

## Helping business achieve operational efficiency through people and SOA.

*Flexibility that enables people to rapidly access and interact with targeted business processes*



**Business leaders recognize that their people drive the business processes within an organization.**

They know that the work environment determines the level of effectiveness. And so a growing number of businesses are looking to service-oriented architecture (SOA) as a key step toward enabling their people to rapidly access and interact with targeted business processes and information. This is critical to achieving operational efficiency and agility.

For some companies, determining where to start with SOA can be challenging. IBM helps to simplify this process by defining business-centric and IT-centric entry points. This brochure focuses on a business-centric approach to SOA called the *people* entry point. Here, IBM Lotus® software helps people interact and collaborate within a portal environment to maximize organizational productivity and efficiency.



According to Gartner, “As organizations search for a way to leverage a service-oriented architecture, many can use portal products as a first step.”<sup>1</sup>

### IBM SOA strategy enables speed and agility

In a recent IBM study, CEOs expressed that the market is expanding and growth is a priority—but that “growth through innovation” is key. Their view is that the ability to change and adapt with speed is an enabler for driving innovation throughout their businesses. And that integrating business and technology is fundamental for innovation. Too often, businesses discover that their ability to innovate is hampered by inflexible IT systems that are difficult, expensive and time-consuming to change.

The IBM strategy for SOA recognizes that SOA has changed the way we think about how to build enterprise IT systems. SOA breaks IT into flexible services—repeatable business tasks such as *check customer credit* or *open new account*. These services can be combined, configured and reused to address changing business priorities, creating a flexible IT infrastructure that enables the enterprise to adapt with speed and agility. And that helps reduce overall costs. By presenting applications, information and other IT assets as loosely coupled services or building blocks that support specific business needs, SOA reconnects technology to business outcomes.

### SOA life cycle

In IBM's experience, companies think about SOA in terms of a life cycle. This life cycle starts with a model phase, in which business requirements are gathered and analyzed to simulate and improve business tasks. Next comes an assemble phase, in which businesses create services out of new and existing IT assets, and put them together to deliver the business process. After creating reusable services, companies deploy the business process into a robust, scalable and secure services environment. Finally, they manage and monitor the performance of these business processes, from both an IT perspective and a business perspective, feeding gathered intelligence back into the SOA life cycle to enable continuous process improvement. Underpinning the success of this life cycle is robust project governance.

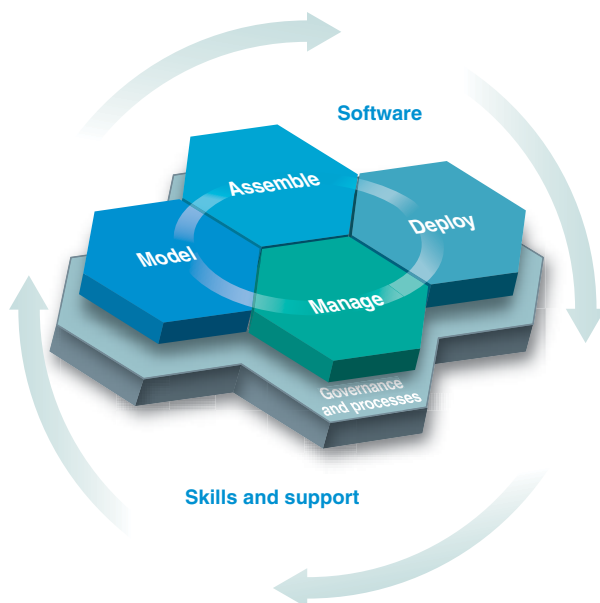


Figure 1. SOA foundation





### **Entry points to an SOA**

Determining where to start can be challenging. Approaching today's critical needs with strategic business goals in mind is what SOA is all about. IBM breaks down barriers to getting started by offering focused, approachable entry points into SOA. SOA entry points help businesses pursue SOA incrementally. They take a project-based approach so each project can deliver real business value. IBM has found that many companies approach SOA from entry points of integrating people, processes, information or a combination of all three. IBM offers focused software, services and expertise to help utilize these entry points effectively.

