THE LORD OF IPV6

https://github.com/awalece/The-Lord-of-IPv6

OBJECTIVES

- Narrow Objectives
  - Display per country IPv6 statistics
    - Prefix delegated by the RIR
    - Prefixes visible and not visible in the global routing table
    - Date of first IPv6 prefix delegated
- Wide Objectives
  - Display v6 deployment statistics from secondary sources
    - APNIC
    - Google
    - Cisco 6lab
    - Vyncke (vyncke.org)
    - Mark Prior (mrp.net)

TEAM MEMBERS

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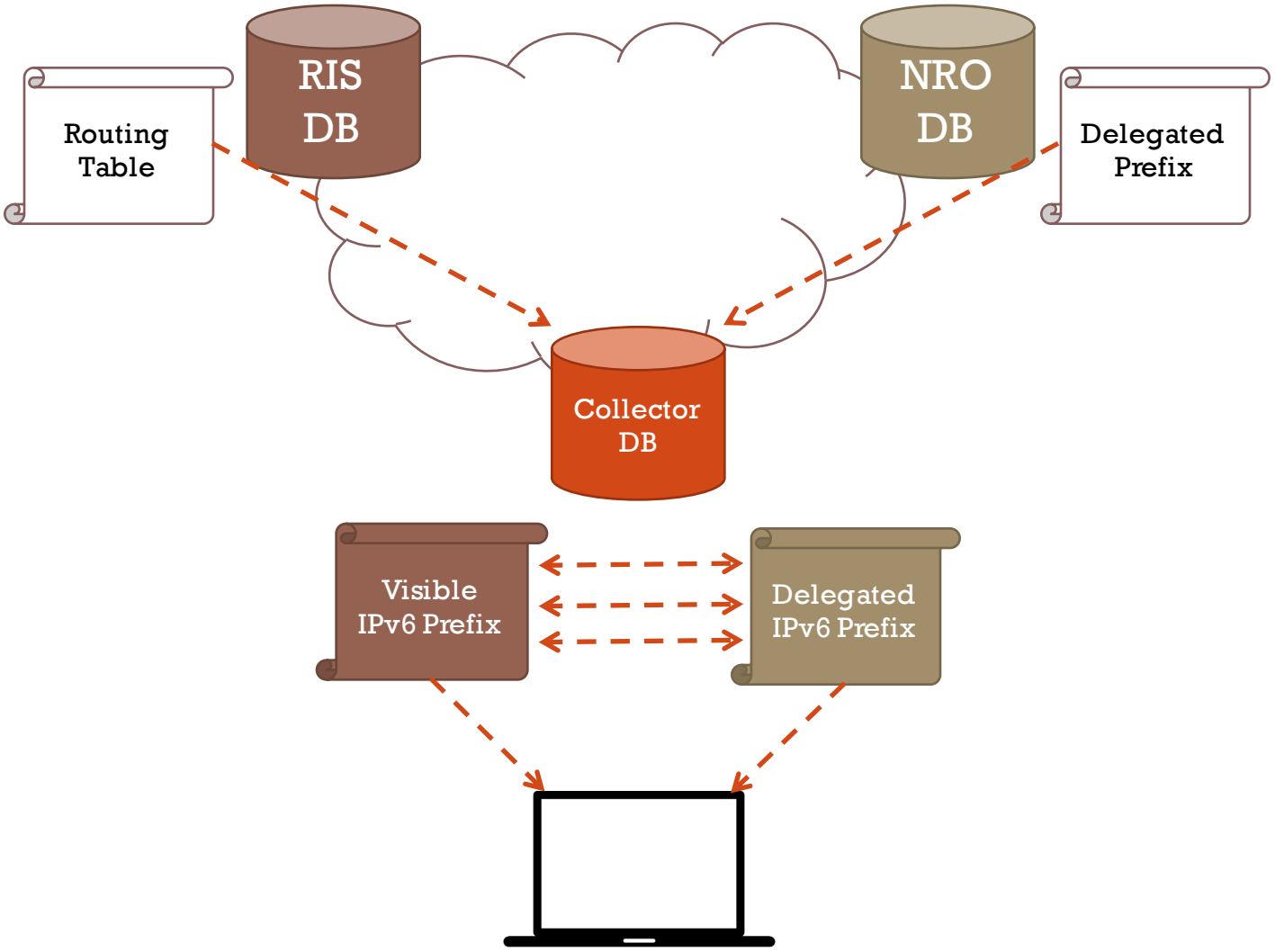
PROPOSAL


