BIG DATA IS NO LONGER A BIG SECURITY CHALLENGE

Big Data presents a tremendous opportunity for organizations to tap into new volumes and varieties of data, thereby making more informed plans and decisions, discover new opportunities for optimization, and deliver breakthrough innovations. But it is not without risk. Without the right security, Big Data can pose big security challenges.

Big Data = Big Data RISKS

According to a 2014 Information Week article, “The data volume in the enterprise is going to grow 50× year-over-year between now and 2020 and 85% of that data is coming from net-new data sources. More than half (59%) of respondents said they’re not taking specific steps to address the expected data deluge from sensors, cameras, and numerous other IoT devices. The result is that no matter the architecture of a Big Data implementation, there are inherent risks to these very large data sets and its outputs.

SENSITIVE DATA CAN BE ANYWHERE

Data sources for information fed into a Big Data implementation inevitably contain either sensitive, protected information or key intellectual property. This information is distributed throughout the Big Data implementation. That entire data storage layer needs to be protected. Not only can the raw data represent a risk — the results are just as critical. Results from Big Data analytics can be just what a malicious insider or Advanced Persistent Threat attacker are looking for. their sensitive data and addressing compliance requirements.

The Vormetric Data Security Platform offers the granular controls, robust encryption, and comprehensive coverage that organizations need to secure sensitive data across their Big Data environments—including Big Data sources, Big Data infrastructure, and Big Data analytic results. By delivering a single security solution that offers coverage of these areas, Vormetric enables security teams to leverage centralized controls that optimize efficiency and compliance adherence.

“Vormetric Data Security Platform is useful in big-data scenarios, since it is relatively straightforward to work with both structured databases and unstructured files that are often combined in a Big Data exercise. Vormetric can encrypt the initial data as well as the results of a big-data run, which are often more valuable than the initial data.”

Garrett Bekker
451 Research

VORMETRIC BIG DATA PARTNERS
Seamlessly Protect Big Data Environments – Vormetric solutions for big data enables organizations to maximize the benefits of big data—while maximizing the security of their sensitive data and addressing compliance requirements.

Prevent Data Breaches & Safeguard Intellectual Property – Big Data environments, data is routinely replicated and migrated among a large number of nodes. In addition, sensitive information can be stored in system logs, configuration files, disk caches, error logs, and so on. To establish data security in Big Data environments, organizations can use the following Vormetric solutions:

• Vormetric Transparent Encryption – Encrypt and control access at the file-system level and it doesn’t require any changes to applications.

• Vormetric Application Encryption and Vormetric Tokenization – Encrypt or tokenize specific columns in an application before it writes the field to a database. Doing so ensures that specific fields remain unreadable, even after it is imported into, and processed within, the Big Data environment.

Meet Compliance Requirements – The Vormetric Data Security Platform provides a common, extensible implementation infrastructure that supports compliance requirements with protection for data-at-rest using encryption, enterprise key management, tokenization, access control and security intelligence across Big Data environments. These include FedRAMP/NIST 800-53 requirements for US Federal agencies, FIPS 140-2 for security management environments, the Australia Privacy Act, the EU Data Protection Act, South Korea’s PIPA and Singapore’s MAS TRM.

Fine-grained Access Controls – Vormetric provides the fine-grained, policy-based access controls that restrict access to privileged data – allowing only approved access to data by processes and users as required to meet strict compliance requirements.

Centralized Key Management – The Vormetric Data Security Platform provides high availability, standards-based enterprise encryption key management for Transparent Database Encryption (TDE), KMIP compliant devices, and offers vaulting and inventory of certificates. Consolidating enterprise encryption key management delivers consistent policy implementation between systems, reduces training and maintenance costs.

Security Intelligence – Vormetric logs capture all access attempts to protected data providing high value, security intelligence information that can be used with a Security Information and Event Management solution to identify compromised accounts and malicious insiders as well as finding access patterns by processes and users that may represent and APT attack in process.

Automation – Use the Vormetric Toolkit to easily deploy, integrate and manage your Vormetric Data Security implementation with the rest of your Big Data implementation.

FEATURES & BENEFITS

• Fully integrated functionality for Big Data and No SQL environments

• Granular access control limits access to privileged data

• Tokenization with Dynamic Data Masking helps address compliance objectives while gaining breakthroughs in operational efficiency

• Central management of security keys and policies

• Full scalability as traffic flows change or new demands are added to the environment

• No development changes are required to existing applications or infrastructure

• Scalability for high throughput, high demand environments with easy expansion to protect growing amounts of data.

• Virtual and physical appliance

• Web, CLI, and API interfaces

• FIPS 140-2 certified

ABOUT VORMETRIC

A leader in data security solutions, Vormetric (@Vormetric) protects data-at-rest in physical, virtual, Big Data and cloud environments. Trusted by businesses and governments for over a decade, the Vormetric Data Security Platform secures the data of more than 1,500 global enterprises—including 17 of the Fortune 30. With Vormetric, a single infrastructure and management environment protects data wherever it resides with file, volume and cloud storage encryption, tokenization with dynamic data masking, field-level application encryption, sophisticated access control policies, third party and integrated encryption key management. For more information, please visit: www.vormetric.com.