

The next level of PKI deployment

Unbound Tech and PrimeKey have developed a partnership where we together enhance PrimeKey's PKI software EJBCA Enterprise with support for the Unbound Key Control solution. Together, the two products deliver the next level of Public Key Infrastructure (PKI) agility.

The connected society enables the availability of massive amounts of data, requiring new disruptive solutions and business models to evolve in an agile way. Continuous development, deployment and optimization enables companies to start small and grow with a successful business case. For the new businesses and new business models, it is important to have the relevant security implemented from the start to ensure security effectiveness and cost-efficiency. This is why IT infrastructure and IT security need to follow this evolution and offer flexible and cost-effective deployment options, adapted to the business models of today.

With the combination of PKI by PrimeKey's EJBCA Enterprise and Unbound Key Control (UKC) by Unbound Tech, it is no longer necessary to deploy and manage a physical Hardware Security Module (HSM). UKC is a pure-software, FIPS 140-2 validated virtual HSM and key management solution that combines the security of a traditional HSM with the flexibility and agility of software.

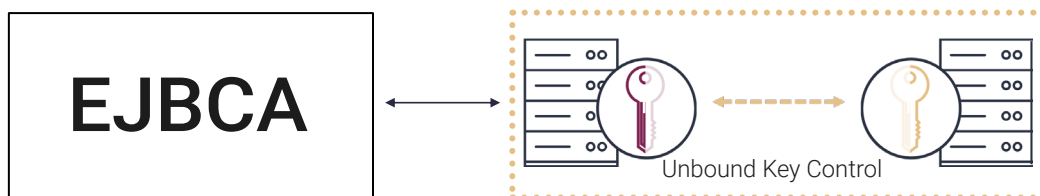
Securing the CA Root Key in PKI

When using PKI solutions there is significant need to secure the root key of a Certificate Authority (CA). If a CA's root key is compromised the credibility of the CA is broken, resulting in all issued transactions, processes etc. being compromised. Therefore, in a PKI environment – particularly one integral to business processes, financial transactions, or access controls – it is essential that private keys be guarded with the highest level of security possible. An attacker with knowledge of the private key can create new smartcards/tokens and have unlimited dormant access to the CA's network.

EJBCA Enterprise and UKC

With the partnership between PrimeKey and Unbound, EJBCA Enterprise integrates with UKC to secure the Root CA private key as well as policy, intermediate and issuing CA keys. In addition, EJBCA Enterprise makes use of UKC for protection of logfile signing keys and TLS keys used for secure authentication to and from EJBCA Registration Authority, EJBCA Validation Authority and EJBCA SignServer Enterprise.

UKC splits keys into shares placed on separate nodes and ensures the shares are never united – not even when generated or while in use – eliminating any single point of compromise. The solution can be deployed across your entire decentralized hybrid cloud and geo-distribute environments without disrupting existing application workflows.



About Unbound Tech

Unbound Tech equips companies with the first pure-software solution that protects secrets such as cryptographic keys, credentials or other private data by ensuring they never exist anywhere in complete form. Founded in 2014, Unbound has been recognized with numerous industry awards and named in multiple Gartner Hype Cycle Reports. www.unboundtech.com

Benefits

Elastic and Scalable

A combined solution that adapts to your needs. No extra hardware needed when expanding your infrastructure.

Transparent and seamless integration

The integration of UKC is the same as with traditional HSMs.

Mathematically proven security guarantee

The key material never exists in the clear throughout its lifecycle including creation, in-use and at-rest.

Multi-site, Multi-Cloud Hybrid IT support

Control and manage keys anywhere; on-premise, in the cloud or in hybrid deployments.

Crypto-Agility

Quickly add support for new cryptographic algorithms and fix discovered vulnerabilities via software upgrade.

About PrimeKey

PrimeKey is one of the world's leading companies for PKI and digital signing solutions. Deployed as software, appliance or cloud, our products EJBCA and SignServer deliver the capability to implement an enterprise grade PKI system ready to support solutions such as IoT, e-ID, e-Passports, authentication, digital signatures unified digital identities and validation. PrimeKey has its head office in Stockholm, Sweden.