IBM’s security and privacy offerings—success stories.

A guide to client references

Security and privacy offerings—a necessity for organizations of all sizes

It’s no secret that organizations of all sizes view security as a top priority. Rapidly evolving security threats, increasingly complex IT environments and regulatory requirements to protect privacy are ongoing concerns worldwide. As the parameters for effective security and privacy measures are constantly changing, organizations are challenged to respond to dynamic shifts in the global business environment. They may not want to devote the in-house resources to designing, implementing and managing a security and privacy program.

Organizations across industries may need help in a range of areas, including:

- **Assessment**—determining which security capabilities they have and which they lack, tying capabilities to risk-management and compliance requirements, prioritizing their projects, targeting their investments, and defining the roles and responsibilities necessary to support a comprehensive security strategy
- **Implementation**—designing and building a security and privacy solution to fit their particular needs and business priorities
- **Execution**—launching and managing the day-to-day processes necessary to keep a comprehensive security and privacy program running and updated.

IBM has a long track record of providing cost-effective security and privacy solutions to organizations big and small—and across the globe. This reference guide can help you make that case. Use it to quickly find industry-specific stories that will help you prepare for your conversations with clients.
Security and privacy offerings fit within IBM’s solutions framework

Clients are clamoring for solutions that address an entire set of business problems. They no longer look primarily for point products that meet a single need—because such products leave them with the headache of trying to integrate the new purchase with the rest of their solution. Instead, clients want menus of products and services that they know will work well together and with their legacy environments.

The security and privacy solutions showcased in this guide represent cross-IBM capabilities to deliver integrated solutions that incorporate hardware, software, middleware and services.

Service product lines: Security and privacy—new ways to meet clients’ ever-increasing need for security

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Security and privacy references—global coverage for your security needs

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Featured client references for security and privacy offerings, by sector

IBM has a comprehensive list of security and privacy accounts that can be used to illustrate the many choices we can offer to clients—by sector, industry and geography. *Click on the icons below to view each reference.*

**Communications**
- Airline transforms and secures its service chain to gain competitive advantage
- Luxury resort company increases sales with a security-rich, wireless shopping network
- Online auction company improves customer experience by enhancing network infrastructure
- Shipping company secures network from hackers and other threats
- Telecommunications company launches new services on a security-rich platform
- Television broadcaster upgrades network security
- Travel company increases flexibility, customer responsiveness and security

**Distribution**
- Brewery consortium continues an ongoing program to improve IT security
- Packaging company implements virus and spam protection
- Retailer improves customer experience and streamlines supply chain with security-rich system
- Technology provider establishes a global security policy
- Textile company blocks hackers with IBM’s help

**Financial services**
- Austrian bank conglomerate establishes a consistent security policy
- Automotive finance company gets a roadmap for success
- Bank aligns data center of newly acquired company with corporate standards
- Danish bank upgrades wireless devices to protect sensitive data
- Egyptian bank safeguards online banking services
- Financial services company increases security and improves productivity
- German insurance company strengthens its protection of client data
- German savings bank increases network reliability and flexibility
- India-based financial services provider increases productivity and reduces maintenance needs
- Insurance group improves compliance with an enhanced security plan
- Insurance provider adopts a security-rich virtual private network (VPN) solution
- International bank invests in new security infrastructure
- Investment company implements new security policies
- Italian banking IT firm adds RFID capabilities and monitoring
- Korean bank gains a competitive edge with encryption services
- Large agricultural bank reduces its exposure to risk
Featured client references for security and privacy offerings, by sector (continued)

**Industrial**
- Aerospace and defense provider joins forces with IBM
- Chemical company gains a security-rich remote communications system
- Crystal products company secures its network
- Oil and energy supply company implements a new security plan
- Petroleum company builds a highly available, security-rich data center
- Shipbuilding leader enhances network management and security

**Public**
- Educational organization enables security-rich wireless access on campus
- Government agency safeguards its data center with a fire-protection system
- Government increases effectiveness and reduces costs with a security-rich, wireless network
- Government oversight organization enhances responsiveness and security
- Healthcare provider secures network access and supports HIPAA compliance

- IBM Business Partner bolsters training company’s IT security teaching staff
- Land-registry agency becomes more responsive with automated, security-rich record system
- Large county government resolves user identity management challenges
- Local government adopts an integrated portal with enhanced security
- Medical center upgrades its network, protects against viruses and improves IT uptime
- Meteorological institute improves data security at high-altitude observatory
- Military education institution bolsters the security of its IT environment
- Pediatric hospital virtually eliminates spam and viruses
- Pension association increases responsiveness and security with smartcards
- Pension fund launches a security initiative to comply with ISO 17799
- Pharmaceutical company improves the security of its vital drug-development data
- Polish drug manufacturer speeds the deployment of a security-rich network
- Road-transportation agency deploys a security-rich toll solution to reduce traffic
- State agency prevents unauthorized users from accessing internal applications
- University reduces costs with identity management and data security project
Airline transforms and secures its service chain to gain competitive advantage

Client requirements:
Like other airlines after 9/11, this company saw a rapid decline in its passenger count that required it to reduce costs dramatically while finding innovative ways to attract passengers. The airline chose to differentiate its services by offering more security-rich, personalized services for customers who were becoming increasingly Internet-savvy.

Solution:
IBM Global Business Services helped the company revitalize and integrate the airline’s entire service chain. Ultimately, real-time data on every customer contact—from sales and marketing to reservations, ticketing, check-in and in-flight services—will be available through security-rich, integrated online profiles. And IBM now manages the airline’s systems. Each machine includes IBM Embedded Security System technology, which is designed to keep unauthorized users out, verify the integrity of e-mail and online commerce and protect sensitive data.

Benefits:
- Improved customer experience with a real-time, comprehensive view of customer information
- Positioned company to become fully digitized and generate more than half of sales via the Internet by 2006
- Provided ability to rapidly create and introduce differentiating services
- Reduced IT-related expenses and freed up capital for ongoing business transformation initiatives

COMMUNICATIONS

<table>
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<tr>
<th>LOCATION:</th>
<th>Finland</th>
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<tr>
<td>INDUSTRY:</td>
<td>Travel and transportation</td>
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<tr>
<td>PROFILE:</td>
<td>One of the world’s oldest airlines serving more than seven million passengers internationally with scheduled and charter flights</td>
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<tr>
<td>SIZE:</td>
<td>10,000+ employees</td>
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Luxury resort company increases sales with a security-rich, wireless shopping network

Client requirements:
This client’s resorts offer entertainment, sports and recreational activities, good food, childcare and shopping. To increase sales, the company wanted to implement a “point-of-sale everywhere” system that would allow customers to purchase food, beverages, clothing and souvenirs quickly and easily from locations throughout its resorts, including beaches and other outdoor areas. The company also wanted better visibility of sales transactions across all resort locations.

Solution:
IBM Global Technology Services and IBM Business Partner World System Consulting deployed a wireless point-of-sale network that enabled the company’s guests to quickly, securely and easily make purchases from kiosks located throughout the resorts. Guests are issued Quick Pay badges with smart card technology, which allow them to accrue loyalty benefits that they can use during their current stay or future visits. The wireless system provides the security and visibility the company needed to improve its customer relationship management and supply chain management processes.

Benefits:
• Provided a dynamic, security-rich and resilient infrastructure with complete IP connectivity at all locations
• Increased sales by 20 percent within resorts
• Reduced costs by 10 percent by optimizing the supply chain
• Improved customer satisfaction and enhanced loyalty
Online auction company improves customer experience by enhancing network infrastructure

Client requirements:
For an online auction company, portal responsiveness, security and availability are competitive differentiators. As auction momentum grew, this company’s existing infrastructure struggled to support large surges in user traffic that outpaced the capabilities of the company’s servers and load balancers. Secure Sockets Layer (SSL) traffic was placing additional stress on the servers. And firewalls were nearing capacity, resulting in user connections being dropped. The company needed to change its IT infrastructure to support the increase in customer traffic without compromising security.

