

BGPbotz

IM-based route view bot

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Route Views

- Generally web or telnet based
- Provides a looking-glass for BGP from different vantage points (routers)

```
route-server.he.net> sh ip bgp 35.0.0.0
BGP routing table entry for 35.0.0.0/8
Paths: (23 available, best #13, table Default-IP-Routing-Table)
  Not advertised to any peer
  237, (aggregated by 237 198.108.93.41)
    206.223.119.39 from 216.218.252.180 (216.218.252.168)
      Origin IGP, metric 20, localpref 47, valid, internal
      Originator: 216.218.252.168, Cluster list: 216.218.252.180 216.
      Last update: Fri Aug 28 09:44:50 2009
```

Disadvantages

- Have to remember telnet/web address, eg:
 - route-server.ip.att.net
 - route-views.ab.bb.telus.com
- “More” text in your console:

```
Originator: 216.218.252.168, Cluster list: 216.218.252.148  
Last update: Fri Aug 28 09:44:50 2009
```

```
237, (aggregated by 237 198.108.93.41)  
206.223.119.39 from 216.218.252.167 (216.218.252.168)  
Origin IGP, metric 60, localpref 100, valid, internal  
Originator: 216.218.252.168, Cluster list: 216.218.252.167  
Last update: Fri Aug 28 09:44:50 2009
```

```
--More--
```

BGPbotz

The screenshot shows a Jabber chat window titled "bgpbotz". The window has a menu bar with "Conversation", "Options", "Send To", and "OTR". There are two tabs: "bgpbotz" and "bgpbotz@jabber.research.merit.edu". The chat area shows a conversation:

(03:35:18 PM) **I33tosaurus:** sh ip bgp 35.0.0.0
(03:35:18 PM) **bgpbotz:** show ip bgp 35.0.0.0
BGP routing table entry for 35.0.0.0/8
Paths: (1 available, best #1, table Default-IP-Routing-Table)
Not advertised to any peer
{65040}, (aggregated by 237 198.108.93.34)
198.108.93.62 from 198.108.63.41 (198.108.63.41)
Origin IGP, localpref 100, valid, internal, best
Last update: Sun Aug 23 17:23:59 2009

At the bottom, there is a toolbar with "Font", "Insert", and "Smile!" buttons, and a status indicator "Not private".

BGPbotz

- Links for long results:

(03:40:42 PM) **I33tosaurus:** show ip bgp

(03:40:51 PM) **bgpbotz:** show ip bgp

BGP table version is 0, local router ID is 198.108.62.154

Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
r RIB-failure, S Stale, R Removed

Origin codes: i - IGP, e - EGP, ? - incomplete

Network	Next Hop	Metric	LocPrf	Weight	Path
*>i0.0.0.0	198.108.93.55	110	0	7018	i
*>i3.0.0.0	198.108.93.55	331	110	0	2914 9304 80 i
*>i3.51.92.0/23	198.108.93.55	110	0	7018	?
*>i4.0.0.0	198.108.93.55	100	0	7018	3356 i
*>i4.0.0.0/9	198.108.93.55	100	0	7018	3356 i
*>i4.21.103.0/24	198.108.93.41	279	110	0	11537 3549 46133 i

TRUNCATED

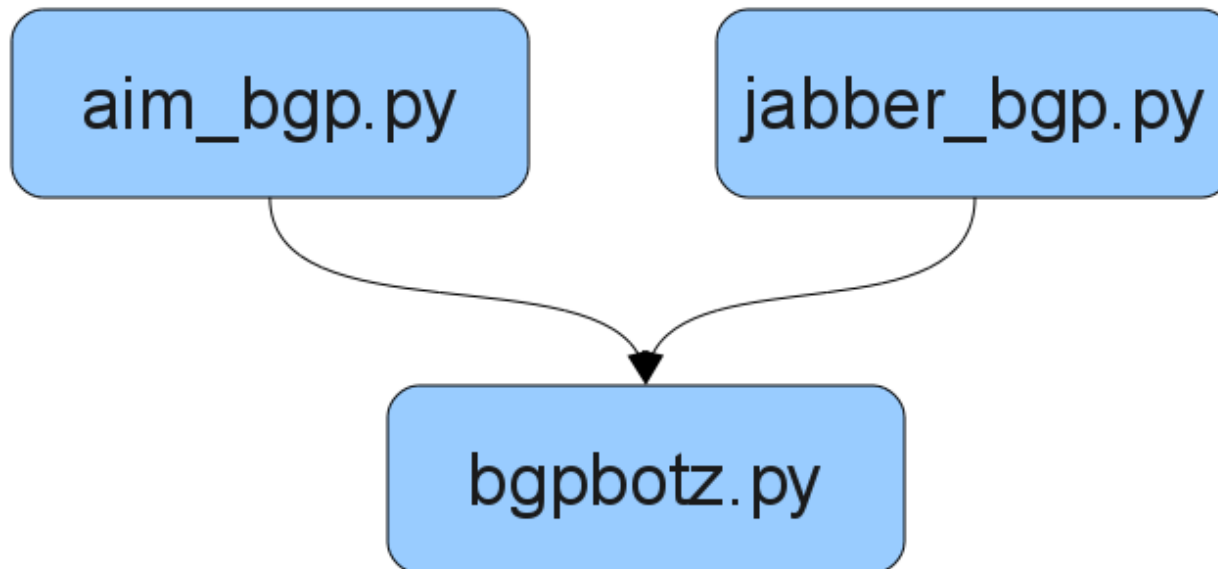
<http://bgpbotz.merit.edu/t6kb1vh8>

Commands

- show ip bgp
- show bgp view (router) ipv6
- ping
- traceroute
- aslookup
- whois
- grep

