



# Nexus. The Trust Centre solution for service providers

Nexus has many years of experience, great references and several million users worldwide who use digital certificates out of the Nexus Trust Centre solution. The well-engineered, comprehensive Nexus products are extremely successful in this complex application area, especially in accredited, law compliant Trust Centres.

**A TRUST CENTRE** is the central component of a highly secure Public Key Infrastructure (PKI). It includes a range of services such as user registration, certification (CA), smart card printing, PIN letter management, directory service, revocation service and online status information service. Severe technical and security requirements apply in order to ensure high trustworthiness and usability of the electronic ID (the certificate). Trust Centre operators provide their services to internal organisational units or to external customers.

### Security, reliability and availability

The tenants expect the implementation of a stringent security concept. Customer data, cryptographic keys and PINs must be kept secret and an adequate access protection must prevent unauthorised usage. The PINs used must be secret and the user should be able to reset them any time. The application of Hardware Security Modules (HSM) must be an integral part of the solution. Security audits must be possible.

Reliability and high availability are of upmost importance in a high performance Trust Centre. They are stipulated in the corresponding service level agreement (SLA) between the tenants and the Trust Centre operator. A robust and reliable infrastructure needs to be designed so that it can be used to trace and monitor processes at any time. The flexibility of the components of a Trust Centre is also an essential requirement of the operator. This means the inclusion of individual policies, certificate formats and card

layouts. Besides the flexibility regarding the constantly evolving standards, a high level of integration with existing IT landscapes needs to be ensured.

Furthermore, the tenants expect individual services from their Trust Centres: LDAP support, OCSP service, time stamp service, e-mailing, helpdesk and self-service portals. Interfaces must also cater to customer specific components (user registration systems, card management systems, directories). Tenants increasingly wish taking over the administration of their users and policies, so the Trust Centre should offer safe mechanisms to delegate these functions to the client.

A Trust Centre solution must enable the operators offering their customers the best service as well as winning new ones; all of it with low operating costs with worthwhile margins. A Trust Centre solution must furthermore be easy to scale, if business grows.





# PRODUCT SHEET

Multiple tenants need to be handled cost-efficiently on the same platform, while virtually separating their policies, CAs, users and data.

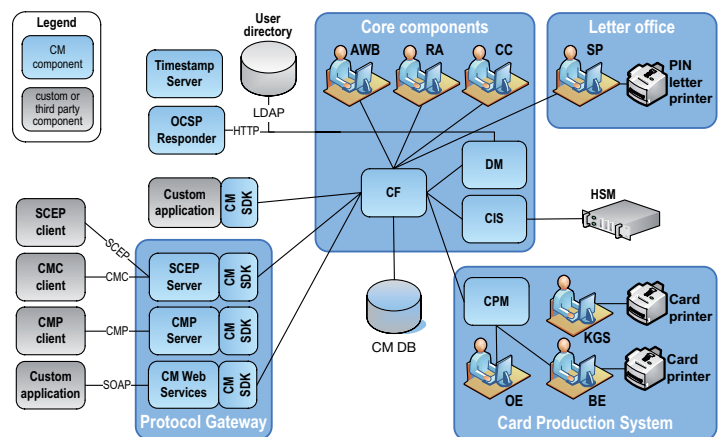
## Products for a future proof product range

In order to develop a future proof product range, Nexus integrated these business models and processes according to customers' wishes and demands. The scalability of Nexus products is ensured by the

distribution of the internal services (signing, CRL generation, publishing, card management etc.) and with the use of "load-balanced" parallel services. More HSMs and card production workstations can be added any time to scale the system to increased throughput requirements.

Nexus supports cluster installations for the sake of high availability of systems. "Load-balanced" systems and clustered HSMs can be used here as well to get the maximum possible availability.

The handling of multiple tenants with the complete separation of the tenants' user and data spaces is one of the main unique features of the Nexus solution: Individual policies for every single CA can be defined here. CM users (administrators and operators) can be assigned to individual CAs or user groups. Accordingly, the visibility of user data for operators can be limited to the CA or end-user of the client. It is possible to define administration domains which can be delegated by the Trust Centre operator to the tenant organisation for administration.



The Nexus Trust Centre solution is open for integration in customer-specific environments and expansion of functionalities. Following interfaces are supported:

- CM Web Services.
- Standard-compliant Services: SCEP, CMP, CMS.
- CM SDK: client Java API with strong authentication and authorization for RA functions in 3rd party client products and in-house developments.
- Interfaces for internal and external server modules (modifier).
- Input view API: the means for easy customisations of the RA client user interface and for including customer-specific input functions.

Many other innovations and unique features guarantee an economical operation and highly professional use of Nexus products.

