

# Reliable Distributed Systems

José Orlando Pereira  
HASLab/DI/U. Minho

## **Multicast**

Assume that a server may crash and stop providing the service. Attempt to provide fault tolerant operation by having multiple servers and clients contacting them all for service.

### **Steps**

1. Re-implement the bank client/server using multicast communication.
2. Test multiple servers with a single client. Fail a server by killing the process.
3. Test multiple servers with multiple clients. Fail a server by killing the process.

**Learning Outcomes** Recognize the usefulness of multicast communication for fault tolerant distributed systems. Understand the challenges for fault tolerant replication.