



Comprehensive Database Security

Safeguard against internal and external threats

In today's enterprises, databases house some of the most highly sensitive, tightly regulated data—the very data that is sought after by malicious insiders and external attackers. With solutions from Intel Security and Vormetric, your organization can establish a strong, comprehensive defense for databases and the assets they contain.

The Limitations and Risk of Traditional Approaches

Within your enterprise, databases represent a central aggregation point—and a focal point for thieves. Databases are where a wide range of corporate assets ultimately reside, including sensitive, regulated resources, like customer payment data, patient records, intellectual property, and much more. In short, your databases, whether physical or in the cloud, hold the data that matters to your business and the data that is prized by malicious insiders and external attackers. The traditional focus of security teams has been on establishing and shoring up perimeter defenses. However, these defenses leave your organization's databases exposed to a range of insider threats:

- Privileged users can exploit their visibility and permissions to access private data, sabotage configurations, and hide their tracks.
- Other staff can abuse their access privileges, or they may inadvertently circumvent policies and leave data exposed.
- If administrator or user credentials are compromised, external attackers can also exploit these permissions to wage attacks.

To comply with your organization's security policies and regulatory mandates, your security teams need to address these threats. This requires the establishment of strong defenses for corporate data in databases.

Joint Solution

Intel Security and Vormetric provide a joint solution that establishes comprehensive protections for sensitive database assets, whether they are physical or cloud-based. The integrated solution enables you to implement multilayer defenses, so that your organization can guard against a wide range of threat vectors.

Vormetric

McAfee
COMPATIBLE

McAfee Compatible Solution

- Vormetric Data Security Platform
- Vormetric Transparent Encryption
- Vormetric Application Encryption
- Vormetric Data Security Manager

McAfee Data Center Security Suite for Databases

- McAfee Vulnerability Manager for Databases
- McAfee Database Activity Monitoring
- McAfee Virtual Patching for Databases

Vormetric Key Features

- Data-at-rest encryption.
- Integrated key management.
- Privileged user access control.
- Granular audit logs.

Solution Brief

The solution includes:

- **McAfee® Data Center Security Suite for Databases:** This solution helps safeguard databases against abuse from authorized and unauthorized access, including malicious database administrators, SQL injection attacks, and more.
- **Vormetric Data Security Platform:** With Vormetric solutions, organizations can establish strong controls over sensitive data in databases and files, whether they are on premises or in the cloud. Vormetric helps guard against abuse at the system level, for example, safeguarding against administrator abuse or lost or stolen media.

McAfee Solutions

McAfee Data Center Security Suite for Databases includes technologies that can scan, monitor, and secure databases. The suite features these products:

- **McAfee Vulnerability Manager for Databases:** Automatically discovers databases on your network, determines if the latest patches have been applied, and conducts more than 4,700 vulnerability checks.
- **McAfee Database Activity Monitoring:** Automatically finds databases on your network and protects them with a set of preconfigured defenses. The product monitors activity on each database server and can spot and block malicious behavior in real time.
- **McAfee Virtual Patching for Databases:** Shields databases from the risk presented by unpatched vulnerabilities. The product can detect and prevent attempted attacks in real time. With the offering, you can apply patches without having to test applications or take databases offline.

Vormetric Solutions

The Vormetric Data Security Platform delivers robust encryption and key management, granular access controls, and logging. Security teams can encrypt sensitive database data and apply granular policies as to who can decrypt that data. By leveraging the Vormetric Data Security Platform, organizations can address their most stringent security policies and regulatory mandates.

Key Capabilities

McAfee Data Center Security Suite for Databases

- Maximizes visibility and protection from all sources of attacks.
- Monitors external threats, privileged insiders, and sophisticated threats, from within the database.
- Protection from threats, even before installing vendor-released patch updates.
- Non-intrusive software design means no disruption to production databases.

Vormetric Data Security Platform

- Secure all data-at-rest, including databases, logs, and unstructured data for both physical and cloud-based deployments.
- Centrally manage cryptographic keys, policies, and access.
- Quickly detect advanced persistent threats (APTs) and insider abuse.
- Simplify encryption deployment and management.
- Address the most stringent security policies and compliance mandates.

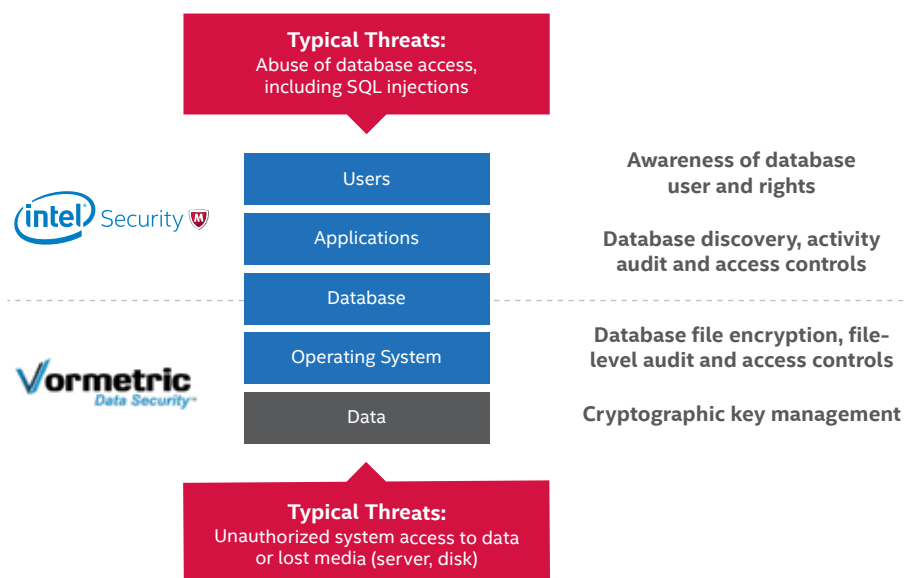


Figure 1. By leveraging Intel Security and Vormetric solutions, organizations can protect their databases against a broad range of threats.

