



PeeringDB

PeeringDB Operations & Product Update

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What is PeeringDB?

PeeringDB is a freely available, user-maintained, **database of networks**, and the go-to location for interconnection data. It facilitates the global interconnection of networks at **IXPs**, **data centers**, and **other interconnection facilities**. It is the first stop in making interconnection decisions.

Global System Statistics

1037 Exchanges
25806 Networks
4842 Facilities
45748 Connections to Exchanges
41172 Connections to Facilities
5474 Automated Networks
42749 Registered Users
24120 Organizations

Committees

Admin Committee

- Manage administration of user accounts and PeeringDB records
- Answer support tickets
- Cleansing and completion of PeeringDB records

Leads: Patrick Gilmore (Chair) and Darwin Costa (Vice Chair)

Contact: admincom@lists.peeringdb.com

Operations Committee

- Manage PeeringDB infrastructure

Leads: Job Snijders (Chair) and Aaron Hughes (Vice Chair)

Contact: pdb-ops@lists.peeringdb.com

Outreach Committee

- Manage marketing and social media
- Develop and maintain presentations, workshops and webinars
- Coordinate presentations and attendance at events

Leads: Ben Ryall (Chair) and Bijal Sanghani (Vice Chair)

Contact: outreachcom@lists.peeringdb.com

Product Committee

- Manage roadmap and development priorities
- Ask for input from the community on desired features
- Write SoWs to solicit bids to complete requested features

Leads: Stephen McManus (Chair) and

Matt Griswold (Vice Chair)

