People-centric application development solutions
To support your business objectives

IBM

Lotus software

Creating business flexibility with IBM Lotus application development software.

Support business agility through cost-effective development of people-centric applications

Organizations look to IT to improve business agility through flexible, innovative business applications. At the same time, IT organizations are tasked with reducing application development costs. To strike a balance between these often conflicting demands, IT departments require development tools that make the most of existing applications, simplify application creation and management, and enrich the end user experience.

The IBM Lotus® application development product portfolio can help you achieve this balance by enabling you to build upon the industry-leading capabilities of your Lotus collaborative technology. The portfolio provides tools based on open platforms and standards, so development teams can cost-effectively create and assemble innovative, robust, scalable and security-rich applications that empower your people, enhance their productivity and meet almost any business requirement. You're able to:

- Extend your existing investment in Lotus and IBM Lotus Domino® collaborative technology with rapid creation and deployment of new applications and reusable components.
- Involve business users in creating and modifying processes using composite applications.
- Expand access to enterprise systems data across platforms to adapt more quickly to organizational changes.
- Document and refine your company's processes with automated, dynamic workflows.

Build and deploy business applications with greater ease and speed

Enhance what you have to deliver business value more quickly

To stay ahead of marketplace demand, companies are seeking to make their processes more responsive, accessible and efficient through collaborative business applications—without incurring higher costs or facing long development cycles. IBM Lotus Domino Designer® software enables you to deliver new applications quickly with an integrated development environment.

Rapidly create collaborative applications

Using GUI-driven, point-and-click capabilities, your application developers can quickly develop security-rich applications that end users are able to access from IBM Lotus Notes® clients, Web browsers, business portals and mobile devices. Novice developers can customize applications based on supplied templates, while advanced developers can use the more robust programming features to address special requirements. In addition, all developers can add presence awareness and instant messaging capabilities to the Lotus Notes and Web applications they build to make it easier for end users to interact with other team members in real time.

Save time with Web services

You can further reduce development costs, compress delivery cycles and leverage other IT investments by utilizing Web services. Lotus Domino Designer software provides a Web services design element and built-in support for Web Services Description Language (WSDL), so you can rapidly create or extend Java™ or IBM LotusScript™ code with Web services—and expose thousands of Lotus Domino applications to external systems such as Java Platform, Enterprise Edition (Java EE) and Microsoft® .NET applications. You no longer need separate development environments for Web services and Lotus applications.

With Lotus Domino Designer 8 software, developers can also use Web services from external sources within Lotus Domino applications in many different contexts. And programmers who are building portal applications can rapidly create an interface for consuming Web services using the IBM Lotus Component Designer tool.

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Integrate line-of-business solutions and data into new types of applications

Support more robust people-centric processes

IBM Lotus Notes and Domino 8 software makes it easier to integrate line-of-business solutions and data into new types of applications, called composite applications. With composite applications, developers can create and aggregate components on the screen to present content from multiple systems in a unified interface for the end user. You save development time, reduce silos of information and enable your company to be more responsive to changing business needs and customer demands.

The integration of information from multiple business components enables developers to provide application users with content specifically geared to their business roles and tasks. For example, the business components in a composite application for the sales team might include access to relevant back-end sales order entry, order tracking, service management and accounts receivable programs, as well as such front-end productivity-enhancing and collaboration components as e-mail, a calendar, a people finder and a document library.

Lotus Notes 8 software provides support for heterogeneous technologies in composite applications. Developers can mix and match Lotus Notes software, Java Specification Request (JSR) 168 portlets, productivity tools and other components, and each of these components can display content from disparate systems and communicate in the context of the composite application. Composite applications can be hosted on either a Lotus Domino or IBM WebSphere® Portal server, so IT is able to follow its strategy for back-end platforms while continuing a familiar interface for end users.

When working with a composite application hosted on WebSphere Portal software or on Lotus Domino software, a developer can use the composite application editor packaged with Lotus Notes 8 software to edit the application, no matter where it resides. And, because composite application components can be reused across platforms, developers are able to create a wide variety of applications without extensive code revisions.

