

META-PEERING: TOWARDS AUTOMATED ISP PEER SELECTION

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FINDING THE RIGHT PEER IS A SLOW PROCESS



Meet & Greet



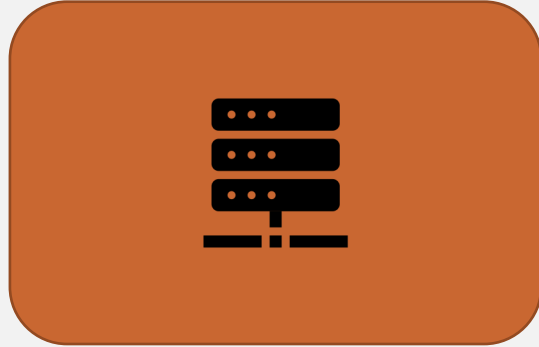
Finding Peers



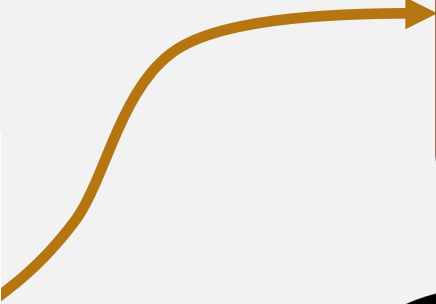
The whole process
can take months!



Terms &
Conditions



Deployment



FINDING THE RIGHT PEER IS HARD!



