

www.globalmmcs.org

Introduction

There are numerous video conferencing architecures, including H.323, SIP, Access Grid and Web-casting like Real-Streaming. In general, one cannot directly interact with one another. The goal of GlobalMMCS project is to build a service-oriented audio/visual collaboration system based on the Web Services framework, which can provide scalable, reliable, pervasive and persistent multimedia collaboration services to heterogeneous clients.



GlobalMMCS research includes:

- Support for H.323, SIP, and Access Grid protocols
- Audio and video mixing services to combine XGSP, a generic XML-based session management system
- Support video annotation, archive and replay
- Support for mobile devices

XGSP Web Service MCU Architecture

GlobalMMCS integrates video from desktop screen, web camera, Polycom ViaVideo and PDA camera feeds. Cellular phone display shows four live video feeds. PDA and PC with shared and scalable whiteboard. The new eclipse SWT based Global-MMCS client has been wrapped as a standard Google Desktop Plugin which allows people to connect to Global-MMCS servers through their google desktop installations. Collaboration tools are as follows:

Stream archiving

- Instant replay allowing annotation and rewind/forward of real-time streams.
- Bridge the gaps between different protocols, standards, servers and clients.



- Support for H.323, SIP, and Access
 Grid protocols.
- Audio and video mixing services combining streams for clients like PDA's and Polycom that only support one stream.





Shared

eLearning

- Java clients.
- Servers support several hundred clients per Linux server.
 Servers are scalable indefinitely using NaradaBrokering's distributed network.



eSports

Codec version to RealVideo.
 Use of NaradaBrokering for both control and data streams XGSP, a generic XML-based session management system.

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