PeeringDB

Use in Latin America

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Why peering is it important?

- Improved network performance
- Lower costs
- Greater control
- Increase redundancy

What is PeeringDB?

PeeringDB, a nonprofit member-based organization, facilitates the exchange of user maintained interconnection related

information, primarily for Peering Coordinators and Internet Exchange, Facility, and Network Operators.

Since 2004, this is a registry of organizations and Autonomous Systems in database with information of the places where they do peering, and what peering policy they have.

What is PeeringDB?

- Physical location Autonomous Systems
- Routing Policy
- Where they have equipment for peering
- Which Internet Exchanges are connected
- Facilities
- Peering IP addressing and speed interfaces

What is PeeringDB?

Basically it is an answer to the question:

Who can I exchange traffic with and where?

The fact that your AS is registered in PeeringDB increases considerably your chances to do peering, as your information gains greater visibility for the world.

PeeringDB – AS Information

It is strongly recommended that all Autonomous Systems interested in performing peering keep the data updated in PeeringDB, since many networks have as peering policy only to exchange traffic with networks registered in PeeringDB.

Colocation providers and IX providers are also encouraged to register.

All information must be updated by the AS / user.

PeeringDB – MANRS recommendation

3. Facilitate global operational communication and coordination between network operators.

- Network operator maintains globally accessible up-to-date contact information.

Discussion:

Common places to maintain such information are PeeringDB, RIRs' whois databases and large IRRs like RADB and RIPE. A network operator should register and maintain 24/7 contact information in at least one of these databases. This contact information should include the operator's current point of contact information for the NOC of the AS, all netblocks, and domain names. Operators are encouraged to document their network routing policies in an IRR. Additional information is also welcome, such as, for example, a looking glass URL in the appropriate field in their PeeringDB record.

References:

- "Using RPSL in Practice", http://tools.ietf.org/html/rfc2650
- Peering DB, https://www.peeringdb.com
- RADB, http://www.radb.net/

Advanced Actions

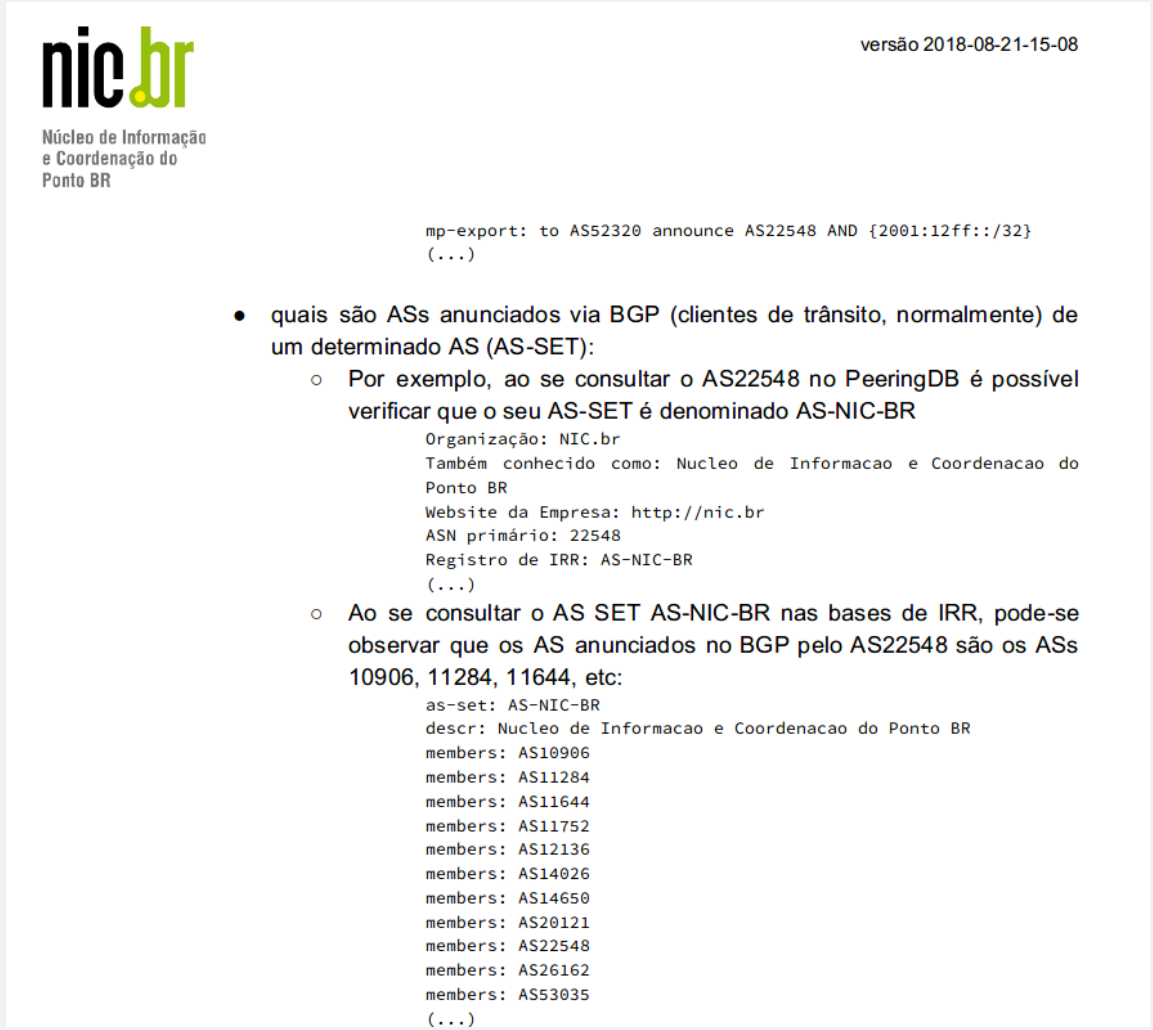
4. Facilitate validation of routing information on a global scale.

- Network operator has publicly documented routing policy, ASNs and prefixes that are intended to be advertised to external parties.