Solution:
IBM Global Technology Services helped the online auction company improve its IT infrastructure to support increased traffic. IBM installed and configured new Cisco networking equipment, including a Cisco Catalyst 6509 Switch with firewall, content-switching modules, SSL accelerator modules, line cards for servers and other switches arranged in a redundant configuration. IBM also provides ongoing maintenance services.

Benefits:
• Improved ability to support traffic spikes and future increases in traffic
• Increased transactions and revenue enabled by faster response times and more reliable and secure connectivity
• Improved utilization of server resources
Shipping company secures network from hackers and other threats

Client requirements:
This cargo shipping and logistics company is focused on North Atlantic marketplaces. Realizing it was vulnerable to hacker attacks, the company needed an experienced IT partner to help it quickly address its current and future network security risks.

Solution:
IBM Global Technology Services – Integrated Technology Services helped the company develop a plan to improve its network security and minimize the risk of hacker attacks. Using the IBM Value Blue method, a multilevel methodology designed to seamlessly align a company’s IT assets with its strategic objectives, IBM delivered an executive report and a detailed technical report with findings and recommendations.

Benefits:
• Provided a prioritized, time-saving plan for implementing a new security program
• Reduced spam and lowered the risk of virus attack
• Improved IT staff productivity by simplifying management needs
Telecommunications company launches new services on a security-rich platform

Client requirements:
This Chinese telecommunications provider wanted to use a QUALCOMM wireless technology platform that enables users to access a wide variety of wireless applications through their phones. The client wanted to use the platform to gain a competitive edge. To do so, however, the telecommunications company needed a new infrastructure to support security-rich application downloads and billing services.

Solution:
IBM Global Technology Services delivered a comprehensive solution encompassing hardware, software, services and wireless expertise. IBM products and services are involved at all phases of the solution, including wireless application downloads, transactions, data storage, backup, long-term storage and performance monitoring. IBM Global Technology Services provided enhanced security features for the infrastructure, and IBM Global Business Services helped develop the billing application, complete with authentication.

Benefits:
- Attracted millions of new customers with the value-add service offerings
- Increased reliability and availability, allowing for 24x7 services to customers
- Enhanced security for sensitive transactions
Television broadcaster upgrades network security

Client requirements:
The client is a leading commercial broadcaster. As a proactive measure, the broadcaster upgraded its network security capacity to include sophisticated tools such as intrusion detection, anti-spam and network monitoring. The upgrade required the company to commit staff to ongoing monitoring and analysis, but hiring additional staff was a costly and time-consuming endeavor. The company needed a best-in-class security solution from a vendor with expertise in network security.

Solution:
IBM Global Technology Services – Integrated Technology Services implemented an IBM Secure 24® system, an advanced and intelligent 24x7 security management solution. The Secure 24 solution monitors feeds from the component parts of the company’s network security infrastructure and evaluates threats based on agreed-on parameters. Incidents identified as threats trigger alerts that escalate directly to the company’s internal IT team with recommendations for remediation. Plus, the Secure 24 solution provides reporting and a biannual security review.

Benefits:
• Enhanced network protection and reliability with 24x7, real-time monitoring and analysis
• Improved security-related decision making, helping to reduce risk
• Enabled internal staff to focus on strategic tasks and helped reduce the company’s management overhead
Travel company increases flexibility, customer responsiveness and security

**Client requirements:**

This online booking travel company handles everything from negotiating rates to tracking bookings to taking calls from attendees. The company’s back-end infrastructure was becoming increasingly complex. Web response time had stretched to 20 seconds for customers, and call-center reps didn’t have a real-time view of customer account information.

The company needed a highly resilient hosting solution that was flexible, could scale and would provide a security-rich environment—24x7. The company also wanted comprehensive IT management and security services, which would allow its own IT team to develop applications for core offerings.

**Solution:**

The company simplified its infrastructure by migrating to a more agile, security-enhanced, open-standards-based platform in a state-of-the-art IBM facility. The company also off-loaded non-core IT management responsibilities to IBM. IBM helped the company architect an enterprisewide security solution designed to fully protect the company’s data and systems. The design also helped ensure that the security environment could constantly evolve with business needs.

**Benefits:**

- Positioned the company to drive revenue growth, increase market share and improve bottom line
- Enhanced overall business flexibility and security
Brewery consortium continues an ongoing program to improve IT security

Client requirements:
This client is a holding company for a large Austrian brewery consortium. With locations in Austria and other countries in central Europe, the company needed objective security consultants to verify that previously identified security measures had been implemented properly. It also needed to conduct a new assessment targeting potential security exposures through the Internet and phone systems. The company was concerned that attacks on its systems might reduce the availability of its critical business applications.

Solution:
IBM Security and Privacy Services consultants helped perform the assessment. Given access to the company’s network, IP addresses and telephone numbers, the IBM team performed internal and external security reviews and tested the IT systems’ vulnerability to penetration. The goal was to measure the potential impact of certain attacks or intrusions on system and network availability.

Benefits:
• Received concrete recommendations to help reduce the risk of intrusion, including:
  – Discrete user passwords and tighter access control
  – Updated software
  – Elimination of unnecessary user services
Packaging company implements virus and spam protection

**Client requirements:**
This client is a privately owned packaging company. Each of its 100 employees was receiving approximately 400 spam e-mails per day. This deluge of unwanted e-mail was troubling because the client didn’t have virus protection for its communication system. To reduce exposure to viruses carried in spam, and to minimize the spam received, the client needed an e-mail security system.

**Solution:**
The client was attracted to the built-in redundancy of IBM’s e-mail security services and IBM’s strong reputation. Implemented by IBM’s Business Continuity and Recovery Services specialists, the solution features e-mail anti-virus, anti-spam and content-filtering, which scan for threats that occur at the Internet level—before unwanted e-mails reach the company’s network.

The anti-virus service uses multiple commercial scanners and patented artificial intelligence to detect and stop viruses and proactively scan for new threats. The anti-spam service combines spam-filtering technologies and configurable blacklists/whitelists to identify and reroute spam. The client can specify how intercepted spam should be handled. The content-filtering service uses patented image-composition analysis to detect inappropriate images attached to e-mails. It enables different sensitivity settings and routing options.

**Benefits:**
- Increased productivity and enhanced bandwidth because 98 percent of spam is stopped at the network level
- Reduced the risk of legal liability
- Ensured that e-mail is protected during server outages because IBM backs up operations
Retailer improves customer experience and streamlines supply chain with security-rich system

Client requirements:
This retailer sells furniture and household items from 130 showrooms. The client’s reliance on printed catalogs, samples and other materials provided no real-time visibility into the latest product images and inventory levels. The lack of information sometimes prevented customers from ordering products because they couldn’t visualize their preferred style or their order couldn’t be confirmed fast enough. Meanwhile, the central delivery center didn’t allow vendors to access supply chain data. Vendors were frustrated, and replenishment times were lengthy. The company sought a mobile sales tool that staff could use with customers and a system that integrated with its vendors to streamline the supply chain. The company also wanted to prevent intrusion on its network.

Solution:
IBM Global Technology Services helped the company design an innovative mobile solution for its sales team. The infrastructure connects every showroom and provides sales staff with wireless access to product images, up-to-date inventory and real-time ordering. The delivery center is also linked to a robust IT platform. The entire infrastructure is protected by IBM security features—such as advanced firewall and cryptography functionality—and user authentication prevents intrusion.

Benefits:
- Improved customer experience
- Shortened sales process and increased staff productivity
- Streamlined supply chain by providing vendors with remote access
- Enhanced network protection
Technology provider establishes a global security policy

Client requirements:
The client is a large, global wholesale provider of technology products and supply-chain optimization services. The ability to rapidly adapt and respond to internal and external changes and continue operations with limited impact to the business is essential to a technology distributor. The high-volume business—which engages in constant communication with its resellers—needed high availability from its IT infrastructure. Realizing that strong, global security policy and management are keys to maintaining high availability, the company wanted to perform a global security audit and close any gaps in its security resources.

