

### IBM SOA Infrastructure Consulting Services – infrastructure architecture and design for SOA



### Highlights

- Assesses SOA capabilities and defines infrastructure requirements to support SOA
- Builds a conceptual framework leveraging IBM's SOA experience and best practices
- Outlines an implementation for infrastructure designed to support SOA
- Supports the development of an SOA that enables enterprisewide innovation

#### Understanding the implications of SOA

Aligning IT to meet the objectives of the business and differentiating the organization through innovation can stress the limits of the IT environment. In order to meet this challenge, many organizations are turning toward service-oriented architecture (SOA) as a broad strategic solution to enable business growth.

SOA is an enterprise architecture paradigm based on a set of design principles that takes business applications and breaks them down into individual business functions and processes, called services. These

services can then be optimized and connected to create new functionality, and existing applications can be reused without expensive rewrites. SOA offers greater control and insight into business and IT processes, improving manageability and IT service delivery.

A fundamental shift in the approach to IT, SOA requires a clear strategy, but it also requires an underlying IT infrastructure that can support it. A poorly designed infrastructure architecture can result in an inability to support SOA governance practices, meet end-to-end security requirements and achieve service level agreements. Your IT architecture must be secure, resilient and flexible. It must be able to bridge the gap between application requirements and infrastructure capabilities to deliver computing resources in a dynamic manner. Many organizations, however, lack the internal expertise and proven methodologies necessary to design such an infrastructure.

IBM SOA Infrastructure Consulting Services – infrastructure architecture and design for SOA helps you take the necessary steps toward building an infrastructure that can support an SOA. We work with you to define the consolidated infrastructure requirements to support SOA and assess your current SOA capabilities. We then help you create the conceptual and specification designs required to implement SOAenabled infrastructure elements. From that framework, we create a plan that outlines the next steps in the process to help accelerate your SOA implementation. We bring the extensive experience of IBM—with our full range of methods, techniques, assets and service expertise—to your organization, allowing you to leverage our industry leadership in SOA.

# Building a consolidated view for architectural requirements

Guided by the proven IBM Global Services Method, our specialists work with you to discover and document relevant information about your current IT environment. With infrastructure architecture and design for SOA, we help you get to the root of the challenge: Is your IT infrastructure able to support an SOA, and if not, what changes need to be made? Together we examine

the effectiveness of your infrastructure strategy specifically as it relates to business drivers and proven SOA methodologies and standards. The process can provide you with a better understanding of the strengths and weaknesses of your IT environment.

We collaborate with you to gather nonfunctional requirements for your infrastructure and to identify parameters for availability, manageability, performance, reliability, scalability and security. Taking the time to ask the right questions results in business clarity that can reveal potential challenges, drive results and minimize risks.

## Creating a conceptual framework for an SOA-enabled infrastructure

Armed with an SOA strategy and a comprehensive view of the infrastructure requirements this generates, IBM works with you to create a conceptual framework that can form the basis for future IT initiatives. We create a collaborative design that leverages IBM's rich SOA experience and global intellectual capital for infrastructure architecture. The design is intended to clarify how your infrastructure can drive real business results through its support of the SOA.

Our disciplined methods, combined with our intellectual capital, help you to quickly move on to the implementation of your SOA infrastructure. With IBM infrastructure architecture and design for SOA services, we can assist you in building a long-term strategic framework that is designed to optimize your infrastructure technology to deliver to the right level of service to the business. The conceptual design includes an architectural overview, guiding principles and architectural decisions. We help you understand how your infrastructure will be affected by new application requirements and how XML transformation between old and new systems may affect system performance. In essence, the design defines the goals for your IT infrastructure while overcoming potential roadblocks.

### Outlining the specifications necessary to execute SOA

The conceptual design forms the basis of a more detailed specifications model that includes targeted technologies and projects to enable SOA. It helps you understand whether or not your infrastructure requires an enterprise service bus (ESB) or service registry. IBM works

with you to create a technical architecture design to support the greater dynamic responsiveness required to enable changes in business process execution. The design addresses your end-to-end enterprise infrastructure with the goal of delivering enhanced value and minimizing risk. As part of your infrastructure architecture and design for SOA engagement, IBM experts also recommend state-of-theart tools and capabilities to help optimize service quality and enhance application and information integration.

By enabling SOA across your enterprise using the right infrastructure architecture, your IT organization can improve its responsiveness with a more secure and managed integration environment. This helps enable increased business agility and the resiliency to deal with emerging business threats and opportunities. More important, SOA can better equip you to innovate and differentiate your organization in the marketplace.

### Helping enable enterprise innovation

With strategic and tactical design elements, IBM can help you move toward your SOA maturity objectives by prioritizing the projects that address your most pressing infrastructure needs. Recommendations may focus on opportunities to integrate and automate management and security functions for end-to-end SOA environments, or projects that help increase efficiency and reduce risk. We can help you understand how new applications can be supported within your current infrastructure and how the design of the infrastructure can help ensure that all requirements and expectations are met.

Using our proven methods, we help you develop a clearer picture of the infrastructure investments required to execute an SOA with an enhanced ability to establish project priorities that support business objectives. We work with you to design projects that can be deployed quickly across the enterprise to help accelerate the benefits of SOA and lower the risk of SOA investments. Infrastructure architecture and design for SOA from IBM helps you set the stage for successful SOA management, security and application services by helping you deliver performance, availability and scalability.

With its broad range of products and services, IBM can also offer you a host of SOA-related products and services to complement your infrastructure architecture and design deliverables. After completing the infrastructure architecture and design process, IBM SOA Infrastructure Consulting Services – infrastructure implementation for SOA can help you move closer to an SOA-enabled infrastructure by implementing the next projects in your SOA design.

#### Why IBM?

With our methods, intellectual capital and broad range of competencies, we are an industry leader in designing SOA infrastructure solutions. Our proven methods are designed to enable structure, consistency and repeatable quality while producing innovative solutions tailored to your needs. Adding to the effectiveness of our methodologies is a host of intellectual capital assets, enabling us to start with proven templates rather than "blank slate" experiments.

Your greatest ally, however, can be IBM personnel. For your SOA solution, you can rest assured that our people offer superior experience and expertise. We have subject matter experts in virtually every IT discipline, ranging from storage and capacity to continuity and



availability to service delivery and industry best practices. Our specialists possess a keen understanding of the challenges facing you and your industry and can develop a comprehensive, proven solution that leverages the capabilities of IBM to develop your SOA.

### For more information

To learn more about IBM SOA Infrastructure Consulting Services – infrastructure architecture and design for SOA, contact your IBM representative or visit:

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Produced in the United States of America 04-07

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