

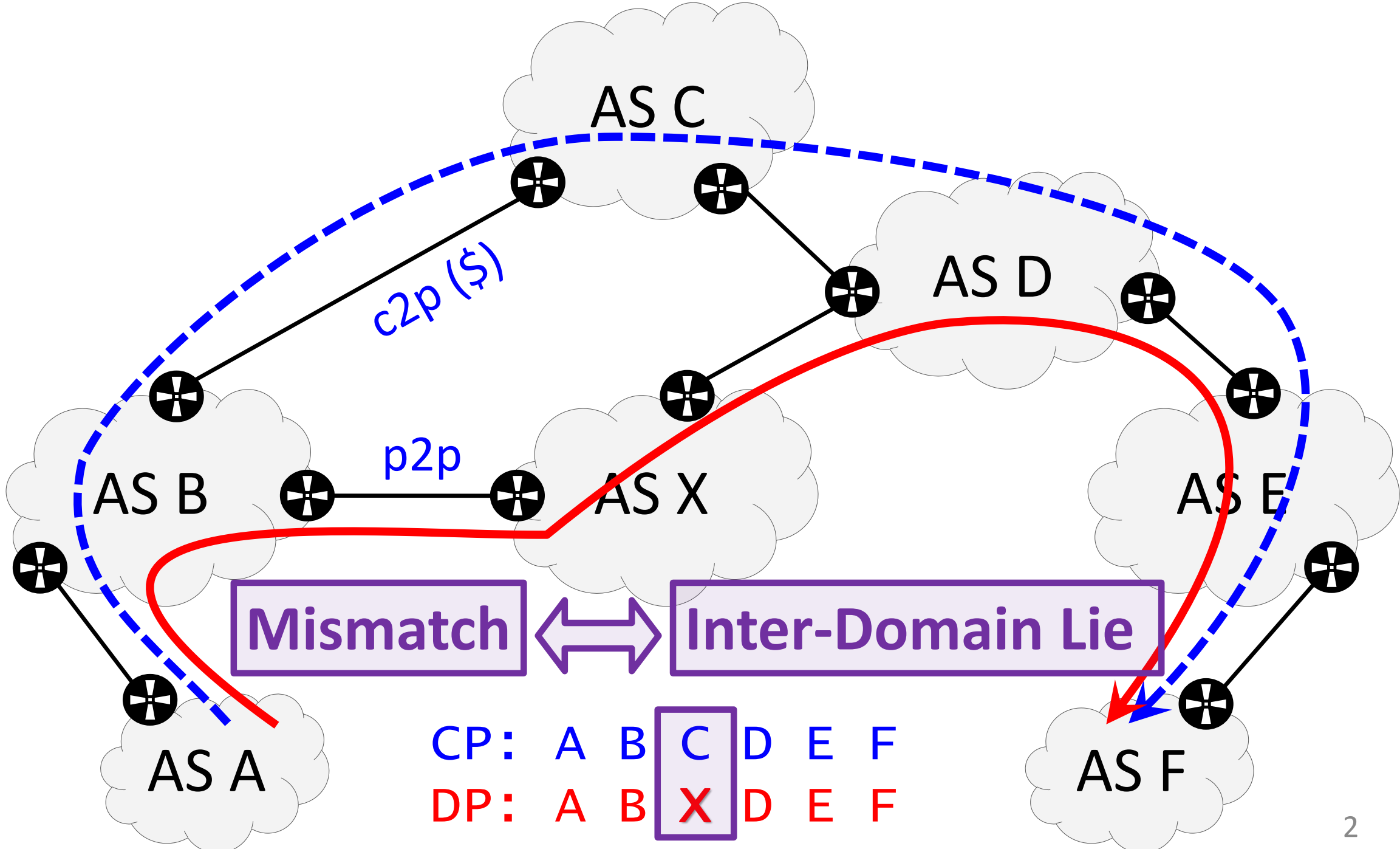
Filtering the Noise to Reveal Inter-Domain Lies