Solution:
As the first step in this ongoing engagement, IBM Global Technology Services conducted an IT penetration and systems analysis at 40 of the company’s worldwide sites. The data will be used to benchmark the current practice in each location against corporate policy and industry best practices. In addition, IBM is assessing the company’s wireless usage and reviewing its security policy and governance model. As a key piece of this engagement, IBM provided a consultant to act as senior security officer for the company. The consultant works with staff on a daily basis and has become a valued member of its security team.

Benefits:
- Gained a deeper understanding of security threats along with a plan for addressing risks
- Increased availability of systems through a reduction of security exposure, enabling consistent, timely order processing and shipments
- Minimized the potential impact of staff turnover by providing a resident security expert
Textile company blocks hackers with IBM’s help

Client requirements:
This textile company manufactures cotton, polyester, mélange and flame-retardant yarns and fabrics. Its operations relied on a Web-enabled data center that housed highly sensitive, business-critical information. Data-center security was a primary concern; and while the company’s basic security measures thwarted most Internet security threats, external attacks were becoming more sophisticated and affecting day-to-day operations. To secure the integrity of its business data and prevent revenue loss that could result from system downtime, the company needed to upgrade and diversify its Internet security policies.

Solution:
IBM Global Technology Services helped the company revamp its Internet security infrastructure, starting with a site survey to understand the company’s network topology and security focus. Then, IBM designed and implemented a comprehensive, Cisco-based security solution. The Integrated Technology Services team also installed Cisco Content Switches for application and server load balancing to optimize the data center’s Web-based performance. IBM helps ensure continuous operation of the solution by providing ongoing technical support as part of a three-year service contract.

Benefits:
- Protected business-critical data with a more robust security solution
- Increased uptime and reduced revenue loss through the mitigation of hacker attacks
Austrian bank conglomerate establishes a consistent security policy

Client requirements:
In a cooperative venture, three Austrian banks share a common data center and IT management organization. Like all banks, the client was compelled by the Basel II accord to improve financial stability and reduce operational risk. Since the banks lacked the necessary expertise in house, it decided to work with an experienced IT provider to evaluate and improve its existing security programs.

Solution:
IBM Global Technology Services performed an assessment of the joint data center and the security programs of each bank. Determining that the banks possessed varying security capabilities, IBM consultants worked to establish a consistent security policy in line with Basel II requirements. IBM also helped the banks create an awareness program to ensure that employees would carry out the security policies effectively.

Benefits:
- Reduced operational risk through more effective, unified security programs
- Supported compliance with Basel II requirements, reducing the risk of incurring regulatory fines
Automotive finance company gets a roadmap for success

Client requirements:
Initiated as a small organization with eight associates, the company today is the one of the largest captive finance companies worldwide. The client needed a consistent security program for its IT operations in Brazil, Argentina and Venezuela. It set out to evaluate the effectiveness of the security measures in each country, identify weaknesses and then align them with a unified strategy.

Solution:
Consultants from IBM Global Business Services and IBM Application Management Services began by assessing the company’s capabilities and readiness across ten key areas of the business, from security policies to access control to compliance. Drawing from extensive experience assessing the security practices of other clients, IBM performed a benchmark test that compared the finance company’s capabilities with the practices and performance of industry leaders. The consultants also performed intrusion tests on the company’s Web-based systems to identify weakness and recommend improvements.

Benefits:
• Unified the approach to security planning and execution across borders
• Created a prioritized, measurable roadmap for improvement
• Reduced high-risk security exposures
• Enhanced on-the-job training
**Bank aligns data center of newly acquired company with corporate standards**

**Client requirements:**
This major European bank acquired a software development company, and it needed to expand the acquired company’s data center and network to support the development of customer-centric solutions. It also needed to implement different security and networking solutions in the newly acquired data center. A corporate security regulation prohibited using the same vendor to provide security and network solutions. The bank wanted a provider to integrate systems and products from two vendors.

**Solution:**
The bank engaged IBM Global Technology Services to design and implement the new security and network solutions at the data center. Working with IBM, the bank implemented a Nokia-based security solution and a Cisco-based networking solution. IBM provided end-to-end services that included design, deployment and support for the solutions, as well as service-level agreements for problem resolution.

**Benefits:**
- Aligned security and networking solutions with corporate requirements
- Increased overall network performance
- Enhanced security and network redundancy of newly acquired company’s data center
Danish bank upgrades wireless devices to protect sensitive data

Client requirements:
The client had previously invested in handheld devices with e-mail and other personal information management (PIM) functionality to boost the productivity of its mobile employees. Inevitably, the devices became outdated, particularly in the area of security. Concerned with the integrity and security of data transmissions, the bank decided to upgrade its mobile technology. The bank lacked the expertise, however, to evaluate its options quickly and effectively implement a solution.

Solution:
The IBM team began by screening a variety of products—comparing their capabilities with the bank's business and technical requirements. IBM recommended implementing an Excitor product on Nokia handheld devices and then implemented the solution and provided education services. Going forward, IBM will provide ongoing maintenance support.

Benefits:
• Provided a faster, more comprehensive selection process
• Enabled security-rich e-mail and calendaring functionality, with encryption for sensitive bank data
• Improved usability, leading to higher productivity
Egyptian bank safeguards online banking services

Client requirements:
Like other airlines after 9/11, this company saw a rapid decline in its passenger count that required it to dramatically reduce costs while finding innovative ways to attract passengers. The airline chose to differentiate its services by offering more personalized services for customers who were becoming increasingly Internet-savvy.

Solution:
The bank adopted an IBM Tivoli® security solution, designed and implemented by an IBM Global Technology Services team. Each time customers log in, their digital certificates are authenticated by IBM Tivoli Access Manager software. IBM Tivoli Risk Manager software enables the bank to integrate all the security systems associated with the Web application into a single point of control, so the bank can closely monitor the environment for intrusions or vulnerabilities.

Benefits:
- Protected confidential data and reduced operational risk
- Increased customer satisfaction and boosted loyalty
- Enhanced revenue potential
Financial services company increases security and improves productivity

Client requirements:
This client serves 60 million clients in 50 countries. Like others in its industry, the company faces increasingly stringent government regulations and client scrutiny with respect to its data security. To comply with increasing requirements, it needed to upgrade its identity-management practices. The company was using three main security databases to control access rights for its many employees worldwide. But every user profile was created, managed and deleted manually.

Solution:
IBM provided an integrated identity-management solution based on IBM Tivoli Identity Manager and IBM Tivoli Access Manager software, as well as design and deployment support from IBM Global Technology Services. The identity-management solution draws employee information directly from the company’s PeopleSoft human resources applications. The company plans to enable single-sign-on capabilities for users—a feature that will help reduce the number of help-desk calls requesting password resets.

Benefits:
- Anticipated cost savings of €15 million per year, including 25 percent reduction in help-desk costs
- Faster access-rights administration
- Improved ability to fulfill regulatory reporting requirements
**German insurance company strengthens its protection of client data**

**Client requirements:**
The insurance company needed to meet the stringent data privacy rules of the Bundesdatenschutzgesetz (BDSG)—the German law governing the protection of personal data. Under the law, unauthorized personnel are not allowed to view, edit or copy a client’s personal data. At the same time, authorized users must be able to securely and efficiently access required information. The company sought a high-security, user-friendly data management solution that could be deployed quickly, cost-effectively and uniformly across its branch offices.

**Solution:**
SerCon, part of IBM Global Business Services in Germany, implemented an IBM Tivoli software distribution solution to meet the insurance company’s requirements—and help it comply with the BDSG. IBM managed the entire implementation, including providing project management, tool selection, operational concept and rollout design, support to align service-level agreements, and testing. The companywide system management solution includes IBM Tivoli Distributed Monitoring, IBM Tivoli Software Distribution, IBM Tivoli Remote Control, IBM Tivoli Inventory, WISE Packetstudio and MSI Packet Assembling software.

