

Internet Media Guides

MMUSIC, IETF-56

IMG Need

- We have worked on a variety of problems:
 - IP TV & radio over unidirectional links
 - Massively scalable file delivery (multicast)
 - Content metadata synchronization (server-server & server-client)
- These have a common basic need for delivering metadata for (generic) media which is scalable & customizable
- This need is in several network environments, especially unidirectional/one-to-many, bidirectional/unicast & the combination of both
- We need a complete system for metadata delivery which can be used in these varying situations

IMG Problem Space

- For example, we have implemented SDP/SAP for the multicast case and SDP/HTTP for the unicast case
- These existing standards solve some of the issues very well
- However, there are several major usages which are not catered for:
 - large ($>MTU$) and prioritised (urgent) metadata transfers
 - optimizations for combined unicast and multicast delivery of metadata
 - service also for hosts which have intermittent IP connections
 - robust delivery (e.g. FEC) in the case of unidirectional/multicast
 - scalable and personalized delivery to a large user base – in the case of unicast
- We need additional standardised techniques which are in the same field as SDP, SAP, ...
- MMUSIC and the IETF seem to be the natural home to develop these techniques

An Interoperable IMG

- There are also other WGs who have identified a similar need:
 - DVB-IPI
 - TV Anytime
 - IP Datacast Forum
 - IETF-CDI
- Thus, common base specification(s) that solve this need will enable a wide range of applications and interoperability
- (We believe that the alternative, no interoperability, will continue to inhibit IP multicast service deployment)

MMUSIC and IMG

- We have had to solve media discovery problems and so implemented SDP/SAP solutions.
- This has demonstrated clear needs in the area of Internet media metadata delivery.
- The work needed is above UDP/TCP/IP and below application (metadata) and in the same spirit as SDP, SAP, ...
- It seems natural that MMUSIC is the right place to solve these problems.
- We want to solve these clearly perceived problems with techniques in mmusic's existing scope

Internet Media Guides (1)

An Internet Media Guide (IMG) is a **set of multimedia session descriptions** expressed using SDP, SDPng or some similar session description format. It is used to **describe a collection of multimedia sessions** (e.g. television programme schedules). The IMG must be delivered to a potentially large audience, who use it to join a subset of the sessions described, and who may need to be notified of changes to the IMG.

Internet Media Guides (2)

MMUSIC will investigate work on delivery mechanisms for IMGs, generalizing our work on session announcement and discovery protocols (SAP, RTSP, SIP). We will **investigate and document requirements for IMG delivery mechanisms**, and **identify the requirements that these delivery mechanisms impose on the session description formats** used by the IMG. We will then work to **produce a framework document** outlining the use of **(existing) protocols** to create an IMG delivery infrastructure. After successful completion of these initial milestones for IMG delivery, the MMUSIC charter will be updated to reflect the actual steps for IMG delivery specifications.

What we want...

- Enthusiasm
- Buy-in
- Your ideas
- Contributions
- Progress
- Solve this problem

- open floor...