



Offline Root CA Storage

Risk-reducing, Offline Certificate Authorities

VirtuCrypt Elements Offline Root CA Storage provides a secure root certificate authority infrastructure. At the highest point within a Public Key Infrastructure (PKI) hierarchy, the root CA is trusted by all an organization's users, and as such it is critical to maintain the root private key securely to prevent unauthorized use. For comprehensive risk reduction, the Root CA's private key is kept offline within a FIPS 140-2 Level 3 and PCI HSM validated Secure Cryptographic Device. This solution satisfies PCI PIN and P2PE requirements that dictate that CAs used to sign subordinate CAs be kept in an offline dedicated network.

How It Works

VirtuCrypt provides the hardware on which the offline root CA is installed. This service works by following the procedures below:

- The Root CA's private key generates a self-signed root certificate, allowing it to preside as the root of trust for the infrastructure
- Signing requests are generated by an external Subordinate CA and signed by the Root CA's private key.
- Generated subordinate CA certificates are issued to the remote CA and out-of-band certificate validation is performed.
- The Subordinate CA may be used to issue additional certificates that will chain up to the root CA.
- During the Root CA signing process, the VirtuCrypt infrastructure is kept offline at all times

Root CAs have limitless applications within a cryptographic environment, including data protection, remote key loading, and ID issuance. Capable of such wide-ranging uses, these CAs require significant protection.

A fully-managed and hosted PKI enables your organization to validate the integrity of users, devices, and more.



THE VIRTUCRYPT INTELLIGENCE PORTAL (VIP)

The VIP Dashboard provides an intuitive way to securely control and monitor your entire cryptographic environment from one location. Users can configure their VIP Dashboard to include only the information that is most useful to them and define custom alerts through VirtuCrypt's active environment monitoring utility.

Organizations also have the opportunity to rebrand the VirtuCrypt Dashboard so that it can be offered to customers with the cohesive look and feel they've worked hard to build. This includes adjusting color schemes, logos, and imagery to match the company's brand and create instant product recognition for customer base.

VIRTUCRYPT DATA CENTER SPECIFICATIONS

The multiple geographically separate data centers selected by VirtuCrypt showcase its high regard for uncompromising security. Not only are these data centers outfitted with state-of-the-art technology, but they enforce physical and logical security measures, such as biometric access controls and dual authentication, that ensure the integrity of the world's most sensitive data.

