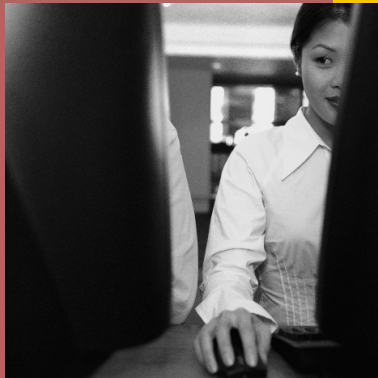


SAP Solution Brief
SAP NetWeaver



ENTERPRISE SERVICES ARCHITECTURE – DESIGN, DEVELOPMENT, AND DEPLOYMENT

Enhancing and Extending the Concepts of Service-Oriented Architecture

Enterprise Services Architecture provides a blueprint for services-based, enterprise-scale business solutions that are adaptable, flexible, and open. Enterprise Services Architecture takes the concept of service-oriented architecture to a new level by transforming Web services into enterprise services. The SAP NetWeaver™ platform provides you with the ability to implement Enterprise Services Architecture tailored to your specific needs at your own pace. SAP is evolving all its solutions to be compliant with the Enterprise Services Architecture blueprint.

At the heart of every business is a constant drive for growth. Companies can achieve this growth by adopting two fundamental strategies. They can drive top-line growth through innovation to realize a competitive advantage; and they can achieve bottom-line growth through efficiencies and increased productivity.

The key problem your IT organization faces in supporting this growth is that, despite your best efforts, the amount of change that must be implemented in a given time frame continues to accelerate. Keeping up with your organization's rapidly changing business requirements is becoming increasingly difficult.

Further complicating matters is the fact that innovations that successfully differentiate your company today will inevitably be copied by your competitors and, over time, become standard practices. At that point, the emphasis shifts from innovation to determining how productively and efficiently you can run those routine business processes.

This situation creates a dilemma for IT. On one hand, innovation is often supported by custom applications, usually built from scratch. On the other hand, packaged applications facilitate standardization while capturing best practices.

Building new, customized solutions that support innovation is expensive and time-consuming because leveraging the functionality of your existing packaged applications is extremely difficult. And, as an innovative solution becomes a standard practice, you have to migrate this custom-built application into a packaged solution. The value of the process has changed, and this is reflected in its cost to the organization.

However, because the custom application and the packaged solution are almost always based on different platforms, making the transition tends to be a costly and lengthy process. The ultimate consequence: IT is often unable to deliver business-process change and innovation at the pace and efficiency required by the business.

Service-Oriented Architecture and Enterprise Services Architecture: Meeting the Challenge

To meet these challenges, IT organizations are investigating and implementing service-oriented architectures. A service-oriented architecture is a distributed software model that uses independent Web services to support business processes. These Web services can be used and reused in sequences defined by business logic to form applications that enable specific business processes.

With Enterprise Services Architecture (ESA), SAP has enhanced and extended the concept of service-oriented architectures. ESA is the software blueprint that enables innovation and standardization in a single environment, allowing you to deliver new, innovative applications and packaged solutions with the speed and efficiency that the business requires.

ESA provides a comprehensive blueprint for services-based, enterprise-scale business solutions – a business-driven, enterprise-level approach to service-oriented architecture that offers increased adaptability, flexibility, and openness. ESA allows enterprises and their IT organizations to adapt to continuous change and create new opportunities, while keeping costs under control.

At the heart of ESA are enterprise services – Web services that provide enterprise-level business value. Enterprise services are an aggregation of fine-grained Web services in combination with simple business logic. They make use of the syntax and standards of Web services to meet business-level requirements such as scalability, robustness, security, and manageability.

Enterprise services provide repeatable, extensible support for specific business-process steps. For example, take a process step such as “cancel order” that might originate in the finance department in response to a customer’s credit standing. Carrying out the task takes more than the single deletion of the order record in your sales management system. It may require a production cancellation, as well as certain actions in the accounting and customer relationship management systems. Enterprise services provide a holistic combination of actions that are semantically linked to complete the specific task, no matter how many cross-applications are involved.

The SAP NetWeaver™ Platform

The SAP NetWeaver™ platform is the technical enabler of Enterprise Services Architecture. SAP NetWeaver is the engine that allows you to deploy innovative business processes across your enterprise while making use of existing software and systems. The platform powers both general-purpose and industry-specific software products that facilitate innovative business processes. With SAP NetWeaver, you can leverage the ESA blueprint to create a single platform within your organization – an “applistructure” – that brings together applications and technology, and makes possible a new, highly effective service-oriented IT strategy.

