



A COMPLETE LEARNING ENVIRONMENT FOR ENTERPRISE SOA

SAP® Discovery: A Preconfigured, Ready-to-Use Solution for Driving Business Process Innovation

Service-oriented architectures (SOAs) 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 for enterprise SOA offers you a head start on the road to a full SOA implementation by providing a vehicle for easily prototyping and testing enterprise service-based composite applications.

Today more than ever, businesses view 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 architecture because they employ reusable pieces of application functionality that can be composed in different ways to create composite applications. These composite applications form the foundation of SOA.

Enterprise SOA will change the way you think about upgrading your IT infrastructure. This is because you can implement SOA incrementally – meaning the end of costly “rip and replace” infrastructure overhauls. Numerous enterprise IT managers, as well as enterprise architects, business process managers, IT development teams, consultants, and system integrators, are putting in place development “sandboxes” in order to gain familiarity with building composite applications. Using the sandbox approach, you can learn how to consume enterprise services and build composite applications – without disrupting your business environment.

Not Your Average Enterprise SOA Sandbox

Most IT managers understand the benefits of enterprise SOA and the SAP technologies available, but struggle with understanding how to get there. The answer is the SAP® Discovery system for enterprise SOA, an out-of-the-box software-based evaluation tool for enterprise SOA. Designed to encourage SOA adoption,

SAP Discovery system enables customers and partners to evaluate the benefits of aligning SOA with business processes to reduce total cost of ownership and increase productivity. SAP Discovery system allows you to experience the simplicity and flexibility of composing new business processes using enterprise services in a self-contained SOA environment, thus accelerating your learning curve.

SAP Discovery system for enterprise SOA is a preconfigured and preinstalled SAP landscape for innovation and exploration. It offers a unique opportunity for you to create prototype applications using preconfigured, prepopulated software that is as familiar as your own SAP applications. Since the components in this system span the SAP ERP application and the SAP NetWeaver® technology platform, SAP Discovery system demonstrates how a true heterogeneous landscape can be integrated and managed by SAP software. This is an ideal tool for evaluating composite applications within the comfortable context of your own businesses and industries. There is no better way to start on the road to a full enterprise SOA implementation easily and economically. With SAP Discovery system, you can:

- Test-drive enterprise SOA in your business environment without disruption
- Enable hands-on experience with practical examples of enterprise SOA implementations
- Interact with solutions using the most advanced business process technologies – SAP ERP; SAP NetWeaver; master data management; business intelligence; interactive forms; governance, risk, and compliance (GRC); and many more

SAP Discovery System

SAP Discovery system includes preinstalled and preconfigured software from SAP as shown in the following table.

SAP® DISCOVERY SYSTEM SOFTWARE LIST

Software Components

- SAP® ERP application
- Enterprise services
- SAP NetWeaver® technology platform
 - SAP NetWeaver Portal component
 - SAP NetWeaver Master Data Management component
 - SAP NetWeaver Business Intelligence component
 - SAP NetWeaver Exchange Infrastructure component
 - SAP NetWeaver Application Server component
- Web Dynpro development environment
- SAP Solution Manager application management solution
- SAP GRC Access Control application
- SAP xApp™ Manufacturing Integration and Intelligence composite application
- SAP solutions for RFID
- SAP GRC Global Trade Services application
- MaxDB database

Development Tools

- SAP NetWeaver Developer Studio tool
- SAP NetWeaver Visual Composer tool
- Adobe Lifecycle Designer
- ABAP™ programming language workbench

Integration Readiness

- Duet™ software
- SAP NetWeaver Composition Environment offering

Content to Meet All Your Exploratory Needs

SAP Discovery system comes preconfigured with five distinct categories of content to enable you to experiment with everything from enterprise services bundles to stand-alone software components.

