Akka Assignment 2

Sascha Obst, Johannes Hötter

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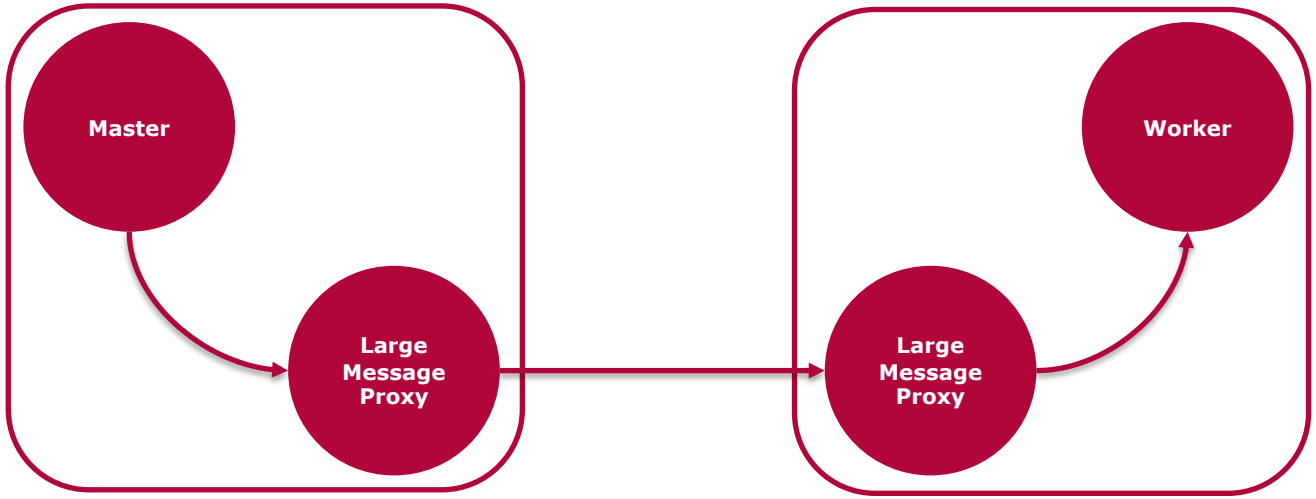
The task



- Implementing the LargeMessageProxy in order to send large messages from system 1 to system 2 without breaking the connection

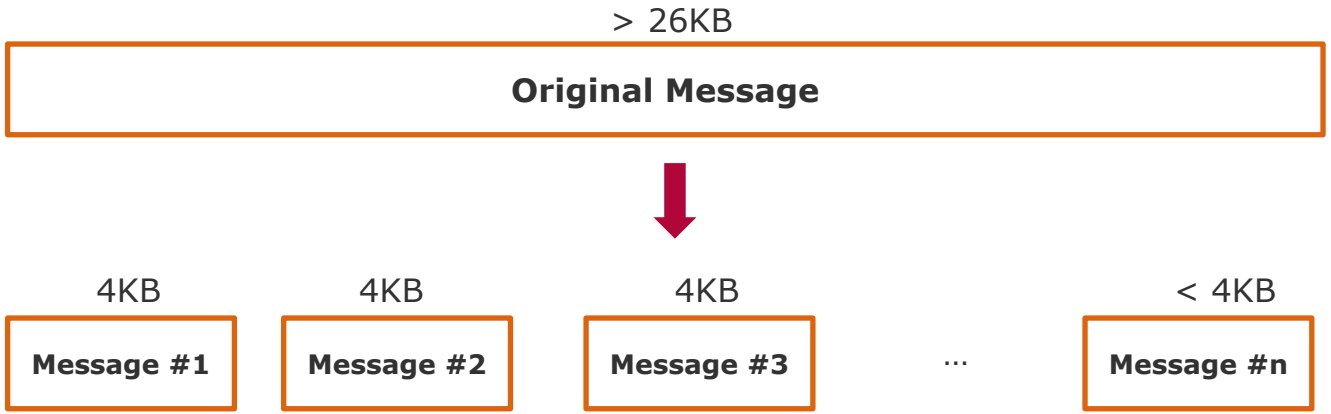
The task

Methodology:

1. Serialize the LargeMessage to a byte array using Kryo
2. Split the byte array into enumerated chunks
3. Build a Source from the chunks
4. Send a Reference of the Source to the receiving Proxy
5. Resolve the Reference in the receiving Proxy
6. Get the chunks from the Source by running it to the Sink and sort them by their enumeration
7. Merge the chunks into a byte array
8. Deserialize the byte array using Kryo