MANRS

https://www.manrs.org/isps/

PeeringDB – IX.br security actions



nic.br
Núcleo de Informação e Coordenação do Ponto BR

versão 2018-08-21-15-08

```
mp-export: to AS52320 announce AS22548 AND {2001:12ff::/32}
(...)
```

- quais são ASs anunciados via BGP (clientes de trânsito, normalmente) de um determinado AS (AS-SET):
  - Por exemplo, ao se consultar o AS22548 no PeeringDB é possível verificar que o seu AS-SET é denominado AS-NIC-BR

```
Organização: NIC.br
Também conhecido como: Nucleo de Informacao e Coordenacao do
Ponto BR
Website da Empresa: http://nic.br
ASN primário: 22548
Registro de IRR: AS-NIC-BR
(...)
```

  - Ao se consultar o AS SET AS-NIC-BR nas bases de IRR, pode-se observar que os AS anunciados no BGP pelo AS22548 são os ASs 10906, 11284, 11644, etc:

```
as-set: AS-NIC-BR
descr: Nucleo de Informacao e Coordenacao do Ponto BR
members: AS10906
members: AS11284
members: AS11644
members: AS11752
members: AS12136
members: AS14026
members: AS14650
members: AS20121
members: AS22548
members: AS26162
members: AS53035
(...)
```

AS-SET field will be used to validate which ASNs can be announced to IX.br by participants.

http://ix.br/doc/acoes-seguranca-ix-br-20180927.pdf

PeeringDB – AS informations

PeeringDB team recommends that the Autonomous Systems information on whois (e.g. lacnic.net) be updated with some corporate email.

At the moment of registering the user account in PeeringDB,

if the registered e-mail is identical to the one that is in the whois LACNIC database, the approval will be done automatic.

Otherwise the approval will done by a PeeringDB administrator manually and can be deny.

PeeringDB – AS informations

If you have any doubts or errors in PeeringDB please contact the PeeringDB administrators.

All PeeringDB administrators are volunteers.

The team answer quickly.

Contact: support@peeringdb.com

IX.br(PTT.br) – PeeringDB support

NIC.br helps new users with presentations and guides

Guides and presentations are available on the IX.br website or at peeringdb.com

http://ix.br/doc/PeeringDB.pdf

http://ix.br/doc/PeeringDB_Cadastro_de_Facilities.pdf

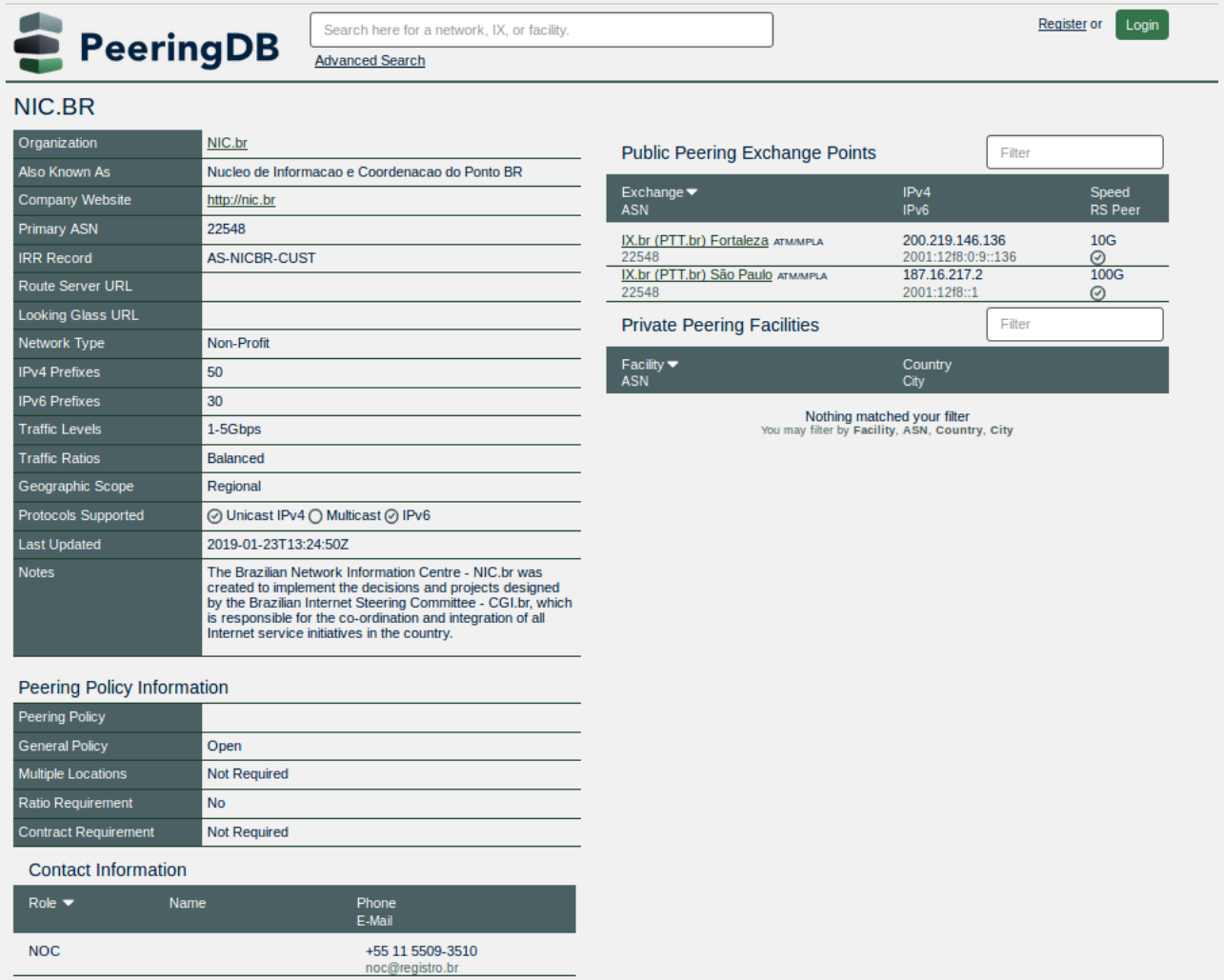
https://docs.peeringdb.com/

Normally after presentations there is a increase of new users.

PeeringDB – What do I can register?