SAP® Discovery System

Content

- Enterprise SOA demonstrations
- Industry-specific examples
- Component-specific demonstrations
- Integration readiness
- SAP Best Practices

Software

- SAP ERP and SAP NetWeaver®
- Development tools
- Additional SAP components

Hardware

- Laying the foundation with hardware by our partners



Figure 1: SAP Discovery System – A Preconfigured SAP Landscape for Innovation and Exploration

Enterprise SOA Demonstrations

SAP Discovery system provides a sample collection of common business process demonstrations, using enterprise services bundles. These include:

- Service-enabled procurement process
- Customer fact sheet
- Electronic bill payment and presentment

To better familiarize you with all the functionality available using enterprise SOA, a snapshot of the Enterprise Services Workplace (ES Workplace) site is included with the SAP Discovery system software. The ES Workplace is an enterprise services learning environment found on the SAP Developer Network site. It allows you to browse and test the many enterprise services available from SAP. To visit ES Workplace, go to www.sdn.sap.com/irj/sdn/esworkplace.

Industry-Specific Examples

In addition to offering business process demonstrations, SAP Discovery system supports documented enterprise SOA test cases for selected industries, including telecommunications and the public sector. There also is a test case for the banking industry that includes financial statement reporting, segment accounting, and daily balance drill-down reporting. These examples demonstrate the value of enterprise SOA for real-life customer situations in specific business environments.

Component-Specific Demonstrations

Component-specific demonstrations enable you to get hands-on experience with the leading SAP software solutions. Just some of the demonstrations you will find involve the following:

- SAP GRC Access Control application
- SAP GRC Global Trade Services application for compliance and customs
- SAP xApp™ Manufacturing Integration and Intelligence composite application
- SAP Solution Manager application management solution for maintenance optimization
- SAP solutions for RFID for inbound/outbound delivery

Integration Readiness

To broaden the scope of the sandbox, SAP Discovery system is preconfigured to enable integration with Duet™ software and the SAP NetWeaver Composition Environment offering. This helps to simulate your actual landscape and to facilitate smooth implementation of enterprise services.

SAP Best Practices

All SAP Discovery system content is configured based on the SAP Best Practices family of offerings. SAP Best Practices ensures that you implement best business practices in key functional areas and a range of industries using SAP software. The offerings deliver methodology, documentation, and preconfiguration that enable rapid, reliable deployment with quick return on investment. SAP Best Practices reflects SAP's years of business expertise and the best business practices of more than 6,000 customers worldwide in over 20 industries.

Customize Your Learning Experience

Using test cases as learning tools offers you a realistic opportunity to see and understand the power of enterprise SOA and composite applications at work, in a familiar landscape. The procurement demonstration, for example, follows the procurement process through all standard steps, from creating the sales order, analyzing stock, listing suppliers, and requesting quotations through to placing the purchase order, confirming the order, and receiving the goods. The demonstration supports three different roles: the salesperson, the procurement manager, and the warehouse manager.

Using this preconfigured test case, the salesperson places an order using the functionality of the SAP Interactive Forms software by Adobe. The procurement manager then uses a business analytics application to analyze the current stock situation. The procurement manager then launches a development environment application from the SAP NetWeaver Portal component to initiate a request for quotation from several suppliers, receive their quotes, and select the number of units for purchase. Finally, the warehouse manager receives the goods and enters them into the enterprise resource planning system.

Throughout the demonstration, 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, such as the SAP NetWeaver Master Data Management and SAP NetWeaver Exchange Infrastructure components, functions in the background to perform the data harmonizing and process synchronization necessary for the test case to operate smoothly in different IT environments, whether heterogeneous or all SAP. In addition, SAP NetWeaver demonstrates business process management functionality that is used for routing and synchronizing messages – key for business-to-business integration with suppliers.

Develop and Implement a Customized Proof of Concept

With SAP Discovery system, not only will you develop composite applications tailored to your business environment, you will have the opportunity to evaluate your enterprise SOA solution in the form of a proof-of-concept demonstration. Working directly with SAP or an SAP partner, you can build a customized proof of concept that enables you to focus on your specific business requirements – without becoming bogged down in the complexities of the technical setup and hardware sourcing.

Using the components provided, developers can create actual prototypes for applications and test how new business processes can be modeled flexibly and simply using enterprise services.

Standard components from SAP are used here, so a complete business scenario can be carried out “from A to Z” even in a sample implementation. You are therefore able to evaluate the effect of enterprise SOA accurately. And you can evaluate which complex business operations – particularly the cross-organization or cross-enterprise processes – can be adaptively supported. These insights make it clear how SOA could work for your business environment.

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 SOA. 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 significant, 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 enterprise, please visit SAP Developer Network at www.sdn.sap.com/irj/sdn/esoadiscovery.