

ICMI LEARNING

**The personalization
device, store data
command, and data
grouping**

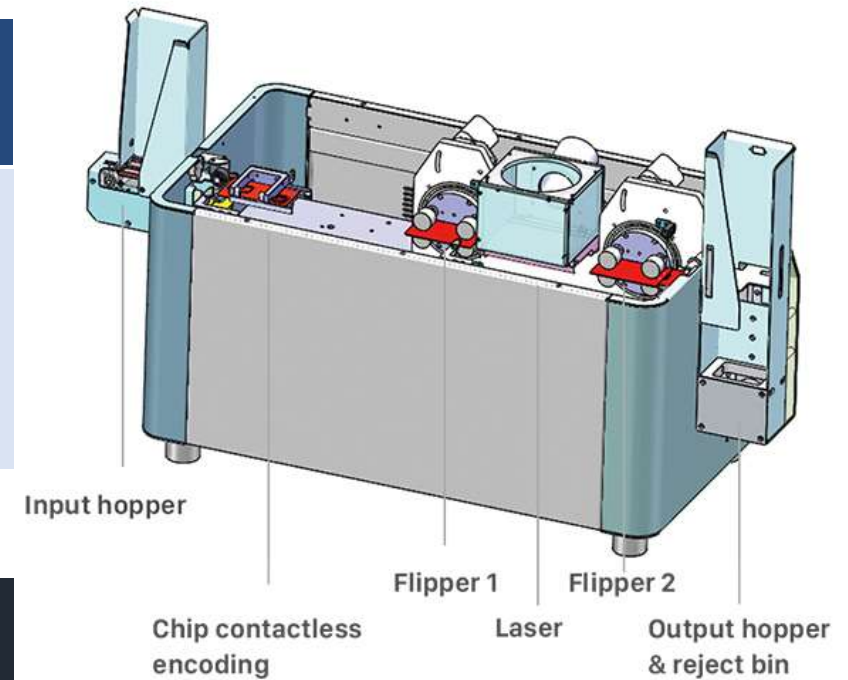
The personalization device, store data command, and data grouping

Personalization devices

Devices used to load data onto the chip during the personalization phase

Processing step, or PS

The chip is loaded with the necessary applications, keys, and configuration data



- **Name**
- **A/c info.**

The personalization device, store data command, and data grouping

Personalization devices

Data is loaded onto the chip using

Store data commands

Data grouping



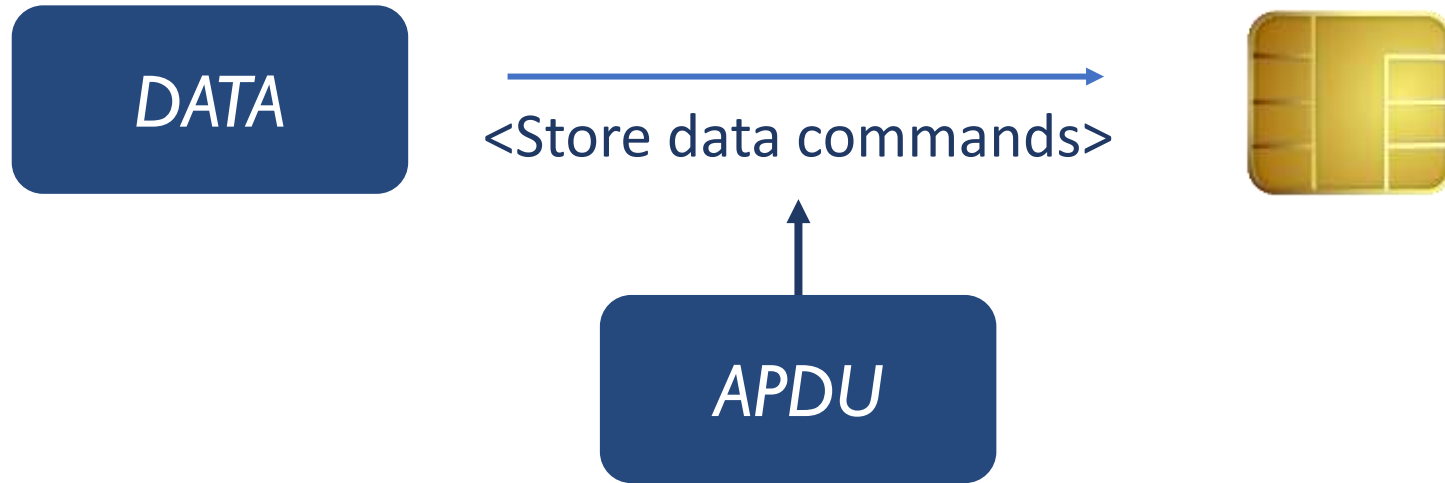
*Personalization
devices*

Commands allow communication



The personalization device, store data command, and data grouping

To load data onto the chip, the personalization device uses “store data commands”



