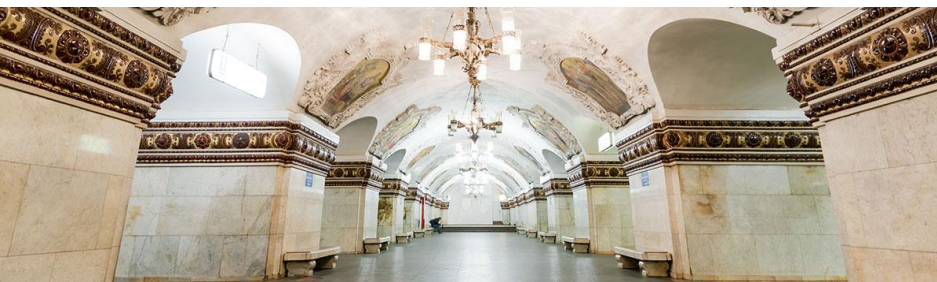




PeeringDB Update

Arnold Nipper

arnold@peeringdb.com



Presentation Goals

- Slide overview and content
 - We're developing a new 2018 slide deck with a short/medium/long format for presentation at conferences
 - A 101 introduction tutorial is at the end after the main deck
 - Planning to expand the tutorial into more detailed 201, 301, etc. versions
- Highlight integration with PeeringDB
 - We want to promote the latest tools and integration developments
 - If you have a tool you'd like us to announce, please get in touch at productcom@lists.peeringdb.com
- We want your feedback on PeeringDB's presence at conferences!
 - Goal is to educate and evangelize PeeringDB to facilitate interconnection
 - How can we be most effective in building the peering community?

Agenda

1. Organization Update
2. Strategic Goals and Organizational Objectives
3. Feature Planning Process and Roadmap Update
4. Third Party Integration

What is PeeringDB?

Mission statement: “PeeringDB, a nonprofit member-based organization, facilitates the exchange of user maintained interconnection related information, primarily for Peering Coordinators and Internet Exchange, Facility, and Network Operators.”

- A PeeringDB record makes it easy for people to find you, and helps you to establish peering
- If you aren't registered in PeeringDB, you can register at <https://www.peeringdb.com/register>
- We use basic verification for new accounts and require current whois information, so please
 - Update and maintain your whois information
 - Register from a company email address



Database Record Statistics

	2.0 Launch 2016-03-15	2016-12-31	2016 % Growth	2017-12-31	2017 % Growth
Facilities	1,957	2,130	9%	2,635	24%
IXPs	630	556	-12%	614	10%
Networks	5,881	8,116	38%	11,327	40%
Organizations	7,490	9,132	22%	11,917	30%
Users	7,866	11,486	46%	15,538	35%

- Strong growth each year since PeeringDB 2.0 launch
 - Lower IXP count in 2016 due to database cleanup
- Users number indicates registered users affiliated with an organization
 - All information except for contact info is available without a login
 - Not an indication of total PeeringDB users

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
 - 332 addresses subscribed to the Governance mailing list (as of May 3, 2018)
 - Governance list is at <http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov>
 - More information available at <http://gov.peeringdb.com/>

Board of Directors and Officers



Chris Caputo – Secretary & Treasurer
(Non-Board Member)



Patrick Gilmore – Director
(Term Expires 2019)



Aaron Hughes – President
(Term Expires 2020)



Arnold Nipper – Director
(Term Expires 2019)



Bijal Sanghani – Director
(Term Expires 2019)



Job Snijders – Vice President
(Term Expires 2020)

Committees

Admin Committee

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

Leads: Arnold Nipper (Chair)

Contact:
admincom@lists.peeringdb.com

Operations Committee

- Manage PeeringDB infrastructure

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

Contact:
pdb-ops@lists.peeringdb.com

Outreach Committee

- Manage marketing and social media
- Develop and maintain presentations, workshops and webinars
- Coordinate presence at events

Leads: Greg Hankins (Chair) and Bijal Sanghani (Vice Chair)

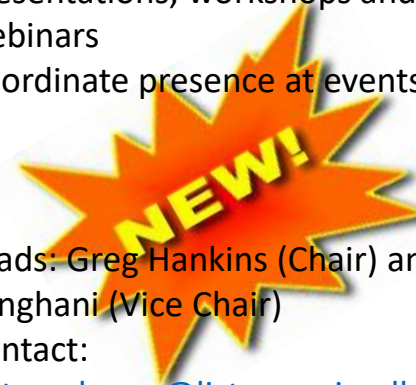
Contact:
outreachcom@lists.peeringdb.com

Product Committee

- Ask for input from the community on desired features
- Manage roadmap and development priorities
- Write SoWs to solicit bids to complete requested features

Leads: Eric Loos (Chair) and Matt Griswold (Vice Chair)

