Biometrika

Secrets SDK

Protection of secret data using fingerprint

Thanks to the features of Fx3000 fingerprint scanner (Match on Board, on board encryption, direct management of the Smart Card reader), Secrets SDK provides a secure way to manage an archive of secret data protected by fingerprints: the archive is stored on Fx3000 or on a Smart Card.

The stored “secrets” consist of any kind of data (passwords, file etc) that might need protection: the protected data can be retrieved from the Fx3000 after a successful fingerprint verification.

When an application, integrating Secrets SDK, needs to retrieve a “secret” stored on Fx3000, the scanner automatically requires verification of the fingerprint : the protected data is sent to the application only if the verification is successful.

The archive of secrets can be stored on a Smart Card in order to allow the maximum privacy of data and the highest security in the management of the secret data.

Features

Fingerprint scanner

- Fx3000 and Fx3000 SC

Operations

- Secure storage and encryption of secret data (on Fx3000 or on a Smart Card)
- Protected data can be retrieved from Fx3000 after a successful fingerprint verification (Match On Board)
- The use of Smart Cards can maximize the protection of data
- No data is transmitted through the computer
- A simple interface of the library enables a rapid and simple integration in third party software

Operating systems

- Windows 98, 2000 e XP

Secrets SDK

Protection of secret data using fingerprint

Operations

Secrets SDK provides a secure way for managing an archive of secret data. The archive is stored inside the Fx3000 scanner or on a Smart Card. Data is stored in an encrypted archive and protected by fingerprints: each “secret” stored in the archive can be retrieved only a fingerprint verification is granted.

Secrets Archive

The archive of secret data (passwords, files etc) is created and encrypted inside the Fx3000 (and eventually saved on a Smart Card). A fingerprint is also acquired as protection of the archive: every time a secret data has to be retrieved from the archive a fingerprint verification is performed by the Fx3000. If the verification is successful the required data is decrypted and given as output.

Archive management

Secrets SDK provides all the functions needed to manage the archive: add and delete secrets, open, save and close the archive, a request of a specific secret. All the operations that modify or require the access to secrets are enabled after a successful fingerprint verification (if a PIN is set, even the digit of the code is required).

Match On Board

The fingerprint verification is performed inside the Fx3000 scanner thanks to its Match On Board feature. The fingerprint represents the access key to the protected data.

Smart Card

Fx3000 enables the direct management of the Smart Card reader: thanks to this feature the archive and the fingerprint can be stored on a Smart Card avoiding any data being transmitted through the computer (which is much more vulnerable to attacks). In this way the archive always remains in the owners hands, encrypted and protected by the finger.

PIN

In order to increase the archive security a PIN can be set for further protection of the archive. If a PIN is set, every time a secret has to be retrieved, the user also needs to digit the PIN after the fingerprint verification.

Encryption

The archive is kept in the Fx3000 memory in an encrypted way. A specific secret is decrypted after a fingerprint verification: in other words the secret is made available only when it is required.

Biometrika
Via Monte Santo 21, 47100 Forlì (FC) ITALY
Tel +39 0543 370680 Fax +39 0543 456198
www.biometrika.it