

Windows IT Trends and Industry Innovations

In this section, we examine the state of the industry and future direction in several areas of interest to Windows IT professionals. Nine articles, the full text for which you will find online, offer insight into the state of collaborative computing, e-commerce, enterprise management, enterprise security, midmarket software, mobile and wireless computing, network and system administration, storage, and Web services. In addition, case studies offer examples of innovative solutions that have been applied in a Windows environment.

Collaborative Computing

Although collaboration has received much hype as a business philosophy for the early 21st century, it is still in its infancy. Some industry sectors are adopting relatively sophisticated working methodologies in areas such as product design, but much of the collaboration that takes place is still rudimentary and many of the promised efficiencies have yet to be realized. At a technical level, the IT industry is still grappling with fundamental integration issues that hamper collaborative projects, particularly between organizations running incompatible systems. From a purchasing perspective, the wide array of collaborative functionality available from different vendors is confusing. And at a cultural level, the challenges to adopting collaborative working methods are daunting. Collaboration is emerging as a powerful business methodology—but the practical difficulties shouldn't be ignored. For the complete article, go to <http://www.itbuynet.com/Pdf/0502-collaborative.pdf>.

E-commerce

The resources of the Internet are being applied successfully in many financial areas—for example, people around the globe are buying airline tickets online, organizing their banking over the Web, investing in the stock market, and even buying their next car online. Nevertheless, a great deal of skepticism remains about the long-term viability and profitability of companies engaged in e-commerce. To shed some light on

the future direction of e-commerce, we turned to spokespersons for two leading e-commerce vendors: Tom Kuhr, vice president, marketing and product management, Day Software; and Carol Honabach, director of operations, Web4, Inc., a subsidiary of netGuru, Inc. For the complete article, go to <http://www.itbuynet.com/Pdf/0502-ecommerce.pdf>.

Enterprise Management

You probably would not be surprised to learn that enterprise Windows networks are becoming increasingly more complex to design, implement, and manage. Many Windows NT veterans will remember when designing an enterprise NT network was mostly a matter of specifying domain trusts and group memberships. Implementation was not much more complex than installing a domain controller at each site and management required only proficient use of User Manager and Event Viewer. But times are changing. Companies are finally planning migrations to Windows 2000 servers and the Active Directory (AD) service. And with the release of Windows XP, we now have a Windows client with more features, functionality, and complexity than ever before. In addition, many IT departments migrating to AD may also be contemplating upgrading back office systems, including migrating messaging systems to Exchange 2000. To best handle the complex nature of implementing and managing these new technologies, you might find it worthwhile to prepare designs and to research tools and

methodologies so that you ensure implementation of a well designed and secure Windows network. For the complete article, go to <http://www.itbuynet.com/Pdf/0502-management.pdf>.

Enterprise Security

When you consider what effect poor enterprise and system security can have on our economy, our data, our networks, our companies, and, ultimately, our country the state of neglect prevalent in the IT world seems remarkable. According to the sixth annual Computer Crime and Security Survey (conducted jointly by the Computer Security Institute and the Federal Bureau of Investigation's Computer Intrusion Squad—<http://www.gocsi.com>), numerous areas are ripe for improvement. The 2001 survey used data from more than 530 companies, government agencies, universities, financial institutions, and medical institutions. The survey's title says it all: "Financial losses due to Internet intrusions, trade secret theft, and other cyber crimes soar." Some of the findings are alarming. For the complete article, go to <http://www.itbuynet.com/Pdf/0502-security.pdf>.

Midmarket Software

A closer alignment between technology and business requirements is changing the shape of the software market for small and midsize businesses. In established application areas such as financial and human-resource software, vendors are packaging their solutions into vertical market tem-

plates. These templates not only provide for rapid implementation of solutions but also deliver a faster Return on Investment (ROI) by reducing the amount of custom work that solutions require to become productive.

