



Art of the Deal: Web Services on Intel® Platform Help Siemens Business Services Streamline Proposals

SOLUTION SUMMARY

Challenge	As a leading worldwide provider of IT solutions and services, Siemens Business Services (SBS) competes with providers around the world for contracts. With the quality and timeliness of bid proposals playing a critical role in winning new business, SBS sought to streamline and improve its proposal and client collaboration activities.
Solution	SBS adopted a Web Services-based collaborative environment that runs on Intel®-based servers and clients and allows SBS managers to easily share documents, input and knowledge. Developed by Brainloop AG, the Secure Dataroom* enables a rich, dynamic collaboration environment that can be used to collaborate anywhere, anytime over any device.
Business value	SBS expects its automated collaborative document management solution to help the company win more contracts, streamline its business processes, increase billable consultant hours and shrink contract closing times by a projected 20 percent. The increasing robustness of the resulting contracts paves the way for smooth-running projects, adding to the efficiency gains. SBS is so impressed with the results that it's working to adapt the solution as a service for its own customers, which will generate a new revenue stream.
Servers	2-way Fujitsu Siemens Computers Primergy* H250 servers based on Intel® Xeon™ processor family technology
Operating system	Microsoft Windows* 2000 Server
Application	Brainloop Secure Dataroom 2.0
Back-end software	Microsoft SQL Server* 2000, Microsoft .Net* Runtime
Client systems	PCs based on the Intel® Pentium® 4 processor and notebooks based on the Intel® Pentium® 4 Processor – M

Business Challenge

MAKING A FIRST IMPRESSION

Siemens Business Services is a leading worldwide provider of IT consulting and services. With nearly 36,000 employees around the globe, SBS offers a host of business services, from consulting and systems integration to IT infrastructure management and outsourcing. This far-reaching suite of services produced sales of 6 billion Euros in 2001.

Like any IT prime contractor, SBS must traverse a lengthy and complex proposal process before winning the rights to a project. Stakeholders are spread across many divisions, and creating and revising a complex proposal for an enterprise-scale project often involves up to 20 SBS employees, including project managers, engineers, accountants and lawyers. The final delivered document can be more than 200 pages long.

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Oliver Gajek
Co-founder
Brainloop AG

Since it specializes in process and integration consulting, SBS has unique expertise in handling complex, inter-department and inter-business processes. The company had sought ways to capture and manage the proposal process in a client/server environment, but had been unable to land on a solution that embraced the entire scope of the proposal effort.

So when SBS reviewed the Secure Dataroom* solution from German software developer Brainloop AG, it realized there

was more at stake than simply streamlining critical business process. The global consulting outfit saw an opportunity to employ Secure Dataroom as a powerful service offering to its own customers.

IRONING OUT THE PROPOSAL PROCESS

The challenge of the proposal process is particularly acute since SBS often works with changing specifications under tight deadlines. A revision in engineering specifications, for example, can have major implications in other areas of the proposal, including billing, subcontracting and project timelines. If one member of the team downstream from a proposal change fails to react to a directive, it can set off a cascade of delays and revisions that threaten to derail the entire proposal.

Andreas Essing, competence manager in the messaging and collaboration group at Siemens Business Services, says the company had looked into a variety of solutions, with the aim of centralizing file management and information access. But previous candidates fell short of an end-to-end workflow solution.

“It’s not easy to implement a workflow environment in the file system,” Essing says. “You need a review process. You have to make sure you have a formal way to put in and clarify documents. And you need to have an additional layer on top of the document storage, which actually gives you tasks that someone has to follow up for specific review.”

One particularly troubling issue with proposal workflow is the informal nature of communications. Essing points out that vital information and directives can end up buried in email messages, even as updated document versions obsolete the “official” version stored on central servers. The result: Two parties tasked with editing different portions of a proposal document can easily end up working on different versions. The challenge grows as proposal activities stretch beyond the internal team to include subcontractors, suppliers, outside legal counsel and other third parties.

Because SBS offers business process consulting services, an airtight and efficient proposal process is critical. Not only

is the proposal a key sales tool that helps win contracts, but its quality reflects directly on SBS’ ability to bring process-related insight and solutions to its customers. A well-thought-out proposal lays the foundation for a smooth-running, cost-efficient project. In short, deploying a flexible, robust proposal collaboration solution was a business-critical challenge for Siemens Business Services.

