

# Hi-Link Technology Group

Managed Cyber Security Services

Vasim Limbadiya

04/05/2018

# Why Managed Security ?

**1** IN **5**

of all small businesses will suffer a cyber breach this year.

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**81%**

of all breaches happen to SMBs, just like yours.

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**97%**

of all breaches could have been prevented with today's technology.

# 24 x 7 SOC Threat Response Team

- Hi-Link partnered with CARVIR Cyber Security
- SOC located in metro Atlanta, GA
- All CARVIR Employees
- Complete Background Checks
- Several Analysts are FBI, NSA or DoD trained



# Hi-Link Managed Cyber Security Services

**SentinelOne** : Managed Next Generation End Point Protection

**EventTracker** : Managed SIEM, Threat Intelligence & Log Management



SentinelOne

# Real-time, Unified Endpoint Protection

[Vasim Limbadiya]

[04/05/2018]

# Real-Time, Unified Endpoint Protection

## SentinelOne

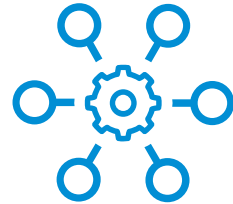
Go beyond prevention with a total protection platform. SentinelOne is the only platform that defends every endpoint against every type of attack, at every stage in the threat lifecycle.



**Complete visibility**  
into all endpoint activity  
without any performance drag



**Advanced static prevention +  
Dynamic behavior detection**  
to protect against threats across  
all major vectors



**Fully automated**  
threat mitigation  
and remediation

**Gartner**

Visionary  
2017 Magic Quadrant for Endpoint Protection Platforms



**Certified Antivirus  
replacement**



# 2016 to 2017: a dramatic leap forward



# A Visionary on the 2017 Gartner MQ



“...SentinelOne has had stellar growth in the enterprise EPP market, and expects it to continue for the next couple of years as it maintains a reputation as a leading NGAV vendor.”

## A Visionary

### Gartner 2017 Magic Quadrant Endpoint Protection Platforms

#### Gartner, Magic Quadrant for Endpoint Protection Platforms, 30 January 2017

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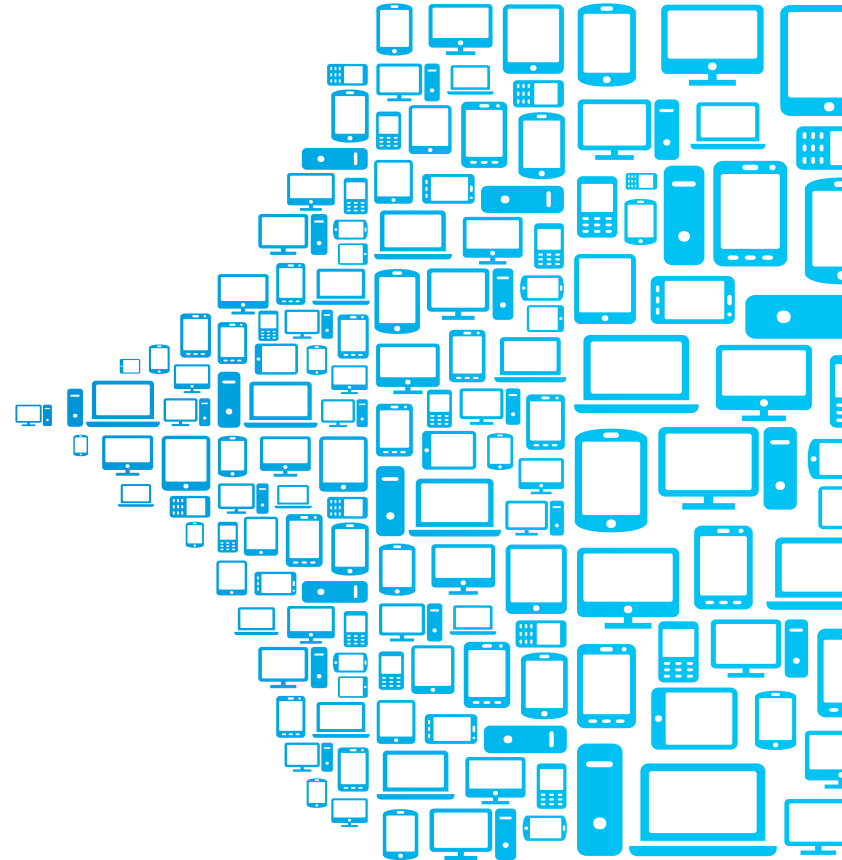
# 95% of Breaches Originate at the Endpoint

