PeeringDB Update

Name

bijal@peeringdb.com

Presentation Goals

- Slide overview and content
  - We're developing a new 2017 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 lastest 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 and Election 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

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
  - 327 addresses subscribed to the Governance mailing list (as of 25 Apr, 2017)
  - 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 2018)

Arnold Nipper – Director
(Term Expires 2019)

Bijal Sanghani – Director
(Term Expires 2019)

Job Snijders – Vice President
(Term Expires 2018)

Committees

Admin Committee	Operations Committee	Product Committee
• Manage administration of user accounts and PeeringDB records • Answer support tickets	• Manage PeeringDB infrastructure	• Ask for input from the community on desired features • Manage roadmap and development priorities • Write SoWs to solicit bids to complete requested features
Leads: Arnold Nipper (Chair) and Bijal Sanghani (Vice Chair) Contact: admincom@lists.peeringdb.com	Leads: Job Snijders (Chair) and Aaron Huges (Vice Chair) Contact: pdb-ops@lists.peeringdb.com	Leads: Eric Loos (Chair) and Matt Griswold (Vice Chair) Contact: productcom@lists.peeringdb.com

Admin Committee

Samer Abdel-Hafez
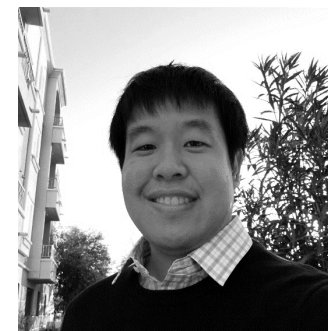
Luisa Fernanda Villa y Battenberg