Contact:
productcom@lists.peeringdb.com



Admin Committee



Luisa Fernanda Villa
y Battenberg



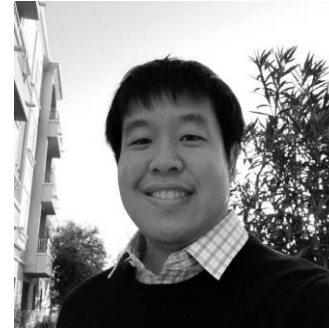
Hendrik
Braasch



Christoffer
Hansen



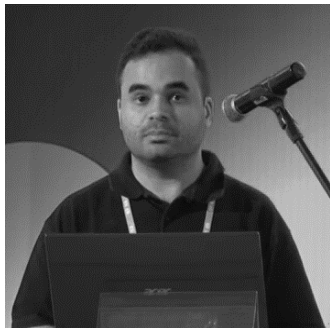
Peter
Helmenstine



Bryan
Jong



Noelle
Kenny



Julimar Mendes



Arnold Nipper –
Chair



Rob Parker



Brad Raymo

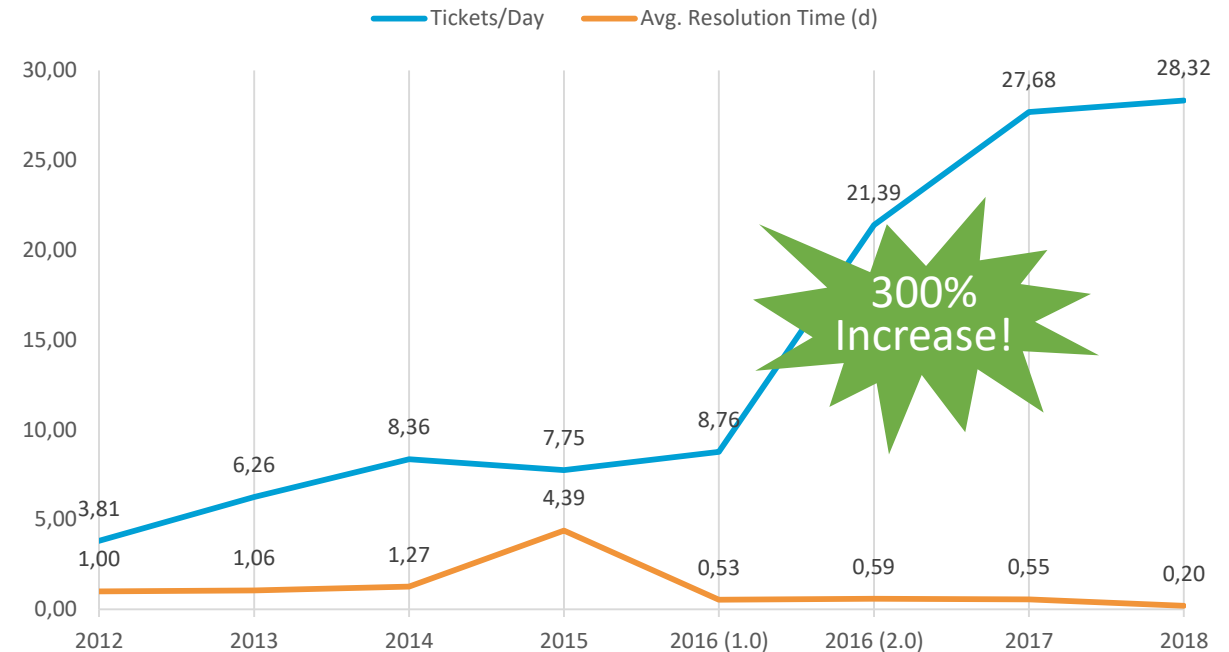
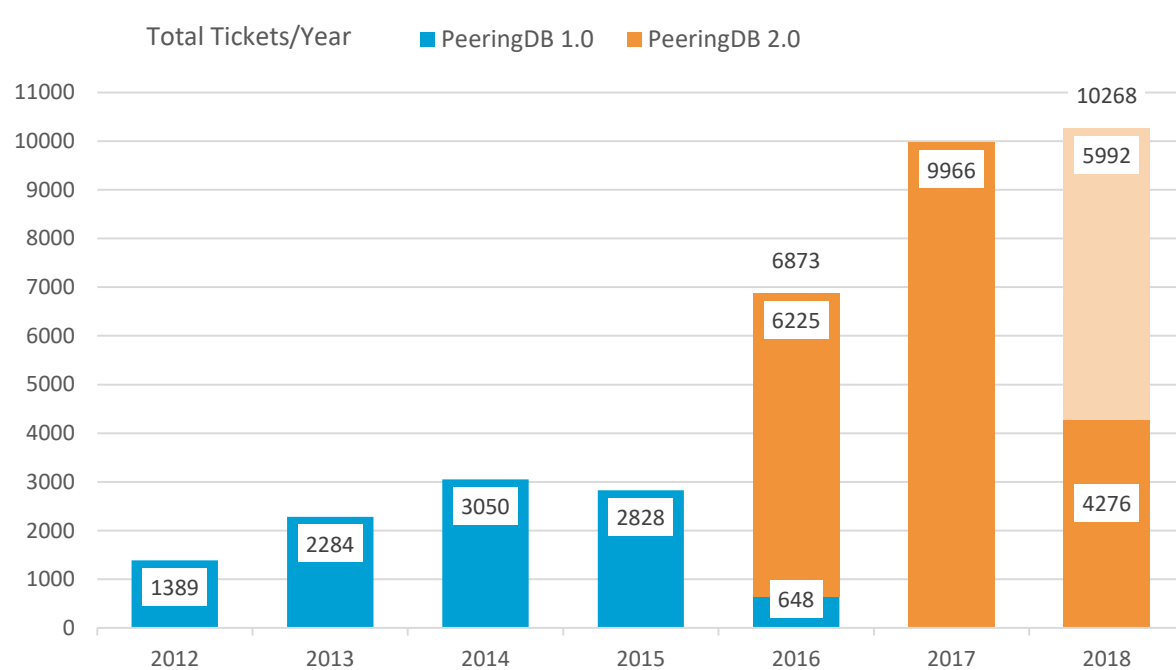


Job
Snijders



Marty
Strong

Support Ticket Statistics



- Admin Committee volunteers are based around the world in a variety of time zones
- Goal is to resolve support tickets within 24 hours

Automated Request Validation

- A lot of support tickets were opened to manually approve new network registrations and affiliation requests
- Automated request validation was introduced in PeeringDB 2.2.1 on July 5, 2017
 - Validation is based on RIR RDAP information
- Gives users immediate automated processing of these requests, no more waiting on a human to respond
- Significantly reduced the Admin Committee's workload
 - ~2,900 automated tickets services since July 5 , 2017 (33% of total tickets)
- First set of new, budgeted features following the Product Committee workflow

Operations Committee



Matt
Griswold



Aaron Hughes –
Vice Chair



Stefan
Pratter



Job Snijders –
Chair



Matthew
Walster

Outreach Committee



Greg Hankins –
Chair



Aaron Hughes



Arnold Nipper



Bijal Sanghani –
Vice Chair

Product Committee



Samer
Abdel-Hafez



Karthik
Arumugham



Matt Griswold –
Vice Chair



Greg
Hankins



Florian
Hibbler



Aaron
Hughes



Martin
Levy



Eric Loos –
Chair



Stephen
McManus



Arnold
Nipper



Chris
Phillips



Job
Snijders

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

Microsoft Diamond Sponsor

Organization	Microsoft
Also Known As	8068
Company Website	http://www.microsoft.com
Primary ASN	8075
IRR Record	AS-MICROSOFT

DE-CIX Frankfurt Platinum Sponsor

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



Proud Sponsor of
PeeringDB
GOLD

Thank you to our sponsors!

