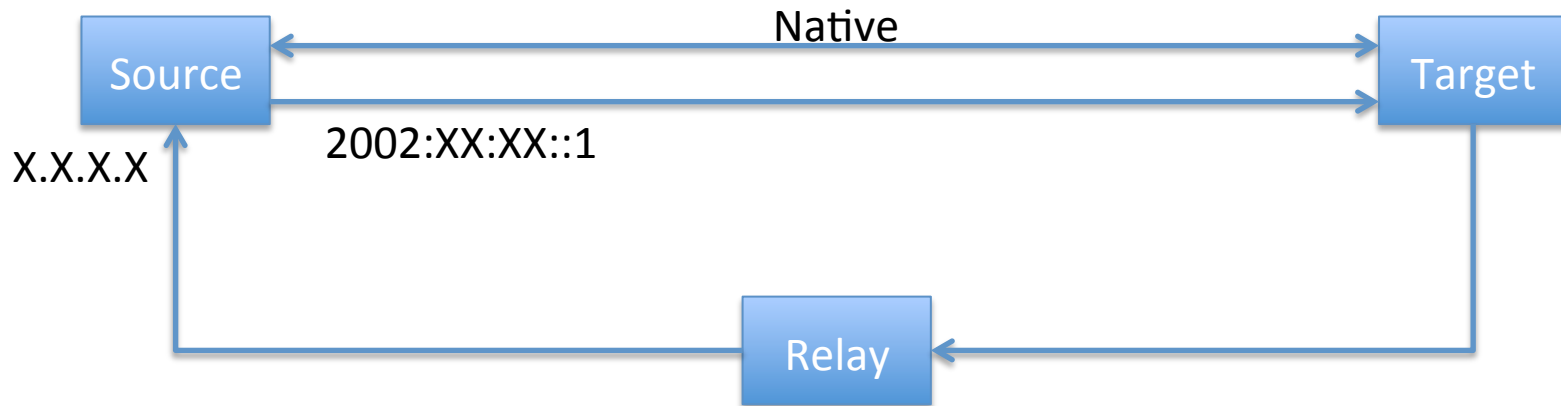


Differential 6to4 Measurements (World IPv6to4 Day)

