

Fortanix Data Security Manager — The Go-to-Solution for VM Encryption

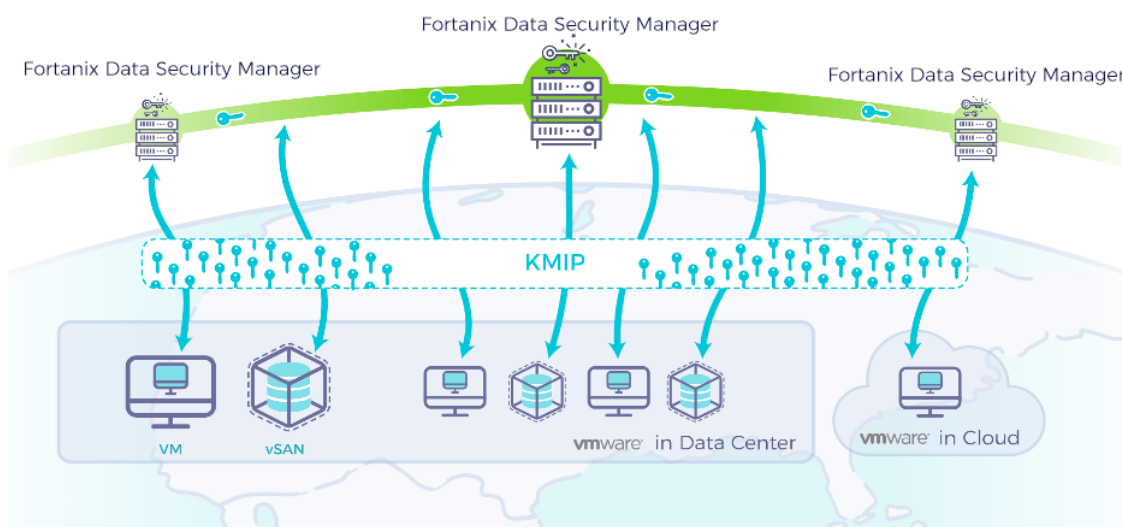
Market Need

Virtual environments running VMware can readily leverage vSphere VM Encryption or vSAN encryption to protect VMs and data-at-rest. However, enterprise key management that is both secure and adaptable to a dynamic software-defined infrastructure remains a challenge. Traditional HSMs require proprietary hardware and are inflexible for a software-defined data center. They also do not offer KMIP support. Software-only key managers on the other hand do not offer the protection of HSMs.

Solution Overview

The joint VMware and Fortanix Data Security Manager solution offer scalable data protection and compliance for software-defined data center and cloud environments. Fortanix Data Security Manager, is a unified HSM and Key Management solution that easily integrates via KMIP for VMware vSAN and vSphere VM encryption. Fortanix Data Security Manager makes it possible for VMware partner cloud providers to deliver VM encryption as a service to the customers (tenants) through VMware cloud director. Secured with Intel® SGX, Fortanix Data Security Manager delivers HSM security with software defined simplicity, and a cloud scale architecture.

Fortanix Data Security Manager with built-in multi-tenancy, when integrated together with VMware cloud director, enables service provider partners the ability to offer VM encryption as a service, key management, tokenization, and secrets management through a single platform.



Fortanix Data Security Manager can be easily configured via vCenter and can be delivered as a service via VMware Cloud Director. It supports all operations including key rotation. In addition, Fortanix Data Security Manager' centralized web-based UI provides comprehensive encryption key visibility and control for multiple VMware clusters, large or small, private or public.