Diamond
Sponsor



Microsoft

Platinum
Sponsors



Gold
Sponsors



AUSTRALIA
INTERNET PEERING FOR AUSTRALIA



Silver
Sponsors



Agenda

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2018 – 2019 Strategic Direction

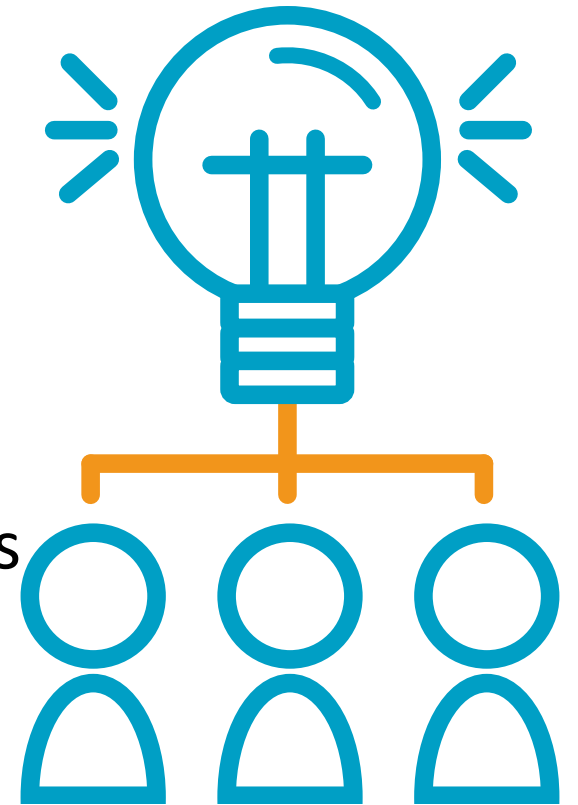
- Ensure reliability, security and support of PeeringDB services
- Maintain, develop, and enhance functionality of PeeringDB services as sought by the users and supported by the membership and community
- Educate the community on effective use of PeeringDB
- Evangelize use of PeeringDB



**Rock Solid
Critical Infrastructure**

2018 – 2019 Strategic Direction

- Encourage support of PeeringDB via sponsorship
- Build a reserve of 2 years of operational funds for the longterm stability of the organization
- Strengthen relationships with operator and peering forums, and other related databases, to work cooperatively on interconnection topics
- Strengthen relationships with Regional Internet Registries (RIRs) with respect to access to authoritative data
- Legal review of liabilities, and insurance (D&O)
- Succession planning



High Priority Tasks for 2018

- Maintain SLAs and contracts for all supporting service providers
- Write Operational Service Level Policy (OSLP) for services provided to the community and regularly report compliance
- Document operational infrastructure
- Regular third-party security audit
- Ensure security for private user data
- Conduct redundancy and restoration test bi-annually
- Provide education material in the form of a quick start guide, embedded online assistance, webinars and tutorials for both users and developers

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Feature Workflow

- All features tracked using GitHub at <https://github.com/peeringdb/peeringdb/issues> with the ZenHub overlay
 - Anyone can open a feature requests, there are no internal or hidden requests
 - Open and transparent process for feature development
 - Workflow is at <http://docs.peeringdb.com/workflow/>
- Product Committee feature process
 - Evaluate and prioritize the requests
 - Request a quote for development costs
 - Request budget from the board
 - Manage implementation and scheduling

Example Categories

AC (Support Workflow)

Bug

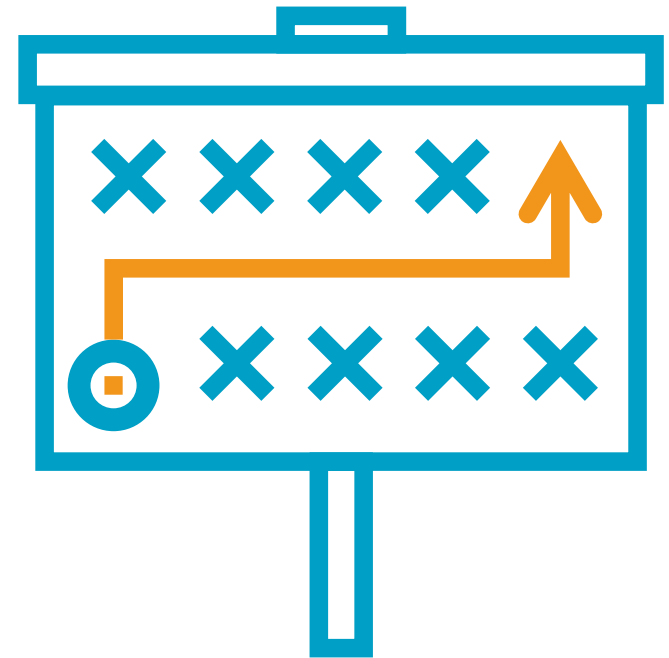
Enhancement

Usability

Your input is needed on features!

