



PeeringDB

PeeringDB Update

Filiz Yilmaz - Former Product Manager
Steve McManus - Product Committee Chair
Arnold Nipper - Admin Committee Chair

Agenda

1. Welcome and Introduction to PeeringDB - Filiz Yilmaz - 5 mins
1. Data Ownership Policy - Filiz Yilmaz - 15 mins
 1. Recap of Data Ownership Task Force
 2. Recommendations and the resulting Policy components
1. Product Committee - Steve McManus - 15 mins
 1. What the changes look like
 2. Timeline for changes rolling out
1. Admin Committee - Arnold Nipper - 10mins
 1. Process changes for Admin Committee
 2. What to expect from Admin Committee
1. Q&A - 15 mins

Introduction to PeeringDB

Mission statement

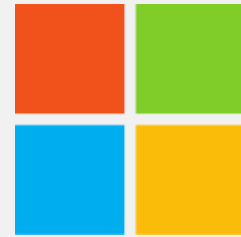
PeeringDB, a nonprofit member-based organization, facilitates the interconnection of Internet networks globally, with user-maintained information.

Helps establish new peering more efficiently, with all information easy to find in one place

Can be used for automation to generate router configurations

Thank you to our sponsors!

Diamond
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Microsoft

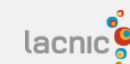
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Data Ownership Task Force - Early beginnings

- Remember Summer of 2019.... and IXF-Importer problems?
- Issues pouring in regarding who owns the data in PeeringDB when more than one party is involved and how data gets updated (as in netixlan, ixfac, netfac objects) .
- A [call](#) for participation made on September 10th, 2019
 - A group of 18 people responded to the call
 - Good mix of IX & Network operators, Facility owners, Board members and PeeringDB users
- Public Mailing list and a web page on PeeringDB.com
- Shared drive on PeeringDB Google folder for collaboration

[Data Ownership Task Force](#) established in September 2019, to work on a PeeringDB Policy on data ownership

Progress / September 2019 - April 2020

- Agreement on Scope
- Stock-taking exercise, problem statements and identification of issues
- The policy documented needed components as:
 - Overarching principles on purpose of the PeeringDB & expectations of use
 - Description of data element interaction and dependencies
 - Recommendations for solutions
- Solution is in “***conflict resolution***”
- A working draft put in Review in February 2020
- Last Call by end of March 2020
- Policy announced on **6 April 2020**

Recommendations in a Nutshell

https://docs.peeringdb.com/gov/misc/2020-04-06_PeeringDB_Data_Ownership_Policy_Document_v1.0.pdf

- The deletion or alteration of a "fac" "ix" "ixlan" "ixpfx" data elements may cause associated "ixfac", "netfac", "netixlan" data elements to be deleted. Task Force recommends that PeeringDB be modified to prevent disruptive changes to these data elements when they have one or more dependent data elements. (5.1.2, 5.1.3, 5.1.4, 5.1.5, 7.1, 7.2)
- When needed, the removal of dependent data elements should be coordinated by the Admin Committee and Admin Committee is empowered to mediate a resolution process (6.2, 7.1, 7.2)
- Specifically to IX-F member import, The Task Force recommends PeeringDB employ user interface methods and email notifications to encourage data harmony between a Network and an Internet Exchange, as a means of expediting resolution and decreasing the burdens on the Admin Committee. (6.1)
- This Task Force recommends that the Admin Committee charter be amended to include a general dispute resolution procedure that covers data ownership in addition to other potential disputes. (3.3)

Policy Document has more!

- Description of each data element as well as user interface elements
- How these data elements interact with each
- Elaboration on recommended changes and why
- Example queries

Thanks to Task Force Members again!

Intense work during the course of 6 months

They had 9 meetings, followed mailing list discussions, reviewed several drafts and followed up on changes consistently

Since Then...

- Product Committee prioritised this work
- Specs documented with vendor
- Work got quoted and made ready for implementation in next release!

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Functionality Changes

- Imports from IX-F will look at the network's automatic import flag to determine if it should be automatically applied or not.
 - If so, PeeringDB will attempt to apply the data.
 - If not, PeeringDB will store the proposed update.

Functionality Changes

- If the update fails or the network doesn't want automatic updates, the proposed update will be stored in a new set of tables.
 - Emails will be sent to the network owner to ask them to resolve the issue
- New UI elements for Network owners and PeeringDB Admins will let them view and approve or disapprove of applying the changes from IX-F.

Functionality Changes

- Users who have admin permissions for a network object can see which IX records IX-F data thinks should be added.
 - From here they can either accept the addition, or ignore certain imports they don't want to show up on peeringdb
 - Users can also bulk import all adds if desired (via Auto-add)



Auto-resolve

Auto-add

Functionality Changes

- In Conflicts, users can see which IX records IX-F data thinks is inaccurate.
 - From here they can either resolve them individually, or in bulk (via Auto-Resolve).