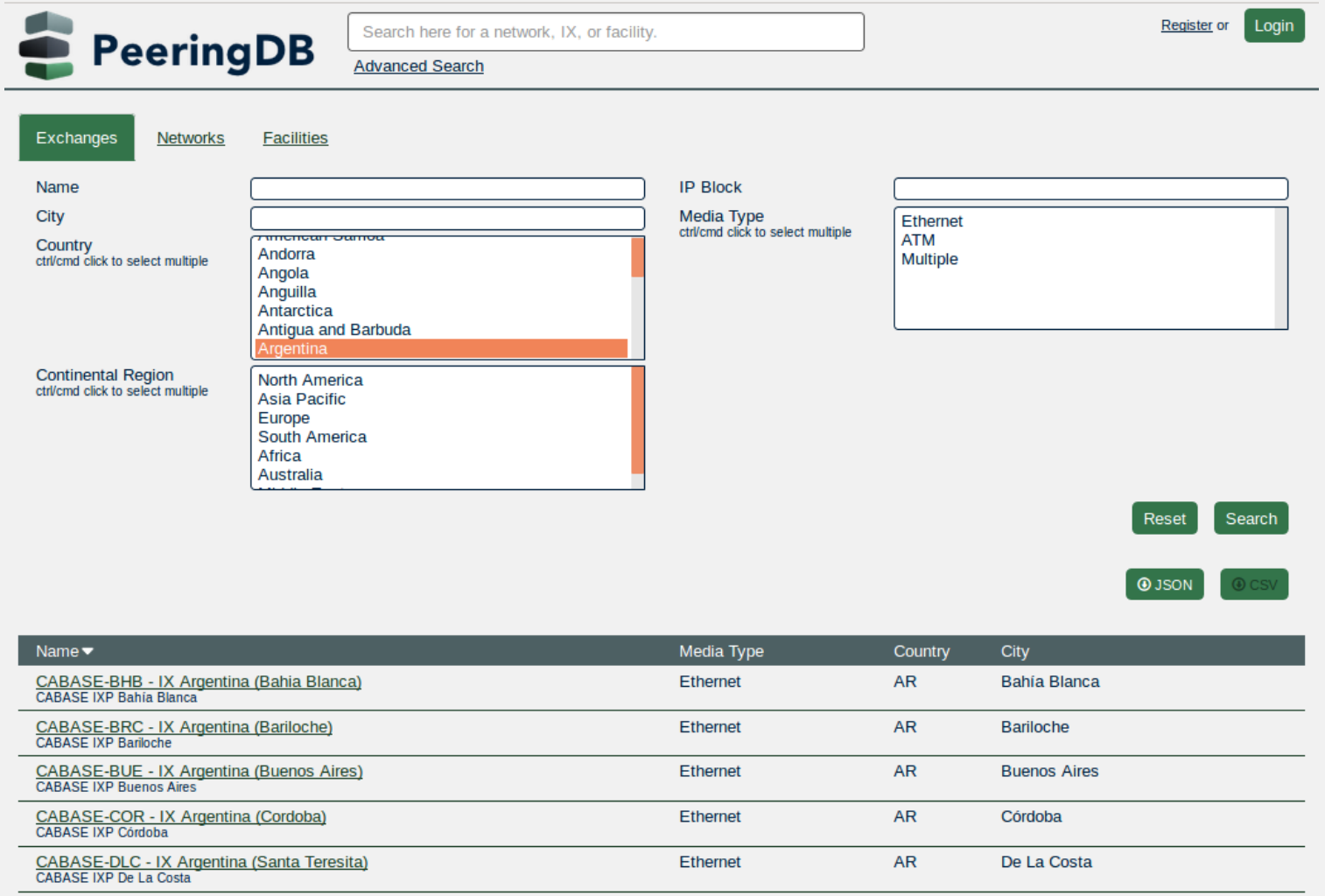
- Organizations
- Networks
- Facilities
- Internet Exchanges Points

