JBoss
SOAML
eclipse
magicdraw®
CAMEO™
SOA+
POWERED BY MODELPRO
UNIFIED MODELING LANGUAGE
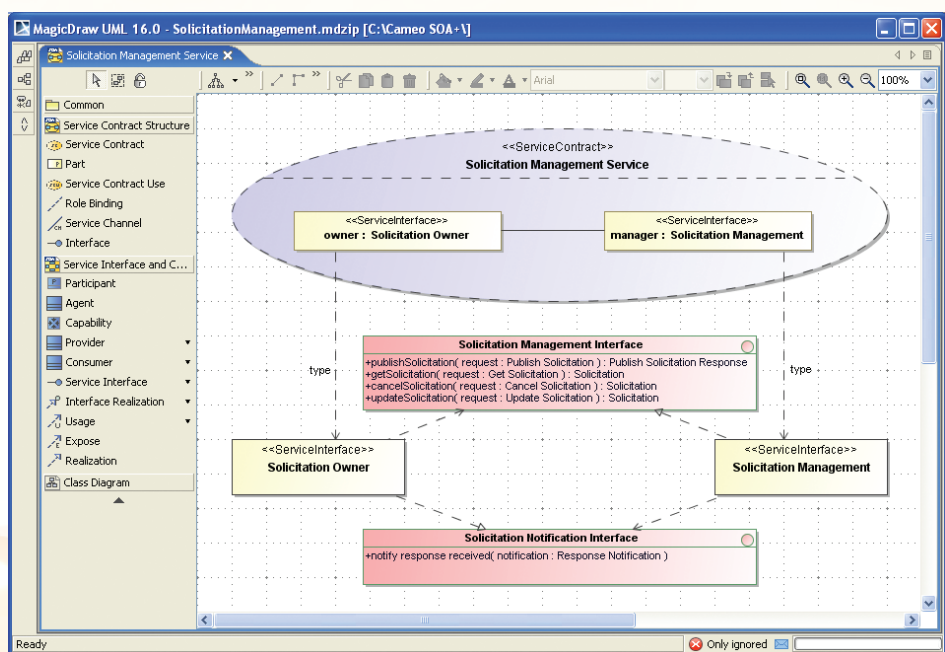UML™
Java POWERED
ModelPro™

Executive Overview

The industry adoption of service-oriented architectures (SOA) as an approach to systems development and modernization has become well rooted in both commercial and government organizations. SOA's modeling standardization in the SoaML (from the Object Management Group or OMG®) offers the opportunity to architect, design and now implement SOA solutions that lead to improved cost optimization and business agility. No Magic and ModelDriven.org combine together to

Cameo™ SOA+ brings together SOA at both the business and technology levels to address the full spectrum of services. From enterprise and business architectures to implementing, using, and composing services on your favorite Enterprise Service Bus (ESB) or application server, this integrated solution is versatile enough for both personal and team-based development. SoaML helps create and use services based on new and existing capabilities using composite services.

Since Cameo™ SOA+ leverages the latest Model Driven Architecture® (MDA) standards and technologies, the transition from model to implementation is highly automated: reducing implementation and maintenance costs, supporting multiple technology platforms while keeping both models and implementations synchronized.

Automatic Generation of SOA Project Implementation Files

This best-of-breed solution is available through combining the elegance of the award-winning Magicdraw® offering from No Magic with the power of ModelPro MDA tooling from ModelDriven.org. Cameo™ SOA+ provides the ability to easily create SOA business and systems architectures. The creation of web services including business logic as well as other associated artifacts (configuration files, WSDL files, XSD files, etc.) can be automatically generated to implement and deploy specific services that may be consumed by new or legacy systems, inside or outside the enterprise. What few aspects of the generated files that cannot be produced from the SOA models can be easily added by developers to complete the application.

offer a solution that makes the adoption of SOA a reality.

SOA projects, however, can easily get out-of-hand due to the need to manage and coordinate numerous different protocols, formats, languages and technologies. Cameo™ SOA+ powered by ModelPro™ is a set of cooperating tools ensuring an architect/designer/developer will avoid becoming overwhelmed with the potential enormity of the task.

