



TK1: Distributed Systems - Programming & Algorithms

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2nd Exercise

Submission Date: 18.11.2015

By handing in a solution you confirm that you are the exclusive author(s) of all the materials. Additional information can be found here: <https://www.informatik.tu-darmstadt.de/de/sonstiges/plagiarismus/>

Task 1.1: RPC Failure Semantics (3 P.)

You want to implement RPC with at-most-once failure semantics. What do you have to implement on the client and the server side (e.g., buffer, algorithms, additional information in messages)?

Task 1.2: Marshalling (4 P.)

- a) Define the term "Marshalling".
- b) In the lecture CORBA CDR has been presented. In CORBA CDR there is no explicit typing. Explain why this is the case and describe advantages as well as disadvantages.

Task 1.3: Request-Reply Protocol (3 P.)

- a) Describe advantages and disadvantages of Request-Reply-Acknowledge (RRA) in comparison to Request-Reply (RR).
- b) Should a server with RRA send a reply multiple times to get an ACK?