Enterprise SOA Made Easy (Really!)
Answers to the Six Most Frequently Asked Questions

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Enterprise service-oriented architecture (enterprise SOA), also known as enterprise services architecture (ESA), is something that every customer needs to understand. SAP is hurtling down this path and taking its worldwide customer base with it. What does this mean to you and your landscape? It means that in the months and years ahead, you will be moving your solutions landscape from the long-standing client/server architecture to the newer and far more flexible enterprise SOA. Expect the transformation to be sure and steady. And it need not be difficult.

In this Q&A, SAP Insider presented SAP Senior Vice President Ori Inbar with the six most frequently asked questions concerning enterprise SOA.

Inside

1. What, exactly, is enterprise SOA, and why should SAP customers adopt it?

Let me answer the "why" first. To stand out among the competition, many CEOs and executive teams have embarked on a strategy for growth, and the lines of business are responding with various initiatives to implement that strategy. Caught in the middle is the CIO, who is being called upon to provide the infrastructure to execute on said strategy, but who is hampered because 40% of his budget is being spent by the lines of business on one-off solutions, and the other 60% is being spent on operations.

The solution is enterprise service-oriented architecture, a technology platform strategy that enables IT to construct useful applications out of reusable components and standards-based enterprise services. Enterprise SOA enables business process innovation. By adding flexibility into an architecture, it enables an organization to drive change faster and at lower cost.

And these aren't small-scale savings, either. Intel examined all the business processes that they will need to change or upgrade over the next five years, and then calculated how much these changes would cost with an enterprise SOA in place. Their calculations revealed savings of up to $194 million by implementing this architecture.

2. Is enterprise SOA simply SAP's turn of phrase for service-oriented architecture? What is the difference between the two?

Service-oriented architecture operates within the semantic realm of IT, but not necessarily that of business. An IT person can immediately see the benefit in having a host of Web services that communicate with each other using standards. But the value proposition for the business side is much harder to quantify.

Enterprise service-oriented architecture embraces SOA and takes it to the next level by adding business semantics and business processes to standards-based Web services. It's the difference between *Cancel Order* and *Delete Order*. Delete Order is a typical task (a Web service) in an SOA — you send a note to a database saying,

"remove this line from the database." But in an enterprise SOA, with an enterprise service, you could accomplish an end-to-end business task and reduce the need for coding. When you cancel an order, you not only tell the database to remove the record, but you also automatically notify the warehouse so it can cancel the shipment and update the new stock. You alert the salesperson responsible so he or she can notify the customers of the cancellation and, perhaps, identify another service or product that might be useful. What's more, you can use the building blocks of this enterprise service to compose reusable, flexible composite applications that address entirely new business processes.

Enterprise SOA, therefore, is the blueprint of a service-oriented architecture combined with the functionality and reliability of SAP's enterprise applications. The platform that enables enterprise SOA today is SAP NetWeaver, which is evolving into a business process platform (BPP). BPP takes the technology platform and enriches it with reusable application functionality exposed as standards-based enterprise services. These enterprise services can be quickly assembled to compose new applications, called SAP xApps, that support flexible business processes.

3. SAP introduced the concept of the Enterprise SOA Roadmap a few years ago as a path to enterprise SOA, using SAP NetWeaver — and the solutions built on it — as the business process platform to get there. When will SAP complete this roadmap?

I encourage customers to think of enterprise SOA as a journey, not something that can happen overnight. Like a company's drive for innovation, enterprise SOA is not something that ends — not for SAP, nor for our partners or customers.

What is more important is for our customers to build their own enterprise SOA roadmaps. That's why SAP offers the *Enterprise SOA Adoption Program*, where we sit with customers and help them outline a path to enterprise SOA: how to approach the business, what the implications are for your existing R/3 systems, and how to adopt SAP NetWeaver.[1]

The single biggest challenge we have at SAP is getting our customers to understand that enterprise SOA is not an SAP product, but an architecture and a strategy. To help them, we've created

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[1] For more information, see the article "Taking the First Steps to Incorporate SOA in Your Enterprise: Introducing the Enterprise Services Architecture Adoption Program" in the April-June 2005 issue of *SAP Insider* (www.SAPinsider.com).

the *SAP Discovery System for Enterprise SOA*, an environment that simulates an enterprise SOA landscape. We send the customer a server with SAP NetWeaver, elements of mySAP ERP, and enterprise services pre-installed. It also comes with a scenario describing how to build a composite application — an xApp — that leverages these enterprise services.

