Extensions of Session Description Protocol (SDP) for Seamless Session Mobility

draft-mingqiang-mmusic-session-mobility-attribute-01.txt

Matsushita Electric (Panasonic):

Xu Mingqiang Daisaku Komiya Sachiko Kawaguchi Mahfuzur Rahman Brijesh Kumar

Eunsoo Shim

Contents

- Overview of previous version
- Changes from the previous version
- Issues and requirements for seamless session mobility
- Next steps

Overview of Previous Version

- draft-mingqiang-mmusic-session-mobility-attribute-00.txt
- Targeted for seamless session mobility
 - . Instant media transfer was proposed as an requirement
 - . A solution was proposed for instant media transfer
 - . Related SDP extensions were proposed

Changes from the Previous Version

- Comments from IETF63rd
 Media synchronization should be considered for session mobility
- Changes from the viewpoint of media synchronization
 - Issues with session transfer are analyzed
 - Requirements for seamless session mobility are revised
- Concentrates on the requirements only in this version

Issues and Requirements: Generic

Issue:

Session Destination plays after Session Source stopped playing. If the continuity of media is not kept, it may happen that media is skipped or overlapped.

Requirement 1: Minimal Time Gap

Requirement 2: Minimal Media Gap

Issue:

Too much response delay is annoying for user.

Requirement 3: Minimal Response Delay

Issues and Requirements

Issue:

If a session destination receives video data from an intermediate frame of a GOP, Session Destination cannot decode the video frames within GOP

Requirement 4:

Supporting MPEG-like media that uses prediction-based coding

Issues and Requirements

Issue:

Buffer overflow will be caused while transferring the buffer content from Session Source to Session Destination if the session destination has a smaller buffer.

Requirement 5: Supporting Different Buffer Sizes

Issue:

Session Source and Session Destination may have different network environments; this will affect the time to achieve buffering in the media buffer and thus affect the time gap and media gap.

Requirement 6: Supporting Different Network Characteristics

Issues and Requirements

Issue:

- Media characteristics such as image resolution can be different between Session Source and Session Destination
- The media data transferred from the Session Source may not fit into Session Destination

Requirement 7:

Supporting Media Characteristics Change

Comments?

· Rationality of the proposed requirements

· Completeness of the proposed requirements

Next Steps

- ◆ Add a section for solution
 - Media related information exchange between
 Session Source and Session Destination is required
- ◆ Add a section for required extensions of SDP
 - •e.g. buffer size