Missed
Opportunities



Disagreements



Sub-Optimal
Relations

Post-Peering Phase



De-Peering

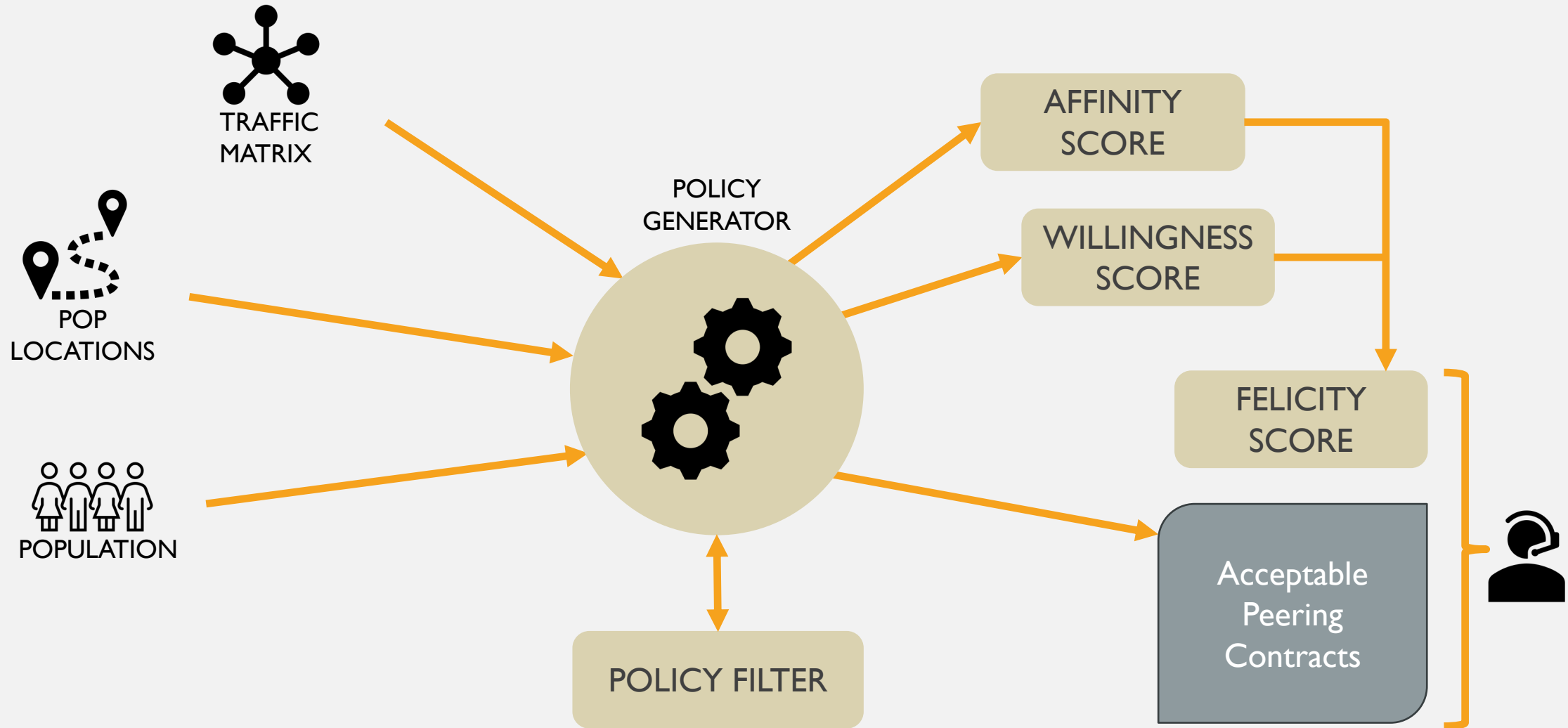