Customers received their first glimpse of SAP NetWeaver as a business process platform at SAPPHIRE. With the release of mySAP ERP 2005 and SAP NetWeaver 2004s to the general public, combined with an enterprise services repository to store over 500 new productized enterprise services, customers will be able to make the initial steps toward a business process platform for the first time.

4. How should SAP customers prepare their organizations to adopt enterprise SOA, if they haven't done so already? What changes should they plan for?

If you mean how do customers move to enterprise SOA from a technology and applications perspective, the simple answer is to upgrade to mySAP ERP 2005 and SAP NetWeaver 2004s.

Aside from the normal hardware and software aspects common to any upgrade, customers need to give special attention to organizational changes. Becoming an enterprise services organization means that IT has to break out of the technical silo and focus more on business processes, which naturally span applications and cut across departments. This is prompting the emergence of a new role we call *business process experts*. In the past, business analysts and application consultants were essential for deploying our software. But they didn't have the ability to actually change the business process themselves.

Get Your Hands on Enterprise Services

SAP customers need not wait to get started with enterprise services and build their enterprise SOA roadmap. Customers can access and evaluate over 500 productized services available now (with the latest release of SAP NetWeaver and mySAP Business Suite) at the Enterprise Services Workplace on the SAP Developer Network (**https://www.sdn.sap.com** → *ESA*). The ES Workplace is a hosted environment for partners, developers, and customers to browse through these services through industry-specific business processes — by name or by function — and drill down to the code level. It also allows developers to test code that uses these services in their applications. Customers and partners can influence the definitions of the services by joining the Enterprise Services Community on SDN.

Built-In Advantage for Enterprise SOA

Chris S. Thomas
Chief Strategist,
Intel

Enterprise technology is embarking on an exciting new path in the era of Web services. By adopting an enterprise service-oriented architecture (enterprise SOA), companies can efficiently combine application logic and data from existing systems and deploy them as business-quality Web services. With services at the core of the enterprise, organizations are equipped with the flexibility and adaptability to keep pace with innovation — at ever-decreasing costs. Furthermore, SAP NetWeaver, the technical platform for enterprise SOA, ensures that the resulting services are secure, reliable, manageable, scaleable, and extensible.

## Service-Oriented Infrastructure: The Next Step

The enterprise SOA foundation, though, is just the beginning. Intel is taking the enterprise SOA model to the next level with cutting-edge technology designed to achieve a new level of service quality from computing, data, and networking infra-structures. Through a *Service-Oriented Infrastructure* (SOI), Intel is extending its offerings beyond hardware to provide software optimization tools, technical support, consulting, and innovative new technologies to help realize the enterprise SOA vision. Intel's SOI solution stack not only promotes greater data center efficiency and higher service quality, but it also enables organizations to extend their business services to new users and to integrate rich client technologies like Asynchronous JavaScript and XML (Ajax) and Voice-over IP (VoIP).

Working in concert with our existing platforms, Intel's SOI optimizes the capabilities of a service-oriented archi-tecture like enterprise SOA to reduce cost, speed time-to-money, respond to change, and drive innovation. The result is a new model for IT infrastructure — the *Service-Oriented Enterprise* (SOE),

modeled in **Figure 1**. A central tenet of this SOE model is a "market-first" or "outside-in" approach, which recognizes

Why All the Excitement About Services?

By arranging IT and lines of business around *services* instead of applications, your enterprise can more efficiently capitalize on changing market conditions. A major benefit of service-orienting the IT infrastructure is the ability to catalyze the development and delivery of new, innovative business services and to more quickly and easily incorporate emerging technologies. The result? Cost-effective data centers and increased flexibility in servicing your customers.

