SIEM Logging

Presenters:
Matt Bradley, EchoSat

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Agenda

- Housekeeping
- Presenters
- About Conexxus
- Presentation
- Q & A

Housekeeping

This webinar is being recorded and will be made available in approximately 30 days.

- YouTube (youtube.com/conexxusonline)
- Website Link (conexxus.org)

Slide Deck

- Survey Link – Presentation provided at end

Participants

- Ask questions via webinar interface
- Please, no vendor specific questions

Email: **info@conexxus.org**

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Presenters

Conexxus Host

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Moderator

Kara Gunderson

Chair, Data Security Committee

POS Manager, CITGO Petroleum

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Speakers

Matt Bradley

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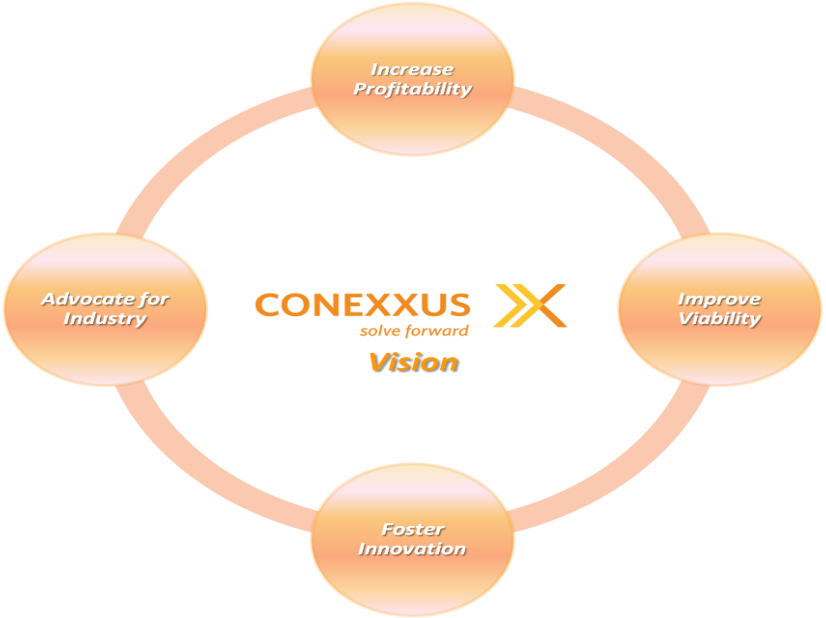
About Conexxus

- We are an independent, non-profit, member driven technology organization
- We set standards…
  - Data exchange
  - Security
  - Mobile commerce
- We provide vision
  - Identify emerging tech/trends
- We advocate for our industry
  - Technology is policy



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Conexxus Webinar Schedule

Month	Subject	Speaker(s)	Company
March 2017	SIEM Presentation	Matt Bradley	EchoSat
April 2017	Internet of Things & Impact of Bring Your Own Device to the Workplace	Bradford Lowey Jeff Gibson	Wayne Fueling EchoSat
May 2017	Customer Engagement Technologies to Enhance Sales and Profitability	Ed Collupy Gray Taylor Lesley Saitta	W. Capra Conexxus Impact 21

If you have a suggestion for a webinar, please contact Conexxus at info@conexxus.org.

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2017 Conexxus Annual Conference

Loews Annapolis Hotel

Annapolis, Maryland

April 23 – 27, 2017

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Centralized Logging and Alerting (SIEM)

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What is SIEM?

