



PeeringDB

What's new on PeeringDB?

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Agenda

- Organization updates and information on the 2025 elections
- 2024 new feature highlights
- 2025 development focus and roadmap

What is PeeringDB?

Mission statement: “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.”

- A PeeringDB record makes it easy for people to find you, and helps you to establish peering
- If you aren't registered in PeeringDB, you can register at <https://www.peeringdb.com/register>
- We use basic verification for new accounts and require current whois information, so please
 - Update and maintain your whois information
 - Register from an email address associated with your ASN /company



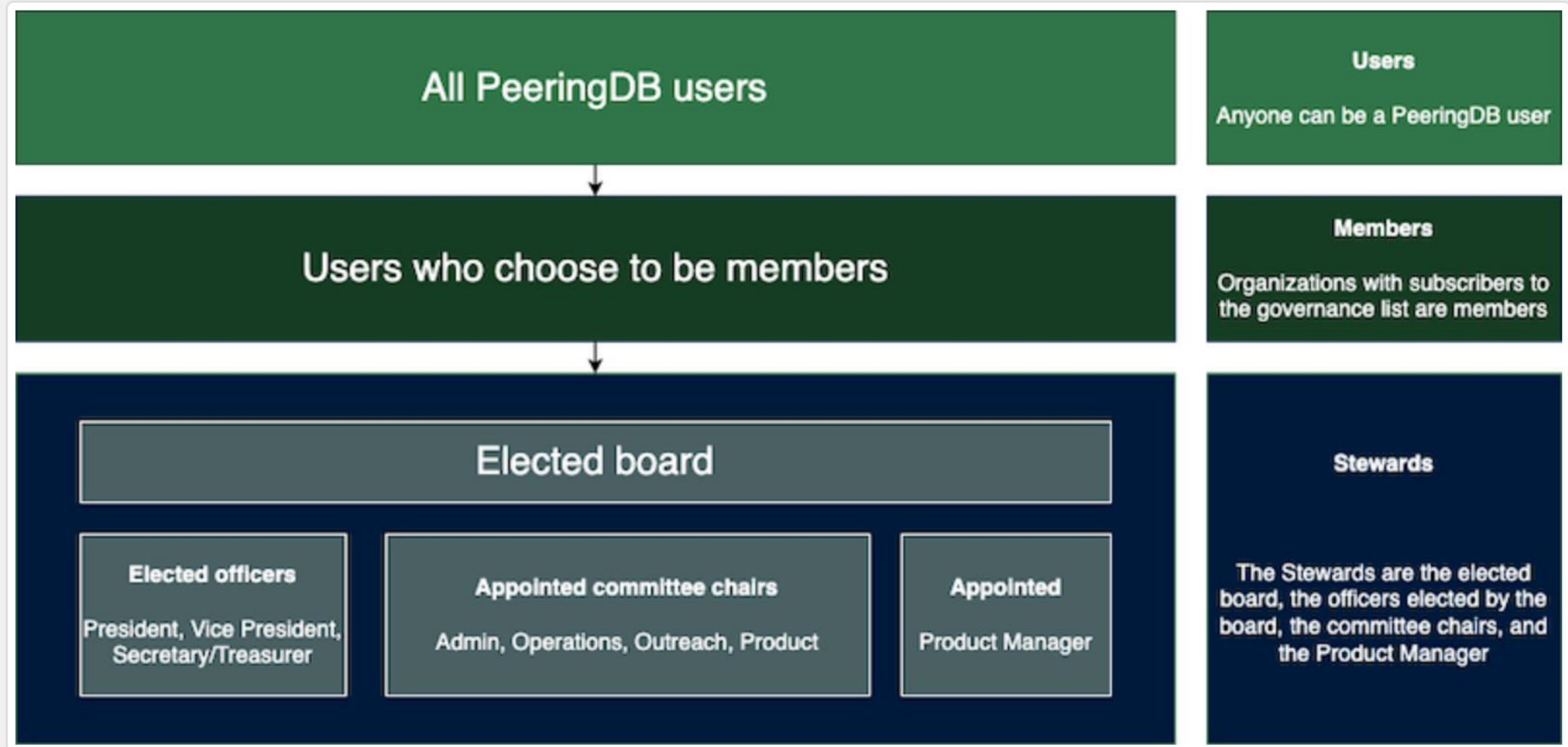
Governance and Membership

- PeeringDB is a United States 501(c)(6) volunteer organization that is 100% funded by sponsorships
- Healthy organization, building financial reserves and executing the long-term strategic plan
- Membership rules
 - A corporation, limited liability company, partnership or other legal business entity may be a Member of the Corporation
 - Membership is determined by having both an active PeeringDB.com account and an individual representative or role subscription to the PeeringDB Governance mailing list
 - 30617 organizations registered
 - 497 addresses subscribed to the Governance mailing list (as of January 28, 2025) **1.6%**
 - Governance list is at <https://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov>
 - More information available at <https://docs.peeringdb.com/gov/>