Make the most of current skills

Lotus Domino Designer software provides a choice of programming languages, so you can choose the most appropriate skill levels for creating a full range of productivity and collaborative applications that can be deployed on a wide range of servers and user devices. In addition, traditional Lotus Domino applications on Lotus Domino servers can be utilized as Web services to be consumed by external systems such as Java EE and .NET applications. For example, consider a Web service to process an order inquiry request from a non-Lotus Domino application. The order information stored in a Lotus Domino application can be accessed via a Web service—written in either the LotusScript or the Java programming language—that works with the Lotus Domino object model to locate and return the requested information. Back-end systems and user-facing applications can use the same Web

service in the Lotus Domino applications. Similarly, the Lotus Component Designer tool enables scripting developers to leverage their Lotus Domino and Microsoft Visual Basic skills to build flexible end-to-end applications or WebSphere Portal components.

This flexibility enables you to fully leverage your current development team and preserve and extend your existing IT assets. You're also able to reduce the costs and time associated with learning new skills—for developers and end users alike.

Involve business users in process innovation

The constant demand for new business applications, upgrades and modifications can make even the most efficient development teams fall behind. If IT could empower business users to assemble applications while still maintaining infrastructure integrity and security, both the development organization and the enterprise as a whole would be able to respond more quickly to marketplace changes that require new ways of doing business. Lotus software can help you achieve just that with the ability to create composite applications.

Consider a mash-up—Web 2.0 technology that combines several applications or sources of information into a single, cohesive experience for the end user. The value of mash-ups is that content can be packaged and reused across

multiple applications or Web sites, reducing development expense while delivering a wide range of contextual information and capabilities to end users.

A composite application is similar in concept, but scaled to support the robust environment of enterprise applications. Rather than simple Web sites or aggregated information created through mash-ups, composite application environments allow business users to assemble applications from a palette of available application components. Much as a programmer uses a palette of common user interface components— such as menu bars, text fields and drop downs—to rapidly build applications, the authorized business user can select components that represent common business services, such as "look up customer" or "display order," to create new processes or modify existing ones.

"Currently, we are developing an application that will help us streamline the workflow around our lead-generation process. Lotus Workflow [software] allows us to define, create and manage the execution of work when we develop new software. It helps us automate our actual work process, which reduces the use of paper, improves the communication among different departments and increases efficiencies."

—Horace Lee, IT manager, Baleno Holdings

Lotus software provides tools that enable developers to build composite applications and the components that constitute them. The composite application editor in Lotus Notes 8 software allows authorized business users to assemble components into composite applications relevant to current business requirements. Similarly, the Lotus Component Designer tool enables script developers to generate components for WebSphere Portal applications. Your enterprise can then deploy these new composite applications to either WebSphere Portal software, Lotus Notes and Domino software, or both.

Composite applications that are hosted on a WebSphere Portal server are listed in the WebSphere Portal applications catalog, while composite applications that reside on a Lotus Domino server can be accessed by Lotus Notes clients in the same way as any traditional Lotus Domino application. Only those applications and templates to which the user has access will display. In this way, IT is able to empower greater levels of business user involvement and collaboration without sacrificing infrastructure security or violating IT policy.
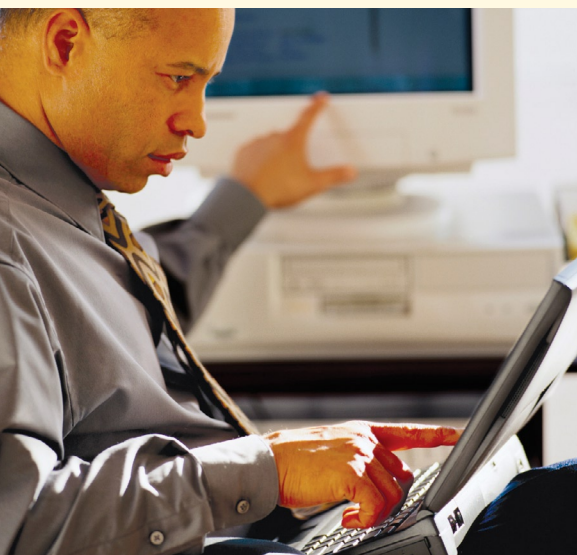
For example, when a loan approval officer in a bank receives a loan application, she needs to review the customer's loan history, any assets he may have with the bank and, perhaps, his deposit and savings history. This information resides within four different applications. With the composite application editor, the loan officer can connect these systems together, so that when she clicks on the customer's name, she can view all of the data she needs at one time via four interactive components in her Lotus Notes client.

