



**PeeringDB**

# PeeringDB Workshop

How is PeeringDB organised? // Track 1

**APRICOT 2020**

[arnold@peeringdb.com](mailto:arnold@peeringdb.com)

**APNIC 49**

**25**  
YEARS

**MELBOURNE  
AUSTRALIA**

12 – 21 February 2020

# Agenda

- Please always use the tutorial DB at <https://tutorial.peeringdb.com>
- What is PeeringDB?
- Organisation
  - History
  - Association
  - Committees

# 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.”

# Why should I have a record in PeeringDB?

- As a network a PeeringDB record makes it easy for other networks to find you, and helps you to establish peering / interconnection
- As a colocation provider a PeeringDB record creates visibility, and helps you to attract additional networks and Ixes
- As an IX a PeeringDB record provides information about your participants, and colocations where your service is available
- Provides a user friendly GUI and a powerful API for automatisation



# 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
  - 344 addresses subscribed to the Governance mailing list (as of April 16, 2019)
  - Governance list is at <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov>
  - More information available at <http://gov.peeringdb.com/>

# Governance

- The Members
  - Any corporation, limited liability company, partnership or other legal business entity may be a Member
  - One (virtual / online) member meeting per year
- The Board
  - Sets strategic directions and overlooks financial issues
  - Half of the board is elected every year
- The Committees
  - Responsible for the day to day work
  - Admin Committee
  - Operations Committee
  - Outreach Committee
  - Product Committee

# Committees

## Admin Committee

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

Leads: Stefan Funke (Chair)

Contact: [admincom@lists.peeringdb.com](mailto:admincom@lists.peeringdb.com)

## Operations Committee

- Manage PeeringDB infrastructure

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

Contact: [pdb-ops@lists.peeringdb.com](mailto: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: Greg Hankins (Chair) and Bijal Sanghani (Vice Chair)

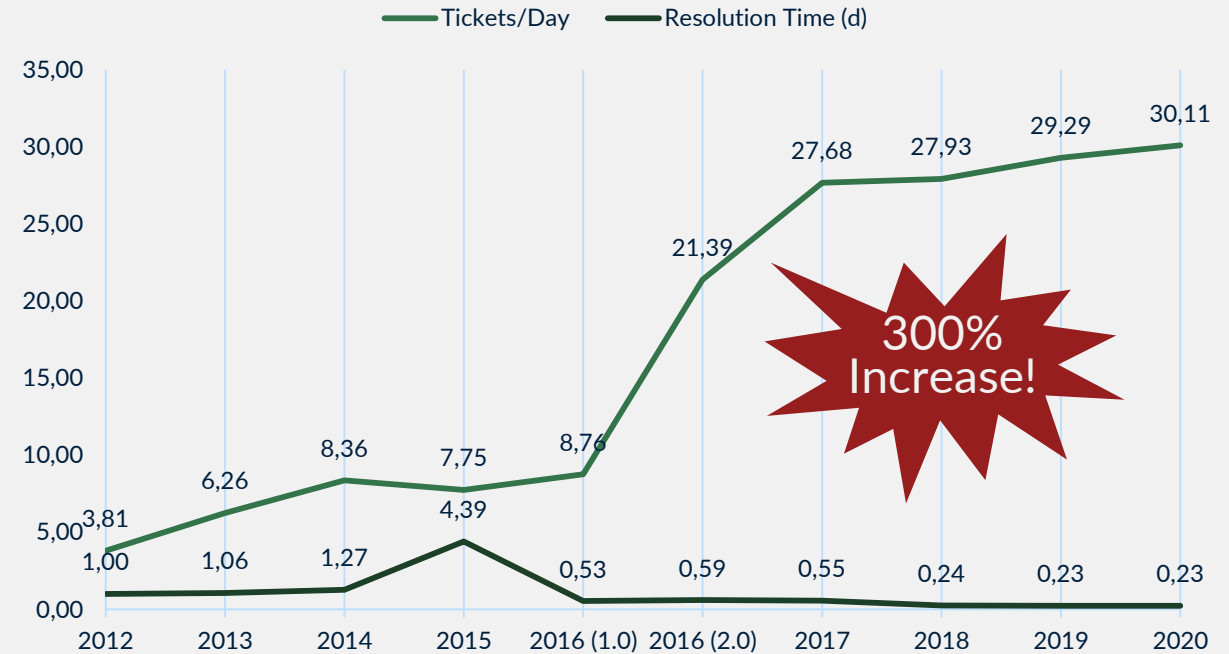
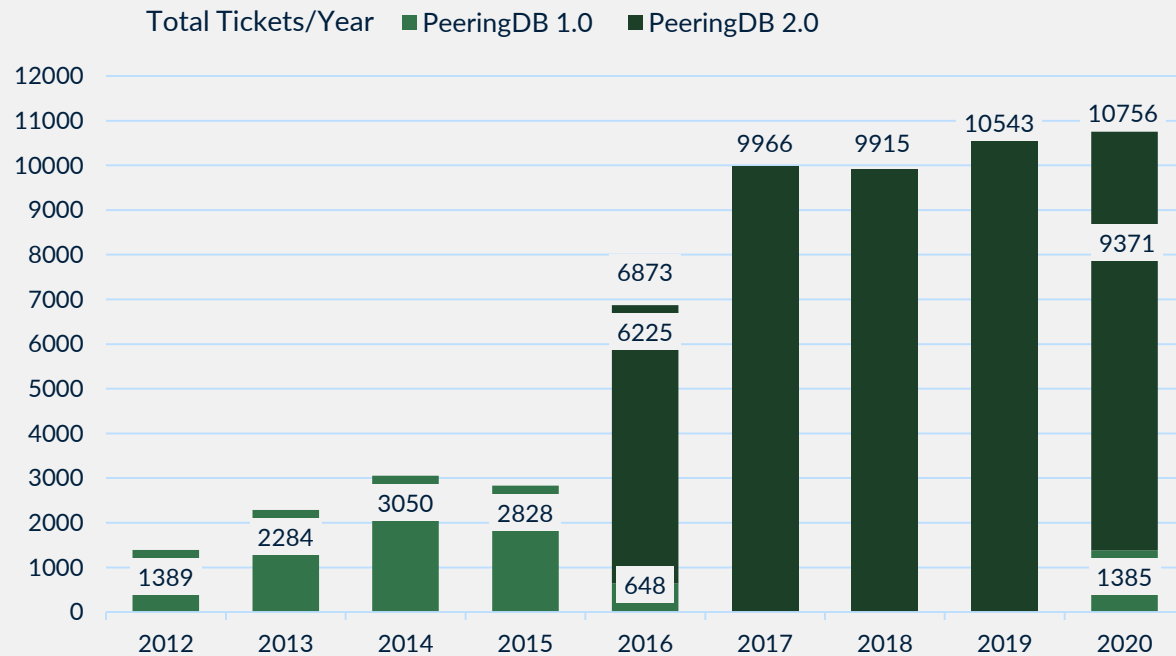
Contact: [outreachcom@lists.peeringdb.com](mailto:outreachcom@lists.peeringdb.com)

## 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: Filiz Yilmaz  
Contact: [productcom@lists.peeringdb.com](mailto:productcom@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



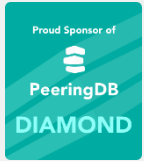
# Product Development Workflow

- All issues tracked using GitHub at <https://github.com/peeringdb/peeringdb/issues>
  - Anyone can open a feature requests or file a bug report
  - Open and transparent process for product development
  - Workflow is at <http://docs.peeringdb.com/workflow/>
- Product Committee issue process
  - Evaluate and prioritize the requests
  - Request a quote for development costs
  - Request budget from the board
  - Manage implementation and scheduling
- Your input is needed on features!

<b>1 Decide</b> No due date ⌚ Last updated 3 days ago Issues under Decide queue. Issues are kept in Decide while the Product Committee discusses the issue. Next milestone is "Consensus Reached"	 12% complete 128 open 19 closed <a href="#">Edit</a> <a href="#">Close</a> <a href="#">Delete</a>
<b>2 Consensus Reached</b> No due date ⌚ Last updated 3 days ago Issues that are in the Consensus queue. When a decision is made abo...(more)	 0% complete 6 open 0 closed <a href="#">Edit</a> <a href="#">Close</a> <a href="#">Delete</a>
<b>3 Consensus Finalized</b> No due date ⌚ Last updated 1 day ago When an issue is at milestone "Consensus reached" PC members have t...(more)	 100% complete 0 open 2 closed <a href="#">Edit</a> <a href="#">Close</a> <a href="#">Delete</a>
<b>3a Needs Implementation discussion</b> No due date ⌚ Last updated 6 days ago	 0% complete 5 open 0 closed <a href="#">Edit</a> <a href="#">Close</a> <a href="#">Delete</a>
<b>4 Ready for Implementation</b> No due date ⌚ Last updated 1 day ago Last milestone before milestone "Next release". The predecessor is "Consensus Finalized".	 0% complete 22 open 0 closed <a href="#">Edit</a> <a href="#">Close</a> <a href="#">Delete</a>
<b>Next Release</b> No due date ⌚ Last updated 5 days ago	 80% complete 3 open 12 closed <a href="#">Edit</a> <a href="#">Close</a> <a href="#">Delete</a>

# Become a PeeringDB Sponsor!

- Diamond Sponsorship - \$25,000 / year



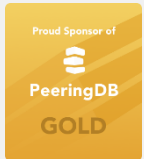
- Limited to 2 sponsors
- Very large logo on top line of Sponsors page with URL
- Diamond Sponsor badge display on all records
- Social media promotion

- Platinum Sponsorship - \$10,000 / year



- Large logo on second line of Sponsors page with URL
- Platinum Sponsor badge display on all records
- Social media promotion

- Gold Sponsorship - \$5,000 / year



- Medium logo on third line of Sponsors page
- Gold Sponsor badge display on all records
- Social media promotion

- Silver Sponsorship - \$2,500 / year



- Small logo on fourth line of Sponsors page
- Silver Sponsor badge display on all records
- Social media promotion

## Microsoft Diamond Sponsor

Organization	<a href="#">Microsoft Corporation</a>
Also Known As	8068 8069
Company Website	
Primary ASN	8075

## DE-CIX Frankfurt Platinum Sponsor

Organization	<a href="#">DE-CIX Management GmbH</a>
Long Name	Deutscher Commercial Internet Exchange
City	Frankfurt
Country	DE
Continental Region	Europe
Media Type	Ethernet



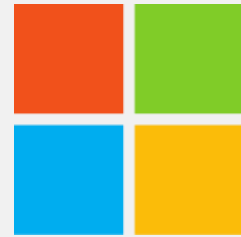
Proud Sponsor of

**PeeringDB**  Gold

Contact [sponsorship@peeringdb.com](mailto:sponsorship@peeringdb.com) for sponsorship info!

