

Displaying IPv6 routing in a graphical form – a new tool from Hurricane Electric

Hurricane Electric

IPv6 Native Backbone – Massive Peering!

<http://bgp.he.net/>

JANOG26

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Hurricane Electric

A new visual BGP tool from Hurricane Electric

<http://bgp.he.net/>

Showing route propagation in a graphical form

Caveat:

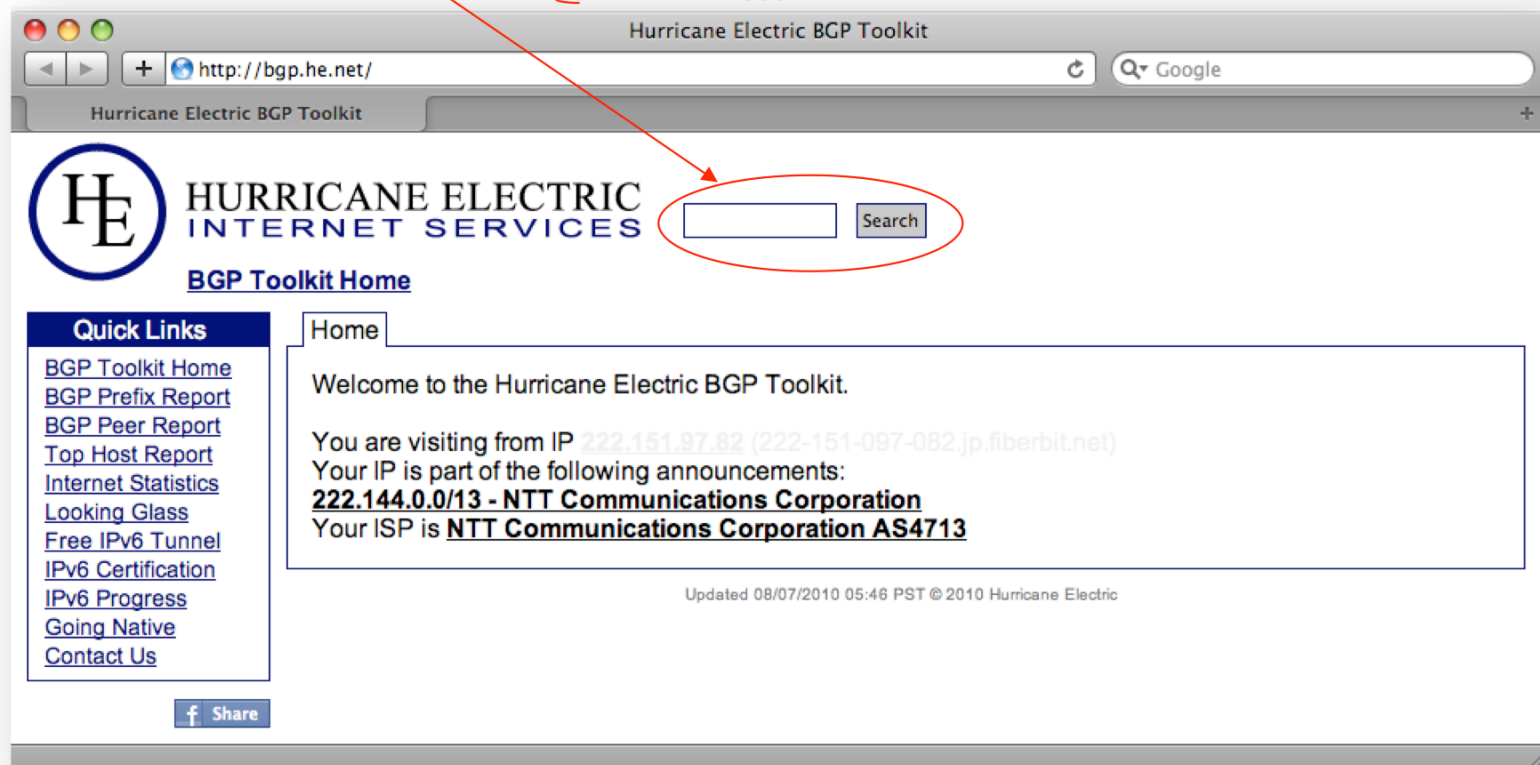
- This tool is only as good as it's source data.
- IP information is uploaded from RIS & Oregon routeviews.
- Some views are missing; not all routes and paths are visible.
- NOT based on the Hurricane Electric routing tables.



http://bgp.he.net/ - Searching on ASN, IP, etc.

