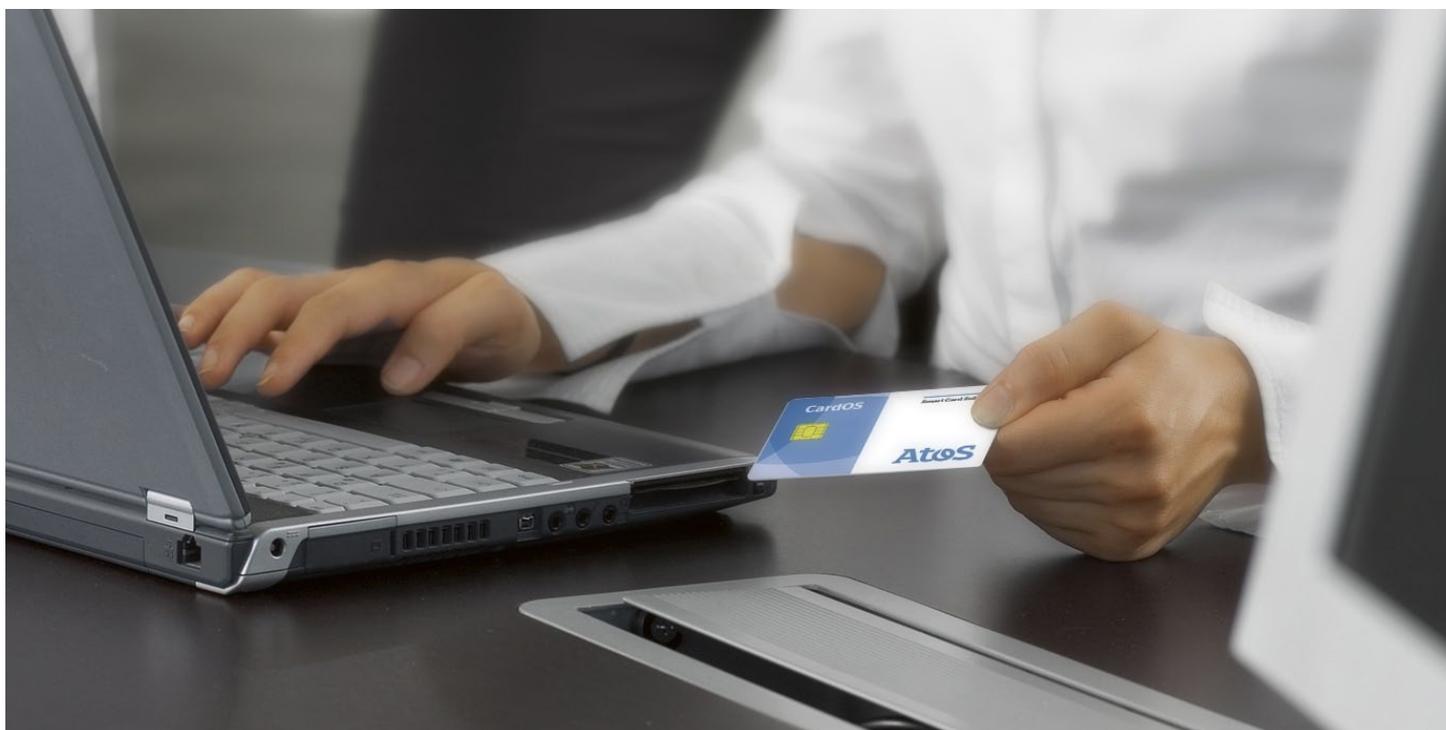


CardOS OTP-Calculator convenient authentication

One Time Password generation with CardOS



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

Great convenience by supporting technical standards

Overview

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

CardOS OTP-Calculator is a member of the CardOS product family. One Time Passwords, valid for a single login to a server or application, provide a secure authentication solution.

CardOS OTP-Calculator 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 OTP-Calculator is intended to support the smartcard-based OTP generation for the use with any user device which does not provide an own smart card reader.

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

CardOS OTP-Calculator 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.

Description

CardOS OTP-Calculator provides an effective implementation for OTP generation. The OTP calculation is implemented according to RFC 4226 (HOTP/OATH). 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 CardOS smart card during card personalization and the synchronization of the user's card credentials with the authentication service.

One CardOS smart card can hold the information for several authentication servers. The CardOS OTP application can not only be stored on a pure OTP card, but also 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 OTP-Calculator provides the user interface to operate the on-card OTP generation. This 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 the safe 2-factor authentication. Thus the CardOS OTP-Calculator enables secure, smart card based generation of One Time Passwords for all user devices without smart card readers or NFC smart card connectivity.

Current Version

CardOS OTP-Calculator V1.0

Technical Data

Supported Standards:

- ▶ RFC 4226 / HOTP

Supported smart card Operating Systems:

- ▶ CardOS V5.0
- ▶ CardOS V5.3
- ▶ 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).



About Atos

Atos SE (Societas Europaea) is a leader in digital services with 2014 pro forma annual revenue of circa € 11 billion and 93,000 employees in 72 countries. Serving a global client base, the Group provides Consulting & Systems Integration services, Managed Services & BPO, Cloud operations, Big Data & Cyber-security solutions, as well as transactional services through Worldline, the European leader in the payments and transactional services industry. With its deep technology expertise and industry knowledge, the Group works with clients across different business sectors: Defense, Financial Services, Health, Manufacturing, Media, Utilities, Public sector, Retail, Telecommunications, and Transportation.

Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and is listed on the Euronext Paris market. Atos operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, and Worldline.

For more information, visit: atos.net

Legal remarks

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this document are available through the Atos sales organization worldwide. Availability and packaging may vary by country and is subject to change without prior notice. Some/All of the features and products described herein may not be available in the United States or Japan.

The information in this document contains general technical descriptions of specifications and options as well as standard and optional features which do not always have to be present in individual cases. Atos reserves the right to modify the design, packaging, specifications and options described herein without prior notice. Please contact your local Atos sales representative for the most current information.

Note: Any technical data contained in this document may vary within defined tolerances. Original images always lose a certain amount of detail when reproduced.

For more information, contact: security@atos.net

atos.net/security

Atos, the Atos logo, Atos Consulting, Atos Worldgrid, Worldline, BlueKiwi, Bull, Canopy the Open Cloud Company, Yunano, Zero Email, Zero Email Certified and The Zero Email Company are registered trademarks of the Atos group. January 2016 © 2016 Atos.