A slide about the 2025 elections

- 2025 Election Guide:
 - https://docs.peeringdb.com/gov/misc/2025-04-14_election.html
- Nomination of candidates accepted until 14 April 23:59:59 UTC
- Voting 15 April until 29 April 23:59 UTC
- HOWTO become a member and vote:
 - https://docs.peeringdb.com/howto/member_vote/
- 2024-04-22, SEE12: I invited you to vote because in 2023 the voters were 121 only. In 2024 only 98 votes were cast

How to Vote



Board of Directors and Officers



Shawna Bong – Secretary and Treasurer (Officer)



Aaron Hughes – Vice President (Term Expires 2026)



Rahul Makhija – Director (Term Expires 2025)



Christopher Malayter – President (Term Expires 2025)



Livio Morina – Director (Term Expires 2025)



Job Snijders – Director (Term Expires 2026)

Committees

Admin Committee	Operations Committee	Outreach Committee	Product Committee
<ul style="list-style-type: none">• Manage administration of user accounts and PeeringDB records• Answer support tickets• Cleansing and completion of PeeringDB records <p>Leads: Chriztoffer Hansen (Chair) and Peter Helmenstine (Vice Chair) Contact: admincom@lists.peeringdb.com</p>	<ul style="list-style-type: none">• Manage PeeringDB infrastructure <p>Leads: Job Snijders (Chair) and Aaron Hughes (Vice Chair) Contact: pdb-ops@lists.peeringdb.com</p>	<ul style="list-style-type: none">• Manage marketing and social media• Develop and maintain presentations, workshops and webinars• Coordinate presentations and attendance at events <p>Leads: Ben Ryall (Chair) Contact: outreachcom@lists.peeringdb.com</p>	<ul style="list-style-type: none">• Manage roadmap and development priorities• Ask for input from the community on desired features• Write SoWs to solicit bids to complete requested features <p>Leads: Jack Carrozzo (Chair) and Matt Griswold (Vice Chair) Product Manager: Leo Vegoda Contact: productcom@lists.peeringdb.com</p>

New 2024-2025 Strategic Plan

- The 2024-2025 strategic direction and organizational objectives were published in January
 - Maintaining services
 - Developing new features
 - Engaging with the community
 - Ensuring the long-term stability of the organization
- Full version is here: https://docs.peeringdb.com/gov/misc/2025-01-23-PeeringDB_Strategic_Plan_2024-2025.pdf
- Board also approved a 50% increase in hours available for combined development and operations

2024 Year in Review

	2023	2024	Difference	% Increase
Campuses	N/A	556	New	New
Carriers	N/A	8,164	New	New
Exchanges	1,152	1,239	87	8
Facilities	5,282	5,633	351	7
Networks	29,148	31,597	2,449	8
Organizations	27,714	30,008	2,834	10
Users	41,975	46,657	4,682	11

2024 New Feature Highlights

- Users tell us that search and data quality are important to them, and this was a big development area in 2024
- Networks whose ASN has been reclaimed by an RIR or NIR are automatically removed now
- v2 search
 - Introduced new v2 search functionality early last year with several enhancements over many releases
 - Key features
 - Use natural language queries in combination with the name in a geographic region
 - Search for a network prefixed with “AS”, partial matches show all relevant networks
 - Search for exchanges based on the facilities they are in
 - Search for campuses in in a geographic region, also displays a list of facilities
 - HOWTO: v2 Search (https://docs.peeringdb.com/howto/v2_search/)

