# Security & Compliance

Thursday, September 4 2014



A security breach/attack is defined as an event in which a corporation's network is compromised or an individual's name plus Social Security Name (SSN), driver's license number, medical record, or financial record/ credit/debit card is potentially put at risk – either in electronic or paper format.



### **Types of Security Attacks**



- Frontal Database Attack
- Screen Scraping
- Eavesdropping
- Data Modification
- Identify/IP Address Spoofing
- Malicious Malware/Viruses
- Hidden Proxy Attack
- Password-Based Attack
- Denial-of-Service Attack
- Man-in-the-Middle Attack
- Compromised-Key Attack
- Sniffer Attack
- Application-Layer Attack





## **Big Data Security Breaches!**

### Target – December 2013

- 40 million customer's credit card and debit card information stolen.
- Additional 70 million customer's personal information compromised.

### Michaels Stores/ Aaron Brothers – April 2014

- Attacked by criminals using highly sophisticated malware.
- Exposed close to 3 million customer credit and debit card information.

### eBay – May 2014

- Hackers got a hold of employees login credentials and gained access to the company's network.
- Compromised a database containing customer names, encrypted passwords, email addresses, physical addresses, phone numbers & dates of birth.

### Community Health Systems – August 2014

- Hackers broke into its computers and stole data such as SSNs, physical address, birthdays and telephone numbers.
- 4.5 millions patients; 206 hospitals; 29 states were affected.

### Home Depot? – September 2, 2014

 Made a statement that they are looking into "unusual activity" and are working with both banks and law enforcement after suspicions of a credit card data breach.



### As of 8/26/2014:

- 505 total breaches
- 17,780,652 records exposed/compromised

This number increases on a daily basis. Represents 26.2% increase over the same time period last year (400 breaches).



Source: ITRC



# **As of 8/26/2014:** 505 total breaches; 17,780,652 records exposed

- Banking/Financial
- Business
- Education
- Government/Military
- Medical/Healthcare

Source: ITRC



# \*81% of large organizations had a security breach



# 59% of businesses expect an increase in security incidents in the next year

Source: Dept. of Business, Innovation and Skills



### PCI-Compliance: Credit Card Security

- Requires network infrastructure and systems are secure.
- Builds customer trust and confidence.
- Protection from on-going sophisticated security threats.
- Protection from potential negative consequences:
  - Negative long-term company reputation
  - Loss of sales/customers
  - Lawsuits/Fines





## HIPAA: Protected Health Information

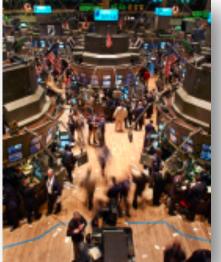


- Protection of individual's identifiable health information, in the form of electronic, paper or oral.
- Information pertaining to individual's present, past or future physical or mental health condition.
- Who needs to comply:
  - A health care provider doctors, clinics, pharmacies, etc...
  - A health plan health insurance companies, HMOs, etc...
  - A health care clearinghouse entities that process nonstandard health information they receive



### Dodd-Frank: Consumer Protection Act

- Aims to prevent financial crisis by regulating financial firms to be more transparent and accountable.
- All calls from any device related to financial transactions must be recorded, analyzed, stored, searchable and retrievable.
- Who needs to comply:
  - Commercial and Investment Banks
  - Wealth/Investment Management Firms
  - Brokerage and Clearing Firms
  - Energy companies with trading divisions





### **NetFortris: A Secure Foundation**

#### **Financial & Operational Strength**

- Established operations in August 1994
- Privately-held by SPIRE Capital, NY
- Headquartered in SF with three NOCs supporting customers 24/7/365
- Nationally deployed fiber-based VoIP offering with highly customized voice, data services

#### Technology & Expertise

- Facilities-based Tier One provider
- Nationwide, legacy-free network with global access
- 10G-enabled, multi-peering point
- Multi-level dynamic QoS
- Multi-level failover protection



#### **Compliance-Driven Solutions**

- PCI-Certified and Compliant network for retail industry
- HIPAA Compliant network for healthcare providers
- Dodd-Frank Compliant with Call Recording & Analytics Solution for financial institutions



- Name at least two types of security attacks.
- What is the purpose of the PCI-Compliance Act?
- What is the purpose of the HIPAA Act?
- Who needs to comply with the Dodd-Frank Act?