In our discussion of the SOA life-cycle model, we learned that it is designed to help companies implement an SOA project more easily. It does this by associating the software and best practices to a point in the life cycle where companies can start their SOA projects. SOA entry points provide a business-centric and IT-centric approach to the life cycle. This enables companies to start an SOA project that targets specific business needs to help achieve benefits more rapidly.





### People entry point: the Lotus software role in SOA

To enable efficient real-time decision making, people need to easily interact and collaborate with other people. They also need to have instant access to information and data from multiple sources. SOA can help people do all of these things easily—from within the context of their business processes. Companies that focus on people as the entry point to SOA are taking a business-centric approach. This approach maximizes people productivity to enhance business results.

IBM® Workplace™, Portal and Collaboration software from the Lotus family of products enables the people entry point. It delivers the essential people-focused capabilities of the IBM SOA strategy and provides significant value to organizations large and small worldwide. To make use of this entry point, many businesses start at the front end of SOA using IBM WebSphere®

Portal software. With WebSphere Portal software, you build a view of a key business process by aggregating information in a way that makes sense for people. This creates an intuitive, role-based user experience—to help people make better decisions.

Once the portal foundation of SOA is established, businesses can easily expand the portal environment and extend people productivity with other Lotus software for SOA. This software can range from prebuilt collaborative capabilities and composite applications to alert-driven dashboards. From products that help accelerate composite application development to products that enable people to access those applications from mobile devices. Determining the next step usually depends on whether the objective is to achieve immediate business goals. Or your objective may be to position your business to extend the

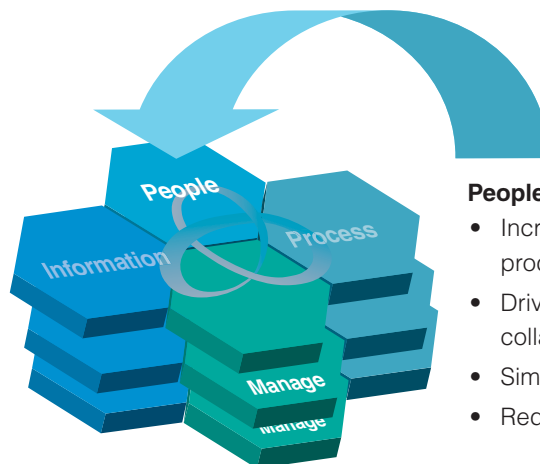
SOA application environment to respond to changing businesses needs in the future.

### The role of Lotus products within an SOA

The Lotus software portfolio provides industry-leading products to start or extend an SOA environment—for businesses of all sizes. They support the people entry point to enable interaction between people, processes and information.

### The front end and composite application foundation for SOA

Portals have evolved over recent years as the needs of businesses have become more demanding. Starting with personalized access to content and applications, to deeper integration with back-end systems. And today, process-driven portals are the preferred approach to optimizing collaborative business processes. Lotus software offers the industry-leading portal for your composite application foundation.



### People entry point

- Increase organizational productivity and efficiency
- Drive innovation through collaborative interactions
- Simplify process change
- Reduce integration costs

Figure 2. SOA entry points



**IBM WebSphere Portal software**  
 Delivering the front end to SOA, WebSphere Portal software serves as a foundational starting point to SOA for many companies. It provides the essential framework to give people access to the right content, applications and processes based on their roles. WebSphere Portal software hides underlying complexities to simplify the user experience. It does this by presenting a single composite view “on the screen.” Even when interacting with multiple back-end systems, applications appear as one to the user. By consolidating access to what is relevant to the

user—all within a single portal view—you simplify the user’s tasks. This helps improve productivity.