Under-utilized
resources

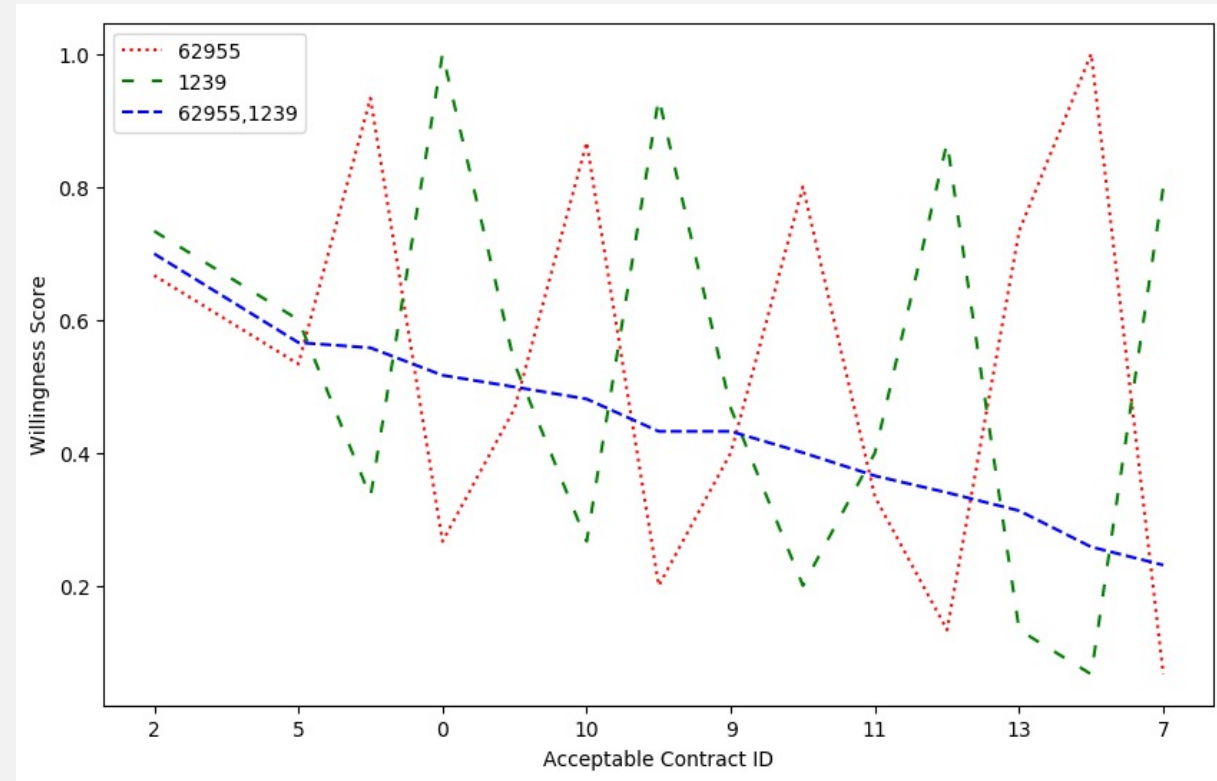
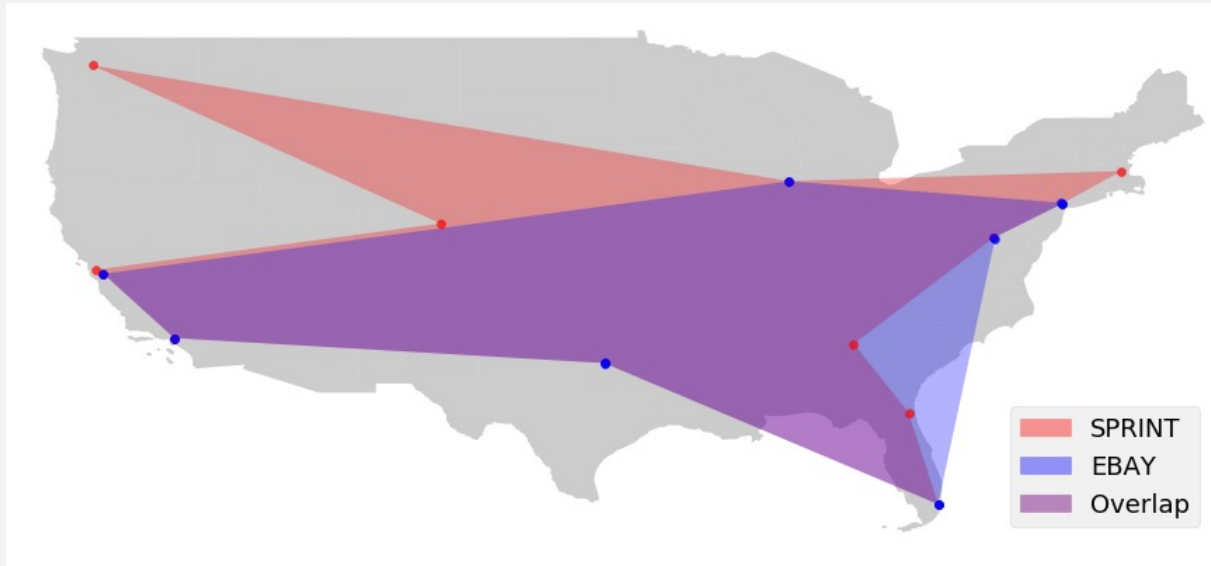