**Benefits:**
- Improved compliance with German BDSG requirements
- Rapid deployment with virtually no impact on normal business operations
- Improved privacy of client data
German savings bank increases network reliability and flexibility

Client requirements:
Facing stringent regulatory requirements laid out in the Basel II accord, the bank needed to improve the availability of its network, which was based on outdated Token Ring and asynchronous transfer mode (ATM) technologies. Significant downtime could drive customers away, as could slow or unreliable transactions. To comply with regulations and keep its customers satisfied, the bank needed to revamp its network infrastructure.

Solution:
The organization adopted a comprehensive network security solution from IBM Global Technology Services. IBM began by performing a network assessment, identifying weaknesses and requirements and drawing up recommendations for improvement. The IBM team then planned, designed and implemented a network infrastructure built on Cisco routers and switches.

Benefits:
- Increased bandwidth by 20 percent, improving transaction speed and reliability
- Boosted network availability by 50 percent, helping meet stringent regulations
- Avoided significant business disruption during implementation
India-based financial services provider increases productivity and reduces maintenance

Client requirements:
The client’s offerings include financial products—such as charge cards, card member lending products and traveler’s checks—and personal and institutional financial services, as well as corporate banking and global trading services. The company found its customer base expanding significantly. However, its two existing service centers in Delhi, India and Sydney, Australia lacked the network resources to accommodate the recent spike in business. To remain responsive and enable future growth, the company needed to add a new customer response center with a scalable, security-rich network infrastructure.

Solution:
IBM Global Technology Services designed and implemented a local area network (LAN) for the company’s new customer response center in India. The LAN was based on a number of key design principles, including high availability, scalability, flexibility, fault tolerance and cost-efficiency. For security, IBM utilized Cisco PIX525 firewalls between the wide area network (WAN) links and the LAN.

Benefits:
• Virtually eliminated downtime and increased employee productivity
• Provided faster, more secure and more reliable access to local and remote servers
• Simplified network management
• Reduced the need for network maintenance
Insurance group improves compliance with an enhanced security plan

Client requirements:
This client is a successful group of insurance companies in Germany that needed to enhance its security program to comply with government regulations and internal business requirements. Its existing security plan and infrastructure were outdated and failed to address many key security risks, such as unauthorized system access and the integrity of backed up data. Because the company lacked the in-house skills to address these problems, it sought an IT provider with experience in delivering security solutions and strategy.

Solution:
With extensive expertise in the security area, IBM Global Technology Services performed a security assessment, examining the client’s existing procedures and identifying the shortfalls in relation to current business needs. Then the IBM team created a customized security plan that established guidelines, standards, procedures and technical specifications—creating a comprehensive framework for the client’s IT strategy.

Benefits:
• Improved compliance with internal and external security requirements
• Increased adaptability to accommodate changing business conditions and regulations
Insurance provider adopts a security-rich virtual private network (VPN) solution

Client requirements:
As the company prepared to open several new branches, it realized that its inflexible, difficult-to-install Frame Relay network would cause problems for expansion. Searching for a more flexible, up-to-date solution, the client chose to migrate to a VPN. This move, however, was not without risk; the client needed an advanced security solution to protect its reengineered network infrastructure. Lacking the in-house skills to perform the migration and implement the needed security precautions, the company sought an experienced provider with expertise in networking and security.

Solution:
IBM Global Technology Services migrated the network from Frame Relay technology to VPN and then designed and implemented a security infrastructure to support it. In upgrading the client’s central firewall, IBM implemented two IBM eServer™ xSeries® 235 servers to operate as the gatekeepers for the environment.

Benefits:
- Reduced costs by 40 percent
- Provided the flexibility to add mobile users and integrate service locations as needed
- Offered consistent security across the network, reducing vulnerability to intrusion
International bank invests in new security infrastructure

Client requirements:
One of the United Kingdom's largest financial companies, this bank provides retail banking, investment banking and asset management services to a wide range of personal and business customers worldwide—with operations in more than 70 countries. The bank was using a cryptographic infrastructure that was developed in house, which required an extensive, highly skilled technical staff. The infrastructure was unable to support recent changes in industry regulations and bank requirements. The bank wanted to replace the system with a more modern technology that could enable centralized control.

Solution:
The bank worked with IBM Global Business Services to perform a security assessment and identify a suitable solution. First, IBM consultants conducted workshops, documenting the bank’s business and technical needs. Then, IBM compared those requirements to the bank’s technology options. The bank settled on Distributed Key Management System (DKMS) technology and employed IBM’s services to help design and implement the solution.

Benefits:
• Centralized and simplified key infrastructure with automated features
• Reduced need for in-house expertise
• Improved compliance with recent financial services industry regulations
Investment company implements new security policies

Client requirements:
Faced with government regulations concerning security and privacy—such as the Gramm-Leach-Bliley Act and the Sarbanes-Oxley Act—this financial organization needed to ensure that its existing security policies supported compliance. It also recognized that security precautions were essential to customer confidence and satisfaction. But keeping costs low was equally important for the investment firm. Thus, it set out to tighten security controls while improving internal efficiencies to achieve cost savings.

Solution:
Consultants from IBM Global Business Services conducted a security assessment, performing a gap analysis to identify vulnerabilities. IBM worked closely with the client’s IT staff to ensure proper documentation and knowledge transfer—and even incorporated a validation phase with auditors from the Federal Reserve Bank and the Securities & Exchange Commission (SEC). Then, armed with recommendations for improvement, IBM helped the organization implement a security policy based on best practices and designed to remove cumbersome administrative layers that tend to delay responses to security threats.

Benefits:
- Increased compliance with regulations
- Improved ability to respond to security threats, minimizing impact on business operations
- Enhanced management efficiency, resulting in fewer support requirements and lower costs
Italian banking IT firm adds RFID capabilities and monitoring

**Client requirements:**

Recently, this IT firm opened two new buildings designed to house IT operations and sensitive financial information. The company knew that these facilities would need tight security, but it also wanted to keep costs down. In a traditional security solution, the buildings would have called for two security guards—one at each site to monitor physical access to doors and gates, prevent intrusion and guard against fire damage, as well as perform other duties. The client reasoned that it could cut staffing costs in half by enabling one employee to monitor both buildings through a digital, remote security system.

**Solution:**

The organization adopted a digital security surveillance solution, employing the implementation expertise of IBM Global Technology Services. IBM implemented a General Electric Secure Perfect V6.0.1 software security platform, which provides a customizable control room view of each of the two buildings and manages all the security events. For each building, the solution provides two security clients for local patrolling that are linked through an IP network to security cameras. One security guard can access video footage quickly from any of its local video workstations or through a remote server — and monitor both buildings easily.

The Secure Perfect solution is integrated with a radio frequency identification (RFID) reader that scans identification badges. The security system is also integrated with the company’s intrusion panel monitor device, a smoke detector system, a video motion detector and server monitoring.

**Benefits:**

- Reduced need for guards by 50 percent
- Helped prevent intrusion, fire damage and other problems in the server rooms
Korean bank gains a competitive edge with encryption services

Client requirements:

After a merger, this bank became part of a global network of financial services organizations. One of the company’s top priorities was security, as it had already witnessed damaging security breaches with direct competitors in Korea. As a financial services organization, the client faced pressure from industry leaders and customers to institute security measures to protect sensitive data such as personal identification numbers (PINs) and national identification numbers (NINs). Enhanced security measures would require complex encryption algorithms, which, in turn, would require high-performance servers.

Solution:

The bank worked with IBM Global Technology Services to carry out a security encryption implementation that would safeguard sensitive customer information. IBM helped to install an IBM eServer zSeries® 990 server with a powerful hardware security module (HSM) to generate complex cryptographic keys. The server features common cryptographic facilities (CCFs), which run the encryption and decryption services while optimizing processor usage and enhancing performance. The IBM z/OS® V1.4 operating system helps achieve high performance by off-loading more complex operations to a combination of CMOS and PCI Cryptographic Coprocessors on the zSeries server. The solution also utilizes IBM DB2® Utilities Suite for z/OS V7.0 software, which runs on the zSeries server and stores all encrypted customer PINs and NINs.