Hendrik Braasch
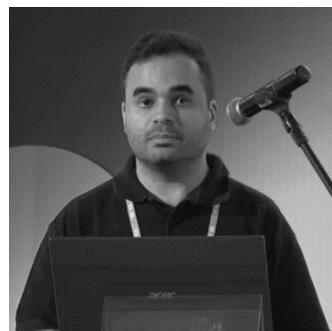
Christoffer Hansen

Peter Helmenstine

Bryan Jong

Noelle Kenny
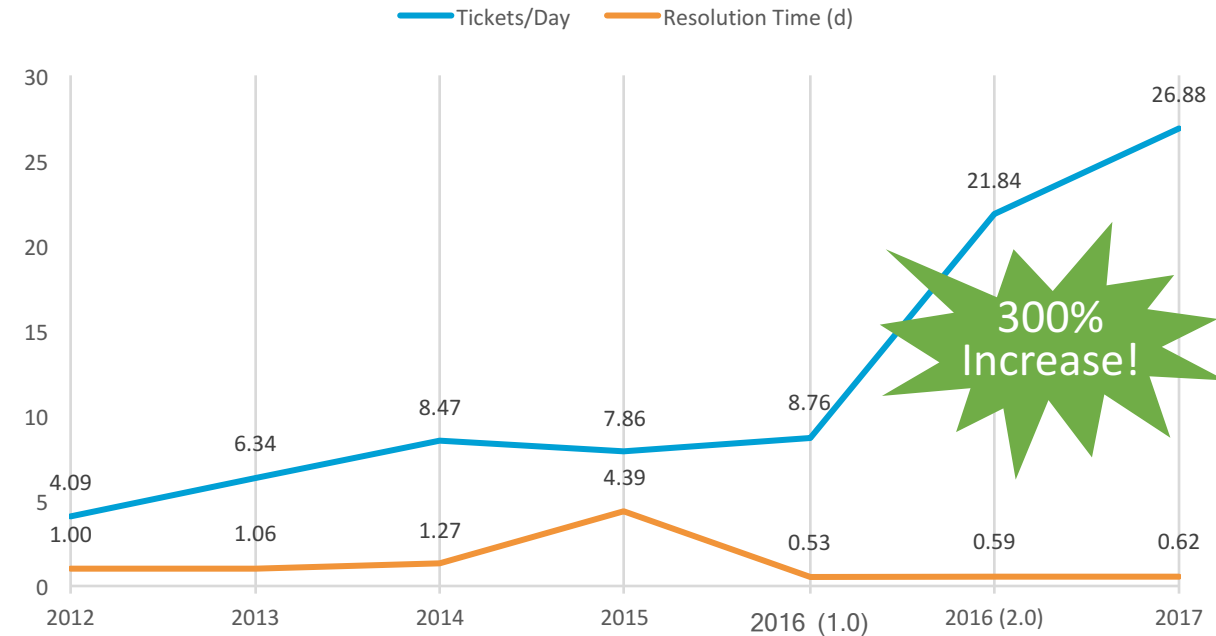
Julimar Mendes

Arnold Nipper - Chair

Brad Raymo

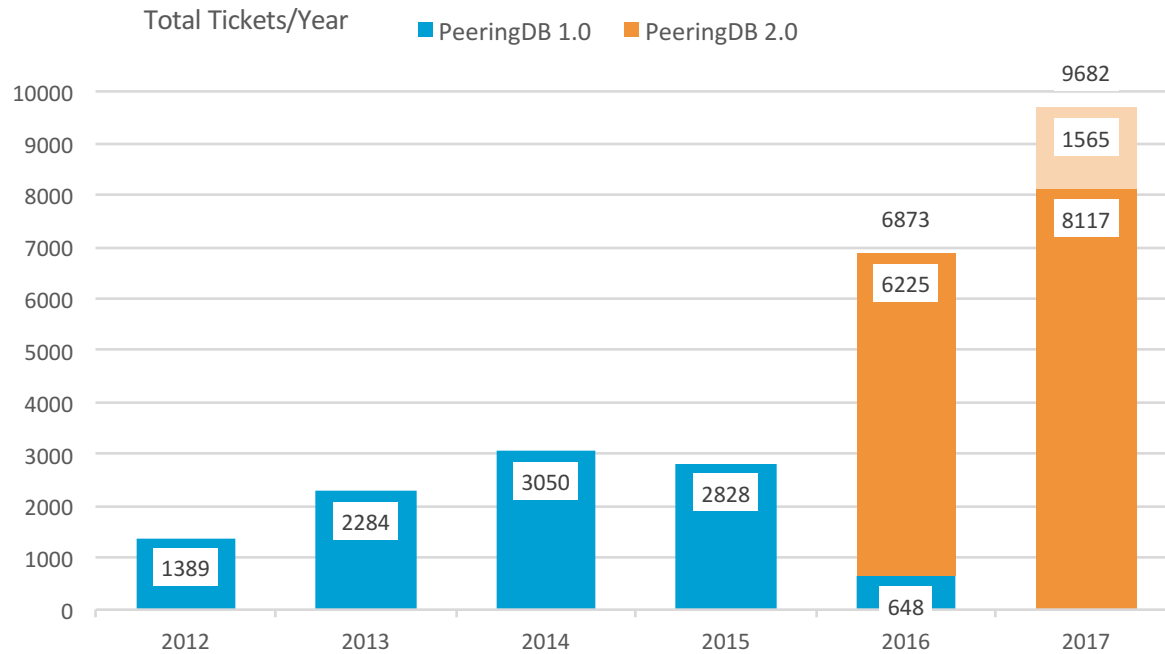Bijal Sanghani – Vice Chair

Job Snijders

Support Ticket Statistics

Total Tickets/Year — PeeringDB 1.0, PeeringDB 2.0

Year	2012	2013	2014	2015	2016	2017
PeeringDB 1.0	1389	2284	3050	2828	648	
PeeringDB 2.0					6225	8117
Total					6873	9682
(2.0 top)						1565

Tickets/Day — Resolution Time (d)

300% Increase!

Year	Tickets/Day	Resolution Time (d)
2012	4.09	1.00
2013	6.34	1.06
2014	8.47	1.27
2015	7.86	4.39
2016 (1.0)	8.76	0.53
2016 (2.0)	21.84	0.59
2017	26.88	0.62

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

PeeringDB

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 whois information
  - LACNIC validation expected to work by mid-August with their new RDAP software
- Gives users immediate automated processing of these requests, no more waiting on a human to respond
- Significantly reduced the Admin Committee's workload
  - ~750 automated tickets services since July 5 , 2017 (30% of total tickets)
- First set of new, budgeted features following the Product Committee workflow