A combination of SIM (Security Information Management) and SEM (Security Event Management)

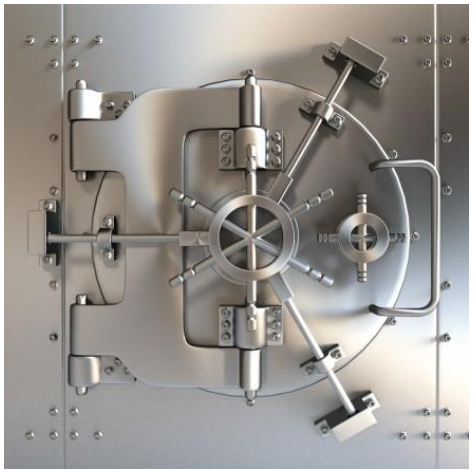
Critical component of situational awareness

Provides

- Real-time visibility into network events
- Access to historical records for forensic purposes
- Reporting tools for compliance requirements

Software based, hardware based, or offered as managed service

Who needs a SIEM?



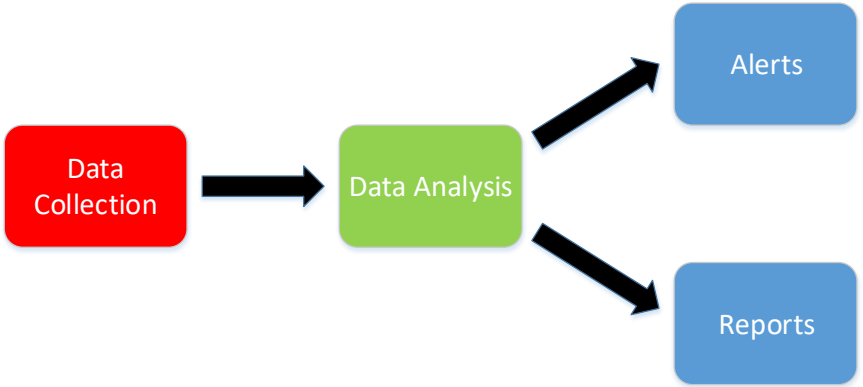
Any organization with information to protect

Any organization required to meet compliance standards

PCI, SOX, HIPAA

What does a SIEM do?

- Aggregation of event data
- Event correlation
- Alerting
- Reporting



What does a SIEM NOT do?

- Provide 100% protection
  - Help you protect yourself
- Make you compliant
  - Help you reach compliance

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Business Benefits of SIEM?

Operational Efficiency
- Real-time Monitoring
- Application status, down-time, trending

Cost Savings
- Unification of multiple critical apps
- Licensing

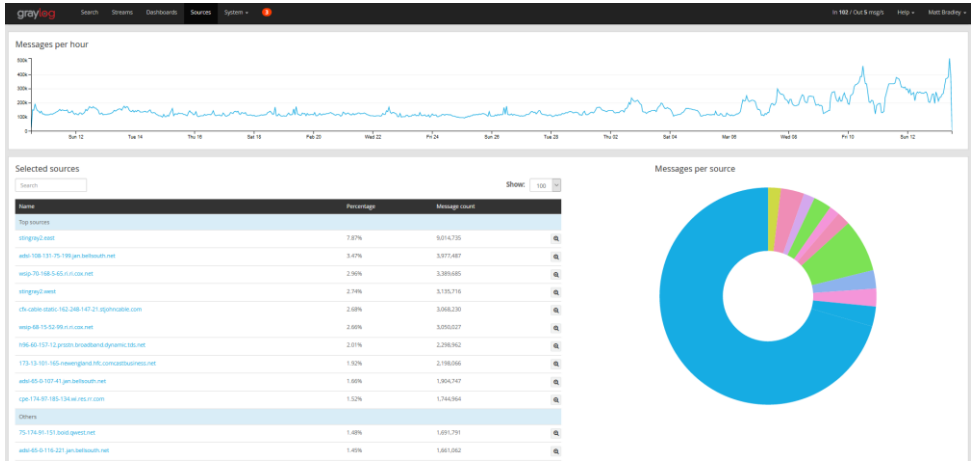
Compliance
- Meet regulatory requirements

Centralization
- Reduced complexity
- One place to look

ROI
- Impossible to manually analyze log data
- IT can focus on strategy

What to look for in a SIEM?

