META-PEERING: TOWARDS AUTOMATED ISP PEER SELECTION

Prasun Dey    Shahzeb Mustafa    Murat Yuksel

University of Central Florida
FINDING THE RIGHT PEER IS A SLOW PROCESS
The whole process can take months!

Meet & Greet

Finding Peers

Terms & Conditions

Deployment
FINDING THE RIGHT PEER IS HARD!
Missed Opportunities
Disagreements
Sub-Optimal Relations
De-Peering
Under-utilized resources
Financial Losses

Post-Peering Phase
META-PEERING

TRAFFIC MATRIX

POP LOCATIONS

POPULATION

POLICY GENERATOR

AFFINITY SCORE

WILLINGNESS SCORE

FELICITY SCORE

POLICY FILTER

Acceptable Peering Contracts
SPRINT(1239) - EBAY(62955)

<table>
<thead>
<tr>
<th>Name</th>
<th>PoP location</th>
<th>PeeringDB link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equinix Los Angeles (LA1)</td>
<td>Los Angeles, CA</td>
<td><a href="http://www.peeringdb/fac/8">www.peeringdb/fac/8</a></td>
</tr>
<tr>
<td>Equinix Chicago (CH1/CH2/CH4)</td>
<td>Chicago, IL</td>
<td><a href="http://www.peeringdb/fac/7">www.peeringdb/fac/7</a></td>
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COLUMBUS (23520) - EBAY (62955)

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<tr>
<td>Equinix San Jose (SV1/5/10)</td>
<td>San Jose, CA</td>
<td><a href="http://www.peeringdb/fac/6">www.peeringdb/fac/6</a></td>
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<td>Equinix Ashburn</td>
<td>Ashburn, VA</td>
<td><a href="http://www.peeringdb/ix/1">www.peeringdb/ix/1</a></td>
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</tbody>
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PEERING NOT RECOMMENDED
Peering in CAIDA, not identified

Peering found in CAIDA, successfully classified

Does not peer, but we suggest for peering

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?