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PCI: It Never Ends. Why?

How to stay prepared?

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January 13, 2011

PCI Security Standards Council
PARTICIPATING ORGANIZATION

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PCI compliance basics

- It's all about Data Security
- 12 major areas of compliance requirements – it's the minimum not the maximum
- Essentially 286 specific controls for compliance – new PCI 2.0
- Self Assessment Questionnaire (SAQ) can be daunting

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Merchant levels

- What are the merchant levels – MasterCard or Visa
  - Level 1 – over 6 million
  - Level 2 - 1 million – 6 million
  - Level 3 – 20,000 – 1 million
  - Level 4 – Less than 20,000

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Who is liable for a breach?

- At the very minimum – the entity that owns the merchant ID
- Major Oil Companies are not responsible for marketers and dealers
- Multi-store operators need to pay attention to their own compliance – and breach risk
- Don't wait for MOC to tell you what to do
- New guidelines for Franchisors and franchisees
- Liability starts at the point of breach

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State of PCI – facts from the field

- Good security leads to compliance and keeps it that way
- 60% of breaches are external, 0ver 40% started inside
- 90% of insider breaches are deliberate malicious activity
- 94% is malware
- Backdoor – 38% of all breaches, 85% of all records
- Going after memory resident data, moments before it gets encrypted
- Malware pre-tested against 30 plus engines – created just for you!
- Remote access 34% - that's where it starts
- Please monitor your logs and create alerts based on policies
- Retailers freeze patching during busy season – hackers know this
- Most breaches go unreported
- Majority of breaches discovered through 3rd party notifications
- 86% of forensic audits – everything about the breach was in the logs

What are the fines and Who levies them?

- Visa PCI Non-compliance fines begin at $5000 per month and can be significantly higher
- A data compromise could result in further fines by Visa and MasterCard to recover monetary losses suffered by credit card issuers affected by the breach
- American Express has posted fines beginning at $50,000 for PCI Non-compliance
- A data compromise could result in Visa fines for Account Data Compromise Recovery (ADCR), which pertains to domestic issued cards
- Data Compromise Recovery Solution (DCRS), which pertains to international issued cards
- The merchant where the breach occurred is held responsible, and ADCR/ DCRS fines represent a partial recovery of those losses suffered by the issuers

What are the fines and who levies them? (cont'd)

- MasterCard fines are usually lump sum
- MasterCard levies fines for wrongful storage of magnetic stripe data and wrongful disclosure of account data
  - These fines are typically one-time fines substituted for Visa's PCI Non-compliance fines
  - MasterCard does not have a program similar to Visa's ADCR or DCRS
  - MasterCard issuers utilize the chargeback system to recoup losses resulting from fraudulent transactions and the reissuance of credit cards
  - Some issuers (e.g. Citibank) are very aggressive in pursuing monies via chargebacks while other issuers are less active

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What should be your goal?

- Avoid getting breached – folks it's not worth it
- It's painful, expensive and never ending
- Get the processes in place for becoming and staying compliant

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A Burger King Franchise chain story

- Located in Illinois and Missouri
  - 21 restaurants
  - One location breached over a year ago
  - 2 forensic audits just with Visa so far
  - 5,000 dollars per month fines levied by Visa
  - Master card just got started
  - Consuming the attention of the whole company
  - Over $150,000 spent so far
  - Now considered a Level 1 merchant – 4 years

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How did they recover?

- Completed a detailed gap analysis performed by QSAs
- Upgraded their POS and back office systems to the latest PA-DSS compliant versions
- Implemented a system to completely monitor, log, report and maintain compliance – reviewed by QSAs
- Fines stopped after these steps were completed
- Instituted policies internally to be in compliance
- The whole company is sensitive to PCI compliance
- Now talking openly about their experience

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PCI Compliance today

- PCI DSS moving to a 3 year cycle of changes
- PCI DSS 2.0 was released on October 28th, 2010
- Implementation started in January 2011
- If you are currently compliant with DSS 1.2 you have all of 2011 to become compliant with 2.0
- SAQ D has grown from 236 controls to 286 controls
- The council is increasing its efforts to hold acquiring banks more accountable in enforcing PCI compliance
- QSA annual reviews are getting tougher and many QSAs are on review
- Expect compliance enforcement to get a lot tougher

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What's new in PCI ?