Figure 1   From Handheld Devices to the Data Center, Intel Technologies Provide the Foundation for the Service-Oriented Enterprise
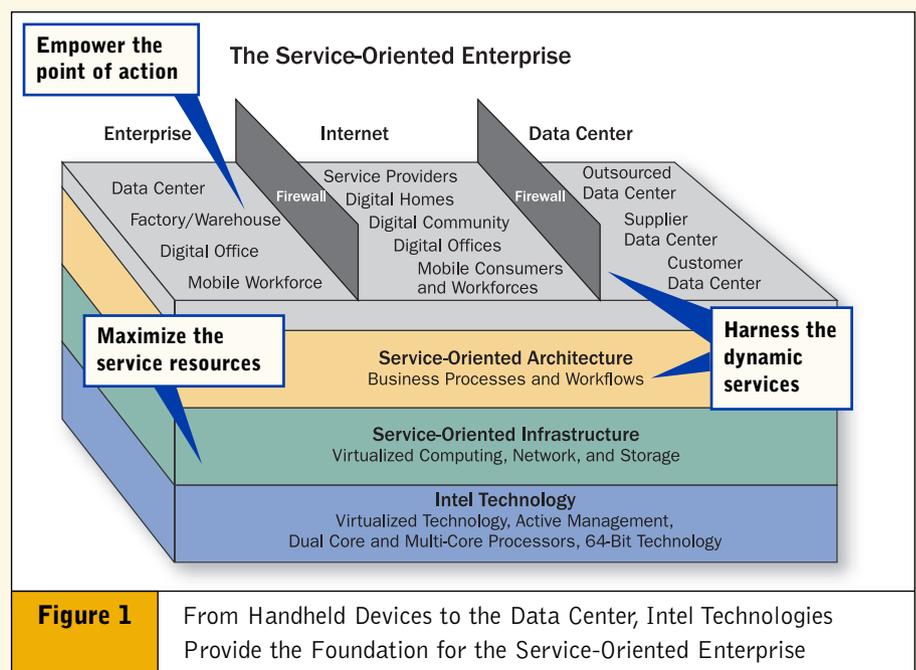
that the core of an enterprise is actually its periphery. In other words, the market-facing points of action — everyday customer transactions, new product introduction, order placement, and shipment delivery — is where the true "service" takes place. Intel platforms, from blades in your data center to laptops in hotel rooms, provide the standardization, advanced technologies, and agility required to capitalize on this new service-oriented business model.

A Closer Look at Intel's Service-Enablement Offerings

With our SOI approach, Intel is both leveraging our existing server platforms and offering new processors, technology, and programs that enable enterprises to turn their infrastructure resources into services. These services can be easily configured and deployed to support the performance, management, security, and power efficiency that are required to support enterprise SOA.

☑ Energy-Efficient Multi-Core Processors

Intel's multi-core processors provide better performance and scalability while remaining energy- and space-efficient. By running concurrently with background applications such as virus protection, firewalls, wireless connectivity, and synchronization activities, the processors complete computing tasks more efficiently and securely than previously possible. Furthermore, they offer more processing capacity and can be concentrated into fewer servers, providing greater density.

☑ Advanced Technology

Intel has engineered new platform technologies to benefit both IT and end users:

- **Intel Virtualization Technology** — By improving flexibility, security, and the ability to consolidate servers, this technology can help decrease acquisition costs and administrative expenses.

Keep Pace with Evolving Communications Technology

Beyond services, the enterprise SOA-SOI combination is also valuable for adopting transformational technologies such as RFID, mobility, rich client, Web2.0, and VoIP. For example, mobile solutions are a natural extension of applications built on enterprise SOA and Intel SOI. Optimized use of mobile technology begins at the data centers and works in concert with your mobile workforce and application infrastructure. Intel Itanium and Xeon-based server platforms are designed to operate efficiently and consistently with enterprise SOA and SOI to provide the level of reliability your mobile workers require.

In addition, Intel Centrino Duo mobile technology delivers revolutionary mobile performance that enables your organization to realize the benefits of Web-based information and data delivery, such as those produced by RFID. Empowering your mobile workforce with RFID and other technologies lets your employees respond quickly and intelligently to market and customer demands from virtually anywhere. Intel platforms and software, in conjunction with enterprise SOA, enable your mobile employees to interact with the global marketplace in new and exciting ways so you can transform your business and be more responsive and competitive.

- **Intel Extended Memory 64 Technology** — By allowing servers, workstations, and desktop platforms to access additional memory and manipulate larger data sets, Extended Memory 64 technology enables Intel server platforms to vastly exceed former boundaries.

- **Intel Active Management Technology** — This technology diagnoses, protects, and heals networked computing assets, and its remote management capabilities enable IT to heal PCs even when the operating system is down.

☑ Services

Intel also provides service offerings to support enterprises as they service-orient their infrastructures:

- **Intel Solution Services** — As Intel's worldwide professional services organization, Intel Solution Services can help accelerate your enterprise SOA deployment by assisting IT with assessment, data center design, capacity planning, virtualization, IT automation, and metering and billing.

- **The Intel Technology Advisor Program** — Through this program, Intel Solution Services' consultants assist with your enterprise planning objectives — assessing business goals, infrastructure requirements, and strategy — to provide knowledgeable technical recommendations.

Conclusion

Intel's commitment to the Service-Oriented Enterprise involves delivering complete platforms that seamlessly integrate with the enterprise SOA vision. Together with SAP technology, Intel provides the robust IT infrastructure that is required to meet rapidly changing business requirements and new usage models.

