Distributed Systems Project, Spring 2011

First assignment: Consistency

In this assignment, you will take a look at how consistency is managed in real-world distributed systems.

Tasks

You have two main tasks in this assignment:

1. Take a look at CODA (http://www.coda.cs.cmu.edu/) and read the documentation and papers about CODA. You do not need to install CODA, but if you are interested, please feel free to experiment with it. You need to answer the following questions:
    a. What consistency models does CODA support?
    b. What algorithms are used to implement the consistency models?
    c. What kind of data replication mechanisms does CODA use?
2. Investigate **one** existing cloud-based storage service, for example, Google Docs, DropBox, iDisk, Box.net, Sugarsync, etc.
    a. Can you find out what consistency model that service uses? If not, explain how you searched for this answer.
    b. Experiment with storing data on that service and attempt to break consistency of data

Deliverables

You need to return one written report with answers to your questions. Do NOT copy answers from documentation.

Timeline

The report is due on February 1st at 10:00. No extensions will be given.

Return

Return your report as PDF by email to Liang.Wang@cs.helsinki.fi. Please indicate clearly all the group members on the report.