Likewise, in newer breeds of applications such as customer relationship management (CRM), the emphasis is falling on "out-of-the-box" solutions that vendors design to deliver the bulk of functionality that users require from day one. Today, three core factors are prominent in the business buyer's mind: reducing the amount of customization required to install new systems, rolling out applications as rapidly as possible to speed ROI, and containing the ongoing costs of running a system. Kevin Meyers, vice president of product marketing and business development at CRM vendor Interact Commerce, says, "What we're hearing from customers is, 'Give me a pragmatic solution.'" For the complete article, go to <http://www.itbuynet.com/Pdf/0502-midmarket.pdf>.

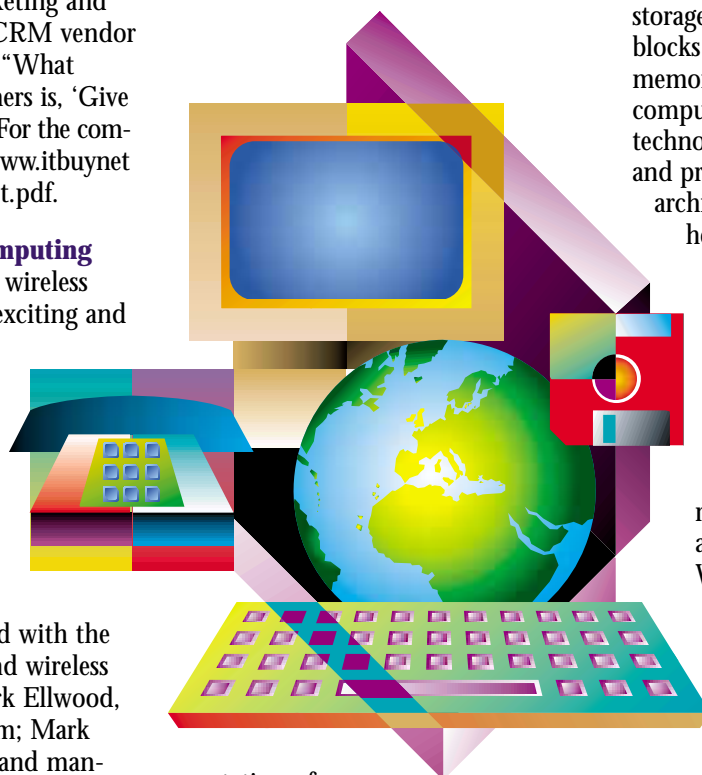
Mobile and Wireless Computing

Undoubtedly, mobile and wireless computing represents an exciting and fast-growing area of the IT and communications industries. To learn more about the technology's present status and future prospects, we submitted a series of questions to three leading executives from companies closely involved with the development of mobile and wireless computing solutions: Mark Ellwood, channels manager, Solagem; Mark Guibert vice president, brand management, Research In Motion (RIM); and Rick Fricchione, vice president, Enterprise Ready Microsoft, Compaq Global Services, Rainier Technology. For the complete article, go to <http://www.itbuynet.com/Pdf/0502-mobile.pdf>.

Network and System Administration

Corporate belt-tightening is affecting even normally recession-resistant IT groups, many for the first time, and is

requiring that IT support more, increasingly complex, systems with fewer resources. The current economy has reduced, but not eliminated, the need to purchase, implement, and manage new technologies. Equipment does wear out and increased capacity requirements may warrant upgrades. Budget trimming might also force longer retention of older computer systems, whose available hardware resources might limit the possibility of upgrading to a more stable OS and easier-to-manage applications. On the upside, certain industry trends are providing some much-needed breathing room for busy administrators. Many companies continue to postpone Win2K server upgrades and the imple-



mentation of Active Directory (AD). These delays give IT more time to research AD architecture designs and the possible radical reconfiguration of existing NT networks, and to review Microsoft's .NET strategy and the integration of its vast array of complex products. For the complete article, go to <http://www.itbuynet.com/Pdf/0502-systemadmin.pdf>.

Storage

Many people learn about storage technology incrementally, as their needs dictate. Storage is a challenging and diverse area, and one that is particularly hard to become expert in because it touches on so many disciplines. Learning is made harder still by the fact that the storage industry has been in flux during the past few years with the rapid introduction of new networking technologies, storage architectures, and software products and paradigms. So even if you took a course in storage a few years ago, you are likely to find many new concepts and practices in use. A full appreciation of modern storage technology must include the following topics: the underlying physics of storage devices; disk and tape media and mechanisms; storage allocation structures, such as blocks and file systems; computer memory and caching technologies; computer system bus and interface technologies; network wire transport and protocols; storage networking architecture and technologies; and host storage management and storage software. For the complete article, go to <http://www.itbuynet.com/Pdf/0502-storage.pdf>.