Cameo™ SOA+ leverages the Unified Modeling Language (UML) along with the latest SOA modeling standard, SoaML, to provide both architects and developers an integrated solution for creating optimal SOA architectures and implementations.

Within the Cameo™ SOA+ solution, you have a pre-defined set of SOA specific diagrams, based on industry standards, that work together to create the services architectures. Although high-level and business-focused, these models contain enough information for the MDA tooling to generate a SOA implementation, complete with source code, that implements the entire architecture.

SOA Diagrams Supported

Cameo™ SOA+ supports all of the standard UML diagrams as well as the following SOA specific diagrams based on the SoaML standard.

Service Structure Diagram – the specification of a service including service contract, service interfaces, events and service choreography. The service structure and choreography diagrams combine to fully define the contract between service providers and consumers, independent of implementation and technology concerns.

Service Choreography Diagram – the specification for how the providers and consumers of a service interact to fulfill the service contract. Indicates what information is sent between provider and consumer as well as when the information is communicated.

Services Architecture Diagram – a high-level diagram of the participants in a SOA as well as the services they provide/use to meet their business objectives.

Message Type Diagram – the model of SOA message data as well as the tie between SOA messages and the UML information model. Message types are then used in the Service Structure Diagram.

Composite Application Component Diagram – the model of components and sub-components that provide and use services as a composite application component that can be provisioned for deployment.

Activity Diagram – the business process and activities within a composite SOA component that provides and uses services.

Capabilities Diagram – the capabilities diagram shows the capabilities behind the services and what other capabilities each service depends on.
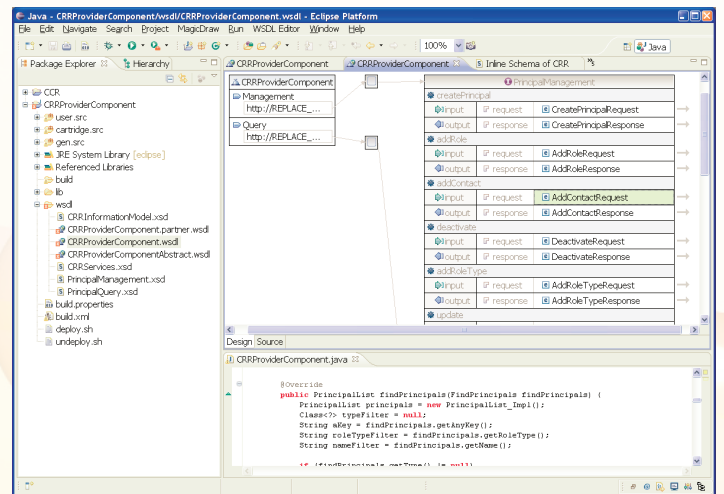
Provisioning Diagram – the provisioning diagram defines the connection between an architecture and an implementation of that architecture. The provisioning diagram is used by the SOA+ ModelPro engine to produce a deployable project. The provisioning diagram specifies the service components to be provisioned, what technologies will be used to implement each service component and where developers should augment the generated project with custom code.
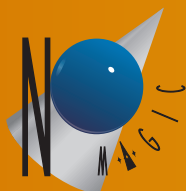
Implementation Technologies Supported

Cameo™ SOA+ comes with built-in support for a variety of technologies based on a library of templates. This set of templates is constantly being expanded as well as being refined based on user needs. Developers using Cameo™ SOA+ may also create their own custom templates from scratch or by extending those already provided. The technology artifacts produced by the pre-defined templates include the following:

- Web Services – XSD and WSDL
- Eclipse IDE – project and build files
- Java & JEE Implementations – java source code (with user override capability) and required libraries for services, messages, components, data and session beans
- Application Servers – Configuration and JAR files specialized for supported application servers (tested on JBoss and Glassfish)

As the supported technologies are constantly expanding, be sure to visit http://soaplus.cameosuite.com to check for updates or to inquire about custom templates. User Interface and DBMS templates are planned to be released in the near future. As the Cameo™ SOA+ community builds, templates will also be made available as contributed by users.

http://soaplus.cameosuite.com

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