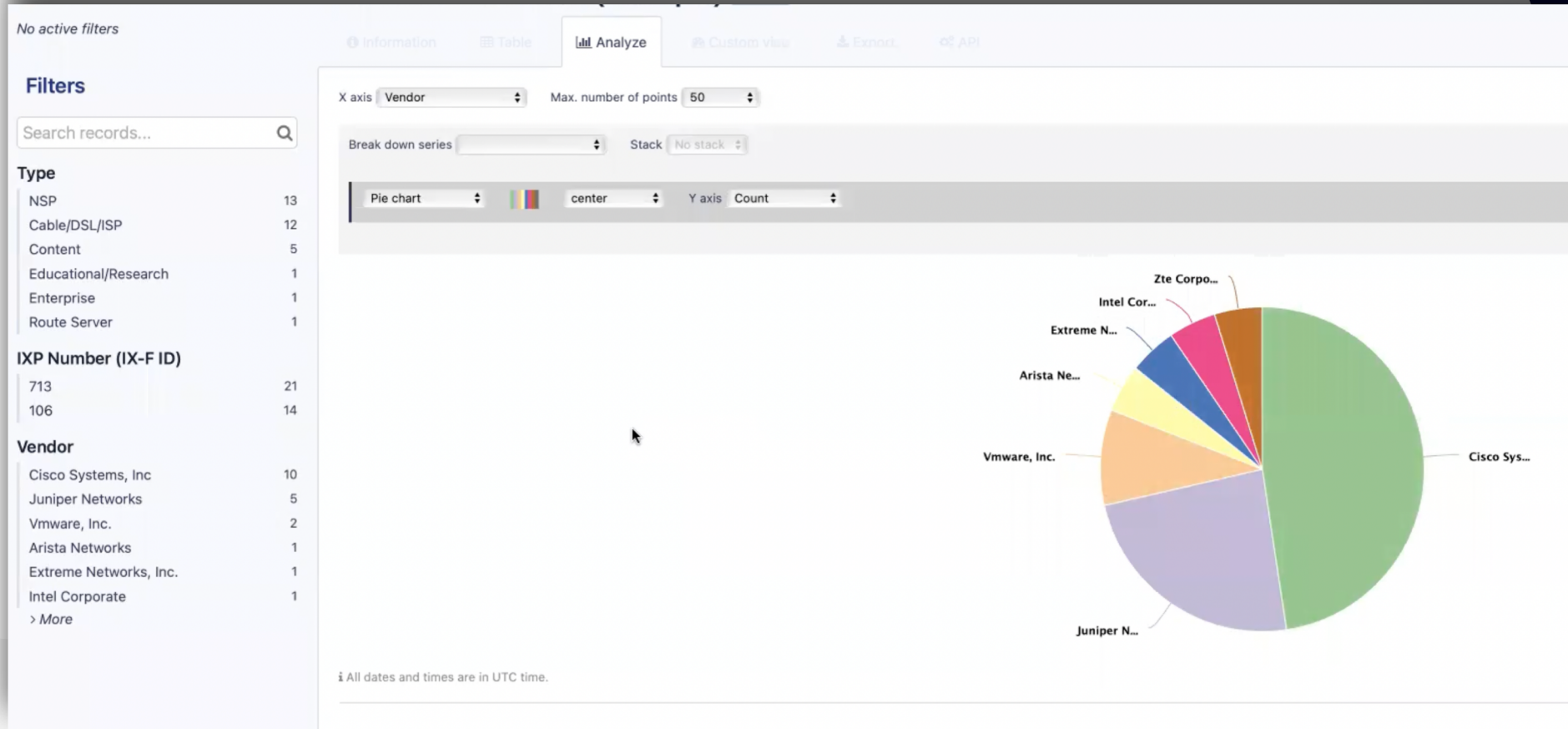
Type

text

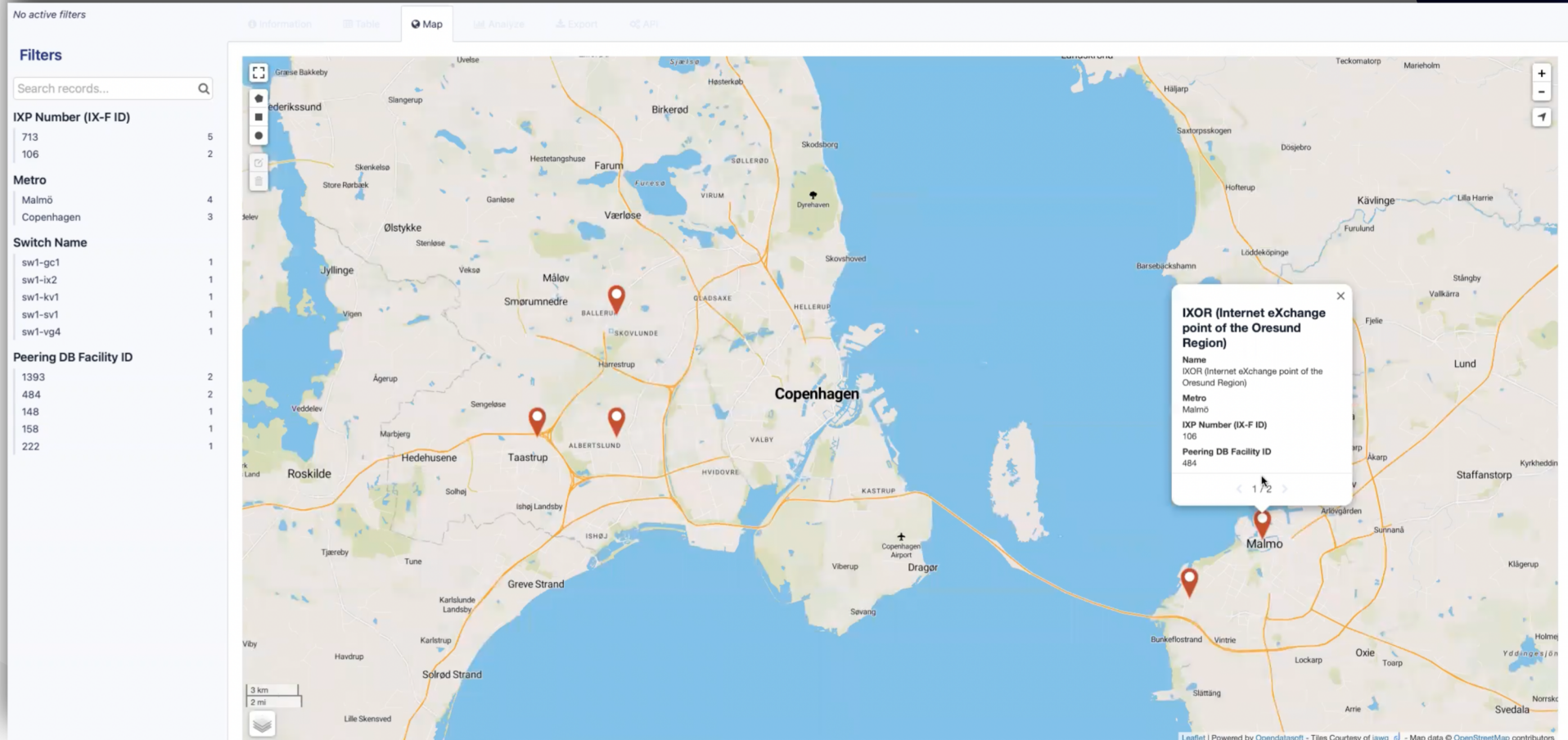
Sample

DK

Dynamic charting



Interactive maps



Other Information

- Mailing list for users - <https://lists.euro-ix.net/mailman/listinfo/ixpdb>
- GitHub JSON Member List Schema – <https://github.com/euro-ix/json-schemas>
- API – <https://api.ixpdb.net>
- Website - <https://ixpdb.euro-ix.net/en/>
- IXPDB admin team - ixpdb-admin@euro-ix.net

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Thank You!

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