Web Services

Web services, the latest major trend in computing, stand ready to transform how we interact with computers. Although Web services are a relatively new concept that has taken much of computing by storm, the sudden adoption of this technology may not be as surprising or as revolutionary as you might think. Web services are the natural evolution of key concepts of enterprise software development. These concepts include the Internet, multi-tier distributed computing, and XML. Web services help bring these concepts together in such an easy-to-understand way that software developers are trying to show how they have mastered distributed computing's newest paradigm. For the complete article, go to <http://www.itbuynet.com/Pdf/0502-web.pdf>.

Sybase Uses Quest Software to Deploy Windows 2000 and Active Directory Worldwide



Based in Ottawa, Canada, Bruce Macdonald is the Senior Project Manager of Sybase's Global Infrastructure Team (GIT). He leads a core group of 35 people who coordinate with all Sybase IT groups in managing a global Windows network infrastructure that supports over 5,000 end users. Sybase needed to migrate these users from Windows NT to Windows 2000 and deploy Active Directory (AD). However, the project could not commence unless the project team could simplify delegation of administration rights without compromising

"I would not go to Windows 2000 without a role-based solution. There's just no way you can manage delegation in an efficient manner and if you don't take advantage of AD delegation, then you're really not much farther ahead from a security point than you were with NT. I could not imagine migrating without ActiveRoles."

Bruce Macdonald
Senior Project Manager, Global Infrastructure Team
Sybase

security, creating more work, or adding potential failure points.

According to Macdonald, native delegation methods were unreliable: "In a Windows 2000 network, a human administrator sets Access Control Lists (ACLs) on the user group and this opens it up to human error. We needed to be able to define a delegation point once, then duplicate it – and get consistent results. And that's definitely not possible using just native tools."

But the alternative to time-consuming, error-prone delegation steps was also unacceptable. "It's easy to dump everybody into the domain administra-

tor's group," said Macdonald. "But then you have too many people with far too much control. We needed a structure where we have only a few people who were truly domain admins."

The Quest Solution

To master AD, Sybase chose Quest Software's FastLane® ActiveRoles. Knowing that Quest had a proven tool for managing AD gave Sybase the confidence to step forward with the AD deployment. "We had seen ActiveRoles in action and we were confident that it would deliver the efficiency gains that native tools promised but could not feasibly deliver," said Macdonald.

With 79 offices worldwide, Sybase needed to delegate rights to different business units and geographical locations inside AD. By adopting the native AD delegation model, FastLane ActiveRoles meshed with Sybase's geographical administrative structure.

"Administratively, we're half centralized and half decentralized. FastLane ActiveRoles is the ideal product that lets us do that," said Macdonald.

Sybase recognizes significant timesavings when changing delegat-

ed rights. Once a user has been set up, that user's complete set of attributes (a "Role") is saved within AD. ActiveRoles enables rapid duplication of granular delegation and greatly simplifies editing of rights for multiple users. "If you have to make a change, you only need to change it once to change it everywhere," said Macdonald.

The Bottom Line

Since installing Quest software, Sybase has completed about 40 percent of its AD deployment. Without ActiveRoles, Sybase would potentially have to hire "at least three or four more administra-

tors" to manage the AD infrastructure, said Macdonald. As changes are made to access rights, Sybase also realizes a significant return on investment through the rapid duplication and editing of Roles. Macdonald estimates that they currently have 150 delegation points throughout the AD.

Sybase is beginning to leverage the other features within FastLane ActiveRoles, such as Group Policy management. "The RSoP (Resultant Set of Policy) report helps us to understand the impact of Role or policy changes before they are executed," said Macdonald.

Would Sybase migrate to Windows 2000 without FastLane ActiveRoles? "I would not go to Windows 2000 without a role-based solution. There's just no way you can manage delegation in an efficient manner and if you don't take advantage of AD delegation, then you're really not much farther ahead from a security point than you were with NT. I could not imagine migrating without ActiveRoles," Macdonald said.