Business Solution

TARGET OF OPPORTUNITY

In the Brainloop Secure Dataroom environment, SBS found a powerful, Web Services-based contract collaboration engine for preparing complex proposals. Managers can create and track action items, to see what items have been signed off and by whom. Central document access ensures that all participants work from a single information source, and powerful versioning controls provide a reliable record of document changes and updates. The benefits extend beyond the proposal into the client engagement. Processes laid out in the proposal can be mapped into the Secure Dataroom environment, ensuring that consultants follow agreed-upon procedures.

Secure Dataroom’s robust functionality is already paying dividends for SBS. The company spends less time and man-hours churning out proposals, thanks to reduced lag in communications and fewer document iterations. Brainloop estimates that SBS can expect to reduce contract closing cycle times by more than 20 percent.

“This environment really helps you to get there faster and in a more formal way,” Essing says. “The payoff is in making the process more efficient. We anticipate winning more bids because of this solution.”

Essing expects additional bottom-line results. Automating the management of collaborative documents relieves consultants of time-consuming housekeeping chores and enables consultants to spend a greater percentage of time on productive—and therefore billable—activities. The environment also lets SBS map its proposal management processes into its consultants’ daily work environment, for improved efficiency and productivity.

The solution has been so compelling that SBS is working with Brainloop to turn the Secure Dataroom into an external offering for SBS customers. “We use Dataroom for our own proposals, but we also see lots of opportunities to sell Web-based Secure Dataroom to our customers,” Essing says, singling out medical equipment as a sector where detailed product life cycle information must be tracked, stored and archived. “We see opportunities in all the situations where you have lots of documentation around a product, and different companies, vendors and suppliers have to produce a joint deliverable.”

FLEXIBLE COLLABORATION THROUGH WEB SERVICES

When SBS discovered Brainloop’s Secure Dataroom, it was impressed by the company’s commitment to the emerging area of Web Services. Web Services make it

faster, easier and less expensive to stitch together disparate systems. Using the Internet and open industry standards such as Extensible Markup Language (XML) technology and Simple Object Access Protocol (SOAP), Web Services provide robust solutions for integrating and

communicating within the enterprise and across corporate boundaries.

Secure Dataroom employs Web Services standards and the Microsoft .Net* framework to exchange data, access resources and enable SBS to readily connect with customers, suppliers and other external parties in the proposal process. Strong, 128-bit encryption over Secure Sockets Layer (SSL) protects all transmissions, while 256-bit file system encryption locks up data on SBS servers to produce an end-to-end protected environment.

"The Web Services architecture is a core prerequisite for us," says Essing. "We believe that software that enables core business processes will never come from a single vendor, but will result from careful integration of best-of-breed components. Brainloop's Web Services approach allows for future integration with internal

systems for documents and archives, such as internal knowledge management repositories, and for integration with systems for structured information, such as our CRM system."

The Web Services model also allows SBS and Brainloop to plug into a host of third-party services and resources that reduce cost, speed time-to-market, and provide for a best-of-breed environment. "With Web Services, we can build better software, fast. We don't need to reinvent the wheel," says Oliver Gajek, co-founder of Brainloop. "We can pull in best-of-breed software, and drop it into our customers' environment and it will be able to integrate."

Gajek offers the example of adding Short Message Service (SMS) capability to an existing environment. "If we had had to build that messaging service to send messages to your mobile phone, it would have taken months of investment," Gajek explains. "Instead, we just went out there and found service providers who provide a Web Services interface. So for us it's a simple SOAP call."

"For collaborative Web Services, the more performance you have on the user's client system, the better. In a multitasking environment, this is just one of several applications the user might be working on at any given time.... We don't want to keep users waiting for the system to respond, so we give them fast machines based on the Intel® Pentium® 4 processor or the Mobile Intel® Pentium® 4 Processor – M."

Andreas Essing
Competence Manager
Messaging and Collaboration
Group
Siemens Business Services

A RICH ENVIRONMENT ON THE USER'S PC

One compelling feature of the Secure Dataroom is its rich integration with the Microsoft Office suite. Office integrates directly into the Dataroom document repository via the WebDAV protocol, allowing the suite, in effect, to act as a front-end interface to the documents and data that Secure Dataroom manages on central servers. Users can sidestep the cost and effort of transitioning to new applications and enjoy the familiar and feature-rich Office interface, while benefiting from the robust contract collaboration functionality of Secure Dataroom.

