

Design your HCE mobile payment project



Involved in more than 50 mobile payment projects worldwide, Gemalto consultants are proud to share their know-how and their practical experience.

This workshop targets Banks, Retailers or other Service Providers, who intend to launch an HCE mobile payment project with an identified payment scheme.

The goal of this workshop is to detail and clarify the business requirements, and to translate them into the adequate Cloud-Based Payment architecture and suitable technical design.

Mixing theory and brainstorming, implementation options are reviewed in detail, with their advantages and their drawbacks. Decisions are taken and gathered into your dedicated customer requirements specification.

Objectives

During this workshop, we will:

- > Detail your business expectations: the overall objectives, the main partners
- > Detail the services offered, the payment experience and the customer journey
- > Define the parametrizations of the HCE application and of the Cloud-Based payment servers, depending on the acceptable level of risk
- > Determine the most suitable options for your implementation, and the roles and responsibilities of the stakeholders
- > Highlight the impacts on the existing infrastructure

Key topics

- > Host Card Emulation
- > Cloud-Based Payment
- > Digitization / Tokenization
- > Consumer experience
- > Impact analysis
- > Implementation options

Who should attend

Financial institution staff involved in the HCE project

- > Marketing Managers
- > Project Managers
- > Risk Managers
- > Operations Managers

Deliverables

- > Slides used during the workshop
- > Summary of the key decisions
- > Customer Requirement Specifications document

Pre-requisites

- > Good knowledge of EMV. It is assumed that attendees have already issued contact and/or contactless chip cards
- > Basic knowledge of HCE and tokenization (e.g. through Gemalto trainings B1031I and B1032I)
- > A license from the chosen payment scheme is required
- > This course is held in English. Sessions in other languages can be planned, please contact us

Duration: 12 days, including a 4-day workshop

Location: Customer premises for the workshop

Course fee: Please contact your local sales representative, or consulting_services@gemalto.com

¹All training courses can be held on-site at customer premises, or at one of the Gemalto training centers. Please contact us for more details.

² Price does not include any taxes

Workshop schedule

The active participation of the attendees is required to make this workshop successful. The agenda can be tailored to customer attendance profile. The standard agenda is provided below:

AGENDA

What is the context of the project?

- > Define the main project scope:
 - Payment scheme(s) and other partners involved?
 - Payment type(s) – Are pre-paid, debit or credit products targeted?
 - Digitalized account management – Definition of new products, definition of token domains and restrictions
 - Transaction types(s) – in-store purchases, online purchases, cash withdrawal, cash back transactions?
- > Define the wallet capabilities:
 - Issuer-centric mobile payment wallet – with one or several HCE cards?
 - Third-party mobile payment wallet – with one or several HCE cards from several financial institutions?
 - Other capabilities: integration with mobile banking app, ticketing and access, rewards and couponing?
- > Define the short term and long term implementation objectives:
 - Proof of concept or commercial implementation? Targeted HCE mobile devices?
 - Deployment of both HCE-based and SE-based solutions to maximize the service reach?
 - In-house or third-party hosted services?
 - Main legacy constraints / requirements to take into account?

Define the payment experience and the HCE mobile payment application functionalities

- > Proximity Payment initiation: manual mode and / or automatic mode, screen on or off
- > Remote payment management: in-app payment options, interactions with merchant
- > Application selection for payment: one or several applications active at a time, default application, prioritization
- > Application activation / deactivation, one-time payment, Android “Tap and pay” settings
- > Key replenishment: push of pull, local and remote parameters to trigger the replenishment
- > Cardholder Verification Method (CVM): mobile PIN, online PIN, online mobile PIN, mobile banking password, etc.
- > Which CVM for each usage: contactless and remote payment, low value and high value, replenishment?
- > Available configuration options for the issuer and the cardholder
- > Transaction logs management
- > Other features: top-up / balance enquiry, access to card information, product information
- > Co-residence of HCE-based and SE-based mobile payment services

Define and manage the risk

- > Single-use keys or multiple-use keys for payment transactions?
- > Risk management parameters: lifetime of ephemeral keys, maximum number of transactions, other thresholds
- > Parameterization of the HCE application / provisioning server for periodical replenishment of keys
- > Parameterization of the authorization server for transaction approval
- > Specificities of Offline Data Authentication in HCE application
- > Active account management and risk mitigation options

AGENDA

Build the customer journey

- > Mobile payment service subscription:
 - On-boarding process: registration from the wallet, online, or physically at the branch
 - Cardholder Identification and Verification process (ID&V): need of a trusted channel, implementation options
 - Account enablement: digitization of the account through tokenization, impact on bank back-end
 - Payment credentials generation: real-time or by batch? Who generates HCE EMV data?
- > Service deployment:
 - Download and installation of the HCE payment application
 - User, HCE payment application and device identifiers
 - Activation code: generation, transmission to the cardholder and usage
- > Payment system flows with HCE and tokenization:
 - Review of authorization requests
 - Review of capture and clearing flows
 - Charge back, reversal, refund operations
- > Service and device life cycle management:
 - Service suspension and resumption
 - CVM unblock / change (when applicable)
 - Mobile device change, lost or stolen, phone number change
 - HCE payment service renewal and termination
- > Summary of all the use cases to support

Implementation options and project plan

- > Roles and responsibilities in the project
 - Credentials generation and provisioning system
 - Transaction management system
 - Account enablement and tokenization
 - HCE mobile payment application and SDK
- > Deployment model for tokenization
 - Integration options - pros & cons of "behind issuer" VS "between scheme and issuer"
 - Tokenization services options - clearing and chargeback management
- > Impacts on your existing infrastructure
 - Card management system
 - Authorization server
 - Fraud management system
- > Security and certification issues
- > High level project plan: Indicative list of tasks, workloads and durations

Related courses

Introduction to the Banking World (B1014I)

Mastering EMV Implementation (B1002I)

Discover HCE mobile payments (B1031I)

Design your HCE Mobile Payment project (B1031W)

Introduction to the Tokenization in Payment Systems (B1032I)

For further information about registration, course schedule:
please contact us via email to: banking.training@gemalto.com
or visit our web site: <http://www.gemalto.com/>