# Thank you to our sponsors!

Diamond  
Sponsor



Microsoft

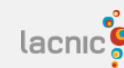
Platinum  
Sponsors



Gold  
Sponsors



Silver  
Sponsors



*DE-CIX Academy*

# PeeringDB Workshop

Learning the Ropes // Track 2

[arnold@peeringdb.com](mailto:arnold@peeringdb.com)

PeeringDB

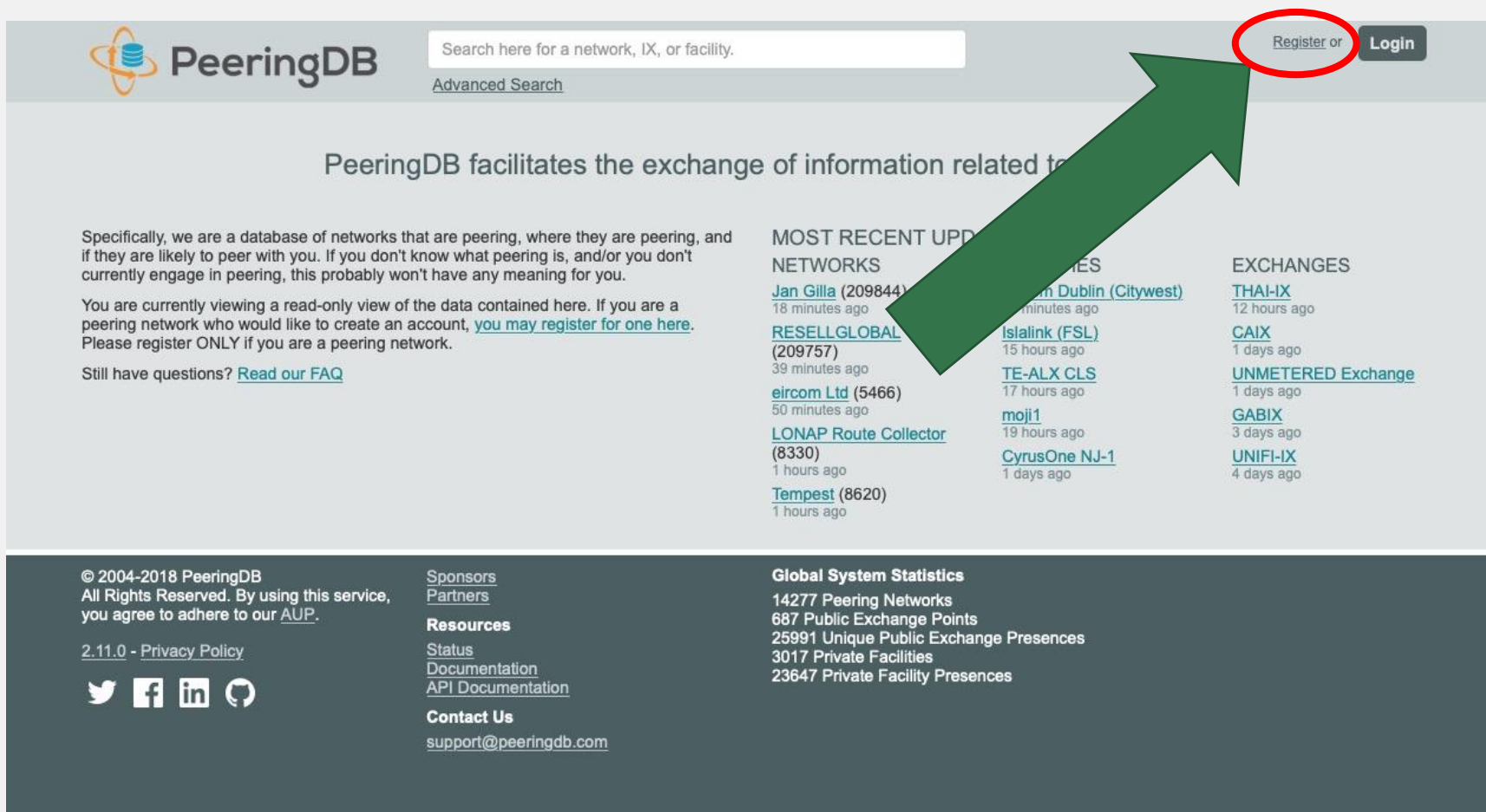


Where

# Agenda

- Please always use the tutorial DB at <https://tutorial.peeringdb.com>
- Registering
  - Yourself
  - Your organization
- Adding information
  - About your organization
  - About your network / Autonomous System
  - Adding your peering policy
- Internet Exchanges and Facilities
  - Add where your network is present
- Retrieve information
  - Present what you have learned about another network

# Registering



The screenshot shows the PeeringDB website interface. At the top left is the PeeringDB logo. To its right is a search bar with the placeholder text "Search here for a network, IX, or facility." and a link for "Advanced Search". In the top right corner, there are two buttons: "Register or" and "Login". The "Register or" button is circled in red, and a large green arrow points from the center of the page towards it. Below the navigation bar, the main content area features a heading "PeeringDB facilitates the exchange of information related to" followed by a paragraph explaining the database's purpose and a link to register. To the right, there are three columns of "MOST RECENT UPDATES" for NETWORKS, EXCHANGES, and other categories, listing various network and exchange names with their update times. The footer contains copyright information, a link to the AUP, social media icons, and global system statistics.

PeeringDB facilitates the exchange of information related to

Specifically, we are a database of networks that are peering, where they are peering, and if they are likely to peer with you. If you don't know what peering is, and/or you don't currently engage in peering, this probably won't have any meaning for you.

You are currently viewing a read-only view of the data contained here. If you are a peering network who would like to create an account, [you may register for one here](#). Please register ONLY if you are a peering network.

Still have questions? [Read our FAQ](#)

**MOST RECENT UPDATES**

**NETWORKS**

- [Jan Gilla \(209844\)](#) 18 minutes ago
- [RESELLGLOBAL \(209757\)](#) 39 minutes ago
- [eircom Ltd \(5466\)](#) 50 minutes ago
- [LONAP Route Collector \(8330\)](#) 1 hours ago
- [Tempest \(8620\)](#) 1 hours ago

**EXCHANGES**

- [THAI-IX](#) 12 hours ago
- [CAIX](#) 1 days ago
- [UNMETERED Exchange](#) 1 days ago
- [GABIX](#) 3 days ago
- [UNIFI-IX](#) 4 days ago

**Global System Statistics**

- 14277 Peering Networks
- 687 Public Exchange Points
- 25991 Unique Public Exchange Presences
- 3017 Private Facilities
- 23647 Private Facility Presences


# Registering

Create account

---

For speedy validation, it is required that you use a work e-mail address. If you plan to register your ASN with PeeringDB, it is recommended that you use an email-address that exists in your ASN's public contact details.

  
  
  
 I'm not a robot   
reCAPTCHA  
Privacy - Terms

- Choose an username
- Password must be at least 10 characters long
- Use a **real work e-mail address**
  - Ideally the one you registered the ASN with
- And put in your first and last name
- You receive a confirmation email
- Click on the link in the email

# Registering

The screenshot displays three distinct sections of the registration interface:

- Select language:** A dropdown menu is set to "English", with a "Set language preference" button below it.
- Email Confirmation:** A red warning message states, "Before getting access to any other features, you need to confirm your email address." Below this, a message says, "We have sent you a message containing the confirmation link." A "Resend Confirmation Email" button is provided.
- Change email address:** A section with a heading "Change email address" and a note: "For speedy validation, it is required that you use a work e-mail address. If you plan to register your ASN with PeeringDB, it is recommended that you use an email-address that exists in the ASN's public contact details." Below the text are input fields for "Email" and "Password".

- You can choose a language
  - If your language is not available yet and you want to help – let us know!
  - Not all languages are fully translated
- To re-send the confirmation email, click the button
- Further options here:
  - Change email address
  - Change password
- You have to click the link in the email to continue!



# Registering

Set language preference

**You have confirmed your email address!**

### Affiliate with organization

To affiliate with an existing organization, please enter the ASN or organization name below.

To register a new network organization, please enter the ASN and organization name below.

To register a new facility or exchange organization, please enter the organization name below (ASN is optional).

ASN **645XX**

Organization **Some Name**

Affiliate

In case the RiR entry cannot be retrieved for your ASN, please contact [support@peeringdb.com](mailto:support@peeringdb.com) for assistance.

Existing affiliations

- Once your email is confirmed:
- Get affiliated with an organization
  - Your company
  - Which is already in PeeringDB
- Or is new to PeeringDB
  - Can be an ISP – enter your AS number!
  - Or a Datacenter
  - Or an Internet Exchange

# Registering

**Affiliate with organization**

---

To affiliate with an existing organization, please enter the ASN or organization name below.

To register a new network organization, please enter the ASN and organization name below.

To register a new facility or exchange organization, please enter the organization name below (ASN is optional).

ASN

Organization

---

In case the RIR entry cannot be retrieved for your ASN, please contact [support@peeringdb.com](mailto:support@peeringdb.com) for assistance.

**Existing affiliations**

---

Your affiliation with [ACME Alternative Hosting](#) has been approved.

- Once approved, you can edit your organization
- Click on your organization to continue...

# Your Organization

- Enter information about your organization – click on edit

## ACME Alternative Hosting

Some of the data on this page is incomplete, please update the fields marked with **i** to improve data quality.