Intel's wide-ranging industry leadership initiatives and our proven track record as a full-solution hardware and software provider help to deliver technological advances that build businesses and provide more choices. To learn more about Intel's technologies and service for SOEs, please visit **www.intel.com/go/soe**. ■

Active Data Warehousing Extends and Empowers Enterprise SOA

Todd Hayes
SAP Global Program Director, Teradata

Today's businesses often rely on hundreds of functional applications. The ability to efficiently and cost-effectively maintain these applications and deliver timely enterprise information to the right users is critical to achieving business success.

Consequently, many IT organizations have made it their primary goal to manage disparate functional applications and unleash the information they contain. To do this, IT must integrate processes and data from multiple applications within a common view.

The question is, *How?* How can you integrate historical and real-time data from multiple sources to gain a clear view of your business? How can you analyze that data to better meet your corporate objectives? And how can you get actionable results fast, so that you can seize opportunities as they arise?

Service-Orient Your Enterprise Information

Taking an enterprise service-oriented architecture (enterprise SOA) approach supports the most complete business process platform for consolidating and harnessing enterprise information assets. It merges both SAP and non-SAP enterprise applications running on SAP NetWeaver, provides a composite application framework, and offers a flexible process infrastructure. Enterprise SOA is highly flexible, making it ideal for companies with applications that are:

- Redundant or that overlap in functionality

- Built on a hodge-podge of computing environments, making them costly to maintain and time-consuming to enhance

- Not standardized and, as a result, cannot be used across the enterprise

Centralize Application Data in an Active Data Warehouse

An enterprise SOA approach allows users to build either distributed or centralized information systems. Teradata, a division of NCR and an SAP Global Technology Partner, recommends a centralized approach to application data.

As a leader in scalable data warehousing, Teradata has historically

Consolidated Business Intelligence for Those Who Need It Most

As the technical platform for enterprise SOA, SAP NetWeaver brings together disparate applications to enable businesses to gather intelligence from any application in the enterprise. Together, SAP NetWeaver and Teradata ADW consolidate that intelligence and make it available to exactly those who need it.

Back-office corporate users, such as executives, product analysts, marketers, and finance personnel, gain intelligence for strategic analysis through applications for:

- Sales reporting
- Forecasting
- Inventory management
- Product profitability

- Financial management
- Customer segmentation
- Customer profitability

Front-line users, such as customers, gate agents, bank tellers, and customer service agents, reap the benefit of strategic insights applied to the local context. For example:

- Call center agents or bank tellers can make individualized customer offers while a customer is on the phone

- Transaction exceptions enable real-time fraud detection while a fraudulent transaction is in progress or a customer is trying to make an unauthorized return

- Supply chain visibility and optimization empower decisions about individual package priorities while the truck is still at the loading dock
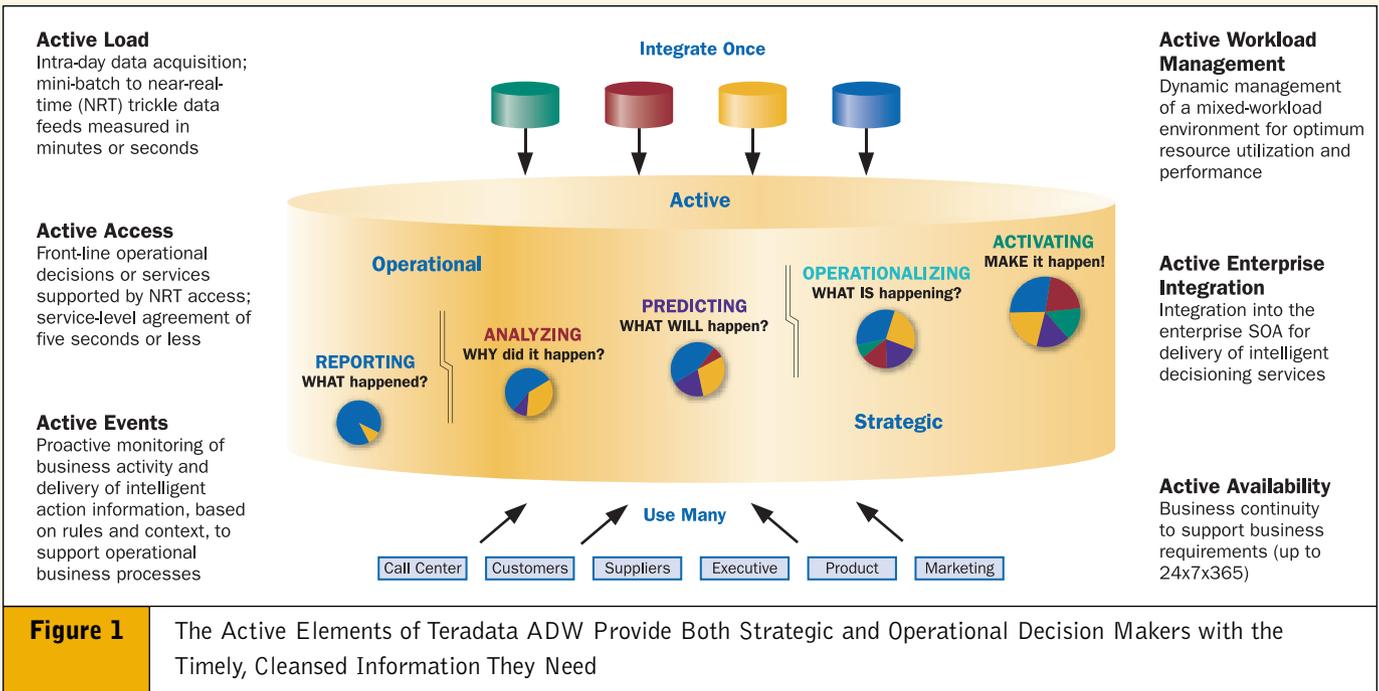
Figure 1 — The Active Elements of Teradata ADW Provide Both Strategic and Operational Decision Makers with the Timely, Cleansed Information They Need

