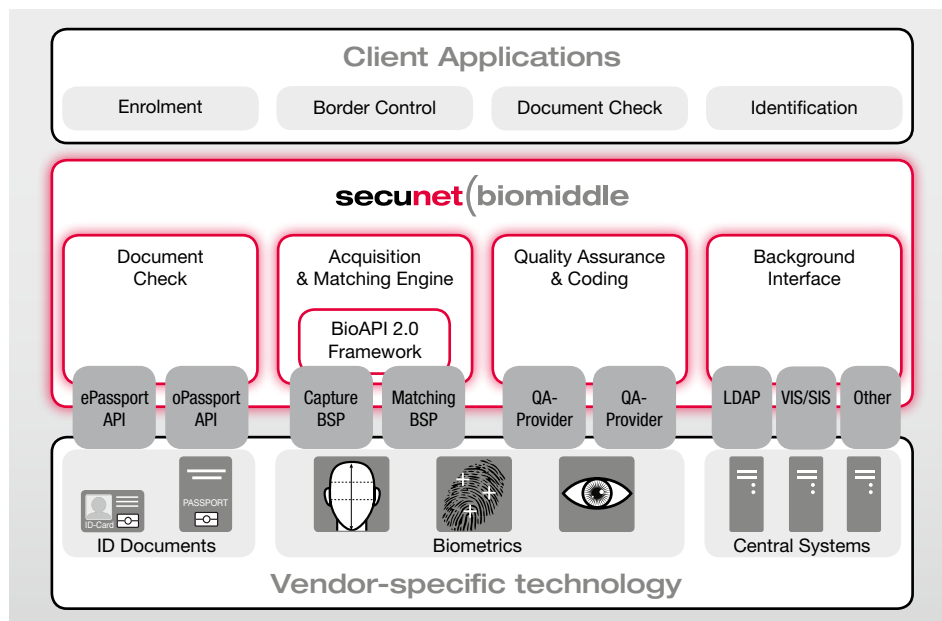


Middleware for Biometric Systems and Electronic ID Documents



Benefits:

- » Modular and standards-based with BioAPI 2.0, ePassportAPI and SOAP
- » Suitable for all technologies and manufacturers
- » Easy integration into existing systems and applications

secunet biomiddle enables the modular use of biometric system components and identity document readers in various biometric or eID applications. Both functionalities are provided via a uniform interface. Internationally standardised interfaces allow for easy replacement of individual components at any time. secunet biomiddle communicates with client applications via a service-orientated interface, making the middleware independent of system platforms and programming languages. **As a joint project with the German Federal Office for Information Security (BSI), secunet biomiddle is internationally recognised as the reference implementation and preferred architecture for use of biometrics in government documents.**

Modular architecture

The architecture of secunet biomiddle contains various modules which combine and provide the functions of a respective area. The individual modules allow for access to ID documents, biometric capture, matching and verification components as well as external systems. The base technologies used are integrated into the middleware by means of a plug-in mechanism. This means: depending on the application scenario, secunet biomiddle can integrate the best possible technology available on the market. The results are given to you in the form of a tailored solution to suit your individual requirements. System flexibility and extensibility of the complete system is ensured through the interchangeability of the plug-ins.

Approved by public authorities

secunet biomiddle, a joint project of secunet and the German Federal Office for Information Security (BSI), is the internationally preferred architecture and reference implementation for the use of biometrics in government documents. The middleware has already been proven in the field in many enrolment and border control projects at home and abroad.

Easy integration into existing applications

secunet biomiddle communicates with client applications via a service-orientated interface. This way, the functions can be made available independent of the system platform or the programming language of the application. It is also possible to call functions via the network. secunet

biomiddle can be integrated very quickly and easily, especially in web environments. For example, a central web application can use an instance of secunet biomiddle on the PC of a user to capture biometric data.

A further advantage of the service-orientated interface is that several applications can simultaneously access the integrated hardware and software components without any resource contention.

Clearly defined interfaces

Biometric hardware and software components are integrated and used by secunet biomiddle via an integrated BioAPI 2.0 framework according to ISO/IEC 19784-1. The interface and the behaviour of these so-called Biometric Service Provider (BSP) components are defined by the standard. Therefore, any technology can be used for which there is a BSP or for which a BSP is feasible.

Electronic ID documents are read by secunet biomiddle via the ePassportAPI. This API is specified by the German Federal Office for Information Security and is also used in the Golden Reader Tool. It is considered to be the reference implementation for reading electronic passports. Reading and verification of optical features of the ID documents is supported by secunet biomiddle on the basis of the performance of the passport reader used.

Quality algorithms or background systems are integrated into the middle-ware via a mechanism based on BioAPI 2.0. The interface is public and can be used for the implementation of additional providers.

Target platforms

secunet biomiddle runs under Windows XP, Vista and Windows 7 as well as Linux.

Selection of supported devices and modules

| Passport reader | Model |
|--------------------------|--------------------------------|
| L-1 Identity Solutions | B5000 Document Authenticator |
| 3M/Rochford Thompson | RTE 8000, 3M ePassport Reader |
| Cross Match Technologies | D SCAN Authenticator |
| Desko | FP 500 |
| Bundesdruckerei | Visotec 300/500 |
| Regula | 70x4, 83x3 |
| Biometric sensors | |
| Cross Match Technologies | Verifier 320, Guardian, Patrol |
| Dermalog | ZF1, LF10 |
| L-1 Identity Solutions | DFR 2100, Touchprint 4100 |
| UPEK | TouchChip, TouchStrip, Eikon |
| Sagem/Morpho | MSO 300, MorphoTop 110 |
| Fujitsu | MBF200 |
| Any webcam | Windows DirectX-based |
| Biometric algorithms | |
| NIST | NBIS |
| Cognitec | FaceVACS |
| L-1 Identity Solutions | BioEngine |
| VIS-BMS | USK Kit 1-4 |
| NEC | NeoFace, NeoFinger |

EasyPASS: Biometric border control with the ePassport

secunet supported the German Federal Office for Information Security and the Federal Police in the pilot-project EasyPASS for biometric-based border control processes. Passengers walk through automated biometric control gates which are supervised by border officials. The advantages are obvious: waiting periods at the border control counters are shortened and more passengers can be processed. Border officials can focus on checking suspicious persons. The German Federal Office for Information Security assigned secunet to take over the planning, implementation and evaluation of this pilot scheme and to provide the central component, the software platform secunet biomiddle. Part of the project was also the integration of the complete system, consisting of double door systems, checking devices for documents, biometric components and the control-application for border officials. After the successful completion of the pilot-phase, secunet opened EasyPASS for everyday use at the airport. The system is now being used as a standard border control process and supervised by the Federal Police.

Austria opts for secunet biomiddle

The Austrian Foreign Office has assigned secunet to furnish every Austrian agency abroad with hard- and software for biometric collection-systems for EU-visa applications. The solution is secunet biomiddle which once more convinced through its modular set-up and its independence from platforms and systems. secunet provides both the applications for capturing the application-data and biometric features and the hardware for collecting fingerprints.

More information:
www.secunet.com/en/biomiddle



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