2024 New Feature Highlights

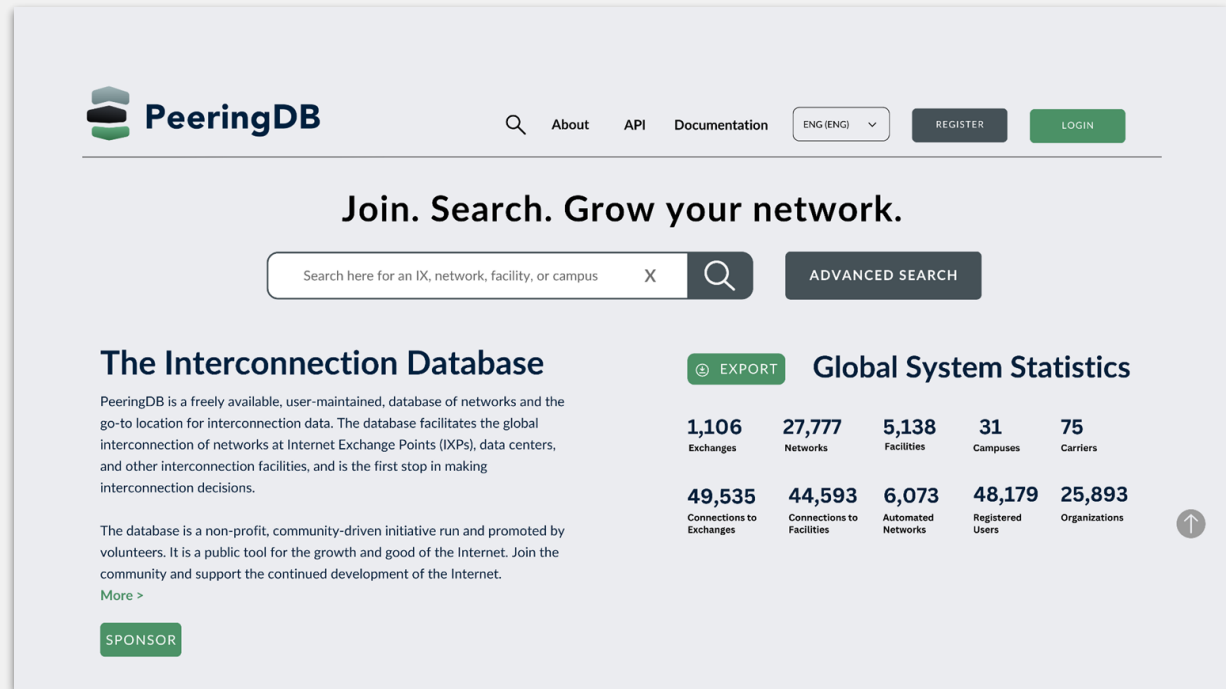
- peeringdb-py enhancements
 - Run queries locally on your infrastructure to avoid query limits and to get the best response time
 - Reduces PeeringDB load (= cost)
 - HOWTO: Install peeringdb-py (<https://docs.peeringdb.com/howto/peeringdb-py/>)
- Keyhole Markup Language (KML) export of geographic data
 - Very cool and very popular to import into GIS applications
 - Covered in many PeeringDB Updates presentations last year (<https://docs.peeringdb.com/presentations/>)
 - Better Search and Export (https://docs.peeringdb.com/blog/better_search_and_export/)
- VM deployments moved to containerized deployments
 - Reduced computing costs, adjusts compute resources dynamically and manages spending
 - Containerized Deployment (<https://docs.peeringdb.com/blog/containerize/>)

2024 New Feature Highlights

- New Carrier and Campus objects
 - Carrier: for provides offering L1 or L2 services in a Facility
 - Different from a Network which is for L3 services with an ASN
 - HOWTO: Get Started with PeeringDB as a Carrier Operator (<https://docs.peeringdb.com/howto/get-started-carrier/>)
 - Campus: two or more Facilities owned by the same organization with inter-Facility cross connects
 - HOWTO: Get Started with PeeringDB as a Facility or Campus Operator (<https://docs.peeringdb.com/howto/get-started-facility/>)
- Many other smaller enhancements, bug fixes, and security updates
 - Refer to the 2024 Release Notes for complete details (https://docs.peeringdb.com/release_notes/release_notes_2024/)

2025 Roadmap: Web UI

- We adjusted our web UI rollout process based on feedback
- We previewed the new UI on separate site but got no feedback, so are doing a phased rollout:
 - PeeringDB volunteers
 - 20% of users
 - Everyone
- Users will get an “opt-out” switch in their profile and be encouraged to share feedback on what to adjust