supported "back-office," strategic uses of data, such as customer analysis and planning, financial management, risk, and demand and supply chain optimization. The company is now expanding its focus to include *operational* intelligence, the basis for the Teradata Active Data Warehouse (ADW). ADW is a data warehouse platform that supports both long-term (strategic) and near-line (operational) decision making.

Active data warehousing requires managing the strategic workload of complex queries and deep data analytics along with operational workloads, which demand near-real-time response to information requests. In addition, operational decision making requires proactive monitoring of business activity and seamless integration of operational business processes and applications.

Teradata ADW extends the scope of traditional data warehousing to manage these mixed workloads and provide timely, cleansed information to decision makers across the company, including customers and suppliers (see sidebar on previous page).

Activate the Data Warehouse for Informed Decision Making

Teradata has designed its ADW to include "Active Elements," which can help users accelerate their SAP applications (see **Figure 1**):

- **Active Load** — Updates data as quickly as possible after a triggering event, surpassing the typical overnight, weekly, or monthly update patterns of a traditional data warehouse

- **Active Access** — Supports simple query-performance service levels, such as single-record strategic queries and operational decision making

- **Active Events** — Filters data and reports context-dependent reactions in near real time; monitors inputs to detect patterns and, when necessary, initiate events, start workflows, send emails, etc.

- **Active Workload Management** — Ensures that all workloads, including data loads, operational access queries, event detection, and strategic queries, can be handled simultaneously

- **Active Enterprise Integration** — Enables Teradata ADW to use open standards and comply with enterprise SOA choices for message and application systems interoperability and management

- **Active Availability** — Protects the entire system in the event of unexpected outages, ensuring business continuity

Protect Your Investment with Sustainable, Scalable Infrastructure

Teradata ADW ensures a sustainable, scalable infrastructure for applications that require large amounts of data. By leveraging the enterprise SOA-enabled SAP NetWeaver platform to deliver analytic and decision-making services as Teradata-optimized components, Teradata ADW makes it possible for decision makers to extend existing and new SAP business models and value chains with optimal speed and transparency.

To learn more about how Teradata can help you integrate active data warehousing into your SAP solution environment, please visit **www.teradata.com**. ◼

Do You Have a Governance Strategy for Your Move to Enterprise SOA?

Sean Kline
Director of Product Marketing, Mercury

Enterprise services-oriented architecture (enterprise SOA), SAP's business-focused version of SOA, leverages Web services and SAP's understanding of enterprise applications to enable organizations to create enterprise services that are both interoperable and attuned to business processes. As a result, these companies can achieve agility through dynamic business process adaptation, data flow with minimal friction, and the ability for their enterprise systems to interoperate with a wide variety of service providers.

All of these capabilities, however, depend on a transition to a radically new paradigm where highly distributed services are shared across a variety of sources and providers. This true SOA orientation introduces new complexities:

- Services must be highly *visible* so they're easily discovered and understood

- Consumers must be able to *trust* the quality and predictability of services

- As services evolve throughout their life cycles, companies must be able to *control* and manage changes

To achieve this degree of visibility, trust, and control, companies must adapt a policy for SOA governance to closely monitor the services that interact with their internal systems. To arrive at a successful SOA governance strategy, companies need a reliable governance platform. But before we discuss the platform itself, let's first take a closer look at exactly what an SOA governance strategy entails.

