

MOBILE PAYMENT SOLUTION USING HCE TECHNOLOGY



SERVICES AVAILABLE

TOKEN GENERATION

- SECURE TOKEN GENERATION
- TRACK2 FORMAT
- UNIQUENESS AND UNFEASIBILITY TO DETERMINE THE ORIGINAL PAN

DEVICE PROVISIONING

- SINGLE USE KEYS UNIQUE TO EACH MOBILE DEVICE
- DELIVERING IN ENCRYPTED FORMAT TO THE PHONE
- TOKEN REPLENISHING ON A REGULAR BASIS

SECURITY PROCESSES

- PROTECTION FOR ALL THE MASTER KEYS
- GENERATION OF ALL LIMITED USE KEYS
- PROVISION OF THE TRUST ENVIRONMENT INVOLVING A COMBINATION OF ENCRYPTION USER AUTHENTICATION AND SECURE MESSAGING

MOBILE API

HCE PAYMENT CHALLENGE

THE ENTHUSIASM FOR HCE HAS CREATED A RENEWED INTEREST IN MOBILE NFC PAYMENT FROM THE MANY PLAYERS IN THE PAYMENT ECOSYSTEM

THIS TOPIC TODAY IS ESSENTIAL FOR BANKS, INTERNATIONAL PAYMENT NETWORKS, MOBILE NETWORK OPERATORS, MANUFACTURERS OF SMARTPHONES, PSPs, TOKENIZATION SOLUTION PROVIDERS AND LARGE RETAILERS

HCE (HOST CARD EMULATION) TECHNOLOGY ALLOWS ROUTING A CONTACTLESS PAYMENT TRANSACTION DIRECTLY FROM THE NFC COMPONENT TO AN APPLICATION INSTALLED IN THE MOBILE AND SUPPORTING THE EXCHANGED APPLICATION

HCE AS A VIABLE OPTION FOR CONTACTLESS MOBILE PAYMENTS LAUNCHED BY GOOGLE IN LATE 2013 WITH THE ANDROID 4.4 OPERATING SYSTEM (OS) RELEASE (KITKAT)

TO MAKE SECURE CLOUD-BASED MOBILE PAYMENTS POSSIBLE, THERE HAS TO BE DIGITAL ISSUANCE SYSTEMS CAPABLE OF SECURELY STORING CREDENTIALS IN THE CLOUD, ISSUING THEM TO MOBILE APPS, AND PROVIDING SECURE ACCESS TO THOSE CREDENTIALS TO TRUSTED APPS IN THE PHONE. DIGITAL ISSUANCE SYSTEMS MUST MANAGE TOKENS DOWNLOADED TO MOBILE PHONES IN LIEU OF REAL CARD DATA FOR PAYMENT TRANSACTIONS

THE MATERIALIZATION OF THE GENERAL INTEREST IN MOBILE NFC PAYMENT TO PROVIDE SERVICES IS BASED ON THREE MAIN PREREQUISITES



MOBILE PAYMENT SOLUTIONS USING HCE TECHNOLOGY AND BASED ON TOKENIZATION SERVICES SHOULD BE CONSIDERED AS AN ELEMENT HELPING THE CONVERGENCE OF THE E-COMMERCE AND PROXIMITY PAYMENT CHANNELS

TOKENIZATION

TOKENIZATION IS ABOUT THE REPLACEMENT, DURING A REVERSIBLE PROCESS, OF THE PAN BY A PAYMENT TOKEN KEEPING THE SAME FORMAT AND THE SAME PROPERTIES AS A CLASSICAL PAN. ADDING ATTRIBUTES TO THE PAYMENT TOKEN ALLOWS LIMITING ITS USE TO A PARTICULAR DOMAIN. A TOKEN PAYMENT MAY BE LIMITED TO A TRANSACTION CHANNEL - FOR EXAMPLE, ONLY FOR NFC MOBILE PAYMENT - AND TO A SINGLE DEVICE, OR BY ASSIGNING A SECURITY LEVEL DURING ITS ISSUANCE AND ITS STORAGE.

END TO END SOLUTION

