

PrivateServer PIN Mailer

General Information

PrivateServer™ includes a capability that enables customers to use the PrivateServer HSM to securely output a PIN Mailer to a printer that is attached to the PrivateServer HSM.

HSMs generally provide the ability of outputting PIN mailers to a printer, but in most cases the solution is limited to old fashioned PIN letters using dot matrix printers.

Recently, financial institutions and other establishments have started using new PIN mailer technologies. These technologies enable organizations to send their customers an advanced PIN Mailer that may contain graphical and textual information in addition to the PIN code. A new tamper-evident technology, incorporated in the printing paper, secures the PIN and makes sure that only the end user can reveal his/her PIN code.

Using PrivateServer, it is now possible to invoke PIN Mailer technology using two modes of work: Basic Mode and Enhanced Mode.

The **Basic mode** provides the minimal functionality needed for calculating and printing simple text-based PIN Mailers in a very simple and convenient manner.

The **Enhanced mode** can be used to print advanced PIN Mailer designs that contain both text and graphics. This mode takes full advantage of the PrivateServer MDK capabilities and enables organizations and integrators to program and customize the content and design of the PIN mailer.

Depending on organizational needs, PrivateServer can support a large variety of printer brands including both PostScript and PCL printer types. The printer can be directly attached to the PrivateServer through a parallel interface, serial interface, or by using a dedicated Ethernet based network interface.



PrivateServer PIN Mailer Features

The following section details the PrivateServer PIN Mailer functionalities between the Basic and Enhanced modes.

- ▶ **Basic mode** - In this mode, PrivateServer provides an easy-to-use functionality that enables organizations to directly invoke a simple PIN mailer command to a printer through a simple API. The provided API accepts a PIN Mailer textual template that indicates the location where the PIN should be printed.





- ▶ **Enhanced mode** - Using PrivateServer MDK, the organization can program a PIN mailer template using any .NET programming language, which is then compiled into a .NET module. This .NET module can be securely uploaded to the PrivateServer HSM and enable it to print advanced PIN Mailer designs. The .NET module can use internal HSM functionality to calculate the user's PIN and output the whole PIN mailer to the attached printer, or decrypt an encrypted PIN block passed from the application.



Additional information about the PrivateServer PIN Mailer functionality:

- ▶ An administrator can configure the printing method. As part of the configuration the administrator can define if the printer is used through a network interface, parallel interface, or serial interface.
- ▶ Standard PostScript, PCL printers, and dot matrix printers are supported. It is planned that non-standard printers will be supported at a later stage.
- ▶ The user's PIN can either be calculated by PrivateServer using the standard PINSTD module functionality or it can be decrypted by the PrivateServer. Both PIN calculation and PIN decryption functionalities occur during the printing action and therefore the PIN is not exposed.
- ▶ The PrivateServer PIN Mailer Enhanced Mode enables organizations and integrators to develop high level code that is based on any .NET compatible development environment. This mode allows for a very flexible design of the PIN mailer output.