Benefits:

- Provided Korea’s first end-to-end encryption system, making this client a leader in banking security
- Gained exceptional stability and scalability, paving the way for future growth
- Experienced minimal business disruption during implementation
Large agricultural bank reduces its exposure to risk

Client requirements:
This agricultural bank provides loans to agricultural cooperatives and other agribusiness companies such as telecommunications firms, water and power supply providers, and food and grain producers. It also supports overseas agribusiness loans under an agreement with the U.S. government. Because the bank had identified inadequacies in its security program, it needed to conduct a full-scale assessment of its existing security controls and capabilities and establish a comprehensive, effective program in its IT environment.

Solution:
IBM began by reviewing the current security controls and creating an information asset profile. Then, as part of the development of a comprehensive security policy, IBM helped identify and document security needs and objectives, develop and document security processes surrounding user accounts, validate and update the business continuity and disaster recovery strategy and develop a data classification and control process to prioritize the protection of key assets.

Benefits:
- Reduced exposure to risk with comprehensive, standardized security policies and processes
- Developed a clear understanding of the costs involved with maintaining a security program
- Experienced a marked improvement in audits performed by the Farm Credit Administration
Leading investment bank gains a security-rich extranet

Client requirements:
For years, the organization sent documents to customers via fax machines and the postal service. It needed to give customers more immediate, convenient access to information by securely providing it online. The sensitive financial information had to be protected, or the company could lose customer and industry confidence as well as become subject to regulatory fines or lawsuits.

Solution:
The bank chose IBM Global Technology Services to design and implement a security-rich extranet infrastructure using IBM Tivoli Access Manager for e-business software, IBM Tivoli Directory Server software and VeriSign managed public key infrastructure (PKI) services. The managed PKI services issue digital certificates to customers. These certificates are used for authentication through the Tivoli Access Manager system, which guards access to the extranet. IBM provides 24x7 infrastructure management services—including network, servers and security—at the IBM Web hosting facility in Boulder, Colorado.

Benefits:
- Provided quick, easy and security-rich access to online information—with single sign-on and PKI digital certificates
- Achieved award-winning customer satisfaction and retention (awards included “Best Technology” and “Best Reporting Capability: Derivatives”)
Leading Spanish savings bank increases its protection against spam and viruses

Client requirements:
An influx of spam put the bank at greater risk of virus attacks and kept the IT staff excessively focused on maintenance tasks. The company needed a new anti-spam package but, facing a flood of nonsubstantive sales and marketing pitches, found it difficult to sort through the options. So the bank decided to consult an experienced technology provider that could help evaluate the options by documenting and comparing concrete facts, including performance metrics and usability features.

Solution:
IBM Global Technology Services performed an objective security assessment. The team began by generating a list of the 20 best anti-spam options, drawing information from analyst papers, product reviews and intellectual capital. Then, after comparing the technical specifications and features to the bank’s business and technical requirements, the IBM team narrowed the pool of products to four. These finalists were tested in a live environment, which helped the bank determine the most appropriate solution based on performance metrics and usability features.

Benefits:
- Provided a systematic, speedy selection process based on technical specifications and network expertise, not marketing claims
- Reduced spam and risk of virus attack
- Increased IT staff productivity as a result of simplified management
Private Colombian bank enhances security and automates user administration

Client requirements:
The bank’s central IT department relied upon manual processes to handle the administration of user accounts. Slow and inaccurate, these methods placed a time-consuming burden on help-desk resources and put security compliance at risk. The company needed to automate its user management and password administration processes, allowing its IT employees to spend more time on business-critical projects.

Solution:
IBM Global Technology Services worked closely with the client to develop a customized solution. IBM Tivoli Identity Manager software automates all user management functions, including password resets and user identity changes, while IBM Tivoli Directory Integrator software provides the synchronization layer for the solution, coordinating the back-end identity repositories. These repositories include a human resources system and user accounts for the organization’s IBM Lotus® Notes®, Microsoft® Windows® and Web applications.

Benefits:
- Reduced demand for IT administrative services
- Decreased help-desk calls and improved IT efficiency
- Enhanced security features
Prominent international bank cuts costs and boosts efficiency

Client requirements:
With more than 3,000 branches in over 60 countries and a staff of more than 100,000 full-time employees, this international bank needed to improve collaboration between employees and reduce real estate costs. It decided to consolidate locations into a single office tower and implement an IP network to support its voice, video and data traffic. The bank sought a reliable IT partner to serve as the single point of accountability for the project, which would include implementing the new network, developing and deploying a converged network management solution and providing project management services.

Solution:
IBM Global Technology Services delivered a LAN infrastructure that provides security-rich support for voice, video and data networking. The solution included planning, design, procurement of Cisco Catalyst 6000 switches, staging, phased rollout and cutover services. In delivering the converged network, the IBM team also created a network management solution and provided project oversight, design and standards guidance, and proof-of-concept test coordination. The team’s management of the LAN switching, IP telephony and systems integration phases provided a consolidated framework for project activity.

Benefits:
- Reduced costs and increased operational efficiency
- Speeded problem resolution and reduced network downtime
Aerospace and defense provider joins forces with IBM

Client requirements:
This company’s mission is to establish an open and secure network connecting manufacturers and aerospace and defense (A&D) companies around the world. It serves buyers and suppliers with solutions that address everything from secure Internet connectivity to complex back-end system integration. The client needed to respond to U.S. Department of Defense (DoD) mandates that suppliers use public key infrastructure (PKI) technology to enable suppliers, contractors and the DoD to engage in trust-based communication.

Solution:
IBM helped develop a methodology that would provide a framework for evaluating, planning and implementing processes and technologies to address the identity-management challenges faced by the client’s customers. The methodology delivers a blend of technologies, policies and processes to ensure optimal use of existing resources and to maximize end-user acceptance. The methodology’s four-phased approach—plan, design, implement and run—leverages appropriate services and technologies to complement the client’s customers’ existing states of readiness.

Benefits:
• Decreases identity-management costs
• Reduces security risk and liability
• Supports compliance with minimum identity-management standards
Chemical company gains a security-rich remote communications system

Client requirements:
Without an enterprisewide communications system, the company’s large mobile salesforce and other remote employees found it difficult to communicate and collaborate. They needed remote access to e-mail, business applications and the Internet so they could stay informed and in touch with the central offices.

Solution:
Seeking a provider to design, implement and manage a security-rich, enterprisewide communications system, the client turned to IBM Global Technology Services. The new infrastructure includes a Cisco firewall and a VPN, virus protection and a Web-based e-mail system—all running on IBM eServer xSeries servers.

Benefits:
- Provided speedy, security-rich communication and collaboration across the distributed enterprise
- Shortened the sales cycle
- Enabled faster, more informed decision making
- Protected the system from intrusion and virus attacks
Crystal products company secures its network

Client requirements:
This global marketer of crystal products supplies crystals to consumers and to the crystal-processing, fashion, light and architecture industries. Products include crystal jewelry stones, grinding and dressing tools, precision optical equipment, giftware and décor. To enhance network security, the company wanted to engage an outside source to perform “ethical hacking” to determine its network’s vulnerability to hacker attacks.

Solution:
The company hired IBM Global Technology Services – Integrated Technology Services to conduct the testing. It provided IBM with IP addresses of a number of its systems that were accessible via the Internet. Then IBM was given a range of telephone numbers that permitted connections with internal servers. IBM tested those systems and investigated other telephone extensions that might have rogue modems connected to them. Lastly, IBM was given access to internal local area network ports to examine the traffic and perform active system intrusion.