- Notable changes:
  - A requirement that retailers must perform extensive searches for cardholder data across all their networks and systems
  - A move to a three-year PCI lifecycle
  - Clarification on what constitutes acceptable network segmentation
  - Anti Virus and Firewall logs must be retained – 12 months
  - Wireless Intrusion Detection primarily intended for multi-site operations – unlikely to get a pass from QSAs
  - File integrity monitoring requirement is more explicit – validation of compliance
  - PA-DSS and PCI DSS becoming aligned

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How to Ensure You'll Always be Compliant

- Preparation
- Traps to Avoid
- Common Gaps
- Insider's Tips

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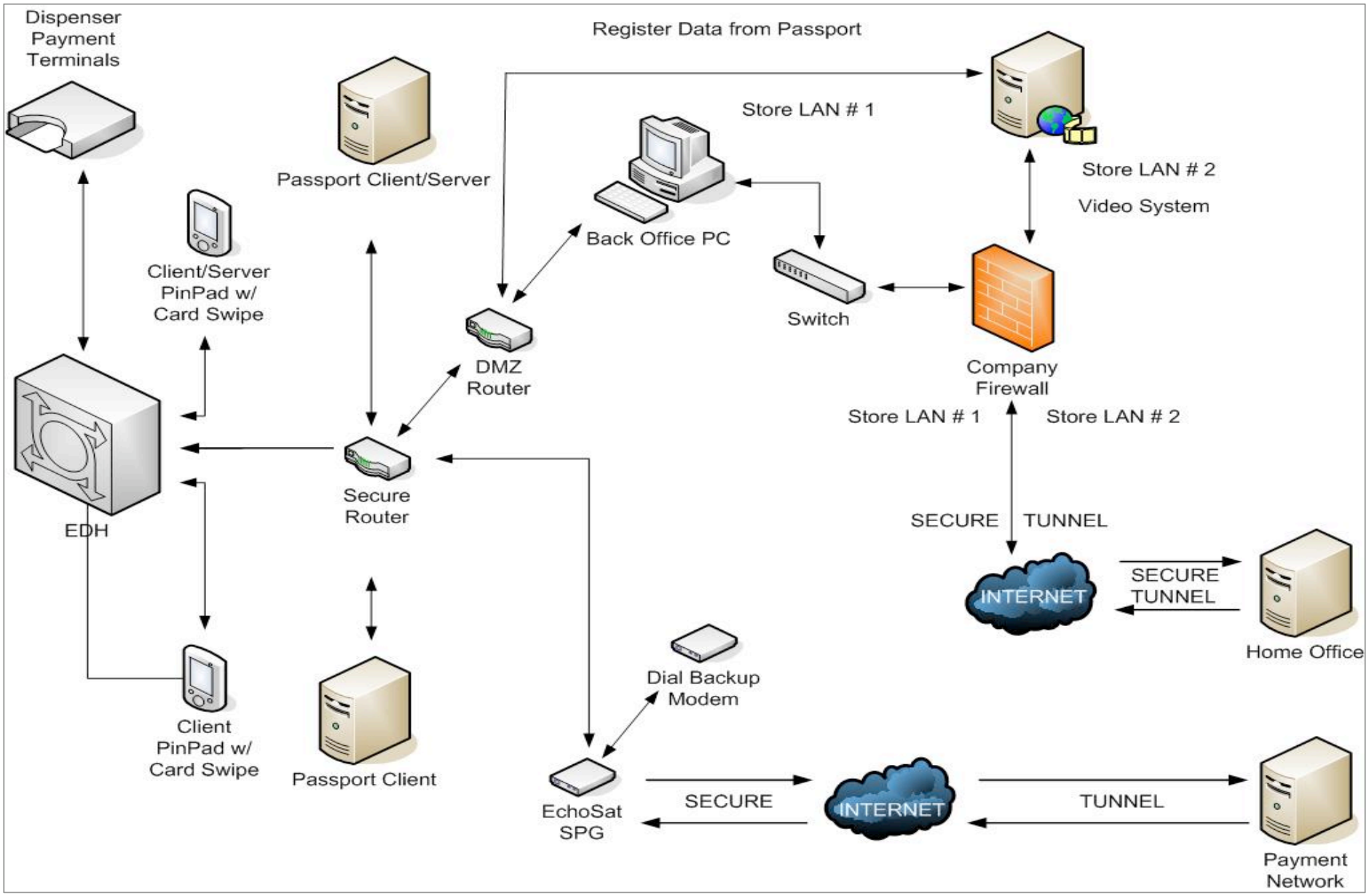
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Payment
Terminals
Register Data from Passport
Passport Client/Server
Store LAN # 1
Store LAN # 2
Video System
Back Office PC
Client/Server
PinPad w/
Card Swipe
Switch
DMZ
Router
Company
Firewall
Store LAN # 1
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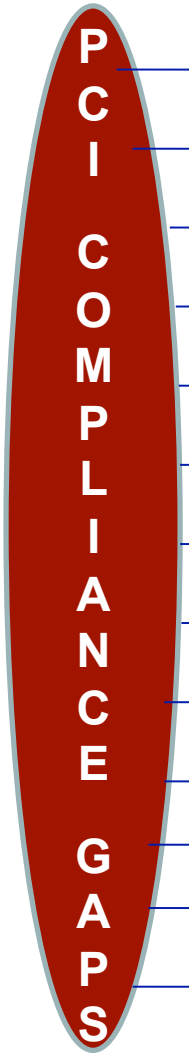
Common Gaps



