



Apple Pay™ NFC Payment Solution Overview for FIs



MasterCard® MDES
Visa® Token Service

Agenda

- Apple Pay Overview
- The Consumer Experience
- Financial Institution Considerations
- The Vantiv Partnership
- Processes and Support
- Next Steps

Apple Pay Overview



- Apple Pay is a digital payment service for contactless point-of-sale and in-app payments
- Apple Pay utilizes MasterCard Digital Enablement Service (MDES) and Visa Token Service (VTS) plus biometric authentication to deliver new levels of payment security
- Apple Pay initially supports only consumer retail debit and credit cards



Apple Pay Overview



- Apple Pay is scheduled to launch in mid to late October 2014
- Apple, Visa and MasterCard are controlling “go live” dates
- Financial institutions must be certified by Apple, agree to Apple’s T&C’s and pricing before their cardholders will be able to use Apple Pay
 - › This will occur during the MDES or VTS enrollment process
 - › Currently, Apple requires an FI’s Debit and Credit portfolio to enroll and “go live” at the same time



Apple Pay Overview



- Apple Pay transactions require dual POS routing per Durbin regulations
 - › FI's Alternative PIN Network must be certified for Apple Pay, MDES or VTS
 - › Jeanie is available for Vantiv's Apple Pay solution
- Post October 2015 liability shift, EMV liability rules will apply to Apple Pay transactions
- Apple Pay will invoice FI's through MasterCard or Visa
 - › Vantiv will support the pass through fees to FI's where applicable



