PCI Made Simple

Craig Lawrance

XYPRO Technology

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2013 HP AllianceOne Partner of the Year

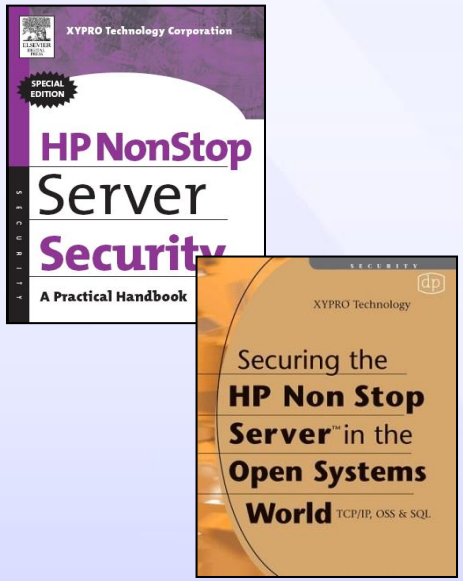
Security Category

Agenda

- Why bother with PCI at all?
- What is happening out there in hacker-land?
- Overview of 2013 Verizon Data Breach report
- Key Security Findings and Applicability to NonStop
- Closing the Security Gaps—Securing the NonStop

About XYPRO

- Founded in 1983 – over 30 years working with the HP NonStop community
- Specialists in Mission Critical security, compliance and encryption
- Sales and Support offices around the world
- XYGATE Merged Audit & **User Authentication** included on all HP NonStop servers
- We wrote the book on NonStop Security—twice!
- **2013 HP Partner of the Year in Security**



2013 HP AllianceOne Partner of the Year

Security Category

Enterprise Security Program Platinum Partner

PCI Security Standards Council™

PARTICIPATING ORGANIZATION

PCI DSS 3.0 drivers

- Card Data remains the main target
- Get the basics right
  - Weak passwords /authentication
  - Poor self-detection
- Not just an IT issue
- PCI DSS needs to become culture

Security breaches are still making news

- Yahoo Japan: 22 million logins potentially published (May 20, 2013)
- Healthcare: more than 10 breaches in May 2013
- $45 million stolen from two Middle East banks (May 9, 2013)

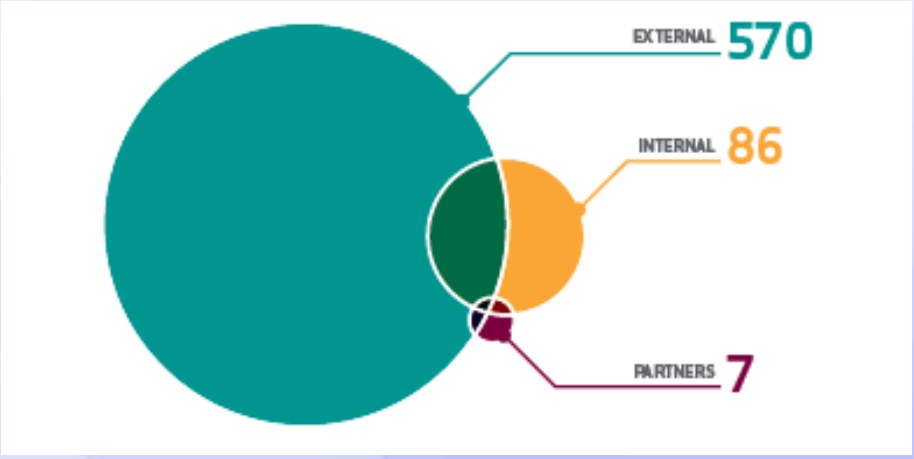
2013 Data Breach Investigations Report (DBIR)

- Verizon DBIR is comprehensive summary of security incidents each year
- 2013 report just published – covers incidents from 2012
  - **19** Contributors
  - **27** countries represented
  - **47,000** security incidents analyzed
  - **621** confirmed data breaches studied
  - At least **44** million compromised records
  - Many countries now looking at mandatory breach reporting laws

Verizon DBIR 2013 Overview

- **37%** of breaches affected financial institutions
- **75%** of attacks were opportunistic (majority financially motivated)
- **66%** of breaches took MONTHS OR YEARS to be identified
- **69%** of breaches identified by an external party (**9%** by customers!)
- **86%** of the breaches had no internal element

Source of Data Breaches
534 (86%) of the breaches that Verizon analyzed had no internal element