**Endpoints are primary targets.  
This is where sensitive data lives.**



**Endpoints are your organization's  
weakest link.**

Endpoint platforms are diverse, and often drift from standard configuration with frequent exposure to unsecured networks



# AV is no Match for the New Threat Landscape



## Malware

- Ransomware, trojans, worms, backdoors
- File-less / Memory-based malware



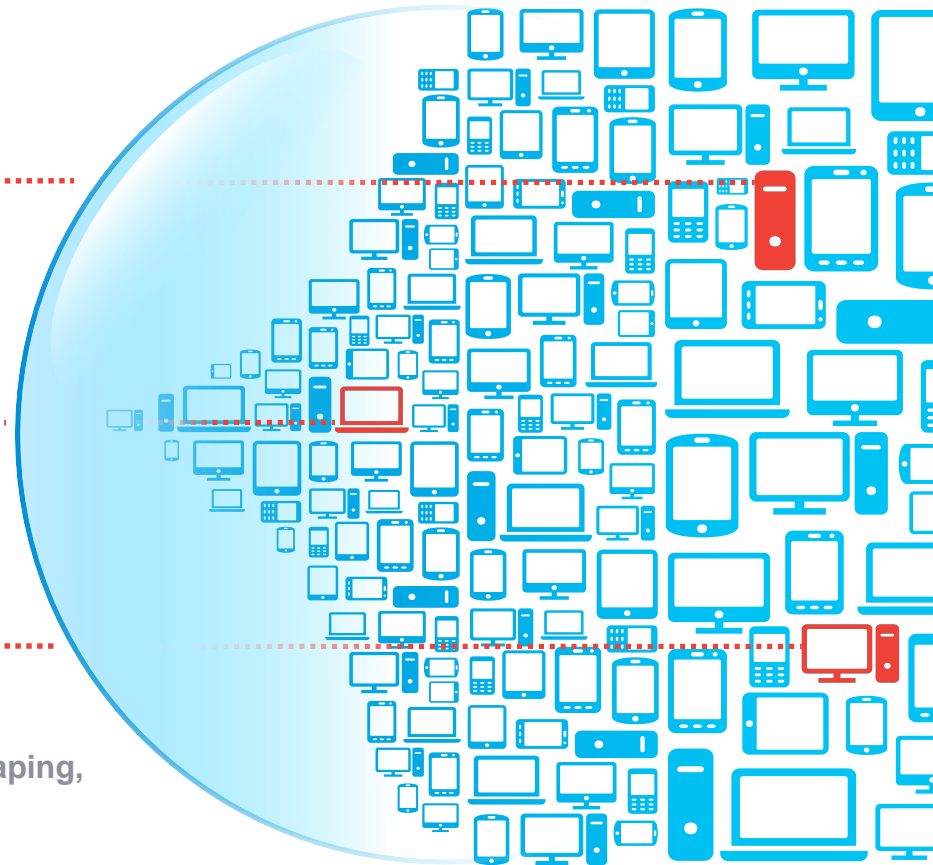
## Exploits

- Document-based exploits
- Browser-based exploits



## Live Attacks

- Script-based: Powershell, Powersploit, WMI, VBS
- Credentials: credential-scraping, Mimikatz, tokens



# Traditional AV Solutions Cannot Keep Pace

## Total Malware



Last update: 11-28-2016 15:39

Copyright © AV-TEST GmbH, www.av-test.org

# 390K

new malicious code  
samples per day  
(according to AV-Test.org)

# NGEP Offerings are Based on Different Philosophies, Technologies

## Legacy AV + Add-ons

- Prevention focused
- Includes HIPS, Anti-Exploit, Application control

### CAUTIONS:

- Multiple agents, multiple tools
- Same AV-related deficiencies

## Scan-based Predictive Analysis

- Scan file system and crunch metadata to predict the existence of threats

### CAUTIONS:

- Still limited to file-based malware
- Algorithm requires constant tuning by experts

