

# Pharma solutions provider



## Success Story

Enterprise-ready certificate management

Best of breed hardware security-based solution

Optimized lifecycle management of digital certificates

## Enterprise-ready certificate management

Keyon's customer, a leading global organization for integrated solutions in the pharma and healthcare sector, increased the use of digital certificates, which required an automated certificate management as well as a solution to migrate their internal PKI to new security standards. The cost/benefit ratio were important factors in choosing the solution.

With an increased use of digital certificates, the issuance and management of such certificates needs automation with an enterprise-ready approach.

Based on Keyon's true-Xtender, the internal Microsoft PKI was unleashed and the certificate lifecycle management was automated and optimized. Keyon supported the customer with the setup of the new PKI and enabled a simplified

migration of the current PKI to the new enterprise-ready version. Keyon also integrated a Hardware Security Module (HSM) from Securosys to meet the latest security requirements for key generation, key management, and key usage. This significantly increases the security in regards to today's vulnerabilities such as Spectre and Meltdown.

## The customer

Keyon's customer is a leading global organization for integrated solutions in the pharma and healthcare sector.

With headquarters in Switzerland, the customer has more than 100 subsidiaries and over 12'000 full-time employees worldwide.

## Requirement

In today's world of digital transformation, more and more applications require the use of digital certificates. This also applies to Keyon's customer. To meet the related requirements and to be enterprise ready for the future, the customer wanted to renew their existing Microsoft PKI. In order to facilitate the management of the digital certificates, they also required an automated enrollment and management service.

To maximize the security of cryptographic operations, the customer opted for a Hardware Security Module (HSM) by the Swiss manufacturer Securosys, which is used for key generation, key management, and key usage.

## Solution

Keyon successfully planned and implemented all organizational and technical processes of the new PKI and performed the migration from the existing to the new one. All PKI processes and policy enforcements are done based on the true-Xtender suite - the comprehensive solution for the issuance and management of X.509 certificates. Keyon also successfully planned and implemented all organizational and technical processes related to the secure generation and management of the Certificate Authority (CA) private keys. Besides the implementation, the engagement included the elaboration of processes and role concepts for certificate and key management, backup and restore procedures, high availability, monitoring, and operations. The close cooperation between the customer and Keyon ensured a continuous know-how transfer and enabled the customer to operate the entire solution independently.

To improve the management of the digital certificates, the following products were integrated:

- [Keyon true-Xtender Registration Authority](#)  
Enables the seamless integration of the certificate management into the companies' internal processes and offers next to a browser-based GUI a web service for automated processes;
- [Keyon true-Xtender Cert Expiration Service](#)  
Checks periodically whether certificates expire within a specified time limit and provides the respective notification service.

Due to Keyon's comprehensive know-how and structured approach, the project has been successfully completed on time and on budget.