Advanced Operating System Issues (AOSI)

Excercise Sheet 2
Due date: 10.11.2011

1 Communication Models

Define the basic idea of communication and the special characteristics in the fallowing communication models: **Message Passing, Remote Procedure Call, Shared Data Spaces, Publish/Subscribe**

2 Message Passing

Discuss why the TCP protocol is inappropriate to realize cooperation in a distributed System!

3 RPC

Imagine a crashing server during the processing of a synchronous RPC of a client. Which problems can happen?

4 Shared Data Spaces

Why is it necessary for data space to be immutable? How can an overwrite operation be simulated by the existing operations on the data space?

5 Publish/Subscribe

Describe why multicast support is beneficial for a Publish/Subscribe communication.