



**PeeringDB**

# What's New and What's Next

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# 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
  - 506 addresses subscribed to the Governance mailing list as of March 21, 2025
  - **Each year half of the board is up for election. Meeting and election are on April 10, 2025**
  - Governance list is at <https://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov>
  - More information available at <https://docs.peeringdb.com/gov/>

# 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"><li>• Manage administration of user accounts and PeeringDB records</li><li>• Answer support tickets</li><li>• Cleansing and completion of PeeringDB records</li></ul> <p>Leads: Chriztoffer Hansen (Chair) and Peter Helmenstine (Vice Chair) Contact: <a href="mailto:admincom@lists.peeringdb.com">admincom@lists.peeringdb.com</a></p>	<ul style="list-style-type: none"><li>• Manage PeeringDB infrastructure</li></ul> <p>Leads: Job Snijders (Chair) and Aaron Hughes (Vice Chair) Contact: <a href="mailto:pdb-ops@lists.peeringdb.com">pdb-ops@lists.peeringdb.com</a></p>	<ul style="list-style-type: none"><li>• Manage marketing and social media</li><li>• Develop and maintain presentations, workshops and webinars</li><li>• Coordinate presentations and attendance at events</li></ul> <p>Leads: Ben Ryall (Chair) Contact: <a href="mailto:outreachcom@lists.peeringdb.com">outreachcom@lists.peeringdb.com</a></p>	<ul style="list-style-type: none"><li>• Manage roadmap and development priorities</li><li>• Ask for input from the community on desired features</li><li>• Write SoWs to solicit bids to complete requested features</li></ul> <p>Leads: Jack Carrozzo (Chair) and Matt Griswold (Vice Chair) Product Manager: Leo Vegoda Contact: <a href="mailto:productcom@lists.peeringdb.com">productcom@lists.peeringdb.com</a></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](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	-	556	n/a	n/a
Carriers	-	8,164	n/a	n/a
Exchanges	1,152	1,239	87	7.6
Facilities	5,282	5,633	351	6.7
Networks	29,148	31,597	2,449	8.4
Organizations	27,714	30,008	2,834	10.2
Users	41,975	46,657	4,682	11.2

# PeeringDB in Central and Eastern Europe

CC	IXP/OP	ASN	LASN	Colo/OP	ASN	LASN	TASN	TLASN	PDB	RIR	Routed
AT	6/6	187	88	55/42	225	109	279	123	185	746	627
BG	7/7	211	92	29/14	200	71	301	104	149	732	658
CH	12/12	886	191	82/53	332	172	985	220	341	1059	787
CZ	5/4	275	124	32/25	180	118	322	145	203	692	592
DE	55/40	1887	604	327/147	1490	616	2433	790	1244	3098	2416
HR	2/2	36	23	12/6	37	16	50	24	33	173	143
HU	1/1	98	46	6/6	92	47	126	55	81	303	237
MD	2/2	23	19	5/4	11	7	25	19	33	210	150
PL	16/14	846	646	78/45	583	455	937	682	848	2466	2132
RO	9/9	159	89	44/34	147	74	210	104	163	1097	926
SK	4/3	94	48	6/6	60	25	117	50	65	227	193
UA	26/21	418	279	53/43	233	186	451	289	459	2015	1614

**CC: Country Code**  
**IXP: Internet Exchange**  
**OP: Operator**  
**ASN: Autonomous System**  
**LASN: Local ASN**  
**Colo: Colocation**  
**TASN: Total ASN (IXP+Colo)**  
**TLASN: Total Local ASN**  
**PDB: PeeringDB**  
**RIR: Regional Internet Registry**  
**Routed: in DMZ**



# 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/](https://docs.peeringdb.com/howto/v2_search/))
  - Still work in progress