Solution Brief

The Vormetric Data Security Platform includes these products:

- **Vormetric Data Security Manager:** Provides a central platform for managing encryption, policies, keys, and security intelligence. Offered as a physical or virtual appliance, Vormetric Data Security Manager enables your administrators to centrally manage encryption across thousands of databases.
- **Vormetric Transparent Encryption:** Equips your security team with file-level encryption, access control, and security intelligence. Vormetric Transparent Encryption can be deployed without having to re-architect applications, infrastructure, or business practices.
- **Vormetric Cloud Encryption Gateway:** Enables organizations to safeguard files in cloud storage environments. The cloud security gateway solution encrypts sensitive data before it is saved to the cloud storage environment, enabling security teams to establish the visibility and control they need around sensitive assets.
- **Vormetric Application Encryption:** Makes it easy to add column-level encryption to an existing application. Development teams can implement the solution without having to acquire encryption or key management expertise. With Vormetric Application Encryption, your organization can secure sensitive data in fields or columns in any database. You can encrypt data before it is written into the database—and ensure data is encrypted at the application server, in transit, and in the database.

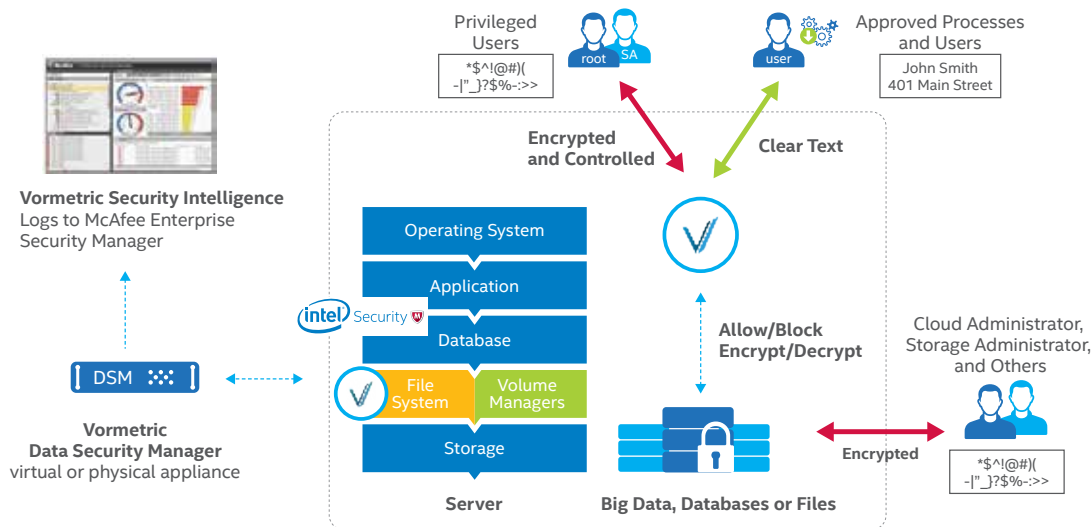


Figure 2. Vormetric solutions augment Intel Security database security solutions, enabling organizations to enforce encryption and granular policies over sensitive data access.

Vormetric Solution Advantages

By deploying the Vormetric Data Security Platform, your organization gains several key advantages:

- **Flexible implementation and broad environment coverage:** By leveraging the platform's flexible implementation of centralized policy and key management, you can address security policies and compliance mandates across databases and files—whether they are located in the cloud, in virtual infrastructures, or in traditional infrastructures. Vormetric solutions offer significant flexibility in implementing security in the cloud. Choose virtual or hardware appliances, and run them in the provider's cloud or on premises. Either way, your organization retains control over keys and data.
- **Structured and unstructured data support:** Vormetric solutions complement the database discovery capabilities offered by Intel Security. The Vormetric Data Security Platform gives your IT organization a consistent and repeatable method for managing encryption, access policies, and security intelligence for all structured and unstructured data.
- **Granular privileged user access policy enforcement:** With the Vormetric Data Security Platform, security teams can enforce granular, least-privileged user access policies—by user, process, file type, time of day, and other parameters. Security teams can control not only whether users are granted access to clear-text data, but what file system commands are available. With Vormetric, organizations can create a layer of separation between systems and the data they hold. In this way, security teams can enable administrators to manage configurations and ongoing maintenance on specific database servers, without being able to view the sensitive data that resides on those systems in the clear.
- **Comprehensive compliance controls and audit trails:** The optional combination of Vormetric Security Intelligence logs and McAfee Enterprise Security Manager meets many general compliance and regulation controls for data encryption, data sovereignty, least-privileged policy, and data access auditing. The Vormetric Data Security Platform delivers detailed logs that can prove to an auditor that encryption, key management, and access policies are working effectively. Logs specify when users and processes accessed data, under which policies, and if access requests were allowed or denied. The logs will even reveal when a privileged user submits a command like “switch user” in order to attempt to imitate another user. In addition, Vormetric audit logs can be fed into McAfee Enterprise Security Manager to speed detection of APTs and insider abuse and to create compliance reports.
- **Administrative simplicity:** Vormetric Data Security Platform offers a range of features that help minimize the time and effort associated with implementing and maintaining encryption. The platform features file encryption capabilities that can be implemented without requiring any recoding of associated applications. Further, it offers a unified and centralized platform for managing data-at-rest encryption and key management across an enterprise.

Learn More

To learn more about the McAfee Enterprise Security Manager and Vormetric Data Security joint solution, please visit [Intel Security](#) or [Vormetric](#).