- Unnecessary and vulnerable services not removed
- Inadequate access controls and vulnerable remote control- 2FA
- Storage of magnetic stripe data
- Lack of monitoring
- Lack of segmentation in a network
- Lack of logging - event ,firewall, and anti-virus logs
- Lack of internal system scanning
- Lack of wireless intrusion detection
- Lack of file integrity monitoring
- Lack of alerting and consolidated reporting
- Incomplete policies and procedures
- Missing and outdated security patches
- Default system settings and passwords

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How To Ensure You'll Always Be Compliant?

- Preparation

  - ✓ Understand your service and compliance levels
  - ✓ Understand your network environment, hardware and software
  - ✓ Prepare for an audit – internally or with assistance from a service provider
  - ✓ Do a gap analysis – document it – no shortcuts
  - ✓ Determine how to address them
  - ✓ Avoid compensating controls, fix gaps right the first time
  - ✓ Find a partner to lead you through the evaluation process
  - ✓ Go through the 12 PCI DSS standards and requirements
  - ✓ Hire a Qualified Security Assessor (QSA) to Complete "Attestation of Compliance" to confirm that your business meets all PCI requirements

How To Ensure You'll Always Be Compliant? (cont'd)

- Traps to Avoid

  - ✓ Treating PCI as a technology checklist – its not a check box game
  - ✓ Focusing on the cost of PCI compliance tools
  - ✓ Not practicing PCI all year long
  - ✓ Failing to look at the whole picture
  - ✓ Getting the auditing process started too early
  - ✓ Taking systems out of scope to limit your work
  - ✓ Focus on validation of compliance - proof

How To Ensure You'll Always Be Compliant? (cont'd)

- Insider's Tips

  - ✓ Avoid manual processes for determining the state of your systems
  - ✓ Get tools and technologies in place that can assist you for a long time
  - ✓ Managed firewall service is not the entire PCI compliance process
  - ✓ Involve your senior management in discussions
  - ✓ Manage your whole environment even if systems are out of scope
  - ✓ Watch out for remote control access – first place QSAs look for problems
  - ✓ Get your act together - systems fixed and policies in place

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Staying compliant requires a process

- Takes a lot of effort and requires senior management support
- Do a PCI readiness assessment
  - You can do it or have a consultant do it
  - Attempt to answer questions on SAQ
  - Take a holistic approach, nothing piece meal
- Determine the gaps
  - Start with external scanning of your sites and home office to see what are all showing up
  - Understand the extent of issues and risks

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Staying compliant requires a process

- Find a solution to help you determine the state of your systems and fix them. Steps include:
  - External & Internal Scanning
  - Monitoring
  - Logging
  - Patching
  - Collecting data for evidence
  - Looking at the evidence to support the SAQ
- Get someone to come in and verify that you are meeting the requirements
- Continue process on an ongoing basis

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Its like changing tires in a moving car !

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