
# PeeringDB Update

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# Agenda

- **PeeringDB 2.0**
- Membership / Governance
- Committees
- April 2016 Elections
- Sponsorship
- Contact Information

# What is PeeringDB?

- PeeringDB is the database of peering information on the Internet
- Contains peering location and contact information for
  - Networks
  - Exchanges
  - Facilities
- 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
  - Please update your whois information
  - Please register from a company email address

# PeeringDB 2.0

- PeeringDB 2.0 launched 15 March, 2016
  - Backend database (1.0) discontinued simultaneously
  - Last legacy SQL dump for public consumption: https://peeringdb.com/v1/dbexport/peeringdb.sql
  - Investigating 404s for old SQL to contact users
  - Questions to support@peeringdb.com
- Challenges during the launch
  - Very minor bug fixes required, but overall a success!
  - Lots of support tickets
  - 2.0.7 current release
  - 20C (developer contractor) very responsive to community - thanks!

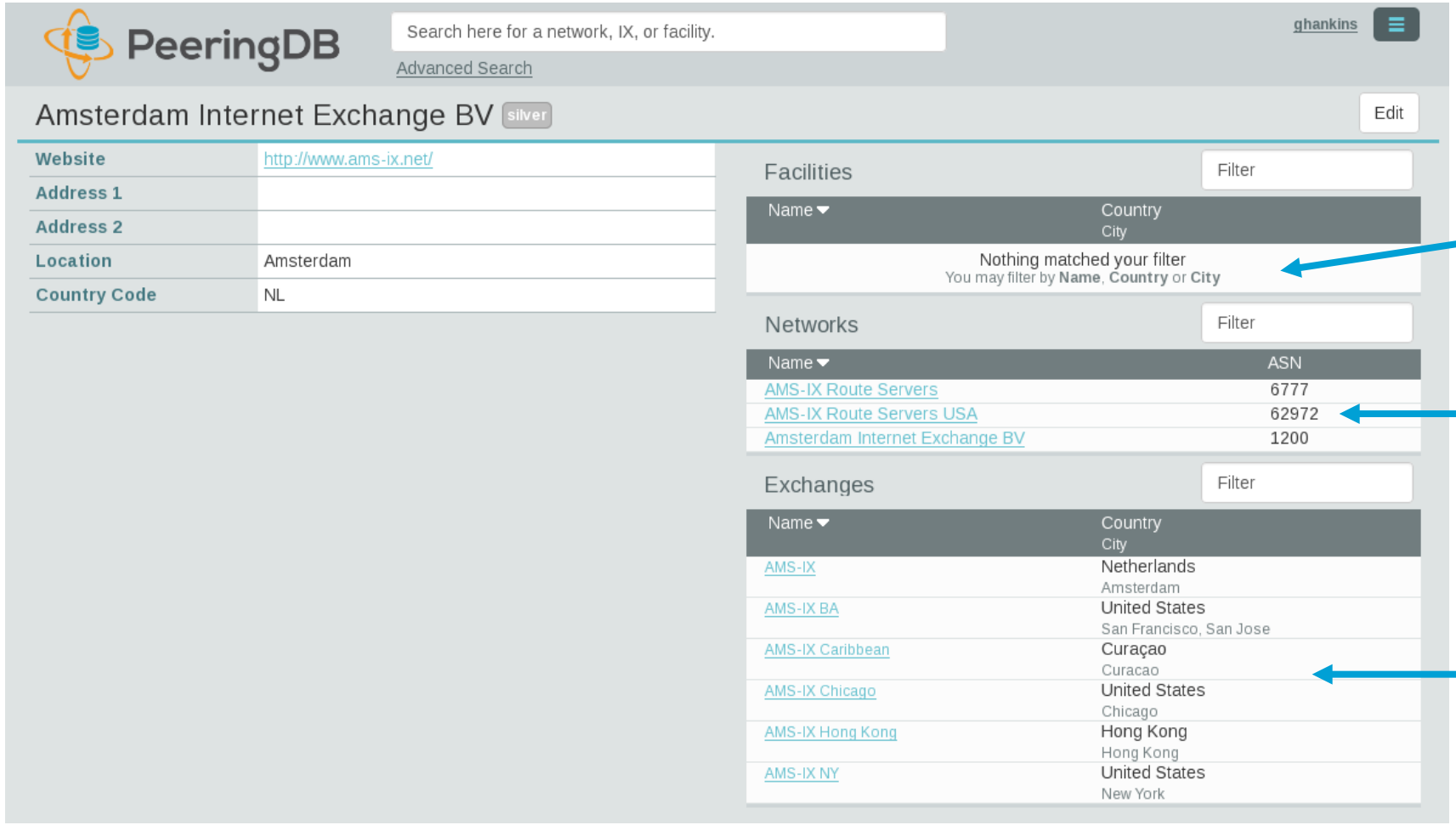
# Key New Infrastructure Features

- Complete rewrite in Python
  - Fast and clean, widely used and supported
  - 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!

# 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 organization
  - 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