Financial
Losses

META-PEERING



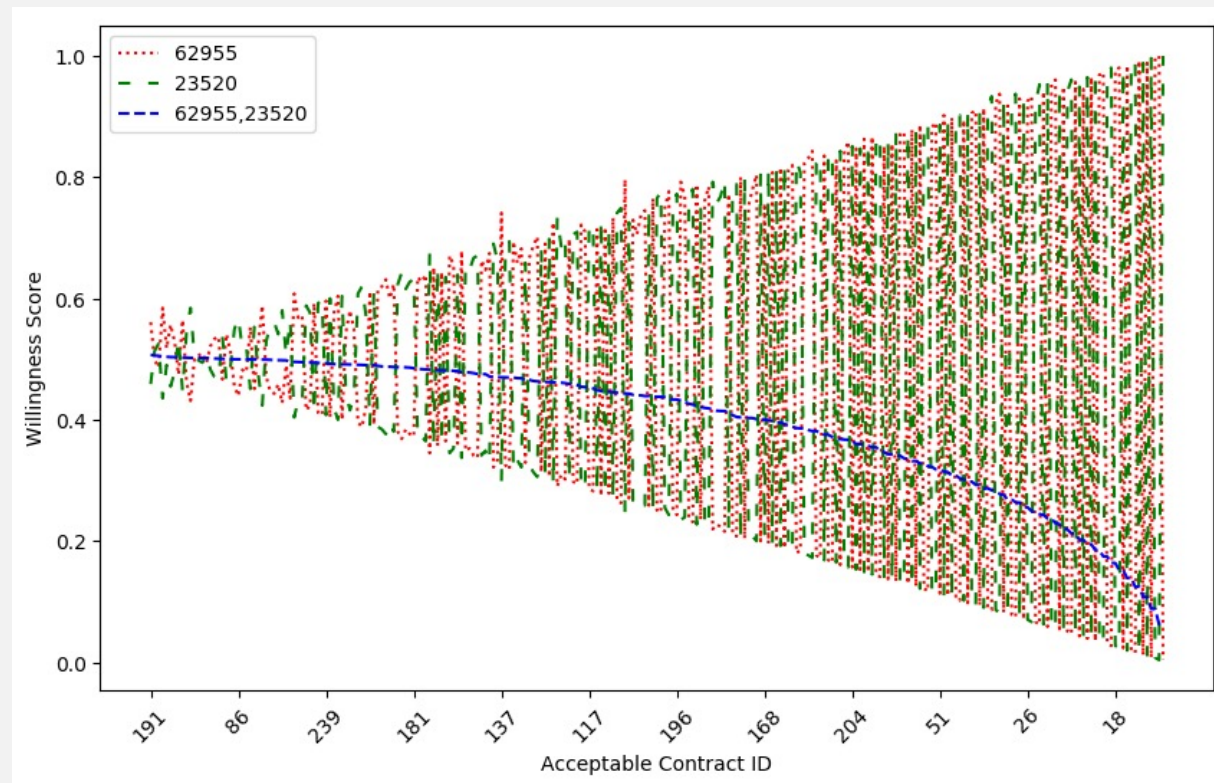
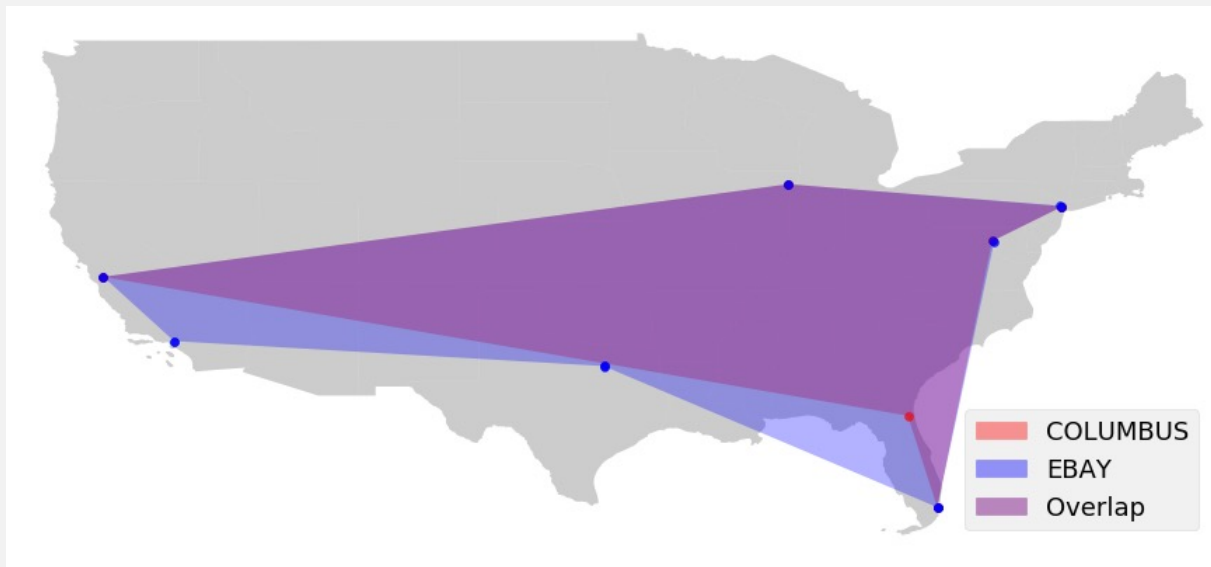
SPRINT(1239) - EBAY(62955)



Name	PoP location	PeeringDB link
Equinix Los Angeles (LA1)	Los Angeles, CA	www.peeringdb/fac/8
Equinix Chicago (CH1/CH2/CH4)	Chicago, IL	www.peeringdb/fac/7

PEERING RECOMMENDED

COLUMBUS (23520)- EBAY(62955)



Name

PoP location

PeeringDB link

Equinix San Jose (SV1/5/10)

