A Perfect Fit: Understanding the Interrelationship of the PCI Standards

9/5/2008

Agenda

- Who is the Council?
- Goals and target for today's Webinar
- Overview of the Standards and "who's who"
  - PCI DSS
  - PA-DSS
  - PED Security Requirements
- Relationship between standards
- Facts and myths
- Q&A

Who is the Council?

S S C

- An Independent Industry Standards Body
  - Security Standards and Supporting Documents
  - Frequently Asked Questions
  - List of Approved QSAs, ASVs, PED Labs
  - Education and Outreach Programs
  - Participating Organization Membership, Community Meetings, Feedback
- One Global Voice for the Industry

Goals and Target Audience

- **Goals**
  - High level understanding of each of the PCI standards and what they do and who they apply to
  - See the interrelationship of the standards and when combined, how they are your best protection against a data breach
  - Debunk several myths surrounding PCI, the standards and compliance

Goals and Target Audience

- **Target Audience**
  - Merchants and service providers who are implementing the standards
  - Non technical business analysts or SMB owners who are just embarking on PCI compliance programs
  - Information security professionals wanting to get a "quick start" to understanding PCI

Please Note: This is not an in-depth technical discussion for the assessment community

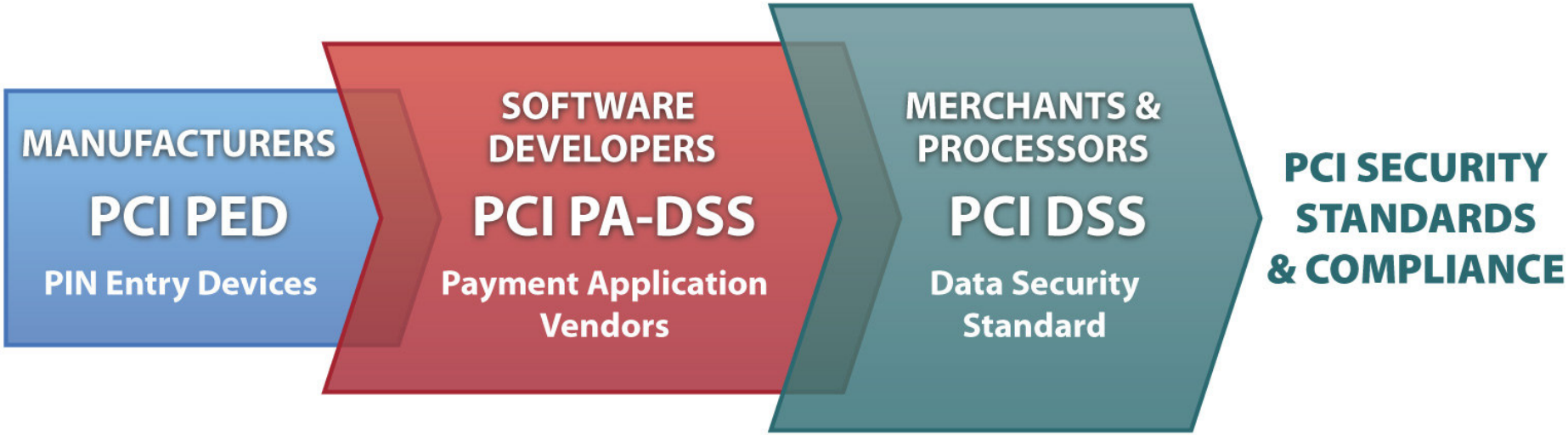
Standards Overview

- The SSC understands that PCI applies to more than just merchants. As a result of industry feedback, additional standards were added to the management of the council :
  - Data Security Standard (DSS)
  - Payment Application Data Security Standard (PA-DSS)
  - Pin-Entry Device (PED)

Who's Who

PAYMENT CARD INDUSTRY SECURITY STANDARDS

Protection of Cardholder Payment Data



Ecosystem of payment devices, applications, infrastructure and users

PCI SSC Standards

9/5/2008

The Cost of Complying

Three Categories of Compliance

- Upgrading Payments Systems and Security
- Verifying Compliance (Assessment)
- Sustaining Compliance

How much does this cost your organization?

