Creating, Developing and Instituting an Effective Incident Response Plan

Webinar

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Stan Hui – Payment System Security
Stephen J. Kopeck – Verizon
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Agenda

• Data Breach Landscape
• The Need for Incident Response
• Incident Response Plan Elements
• Questions and Answers
Data Breach Landscape

Stan Hui
Visa Inc. CAMS Compromise Events
Entity Type by Month

Source: Compromised Account Management System (CAMS) – Original "IC" and "PA" Alerts
Visa Inc. CAMS Compromise Events
Top Market Segment* (MCC)

- Restaurants and retailers are leading market segments in 2014
- Insecure remote access and poor credential management continue to be attack vectors

* Market Segment based on Acceptance Solutions MCC “Market Segment” category
Source: Compromised Account Management System (CAMS) – Original “IC” and “PA” Alerts
Recent Threats due to POS Integrators

- POS Integrators support merchant POS software installations
- Typically merchant setup includes Remote Access Services (RAS) for monitoring and software support
- Integrators have access to POS system - however PCI compliance not maintained
- Multiple POS Integrator related compromises since June 2014
- Merchants infected with ‘Backoff’ family of malware
- Remote Access Services and Applications Exploited
  - Currently LogMeIn users targeted (other RAS include: Remote Desktop Protocol, PCAnywhere, TeamViewer and VNC)
  - Brute forces login credentials
  - Creates a ‘backdoor’, logs keystrokes and collects credit card data
  - Extremely low anti-virus detection rates
  - Exfiltration to remote IP addresses
- Non-Compliant Integrators / Merchants set up with default / shared remote access IDs without two-factor authentication or regular password changes
  - Entities not following PCI compliant practices
 Requirement 12 – Maintain a policy that addresses information security for all personnel

• Requirement 12.5.3 – Establish, document, and distribute security incident response and escalation procedures to ensure timely and effective handling of all situations

• Requirement 12.10 – Implement an incident response plan. Be prepared to respond immediately to a system breach

“Without a thorough security incident response plan that is properly disseminated, read, and understood by the parties responsible, confusion and lack of a unified response could create further downtime for the business, unnecessary public media exposure, as well as new legal liabilities.”

• Requirement 12.10.1 – Create the incident response plan to be implemented in the event of system breach
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OBJECTIVE

To outline and discuss the fundamental components of developing, and implementing an Incident Response Plan.
PUTTING IT INTO PERSPECTIVE

THE NEED FOR IR—

— Incidents continue to occur with increasingly sophisticated threats:
  — organized crime / sensitive data theft
  — denial of service attacks / “hacktivism”
  — insider threats / corporate espionage
  — malware outbreaks

— Question of not “if”, but “when”

— Solution = IR Plan

IR is not just an IT problem…

— Management
— Legal
— Human Resources
— Physical Security
— Loss Prevention
— Corporate Communications
— Others, as necessary

The cost of being prepared is always less than being a victim
PUTTING IT INTO PERSPECTIVE

THE NEED FOR IR—

1 – Recover quickly from an incident
   — damage and loss minimized
   — future incidents prevented, or at least mitigated

2 – Implement a pre-planned strategy
   — efficient, effective, and repeatable process

3 – Protect the company’s interests
   — proprietary information / intellectual property
   — sensitive customer data
   — brand image / reputation

4 – Maintain compliance
   — legal liability reduced
   — insurance costs reduced
FOCUS AREAS—

—Scope & Purpose
—IR Roles and Responsibilities
—Internal Stakeholders
—External Entities
—IR Process Flow/Phases
—Revision History
—IR Resources
—IR Stakeholder Contact List
—First Responder Checklist
—Incident Report Template
—Evidence Chain of Custody/Log
INCIDENT RESPONSE STAKEHOLDERS—

—Chief Information Risk Officer
—Incident Response Team / Manager
—Business Organizations / Managers
—Information Technology (IT) Organizations / Managers
—Information Security / Officers
—Legal
—Human Resources
—Compliance
—Physical Security
—Loss Prevention
—Corporate Communications / Public Relations

*It ultimately depends on the situation…*
INCIDENT RESPONSE PHASES—

— Preparation
— Detection & Analysis
— Containment, Eradication, & Recovery
— Post-Incident Activities

NIST SP 800-61, R2, Computer Security Incident Handling Guide
INCIDENT HANDLING ELEMENTS

INCIDENT RESPONSE PROCESS—

Source: NIST SP 800-61, R2, Computer Security Incident Handling Guide
RECOMMENDATIONS

THINGS TO CONSIDER—

— Less is more philosophy
— Develop, Review, Train, & Operate by the Plan
— It is a living document
— Ensure everyone is familiar with the plan – Required reading
CONCLUSION

TAKE-AWAYS—

— Remember any organization can be a target
— Establish policies and plans before an incident occurs
— Processes should be reliable and consistent
— Ensure Incident Responders are trained and know their roles, responsibilities, & authorizations
— Maintain good documentation
— Always consider preservation of evidence
— Engage outside help if necessary; don’t exceed your knowledge level
— Ensure maximum participation in post-mortem discussions; integrate lessons-learned into Incident Response Plan

*The cost of being prepared is far less than being a victim*
Visa is hosting a must-attend event that will focus on trends and developments related to cyber security, mobile payments, e-commerce and Visa’s global authentication strategy. In order to secure the future of commerce all stakeholders including merchants, acquirers, agents and Visa need to collaborate on key initiatives in addressing today’s most relevant issues. This event will be held in the San Francisco Bay Area at the Hyatt Regency Hotel just south of San Francisco. For more information, email pcirocs@visa.com.
Upcoming Merchant Events and Resources

**Upcoming Webinars** – Training tab on [www.visa.com/cisp](http://www.visa.com/cisp)
- Identifying and Mitigating Threats to E-commerce Payment Processing
  - 29 April 2015, 10 am PST
- Strategies to Effectively Manage Data Compromise Events
  - 27 May 2015, 10 am PST

**Visa Data Security Website** – [www.visa.com/cisp](http://www.visa.com/cisp)
- “What To Do If Compromised” Guidelines
- Alerts, Bulletins
- Best Practices, White Papers
- Webinars

**PCI Security Standards Council Website** – [www.pcissc.org](http://www.pcissc.org)
- Data Security Standards – PCI DSS, PA-DSS, PTS
- Programs – ASV, ISA, PA-QSA, PFI, PTS, QSA, QIR, PCIP, and P2PE
- Fact Sheets – ATM Security, Mobile Payments Acceptance, Tokenization, Cloud Computing, and many more…
STEVE KOPECK
PRINCIPAL CONSULTANT | VERIZON RISK
STEPHEN.KOPECK@VERIZON.COM
202.384.2687