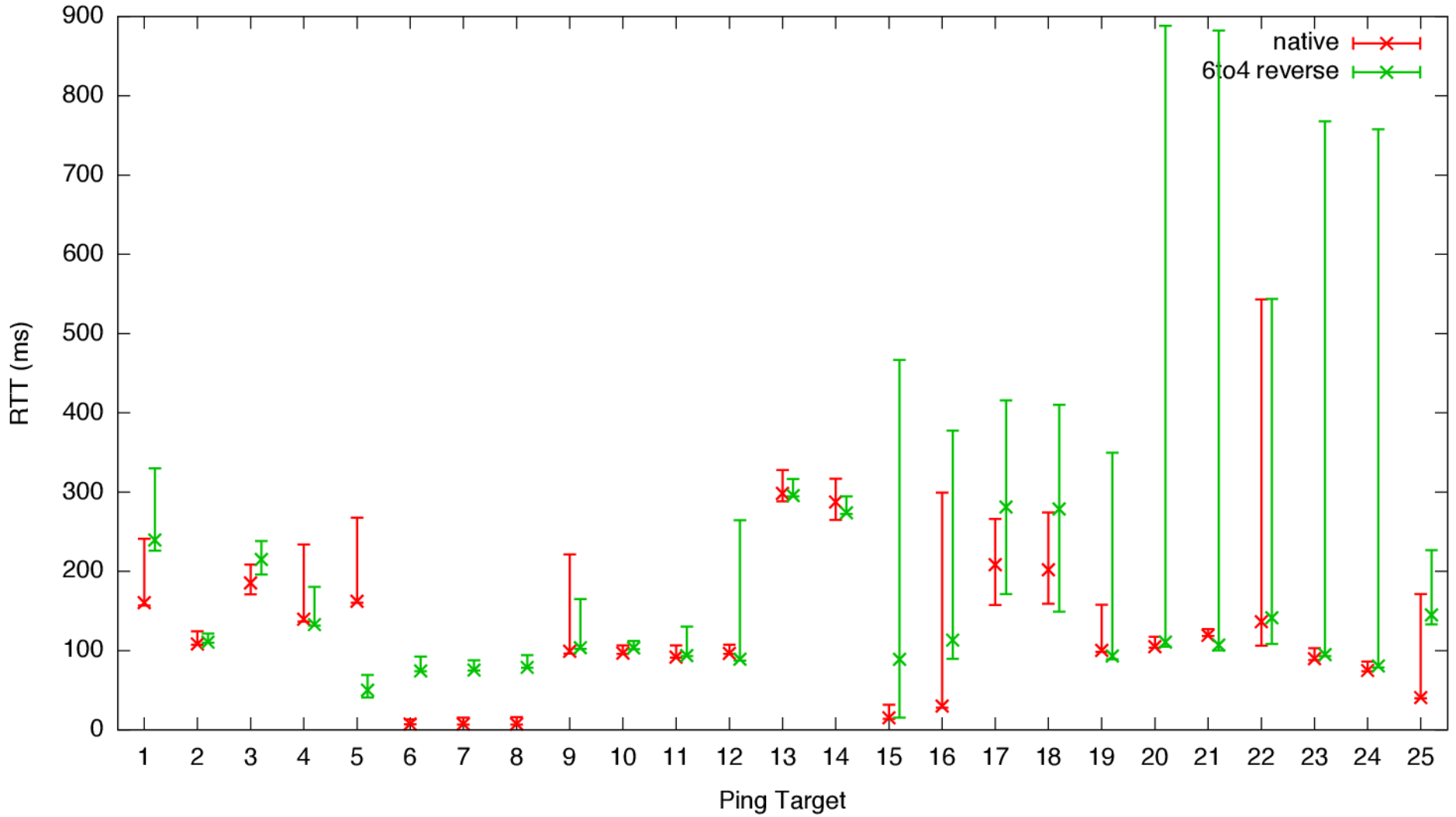
Richard Barnes, BBN

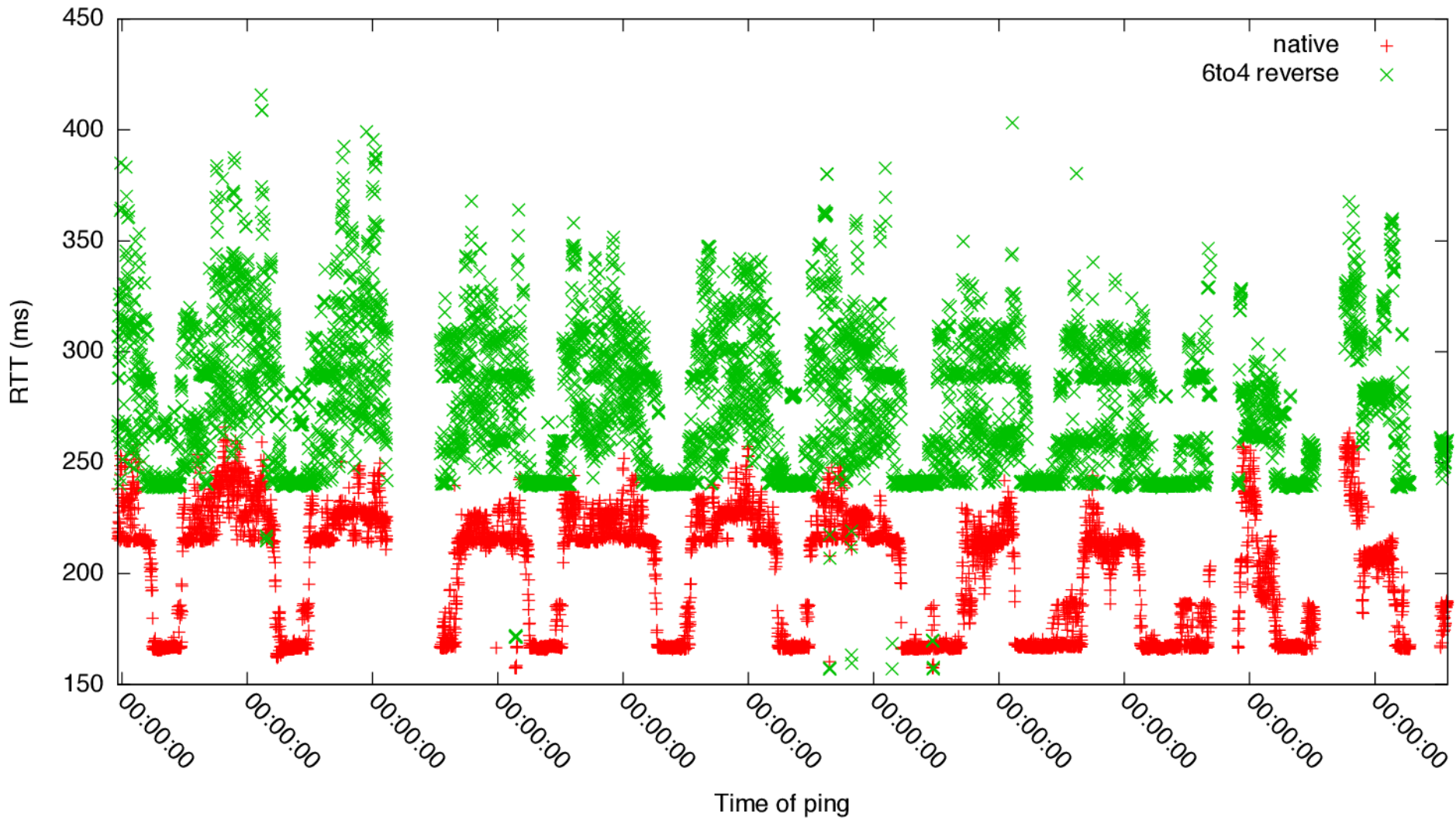
Methodology



- Single vantage point from edge of BBN/