Website <b>i</b>	
Address 1 <b>i</b>	
Address 2	
Location <b>i</b>	
Country Code <b>i</b>	
Notes	

### Facilities

Filter

Name ▼	Country	City
Nothing matched your filter You may filter by Name, Country or City		

### Networks

Filter

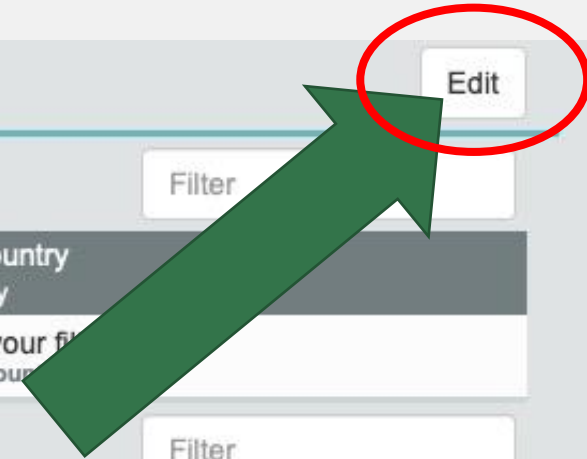
Name ▼	ASN
<a href="#">ACME Alternative Hosting</a>	64501

### Exchanges

Filter

Name ▼	Country	City
Nothing matched your filter You may filter by Name, Country or City		

Edit



# Your Organization

ACME Alternative Hosting

Website ⓘ	<input type="text" value="http://www.example.com"/>
Address 1 ⓘ	<input type="text"/>
Address 2	<input type="text"/>
Location ⓘ	<input type="text" value="City"/>
	<input type="text" value="State"/>
	<input type="text" value="Zip-Code"/>
Country Code ⓘ	<input type="text"/>
Notes Markdown enabled	<div style="border: 1px solid #ccc; height: 100px;"></div>

- Lets focus on the left side of the screen
- Enter the required information (use either your Sheet or your real company information)
- Use the notes field to promote your company as a peer (if you want to)
  - You can use Markdown (see handout for URL)

# Your Organization

ACME Alternative Hosting Inc.	
Website	<input type="text" value="http://www.acme.example"/>
Address 1	<input type="text" value="Vienna"/>
Address 2	<input type="text"/>
Location	<input type="text" value="Vienna"/>
	<input type="text" value="State"/>
	<input type="text" value="01000"/>
Country Code	<input type="text" value="Austria"/>
Notes Markdown enabled	<pre># ACME Hosting * Best hosting provider ever * Open peering policy * Peer with us!</pre>

- You can also change your company name
- Enter some information and click “Save”

# Network Information

- Now it gets interesting
- With your basic company information now in, let's add information about your network
- Click on your network name – beside your AS number on the right side

PeeringDB  asmith

[Advanced Search](#)

## ACME Alternative Hosting Inc. Edit

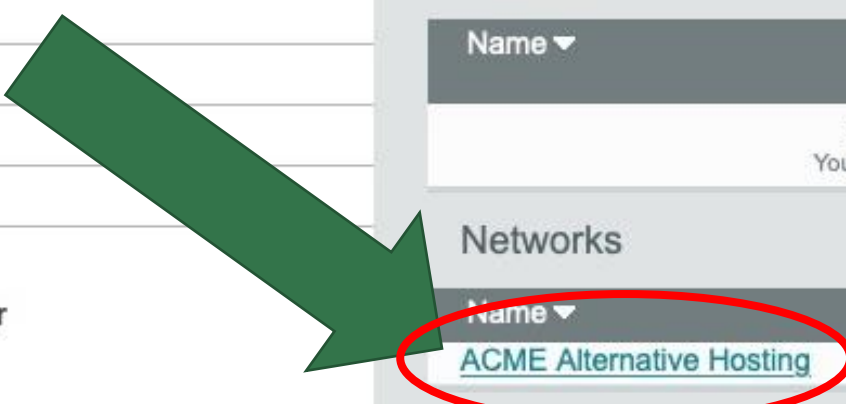
<b>Website</b>	<a href="http://www.acme.example">http://www.acme.example</a>
<b>Address 1</b>	Vienna
<b>Address 2</b>	
<b>Location</b>	Vienna 01000
<b>Country Code</b>	Austria
<b>Notes</b>	<b>ACME Hosting</b> <ul style="list-style-type: none"><li>• Best hosting provider ever</li><li>• Open peering policy</li><li>• Peer with us!</li></ul>

### Facilities

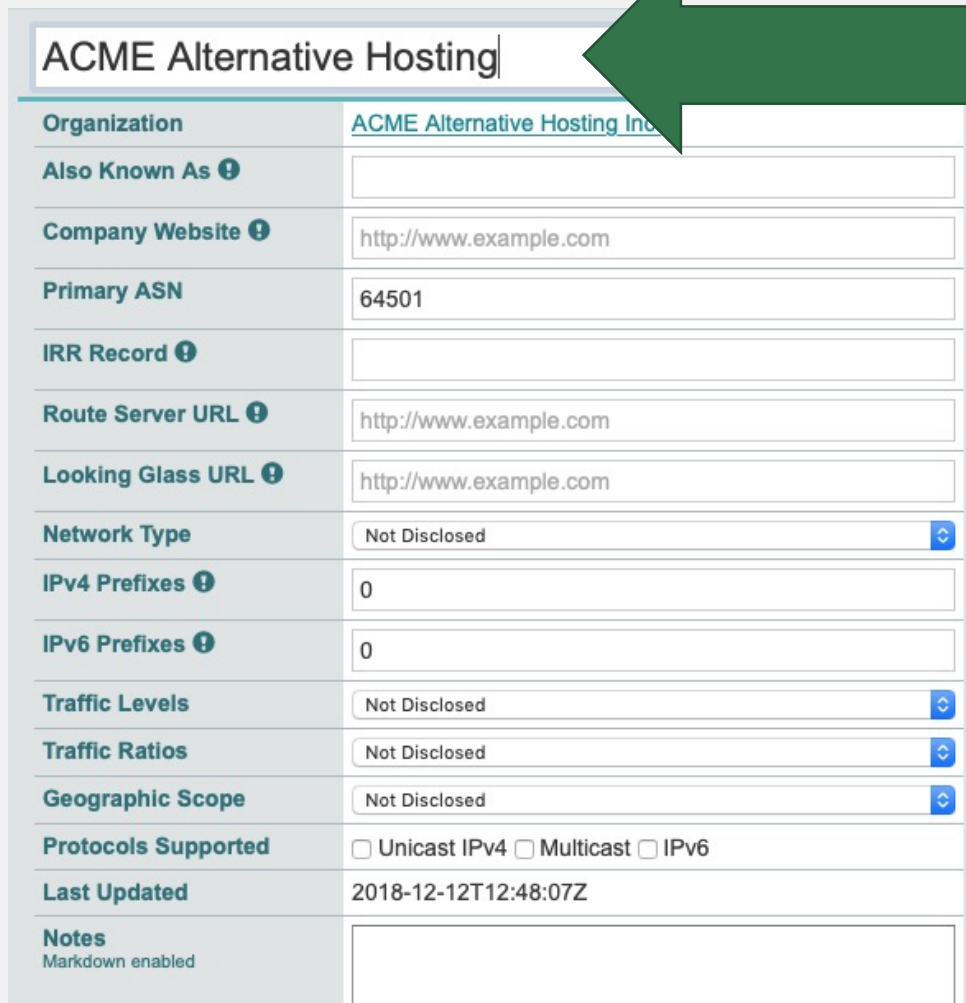
Name ▼	Country	City
Nothing matched your filter You may filter by Name, Country or City		

### Networks

Name ▼	ASN
<a href="#">ACME Alternative Hosting</a>	64501



# Network Information



ACME Alternative Hosting	
Organization	ACME Alternative Hosting Inc
Also Known As ⓘ	
Company Website ⓘ	http://www.example.com
Primary ASN	64501
IRR Record ⓘ	
Route Server URL ⓘ	http://www.example.com
Looking Glass URL ⓘ	http://www.example.com
Network Type	Not Disclosed
IPv4 Prefixes ⓘ	0
IPv6 Prefixes ⓘ	0
Traffic Levels	Not Disclosed
Traffic Ratios	Not Disclosed
Geographic Scope	Not Disclosed
Protocols Supported	<input type="checkbox"/> Unicast IPv4 <input type="checkbox"/> Multicast <input type="checkbox"/> IPv6
Last Updated	2018-12-12T12:48:07Z
Notes	Markdown enabled

- Again, click on „Edit“ (top right)
- Here is a lot of information to enter
- Most is self-explanatory
- But some is not that obvious
  - Title here is your **network name**
  - Does not have to be the same as your company name
  - Some companies run more than one network
  - Or use a different name for their networking business

# Network Information

ACME Alternative Hosting	
Organization	ACME Alternative Hosting Inc
Also Known As ⓘ	
Company Website ⓘ	http://www.example.com
Primary ASN	64501
IRR Record ⓘ	
Route Server URL ⓘ	http://www.example.com
Looking Glass URL ⓘ	http://www.example.com
Network Type	Not Disclosed
IPv4 Prefixes ⓘ	0
IPv6 Prefixes ⓘ	0
Traffic Levels	Not Disclosed
Traffic Ratios	Not Disclosed
Geographic Scope	Not Disclosed
Protocols Supported	<input type="checkbox"/> Unicast IPv4 <input type="checkbox"/> Multicast <input type="checkbox"/> IPv6
Last Updated	2018-12-12T12:48:07Z
Notes Markdown enabled	

- Use this field for an alternative name
- Or an „old“ name if you changed names
- Or leave it empty
- Company website – remember this is PeeringDB
  - Put in the URL your peers should see
- AS number – your main one
  - If you have more, you can add a 2nd entry later
  - This field will probably be removed



# Network Information

ACME Alternative Hosting	
Organization	<a href="#">ACME Alternative Hosting Inc.</a>
Also Known As ⓘ	ACME Hosting
Company Website ⓘ	<a href="http://www.acme.example">http://www.acme.example</a>
Primary ASN	64501
IRR Record ⓘ	AS64501:AS-ACME-HOSTING
Route Server URL ⓘ	<a href="http://www.example.com">http://www.example.com</a>
Looking Glass URL ⓘ	<a href="http://www.example.com">http://www.example.com</a>
Network Type	Not Disclosed
IPv4 Prefixes ⓘ	0
IPv6 Prefixes ⓘ	0
Traffic Levels	Not Disclosed
Traffic Ratios	Not Disclosed
Geographic Scope	Not Disclosed
Protocols Supported	<input type="checkbox"/> Unicast IPv4 <input type="checkbox"/> Multicast <input type="checkbox"/> IPv6
Last Updated	2018-12-12T12:48:07Z
Notes	Markdown enabled