The Three Critical Elements of SOA Governance

By virtue of its services-based design, an SOA must be closely monitored to ensure its services are communicating effectively and delivering the right information to the right people. Therefore, a strong SOA governance policy must:

☑ Provide Visibility

Owners of business applications can use SAP NetWeaver to produce services based on mySAP ERP, CRM, and SRM functionality, as well as non-SAP services that can be consumed through enterprise SOA. After creating these services:

- Enterprises need to classify and describe the services to ensure the right people or applications have the right information about them.

- Potential consumers need easy ways to discover these services and understand their intended functions, attributes, characteristics, and operating history in order to make informed choices about their use. Consumers may not know exactly what they need, which is why browse and full-text search capabilities are required.

- Enterprises must identify ways to associate their SOA usage policies with services as a basis for enforcement.

Proper visibility hinges on having a trusted system of record that fulfills each of these requirements.

☑ Facilitate Trust

Moving from the more controlled world of packaged applications to the distributed world of shared services requires a high degree of trust. In a service-oriented environment, consumers and providers become increasingly distant — making it critical to have formalized relationships and mechanisms for setting expectations between the two groups:

- Providers must fully and accurately describe the services

- Consumers must understand costs and other implications

- Both parties must agree to service levels

Therefore a contract that formalizes and binds the relationship between service providers and consumers is necessary. One of the key aspects of contracts is establishing common guidelines for various applications to follow when dealing with services. For example, Dow Corning, an SAP customer using mySAP ERP, SAP Business Information Warehouse (SAP BW), SAP NetWeaver Portal, and other SAP components, also uses services coming from various manufacturing sources. To operate effectively in this heterogeneous environment, Dow Corning needs to develop standards and guidelines, codify those as enforceable

BTO Strengthens the Effectiveness of Governance

Systinet 2 extends the value of enterprise SOA with Business Technology Optimization (BTO), Mercury's overarching method for optimizing the business outcomes of IT initiatives such as ERP and CRM. BTO helps chaos-proof business outcomes by:

- Delivering a predictable, consistent enterprise SOA
- Providing control, visibility, and integrity to ensure enterprise service reuse
- Optimizing the quality, performance, and availability of enterprise applications

BTO combines SOA governance with solutions for application delivery and management so IT can optimize the business outcome of enterprise SOA.

policy, and integrate the validation of policy into the publication process. It will be through these policies, in part, that consumers and providers will trust that services operate as expected.

☑ Maintain Control

While packaged applications tend to version as a whole, enterprise SOA is more akin to an organic, continually evolving creature. Services, policies, consumers, and providers all change independently of one another. This autonomy, while a primary benefit of enterprise SOA, could also cause everything to come crashing down if appropriate controls are not in place to manage them.

Thus, there needs to be a way to manage the full life cycle of services and other enterprise SOA artifacts from initial introduction to final retirement. A key part of this is capturing the target architecture and the full information lineage about services — specifically, relationships and interdependencies that must be tracked and managed as services change. Without this information lineage, service changes could disrupt business processes and create chaos within the infrastructure.

An Enterprise SOA-Ready Solution for Governance

The Systinet 2 SOA governance and lifecycle management platform provides

a complete set of capabilities for establishing this visibility, control, and trust. Systinet 2 ensures consistent access, management, and governance of the reusable enterprise services, associated artifacts, and information that enable enterprise SOA.

To address the key considerations of SOA governance, Systinet 2 contains a standards-based system of record that ensures access to and reuse of services, as well as a basis for governance and lifecycle approaches to managing applications. As an integrated registry/repository able to synchronize with a wide variety of repositories in the enterprise, the system of record within Systinet 2 offers standards support that is critical for working in heterogeneous environments and interoperating with key enterprise SOA ecosystem vendors.

While the registry/repository represents the system of record, SOA also requires governance applications to ensure the quality and predictability of the services that are put into production when creating consumer or provider contracts and managing and enforcing enterprise SOA policies. Systinet 2 governance applications, such as Systinet Contract Manager and Systinet Policy Manager, fulfill these requirements. Furthermore, Systinet 2 provides life-cycle capabilities essential for structured approvals, versioning and subscriptions,

change management, and impact analysis to allow enterprise services and enterprise SOA artifacts to be managed from cradle to grave.

