

Distributed Systems Practical Work

M2 MOSIG

2014-2015

Task 1

- Design and implement a uniform reliable broadcast protocol
- Assumptions:
 - Fixed known set of processes
 - Crash faults
 - Reliable links
 - Perfect failure detector (you need to implement it)
- Language: Java

Task 2

- Evaluate the performance of your protocol
 - Use 4 computers located in the same Ensimag classroom
 - Assess the throughput with one sender when varying the message size
 - Assess the throughput with 10kB messages when varying the number of senders
- Optional: assess the behavior of the protocol under faults

Task 3

- Write a report
 - Pseudo-code of your protocol
 - Sketch of the proof
 - Description of your implementation
 - Performance evaluation

Misc.

- No lectures on
 - December 05
 - December 12
- Report to be sent by email on December 18
- Defenses on December 19
 - 10 minutes per student (can include a demo if you want)