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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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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
  - 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?