PeeringDB - public search - network

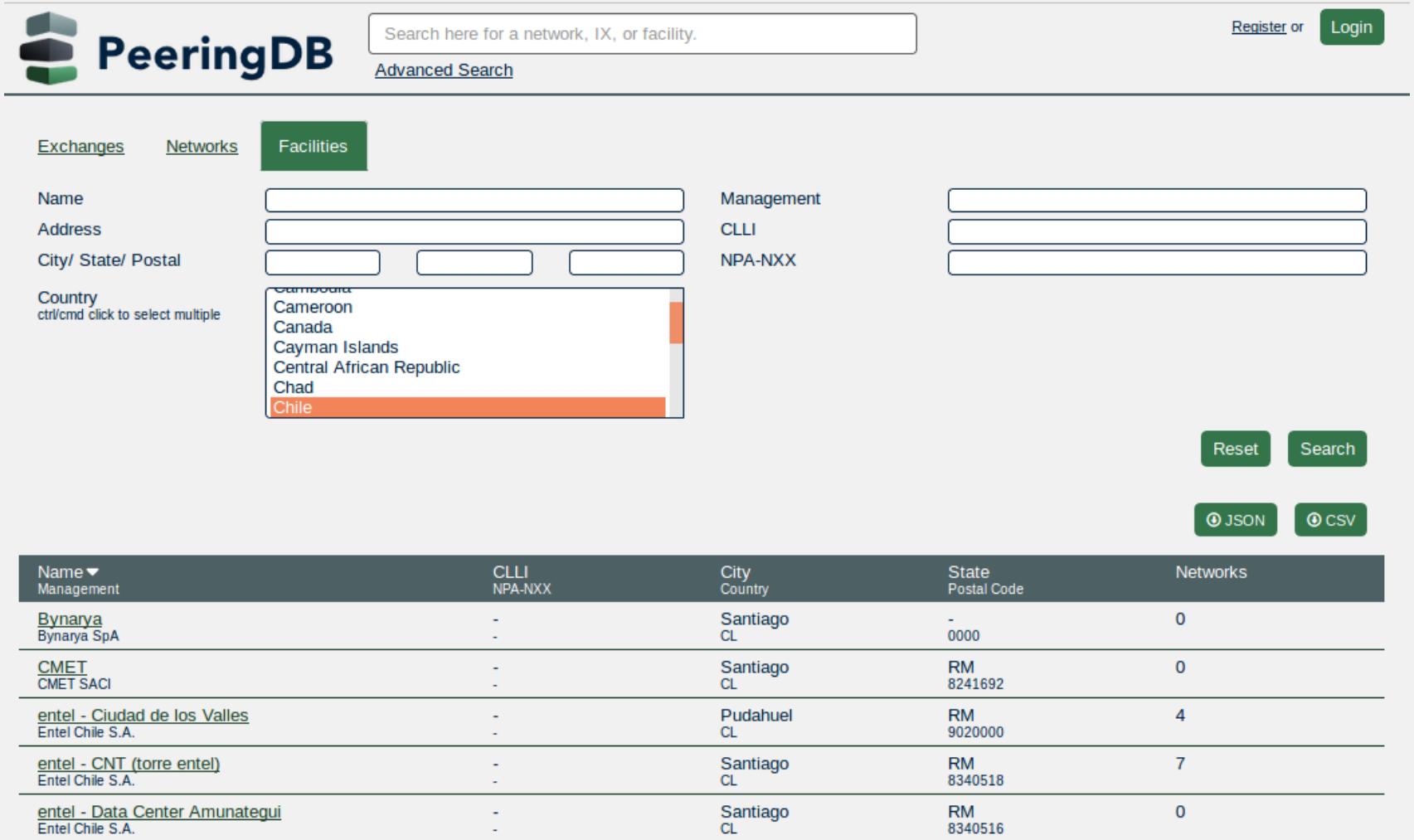


- Organization
- contact NOC team
- Internet Exchange

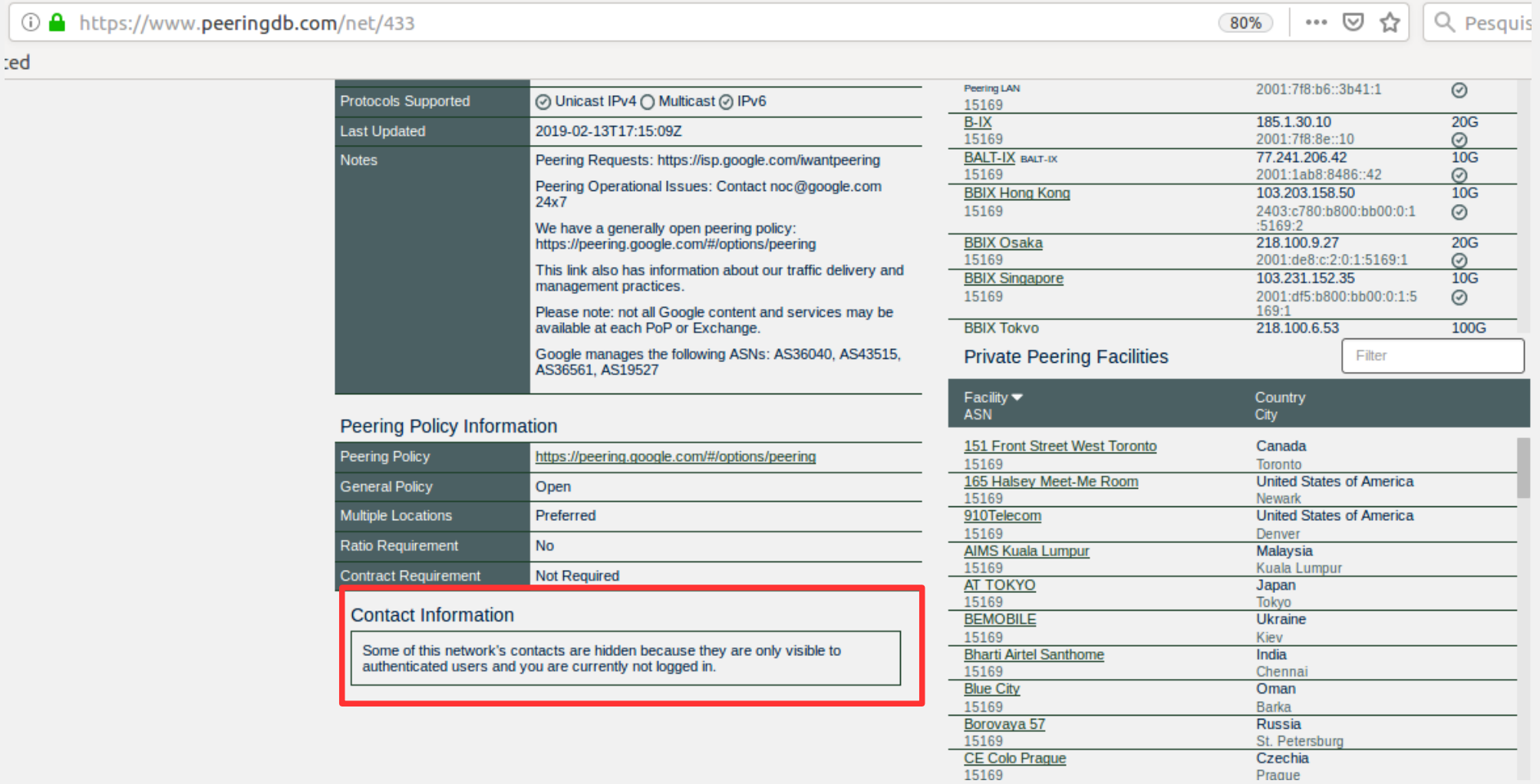
PeeringDB - advanced search – Internet Exchange



PeeringDB - advanced search - Facility



PeeringDB - Private informations



PeeringDB - common mistakes – brazilians ASNs

- Email
- IP addressing
- Capacity of bandwidth of interfaces
- Facilities records and Internet Exchanges
- Links request to organization no need

PeeringDB - common mistakes – brazilians ASNs

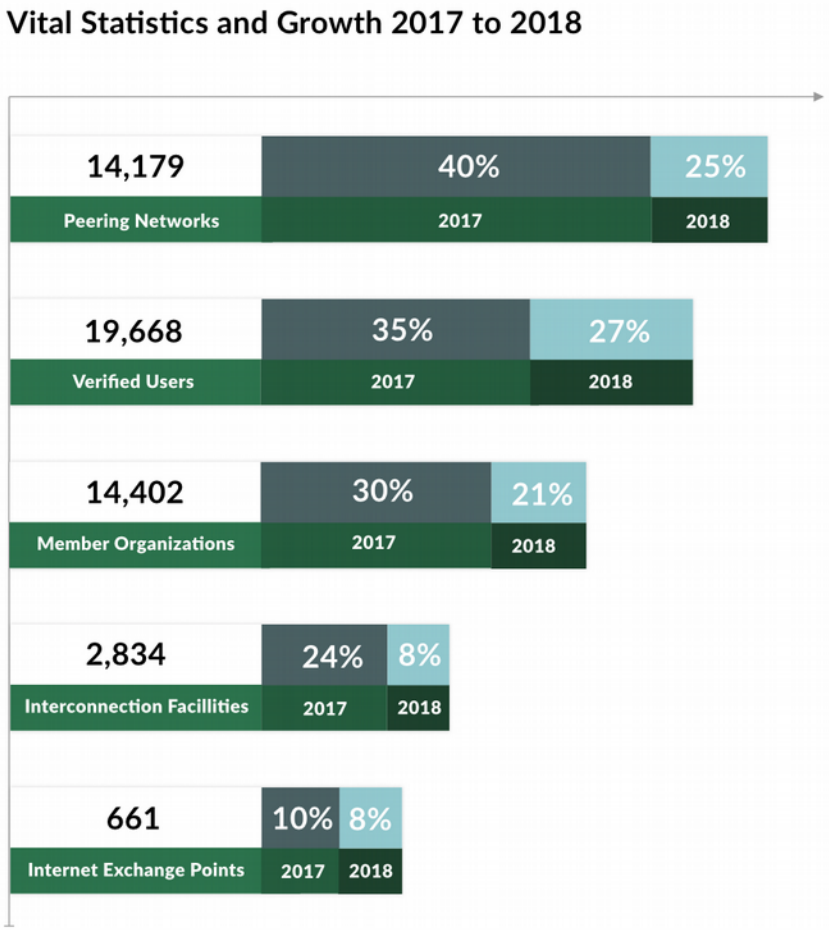
ASN	IPv6	Speed ▲ Policy
		20T Open
		1T Selective
Google LLC 15169	187.16.216.55	500G Open
Google LLC 15169	187.16.218.58 2001:12f8::218:58	500G Open
Facebook Inc 32934	187.16.220.240 2001:12f8::220:240	400G Selective
Facebook Inc 32934	187.16.222.60 2001:12f8::222:60	400G Selective
Facebook Inc 32934	187.16.222.61 2001:12f8::222:61	400G Selective
Facebook Inc 32934	187.16.218.82 2001:12f8::218:82	400G Selective
Globo Comunicação e Participações S.A. 28604	187.16.218.72 2001:12f8::218:72	300G Selective
Globo Comunicação e Participações S.A. 28604	187.16.219.62 2001:12f8::219:62	300G Selective
Netflix 2906	187.16.220.83 2001:12f8::220:83	300G Open
Netflix 2906	187.16.223.20 2001:12f8::223:20	300G Open
Twitch 46489	187.16.221.244 2001:12f8::221:244	300G Selective
Twitch	187.16.221.243	300G

