The Road to EMV on the Forecourt

May 7, 2015
Agenda

• Presenters
• Housekeeping
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• The Road to EMV on the Forecourt
• Q & A
Presenters

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Once the survey is completed, a link will be provided to the presentation handout. Conexxus uses the survey results to develop the content for our webinar series.
About Conexxus

• We are an independent, non-profit, member driven technology organization

• We set standards…
  – Data exchange
  – Security
  – Mobile commerce

• **We provide vision**
  – Identify emerging tech/trends

• **We advocate for our industry**
  – Technology is policy
2016 Conexxus Annual Conference
May 1 – 5, 2016
Loews Ventana Canyon Resort
Tucson, Arizona
EMV on the Forecourt

Considerations for US Migration

Conexxus WebEx – May 2015
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What is this EMV?

Simple Answer: Payment cards based on chip card technology

- Named after the originators – EuroPay, MasterCard and Visa
- Payment processing with cards containing a secure microprocessor chip or devices with EMV credentials

EMV vs. Magnetic Stripe Transactions

- Unlike magstripe transactions, where basic account number and validation is processed, EMV transactions contain additional security information exchanged between the card, terminal and host.
  - Increased security for fraud protection
  - Banks issuing EMV Chip Cards to customers
  - Payment processors already required to support chip transactions
  - Card holders will soon be aware of the increased protection and look for EMV payment terminals
Potential Petroleum US EMV Migration

- Published reports show U.S. EMV liability shift as early as 2015, but industry adoption expected to extend beyond the end of the decade

**April 2013:**
Processors required to support chip transactions

**Oct 2015:**
Non-AFD EMV liability shift begins

**Oct 2017:**
AFD EMV liability shift begins

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**Wayne Fueling Systems**

**Indoor EMV Systems Releases**

- EPS/POS Upgrades for Indoor EMV
- Network Certifications
- Sites Enable Indoor EMV

**Dispenser EMV Systems Releases**

- POS/EPS Integration for Dispenser EMV
- Network Certifications
- Sites Enable Outdoor EMV (AFD’s)
Current Industry Focus on EMV at POS

- Electronic Payment Server (EPS) Transition and Point Of Sale (POS) / Pin Pad changes
  - Host interface changes for EMV driving POS and EPS application changes
  - Solutions moving from (POS ⇔ Host) to (EPS ⇔ Host)
  - Integrating pin pads with support for EMV chip cards
- Supporting existing dispenser interfaces for now

*Dispenser EMV protocol support in future phase*
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Dispenser Upgrades

EMV Enablement

Other Considerations

Forecourt Communications
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Dispenser Upgrades
What does EMV mean for my Dispensers?

- **Dispenser Hardware Upgrades / Replacements**
  - Minimally, involves card reader replacement and software update
  - May involve entire payment terminal upgrade/replacement
  - Can vary widely by dispenser model
  - Some dispenser models not upgradeable

*Dispenser payment terminals will use new communication protocols to support EMV*
What does this mean for my Dispensers?

• Manufacturers and 3rd parties are providing a range of upgrades for most legacy dispensers
  – However, dispensers 20+ years old more than likely need to be replaced

• Wayne provides EMV upgrade kits for Ovation, Vista, and Premier dispensers
  – Builds on secure PCI platform
  – Spans two decades of equipment
Generic Dispensers EMV Upgrade Path

1. Secure Platform Upgrades
2. EMV Hardware, Software, Connectivity
3. Site Systems EMV Support

EMV Enabled Dispensers
Wayne EMV Positioning and Strategy

• Wayne anticipated US EMV migration
  – Modular product strategy eases upgrades

• PCI investments preserved for EMV
  – Keypads, displays, and most electronics
  – Card readers/software upgraded to support EMV transactions
  – *Hardware can be deployed now and enabled when site systems are ready*
    • Existing protocols allow magstripe only mode

Secure Hybrid Card Reader  
PCI 3.0 SPM Keypad
Upgrade Paths to EMV Ready Dispensers

iX Pay Dispensers (PCI)  Ovation iX, 4/Vista, Helix, Ovation²

Legacy Dispensers (non-PCI)  Ovation qCAT, 1/2/3/Vista, Premier B & C

EMV Ready Hardware
- Secure reader
- Magstripe only mode
- Existing POS interface

EMV Enabled Dispensers

EMV Ready Hardware
- Secure reader
- Magstripe only mode
- Existing POS interface

EMV Enabled Dispensers
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Dispenser Upgrades

Forecourt Communications
EMV Impact to Forecourt Communications

- EMV requires more data from the outdoor payment terminals
- Changes to payment terminal interfaces
  - Updated EPS & forecourt controller interfaces, e.g. XML protocol to payment terminals
- TCP/IP connections to dispenser payment terminals
  - Ethernet cables or devices to drive TCP/IP over existing wires

One option is Ethernet to dispensers
• Preferred for new sites
• Costly install for existing sites
• Media enabled sites already have Ethernet
Example EMV Site Diagram using Ethernet 2-wire Solution

- Preferred for existing sites
- Less cost & downtime vs. Ethernet install
- Media sites can also leverage this solution
Simplify preparing your forecourt for EMV

Wayne Connect™ IP-485® network solution

- Supports EMV bandwidth demands using existing site wiring
- Significant cost savings versus new conduit and cabling
- Also supports media and service connectivity in parallel
Benefits of TCP/IP Connectivity to Dispensers

- Serial communications are limiting
  - Transaction performance speed
  - No remote service & support

- Dispenser TCP/IP connectivity provides:
  - Increased transaction performance
  - Simplified interfaces to site systems
  - Remote management & service diagnostics capability
  - Enterprise connectivity for media, loyalty, and other cloud services including mobile payment
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Dispenser Upgrades

EMV Enablement

Forecourt Communications
Example EMV Enablement Project Breakdown

EPS/POS Integration of EMV Dispenser Protocols

Phase 1
- EMV Business Requirements
- Capability Assessment
- EPS & Middleware Plans
- Coordinate 3rd party involvement

Phase 2
- Resource commitments
- Development funding (if required)
- Provision testing environment
- Network connectivity
- Unit testing
- Card brand testing
- Host testing

Phase 3
- Host Certification
- Verify EMV Certification
- Associate Training Programs

Phase 4
- Pilot Sites
- Launch Marketing
- Rollout

6 Months to 2 Years
Full Site EMV Enablement

- EPS/POS support Integration, certs and pilot complete

- Site EMV Enablement for Dispensers
  - Load EMV application software on dispensers
  - Install/connect TCP/IP solution to dispensers
  - Update EPS/POS software to support EMV dispenser protocols
  - Validate host settings to enable dispenser EMV transactions
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Dispenser Upgrades

EMV Enablement

Other Considerations

Forecourt Communications
Implementation Timing and Complementary Systems

• Focus on big picture implementation and coordination
  – Create migration program and cross-functional task force
  – Set your own milestones for multi-year transition

• Engage early with payment processor
  – Establish clear direction and cutover timing

• Plan equipment migrations well ahead of time
  – Availability of equipment and service providers

• Consider impact of emerging payment methods
  – How do NFC and alternative mobile payments fit?

• Review loyalty/media initiatives influence on migration
  – Payment terminal ability to evolve with system changes
  – Bundling upgrades to save cost
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EMV whitepaper available online: www.tinyurl.com/EMVontheForecourt
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