





*It's about business, not just technology.*

### **Building trust into e-business**

IBM® Vault Registry is designed to establish a high level of security and trust of sensitive or business-critical transactions and data using digital certificates. Digital certificates are an increasingly accepted means for authentication and access control over unsecured networks, such as the Internet. However, certificates are only as valuable as the degree of trust that the registration and certification process provides to certificate recipients. IBM Vault Registry infuses trust into the extended enterprise by allowing e-business transactions to travel across organizational boundaries with privacy, security and confidence.

### **IBM Vault Registry solution**

IBM Vault Registry provides a solution for managing the registration and issuance of digital certificates to trusted entities, enabling successful e-business. IBM Vault Registry implements an enhanced trust model that reduces the risk of compromised authenticity, data integrity and transaction privacy during the registration and certification processes. Using digital certificates for authentica-

tion and access control, data is protected against unauthorized access in special areas of memory, or "vaults," establishing more trust in your certificates. Much like a bank's safe deposit box that protects your valuable assets from bank employees, the "vault" protects your applications and data from unauthorized parties.

### **Extending security with S/MIME and VPN support**

IBM Vault Registry, Version 2.2, extends the reach of your business applications with the added support of Secure Multi-Purpose Internet Mail Extensions (S/MIME), a specification for electronic messaging, and virtual private networks (VPNs), a technology that supports tunneling protocols for encrypting data transported over the Internet. These specifications are quickly evolving as de facto standards for highly trusted private communication over IP networks.

Vault Registry, Version 2.2, responds to the growing need of businesses to easily integrate with various e-mail and messaging products that implement S/MIME. Vault Registry, Version 2.2, also allows you to register and issue certificates for VPNs, providing your business with a framework for converting a public network into a VPN.

### **IBM Vault Registry components**

IBM Vault Registry is a comprehensive solution for registering and certifying e-business participants. It integrates an innovative vault controller, a flexible vault registration application, robust certificate management system and Lotus® Domino® Go Webserver™ with the proven IBM eNetwork™ X.500 Directory and the award-winning IBM DB2® database. IBM Vault Registry meets the challenge of building trust into Web applications.

#### *Vault controller*

The vault controller runs applications in "vaults" that explicitly restore the operating system enforcement of security policies to the Web environment by isolating application execution and data between users.

#### *Vault registration application*

The vault registration application enables organizations to register users and administer the issued certificates for their services. The application is written to easily customize the registration pages and the policies associated with the registration process to their unique business environments.

#### *Vault certificate management system*

The certificate management system enables a CA to issue, renew and revoke X.509, Version 3, certificates. Additionally, the certificate authority (CA) publishes certificates, certificate revocation lists (CRLs) and policy information in an X.500 Directory.

#### *Vault agent*

The vault agent provides a means to exchange encrypted information between programs operating in the vault controller and those in a remote environment.

#### *Vault certificate validator*

The vault certificate validator provides a means for client or server programs to validate a certificate at the time credentials are presented to initiate a business transaction.

#### *Lotus Domino Go Webserver*

Lotus Domino Go Webserver serves as the underlying Web server platform for the vault controller and the vault registration application.

#### *IBM eNetwork X.500 Directory (prerequisite)*

The IBM eNetwork X.500 Directory stores X.509 certificates, CRLs, CA policies and other information about registered users and servers.

#### *IBM DB2 Universal Database Enterprise edition, Version 5 (prerequisite)*

DB2® Universal Database™ is used by the registration application and the certificate management system to store data and maintain transaction logs for audit, reporting and recovery purposes.

#### *IBM 4758 Cryptographic Coprocessor (optional)*

The Cryptographic Coprocessor protects and backs up the CA signing key and minimizes the risks associated with an administrator's misuse of the system.

### **Why customers choose IBM Vault Registry**

- **Trust**  
IBM Vault Registry greatly enhances the trust required for business-critical applications by protecting your data and applications from unauthorized parties – even system administrators and operators.
- **Cost**  
IBM Vault Registry is an integrated CA solution reducing the time and expense of building a digital certification solution with offerings from multiple vendors.
- **Control**  
IBM Vault Registry allows you to operate the CA internally, providing you with greater control over business-critical applications and data.
- **Time to market**  
IBM Vault Registry allows you to focus on building applications rather than integrating components.
- **Growth protection**  
IBM Vault Registry is highly scalable, allowing the solution to grow with your business needs.

- **Service and support**

IBM Vault Registry comes with IBM's reputation for customer support and service.

### **Identifying features**

- **Security-rich system environment**  
Vault processes run on behalf of users (as authenticated by digital certificates) and are protected from other processes. The system administrator is prevented from accessing the contents of a "vault" without the proper digital authorization, just as a bank employee can't access the contents of your safe deposit box.
- **Trusted application environment**  
Applications written for the vault controller and vault agent utilize a protected environment to help prevent against unauthorized access.
- **Robust operational characteristics**  
IBM Vault Registry is designed to provide an industrial-strength CA solution with high system availability, integrated system monitoring and auditing and reporting capabilities.
- **Flexible registration application**  
Vault Registry allows businesses to easily "rebrand" the application and to customize the registration policies, including connections to existing business-critical applications.



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## IBM Vault Registry at a glance

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### Software requirements

- IBM Vault Registry products execute on AIX/6000<sup>®</sup>, Version 4.3.0. Two components, the vault agent and the vault certificate validator, are available for execution on Windows NT<sup>®</sup>, Version 4.
- The Web server product supplied with IBM Vault Registry is a prerequisite for the vault controller program.
- Support for some VPNs requires an optional feature.
- The following prerequisite products must be ordered separately:
  - IBM DB2 Universal Database Enterprise edition, Version 5
  - IBM eNetwork X.500 Directory
  - Netscape Navigator 4.0, or higher; Netscape Communicator 4.0; or higher or Microsoft<sup>®</sup> Internet Explorer 4.0, or higher

*Note: The user features of IBM Vault Registry have also been tested with Netscape Navigator 3.0 for encryption levels of 40- and 56-bit.*

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### Hardware requirements

- IBM Vault Registry is executable on the following RS/6000<sup>®</sup> machine type-models:
  - 7017-S70, 4-, 8-, or 12-way SMP (or specify machine type 7013-J40 or 7015-R40 if upgrading)
  - 7025-F50, 1- to 4-way deskside SMP
  - 7026-H50, 1- to 4-way rack SMP
- In a large production environment, a minimum of eight processors, 1GB of RAM and 18GB of hard-disk space are required.

*Note: The recommended hardware configuration is dependent upon the customer's use of IBM Vault Registry.*

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### A solution you can trust

IBM is a leader in providing organizations with proven solutions for successful e-business. With the introduction of IBM Vault Registry, IBM addresses a variety of concerns that arise in conducting business over unsecured networks. IBM Vault Registry creates an environment of trust where e-business is truly your business – providing more security and privacy.

### For more information

about IBM Vault Registry, visit us on the Internet at [www.ibm.com/registry](http://www.ibm.com/registry).



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IBM Corporation  
IBM Vault Registry Product Team  
30 Saw Mill River Road  
Hawthorne, NY 10532

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