## EDR

- Threat detection based on behavior and/or IOCs, coupled with mitigation and forensics

### CAUTIONS:

- No prevention
- Requires specialized personnel operating in SOC capacity

# Multi-layered Approach Addresses the Entire Threat Lifecycle

## Pre-Execution



Cloud Intelligence +  
Whitelisting / Blacklisting



Advanced  
Static Prevention

## On Execution



Dynamic Malware  
Detection



Dynamic Exploit  
Detection

## Post-Execution



Mitigation

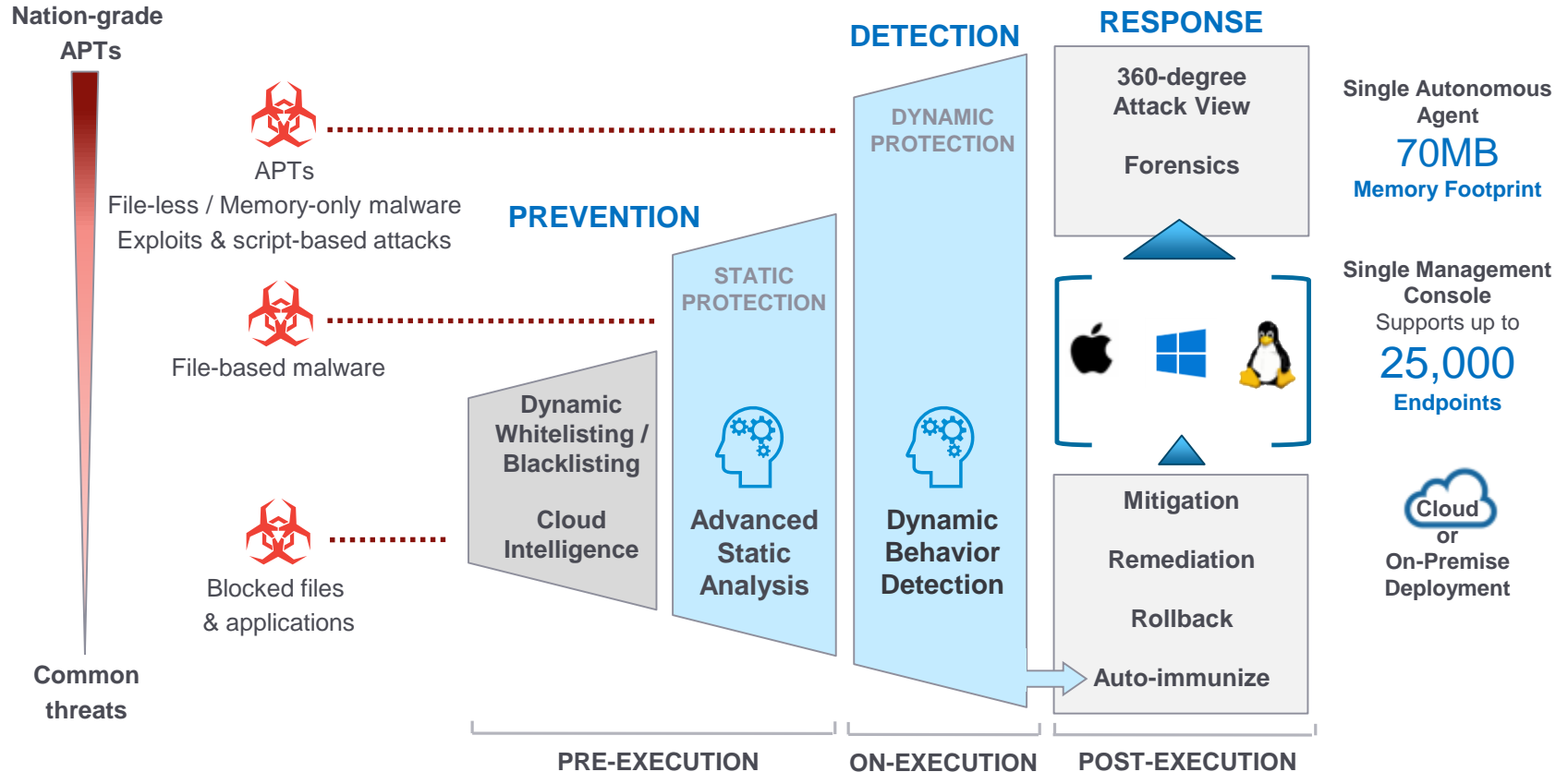


Remediation



Forensics

# The SentinelOne Endpoint Protection Platform



# Multi-layered Protection Across Major Threat Vectors

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## Dynamic Whitelisting / Blacklisting