Based on TMA 2019 Paper - Focus on Infrastructure

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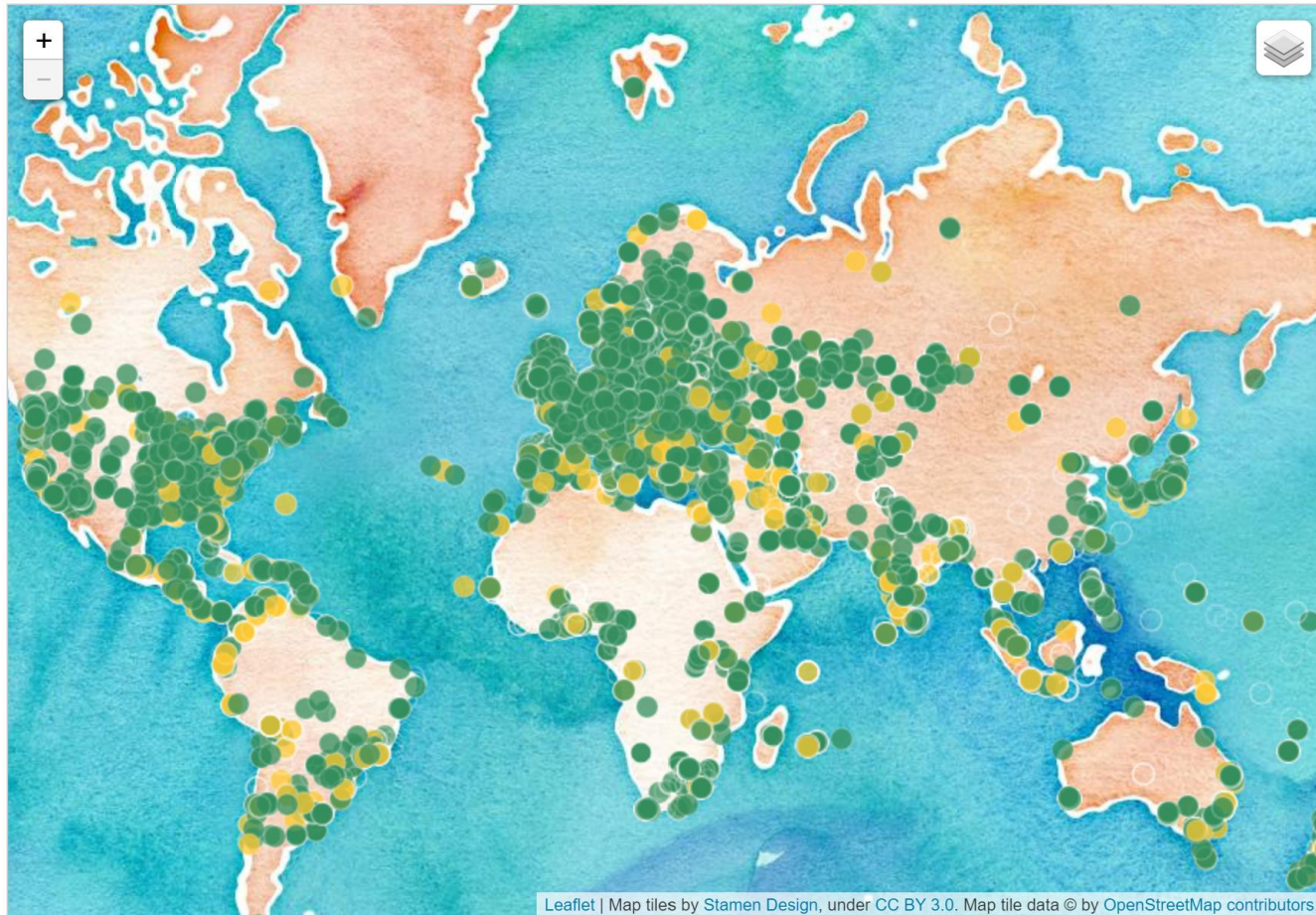




Infrastructure?...That's easy!

