# BGPD-3 Caida — Hacktahon San Diego Feb 2016

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# Objective

**BGPD-3** 

Replay BGP updates from BGPStream / MRT / other formats into BGP daemons

## Tasks

- Study current solutions
- Create a lab
- Hack
- Documentation

## Problems founds

- After sending the BGP Updates for prefixes with more than one path only the last one was kept
- Not IPv6 Support

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## Proposed solutions

#### Multiple path issue

- Use add-path capability (Thanks to Alvaro)
- Create new BGP session on the fly when prefixes had more than one path

#### IPv6 issue

- Send bgp prefixes using v4
- Do it the right way
- Give up ©

## What was done

- We found an anonymous perl script called bgpsimple.pl
- We create a way to use bgpsimple along with bgpreader
- We had to hack NET::BGP Perl modules to support Add-Path capability
- We had to hack NET::BGP Perl modules to support IPv6

## Screenshot

```
bird> show route all
2a02:2928::/32
                  unreachable [one6 02:02:43 from 2a00:1620:c0:60:314f:da6:924:a226] * (100/-) [AS39288i]
        Type: BGP unicast univ
       BGP.origin: IGP
       BGP.as_path: 65001 6939 39288
       BGP.next_hop: 2a00:1620:c0:60:314f:da6:924:a226
       BGP.local_pref: 100
                  unreachable [one6 02:02:49 from 2a00:1620:c0:60:314f:da6:924:a226] (100/-) [AS39288i]
        Type: BGP unicast univ
       BGP.origin: IGP
       BGP.as_path: 65001 7018 6453 9002 39288 39288
       BGP.next hop: 2a00:1620:c0:60:314f:da6:924:a226
       BGP.local pref: 100
       BGP.community: (7018,5000) (7018,37232)
                  unreachable [one6 02:02:49 from 2a00:1620:c0:60:314f:da6:924:a226] (100/-) [AS39288i]
        Type: BGP unicast univ
       BGP.origin: IGP
       BGP.as_path: 65001 7018 6453 9002 39288 39288
       BGP.next_hop: 2a00:1620:c0:60:314f:da6:924:a226
       BGP.local_pref: 100
       BGP.community: (7018,5000) (7018,32104)
                  unreachable [one6 02:02:49 from 2a00:1620:c0:60:314f:da6:924:a226] (100/-) [AS39288i]
        Type: BGP unicast univ
       BGP.origin: IGP
       BGP.as path: 65001 7018 6939 39288
       BGP.next hop: 2a00:1620:c0:60:314f:da6:924:a226
       BGP.local_pref: 100
       BGP.community: (7018,5000) (7018,33051)
                  unreachable [one6 02:02:49 from 2a00:1620:c0:60:314f:da6:924:a226] (100/-) [AS39288i]
        Type: BGP unicast univ
 --More--
```

# Q & A