Through its integrated registry/ repository and rich set of governance and lifecycle management applications, Systinet 2 provides capabilities for:

- Publishing and discovering services
- Creating and enforcing policies
- Facilitating consumer/provider contracts and consumption agreements
- Seamlessly implementing changes to business services without disrupting consuming applications

Together these capabilities offer a comprehensive SOA governance solution critical for a successful enterprise SOA.

Summary

Enterprise SOA does an exceptional job of laying out a roadmap for aligning enterprise services with business processes and helping organizations achieve the benefits of standards-based service orientation. To maximize the value of enterprise SOA, organizations should deploy SOA governance practices early in the process so they can maintain full visibility into their enterprise services, foster trust between service providers and consumers, and control their architecture as it evolves.

Systinet 2's system of record and integrated registry/repository helps organizations successfully establish such governance practices. Moreover, it prepares organizations to realize the full potential of enterprise SOA, delivering the foundation for business agility and service reuse without sacrificing IT control or predictability. For more information on Systinet 2, please visit **www.systinet.com**.

Systinet is a division of Mercury, an SAP software partner. For additional information on Mercury products and services, visit **www.mercury.com**. ■

Maximize the Benefits of a Demand-Driven Supply Chain with Logility and SOA

Karin Bursa
Vice President,
Marketing,
Logility

To meet customer demands for greater responsiveness, more frequent deliveries, and more affordable, efficient compliance, many SAP customers are learning how enterprise SOA can help address new synchronization challenges within the supply chain. By building IT landscapes using enterprise software based on enterprise SOA's open, service-oriented principles, companies can become demand driven and achieve successful SCM.

How Logility and SOA Can Enable Demand-Driven SCM

Logility Voyager Solutions is a suite of integrated applications designed to increase visibility and efficiency throughout the supply chain. This collaborative SCM software suite, which is compatible with multiple ERP systems, is modular in approach and scalable by design, which complements an enterprise SOA-based IT strategy.

Logility Voyager Solutions enables you to become more demand driven, establish more collaborative business processes, and incorporate real-time performance management. Many

industry-leading companies have successfully deployed Logility to complement their SAP solutions, extend their enterprise SOA strategy, and quickly capitalize on the benefits of a demand-driven supply network — benefits like visibility into customer-level demand, improved forecast accuracy and inventory planning, and an increased level of service to customers.

> *Businesses with demand-driven strategies are keenly focused on cost-effectively serving their customers and synchronizing demand data and processes across their customer and supplier networks.*

Logility Enhances Your SAP Solution Investment

Logility Voyager Solutions complements your enterprise SOA strategy by leveraging your mySAP ERP deployment's demand, inventory, and replenishment planning; supply and global sourcing optimization; manufacturing planning and scheduling; and transportation

planning and management. Logility Voyager Solutions increases visibility and reduces supply chain costs by:

- Using sophisticated algorithms to forecast the future demand of SAP applications

- Enabling collaboration with sales, inventory, and operations

- Providing inventory management with time-phased policies

- Offering supply planning with constraint-based optimization so you can decide what to make, buy, or move considering costs, customers, manufacturing sites, on-hand inventory, raw materials, resource capacities, transportation, and more

Using this information, Logility Voyager Solutions then sends recommendations to mySAP ERP.

The ability to model and compare multiple supply chain scenarios leads to better decision making and ties operational tactics to specific supply chain goals to determine how to profitably synchronize supply with demand. Logility Voyager Solutions, used within a service-enabled infrastructure, offers increased flexibility and depth, quick time-to-benefit, and the proven ability to integrate with SAP solutions. For more information, please visit **www.logility.com**. ◼

Emerging Supply Chain Trends

As global sourcing and production increase across all industries, the need for more collaborative business processes and real-time performance management has become critical. Companies are finding that better inventory management and more accurate forecasting fuels cost-effective, top-line growth. According to a recent AMR Research report, the biggest increase in supply chain spending will be seen in the areas of supply chain visibility, demand management, and sales and operations planning.

Today, one way to incorporate that change and better manage IT as an enterprise services organization is to split IT into two divisions, one headed by a Chief Process Innovation Officer, the business face of IT, and the other by a Chief IT Officer responsible for taking costs out of IT (see **Figure 1**). The creation of a Chief Process Innovation Officer would also prompt a reorganization of new IT roles under this position (see **Figure 2**).

Change management with enterprise SOA is really about the changing role of IT. Supervision of business process management is going to be at the core of these changes. But it's broader than that. It's looking at things horizontally as opposed to through traditional silos. SAP and its partners can provide direction to make this transition easier.