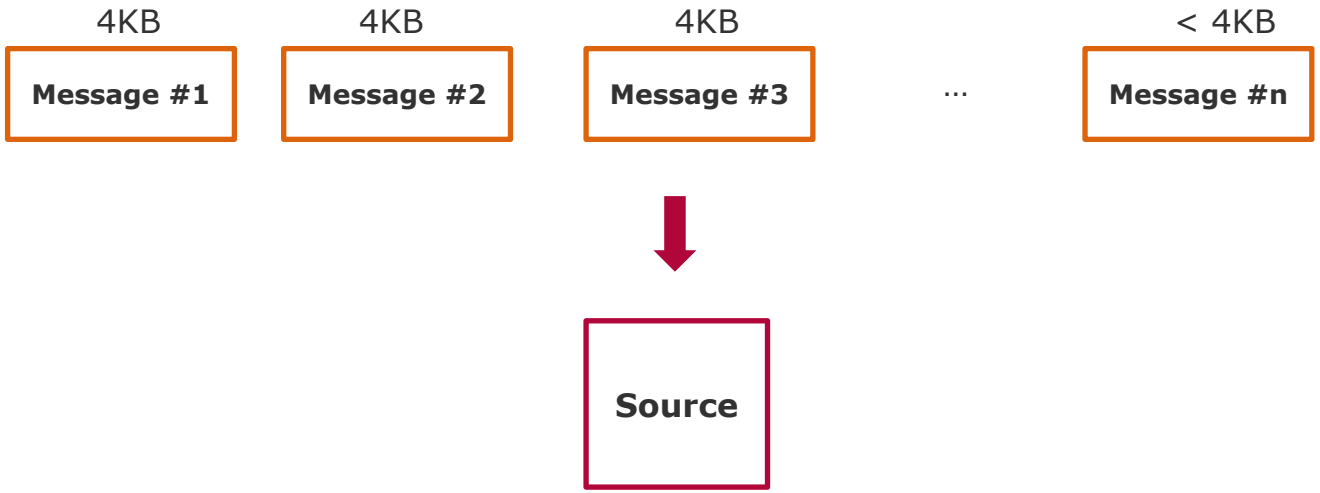
Getting the enumerated chunks

- Splitting the serialized message into n byte chunks with a fixed maximum size (e.g. 4KB), each having an identifier



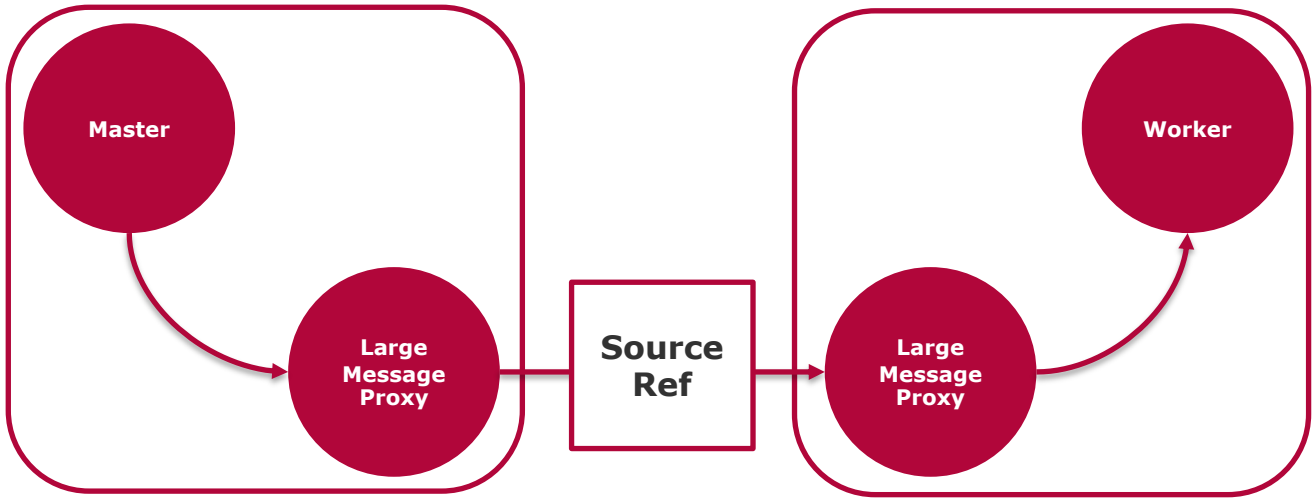
Creating the Source(Reference)

- Load the enumerated chunks into a Source Object and pass the reference to this Source to the receiving proxy



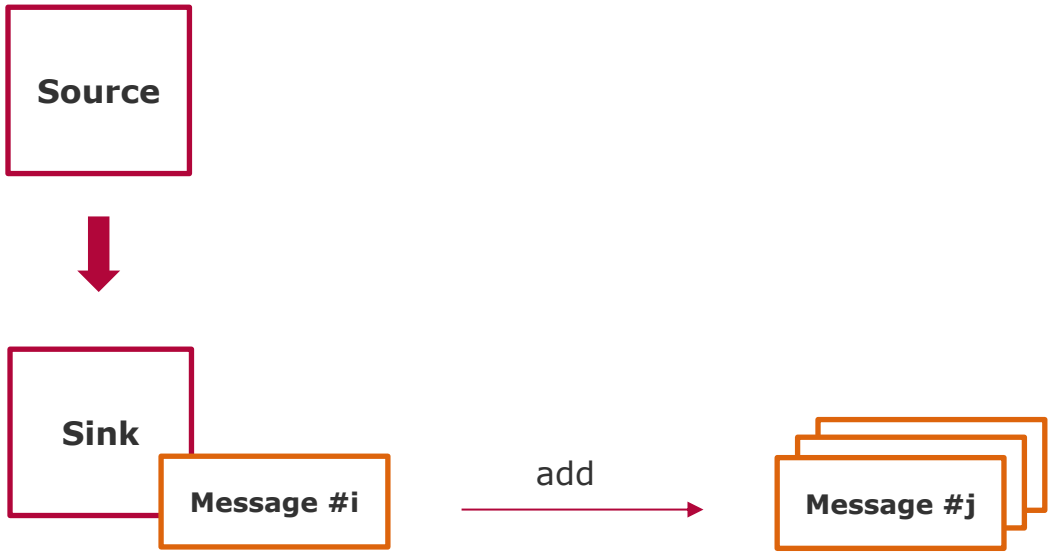
Sending the SourceReference

- Send the Source Reference from system 1 to system 2



Loading the chunks from the Source

- Run the Chunks from the Source to the Sink, and append the current chunk to a list



Merge the chunks and deserialize into the message

- Sort the list of chunks by the identifier and concatenate the chunks
- Deserialize them afterwards