- ✦ Reduce overall attack surface by blocking known bad programs



## Advanced Static Prevention

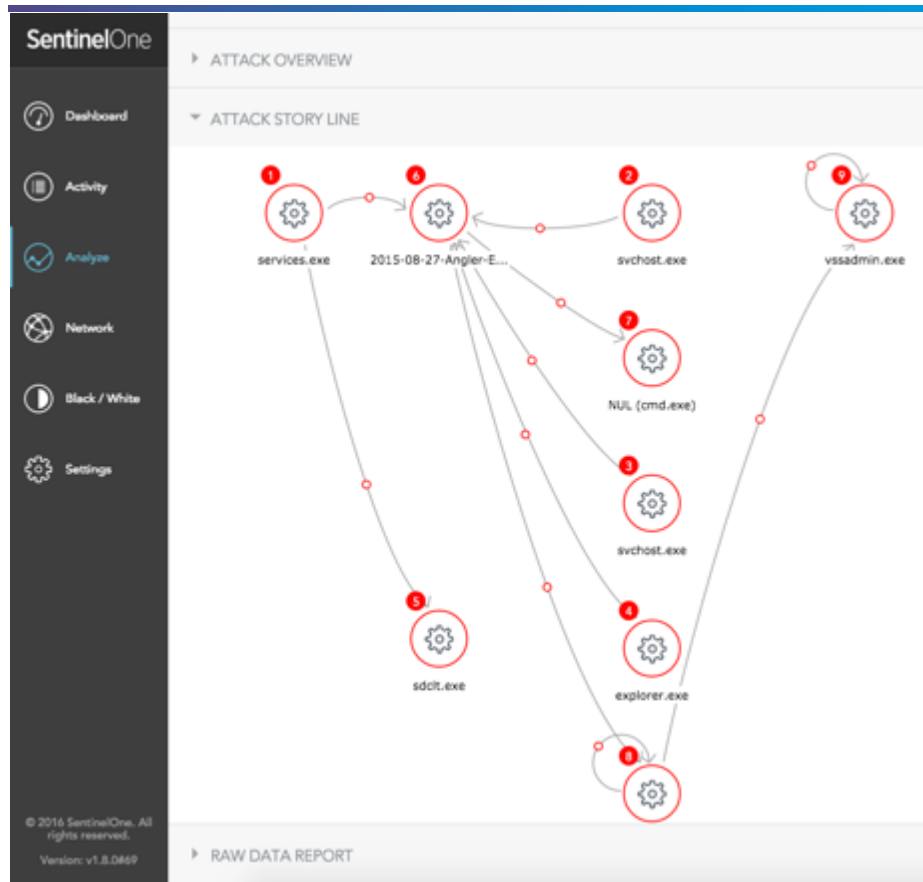
- ✦ Deep File Inspection engine uncovers known and unknown malware-- upfront



## Behavior-based Threat Detection

- ✦ Dynamically detect the most advanced attacks across any vector

# Deep Endpoint Visibility and 360° View of Attacks



## Lightweight, autonomous agent

- ✦ Continuously monitors all user/kernel activity on the user endpoint or server, online or offline
- ✦ Server agents sit out-of-band, preserving performance

## Full-context forensics in real time

- ✦ 360-degree view of threats, from inception to termination



# Fully Automated, Policy-driven Response

default POLICY NAME    Default group, Gene's group,... POLICY: GROUP(S)    System CREATOR    03/22/16 05:11:53 CREATED    Default SOURCE

## Zero-touch mitigation

- ✦ Policy-based; covers all endpoints for decisive incident response

## Robust containment

- ✦ Stops lateral threat movement by disconnecting the infected device from the network