About Sybase

Sybase is the enterprise infrastructure company that bridges heterogeneous technologies. With industry-leading Enterprise Portal (EP), mobile and wireless solutions, essential integration products, and high performance database management systems, Sybase is one of the largest independent software companies in the world. Sybase's e-Business solutions are focused principally on customers in four vertical markets: financial services, telecommunications and media, healthcare, and government and the public sector. Sybase products dominate in mission critical environments around the world. Sybase, Inc. is headquartered in Dublin, California.

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UC4 Becomes Industry Standard for Job Scheduling



Established in 1982, Software Engineering of America (SEA) has built a global reputation as a leader in the field of data center software solutions. SEA is one of the most successful companies in the data center software industry, with products used at thousands of installations worldwide. More than 10,000 data centers of all sizes and configurations use one or more of SEA's products, including 9 of the Fortune 10 and 85 percent of the Fortune 500 companies.

Since 1986, SEA has been ranked consistently as one of the Top One Hundred independent software vendors by industry trade journals. A noted industry analyst for Hambrecht & Quist, quoted by *Computerworld*, described SEA as a "high-quality and thoughtfully managed company."

For the year ending 2000, SEA experienced more than 30 percent growth with more than \$202 million in revenues. SEA has no debt and no outside investors, and during its 19 years in business has maintained a substantial amount of working capital to meet its needs for research, development, and acquisitions. SEA has achieved this level of success by adhering to a commitment to develop and enhance products based on user input and by backing these products with around-the-clock technical support that its customers can rely on. These policies have been implemented by Salvatore Simeone, president and CEO, who believes strongly in a philosophy of user-driven development and complete availability of high-quality technical support, 24 hours a day, 7 days a week.

SEA Product Lines

SEA product lines include comprehensive data center solutions for cross-platform job scheduling, automated

operations, console management, and tape media management; a complete line of output automation solutions; DASD data management; JCL syntax checking; documentation and standards enforcement tools; RACF security administration; performance monitoring; and consulting and training services for all facets of automated operations.

UC4 is SEA's solution for multiplatform job scheduling and event automation in heterogeneous system environments. UC4 can run on multiple operating systems such as MVS OS/390, TANDEM NSK, UNIX, VMS, Windows NT, MPE/IX, and AS400—all from a single point of control. UC4 seamlessly integrates with ERP applications such as SAP and Peoplesoft, as well as with frameworks such as HP OpenView NNM.

UC4 includes a built-in file transfer component. You do not need to use FTP because UC4 enables users to transfer files from platform to platform. When a job fails, UC4's Call Operator can notify a user via email, pager, or cellular phone. UC4 maintains rerun and restart functionality on every platform, including MVS. UC4 also supports centralized report management and archiving.

A Solution for all Your Needs

UC4 is the client/server solution for all your business automation needs. The architecture of UC4 facilitates complete scheduling and integrated monitoring of all platforms and applications. With UC4's state-of-the-art GUI, the handling of jobs, file transfers, and other business processes is the same regardless of platform. UC4 is a versatile and user-friendly system man-

agement solution.

Despite continued software industry consolidation and the shrinking number of software choices available, SEA assures its customers of its intent to remain a leading privately held data software provider in the industry.

SEA will remain one of the leading

"The UC4 batch scheduler from SEA is so easy to use. UC4 has allowed us to manage more than 200 batch processes with varying calendar dependencies requiring only 10 percent of an FTE. This frees up IT resources, giving us more time to devote to value-added activities. I would recommend the UC4 batch scheduler product to anyone interested in reducing the operations management workload."

Lee Van Whye
Senior IT Specialist
Terra Industries, Inc.

providers of a broad range of enterprise-wide software solutions. SEA continues to form strategic partnerships and alliances with other software and hardware companies such as IBM, Hewlett-Packard, SAP, Sun Microsystems, NCR, Linux, and Wang. SEA is proud to be nearing the beginning of its third decade in the data software industry and of its continued tradition of providing customers with reliable technical support 24 hours a day, 7 days a week, 365 days a year.