For merchants with complex or older systems, it may cost millions

The Cost of Not Complying

Same study estimated non-compliance costs significantly higher, including

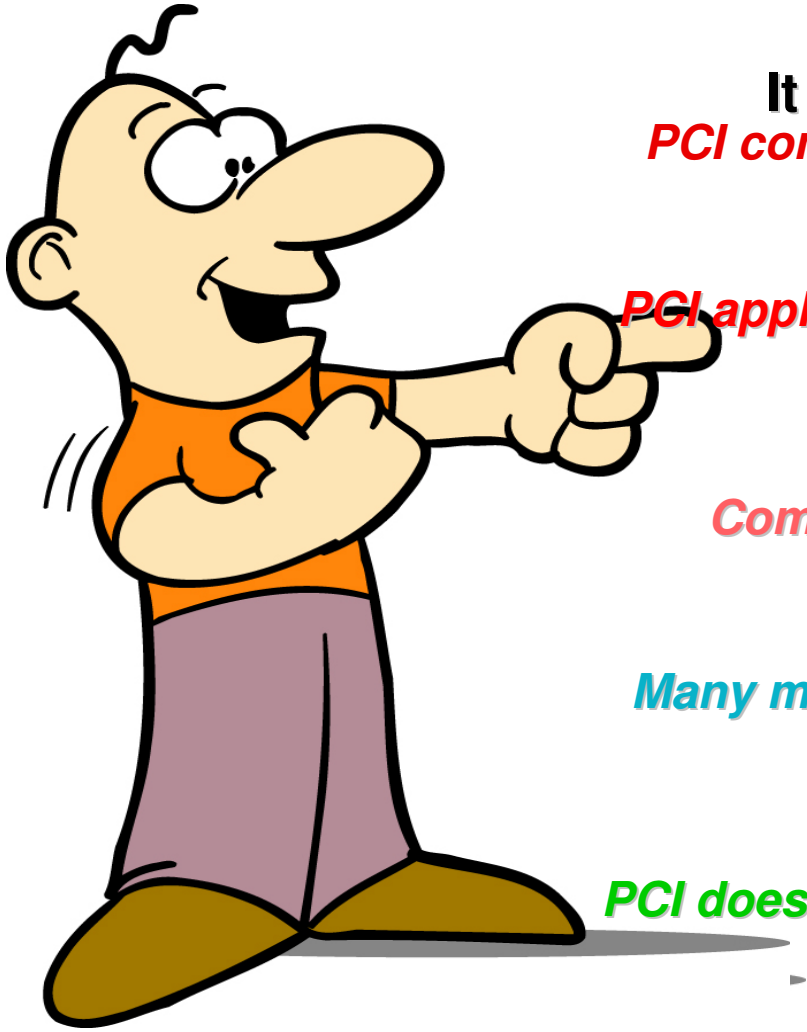
- "Crisis" cost upgrades
- Repeat assessments
- Notification costs
- Brand reputation
- Shareholder and consumer lawsuits

The cost of a breach can easily be 20 times the cost of PCI Compliance

"PCI Compliance Cost Analysis: A Justified Expense."
A joint analysis conducted by Solidcore Systems, Emagined Security and Fortrex. Jan. 2008
[This study utilized data from several sources including level 1 and level 2 merchants with 2,000 – 2,500 retail locations.]

The Five Stages of Grief

- **Denial**
- **Anger**
- **Bargaining**
- **Depression**
- **Acceptance**



It doesn't apply to me
PCI compliance is mandatory

It isn't fair
PCI applies to all parties in the payment process

I'll do some of it
Compliance is "pass / fail"

