PeeringDB Workshop

How is PeeringDB organised? // Track 1

arnold@peeringdb.com
• 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 automation
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

<table>
<thead>
<tr>
<th>Admin Committee</th>
<th>Operations Committee</th>
<th>Outreach Committee</th>
<th>Product Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Manage administration of user accounts and PeeringDB records</td>
<td>• Manage PeeringDB infrastructure</td>
<td>• Manage marketing and social media</td>
<td>• Manage roadmap and development priorities</td>
</tr>
<tr>
<td>• Answer support tickets</td>
<td></td>
<td>• Develop and maintain presentations, workshops and webinars</td>
<td>• Ask for input from the community on desired features</td>
</tr>
<tr>
<td>• Cleansing and completion of PeeringDB records</td>
<td></td>
<td>• Coordinate presentations and attendance at events</td>
<td>• Write SoWs to solicit bids to complete requested features</td>
</tr>
</tbody>
</table>

Leads: Stefan Funke (Chair)  
Contact: admincom@lists.peeringdb.com  

Leads: Job Snijders (Chair) and Aaron Hughes (Vice Chair)  
Contact: pdb-ops@lists.peeringdb.com

Leads: Greg Hankins (Chair) and Bijal Sanghani (Vice Chair)  
Contact: outreachcom@lists.peeringdb.com

Leads: Stephen McManus (Chair) and Matt Griswold (Vice Chair)  
Product Manager: Filiz Yilmaz  
Contact: productcom@lists.peeringdb.com
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
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

Contact sponsorship@peeringdb.com for sponsorship info!

<table>
<thead>
<tr>
<th>Organization</th>
<th>Microsoft Corporation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Also Known As</td>
<td>8068 8059</td>
</tr>
<tr>
<td>Company Website</td>
<td></td>
</tr>
<tr>
<td>Primary ASN</td>
<td>8075</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organization</th>
<th>DE-CIX Management GmbH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Name</td>
<td>Deutscher Commercial Internet Exchange</td>
</tr>
<tr>
<td>City</td>
<td>Frankfurt</td>
</tr>
<tr>
<td>Country</td>
<td>DE</td>
</tr>
<tr>
<td>Continental Region</td>
<td>Europe</td>
</tr>
<tr>
<td>Media Type</td>
<td>Ethernet</td>
</tr>
</tbody>
</table>

Contact sponsorship@peeringdb.com for sponsorship info!
Thank you to our sponsors!

Diamond Sponsor

Platinum Sponsors

Gold Sponsors

Silver Sponsors

2019-11-10
DENOG 11, Hamburg, Germany
DE-CIX Academy

PeeringDB Workshop
Learning the Ropes

arnold@peeringdb.com
• 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
Registering

- 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
• 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!
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

Affiliate

In case the RIR entry cannot be retrieved for your ASN, please contact 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 ✗ to improve data quality.

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Country City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>Address 1</td>
<td></td>
</tr>
<tr>
<td>Address 2</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>Country Code</td>
<td></td>
</tr>
<tr>
<td>Notes</td>
<td></td>
</tr>
</tbody>
</table>

#### Networks

<table>
<thead>
<tr>
<th>Name</th>
<th>ASN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACME Alternative Hosting</td>
<td>64501</td>
</tr>
</tbody>
</table>

#### Exchanges

<table>
<thead>
<tr>
<th>Name</th>
<th>Country City</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Manage
• 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

- 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
• 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**

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

- 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

<table>
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</tr>
<tr>
<td>Primary ASN</td>
<td>64501</td>
</tr>
<tr>
<td>IRR Record</td>
<td>AS64501:AS-ACME-HOSTING</td>
</tr>
<tr>
<td>Route Server URL</td>
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<td><a href="http://www.example.com">http://www.example.com</a></td>
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<td>Traffic Levels</td>
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<td>Not Disclosed</td>
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<td>Unicast IPv4, Multicast, IPv6</td>
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<tr>
<td>Last Updated</td>
<td>2018-12-12T12:48:07Z</td>
</tr>
</tbody>
</table>

- **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**

<table>
<thead>
<tr>
<th>ACME Alternative Hosting</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
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<td><a href="http://www.example.com">http://www.example.com</a></td>
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<td><a href="http://www.example.com">http://www.example.com</a></td>
</tr>
<tr>
<td><strong>Network Type</strong></td>
<td>Content</td>
</tr>
<tr>
<td><strong>IPv4 Prefixes</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>IPv6 Prefixes</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Traffic Levels</strong></td>
<td>100-1000Mbps</td>
</tr>
<tr>
<td><strong>Traffic Ratios</strong></td>
<td>Mostly Outbound</td>
</tr>
<tr>
<td><strong>Geographic Scope</strong></td>
<td>Regional</td>
</tr>
<tr>
<td><strong>Protocols Supported</strong></td>
<td>Unicast IPv4, Multicast, IPv6</td>
</tr>
<tr>
<td><strong>Last Updated</strong></td>
<td>2018-12-12T12:48:07Z</td>
</tr>
</tbody>
</table>

- 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
• 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
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

- 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

- 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
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

• 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

<table>
<thead>
<tr>
<th>Add Facility</th>
<th>Add Network</th>
<th>Add Exchange</th>
<th>Users</th>
<th>Permissions</th>
</tr>
</thead>
</table>

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

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: for USA only  
- 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

- 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

- 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
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
User administration

- 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 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“
• Facilities, Contacts, all the same
• Click on „Edit“
• Click on the remove symbol at the entry
• Click on “Save”
Removing – more information

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