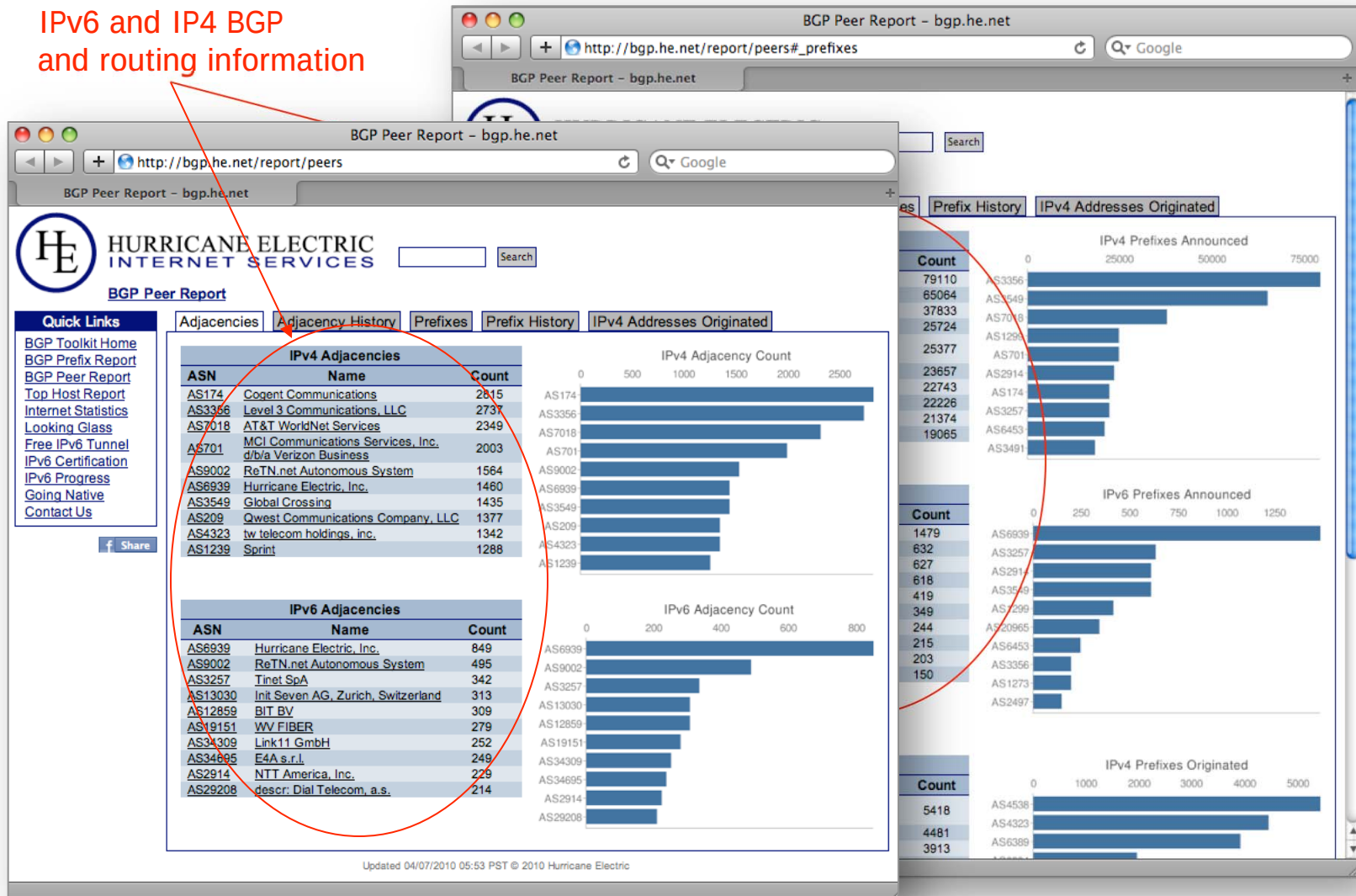
Search command {

ASN	AS2515	or AS2497
IPv4 address	202.12.30.115	or 210.130.137.80
IPv4 block	202.12.30.0/24	or 210.130.137.0/24
IPv6 address	2001:0dc2::1	or 2001:240:bb42:b000::1:80
IPv6 block	2001:0dc2::/32	or 2001:240::/32
DNS name	nic.ad.jp	or www.ijj.ad.jp
...etc ...		



Example of BGP tools – IPv4/IPv6 statistics

IPv6 and IP4 BGP
and routing information



<http://bgp.he.net/>

<http://bgp.he.net/> – Available information

■ BGP Prefix Report

□ Prefixes, Networks, Distribution

- IPv4/IPv6 Prefixes Originated (90 Days)
- ASN's with IPv4/IPv6 Announcements (90 Days)
- IPv4/IPv6 Announced Prefix Count by CIDR

■ BGP Peer Report

□ Adjacencies, Adjacency History

- IPv4/IPv6 Adjacencies
- IPv4/IPv6 Adjacency Count (90 Days)

□ Prefixes, Prefix History

- IPv4/IPv6 Prefixes Announced
- IPv4/IPv6 Prefixes Announced (90 Days)

