

# CardOS SmartOTP convenient authentication

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One Time Password generation with CardOS



A product for sophisticated requirements -  
CardOS SmartOTP offers a simple and  
highly secure method to calculate One Time  
Passwords with CardOS smart cards.

# Great convenience by supporting technical standards

## Overview

CardOS® SmartOTP offers an efficient and user friendly, easy to use software application for generating One Time Passwords (OTP). The calculation is performed securely on CardOS smart cards, based on established standards.

CardOS SmartOTP is a member of the CardOS product family. One Time Passwords, valid for a single login to a server or an application, provide a secure authentication method.

CardOS SmartOTP offers a simple and user-friendly solution to calculate OTPs on CardOS smart cards and thus allows fulfilling the demand for 2-factor authentication.

Following the standard RFC 4226 (HOTP/OATH) the generated OTP can be applied to a number of standard authentication services.

CardOS SmartOTP will be available for all common operating systems.

CardOS SmartOTP, combined with the secure smart card operating system CardOS, offers an efficient and secure solution for the creation of authentication credentials.

CardOS SmartOTP can be used with CardOS cards enrolled for the sole purpose of OTP generation, as well as with cards used for general ID purposes like employee IDs at companies and organizations, student batches and signature cards.

## Software Pack

CardOS SmartOTP provides an easy installation. The graphical user interface of CardOS SmartOTP can be branded with an customized image.

## Description

CardOS SmartOTP provides an effective implementation for OTP generation. The OTP calculation is implemented according to RFC 4226. For that purpose the CardOS smart card receives a special OTP application, holding the OTP information shared with the authentication service for which the OTP is to be generated. This shared information (shared secrets and synchronization information) is stored on the card during card personalization and the synchronization of the user's card with the authentication service.

One CardOS card can hold the information for several authentication servers. The CardOS OTP application can not only be stored on a pure OTP card, but as well on a PKI card holding cryptographic keys and certificates for encryption and signature purposes as well. So the use of e.g. employee batches is possible.

CardOS SmartOTP provides the GUI to start the OTP generation and operates the highly secure on-card OTP calculation. The on-card OTP calculation ensures the most secure OTP generation. The shared secrets used for the calculation are protected by the powerful security mechanism of the CardOS operating system. The ownership of the smart card together with the PIN secured access to the smart card ensure safe 2-factor authentication.

## License

The software license is required in order to install and use the CardOS SmartOTP. The number of licenses corresponds to the total number of systems on which CardOS SmartOTP is installed. In the case of terminal servers, the number of licenses corresponds to the maximum number of concurrent users for each terminal server.

## Current Version

- ▶ CardOS SmartOTP V1.0 for Windows, Linux, MacOS
- ▶ CardOS SmartOTP V1.0 for Windows phones \*

## Technical Data

### Supported Standards:

- ▶ RFC 4226 / HOTP

### Supported Operating Systems:

- ▶ Windows 7 (SP1)
- ▶ Windows 7 x64 (SP1)
- ▶ Windows 8
- ▶ Windows 8 x64
- ▶ Windows 8.1
- ▶ Windows 8.1 x64
- ▶ Windows 10
- ▶ Windows Phone 8.1, Windows 10 Mobile
- ▶ Linux, MacOS

### Supported smart card Operating Systems:

- ▶ CardOS V5.0
- ▶ CardOS V5.3
- ▶ CardOS DI V5.3

### Supported Smart Card Connectivity:

- ▶ PC/SC compatible smart card readers
- ▶ NFC- smart card connectivity with CardOS DI V5.3

### Supported Languages:

- ▶ English

### Supported Authentication Services:

- ▶ Servers supporting HOTP / OATH (RFC 4226), e.g. Atos DirX Access

## Further Information for Integration

Shared Information for OTP generation needs to be stored in the respective backend authentication service, e.g. Atos DirX Access or other backend service supporting HOTP / OATH (RFC 4226).

\* Supported card: CardOS DI V5.3, contactless, via smart phones with smart card aware NFC reader.



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