- Conflicts that show up here indicate that the IX operator and the Network object have a disparity between how they think this network connects to the IX, and *must* be resolved.
- Admin Committee can and step in and help resolve this issues as needed.

Functionality Changes

Some exchanges suggest updates to your entries in their peering list.

Expand each exchange below to review, apply or dismiss those suggestions

SIX Seattle

Their PeeringDB entry.

Auto-resolve

Auto-add

Remove

206

IPv6 not set



Dismiss

Delete

Public Peering Exchange Points

Filter

Exchange ↓ ASN	IPv4 IPv6	Speed RS Peer
<input checked="" type="checkbox"/> <u>SIX Seattle</u>	206 <input type="text"/>	<input type="text" value="0"/>
<input type="checkbox"/> <input checked="" type="checkbox"/> Operational	<input type="text"/>	<input type="checkbox"/>

Functionality Changes

- Org, Fac, IX and IXLAN objects are protected against deletion as long as they are referenced
 - This makes sure operational data (e.g. connections to an exchange) are not deleted erroneously
- An error message pops up if you try to delete a protected object.
 - Contact PeeringDB Admin Committee to resolve the issue!

IX-F import // Exchanges

- Check data before configuring the URL
 - e.g. <https://ixpdb.euro-ix.net/en/validator/>
- If compliant, enable IX-F import
- Check what happens via “Preview”
 - or use API:
[https://peeringdb.com/import/ixlan/\\$ix_id/ixf/preview](https://peeringdb.com/import/ixlan/$ix_id/ixf/preview)

LAN	
DOT1Q	<input type="radio"/>
MTU	1500
Enable IX-F Import	<input type="radio"/> ←
IX-F Member Export URL	<input type="text" value="https://portal.de-cix.net/customer_fra"/>
IX-F Import Preview	<input type="button" value="Preview"/> ←

Networks

- It is a good idea to give your peers a heads up when connecting to an exchange
 - untick box “Operational”
 - when live don’t forget to tick box “Operational”

<input checked="" type="checkbox"/> DE-CIX Frankfurt	80.81.194.52	200000
8075 <input checked="" type="checkbox"/> Operational	2001:7f8::1f8b:0:1	<input type="checkbox"/>

- Addresses
 - make sure the Exchange and you agree on type and value of the address
 - if you don’t use IPv{4,6} request your exchange to publish it neither
- Agree with the Exchange on values of Speed and RS Peering
- Remove the entry when you leave an Exchange

Timeline

- August 5th - changes land in beta - <https://beta.peeringdb.com/>
 - Need your help testing these changes and ensuring that they both work and meet your quality expectations for PeeringDB
- August 26th - changes land in production - <https://peeringdb.com/>
 - Need your help ensuring all the changes still work in production and letting us know as soon as possible if not!

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Conflicts

- conflicts may happen
 - when a network wants to use the “heads-up feature” (already got IPs from the IX), but the IX does not yet publish IX-F JSON data
 - when a network went south and the IP has been given to a new participant
 - when there is a typo/general mismatch between network and IX
- which conflicts are addressed?
 - mismatch in ASN
 - mismatch in IPv4 and IPv6 address
 - mismatch in field “operational”
- which conflicts are not yet addresses?
 - mismatch in Route Server Peer flag
 - mismatch in speed
 - too many conflicts initially

Resolution Procedure

- every time the IX-F importer runs
 - collect all conflicts for each network and each exchange
 - if we have contact info send **one** email containing all conflicts
 - else open a ticket with AdminComm to immediately look into this issue
- Networks/Exchanges should try to resolve the conflict
- If after 6 days the conflict still exists a ticket is open with AdminCom and all parties involved

Start-Up Phase // Important Notice for IXes

- Putting the new functionalities in place may send hundreds of notifications per IX and generate an equal amount of tickets when importing information via the IX-F JSON import
- To not overrun AdminCom and the users, **enabling the IX-F JSON import will be controlled by AdminCom initially** until we are in a steady, stable state
- I.e. toggling the “Enable IX-F Import” has no effect until then
- **Please let us know when you want to be an early adopter**

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Information and Resources

- Announce list: <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-announce>
- Governance list: <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov>
- Technical list: <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-tech>
- User Discuss list: <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/user-discuss>
- Docs, presentations, guides, tools: <http://docs.peeringdb.com/>
- Board and Officers: stewards@lists.peeringdb.com
- Admins: support@peeringdb.com
- Presentation requests: outreachcom@lists.peeringdb.com
- Uptime status: <http://status.peeringdb.com/>
- Bugs and feature requests:  <https://github.com/peeringdb/peeringdb/>
- Social media:
 -  <https://www.facebook.com/peeringdb/>
 -  <https://www.linkedin.com/company/peeringdb>
 -  [@PeeringDB](https://twitter.com/PeeringDB)



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Further Questions?