



ORIGO SmartSecure is a back office system created by SmartSoft which uses a two factor authentication process for internet, phone banking, and e-commerce applications.

ORIGO SmartSecure CAP/DPA/OTP

Being the first solution in the world, ORIGO SmartNet allows the cardholder to change or unblock their PIN, top-up their card, and follow campaign earnings on the card by using an internet banking channel.

E-Banking Solutions

Two Factor Authentication Solutions for Banks by SmartSoft

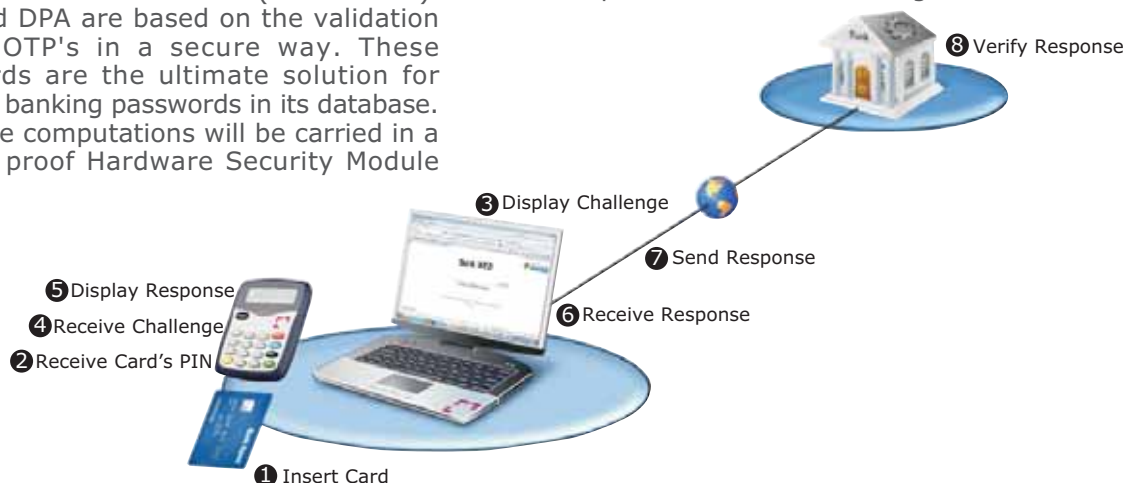
Nowadays the Internet, phone banking, and particularly online shopping and e-commerce are growing rapidly. In order to keep an adequate levels of them, every growing channel like MasterCard and VISA have adopted CAP (Chip Authentication Program) and DPA (Dynamic PassCode Authentication) standards respectively for so called CNP (Cardholder Not Present) applications. The abovementioned standards aim to prevent the most treacherous methods known as online phishing, key logging, man in the middle, and Trojan horse attacks.

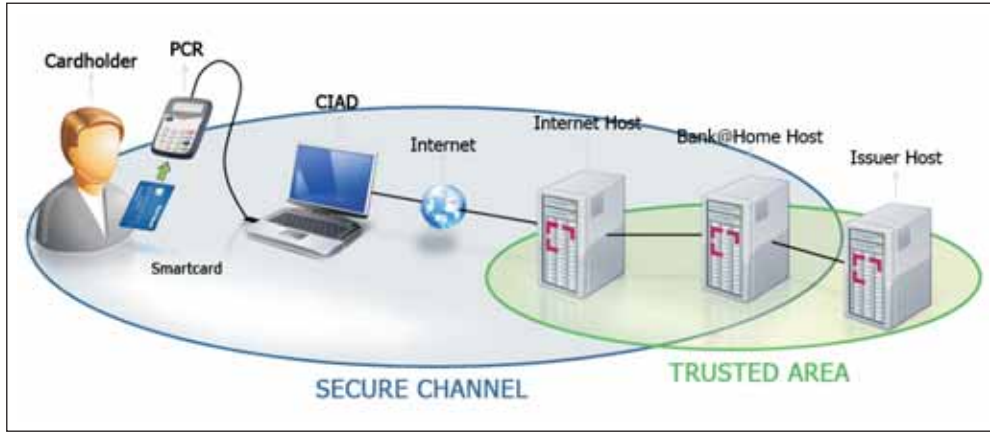
This method is based on a chip payment card and an offline Personal Card Reader (PCR) owned by bank customers. A One Time Password (OTP), which is an EMV cryptogram, is generated by using the secret information on the card itself (via PIN code). CAP and DPA are based on the validation of the OTP's in a secure way. These standards are the ultimate solution for internet banking passwords in its database. All of the computations will be carried in a tamper proof Hardware Security Module