# 2024 New Feature Highlights

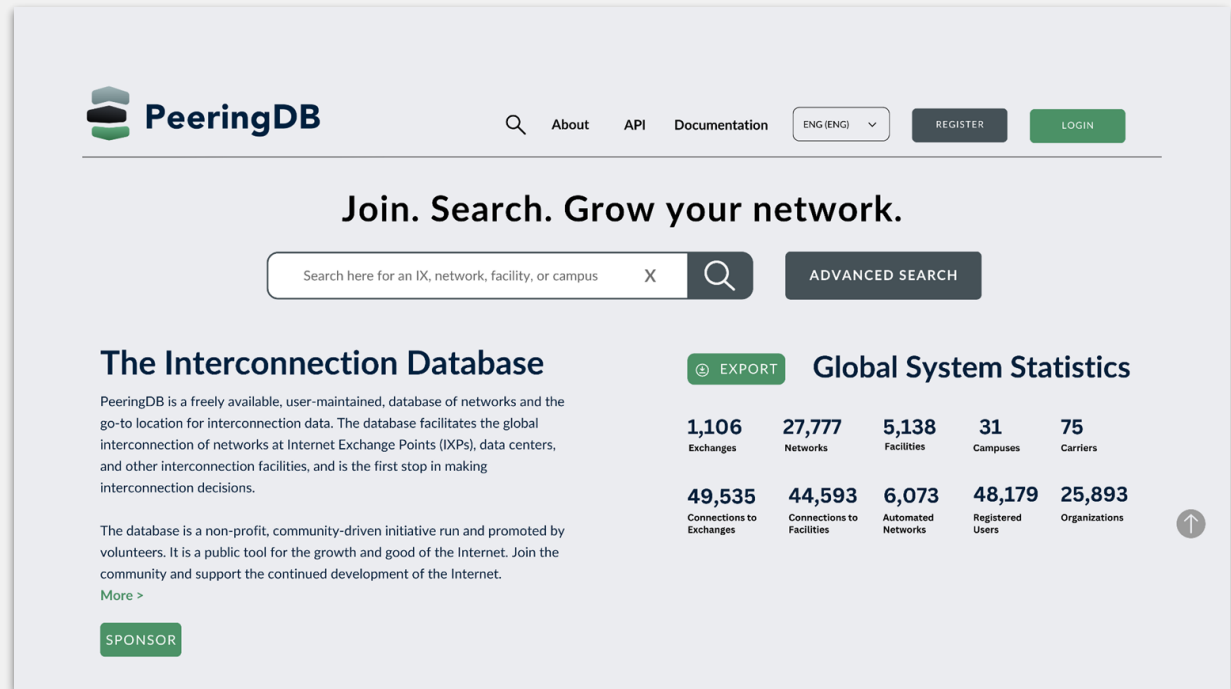
- peeringdb-py enhancements
  - Run queries locally on your infrastructure to avoid query limits and to get the best response time
  - Reduces PeeringDB load (= cost)
  - HOWTO: Install peeringdb-py (<https://docs.peeringdb.com/howto/peeringdb-py/>)
- Keyhole Markup Language (KML) export of geographic 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/](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/](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

