

# Service-Oriented Architecture for Financial Services

Pragmatic Service-oriented Solutions for an Agile Enterprise



## Customer Needs

- Remove the high cost of introducing and integrating new IT systems and functionality.
- Have an IT infrastructure that supports rapid exploitation of business opportunities, or timely response to market environments.
- Achieve better leverage of prior investment in IT assets.
- Ability to better comply with regulatory mandates.
- Remove lock-in to proprietary and vendor-specific systems and technologies.

## Business Benefits of SOA

- The business drives how its IT works, rather than vice versa, leaving it free to focus on its areas of core competence.
- Achieve a higher level of IT-enabled business agility.
- Release “trapped” ROI from previous projects, by better leverage and reuse of existing IT functionality.
- Greater freedom of choice on procurement of new IT platforms and products.
- Better reuse and leverage of new investment.
- Improved ability to monitor and audit business processes, and comply with regulations.

The Service-Oriented Architecture (SOA) services, platform and tools from Sun and our partners will help you make your IT infrastructure more agile and responsive to changing business needs and regulations.

## Introduction

A decade of deregulation has changed the financial services landscape, fueling globalization and consolidation, and intensifying competition. Legislation introduced over the past three years has forced regulatory compliance to the top of the agenda for most CIOs. They are also under pressure to manage IT in a way that can help them regain their customers' trust in the wake of the accounting scandals. Cost pressures and decreasing margins are forcing businesses to find new ways to better leverage IT assets, and do more with less.

A Service-Oriented Architecture (SOA), when implemented effectively, can enable financial services companies to better leverage and integrate IT assets, while increasing flexibility to respond to business change and opportunity. But in a world of rapidly changing technology and emerging standards, achieving that effective implementation is not always straightforward. Sun Microsystems delivers a pragmatic approach to SOA, which emphasizes incremental projects, quick returns on investment, and building out an SOA infrastructure in phases. Our operationally resilient hardware and operating systems, our Java™ technology-based Java Enterprise System and its targeted Suites, and our SOA Services expertise enables customers to meet their IT challenges through the use of SOA at a lower total cost of ownership. Our partners complement our product and services offerings by providing technologies and industry-specific solutions to meet the needs of our financial services customers.

## A Unifying Architecture

SOA allows businesses to better leverage their investments in technology by promoting wrap-and-reuse of their existing IT assets. It provides the framework and infrastructure to expose business functionality as loosely coupled, reusable services, thus enabling significant cost savings and faster returns on investment. Through the use of business process management, SOA makes business applications more agile and improves the ability of the business to respond to changing customer demands and emerging competitive forces.

Sun provides the services, software infrastructure, and tools to enable customers to start moving towards SOA. With an emphasis on open standards and interoperability between platforms, Sun enables customers to solve business problems in ways that avoid vendor lock-in and reduce costs.

# Joint Sun and SeeBeyond Financial Services SOA Solution Automates the Management of Corporate Actions

## Highlights

**Sun SOA Services**—Sun's SOA Services offer a structured, phased, iterative process to empower customers to start adopting SOAs in their IT organization. These Services cover the spectrum from education on SOA, to project assessment, planning, and implementation.

**Sun Java Enterprise System**—The Java Enterprise System combines software and services as a single entity, for a single price of \$100 per employee, per year. It provides customers a simple, predictable, affordable way to acquire the comprehensive SOA platform on which to deploy their business applications. The Sun Java Application Platform Suite provides all the key components for building and deploying service oriented business applications. The Sun Java Identity Management Suite provides the components for enforcing identity management and security for these business applications.

**Sun Java Studio Enterprise**—The Java Studio Enterprise is a complete, cost-effective, unified platform of tools, support, and services that enables you to develop applications in an environment carefully designed to improve productivity while simplifying the creation of SOA applications ready to be deployed on the Java Enterprise System.

## Joint Sun and SeeBeyond Financial Services SOA Solution for Corporate Actions

Asset Management companies, Custodians, and even Brokerage firms need solutions to monitor and manage corporate actions notifications. Delays or mistakes in receiving, processing, and forwarding corporate actions to downstream investors and partners can result in millions of dollars worth of losses to Asset Management firms and their clients.

