

IBM Global Services



# *IBM Security Services*

*Enabling e-business while  
managing risk*



e-business

“e-business is opening up the world.

The Internet has added an exciting new dimension to doing business.

It helps you seek new markets, transact business faster, reduce expenses and compete around the world. Internally, your employees can share critical business information over intranets and extranets – instantly connecting your company to your trading partners, suppliers, customers and colleagues.

This has created a new openness that provides for a richer interchange of ideas and information, streamlines the way you do business, and enables new business opportunities. As important, you must now guard against a bewildering number of new entry points to your networks that make your information assets far more vulnerable to intrusion, theft or sabotage.”

# IBM Security Services Helps Protect Your Business

**You and your customers have an expectation of doing business safely and securely. That's exactly the way it should be. Today, however, the pace of change in technology makes this very difficult.**

**We have created the offerings that help you defend your assets and operate safely. For decades, we've been guarding IBM and many other businesses from intrusion at every level. As networks evolved, we expanded our security approaches to encompass this new way of doing business. Now, we have taken our experience and intellectual capital and created a comprehensive set of offerings that can dramatically reduce risk and exposure within today's interconnected world. IBM Security Services combines knowledge of your industry with expertise in security and Internet technologies to help you develop a strategy for securing your assets and putting that strategy into practice in your organization.**

## The risk

Almost every day you read about hackers who have penetrated business and government sites. This is very unsettling. Is the electronic highway just a means to a fast getaway for criminals?

The unpleasant fact is that there are individuals and groups who may be capable of severely damaging your business. These include hackers on the outside – and disgruntled employees on the inside. Their target – the information assets that belong to you and your customers. At best, unauthorized intrusions are an embarrassment and a nuisance. At worst, they can cost you millions of dollars and damage your reputation.

What are you facing? According to a survey conducted for the FBI by Computer Security Institute:

- 75 percent of 563 responding companies said they had been victimized by computer-related crime
- 59 percent of these companies placed a dollar figure on their losses – which averaged more than \$400,000
- 49 percent reported unauthorized use of their computer systems

A *New York Times* article portrayed employees as the biggest threat to a company's security. Rogue employees have always posed a challenge to all types of security – from pilfering office supplies to harming co-workers. And today, the same challenges apply to electronic assets. Employees may snoop into private e-mails or they can shut down the entire business, potentially costing millions of dollars.

Add to this the fact that many companies rely on external contractors and provide network access to freelance programmers located around the world, and you begin to understand why there are so many new demands on security.

## Our approach

IBM Security Services offerings fit into a continuum that includes assessing, planning, architecting, constructing and operating secure environments. Each offering has been designed to accomplish one of five goals:

1. Increase the awareness of the impact e-business has on existing approaches to security in your organization
2. Assess and analyze existing security systems based on your business requirements
3. Design and architect cost-effective security solutions
4. Implement the solutions
5. Manage your security systems and programs

The place to begin is by attending our Security Workshop to learn how electronic business can affect security throughout your organization. Next, we can perform a general assessment of your organization's security. If you would like more specific assistance, our offerings can focus an assessment on any aspect of your business that requires security – ranging from single applications and networks to the entire enterprise.

We also have the expertise to drill deeply into your organization's infrastructure to compare your policies and standards to international standards and our best practices. We draw on our worldwide experience and intellectual capital to assess vulnerabilities at all levels of your organization. This is significant because the bedrock of security is based on definable, repeatable processes that are consistently enforced.

As you think about security, there are two key points to consider. First, security must evolve in step with your business. As your company grows, you should always reassess your security to close any new gaps that the fast pace of business may create. Second, security is an investment. Inappropriate security measures can be just as costly as obsolete equipment or poorly trained employees. Proper security measures will help keep your business healthy and productive.

The experience that IBM's Security Services team has gained from engagements with companies around the world enables us to understand your business needs. We will recommend security measures that make sense in context with your business objectives. Our goal is to help you attain the level of security dictated by your operation.



