Simple ALTO (SALTO) Protocol

(formerly known as H12)

Sebastian Kiesel and Martin Stiemerling
{kiesel|stiemerling}@nw.neclab.eu
NEC Europe Ltd.

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Where we are?

- Departing from
  - original P4P protocol proposal
  - original Oracle proposal
  - evolved draft-penno-alto-protocol
  - and the H12 protocol (draft-kiesel-alto-h12)
- draft-kiesel-alto-salto wasn’t ready for IETF#76 deadline
- Main difference between SALTO and draft-penno-alto-protocol
  - operational model between client and server

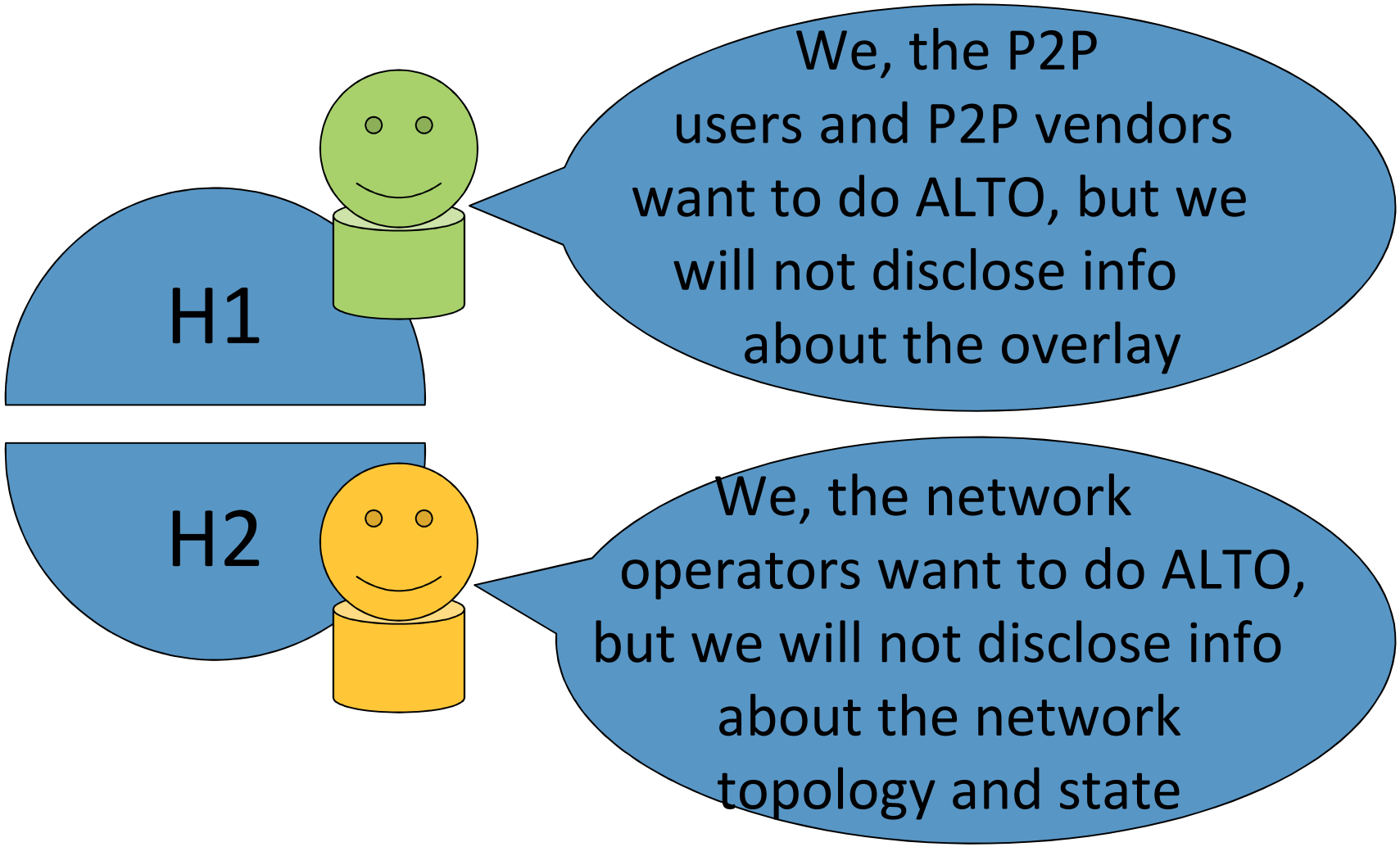
Problem Space

- orthogonal issues
  - map download vs. oracle query
  - IP prefixes vs. "macros" (PIDs) on the wire (ALTO client protocol)