PeeringDB - How can we help?

- Check your information and make sure it is correct
- Please send feedback to us
- All ASNs should register

- Make materials and guides in Spanish

PeeringDB - statistics



PeeringDB

www.peeringdb.com

Usage (2018)

Total Hits	174,096,231
Avg. Daily Hits	476,976
Unique Hits	717,774

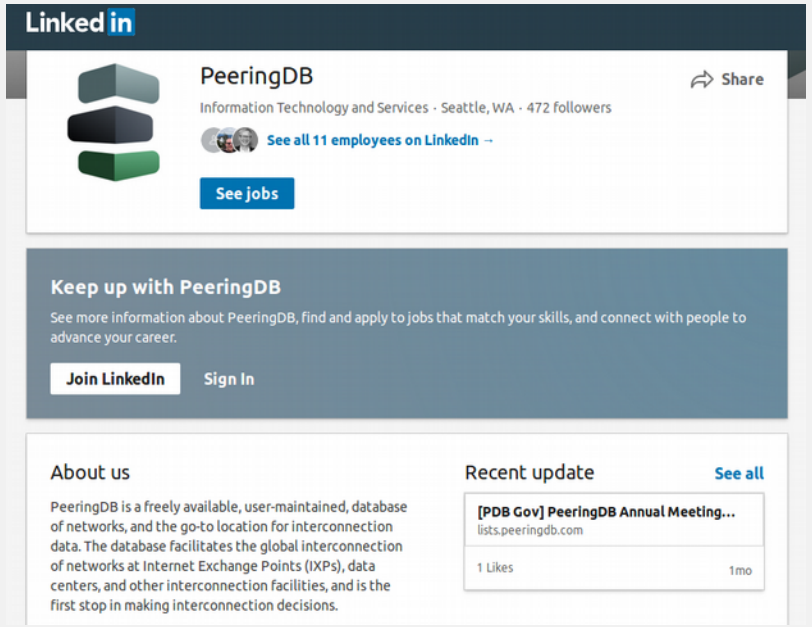
Support Tickets (2018)

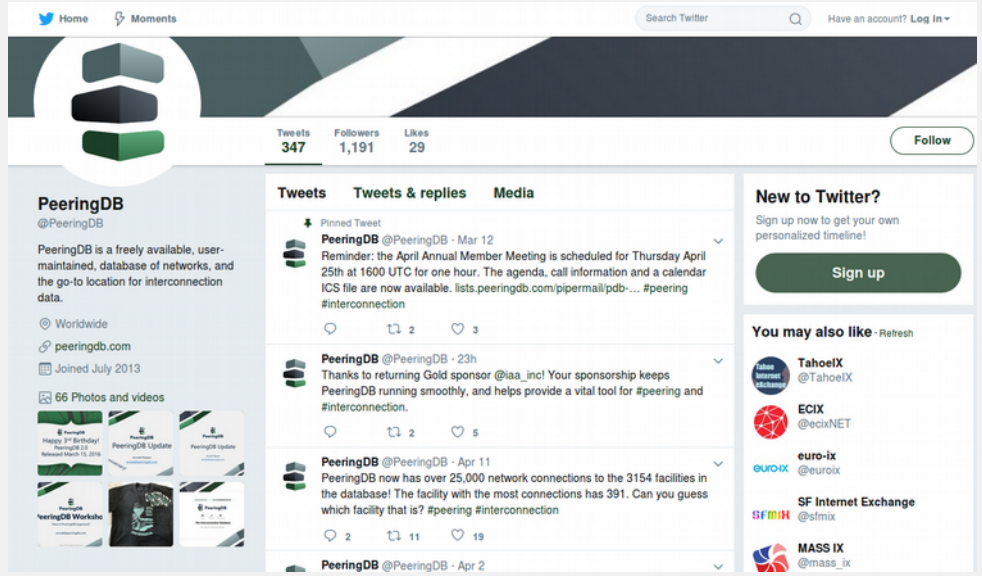
Total Support Tickets	9,915
Avg. Tickets Per Day	27
Avg. Resolve Time	5 h 51 min

