Akka Homework – Task 1
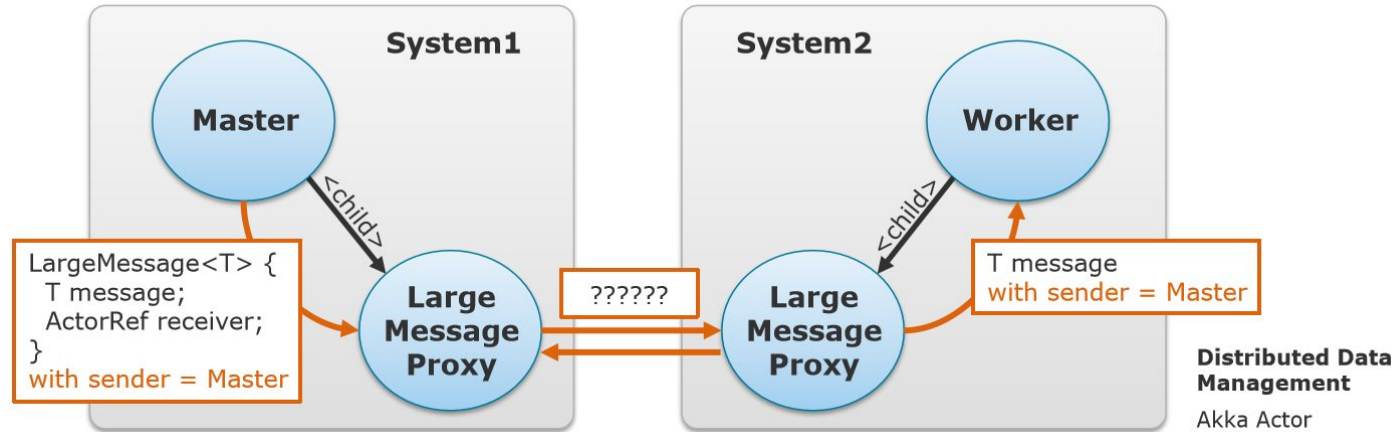
Isabel Bär, Yannik Schröder

Distributed Data Management SS 2020

Task 1: Large Message Proxy

Task

- Implement the LargeMessageProxy actor!

Distributed Data Management

Akka Actor Programming

ThorstenPapenbrock
Slide 130

Chart 2

Task 1: Our Approach Step By Step: Batch Solution

1. serialize the Large Message into Byte Array

2. split the array into batches

3. send Pre-message with buffer-size in order to tell the receiving side how many bytes will be expected

4. send the Large message batch-wise

5. send Post-Message to re-construct byte array

6. deserialize byte array into large message and forward it to Receiver

Notes:

- We can rely on the sender/receiver order (all messages between specific sender-receiver pairs are ordered) to make sure we are able to correctly re-construct the Large Message.

- *serializerID* and *manifest* have to be available on both sender and receiver side in order to serialize/deserialize correctly

Chart **3**