

arnold@peeringdb.com

### Agenda

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



**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 lxes
- 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 automasation



### **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 <a href="http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov">http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov</a>
  - More information available at <a href="http://gov.peeringdb.com/">http://gov.peeringdb.com/</a>



### Governance

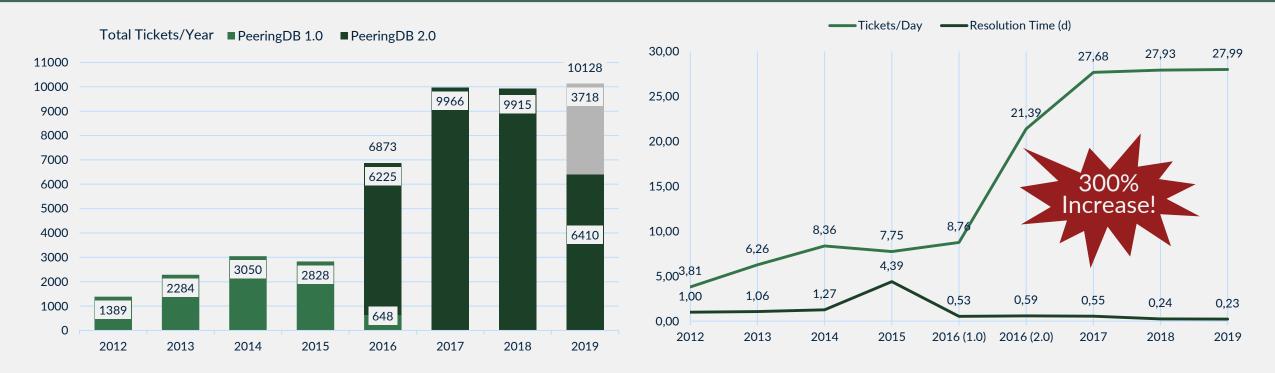
- The Members
  - Any corporation, limited liability company, partnership or other legal business entity may be a Member
  - One (virtual / online) member meeting per year
- The Board
  - Sets strategic directions and overlooks financial issues
  - Half of the board is elected every year
- The Committees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

### Committees

Admin Committee	Operations Committee	Outreach Committee	Product Committee
<ul> <li>Manage administration of user accounts and PeeringDB records</li> <li>Answer support tickets</li> <li>Cleansing and completion of PeeringDB records</li> </ul>	Manage PeeringDB     infrastructure	<ul> <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>	<ul> <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>
Leads: Stefan Funke (Chair) Contact: <u>admincom@</u> <u>lists.peeringdb.com</u>	Leads: Job Snijders (Chair) and Aaron Hughes (Vice Chair) Contact: <u>pdb-ops@</u> <u>lists.peeringdb.com</u>	Leads: Greg Hankins (Chair) and Bijal Sanghani (Vice Chair) Contact: <u>outreachcom@</u> <u>lists.peeringdb.com</u>	Leads: Stephen McManus (Chair) and Matt Griswold (Vice Chair) Product Manager: Filiz Yilmaz Contact: <u>productcom@</u> <u>lists.peeringdb.com</u>



### **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

eeringDB

### **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	Microsoft Corporation
Also Known As	8068 8069
Company Website	
Primary ASN	8075

#### DE-CIX Frankfurt Platinum Sponsor

Proud Sponsor of

Organization	DE-CIX Management GmbH	
Long Name	Deutscher Commercial Internet Exchange	
City	Frankfurt	
Country	DE	
Continental Region	Europe	
Media Type	Ethernet	