- IRR Record
  - Your AS-Macro (also called AS-Set)
  - You have registered in *IRR* database
  - Of your RIR (Regional Internet Registry)
- Route Server URL - if you have one
- Looking Glass URL


# Network Information

ACME Alternative Hosting	
Organization	<a href="#">ACME Alternative Hosting Inc.</a>
Also Known As ⓘ	ACME Hosting
Company Website ⓘ	<a href="http://www.acme.example">http://www.acme.example</a>
Primary ASN	64501
IRR Record ⓘ	AS64501:AS-ACME-HOSTING
Route Server URL ⓘ	<a href="http://www.example.com">http://www.example.com</a>
Looking Glass URL ⓘ	<a href="http://www.example.com">http://www.example.com</a>
Network Type	Content <span>⌵</span>
IPv4 Prefixes ⓘ	3
IPv6 Prefixes ⓘ	3
Traffic Levels	100-1000Mbps <span>⌵</span>
Traffic Ratios	Mostly Outbound <span>⌵</span>
Geographic Scope	Regional <span>⌵</span>
Protocols Supported	<input checked="" type="checkbox"/> Unicast IPv4 <input type="checkbox"/> Multicast <input checked="" type="checkbox"/> IPv6
Last Updated	2018-12-12T12:48:07Z
Notes Markdown enabled	

- Fill in the rest
  - Either according to your sheet
  - Or choose your real network
- In „Notes“ you can use Markdown
  - You can give your peers free text information
  - Like details about your peering policy
  - More about your peering policy further down below

# Peering Information


PeeringDB Configuration

Allow IXP Update 

IXP Update Tools

Peering Policy Information

Peering Policy	
General Policy	Open
Multiple Locations	Not Required
Ratio Requirement	No
Contract Requirement	Not Required



- Now we add information about Peering!
- Important: Allowing IXP Update helps maintaining DB accuracy
- So please allow if you trust your IXPs
- Currently the so-called IX-F importer is disabled

# Peering Information

PeeringDB Configuration

Allow IXP Update ?	<input type="radio"/>
IXP Update Tools	<input type="button" value="Preview"/> <input type="button" value="Postmortem"/>

Tools for the IXP Update

Peering Policy Information

Peering Policy	
General Policy	Open
Multiple Locations	Not Required
Ratio Requirement	No
Contract Requirement	Not Required

- **Preview** lets you see what will happen with the next import
- **Postmortem** shows what happened at the last import
- Use the dropdowns to publish your peering policy
- In case of selective/restrictive you may use the notes field above

# Contact Information

Contact Information

Role ▾	Name	Phone
	Visibility	E-Mail
<input checked="" type="checkbox"/> Abuse	Abuse Desk	
	Public ▾	abuse@acme.example
<b>Role</b>	NOC ▾	
<b>Name</b>	Network Operations	
<b>Email</b>	noc@acme.example	
<b>Phone</b>	+43 1 2341668	
<b>Visibility</b>	Users ▾	

Add Contact

- **Very important!**
- To inform peers how to contact you
  - In a number of roles
- You can add as many as you need
  - „Add Contact“ to store and next
  - Public, for logged in users, or private
- You do not have to fill out all fields
- But please:  
**keep contact info up to date**
- Do not forget to „save“ when complete

# Review what you have entered

- You now have entered:
  - Information about your organization, like:
    - Address
    - Website
    - Free form text
  - Network information
    - Your AS number
    - Number of prefixes you announce,
    - Traffic info
  - Peering information, like peering policy
  - Contacts for your peers
- Please check if everything is correct

# Add peering at an IXP

Public Peering Exchange Points

Exchange ▼ ASN	IPv4 IPv6	Speed RS Peer
Nothing matched your filter You may filter by Exchange, ASN or Speed		
Exchange	<input type="text" value="VIX AT Vienna Internet Exchange"/>	
Local ASN	<input type="text" value="64501"/>	
IPv4	<input type="text" value="192.203.0.222"/>	
IPv6	<input type="text" value="2001:7f8:30:0:1:1:6:fbf5"/>	
Speed (mbit/sec)	<input type="text" value="1000"/>	
RS Peer	<input checked="" type="checkbox"/>	

- Click on „Edit“ at the top right again
- Enter an IXP name in Exchange
  - And select the IXP you are connected to from the list
- Enter speed, IPv4 and IPv6
- Select “RS Peer” if you are peering with the route server
- **Click on „Add Exchange Point“!**
- And then click on „save“.

# Presence at a datacenter

Private Peering Facilities

Filter

Facility	ASN	Country	City
ITandTEL TechCenter Linz	64501	AT	Linz

Facility

Klagenfurt

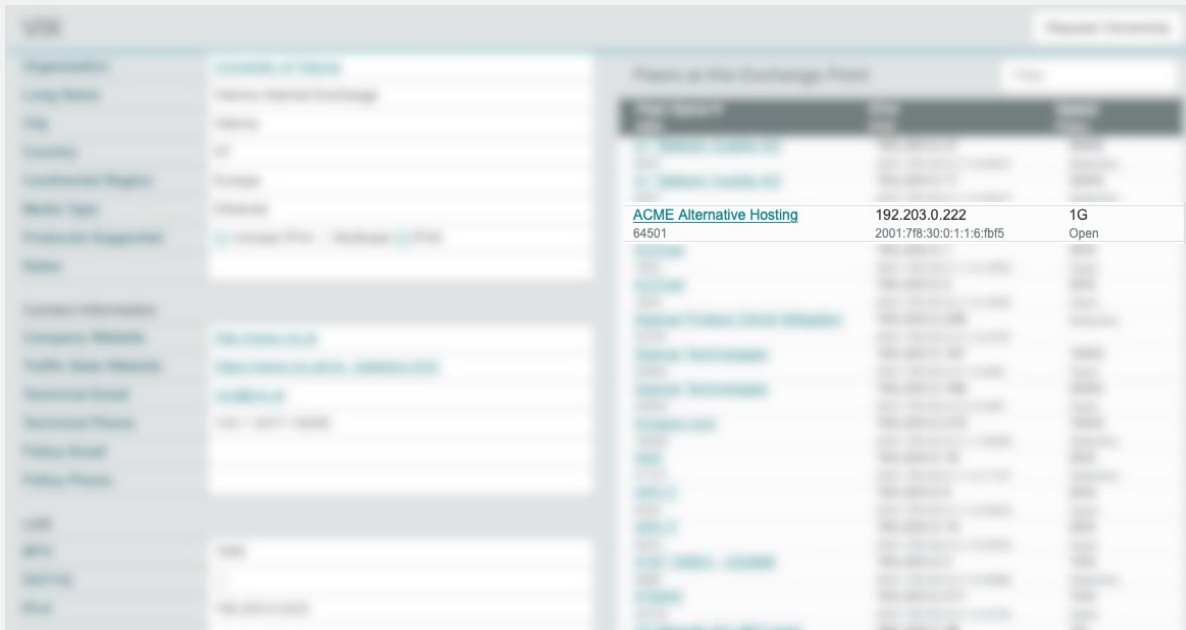
- Kelag Klagenfurt  
Arnulfplatz 2
- Klagenfurt Stadtwerke  
Gabelsbergerstrasse 50a

- Now again click on „edit“
- Scroll down and enter a city or datacenter name in „Facility“
- Select the facility you are in from the list and....
- ...click on „Add Facility“
- When you have added all facilities click on „Save“



# Check what you have entered

- Click on the name of the IXP you entered
- Find your entry in the list
- Do the same for the facilities you are in

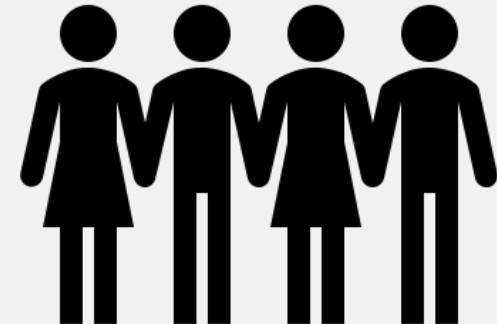


The screenshot shows a web interface with a table of Internet Exchange Points (IXPs). The table has columns for IXP Name, IP Address, and Capacity. The entry 'ACME Alternative Hosting' is highlighted in blue.

IXP Name	IP Address	Capacity
ACME Alternative Hosting	192.203.0.222	1G
64501	2001:7f8:30:0:1:1:6:1bf5	Open

# Now lets see if others find you...

- Write your AS number on a sheet of paper
- All stand up and form a circle
- Give the person opposite to you your AS number
- and receive their AS number
- Use PeeringDB to learn about
  - Their organization
  - Their network



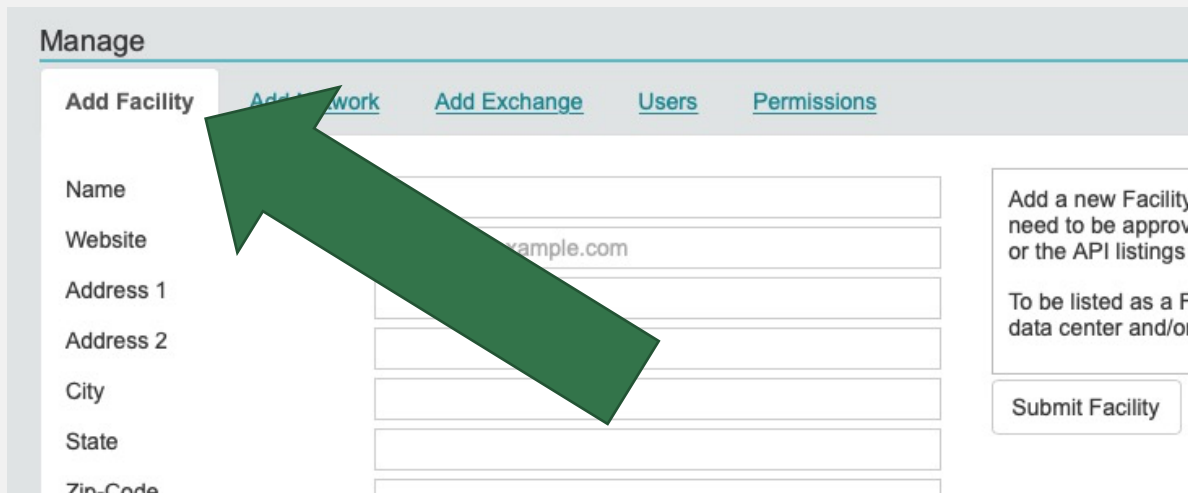
# What to find out

- You should answer the following questions:
  - What is the main business of their organization / network
  - What is their peering policy
  - What is the size of the networks in terms of
    - Traffic
    - Prefixes
  - Where are they present
    - IXPs
    - Facilities
  - Would you peer with them?
    - According to your own peering policy
    - Why? / Why not?

