

# EMV Seminar - Common Payment Application (CPA)

Banking & Payment Services

ADVANCED COURSES

Course Reference: B1009S





Today, a bank issuing EMV cards from several Payment System schemes needs to duplicate some functions – and the associated investment –, especially in the card issuance and Back/Front office system, to be able to comply with the specifications of each scheme.

In order to alleviate this drawback, EMVCo has recently published the Common Payment Application (CPA) specification. With CPA, a bank may issue the same type of card for several International Payment Systems, thus optimizing the chip migration investment. This technical 4-day seminar allows for the technical management and staff to understand in details the CPA specifications, and how it can be adapted to specific payment systems.

## Objectives

At the end of the training, you will:

- | Understand the main features and benefits of CPA, as well as its impacts on the authorization system
- | Be able to adapt CPA options to your Risk Management Strategy
- | Understand the diversity of CPA application providers' offer

## Key topics

- | What is CPA? What is CCD (EMV Common Core Definitions)?
- | Implementer options
- | Issuer options
- | CPA Card Risk Management

## Who should attend

People from technical management and staff working in issuing banks or national bank associations involved in the migration process, such as:

- | Operations
- | IT systems, security, quality
- | Marketing
- | Fraud monitoring

## Each session consists of

- | A complete course manual

## Pre-requisites

- | Knowledge of EMV and Card Risk Management. It is highly recommended to have attended the training "EMV migration for Issuers"
- | This course is held in English. On customer request a session in French can be organized

## Duration:

- | 4 days

## Location:

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

## Course fee:

- | € 2799 per attendee, Price does not include taxes nor travel expenses

# Course schedule

---

When performed at customer premises, the agenda is tailored to customer attendance profile.  
The standard agenda is provided below:

## Day 1: Introduction to Common Personalization Application

### Introduction

- | EMV Implementations
- | CPA Implementation

### General Overview

- | Application Profile Management
- | CPA Card Risk Management Counters
- | Application Profile Parameters Management
- | Interface with Issuer Host
- | Transaction Log File
- | CPA Card Risk Management Checks
- | CPA Application Memory size
- | Card Manufacturer Implementation Options
- | Examples of implementation

### CPA Card State Machine

## Day 2 – Detailed analysis of the CPA specifications – CPA card parameters

### Detailed analysis of each CPA Card Risk Management Parameters

- | Profile Selection Parameters
- | Profile Definition Parameters
- | CRM Counters Parameters
- | Accumulator Counters Management
- | Cyclic Accumulator Counters Management
- | VLP Accumulator Counter Management
- | Transaction Counter Management
- | Application Parameters
- | Miscellaneous other parameters

## Day 3 – Detailed analysis of the CPA specifications – CPA card parameters usage

### Detailed analysis of CPA parameters usage in card decision process.

- | Detailed analysis of the 1st GENERATE AC command
  - Data sent to the card
  - Card Risk Management Checks
  - Card Decision algorithm
  - Card Response
- | Detailed analysis of the 2<sup>nd</sup> GENERATE AC command
  - Data sent to the card
  - Card Risk Management Checks

## Day 4 – Detailed analysis of the CPA specifications – Other CPA features

### Detailed analysis of the following CPA features

- | Interface with Issuer Host (data exchanged during online authorization process)
- | Transaction Log File Management
- | Very Low Payment (VLP) Data File (profile dedicated to low payment transactions)
- | Syntax of the Script Commands
- | Cryptographic Functions
- | Management of dates

## Related courses

**EMV Business Impacts (B1001I)**

**Mastering EMV Implementation (B1002I)**

**EMV Migration for Issuers (B1003S)**

**Common Payment Application (CPA) (B1009S)**

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