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National Semiconductor Corporation Chooses SEA for Enterprise Management Tools



Software Engineering of America (SEA), a leading global provider of data center software solutions, announced that National Semiconductor Corporation has agreed to purchase SEA's UC4 job scheduler product. National will use UC4 to prioritize, batch, and schedule its 8,000 data center jobs per day from across its entire enterprise.

UC4 is a workload management solution for companies with dynamic, complex computing environments. From a single point of control, UC4 will enable National's IT executives to run the company's operating systems with maximum efficiency.

As a global leader in semiconductor products, National designs, develops, manufactures, and markets a wide array of integrated circuits for fast growing markets such as wireless handsets. With facilities around the world, National's business units require 24x7 data availability from the company's central data center in Santa Clara, California.

Previously, keeping an accurate read of the demands on National's computing resources was a difficult task to monitor—a task that the company envisions will be made more manageable with

UC4. With National's adoption of large-scale ERP-type systems (SAP) and the corresponding job demands these systems place on its data center, National believes the impact of UC4 will allow for greater accountability.

"We selected UC4 because it gives us an essential tool to get a better handle on our system resources," said Tom Cremer,

"We selected UC4 because gives it's an essential tool for us to get a better handle on our systems resources. And UC4's ability to run both on our open systems and on our mainframe--and seamlessly interact with our SAP software--made it an ideal solution for us."

Tom Cremer
Director of Data Center Operations
National Semiconductor Corporation

director of data center operations for National. "And UC4's ability to run both on our open systems and on our mainframe—and seamlessly interact with our SAP software—made it an ideal solution for us."

For the scheduling of jobs in mySAP e-business solutions, UC4 is able to automate various processes so that complex commands can be completed under varying preconditions and automate calendar definitions for the execution of tasks at defined deadlines.

"Global companies such as National are

turning to SEA's job scheduler to provide a high degree of overall system reliability," said Sal Simeone, founder and president of SEA. "We believe UC4's cross-platform abilities will continue to be in demand by companies that want to truly maintain a more manageable environment."

National Semiconductor is a premier

analog company driving the information age. Combining real-world analog and state-of-the-art digital technology, the company is focused on the fast growing markets for wireless handsets, displays, information appliances, and information infrastructure. With headquarters in Santa Clara, California, National reported sales of \$2.1 billion for its last fiscal year. National has about 9,800 employees worldwide. Additional company and product information is available at www.national.com.

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"Thanks for sending your team last week. Their technical knowledge and attention to detail is world class. We accomplished all that was planned. Our production environment is set up and fully redundant with failover protection. We are now in production and will be ramping up our implementation plans. The implementation of UC4 is a mission-critical project for MIS operations. I move forward with confidence knowing your team will be supporting us."

Terry Terfinks
Senior IT Specialist
Air Products and Chemicals

Wise Does More with Application Deployment A Desktop Engineering Team's Quest for the Right Solution



Software installations made easy™

Provident, a large, national insurance company, wanted to customize installations so that they would work over multiple technologies and for on- and off-site desktops. The company's desktop engineering team was tired of performing redundant installation work, only to meet with little success.

Burdened by incompatible technologies that snarled workflow and delayed project delivery, the company embarked on a quest to find the right application repackaging solution. After careful evaluation of Wise Solutions, InstallShield®, and Novell® Snapshot, they chose Wise Solutions, with great results.

"Our application integration team was using too many different technologies to get the job done," said Matthew Giblin, Provident technical consultant and team leader for desktop engineering. "The tool that we would ultimately select had to be easy-to-use and robust, and provide our applications the flexibility to be moved between a Novell and a Microsoft end-user environment."

Careful Evaluation

Provident's requirements for an application deployment solution were simple: it had to be easy to operate, versatile, and based on industry standards. A careful evaluation over several months was in order.

The team selected a few well-known applications and measured them against the products it had been using. Each product was fully tested within Provident's complex environment and evaluated on the above criteria.

After several months of testing, Wise was chosen as the best solution. The product not only met all their rigorous testing standards, it also provided additional valuable features.