What Enterprise Services Architecture Can Do for You

By tailoring ESA to meet your organization’s specific requirements, you will be able to leverage existing IT assets and reduce integration expense. You can service-enable applications by implementing Web services–based access to application logic based on underlying business objects.

With Enterprise Services Architecture in place, you can quickly and flexibly respond to changing business conditions. The power of SAP NetWeaver allows you to create, revise, and reuse your enterprise services to meet unexpected challenges, and launch initiatives designed to generate new revenues and increase your company's market share. In addition to customer and market-driven changes, working within an ESA framework allows you to speed up internally driven changes – everything from improving your employees' self-service HR options to integrating the applications and infrastructure of a newly acquired company.

Because ESA allows you to shield your IT environment from the details of a specific system, you can use enterprise services to implement new functionality as needed. You can even implement single business processes without having to subject complete systems to a lengthy and expensive overhaul. By creating a single infrastructure for uniform service definition, implementation, and usage, you can change a business process without significantly impacting the underlying system.

Enterprise services allow you to develop composite applications. A composite application resides on top of other applications that cut across functional silos. The composite application generally adds its own business logic according to business-process requirements and provides specialized user interfaces to fully support the particular business scenario. Composite applications can help you extend the life span of your legacy applications, and mix and match underlying components from SAP and other vendors. With the ability to adapt your existing functions and services quickly and easily, you can make changes more frequently, and at a lower cost.

As you begin to implement the ESA blueprint, you reduce your company's business risk by enabling better control of businesses processes; establishing corporate-wide security, privacy, and implementation policies; and providing auditable information trails. Enterprise services increase business visibility – essential in today's environment where regulations like the

U.S. Sarbanes-Oxley Act, the Gramm-Rudman-Hollings Act, the Health Insurance Portability and Accountability Act (HIPPA), and other mandates demand stringent levels of compliance and corporate governance.

With enterprise services, you have the flexibility to delegate parts of an overall business process to different parts of the organization or inside the operations of your business partners and suppliers. You will realize a dramatic improvement in business efficiency, find new ways to provide value to your suppliers and partners, and create new business opportunities.

Enterprise Services Architecture Adoption Program

ESA supports both a strategic and tactical approach to transforming your IT operations. Strategically, you can rebuild your entire IT landscape to support a service-oriented architecture following a series of well-defined steps as defined in the program. Many companies take an incremental approach by applying service-oriented solutions to new projects and moving toward an eventual overall adoption of a service-oriented architecture when a critical mass of service-enabled projects is reached.

The program provides all the information, tools, and consulting services that you need to implement a service-oriented architecture supported by key IT practices. Guided by your company's primary business objectives and the many ESA options, you can craft your own road map for improving your business processes and building enterprise services in incremental phases.

The ESA road map provides all the information you need to turn your IT and business landscape into a service-oriented architecture powered by enterprise services. This road map defines how to achieve individual strategic objectives within ESA and lays out a time frame for realizing those objectives. The road map shows you precisely how all the pieces of your business processes and technologies fit together, interact, and evolve. Finally, it links strategies, organizations, processes, applications, and technology into a harmonious whole, and lays the groundwork for setting priorities for future actions.

The New Role of IT: Driving Innovation

With the guidance of Enterprise Services Architecture, you can deploy a service-oriented architecture that helps you consolidate and standardize your existing processes and achieve new, flexible, innovative business processes at a lower total cost of ownership.

You boost your productivity through standardization and by controlling business processes, while out-tasking nonstrategic operations. You help drive your company's differentiation in the marketplace at lower cost by designing new business processes that leverage your existing infrastructure and functionality. ESA gives your organization the flexibility to manage and adapt processes quickly and efficiently so you can stay ahead of the rapid pace of business change.

ESA adds a new dimension to the role of the CIO and the IT organization. In addition to deploying technology to meet business directives issued by top management, you can take an even more proactive stance. The adoption of ESA leads to a deeper knowledge of business processes on the part of IT. ESA allows IT to examine business-process metrics and make recommendations for process changes that focus on business results. IT makes these recommendations using the language of business rather than that of technology.

A service-oriented IT organization will need new skills and new attitudes that include an emphasis on business knowledge, creative thinking, and relationship-building skills along with a thorough grounding in the technology. ESA provides the framework that allows your organization to transition to a service-oriented IT, and make business processes and services central to both business design and IT delivery.

Find Out More

Contact SAP to learn more about how you can build your road map to Enterprise Services Architecture. For additional information, please visit our Web site at www.sap.com/netweaver.