RIPE ATLAS: 11k++ probes (02/2020)

<https://atlas.ripe.net/results/maps/network-coverage/>

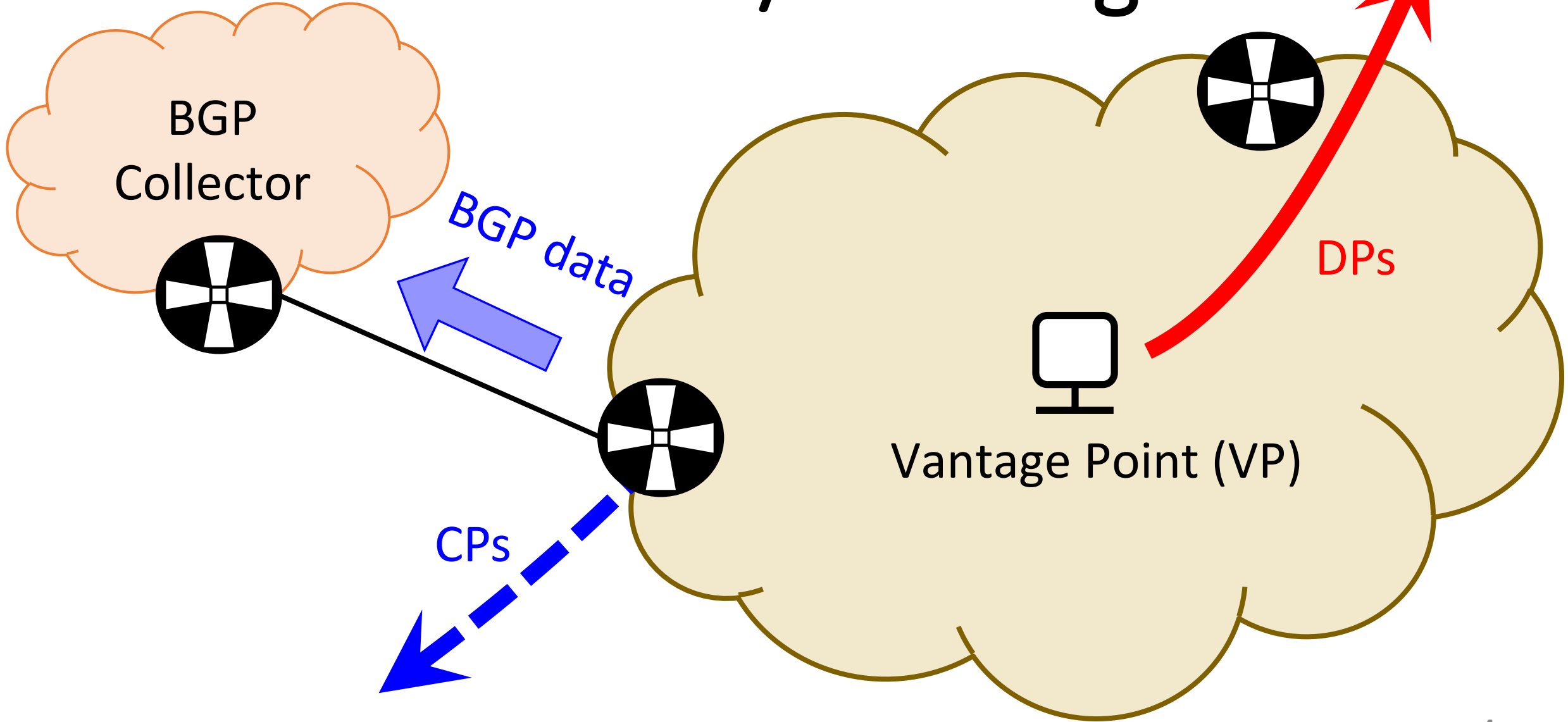