  - IP prefixes vs. "macros" (PIDs) inside the ALTO server
- penno-alto:
  - exposes too much server internal structure to the client (via the protocol)
  - separation between network map and cost map fine for the server and for load reduction
  - problematic if network maps aren't as stable as assumed
- Network maps assume static network
  - isn't this mandating too much to the operator?
  - are network maps really this static?
  - check out Cisco's ODAP; dynamically assign IP blocks (http://www.cisco.com/en/US/docs/ios/12_2t/12_2t15/feature/guide/ftodapss.html)

SALTO Protocol

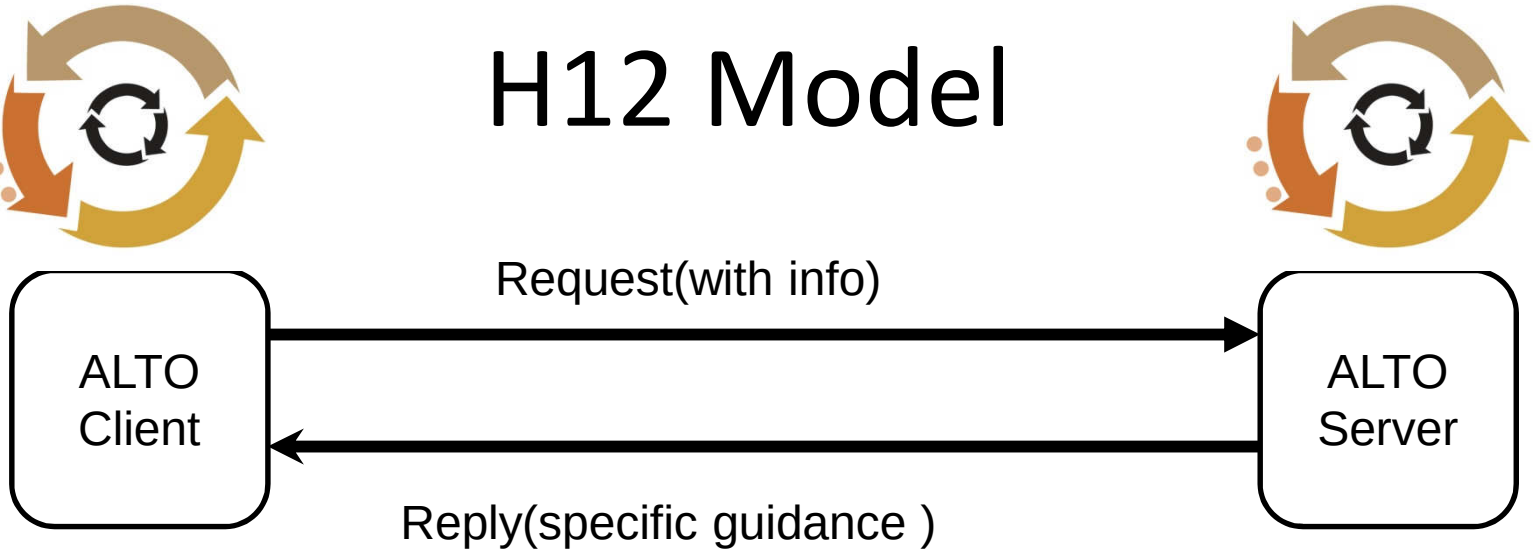
- implements H12
- Supports caching in network and in SALTO client
- Based on HTTP/1.1
- considering XML based message body for SALTO information

