Update: Report of ALTO-Like Experiments in Japan draft-kamei-p2p-experiments-japan-05

Satoshi Kamei Tsuyoshi Momose Takeshi Inoue

Overview

 An experiment to reduce P2P traffic effectively held in Japan from 2008 to 2010

 Cooperation with 20+ ISPs, 6 P2P application vendors and 10+ content providers

 Geographic information is taken into consideration for inter ISP.

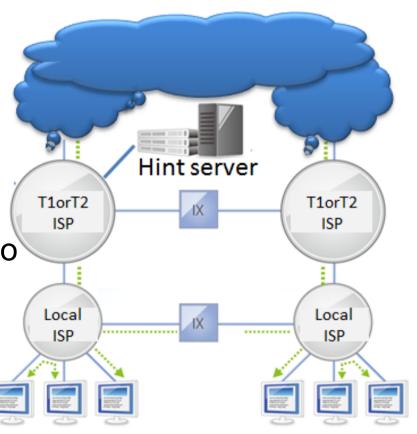
2 technologies are introduced:

Hint Sever

suggest appropriate peer nodes

Dummy nodes

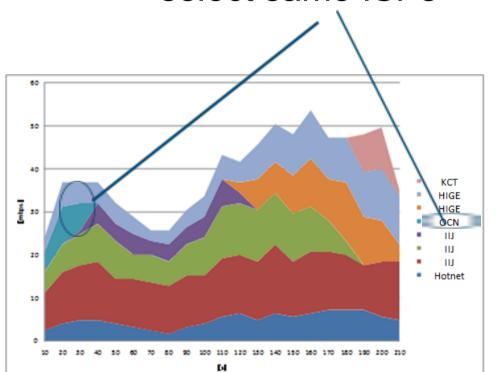
 Measure P2P traffic without modification P2P applications



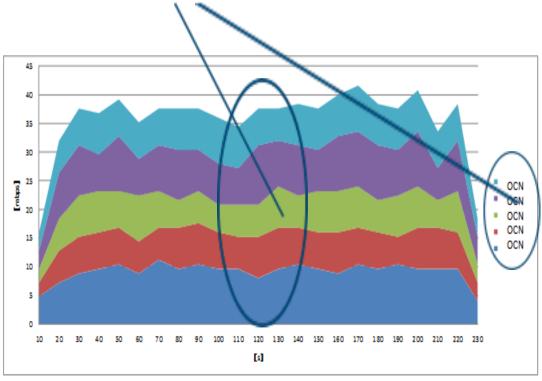
Overview

- Confirmed ALTO-like approach is effective
 - o inter-ISP
 - o multi P2P applications

select same ISPs



select same ISPs



w/o Hint Server w/ Hint Server from P2P client in OCN

Changes in this version (1)

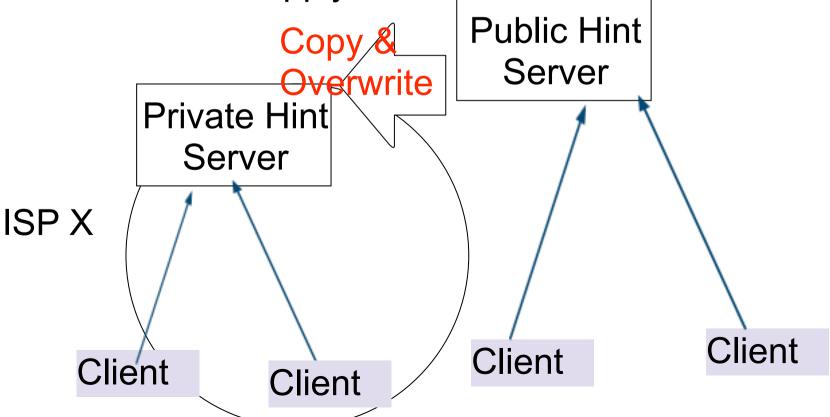
- Contents is almost same as the previous version for the part of description of experiment as of 2008
 - some document structure and sentences were brushed up
- Added the current experiment status
 - The experiment continues until FY2010 (Mar 2011)
 - The protocol is replaced with alto.(*-alto-protocol-07)
 - mainly use "Endpoint Cost Service"
 - all other "required" services for compatibility.
- Analysis is more precisely
 - Clarify operation issues for hierarchical ALTO servers, and importance for measurement.

Changes in this version (2)

 ALTO servers are put both private and public site and used simultaneously in this experiment.

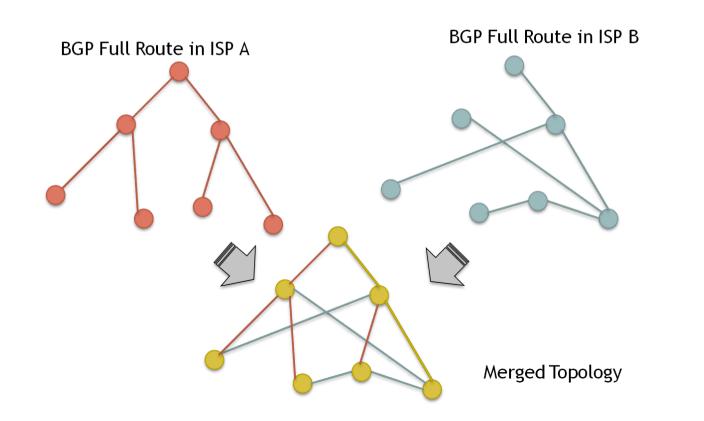
There were no modifications in alto specification are

needed to apply it.



Changes in this version (3)

- The methods to generate ALTO databases were changed
 - 2008-2009 BGP data + GeoIP
 - o 2010 add 2 more major ISP's BGP data



PID = AS cost = AS Hop