Routeviews: 31 collectors

<http://www.routeviews.org/routeviews/index.php/map/>

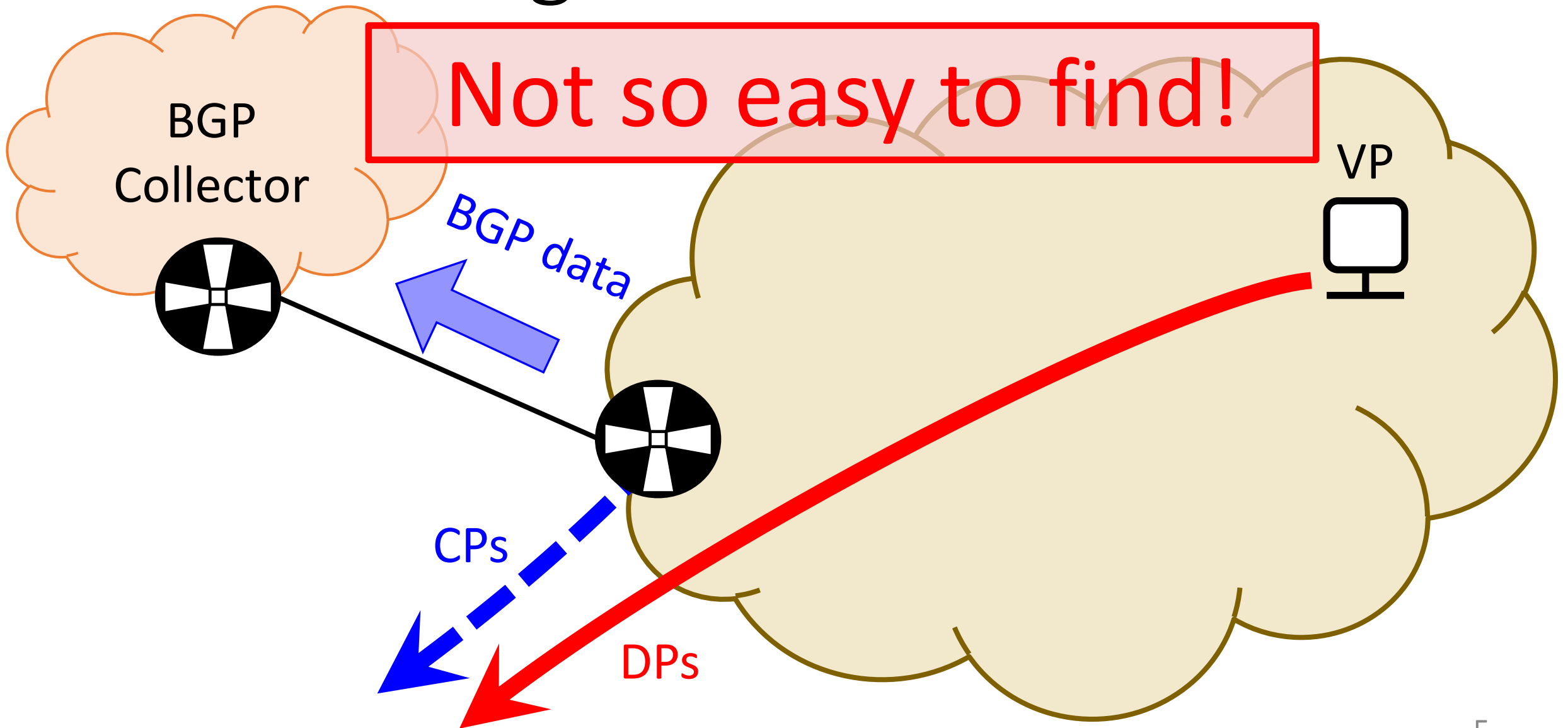