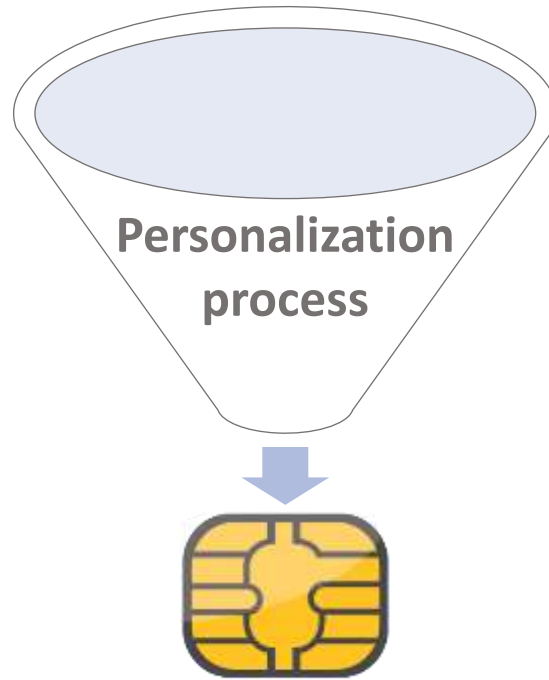
Data grouping

The process of grouping related data elements together into a single data object

The personalization device, store data command, and data grouping

APDU commands

Communication , to send store data commands to write data to the chip



Store data commands

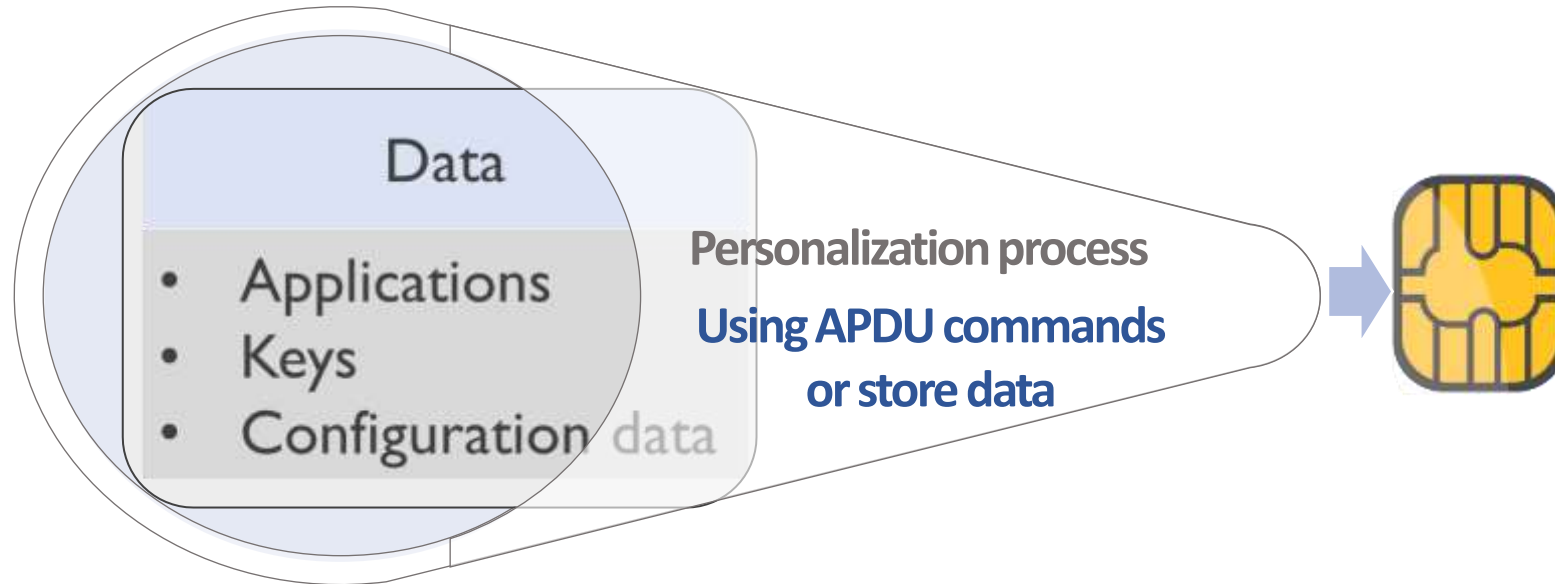
To write the data to a specific file on the chip

