

LACNIC directory services

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- Today there isn't a single server to send queries for IP addresses and AS numbers
- Current LACNIC WHOIS traffic shows 75% of the queries on our covering area and 40% of the objects at our DB
- Lots of requests from Law-enforcement about our use of resources based on whois misinformation
- Needed an interim solution during the development/deployment of a long term one – IRIS AREG (CRISP WG product)

Technology

Proxy non-caching server (using non-blocking I/O)

Index based on IANA, the RIRs stats files and NIR information

Deployments

LACNIC in production since Sep/2005

APNIC testing and expected to Dec/2005

Credits

This technology was originally designed and specified by the NRO and proudly developed/further modified by LACNIC to run as a front-end to our WHOIS server

All the RIRs for the distributed-rate-limiting coordination

Shane Kerr – For the initial Proof-of-concept in Python

Hugo Kobayashi – For the production version

George Michaelson – For the Linux port

```
# whois -l 209.52.107.230
% Joint Whois - whois.lacnic.net
% This server accepts single ASN, IPv4 or IPv6 queries
```

```
OrgName:    TELUS Communications Inc.
OrgID:      TACE
Address:    #2600 4720 Kingsway Avenue
City:      Burnaby
StateProv:  BC
PostalCode: V5N-4N2
Country:    CA
...
```

```
# whois -l 200.160.0.0
% Joint Whois - whois.lacnic.net
% This server accepts single ASN, IPv4 or IPv6 queries
```

```
% Copyright registro.br
...
% 2005-11-06 13:12:35 (BRST -02:00)
```

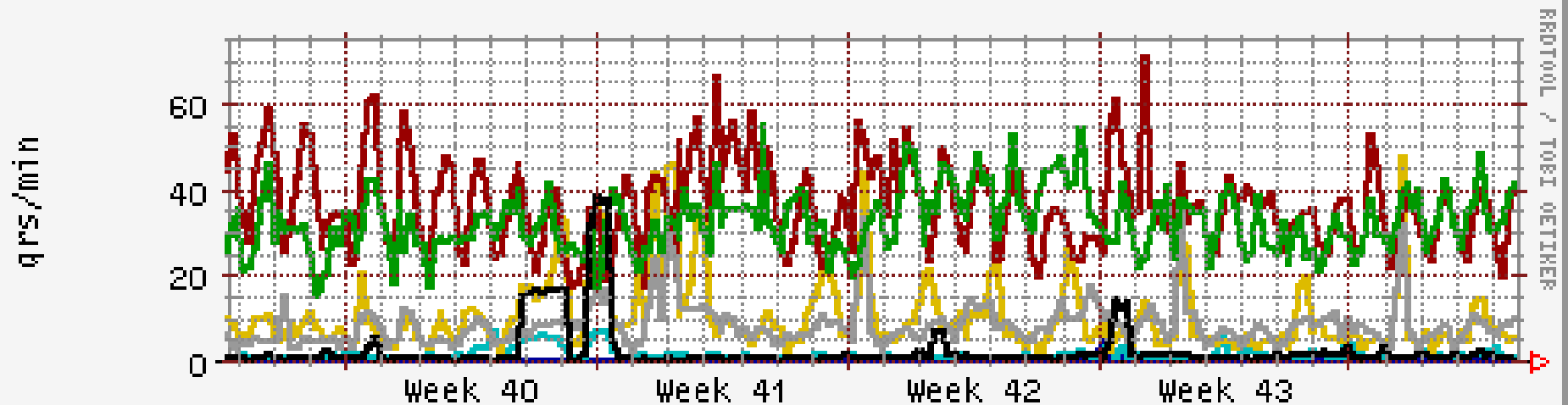
```
inetnum:    200.160.0/20
aut-num:    AS22548
abuse-c:    FAN
owner:      Núcleo de Informação e Coordenação do Ponto BR
...
```

```
# whois -l 202.12.29.20
% Joint Whois - whois.lacnic.net
% This server accepts single ASN, IPv4 or IPv6 queries
```

```
% [whois.apnic.net node-2]
% Whois data copyright terms http://www.apnic.net/db/dbcopyright.html
```