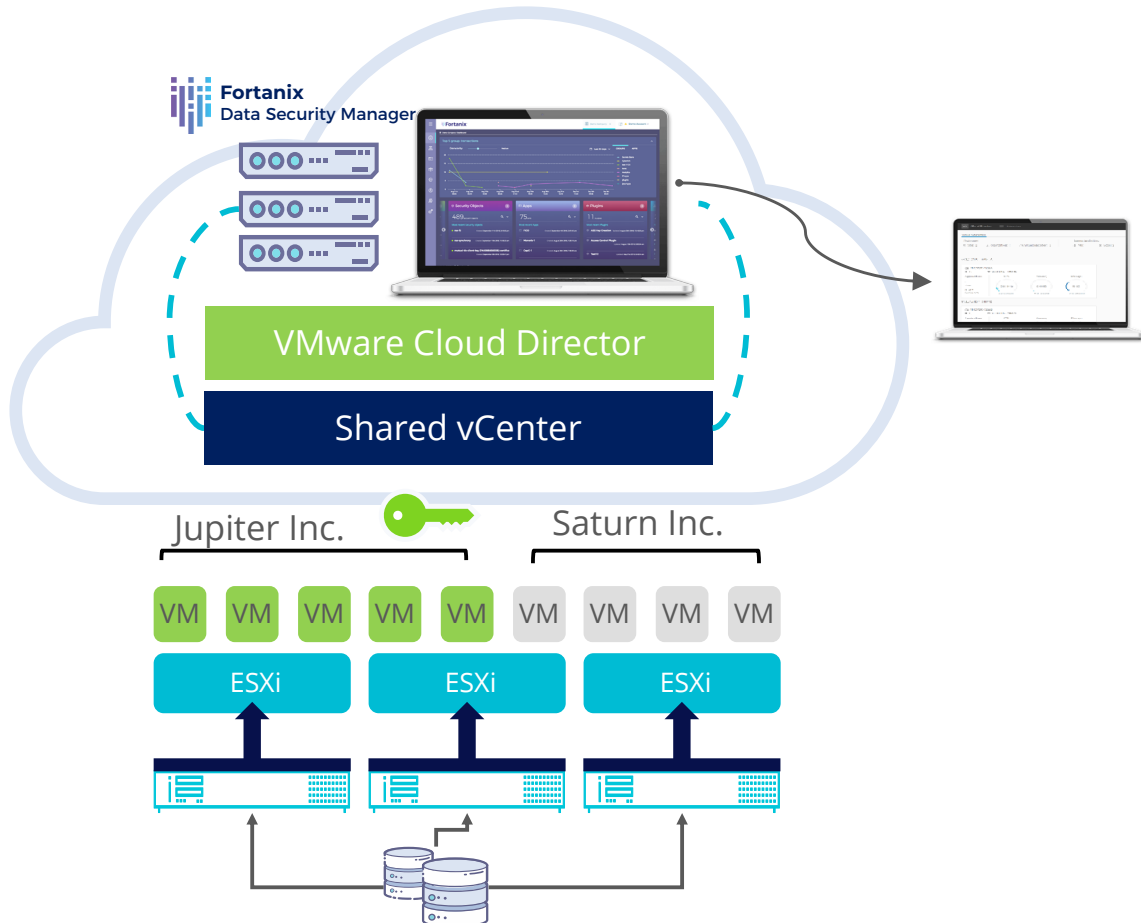
Service Offerings for VMware Cloud Director

1. Provider Side VM Encryption

This use case is centered around a service provider admin encrypting the VMs in their cloud environment to satisfy their own internal security compliance requirements as a Service Provider. Ideally the end customer or the Tenant does not care and does not know anything about the fact that their service provider is encrypting their VMs.