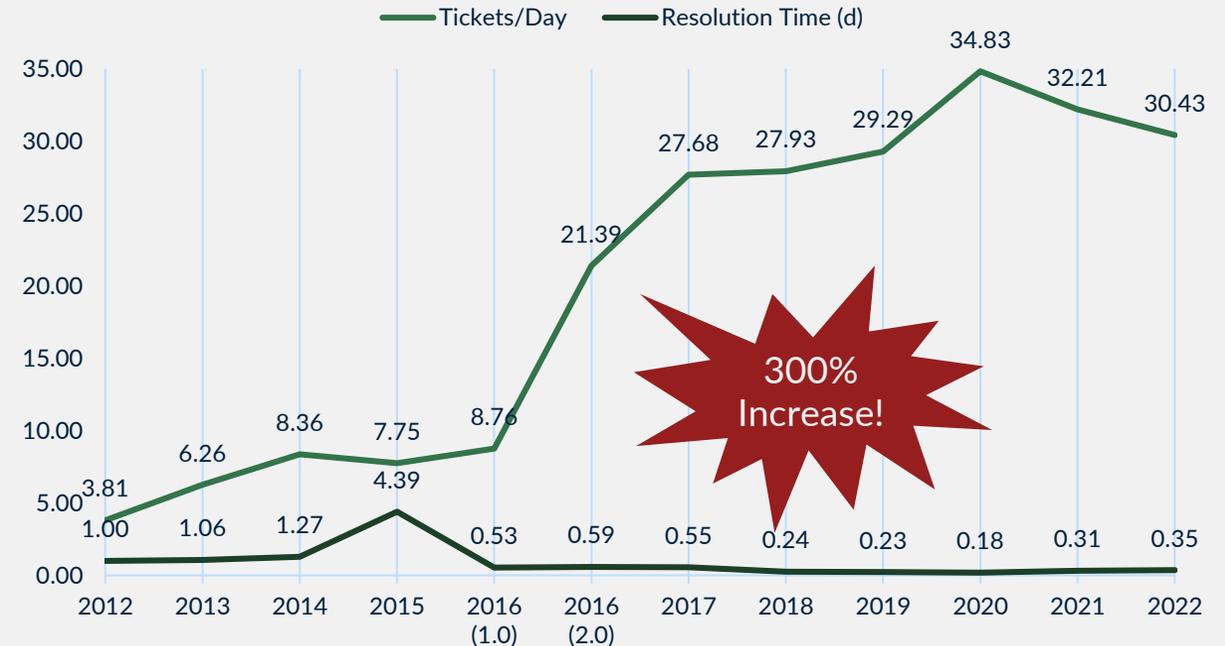
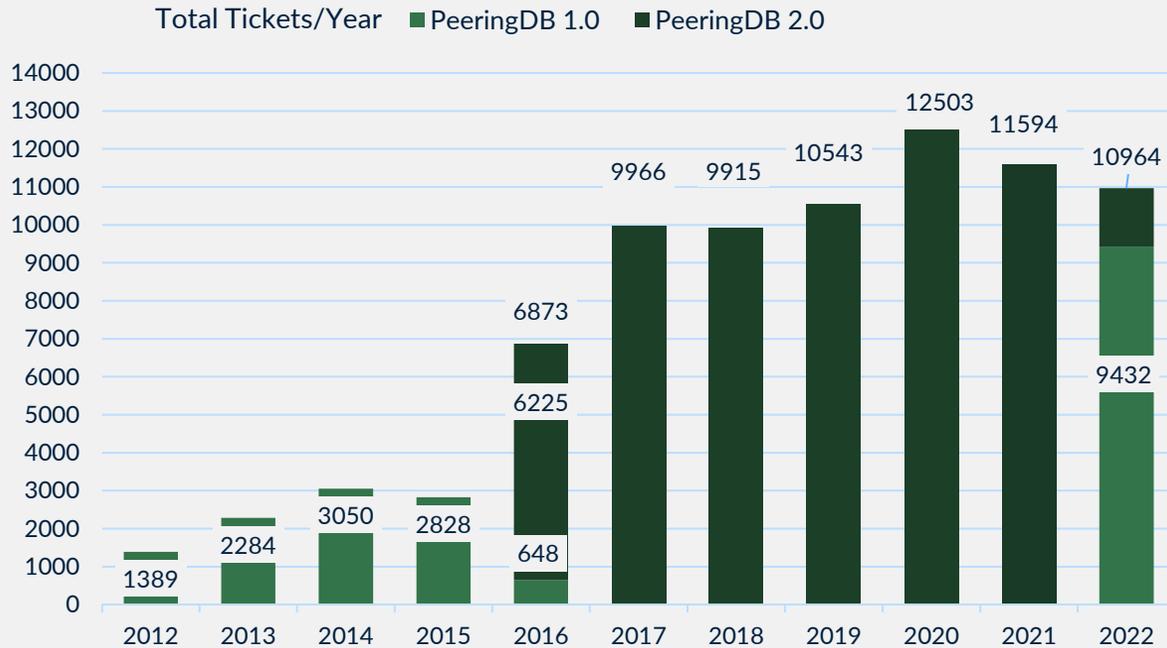
Product Manager: Leo Vegoda

Contact: productcom@lists.peeringdb.com

We are looking for volunteers

- For Admin Committee
 - who speak languages other than English
- For Outreach Committee
 - Folks with marketing experience are highly welcome
- For Operations Committee
 - Small and highly trusted
 - Experience with containers is a plus
- **Apply to stewards@lists.peeringdb.com**

Support Ticket Statistics



- Admin Committee volunteers are based around the world in a variety of time zones with diverse language skills
- Goal is to resolve support tickets within 24 hours

Recent Volunteer Contributions

- Focus on volunteer contributions
- Security changes from Amazon
- UX changes from Google
- Various other changes from individuals

HOWTO: Get Started with Developing for PeeringDB

Technology

We use Python with Django and MySQL. Django manages interaction with the database. We publish all our code on GitHub. We have documented how to set up our development environment.

What to develop

PeeringDB users can request features and report bugs by creating issues on GitHub. Review open issues to either find a project you'd like to work on, or to see if there's an existing issue for the feature you want.

If you want to develop a feature that has not been discussed on GitHub, you should either create an issue or contact us to discuss what you need. You can send a message to productcom@lists.peeringdb.com or contact any of the members of the Product Committee.

