

StorMagic SvKMS

ENCRYPTION KEY MANAGEMENT

STORMAGIC SvKMS

StorMagic SvKMS is an encryption key management solution that can be deployed in any environment. It simplifies complex security and key management infrastructure by providing centralized management and, illustrated in fig. 1, the ability to deploy a KMS to wherever it is needed. This makes it perfect not only for the datacenter, but for the cloud and edge computing environments as well.

Whether on-prem, cloud or multi-cloud, SvKMS offers organizations the flexibility to locate their key management resources where required. It eliminates the need for hardware security modules (HSMs) and uses a REST API for easy integrations into any workflow with custom key imports facilitating an easy transition from legacy solutions.

StorMagic SvKMS is FIPS 140-2 certified, allows advanced identification and access management through SAML 2.0, and can be configured as a single- or multi-tenanted solution, making it an ideal choice for managed security solution providers.

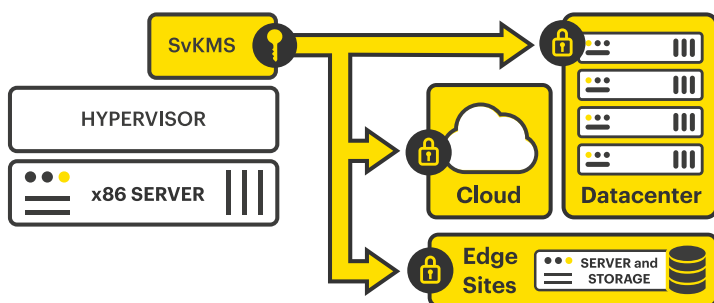


Fig. 1: A typical SvKMS deployment serving keys remotely to any environment or workflow.

This data sheet is broken down into four sections, covering the features in SvKMS, its requirements, hardware and software compatibility, and finally support levels.

SvKMS FEATURES

StorMagic SvKMS includes a comprehensive suite of features allowing control of the full key management lifecycle. All of these features are detailed in the table at the end of this document.

KMIP

SvKMS has been built around maximizing the KMIP open standard to enable organizations to leverage it as part of their key management operations. With SvKMS you can centrally manage, store, and consolidate encryption key management tasks across cloud, SaaS, on-premise systems, and endpoint devices like mobile and IoT.

BYOK/CSEK

Bring Your Own Key (BYOK), or Customer Supplied Encryption Keys (CSEK), ensures encryption keys remain in the hands of the business, regardless of location. This gives business users control for data held off-premise - if the content owner disables access to the keys, it becomes impossible for the information to be decrypted by any third party.

Custom key import

Over time, an organization may have anything from hundreds to millions of keys being used within a complex cryptographic environment. SvKMS's custom key import feature allows users to import keys that may have been created by another key manager in a common format, or through a custom algorithm - including PGP, GPG, DES, CAST and Blowfish.

REST API integration and automation

Manually addressing all key management functions at the application level is time-consuming and inefficient, and old-style key managers are driven by complex, error-prone command line interfaces. StorMagic SvKMS has a flexible and robust REST API, allowing organizations to automate key management functions and create streamlined workflows.

Licensing and pricing

SvKMS is available in three tiers, known as 'Editions' – Essentials, Professional and Enterprise. Each Edition determines the type of use case and scale of the key management solution required. Depending on the Edition, SvKMS can be deployed as either an on-premise, or a cloud-based subscription service known as Key Management-as-a-Service (KMaaS). Details of the features included in each SvKMS Edition are provided in the features table at the end of the data sheet. More information on how SvKMS is licensed and priced can be found on the [SvKMS Pricing webpage](#).

All StorMagic SvKMS subscriptions include our [Platinum Enterprise Support service](#), which provides 24 hours per day, 7 days a week maintenance and support.

A free, fully functional evaluation of SvKMS is available to download, enabling organizations to trial and experience the features and benefits of SvKMS, before purchasing.

For more information and to download an evaluation copy, visit stormagic.com/trial.

SYSTEM REQUIREMENTS

StorMagic SvKMS is compatible with any x86 server, providing it meets the minimum requirements listed below. StorMagic SvKMS has the following minimum hardware requirements:

CPU	4x vCPUs
Memory	8GB RAM ¹
Disk	20GB HDD ²

¹ Minimum of 8GB RAM required, 16GB recommended for large environments.