New Release Process

- Announced at least one week in advance with all changes to give the community notice
 - Beta site is already running the development version for testing
 - Announced on PDB Announce list, Twitter, Facebook
- Released on Wednesdays at 0400Z and avoids
 - Mondays and Fridays
 - International holidays
 - Large conferences and events (APRICOT, EPF, GPF, NANOG, RIPE, etc.)
- List of current changes (release notes) for each version are on GitHub at <https://github.com/peeringdb/peeringdb/milestones>



Beta Development

- Beta server
 - Available at <https://beta.peeringdb.com/>
 - Runs the latest beta software version
 - Full access over HTTP and the API
 - Database is local to the beta server only, changes are not reflected on the production servers
- Latest changes
 - Available at <https://beta.peeringdb.com/changes>
 - Redirects to the list of issues on GitHub
 - Documents all of the changes in the current beta version
- Anyone can log bugs and feature requests in GitHub at <https://github.com/peeringdb/peeringdb/issues>



2018 Roadmap

- Several maintenance releases with small features have been released since PeeringDB 2.0 was launched
- Released 2.5.3 on 2017-09-06
 - Updated to Django 1.11; added coordinates for facilities and organizational addresses
- Released 2.6.5 on 2017-11-14
 - Allow IXP Updates and Import of member information in IX-F JSON schema format
- We will have major releases with larger features in 2018
- Roadmap focus areas
 - Data quality, privacy, confidentiality
 - Usability and API
 - Platform stability and reliability
 - Product evolution
- Communication focus areas
 - Partner management
 - Communication outreach
 - Membership engagement

Import of Data Provided by IXPs

- For Networks
 - Allow IXPs to maintain your IXP connection information
 - One setting for all IXPs where you are connected
 - Off by default
- For IXPs
 - IXPs provide participant data (IP addresses, speed, RS peering)
 - Imported into PeeringDB nightly using IX-F JSON schema
- See issue [#237](#) on GitHub for details

** We welcome and encourage dual-stack peering at all peering locations.

PeeringDB Configuration

Allow IXP Update ☐

Peering Policy Information

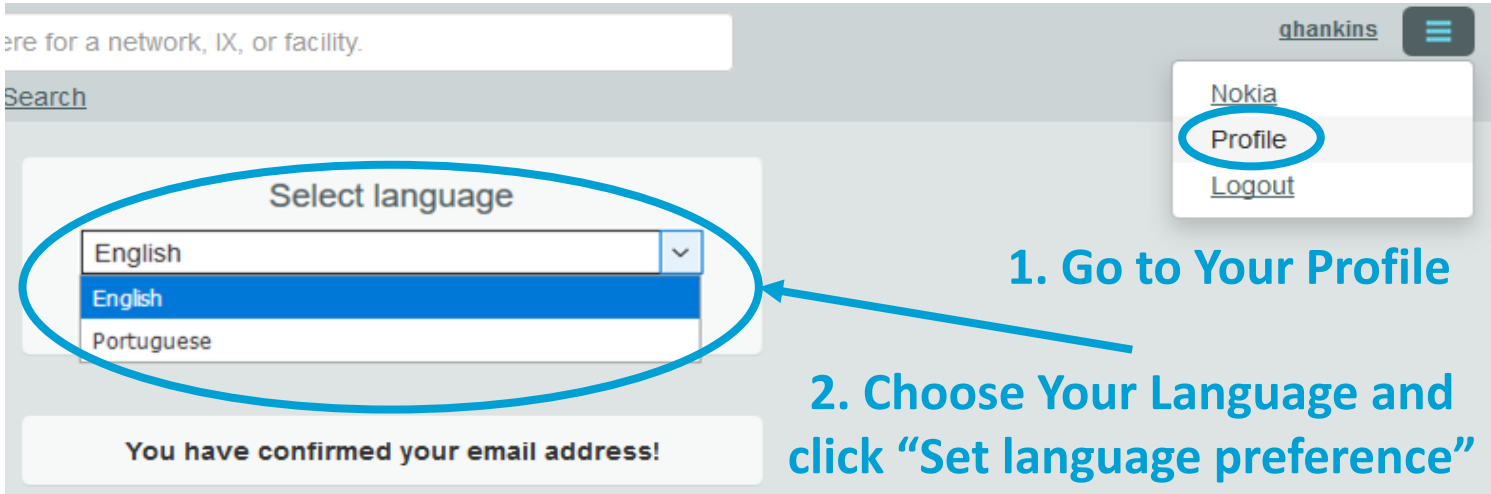
Networks Click “Allow IXP Update” in Network Record

LANs Filter

Name	DOT1Q	MTU
<input type="checkbox"/> Main	<input type="checkbox"/>	1500
<input type="text" value="IXF Member Export URL"/>		
<input type="checkbox"/> IPv4	80.81.192.0/22	
<input type="checkbox"/> IPv6	2001:7f8::/64	

IXPs Set Export URL in Exchange Record

Internationalization Support – New in 2.9.1



Search for a network, IX, or facility.

Select language

English

English

Portuguese

You have confirmed your email address!

1. Go to Your Profile

2. Choose Your Language and click “Set language preference”

3. Text Now Appears in the Selected Language!

Translations Wanted!

Get in Touch With

productcom@lists.peeringdb.com
if You are Interested in Translating

Especificamente, somos um banco de dados de redes que fazem peering, onde eles fazem peering, e se eles gostariam de fazer peering com você. Se você não sabe o que é peering, e/ou se você ainda não faz peering, então isso provavelmente não terá qualquer significado para você.