# Multiple Records Under a Single Organization

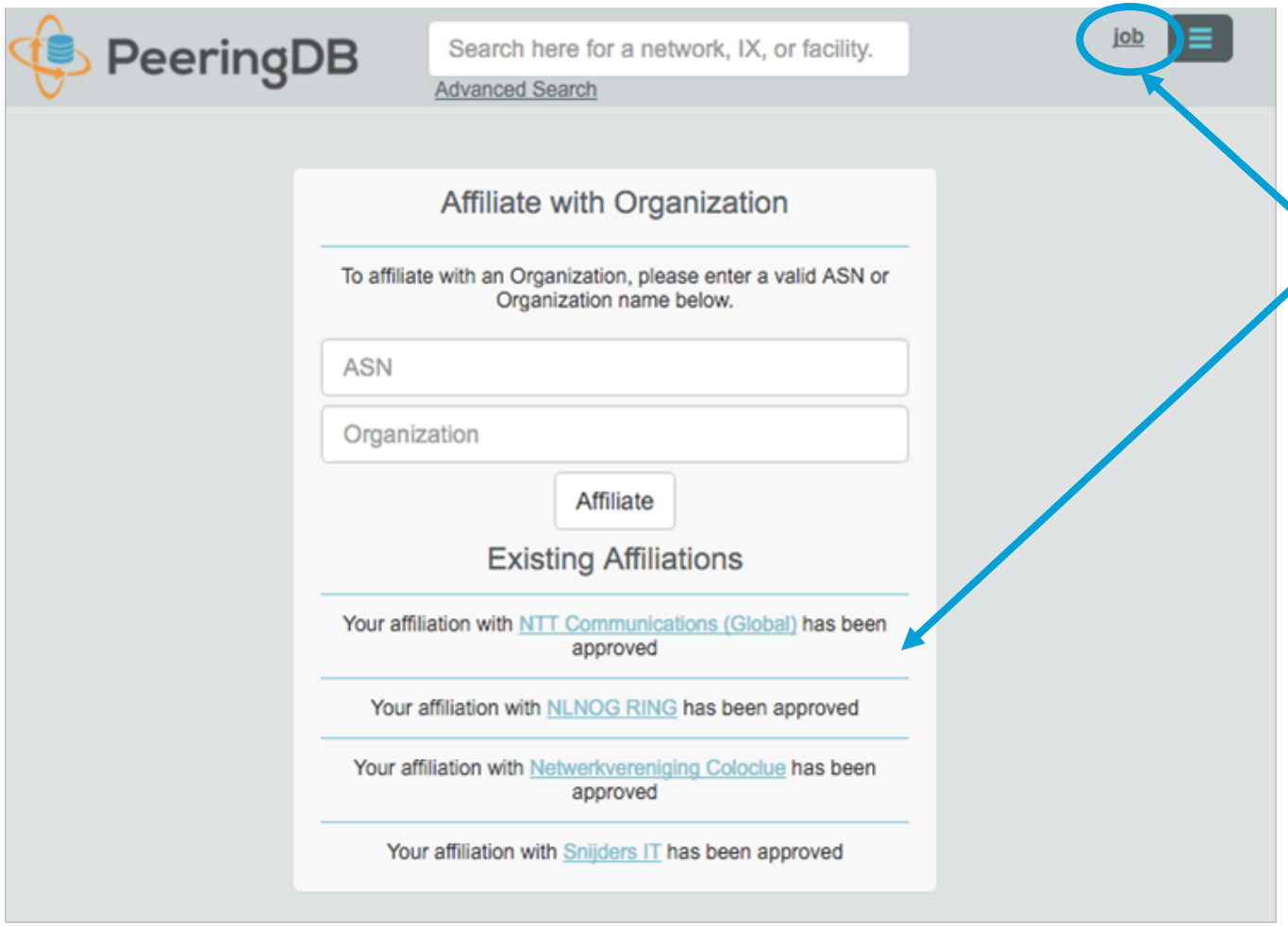



**Facilities are Shown Here**
AMS-IX has no Facilities

**Networks are Shown Here**
AMS-IX has 3 Network Records

**Exchanges are Shown Here**
AMS-IX has 6 Exchange Records

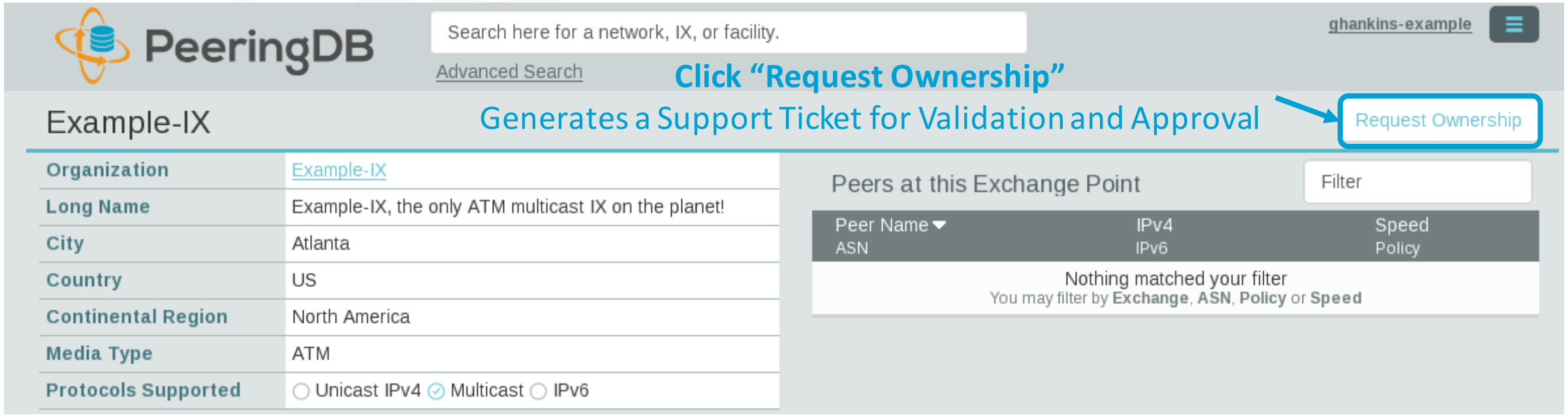
# One Account Managing Multiple Organizations