Benefits:
- Provided a comprehensive assessment of the network’s vulnerabilities
- Increased awareness of security issues
- Improved network security
Oil and energy supply company implements a new security plan

Client requirements:
In addition to supplying oil and other energy products, the company maintains an extensive network of service stations and offers a broad range of automotive goods and services and a wide selection of household items, food products and other merchandise. The client’s complex IT environment spanned its headquarters, a backup center, multiple branch offices and subsidiaries, and hundreds of gas stations, warehouses and distribution vehicles. But it did not have a formal security organization or backup processes. It sought a trusted IT vendor to help it develop a comprehensive security plan.

Solution:
IBM Global Technology Services assessed the company’s security systems and helped it establish a comprehensive program for business security and continuity. A team from Integrated Technology Services – Business Continuity and Recovery Services (BCRS) developed an enterprisewide solution that included strategies for managing risk; an action plan for tackling security issues; control definitions for protecting customer data; identification of vital applications, processes and systems required for continued operation in the event of a disaster; a strategy for recovering business information systems after a disaster; and a detailed description of recovery processes after a disaster. IBM also helped the company establish a “hot” backup recovery site approximately ten kilometers away from its production data center.

Benefits:
• Increased level of information security and mitigated IT risks in the event of a disaster
• Improved protection of critical business data
PETROLEUM COMPANY BUILDS A HIGHLY AVAILABLE, SECURITY-RICH DATA CENTER

CLIENT REQUIREMENTS:
This client sells its products through a wide network of petrol stations, kerosene dealers, liquefied petroleum gas (LPG) distributors and lube shops. It also supplies fuel directly to several airlines and other industries. For business-critical applications, particularly those that govern day-to-day invoicing, the client needed higher levels of availability and reliability. It set out to build a state-of-the-art data center that could support uninterrupted business operations. Because the data center would serve as the IT hub, it needed a solid foundation and the flexibility to expand and integrate new systems, as necessary.

SOLUTION:
The company worked with IBM Global Technology Services to design, build and support the new data center. IBM assisted in all phases of the implementation, including facilities design, equipment installation and security infrastructure development. The infrastructure includes a fire detection, alarm and automatic suppression system; an access control system; and closed circuit televisions (CCTV) for monitoring the facilities. To help ensure high availability, IBM established an automatic failover setup between the new data center and the client’s existing facilities.

BENEFITS:
• Virtually eliminated downtime for business-critical applications such as invoicing
• Lowered risk ratings from analysts due to the security-rich, redundant infrastructure
• Provided scalability to help accommodate future needs
Shipbuilding leader enhances network management and security

Client requirements:
The client is a global leader in ship repair and the construction of new small to midsize customized vessels. It maintains a strategic network of facilities in several regions, including Asia Pacific, the Gulf of Mexico, Brazil, the Caspian Sea, the Middle East and the North Sea. To accommodate significant global business growth, the client needed to upgrade its existing network infrastructure and improve its network management capabilities.

Solution:
IBM Global Technology Services collaborated with the client to develop a solution extending beyond the project’s original requirements to deliver additional business value. IBM delivered an integrated network management and IT security solution by combining key IBM services and technology, including enterprise security architecture and IBM Tivoli software as well as project management, network management and onsite support services.

Benefits:
- Enhanced security features
- Streamlined system management and troubleshooting
- Provided scalability to respond to increasing demands
- Aligned IT with business needs
Educational organization enables security-rich wireless access on campus

Client requirements:
The client is an educational organization designed to train children and adults for the French baccalauréat exam and business and technology degrees. It also offers specialized training for the sales, retail and tourism fields. To remain competitive, the client needed to provide the latest technology to students and faculty. At the same time, it also needed to protect systems and data from intrusion. Previously, its students were able to access campus systems and the Internet only through wired terminals in classrooms and labs. The organization decided to implement a wireless network.

Solution:
Working with IBM Global Technology Services, the client implemented a security-enhanced wireless computing infrastructure, equipping students with IBM ThinkCenter M50 desktops and IBM ThinkPad T42 laptops. The IBM team installed 50 classroom access points to the organization’s new 802.11g wireless network. An authentication server was also installed to restrict access and enhance security of sensitive data and systems.

Benefits:
- Increased productivity for students and faculty by 30 percent
- Broadened access to learning resources—in a security-rich environment
- Improved competitive standing in attracting students and faculty

PUBLIC

LOCATION: France
INDUSTRY: Education
PROFILE: Education and training organization
SIZE: 100–499 employees
Government agency safeguards its data center with a fire-protection system

Client requirements:
This government agency realized it needed to enhance the physical security of its data center, specifically by installing a fire-protection system. The agency did not have the in-house skills to put the system in place, so it needed to find a leading technology provider to install and implement the solution.

Solution:
IBM Global Technology Services – Integrated Technology Services implemented a HI-FOG system from Marioff in the data center’s server room. The HI-FOG system’s fast-detection feature activates the system at the smallest sign of a fire, releasing water mist into the server room for ten minutes. The system is also equipped with a smoke-scrubbing component that removes smoke particles, which can be very damaging to sensitive technical equipment.

Benefits:
- Increased confidence that the data center is protected against fire
- Minimized likelihood of water damage
- Reduced potential for smoke damage
Government increases effectiveness and reduces costs with a security-rich, wireless network

Client requirements:
In addition to training police forces and judiciaries, this client provides economic and criminal investigation assistance to developing countries to help fight terrorism and defend human rights.

The agency wanted to team with an experienced network services provider with a significant presence in a Latin American country. It wanted the provider to assess, design and implement a network solution that would connect forensic agencies in three of the country’s cities to allow the agencies’ labs to share information from the evidence results database. The system needed to be able to support remote management. Lastly, the client wanted the vendor to provide ongoing support for the solution.

Solution:
IBM Global Technology Services first performed site readiness reviews for the local government and then conducted wireless metropolitan area network (WMAN) site surveys in the three cities. Next, IBM developed a proposal for a LAN that connects the forensic systems to the WMAN and to a VPN so that the software providers could have remote access. In addition to installing and testing the wireless network, including equipment and network management tools, IBM also documented the solution and continues to support it.

Benefits:
• Reduced the time agencies spend sharing information from days to seconds
• Provided secured connectivity through a LAN so that forensic systems can connect easily to the wireless network
• Enabled remote connectivity through a VPN, reducing time and costs
Government oversight organization enhances responsiveness and security

Client requirements:
This organization faced an e-government initiative that required it to improve information management, security and accountability. The goal of the initiative was to save money and improve the delivery of services to citizens. The organization needed ongoing systems integration, network services and maintenance support. It also anticipated needing major technology updates. It required an IT provider that could ensure up-to-date technology and services to support all of its major functions.

Solution:
IBM Global Technology Services – Application Management Services and IBM Global Business Services were contracted to provide services for six and a half years. IBM supports 8,000 users and provides an onsite team to support routine business activities. The major services and projects include validation and technical services, systems integration services, systems administration, technical design and performance services, and information and communications technology security service.

Benefits:
- Reduced total cost of ownership
- Provided faster support
- Supported a more collaborative work environment
- Improved compliance with security requirements
Healthcare provider secures network access and supports HIPAA compliance

Client requirements:
The client’s general production environment includes more than 30 enterprise applications, 75 department-based applications and multiple IBM Lotus Notes applications. Its call center receives more than 53,000 calls each year. Like other healthcare companies, the client was facing critical issues associated with HIPAA compliance. It needed a single-sign-on solution to manage the security issues associated with authentications for a large number of applications. The client also needed to reduce the number of help-desk calls about password and access issues.

Solution:
Working with IBM Global Technology Services and IBM Business Partner ActivCard, the client implemented an enterprisewide single-sign-on solution for efficient, seamless access to applications, automatic password updates, password randomization and enhanced authentication. In the future, IBM and ActivCard will help the client deploy biometrics and smart-card solutions.

