

eNetwork Software solution for security and directory integration

"By sharing data with physicians and insurers, we improved our cash flow, reduced our expenses, and improved our image in the community."*

-Hospital executive

A hospital, through acquisitions and expansion of its existing facilities, has been increasing the number of beds each year. With constraints on what the hospital system can charge for services and rising costs, hospital administrators know they have to be effective and efficient to stay in business and, more important, to continue to grow their business.

To control expenses and improve cash flow, the hospital has just engaged an independent consultant to conduct a study to help reengineer the business. Currently, large amounts of time are spent on input and verification of patient records. Risk of error is greatest there, leading to high liability expenses and insurance costs. The same problem exists with billing and payment information. And when billing for the insurance company is delayed, reimbursements to the hospital are delayed.

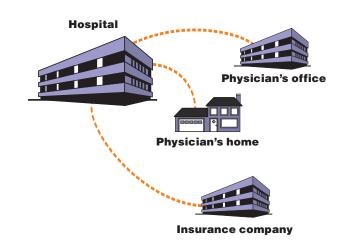
Security is a big concern. Hospital personnel should have access only to the information that is required to complete specific tasks related to their responsibility. For example, the dietary department needs the patient's menu choices, dietary restrictions, and food allergies, but not the patient's home address. Most of all, if this information is to be transmitted over the Web, security must be assured.





"For emergencies, I can authorize treatment immediately, because I have the information I need to make a diagnosis at my fingertips."

-A staff physician



Business solution

Doctors are in the business of saving lives—not of worrying about how to get to their patients' records or other sensitive information. Healthcare workers need the information at their fingertips and they need it fast. They need to be assured that patient information is secure and easy to access. It can be a matter of life or death.

To meet these requirements, the hospital has implemented a test system to consolidate and secure medical, administrative, and financial records under one system.

The family doctor or admitting physician's office handles admittance information— electronically. Once entered, the same information is used and updated online by all the hospital departments and healthcare personnel. For simplicity, physicians and the entire staff have simple forms and enter data using penbased input or voice input. Staff physicians have electronic access to the records from their offices or from home

systems and laptops using the Internet. This reduces the number of trips doctors need to make to hospitals and makes better use of their time when in the hospital—they spend more time with patients and can handle larger patient loads.

Doctors, nurses, and other medical staff have access to patient information, such as medical history and prescription data. Customization of the healthcare systems is done for secure access to different applications, using one user ID and password. Doctors can handle emergencies better, because they can get the information they need and authorize treatment immediately—no matter where they are at the time.

By sharing records with admitting physicians and insurance companies, the hospital eliminates redundant paperwork, improves accuracy of patient data, and shortens billing cycles. The administrative personnel work more efficiently, because less data entry and verification are required for billing and payment information. A complete record of charges is submitted to the insurance

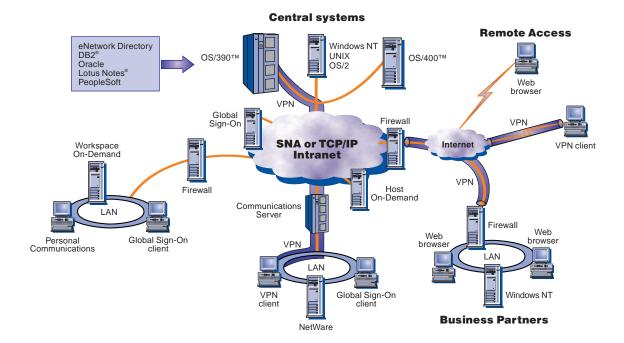
companies. With consolidated claims and billing information, the insurance companies cooperate with the hospital and doctors by processing claims faster. In addition to faster processing of claims, the hospital is able to improve relationships with physicians and insurers. And at the same time, hospital ratings are the highest in the communities it serves.

To implement this new system, the hospital information technology (IT) staff uses existing software. They can't afford to rewrite databases and create all new applications. Existing databases and systems are coordinated and accessible to each system.

Customer environment

The hospital network includes:

- A data center with an IBM[®] System/390[®] (S/390[®]) and AIX[®] servers
- Traditional applications for billing, administration, and medical records processing.