□ IPv4 Addresses Originated

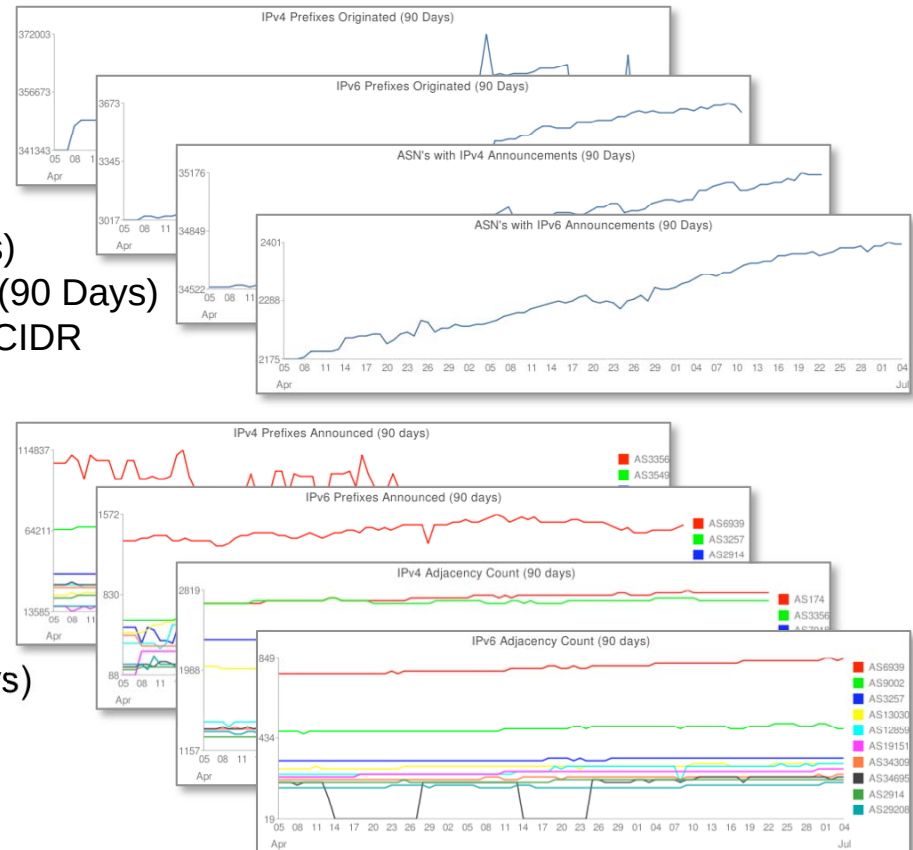
- IPv4 Addresses Originated

■ Top Host Report

□ Top Hosts

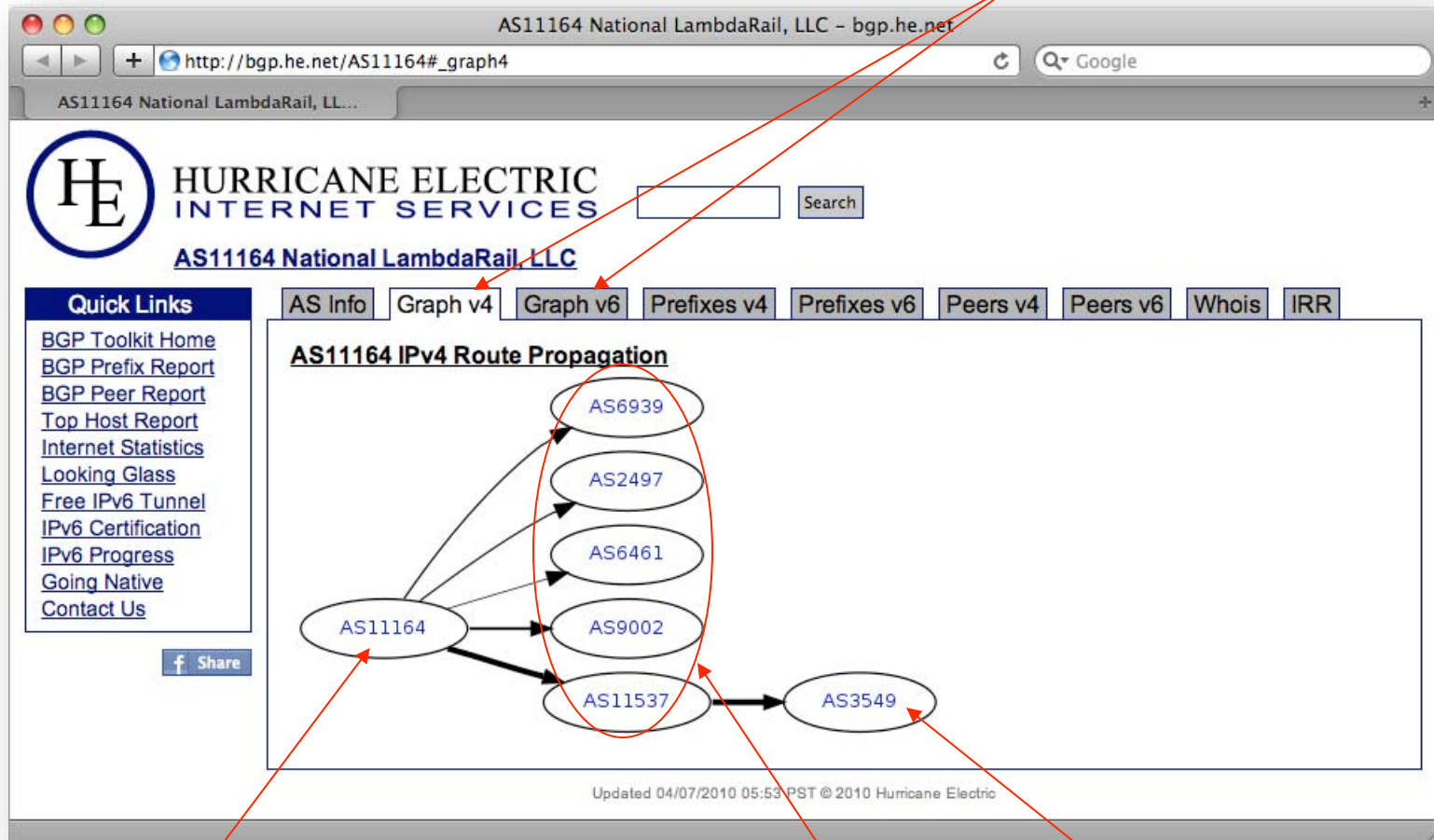
■ Internet Statistics

□ Internet Statistics



http://bgp.he.net/ – Route propagation graphs

Select tab for v4 or v6 graphs

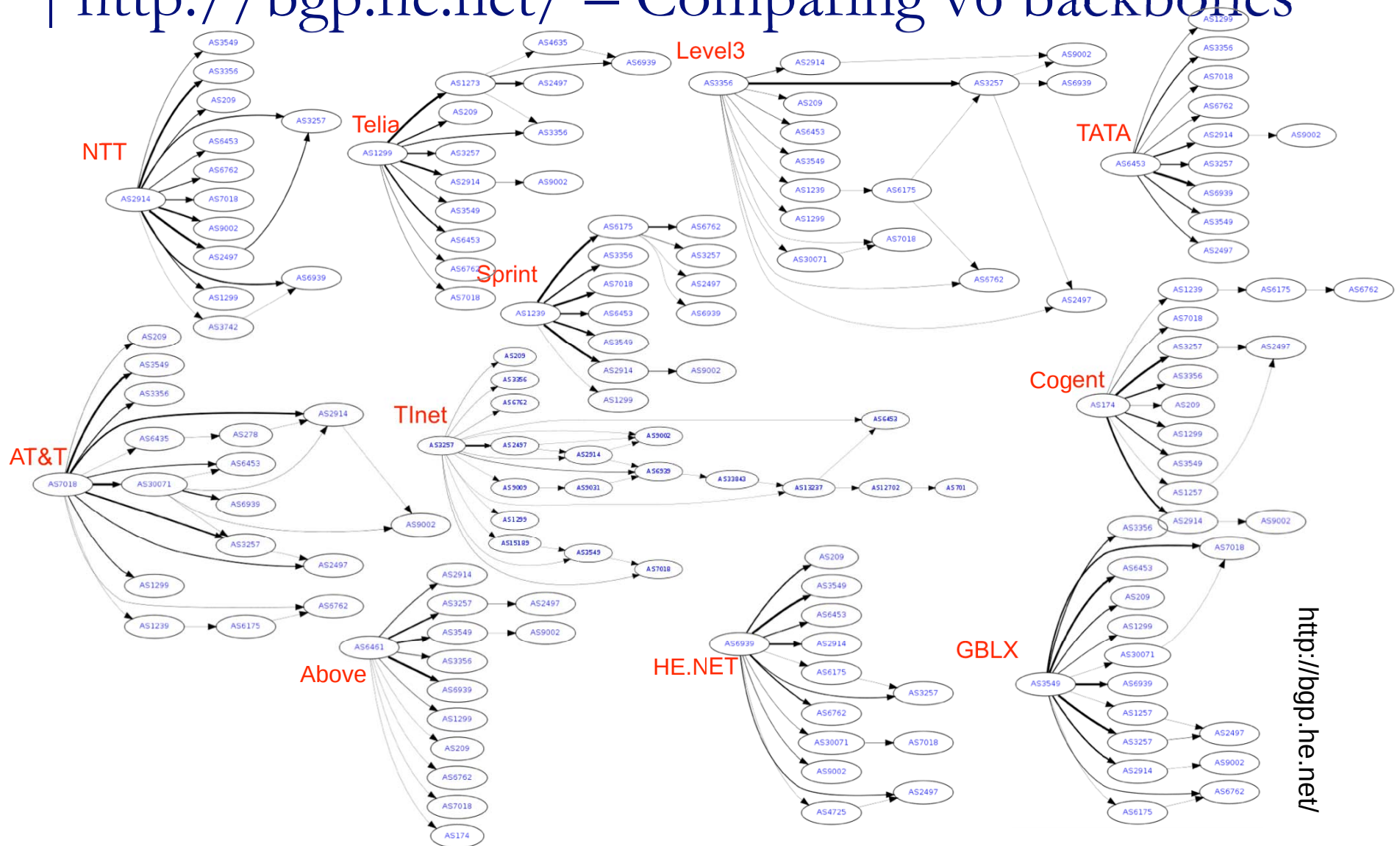


ASN originating routes

Peers that see routes

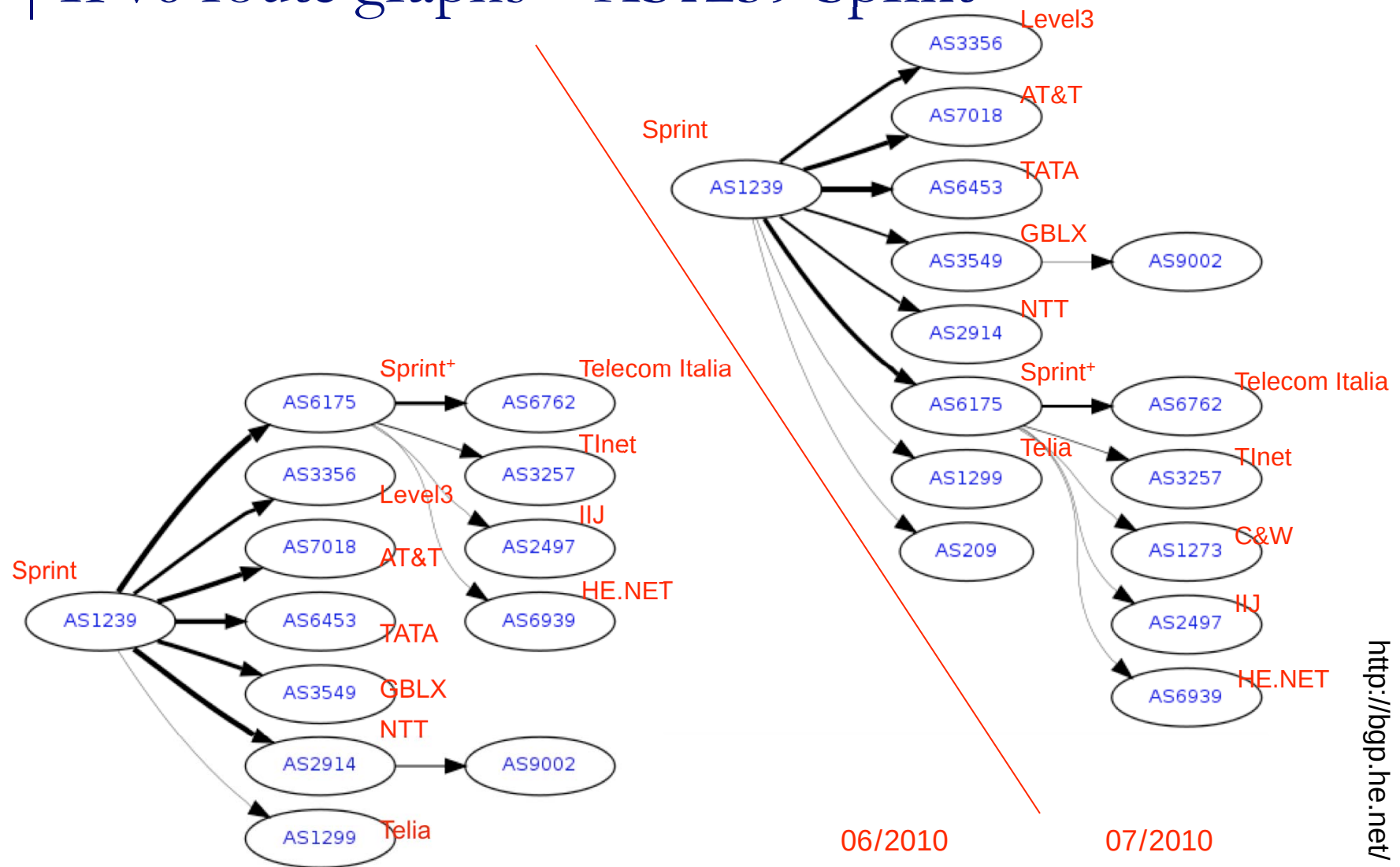
Routes see downstream of peers

<http://bgp.he.net/> – Comparing v6 backbones

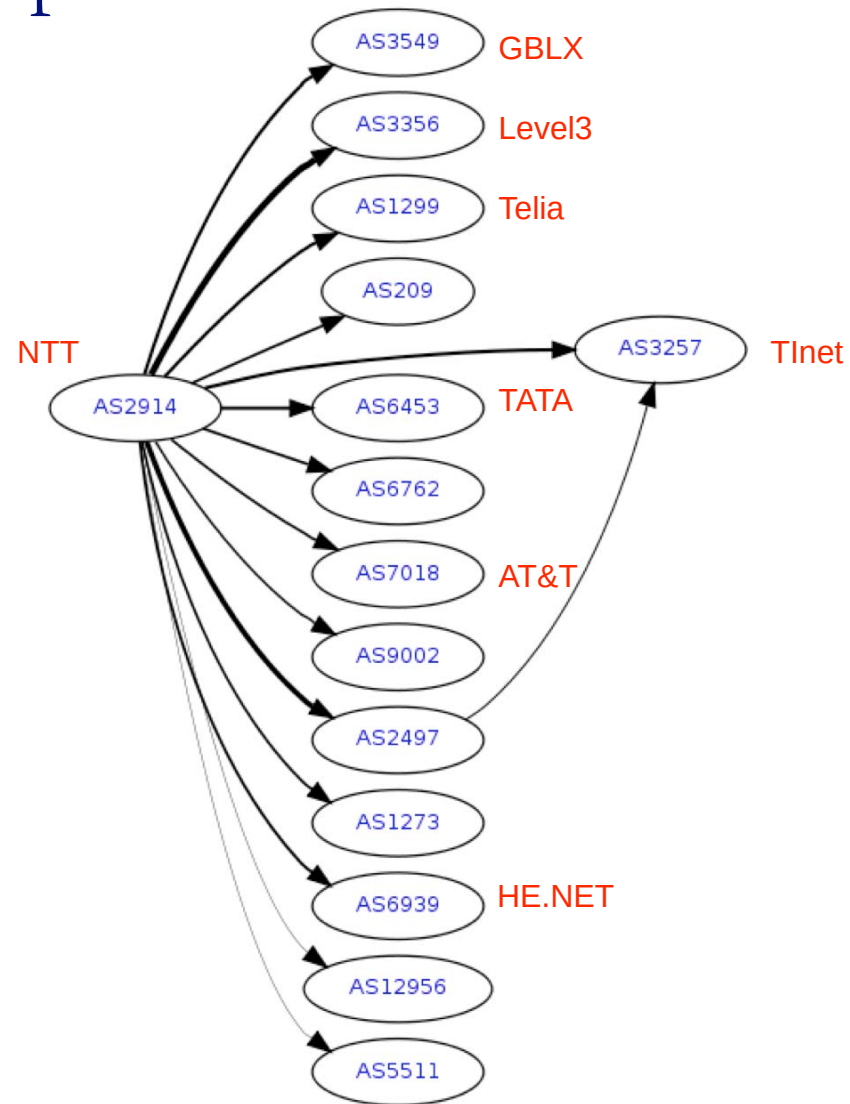


<http://bgp.he.net/>

IPv6 route graphs – AS1239 Sprint

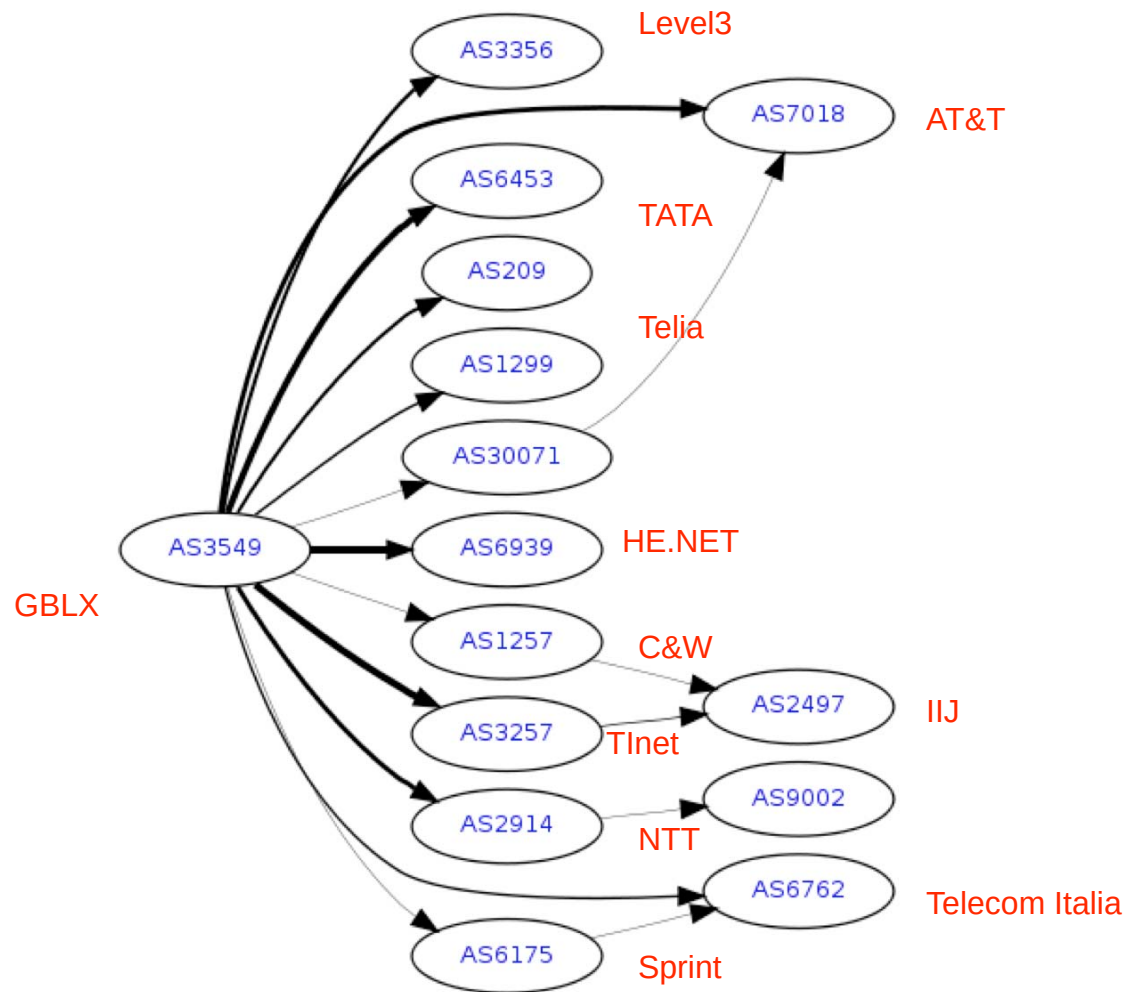


IPv6 route graphs – AS2914 NTT



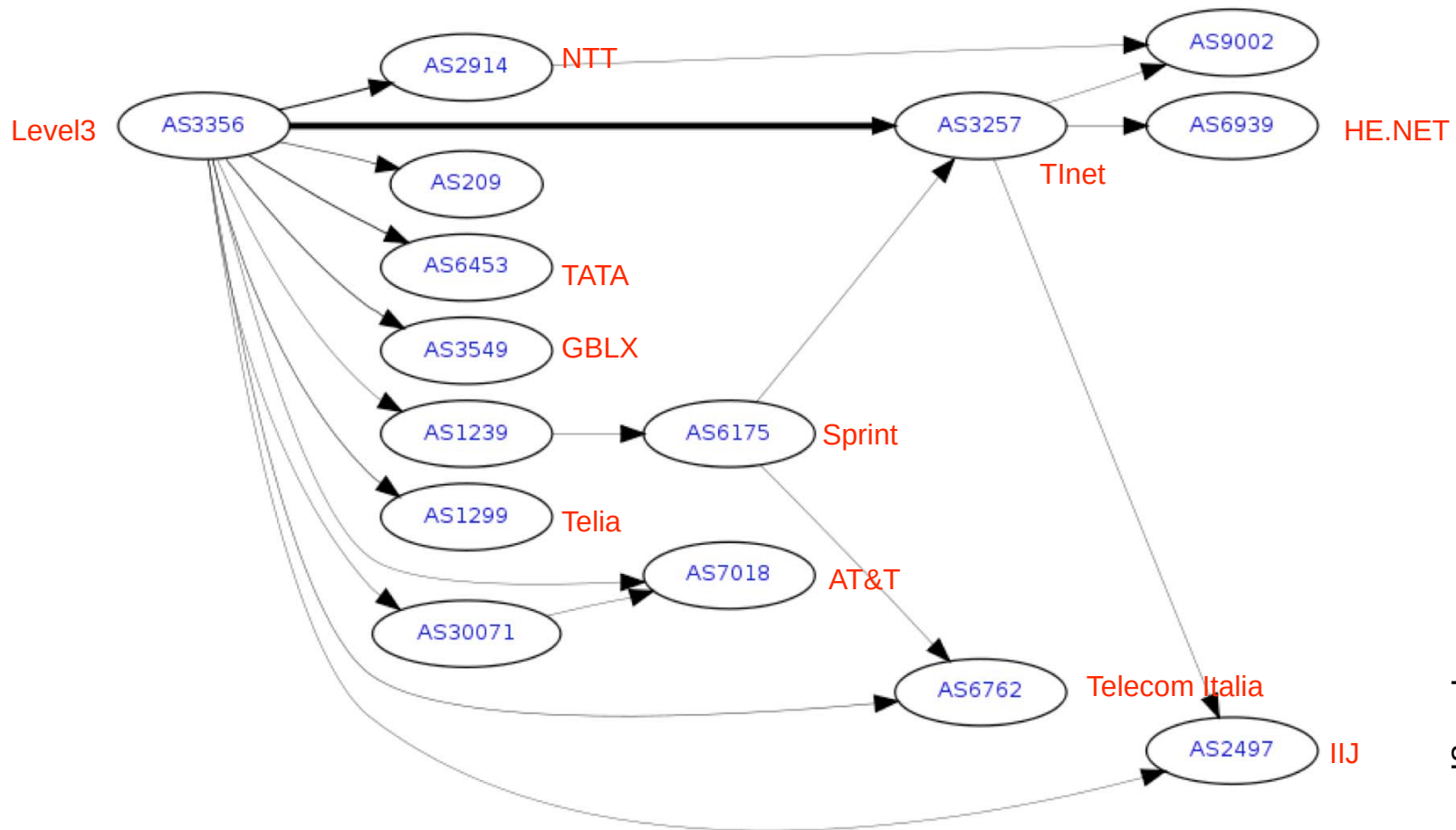
<http://bgp.he.net>

