

# Mucho Big Data y ¿La Seguridad para cuándo?

Juan Carlos Vázquez Sales Systems Engineer, LTAM

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SAFE NEVER SLEEPS...

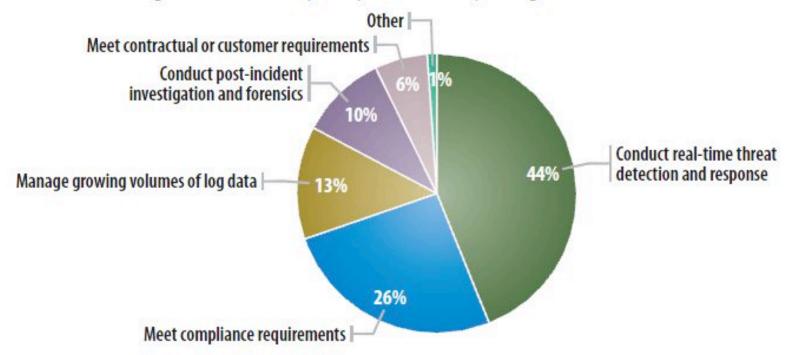
# Agenda

- Business Drivers
- Big Security Data
- GTI Integration
- SIEM Architecture & Offering
- Why McAfee
- Demo

# Shifting from Compliance to Security



Which of the following best describes the primary driver behind your organization's use of an SIEM tool?

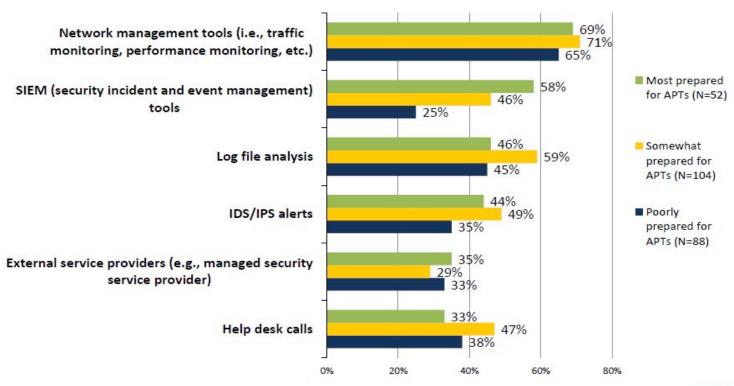


**Source:** *InformationWeek* 2012 Security Information and Event Management Vendor Evaluation Survey of 322 business technology professionals, April 2012

# SIEM as solution to detect CyberAttacks



## Sources Used to Determine if Organization is Experiencing a Cyber Attack, by Preparedness for APTs



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## SEM + SIM = SIEM



# SIEM is the Evolution and Integration of Two Distinct Technologies

- Security Event Management (SEM)
  - Primarily focused on Collecting and Aggregating Security Events
- Security Information Management (SIM)
  - Primarily focused on the Enrichment, Normalization, and Correlation of Security Events

# Security Information & Event Management (SIEM) is a Set of Technologies for:

- Log Data Collection
- Correlation
- Aggregation
- Normalization
- Retention
- Analysis and Workflow

## Three Major Factors Driving the Majority of SIEM Implementations



Real-Time Threat Visibility



Security Operational Efficiency



Compliance and/or Log Management Requirements

5 mayo 9, 2013

## Security Connected Platform (SCP)



#### **NETWORK SECURITY**

- High Assurance Firewall
- **Network Intrusion Prevention**
- **Network Access Control**
- **Network Behavior Analysis**

- **INFORMATION SECURITY**
- **Email Security**
- Web Security
- **Data Loss Prevention**
- Encryption
- **Identity & Access Management**
- API and Web Services Security

#### **SECURITY MANAGEMENT**

- **Security Operations Mgmt**
- Policy Auditing & Management
- **Vulnerability Management**
- Risk Management/SIEM
- Compliance Management



#### **ENDPOINT SECURITY**



- Malware Protection
- **Device Encryption**
- **Application Whitelisting**
- Desktop Firewall
- **Device Control**
- **Email Protection**
- **Network Access Control**
- **Endpoint Web Protection**
- Host Intrusion Protection
- Mobile Device Management
- Server & Database Protection
  - Hardware Assisted Security
- Smartphone and Tablet Protection
- Virtual Machine and VDI Protection
- **Embedded Device Protection**