I'll never get there
Many merchants already have

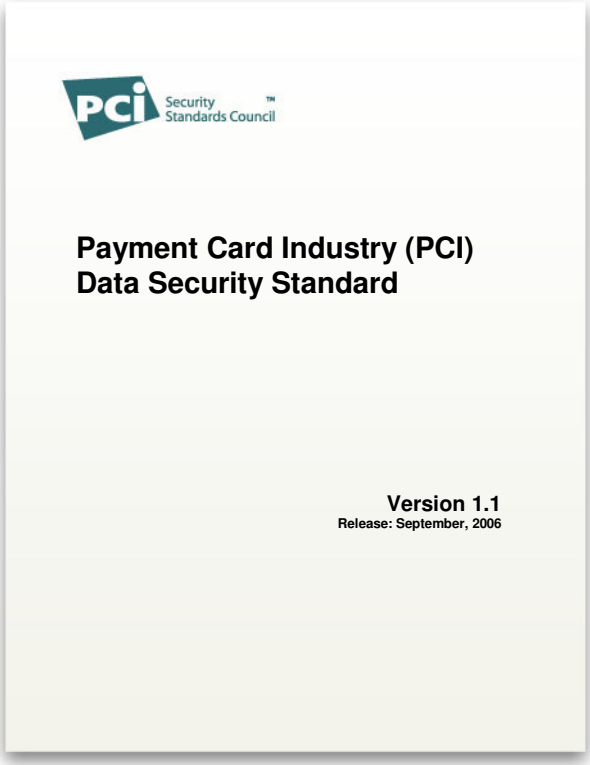
It'll be OK
PCI doesn't introduce any new, alien concepts

PCI

Six Goals, Twelve Requirements

Build and Maintain a Secure Network	**1. Install and maintain a firewall configuration to protect cardholder data** **2. Do not use vendor-supplied defaults for system passwords and other security parameters**
Protect Cardholder Data	**3. Protect stored data** **4. Encrypt transmission of cardholder data across open, public networks**
Maintain a Vulnerability Management Program	**5. Use and regularly update anti-virus software** **6. Develop and maintain secure systems and applications**
Implement Strong Access Control Measures	**7. Restrict access to cardholder data by business need-to-know** **8. Assign a unique ID to each person with computer access** **9. Restrict physical access to cardholder data**
Regularly Monitor and Test Networks	**10. Track and monitor all access to network resources and cardholder data** **11. Regularly test security systems and processes**
Maintain an Information Security Policy	**12. Maintain a policy that addresses information security**

The PCI Data Security Standard

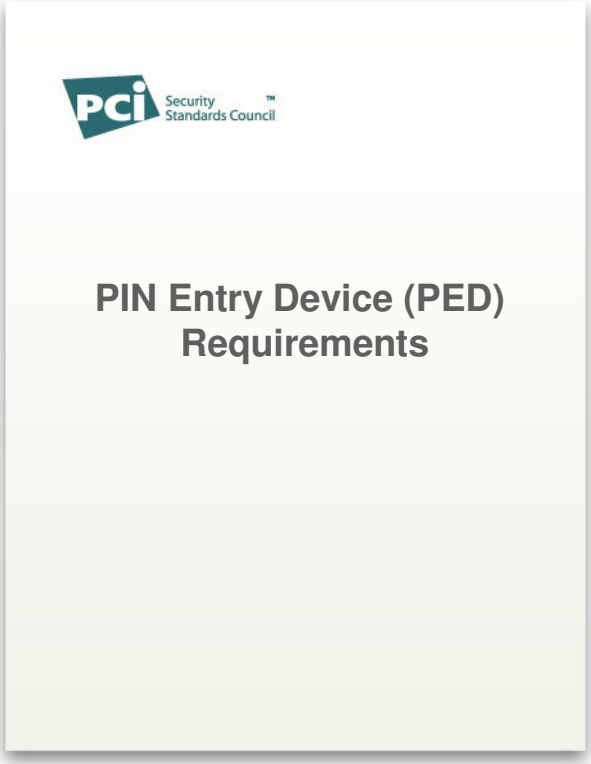


- The PCI DSS is a set of comprehensive requirements for enhancing payment account data security
- The PCI DSS is a multifaceted security standard that includes requirements for security management, policies, procedures, network architecture, software design and other critical protective measures
- This comprehensive standard is intended to help organizations proactively protect customer payment data