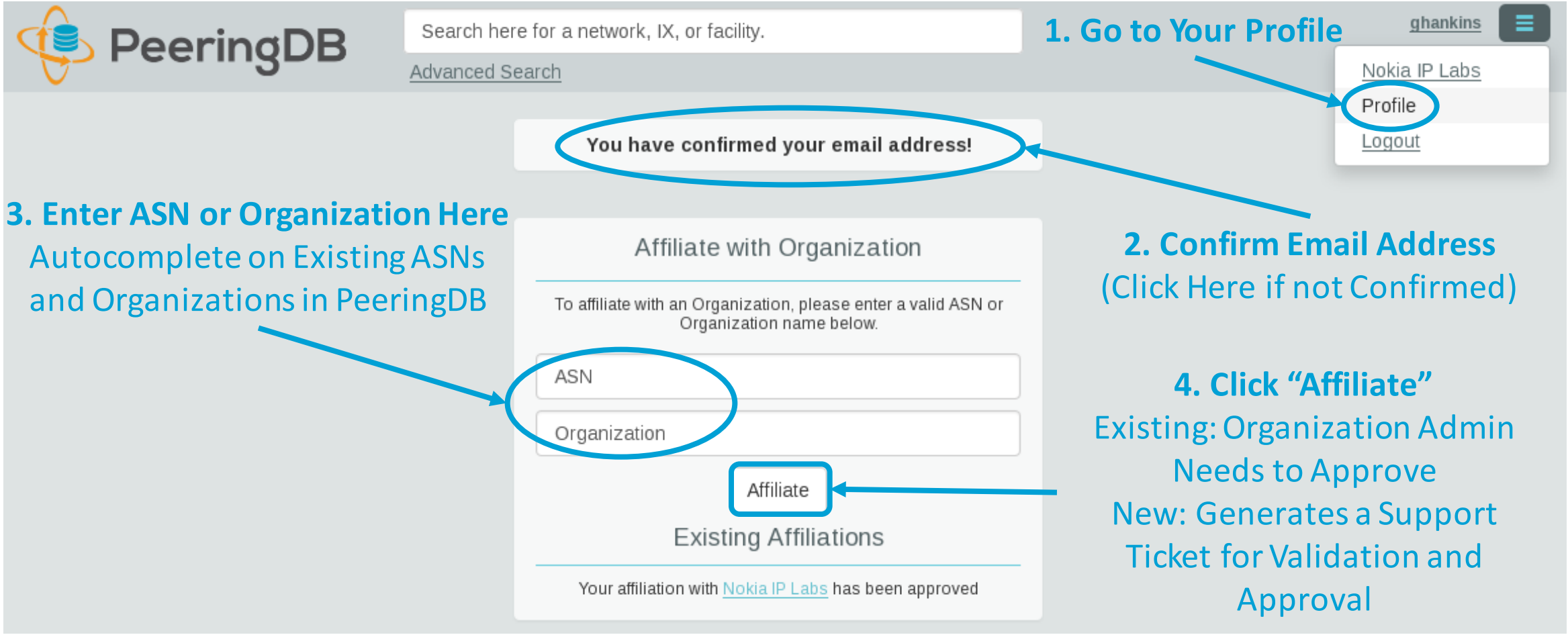

**Account "job" is Affiliated with 4 Organizations**

# 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 to them



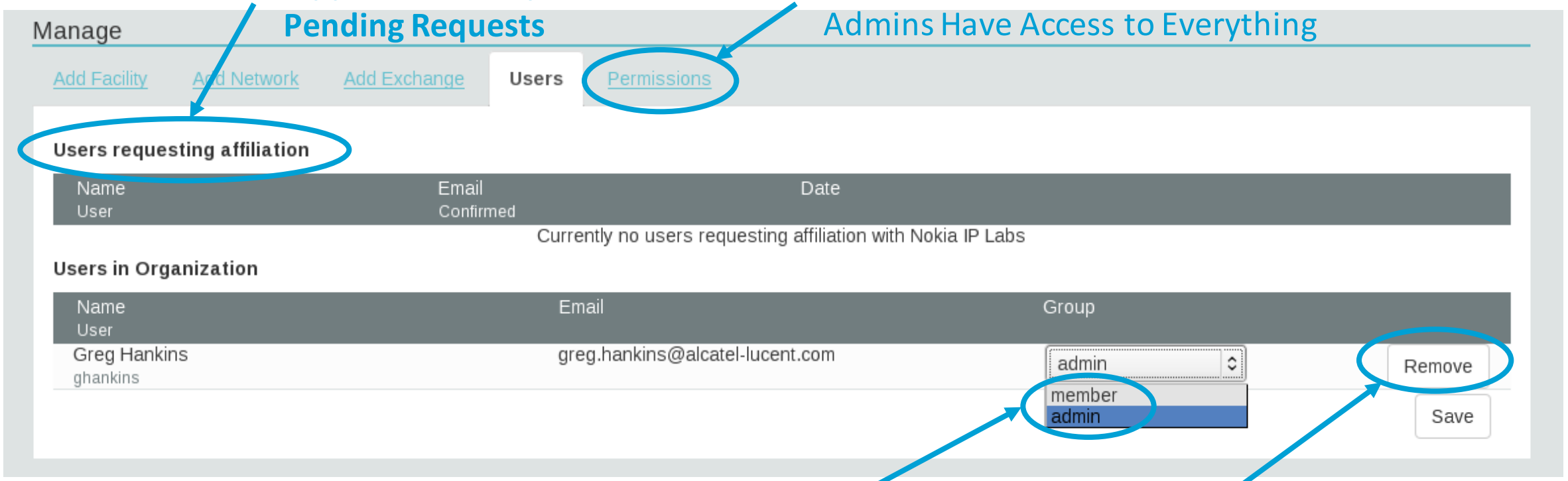
# Request Affiliation to an Organization



