

Support for the setup and operation of a Windows PKI

SARTORIUS

Sartorius has received professional support for many years from the Secardeo PKI experts and uses their software solution.

Sartorius AG



Sartorius AG is a DAX-listed pharmaceutical and laboratory supplier based in Goettingen. The company was founded in 1870 and employs around 16,000 people. Sales in 2022 amounted to EUR 4.175 billion.

Challenges and goals

The PKI originally introduced at Sartorius was based on a two-level CA hierarchy with Microsoft CAs.

A reliable, competent partner for PKI consulting and engineering was sought for secure operation and the continuous further development and modernization of the Windows PKI.

Requirements

To ensure the continued security and reliability of the PKI Sartorius PKI, the status of the CAs and other PKI components should be checked regularly. For this purpose, a monthly audit of the issuing CAs should be carried out.

The Windows PKI should correspond to the current state of the art. This requires continuous updates of the CA software as well as updates of the cryptographic processes and key lengths used.

Up-to-date technical and organizational concepts are always required for the further development of the PKI and its operation. Furthermore, other PKI solutions, for example for mobile devices, must also be analyzed and evaluated.

Since there is no longer a corresponding AD object for many of the certificates issued due to the decommissioning of computers, the departure of employees or changes of address/name, a solution for automatic revocation in AD is required.

Another requirement for Sartorius is the provision of publicly recognized TLS certificates for the external web servers.

The solution

Secardeo was involved for advice in an early phase of the PKI. Since the beginning of the PKI, Secardeo has been conducting monthly audits of the issuing CAs and the root CA with the appropriate tools. Sartorius receives a clear report on the status, which also points out the necessary measures.

The migration of the PKI took place continuously with the support of the Secardeo experts. This also included the migration to SHA-2. Technical and organizational concepts were prepared for this. Furthermore, an assessment was carried out that evaluated the Windows PKI and the mobile PKI.

The Secardeo component certRevoke was introduced for the auto-revocation of "orphaned" certificates in the Active Directory. This monitors the AD for the configured attribute changes and initiates a certificate revocation via the issuing CA.

Secardeo provides an MPKI access to the SwissSign CA to obtain public certificates.



Customer Benefits

The cooperation with Secardeo has now extended over many years. This means that the Secardeo experts have in-depth knowledge of the technical and organizational aspects of the PKI at Sartorius.

The customer is always up-to-date on the PKI status through the audit reports.

Updates, extensions and migrations of the PKI can be reliably planned and implemented with Secardeo. Current questions on the subject of PKI can also be clarified at short notice.

The auto-revocation of "orphaned" certificates results in a tidy state at all times and possible security risks associated with this are prevented.

Overall, Sartorius has the advantage of not having to build up complex, detailed PKI knowledge internally and keep it up to date. In this way resources can be saved and at the same time a high quality of PKI operation can be achieved.

