SOLUTION BRIEF

Securing Sensitive Data in Mixed Database Environments

One Security Solution to Protect All Your Databases
Securing sensitive data on databases is integral to meeting an organization’s compliance and regulatory mandates. Over the years, the accumulation of sensitive data in databases has reached terabyte status in many enterprise IT environments. Also, more users and other applications from both inside and outside the organization are accessing sensitive data stored in databases. This situation magnifies the potential for disastrous data breaches involving sensitive customer, employee and financial data. Protection of this data has become a critical element to ensure compliance, privacy and manage information risk. Complicating matters further is the diverse number of database vendor platforms that companies use to store their information and the inherent problems associated with managing the security for those disparate database platforms. Many companies utilizing a variety of databases in their corporate networks, such as Microsoft SQL Server, IBM DB2, Oracle and others, end up having to develop and support native or software based security solutions on a database by database basis that prove costly, inefficient and introduce their own set of security problems.

Gemalto SafeNet KeySecure offers the most comprehensive solution for protecting sensitive data in mixed database environments. SafeNet KeySecure solution protects databases from both internal and external threats, leveraging a single solution across multiple locations, ensuring compliance with regulatory mandates and mitigating the risk of data theft. In contrast to traditional native database security approaches that burden database servers, complicate security management and expose your most sensitive data to attack, SafeNet KeySecure offers a high-performance, appliance based database security solution that reliably protects all databases with a single platform.

Key Features
- One Security Solution to Protect All Your Databases
- Streamlined Implementation for Rapid Returns
- Easy to Manage for Lowest Cost of Ownership
- Maximum Flexibility to Accommodate Unique Requirements
- Effortless Audit and Compliance Reporting
- The Most Secure Database Encryption Solution

Streamlined Implementation for Rapid Returns
By providing an out-of-the-box solution with centralized administration of cryptographic policies and configuration, SafeNet KeySecure dramatically reduces implementation time and expenses compared to proprietary security approaches. Enterprise customers with multiple databases receive instant benefit utilizing SafeNet KeySecure’s easy to implement, out-of-the-box connectors, dramatically reducing implementation time and cost. Integration across various database platforms is automated, transparent to applications and administration is intuitive. System connectors provide for load balancing, health checking, and connection pooling among a cluster of redundant security applications.

Easy to Manage for Lowest Cost of Ownership
SafeNet KeySecure streamlines ongoing administration and dramatically reduces costs with the ability to centrally administer all cryptographic policies and configurations. SafeNet KeySecure offers centralized management for securing database and applications across hundreds, or even thousands of geographically distributed locations. Organizations can centrally manage every facet of security administration, including key management, maintenance and troubleshooting, policy management, logging, reporting and software upgrades.
Securing Sensitive Data in Mixed Database Environments

Maximum Flexibility to Accommodate Unique Requirements
SafeNet KeySecure is the only encryption solution that provides the flexibility to encrypt data not only at the database layer, but also at the application layer at the point of data entry, as well as during transport at the network layer. This results in increased security by eliminating points of vulnerability outside the database. Granular volume-, column-, or field-level encryption of sensitive data enables optimal balance between security and performance requirements.

Effortless Audit and Compliance Reporting
SafeNet KeySecure provides comprehensive, secure, and centralized logging and auditing of all cryptographic functions and data access events to provide proof of compliance. Consolidated logging information and audit reporting enables auditors to easily understand who accessed what data and which administrators made changes to encryption configurations or key management policies. SafeNet KeySecure’s centralized audit trail and reporting is far more efficient than the traditional, time-consuming process of manually gathering and analyzing information from multiple application and database logs.

Technical Specifications

**Performance**
- Processes more than 100,000 encryptions per second
- Scalable to hundreds of thousands of encryptions per second via clustering of multiple SafeNet KeySecure platforms
- Less than 100 microseconds latency

**Security Algorithms**
- 3DES, DES, AES, RSA (signatures and encryption), RC4, SHA-1, HMACSHA-1

**Asymmetric Key Sizes**
- 512, 1024, 2048

**Symmetric Key Sizes**
- 40, 56, 128, 192, 256

**Certificate Management**
- Multiple certificates, built-in certificate authority, manage certificate requests, certificate revocation list (CRL) support

**Network Management**
- SNMP (v1, v2, and v3), NTP, URL health check, signed secure logs, syslog, automatic log rotation, secure encrypted and integrity checked backups and upgrades, extensive statistics

**System Administration**
- Secure Web-based GUI, secure shell (SSH), console

**Web and Application Servers Supported**
- BEA, IBM, IIS, Oracle, Apache, Sun ONE, JBoss, SAP, PeopleSoft, and more

**Databases Supported**
- IBM DB2, Microsoft SQL Server, Oracle, and Teradata

**Mainframes Supported**
- IBM z/OS

**Enclosure**
- Form Factor: 1U, rack mountable [Height: 1.7”; Width: 19”; Depth: 30”]

**Network Interfaces**
- 2 x 10/100/1000 Mbps Fans
- Eight system cooling fans
The Most Secure Database Encryption Solution
SafeNet KeySecure offers the highest level of security available in a commercial database encryption solution, validated to FIPS 140-2 Level 2 and Common Criteria Evaluation Assurance Level 2. By providing centralized cryptographic processing, key management, logging, auditing, and security policies in a single, hardened appliance, SafeNet KeySecure maximizes overall security. Centralized authentication and authorization prevents rogue applications and database users from accessing sensitive data. This enables organizations to build security policies that restrict who can access confidential data and logs all access to the systems. Separation of duties between the database administrator (DBA) and the security administrator (SA) prevents “super user” access and its associated risks. Separation of duties also enables organizations to ensure that DBAs cannot access cryptographic keys and that SAs do not have DBA privileges.

Enterprise Data Protection
SafeNet KeySecure is a key component of Gemalto’s SafeNet Data Protection Solutions, designed to reduce cost and complexity for organizations that need to protect sensitive data to meet compliance obligations and defend against potentially devastating data breaches.

About Gemalto’s SafeNet Identity and Data Protection Solutions
Through its acquisition of SafeNet, Gemalto offers one of the most complete portfolios of enterprise security solutions in the world, enabling its customers to enjoy industry-leading protection of data, digital identities, payments and transactions – from the edge to the core. Gemalto’s newly expanded portfolio of SafeNet Identity and Data Protection solutions enables enterprises across many verticals, including major financial institutions and governments, to take a data-centric approach to security by utilizing innovative encryption methods, best-in-class crypto management techniques, and strong authentication and identity management solutions to protect what matters, where it matters. Through these solutions, Gemalto helps organizations achieve compliance with stringent data privacy regulations and ensure that sensitive corporate assets, customer information, and digital transactions are safe from exposure and manipulation in order to protect customer trust in an increasingly digital world.

Contact Us: For all office locations and contact information, please visit www.safenet-inc.com
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