Centralized Key Management for Securing your Hyper Converged Infrastructure

Coupling a powerful, yet flexible, hyper-converged data center with a solution that orchestrates your encryption strategy is the key to achieving data security without hindering business productivity. Together, Fornetix and Nutanix bring orchestration and scalability to your infrastructure in a secure way, resulting in a more controlled and cost-effective approach.

Nutanix simplifies datacenter infrastructure by integrating server, storage, networking, and virtualization resources into a turnkey hyper-converged solution that runs any application at any scale and can be deployed in less than 1 hour. Nutanix applies a holistic approach to security throughout their solution which includes support for FIPS 140-2 compliant data-at-rest encryption, with options to leverage self-encrypting drives (SEDs) or software-based encryption using standard drives. This capability allows customers to encrypt data using strong encryption algorithms backed by enterprise grade key management.

With an integration made possible through the Key Management Interoperability Protocol (KMIP), Nutanix communicates with the Fornetix VaultCore™ Key Management System to ensure unification and control over encryption keys across the enterprise.

VaultCore™

Fornetix VaultCore focuses on the key management, distribution, and federation of the associated encryption keys, resulting in a coordination of data security and data availability for Nutanix customers, with little impact on performance. This provides users with an enterprise encryption key management solution that combines encryption key lifecycle automation with granular user access controls across data-at-rest and data-in-motion, making it the ideal partner to fully utilize the security functionality enabled by design by the Nutanix solution.
SOLUTION ARCHITECTURE

Figure 1 - Graphic above demonstrates how the integration between Nutanix and Fornetix supports flexibility and high availability, while powering data-at-rest encryption.

KEY SOLUTION BENEFITS
Together Nutanix and Fornetix help you to achieve data security by delivering an enterprise encryption key management solution that provides:

- **Security Shaped by Trusted Standards** -
  Nutanix and Fornetix both utilize KMIP to allow for simplistic deployment. KMIP provides a comprehensive protocol for communication across various key management environments, reducing costs and increasing efficiency of heterogeneous devices and applications. VaultCore is built on the concept of interoperability through vetted and understood industry standards, leading to heightened organizational security governance and maximizing business productivity.

- **Scalability Without Affecting Performance** -
  Manage 10’s of millions of keys utilizing one VaultCore appliance with little impact on network performance. When adding additional storage and compute abilities to the Nutanix Cloud Platform VaultCore’s capabilities provide everything you need to easily scale to protect sensitive data across your infrastructure.

- **Alignment of Business Processes with Simplified and Centralized Key Management** -
  Fornetix VaultCore helps coordinate encryption key lifecycle activities with applications, communications, and infrastructure management. By coordinating these resources with the rest of the enterprise, the monitoring of key utilization becomes aligned with other components of policy, enterprise monitoring, and management functions. This makes encryption more accessible and operationalizes it as a service. Key management then becomes an integral component of mission management, placing encryption in line with other aspects of secure data and communications environments.

- **FIPS 140-2 Out-of-the-box Compliance** -
  Comply with FIPS 140-2 Level 2 requirements with a physical tamper proof Fornetix VaultCore appliance.
ABOUT FORNETIX
Fornetix® VaultCore™ is a groundbreaking cybersecurity solution designed to unleash encryption’s full potential by simplifying key management. Perimeter defenses alone have proven insufficient at protecting sensitive information during a data breach. Fornetix empowers organizations to build a data security strategy with encryption as the strong foundation. Safeguard sensitive information with a system backed by granular policy tools, user access controls, and powerful automation. VaultCore is a scalable and flexible solution that can manage hundreds of millions of encryption keys while integrating seamlessly with existing technology investments. (www.fornetix.com | @Fornetix)

ABOUT NUTANIX
Nutanix makes datacenter infrastructure and clouds invisible, elevating IT to focus on the applications and services that power the business. The company’s Enterprise Cloud OS software converges private, public and distributed clouds, bringing one-click simplicity to infrastructure and application management. Nutanix Enterprise Cloud solutions integrate virtualization, storage, networking and security to power any application, at any scale – and are delivered as turnkey hyperconverged infrastructure (HCI) appliances, software for popular server platforms, and innovative Xi Cloud Services. (www.nutanix.com | @Nutanix)

NUTANIX READY VALIDATION
• Fornetix VaultCore Validated on Nutanix AHV and AOS for Software Data-at-Rest Encryption

RESOURCES AND GETTING STARTED
• https://www.nutanix.com/partners/technology-alliance-program/fornetix/