Benefits:
• Improved security of patient data by standardizing access policies
• Improved compliance with HIPAA regulations
• Reduced help-desk costs associated with password and access issues
IBM Business Partner bolsters training company’s IT security teaching staff

Client requirements:
To its customers, this company imparts state-of-the-art knowledge in areas such as IT, legal, marketing, public relations and more. The client wanted to increase its training offerings in IT security to meet a growing demand for education on the subject. But the organization needed to find qualified IT security trainers—a difficult task, considering the limited number of trained individuals.

Solution:
The client selected SerCon, an IBM Business Partner and subsidiary of IBM Global Business Services, to provide training services to its customers. Leveraging SerCon’s capabilities, the company offers three-day workshops on topics that include risk management, technical security measures, public key infrastructure (cryptography), security in outsourcing engagements, risk costs and security certifications. SerCon provides trainers for one-half to one day of those training sessions.

Benefits:
- Enabled the company to offer three-day seminars about IT security
- Enhanced the organization’s reputation for training excellence
- Increased revenue by offering in-demand education
Land-registry agency becomes more responsive with automated, security-rich record system

Client requirements:
This client is a local government agency established to computerize and automate the region’s land-registry process. For years, land ownership records were stored in 46 branch offices. Each transaction had to be updated and signed by a judge for legal validation. The handwritten records were kept in 40,000 paper volumes and available to the public and business professionals, but locating a record was time-consuming and labor-intensive. The documents in the century-old system needed to be replaced by an automated electronic record system that could ensure security and proper authentication.

Solution:
IBM Global Business Services On Demand Innovation Services created a security-rich, online land-registry system that will eventually allow access to land-ownership records via the Internet. Notaries will be able to submit electronic requests to publish land-ownership transactions. To prevent unauthorized access, IBM built a biometric authentication framework into the application. It requires fingerprint verification, which ensures that only judges can validate online transactions. Other users—such as landowners, businesses, notaries and banks—can view certain records based on their profiles. IBM also built a scanning facility to convert the registry’s 40,000 volumes into electronic records. To help ensure security during transportation and scanning, IBM tracked each volume using RFID technology.

Benefits:
• Improved efficiencies and reduced costs with the online land-registry system
• Increased citizen convenience
• Virtually eliminated the need for notaries to travel to local courthouses
• Enabled banks to access registry data remotely
Large county government resolves user identity management challenges

Client requirements:
This county government for a large metropolitan area supports a complex IT infrastructure that provides services for county employees as well as for external government, commercial, business and public organizations. The county’s IT environment consisted of several different systems, applications and servers, each with independently managed user registries. The technologies had inconsistent security policies and enforcement mechanisms and inconsistent user lifecycle management procedures and processes, which were challenging and costly to maintain.

Solution:
IBM Global Business Services developed a plan for incremental multirelease consolidation of selected user registries that identified the tasks, deliverables and required resources specific for each release. IBM then provided a high-level identity management framework that presents the integration of IBM Tivoli Identity Manager software and Secure Gateway applications, identifies the proposed solution’s architectural components and outlines the user provisioning processes. The IBM team gathered data about the county’s key user provisioning business areas and performed a gap analysis of its security policies and standards. It also developed a user registry consolidation plan.

Benefits:
• Provided a plan for resolving existing identity management challenges
• Provided a roadmap for successfully upgrading to the Tivoli Identity Manager solution
Local government adopts an integrated portal with enhanced security

Client requirements:
This client is the governmental organization in charge of a Japanese city. Most of the client’s IT systems stood alone, isolated from all the others, causing a massive amount of manual paperwork. The government office wanted to increase efficiency and reduce costs by minimizing its dependency on manual administrative tasks. Its goal was to build a common infrastructure for all its business applications using open standards and security-rich technology.

Solution:
IBM Global Business Services led the project, providing infrastructure design and implementation services to create a common infrastructure that supports the office’s document management, financial accounting, human resources and salary applications. The solution is based on IBM WebSphere® and IBM Tivoli software running on 15 IBM eServer xSeries servers. IBM Tivoli Access Manager for e-business V5.1 software provides security-rich single-sign-on capabilities for the portal environment.

Benefits:
- Reduced costs by 30 percent
- Provided faster data sharing and improved productivity
- Enhanced security and enabled tighter access control
Medical center upgrades its network, protects against viruses and improves IT uptime

Client requirements:
This client’s facilities include acute care, subacute care, ambulatory care, physician offices, clinics, affiliated physician offices, adult day care and health parks. The medical center wanted to expand its IT capabilities, but budget constraints prevented it from maintaining staffing levels necessary to manage its existing complex IT environment. Associated management issues hampered the center’s ability to provide reliable IT systems for doctors and patients. Moreover, the center’s networking infrastructure was prone to viruses, limiting its ability to provide critical patient data when necessary.

Solution:
IBM Global Technology Services upgraded the center’s system. To improve operations, IBM helped deploy personal computers (PCs), which include ThinkVantage Technology tools to help safeguard data from viruses. Staff also use the Rescue and Recovery self-recovery feature to restore their systems after a failure. The one-button information and recovery solution helps users diagnose problems, get help and restore systems and files, even if the operating system won’t boot.

Benefits:
• Enabled IT staff to focus on core competencies because applications and systems are managed by IBM experts
• Improved quality and speed of healthcare through expanded electronic medical records capabilities
• Reduced costs for procuring and managing IT solutions
• Increased uptime with an upgraded, virus-protected system
Meteorological institute improves data security at high-altitude observatory

Client requirements:
The meteorological institute’s high-altitude observatory, accessible only via a long hike or cable-car ride, had an outdated IT infrastructure based on individual PC workstations. It needed to reliably record data around the clock, but the existing system lacked the redundancy and stability to keep data safe when the observatory was unreachable for days at a time. The institute needed a new IT infrastructure that would offer anonymous and authorized online access to observatory data, support the security-rich collection of all measurement data and provide security-rich data backups and virus protection.

Solution:
IBM Global Technology Services helped design, test and deploy a solution that comprises an upgraded Internet connection based on a 2MB directional radio link and a Cisco firewall, as well as two redundant IBM eServer xSeries 345 systems backed up by an IBM TotalStorage® 3580 Ultrium 2 Tape Drive device. IBM also helped deploy an authorized-access system for nonpublic and highly sensitive information over a VPN and RSA encryption security system, which requires user authentication through PINs that are regenerated every minute with intelligent key rings. The client plans to implement a public Web service on the IBM servers to offer real-time access to meteorological information over the Web.

Benefits:
• Enabled direct, real-time access to vital experimental data
• Provided the ability to maintain and adjust measurement devices remotely
• Reduced IT downtime to zero
Military education institution bolsters the security of its IT environment

Client requirements:
This military education institution had an aging client/server-based IT environment that could not meet current or future IT-related requirements to support its technology-focused mission. The institution needed to transition from a client/server to a Web-based environment, but its network security was not robust enough to support the transition. The institution also needed better redundancy and backup capabilities.

Solution:
The military education institution engaged IBM Global Business Services to assist with its modernization efforts. IBM developed a plan for stabilizing the institution’s infrastructure first and then enhancing the user environment moving forward. First, the IBM team determined the institution’s highest risk areas and prioritized implementation projects. IBM then helped the institution replace aging servers with modern servers in a clustered configuration to support redundancy. IBM also designed and implemented security policies and management processes using proven applications.

Benefits:
- Enhanced capabilities to meet mission objectives with a security-rich, responsive and user-friendly IT environment
- Improved control over IT environment
- Increased ability to respond rapidly to changing requirements
Pediatric hospital virtually eliminates spam and viruses

Client requirements:
A leader in healthcare services, the hospital had a spam problem that was spiraling out of control, with each user receiving an average of 300 unwanted spam e-mails per day. Also, the client’s systems were plagued with virus attacks that its network management software could not block. It needed a solution that would block spam e-mails from its personnel’s inboxes, eliminate any existing viruses from the network and help prevent future virus attacks.