Apple Pay Consumer Experience

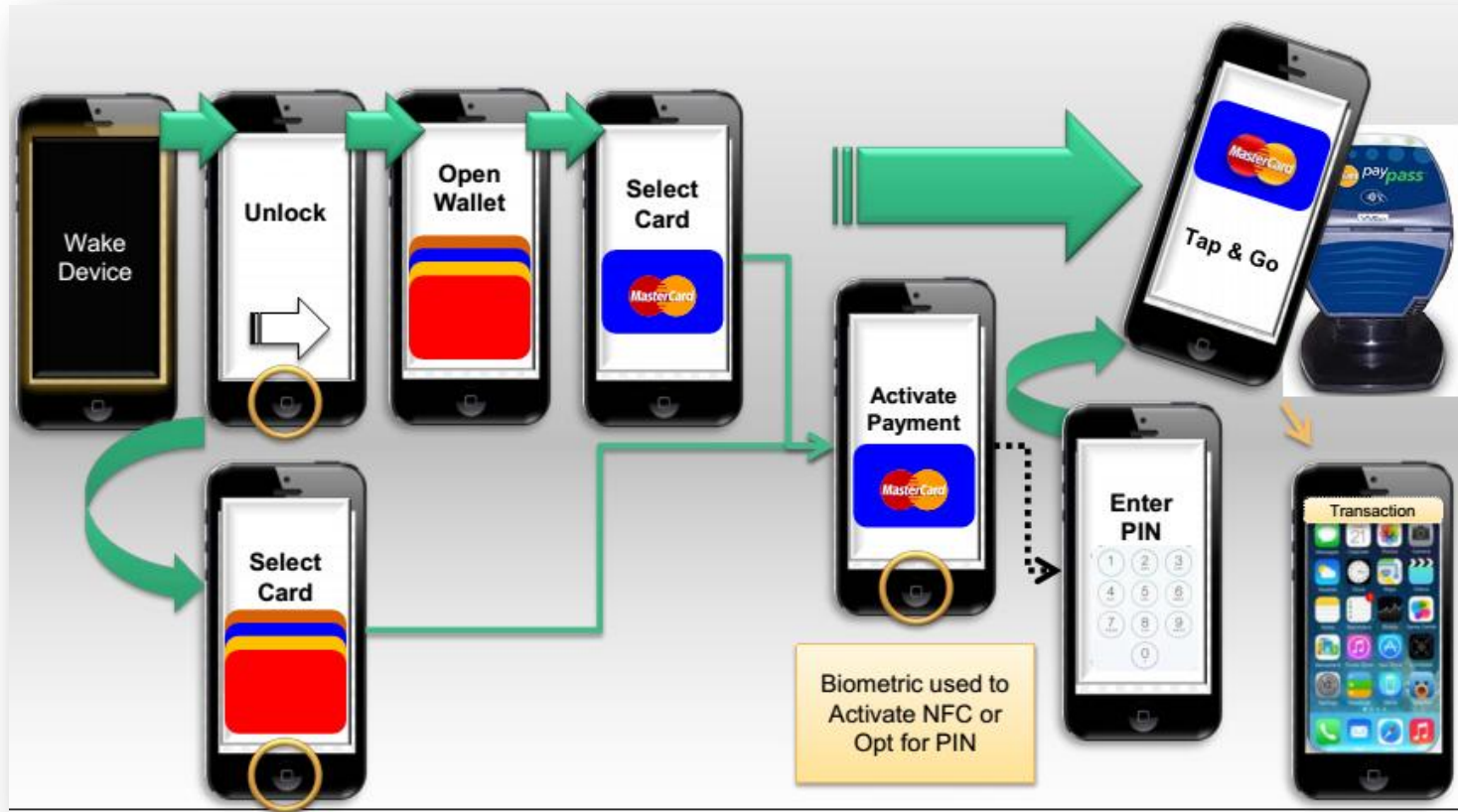
Token Provisioning

- Cardholder inputs card credentials into the Apple Pay app
- Apple Pay will initiate a token request to MDES or VTS
- MDES or VTS performs a card eligibility check with Vantiv
- MDES or VTS generates the Token and sends to the device
- The Token is provisioned to the device's secure element as a Digital Account Number