Você está atualmente numa visualização somente leitura dos dados contidos aqui. Se você é uma rede de peering que gostaria de criar uma conta, [você pode se registrar para uma aqui](#). Por favor, registrar apenas se estiver uma rede de Peering

Ainda tem dúvidas ou perguntas? [Leia o nosso FAQ](#)

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Third Party Integration

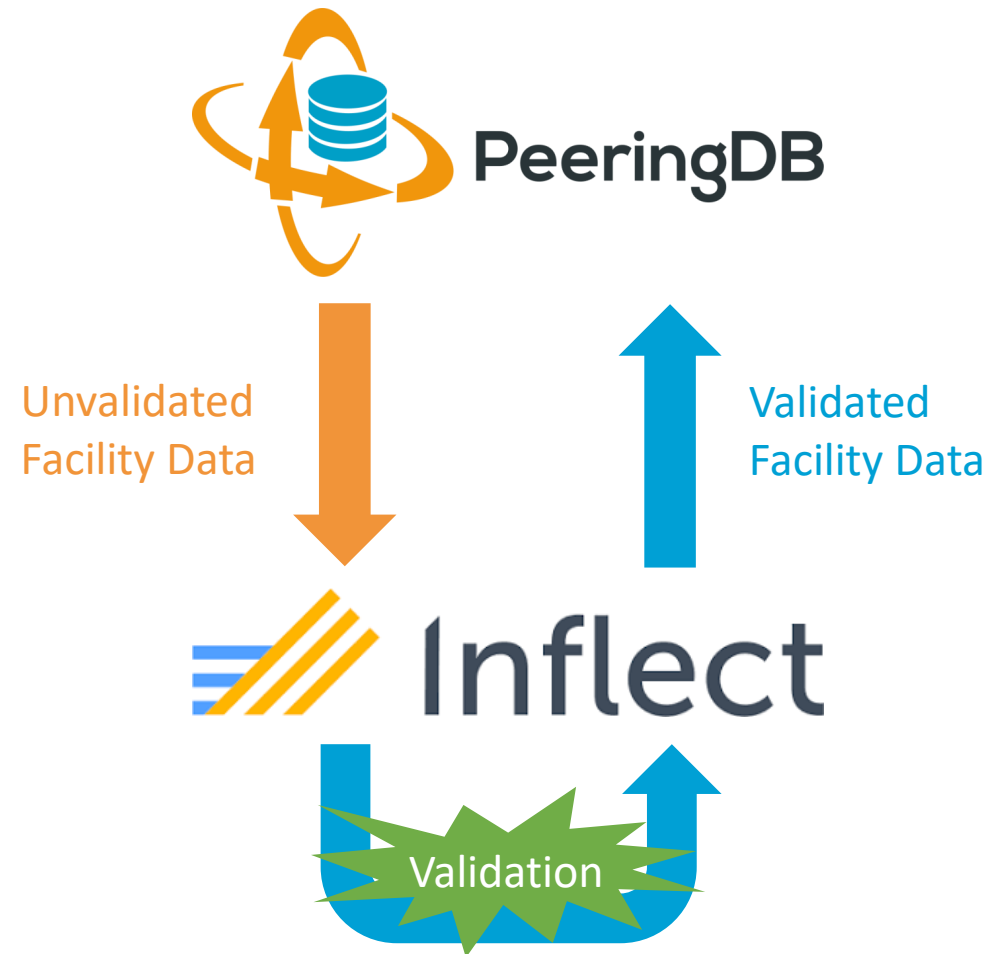
- PeeringDB maintains interconnection data
 - Permissions and privacy on user information are set by the user
 - Accuracy is essential
 - Exchange sources are vetted
 - Data conflicts are resolved by the Admin Committee
- Third party integration with PeeringDB has started in two ways
 - Data exchange with organizations
 - Use by free and commercial software, full list at <http://docs.peeringdb.com/#tools>

Data Exchange





- PeeringDB's goals are to
 - Maintain data integrity
 - Provide complete data needed for interconnection
- Working to exchange data with organizations that maintain data on facilities, IXPs, and networks
 - Open and transparent process and integration
 - Not for user data
- IXP data: IX-F, PCH
- Network data: RIRs (ASNs)
- Facility data: Inflect

Facility Data Validation by Inflect

- Facility data is inconsistent and incomplete
 - Any registered user can suggest facility data
 - Sometimes it's maintained by the facility operator, often it's not
- Inflect is an open, neutral search and procurement tool for internet infrastructure services that provides accurate, validated information
 - Preferred partner to provide **free** validation of facility data
 - LOI signed August 4, 2017
 - Work in progress now to exchange and import validated facility data



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:
productcom@lists.peeringdb.com
- Uptime status:
<http://status.peeringdb.com/>
- Bugs and feature requests:
 <https://github.com/peeringdb/peeringdb/>
- Social media:
 -  [@PeeringDB](https://twitter.com/PeeringDB)
 -  <https://www.facebook.com/peeringdb/>
 -  [https://www.linkedin.com/company/peeri
ngdb](https://www.linkedin.com/company/peeringdb)



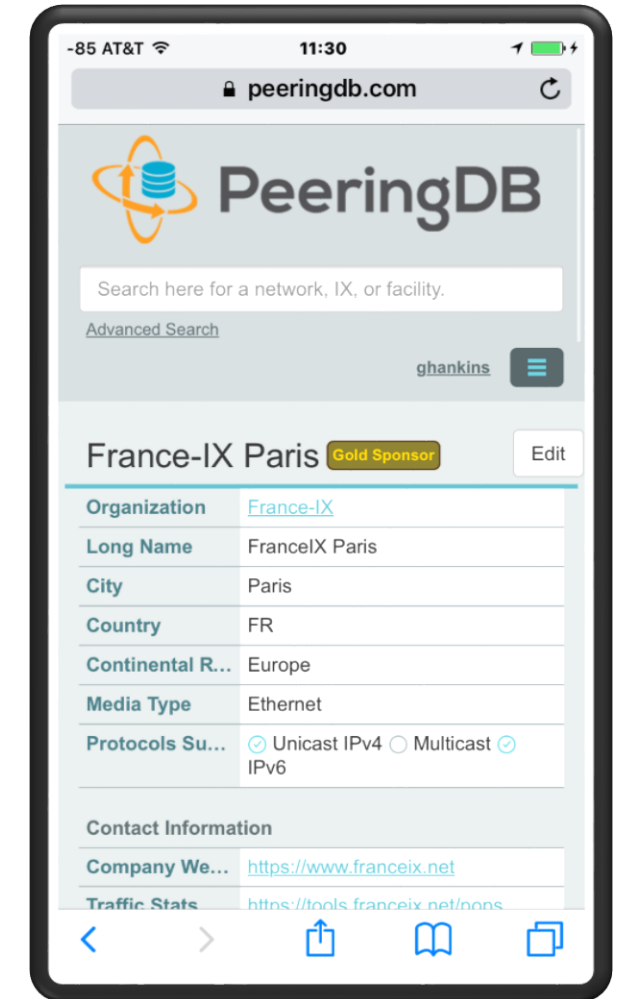
Questions?