The Wise Solution

The team began using Wise, with impressive results. Provident immediately benefited from:

- Substantial time savings
- Elimination of redundant tasks
- Improved resource utilization
- Faster project turnaround

For example, an essential element of success was the team's ability to customize installations using Wise. Whether it was a Novell network installation, a Microsoft network installation, or a CD-ROM installation, the team needed to create a multitude of delivery methods using the same integrated installation. With Wise, the team was able to achieve this result.

Wise also enabled the team to maintain a standard for all application integrations and deployments and allowed it to develop helpful products. "Our team has adopted this new standard and is constantly learning how to make better use of the tool," Giblin said. "The Wise Solutions Web site (Knowledgebase and Newsgroups at www.wise.com/support.asp) has provided excellent assistance to our team at times of research and expanded learning."

Perhaps most important, Giblin's customers enjoyed a higher installation success rate and a standard look-and-feel for all installations. "Customer satisfaction, quality, and time savings are all reasons why we needed a tool and chose Wise. That is what Wise has

given our organization," Giblin observed. "Today, our quality of service to our customers is much better."

Provident's careful evaluation of application deployment solutions paid off. By choosing Wise, Giblin's team revolutionized the way it worked, freeing up time, resources and creativity to better serve its customers.

"Wise provided our team with a tool that allowed us to better utilize our resources with quicker project turnaround times and with a higher success rate than in previous years," according to Giblin. "Wise offered an easy interface and had a better selection of features over the other tools we evaluated."

Wise Solutions, Inc., provides advanced application management and deploy-

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Matthew Giblin
Technical consultant and team leader
Provident

ment solutions to system administrators and software developers, including Wise Package Studio, the premier solution for system administrators. With a full range of capabilities and features, Wise delivers the perfect combination of power, ease of use and versatility to help system administrators repackage applications prior to deployment.

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Secure Right From the Start

USB Authentication Provides Cost-Effective Windows 2000 Smart Card Network Logon and Secure Email



Does it make sense to lock up your office but leave the key under the mat? Using only password-based network protection does just that. But with the introduction of USB authentication technology from Aladdin Knowledge Systems, organizations can easily gain cost-effective, portable Windows 2000 Smart Card network logon for every employee.

Employees access sensitive information every day via their company network. In fact, this is often one of the first mindless motions employees go through when arriving at their workstation. So when researching options to replace employees' unsecured passwords, IT administrators quickly discover that any alternative needs to be a durable, yet simple, two-factor authentication device. Often, credit-card sized smart cards are the first alternative that comes to mind. To avoid an expensive mass deployment of smart card readers, organizations can select Aladdin's readerless USB-based eToken Enterprise solution to authenticate its employees—the key-sized eToken plugs into the USB port (something they have) and employees type in an eToken Password (something they know).

Providing welcome relief to the headaches and hefty price that come with traditional smart cards, eToken offers the ability to use USB connectivity—especially significant for large-scale distribution of tokens. By deploying readerless smart card technology, IT administrators significantly minimize cost, while gaining simpler implementation. Customers and users more readily accept USB tokens primarily because they use the USB port infra-

structure already available—something not possible if traditional smart card solutions are selected.

Using Windows 2000, an operating system that offers an integrated network logon solution based on advanced public key technology, organizations verify and authenticate the validity of each employee. Logging on to the domain server through eToken PRO's readerless smart card RSA 1024 / 3-DES / SHA-1 technology, Windows 2000 supports the use of eToken in the same way that it supports smart cards, providing maximum security and portability but without the hassle of reader deployment. Smart card logon requires that a personal certificate-key pair is issued for the domain user; thus the certificate and the keys stored only on the eToken are used for identifying and authenticating users to the domain.

Deployment

As the first step in implementing eToken throughout the organization, system administrators install eToken Enterprise's eTCAPI and eTCertStore onto an enrollment station and then install the eToken Run Time Environment (RTE) on each employee's PC, allowing each PC to recognize eToken.