IPv6 route graphs – AS3549 Global Crossing



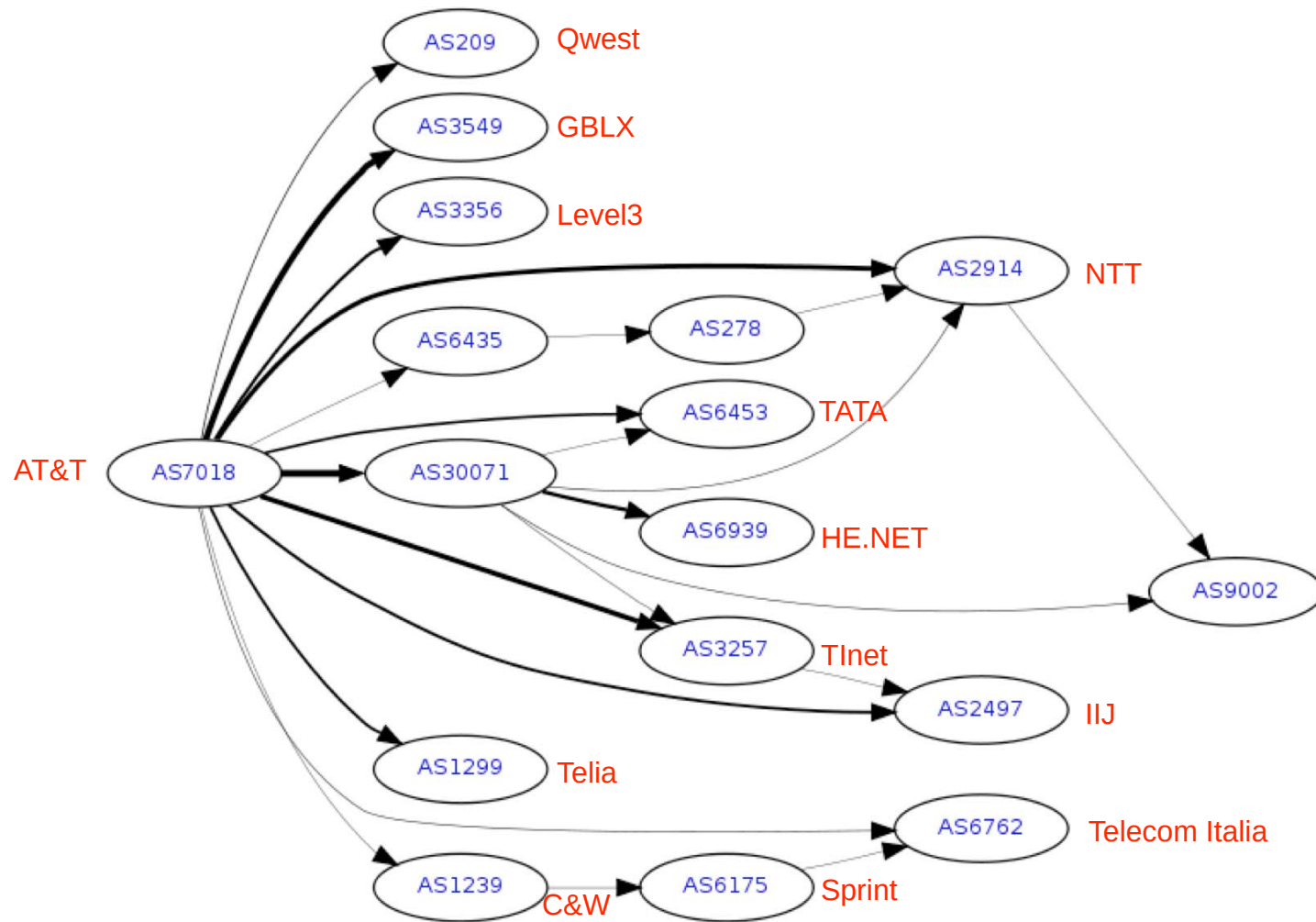
<http://bgp.he.net/>

IPv6 route graphs – AS3356 Level3



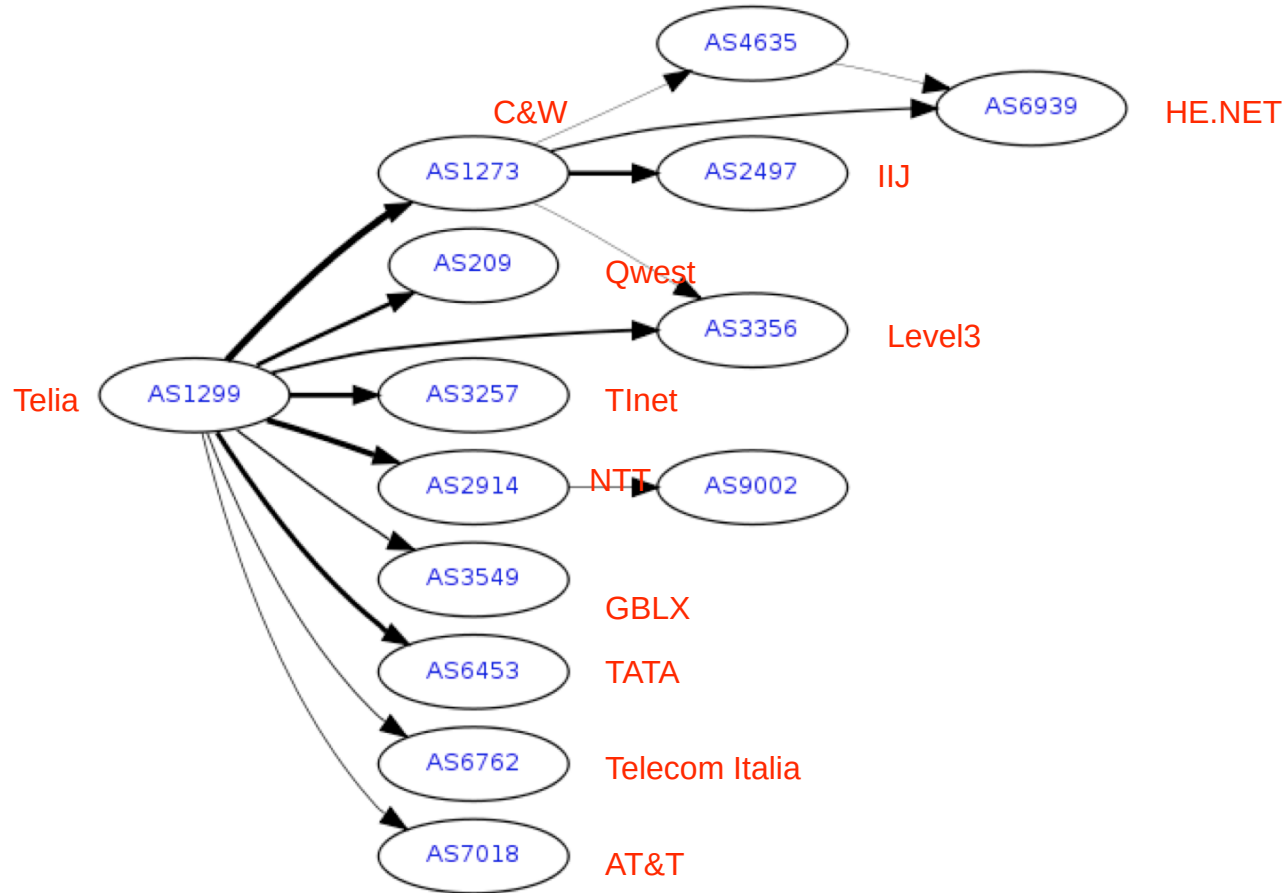
<http://bgp.he.net/>

IPv6 route graphs – AS7018 AT&T



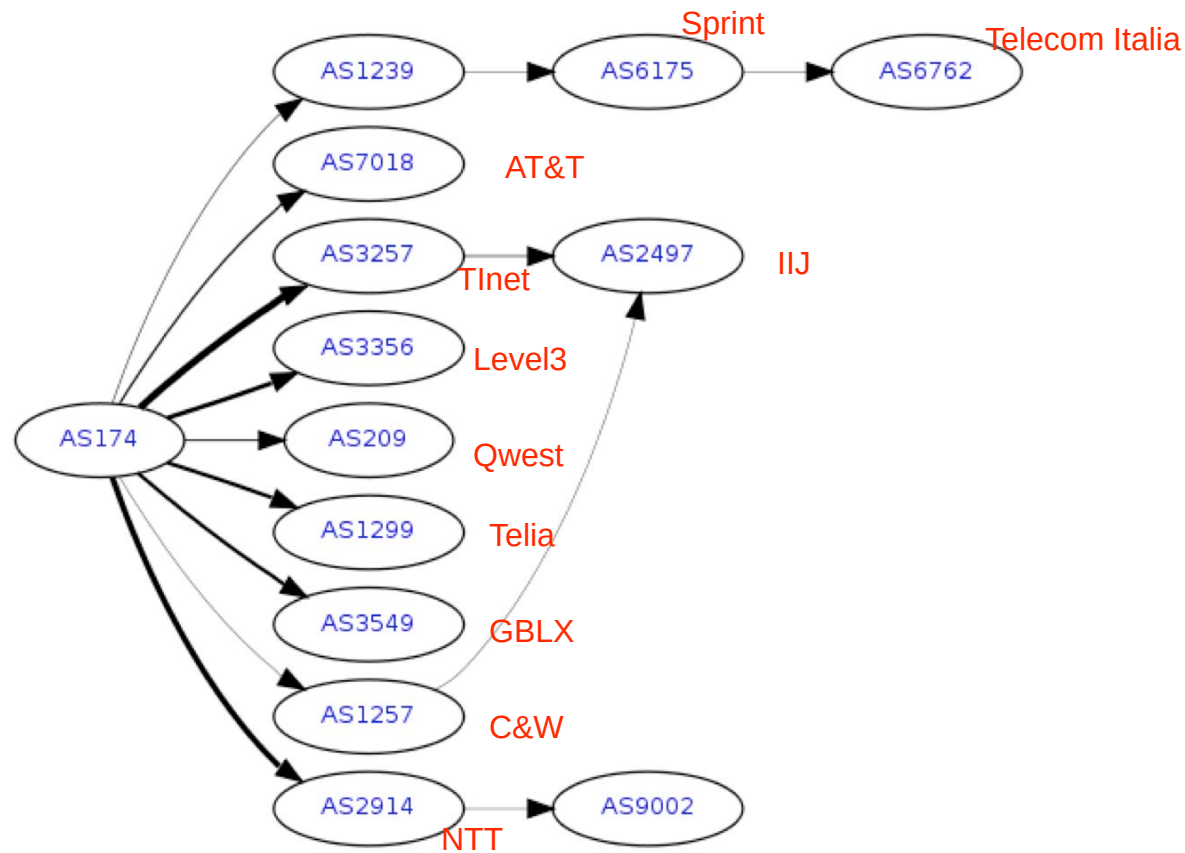
<http://bgp.he.net>

IPv6 route graphs – AS1299 Telia



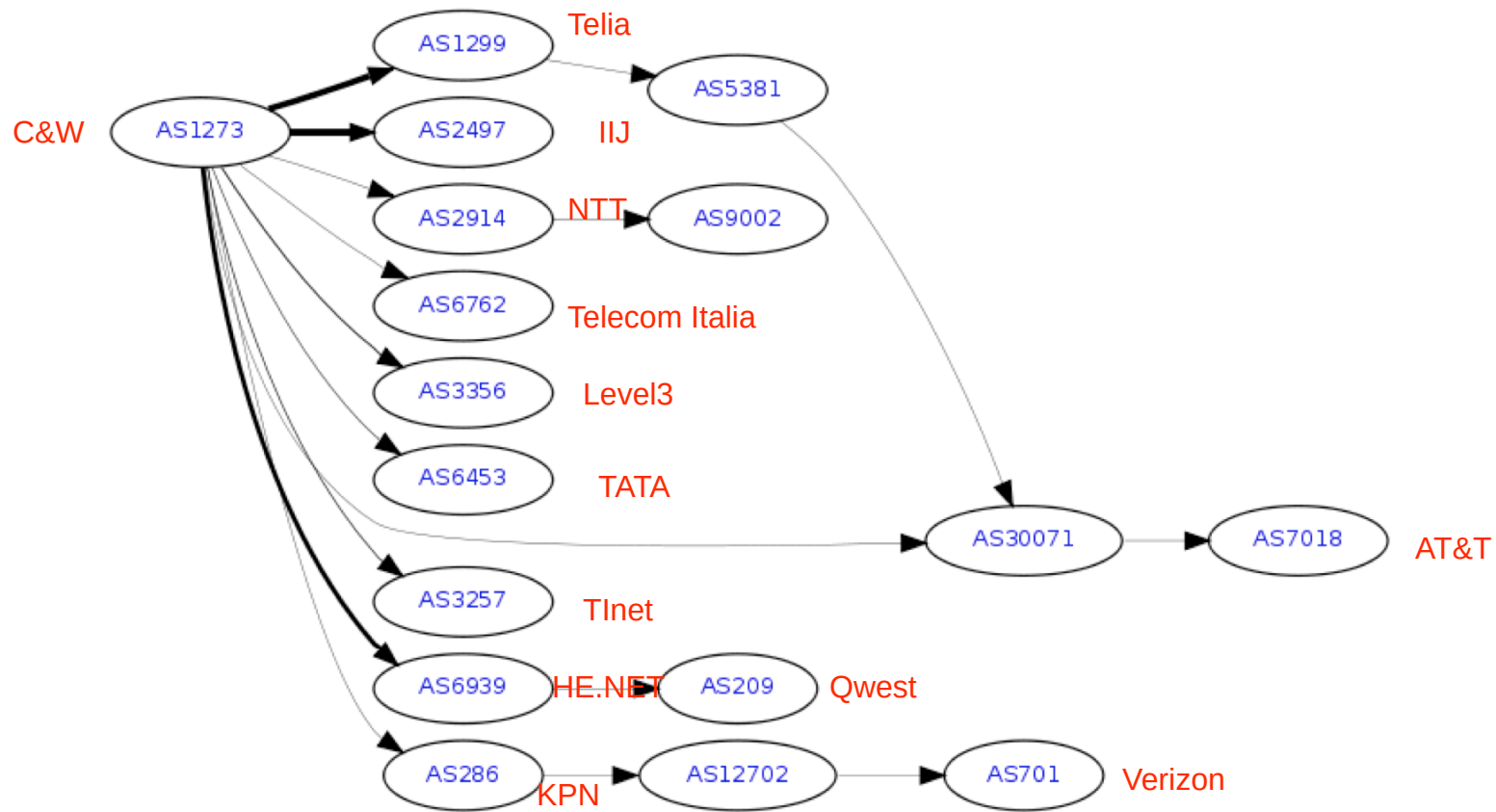
<http://bgp.he.net/>

IPv6 route graphs – AS174 Cogent



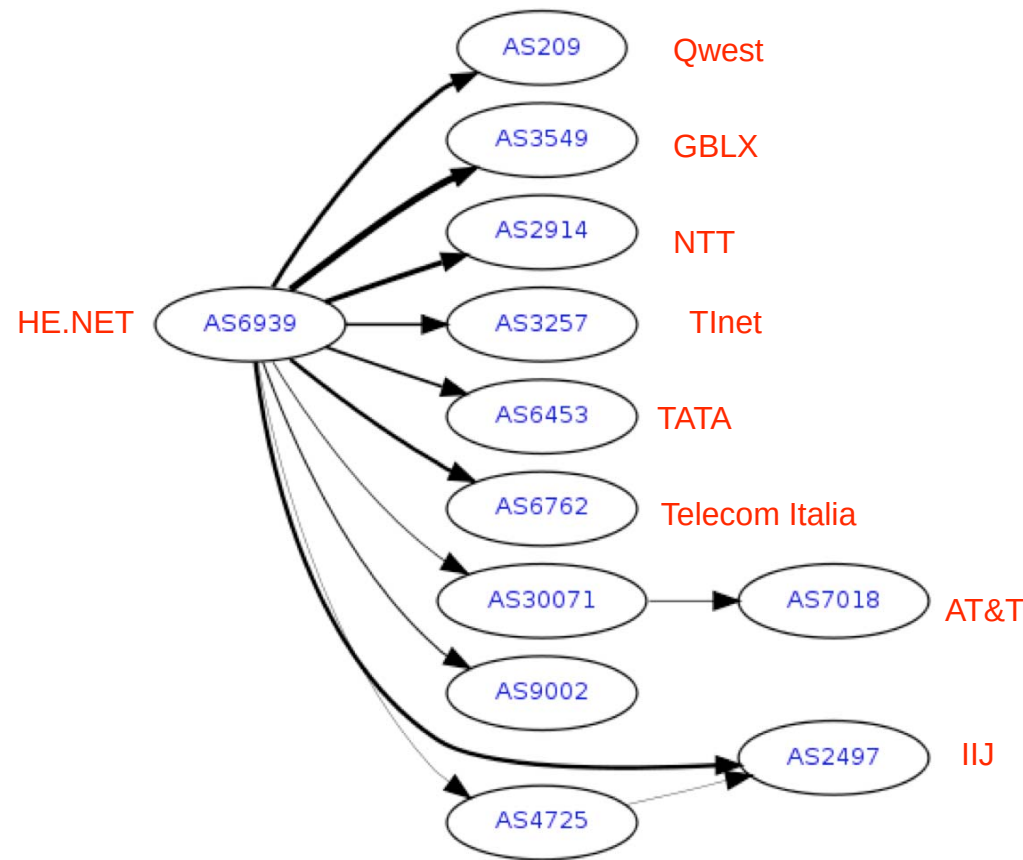
<http://bgp.he.net/>

IPv6 route graphs – AS1223 C&W



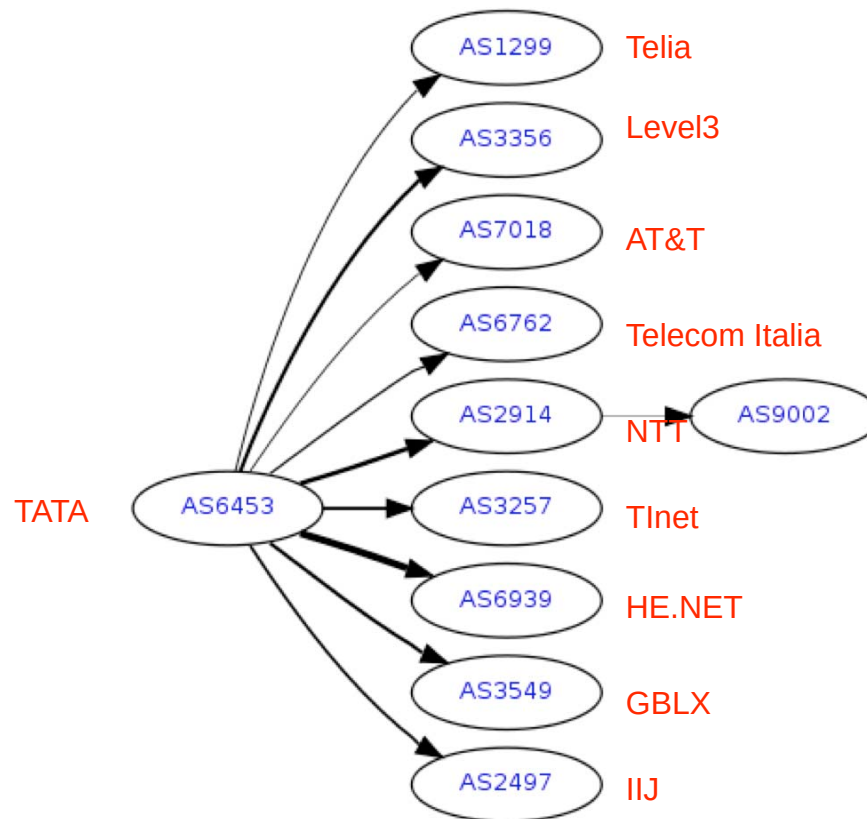
<http://bgp.he.net/>

IPv6 route graphs – AS6939 Hurricane Electric



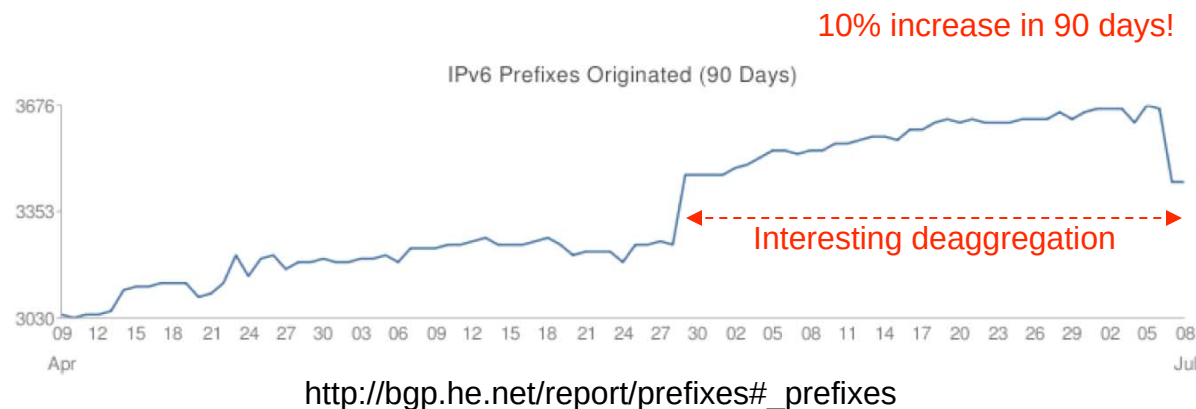
<http://bgp.he.net/>

IPv6 route graphs – AS6453 TATA



