

Towards A Framework for Service-Oriented Architecture Metadata Management

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Abstract—Service-Oriented Architecture has gained considerable attention in construction of enterprise level business solutions. Although this architectural approach provides many benefits, it comes at the cost of increased complexity. This research focuses on the development of a metadata framework using semantic web technologies of XML, Resource Description Framework (RDF) and Web Ontology Language (OWL). The resultant framework is in the form of an Enterprise Services Ontology and Enterprise Services Profile. These ontologies provide the foundation that has been employed to develop a proof-of-concept Services Repository to prove that a semantic service repository can be a viable means of addressing complexity and management problems faced by enterprise scale Service Oriented Architecture (SOA) implementations.

Index Terms—Service-Oriented Architecture, Metadata Management, Enterprise Services Ontology and Enterprise Services, acceptance criteria