Updates to PCI DSS

- October 2008:
  - PCI DSS Revision v1.2
  - Assessed and Incorporated feedback received from over 2,500 queries and suggested changes from Community Stakeholders
  - 1.2 revision address the existing six goals and twelve requirements of the DSS with future effective dates for potential new sub requirements
  - See Summary of Changes at: http://www.pcisecuritystandards.org/pdfs/pci_dss_summary_of_changes_v1-2.pdf
  - Areas of focus
    - Clarity and flexibility of requirements
    - Incorporate existing and new best practices
    - Scoping and reporting clarification
    - Eliminate overlapping sub requirements and consolidate documentation
    - Expanded FAQ and glossary

The PIN Entry Device Requirements



- These requirements are divided into the following categories:
- Device Characteristics:
  - Physical Security Characteristics
  - Logical Security Characteristics
- Device Management
  - Device Management During Mft.
  - Device Management Between Mft. and Initial Key Loading
  - Considers how the PED is produced, controlled, transported, stored and used throughout its life cycle. If the device is not properly managed, unauthorized modifications might be made to its physical or logical security characteristics.

PIN Entry Device Requirements

PED

Physical Attributes	Logical Attributes
• Attributes that deter physical Attacks – ex penetration of device to determine key(s) – Planting a PIN disclosing bug within	• Logical security characteristics include functional capabilities that preclude: – Allowing device to output clear text PIN encryption key

The PED Security Requirements are designed to secure personal identification number (PIN)-based transactions globally and applies to devices (attended or unattended) that accept PIN entry for all PIN-based transactions as well as non-cardholder interface devices (hardware security modules)

PIN Entry Device Requirements

Device Types Under PED

Traditional Devices include

- Point-of-sale PED Designed for Secure PIN Entry
- Attended devices (e.g., sales clerk, cashier)

New Devices scheduled for 2008 include

- Unattended Payment Terminals (UPTs)
  - Fuel Pumps, Kiosks, Ticketing Machines
- Hardware (or Host) Security Modules (HSMs)
  - Non-cardholder interface
  - Embedded devices that are used for:
    - PIN translation, Card Personalization, Data Protection, Electronic Commerce

The Payment Application Data Security Standard

- Based on Visa USA's PABP, PA-DSS is a comprehensive set of requirements designed for payment application software vendors to facilitate their customers' PCI DSS compliance
- This comprehensive standard is intended to help organizations minimize the potential for security breaches due to flawed payment applications, leading to compromise of full magnetic stripe data
- Distinct from but aligned with PCI DSS

The Payment Application Data Security Standard

P

A

Fourteen Requirements…Protecting Payment Application Transactions

Do not retain full magnetic strip, card validation code or value (CAV2, CID, CVC2, CVV2) or PIN block data
Provide secure password features
Protect stored cardholder data
Log Application Activity
Develop Secure Applications
Protect wireless transmissions
Test Applications to address vulnerabilities
Facilitate secure network implementation
Cardholder data must never be stored on a server connected to the Internet
Facilitate secure remote software updates
Facilitate secure remote access to application
Encrypt sensitive traffic over public networks
Encrypt all non-console administrative access
Maintain instructional documentation and training programs for customers, resellers, and integrators

