

AgentOWL – Agents with OWL ontology models using JADE agent system and Jena



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Agent Technology Roadmap: Current MAS – lack of Internal Agent Knowledge Model, lack of interconnection with semantic web results (knowledge model representations) and commercial standards

MAS Standards: FIPA, MASIF

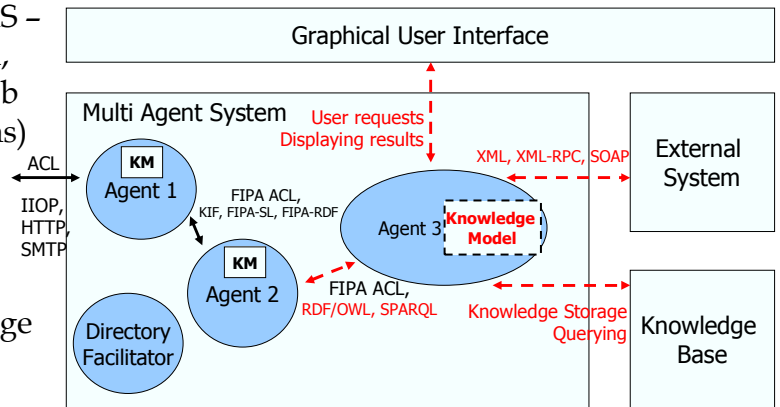
- Agent communication, agent platforms
- No standards for internal agent knowledge model with available implementations

JADE Agent System

- Support for ontologies based on FIPA-SL
- No Query engine, No Storage, No Inference

Ontologies in Semantic Web

- Knowledge Representation
- OWL-DL - Description Logic compatible
- Query and Storage Engines available
 - RDF, OWL, SPARQL based



Used Technology

- RDF, OWL, SPARQL
- XML, XML-RPC
- Java, MAS

Used Tools

- JADE
- Jena
- Protégé



Agent Library

- Support for OWL based Agent Knowledge Model
- Support for XML-RPC connection to receive event and send plain XML
- Support for Presentation of Ontological Knowledge (RDF/OWL => plain XML + XSL => HTML)
- Support for agent communication using FIPA ACL with OWL and SPARQL as content languages
- JADE and Jena Integration
- Available on JADE official website to MAS community (years 2005 - 2006: 735 downloads)

description & value		community & developers		JADE board	application & business		papers & resources		news
faq	mailing lists	add-ons & 3rd party sw	bugs & suggestions	to do list	source code				
sections									
+ faq + mailing lists + bugs & suggestions + to do list + source code (NEW!)									
AgentOWL		?	Jan 2005	tested with JADE version 3.2	Michal Laclavik PhD student at Institute of Informatics SAS, Bratislava, Slovak Republic.		?		