San Jose, CA

www.peeringdb/fac/6

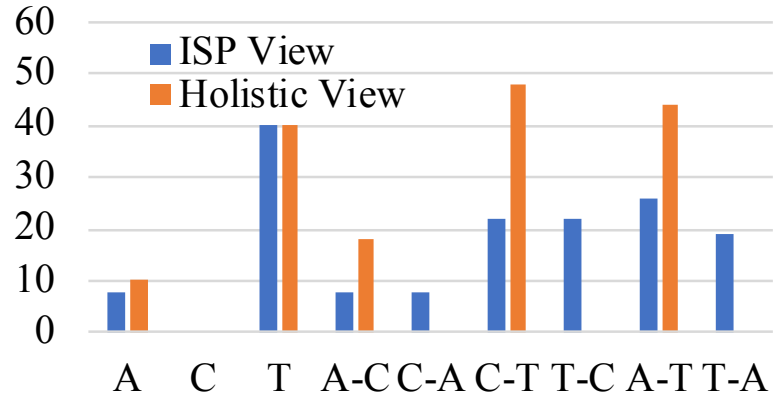
Equinix Ashburn

Ashburn, VA

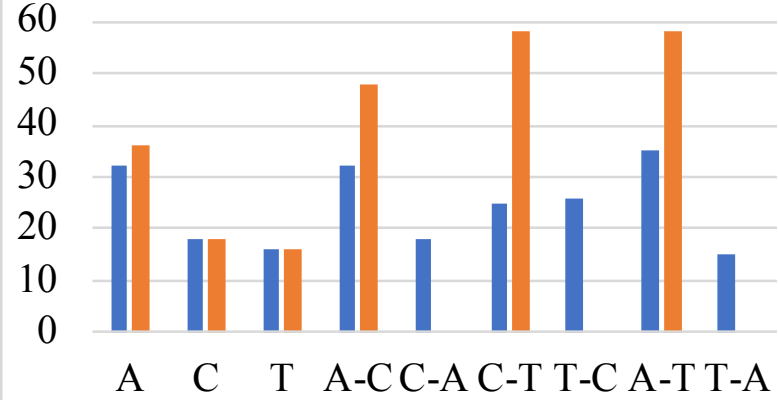
www.peeringdb/ix/1

PEERING **NOT** RECOMMENDED

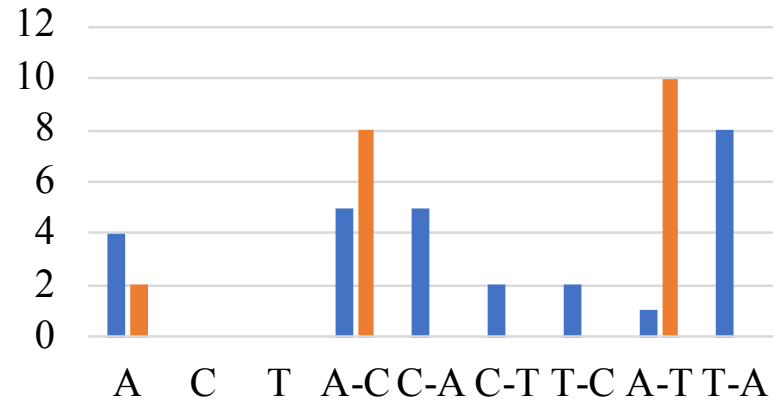
Peering found in CAIDA
successfully classified



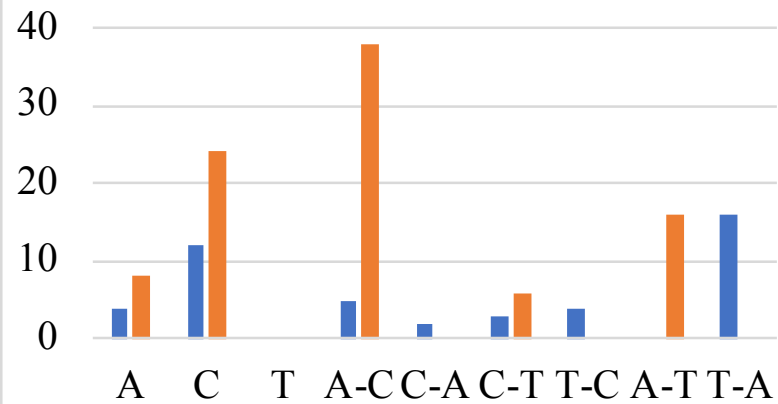
Does not peer, but we suggest
for peering



Peering in CAIDA, not
identified



Does not peer, we do not
suggest for peering



DISCUSSION

- We envision the ISP peering process to be well integrated and automated.
- We are working on extending this model that uses a more complex feature set for better predictions.
- In particular, we are testing a Random Forests classifier that uses different features extracted from PeeringDB and CAIDA data-sets.
- We envision Meta-Peering to be an end-to-end platform which automates pre and post peering phases.

QUESTIONS?