² 20GB HDD minimum requirement. For optimal performance, 40GB HDD recommended.

SOFTWARE REQUIREMENTS

StorMagic SvKMS can be run in any cloud and on any hypervisor, and has numerous integrations with other software solutions. Further details of these can be found in the tables below.

Cloud Platform Compatibility

Four major cloud providers - Amazon, Microsoft, Google and OpenStack - are supported by SvKMS and the solution can be deployed across one, or multiple providers, as required.

Cloud Platform	SvKMS version		
	2.4	2.5	2.6
Google Cloud	●	●	●
Amazon Web Services	●	●	●
Microsoft Azure	●	●	●
OpenStack - Version 15 (Train)	●	●	●

Hypervisor Compatibility

SvKMS supports many different hypervisors, including VMware vSphere, Microsoft Hyper-V, Linux KVM, Nutanix AHV and Oracle VirtualBox. It is installed as a VM on top of the hypervisor, allowing advanced hypervisor features to be leveraged such as high availability and fault tolerance. The table below outlines SvKMS' compatibility with different hypervisor versions.

Hypervisor	SvKMS Version		
	2.4	2.5	2.6
VMware	vSphere 7.0 & updates		●
	vSphere 6.7 & updates	●	●
	vSphere 6.5 & updates	●	●
Microsoft	Windows Server 2016	●	●
	Hyper-V Server 2016	●	●
Linux KVM	CentOS 8.0	●	●
	CentOS 7.6	●	●
	RHEL 8.0	●	●
	RHEL 7.6	●	●
	Ubuntu 18.04 LTS	●	●
Oracle	VirtualBox 6.1	●	●
	VirtualBox 6.0	●	●
	VirtualBox 5.2	●	●
Nutanix	AHV 5.10	●	●

INTEGRATIONS AND SUPPORTED WORKLOADS

Once SvKMS is deployed, it can be connected and integrated into many different services and workloads. The table below lists out the current available and documented integrations, however thanks to the REST API included within SvKMS, it can also easily integrate with proprietary applications within an organization. By bringing all of these workloads into a centralized key manager, the entire key management operation is dramatically simplified and far more secure.



Integration	Explanation	SvKMS Version		
		2.4	2.5	2.6
AWS EC2 and S3	Support for external key management using BYOK	●	●	●
Azure Key Vault Managed HSM	SvKMS can be used as an interface between Key Vault and third party HSMs		●	●
Azure Storage	Support for external key management using BYOK	●	●	●
BitLocker	Use SvKMS to provide external, secure AES key protection for encryption and decryption of Windows drives		●	●
Commvault	SvKMS is a Commvault-certified key manager and uses KMIP to protect Commvault software encryption keys stored in a CommServe database	●	●	●
Google Cloud EKM	Use SvKMS as an external key manager to protect data in Google Cloud, giving greater control than BYOK		●	●
IBM DB2	SvKMS SvKMS can create a centralized key store when using DB2 native encryption	●	●	●
IBM Informix	Use KMIP for third party key management for storage space encryption (dbspaces, blobspaces, and smart blobspaces)			●
MariaDB	SvKMS acts as a centralized key store for MariaDB native encryption, via the REST API	●	●	●
MongoDB	Enables data-at-rest encryption through storage-based symmetric key encryption, via KMIP	●	●	●
MySQL	Use SvKMS as a centralized key store for MySQL encryption, via KMIP	●	●	●
NetApp ONTAP	SvKMS can act as a key management server for volume encryption, via KMIP	●	●	●
Nutanix Prism	Enables the use of self-encrypting drives (SEDs), via KMIP integration	●	●	●
Salesforce Shield	Protect encrypted Salesforce data by using SvKMS as a key manager with BYOK		●	●
Veritas NetBackup	SvKMS can act as the key management server for Veritas NetBackup encryption, via KMIP	●	●	●
VMware vSphere and vSAN	Enables vSphere VM encryption, via KMIP integration	●	●	●

For more detailed information on each of these integrations, alongside many others, please visit the [SvKMS integrations page](#) of the StorMagic website. Each solution's integration is broken down in detail, with downloadable integration guides available for each one.

HSM Integrations

SvKMS also integrates with many leading HSM vendors, to provide centralized management and advanced key management capabilities to these hardware solutions that are typically favored by organizations for their reliability and ability to provide root-of-trust. For more information about how SvKMS integrates with HSMs, please visit the [HSM extension page](#) of the StorMagic website.