Tutorial Slides

PeeringDB 2.0 Key New Infrastructure Features

- Complete rewrite in Python
 - Python: fast and clean, widely used and supported
 - HTML5: adaptive design for desktop and mobile
 - Support for a multideveloper environment
- Redesigned schema with data validation
 - All data is permissioned and editable
 - Input validation on fields: IP addresses, email addresses, etc.
 - Validation in PeeringDB record: dropdown box to select ASN at exchange
- Data versioning
 - Revision history for every data change
 - Easy to restore and roll back
 - Historical data import from CAIDA going back to 2010 (not available yet)
- RESTful API
 - Stateless
 - Incremental database syncs
 - With documentation and tools, oh my!



PeeringDB 2.0 Key New User Features

- Facilities and exchanges can now update their own info
 - Networks are still required to associate their record at a facility or exchange
- Multiple records of any type can be associated with an organization
 - Simpler organization management with a single account for network, facility, exchange records
- One account can manage multiple organizations
 - Manage all of the things with a single account
- Users can manage their accounts
 - Admin account for an organization can delegate fine-grained permissions
- Contact info has permissions
 - Private/users/public permissions
 - All users must register, no more guest account
 - Public view can see all info except contact info (no login needed)
- APIs and local database sync
 - Sync PeeringDB to a local database in any engine format

RESTful API Designed for Automation

- All operations are supported and are designed to be automated
 - Read
 - Create
 - Update
 - Delete
- Each object type has an associated tag
 - org
 - net
 - ix
 - fac
- List of objects: <https://peeringdb.com/apidocs/>
- API documentation: http://docs.peeringdb.com/api_specs/

Quick Examples Return Output in JSON

- List all networks: `curl -X GET https://<username>:<password>@www.peeringdb.com/api/net`
- Show a specific network: `curl -X GET https://<username>:<password>@www.peeringdb.com/api/net/20`

```
{ "meta": {}, "data": [{ "id": 20, "org_id": 10356, "org": { "id": 10356, "name": "20C", "website": "http://20c.com", "notes": "", "net_set": [20], "fac_set": [], "ix_set": [], "address1": "", "address2": "", "city": "Chicago", "country": "US", "state": "IL", "zipcode": "", "created": "2014-11-17T14:59:34Z", "updated": "2016-03-23T20:39:18Z", "status": "ok"}, "name": "20C", "aka": "", "website": "http://20c.com", "asn": 63311, " ... }
```

List All Peers at an IXP (CATNIX)

Peers at this Exchange Point		Filter
Peer Name ▼ ASN	IPv4 IPv6	Speed Policy
Acens Technologies 16371	193.242.98.9 None	1G Open
ADAM 15699	193.242.98.137 2001:7f8:2a:0:2:1:1:5699	1G Open
Adamo Telecom Iberia S.A 35699	193.242.98.143 2001:7f8:2a:0:2:1:2:9518	10G Open
Altecom (Alta Tecnologia en Comunicacions, S.L.) 16030	193.242.98.4 2001:7f8:2a:0:1:1:1:6030	10G Open
bitNAP Datacenter 43578	193.242.98.160 2001:7f8:2a:0:3:1:4:3578	1G Open
BT Spain 12541	193.242.98.145 2001:7f8:2a:0:2:2:0:8903	1G Open
CATNIX-SERVICES 49638	193.242.98.119 None	6G Open
Claranet 8426	193.242.98.131 2001:7f8:2a:0:2:1:0:8426	1G Selective
Cloudflare 13335	193.242.98.153 2001:7f8:2a:0:2:1:1:3335	10G Open
Colt Technology Services 8220	193.242.98.13 None	1G Open
CSUC 13041	193.242.98.38 None	10G Open
Easynet Global Services 4589	213.234.0.15 2001:7f8:2a:0:2:1:0:4589	1G Selective
EBRETIC ENGINYERIA SL 199496	193.242.98.162 2001:7f8:2a:0:3:1:19:9496	1G Open

```
% curl -s -X GET https://www.peeringdb.com/api/netixlan\?ixlan_id=62 \
| jq '.data[]'
{
  "id": 459,
  "net_id": 91,
  "ix_id": 62,
  "name": "CATNIX",
  "ixlan_id": 62,
  "notes": "",
  "speed": 1000,
  "asn": 8220,
  "ipaddr4": "193.242.98.13",
  "ipaddr6": null,
  "is_rs_peer": false,
  "created": "2010-07-29T00:00:00Z",
  "updated": "2016-03-14T21:09:42Z",
  "status": "ok"
}
```

Local Database Sync

- Database sync gives you a local copy of PeeringDB for customization or internal use
 - Sync as often as you like
 - Incremental sync is supported
- Improves performance and reduces load on PeeringDB servers
- Build custom indexes and interfaces
- Add custom fields
- Choice of database engines
 - Currently supported: MySQL, Postgres, SQLite
- Sync using the provided tools or build your own using the API

Django Library

- django-peeringdb is a Django library with a local PeeringDB database sync
- Defines the database schema to create a local database copy
- Easy to integrate in a common framework for locals tools and custom interfaces
- Supports multiple database engines (MySQL, Postgres, SQLite)
- Available at <http://peeringdb.github.io/django-peeringdb/>

Python Client

- peeringdb-py is a Python client for PeeringDB
- Gets objects and outputs in JSON or YAML format
- Provides a whois-like display of records
- Integrated local database sync
- Python library for integration with custom tools
- Available at <http://peeringdb.github.io/peeringdb-py/>
- Examples at <https://github.com/grizz/pdb-examples>

Register or Request Affiliation to an Existing Organization

PeeringDB Search here for a network, IX, or facility. [Advanced Search](#) ghankins

You have confirmed your email address!