Cambridge network

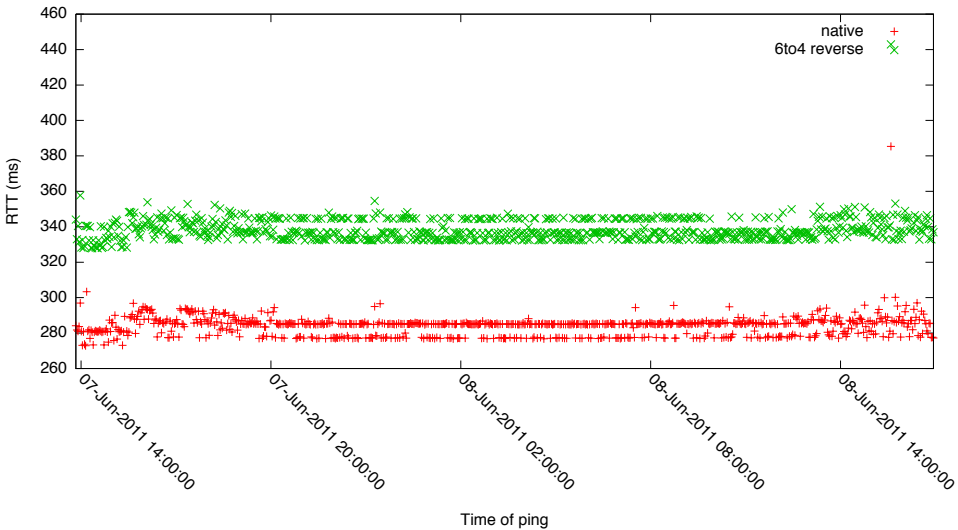
Mean, min, and max RTTs by target



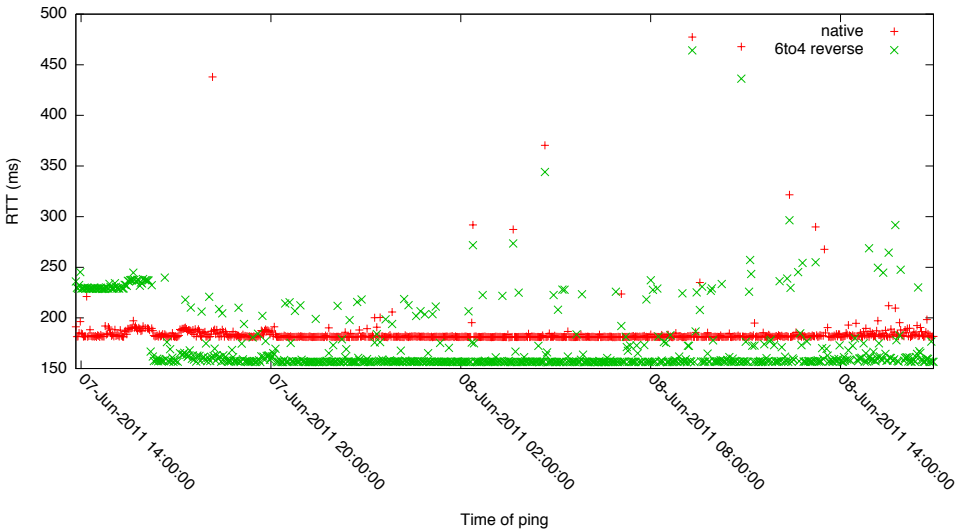


Data show and tell...

