

With many years of experience in the field of payment card technologies, «CARTSYS» company specializes in developing systems and components designed for secure handling of sensitive data such as PIN codes and card verification data (CVV2/CVC2) with subsequent integration into the bank's payment card service information structure.

## **CVV**-generation

## Providing CVV2/CVC2 in On\_line mode.

This functionality is used for embedding in the bank's mobile application.

The proposed solution allows, at the request of the customer, to generate the CVV2/CVC2 code of the card in real time according to the specified incoming parameters of the card. The operations performed by the system are logged. The component is monitored.

A use case is to show the CVV for the card in the mobile app:

- the customer sees his accounts and cards in the app;
- the customer clicks on the card, which is the active;
- button on the card show CVV. The customer clicks this button and the CVV2/CVC2 code is shown on the card immediately, online.

## PIN-generation

## The component is designed to solve problems such as:

- On line PIN-code generation by request;
- PIN-code entry by the cardholder via remote channels in the bank, generation of PVV/PIN offset verification values for placement in the processing center database.

The proposed solution allows to simultaneously support several algorithms of PIN-code generation (allowed by payment systems), automatic selection of processing parameters, depending on the content of input data, generation, import and export of RSA-certificates, other key information. Logging of operations performed by the system. The component is also monitored to inform the bank's external systems of the component's performance.

HSM equipment is used for all solutions.

Models and brands: ProtectServer PCIe HSM (PL25) or ProtectServer External HSM 2 (PL25).