Smart-M3 Open Source

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Abstract

Smart-M3 is an interoperability platform that provides mechanisms to share information expressed using RDF. The platform consists of a Semantic Information Broker (SIB) that stores the information, and Knowledge Processors (KP) that can insert, remove, query and subscribe to information. The information is stored in Smart-M3 according to some standardized or otherwise agreed ontologies. Information sharing helps the participating KPs to gather relevant context information which leads to more efficient operation and innovative multi-device use cases.

The Smart-M3 open source release contains KP APIs for C/GLib, Python, and Qt/C++. The KPs can connect to the SIB by using either TCP/IP or NoTA H_IN protocol. Eventually more support for different programming languages and connectivity mechanisms will be added. There is also an ontology library generator for C/GLib API that allows developers to program using ontology concepts instead of using Smart-M3 basic operations and RDF. Ontlogy library generators for other languages are also forthcoming.