H is for Hemispheres



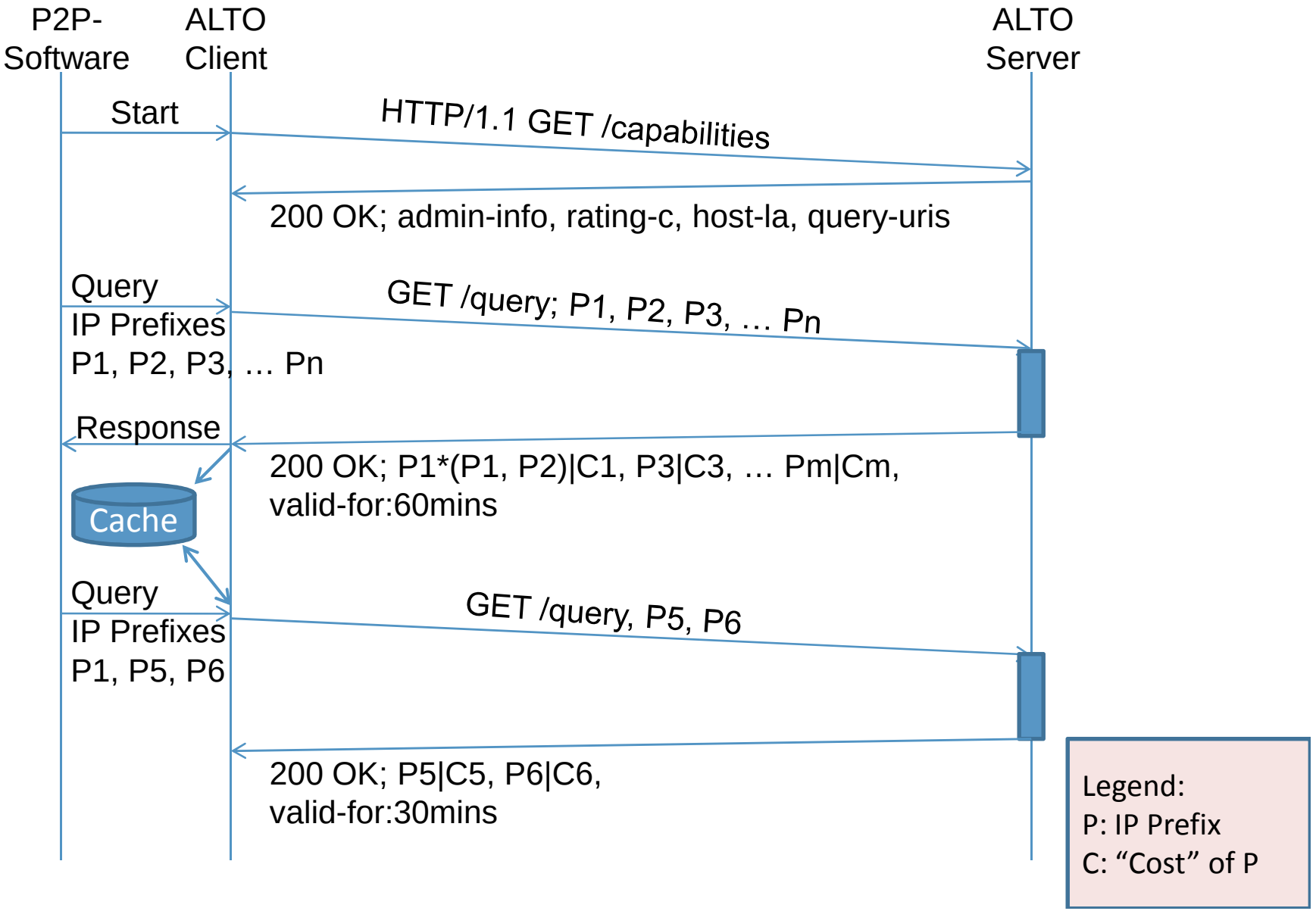
How to bring them together?

H12 Model



- client can send info
  - IP address, IP address prefixed (e.g., /24)
  - up to the client to decide how specific
- server works out his preferences by using client's info
- server replies with specific guidance
  - can be a 1:1 answer of request (replying with /24)
  - can be much broader answer (replying with /16)
  - can be more narrow answer (replying with multiple /24)

Protocol Example



Outlook

- SALTO is another way of ALTO
- Protocol draft to be submitted after IETF meeting
- Let’s discuss this
- First implementation ready

Acknowledgement

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