Solution:
The hospital signed a five-year contract with IBM Global Technology Services to provide comprehensive anti-spam and anti-virus services. IBM provides the hospital with Internet-level scanning and monitoring of its network, stopping viruses and spam before they enter the network. Working from a remote location, the IBM team constantly monitors the hospital’s network, scanning all inbound and outbound e-mail.

Benefits:
- Blocked approximately 99 percent of spam messages
- Virtually eliminated virus threats
- Improved network bandwidth and performance
- Reduced network bandwidth costs
Pension association increases responsiveness and security with smartcards

Client requirements:
This European insurance association distributes approximately €14 million per year, mainly as old-age pensions. To meet member requests for direct access to account information, the company wanted to make information available to its customers over the Internet. But the client realized that it first needed to implement technology that could guarantee high levels of security—including signature authentication—to protect its members’ private data.

Solution:
IBM Global Business Services conducted a workshop with the company to determine its distinct needs. The workshop revealed that smart cards could guarantee necessary levels of security. The team also identified the modifications that would have to be made to an existing call center application to accommodate user access. The application required an additional security module that could interface with the smart cards, enabling them to identify and authenticate users and provide the functionality to legally sign documents.

Benefits:
• Reduced information-request processing time—from days to seconds
• Improved robustness, which allows the firm to handle up to 17,000 monthly requests
• Enhanced efficiency due to ability to reuse the solution for other processes mandating strong signature authentication and security
Pension fund launches a security initiative to comply with ISO 17799

Client requirements:
This fund’s new CEO wanted to improve security procedures, and wanted the fund to ultimately comply with ISO 17799, a comprehensive set of information security standards.

Solution:
A team from the IBM Global Technology Services – Business Innovation Services Security and Privacy practice conducted a series of interviews with the client’s senior IT staff to establish the requirements. The team then used the IBM Security and Privacy Methodology for Security Policy Development to generate a set of high-level policies based on ISO 17799. The next phase was to develop security standards that will enable the client to implement the security policies developed during the subject engagement.

Benefits:
- Improved security posture
- Gained a reliable basis for a comprehensive information security program that will comply with the requirements of ISO 17799
Pharmaceutical company improves the security of its vital drug-development data

Client requirements:
This client is a research-oriented and integrated organization that maintains research and development (R&D), manufacturing and marketing operations across Asia, Europe and North America. To maintain its standing in the competitive pharmaceutical industry, the client must protect its valuable drug information while it speeds new drugs to market. It exchanges confidential data between its network and mobile workforce and needs to maintain high security levels. The client wanted a user-friendly solution that could improve the security of its transferred information and increase the productivity of its mobile workforce.

Solution:
IBM Global Technology Services and IBM Business Partner VeriSign rolled out 6,350 Lenovo ThinkPad X40 laptops featuring advanced ThinkVantage Technologies. The laptops’ Rescue and Recovery ThinkVantage Technology enables users to access tools that can automatically restore a failed laptop at the push of a button—even if the laptop’s operating system won’t boot. The Embedded Security Subsystem ThinkVantage Technology prevents security chips from being transferred to other laptops and keeps already removed security chips from being activated. With the Embedded Security Subsystem and PKI services provided by VeriSign, the client can protect confidential information.

Benefits:
• Bolstered security and accessibility of wireless network without placing an extra burden on users
• Reduced user dependence on IT department to resolve computer failures
• Increased productivity of mobile personnel
Polish drug manufacturer speeds the deployment of a security-rich network

Client requirements:
This drug company did not have an enterprisewide network, and it had no way to store and access business information in a central location. Additionally, its LANs were not secure and could not be centrally managed. Since the LANs had to be independently administered, they were especially vulnerable to viruses, worms and other debilitating malware and intrusion attempts. The company needed a comprehensive enterprise network that could provide security-rich, shared Internet access, enterprisewide coverage and central management of network devices.

Solution:
IBM Global Technology Services implemented a security-rich network solution. To manage network traffic and help ensure optimal resiliency, IBM installed a Cisco router, a Cisco firewall platform and Cisco switches. IBM also structured the solution so that the new network is fully redundant (no single node or link failure could affect the operation of the entire network). Internet access is safeguarded and only authorized IT personnel perform network management. This solution was supported by IBM Global Financing, which enabled the client to engage IBM to start the project immediately, without up-front expenditures.

Benefits:
• Improved protection against malware and hackers with a solution that has proven resistant to failure
• Reduced overhead costs as a result of simplified network management
• Rapid implementation, with deferred payments made possible by IBM Global Financing
Road-transportation agency deploys a security-rich toll solution to reduce traffic

Client requirements:
This client develops and applies road-transport regulations and is responsible for planning, constructing, operating and maintaining all state roads. A city wanted to implement a toll solution that would charge drivers each time they drove in a central city region. The client sought a vendor that could provide a turnkey solution, including technology and business processes to run the system. The solution would have to include technical infrastructure on the roadside, cameras, RFID readers, a data network and a solution to handle roadside transactions, with external interfaces between the bank collecting the tolls and payment locations.

Solution:
IBM Business Performance Transformation Services designed and implemented a comprehensive solution that includes Intel® platform-based roadside equipment and a hosted central IT system, as well as a call center and back-office functions. IBM manages the full scope of business processes and technical operations. IBM Global Business Services provides integrated customer service, payment channels and other services that dynamically adjust to the city’s changing traffic needs. IBM Global Technology Services – Integrated Technology Services, IBM e-business Hosting™ Services and IBM Application Management Services provide IT maintenance and application services and support. Additionally, IBM Global Technology Services installed a comprehensive IT environment to support the toll solution.

Benefits:
• Reduced costs by sourcing a comprehensive, managed toll solution to IBM experts
• Reduced congestion and pollution in the central city region
• Enabled the city to collect SEK1.2 billion annually in tolls
State agency prevents unauthorized users from accessing internal applications

Client requirements:
With 2,500 employees and numerous software development teams—serving millions of residents and employees and hundreds of thousands of employers—this state agency needed to make sure that it could provide Internet security authorization across multiple internal applications and prevent intrusions. As there was no common architecture or security policies in place to safeguard the integrity of data or to ensure application consistency, software teams weren’t always able to build adequate authorization and authentication functionality into the agency’s programs.

Solution:
Consultants from IBM Global Technology Services—Integrated Technology Services helped the client design a security solution, develop security policies, create a security matrix and implement a prototype security authorization service. IBM used the IBM Global Services Methodology templates to provide the agency with a synopsis of the current and planned environments, solution requirements, software application policies, application standards and guidelines, enterprise application integration (EAI) messaging policies, templates, and security application review processes.

Benefits:
• Improved overall software application-level security through the implementation of a role-based security matrix and processes
• Achieved a reduction of 80 to 160 employee hours per project, resulting from the use of common architecture and standards
University reduces costs with identity management and data security project

Client requirements:
This university was seeking ways to reduce costs, particularly in its IT infrastructure, while attracting more students. One way to accomplish this goal was to eliminate manual and redundant processes. The university also wanted to make it easier for students and employees to use the school’s IT systems and to improve the security and efficiency of its identity management policies and processes.

Solution:
IBM Global Business Services analyzed the client’s processes and directory structures and recommended improvements. IBM introduced a role-based authorization model to simplify account administration and recommended standard user ID and password rules to simplify user access. The team also connected several directories with the university’s human resources application.

Benefits:
- Improved the accuracy, reliability and security of the university’s identity data
- Reduced infrastructure costs by automating certain administrative tasks and eliminating redundant processes
- Made it easier for students and staff to retrieve a forgotten password with a self-administration system
- Enabled the system to automatically revoke accounts and access for students and employees who leave the university, eliminating manual processing

PUBLIC

| LOCATION: | Germany |
| INDUSTRY: | Education |
| PROFILE: | A European university with two locations, meeting the educational needs of 30,000 students |
| SIZE: | 10,000+ employees |
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Presentation Slide Library

An easy-to-use, interactive collection of ready-to-use client reference slides

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