PCP Extensions for Footprint Discovery

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Lyle Bertz (lyle.t.bertz@sprint.com)

Brent Hirschman (brent.hirschman@sprint.com)

Routing & Optimization

The architecture for exchange of information for routing between networks has been well established:

- Border Gateway Protocol (BGP)
- Application Layer Traffic Optimization (ALTO)

Each has common information

ENDPOINT	FOOTPRINT	METADATA
- Configuration in files - Discovery on the host(s) - PCP enables ability to determine the *public* endpoint seen by the peer network.	- Configuration files - PCP could help here	- Framework Specific

Footprint Discovery

- PCP has all of the correct mechanisms
  - Architecture including home gateways
  - Notification of changes from the server to client
  - Some precedent of subnet information with the PREFIX command
- No other WG is working with home gateways and NAT functions
- Extending PCP to support footprint discovery and 3rd party queries of servers, e.g. CDNI endpoints, to query the home gateways to determine mappings would automate all footprint discovery and change notification management