

Protocol Requirements for Internet Program Guides

Yuji Nomura

Fujitsu Laboratories Ltd.

Henning Schulzrinne

Columbia University

Basic Protocol Requirements

- A program guide is a set of meta-data describing the feature of multimedia content
- Potential hosts
 - Any Internet host
 - PCs, PDAs, Cellular Phones, PVRs,..
- Protocol Operations
 - On demand Retrieval
 - Update Notification
- Description:
 - Multiple segments, Hierarchical structure
 - URL, Genre, Rating, Availability, Bandwidth, Billing,..

SAP

- Distributes session meta-data by using multicast
- Not provide request/response operations

SDPng

- Describes single session meta-data for multimedia conferencing
- Not cover
 - Wide range of generic multimedia content such as news programs, TV shows, Movies,..
 - Hierarchical structure

MPEG-7

- ISO/IEC standard developed by MPEG (Moving Picture Experts Group)
- Standardized in Sep. 2001
- NOT a COMPRESSION Standard similar to MPEG-1/2/4
- Offers a comprehensive set of audiovisual description tools
 - Description Schema: XML Schema
 - Descriptor

Conclusion

- Protocols are needed for program guides
 - On demand retrieval
 - Update notification
 - Comprehensive description
- Thank you
 - nomura@cs.columbia.edu