Introduction to PeeringDB API

arnold.nipper@de-cix.net

Endpoints

- All via https://peeringdb.com/api/$OBJ

- Canonical

  - ix, net, fac, org, poc

  - ix, network, facility, organisation, point of contacts (aka roles)

  - To get a single one, add the id

    - e.g. https://peeringdb.com/api/net/947

{ix,net}fac

```
{
  "meta": {},
  "data": [
    {
      "id": 22,
      "name": "Equinix Ashburn (DC1-DC11)",
      "city": "Ashburn",
      "country": "US",
      "net_id": 2,
      "fac_id": 1,
      "local_asn": 20940,
      "created": "2010-07-29T00:00:00Z",
      "updated": "2016-03-14T20:53:30Z",
      "status": "ok"
    }
  ]
}
```

- ixfac, netfac
  - combines facility and ix / net information
  - e.g. https://peeringdb.com/api/netfac/22?depth=0&pretty

netixlan

```
{
    "meta": {},
    "data": [
        {
            "id": 8422,
            "net_id": 2,
            "ix_id": 31,
            "name": "DE-CIX Frankfurt: DE-CIX Frankfurt Peering LAN",
            "ixlan_id": 31,
            "notes": "",
            "speed": 300000,
            "asn": 20940,
            "ipaddr4": "80.81.192.28",
            "ipaddr6": "2001:7f8::51cc:0:28",
            "is_rs_peer": false,
            "created": "2011-04-21T00:00:00Z",
            "updated": "2018-06-01T00:20:43Z",
            "status": "ok"
        }
    ]
}
```

- Combines ix and net information

- e.g. https://peeringdb.com/api/netixlan/8422?depth=0&pretty

Further endpoints

- ixlan

  - Abstraction of the physical IX

  - May go away

  - Each IX has to have at least one IXLan

  - Keep in mind that ixlan != ix

- ixpfx

  - IPv4 / IPv6 range used on an IXLan

How to query information

```
curl -sG https://peeringdb.com/api/netixlan --data-urlencode asn=58717 \
 --data-urlencode fields=ix_id,ipaddr4,ipaddr6,speed | jq -c '.data[]'

{"ix_id":215,"speed":1000,"ipaddr4":"198.32.167.102","ipaddr6":null}
{"ix_id":158,"speed":10000,"ipaddr4":"27.111.228.8","ipaddr6":"2001:de8:4::5:8717:1"}
{"ix_id":158,"speed":10000,"ipaddr4":"27.111.229.92","ipaddr6":"2001:de8:4::5:8717:2"}
{"ix_id":429,"speed":10000,"ipaddr4":"103.16.102.35","ipaddr6":"2001:de8:12:100::35"}
```

How to query information

- Calculating number of presences and peering bandwidth of an ASN

```
curl -sG https://peeringdb.com/api/netixlan --data-urlencode asn=20940 \
| jq '[.data[] | .ix_id] | unique | length'
154
```

```
curl -sG https://peeringdb.com/api/netixlan --data-urlencode asn=20940 \
 | jq '[.data[] | .speed] | add + 0 | ./1000'
8264
```