



NCB – Credit Card Issuing and Acquiring Platform Solution Proposal

24 February 2015



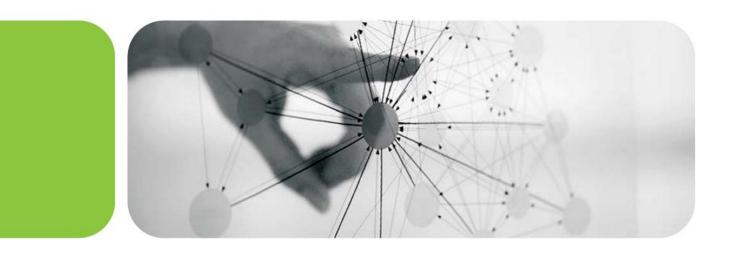
Agenda



- NCB Requirements
- Solution Overview
- Infrastructure Requirements
- Solution Timeline
- Financial Summary









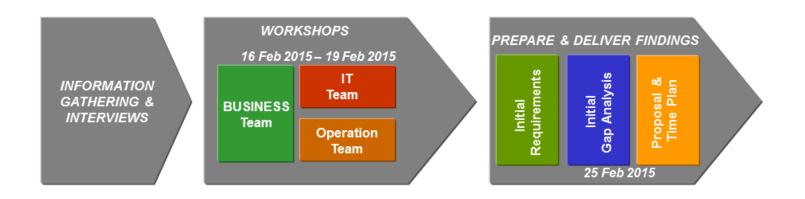
NCB Current Requirements



NCB Requirements



➤ NCB Functional and Non-Functional Requirements were communicated and discussed during the workshops conducted at NCB premises on the 19th of March, 2014 and from the 16th to the 19th of February 2015.







NCB Requirements



- Details can be found in the Initial Requirements and Gap Analysis document version 2.0.
- It was confirmed that Cortex Credit Card Management solution, sourced by FIS and locally supported and enhanced by eMCREY (FIS local partner) meets and hopefully will exceed NCB Requirements





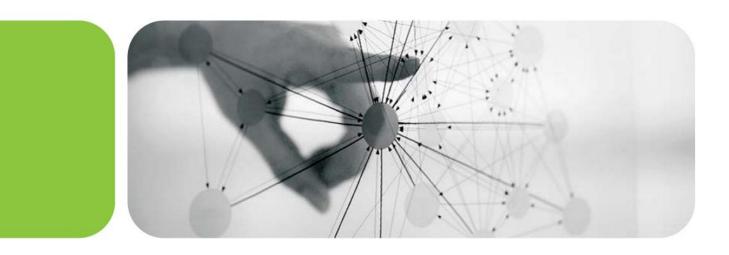
NCB Requirements



- Credit Card Management
 - Application Processing
 - Card Issuance (Prepaid, Traditional Credit Card)
 - PIN Management
 - Card Transactions (Including Balance Transfer, Cash advance/loan...)
 - Credit limit
 - Billing (including eBilling)
 - Statement (including eStatement)
 - Collection
- Reconciliation/Merchant Management
- Dispute Management
- Fraud Detection and Risk Management
- Loyalty/Reward
- Integration with NCB Environment (Customer Portal, Fund transfer, Complaint, Dispute, Customer OnBoarding, etc.)
- Time to Market
- Alignment with NCB Architecture & Infrastructure Preferences









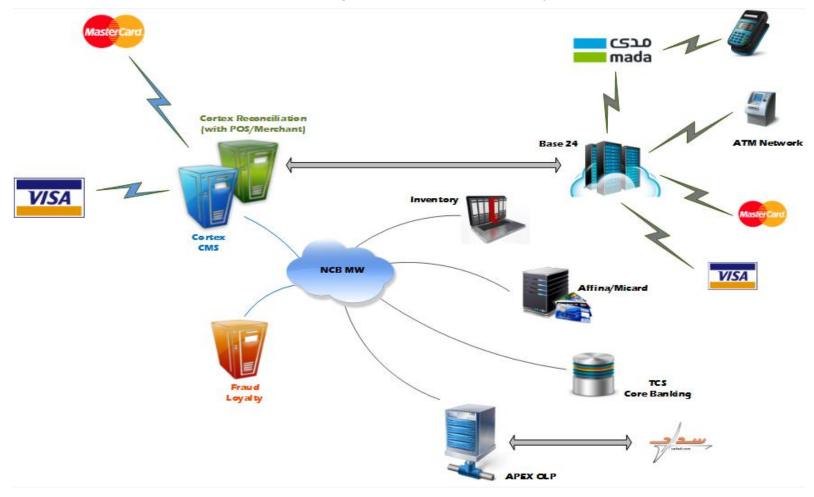
Cortex Solution Overview



Solution Overview

(Details can be found in the solution presentation and the submitted Technical Proposal version 2.0)

