

Resource Description Group

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Motivation

- User perspective
 - No adaptation of content to user and terminal context
 - Security requirements
 - QoE (e.g. starting delay, stalling time)
 - Improve service discovery
- Provider perspective
 - No adaptation of content to available network resources
 - Enhance user satisfaction through differentiation
 - Profit maximization

What is the research problem?

- Describing resources for enabling intelligent, context-aware allocation
 - Common basic, scalable resource description framework
 - Flexible extension possibilities
 - Identification of relevant properties for resource description
 - Location, quality, application, security, resource reservation
 - ...
 - Allow for interactive bargaining of resources
 - Allow for price discrimination

Experiment Design

- Replicate different (competing) video providers
 - Regular streaming video
 - P2P assisted video streaming
 - Video on Demand rental service (download)
- Create set of simulated users
- Involve real users as possible
- Default descriptions for (real) users and resources
 - Get feedback on system usability from actual users
 - Compare legacy infrastructure usage with new approach

Experiment Design (Cont'd)

- How to measure “success”
 - Number of successful matches
 - Matching time / Time to establish connection
 - Durability and stability of matches
 - User satisfaction
- Expected results
 - User evaluation (cultural differences)
 - Improvement and evolution of experiments

Benefits of Int'l Cooperation

- Diverse skill set and knowledge base
- More man power
- Federation of testbeds allows for more valid and representative experimental results
- Access to consolidated research resources
- Potential differences in results depending on culture

Questions?

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