# Present what you have learned

- Present to the group what you have learned
- About the organization and network you have received
- The person who has entered the information checks
  - If everything is correct
  - If anything important is missing

# Add your facility



The screenshot shows the 'Manage' section of the PeeringDB interface. It features a navigation bar with links for 'Add Facility', 'Add Network', 'Add Exchange', 'Users', and 'Permissions'. Below this is a form with fields for Name, Website (with 'example.com' as a placeholder), Address 1, Address 2, City, State, and Zip-Code. To the right of the form, there is a note: 'Add a new Facility need to be approve or the API listings' and 'To be listed as a F: data center and/or'. A 'Submit Facility' button is located at the bottom right of the form. A large green arrow points from the bottom left towards the 'Add Facility' button.

- If you run your own datacenter
- Why not add it to PeeringDB?
- Go to your organization page
- Scroll down to „Manage“
- Choose „Add Facility“

# Add your facility

## Manage

### Add Facility

[Add Network](#)[Add Exchange](#)[Users](#)[Permissions](#)

Name	<input type="text" value="ACME Alternative Datacenter"/>
Website	<input type="text" value="http://www.acme.example"/>
Address 1	<input type="text" value="Old Road 301"/>
Address 2	<input type="text"/>
City	<input type="text" value="Vienna"/>
State	<input type="text"/>
Zip-Code	<input type="text" value="A-1001"/>
Country	<input type="text" value="Austria"/>
CLLI Code	<input type="text"/>
NPA-NXX	<input type="text"/>

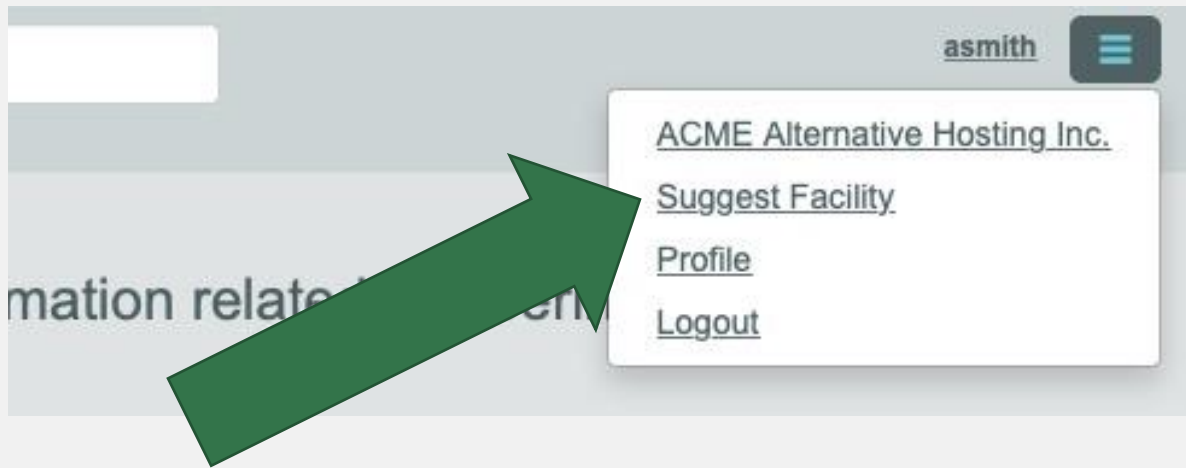
Add a new Facility to your Organization. Note that the newly created Facility will need to be approved by PeeringDB staff before it will appear in the search results or the API listings

To be listed as a Facility in PeeringDB we would expect that you offer colocation, data center and/or meet-me-room services to the public.

- Fill in applicable fields
- CLLI and NPA-NXX: deprecated
- Click „Submit Facility“
- Entry will be reviewed
- And added or declined

# Suggesting a facility

- For facilities not your own
- **But you are in or know about**
- Choose „Suggest Facility“
- Needs to be reviewed by PeeringDB staff



# Suggesting a facility

Name	<input type="text" value="ACME Alternative Datacenter"/>
Website	<input type="text" value="http://www.acme.example"/>
Address 1	<input type="text" value="Old Road 301"/>
Address 2	<input type="text"/>
City	<input type="text" value="Vienna"/>
State	<input type="text"/>
Zip-Code	<input type="text" value="A-1001"/>
Country	<input type="text" value="Austria"/>
CLLI Code	<input type="text"/>
NPA-NXX	<input type="text"/>

Suggest Facility to be added to the database. Your suggestion will be reviewed by the PeeringDB Administration Committee. It will then either be finalized and entered into the database, or declined. No further action is required on your part.

In order to be approved we would expect that the suggested Facility offers colocation, data center and/or meet-me-room services to the public.

- Fill in applicable fields
- CLLI and NPA-NXX: deprecated
- Click „Suggest Facility“
- Entry will be reviewed
- And added or declined



# Adding users

- You do not have to be the only person working with PeeringDB
- Other users from your organization may also register!
- Users can be „admin“ or „member“
  - The first user automatically will be an „admin“
- Administrators are allowed to edit all fields (of your organization)
- Members rights can be as restrictive or as open as you need them to be
- Let's try it out
- Request affiliation with the organization you just presented

# Affiliate with an organization

The screenshot shows the PeeringDB user interface. At the top right, the user's name 'asmith' is displayed next to a menu icon. A search bar is located at the top left. Below the search bar, there is a 'Select language' section with a dropdown menu set to 'English' and a 'Set language preference' button. A confirmation message states 'You have confirmed your email address!'. The main section is titled 'Affiliate with organization' and contains instructions for entering an ASN or organization name. Below the instructions are two input fields: 'ASN' and 'Organization'. A green star-shaped callout with the number '1' points to the user's profile information at the top right. Another green star-shaped callout with the number '2' points to the 'ASN' input field. A third green star-shaped callout with the number '3' points to the 'Organization' input field. A fourth green star-shaped callout with the number '4' points to the 'Affiliate' button at the bottom of the form.

- Go to your profile page (1)
- Request affiliation
  - Either use the AS number (2)
  - Or name and select (3)
  - Click on „Affiliate“ (4)
- Admin of organization gets an email if there is one. Otherwise PeeringDB support
- Checks, and either approves or denies

# Approve affiliation requests

- Go to your organization page
- Scroll down to the „manage“ section
- Click on the „Users“ tab
- Either approve or deny new users

Manage

[Add Facility](#) [Add Network](#) [Add Exchange](#) **Users** [Permissions](#)

Users requesting affiliation

Name	Email	Date	
Wolfgang Tremmel wtremmel	wolfgang.tremmel@de-cix.net Yes	2018, Dec. 14	<input type="button" value="Approve"/> <input type="button" value="Deny"/>

Users in Organization

Name	Email	Group	
Adam Smith asmith	asmith@garf.de	admin	<input type="button" value="Remove"/>

# User administration

Manage

Add Facility Add Network Add Exchange **Users** Permissions

**Users requesting affiliation**

Name	Email	Date
User	Confirmed	

Currently no users requesting affiliation with ACME Alternative Hosting Inc.

**Users in Organization**

Name	Email	Group
User		
Adam Smith asmith	asmith@garf.de	admin
Wolfgang Tremmel wtremmel	wolfgang.tremmel@de-cix.net	member

Remove Remove Save

Manage

Add Facility Add Network Add Exchange **Users** **Permissions**

Here you can grant permissions to regular members of your organization. Administrative users are not listed here as they have access to everything by default. Additionally, entities that are pending review cannot be permissioned out to users, and will not appear in the entity list.

Wolfgang Tremmel <wolfgang.tremmel@de-cix.net> wtremmel	Create	Update	Delete
Any Exchange	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Add Save

- Users can be admins or members
- Use the dropdown to change
- For members – you can add permissions
- Use the permissions tab to grant create, update and/or delete to selected of any entities
- Do not forget to „save“ your changes

# Removing Users

- Be sure you are logged in as an admin
- Go to your organization page
- Scroll down to the „manage“ section
- Click on the „Users“ tab
- Click on „Remove“ on the right side
- And do not forget to „save“
- The user is only deleted from your organization
- If you want to remove a user completely, email PeeringDB support

Manage

[Add Facility](#) [Add Network](#) [Add Exchange](#) **Users** [Permissions](#)

Users requesting affiliation

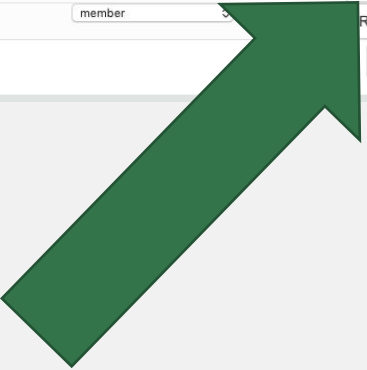
Name	Email	Date
User	Confirmed	

Currently no users requesting affiliation with ACME Alternative Hosting Inc.