PeeringDB

Operations Committee

Matt Griswold

Aaron Hughes – Vice Chair

Stefan Pratter

Job Snijders – Chair

Matthew Walster
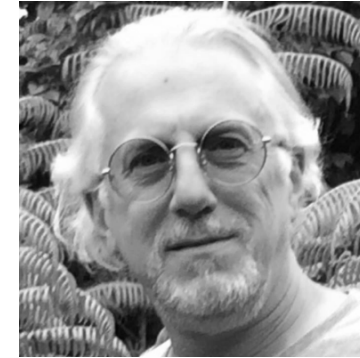
Product Committee

Karthik
Arumugham

Matt Griswold –
Vice Chair

Greg
Hankins

Aaron
Hughes

Martin
Levy

Eric Loos –
Chair

Stephen
McManus

Arnold
Nipper

Chris
Phillips

Kay
Rechthien

Bijal
Sanghani

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

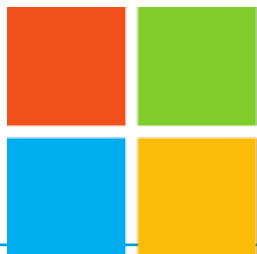| DE-CIX Frankfurt	Platinum Sponsor
Organization	DE-CIX Management GmbH
Long Name	Deutscher Commercial Internet Exchange
City	Frankfurt
Country	DE
Continental Region	Europe

Proud Sponsor of **PeeringDB** GOLD

Thank you to our sponsors!

Diamond Sponsor

Microsoft

Platinum Sponsors

DE-CIX MARKLEY YAHOO!

Gold Sponsors

facebook FranceIX Convergence hub IX | AUSTRALIA INTERNET PEERING FOR AUSTRALIA

PREFIX IPv4 BROKER

Silver Sponsors

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KDDI TELEHOUSE lacnic LINX Est. 1994 netnod NIX·CZ NLix neutral internet exchange NTT Communications

NYIIX LAIIX PeeringManager RIPE NCC RIPE NETWORK COORDINATION CENTRE SysEleven TERACO AFRICA'S DATA CENTRE workonline communications zenlayer

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2017 – 2018 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
- Educate the community on interconnection
- Evangelize use of PeeringDB

**Rock Solid
Critical Infrastructure**

Uptime Status: http://status.peeringdb.com/

2017 – 2018 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
- Legal review of liabilities, and insurance (D&O)
- Succession planning
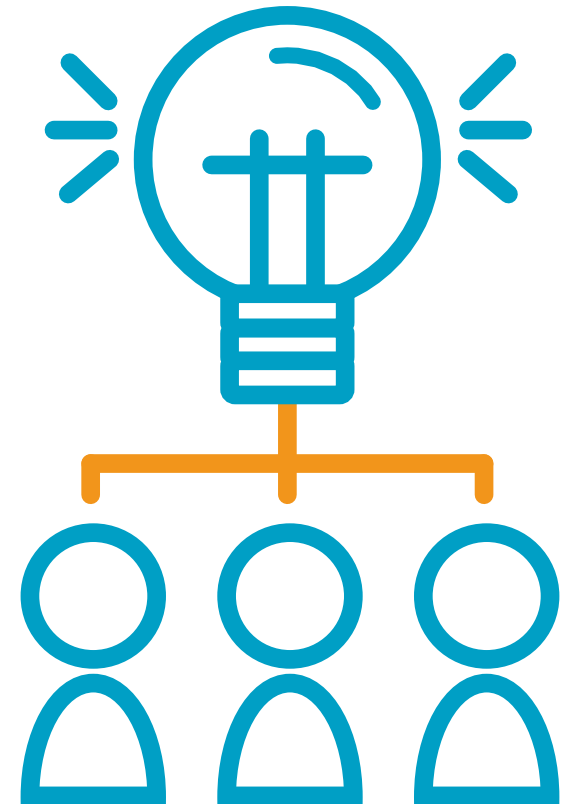
High Priority Projects for this Fall and Winter

- New Operations Committee formed to address recent outage
  - Members: Matt Griswold, Aaron Hughes, Stefan Pratter, Job Snijders (Chair), Matthew Walster
  - Responsible for managing infrastructure
  - Goal to move PeeringDB to a cloud provider before the end of the year
- PeeringDB code base to be open source
  - Open sourcing the platform will drive innovation
  - Open source license to be decided
  - Expected publication date of January 2018

