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Abstract

Implementing a eventual consistency job distribution with CouchDB

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The implementation of a job distributor in a distributed system can be a complex task. There is no shared memory or a reliable global clock, and network failures can, and will, occur, making communication between the different nodes of the system complex.

To make life easier for the programmer, I have evaluated if CouchDB can be used as tool for reliable communication and synchronization between nodes. The results shows that CouchDB indeed can be used for this purpose. CouchDB takes care of the communication, and guarantees that the nodes will, eventually, get the jobs to execute.

With CouchDB as the backbone in a job distributor, the programmer can concentrate of the functionality of the job distributor, and not worry about the need to implement a reliable communication between nodes with all the complexity that comes with it.

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