PeeringDB - news

- Rebranding update last february
- Promotional t-shirts and stickers

PeeringDB – social networks

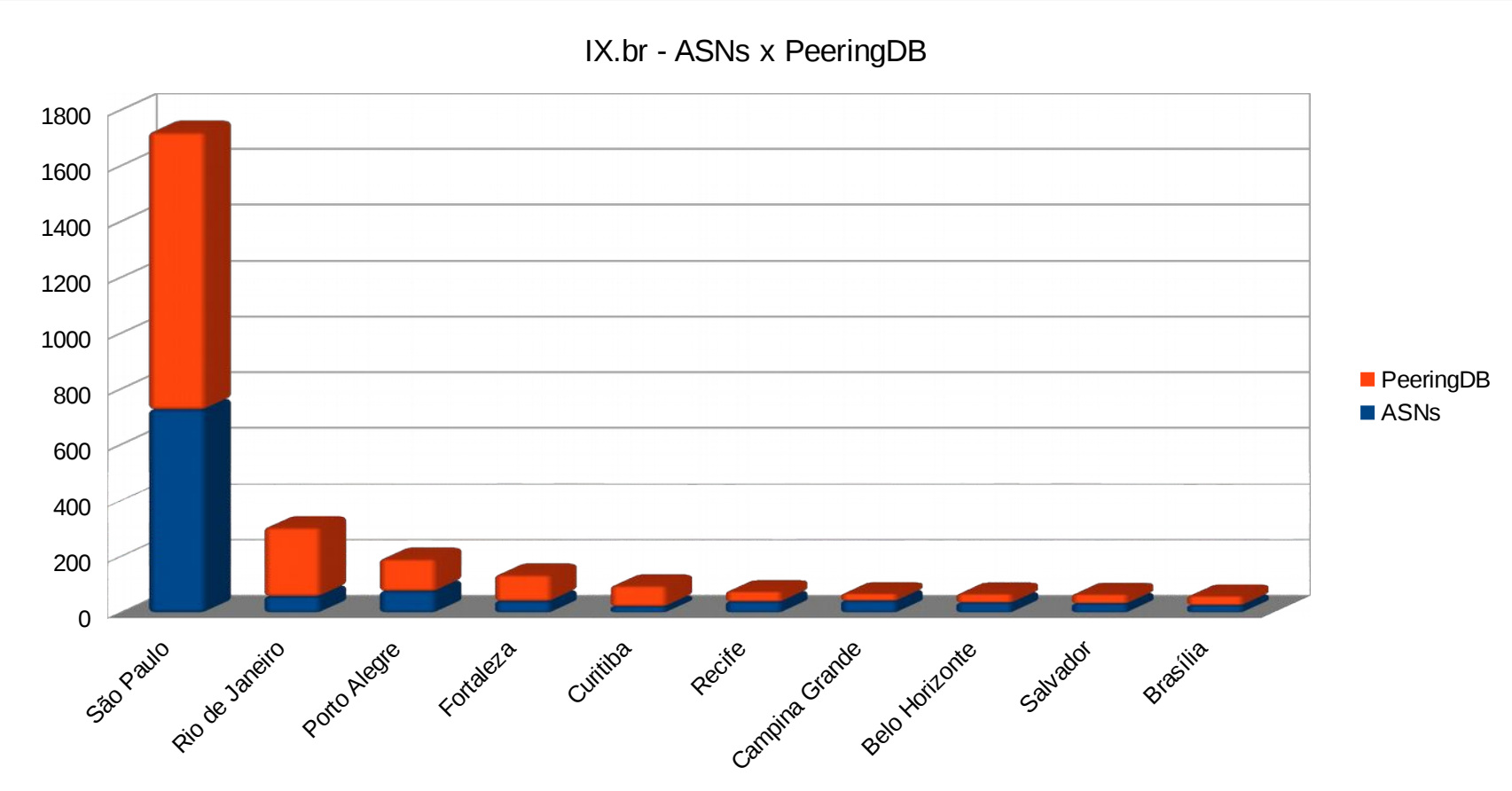




PeeringDB - Autonomous Systems – IX.br

Location	ASNs	PeeringDB	Percentage
Sao Paulo	1723	995	57%
Rio de Janeiro	306	248	81%
Porto Alegre	193	116	60%
Fortaleza	136	95	69%
Curitiba	97	75	74%
Recife	77	38	50%
Campina Grande	69	27	40%
Belo Horizonte	68	33	48%
Salvador	67	35	51%
Brasilia	61	35	56%

