

Entrust KeySafe 5

Centralized management and monitoring for distributed nShield HSM estates.

OVERVIEW

Enterprises today increasingly use widely distributed estates of on-premises and cloud-based hardware security modules (HSMs) to protect their critical cryptographic assets. Maintaining visibility and control over these mixed deployments can be complex and time-consuming, often requiring manual steps and relying on local knowledge or system access. As these environments grow in scale and complexity, the ability to continuously monitor system resources becomes essential to ensure operational efficiency, security, and compliance.

Entrust KeySafe 5 is a centralized solution that enables remote management of setup and configuration tasks, providing comprehensive visibility into the status of nShield Security World, the unique, scalable architecture that supports both nShield HSMs and nShield as a Service deployments. It is designed to simplify operations across mixed environments by offering a unified interface for managing diverse HSM estates.

In addition to configuration management, KeySafe 5 delivers robust monitoring capabilities. It supports the visualization of both real-time and historical operational data, helping administrators maintain situational awareness and system health. The platform also includes a flexible monitoring alerting system, allowing users to configure both predefined and custom alerts to detect malfunctions, warnings, and other events of interest.*

KeySafe 5 is accessible through a modern graphical user interface (GUI) as well as a comprehensive set of HTTPS REST APIs, enabling seamless integration with existing systems and workflows.

* Available as a licensed add-on

KEY FEATURES

- Fully automated management of nShield HSMs
- Centralized configuration and control across on-premises and cloud-based deployments
- Scalable architecture supporting mixed estates and multi-tenant environments
- Real-time and historical monitoring with customizable alerting capabilities
- Unified visualization of nShield Security World data
- Intuitive graphical user interface built on public REST APIs
- Seamless support for all nShield HSM variants

Functionality

For each nShield HSM client machine that needs to be managed using this platform, it's necessary to install a KeySafe 5 agent binary alongside the existing nShield HSM hardserver.

KeySafe 5 Features

- **HSM data**
 - Memory usage
 - Temperature
 - Fan speed
 - Utilization
 - Object and command count
- **Host data and management**
 - Type
 - Trigger conditions
 - Notification channels (Web UI, email, Webhook)
- **HSM management**
 - HSM information (enquiry)
 - Slot information & card formatting (slotinfo)
 - Mode change & clearing of a module (nopclearfail)
 - Enable/disable static features
 - Enable/disable dynamic features
- **Client license upgrades**
- **Feature certificate storage and management**
- **Perform management of feature certificates**
- **Security World management**
 - World information (nfkminfo)
 - World creation & loading (new-world)
 - Replace ACS (racs & TurboRACS)
 - Cardset & softcard support (createocs & ppmk)
 - Listing, creation, deletion, change passphrase, and recover passphrase
- **CodeSafe 5 management functionality**
- **Host management**
 - Listing of hardserver version
 - Listing of KeySafe 5 agent version
 - Ability to group multiple hosts into a single HSM pool to perform management operations

Features



Remote estate management: Monitoring and managing an estate of nShield HSMs and the accompanying Security World regardless of geographical distance between appliance and operator.



Centralized platform: Works with a large or small nShield HSM estate, offering a central platform for deployment, configuration, maintenance, and monitoring of the entire deployment.



Automation: A simplified GUI, supported by an API capable of working independently of the UI, enables an automated approach to the management of the nShield HSM estate.



REST API implementation: Public API specifications allow customers to develop their own client applications. Interoperable with third-party tooling, implementing open-source APIs (e.g., OpenMetrics, OpenTelemetry).



Web user interface: Features a user-friendly and visually rich means to orchestrate nShield HSM data and deployment including physical unit configuration (network settings, etc.), Security World management, and firmware upgrades.



On-Premises and Cloud Deployments: Enables management of existing nShield estates and supports current and future nShield-as-a-Service deployments, including multi-tenancy capabilities.



Cryptographic Security Platform Support: KeySafe 5 supports integration with Entrust's Cryptographic Security Platform (CSP), enabling secure discovery and management of keys generated by Entrust nShield HSMs.

Technical Specifications

KeySafe 5 supports any combination of nShield HSM deployments including nShield 5c and 5s, nShield Connect and Solo XC, nShield Connect + and Solo +, and nShield Edge.

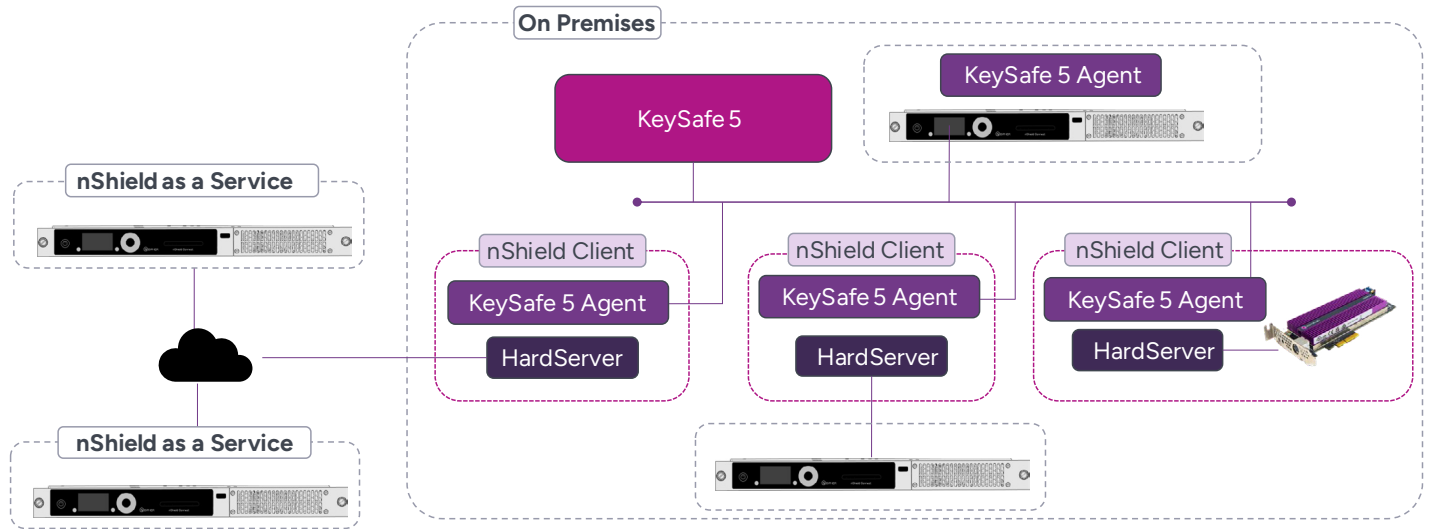


Diagram showing typical nShield Deployments managed by KeySafe5