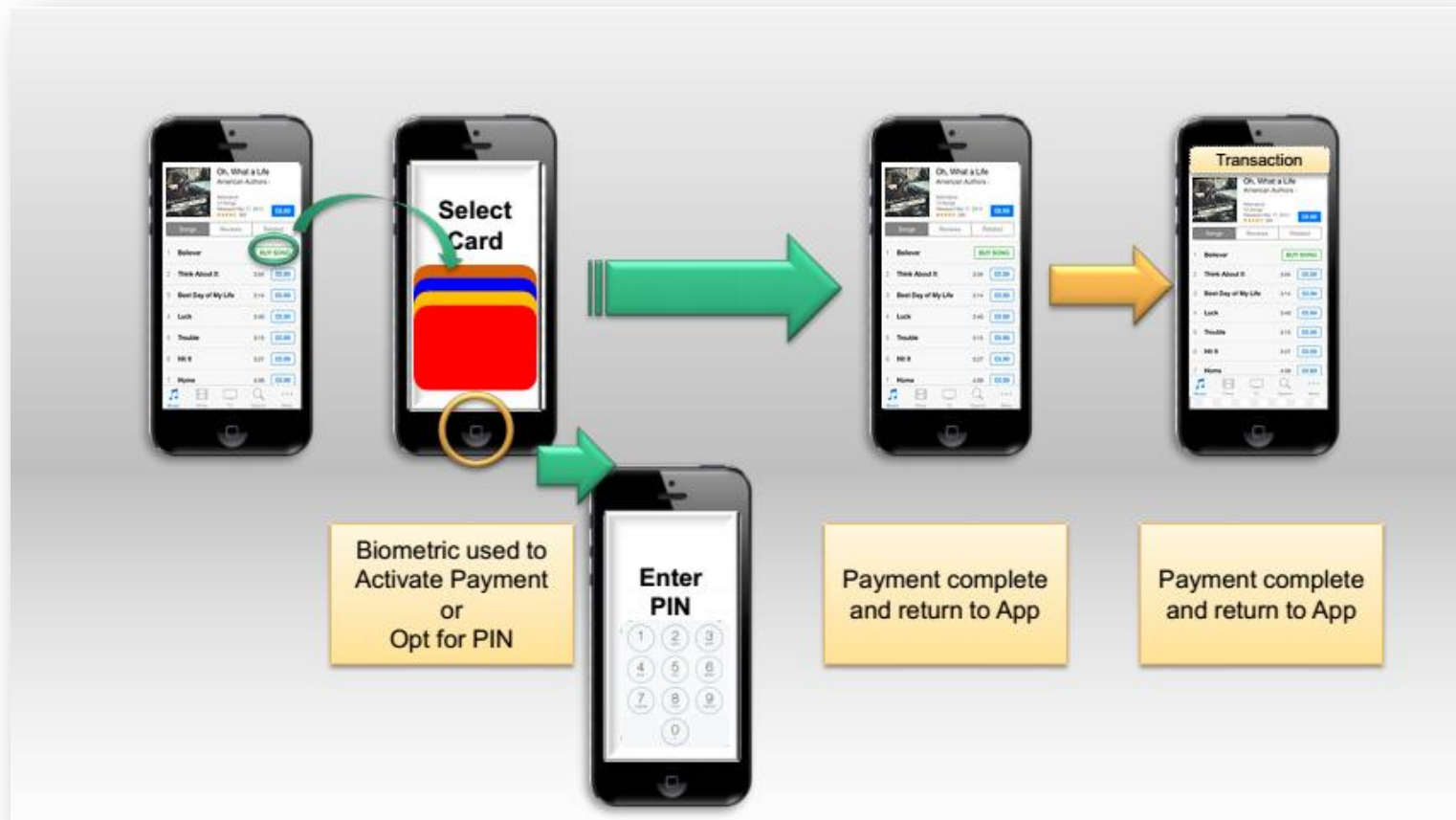
Apple Pay Consumer Experience

Payment - NFC



Apple Pay Consumer Experience

Payment – In App



Financial Institution Primary Considerations

- FI's must first enroll in MDES or VTS to offer Apple Pay
- Both Principles and Affiliates will work through Vantiv
- MasterCard, Visa, Apple and Vantiv will have fees
- Apple is not negotiating their T&C's or fees
- FI's will need Apple Pay supported devices for testing
- MasterCard and Visa are providing customer service portals for FI's customer service teams to provide Token lifecycle management
- FI's Alternative PIN Network will need to be Apple Pay, MDES or VTS certified
- An FI's Core does not need to do anything to support the transaction authorization or token provisioning

Apple Pay Vantiv Support

Debit & Gateway Credit – MDES

- Vantiv has built and certified support for MDES “Default” implementation
- Vantiv supported one of the first 5 issuers to go live with MDES and Apple Pay
- Vantiv has been trained by MasterCard to enroll FI’s into MDES and Apple Pay
- When MasterCard and Apple are ready to accept new FI’s, Vantiv will publish an on boarding guide, procedures and timelines
- On boarding is estimated by MasterCard to be 8-10 weeks minimum including Apple Pay certification and testing

Apple Pay Vantiv Support

Debit & Gateway Credit – VTS

- Visa Token Service was announced on September 9, 2014
- Vantiv will implement Visa's token service transaction mandates in our October 2014 compliance release
- Vantiv is actively engaged with Visa developing the scope to fully support VTS
- Vantiv will announce VTS support timelines within the next 30 days



Apple Pay Vantiv Support

Debit & Gateway Credit – Direct

- Vantiv will identify cards that have been tokenized with a DPAN indicator on the Card Production tab in the October 2014 release
- Token transactions will be identified in Transaction Research by POS Entry Mode

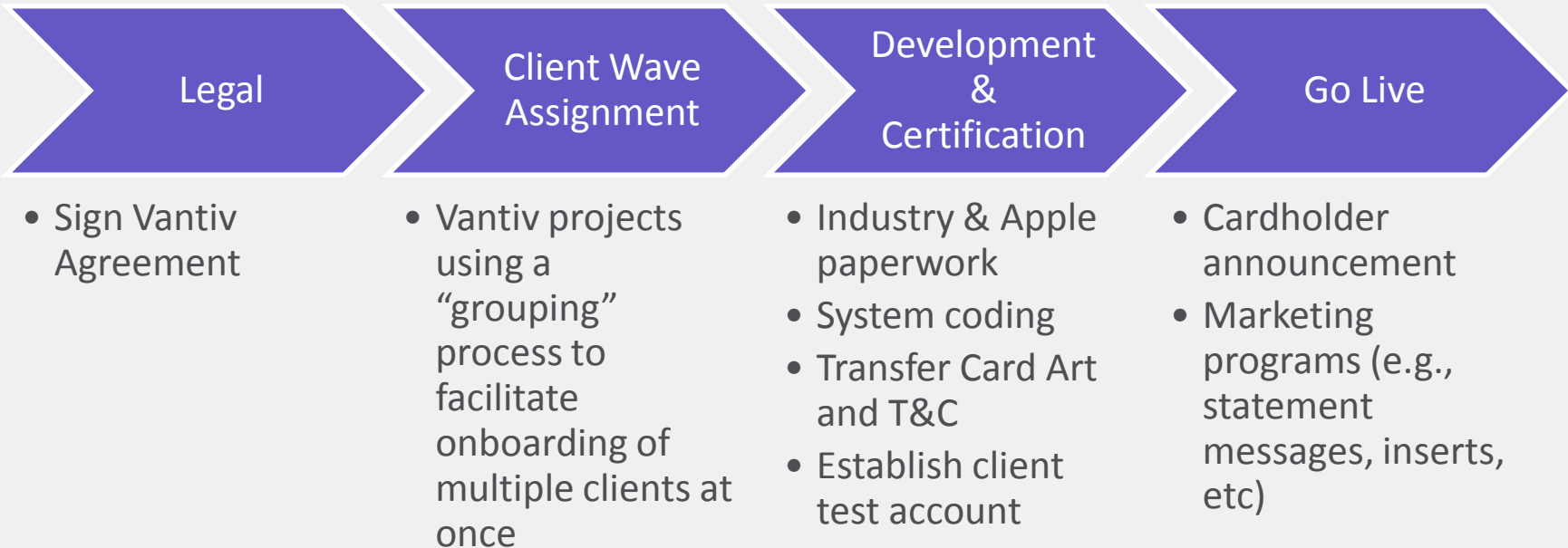
The screenshot displays the Vantiv Issuer Direct - 5/3 application window. The top menu bar includes File, Edit, View, Card Maintenance, Customer Maintenance, Account Maintenance, Open Card, and Help. The main content area is divided into two sections: Cardholder Information and Card Inquiry. The Cardholder Information section shows fields for Name (LEIF S TEST), Date of Birth, Mother Maiden Name, and Fed ID (278905512). The Card Inquiry section is further divided into Ownership Information and Card Production Information. The Card Production Information section is highlighted with a red arrow pointing to the DPAN Indicator field, which is set to YES. Other fields in this section include Renewal Period (3 YEARS), Number Of Plastics (1), Type Of Embossing (STANDARD PRODUCT DESIGN), Card Design (22-CONSUMER GOLD), and Issue Type (CUSTOM ISSUE). The bottom of the window features buttons for Search Results, Refresh, Close, and New Search.

