

ICOM 6006: Distributed Systems
Project Assignment

Due: May 25, 2011

The goal of this assignment is to investigate and present in a technical paper the design principles underlying a specific implementation of a distributed system (see table I for a student-system assignment). The technical paper must include a discussion of the system architecture, and the design principles in terms of processes, naming, synchronization, replication and consistency, fault tolerance, and security as discussed in class. The format of the paper must be as follows.

Introduction

- Provide a high level discussion of the findings
- Describe the organization of the technical report

Technical Discussion

- Discuss the system architecture
- Discuss the pros and cons of the software system
- Discuss the design principles and protocols in terms of processes, naming, synchronization, replication and consistency, fault tolerance, and security
- Provide references to support your arguments

Experimental Results

- Provide information about the use of the systems (you may need to deploy the system for example using a set of virtual machines).
- Discuss the experimental setting required to demonstrate the use of the principles.
- Discuss the experimental results

Conclusions

- Provide sound conclusions
- Establish potential future work

Table 1: Student-System Assignment

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Ernesto Perez	Cassandra
Harold Valdivia	Hadoop