#### **PARTNER COMMUNITY**



- Security Innovation Alliance
- McAfee Connected
- Global Strategic Alliance Partners

6 mavo 9, 2013

### The State of SIEM



#### **SIEM Promise:**







### **Legacy SIEM REALITY:**







# The Big Security Data Challenge: Lots and Lots of Data



|            | Pilliana of Evanta   |  |
|------------|--|--|
| APTs       | Billions of Events   |  |
| Cloud      | Application and Database Session User Identity and File Access | Multi-dimensional Active Trending; LT Analysis |
| Data       | Endpoint Context   | Trending, Et Analysis                          |
| Insider    | Threat Context   |  |
| Anomalies  | Flows<br>Network Data  | Large Volume Analysis                          |
|            |  |  |
| Compliance | Application Logs OS Logs Database Logs                         | Historical Reporting                           |
|            | IAM  |  |
| Perimeter  | Firewall<br>Vulnerability                                      | Correlate Events Consolidate Logs              |
|            | IDS/IPS  |  |

# Big Data vs. Big Security Data



# **Big Data:**

Datasets whose size and variety is beyond the ability of typical database software to capture, store, manage & analyse.

## **Big SECURITY Data:**

Understanding security data as big data.

- How do I gather security context?
- How do I manage big security information?
- How do I make security information management work?

- Size of security data doubling annually
- Advanced threats demand collecting more data
- Legacy data management approaches failing
- SIEM use shifting from compliance to security

## McAfee Starts at the Core





## McAfee ESM

## **McAfeeDB**

- Real-time, complex analysis
- Indexing purpose-built for SIEM
- Massive context feeds with enrichment
- Historical retrieval and analytics
- Integrated log and event management
- No DBA required