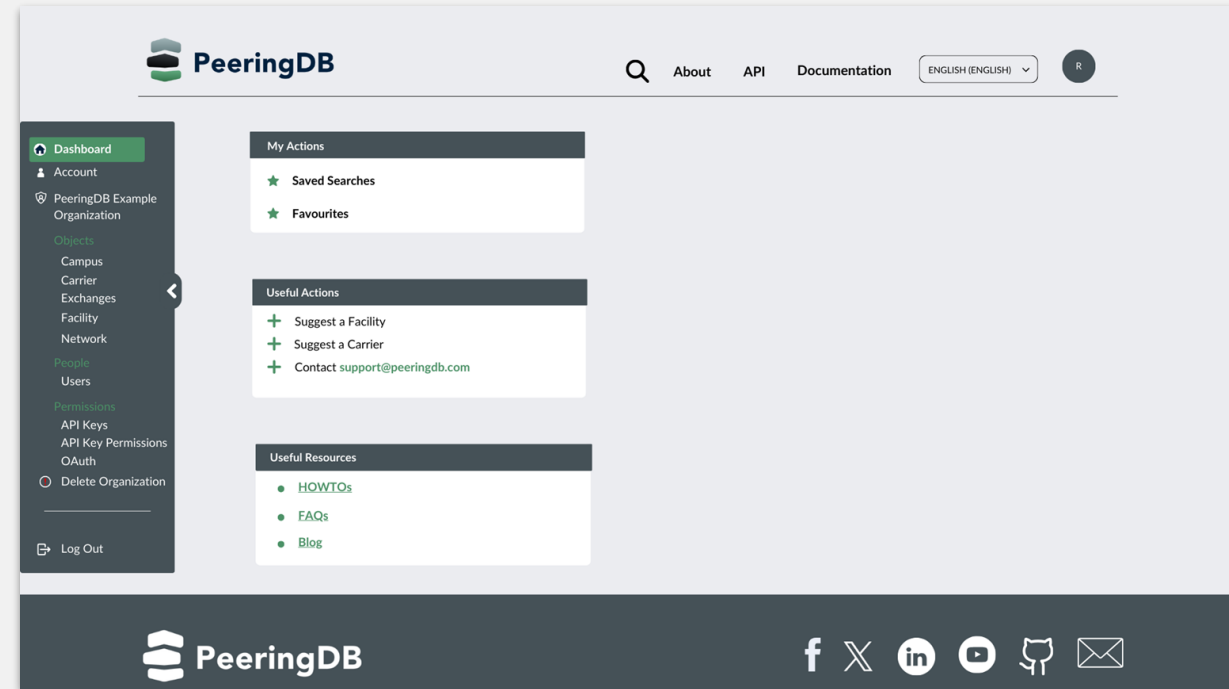


The screenshot displays the PeeringDB website interface. At the top left is the PeeringDB logo. To its right are navigation links for 'About', 'API', and 'Documentation', along with a language selector set to 'ENG (ENG)', and 'REGISTER' and 'LOGIN' buttons. Below the navigation is a main heading: 'Join. Search. Grow your network.' Underneath this is a search bar with the placeholder text 'Search here for an IX, network, facility, or campus' and an 'ADVANCED SEARCH' button. The main content area is divided into two columns. The left column is titled 'The Interconnection Database' and contains a paragraph describing the database as a freely available, user-maintained resource for interconnection data. Below this is a 'More >' link and a 'SPONSOR' button. The right column is titled 'Global System Statistics' and features an 'EXPORT' button followed by a table of statistics.

Global System Statistics				
1,106	27,777	5,138	31	75
Exchanges	Networks	Facilities	Campuses	Carriers
49,535	44,593	6,073	48,179	25,893
Connections to Exchanges	Connections to Facilities	Automated Networks	Registered Users	Organizations

