



Entrust Datacard™ and SafeNet Assured Technologies

# Integrated Solution Enhances Security of Public Key Infrastructure (PKI) Deployments

## Key Benefits

- **Secure strong foundation for user identities across enterprise applications**
- **Control access to on-premises and hosted deployments**
- **Manage certificate life cycle, including backup/recovery**
- **Provide root of trust to safeguard sensitive private keys**
- **Intrusion-resistant, tamper-evident cryptographic HSM hardware validated to FIPS Level 2 and 3, depending on configuration**
- **Secure audit logging of HSM events**
- **Robust high availability grouping of HSMs**

## THE PROBLEM: INCREASING NEED FOR TRUSTED IDENTITY ACROSS A RAPIDLY EXPANDING ECOSYSTEM

The new age of connectivity drives powerful growth opportunities in the modern enterprise, but it also requires you to change the way you protect information, networks and devices. Public key infrastructure (PKI) solutions are ideally suited to establishing the trusted identities of users, devices, applications and services for secure access to critical enterprise systems and resources, delivering critical elements of a secure environment.

## THE CHALLENGE: SECURING THE MANAGEMENT OF CERTIFICATION AUTHORITY (CA) KEYS

Strong protection for the private keys used by on-premises or hosted PKIs is essential to an effective security strategy. The level of trust in a PKI deployment depends on the level of protection provided to the private keys at the core of this trust infrastructure. CA keys stored and managed in software can be at risk of compromise via advanced threats, impacting the trustworthiness of the environment. The challenge is how to reduce this risk.

## THE SOLUTION: AN INTEGRATED SOLUTION WITH A STRONG ROOT OF TRUST

Stringent government security guidelines require the use of dedicated hardware to enhance security and reduce any risk associated with sensitive data.

Entrust Datacard and SafeNet Assured Technologies (SafeNet AT) have teamed up to offer a high-performing solution that integrates the best of both companies' security technologies to ensure secure identities and efficient deployment.

Entrust Datacard PKI solutions establish and manage certificate-based security for critical business applications. Entrust Authority™ Security Manager enables customers to deploy and manage their own digital certificates. The product authenticates users, controls access and secures cryptographic applications. For customers seeking a hands-off approach, Entrust® Managed PKI (mPKI) delivers a hosted solution.

SafeNet AT's Entrust Datacard Ready Luna SA for Government hardware security modules (HSMs) integrate with the Entrust Datacard PKI offerings to protect the confidentiality and integrity of sensitive keys. Organizations looking to extend the security of on-premises or hosted PKIs can deploy Entrust Datacard solutions in conjunction with SafeNet AT's Luna SA for Government HSMs to ensure that critical keys are never exposed to unauthorized entities. SafeNet AT HSMs securely generate, store and manage CA private keys.

## Why use SafeNet AT Luna SA for Government with Entrust Authority Security Manager?

While it is possible to deploy PKIs without a hardware root of trust, CA keys handled outside the cryptographic boundary of a certified HSM are significantly more vulnerable to attacks that can compromise the PKI's credential issuance and certificate revocation capabilities.

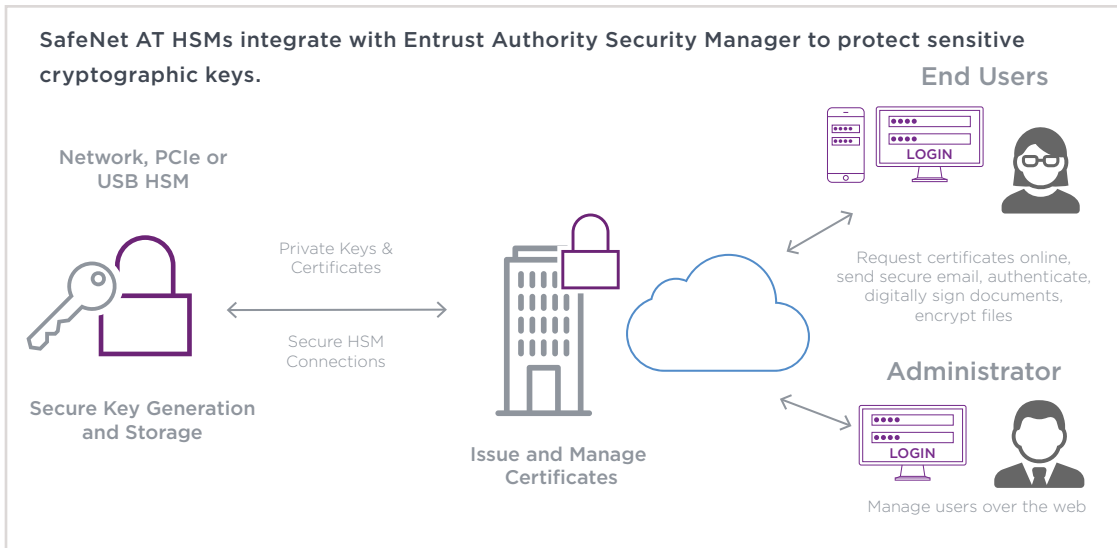
The use of HSMs is widely considered best practice for PKI deployments, providing a proven and auditable way to secure valuable cryptographic material. HSMs enable organizations to:

- Secure CA keys within carefully designed cryptographic boundaries that employ robust access control mechanisms with enforced separation of duties to ensure keys are only used by authorized entities
- Ensure availability by using sophisticated key management, storage and redundancy features to guarantee keys are always accessible when needed
- Deliver high performance to support increasing numbers of demanding applications

The Entrust Datacard Ready certification of SafeNet AT HSMs assures interoperability, ease of deployment and enhanced security.

SafeNet AT's Luna SA for Government is a dedicated crypto processor designed to protect the cryptographic key life cycle. This HSM, when integrated with the Entrust Datacard Security Manager, enables an organization to protect its cryptographic infrastructure by securely managing, processing and storing cryptographic keys inside a hardened, tamper-resistant device.

The SafeNet AT Luna SA for Government's Entrust Datacard Ready integration allows government organizations to use the most trusted HSM available for securing the root private key of the PKI. With this keys-in-hardware approach, the Entrust Security Manager communicates with the HSM over a secured communication link to access the key, but the key never leaves the protected boundaries of the HSM.



For more detailed information, please call **888.690.2424** or visit **[entrustdatacard.com](http://entrustdatacard.com)** or **[safenetAT.com](http://safenetAT.com)**.

## About Entrust Datacard Corporation

Consumers, citizens and employees increasingly expect anywhere-anytime experiences — whether they are making purchases, crossing borders, accessing e-gov services or logging onto corporate networks. Entrust Datacard offers the trusted identity and secure transaction technologies that make those experiences reliable and secure. Solutions range from the physical world of financial cards, passports and ID cards to the digital realm of authentication, certificates and secure communications. With more than 2,000 Entrust Datacard colleagues around the world, and a network of strong global partners, the company serves customers in 150 countries worldwide. For more information, visit [entrustdatacard.com](http://entrustdatacard.com).



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## About SafeNet AT

SafeNet Assured Technologies, LLC protects the most vital data from the core to the cloud to the field. We serve as a trusted, U.S. based source for cyber security solutions for the U.S. Federal Government. Our solutions enable agencies to deploy a holistic data protection ecosystem where data and cryptographic keys are secured and managed, and access and distribution are controlled. For more information, please visit [safenetAT.com](http://safenetAT.com).

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