The background is a collage of various currency symbols and numbers. Large, semi-transparent numbers like '7', '8', '6', '1', '0', '3', '7', '1', '6' are scattered across the image. Currency symbols such as the Euro (€), Dollar (\$), and Pound (£) are also visible. There are orange arrows pointing in different directions: one pointing up on the left, one pointing right at the top right, and one pointing down on the bottom right. A central dark blue rectangle with a white border contains the text 'Personalization data'.

Personalization data

Personalization data

Data Prepared by the issuer or a third-party personalization bureau using data preparation system



The personalization data is grouped into data groups based on the card profile, and each group is assigned a specific data object identifier (DO)

The personalization device, store data command, and data grouping

The data needed for personalizing an IC card application is separated into three parts

Data for the
personalization
device

Data to be
logged

Data to be
sent to the IC
application

The personalization device, store data command, and data grouping

Data for the personalization device

Includes information to help the device process the data

The AID (Application Identification) for the application

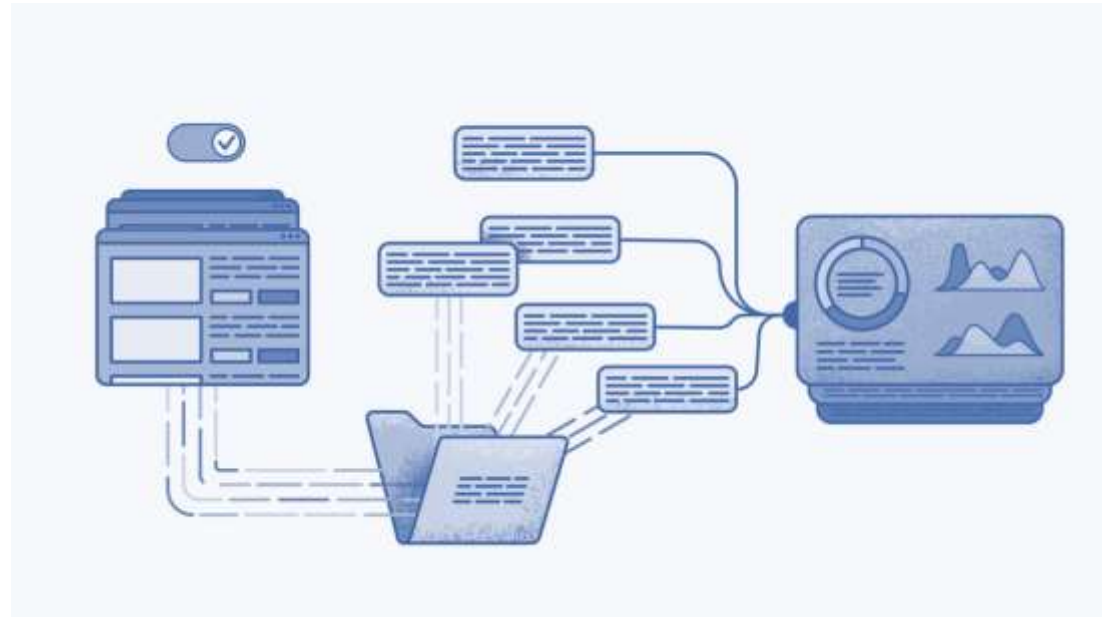
The identifier of the Transport Key used to encrypt secret data in the record for the application

Processing steps and instructions for the device

The personalization device, store data command, and data grouping

The data to be logged

The data to be logged is the data that needs to be recorded for that specific application



The personalization device, store data command, and data grouping

Data to be sent to the IC application

This data can be in the form of one or more groupings with a Data Grouping Identifier (DGI), depending on the processing step (PS)



The personalization device, store data command, and data grouping

Data can be similar for all the cards in a batch, while some of it may vary for each card



The personalization device, store data command, and data grouping



Personalization data



Personalization device

The data preparation system must also protect the completed personalization data file by adding security measures



Detect any changes made to the personalization data file

Prevent unauthorized access or manipulation of the data