If you want to develop code for an issue that has achieved consensus on GitHub, we suggest starting with issues labeled as Good first issue. These are simple issues that will help you get a feel for PeeringDB.

Style

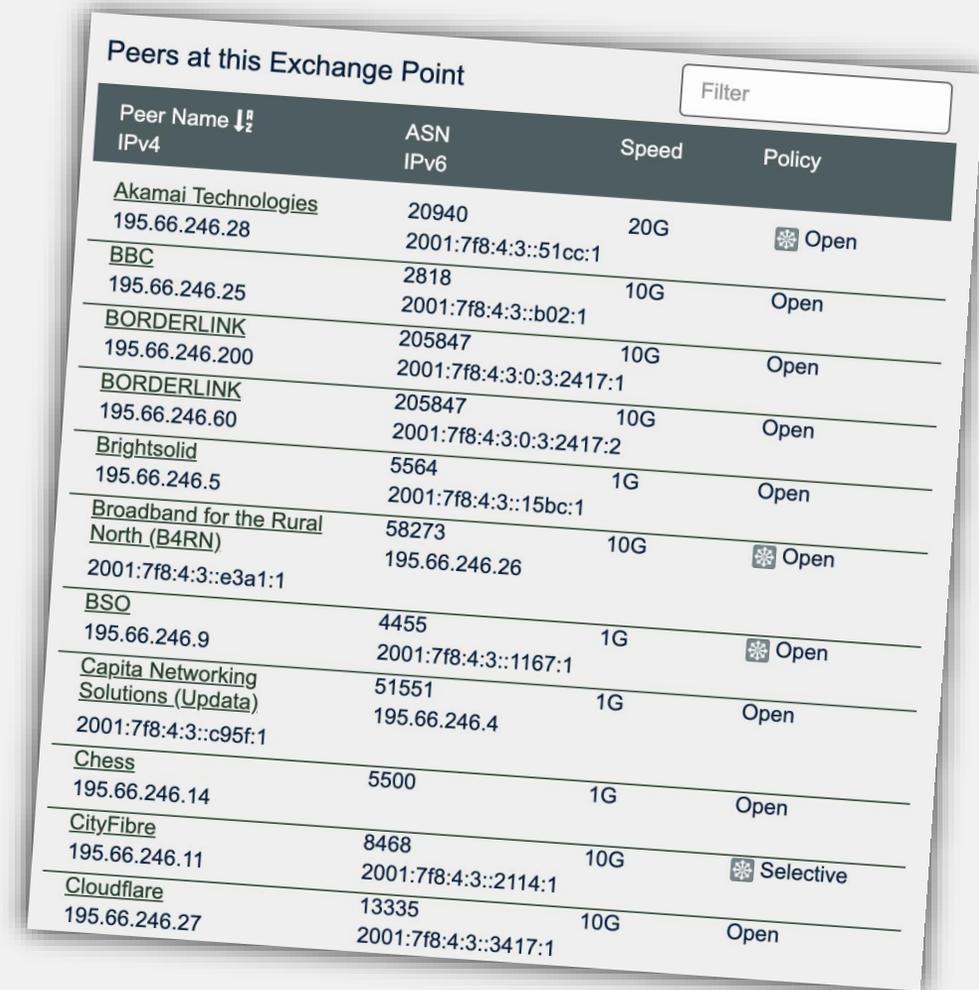
Before you start developing code look at how similar functions have been implemented. Use the same design as existing functions and develop unit tests for your code. We aim for 80% unit test coverage. You also need to run `black` on your code before submitting a Pull Request. We use `black` to ensure that all of our code has the same formatting. Reusing designs, developing unit tests, and using consistent formatting makes it easier for us to maintain the code over time.

We keep the feature parity between the web interface and the API. A feature added to one needs to be added to the other.

