# PEERINGDB 2.0

### **MATT GRISWOLD**



## **GOV.PEERINGDB.COM**

New independent non-profit organization coming soon!

Running for the PeeringDB Board has no requirements

Please let us know if you're interested

First election will be held from November 15-30

Only membership requirement is having an active account and being subscribed to the <a href="mailto:pdb-gov mailing list">pdb-gov mailing list</a>

## **VERSION 1 ISSUES**

Old, generated code, unmaintainable

Schema issues

1 network per user, etc.

MySQL the only "API"

insecure; doesn't scale

## **VERSION 1 ISSUES**

No data validation

Lots of typos

**Exposed contact information to potential spammers** 

## **VERSION 2**

New, clean, shiny Python

Completely redesigned schema

**RESTful API** 

All data is cleaned and validated

Contact info has permissions

Guest login won't see contact details

# **VERSION 2**

**Everything is permissioned and editable** 

Allows data centers and IXs to update their own info

**Documented APIs!** 

New features planned after initial cut-over

Beta version is live now at beta peeringdb.com

# **API SPECS**

### Each data type has an associated tag

net

org

ix

etc

## **API SPECS**

#### To list all networks:

curl -X GET https://<username>:<password>@beta.peeringdb.com/api/net

### To view a specific network:

curl -X GET https://<username>:<password>@beta.peeringdb.com/api/net/20

# **API SPECS**

### All operations are supported

read

write

create

See docs for further details

## PYTHON LIBRARY AND LOCAL DATABASE

Very early in life cycle

Expect more tests and features in the near future

Python seems to be the go-to language for network people

More languages and libraries will show up, PHP will probably be next

### Advantages

Local (not dependent on servers being up, etc.)

Custom indexes can be built

Custom fields can be added

Database engine can be chosen (MySQL, Postgres, SQLite)

#### To install:

pip install peeringdb

To configure a local database:

peeringdb configure

To keep in sync after configuration:

peeringdb sync

#### **COMMAND LINE INTERFACE**

To output YAML:

peeringdb get net20

### To output JSON:

peeringdb get -O json net20

<u>github.com/peeringdb/peeringdb-py</u>

To build custom applications with the PeeringDB client library:

from peeringdb.client import PeeringDB pdb = PeeringDB()

## DJANGO-PEERINGDB

Django module

Easy to integrate in a common web framework

Multiple database options

Used by peeringdb-py to sync data

## DJANGO-PEERINGDB

#### Use cases

Very easy to generate peering router config

```
protocol bgp chix_{{tag}} {
description "Peer: as{{peer.asn}} ({{peer.descr}})";
neighbor {{peer.ip}} as {{peer.asn}};
route limit {{peer.max_prefix}};
```

## UNITED IX SIGNUP

Customer signs up, gives ASN, backend system queries and auto populates IXP Manager data

NOC info

Max prefix

# OTHER COMPANIES USING V2 INTERFACE

### **Apple**

Couchbase sync

### Netflix

Redis sync

<u>github.com/netflix/peeringdb-py</u>

### PEERINGDB MAILING LISTS

#### **Peering DB Announce:**

lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-announce

#### **Peering DB Governance:**

<u>lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-gov</u>

#### Peering DB Technical:

<u>lists.peeringdb.com/cgi-bin/mailman/listinfo/pdb-tech</u>

#### PeeringDB User Discuss:

<u>lists.peeringdb.com/cgi-bin/mailman/listinfo/user-discuss</u>

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