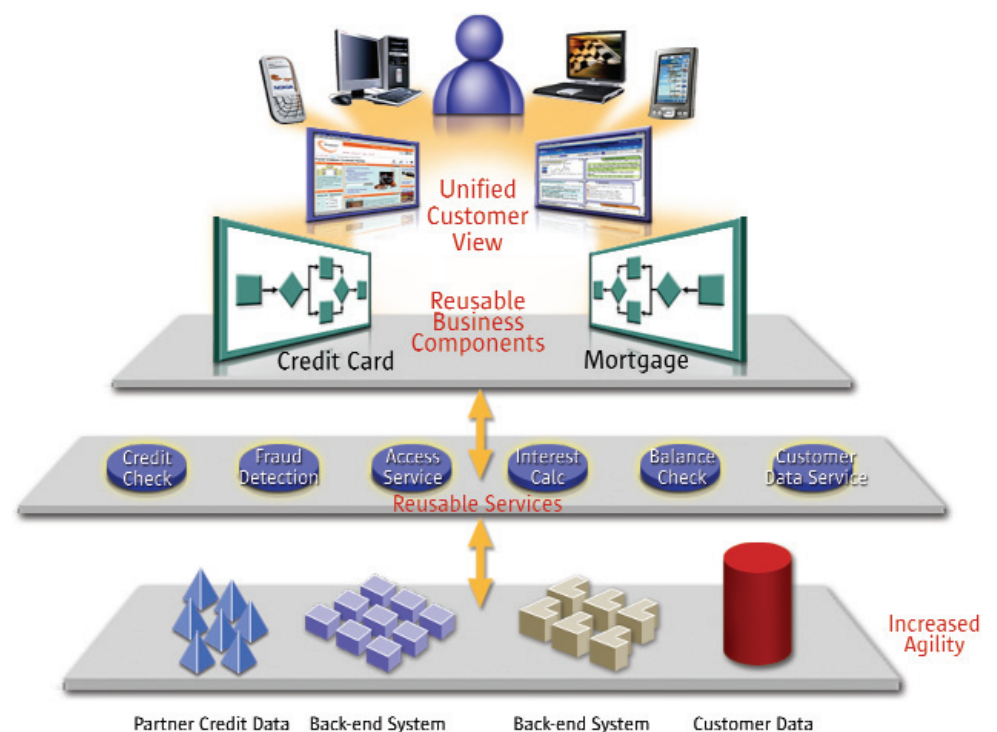
Asset Managers today handle corporate actions through a manual process. A typical Asset Management firm will receive notification details via SWIFT, fax, and other communi-

cation channels from its custodians, as well as from different data vendor sources. Reconciling this redundant information and detecting mismatches is the first and largest task facing any corporate actions department.

Not only is it expensive when a corporate action is not processed in time—it is also bad for the image of the institution as a provider of portfolio management services. Corporate action updates are crucial and have the potential to lead to substantial losses in the customer's portfolio. Timely processing is important but proper interpretation of the corporate action's content is also crucial. Finally, as manual processes do not scale with volume, the rising volume of corporate actions and the seasonal nature of such events can cause severe processing headaches.

## SOA Solution for Corporate Actions

Sun and SeeBeyond are partnering to deliver joint offerings for financial services customers with an initial solution targeted at Corporate Actions. This solution automates the management of corporate actions.



Using a Web services-capable portal, the solution allows companies to acquire corporate action information from multiple sources and over multiple manual and automatic channels in a consistent manner. The solution also provides a unified portal-enabled view into all the incoming corporate action notifications for improved monitoring and management. New data sources, including market data providers like Bloomberg or Reuters, and new standards such as FIX, ISO15022, and SWIFT Message types, can be quickly and easily incorporated into the notification infrastructure.

The solution provides pre-built, customizable, reusable services and business processes to normalize and scrub the data into a “golden record” that acts as a single source of truth on corporate action notifications.

**Benefits of the SOA Solution for Corporate Actions**

Asset Management firms and Brokerages can incur millions of dollars of losses to themselves, their partners, and their customers if corporate actions are not processed correctly and in a timely manner. The Sun SeeBeyond SOA Solution provides a flexible, automated solution for corporate actions.

*Improved Governance*—By automating the handling of corporate actions, the solution enables Asset Management firms to track and audit their corporate action information, thus improving regulatory compliance. Through the use of federated identity management and single-sign-on between various components of the solution, the firm is able to better control access to sensitive corporate actions information.

*Reduced Risk*—The Sun SeeBeyond SOA Solution allows Asset Managers to lower the risk to their portfolios and to their investors by reducing errors caused by manual entry and processing of corporate actions.

*Better Customer Service*—Individual investors benefit from receiving timely updates on corporate actions information that could potentially affect their portfolio decisions. Asset Managers are able to improve fund performance by acting on the most up-to-date corporate information.

*Reduced Costs*—By adopting a Service Oriented approach and by creating reusable services, firms are able to reduce their total IT costs, and build new applications faster.