#### Contact <a href="mailto:sponsorship@peeringdb.com">sponsorship@peeringdb.com</a> for sponsorship info!

PeeringDB



Proud Sponsor of

PeeringDE

DIAMOND

PeeringD

PLATINUN

2

PeeringDE

Proud Sponsor o

PeeringDB

SILVER

🗧 Gold

### Thank you to our sponsors!





PeeringDB



#### 



### **DE-CIX Academy**

# **PeeringDB Workshop**

Learning the Ropes

arnold@peeringdb.com

PeeringDB

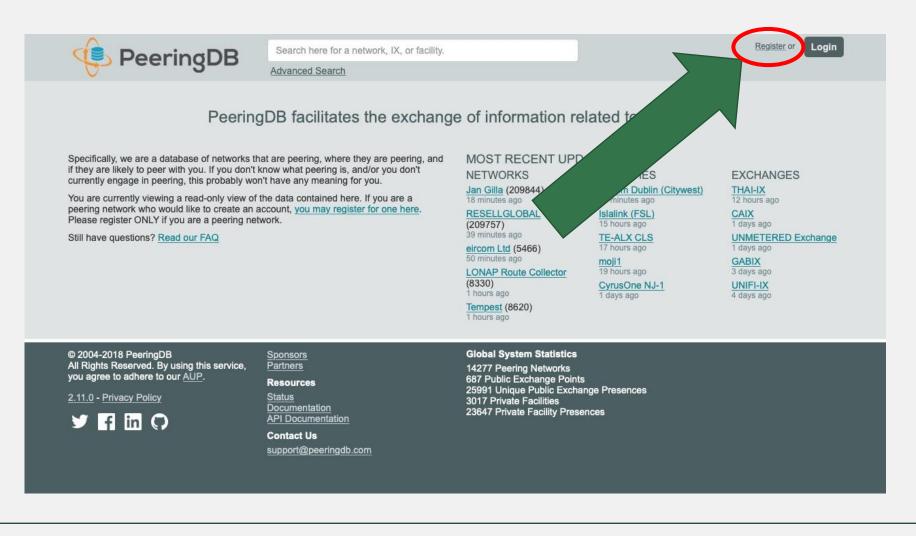
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DECIX

### Agenda

- Please always use the tutorial DB at <a href="https://tutorial.peeringdb.com">https://tutorial.peeringdb.com</a>
- 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





Create ac	count
Username	
Password	
Confirm password	
For speedy validation, it is required address. If you plan to register you recommended that you use an ema	ur ASN with PeeringDB, it is
ASN's public cont	
AŠN's public cont	
AŠN's public cont Email First name	

- Choose an username
- Password must be at least 10 characters long

- Use a **real** work **e-mail address** 
  - Ideally the one you registered teh ASN with
- And put in your first and last name
- You receive a confirmation email
- Click on the link in the email

	Select language
English	٥
	Set language preference
	Email Confirmation
	ng access to any other features, you need to confirm your email address.
We have se	nt you a message containing the confirmation link.
	Resend Confirmation Email
	Change email address
address. If	validation, it is required that you use a work e-mail you plan to register your ASN with PeeringDB, it is ed that you use an email-address that exists in the ASN's public contact details.
Email	

- 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!

Yo	u have confirmed your email address!
	Affiliate with organization
To affiliat	e with an existing organization, please enter the ASN or organization name below.
To regist	er a new network organization, please enter the ASN and organization name below.
	ster a new facility or exchange organization, please r the organization name below (ASN is optional).
ente ASN	r the organization name below (ASN is optional).

- 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



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	• Oi or
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.	• Cl
To register a new facility or exchange organization, please enter the organization name below (ASN is optional).	CO
ASN	
Organization	
Affiliate	
In case the RiR entry cannot be retrieved for your ASN, please contact <u>support@peeringdb.com</u> 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

CME Alterna	ative Hosting		Edit
Some of the data on t	this page is incomplete, please update the fields marked with <b>9</b>	Facilities	Filter
to improve data quality.		Name 🔻	Country City
ebsite		Nothing You may filter	matched your f
idress 1			
idress 2		Networks	Filter
cation 0		Name <del>-</del>	ASN
ountry Code		ACME Alternative Hosting	64501
otes		Exchanges	Filter
		Name <del>v</del>	Country City
		Nothing	matched your filter