# IBM Security Services Offerings

**Our clients have asked us to package what we deliver to them in a way that is easy to evaluate and faster to implement. Today, we are announcing 19 discrete security offerings which are available globally. They were designed so you can select them individually or in combination; whatever best meets your needs. They are grouped into four major categories: Assessment and Planning to determine where you are today; Architecture and Design to develop the blueprint for a more secure environment; Implementation to put it into action; and Management to maintain the vigilance your organization requires.**

**This list is a work in progress. We will continue to add new services as technologies advance and as we can transform the unique work we perform for clients into the packaging being asked for. Our offerings are distinguished from our custom work in that they are founded on methodologies developed from our many engagements. They can be replicated quickly and consistently and easily tuned when new best practices are identified. Our practitioners around the world have been trained in these methodologies and are ready to work with you, wherever you need us.**

## **IBM Security Assessment and Planning Services**

Our assessment and planning services range from providing an overview of your organizational issues to assessing specific components, such as network applications, systems and the Internet. Since

security involves all parts of your business, we also go beyond the electronic and network concerns and include physical site security. The bottom line is that after our assessments, you'll know the relative strengths and weaknesses in your environment.

### **IBM Security Workshop**

We recommend that every one of our customers take this workshop. No matter how well developed your e-business is, our Security Workshop helps you understand the ramifications associated with new electronic business activities. Held at your location, it includes your key high-level representatives responsible for business management, networks, platforms, security and application development and support.

At the end of the workshop, you'll have a much better handle on how to protect your vital information assets. In addition, you have the option of requesting a report that details your operation's strengths and weaknesses, plus recommendations on how to improve your security.

### **Security Health Check**

Our Security Health Check is recommended as a way for you to gauge the overall effectiveness of your security plan. While the Security Workshop provides a high-level familiarity with issues and exposures, the Security Health Check consultants conduct interviews with key members of your organization to gain a more complete understanding of your existing security controls.

The results of the assessment will be compared against a best practices model. Then we will provide you with a final report detailing your company's strengths and weaknesses, as well as recommended actions.

### **Ethical Hacking**

How can you discover if your business is secure from unauthorized intrusion? There's one effective way – by having someone try to slip past your protective measures. Our own ethical hackers stress test your network by simulating a real break-in.

IBM Security Services ethical hackers are top professionals who are skilled in the common and uncommon tricks real hackers can use to assault your business. IBM hackers take three tactical approaches to gain unauthorized access to your internal network:

- As a relatively unsophisticated solitary hacker
- As a small team of competent hackers
- As a sophisticated, highly organized team of very competent hackers

Their findings are provided in a detailed report that also includes recommendations for immediate and long-term improvements.

### **System Security Assessment**

Has the security management for each of your system platforms kept pace with your business growth? Our System Security Assessment helps you identify vulnerabilities associated with your business-critical internal operating systems (for example; UNIX,<sup>®</sup> AIX,<sup>®</sup> OS/400,<sup>®</sup> OS/390,<sup>™</sup> Windows NT<sup>®</sup> or Windows<sup>®</sup>) and core middleware components (Exchange, DB2,<sup>®</sup> MQSeries,<sup>®</sup> Lotus<sup>®</sup> Notes,<sup>®</sup> etc.).

Our professionals assess each system's mechanisms for identification and authentication, access control, confidentiality, integrity and non-repudiation, for example. We also interview administrators and managers and review documented security policies, standards and processes related to your system security.

#### **Network Security Assessment**

Not every threat is Internet-related. Your internal network also needs properly implemented security controls, management processes and technology to help prevent intentional attacks and unintentional mistakes. Our Network Security Assessment focuses on network design, configuration and deployment to determine the security controls you've established. It covers system platforms, routers, bridges, switches or other network components that provide security.

Our professionals perform network intrusion tests and configuration analyses to uncover vulnerabilities. We then recommend the steps you can take to develop network security process and procedural compliance consistent with your business objectives.

#### **Internet Security Assessment**

This offering includes ethical hacking, but takes it a step further to include an examination of the configuration and management of your overall topology and design to determine how effectively your internal networks are protected from external intrusion. This comprehensive assessment is custom designed to analyze system platforms, network connections, network servers and firewalls.