**Product Components of the SOA Solution for Corporate Actions**

*Sun Java Application Platform Suite*

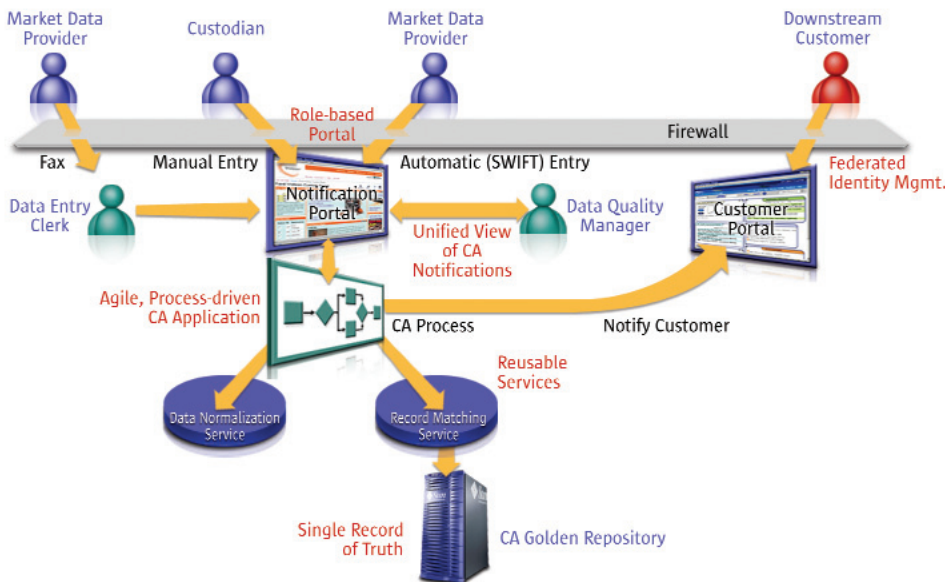
The Sun Java Application Platform Suite is a fully integrated and integratable suite of all the tools and services required for design, development, deployment, management, and delivery of next-generation Service-Oriented Architectures.

This suite brings together the Application Web and Portal services of the Java Enterprise System. Based on Java 2 Platform, Enterprise Edition (J2EE™) technology, these services maximize application reuse and developer collaboration, enabling IT to focus on business strategy and innovation. Fast and accurate development and delivery is an essential competency for virtually all companies today, which is made possible through a complete set of developer tools supporting the latest standards and SOA methodologies. In addition, secure universal access are the hallmarks of Sun’s world-class application platform with out-of-the-box support for role-based delivery of application and services, remote access, and support for over 4,000 mobile devices. The Java Application Platform Suite exceeds the competition in providing unmatched value and the most comprehensive platform for IT organizations worldwide.

This suite supports the full application life cycle and includes the following world-class middleware products:

**Sun Java Application Platform Suite includes:**

- \_\_\_\_ Sun Java System Application Server
- \_\_\_\_ Sun Java System Web Server
- \_\_\_\_ Sun Java System Portal Server
- \_\_\_\_ Sun Java System Portal Server, Secure Remote Access
- \_\_\_\_ Sun Java System Portal Server, Mobile Access
- \_\_\_\_ Sun Java Studio Enterprise
- \_\_\_\_ Sun Java Studio Creator



*Sun Java Identity Management Suite*

Sun offers the most comprehensive, innovative, integrated, and integratable suite of identity management solutions to secure, streamline, and simplify the process of managing user identities across a variety of computing infrastructures and application environments. The full suite of solutions eliminates costly manual approaches to creating, maintaining, and deleting identity data, enabling organizations to increase accessibility while maintaining tight security. To help ensure compliance with regulatory requirements, Sun's Identity Management offerings provide centralized control, complete visibility into access privileges, and consistent enforcement of identity management policies across the enterprise.

Sun's Identity Management suite provides all of the core functions and services required by enterprises to use, share, and manage identity information, and includes the following products:

**Sun's Identity Management Suite includes:**

- Sun Identity Manager
- Sun Access Manager
- Sun Directory Server Enterprise Edition

*SeeBeyond ICAN Suite 5*

The SeeBeyond Integrated Composite Application Network Suite (SeeBeyond ICAN Suite 5) provides a complete integration platform that helps organizations rapidly assemble and deploy enterprise-scale end-user applications built on existing systems and infrastructure to dramatically improve business operations. Utilizing the industry's only J2EE technology-certified integration framework, SeeBeyond ICAN Suite delivers a Web services-based SOA for comprehensive standards support and application development productivity.

**The SeeBeyond ICAN Suite includes:**

eGate Integrator	Industry-leading integration server and repository with comprehensive set of adapters
eInsight Business Process Manager	Business process management and Web services orchestration platform
eVision Studio	Web user interface creation and deployment environment
eTL Integrator	High-performance data extraction, transformation, and loading utility
eXchange Integrator	B2B tool for external partner communication using EDI and XML
eView Studio	Custom single entity view application creation
eBAM Studio	Business activity monitoring utility

Learn more about Sun's SOA offerings at <http://www.sun.com>