The implementation details documented in issues should be detailed enough to use as documentation for the web interface. Documentation is also needed for the API. The minimum we need for API documentation is an example of how to format the request and a pointer to the document section to update.

Recent Product Improvements

- Better support tools
- Better IX-F Export handling
- Networks peering with Route Servers now more visible
- Organizational policy features allow to require your users to:
 - Enable MFA
 - Use a specific email domain
 - Periodically revalidate their accounts
- And users can associate multiple addresses with an account



Peer Name ↓	ASN	Speed	Policy
IPv4	IPv6		
<u>Akamai Technologies</u> 195.66.246.28	20940 2001:7f8:4:3::51cc:1	20G	❄️ Open
<u>BBC</u> 195.66.246.25	2818 2001:7f8:4:3::b02:1	10G	Open
<u>BORDERLINK</u> 195.66.246.200	205847 2001:7f8:4:3:0:3:2417:1	10G	Open
<u>BORDERLINK</u> 195.66.246.60	205847 2001:7f8:4:3:0:3:2417:2	10G	Open
<u>Brightsolid</u> 195.66.246.5	5564 2001:7f8:4:3::15bc:1	1G	Open
<u>Broadband for the Rural North (B4RN)</u> 2001:7f8:4:3::e3a1:1	58273 195.66.246.26	10G	❄️ Open
<u>BSO</u> 195.66.246.9	4455 2001:7f8:4:3::1167:1	1G	❄️ Open
<u>Capita Networking Solutions (Updata)</u> 2001:7f8:4:3::c95f:1	51551 195.66.246.4	1G	Open
<u>Chess</u> 195.66.246.14	5500	1G	Open
<u>CityFibre</u> 195.66.246.11	8468 2001:7f8:4:3::2114:1	10G	❄️ Selective
<u>Cloudflare</u> 195.66.246.27	13335 2001:7f8:4:3::3417:1	10G	Open

General Updates

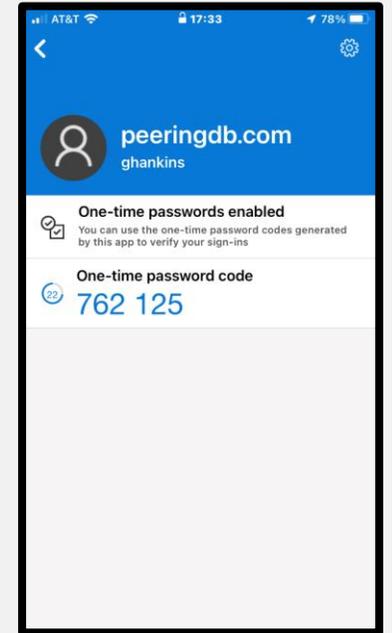
- <https://www.peeringdb.com> is enforced (2.35.0)
- Please check your scripts (e.g. -L for curl)
- Enables better delivery via CDNs
- Lots of bug fixes and small features
 - Users especially like the logo feature
 - Various counters for fac, ix and net objects
 - Updated fields allow for easy tracking of changes
 - netixlan_updated
 - netfac_updated
 - poc_updated

Authentication Changes

- API keys (2.26.0)
 - 256-bit random number, base-62 encoded
 - On org level (additional tabs)
 - Needs an email associated with it (ideally role-account)
 - Can be created by any Admin
 - Same granular (CRUD) permissions as users
 - On user level
 - HOWTO: https://docs.peeringdb.com/howto/api_keys/
- Substantially rate-limit unauthenticated API queries (2.34.0)
 - Wild running scripts
 - Bad code
 - See [tech-list](#) for details
 - HOWTO: https://docs.peeringdb.com/howto/work_within_peeringdbs_query_limits/

Account Security

- Two-factor authentication (2FA) (2.21.0)
 - Using time-based one-time password (TOTP) - no SMS, no email
 - Setup via User Profile
 - Highly recommended
 - Provision for backup codes and recovery tokens
- Fast IDentity Online (FIDO) Universal 2nd Factor (U2F) 2FA support (2.33.0)
 - Allowing users to enable 2FA without relying on a TOTP app
- HOWTO: <https://docs.peeringdb.com/howto/authenticate/>