You may filter by Name, Country or City

### **Your Organization**

#### ACME Alternative Hosting

Website	http://www.example.com
Address 1	
Address 2	
Location 9	City
	State
	Zip-Code
Country Code 9	
Notes Markdown enabled	

- 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)



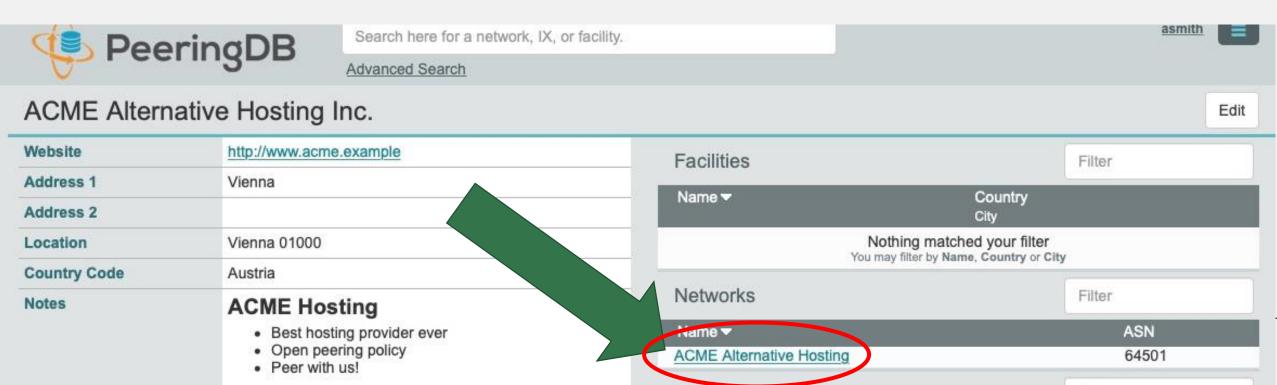
### **Your Organization**

Website	http://www.acme.example	
Address 1	Vienna	
Address 2		
Location	Vienna	
	State	
	01000	
Country Code	Austria	\$
Notes Markdown enabled	# ACME Hosting * Best hosting provider ever * Open peering policy * Peer with us!	

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



- 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



ACME Alternative Hosting		
Organization	ACME Alternative Hosting Inc.	
Also Known As		
Company Website 9	http://www.example.com	
Primary ASN	64501	
IRR Record 9		
Route Server URL 9	http://www.example.com	
Looking Glass URL	http://www.example.com	
Network Type	Not Disclosed	٥
IPv4 Prefixes <b>9</b>	0	
IPv6 Prefixes	0	
Traffic Levels	Not Disclosed	0
Traffic Ratios	Not Disclosed	٥
Geographic Scope	Not Disclosed	\$
Protocols Supported	□ Unicast IPv4 □ Multicast □ 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



ACME Alternative Hosting		
Organization	ACME Alternative Hosting Inc	
Also Known As 9		
Company Website <b>9</b>	http://www.example.com	
Primary ASN	64501	
IRR Record		
Route Server URL 9	http://www.example.com	
Looking Glass URL	http://www.example.com	
Network Type	Not Disclosed	
IPv4 Prefixes	0	
IPv6 Prefixes 9	0	
Traffic Levels	Not Disclosed	
Traffic Ratios	Not Disclosed	
Geographic Scope	Not Disclosed	
Protocols Supported	Unicast IPv4  Multicast  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



ACME Alternativ	ve Hosting
Organization	ACME Alternative Hosting Inc.
Also Known As	ACME Hosting
Company Website	http://www.acme.example
Primary ASN	64501
IRR Record	AS64501:AS-ACME-HOSTING
Route Server URL 9	http://www.example.com
Looking Glass URL	http://www.example.com
Network Type	Not Disclosed
IPv4 Prefixes	0
IPv6 Prefixes 9	0
Traffic Levels	Not Disclosed
Traffic Ratios	Not Disclosed
Geographic Scope	Not Disclosed
Protocols Supported	Unicast IPv4      Multicast      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