IT solution

IBM is able to provide a comprehensive security solution that is reliable and supports the security needs of the enterprise:

- Install IBM Global Sign-On to ensure that secure data can be accessed from anywhere on the network with the ability to log on only once. IBM Global Sign-On is designed for large enterprises consisting of multiple systems and applications within heterogeneous, distributed computing environments. It eliminates the need for users to remember multiple user IDs and passwords. It supports multiple clients including OS/2®, Windows® 95, and Windows NT® clients. This software is compatible with a wide range of target systems and is the only single sign-on product on the market with integrated support for Tivoli® User Administration.
- Install IBM eNetwork™ Firewall where the hospital, physicians, and insurance company networks link to the Internet.
 IBM Firewall eliminates security exposure and prevents unauthorized users from

accessing your network. It automatically and immediately notifies the company of security breaches. IBM Firewall provides functions that let you manage your Internet connection and centrally manage multiple firewalls from a single point.

- Use eNetwork Virtual Private Network (VPN) technology to allow users to securely exchange information across the Internet with other companies and reduce the cost of expensive leased lines. IBM offers a complete set of virtual private network services, including data integrity checking and authentication.
- Install IBM AntiVirus software to protect data from viruses by detecting, verifying, and removing them.

Major advantages

With the eNetwork Software solution for security and directory integration, the healthcare institution can:

- Increase productivity by enabling doctors, nurses, and other mobile workers to gain access and get information from anywhere securely
- Increase profitability by reducing liability and reducing costs to verify patient records
- Reduce expenses and expand the hospital's reputation for excellent patient care

eNetwork Software solution for security and directory integration

IBM eNetwork Software security and directory integration solution provides you with peace of mind that your business is secure, while helping you to leverage the Internet with your existing enterprise information technology investment. Build on what you have. You can connect different kinds of networks on different kinds of platforms—you can have a system that communicates anywhere across the Internet. IBM delivers integrated information security solutions so you can enforce network security policies and your business can exploit the Internet with confidence. Address all aspects of your security challenges through one proven security vendor—IBM.

The eNetwork Software solution for security and directory integration works together simply to provide:

- Authorization. Gives access to only fully identified and authorized clients. Access control list and data protection methods, such as encryption, maintain privacy. Information is seen only by the intended recipients.
- Accountability. Determines who performed any action and when it happened through the system's accountability features.
- Availability. Prevents or recovers quickly from security breaches to keep networks, systems, and applications running.
- Investment protection. Allows the infrastructure already in place to work with the existing applications. This solution provides secure intranet and Internet access, regardless of platform and network environment. You can grow your business to meet your future needs by providing a scalable directory to maintain a highly reliable network.
- Peace of mind. Keeps its system security promises. It ensures networks, systems, and applications are available when you need them.

IBM Security Services

IBM Security Services help customers assess and improve security in their computing environments. These services address exposures across operations, including networks, systems, applications, policy and management systems, and physical site security. IBM has the unique capability as a security services provider to give customers a choice of individual offerings or a comprehensive security solution.

IBM Security Services help you plan, design, construct, and operate secure information technology environments. IBM's security specialists have years of experience helping clients understand and address information technology challenges and e-business security issues. IBM experts will help you plan, design, construct and operate a secure environment for your e-business applications. IBM assesses your current security strengths and vulnerabilities and works with you to develop a custom security architecture for your e-business. IBM helps you develop a custom security program that combines many of the following elements of a total security plan:

- IBM Security Assessments and Planning Services
- IBM Security Architecture and Design Services
- IBM Security Implementation Services
- IBM Security Management Services

For more information

Find out more information about the security and directory integration solution. Visit the eNetwork Software Web site to order an evaluation kit and put our solution to the test, or contact your IBM representative or IBM Business Partner at:

www.software.ibm.com/enetwork/



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IBM Corporation Research Triangle Park, NC USA

5-98

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* This scenario is a composite based upon typical customer requirements and not intended to represent a specific customer engagement. Individual customers will have different requirements. Contact your IBM representative to discuss your specific needs.



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G325-3800-00