# Organization User Management

**Approve or Deny Pending Requests**

**Delegate Permissions for Members**
Admins Have Access to Everything

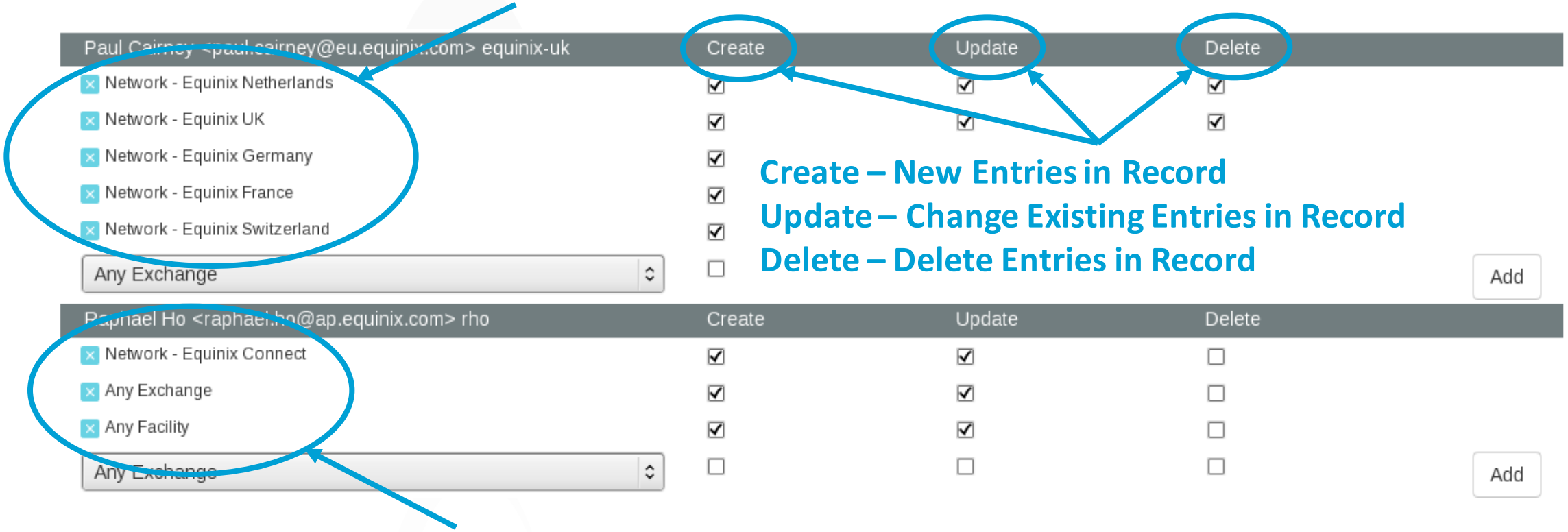



**Change User Access Levels**
Admin – Administrator
Member – Delegate Permissions

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

# Administrative Permission Delegation

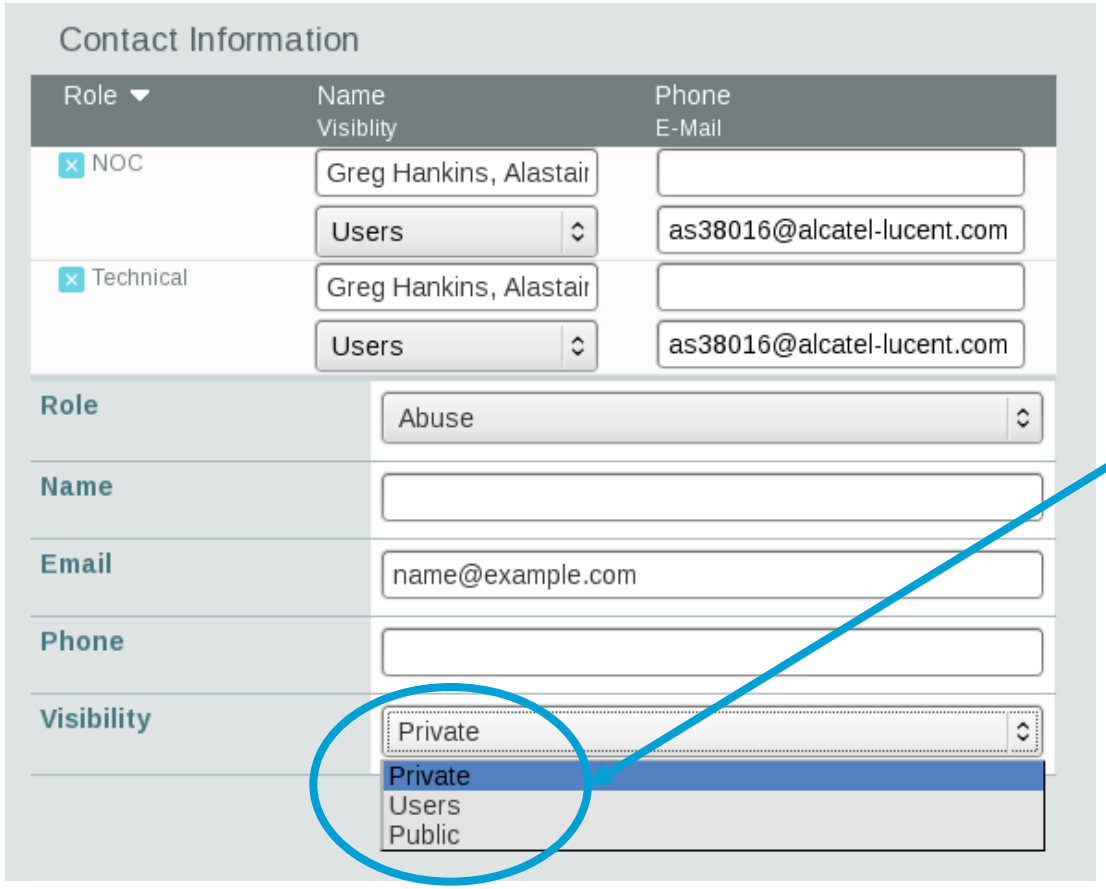
**User “equinix-uk” can Manage Several Network Records, but no Exchanges or Facilities**




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

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

# Network Record Contact Information Permissions




**Separate Visibility Preferences for Each Role**

Private – Organization Only (Default)

Users – Registered Users Only

Public – Anyone (no Login Required)