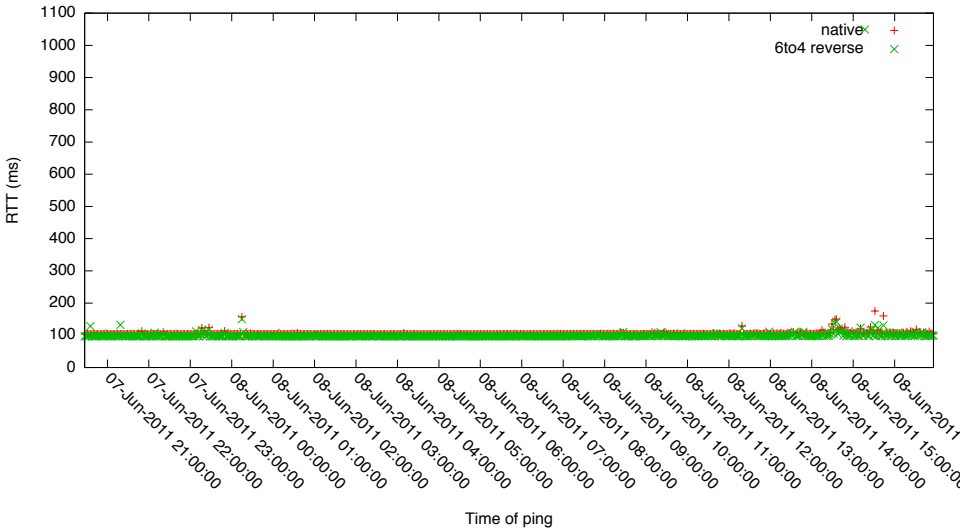
RTT to 2001:350:4000:2::2 (www.interop.jp)



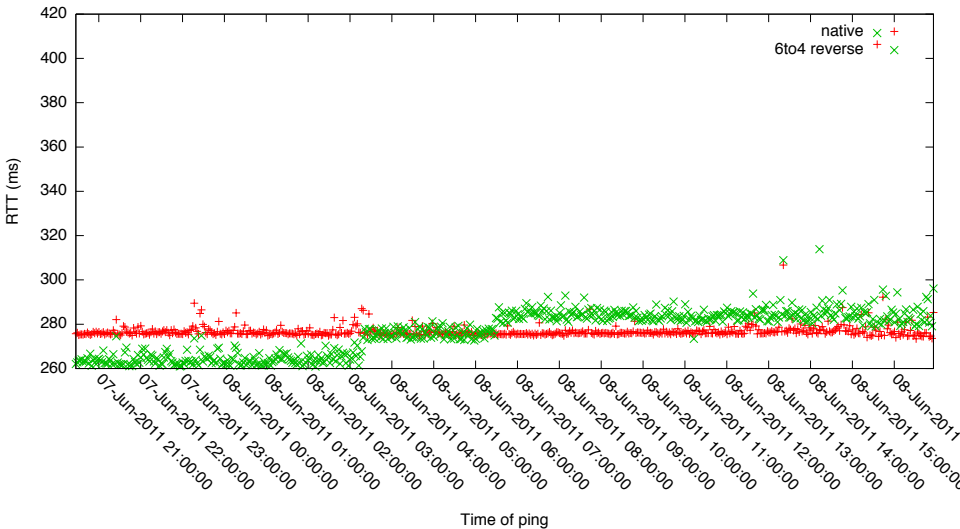
RTT to 2001:1890:124e:500::3 (www.dlink.com)