<http://bgp.he.net/>

Is IPv6 routing/interconnections/peering prevalent?



<http://bgp.he.net/>



http://bgp.he.net/ – DNS reporting (part 1)

Pick a fully-qualified domain name

DNS info

IP info

The screenshot shows a web browser window with the URL <http://bgp.he.net/dns/dns.ne.jp>. The page header includes the Hurricane Electric logo and the text "HURRICANE ELECTRIC INTERNET SERVICES". A search bar is present. Below the header, there are tabs for "DNS Info", "Website Info", "IP Info", and "Whois". The "DNS Info" tab is selected, showing the following information:

- Start of Authority**
 - mname: dns.sakura.ad.jp mname: dns.sakura.ad.jp
 - serial: 2010070800
 - refresh: 900 retry: 300
 - expire: 3600000 minimum: 3600
- Nameservers**
 - ns1.dns.ne.jp, ns2.dns.ne.jp
- A Records**
 - 210.224.172.53

On the left side, there is a "Quick Links" section with various links such as "BGP Toolkit Home", "BGP Prefix Report", "BGP Peer Report", "Top Host Report", "Internet Statistics", "Looking Glass", "Free IPv6 Tunnel", "IPv6 Certification", "IPv6 Progress", "Going Native", and "Contact Us". A "Share" button is also visible.

http://bgp.he.net/



http://bgp.he.net/ – DNS reporting (part 2)

The screenshot shows a web browser window with the address bar displaying `http://bgp.he.net/dns/dns.ne.jp#_ipinfo`. The page header includes the Hurricane Electric logo and the text "HURRICANE ELECTRIC INTERNET SERVICES". Below the header, there is a search bar and a "Search" button. The main content area features a navigation menu on the left with links such as "BGP Toolkit Home", "BGP Prefix Report", "BGP Peer Report", "Top Host Report", "Internet Statistics", "Looking Glass", "Free IPv6 Tunnel", "IPv6 Certification", "IPv6 Progress", "Going Native", and "Contact Us". The main content area also has tabs for "DNS Info", "Website Info", "IP Info", and "Whois". The "Whois" tab is selected, showing a routing path: `210.224.172.53 > 210.224.160.0/19 > AS9371 > SAKURA Internet Inc.`. The text "AS9371" is circled in red, and a red arrow points from the text "ASN info" to it. The page footer includes a "Display a menu" link and a "Share" button.

ASN info

http://bgp.he.net

http://bgp.he.net/ – DNS reporting (part 3)

210.224.172.53 – bgp.he.net

http://bgp.he.net/ip/210.224.172.53#_dns

HURRICANE ELECTRIC
INTERNET SERVICES

210.224.172.53

Quick Links

- BGP Toolkit Home
- BGP Prefix Report
- BGP Peer Report
- Top Host Report
- Internet Statistics
- Looking Glass
- Free IPv6 Tunnel
- IPv6 Certification
- IPv6 Progress
- Going Native
- Contact Us

IP Info Whois DNS RBL

210.224.172.53 resolves to www.sakura.ad.jp.

The following A records are set to 210.224.172.53:

4tvh.info, jpn.org, sakura.ne.jp, sakuraweb.com, squares.net

Updated 08/07/2010 05:46 PST © 2010 Hurricane Electric

http://bgp.he.net

Summary

Enjoy using it ...

<http://bgp.he.net/>

... hopefully it's useful.



Thank you

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