2. Confirm Email Address
(Click Here if not Confirmed)

3. Enter ASN or Organization Here
Autocomplete on Existing ASNs and Organizations in PeeringDB

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

Existing affiliations

Your affiliation with [Nokia IP/Optical Networks Labs](#) has been approved.

1. Go to Your Profile

4. Click "Affiliate"
Existing: Organization Admin Needs to Approve
New: Generates a Support Ticket for Validation and Approval

Request Ownership of an Existing Organization

- Network records should already have an organization admin copied from PeeringDB 1.0
- Facility and exchange records will need to have an organization admin assigned

PeeringDB

Search here for a network, IX, or facility.

ghankins-example

Advanced Search

Click “Request Ownership”
Generates a Support Ticket for Validation and Approval

Example-IX

Organization	Example-IX
Long Name	Example-IX, the only ATM multicast IX on the planet!
City	Atlanta
Country	US
Continental Region	North America
Media Type	ATM
Protocols Supported	<input type="radio"/> Unicast IPv4 <input checked="" type="radio"/> Multicast <input type="radio"/> IPv6

Peers at this Exchange Point

Filter

Peer Name ▼ ASN	IPv4 IPv6	Speed Policy
Nothing matched your filter You may filter by Exchange , ASN , Policy or Speed		

Request Ownership

Multiple Records Under a Single Organization

LINX Silver Sponsor	
Website	https://www.linx.net
Address 1	The London Internet Exchange Ltd
Address 2	5th Floor, 24 Monument Street
Location	London, , EC3R 8AJ
Country Code	GB

Facilities		Filter
Name ▼	Country City	
IXCardiff	United Kingdom Cardiff	

Networks		Filter
Name ▼	ASN	
LINX NoVA (LINX USA Inc.)	21919	
LINX Route Servers	8714	
London Internet Exchange (LINX)	5459	

Exchanges		Filter
Name ▼	Country City	
IXCardiff	United Kingdom Cardiff	
IXManchester	United Kingdom Manchester	
IXScotland	United Kingdom Scotland	
LINX LON1	United Kingdom London	
LINX LON2	United Kingdom London	
LINX NoVA	United States of America Northern Virginia	

Facilities are
Shown Here
LINX has 1
Facility

Networks are
Shown Here
LINX has 2
Network
Records

Exchanges are Shown Here
LINX has 6 Exchange Records

One Account Managing Multiple Organizations

PeeringDB

Search here for a network, IX, or facility.
[Advanced Search](#)

job

Affiliate with Organization

To affiliate with an Organization, please enter a valid ASN or Organization name below.

ASN

Organization

Affiliate

Existing Affiliations

Your affiliation with [NTT Communications \(Global\)](#) has been approved

Your affiliation with [NLNOG RING](#) has been approved

Your affiliation with [Netwerkvereniging Coloclue](#) has been approved

Your affiliation with [Snijders IT](#) has been approved

Account “job” is
Affiliated with 4
Organizations

Organization User Management

Manage

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

Approve or Deny Pending Requests

Delegate Permissions for Members
Admins Have Access to Everything

Users requesting affiliation

Name User	Email Confirmed	Date
Currently no users requesting affiliation with Nokia IP/Optical Networks Labs		

Users in Organization

Name User	Email	Group
Greg Hankins ghankins	greg.hankins@alcatel-lucent.com	<div>admin</div> <div>member</div> <div>admin</div>

Change User Access Levels
Admin – Administrator
Member – Delegate Permissions

Remove Users From the Organization
Does not Remove the User Account From PeeringDB

Remove

Save

Administrative Permission Delegation

User “equinix-uk” can Manage Several Network Records, but no Exchanges or Facilities

The screenshot displays the PeeringDB administrative interface. At the top, a header bar shows the user 'Paul Cairney <paul.cairney@eu.equinix.com> equinix-uk'. Below this, a table lists permissions for various network records. The 'Create', 'Update', and 'Delete' columns are circled in blue. Arrows point from these columns to a legend on the right. The legend states: 'Create – New Entries in Record', 'Update – Change Existing Entries in Record', and 'Delete – Delete Entries in Record'. The table shows that the user 'equinix-uk' has permissions for 'Network - Equinix Netherlands', 'Network - Equinix UK', 'Network - Equinix Germany', 'Network - Equinix France', and 'Network - Equinix Switzerland'. Below this, a dropdown menu shows 'Any Exchange'. To the right, there is an 'Add' button. Below the first user's section, the second user 'Raphael Ho <raphael.ho@ap.equinix.com> rho' is shown. The table for this user shows permissions for 'Network - Equinix Connect', 'Any Exchange', and 'Any Facility'. The 'Create', 'Update', and 'Delete' columns are also present for this user. The 'Add' button is also present for this user.