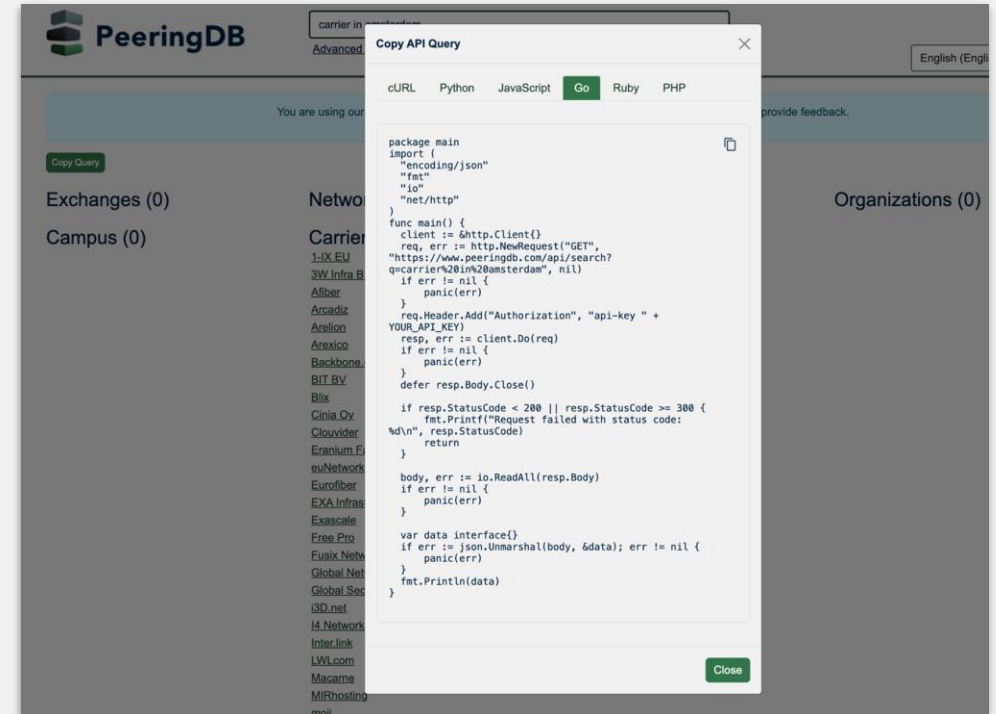
2025 Roadmap: Saved Searches, Notifications

- We're discussing ([#1736](#)) adding a “planned” status with a date
- It would integrate with notifications
- You could share a planned operational date for any object type
- Others could be notified of plans they are interested in



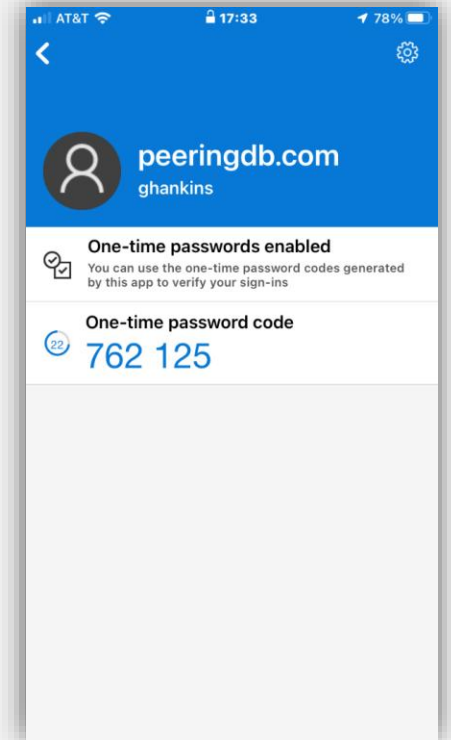
2025 Roadmap: Search

- Refactor v2 search code with improved automated testing
 - Results should be more complete and relevant
- Web search → API query link
 - Help less technical users develop one liners that improve their efficiency
- Implement search filters, e.g. hide IXPs without an ixfac
 - Give users more control over what they see
 - Will apply to authenticated web and user API Key usage
 - Once developed, other filters can be added as needed
- Implement Advanced Search in v2
 - Another step towards removing legacy search



2025 Roadmap: MFA

- Multi-factor authentication (MFA) has been available for years and will mandatory from 1 July 2025
- Two-factor authentication (2FA)
 - Using time-based one-time password (TOTP) - no SMS, no email
 - Provision for backup codes and recovery tokens
- Fast IDentity Online (FIDO) Universal 2nd Factor (U2F) 2FA support
 - 2FA without relying on a TOTP app
- HOWTO:
<https://docs.peeringdb.com/howto/authenticate/>



2025 Roadmap: MFA

- We are keeping anonymous use but will require MFA for all authenticated users
 - We are integrating MFA management in the user profile so managing options is easier
 - API users will need to create an API Key, no more username and password authentication
- More blog posts and announcements will be made on social media in advance
- Direct communications to users who haven't set up MFA

The screenshot shows the 'Multi-factor Authentication Management' interface. It is divided into two main sections: 'Time Based One Time Passwords (TOTP)' and 'Security Tokens and Passkeys'.