WebSphere Portal software enables this within an SOA. It helps companies like yours to quickly and easily build and deploy intranet, Internet or extranet portals. How? By providing a component-based model that supports reusable software assets. And by simplifying integration and increasing the ability to leverage existing IT assets. With WebSphere Portal software, everyone can make better decisions faster. It helps improve the execution of business

processes by using composite applications. And it supports a comprehensive SOA product portfolio from Lotus software—that can extend the value of an SOA environment as needed.

**Tools that help accelerate development and deployment for an SOA**

Lotus software tools are designed to help you consolidate access to multiple siloed applications and information sources. By defining processes as services and enabling their reuse, you can reduce development and deployment time for your SOA.

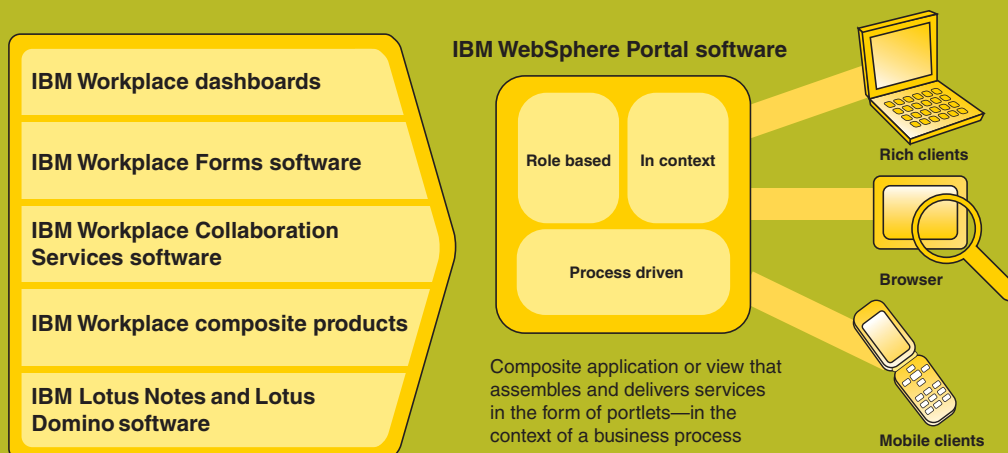


Figure 3. IBM WebSphere Portal software: the framework for flexible interaction

Gartner predicts that, through 2007, an enterprise portal will be the first major application of SOA concepts for more than 50 percent of enterprises (0.6 probability).<sup>2</sup>

**IBM WebSphere Portlet Factory software**  
Portlets are the building blocks of a composite application. IBM WebSphere Portlet Factory software automates portlet development for faster time to value. It provides the tools and technology for developers of any skill level to rapidly create, customize, maintain and deploy portlets. The ease of use and advanced development features help streamline the entire portlet development process, enabling developers to deliver adaptive, robust portlets that help support SOA at a fraction of what it would typically cost. With WebSphere Portlet Factory software's portlet integration, companies can more easily bring existing enterprise applications and data within a single composite view. This includes IBM Lotus Domino® server, SAP software, PeopleSoft software, IBM DB2® information management software and Web services, among others.

**Dashboards and IBM Workplace Dashboard Framework software**  
Workplace dashboards help companies to rapidly deploy portal-based dashboards that provide role-based, composite views of their overall business activity. The software displays highly customized and dynamic operational information—giving decision makers the real-time visibility they need to understand the status of business operations and market activity. This ultimately helps drive overall corporate performance.

IBM Workplace Dashboard Framework software delivers reusable service-oriented components, robust administration tools and dashboard-specific features that help speed the creation of standards-based, active dashboards. This offering, which augments the capabilities of IBM WebSphere Portlet Factory software, can help dramatically reduce the development costs and speed the time to value for a company's dashboard initiatives. As a result, dashboards built

with Workplace Dashboard Framework software let decision makers take immediate action via integrated collaboration features, including instant messaging, e-mail and electronic conferencing.