PeeringDB - Autonomous Systems – IX.br



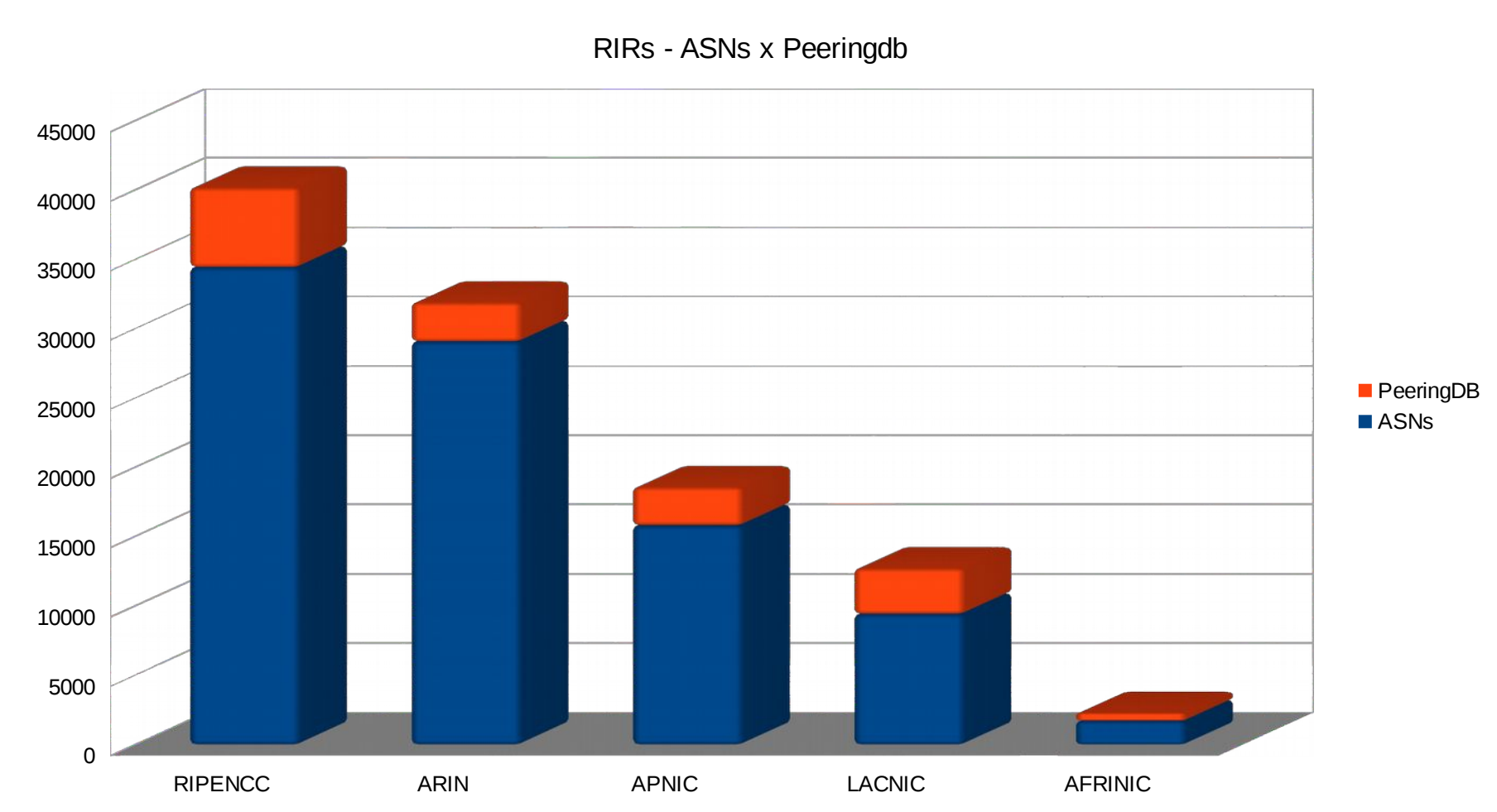
PeeringDB – Latin America database

Countries	IXPs	Facilities	Networks	Network at IXP	Network in Facilities
Argentina	26	15	211	194	62
Bolivia	1	1	1	0	1
Brazil	33	139	1345	1276	409
Chile	8	53	281	208	220
Colombia	2	6	28	14	23
Costa Rica	1	4	13	11	3
Cuba	0	0	0	0	0
Ecuador	4	4	23	22	2
El Salvador	0	0	0	0	0
Guatemala	0	3	3	0	3
Haiti	1	0	5	5	0
Honduras	1	0	4	4	0
Mexico	1	12	33	8	29
Nicaragua	0	1	0	0	0
Panama	0	3	3	0	3
Paraguay	1	5	4	0	4
Peru	1	4	4	1	4
Dominican Republic	0	3	5	0	5
Uruguay	0	1	0	0	0
Venezuela	0	0	0	0	0

PeeringDB – RIRs database

RIRs	ASNs	PeeringDB	Percentage
RIPENCC	34466	5736	16%
ARIN	29098	2818	9%
APNIC	15836	2750	17%
LACNIC	9433	3291	34%
AFRINIC	1717	589	34%

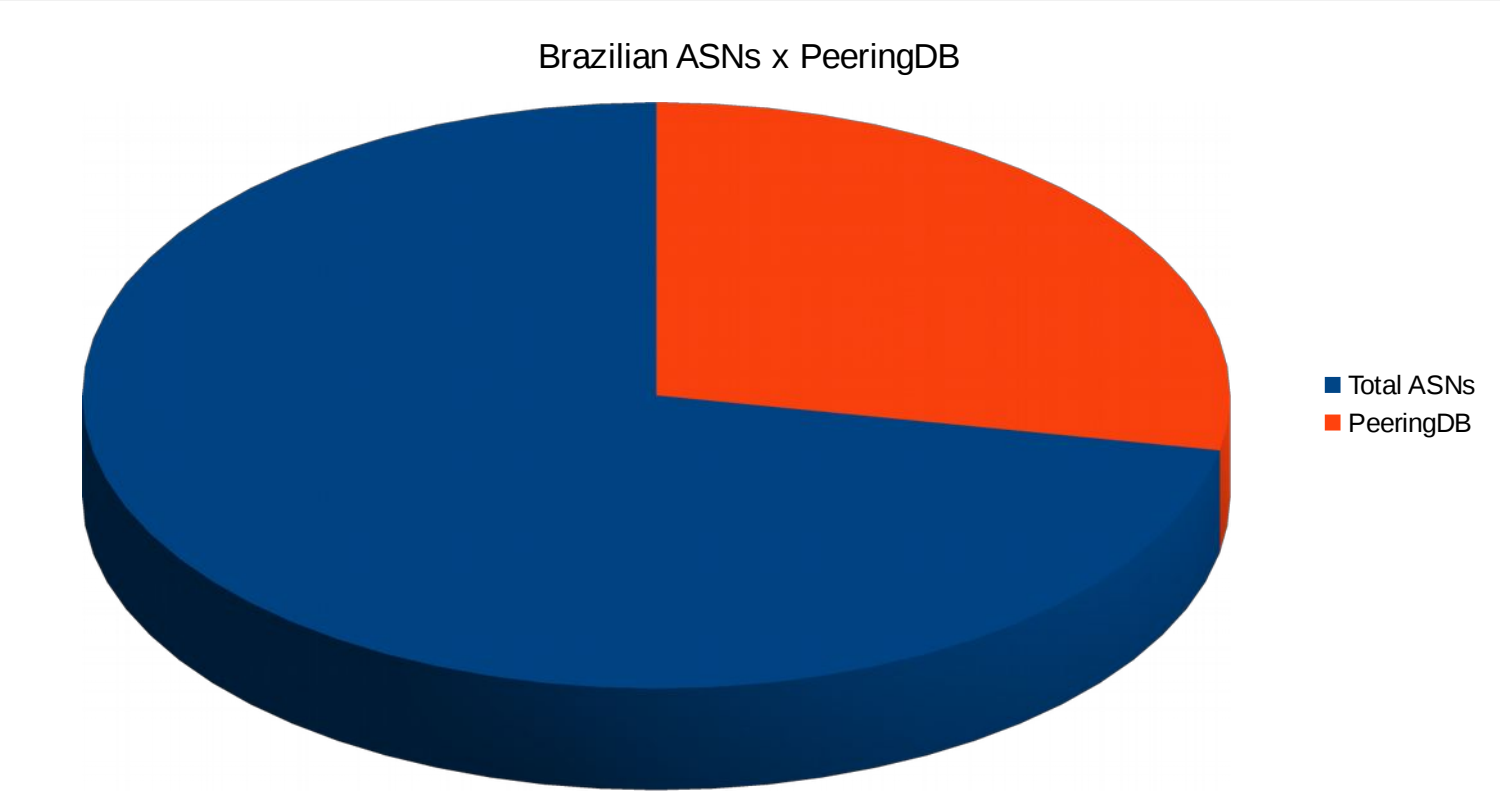
PeeringDB – RIRs database



PeeringDB – Latin America ASNs

Countries	Total ASNs	PeeringDB	Percentage
Argentina	962	357	37%
Bolivia	44	9	20%
Chile	901	199	22%
Colombia	206	19	9%
Costa Rica	89	19	21%
Cuba	7	1	14%
Ecuador	117	33	28%
El Salvador	40	1	2%
Guatemala	49	8	16%
Haiti	13	2	15%
Honduras	86	6	7%
Mexico	403	42	10%
Nicaragua	29	8	27%
Panama	127	10	7%
Paraguay	60	18	30%
Peru	61	13	21%
Dominican Republic	43	13	30%
Uruguay	35	13	37%
Venezuela	99	13	13%

