Title: NON CONTINUOUS MEDIA STREAMS TRANSMISSION USING RTP. A MULTICAST RTP-BASED TOOL

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Summary :

A large number of real-time distributed multimedia applications have already been developed using the *Real-Time Transport Protocol* (RTP), but all of them for continuous media streams, such as audio and video. Nevertheless, in those applications, non continuous media streams such as text, data from sensors or from alarm devices, pointer coordinates, etc., also coexist with audio and video streams and need to be synchronised with them at the receivers. As an example we can cite a tele-videoconference tool including the transmission of the coordinates of the mouse or pointer position. In this example, the client players have to show the movement of the mouse or pointer synchronised with the audio and video streams. Otherwise, it would annoy the final users.

Traditionally, data for non continuous media streams has been transported using TCP or UDP that have no time information in their PDUs that make synchronisation possible. In this paper, we show the possibility of sending data from non continuous media streams using RTP, PDUs (*Protocol Data Units*) of which contain time information for that purpose.

We propose new RTP payload format to do it and, to test if it is feasible we have developed an experimental multicast RTP-based tool for sending data from a text conversation (like a chat tool), using this format. With this tool we have shown the possibility of using RTP to send data from non continuous media streams and get the synchronisation with continuous media streams at the receiver.

In the poster/demo session we would like to show our proposal of RTP payload format and the main features of the implemented tool. We also would like to bring those present the opportunity of trying it, between a couple of laptops.

In the near future we are going to use our proposal in a security and telesurveillance system in which data from alarm sensors and access control devices will be transmitted together with video and audio streams.