You will receive a report indicating identified security exposures, a review of your ability to resist hackers, plus recommendations for improvements.

#### **Application Security Assessment**

New applications may create gaps in your systems and those shared with your customers. Our Application Security Assessment offers you the added confidence of a comprehensive, independent review of your critical networked business applications.

IBM Security Services consultants conduct in-depth, end-to-end reviews of your business application's architecture, design and function to identify vulnerable stress points. In addition, we review the application's development and maintenance process, operational process and technology components – including the platforms it runs on and the databases and networking services it operates with.

Staff members responsible for operations related to the application will be interviewed and we will analyze new security codes in the application and supporting infrastructure services to uncover errors that could expose your valuable information.

#### **Site Security Assessment**

Our site security specialists provide you with an in-depth review of site security controls and processes. They focus on physical security, emergency planning, incident management, contract management and information protection. The objective is to provide you with suggestions to make a more secure working environment for your employees, contractors and visitors, as well as the physical protection of your information assets and property.

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#### **Security Process Assessment**

Consistent, effective security processes are essential for your company's protection. Our Security Process Assessment is designed to analyze your organization's security objectives and define a set of processes and procedures designed to meet these goals. Our specialists interview your employees, review your established processes and documentation and compare your profile to the IBM Security Services IT process model for best practices. This enables us to prepare a customized recommendation that meets your business requirements. The assessment can be corporate-wide, site-by-site, or for departmental business units.

#### **IBM Security Architecture and Design Services**

Once you've gone through the assessment stage, these services allow you to begin to develop security solutions.

#### **Information Asset Profile**

Information is today's business currency. Our Information Asset Profile helps you understand which information assets are most critical, how they are protected and identifies security gaps. Our security consultants interview your key security and business managers to understand what risks may threaten your assets. We look at confidentiality – what happens if business critical information gets in the wrong hands; integrity – what happens if business decisions are based on incorrect information; and availability – the impact on your business if vital information isn't available for use.

After the profile is completed, you receive an inventory of your business-critical assets that also summarizes security requirements.

#### **Security Policy Definition**

Business-critical information does not exist in a vacuum. It is closely linked to complex legal and financial compliance requirements for specific levels of security. Your employees also need to know their responsibilities with respect to the organization's information assets. Corporate policies need to be in place to manage risk and behavior. A security breach can adversely affect the entire enterprise. In order to be secure, you must be able to define and explain your organization's security policies and ensure they meet your corporate legal and financial responsibilities.

Our consultants team with your staff to develop a detailed work plan and deliver a customized security document that will help guide you in meeting your security policy objectives.

#### **Enterprise Security Architecture**

If your company has implemented distributed applications or linked to the Internet, you have potentially increased your vulnerability. Revisiting enterprise-wide security measures should be a top priority. IBM security consultants analyze your enterprise systems and business strategies to determine how you can update your existing enterprise security policy, standards and processes.

At the completion of the project, you receive a detailed enterprise security architecture document you can use to meet new company-wide security challenges.

#### **Internet Security Architecture**

This offering focuses on your organization's connections to the Internet. IBM security consultants review your Internet business strategy and the Web services you provide that link to internal systems.

IBM consultants interview both technology and business managers to determine if your security measures can meet the increased demands of establishing Internet or extranet connections.

The final deliverable is a detailed security document that your organization can follow to address new security challenges posed by the Internet.

#### **Security Standards Definition**

Standards serve as the foundation for effective implementation of security policy and process. Many organizations need to revisit their standards to make sure they evolved with technical and business developments. IBM Security Services consultants team with your staff to investigate standards requirements that are consistent with organizational business goals.

After the analysis is completed, you will be given a security standards document. Each standard will be defined so specific processes can be developed to provide the level of security you need.

#### **Security Process Development**

Security policy and standards have little value if your people don't adhere to them. IBM Security Process Development examines how the people in your organization interface with business-critical information and recommends new processes to reduce risk and improve security. Some of the programs include roles and responsibilities of security staff members, employee awareness programs, incident reporting, enterprise-wide anti-virus measures, user and password management and management self-assessment.