RIS
DB
NRO
DB
Routing
Table
Delegated
Prefix
Collector
DB
Visible
IPv6 Prefix
Delegated
IPv6 Prefix

TOOLS

- bgpdump
- mrtparse
- ~~MariaDB~~ (killed our precious time)
- PostgreSQL
- python
- php
- Apache2

DEVELOPMENTS

- Database
  - Data collected from public sources
  - Re-formatted
  - Database created with PostgreSQL
- Webpage
  - Developed
  - Unique country code listed in dropdown menu

DEVELOPMENTS

```
postgres=# \c maxmind
You are now connected to database "maxmind" as user "postgres".
maxmind=# \d
             List of relations
 Schema |      Name      | Type  |  Owner
--------+----------------+-------+----------
 public | delegated_ipv6 | table | postgres
 public | mrt_ipv6       | table | postgres
(2 rows)

maxmind=# \d mrt_ipv6
    Table "public.mrt_ipv6"
   Column   | Type | Modifiers
------------+------+-----------
 ipv6_route | cidr |

maxmind=# \d delegated_ipv6
        Table "public.delegated_ipv6"
  Column  |          Type          | Modifiers
----------+------------------------+-----------
 cc       | character(8)           |
 resource | character varying(16)  |
 prefix   | cidr                   |
 count    | integer                |
 date     | date                   |

maxmind=#
```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DEVELOPMENTS

```
    ipv6_route
--------------------
 2001::/32
 2001::/32
 2001:4:112::/48
 2001:4:112::/48
 2001:5:5::/48
 2001:5:5::/48
 2001:200::/32
 2001:200::/32
 2001:218::/32
 2001:218::/32
 2001:218:3004::/48
 2001:218:3004::/48
 2001:240::/32
 2001:240::/32
 2001:250::/32
 2001:250::/32
 2001:250:222::/48
 2001:250:222::/48
 2001:250:22a::/48
 2001:250:22a::/48
 2001:251::/32
 2001:251::/32
 2001:252::/32
 2001:252::/32
 2001:256::/32
 2001:256::/32
 2001:258::/32
 2001:258::/32
 2001:260::/32
 2001:260::/32
 2001:260:802::/48
 2001:260:802::/48
 2001:268::/32
 2001:268::/32
 2001:268:83b::/48
 2001:268:83b::/48
 2001:270:fc02::/48
 2001:270:fc02::/48
 2001:278::/32
 2001:278::/32
:
```

cc	resource	prefix	count	date
JP	ipv6	2001:200::/128	35	1999-08-13
JP	ipv6	2001:200:2000::/128	35	2003-04-23
JP	ipv6	2001:200:4000::/128	34	2003-04-23
JP	ipv6	2001:200:8000::/128	33	2003-04-23
SG	ipv6	2001:208::/128	35	1999-08-27
SG	ipv6	2001:208:2000::/128	35	2003-03-06
SG	ipv6	2001:208:4000::/128	34	2003-03-06
SG	ipv6	2001:208:8000::/128	33	2003-03-06
JP	ipv6	2001:218::/128	35	1999-09-22
JP	ipv6	2001:218:2000::/128	35	2002-07-24
JP	ipv6	2001:218:4000::/128	34	2002-07-24
JP	ipv6	2001:218:8000::/128	33	2002-07-24
KR	ipv6	2001:220::/128	35	1999-10-06
KR	ipv6	2001:220:2000::/128	35	2003-11-26
KR	ipv6	2001:220:4000::/128	34	2003-11-26
KR	ipv6	2001:220:8000::/128	33	2003-11-26
KR	ipv6	2001:230::/128	35	1999-11-24
KR	ipv6	2001:230:2000::/128	35	2002-08-02
KR	ipv6	2001:230:4000::/128	34	2002-08-02
KR	ipv6	2001:230:8000::/128	33	2002-08-02
TW	ipv6	2001:238::/128	35	2000-02-08
TW	ipv6	2001:238:2000::/128	35	2002-07-11
TW	ipv6	2001:238:4000::/128	34	2002-07-11
TW	ipv6	2001:238:8000::/128	33	2002-07-11
JP	ipv6	2001:240::/128	35	2000-03-08
JP	ipv6	2001:240:2000::/128	35	2002-07-26
JP	ipv6	2001:240:4000::/128	34	2002-07-26
JP	ipv6	2001:240:8000::/128	33	2002-07-26
CN	ipv6	2001:250::/128	35	2000-04-26
CN	ipv6	2001:250:2000::/128	35	2002-07-26
CN	ipv6	2001:250:4000::/128	34	2002-07-26
CN	ipv6	2001:250:8000::/128	33	2002-07-26
CN	ipv6	2001:251::/128	32	2003-11-11
CN	ipv6	2001:252::/128	32	2007-03-16
CN	ipv6	2001:254::/128	32	2005-11-25