- Log Collection
  - Agent versus Agentless
  - Centralization
  - Interoperability (APIs)
- Log Retention
  - Tamper-proof (encryption?)
  - Simple retrieval and easy analysis
  - Duration (know your requirements)
- Performance
  - EPS (Events per Second) rate
  - Bandwidth
  - Processing power



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What to look for in a SIEM?

Event Correlation (real-time)

- Predefined rulesets and alerts
- Customizable rulesets and alerts
- Ensure correlation is easy and intuitive

User Activity Monitoring

- Audit Trail

Compliance Reporting

- Out-of-the-Box regulatory compliance (PCI, HIPAA, SOX)
- Customizable reports

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What to look for in a SIEM?

File Integrity Monitoring

- Business critical files and folders
- Record adds/changes/deletions/views etc.
- Ensure correlation is easy and intuitive

Forensics Tools

- Log search functionality

Dashboards

- Configurable, drillable
- Help admins make timely, informed decisions
- Exportable

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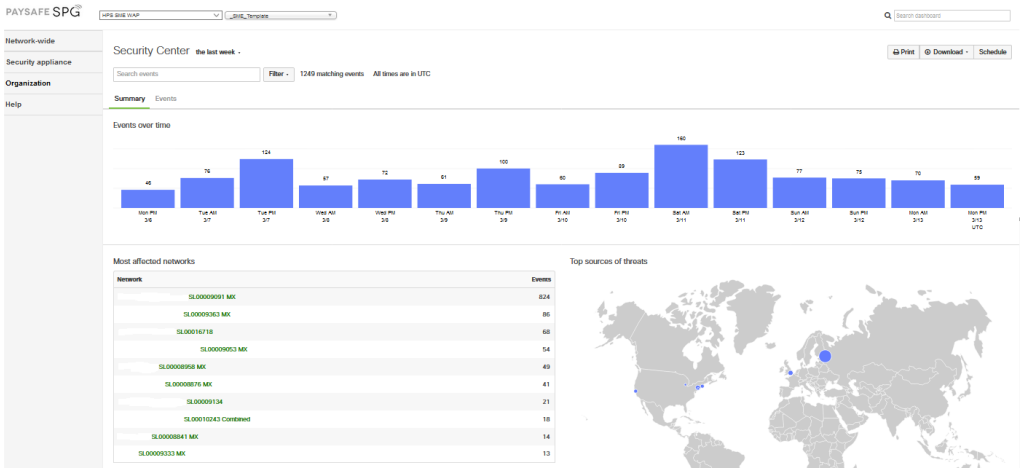
Security Alerting Example

- Threats classified (High, Medium, Low)
- Threats blocked automatically
- Events logged
- Notification sent



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Providers

Dozens of options

- Understand your needs

Figure 1. Magic Quadrant for Security Information and Event Management

Source: Gartner (August 2016)

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Preparation – What's important

IT / Security

Security Events

Flows

Server Logs

Database Activity

Compliance

Identity Context

Data Access

Usage

WHO – WHAT – WHEN – WHERE

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Selection Criteria

Meet Business Needs?

Scalability

Policy and Reporting Capabilities

Ease of Management

Customization

Integration

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Selection Process

Define your needs
- Committee based?
- Identify systems, workflows

Formalize Requirements

Evaluate
- RFI
- Select Finalists (execute POC)
- Cost comparison
- Acquisition, Implementation, Maintenance

Select and Deploy

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Implementation

NSA Mode vs. Clearly Defined Requirements

Define what is important (use case)