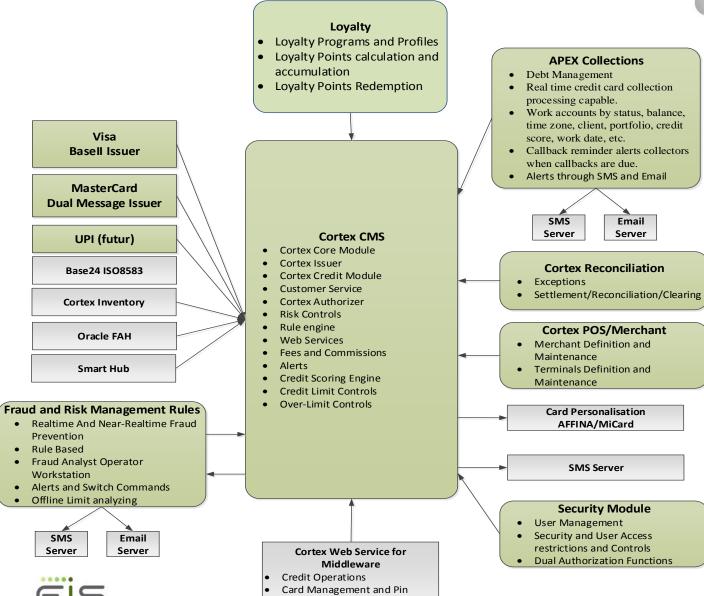








Solution Overview



Operations

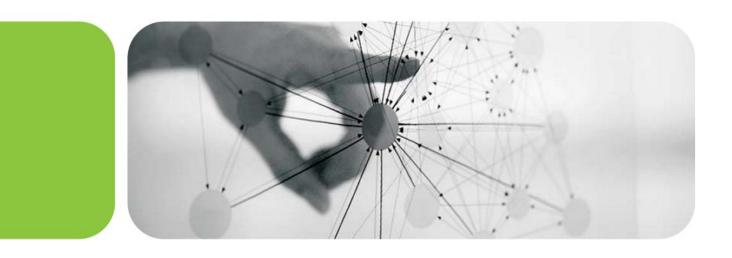
Authorization Operations



Confirmed Scope

- Cortex Core Module
- Cortex Issuer
- · Cortex Credit Module
- Customer Service
- Cortex Authorizer
- Risk Controls
- Rule engine
- Web Services
- Fees and Commissions
- Alerts
- Credit Scoring Engine
- Credit Limit Controls
- Over-Limit Controls
- Security Module
- Visa Basell Issuer
- MasterCard Dual Message Issuer
- Base24 ISO8583 Interface
- Near-Real Time Fraud prevention and Management
- Risk Management
- Cortex Reconciliation for Credit card, reconciliation and settlement
- Cortex POS/Merchant
- Apex Collections and Debt Management
- Oracle FAH Integration
- Card personalization (AFFINA/ MiCard) Integration
- SMS Server Integration
- Channels Integration through Web Services
- Smart Hub Integration







Infrastructure Requirements

Software Requirements



Software Application	<u>Comments</u>
Operating System	Solaris, IBM AIX or HP-UX
Database	Oracle
High Availability Software (if needed)	-Sun Cluster Manager Or IBM HACMP or HP Cluster management software - Oracle RAC
Java Environment	Java Development Kit (JDK)
Application Server	Websphere, Weblogic
Web Browser	Internet Explorer, Chrome, Firefox



Infrastructure Requirements



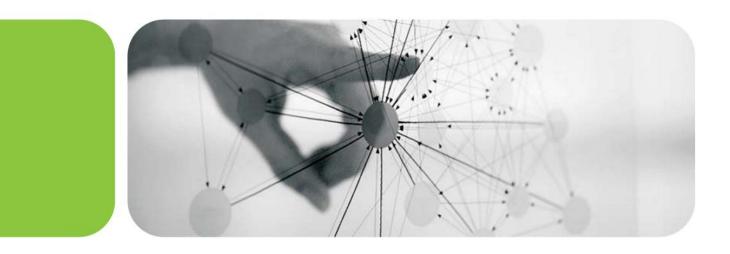
➤ A detailed Hardware specifications (Hardware, OS, Storage, etc.) are provided in the attached document "NCB Cortex Credit - Infrastructure_Requirements_Document_v1."



- Solution supports Virtualisation
- The current centralised installations of Oracle and Websphere at NCB can be used.









Solution Timeline



Project Timeline

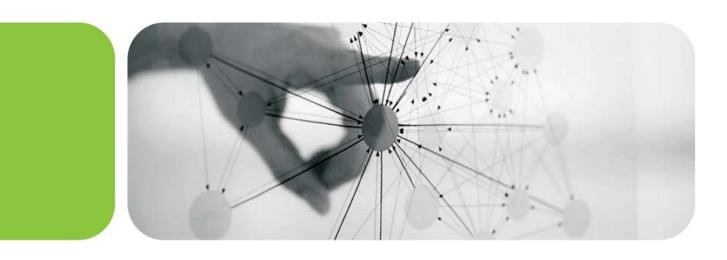
(Details can be found in the project plan "NCB - Credit Card CMS - Project Plan 20150221 V2_0")



	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Track1 - Deployment, Certifications & New Issuance	Ĥ										
Definition & Study	8										
Build											
E2E Testing		1		_	:						
Training						=					
Card Certification		1									
System Setup & Configuration for Factory Test						3					
△ Testing		1					:				
Factory Testing		1									
SIT Testing		1					-				
UAT Testing											
Auth & Clearing Certifications		1						:			
PROD Rollout		1							•		
DR Rollout		1							1		
Track 2 - Full Migration				Г		,					
Definition & Study				Г	\neg						
Build						:					
E2E Testing						_					
△ Testing											
SIT Testing		1									
UAT Testing									:		
Migration Rollout		1									_









Financial Summary (will be provided on the 25th of February 2015)