Time Based One Time Passwords (TOTP)
Primary method: Enter the token generated by your token generator

Backup Tokens
If you don't have any device with you, you can access your account using backup tokens. You have 10 backup tokens remaining.
[Show Codes](#)

Disable TOTP Authentication
You can disable TOTP authentication. If you do this, we recommend you use Security Tokens or Passkeys instead.
[Disable TOTP Authentication](#)

Security Tokens and Passkeys

You can configure a U2F hardware security token and/or a Passkey. They can be configured in two ways:

- Disallow login: Requires username/password login, followed by key verification
- Allow login: Allows direct login without username/password

Device-internal keys, like fingerprint scanners, might be shown before your preferred U2F hardware security token.

If your token is plugged in but not listed, **cancel** the initial prompt. A new prompt for your token should appear afterwards.

Name	Status		
iPhone	Allow login	Disallow login	Remove
iMac	Allow login	Disallow login	Remove
Safari	Allow login	Disallow login	Remove
Register security key	<input type="text" value="Name"/>	<input type="checkbox"/> Allow to use for login	Register

2025 Roadmap: Analysis

- Adding a web tool to help users compare interconnection opportunities at facilities
- Add ASNs, add locations, view and export results

The screenshot shows the PeeringDB website interface. At the top, there is a search bar with the text "IX.br" and buttons for "Search", "Compare", "Export", and "API Query". The navigation menu includes "About", "API", "Documentation", and "ENGLISH (ENGLISH)".

Below the search bar, there is a "Filters" section with the following options:

- Region: South America (Remove)
- Country: Any (Remove)
- City: Any (Remove)
- Carrier: Any (Remove)

Below the filters, there is a table comparing two IX.br locations: "IX.br Sao Paulo" and "CABASE". The table has columns for "Network Type", "Traffic Level", "Exchanges", "Unique IXPs", "Unique ASNs", "Unique Facilities", "Common IXPs", "Common ASNs", and "Common Facilities".

	#	IX.br Sao Paulo	#	CABASE	#	Name	#	Name
Network Type								
Traffic Level								
Exchanges	#1823							
Unique IXPs	#250							
Unique ASNs	#30		#4		#25		#100	
Unique Facilities	#4		#3		#2		#5	
Common IXPs					#15			
Common ASNs					#28			
Common Facilities					#2			

Below the table, there is a list of facilities:

- PIX Century Telecom - Belo Horizonte
- EdgeUno Datacenter Bogota Colombia (BOG4)

2025 Roadmap: Operations and Bug Fixes

- We're working on making both the API and website more responsive
 - You can sync using `peeringdb-py` to keep queries local and integrate PeeringDB data with other sources
- We'll be developing
 - Additional support tools
 - Minor features
 - Bug fixes

Romania and its bordering countries from PeeringDB POV

CC	IXP/OP	ASN	LASN	Colo/OP	ASN	LASN	TASN	TLASN	PDB	RIR	Rtd	%
AL	1/1	19	12	6/6	12	8	23	15	42	128	114	32.8%
BA	1/1	9	5	1/1	2	2	9	5	10	55	43	18.1%
BG	7/7	205	87	29/14	201	71	302	104	149	732	659	20.4%
GR	6/5	98	53	10/7	86	47	124	58	79	241	213	32.8%
HR	2/2	36	23	12/6	37	16	50	24	33	173	144	19.1%
ME	1/1	2	1	0/0	0	0	2	1	5	29	21	17.2%
MK	1/1	13	6	5/3	4	3	13	6	14	66	58	21.2%
RO	10/10	160	89	44/34	149	76	212	105	163	1097	928	14.8%
RS	2/2	38	12	10/10	25	8	53	14	28	193	161	14.5%
SI	1/1	22	14	10/7	18	6	32	15	36	298	267	12.1%

LASN: Local ASN, ie. ASN in CC TASN: Total ASN (IXP + Colo) TLASN: Total Local ASN

Thank you to our sponsors! – Questions?