# 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, "
... }
```

# 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
  - Redis: https://github.com/netflix/peeringdb-py
- 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 output in JSON or YAML format
- Provides a whois-like display of records
- Integrated local datbase sync
- Python library for integrate with custom tools
- Available at http://peeringdb.github.io/peeringdb-py/
- Examples at https://github.com/grizz/pdb-examples

# Agenda

- PeeringDB 2.0
- **Membership / Governance**
- **Committees**
- **April 2016 Elections**
- **Sponsorship**
- **Contact Information**

# Membership / Governance

- PeeringDB organization formally formed 16 Dec, 2015
- PeeringDB 501(c)(6) filed 7 Jan, 2016 (approved 24 Feb, 2016)
- 5 Board meetings have been held
- 86 members registered and voted in the first election
- 288 addresses subscribed to the Governance mailing list (as of 6 Apr 2016)
- 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:
  - http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov
  - More information available at http://gov.peeringdb.com/

# Committees

- Admin Committee
  - Will write charter (in progress)
  - Will seek individuals from the community to serve on Admin Committee
  - Will define roles, responsibilities and assist with schedule for Admin Commitee
  - Seeking 2 community volunteers (1 year term)
  - Board members Job Snijders and Patrick Gilmore (Snijders as Chair)
  - Interested in volunteering? Contact admincom@lists.peeringdb.com
- Product Development Committee
  - Will write charter
  - Will seek input from the community on desired features
  - Will write SoW's to solicit bids to complete requested features
  - Will manage priorities for selected development vendor(s)
  - Seeking 4 community volunteers (1 year term)
  - Board members Aaron Hughes and Matt Griswold (Hughes as Chair)
  - Interested in volunteering? Contact productcom@lists.peeringdb.com

# Admin Committee

## Big thanks to our awesome team of admins!


Greg Hankins


Matt Griswold


Arnold Nipper


Florian Hibler


Job Snijders (Chair)


Patrick Gilmore (Vice Chair)


Eduardo Ascenço Reis


Eric Lindsjö


Walt Wollny


Kate Gerry

Interested in volunteering your service as an admin? Contact admincom@lists.peeringdb.com

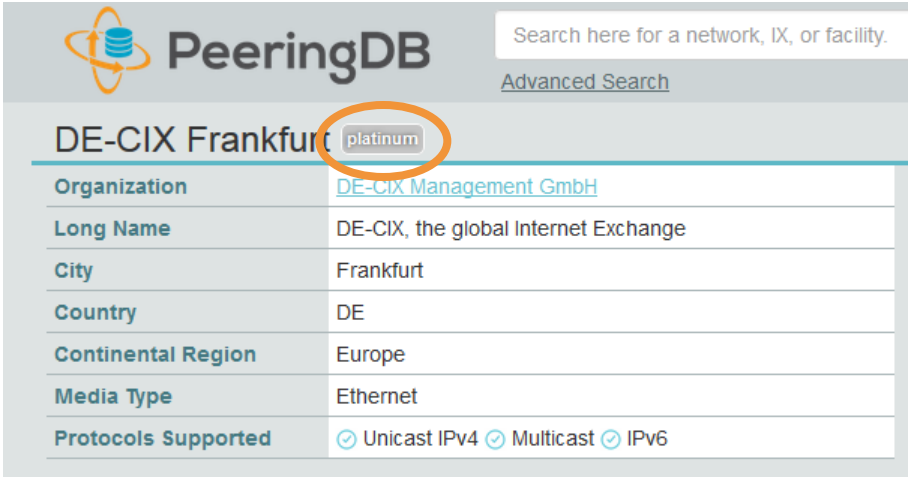
# Product Development Committee

- A Product Development Committee is needed
  - Direct feature requests
  - Maintain the product roadmap
- Interested in volunteering? Contact productcom@lists.peeringdb.com
- Feature requests can be sent to support@peeringdb.com for tracking

