# HCE | cashless 3.0

Activate NFC mobile-based payments on contactless acceptance devices

Enriching a new era in customer payment experience

The promise of mobile payments has captured the imagination of banks, mobile operators, merchants, and consumers for over a decade. Today, through HCE technology it is possible to implement apps and digital wallet services for smartphones that use virtual, cloud-based cards for NFC-POS payments.

Transactions are based on ready-to-use, disposable and preloaded tokens delivered to the handset via WiFi or 3G, avoiding the need for a specific secure element. HCE returns control over payment issuance and user experience back to the card issuers.

TAS cl HCE solution, part of **cashless 3.0**, activates NFC mobile based payments on contactless acceptance devices creating value and convenience in the customer experience.
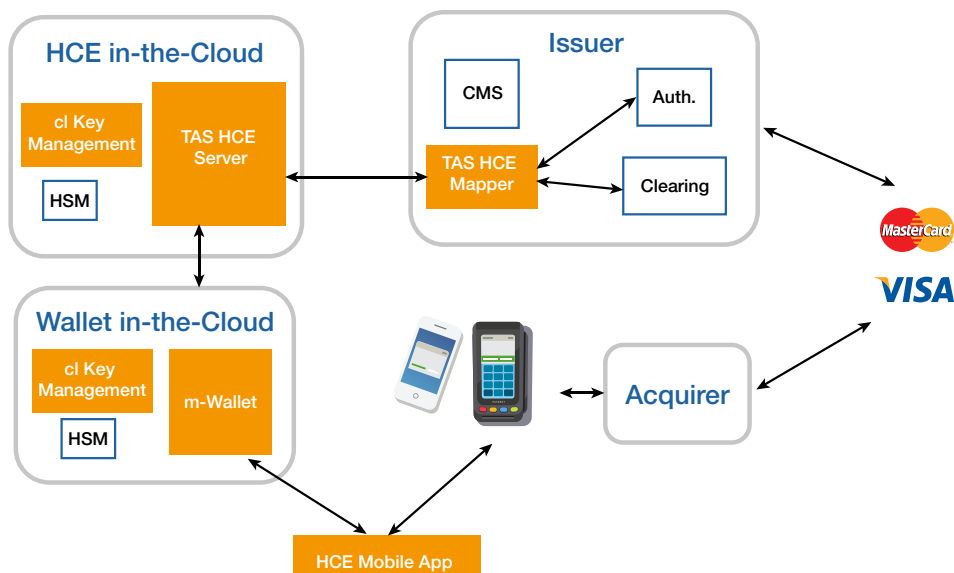
Features

Main characteristics of the cl HCE platform:

- Reduces time-to-market
- Is platform independent
- Integrates and deploys easily with minimal impact on existing systems
- Designed to adapt to Issuer's specific priorities and technological situation
- Emulates any type of card without limitations
- HCE-card data generation in batch mode and HCE-tokens meets PCI compliance specifications
- Uses decoupled HCE-card data linked on-the-fly with the real PAN and session keys
- Eliminates telecom provider requirement for the Secure Element solution
- Meets all VISA and MasterCard compliance specifications

With cl HCE cardholders can:

- Pay with cards they already own, not necessarily contactless
- Pay at any retailer equipped with contactless POS; there is no need to replace / upgrade the acceptance network
- Pay in locations where 3G is not available or is not requested by the cardholder
- Use their smartphones regardless of the native operating system*

* Android OS "KitKat" (ver. 4.4) or BlackBerry 10 OS

Components

cl HCE solution consists of:

- **TAS HCE Server**:
  - Generates and securely stores "HCE-card Data"and Session Keys
  - Participates in HCE-card Data validation

- **TAS HCE Mapper**:
  - Interfaces the CMS, authorization and settlement systems with TAS HCE Server
  - Engages when maintaining the association between HCE-token and PAN

- **m-Wallet**: "Digitize your card" service component for cardholders

- **HCE Mobile App**: on cardholder's smartphone fully emulates a contactless payment application for purchases in stores.

cl HCE functionalities also available as SaaS from the TAS Group Data Centers