Users in Organization

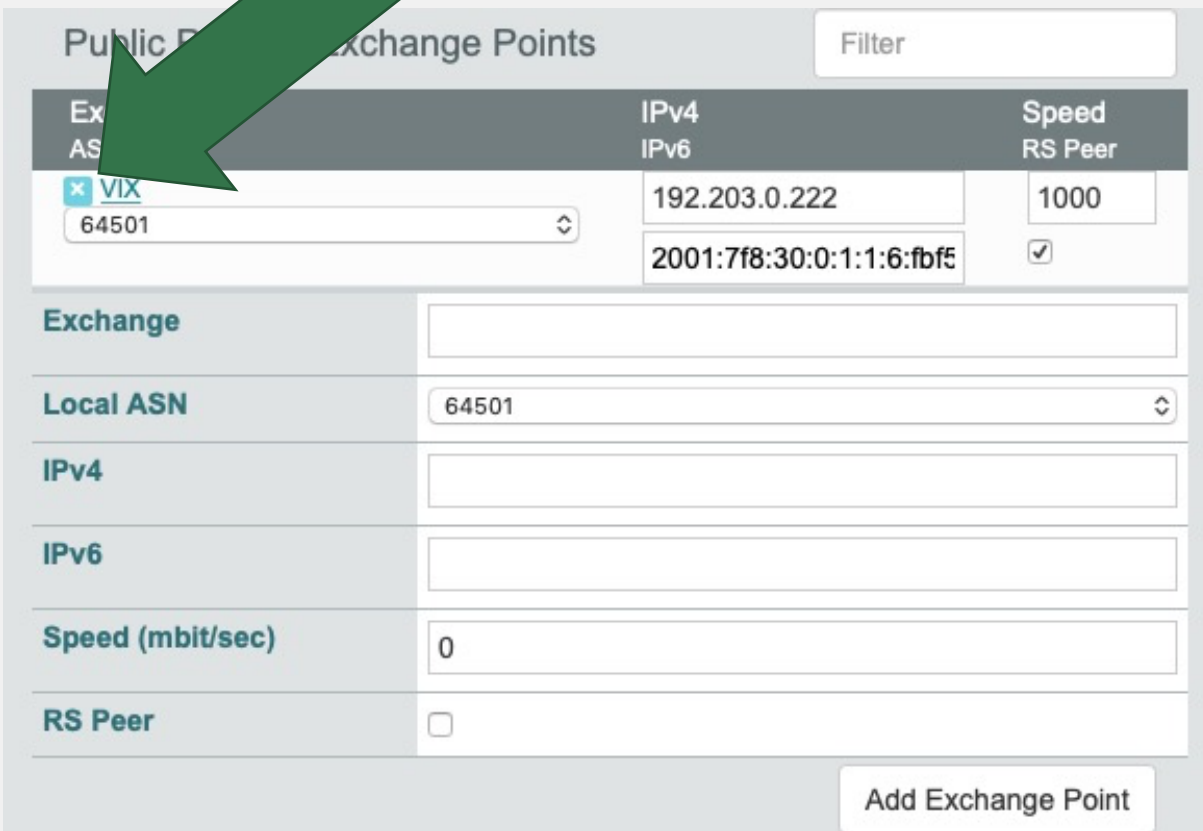
Name	Email	Group	
User			
Adam Smith asmith	asmith@garf.de	admin	Remove
Wolfgang Tremmel wtremmel	wolfgang.tremmel@de-cix.net	member	Remove

Save



# More removing...

- If you leave an internet exchange:
  - please remove your peering IP addresses
- Go to your network page
- Click on „Edit“ (top right)
- Click on the  beside the entry of the exchange
- Confirm and do not forget to „Save“



Exchange	Local ASN	IPv4	IPv6	Speed (mbit/sec)	RS Peer
VIX 64501	64501	192.203.0.222	2001:7f8:30:0:1:1:6:fbf5	1000	<input checked="" type="checkbox"/>

Filter

Add Exchange Point

# More removing...

- Facilities, Contacts, all the same
- Click on „Edit“
- Click on the remove symbol at the entry
- Click on “Save“

Contact Information

Role ▼	Name	Visibility
<input checked="" type="checkbox"/> Abuse	Abuse Desk	Public

Role

Private Peering Facilities

Facility ▼  
ASN

<input checked="" type="checkbox"/> ITandTEL TechCenter Linz	64501
<input checked="" type="checkbox"/> Klagenfurt Stadtwerke	64501

Facility

# Removing – more information

- Objects are only *marked deleted*, but stay in the DB
- *You cannot simply re-add them*
- Please contact [support@peeringdb.com](mailto:support@peeringdb.com) if you need help



Facilities			Filter
Name ▼	Country	City	
<input checked="" type="checkbox"/> <a href="#">ACME Alternative Datacenter</a>	Austria	Vienna	

Networks		Filter
Name ▼	ASN	
<input checked="" type="checkbox"/> <a href="#">ACME Alternative Hosting</a>	64501	





**PeeringDB**

# The PeeringDB API

Workshop // Track 3

**APRICOT 2020**

[arnold@peeringdb.com](mailto:arnold@peeringdb.com)

**APNIC 49**

**25**  
YEARS

**MELBOURNE  
AUSTRALIA**

12 – 21 February 2020

# Agenda

- Please always use the tutorial DB at <https://tutorial.peeringdb.com>
- Introduction
- jq
- JSON
- HTML Operations
- Record Types
  - Basic Records
  - Derived Records

# Introduction

- Why API (Application Programming Interface)?
  - The GUI is nice for human beings
  - Automation needs structured data
- Makes it easy to integrate PeeringDB in your environment

- Light-weight and flexible command-line processor
- awk, sed and grep equivalent to JSON data
- A jq program is a filter
  - Needs an input and produces an output
  - Maybe piped
  - Looks weird sometimes, like „add/length“ produces average of an array
  - Simplest filter is „.“ which is the Identity
    - Maybe used to pretty print JSON output
- See <https://stedolan.github.io/jq/manual> for an introduction
- EX: `curl -sG https://peeringdb.com/api/org --data-urlencode fields=id | jq -c '[.data[] | .id] | length'`

# JSON

- Open standard file format
- Short for JavaScript Object Notation
- Filenames use the extension .json
- Language independent data format
- Basic data types
  - Number
  - String
  - Boolean
  - Array
  - Object
  - null

```
{  
  "firstName": "John",  
  "lastName": "Smith",  
  "isAlive": true,  
  "age": 27,  
  "address": {  
    "streetAddress": "21 2nd Street",  
    "city": "New York",  
    "state": "NY",  
    "postalCode": "10021-3100"  
  },  
  "phoneNumbers": [  
    {  
      "type": "home",  
      "number": "212 555-1234"  
    },  
    {  
      "type": "office",  
      "number": "646 555-4567"  
    },  
    {  
      "type": "mobile",  
      "number": "123 456-7890"  
    }  
  ],  
  "children": [],  
  "spouse": null  
}
```

# Basics

- In general <https://peeringdb.com/api/OBJ>
  - OBJ is case insensitive
  - So called endpoint: /api/OBJ
- Output always fits in one object
  - Meta is optional
  - Data always an array

```
{  
  meta:  
    {  
      status:  
      message:  
    }  
  data:  
    [  
      {},  
      {}  
    ]  
}
```

# Authentication

- Authentication via basic HTTP authorization
- Guest access does not need any authentication
- Examples
  - `curl -sG https://username:password@peeringdb.com/api/poc`
  - `curl -u username:password https://peeringdb.com/api/poc`
  - Put credentials in `~/.netrc`
    - `machine peeringdb.com login username password password`
- Recap: only access to contact information may be restricted
  - Endpoint `/api/poc`
  - You need to be authenticated for view „user“

# Operations

- All HTML operations are supported
  - GET
    - Requests a representation of the specified resource
  - POST
    - Used to submit an entity to the specified resource
  - PUT
    - Replaces all current representations of the target resource with the request payload
  - DELETE
    - Deletes the specified resource



# GET

- GET
  - Multiple objects
    - Endpoint /api/OBJ
  - Single object
    - Endpoint /api/OBJ/id

# Optional URL parameters for GET

- limit
  - Integer value
  - Limits to n rows in the result set
- skip
  - Integer value
  - Skips n rows in the result set
- depth
  - Integer value
  - Nested sets will be loaded
  - See Nesting slide

# Optional URL parameters for GET

- **fields**
  - String value
  - comma separated list of field names
  - only matching fields will be returned in the data
- **since**
  - Integer value
  - Retrieve all objects updated since specified time
  - Unix timestamp in seconds
- ***fieldname***
  - Integer or string value
  - Queries for fields with matching value

# Nested Data / Depth

- Of type OBJ\_set
- Example: *net\_set* will hold network objects
- Depth (for endpoint /api/OBJ)
  - 0: don't expand anything (default)
  - 1: expand all first level sets to ids
  - 2: expand all first level sets to objects
- Depth (for endpoint /api/OBJ/id)
  - 0: don't expand anything
  - 1-4: expand all sets and related objects according to level of depth specified
  - 2 is default

# Nested Data / Depth

<https://peeringdb.com/net/947?pretty> 

<https://peeringdb.com/net/947?pretty&depth=0> 

```
{
  "meta": {},
  "data": [
    {
      "id": 947,
      "org_id": 1187,
      "org": {
        "id": 1187,
        "name": "DE-CIX Management GmbH",
        "website": "https://de-cix.net",
        "notes": "",
        "net_set": [
          947,
          5547,
          6978,
          6979,
          8383,
          8703,
          8919,
          8920,
          9840,
          9841,
          10018,
          13190,
          13251,
          19331,
          20739
        ],
        "fac_set": [],
        "ix_set": [
          31,
          74,
          248,
          804,
          1131,
          1149,
          1150,
          1214,
          1249,
          1277,
          2531
        ],
        "address1": "Lindleystr. 12",
```

```
{
  "meta": {},
  "data": [
    {
      "id": 947,
      "org_id": 1187,
      "name": "DE-CIX Frankfurt Route Servers",
      "aka": "DE-CIX",
      "website": "https://fra.de-cix.net",
      "asn": 6695,
      "looking_glass": "https://lg.de-cix.net",
      "route_server": "https://www.de-cix.net/en/locations/germany/frankfurt/routeserver-gu",
      "irr_as_set": "AS-DECIX",
      "info_type": "Route Server",
      "info_prefixes4": 240000,
      "info_prefixes6": 50000,
      "info_traffic": "1 Tbps+",
      "info_ratio": "Balanced".
```

# Query modifiers

- numeric fields
  - `__lt`: less than
  - `__lte`: less than equal
  - `__gt`: greater than
  - `__gte`: greater than equal
  - `__in`: value inside set of values (comma separated)
- string fields
  - `__contains`: field value contains this value
  - `__startswith`: field value starts with this value
  - `__in`: value inside set of values (comma separated)

# POST

- Used to create an object
- Endpoint /api/OBJ
- Required parameters
  - Depending on OBJ
  - For *org* you need the *name*
  - For *fac*, *ix*, *net* you need the *org\_id*
  - for *fac* you need the *name*
  - For *ix* you need the *name* and *prefix*
  - For *net* you need the *asn*
- Example
  - `curl -sn -X POST -H "Content-Type: application/json" -d @22106.json \`  
`https://tutorial.peeringdb.com/api/org`

```
{  
  "name": "Org-22106"  
}
```