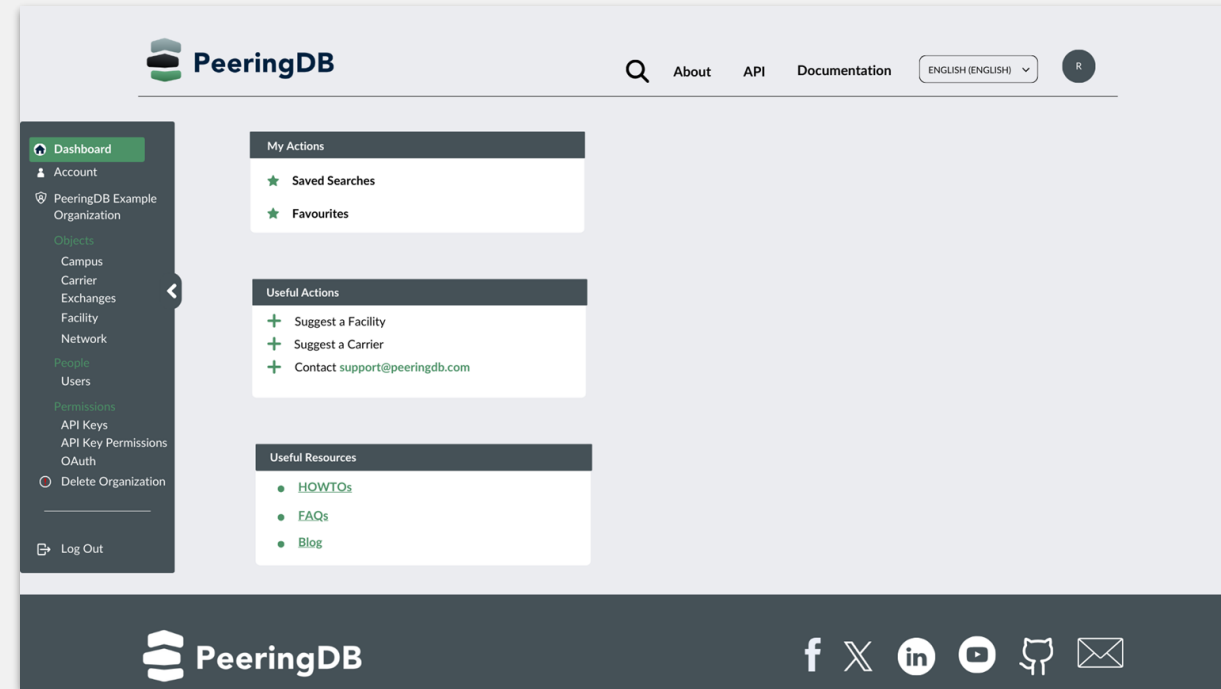


The screenshot displays the PeeringDB website interface. At the top left is the PeeringDB logo. To its right are navigation links: About, API, and Documentation. Further right is a language selector set to 'ENG (ENG)', and buttons for REGISTER and LOGIN. Below the navigation is a main heading: "Join. Search. Grow your network." Underneath this is a search bar with the placeholder text "Search here for an IX, network, facility, or campus" and a search icon, followed by an "ADVANCED SEARCH" button. The main content area is divided into two sections. On the left, "The Interconnection Database" section includes a description of the database and a "SPONSOR" button. On the right, "Global System Statistics" section features a table of metrics and an "EXPORT" button.