(HSM) which automatically prevents the possibility of internal frauds. ORIGO SmartSecure server is also independent from the HSM choice and any CAP/DPA compatible HSM preferred by the bank can be used. Server software is independent of the card vendor and the system can work with any token length. ORIGO SmartSecure server supports Visa 1.4.0, M/Chip 4.0 cards and CAP/DPA applications that are put on these cards. In particular the EMV2000 identity validation algorithm, which provides high security on M/Chip 4.0 cards, is supported by the system automatically.

ORIGO SmartSecure

ORIGO SmartSecure is a back office system created by SmartSoft using a two factor authentication for the internet, phone banking, and E-commerce applications. Apart from MasterCard, CAP Center is supported. ORIGO SmartSecure is an independent PCR vendor that gives the bank





the flexibility to provide its customers with any CAP/DPA compatible PCR vendor. Also, apart from CAP/DPA standards, ORIGO SmartSecure server supports OTP token solutions. The system can work with event & time based tokens in addition to display cards.

ORIGO SmartNet Bank@Home

Developed and presented by SmartSoft, uniquely at the same time all over the world, ORIGO SmartNet is based on connected CAP/DPA standards, which are security standards developed by MasterCard (CAP - Chip Authentication Program) and VISA (DPA - Dynamic PassCode Authentication) for online banking. These standards are becoming widespread throughout the world and Turkey and obtain its security entirely from EMV standards. With ORIGO SmartNet, after logging onto internet banking securely with a connected CAP/DPA system, the issuers can now send issuer scripts to the EMV cards onto the site securely by using the same infrastructure as internet banking.

Issuers who are planning to migrate to contactless technologies, together with the transportation or city card projects, have to be able to manage a large system with the increase in cardholder numbers and service areas. Issuers will present their differences from its competitors with the services provided and new loyalty applications.

ORIGO SmartNet enables issuers;

- Fast processing & low cost advantage by transferring the work load on IVR / branch to an internet banking channel
- Increased customer satisfaction (top-up to his/her card at home)

- Reaching out to more customers without enlarging the POS network

ORIGO SmartNet Applications

- Top-Up
- PIN Change / Unblock
- Loyalty Management through Internet Banking

ORIGO SmartNet offers you the following functions

- The loyalty points on the card can be transferred to an "EMV Offline Amount". It will become necessary to set up new top-up centers for the issuers managing a city card or transportation project. Also, many different cross campaigns will be applied and this will increase the interest in these campaigns and the project will achieve its aim when the cardholder can effectively follow up his earnings from these campaigns and use them. For the issuers to present the easiest and most effective solution to its customers within these projects, which are put into service with high investment costs, ORIGO SmartNet is the best solution ever.
- Being the first solution in the world, ORIGO SmartNet allows the cardholder to change or unblock his PIN, top-up his card, and follow-up campaign earnings on the card through an internet banking channel.
- The work load on the issuer POS, ATM, and ADC will decrease as ORIGO SmartNet adds new value to the internet banking channel by creating a top-up and campaign follow up center while increasing customer satisfaction, decreasing the work load on telephone banking, branches, and bringing the internet banking channel for more effective and efficient use.



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