We will then define and document processes that need to be adapted or developed using IBM's well-tested process methodology. Each process definition will include the important information required to make them effective today, and flexible enough to meet new challenges.

#### **Secure Solution Design**

Anytime you use the Internet to provide a service for employees, suppliers or customers, you add security risks. Even e-mail or publishing company information on a Web server may create new paths to your company's critical information and systems.

Our security consultants can help you design a secure e-business solution that addresses simple access, external publishing, private publishing, production access, e-commerce, collaboration and hosting. At the end of the project, you'll have a document that provides a roadmap to your solution objectives.

“We have the expertise to drill deeply into your organization's infrastructure to compare your policies and standards to international standards and our best practices.”

## **IBM Security Implementation Services**

These services help you effectively add new security measures and technologies to your IT and business systems. We have broad experience installing products from numerous security vendors. Once a specific approach is accepted from recommendations made in our Security Product Selection offering, our security consultants are available for their installation.

### **Security Product Selection**

Today's market offers a wide variety of security products of varying cost, ease-of-use and effectiveness. They include certificate authorities, digital keys, smart cards, sophisticated cryptography programs and an assortment of firewalls for protection within the LAN and desktop encryption products for end user e-mail.

How do you select the best security product for your organization? We can help. Our security consultants first determine your needs, match those requirements to products available to satisfy your needs, and provide you with a detailed analysis of each product's strengths and weaknesses in relation to your needs. Once products are selected, IBM Global Services will work with you to implement them.

## **IBM Security Management Services**

As your organization implements new e-business solutions, IBM Security Services offers a group of managed services to accommodate your needs. With these services, IBM partners with you to provide different levels of security on an ongoing basis.

### **Internet Emergency Response**

For organizations who would like ongoing vigilance, IBM provides the Internet Emergency Response Service. This offering comes in two forms – basic and

enhanced, and is available for Internet, intranet or extranet services. The basic service provides you with weekly and monthly testing of your firewalls and Web servers to monitor policy compliance and vulnerability to unauthorized access or misuse. You'll also receive warnings about security vulnerabilities in protocols, operating systems and application software. Plus, you have the right to declare a security emergency when you suspect a break-in has occurred.

The enhanced version provides real-time intrusion detection. We continually monitor and analyze network traffic to detect security violations. If any are detected, our team of security experts takes immediate action to resolve the emergency – 24 hours a day, 7 days a week.

### **Managed Data Networks – Firewalls**

This highly advanced service gives you smooth access to the Internet while restricting access from the Internet back to your corporate networks. Users can surf the net, access internal networks, and even retrieve Internet and intranet e-mail from a single mailbox without cumbersome, difficult-to-remember passwords. In addition, wide area networking and remote access TCP/IP users can browse the Internet at high speeds, with protection from intrusions back into their networks.

Our firewall security is transparent to remote users. Plus, the firewalls are offered globally, so users are provided a consistent level of security around the world.

This service provides the hardware and software to secure your networks, and our professionals manage all of the firewall components. These include 24 hours a day, 7 days a week attack management network monitoring, user registration, and backup and recovery.

## **The security specialists**

Our goal is simple – to help you guard your organization so you can effectively conduct electronic business safely and securely. IBM Security Services provides offerings that can dramatically reduce your risk and exposure in today's interconnected world. We ensure that our security offerings support your key business objectives as we assess, plan, architect, implement and manage crucial information assets.

When it comes to security, IBM Security Services has the experience and expertise to meet your requirements. We leverage our extensive intellectual capital and best practices models so we can help you develop superior security programs.

Our offerings provide you with a tremendous edge – the ability to conduct business over the Internet and through your intranets and extranets with peace of mind.

## **For more information**

You can learn more about our offerings by visiting our Web site at <http://www.ibm.com/security/html/consult.html>

You can also review the broad range of e-business services at our Web site at [www.ibm.com/services/ebus](http://www.ibm.com/services/ebus)



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