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



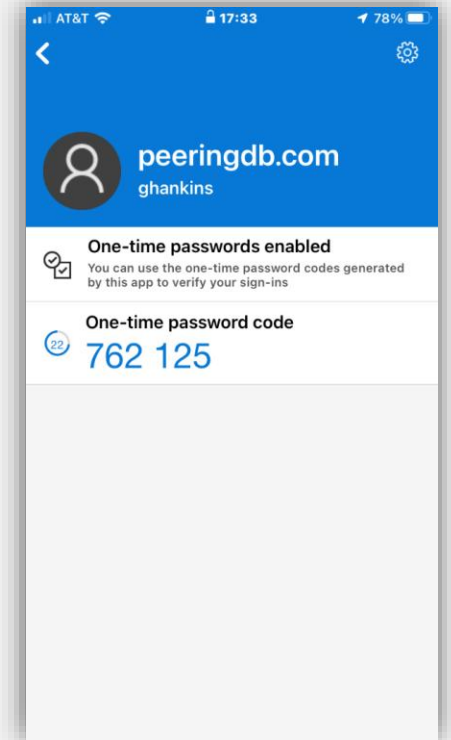
# 2025 Roadmap: Search

- Refactor v2 search code with improved automated testing
  - Results should be completer and more 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

```
Last login: Fri Feb 7 09:38:44 on ttys000
→ ~ curl -H "Accept: application/json" -X GET https://www.peeringdb.com/api/net/578
{"data": [{"id": 578, "org_id": 791, "org": {"id": 791, "name": "LINX", "aka": "London Internet Exchange Ltd.", "name_long": "London Internet Exchange Ltd.", "website": "https://www.linx.net", "social_media": [{"service": "facebook", "identifier": "LondonInternetExchange"}, {"service": "x", "identifier": "linx_network"}, {"service": "linkedin", "identifier": "linx"}, {"service": "website", "identifier": "https://www.linx.net"}], "notes": "", "require_2fa": true, "net_set": [578, 9510, 10345, 20392, 20393, 26805, 33509, 36305, 36306], "fac_set": [2090], "ix_set": [18, 321, 583, 745, 777, 1016, 4231], "carrier_set": [], "campus_set": [], "address1": "WeWork, 2 Minster Court", "address2": "Mincing Lane", "city": "London", "country": "GB", "state": "City Of London", "zipcode": "EC3R 7B", "floor": "", "suite": "", "latitude": 51.510758, "longitude": -0.081093, "created": "2005-09-14T13:39:54Z", "updated": "2024-01-04T10:24:51Z", "status": "ok"}, {"name": "LINX Route Collectors", "aka": "", "name_long": "", "website": "http://www.linx.net/", "social_media": [{"service": "website", "identifier": "http://www.linx.net/"}], "asn": 5459, "looking_glass": "https://alice-collector.linx.net", "route_server": "", "irr_as_set": "AS-LINX", "info_type": "Route Collector", "info_types": ["Route Collector"], "info_prefixes4": 20, "info_prefixes6": 10, "info_traffic": "", "info_ratio": "Mostly Outbound", "info_scope": "Regional", "info_unicast": true, "info_multicast": true, "info_ipv6": true, "info_never_v1": true}]}
```

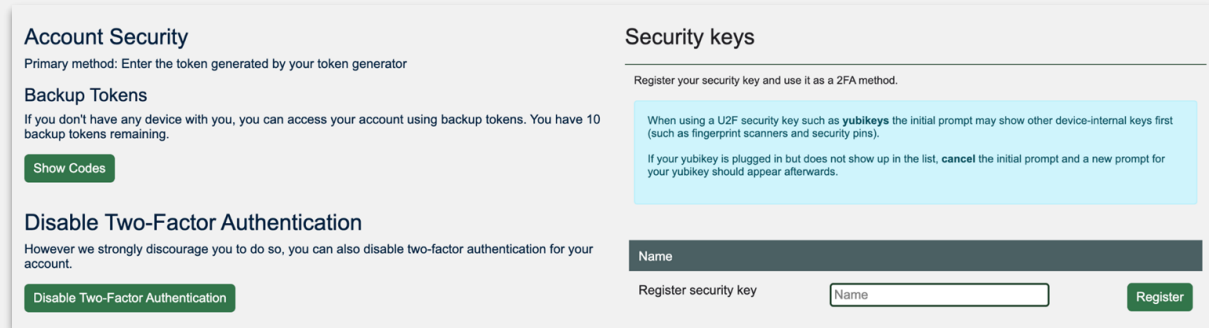
# 2025 Roadmap: MFA

- Multi-factor authentication (MFA) has been available for many years and is now mandatory
- 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
- **Mandatory as of July 1, 2025**



The screenshot displays two panels: 'Account Security' and 'Security keys'. The 'Account Security' panel includes a 'Primary method' section, a 'Backup Tokens' section with a 'Show Codes' button, and a 'Disable Two-Factor Authentication' section with a corresponding button. The 'Security keys' panel includes a 'Register your security key' section with a 'Name' input field and a 'Register' button. A light blue informational box is present in the 'Security keys' section.

**Account Security**  
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 Two-Factor Authentication**  
However we strongly discourage you to do so, you can also disable two-factor authentication for your account.  
[Disable Two-Factor Authentication](#)

**Security keys**  
Register your security key and use it as a 2FA method.

When using a U2F security key such as **yubikeys** the initial prompt may show other device-internal keys first (such as fingerprint scanners and security pins).  
If your yubikey is plugged in but does not show up in the list, **cancel** the initial prompt and a new prompt for your yubikey should appear afterwards.

Name

Register security key



# 2025 Roadmap: Analysis

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

LOGO

	# ---- Name	# ---- Name	# ---- Name	# ---- Name
Network Type				
Traffic Level				
Exchanges				
Unique IXPs				
Unique ASNs	#30	#4	#25	#100
Unique Facilities	#4	#3	#2	#5
Common IXPs			#15	
Common ASNs			#28	
Common Facilities			#2	

# 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

# Thank you to our sponsors!