While delivering significant productivity advantages for end users, this approach heightens the performance demands on SBS' installed base of client PCs. Client-based encryption compounds the performance requirements. "A Brainloop user is typically a heavy user of Office, and often of Office XP, which has made significant progress in such areas as document comparison and collaborative authoring," observes Gajek. "Windows* XP and Office XP increase the demand for powerful client-side infrastructure. In addition, a Brainloop power user would save and open documents directly to and from the Dataroom server rather than saving them to the hard disk. This takes place across an encrypted connection, further increasing the performance loads on client and server."

To ensure responsiveness in this increasingly rich and complex environment, SBS is deploying powerful PCs based on the Intel® Pentium® 4 processor and notebook PCs based on the Mobile Intel® Pentium® 4 Processor – M. The added flexibility and productivity that comes from broad-scale use of notebook computers is expected to further speed the new proposal process.

"For collaborative Web Services, the more performance you have on the user's client system, the better," Essing says. "In a multitasking environment, this is just one of several applications the user might be working on at any given time. With Web Services, you may also have XML parsing going on in the background, as well as various security services. We don't want to keep users waiting for the system to respond, so we give them fast machines based on the Intel Pentium 4 processor or the Mobile Intel Pentium 4 Processor – M."

PLATFORM DECISIONS

SBS's infrastructure already includes a large number of Intel®-based servers, chosen for their performance, reliability and cost-effectiveness. To host its Secure Dataroom environment, the company is using Fujitsu Siemens' Primergy* H250 server with dual Intel® Pentium® III Xeon™ processors. Outfitted with 1 GB of system RAM and running the Microsoft Windows* 2000 operating system, the server can handle about 150 to 200 concurrent users, according to Essing.

That picture is likely to change as more and more SBS employees migrate to the Secure Dataroom environment. Within a year, some 400 SBS staff members could be collaborating on simultaneous projects. If SBS rolls out a Secure Dataroom-powered collaborative environment service to customers, as Essing expects to happen in 2003, the number of supported users will climb well into the thousands. Platforms based on the Intel® Xeon™ processor give SBS a path to support for more users by offering faster clock speeds, the enhancements of the Intel® NetBurst™ microarchitecture and Hyper-Threading Technology that boosts the performance of multitasking operating systems and multithreaded applications.

SBS configures its Secure Dataroom servers in pairs, so sufficient reserve capacity is on hand to handle any system failures. The integrated load balancing capability in Windows 2000 provides for hot failover capability, ensuring responsive operation even in the event of a failure. The servers, currently networked over 100 Mbps Fast Ethernet, will likely move to a high-bandwidth Gigabit Ethernet network as traffic scales up.

Just as important, the built-in load balancing makes it easy for SBS to add servers to the back end. If a large customer adopts the Secure Dataroom service, SBS can quickly tailor its server build-out to handle the increased load. And because SBS can affordably increment back-end processing power, the company can avoid expensive forklift upgrades and pricey over-provisioning.

One thing Essing doesn't worry about is the reliability of the platform. SBS has ample experience with the Intel® architecture in mission-critical environments. "We have had a couple hundred email servers around the world for a customer of ours, and we did all the consultancy and design of this infrastructure serving 10,000 to 15,000 people," he says. "For their environment you need to have high availability and good performance. We went with Intel architecture."

LESSONS LEARNED

- **Use Web Services to address critical business challenges.** Proposal creation is critical to SBS's success as a business services company focusing on process integration. A contract collaboration application built on the Web Services architecture gives Siemens Business Services a robust solution for bringing together the many people who must work together to create its complex proposals. The use of Web Services ensures that the solution is not only open and flexible, but also extensible—SBS can expand the offering by plugging in third-party functionality via SOAP calls.
- **Understand the client impact.** Web Services can bring more data into the end user's PC productivity applications. Through XML parsing and encryption, they also add to the load of background processing on the client. SBS deploys high-end Intel® Pentium® 4 processor-based clients, so its users have the headroom to handle rising workloads, and notebook PCs based on the Mobile Intel® Pentium® 4 Processor – M to increase the flexibility and productivity of proposal contributors.
- **Seek price/performance.** The outstanding price/performance of Intel®-based servers, PCs and notebooks enables SBS to scale its infrastructure in line with demand, while keeping costs low for faster ROI.

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www.intel.com/ebusiness

www.brainloop.com

www.sbs.siemens.com

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