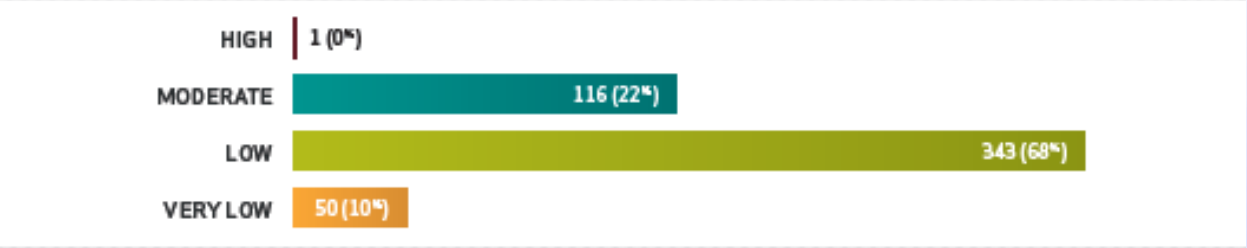


From 2013 Verizon Data Breach Investigations Report

Most attacks still use basic techniques

- 76% of network intrusions exploited weak or stolen credentials
- Over 78% of attack techniques were considered “low” or “very low” in difficulty (on VERIS scale)

Difficulty of tactics used



From 2013 Verizon Data Breach Investigations Report

- NonStop relevance
  - Implement strong user authentication
  - Implement and enforce password management processes
  - Enforce policy of minimum required access
  - Ensure no shared super-user accounts
  - Keep track of what users are doing on critical systems with key logging

14% of breaches were insider attacks

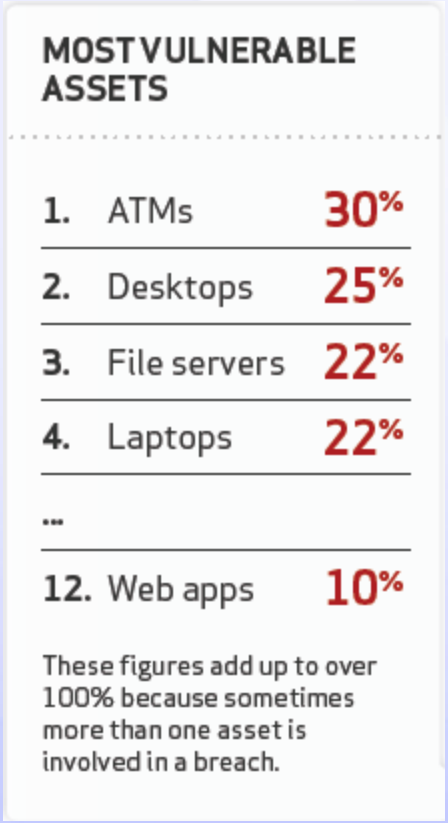
- Correlated - Privilege misuse weighs in at 13%
- Lax internal practices often make gaining access easier
- Over 50% of insiders committing sabotage were former employees using old accounts or backdoors not disabled
- Over 70% of IP theft cases committed by internal people took place within 30 days of announcing their resignation

- NonStop relevance
  - Ensure NonStop user provisioning is integrated with Enterprise Identity Management system
  - Enforce policy of minimum required access
  - Ensure no shared super-user accounts
  - Keep track of what users are doing on critical systems with key logging
  - Integrate NonStop with SIEM

Data at rest is most at risk

- Of 621 cases Verizon investigated, **none involved data in transit**
- 66% of breaches involved data at rest in databases and file servers (the rest was data being processed)