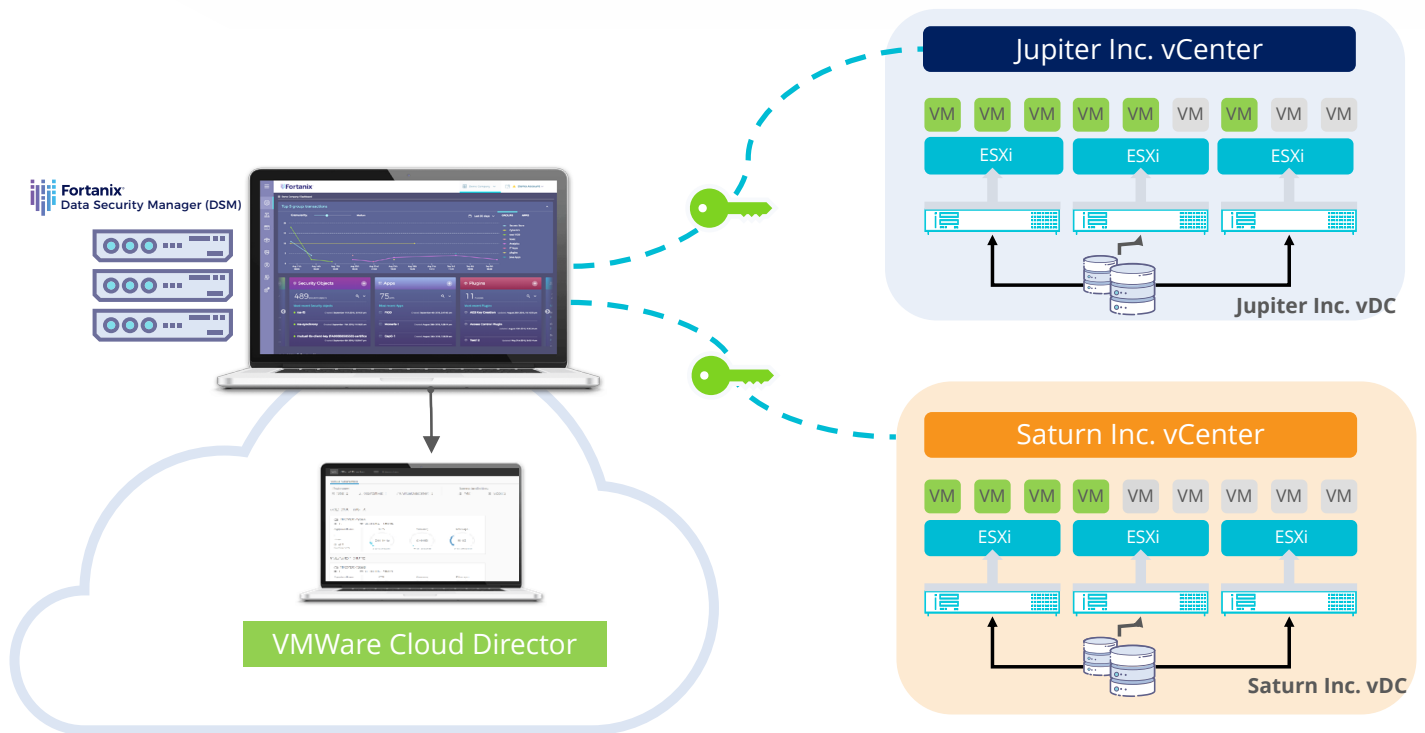
2. Provider Managed Tenant Side VM Encryption

This use case is focused on tenants being able to enable and disable encryption on their VMs using *storage profiles*. Because tenants will not be able to manage or have control over their certificates, they will need to trust and rely on their service provider to manage their encryption key for them on their behalf. This use case satisfies tenants who have security compliance requirements that require encryption of their VMs but who are not interested or in a position to manage a KMS and are happy for their service provider to do it for them on their behalf.



3. Tenant Managed Dedicated vCenter VM Encryption

This use case is for tenant customers who are consuming their own dedicated vCenter from a service provider that they are managing and accessing as an IaaS Virtual Datacenter through the VMware Cloud Director Tenant Portal. In this case the tenant can supply, own, and manage their own encryption certificates and KMS that is associated with their dedicated vCenter.



About Fortanix

Fortanix unlocks the power of organizations' most valuable data by securing it throughout its lifecycle, on premises and in the cloud. Fortanix provides unique deterministic security by encrypting applications and data everywhere – at rest, in motion, and in use with its Runtime Encryption® technology built upon Intel® SGX. Fortanix secures F100 customers worldwide and powers IBM Data Shield and Equinix SmartKey™ HSM-as-a-service. Fortanix is venture backed and headquartered in Mountain View, Calif.

About VMware

VMware, a global leader in cloud infrastructure and business mobility, helps customers accelerate their digital transformation. VMware enables enterprises to master a software-defined approach to business and IT with VMware Cross-Cloud Architecture™ and solutions for the data center, mobility, and security.