

Route-Views Update

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<http://www.routeviews.org>
help@routeviews.org

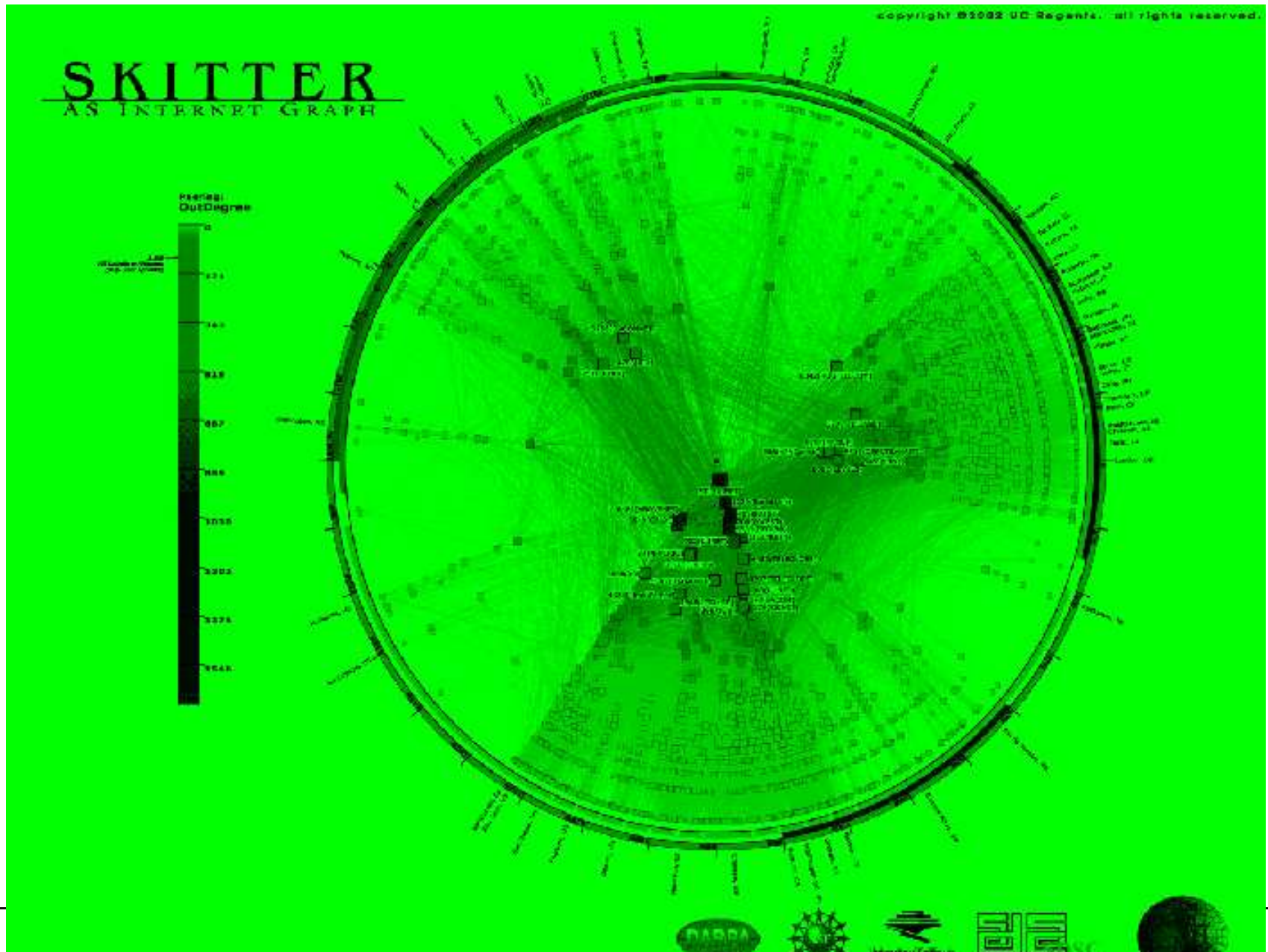
Agenda

- ☐ Project Overview and Purpose
- ☐ Current Status and What's New
- ☐ Issues/Problems
- ☐ Questions and/or Comments
- ☐ <http://www.routeviews.org/talks/NANOG29>

Project Overview (Circa 1995)

- route-views started life as a ...
 - purely operational tool
 - We needed a way to look how providers saw our routes
- Looking glasses were still in the future
- Randy Bush was kind enough to give us a view from MAE-WEST
- People started using route-views and contributing views
- But this caused things to really take off...

