2020-08-30 Day in the Life of BGP

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So, consider this a lightning talk

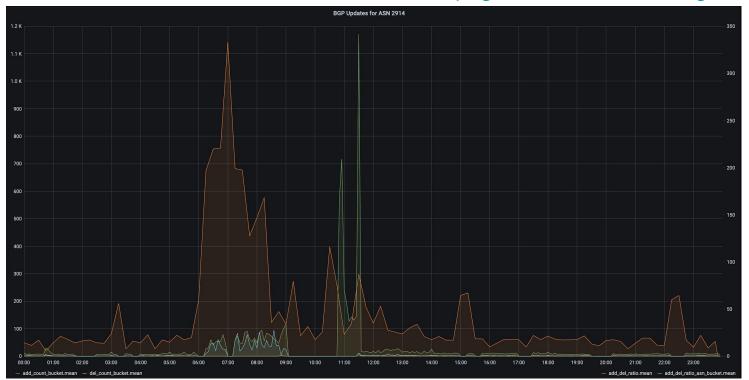
- 209 (Qwest/Centurylink) had a bad day and stopped processing BGP withdraws
- I wanted to see if I could detect similar events in BGP data
- Came up with this metric:
 - Announced Routes / Withdawn Routes per time period
- So had to start with some data
- Archive.routeviews.org
- BGP Update feed

Methodology

- Looked at the peered ASN with route-views
 - Eg: 1668 sent data to route-views
 - Have discrete per-PEERED-asn results vs aggregated over time window
- Bucketed the timestamp into 6 second intervals (1/10th of minute)
- Have global measurement (all feeds add_del_ratio)
- Have per-network values (add_del_ratio_asn_bucket)
 - add_count_bucket & del_count_bucket as well to see raw numbers
- So, what do we have?

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http://nuc.nether.net:3000/d/mhksdYDMz/asn-data-page?viewPanel=23&orgId=1



Live Demo

- So please be kind. This is on an Intel NUC at my house
 - I can move it to something beefier if you're interested
 - Please talk to me before multi-year queries
- http://nuc.nether.net:3000/d/mhksdYDMz/asn-data-page?orgId=1
 - Data stored in influxdb
 - I can replicate this to you if you want it
 - Post-processed all the data available in route-views, so you can look at a nearly 20 year window of time
 - All ASNs that ever fed data do show up in the panel

Questions?