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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
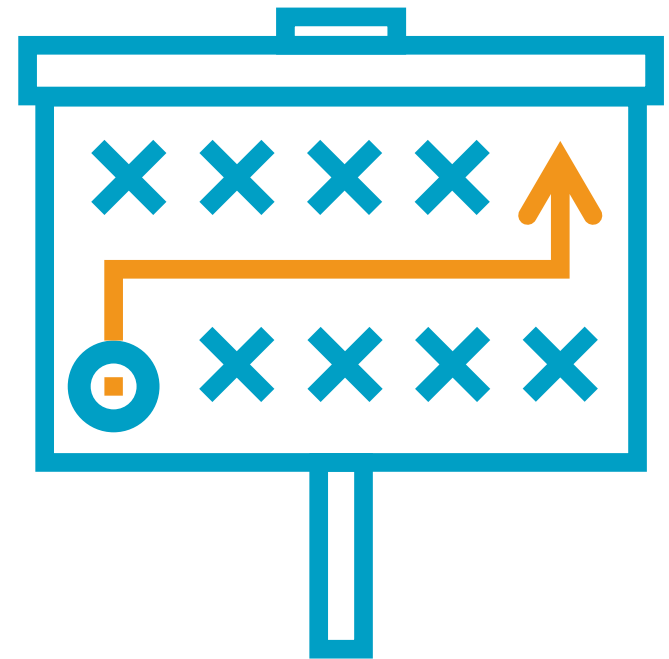
Beta Development

- 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

2017 Roadmap

- Several maintenance releases with small features have been released since PeeringDB 2.0 was launched
- We will have major releases with larger features in 2017
  - Released 2.5.3 on 2017-09-06
  - Updated to Django 1.11; added coordinates for facilities and organizational addresses
- 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

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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, Euro-IX, PCH
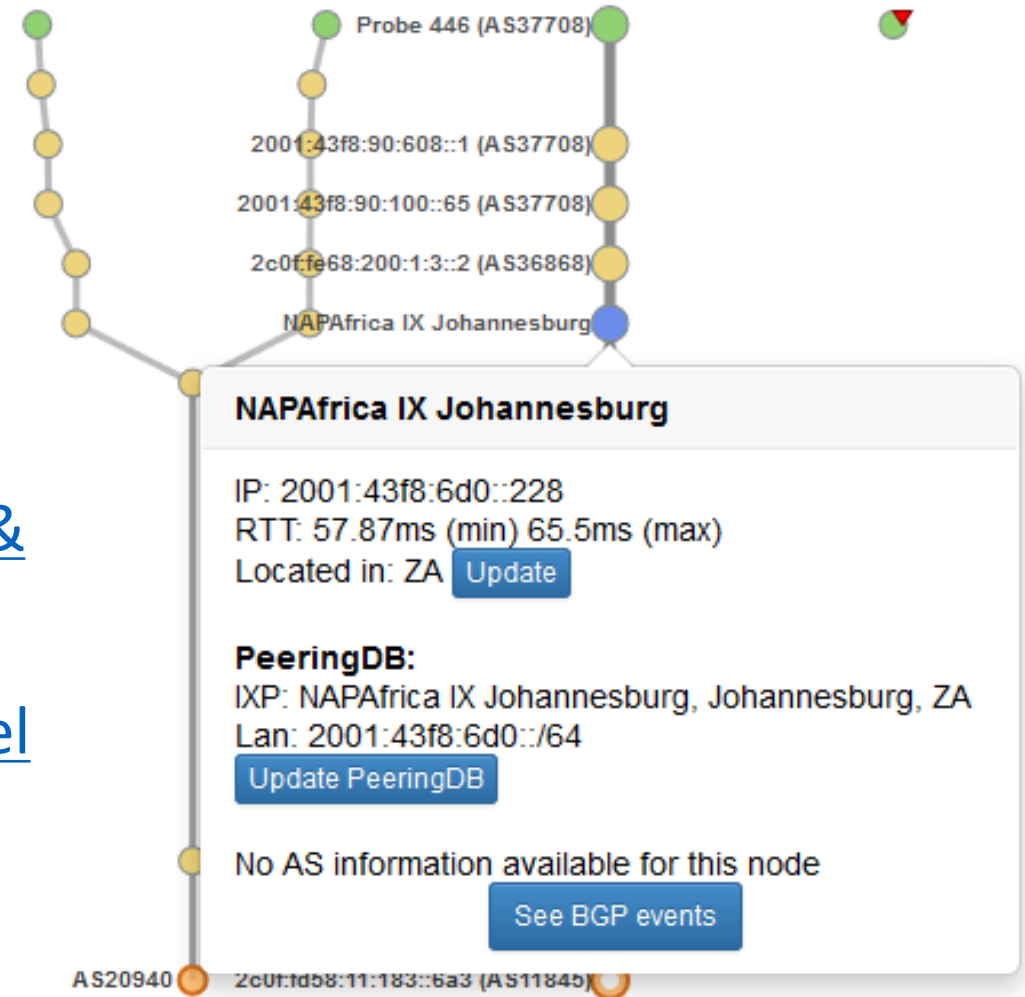- Network data: RIRs (ASNs)
- Facility data: Inflect