Relationship Between the Standards

PCI PED

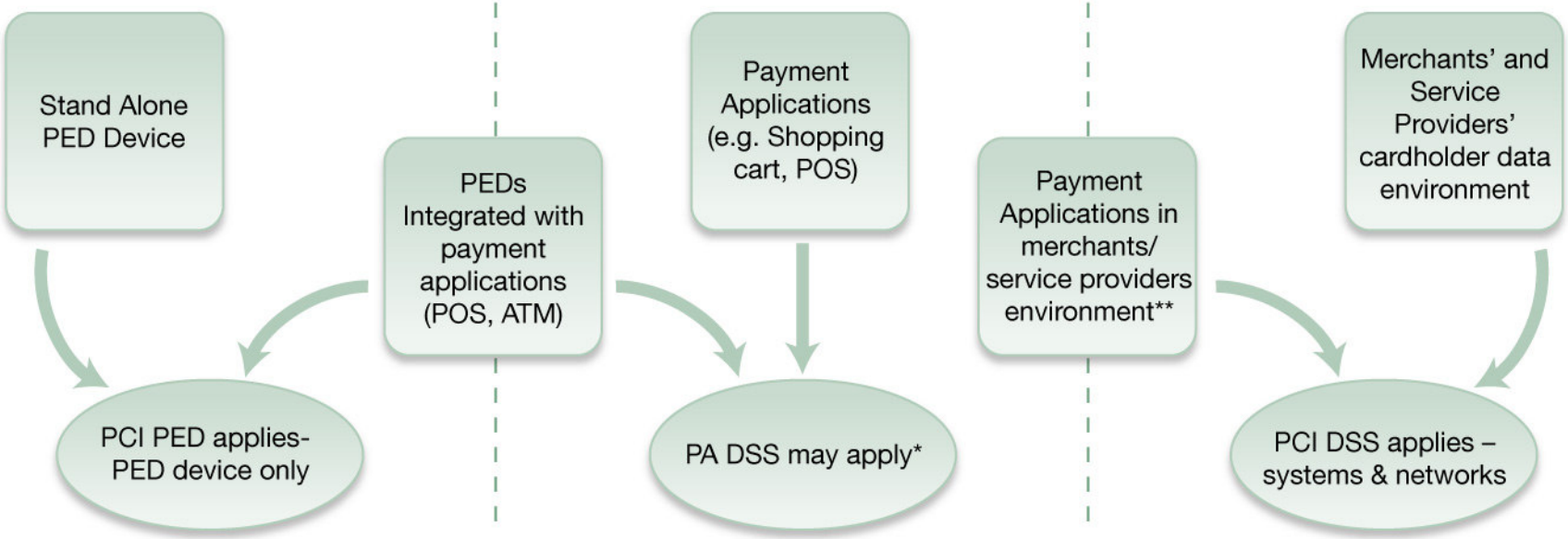
PCI PED addresses device characteristics impacting security of PIN Entry Device (PED) during financial transactions

PCI PA-DSS

PA-DSS applies to software vendors and others who develop payment applications that store, process, or transmit cardholder data as part of authorization or settlement, where those applications are sold, distributed, or licensed to third parties.

PCI DSS

PCI DSS applies to any entity that stores, processes, and/or transmits cardholder data, and specifically to those system components included in or connected to the cardholder data environment (the part of the network with cardholder data)



Myth:

One vendor and product will make us compliant

Myth:

Outsourcing card processing makes us compliant

Myth:

We don't take enough credit cards to have to comply with PCI DSS

Myth:

PCI is too hard.

For more Information www.pcisecuritystandards.org

Security Standards Council™

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FAQ

Resources for Merchants & Service Providers

QUICK LINKS

- Get the PCI DSS
- Get the DSS Self-Assessment Questionnaire (SAQ)
- Get the PIN Entry Devices (PED)
- Get the Payment Application DSS (PA-DSS)
- Find a QSA or an ASV
- Become a QSA
- Become an ASV
- Submit QSA Feedback Form
- Submit ASV Feedback Form

Welcome to the

PCI Security Standards Council

The PCI Security Standards Council is an open global forum for the ongoing development, enhancement, storage, dissemination and implementation of security standards for account data protection.

The PCI Security Standards Council's mission is to enhance payment account data security by driving education and awareness of the PCI Security Standards. The organization was founded by American Express, Discover Financial Services, JCB International, MasterCard Worldwide, and Visa, Inc.

PCI Data Security Standard

The PCI DSS is a multifaceted security standard that includes requirements for security management, policies, procedures.

Read More →

PIN Entry Device (PED) Standard

The Payment Card Industry (PCI) has initiated a collaborative effort to address common industry security criteria.

Read More →

DSS Self-Assessment Questionnaire

The PCI Data Security Standard Self-Assessment Questionnaire is a validation tool.

Read More →

QSA and ASV Programs

The PCI Security Standards Council manages global training and certification programs for qualified security assessors (QSAs).

Read More →

Q&A

Questions?

Thank You!

9/5/2008