Cardholder Information	
Name:	LEIF S TEST
Date Of Birth:	
Mother Maiden Name:	
Fed ID:	278905512

Card Inquiry	
Card Info Connections Authorization History Outstanding Authorizations Settled Transactions Card Production EMV Configuration	
Ownership Information	
Card Embossing Name:	
Secondary Owner:	TEST
Secondary Name ID:	COMA12
Current Address:	6084 DUNMORE DR
City, State:	WEST CHESTER OH
Zip:	45069
Card Production Information	
Renewal Period:	3 YEARS
Number Of Plastics:	1
DPAN Indicator:	YES
Type Of Embossing:	STANDARD PRODUCT DESIGN
Card Design:	22-CONSUMER GOLD
Issue Type:	CUSTOM ISSUE

Apple Pay Vantiv Support

Credit – Enrollment



Vantiv Will Partner With You

- Vantiv will provide full issuer support for Apple Pay participation
 - › Issuer onboarding, programming and data entry
 - Association and Apple paperwork
 - Terms & Conditions
 - Token provisioning rules
 - Card Art
 - Token BIN range assignment
 - › Ongoing provisioning rule changes
 - › Customer service on token issues*



* For card programs where Vantiv provides customer service options. Debit programs may require core integration to specific Visa and MasterCard systems for token management which is yet to be determined.



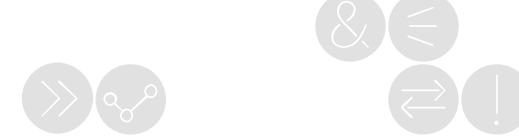
Vantiv Will Partner With You

- Key Focus Areas
 - › Technical participation requirements
 - › Unique association requirements
 - › Principal vs non-Principal structures
 - › Unique BIN vs shared BIN's
 - › Cardholder touch-points



Apple Pay Vantiv Support

Fees and billing



Apple Pay	MDES	VTs	Vantiv
<ul style="list-style-type: none">• For credit transactions, a fifteen basis point (0.15%) transaction fee based on eligible transaction amt• For eligible debit transactions as applicable, \$0.005 per debit transaction	<ul style="list-style-type: none">• Lifecycle management/residency - \$0.02 monthly per PAN• Token provisioning - \$0.08 per device token• \$0.025 Alternate Network Call Out• Fees waived in 2015, effective January 1, 2016	<ul style="list-style-type: none">• Lifecycle management - \$0.02 per action (suspend, resume)• Token provisioning - \$0.07 per token created• Residency - \$0.0025 per active token per month• Fees waived in 2015, effective January 1, 2016	<ul style="list-style-type: none">• Set up charge• Token provisioning fee per transaction

Next Steps

- As your trusted partner, Vantiv is monitoring and keeping in front of the Apple Pay timelines
- As Apple communicates out to the market, we will update our clients
- If you have additional questions, contact your relationship manager