Problem/Challenge

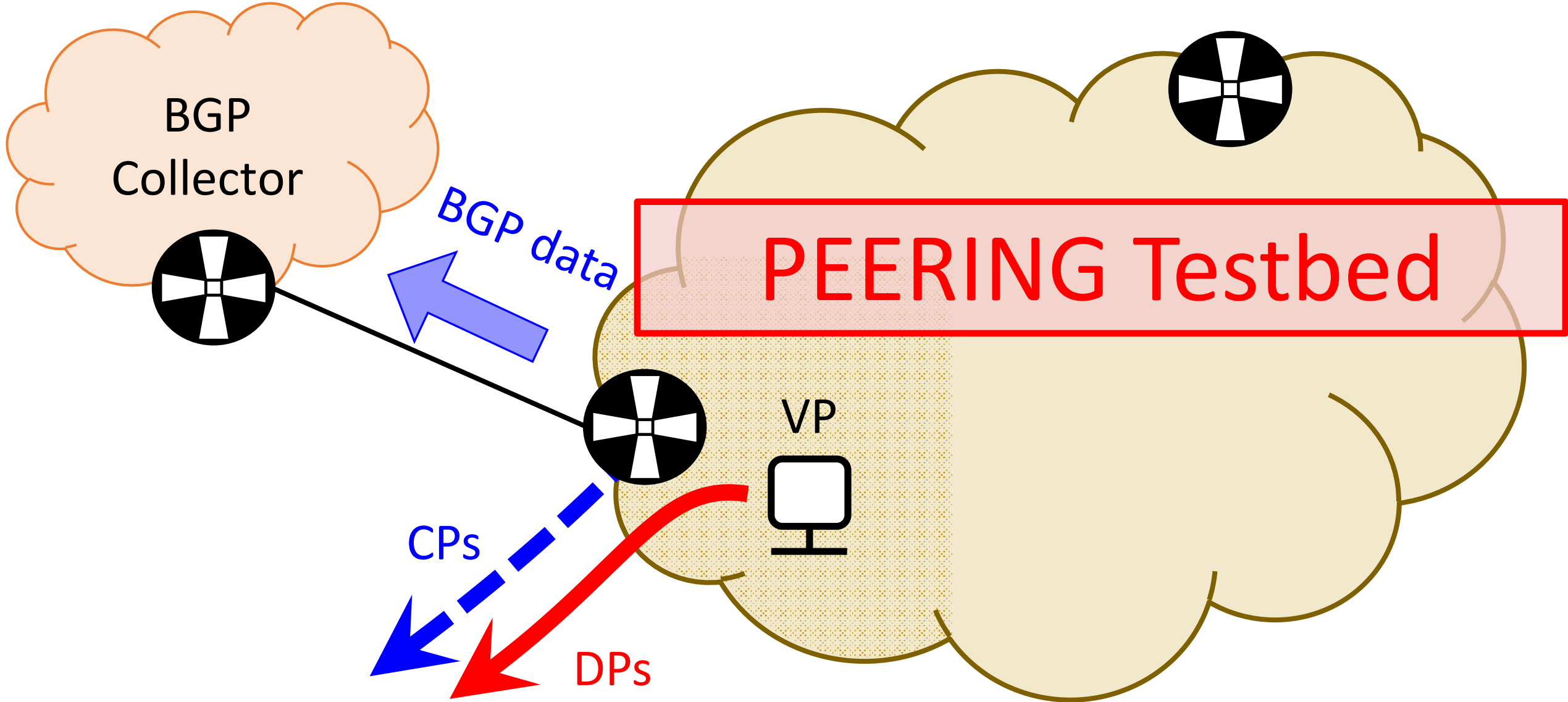


Single-homed Network

Not so easy to find!