#### ACME Alternative Hosting

Organization	ACME Alternative Hosting Inc.
Also Known As	ACME Hosting
Company Website	http://www.acme.example
Primary ASN	64501
IRR Record	AS64501:AS-ACME-HOSTING
Route Server URL 9	http://www.example.com
Looking Glass URL	http://www.example.com
Network Type	Content
IPv4 Prefixes	3
IPv6 Prefixes	3
Traffic Levels	100-1000Mbps
Traffic Ratios	Mostly Outbound
Geographic Scope	Regional
Protocols Supported	☑ Unicast IPv4
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**



#### **Peering Policy Information**

Peering Policy <b>9</b>	http://www.example.com	
General Policy	Open	\$
Multiple Locations	Not Required	٥
Ratio Requirement	No	٥
Contract Requirement	Not Required	٥

- Now we add information about Peering!
- Important: Allowing IXP Update helps maintaining DB accuracy
  - So please allow if you trust your IXPs
- Use the dropdowns to publish your peering policy
- In case of selective/restrictive you may use the notes field above



### **Contact Information**

Role 🔻	Name Visiblity		Phone E-Mail	
X Abuse	Abuse [	Desk		
	Public		abuse@acme.example	
Role	N	oc		٥
Name	Ne	etwork Operations	3	
Email	noc@acme.example		е	
Phone	+4	3 1 2341668		
Visibility	Us	sers		\$

### 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 Ex	change Points	Filter
Exchange <del>-</del> ASN	IPv4 IPv6	Speed RS Peer
	Nothing matched your f You may filter by Exchange, ASN	
Exchange	VIX AT Vienna Internet	Exchange
Local ASN	64501	
IPv4	192.203.0.222	
IPv6	2001:7f8:30:0:1:1:6:fbf	5
Speed (mbit/sec)	1000	
RS Peer		
		Add Exchange Point

- 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

Facility <del>▼</del> ASN	Country City	
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 facilites click on "Save"

### Check what you have entered

and the second sec		
ACME Alternative Hosting	192.203.0.222	1G
64501	2001:7f8:30:0:1:1:6:fbf5	Open
		ACME Alternative Hosting 192.203.0.222 64501 2001:778:30:0:1:1:8:hbf5

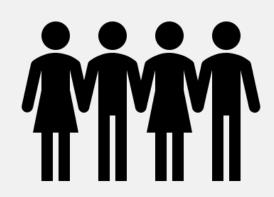
- Click on the name of the IXP you entered
- Find your entry in the list
- Do the same for the facilities you are in



### 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

Г	D	
E		





## 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



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

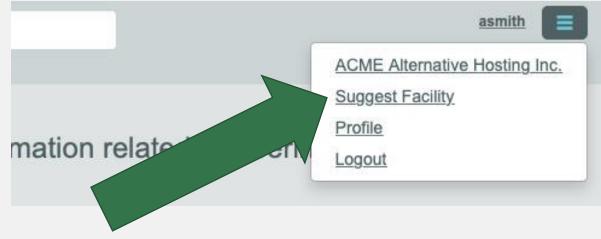
### Add your facility

lanage		
Add Facility Add	<u>I Network Add Exchange Users Permissions</u>	
Name	ACME Alternative Datacenter	Add a new Facility to your Organization. Note that the newly created Facility will
Vebsite	http://www.acme.example	need to be approved by PeeringDB staff before it will appear in the search results or the API listings
Address 1	Old Road 301	To be listed as a Facility in PeeringDB we would expect that you offer colocation,
Address 2		data center and/or meet-me-room services to the public.
City	Vienna	Submit Facility
State		• Fill in applicable fields
Zip-Code	A-1001	
Country	Austria	<ul> <li>CLLI and NPA-NXX: for USA only</li> </ul>
CLLI Code		<ul> <li>Click "Submit Facility"</li> </ul>
NPA-NXX		<ul> <li>Entry will be reviewed</li> </ul>
		· And added or declined

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	ACME Alternative Datacenter
Website	http://www.acme.example
Address 1	Old Road 301
Address 2	
City	Vienna
State	
Zip-Code	A-1001
Country	Austria
CLLI Code	
NPA-NXX	

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.