Although each individual user can easily administer the RTE installation and digital certificate request, IT administrators can choose to centrally manage this initial process and distribute ready-to-use eTokens to employees. Administrators request digital certificates for users and then store each user's certificate directly on their individual eToken. The eToken RTE contains all the necessary files and components needed for eToken to work with a PC. With eToken, employees do

not need to remember different passwords for different user accounts and certificates—only the password for their personal eToken. Most employees carry their eToken on a key chain, and thus their authorization details can be transported and used securely on any Windows 2000 client computer. Therefore, eToken authentication is not restricted to one particular PC; instead, users have a previously unavailable combination of freedom of movement and security.

Most infrastructures easily fulfill the basic requirements, including the need for a Windows 2000 Domain Server with



Active Directory and Windows 2000 clients.

An enterprise CA is configured on an enterprise server, while a privilege user account and Web client for Web-based enrollment limits installation time to just a few weeks.

When compared to traditional smart cards, as well as biometric devices and one-time passwords, eToken offers unmatched levels of security, while also providing much-needed portability, ease of deployment, PKI support, multiple application support, and durability. With eToken, the keys are never left under the mat—they're left inside the minds and pockets of the proper employees.

By Leedor Agam
Vice President, eBusiness &
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www.eAladdin.com/eToken

IMail Server Provides Powerful Web-Based Email to Young Students in Norway



As a leading provider of Internet and desktop publishing and graphic design services in the Norwegian marketplace, WWW Norge A/S's success rests with the skill of its staff in getting the most out of the latest hardware and software. Along with the company's commercial studio business, which specializes in developing 3D graphics, online and print advertisements, and Web pages, WWW Norge also specializes in providing heavy-duty Internet solutions for governmental and private companies. It is this area of business that has benefited most from the adoption of Ipswitch's IMail Server software.

"Before we implemented IMail we were using a custom-built email server," explained Daniel Döderlein, CEO of WWW Norge. "However, we soon realized that it would not be able to handle the amount of traffic we were predicting, so an alternative had to be sourced. Ipswitch's IMail Server proved to be the most comprehensive package available."

The decision to upgrade came after WWW Norge decided to standardize the operating system and email software across the company. The Windows NT platform, combined with IMail Server, proved to be the best option for a number of reasons. "We believe in the future of the Internet and new media, but we also need to have faith in the systems that support our business," said Döderlein. "Not only is IMail excellent, but the available information, technical support, and after-sales service is also very impressive."

IMail's primary task within WWW Norge is to power a free Web-based email system for 12- to 25-year-olds called superhelt.com (superhero). Users are provided with a free email account (similar to Hotmail) and the latest news, competitions, and cool Web links relevant to the target age group. The site has 3,500 registered users (which demonstrates IMail's impressive scalability), with 100 new users signing up every day. IMail lets WWW Norge provide users with their own mailing list, address book, and mail folders—just like a standard desktop-based email client and, according to Döderlein, it is this kind of power and flexibility that has helped superhelt.com become such a success.

"Superhelt.com is a very successful project, generating the majority of its revenue from the sale of advertising. However, we wouldn't have the subscribers, let alone the advertisers, if we didn't offer a great product and IMail helps us achieve this."

At WWW Norge, IMail handles anywhere between 500MB and 1500MB of mail traffic a day. The company is so impressed with IMail's performance that it uses the software to handle its own office email. "Web-based email isn't just for casual users and children," explained Döderlein. "When I and my colleagues travel to our customers we have access to our mail, our folders, and our contacts no matter where we are in the world. Also, we can be confident that both superhelt.com and our own email server will be available, because IMail has proved itself to be a very robust and reliable piece of software."

IMail also comes with a number of

special features (e.g., mail-to-fax, mail-to-pager, Web messaging). WWW Norge has taken an innovative approach in its implementation by modifying the fax and pager options to enable SMS notification (to mobile phones and other portable devices) of incoming mail, explained Döderlein.

"The fax option was not that relevant to our business needs, because we conduct the majority of our business by email. However, the ability to modify the software to send SMS messages is a major benefit. We haven't yet offered this service to our customers because of the cost of SMS notification in the GSM network worldwide, but we use it in the office and it works well.

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Daniel Döderlein
 CEO
 WWW Norge

"Overall, IMail is a great piece of software. We have the knowledge and the security of knowing that we are offering our customers the very best Web-based email service, running on a secure and stable system that is scalable and flexible enough to meet our current and future needs."

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