- NonStop relevance
  - Protect data at rest with encryption or tokenization



From 2013 Verizon Data Breach Investigations Report

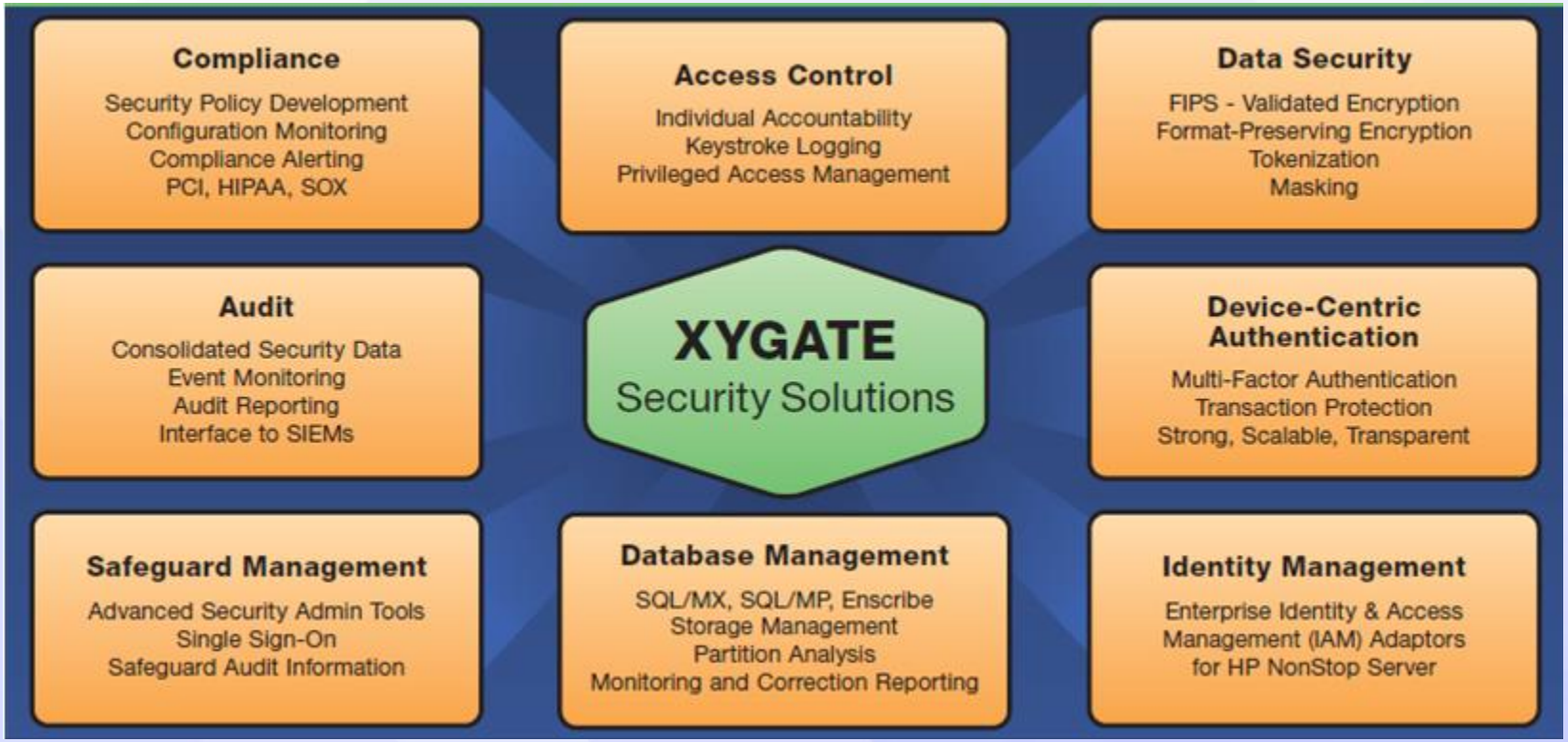
Know your (potential) attacker

Activists Criminals Spies

- Types of attack vary depending on industry and region
- Small retailers subject to attacks on poorly configured remote systems to access POS data
- Banks subjected to ATM skimming and web application attacks
- POS attacks much less frequent in Europe than AP and Americas but Retail is still the largest victim industry

- NonStop relevance
  - Based on industry/business type, protect “at risk” assets
  - Financial examples generally most applicable to NonStop users

XYPRO can help close security gaps



XYGATE products can help

- XYGATE Password Quality (XPQ) provides all necessary support for passwords
  - Password strength, password change policies etc
- XYGATE Access Control and User Authentication remove the need for shared UserIDs, and enables role-based security
  - User impersonation allows non-super users to perform sensitive commands
  - All commands audited with the actual UserID that executed the command

XYGATE products can help

- Protecting data at rest
  - XYGATE XDP offers Format Preserving Encryption and “traditional” AES encryption options to protect all sensitive data
  - FPE can be incorporated into existing applications with no code changes via XDP
- Protect data as it is being processed
  - XYGATE Compliance PRO - ensure files & applications are not tampered with
- Integrate with SIEMs
  - XYGATE Merged Audit supports all major SIEM vendors, including HP ArcSight, and is included on the NonStop Operating System

Further Reading

- Verizon DBIR
  http://www.verizonenterprise.com/DBIR/2013/
- Industry-specific reports
  http://www.verizonenterprise.com/DBIR/2012/verticals/
- Mandiant M-Trends report
  https://www.mandiant.com/resources/m-trends/
- Breach statistics
  http://datalossdb.org/

Thank you!

Craig.Lawrance@xypro.com