Bringing MNOs an end to end Mobile Connect Solution

Mobile Connect for Mobile Network Operator
What is Mobile Connect for MNO?
Unmatched end to end solution

1. Complete authenticator ‘out of the box’: SIM + SMS authentication / small footprint SIM applet + authenticator policy management


3. Discovery services: API Exchange integration – portability data base integration
Our approach with Mobile Connect for MNO

Mobile Connect for MNO is:

- A highly secure mobile centric authentication service
- Fully designed and developed by OAB under GSMA Mobile Connect guidelines
- Managed cloud solution hosted in OAB Datacenters
- A fully multi-lingual (ISO characters) small footprint -7 KB- Cardlet: LOA2 & LOA3 – designed for eIDAS compatibility
- A mutualized solution design for multiples MNOs and Service Providers
- A highly scalable SaaS offer
  - Fully independent and separated business functions & Databases
  - Fully redundant
  - Reliable and scalable
Mobile Connect for MNO is a hosted complete package enabling MNOs to launch Mobile Connect Services

Our offer includes the following services:

- Mobile Connect for MNO platform: AE + dedicated MASP + dedicated OIDC
- Java Card Applet for unlimited users + SMS OTP fallback
- White label Customer Care + Self Care web environments
- Pro active platform management
- Support helpdesk to MNO
- Hosting
Mobile Connect Services available

> MC4MNO SIM based authenticator offers:

- LOA2 Authentication – which is the basis to Freemium applications such as described by GSMA
- LOA3 Higher security authentication + Autorisation + Identity + Attributes + Payment features that represent the large part of monetisable services
Hosting (France)

- Hosted @ Orange Applications for Business Datacenter
- Managed by dedicated OAB resources following ITIL methodology
- SPoC to manage your service
- Global QoS (infrastructure / platform / Service)
- Service level reporting (vs platform of server reporting)

- Recovery Time Objective (RTO/GTR) : 4 hours
- Guaranteed Intervention Time (GIT/GTI) : 15 minutes
- Service Level Availability (SLA) : 99.85%
Service management

1 Monthly reporting
   - Key Performance Indicators
   - Problem reporting

2 Pro active scalability management
   - Increase capability of servers (Ram, cpu,…)
   - Increase number of servers to load balance

3 Software maintenance – Platform & Cardlet
   - Bug correction
   - Product roadmap + lifecycle management
MNO support

- Support to ITIL standards
- Level 1 to level 3 support
- SPoC
- Customer care portal for your customer support representatives
  - Web services with Mobile Connect for MNO functionalities
- Self care portal for end-users
  - Registration
  - Reset code
  - Usage statistics
Current platform footprint

Full commercial launches in Spain, Marocco and Egypt
Mobile Connect for MNO

Functional Architecture & Technical Requirements
Abbreviations

- **OIDC : OpenID Connect**
  - Authentication protocol based on Oauth 2.0

- **OTA : Over The Air**
  - Includes OTA Gateway

- **Identity Gateway**
  - Serves as connector between OIDC request coming from service providers and the Mobile Connect for MNO platform

- **MC API : Mobile Connect API**
  - Connector to AE

- **AE : Acquiring Entity**
  - Mutualized server which routes and performs authentication requests towards MASP servers

- **MASP : Mobile Authentication Service Provider**
  - Dedicated server which emits authentication requests to mobile via the MNO OTA
Technical Requirements

- Available OTA with VPN connection.
- OAB will provide a Standardized Service Contract to MNO for integration purposes.
- Available SMS-C with VPN connection

- Cardlet compatible with most R5 / R6 release SIMS

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- Network Connection to MNO Information System – provisioning, customer care, self care & OIDC / IS attribute sharing with VPN connection.
Mobile Connect for MNO

Portals
Mobile Connect est un service sécurisé qui vous permet d'accéder à tous vos services favoris et vos comptes sécurisés en entrant un simple mot de passe à 4 chiffres sur votre téléphone mobile.

1. Allez sur votre compte et cliquez sur ‘Mobile Connect’.
2. Entrez votre mot de passe à 4 chiffres sur votre téléphone.
3. Accédez directement à votre service sans connaître votre nom d’utilisateur et votre mot de passe.

Pour souscrire ou accéder à votre espace Mobile Connect, cliquez sur le bouton suivant :

**Mon espace Mobile Connect**
Bienvenue

Merci d’avoir choisi de vous enregistrer à Mobilo Connect. Assurez-vous que votre téléphone mobile est à portée de main, allumé et sous couverture réseau.

Après avoir accepté les conditions générales d’utilisation, cliquez sur suivant pour continuer l’enregistrement.

Voir les conditions générales d’utilisation

J’accepte les conditions générales d’utilisation

Annuler

Suivant
Enrolment – Step 3: 2 secret questions

- Secret questions are designed to protect access to most sensitive requests in self-care
  - PIN change (code forgotten)
  - PIN reset (more than 3 mistakes)
Step 4: Applet download via OTA

Download confirmed by SMS
Step 5: Initialize PIN on Mobile

> PIN is securely stored on SIM
Step 6 : Wrap up

> Last confirmation by entering PIN on Phone
Selfcare 1/2

- Reset PIN
- Change Anti Spam code
- Unlock
- T&Cs
- Unsubscribe
Selfcare 2/2

- Transaction history
- List of SPs subscribed to

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Mobile Connect for MNO

Economical Models
Build and Run PAYG model basics – to be discussed

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<tbody>
<tr>
<td>• One time setup fees</td>
<td>• Basic service fee for platform including first 5% of total customer/SIM base</td>
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<tr>
<td>• Including platform setup and integration</td>
<td>• Extended service fee per active user &gt; 5% user base (used the service once in last 12 months)</td>
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<td>• Excludes specific translations (upon request)</td>
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<td>• Unlimited user Cardlet license (within standard implementation)</td>
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Additional optional services

- Service Localization (self care and customer care)
- Cardlet customization
- Cardlet for unsupported SIMs
- Business consulting
- Aggregator Services
gathering application and integration expertise in a single entity

3 complementary growth areas

unique business integration of systems to enhance your business performance

customer experience create a unique 360° customer journey
big data analytics extract business insights from data
Internet of Things run connected things and machines

the power of a telecom operator with the expertise of a digital services provider
your specialist for digital transformation
Key figures

+11,000 customers from SMEs to MNCs (300 outside France and 7,000 with SaaS solutions)

+2,400 employees including +250 outside France

60,000 M2M devices (smart products)

11 million app store downloads

+ €300 million turnover in 2013
Main know-hows and certifications

- For over 25 years, Orange Applications for Business has managed critical systems for its customers operating with several levels of certification

**Certifications**
- Certified CMMI Level 3 for Software Development
- Conforming to processed methodology ITIL rev 3 (ISO 21000) for Operation of Services. Most of operational teams are ITIL certified
- ISO 9001 on several OAB business lines
- Several OAB employees are certified “ISO 27001 Lead Implementer” for information security management system.
- OAB follows best practice recommendations on information security management of ISO 27002 and security rules published by ANSSI.
- OAB operates some PCI-DSS certified payment services
- OAB TSM allowing deployment of NFC Mobile Payment is certified by Mastercard since 2013;

**Member of Industrial organization**
- GlobalPlatform (System Committee)
- AFSCM (Association Française du Sans Contact Mobile)
- ADCET (‘alliance pour le développement des transactions électroniques dans les collectivités territoriales)
Thank you