Abstract

Service oriented architecture is an architectural principle that positions IT services as the primary means through which business services are offered by the organization to its ecosystem. Therefore, SOA offers the prospect of better alignment of Academic and Administrative goals and Information Technology (IT) solutions in Education Organizations. The aim of this paper is to describe SOA in detail with considering all the approaches, concepts and methodologies that surrounds architectural model of SOA. Service based application development, frameworks and other related requirements are discussed in this paper in order to have a complete and accurate figure of SOA and be competent in utilizing service orientation concepts in enterprise application development. Service-Oriented Architecture (SOA) is a method for publishing services hosted by computer systems for the use of other computer
A Framework for Service Categorization and Requirement Gathering along with Discovery and Negotiation Threads of new Services in Service Oriented Architecture (SOA) systems. This method can be used to integrate applications and is therefore called Service-Oriented Integration (SOI). Integration brokers are a traditional method of integrating different kinds of systems by sending messages from one system to another. This paper gathers requirements for an integration broker in Service-Oriented Architecture and presents framework that can be used to build SOI architecture.

References

- Broy, Diernhofer, Grünbauer, Meisinger, Rappl, Rittmann, Schätz, Schoenmakers, Spanfelner, "Service-Oriented Development" white paper.
- Olaf Zimmermann, Niklas Schlimm, Günter Waller, Marc Pestel, "Analysis and Design Techniques for Service-Oriented Development and Integration".
- Gregor Hohpe (2005) "Developing Software in a Service-Oriented World"; white paper.
- Werner Vogels, (2003) "Web Services are not Distributed Objects" IEEE Internet Computing.
- Martin Kuba, Ondrej Krajicek (2007) "Literature search on SOA, Web Services, OGSA and WSRF" IEEE.
- Fahmideh, Mohsen Sharifi, Pooyan Jamshidi, Fereidoon Shams, Hassan Haghighi "Process Patterns for Service-Oriented Software Development" IEEE.
- Francoise Baude, Virgine Legrand (2011) "A component-based orchestration..."
management framework for Multidomain SOA" 978-1-4244-9221-3111 IEEE.
- Michael Jiang, Allan Willey (2005) "Architecting Systems with Components and Services"; 0-7803-9093-8/05/ IEEE.
- Hassan Gomaa, Koji Hashimoto, Minseong Kim, Sam Malek, Daniel A. Menascé (2010) "Software Adaptation Patterns for Service-Oriented Architectures"; 978-1-60558-638-0/10/03 ACM.

Index Terms

Computer Science
Software Engineering

Keywords