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

Unvalidated Facility Data

Validated Facility Data

Validation
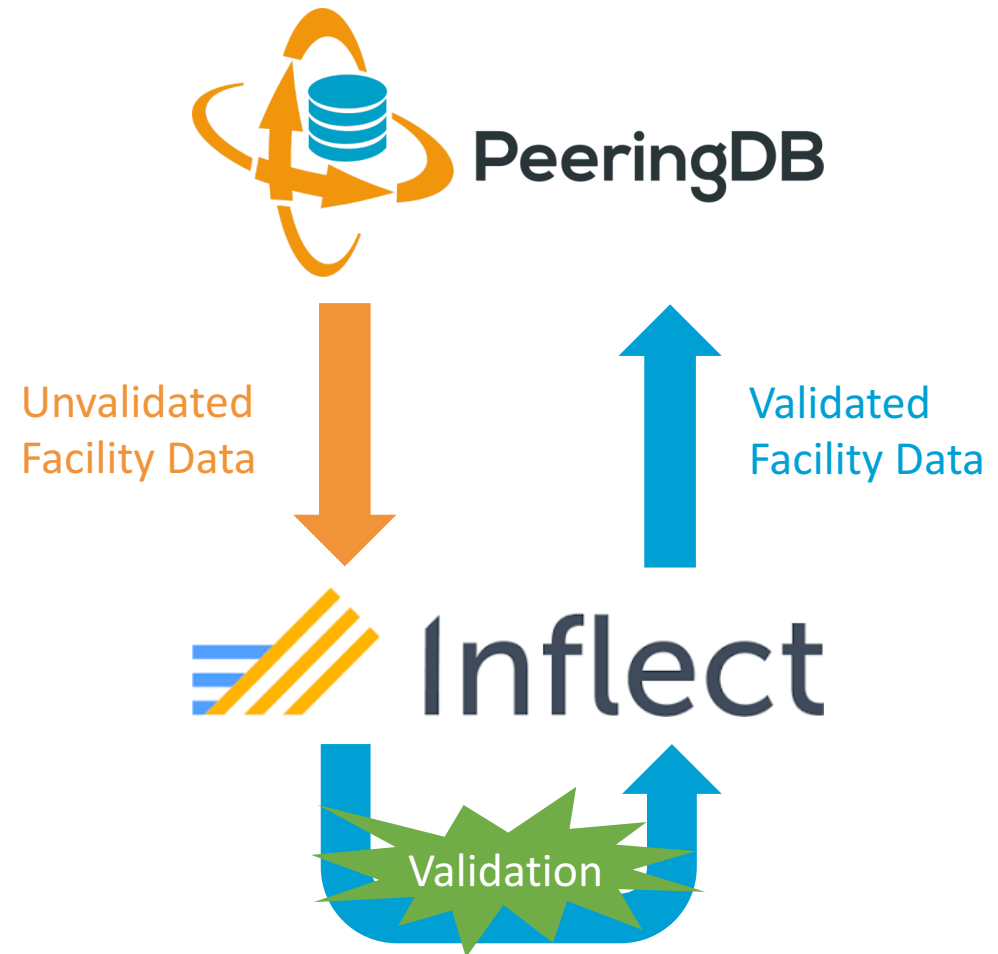
Software Highlight: TraceMON

- 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_candela/tracemon-traceroute-visualisation-network-debugging-tool

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://www.facebook.com/peeringdb/

  https://www.linkedin.com/company/peeringdb

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