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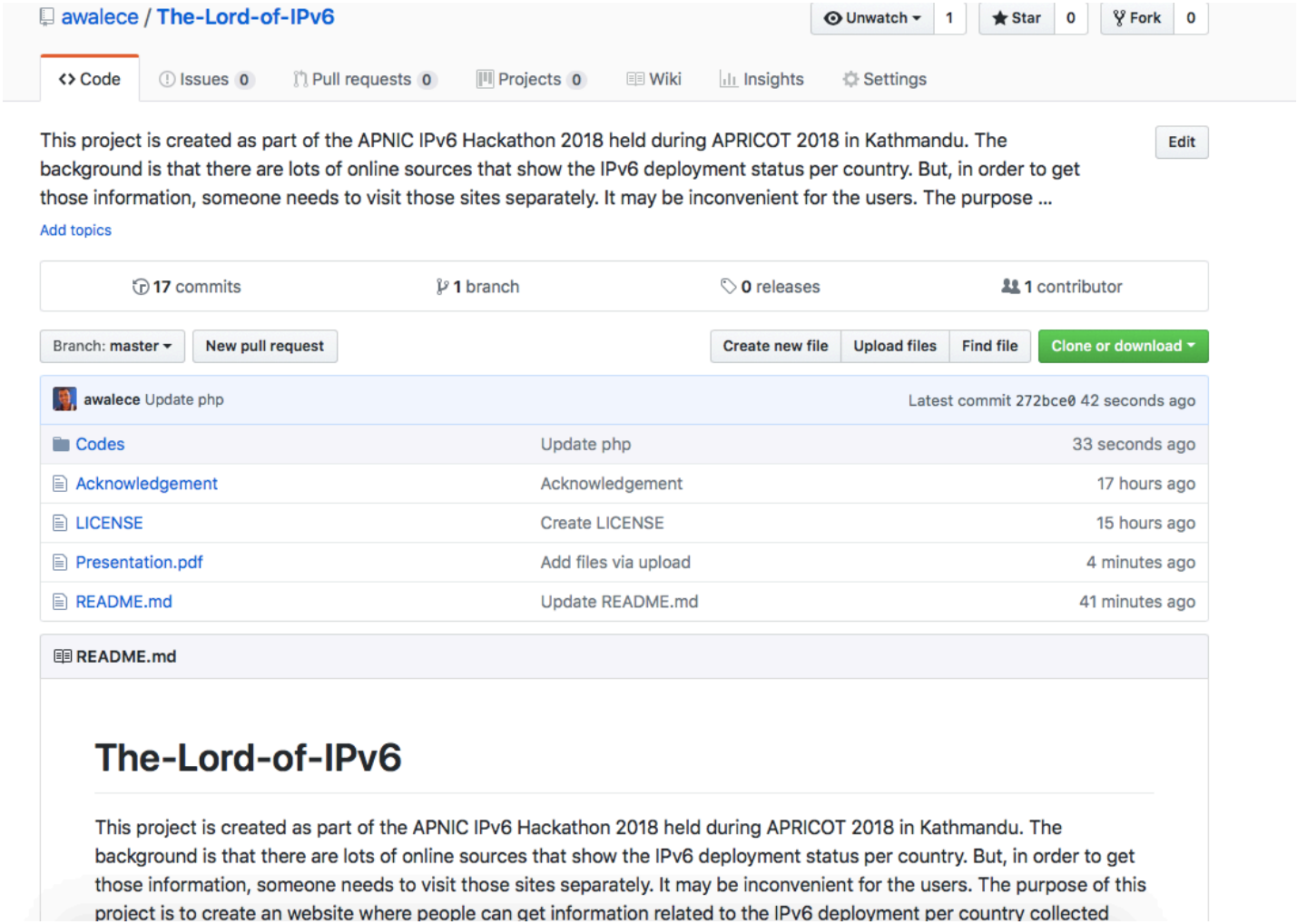

IMPROVEMENT SCOPES

- Current
  - Script to compare between databases
  - Fix the php codes to make the website working
- Future
  - Include Whois data
  - Building graphs

QUESTIONS?