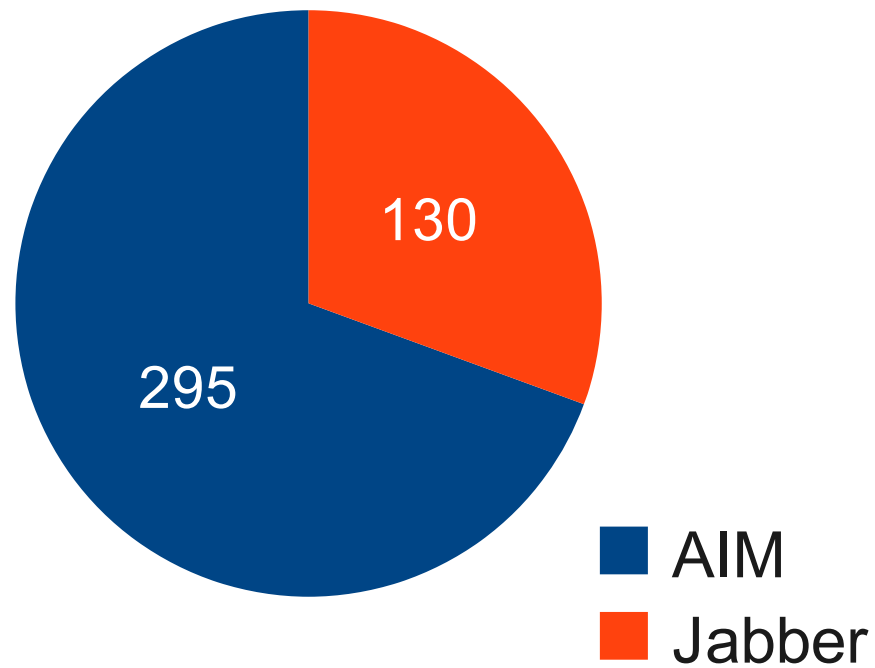
Architecture

- Python
- Chat protocols: AIM, Jabber(XMPP)
- Single thread per user
- Interface to vtysh



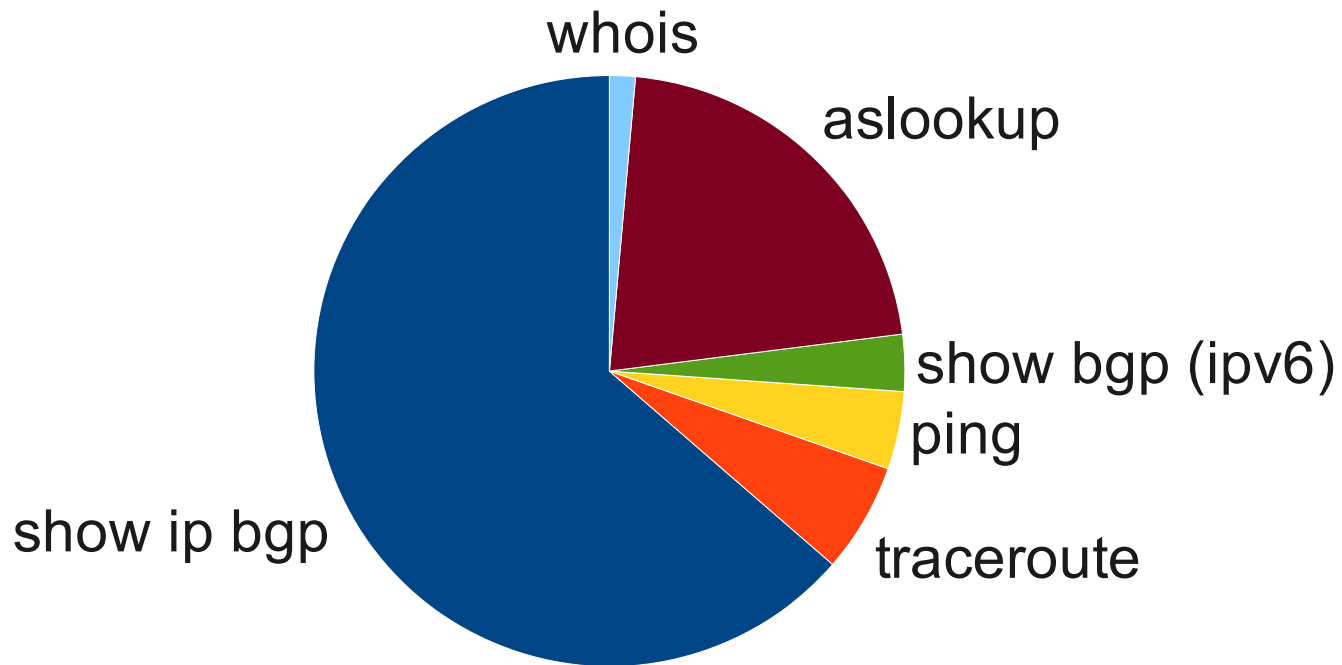
Results

- 400+ screen names from both protocols



Results

- >6000 messages sent, 3400+ “useful” queries



BGPbotz

- Talk to BGPbotz
 - AIM: bgpbotz
 - Jabber: bgpbotz@jabber.research.merit.edu
- Source available; Run your own!
 - <http://bgpbotz.merit.edu>
- Currently 4 views available (2 non-Merit)
 - RS-SWITCH (v4/v6, Switzerland)
 - RS-IBCTECH (v6)
 - RS-YOUR_ISP_HERE