#### Suggest Facility

- Fill in applicable fields
- CLLI and NPA-NXX: for USA only
- 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

1		
	Select language	
English	\$	
	Set language preference	
You h	ave confirmed your email address!	
/	Affiliate with organization	
To affiliate wi	th an existing organization, please enter the ASN or organization name below.	-
	new network organization, please enter the ASN	
To register a	and organization name below.	
To register	a new facility or exchange organization, please organization name below (ASN is optional).	
To register	a new facility or exchange organization, please organization name below (ASN is optional).	2 3

- 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
  - And either approves or denies



1

### **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

dd Facility Add Network	Add Exchange Users	Permissions				
sers requesting affiliation						
Name User	Email Confirmed		Date			
Wolfgang Tremmel wtremmel sers in Organization	wolfgang.tremmel@ Yes	0de-cix.net	2018, Dec. 14		Approve	Deny
Name User	Ema	il		Group		
Adam Smith asmith	asmi	ith@garf.de		admin	0	Remove



### **User administration**

d Facility Add Netw	ork Add Exchange	Users	Permissions		
ers requesting affiliati	on				
Name	Emai	1	Date		
User	Confir	med			
ers in Organization		Currently no u	users requesting affiliation with ACME Alt	ernative Hosting Inc.	
Name User		Em	ail	Group	
Adam Smith asmith		asm	nith@garf.de	admin	Remove
Wolfgang Tremmel		wol	fgang.tremmel@de-cix.net	✓ member 🗘	Remove
				admin	Remove

Add Facility	Add Network	Add Exchange	Users Pe	ermissions			
	• •	•	, ,	ation. Administrative use d out to users, and will no		ave access to everything by def	ault.
			- da	Create	Update	Delete	
Wolfgang 1	remmel <wolfgang< th=""><th>j.tremmel@de-cix.ne</th><th>et&gt; wtremmei</th><th>Create</th><th>Opualo</th><th>Delete</th><th></th></wolfgang<>	j.tremmel@de-cix.ne	et> wtremmei	Create	Opualo	Delete	
		g.tremmel@de-cix.ne	et> wtremmei				Add
<ul> <li>Any Exchange</li> <li>Any Facility</li> <li>Any Network</li> </ul>	ge c		et> wtremmel				Ado
<ul> <li>Any Exchange</li> <li>Any Facility</li> <li>Any Network</li> <li>Facility - AC</li> </ul>	je	enter	et> wtremmei	Save			A

- 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**

Manage						
Add Facility Add Network	Add Exchange Users	Permissions				
Users requesting affiliation						
Name User	Email Confirmed	Da	ite			
Users in Organization		users requesting affiliation wit	h ACME Alternative Host	ing Inc.		
Name User	Er	mail		Group		
Adam Smith asmith	as	mith@garf.de		admin	© Rem	ove
Wolfgang Tremmel wtremmel	wo	olfgang.tremmel@de-cix.net		member	Rem	ove
WIGHNICI					s	ave
					·	

- 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

### More removing...

Public	change Points		Filter	
Ex AS		IPv4 IPv6		Speed RS Peer
× VIX 64501	\$	192.203.0.22	2	1000
04501	~	2001:7f8:30:0	0:1:1:6:fbf5	
Exchange				
ocal ASN	64501			
Pv4				
Pv6				
Speed (mbit/sec)	0			
RS Peer	0			

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- 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 loside the entry of the exchange
- Confirm and do not forget to "Save"

### More removing...

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

Role 🔻	Name Visiblity
🔀 Abuse	Abuse Desk
	Public

**Private Peering Facilities** 

Facility <del>▼</del> ASN	
ITandTEL TechCenter Lin     64501     Klagenfurt Stadtwerke     64501	
Facility	



## **Removing – more information**

- Objects are only marked deleted
- You cannot simply re-add them
- Please contact <u>support@peeringdb.com</u> if you need help