**IBM® Workplace Forms™ software**  
Forms are vital components of many business processes—determining how efficiently a business operates. IBM® Workplace Forms™ software delivers a family of products designed to help you create, deploy and manage XML forms-based processes. With Workplace Forms software, you can quickly and efficiently design standards-based, security-rich forms. It enables companies to create forms that automate the capture and processing of business information. This helps speed up transactions and increase operational efficiency. Now supporting the W3C XForms standard, standardized form components accelerate forms creation—helping to achieve faster forms design and lower development costs for an SOA environment.





#### IBM Workplace Designer software

An easy-to-use tool for script developers, IBM Workplace Designer software is used to build reusable components (deployed as portlets). These components can be used within collaborative portal environments created by IBM Workplace products such as IBM Workplace Collaboration Services and IBM Workplace Services Express software. Supporting SOA standards such as XML, Java™ Platform, Enterprise Edition (Java EE) and JavaScript, Workplace Designer software is ideal for developing your composite applications. It allows you to extend existing applications with collaborative components. This intuitive tool is ideal for small and midsize businesses and enterprise-level deployments.

#### Composite products for an SOA: focused on solving specific business needs

The Lotus product portfolio offers pre-built composite products and component capabilities for an SOA that can help to achieve immediate business benefits.

#### IBM Workplace for Business Strategy Execution software

A composite product for an SOA, IBM Workplace for Business Strategy Execution software helps organizations to improve the management and execution of their business objectives. It extends the value of an SOA composite application environment. Enabling effective strategy execution, it aligns business units and workgroups to corporate objectives, assigns accountability, monitors progress and accelerates exception resolution. Workplace for Business Strategy Execution software delivers intuitive alignment and insight through actionable

scorecards and in-context dashboards. It utilizes portal, collaboration and application integration technologies to extend an SOA application environment. IBM Workplace for Business Strategy Execution software is easily deployed in small and midsize businesses as well as enterprise-class organizations.

#### IBM Workplace for Business Controls and Reporting software

A composite product for an SOA, IBM Workplace for Business Controls and Reporting software provides a controls-management platform—delivering value from the governance layer of the IBM SOA foundation. It enables companies to document, monitor and test internal business controls that can help companies bring clarity, confidence and management control to their critical business issues. That can include IT governance or financial reporting practices.





Workplace for Business Controls and Reporting software helps increase visibility into organizational processes, risks and control effectiveness and helps drive down the cost of compliance with a core platform for risk, compliance and governance. With this tool, documents are made easily accessible to authorized individuals to help accelerate decision making while increasing organizational productivity. Leveraging the flexibility of an SOA, IBM Workplace for Business Controls and Reporting software is easily extensible with other products from the Lotus and IBM software portfolio.

### IBM Workplace Collaboration Services software

With IBM Workplace Collaboration Services software, organizations can extend contextual collaboration into their SOA environments. The modular, reusable collaborative services can be integrated into customized portals and business applications. This provides flexibility to help you adapt quickly to changing business conditions and to help accelerate collaborative business processes.


Workplace Collaboration Services software provides a wide range of capabilities—all in a single, unified

collaboration environment that is easier to use and costs less to manage than multiple products. The underlying SOA provides a flexible and easy way to deploy just the capabilities people need for their roles—and to bring together existing or newly developed capabilities as part of a customized solution.

### Mobile and enterprise access to an SOA environment

IBM WebSphere and Lotus products can help you provide critical, nearly instantaneous access to job-related information for geographically dispersed teams.





### IBM WebSphere Everyplace Deployment software

IBM WebSphere Everyplace® Deployment software expedites the building, deploying and integrating of enterprise applications on rich and mobile clients to help speed business responsiveness and productivity. Its tools and server-managed SOA client platform provide data and transactional integrity to extend SOA out to the edge of the network on desktops such as those running Microsoft® Windows® and Linux® operating systems, laptops and mobile devices. Enhancements will be delivered as IBM Lotus Expeditor software.

### IBM WebSphere Everyplace Connection Manager software

IBM WebSphere Everyplace Connection Manager software provides mobile workers with secure access to their enterprise information, including SOA environments. It supports seamless roaming across multiple types of wireless and wired networks, further improving people productivity.

