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iGreen Machine Connector Reference Implementation

According to this specification the iGreen project member John Deere provides a reference implementation to get a better understanding of the Machine Connector, to enable a proof of concept and to enable other partners a fast entry in this technology. John Deere allows using and modifying the source code and binaries but is not responsible for this software with all rights are reserved.

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The reference implementation is written with Java using the Ektorp API (www.ektorp.org) to access the CouchDB. The project is created with Netbeans 7.0 (www.netbeans.org). In the implementation a minimal set of functions for the server and client are implemented. The main()-Function requires the following three parameters:

1. iGreenID of this instance (e.g. de/jdtest/fzxsrv09)
2. The CouchDB URL of this instance (in most cases localhost)
3. The URL to the next root node which is reachable (e.g. igreen.deere.com)

The main()-Function creates a thread for the core services like replication and initialization and a second thread for the compaction. Other threads may follow when the history maintenance or the OnlineBox connector is developed.

The representation of the JSON documents is done in the models package. For each JSON representation a Support Repository needs to be created.

The core thread implements in the initConfigDB()-Function the section 2.6.1.1. of this specification. The updateReplicator()-Function implements the section 2.6.1.2.

Sample databases could be found in section 4 of this specification.