By pushing this kind of flexibility out to the user level, the business process owners can quickly resolve their own productivity issues. And, as individual business users adopt and add onto one another's process improvements with new connections, suddenly you have enterprise applications developed through spontaneous innovation that provide essential value in differentiating the business.
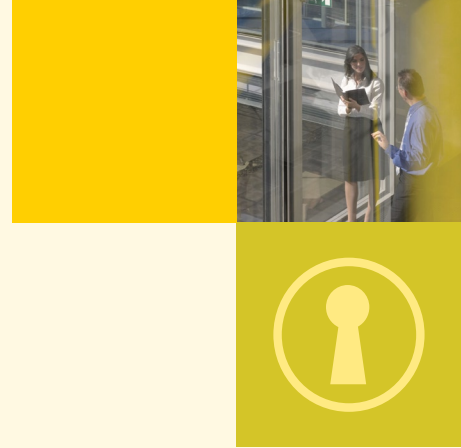
Adapt quickly to organizational changes

What makes IT adaptability so critical? Simply put: change. Imagine your organization acquires or merges with another company, for example. Important business data may suddenly reside on two separate platforms. With IBM Lotus Enterprise Integrator® software, people from both companies can easily access data from either platform and view it within one Lotus Domino application.

Lotus Enterprise Integrator software is a server-based data access tool that provides enterprise-strength data transfer and synchronization between Lotus Domino and supported external systems.

"Wörwag estimates that the IBM Lotus software-powered Wörhoo solution saves each employee one to two hours of work every day by enabling the easy, rapid location of shared knowledge."

—Stefan Welte, IT director, Karl Wörwag Lack- und Farbenfabrik GmbH & Co KG (Wörwag)

Access and view corporate data within Lotus Domino server, no matter where that data resides

You can enable real-time and event-driven access from Lotus Domino applications to data sources and business-process solutions such as IBM DB2®, Oracle, Sybase, Microsoft SQL Server and SAP—without having to transfer data from one platform to another.

For example, an application for sales teams might involve combining a standard Lotus Notes collaborative application with data from disparate sales force automation (SFA), customer relationship management (CRM) and order-entry applications.

Ultimately, you maintain the integrity of your data, because there is no need to reprogram data access rules, business logic and security features of your applications. You preserve existing processes while extending their reach. There's no need to rewrite applications for the different user access points employed by your organization— whether rich desktop clients, browsers, mobile devices or offline deployment. People can continue using familiar

interfaces to access a broader range of critical data and business processes, so you avoid having to invest in costly applications or retraining. And you're able to eliminate the overhead costs associated with redundant data storage.

Boost productivity and responsiveness

When procedures and rules live only inside the heads of workers, process consistency and output speed and quality can suffer. IBM Lotus Workflow™ software offers an easy-to-use application-development tool for standardizing your business processes while providing increased flexibility for modifying and improving them. You're able to better manage and monitor activities with automated workflows that can be quickly rolled out across the enterprise and easily modified as processes evolve.

Using a flow-chart style interface, business managers and developers can collaboratively design and update workflows to meet business requirements. Then, instead of hand coding static linkages to create the desired

workflows, your developers can graphically visualize and connect the actions that need to happen between the various applications. Lotus Workflow software provides point-and-click tools and reusable object libraries for routing rules, role assignment, deadline handling and task automation, so even complex processes can be automated with little or no programming. In fact, one of the hallmarks of Lotus Workflow software is its flexibility. You're able to easily document and refine processes that can range from completely ad hoc, informal teamwork to rigidly structured procedures with multiple levels of approvals and automatic notification to managers when deadlines are missed. Over time, the process definitions that are created with Lotus Workflow software provide a storehouse of workflow design elements that can be reused for timely and cost-effective creation of new and modified workflow applications.

Conclusion

The need to empower people for cooperative development of ideas, standardized knowledge practices and increased operational efficiencies has never been greater. Collaboration tools and people-centric applications can enhance or even transform your organization. The challenge: invest in technology that helps you take advantage of these capabilities today and continues to pay dividends in the future.

IBM solutions enable that advantage. The continued evolution of the robust, industry-leading Lotus Notes and Domino platform allows it to participate openly in diverse IT environments, create value from existing applications and be the foundation for your service-oriented architecture. You can implement collaborative application development technologies that meet your immediate needs and grow in scale and capability, without forcing major infrastructure or platform changes. The platform helps business users collaborate with the developers in your organization to create applications that help your people be more productive and respond quickly to new business requirements—while containing development and deployment costs.

For more information

To learn more about the IBM Lotus products discussed in this brochure, visit:

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