#### Open SOA

# SCA & SDO Implementations Open Source and Vendor Products

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## Implementations of SCA and SDO

- Open Source Runtime Implementations
- Vendor Runtime Implementations
- Open Source Tooling Implementations
- Vendor Tooling Implementations

## Apache Tuscany Incubator Open Source Project

- Aims to provide SOA runtime based on SCA and SDO
  - currently has "incubator" status within Apache
- Java<sup>™</sup> & C++ implementations today
  - ➤ Java<sup>TM</sup> impl runs with Apache Tomcat + Axis
  - > aim to support more capable runtimes in future eg. Geronimo
  - > C++ works with Apache Axis C++
- Runtimes support additional languages
  - > eg Python, Ruby, Groovy, JavaScript
- Binding protocol support
  - Web services, JMS, RMI, JSON
- http://cwiki.apache.org/TUSCANY/

## SOA for PHP Open Source project

- PHP implementations of SCA and SDO
  - aim to support SOA development with the PHP language
  - popular language for server-side support of Web applications
  - now potential approach for server-side of AJAX / "Web 2.0" implementations
- Takes place within the PHP community
  - code hosted on PECL
    - http://pecl.php.net/package/sca\_sdo
  - freely downloadable
  - separate Website space on www.osoa.org
    - http://www.osoa.org/display/PHP/SOA+PHP+Homepage

## Fabric3 Open Source Project

- Open Source project hosted at CodeHaus
  - Java implementation of SCA
  - Federated network of services
  - Apache license
  - http://fabric3.codehaus.org/

#### **Newton Project**

- Open source project related to Paremus' Infiniflow product
  - distributed Java runtime framework
  - SCA / OSGi based technology
  - dynamic allocation of components to grid of systems
  - http://www.codecauldron.org/

## Eclipse SOA Tools Project

- Aims to provide Eclipse-based tooling for SOA applications and systems
  - ➤ based on SCA as model for solutions built using SOA
  - targets a range of systems including SCA runtimes such as Tuscany
  - ➤ hosted at Eclipse: http://www.eclipse.org/stp

#### **Oracle Fusion**

- Oracle Fusion middleware
  - infrastructure for Grid computing, SOA and Event-driven architecture
  - announced recently at JavaOne conference
  - service infrastructure based on SCA
  - http://www.oracle.com/corporate/press/2007\_may/OFM-nextgen-arch.html

#### IBM WebSphere

- IBM WebSphere Application Server V6.1
  - > IBM's base application server
  - "Feature Pack for SOA"
  - provides implementations of SCA and SDO
  - currently in Beta
  - will release support of V1.0 of SCA and V2.1 of SDO
  - related function in WebSphere Process Server, WebSphere ESB
  - https://www14.software.ibm.com/iwm/web/cc/earlyprograms/websphere/soawas61/

#### TIBCO ActiveMatrix

- ActiveMatrix Service Grid from TIBCO
  - Java based SOA runtime
  - Implements SCA and JBI specifications
  - extensible by users
  - policy management, service deployment, and service management can be configured at runtime by administrators
  - http://www.tibco.com/company/news/releases/2006/press765.jsp

## RogueWave HydraSCA

- RogueWave HydraSCA
  - High-performance SOA application infrastructure
  - based on SCA
  - parallel grid execution environment
  - http://www.roguewave.com/hydra/hydrasca.cfm

#### Paremus Infiniflow

- Infiniflow Distributed Services framework from Paremus
  - SCA / OSGi POJO & Spring based infrastructure
  - Grid environment
  - scalable, parallel execution with load balancing
  - http://www.paremus.com/product/product.html

## Covansys SCA Framework for SOA

- SCA Framework for SOA
  - SOA framework using SCA
  - > rapid SOA application development & deployment
  - http://www.covansys.com/what/SCAFrameworkforSOA.htm

#### XCalia XIC

- XCalia Intermediation Core (XIC)
  - provides SDO support
  - innovative dynamic business process orchestration and metadata technology
  - layered technology sits between business services and data layers in an enterprise application
  - http://www.xcalia.com/products/core.jsp

## BEA AquaLogic Data Services Platform 2.0

- AquaLogic Data Services Platform 2.0
  - modify, create, and delete data from heterogeneous, distributed data sources as if it were a single entity
  - http://e-docs.bea.com/liquiddata/docs85/appdev/sdoupdate.html

#### RogueWave HydraSDO

- HydraSDO from RogueWave
  - lightweight, high performance implementation of SDO
  - > multi-language: Java, C++
  - relational database & XML data formats supported
  - http://www.roguewave.com/products/hydrasdo/

#### SAP NetWeaver Application Server

- NetWeaver Application Server, Java EE 5 Edition
  - SDOs provide language bindings for data representation and metadata access of business data in composite applications
  - https://www.sdn.sap.com/irj/sdn/developerareas/java?rid=/webcontent/ uuid/28b1ed0e-0d01-0010-c887-a8fdecdb9053

#### CodeFutures Software: FireStorm/SDO

- FireStorm/SDO
  - database persistence based on SDO
  - current product is Java based
  - intention to also provide C++ version in future
  - connected and disconnected modes of operation
  - http://www.codefutures.com/firestormsdo/

#### **Summary**

- SCA and SDO are the basis for a variety of SOA-related runtimes and tools
- Open Source and Commercial offerings are making SCA and SDO practical technologies for solving business problems
- See:
  - http://www.osoa.org/display/Main/Implementation+Examples+and+Tools

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