File 22106.json

# PUT

- Used to edit object
- Endpoint /api/OBJ/id
- Updates data in OBJ/id
- You have to send all the data, not just the change
- Example
  - `curl -sn -X PUT -H "Content-Type: application/json" -d @22106.json \ https://tutorial.peeringdb.com/api/org/22114`
- Operation of PUT is idempotent

```
{  
    "name": "Org-22106",  
    "address1": "23 Mulholland Drive",  
    "city": "Los Angeles",  
    "country": "US"  
}
```

File 22106.json



# DELETE

- Used to delete objects
- Endpoint /api/OBJ/id
- Example
  - `curl -sn -X DELETE -H "Content-Type: application/json" \ https://tutorial.peeringdb.com/api/org/22114`

# Object Types

- Basic Objects
  - org, fac, ix, net, poc, as\_set
- Derived Objects
  - ixlan, ixpfx, netixlan, netfac

# Basic Objects

- org
  - Root object for fac, ix, net
  - Holds information about organisation
- fac
  - Describes a facility / colocation record
  - More useful information are in derived records netfac
- ix
  - Describes an Internet Exchange
  - More useful information are in derived records ixlan, ixpfx and netixlan
- net
  - Describes a network / ASN
  - More useful information are in netfac and netixlan
- poc
  - Describes various role accounts (point of contact)
  - Currently only for net objects
- as\_set
  - Array of all AS-SETs corresponding to a network / ASN
  - Only introduced recently

# Derived Objects

- ixlan
  - Describes the LAN of an IX
  - One IX may have multiple ixlan
  - May go away with PeeringDB 3.0
- ixpfx
  - Describes the IP range (IPv4 and IPv6) for an ixlan
  - One ixlan may have multiple ixpfx, both for IPv4 and IPv6
- netixlan
  - Describes the presence of a network at an IX
- netfac
  - Describes the presence of a network at a facility

# GUI to API // org

- <https://peeringdb.com/org/1187>
- Add pretty and depth for human friendly output
- <https://peeringdb.com/api/org/1187>
- [https://peeringdb.com/api/fac?org\\_id=1187](https://peeringdb.com/api/fac?org_id=1187)
- [https://peeringdb.com/api/net?org\\_id=1187](https://peeringdb.com/api/net?org_id=1187)
- [https://peeringdb.com/api/ix/org\\_id=1187](https://peeringdb.com/api/ix/org_id=1187)

DE-CIX Management GmbH <span>Platinum Sponsor</span>	
Website	<a href="https://de-cix.net">https://de-cix.net</a>
Address 1	Lindleystr. 12
Address 2	
Location	Frankfurt am Main, Hessa, 60314
Country Code	DE
Notes	

org

Facilities

Name	Country	City
fac		
No filter matches. You may filter by <b>Name</b> , <b>Country</b> or <b>City</b> .		

Networks

Name	ASN
<a href="#">DE-CIX Academy Educational Network</a>	196610
<a href="#">DE-CIX Dallas Route Servers</a>	62499
<a href="#">DE-CIX Dusseldorf Route Servers</a>	56890
<a href="#">DE-CIX Frankfurt Route Servers</a>	6695
<a href="#">DE-CIX Hamburg Route Servers</a>	43252
<a href="#">DE-CIX Istanbul Route Servers</a>	20715
<a href="#">DE-CIX Lisbon Route Servers</a>	43729
<a href="#">DE-CIX Madrid Route Servers</a>	48793
<a href="#">DE-CIX Management GmbH</a>	51531
<a href="#">DE-CIX Marseille Route Servers</a>	20717
<a href="#">DE-CIX Munich Route Servers</a>	47228
<a href="#">DE-CIX New York Route Servers</a>	63034
<a href="#">DE-CIX Palermo Route Servers</a>	25083
<a href="#">DE-CIX R&amp;D Measurement</a>	205530
<a href="#">DE-CIX VoIP</a>	57769

net

Exchanges

Name	Country	City
<a href="#">DE-CIX Dallas</a>	United States of America	Dallas
<a href="#">DE-CIX Dusseldorf</a>	Germany	Dusseldorf
<a href="#">DE-CIX Frankfurt</a>	Germany	Frankfurt

ix

# GUI to API // fac

- <https://peeringdb.com/fac/752>
- Add pretty and depth for human friendly output
- <https://peeringdb.com/api/fac/752>
- [https://peeringdb.com/api/ixfac?fac\\_id=752](https://peeringdb.com/api/ixfac?fac_id=752)
- [https://peeringdb.com/api/netfac?fac\\_id=752](https://peeringdb.com/api/netfac?fac_id=752)

## euNetworks Colocation Hamburg

[Edit](#)

Organization	<a href="#">euNetworks Group</a> <b>fac</b>
Website	<a href="http://www.euNetworks.com">http://www.euNetworks.com</a>
Address 1	Wendenstraße 408
Address 2	
Location	Hamburg, , 20537
Country Code	DE
Geocode	<i>Updated geocode data for this entity will be obtained shortly</i>
CLLI Code	
NPA-NXX	
Notes	

Peer Name ▼	ASN
<a href="#">euNetworks Group</a>	13237
<a href="#">LWL.com GmbH</a>	50629
<a href="#">OMCnet Internet Service GmbH</a>	15388
<a href="#">Vodafone Global Network</a>	1273
<a href="#">Vodafone Kabel Deutschland GmbH</a>	31334

Exchange ▼	Long Name	Networks
<a href="#">DE-CIX Hamburg</a>	Deutscher Commercial Internet Exchange Hamburg	104
<a href="#">ECIX-HAM</a>	European Commercial Internet Exchange Hamburg	60


**netfac****ixfac**



# GUI to API // net

- <https://peeringdb.com/net/13251>
- Add pretty and depth for human friendly output
- <https://peeringdb.com/api/net/13251>
- [https://peeringdb.com/api/poc?net\\_id=13251](https://peeringdb.com/api/poc?net_id=13251)
- [https://peeringdb.com/api/netixlan?net\\_id=31](https://peeringdb.com/api/netixlan?net_id=31)
- OR <https://peeringdb.com/api/netixlan?asn=196610>
- [https://peeringdb.com/api/netfac?net\\_id=13251](https://peeringdb.com/api/netfac?net_id=13251)
- OR [https://peeringdb.com/api/netfac?local\\_asn=196610](https://peeringdb.com/api/netfac?local_asn=196610)

### DE-CIX Academy Educational Network Platinum Sponsor

**net**


Some of the data on this page is incomplete, please update the fields marked with  to improve data quality.

Organization	DE-CIX Management GmbH
Also Known As	DE-CIX
Company Website	<a href="http://www.de-cix.net/academy">http://www.de-cix.net/academy</a>
Primary ASN	196610
IRR as-set/route-set	AS196610:AS-DECIX-ACADEMY
Route Server URL 	
Looking Glass URL 	
Network Type	Educational/Research
IPv4 Prefixes	1
IPv6 Prefixes	5
Traffic Levels	0-20 Mbps
Traffic Ratios	Balanced
Geographic Scope	Regional
Protocols Supported	<input checked="" type="checkbox"/> Unicast IPv4 <input type="checkbox"/> Multicast <input type="checkbox"/> IPv6
Last Updated	2019-02-15T12:19:05Z
Notes	<ul style="list-style-type: none"><li>• We only peer with the route servers</li><li>• Any peering request you send will be used for educational purposes</li></ul>

PeeringDB Configuration

Allow IXP Update	<input checked="" type="checkbox"/>
------------------	-------------------------------------

Peering Policy Information







Peering Policy 	
General Policy	Open
Multiple Locations	Not Required
Ratio Requirement	No
Contract Requirement	Not Required

Contact Information

Role	Name	Phone	E-Mail
Abuse	DE-CIX Abuse Department		abuse@de-cix.net
NOC	DE-CIX 24/7 NOC	+49 69 1730 902 11	

### netixlan

Public Peering Exchange Points

Exchange ASN	IPv4 IPv6	Speed RS Peer
DE-CIX Dusseldorf DE-CIX Dusseldorf Peering LAN 196610	185.1.58.105 2001:7f8:9e:0:3:2:0:1	100M 
DE-CIX Frankfurt DE-CIX Frankfurt Peering LAN 196610	80.81.196.61 2001:7f8::3:2:0:1	1G 
DE-CIX Hamburg DE-CIX Hamburg Peering LAN 196610	80.81.203.11 2001:7f8:3d:0:3:2:0:1	100M 
DE-CIX Munich DE-CIX Munich Peering LAN 196610	80.81.202.115 2001:7f8:44:0:3:2:0:1	100M 
DE-CIX New York DE-CIX New York Peering LAN 196610	206.82.104.220 2001:504:36:0:3:2:0:1	100M 
MSK-IX Moscow MSK-IX peering network 196610	195.208.210.43 2001:7f8:20:101::210:43	

Private Peering Facilities

Facility ASN	Country City
Interxion Frankfurt (FRA1-12) 196610	Germany Frankfurt

poc

netfac

# GUI to API // ix

- <https://peeringdb.com/ix/31>
- Add pretty and depth for human friendly output
- <https://peeringdb.com/api/ix/31>
- [https://peeringdb.com/api/ixlan?ix\\_id=31](https://peeringdb.com/api/ixlan?ix_id=31)
- [https://peeringdb.com/api/ixpfx?ixlan\\_id=31](https://peeringdb.com/api/ixpfx?ixlan_id=31)
- [https://peeringdb.com/api/ixfac?ix\\_id=31](https://peeringdb.com/api/ixfac?ix_id=31)
- [https://peeringdb.com/api/netixlan?ix\\_id=31](https://peeringdb.com/api/netixlan?ix_id=31)

## DE-CIX Frankfurt Platinum Sponsor

Organization	DE-CIX Management GmbH
Long Name	Deutscher Commercial Internet Exchange
City	Frankfurt
Country	DE
Continental Region	Europe
Media Type	Ethernet
Protocols Supported	<input checked="" type="radio"/> Unicast IPv4 <input type="radio"/> Multicast <input checked="" type="radio"/> IPv6
Notes	For peering with the DE-CIX Frankfurt route servers, please see: <a href="#">DE-CIX Frankfurt Route Servers</a>

