

Safeguarding Sensitive Data in VMware Environments

Data-at-Rest Encryption, Key Management, Access Control and Security Intelligence with Vormetric Transparent Encryption

In the wake of the increasingly widespread move to virtual and cloud environments, your organization's data can seemingly end up anywhere, making it challenging to secure and maintain compliance for your sensitive data. Turn to Vormetric Transparent Encryption and gain the persistent, robust, and flexible safeguards you need to ensure sensitive data remains secure and compliant in your VMware virtual, cloud, and hybrid environments.

Today, your organization has to safeguard sensitive assets against broadening and increasingly sophisticated set of threats, including privileged user abuse and advanced persistent threat (APT) attacks. As your organization grows increasingly reliant on VMware, your security challenges grow in complexity and scale. In dynamic VMware environments, sensitive data grows increasingly mobile, consistently being migrated and copied across many virtual machines and spread across the storage infrastructure, and an increasingly diverse mix of physical platforms and operating systems.

If your organization has VMware running in cloud environments, these challenges can be even more complex, forcing you to contend with additional layers of administrative privileges associated with the cloud provider's staff. In addition, you have to guard against the potential for inadvertent or malicious access from other tenants within a multi-tenant cloud environment. These risks point to the critical need to secure sensitive data as it resides on virtual systems and as it is in transit through the virtual environment.

The Solution: Vormetric Transparent Encryption

With Vormetric Transparent Encryption, you can safeguard your critical data within your VMware environments and across your enterprise. The product enables you to encrypt data at the file system or volume level within virtual machines (VMs) and then use fine-grained, centrally managed policies to control access to protected data. Vormetric Transparent Encryption offers these key features:

- **Seamless implementation**—By leveraging this product's transparent approach, your organization can implement encryption without having to make changes to your applications, infrastructure, or business practices.
- **Robust safeguards**—Vormetric Transparent Encryption provides fine-grained, policy-based access controls that restrict access to encrypted data. Privileged users, whether cloud, ESX, or storage administrators can manage systems, without gaining access to encrypted data, unless they have expressly been granted permissions to do so.
- **Flexible, central administration**—All policy and key administration is done through the Vormetric Data Security Manager, which can be deployed as a physical appliance or virtual appliance, and reside either on or off premise, according to your objectives and environments.
- **Automation**—For fast rollouts and integration with existing infrastructure within VMware, both web and command line level APIs provide access to the Vormetric Data Security environment for policy management, deployment, and monitoring.
- **Multitenant**—The Data Security Manager can support 1,000 tenants, each with their own personal management domain for policy and key management.
- **Comprehensive virtualization support**—In addition to VMware, the solution supports Microsoft Hyper-V, KVM (Kernel-based Virtual Machine), and other virtual environments. VCE has [certified this solution](#) on Vblock environments.



“The transparency turned out to be very positive. It really turned out to be as seamless as advertised. We know the data at rest is secure. It mitigated the risk we had with the Illinois Personal Information Protection Act.”

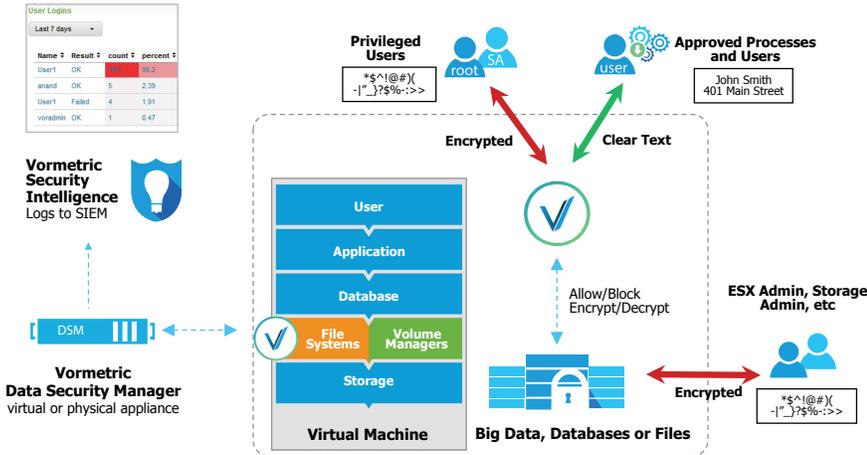
—Mark Guth, the Senior Manager of Information Security at Nicor Gas

“With commercial tools, such as Vormetric, you can actually give certain people certain access without root-level privileges. You can encrypt your data in storage to set up roles of who actually gets to see the data. The admins can do their jobs, and they don't get access to any data files.”

— Robert Bigman, President, 2BSecure, former CISO at the CIA

How Vormetric Transparent Encryption Works

Vormetric Transparent Encryption is an agent available for Windows, Linux, and Unix platforms. The Vormetric Transparent Encryption agent runs in the VMware environment as a kernel module within the virtual machine. These agents are installed on each virtual machine in which data security is to be employed. These agents perform encryption, decryption, access control, and security intelligence logging. Vormetric Transparent Encryption agents evaluate any attempt to access protected data and either grant or deny such attempts, according to policies specified in the Vormetric Data Security Manager.



Key Features

- Simple to deploy—no application, infrastructure or process changes
- Efficient—high-performance, easy to deploy and centralized control
- Lowest TCO—one extensible platform for all your data-at-rest encryption, access control, and security intelligence logging requirements



The Vormetric Data Security Platform

Vormetric Transparent Encryption is part of the Vormetric Data Security Platform, a comprehensive solution that makes it simple to efficiently secure all your organization’s sensitive data, whether it resides in virtualized, physical, big data, or cloud environments.

The Vormetric Data Security Platform consists of several product offerings that share a common, extensible infrastructure. The solution features capabilities for data-at-rest encryption from field to file, enterprise key management, privileged user access control, and security intelligence. Through the platform’s centralized policy and key management, you can address security policies and compliance mandates, while significantly reducing total cost of ownership (TCO).

About Vormetric

Vormetric (@Vormetric) is the industry leader in data security solutions that span physical, virtual and cloud environments. Data is the new currency and Vormetric helps over 1400 customers, including 17 of the Fortune 30 and many of the world’s most security conscious government organizations, to meet compliance requirements and protect what matters—their sensitive data—from both internal and external threats. The company’s scalable Vormetric Data Security Platform protects any file, any database and any application—anywhere it resides. For more information, please visit: www.vormetric.com.

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