

**SAP Solution Brief  
SAP Discovery System**



## **A COMPLETE LEARNING ENVIRONMENT FOR ENTERPRISE SOA**

### **Preconfigured, Ready-to-Use System Shows How SOA Works Across an SAP® Software Landscape**

Service-oriented architectures (SOAs) have begun to deliver on their promise of flexibility, economy, and ease of deployment for enterprise-class software. An SOA enables enterprises to match software to business processes – enhancing agility in IT operations, as well as business strategy. The SAP® Discovery System software for enterprise SOA offers a head start on the road to a full SOA implementation by providing a vehicle for easily prototyping and testing service-enabled composite applications.

Today more than ever, businesses see information technology as one of the most effective ways to build competitive advantage. Across many industries, enterprises know that the key to an IT advantage lies in creating an infrastructure that will conform and adapt to changing business processes. And the key to an agile IT infrastructure involves putting in place a service-oriented architecture (SOA). Enterprise services are essential building blocks for such an architecture, because they employ reusable pieces of application functionality that can be composed in different ways to create the composite applications that form the heart of the enterprise SOA.

Perhaps best of all, enterprises can implement SOA incrementally, without requiring “rip and replace” infrastructure upgrades. Numerous enterprise IT managers, as well as enterprise architects, business process managers, IT development teams, consultants, system integrators, and others, are putting in place prototyping and development “sandboxes” in order to gain familiarity with building composite applications.

A number of these sandbox or test systems are now available, but the SAP® Discovery System software for enterprise SOA is unique: it is the first to let developers create prototype applications using preconfigured, prepopulated software that is as familiar as their own SAP applications. Since the components in

this system span the mySAP™ ERP application, SAP NetWeaver® platform components, and non-SAP solutions, SAP Discovery System clearly demonstrates how a true heterogeneous landscape can be managed by SAP. For developers, IT managers, and enterprises, this is an optimum tool for evaluating composite applications within the comfortable context of their own businesses and industries. There's no better way to start, easily and economically, on the road to a full enterprise SOA implementation.

### How It Works

With SAP Discovery System for enterprise SOA, you get a complete, fully documented system with standard SAP software components for developing and delivering service-based applications, including all the interfaces, functionality, data, and guidance necessary to run a complete, end-to-end business scenario. The software includes:

- mySAP ERP configured with the SAP Best Practices offerings tool suite
- SAP NetWeaver Visual Composer tool
- SAP NetWeaver platform components:
  - SAP NetWeaver Portal
  - SAP NetWeaver Master Data Management
  - SAP NetWeaver Exchange Infrastructure
  - SAP NetWeaver Business Intelligence
  - SAP NetWeaver Application Server

The system also includes a service-enabled sample business scenario, based on a typical procurement business process, as well as other business process scenarios and analytical scenarios.

### The Procurement Scenario

This scenario, which uses standard SAP enterprise services, follows the procurement process through all standard steps, from creating the sales order, analyzing stock, listing suppliers, and requesting quotations through to placing the PO, confirming the order, and receiving the goods. In addition, the scenario supports the three major user roles necessary to procurement: salesperson, procurement manager, and warehouse manager.

In the scenario, the salesperson places an order using the functionality of SAP Interactive Forms by Adobe software. The procurement manager then uses an analytics application – part of SAP NetWeaver Business Intelligence – to analyze the current stock situation. The procurement manager then launches a Web Dynpro development environment application from SAP NetWeaver Portal to initiate a request for quotation from several suppliers, receive their quotes, and select the number of parts for purchase. Finally, the warehouse manager receives the goods and enters them into the enterprise resource planning system.

Throughout the scenario, the configuration of each user's SAP NetWeaver Portal reflects that user's role in the process, and his or her specific interface needs at each point in the workflow. Other SAP software, including SAP NetWeaver Master Data Management and SAP NetWeaver Exchange Infrastructure, functions in the background to perform the data harmonizing and process synchronization necessary for the scenario to operate smoothly in different IT environments, whether heterogeneous or all SAP.

### **Other Scenarios**

SAP Discovery System includes several other business scenarios to further enhance the development learning experience. These include the following:

- Request for new supplier master data
- Request for quotation approval
- Production order rescheduling
- Store-specific maintenance of consumer prices
- Strategic investment buy simulation

In addition, a number of analytical scenarios are provided with SAP Discovery System. Built on the SAP NetWeaver platform, these are part of the SAP xApps™ composite applications for analytics, which seamlessly pull together information from any source in the enterprise so users have everything they need to take immediate action in the context of the daily business processes that are relevant to them. Each scenario is targeted to a specific task performed by a specific role. For example, a travel expense exception scenario allows managers to monitor expenses that are exceptions to an organization's travel policy, inform employees about the out-of-policy behaviors, and make changes to the travel policy setting in the back-end systems. The investment approval scenario gives business unit analysts the ability to review and approve appropriation requests, displaying financial metrics so they can understand the impact of the request on the overall budget.

### **Fully Documented, Enterprise Ready**

SAP Discovery System for enterprise SOA is a fully documented learning tool, with full SAP support. The end-to-end procurement scenario is prepopulated with data and includes all the various user interfaces, as well as the complete underlying composite application source code. As a result, it's simple to install and operate, even in demanding development environments. And it offers a realistic opportunity to see and understand the power of enterprise SOA and composite applications at work, in a familiar landscape.

### **Ahead of the Curve**

With SAP Discovery System for enterprise SOA, enterprise architects, business process experts, IT development teams, consultants, and system integrators can effectively accelerate their learning curve with composite applications and SOAs. They also have a head start on using key SAP software, such as analytics and role-based portals, in conjunction with service-based applications. Ultimately, businesses using SAP Discovery System will take a large, low-risk step forward on the path to enterprise SOA and will begin to benefit immediately from the competitive advantages of this new and important IT paradigm.

To learn more about SAP Discovery System for enterprise SOA and how it can benefit your enterprises, please visit the SAP Developer Network site at [sdn.sap.com/irj/sdn/esadiscovery](http://sdn.sap.com/irj/sdn/esadiscovery).

### **Powered by SAP NetWeaver**

SAP Discovery System is powered by the SAP NetWeaver platform. SAP NetWeaver unifies technology components into a single platform, allowing organizations to reduce IT complexity and obtain more business value from their IT investments. It provides the best way to integrate all systems running SAP or non-SAP software.

SAP NetWeaver also helps organizations align IT with their business. With SAP NetWeaver, organizations can compose and enhance business applications rapidly using enterprise services. As the foundation for enterprise SOA, SAP NetWeaver allows organizations to evolve their current IT landscapes into a strategic environment that drives business change.

[www.sap.com/contactsap](http://www.sap.com/contactsap)

THE BEST-RUN BUSINESSES RUN SAP™



50 080 967 (06/08)

© 2006 by SAP AG. All rights reserved. SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary. Printed on environmentally friendly paper. These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.