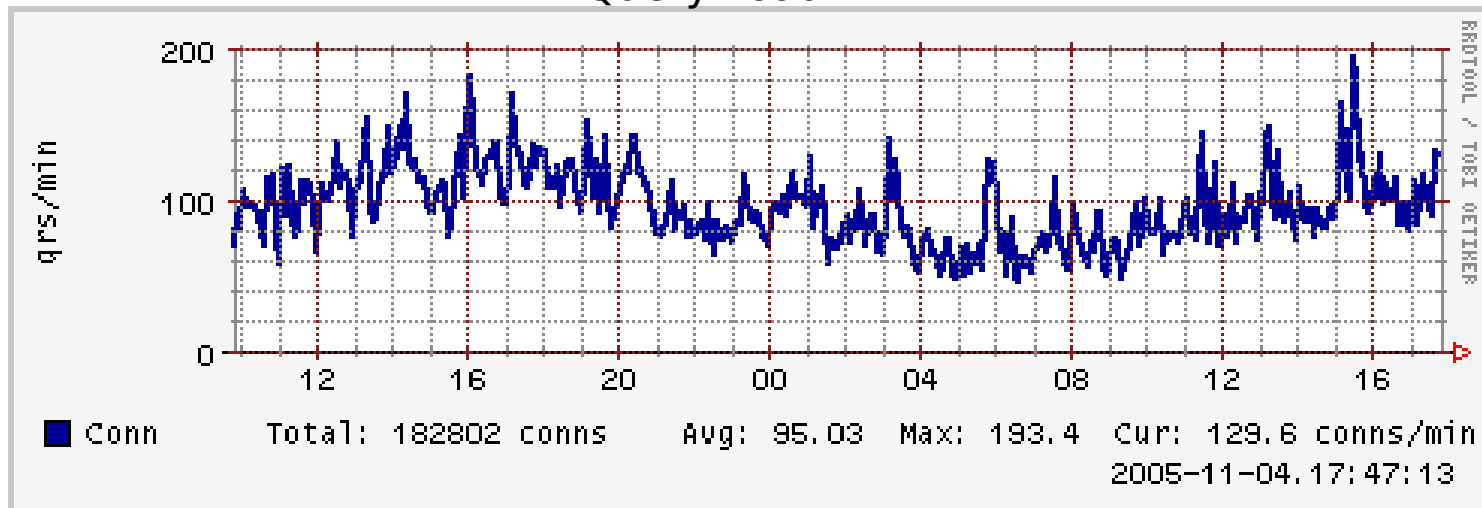
```
inetnum:    202.12.28.0 - 202.12.29.255
netname:    APNIC-AP
descr:      Asia Pacific Network Information Center, Pty. Ltd.
...
```

Per Whois backend Load



■ AFRINIC	Total:	5056 qrs	Avg:	0.19	Max:	25.2	Cur:	0.1 qrs/min
■ APNIC	Total:	36869 qrs	Avg:	1.41	Max:	40.2	Cur:	0.9 qrs/min
■ ARIN	Total:	263214 qrs	Avg:	10.06	Max:	106.2	Cur:	5.2 qrs/min
■ LACNIC	Total:	945257 qrs	Avg:	36.10	Max:	123.4	Cur:	41.1 qrs/min
■ RIPE	Total:	211119 qrs	Avg:	8.08	Max:	73.6	Cur:	9.7 qrs/min
■ BR	Total:	843608 qrs	Avg:	32.28	Max:	149.2	Cur:	41.2 qrs/min
■ UNALLOC	Total:	59905 qrs	Avg:	2.30	Max:	83.4	Cur:	0.4 qrs/min

Query Load



Resource Load