CAIDA Skitter Core



Current Status

- Realtime (CLI) access
 - Useful in diagnosing operational problems
 - Takes $O(5K)$ connections/day
- Data Collection
 - Collect RIBs in 'show ip bgp' format
 - Collect MRT format RIBs and updates
 - Archival Internet Routing Data Repository
 - Working on database front-end(s)
- BGP Beacon (192.135.183/24)
- Provide data to various research groups
- <http://www.routeviews.org/papers>

Current Status -- Services

Host	MFG	BGP Proto	CLI	Location
route-views.routeviews.org (route-views.oregon-ix.net)	Cisco	IPv4 uni/multi-cast	telnet	U of Oregon, Eugene Oregon, USA
route-views2.routeviews.org (route-views2.oregon-ix.net)	Zebra	IPv4 uni/multi-cast	telnet	U of Oregon, Eugene Oregon, USA
route-views3.routeviews.org	Juniper	IPv4/v6 uni/multi-cast	telnet ssh	U of Oregon, Eugene Oregon, USA
route-views6.routeviews.org	Zebra	IPv6	telnet	U of Oregon, Eugene Oregon, USA
route-views.wide.routeviews.org	Zebra	IPv4 uni/multi-cast	telnet	NSPIXP, Tokyo, Japan
archive.routeviews.org			http ftp	U of Oregon, Eugene Oregon, USA
zebra.routeviews.org		BGP Beacon prefix 192.135.183.0		U of Oregon, Eugene Oregon, USA

See <http://www.routeviews.org>

Current Status -- Mailing Lists

list	description
help	Questions and requests regarding Route-Views services. Closed to subscription.
outage	Notifications of outages affecting Route-Views equipment or services. Open subscription, closed posting.
rviews-announce	Announcements pertaining to Route-Views services. Open subscription, closed posting.

Again, see <http://www.routeviewws.org>

What's new...

☐ New Collector Sites

- WIDE/NSPIXP (hosted by KDDI)
- PAIX (ISC)
- Again, thanks to WIDE and PAIX for hosting these
- We need US East Coast and European locations (Hosts welcome!)

☐ Prefix to ASN and AS_PATH zones

- asn.routeviews.org and aspath.routeviews.org

☐ Database front ends

- This is in primordial state
- Input on what would be useful would be greatly appreciated

Prefix to AS/AS_PATH zones

[dmm@wayback:~] 6% dig TXT 223.128.asn.routeviews.org

```
; <<>> DiG 9.2.1 <<>> TXT 223.128.asn.routeviews.org
;; global options: printcmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 26027
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 1

;; QUESTION SECTION:
;223.128.asn.routeviews.org. IN TXT

;; ANSWER SECTION:
223.128.asn.routeviews.org. 86400 IN TXT "3582" "128.223.0.0" "16"

;; AUTHORITY SECTION:
asn.routeviews.org. 86400 IN NS routeviews.org.

;; ADDITIONAL SECTION:
routeviews.org. 86400 IN A 128.223.162.49

...
```

Issues/Problems

- Zebra and MRT data integrity
 - Code-base split into Zebra/Quagga
 - Is MRT's 1 second granularity sufficient?
- eBGP Multi-hop & external events
 - Some routers don't do ebgp-multihop well
 - multi-hop also makes it difficult to study events in the multi-hop path
 - So we're trying to reduce ebgp-multihop scenarios
- And of course, the perennial
 - Archival data storage
 - Data base front end(s)

Aside: Coordination of Routing Data Sources

- ❑ RIPE RIS (www.ripe.net/ris)

- MRT format RIB and UPDATES
- some quagga these days (RRC05 at least)

- ❑ route-views (www.routeviews.org)

- 'sh ip bgp' format at 2 hour intervals
- (older hwb archive on moat.nlanr.net)
- MTR RIB archiving (every 2 hours)
- MTR UPDATES archiving (every 15 minutes)

- ❑ PCH (www.pch.net)

- ❑ Numerous Looking Glasses

- good list at <http://neptune.dti.ad.jp>

Coordination of Routing Data Sources, cont

- Private Listeners/Archives
- So there is a lot of BGP data around these days
- But...
 - What is the quality of this data?
 - Note recent Agilent work on this topic
- And who is coordinating archival storage
 - Would "one-stop shopping" be useful?

Questions and/or Comments?

Thanks

[The Route-views crew]

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