## Scalable and Intelligent Architecture



Intelligence and Operational efficiency

GTI

ePO

MRA

SIA

Adaptive Risk Analysis & Historical Correlation

McAfee Advanced Correlation Engine



Integrated SIEM & Log Management

McAfee Enterprise Security Manager McAfee Enterprise Log Manager



Rich App & DB Context

McAfee Application
Data Monitor



McAfee Database Event Monitor



Scalable Collection & Distributed Correlation

McAfee Receivers



Big Security Data DB

# Global Threat Intelligence and SIEM

**EVENT** 

Mail/

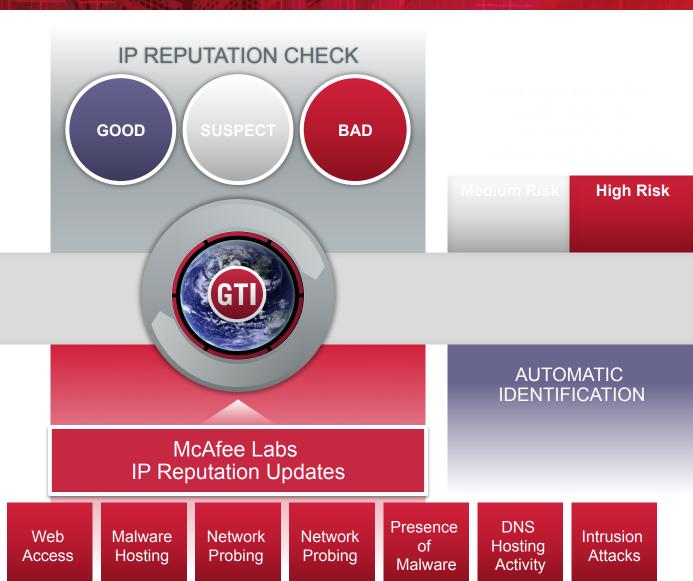
Spam

Sending

Botnet/

**DDos** 





## GTI with SIEM Delivers Even Greater Value



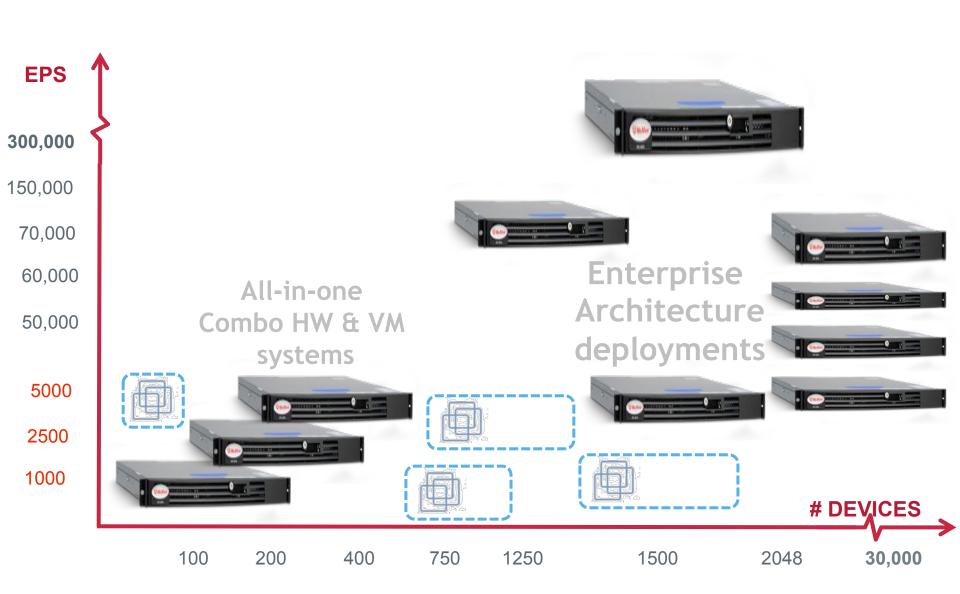
## Sorting Through a Sea of Events...

| 3   |  |  |
|---|--|--|
| Have I Been Communicating With Bad Actors?              | 200M events  |  |
| Which Communication Was Not Blocked?                    | 18,000 alerts<br>and logs  |  |
| What Specific Servers/Endpoints/ Devices Were Breached? | Dozens of endpoints  |  |
| Which User Accounts Were Compromised?                   | Handful<br>of users  |  |
| What Occurred With Those Accounts?                      | Specific files<br>breached<br>(if any)   |  |
| How Should I Respond?                                   | Optimized response   |  |
|   | Which Communication Was Not Blocked?  What Specific Servers/Endpoints/ Devices Were Breached?  Which User Accounts Were Compromised?  What Occurred With Those Accounts? |  |

## McAfee ESM

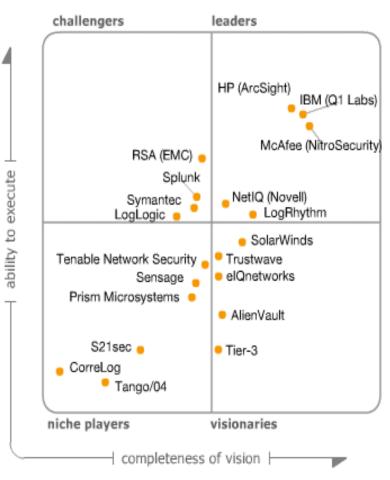
## Scalable, Distributed & Purpose-build





## What does Gartner think?





McAfee Enterprise Security Manager is a good choice for organizations that require high-performance analytics under high-event-rate conditions.

Customer references have validated very high scalability and query performance levels for the McAfee Enterprise Security Manager event data store.

As of May 2012

15 mayo 9, 2013

## Competition and Differentiation



NitroSecurity competes most often with select best-of-breed vendors, and can win most deals due to NitroView's technical proficiency and scalability

#### **Most Frequent Competitors**



 Complex product, heavy services, expensive but best known



- Poor standalone product, but can bundle with other services
- Large existing customer base is turning over



 Now owned by IBM; adequate product, but doesn't scale easily

#### Occasional



Mostly log management; poor SIEM; typically in small accounts



 Log-centric, recently added low-end SIEM; large existing customer base is turning over

#### **Non-Factors / Low-End Solutions**













#### Non-Factors / Low-End Solutions











#### Nitro is Scalable

- Scales easily from SMB to Fortune 500
- Collects all relevant data, not selected sub-sets
- Content-aware & context-aware

#### Nitro is Fast

- 100x to 1,000x faster than other solutions
- Single appliance can handle up to 300K EPS
- Only SIEM with real-time insertion & guery

#### Nitro is Capable

 Comprehensive product offering, covering SIEM, log management, database activity monitor, and application data & protocol monitor

#### Nitro is Easy

- Value increases as more information is added through "single pane-of-glass" operation
- Out-of-box full functionality

16 mayo 9, 2013

