

Peering DB Operations & Product Update

Arnold Nipper arnold@peeringdb.com

What is PeeringDB?

Peering DB is a freely available, usermaintained, 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.



Committees

Admin Committee	Operations Committee	Outreach Committee	Product Committee
 Manage administration of user accounts and PeeringDB records Answer support tickets Cleansing and completion of PeeringDB records 	Manage PeeringDB infrastructure	 Manage marketing and social media Develop and maintain presentations, workshops and webinars Coordinate presentations and attendance at events 	 Manage roadmap and development priorities Ask for input from the community on desired features Write SoWs to solicit bids to complete requested features
Leads: Patrick Gilmore (Chair) and Darwin Costa (Vice Chair) Contact: admincom@ lists.peeringdb.com	Leads: Job Snijders (Chair) and Aaron Hughes (Vice Chair) Contact: pdb-ops@lists.peeringdb.com	Leads: Ben Ryall (Chair) and Bijal Sanghani (Vice Chair) Contact: outreachcom@lists.peeringdb.com	Leads: Stephen McManus (Chair) and Matt Griswold (Vice Chair) Product Manager: Leo Vegoda Contact: productcom@ lists.peeringdb.com



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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

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

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

If you want to develop code for an issue that has achieved consensus on GitHub, we suggest starting with issues labeled as Good

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

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



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

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- Periodically revalidate their accounts
- And users can associate multiple addresses with an account



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



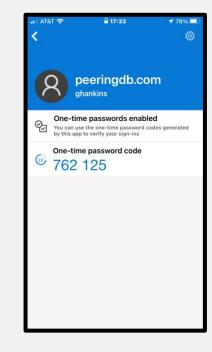
Authentication Changes

- 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

355 409	244 16.0T 89	
Organization	Seattle Internet Exchange	Peers at this E
Also Known As		
Long Name	Seattle Internet Exchange (MTU 1500)	Peer Name ↓² IPv4
City	Seattle	
Country	US	— <u>₩ AARNet</u>
Continental Region	North America	2001:504:16::1d!
Media Type	Ethernet	Accel Net 206.81.81.240
Service Level	24/7 Support	Access
Terms	Non-recurring Fees Only	<u>Communications</u> <u>operative</u>
Last Updated	2021-05-27T00:08:55Z	Acronis US
Notes ?	SIX port fees:	
	 100G: \$7.5k NRC, no MRC 10G: \$1.5k NRC, no MRC 1G: \$100 NRC, no MRC Translate »	<u>Adobe Systems</u> 206.81.81.13
		Adobe Systems 206.81.81.14
		Advanced Communications

Total Speed



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

NPA-NAA	
Last Updated	2022-04-20T20:03:43Z
Notes ?	
	AUBi
Technical Email	support@aubix.net
Technical Phone ?	
Sales Email	sales@aubix.net
Sales Phone ?	
Property ?	Owner
Diverse Serving Substations 3	Yes
Available Voltage Services	208 VAC
Health Check	



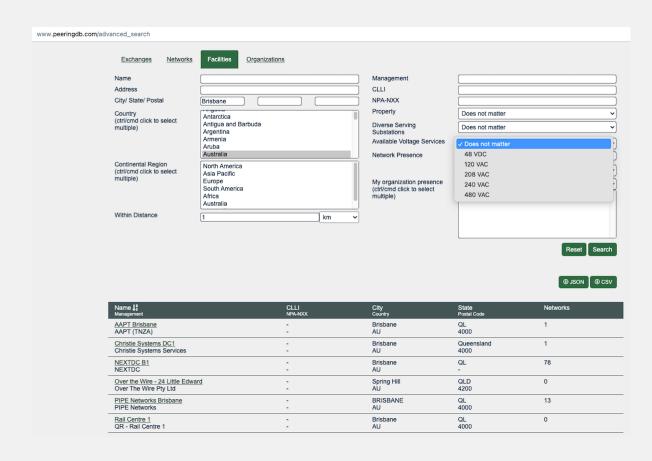
Searching

- 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

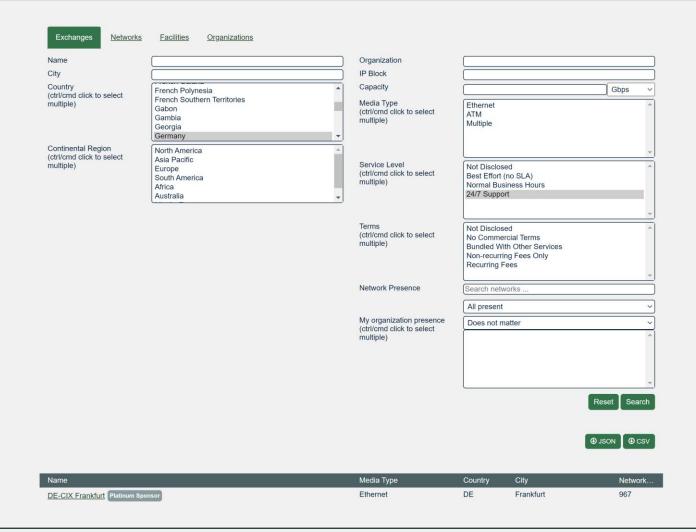
- The address is mapped to coordinates
 - Search a radius from any location
 - Filter searches on criteria
 - Export as JSON or CSV
- Additional information
 - Property Ownership
 - Redundancy
 - Power Provided





Searching - Exchanges

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





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?

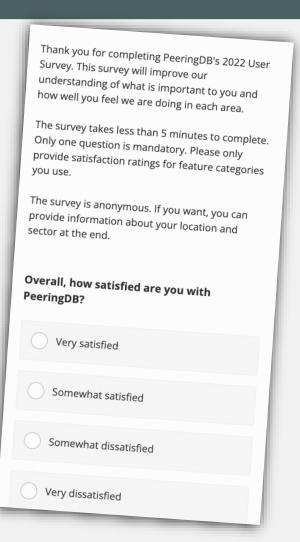
- Regular updates with <u>small features and bug fixes</u>
- Improve searching
 - Both for GUI and API
- Finalize tasks from Data Ownership Task Force
 - Automatically remove stale connections to an IX
- Automate Approving Networks, IXPs, and Facilities according to the latest <u>Guidelines and Criteria</u>
- 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 is open until October 16th
- Available in 6 UN languages, Portuguese & Ukrainian
- Please take the survey
- Please share it with other PeeringDB users in your organization
- https://surveyhero.com/c/pdb22e





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Need help? Contact support@peeringdb.com

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