# Become a PeeringDB Sponsor!

- **Diamond Sponsorship - $25,000 / year**
  - Limited to 2 sponsors
  - Very large logo on top line of Sponsors page
  - Diamond Sponsor display on records
- **Platinum Sponsorship - $10,000 / year**
  - Large logo on second line of Sponsors page
  - Platinum Sponsor display on records
- **Gold Sponsorship - $5,000 / year**
  - Medium logo on third line of Sponsors page
  - Gold Sponsor logo display on records
- **Silver Sponsorship - $2,500 / year**
  - Small logo on fourth line of Sponsors page
  - Silver Sponsor logo display on records
- Contact sponsorship@peeringdb.com for sponsorship info

Proud Sponsor of PeeringDB



# Thank you to our initial sponsors!

**Platinum Sponsor**


**Silver Sponsors**





# Board Elections (April 2016)

- PeeringDB Board election in April 2016 (1 and 2 year terms)
- 5 seats up for election
- Current (initial) Board serves through April 2016
- Interested in more information about roles/responsibilities and time commitments?
  - Contact board@lists.peeringdb.com or http://gov.peeringdb.com/
- Through April 14th 23:59:59 UTC 2016: vandidates may submit their candidacy and maximum 300 word statement, as determined by POSIX "LANG=en_US.UTF-8 wc -w" command, or revisions to their statement, to secretary@peeringdb.com
- April 15th 2016: ballots, with candidate statements, will be submitted to the PeeringDB Governance mailing list (pdb-gov@lists.peeringdb.com)
- April 15th through 29th 23:59:59 UTC 2016: voting

# Board Elections (April 2016)

- Board candidates (as of 10 April, 2016)
  - Patrick W. Gilmore
  - Matt Griswold
  - Florian Hibler
  - Aaron Hughes
  - Arnold Nipper
  - Job Snijders

# Mailing Lists

- Announce: http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-announce
- Governance: http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov
- Technical: http://lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-tech
- User Discuss: http://lists.peeringdb.com/cgi-bin/mailman/listinfo/user-discuss

# Have questions?

- PeeringDB Officers & Board (stewards@lists.peeringdb.com)
  - Aaron Hughes – President, Director
  - Patrick Gilmore – Vice President, Director
  - Chris Caputo – Secretary & Treasurer (non-board member)
  - Matt Griswold – Director
  - Arnold Nipper – Director
  - Job Snijders – Director
- PeeringDB Admins (support@peeringdb.com)

# Thanks to Richard Turkbergen

The PeeringDB Board hereby expresses its enormous appreciation to Richard A. Turkbergen (née Steenbergen) for his creation and donation of PeeringDB to the organization.


# Questions?