Self-Selection Fields – Exchanges (2.27.0)

- Service Level
 - Best Effort (no SLA)
 - Normal Business Hours
 - 24/7 Support
 - Not Disclosed (default)
- Terms
 - No Commercial Terms
 - Bundled with other Services
 - NRC only
 - Recurring Fees
 - Not Disclosed (default)

SIX Seattle

Peers **355** Connections **409** Open Peers **244** Total Speed **16.0T** % with IPv6 **89**

Organization	Seattle Internet Exchange
Also Known As	
Long Name	Seattle Internet Exchange (MTU 1500)
City	Seattle
Country	US
Continental Region	North America
Media Type	Ethernet
Service Level	24/7 Support
Terms	Non-recurring Fees Only
Last Updated	2021-05-27T00:08:55Z
Notes	SIX port fees: <ul style="list-style-type: none">• 100G: \$7.5k NRC, no MRC• 10G: \$1.5k NRC, no MRC• 1G: \$100 NRC, no MRC Translate »

Peers at this E

Peer Name ↓
IPv4

[AARNet](#)

2001:504:16::1d

[Accel Net](#)
206.81.81.240

[Access Communications operative](#)

[Acronis US](#)

[Adobe Systems](#)
206.81.81.13

[Adobe Systems](#)
206.81.81.14

[Advanced Communications Technology](#)

Self-Selection Fields – Facilities (2.30.0)

- Property
 - Lessee
 - Owner
 - Not Disclosed (default)
- Diverse Serving Substations
 - Yes
 - No
 - Not Disclosed (default)
- Available Voltage Services
 - 48 VDC
 - 120 VAC
 - 208 VAC
 - 240 VAC
 - 480 VAC

NPFA-NXX	
Last Updated	2022-04-20T20:03:43Z
Notes ?	
	
Technical Email	support@aubix.net
Technical Phone ?	
Sales Email	sales@aubix.net
Sales Phone ?	
Property ?	Owner
Diverse Serving Substations ?	Yes
Available Voltage Services ?	208 VAC
Health Check	

Searching

- Improvement from NANOG 83 Hackathon (2.33.0)
- Searching for numbers return the most relevant results
- Searching for a short ASN returns just that ASN
- Searching for two segments of an IP address return related ix and netixlan objects
- HOWTO: <https://docs.peeringdb.com/howto/search/>

Searching – Facilities

- The address is mapped to coordinates
 - Search a radius from any location
 - Filter searches on criteria
 - Export as JSON or CSV
- Additional information
 - Property Ownership
 - Redundancy
 - Power Provided

www.peeringdb.com/advanced_search

Exchanges Networks **Facilities** Organizations

Name

Address

City/ State/ Postal

Country (ctrl/cmd click to select multiple)
Antarctica
Antigua and Barbuda
Argentina
Armenia
Aruba
Australia

Continental Region (ctrl/cmd click to select multiple)
North America
Asia Pacific
Europe
South America
Africa
Australia

Within Distance km

Management

CLLI

NPA-NXX

Property

Diverse Serving Substations

Available Voltage Services
48 VDC
120 VAC
208 VAC
240 VAC
480 VAC

Network Presence

My organization presence (ctrl/cmd click to select multiple)

Name ↓	CLLI NPA-NXX	City Country	State Postal Code	Networks
AAPT Brisbane	-	Brisbane	QL	1
AAPT (TNZA)	-	AU	4000	
Christie Systems DC1	-	Brisbane	Queensland	1
Christie Systems Services	-	AU	4000	
NEXTDC B1	-	Brisbane	QL	78
NEXTDC	-	AU	-	
Over the Wire - 24 Little Edward	-	Spring Hill	QLD	0
Over The Wire Pty Ltd	-	AU	4200	
PIPE Networks Brisbane	-	BRISBANE	QL	13
PIPE Networks	-	AU	4000	
Rail Centre 1	-	Brisbane	QL	0
QR - Rail Centre 1	-	AU	4000	

