

# Security & Compliance

Thursday, September 4 2014



# What is a security breach/attack?

**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.

# Breaches occur everyday

## 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



# Breaches occur across all industry

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

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

Source: ITRC

## Did you know...

- ❖ **81% of large organizations had a security breach**
- ❖ **60% of small businesses had a security of 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

# Cash Gift Card Giveaway!

- ❖ **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?**