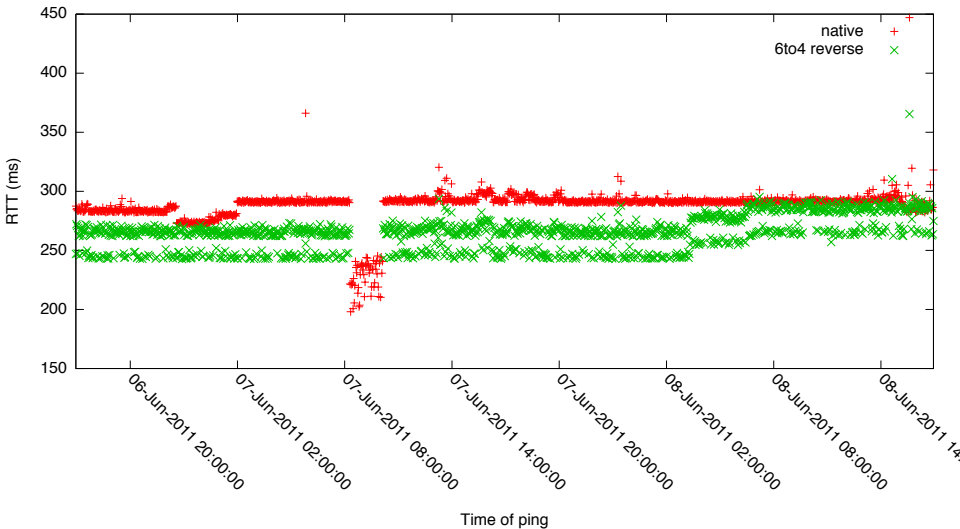
RTT to 2001:1810:1000:5::1001 (www.hostopia.com)



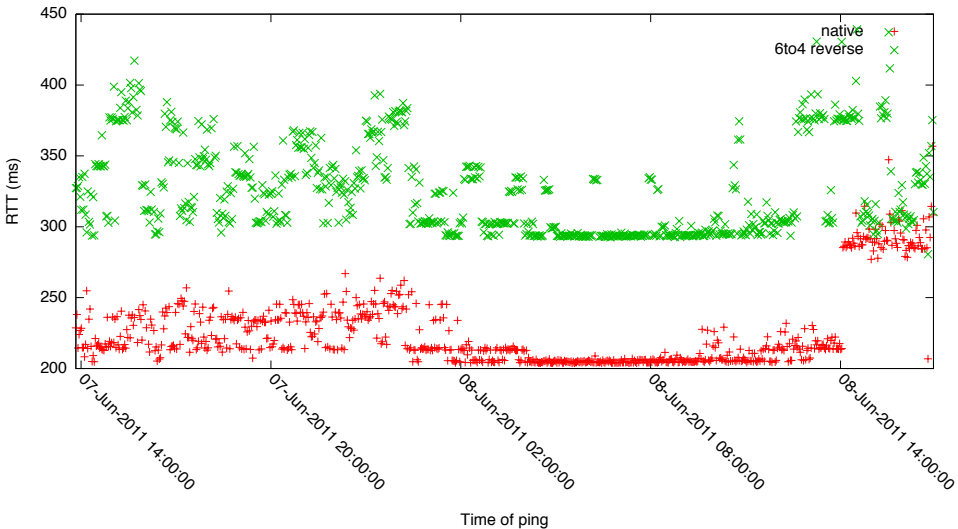
RTT to 2001:380:1bd:bee::9:54 (www.aoyamagakuin.jp)



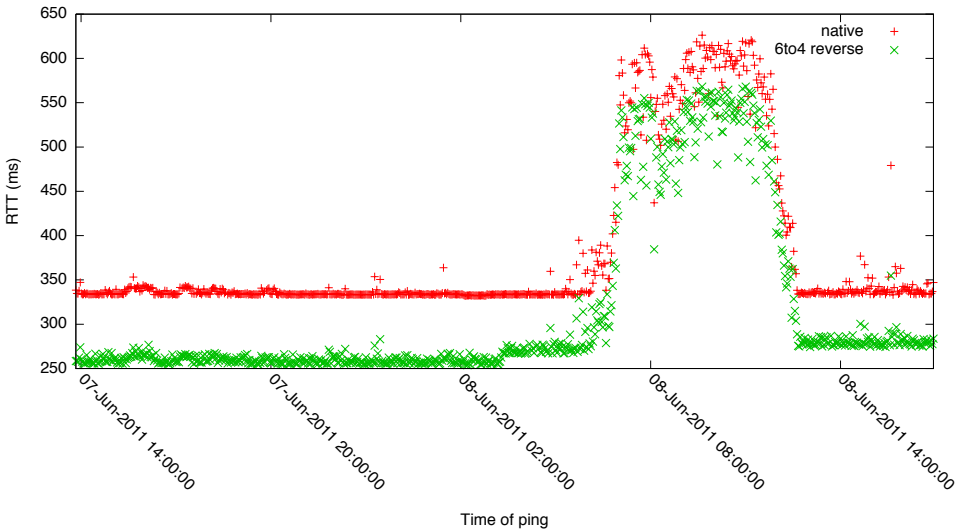
RTT to 2001:200:1c0:3601::80:1 (www.w3.org)