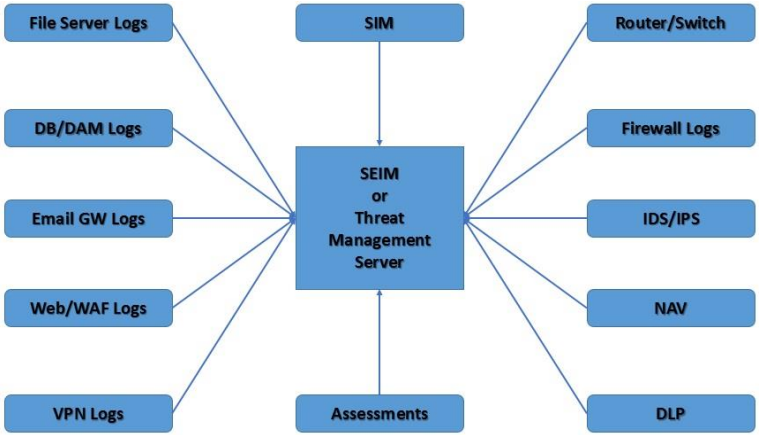
- Classify Exceptions
- Event Spikes
- Time Stamps

Sources (POS, Back Office, Tank Monitor, Router, Switch, Firewall, PC, etc.)

- Syslog
- Local Host Logs (Application, Security, System)
- Active Directory (Adds, Changes, Logins)
- Remote Access (VPNs)
- Databases
- Servers (File Integrity)

Data Storage

- Relational database – Historically
- Currently Indexed File Storage (flat file)



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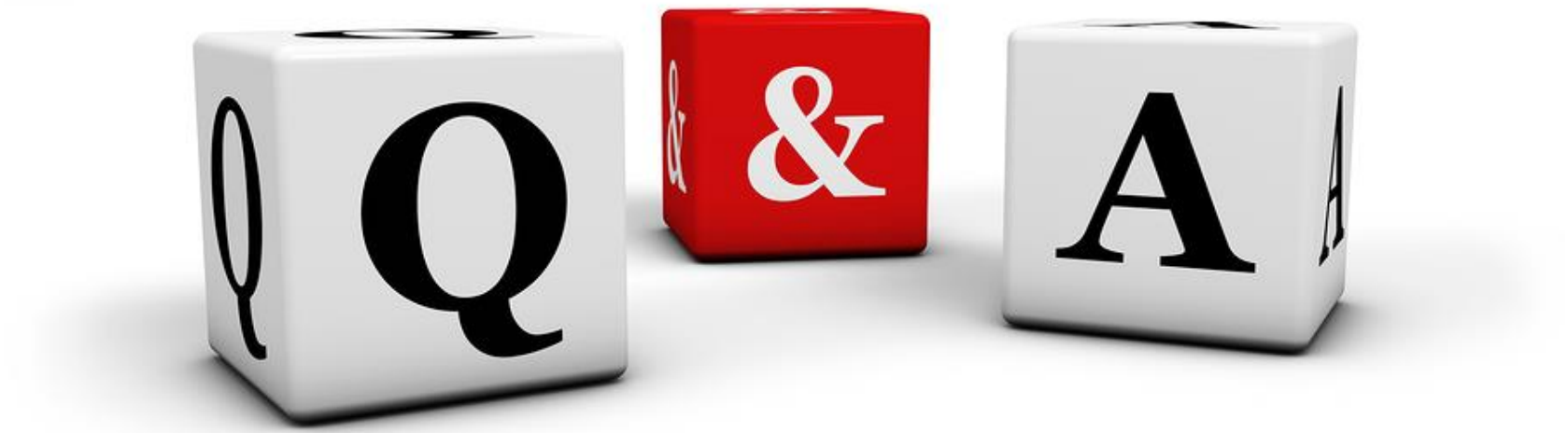
Operations

Maintain your SIEM

- Threats evolve
- Corporate policies change
- Regulatory changes

Human element a factor

- PCI 3.1 Section 10.6.1
  - Review logs daily
  - Automated or manual
  - Ownership / Responsibility



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- Email: info@conexxus.org
- LinkedIn Group: Conexxus Online
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April 2017 @ 12:00PM Eastern:

Internet of Things & Impact of Bring Your Own Device to the Workplace

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