

A hand holding a credit card over a payment terminal. The card is a blue and red digital bank card. The terminal is black and mounted on a stand. In the background, a laptop screen is visible.

International Payment Scheme Contactless Payment Workshop

Banking & Payment Services

INTERMEDIATE COURSES

Course Reference: B1008W



Contactless payment is expected to become one of the dominant modes of transaction within the next couple of years with already large deployment in the US, numerous projects in Asia and pilots in Europe.

During this workshop you will study contactless implementations defined by MasterCard and Visa (MasterCard PayPass, Visa Contactless), focus on the main challenges when launching a contactless payment program and take part in an in-depth overview of card personalization specifications.

Objectives

At the end of the training, you will:

- | Have an overview of the current contactless payment programs implemented by Visa, MasterCard and EMV
- | Identify and quantify the tasks needed to launch a contactless payment program
- | Definition of the Issuing Bank Contactless Card Personalization specifications

Key topics

- | MasterCard PayPass contactless payment implementation
- | Visa Contactless payment implementation
- | Contactless security level defined by Visa and by MasterCard
- | EMV Entry Point Specifications
- | Impacts and scenarios of migration
- | Personalization Templates

Who should attend

People involved in the smart card activity:

- | Marketing managers
- | Technical project managers
- | Banking Project managers
- | Product Managers

Pre-requisites

- | Basic knowledge about smart cards.
- | Contact EMV card personalization specification already defined
- | This course is held in English. On customer request a session in French can be organized.

Duration:

- | 5 days for Visa or MasterCard card personalization specifications
- | 7 days for Visa and MasterCard card personalization specifications

Location:

- | On-site at customer premises, or at one of the Thales training centers. Please contact us for more details.

Course fee:

- | € 12895 for 5 days (€ 16895 for 7 days) per attendee, Price does not include taxes nor travel expenses

Course schedule

Day 1: Contactless Training

Business Overview of Contactless Payment

General technical overview of contactless implementations defined by Visa and MasterCard

- | Comparative analysis of the implementations defined respectively by MasterCard and Visa for magstripe acquiring environment and chip acquiring environment

EMV Contactless Specifications

- | Analysis of the EMV Contactless Entry Point Specifications allowing a terminal to support several contactless implementations (for example contactless implementations defined by MasterCard and Visa)

The remaining part of this training depends on the type of workshop selected by the Bank for their contactless migration:

a) Detailed analysis of the contactless implementation defined by MasterCard

- | Analysis of the MasterCard Contactless Transaction Flow (PayPass Magstripe / PayPass Chip)
- | Detailed analysis of MasterCard PayPass Risk Management Algorithm
- | Algorithm used for generation of the MasterCard CVC3

or

b) Detailed analysis of the contactless implementation defined by Visa

- | Analysis of the Visa Contactless Transaction Flow (Visa MSD / Visa qVSDC)
- | Detailed analysis of Visa Risk Management Algorithm (detailed analysis of the options defined by Visa for qVSDC implementation (VL mode, LV and CTTA mode, LV or CTTA mode))
- | Analysis of Visa Fast DDA algorithm
- | Algorithm used for generation of the Visa Dynamic CW
- | Analysis of Visa Cryptogram version 17

Conclusion

Days 2-5: Workshop on Personalization Requirements

Practice

Card architecture definition (information required for the configuration of the personalization software)

- | List of applications present in the card
- | Contents of the contact part of the payment application (review of data elements supported in already defined card)
- | Contents of the contactless part of the payment application

Card Profile definition for Visa cards or MasterCard cards

- | Definition of the Card Risk Management parameters that will be used for contactless transaction based on the qVSDC mode that will be selected
- | (option) Definition of the Card Risk Management parameter that will be used for contact transaction

Personalization Data File definition

- | Definition of Personalization Data File communicated to Personalization team

At the end of this workshop, the Thales Consultant will provide to the Client a personalization specification document. The contents will be based on the decisions taken during the workshop. An annex of the document will contain list of the remaining decisions to take in order to fully specify the card personalization process.

Note: For definition of contactless card personalization specification for both Visa contactless cards and MasterCard contactless cards, two additional days are required.

Related courses

EMV Business Impacts (B1001I)

Mastering EMV Implementation (B1002I)

EMV Migration for Issuers (B1003S)

**Workshop on International Payment Scheme
Contactless Payment (B1008W)**

For further information about registration, course schedule: please contact us via email to: bps_training@thalesgroup.com or visit our web site: <https://www.thalesgroup.com/en/markets/digital-identity-and-security/banking-payment/consulting>