Searching – Exchanges

- Filter searches on criteria
- Export as JSON or CSV
- Additional information
 - Service Level
 - Terms
 - Network Presence

Exchanges Networks Facilities Organizations

Name

City

Country (ctrl/cmd click to select multiple)
French Polynesia
French Southern Territories
Gabon
Gambia
Georgia
Germany

Continental Region (ctrl/cmd click to select multiple)
North America
Asia Pacific
Europe
South America
Africa
Australia

Organization

IP Block

Capacity Gbps

Media Type (ctrl/cmd click to select multiple)
Ethernet
ATM
Multiple

Service Level (ctrl/cmd click to select multiple)
Not Disclosed
Best Effort (no SLA)
Normal Business Hours
24/7 Support

Terms (ctrl/cmd click to select multiple)
Not Disclosed
No Commercial Terms
Bundled With Other Services
Non-recurring Fees Only
Recurring Fees

Network Presence
Search networks ...
All present

My organization presence (ctrl/cmd click to select multiple)
Does not matter

Reset Search

JSON CSV

Name	Media Type	Country	City	Network...
DE-CIX Frankfurt Platinum Sponsor	Ethernet	DE	Frankfurt	967

Documentation Updates

- Started series of HOWTOs
 - <https://docs.peeringdb.com/howtos/>
- Regular blogs on new features
 - <https://docs.peeringdb.com/blogs/>
- Announced on social media

Create entries

- Get Started with PeeringDB as a Exchange Operator
- Get Started with PeeringDB as a Facility Operator
- Get Started with PeeringDB as a Network Operator

Manage entries

- Manage Organizational Policy
- Manage User Permissions

Search

- Get Started with Search in PeeringDB
- Work Within PeeringDB's Query Limits

Authentication and security

- Authenticate to PeeringDB
- Get Started with API Keys
- Report a Security Issue

Other

- Get Started with Developing for PeeringDB
- Setup a PeeringDB Development Environment
- What is AS112?

What's ahead?

- Regular updates with [small features and bug fixes](#)
- Improve searching
 - Both for GUI and API
- Finalize tasks from [Data Ownership Task Force](#)
 - Automatically remove stale connections to an IX
- Automate Approving Networks, IXPs, and Facilities according to the latest [Guidelines and Criteria](#)
- Published release schedule on the Release Notes page

Release number	Internal testing	Beta release	Production release
2.41.0	2022-10-04	2022-10-11	2022-10-25
2.42.0	2022-11-01	2022-11-08	2022-11-15
2.43.0	2023-01-10	2023-01-17	2023-01-24
2.44.0	2023-01-31	2023-02-07	2023-02-21
2.45.0	2023-03-07	2023-03-14	2023-03-21

2022 User Survey

- Our 2022 user survey was done in October
- Available in 6 UN languages, Portuguese & Ukrainian
- Not fully evaluated yet
- First blog is here (<https://t1p.de/8bnvn>)

Thank you for completing PeeringDB's 2022 User Survey. This survey will improve our understanding of what is important to you and how well you feel we are doing in each area.

The survey takes less than 5 minutes to complete. Only one question is mandatory. Please only provide satisfaction ratings for feature categories you use.

The survey is anonymous. If you want, you can provide information about your location and sector at the end.

Overall, how satisfied are you with PeeringDB?

Very satisfied

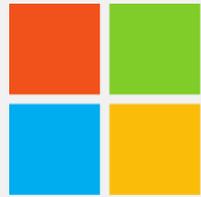
Somewhat satisfied

Somewhat dissatisfied

Very dissatisfied

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STACLAR

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Questions?

Need help? Contact support@peeringdb.com

Got a feature idea? Contact productcom@lists.peeringdb.com