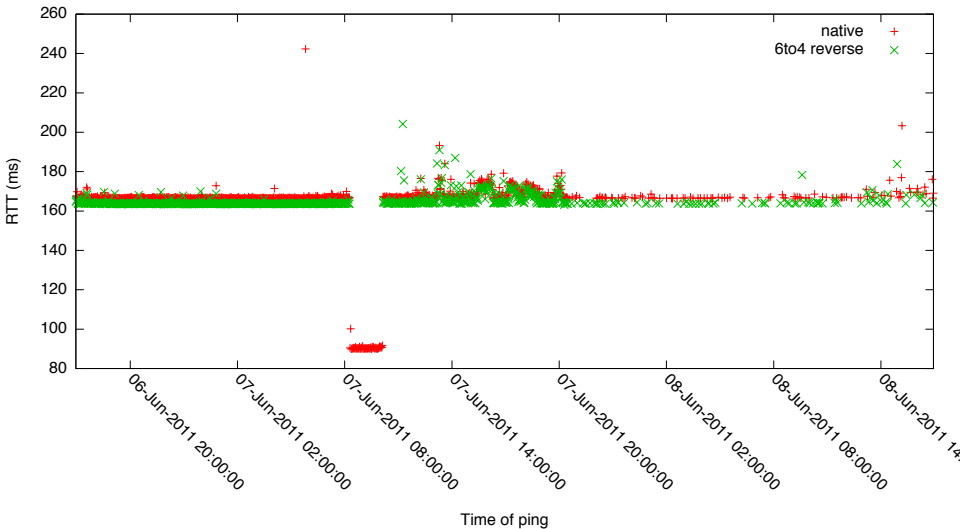
RTT to 2001:1398:16:4:6::1 (www.ipv6.cl)



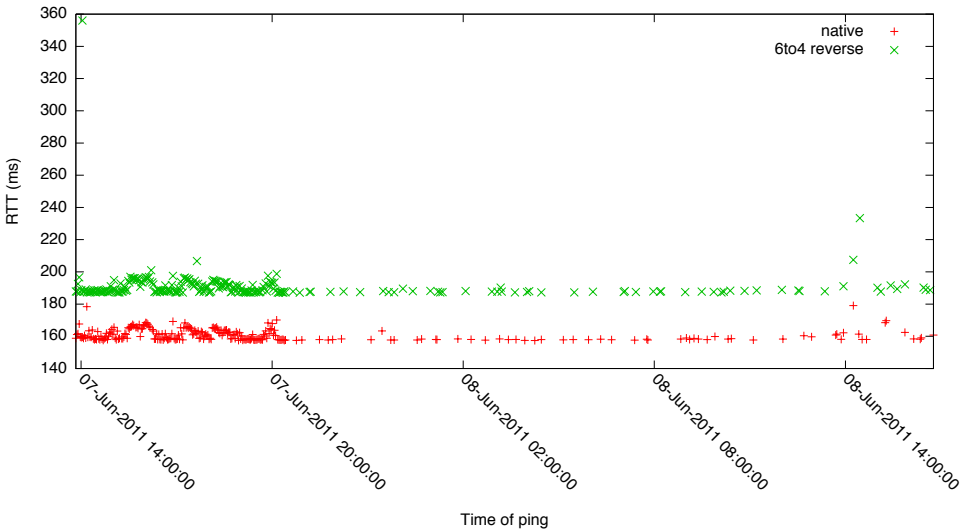
RTT to 2001:200:901:2::3 (www.jp.apan.net)



RTT to 2a01:8900:0:1::b00b:1e5 (ipv6.luns.net.uk)



RTT to 2a01:c0:2:c0de::c001 (www.kaweb.co.uk)



Findings

- Overall, no obvious global trends
 - The 6to4 infrastructure did not melt down
- Average latency penalty: 15.15 ms
- Average penalty >10ms: 66.14 ms
 - 103/393 hosts had “significant” penalties
- Slightly more volatility with 6to4 than native

Ongoing...

- Measurements are still being collected
 - Volunteers welcome!
- RIPE Labs article describing methodology and early findings:
 - <http://labs.ripe.net/Members/rbarnes/world-ipv6-day-asymmetric-6to4-measurements>