MEDIA SYNCHRONISATION
ON
DISTRIBUTED MULTIMEDIA SYSTEMS

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Abstract

Multimedia results from the integration of new types of computer media (e.g. digital audio, digital video, etc.) with traditional media types available in computer systems (e.g. text, graphics, etc.).

One problem facing developers of multimedia systems is the temporal relationship inherent to multimedia presentations. This temporal relationship imposes real-time synchronisation requirements on the processing of multimedia information. However, the current generation of computer systems were not designed to handle the real-time characteristics of multimedia systems and fall short in supporting this requirement.

This thesis presents a framework for a distributed software architecture which takes into consideration the media synchronisation. The framework attempts to meet the following goals:

- To provide a synchronisation formalism to specify the temporal relations required in multimedia applications. The formalism must hide the details about the different characteristics of each media stream.

- To provide a platform that supports the described synchronisation formalism and transparently provides multimedia applications with the correct synchronisation. The platform must provide multimedia applications with a set of controlling functions so that applications can accurately control the behaviour of presentations.

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Papers Published

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