Vendor	Model	SvKMS Version		
		2.4	2.5	2.6
Utimaco	CryptoServer CP5	●	●	●
Entrust	nShield Connect 5000+	●	●	●
	nShield Connect 6000+			●
Thales	Luna 7.0		●	●

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SvKMS FEATURES

	ENTERPRISE	PROFESSIONAL	ESSENTIALS
REST API - web page with more info <ul style="list-style-type: none"> Allows other applications to connect, interact and integrate directly with SvKMS Defines a common interface for key management operations (get, fetch, rotate, create, delete, etc.) Build automation workflows and integrate with many use cases that were limited with previous standards like PKCS#11 	●	●	
USE CASES	Unlimited	5	1
UNLIMITED ENCRYPTION KEYS	●	Up to 250	Up to 50
BYOK/CSEK - web page with more info <ul style="list-style-type: none"> Encrypt your data and retain control and management of encryption keys even in cloud computing environments Generate strong keys and control the secure export of keys to the cloud, thereby strengthening key management practices Separate the lock (encryption) from the key (encryption key) 	●	●	
KMIP SERVER - web page with more info <ul style="list-style-type: none"> A cost-effective solution where only one key management service is necessary to facilitate all key encryption requirements SvKMS can be deployed as a KMIP Server in a virtual environment in minutes, for a fraction of the cost and effort of an HSM Reduces overheads/administration related to managing encrypted data, such as tape drives, databases, storage array and software, through centralized management 	●	●	
CLUSTER MANAGEMENT AND HIGH AVAILABILITY <ul style="list-style-type: none"> Easily activate a new key management installation Simple KMS setup for both a single instance and a complex high availability cluster 	●	●	●
FULL KEY MANAGEMENT LIFECYCLE <ul style="list-style-type: none"> Ensure compliance and enact robust key policies through the entire key lifecycle, from creation to storage, archiving and deletion 	●	●	●
ROBUST KEY MANAGEMENT OPERATIONS	●	●	●
PAINLESS BACKUP AND RESTORE <ul style="list-style-type: none"> Saves and stores the current SvKMS state for future restoration Set on-demand and scheduled backups to an external location, restoring these backups when required 	●	●	●
HYBRID ON-PREMISE/CLOUD CONFIGURATION <ul style="list-style-type: none"> Generate, store and provision keys onsite/on-premise, in the datacenter and/or in private, public or hybrid clouds 	N/A	N/A	N/A
PROACTIVE INSIGHTS (MANAGE NOTIFICATIONS AND ALERTS) <ul style="list-style-type: none"> Audits all activity related to key data that can include anything from key creation, to rotation and compromise Provides alerts on activity in a cryptographic system that requires further investigation in order to detect and prevent breaches or other issues 	●	●	●
ROLE-BASED ACCESS CONTROL (RBAC) <ul style="list-style-type: none"> Allows the administrator to effectively segment and control who has access to various encrypted systems Allows groups to handle who may access a key. For example, a group for databases may allow certain key users access to unencrypt certain data but may exclude other key users within the storage group 	●	●	●
HSM EXTENSION - web page with more info <ul style="list-style-type: none"> Supports PKCS#11 specification, allowing integration with HSMs Consolidates key management into one single pane of glass, while extending the life of in-house HSMs Can serve as an abstraction in front of an HSM, provisioning keys out through the key manager which can then perform many key management lifecycle functions 	●		
TPM PROTECTION	●		
CUSTOM KEY IMPORT - web page with more info <ul style="list-style-type: none"> Manage old key types and secrets - such as PGP, DES, CAST and Blowfish - from the same centralized key manager 	●	●	
SOPHISTICATED, SINGLE-USER INTERFACE (UI) <ul style="list-style-type: none"> One key manager supports many different key management use cases, all from one interface, thus reducing time and costs 	●	●	●
DETAILED AUDITING AND LOGGING, EXPORTABLE TO POPULAR SIEMS <ul style="list-style-type: none"> Analyze and report on key management activities to uncover potential threats Collects data through the use of the syslog format, which can then be exported to external SIEM tools 	●	●	●
FIPS 140-2 LEVEL 1 COMPLIANCE <ul style="list-style-type: none"> Meets the highest levels of NIST compliance for a key management software product 	●	●	●
SINGLE SIGN ON	●	●	