User	Create	Update	Delete
Paul Cairney <paul.cairney@eu.equinix.com> equinix-uk	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Network - Equinix Netherlands	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Network - Equinix UK	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Network - Equinix Germany	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Network - Equinix France	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Network - Equinix Switzerland	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Any Exchange	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Create – New Entries in Record
Update – Change Existing Entries in Record
Delete – Delete Entries in Record

User	Create	Update	Delete
Raphael Ho <raphael.ho@ap.equinix.com> rho	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Network - Equinix Connect	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Any Exchange	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Any Facility	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Any Exchange	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

User “rho” can Manage the “Equinix Connect” Network Record, and Any Exchange or Facility

Network Record Contact Information Permissions

Contact Information

Role ▼	Name Visibility	Phone E-Mail
<input checked="" type="checkbox"/> NOC	Greg Hankins, Alastair Users	 as38016@alcatel-lucent.com
<input checked="" type="checkbox"/> Technical	Greg Hankins, Alastair Users	 as38016@alcatel-lucent.com

Role	Abuse
Name	
Email	name@example.com
Phone	
Visibility	Private Private Users Public

Separate Visibility Preferences for Each Role

Private – Organization Only (Default)

Users – Registered Users Only

Public – Anyone (no Login Required)

Roles:

Abuse

Policy

Technical

NOC

Public Relations

Sales

Adding Your Network to an IXP or Facility

1. Go to your network record and click on “Edit”
2. Start to type in the name of the IXP and select the IXP
3. If the IXP is missing, contact PeeringDB support
4. Add your IP addresses, port speed, and click the “RS Peer” box if you peer with the route server
5. Finally click on “Add Exchange Point”
 - Use the same procedure for adding a Facility

World Phone Internet Services Pvt. Ltd.

<http://www.worldphone.in>

18002

<http://www.example.com>

<http://www.example.com>

Cable/DSL/ISP

250

0

10-20Gbps

Heavy Inbound

Asia Pacific

☒ Unicast IPv4 ☐ Multicast ☐ IPv6

2017-06-29T11:54:36Z

Public Peering Exchange Points

Filter

Exchange	ASN	IPv4	IPv6	Speed	RS Peer
Nothing matched your filter You may filter by Exchange, ASN or Speed					
Exchange					
Local ASN					
IPv4					
IPv6					
Speed (mbit/sec)				0	
RS Peer					<input type="checkbox"/>

Add Exchange Point

Private Peering Facilities

Filter

Facility	ASN	Country	City
Nothing matched your filter You may filter by Facility, ASN, Country, City			
Facility			

Add Facility

Adding a New Exchange to Your Organization

Manage

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

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

Submit Exchange

Generates a Support Ticket for Validation and Approval

Enter Exchange Info Here, Then Click "Submit Exchange"

Name

Website

City

Country

Continental Region

Media Type

Unicast IPv4 ☐

Multicast ☐

IPv6 ☐

Traffic Stats Website

Technical E-mail

Technical Phone

Policy E-mail

Policy Phone

Editing Your Exchange Record

Example-IX

CancelSave

Organization	Example-IX
Long Name	Example-IX, the only ATM multicast IX on the planet!
City	Atlanta
Country	United States
Continental Region	North America
Media Type	ATM
Protocols Supported	<input type="checkbox"/> Unicast IPv4 <input checked="" type="checkbox"/> Multicast <input type="checkbox"/> IPv6
Contact Information	
Company Website	http://www.example.com
Traffic Stats Website	http://www.example.com
Technical Email	name@example.com
Technical Phone	
Policy Email	name@example.com
Policy Phone	

Peers at this Exchange Point

Filter

Peer Name ▼	IPv4	Speed
ASN	IPv6	Policy
Nothing matched your filter You may filter by Exchange, ASN, Policy or Speed		

Networks are Still Required to Associate their Record at a Facility or Exchange

Enter Exchange Info Here, Then Click "Save"

Editing Your Exchange Record

The screenshot displays the PeeringDB interface for editing an exchange record. It is divided into two main sections: LANs and Local Facilities.

LANs Section: This section is highlighted with a blue box. It contains a table with columns for Name, DOT1Q, and MTU. The table has two rows: 'Peering LAN' with a checked DOT1Q box and MTU of 9000, and 'IPv4' with the address 127.0.0.0/8. Below the table is an 'Add' button. A blue arrow points from the text 'Enter LAN Info Here' to this section.

Local Facilities Section: This section is below the LANs section. It has a 'Filter' button and a table with columns for Facility, Country, and City. The table is empty, with a message 'Nothing matched your filter. You may filter by Exchange or Long Name'. Below the table is a search bar with the text 'atlanta' entered and circled in blue. A blue arrow points from the text 'Add Facilities Here' to this search bar. Below the search bar, a dropdown menu shows three results: 'Equinix Atlanta (AT2/3)', 'Telx Atlanta', and 'Level(3) Atlanta Courtland'.

Enter LAN Info Here
Name – Optional Name
DOT1Q – 802.1Q Tag
MTU
IPv4/IPv6 Addresses

Add Facilities Here
Autocomplete on
Existing Facilities, Must
Contact Support to Add
a New Facility



Questions?



Extra Slides

2017 Organizational Objectives

- Obtain contracts for all supporting service providers
- Ensure supporting services are always available
- Ensure regular backups for all services
- Ensure security for private user data
- Conduct redundancy and restoration test bi-annually
- Support the Admin Committee to ensure user expectations are met
- Manage contractor for maintenance, minor development and basic support for underlying PeeringDB platform
- Support the Product Committee for major development and feature enhancements to ensure user expectations are met
- Provide education material in the form of a quick start guide, embedded online assistance, webinars and tutorials
- Participate in peering discussions globally where possible
- Expand social media presence as new material is created
- Survey the existing sponsors
- Write and implement surplus plan
- Present at major conferences where possible
- Conduct one election in April each year
- Conduct one member meeting in April each year
- Engage council for annual review of liabilities and insurance
- Write succession plan

Software Highlight: TraceMON

- TraceMON is a tool for visualizing a network topology generated by traceroutes
 - Provides one-click access to IXP and network info
 - Displays PeeringDB info and allows the user to update their record
- RIPE Atlas users can access it by selecting a traceroute measurement and clicking on the TraceMON tab at <https://atlas.ripe.net/measurements/?search=&status=&af=&kind=2%2C4&age=#!tab-public>
- Full article is at https://labs.ripe.net/Members/massimo_candel_a/tracemon-traceroute-visualisation-network-debugging-tool