Contact Information	<b>ix</b>
Company Website	<a href="https://fra.de-cix.net">https://fra.de-cix.net</a>
Traffic Stats Website	<a href="https://www.de-cix.net/en/locations/germany/frankfurt/statistics">https://www.de-cix.net/en/locations/germany/frankfurt/statistics</a>
Technical Email	<a href="mailto:support@de-cix.net">support@de-cix.net</a>
Technical Phone	+49 69 1730 902 11
Policy Email	<a href="mailto:sales@de-cix.net">sales@de-cix.net</a>
Policy Phone	+49 69 1730 902 12

LANs <span>Filter</span>		
Name	DOT1Q	MTU
DE-CIX Frankfurt Peering LAN	<input type="radio"/>	1500
<input type="radio"/> Enable IX-F Import		

**ixlan** Preview

IPv4	80.81.192.0/21	<b>ixpfx</b>
IPv6	2001:7f8::/64	

Local Facilities <span>Filter</span>		
Facility	Country	City
<a href="#">COLT DC Frankfurt</a>	Germany	Frankfurt
<a href="#">Digital Realty FRA (Lyoner Strasse)</a>	Germany	Frankfurt am Main
<a href="#">Digital Realty FRA (Wilhelm-Fay-</a>	Germany	Frankfurt am

## Peers at this Exchange Point Filter

Peer Name ASN	IPv4 IPv6	Speed Policy
<a href="#">Vodafone Germany</a> DE-CIX Frankfurt Peering LAN 3209	80.81.192.117 2001:7f8::c89:0:3	600G Selective
<a href="#">Vodafone Germany</a> DE-CIX Frankfurt Peering LAN 3209	80.81.193.117 2001:7f8::c89:0:4	600G Selective
<a href="#">1&amp;1 Versatel Deutschland GmbH</a> DE-CIX Frankfurt Peering LAN 8881	80.81.193.80 2001:7f8::22b1:193:80	500G Selective
<a href="#">1&amp;1 Versatel Deutschland GmbH</a> DE-CIX Frankfurt Peering LAN 8881	80.81.195.188 2001:7f8::22b1:0:1	500G Selective
<a href="#">Akamai Technologies</a> DE-CIX Frankfurt Peering LAN 20940	80.81.192.28 2001:7f8::51cc:0:28	400G Open
<a href="#">Amazon.com</a> DE-CIX Frankfurt Peering LAN 16509	80.81.194.152 2001:7f8::407d:0:1	400G Selective
<a href="#">Amazon.com</a> DE-CIX Frankfurt Peering LAN 16509	80.81.195.152 2001:7f8::407d:0:2	400G Selective
<a href="#">Cloudflare</a> DE-CIX Frankfurt Peering LAN 13335	80.81.194.180 2001:7f8::3417:0:1	400G Open
<a href="#">Facebook Inc</a> DE-CIX Frankfurt Peering LAN	80.81.194.40 2001:7f8::80a6:0:1	400G Selective

**netixlan**

**ixfac**



# Basic records in detail // ix and org

```
"data": [  
  {  
    "id": 31,  
    "org_id": 1187,  
    "name": "DE-CIX Frankfurt",  
    "name_long": "Deutscher Commercial Internet Exchange",  
    "city": "Frankfurt",  
    "country": "DE",  
    "region_continent": "Europe",  
    "media": "Ethernet",  
    "notes": "For peering with the DE-CIX Frankfurt route servers, please see:\n\n[DE  
    "proto_unicast": true,  
    "proto_multicast": false,  
    "proto_ipv6": true,  
    "website": "https://fra.de-cix.net",  
    "url_stats": "https://www.de-cix.net/en/locations/germany/frankfurt/statistics",  
    "tech_email": "support@de-cix.net",  
    "tech_phone": "+49 69 1730 902 11",  
    "policy_email": "sales@de-cix.net",  
    "policy_phone": "+49 69 1730 902 12",  
    "net_count": 805,  
    "created": "2010-07-29T00:00:00Z",  
    "updated": "2018-06-19T11:53:46Z",  
    "status": "ok"  
  }  
]
```

```
"data": [  
  {  
    "id": 1187,  
    "name": "DE-CIX Management GmbH",  
    "website": "https://de-cix.net",  
    "notes": "",  
    "address1": "Lindleystr. 12",  
    "address2": "",  
    "city": "Frankfurt am Main",  
    "country": "DE",  
    "state": "Hessia",  
    "zipcode": "60314",  
    "created": "2006-11-01T23:37:13Z",  
    "updated": "2017-07-02T00:03:27Z",  
    "status": "ok"  
  }  
]
```

# Basic records in detail // fac

```
"data": [  
  {  
    "id": 752,  
    "org_id": 8540,  
    "org_name": "euNetworks Group",  
    "name": "euNetworks Colocation Hamburg",  
    "website": "http://www.euNetworks.com",  
    "clli": "",  
    "rencode": "",  
    "npanxx": "",  
    "notes": "",  
    "net_count": 5,  
    "latitude": null,  
    "longitude": null,  
    "created": "2010-07-29T00:00:00Z",  
    "updated": "2019-09-25T22:00:34Z",  
    "status": "ok",  
    "address1": "Wendenstra\u00dfe 408",  
    "address2": "",  
    "city": "Hamburg",  
    "country": "DE",  
    "state": "",  
    "zipcode": "20537"  
  }  
]
```

# Basic records in detail // net and poc

```
"data": [  
  {  
    "id": 13251,  
    "org_id": 1187,  
    "name": "DE-CIX Academy Educational Network",  
    "aka": "DE-CIX",  
    "website": "http://www.de-cix.net/academy",  
    "asn": 196610,  
    "looking_glass": "",  
    "route_server": "",  
    "irr_as_set": "AS196610:AS-DECIX-ACADEMY",  
    "info_type": "Educational/Research",  
    "info_prefixes4": 1,  
    "info_prefixes6": 5,  
    "info_traffic": "0-20 Mbps",  
    "info_ratio": "Balanced",  
    "info_scope": "Regional",  
    "info_unicast": true,  
    "info_multicast": false,  
    "info_ipv6": true,  
    "notes": "* We only peer with the route servers\n* Any peering request you send will be used for educational purposes",  
    "policy_url": "",  
    "policy_general": "Open",  
    "policy_locations": "Not Required",  
    "policy_ratio": false,  
    "policy_contracts": "Not Required",  
    "created": "2017-04-20T19:44:59Z",  
    "updated": "2019-02-15T12:19:05Z",  
    "status": "ok"  
  }  
]
```

```
{  
  "id": 25826,  
  "net_id": 13251,  
  "role": "Policy",  
  "visible": "Users",  
  "name": "Wolfgang Tremmel",  
  "phone": "",  
  "email": "academy@de-cix.net",  
  "url": "",  
  "created": "2018-07-24T09:26:21Z",  
  "updated": "2018-07-24T09:26:21Z",  
  "status": "ok"  
},
```

# Basic records in detail // as\_set

```
{
  "meta": {},
  "data": [
    {
      "196610": "AS196610:AS-DECIX-ACADEMY",
      "262150": "AR-EPEC2-LACNIC",
      "393223": "AS-CWICA",
      "32780": "AS-HSI",
      "196621": "AS196621:AS-CUSTOMERS",
      "327698": "AS-327698",
      "32787": "AS-PROLE",
      "327700": "AFRINIC",
      "32798": "RS-USCS-ALL",
      "5467": "AS-MIPT",
      "32806": "AS27822",
      "32808": "AS-UTBB",
      "42": "AS-PCH",
      "262189": "LACNIC",
      "46": "AS-RUTGERS",
      "262195": "AS-ITXAR1",
      "393269": "AS-DAILYMOTIONUS",
      "57": "AS-NLG-PARTICIPANTS",
      "327740": "ORG-TA38-AFRINIC",
      "62": "AS-C1",
      "393280": "AS393280 in Level3",
      "72": "AS-SLB",
      "327754": "AS-RMS-Powertronics",
      "327693": "AfrinIC::AS-ECHOSP/RS-ECHOSP",
      "81": "AS-MCDEM@ARTM"
```

```
{
  "meta": {},
  "data": [
    {
      "42": "AS-PCH"
    }
  ]
}
```

<https://peeringdb.com/api/as-set/42>

<https://peeringdb.com/api/as-set>

# Derived records in detail // ixfac, ixlan and ixpfx

```
"data": [  
  {  
    "id": 41,  
    "ix_id": 26,  
    "fac_id": 63,  
    "created": "2010-07-29T00:00:00Z",  
    "updated": "2016-03-14T20:33:57Z",  
    "status": "ok"  
  }  
]
```

```
{  
  "id": 31,  
  "ix_id": 31,  
  "name": "DE-CIX Frankfurt Peering LAN",  
  "descr": "",  
  "mtu": 1500,  
  "dot1q_support": false,  
  "rs_asn": 0,  
  "arp_sponge": null,  
  "created": "2010-07-29T00:00:00Z",  
  "updated": "2018-07-08T10:22:35Z",  
  "status": "ok"  
}
```

```
{  
  "id": 312,  
  "ixlan_id": 31,  
  "protocol": "IPv6",  
  "prefix": "2001:7f8::/64",  
  "created": "2011-06-22T00:00:00Z",  
  "updated": "2016-03-14T21:57:28Z",  
  "status": "ok"  
}
```

# Derived records // netfac and netixlan

```
{  
  "id": 30451,  
  "name": "Interxion Frankfurt (FRA1-13)",  
  "city": "Frankfurt",  
  "country": "DE",  
  "net_id": 13251,  
  "fac_id": 58,  
  "local_asn": 196610,  
  "created": "2018-07-24T09:25:24Z",  
  "updated": "2018-07-24T09:25:24Z",  
  "status": "ok"  
}
```

```
{  
  "id": 163,  
  "net_id": 5,  
  "ix_id": 31,  
  "name": "DE-CIX Frankfurt: DE-CIX Frankfurt Peering LAN",  
  "ixlan_id": 31,  
  "notes": "",  
  "speed": 20000,  
  "asn": 3303,  
  "ipaddr4": "80.81.193.183",  
  "ipaddr6": "2001:7f8::ce7:0:2",  
  "is_rs_peer": true,  
  "created": "2010-07-29T00:00:00Z",  
  "updated": "2019-01-18T11:19:59Z",  
  "status": "ok"  
},
```