PeeringDB – Latin America ASNs



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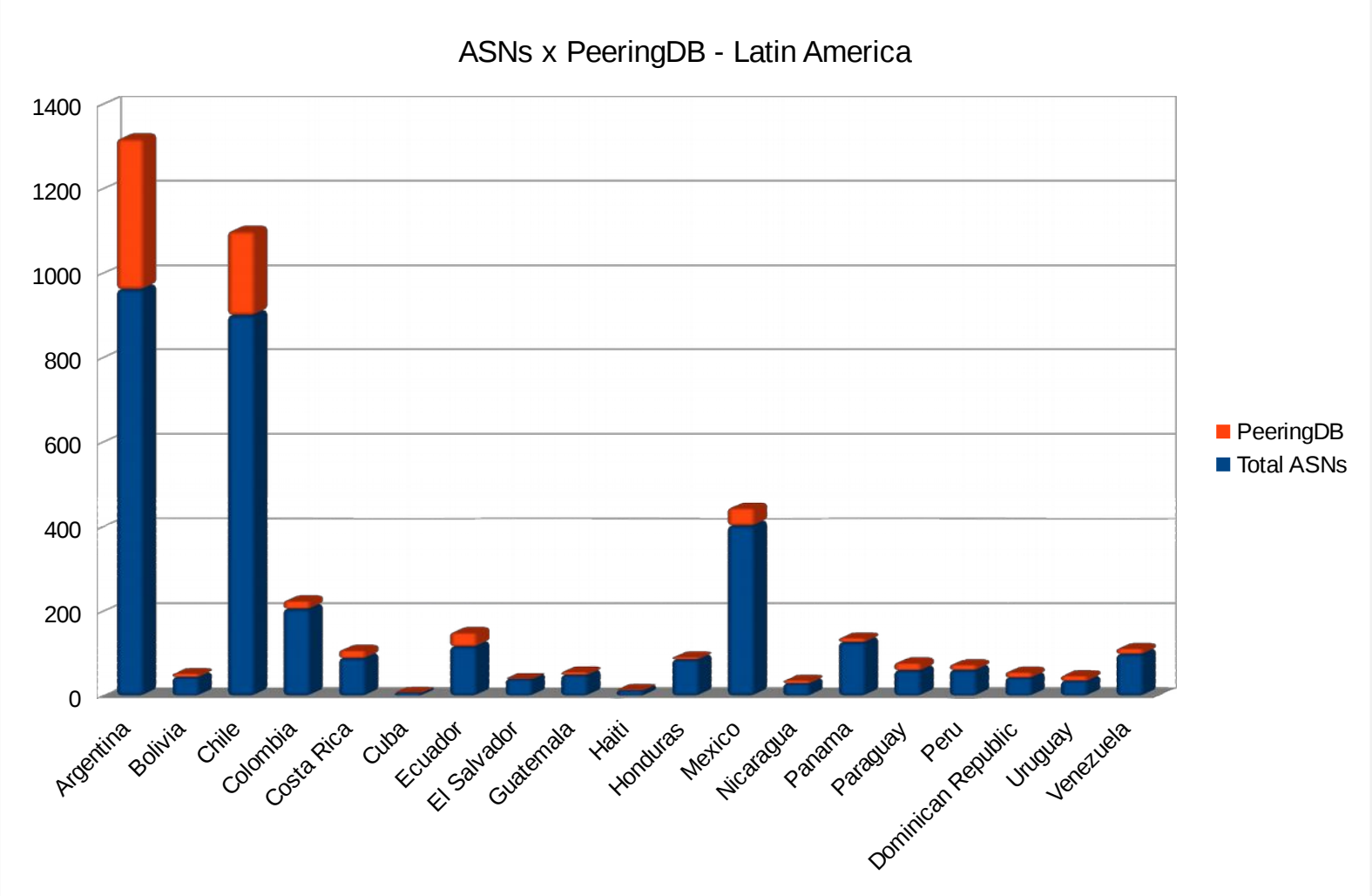
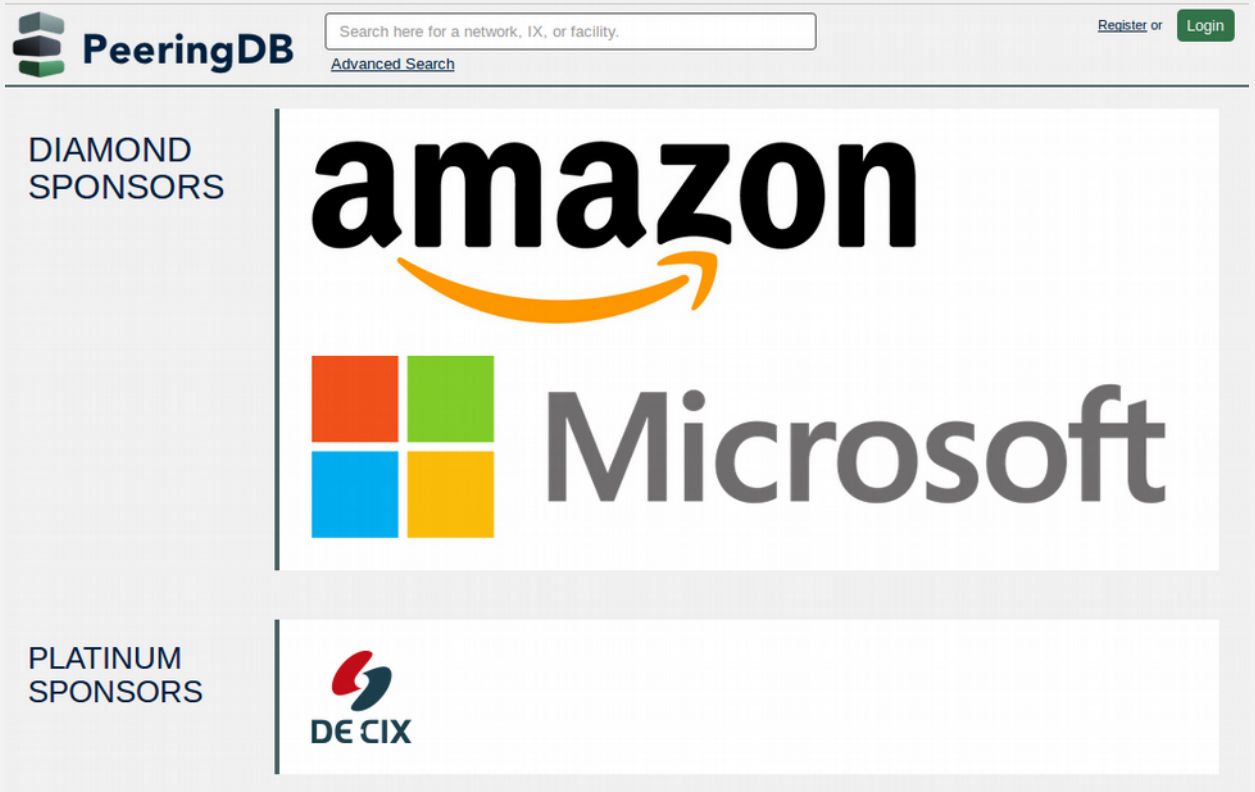


PeeringDB - supporters

PeeringDB - sponsors



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PeeringDB

Questions?

https://www.peeringdb.com/

http://docs.peeringdb.com/