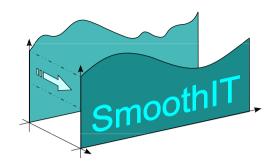
Simple Economic Management Approaches of Overlay Traffic in Heterogeneous Internet Topologies

European Seventh Framework STREP FP7-2007-ICT-216259



ALTO-FCP: Application Layer Traffic Optimization Feedback-Based Client Protocol

Zoran Despotovic, Wolfgang Kellerer DOCOMO Euro-Labs, Munich, Germany Dirk Stähle University of Wuerzburg, Germany Ioanna Papafili AUEB, Greece Spiros Spirou Intracom Telecom, Greece Maria A. C. Rodriguez Telefonica I+D, Spain





Background

- Simple Economic Management Approaches of Overlay Traffic in Heterogeneous Internet Topologies (SmoothIT)
- European Seventh Framework STREP FP7-2007-ICT-216259
- Internal Trial with Telefonica, Madrid, Spain
- External Trial with PrimeTel, Cyprus





Protocol

Complement existing protocol drafts

Three main steps:

Capabilities

- Which rating criteria are supported
- Select a server that fulfils your needs

2. Guidance

- Conversation to support HLA refinements
- 3. Evaluation (Feedback)
 - Learn about conditions in distant networks
 - Learn clients' preferences and find best tradeoffs
 - Support for new applications (unknown rating criteria)





Feedback from Clients

- Where are bottlenecks?
 - Server has path A-B-C-D to AS D (possibly from BGP)
 - Clients say there is no problem with A,B,C
 - -> rank low peers that are on a path passing through D
- New applications
 - E.g., what parameters matter for P2P video streaming?
 - Only distance? RTTs?
 - In case you don't know, you can learn from clients' feedback





Thank you for your attention!