5. Is SAP in this alone? What role can SAP customers look for partners to play in enterprise SOA?

In addition to the enterprise services I mentioned earlier, there is what we call the Industry Value Network, a collaboration of SAP, partners, and customers to deliver complete solutions and services for a given industry on a common platform. When you look at customers within a specific industry, they have a set of pain points unique to their market. SAP addresses many of these pain points, but we recognize we cannot address all of them. That's why we're adopting the concept of co-innovation on a common platform within industries.

For each industry that we serve, we are recruiting the leading system integrators, software vendors, and analysts, and together we are defining the entire map of pain points. Between us, we will identify which pain points SAP is going to cover, and which will fall to key partners or system integrators. We'll then go to the market together with these solutions. Not only
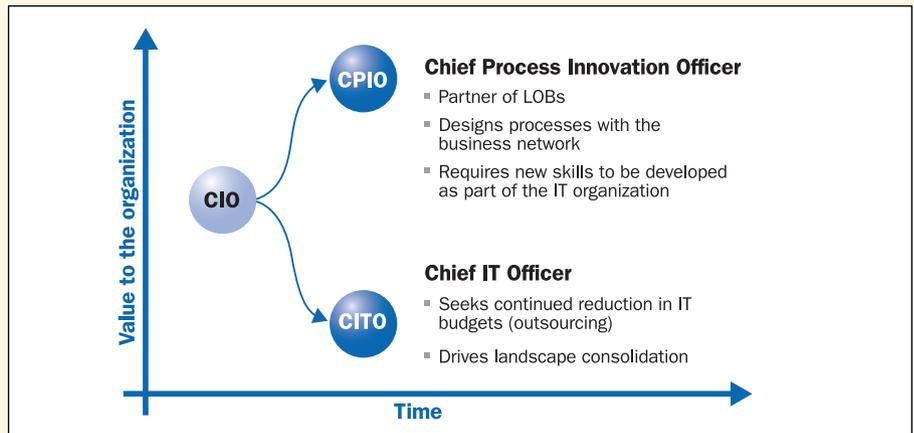

Figure 1 — Splitting the Role of the CIO Between Business Process Innovation and IT Landscape Management
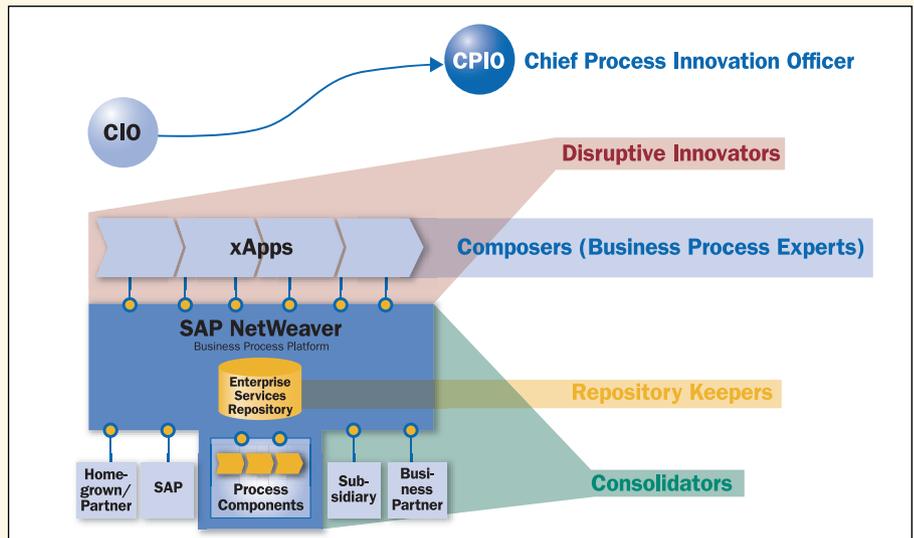

Figure 2 — Refocusing IT Roles: A Chief Process Innovation Officer Can Break the Silos and Build New Horizontal Skill Centers

will these applications be developed on the same technology platform, they will also use the same enterprise services and business semantics, helping customers avoid integration issues.

We're also partnering with the "technology titans" from the computer network, storage, security, and management industries. We likewise work with non-software vendors so that they embed this enterprise SOA blueprint in their product, whether it's hardware or software. SAP customers can then leverage enterprise SOA concepts, not

just in software, but across their entire IT landscape.

6. Is enterprise SOA here to stay? If SAP customers proceed down this path, will they ever have to turn back?

Enterprise SOA is here to stay. SAP has fully embraced these standards and is evolving its solutions accordingly. We offer a product approach to help customers realize the promises of flexibility while maintaining a sustainable cost. SAP is here for our customers' journey. ■