# State Exchange in Distributed Applications

## **ABSTRACT**

This assignment is part of the TRAMP Real-time Application Mobility Platform (TRAMP) project with focus on distributed multimedia applications with real-time requirements. The goal of the assignment is to design and implement at least two components (producer and consumer) of a real-time application (such as a media player) and evaluate the provided distribution framework with respect to delay, throughput and other relevant metrics. Above is an overview of the provided framework. Your objective is to design and implement the pro- ducer and consumer application parts (the two gray components). The producer/consumer duo can run locally on one machine or be distributed over a network. In addition, multiple consumers can subscribe to the same produced data and receive identical copies.

### **Categories and Subject Descriptors**

H.4 [Information Systems Applications]: Miscellaneous

#### **General Terms**

Design, Experimentation, Performance, Measurement

#### 1. INTRODUCTION

In our assignment we were to use the Real-time Application Mobility Platform (TRAMP). This is a project developed by the Distributed Multimedia Systems (DMMS) group at the University of Oslo.

This is a assignment given to us in the course INF5090 - Advanced Topics in Distributed Systems which is a course given by the University of Oslo, as well as Lancaster University in England and University of Mannheim in Germany. The teachers are Thomas Plagemann and Vera Goebel with their teaching assistants Piotr Kaminski and Hans Vatne Hansen. These are also the people that developed the TRAMP framework together with some other developers all from the University of Oslo.

- 2. RELATED WORK
- 3. SYSTEM DESIGN
- 4. THE CHOICE OF STREAMER
- 5. PROPOSED OPTIMIZATIONS
- 6. EVALUATION
- 7. CONCLUSIONS
- 8. REFERENCES