Co-located VPs



Dataset

DPs: 80K destinations

CPs: BGP dumps every 2h

6 VPs in PEERING

~ 10/20 days

2 Additional VPs

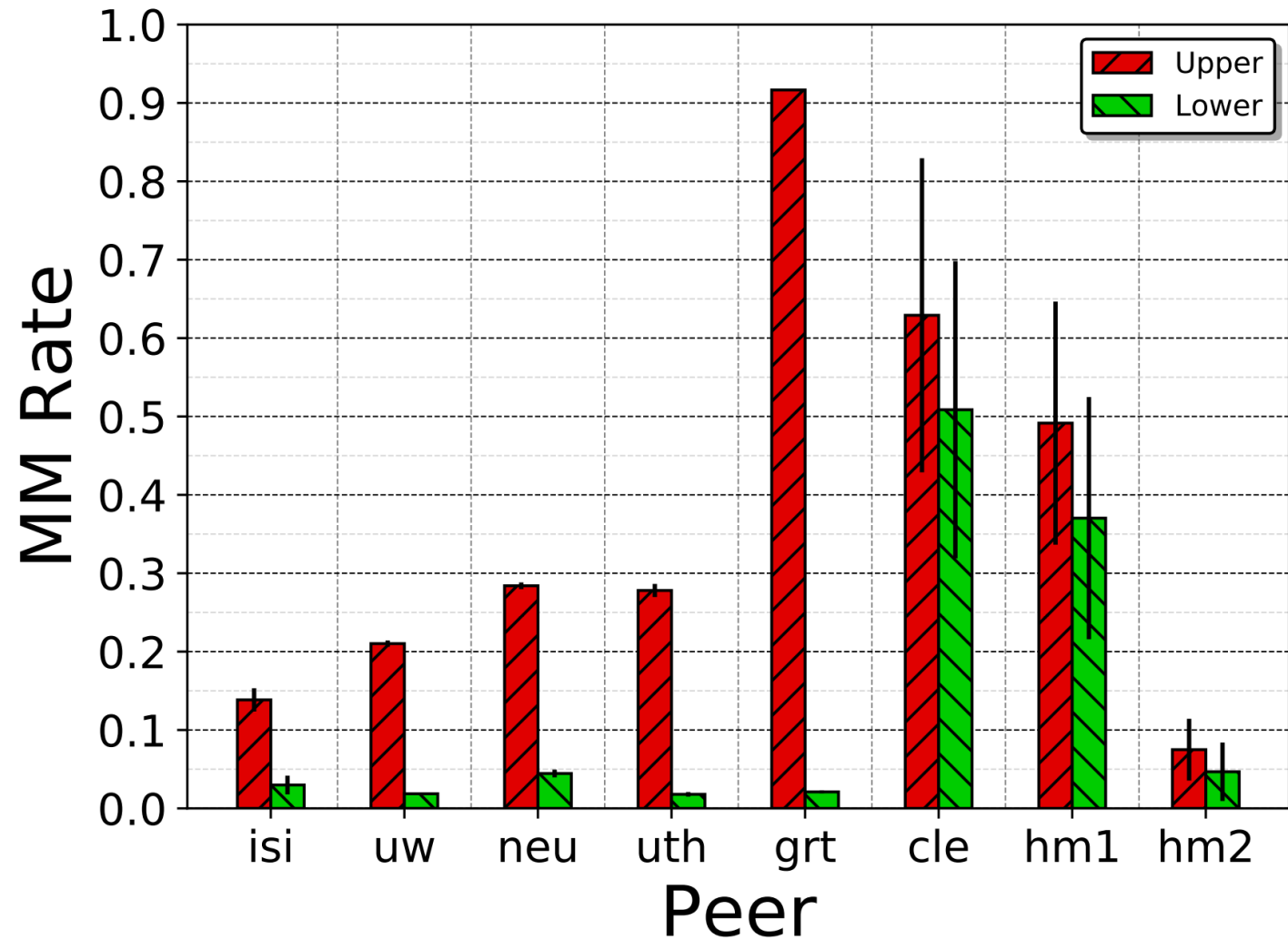
~ 8 months

Currently

~ not running

~ undisclosed (soon)

Results



Conclusions

Infrastructure

- Need for co-located VPs
- Peering Testbed (few full RIBs)
- Look for more co-located VPs

Results

- Few lies, but not zero!
- Some exceptions with high MIM rate
- Look closer at the remaining mismatches

Thanks! 😊

Questions?