### IBM WebSphere Everyplace Mobile Portal Enable software

IBM WebSphere Everyplace Mobile Portal Enable software extends your SOA portal-based composite applications by enabling access from any of the over 1,000 device types in its device repository and exploiting the specific characteristics of each device. It serves content to mobile employees and enables multichannel application access for business-to-consumer services.

### IBM® Workplace Managed Client™ software

IBM® Workplace Managed Client™ software provides a rich client experience for IBM Workplace Collaboration Services users. With Workplace Managed Client software, mobile employees who may not have access to the Internet or intranet on a regular basis can access their business-centric tasks even while offline. This helps your employees stay productive, working with their composite application capabilities even while disconnected. Workplace Managed Client software also helps extend a composite application environment with built-in productivity editors for creating and managing documents, spreadsheets, presentations and projects. These

lightweight but powerful productivity editors support the XML-based OpenDocument Format (ODF) standard. This offers businesses a cost-effective and “open” alternative to licensing similar, proprietary tools.

### Extending SOA with the next major release of the IBM Lotus Notes client

The introduction of “Hannover” —the code name for IBM Lotus Notes® software’s next major release—represents the first major commercial collaboration client based on the Eclipse open-source framework. It aims to set new industry and customer precedents for openness, value and productivity. The upcoming version of IBM Lotus Notes software leverages the on demand capabilities of IBM® Workplace Client Technology™ software as server-deployed, server-managed desktop software. The ability to dynamically configure and reconfigure the client interface without physically touching the desktop will help reduce dependence on traditional desktop computing models. This integration of Workplace software-based functionality into the Lotus Notes client will deliver powerful new capabilities while helping to preserve Lotus Notes users’ existing investments.





By integrating server-managed client capabilities into Lotus Notes software, IBM is delivering a new composite applications model for an SOA that extends the value of IBM middleware from the server room to the desktop. With the next major release of Lotus Notes software, disparate desktop applications can be combined into reusable services. It will be faster and easier to work with these new composite applications, because less data will be sent across the network. In addition, users will be able to work with their composite applications when not connected to the server.

In line with the openness and standards of an SOA, the next version of Lotus Notes software will include office productivity editors that support ODF. This support will offer over 125 million existing Lotus Notes users and new users alternatives to existing integration with proprietary document formats, such as those in Microsoft Office software.

### **Focus on people and let SOA improve business efficiency today**

Companies of all sizes and across all industries are benefiting from portal-based SOA environments. Their employees are more productive by having the tools they need to execute business processes more efficiently. And their IT staff is able to respond to new business demands faster while reducing costs. SOA makes this possible through standards-based integration, component reuse and composite applications that aggregate people, information and processes—even across disparate systems.

With focused entry points, IBM is helping to simplify how businesses get started with SOA. The diverse Lotus software portfolio enables companies to choose the on-ramp to SOA that aligns with their immediate needs. For many, an enterprise portal is the first step toward building an SOA environment.

And IBM's industry-leading portal, IBM WebSphere Portal software, provides the essential foundation. WebSphere Portal software's extensible framework enables businesses to easily take the next step—helping solve other business needs with Lotus software for an SOA. Help enable your organization to improve operational efficiency through people and SOA by taking advantage of the Lotus software portfolio.

### **To learn more**

For more information about IBM business-centric SOA, visit:

[ibm.com/software/solutions/soa](http://ibm.com/software/solutions/soa)

For more information about the people entry point to SOA, visit:

[ibm.com/software/workplace/soa](http://ibm.com/software/workplace/soa)







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Software Group  
One Rogers Street  
Cambridge, MA 02142  
U.S.A.

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- 1 Gartner, Inc. "Portals Provide a Fast Track to SOA." G. Phifer. July 15, 2005.
- 2 Gartner, Inc. "Management Update: A Portal May Be Your First Step to Leverage SOA." G. Phifer. October 12, 2005.