## Full remediation & rollback

- ✦ Reverse malware-driven system and file modifications

Cloud	Cloud validation	<input checked="" type="checkbox"/>
	Show suspicious activities	<input checked="" type="checkbox"/>
Actions	Alert      Kill      Quarantine	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
Containment	Auto immune	<input type="checkbox"/>
	Disconnect from network	<input type="checkbox"/>
Decommission	Auto decommission	<input type="checkbox"/>
	Days offline	<input type="text" value="7"/>

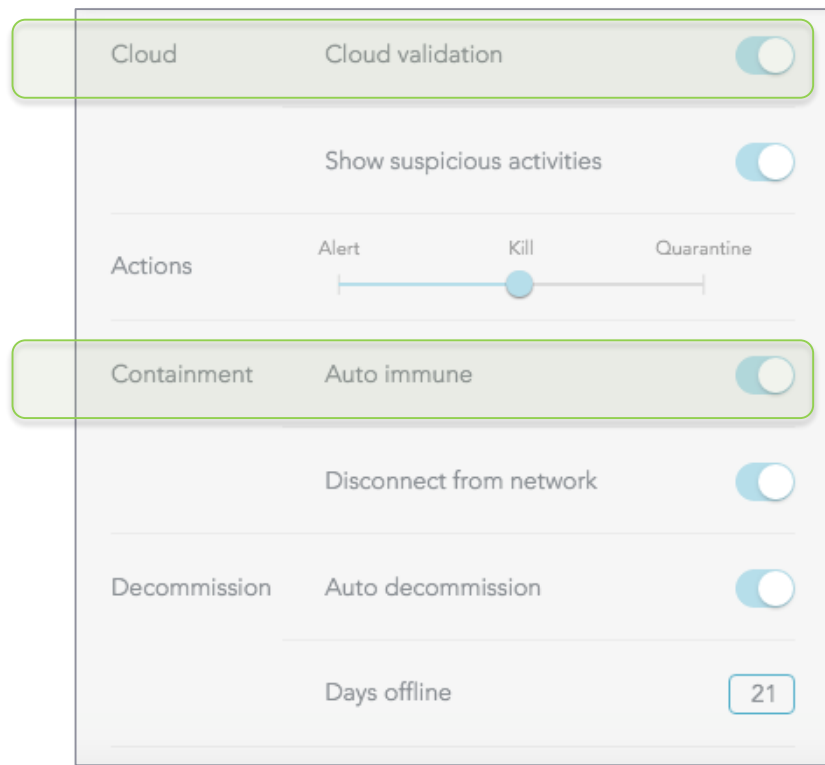
# Adaptive Defenses

## Cloud Intelligence

- ✦ Extend protection by leveraging threat intelligence from select reputation services

## Auto-Immunization

- ✦ Notify all Agents on the network when a new threat is detected



# SentinelOne Benefits

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- ✓ Superior protection against advanced threats without performance overhead
- ✓ Automated threat mitigation at machine speed
- ✓ Visualize attacks with real-time forensics
- ✓ Seamlessly adapt against the latest threats
- ✓ Cut TCO by up to 5x over multi-solution approaches
- ✓ Protect user endpoints and data center servers with a single platform
- ✓ Easily deployable across enterprise-scale environments

# Protection from Ransomware. Guaranteed.

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- SentinelOne detects and remediates ransomware attacks **AND** financially backs its products
- With the SentinelOne Cyber Guarantee:
  - **Customers will be compensated for any successful ransomware attack**
    - Up to \$1,000 per affected endpoint
    - Up to \$1M total



# Other Companies Who Rely On SentinelOne



## Certified

SentinelOne is a certified replacement for Antivirus



**DEMO**



Netsurion

# EventTracker

Actionable Security Intelligence

# What is SIEM?

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- What devices in your network have logs?
- Is there valuable security related data in the logs?
- Do you monitor them?
  - Real-time
  - Hourly
  - Daily
  - Weekly
  - Monthly
  - Yearly



# What is SIEM?

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- Even a small network can generate millions of log records daily generating dozens or hundreds of “alerts”
- Each of these logs has a unique format
- Maybe you have implemented a syslog server and tried to monitor for specific lines of activity
- Now how do you leverage it?

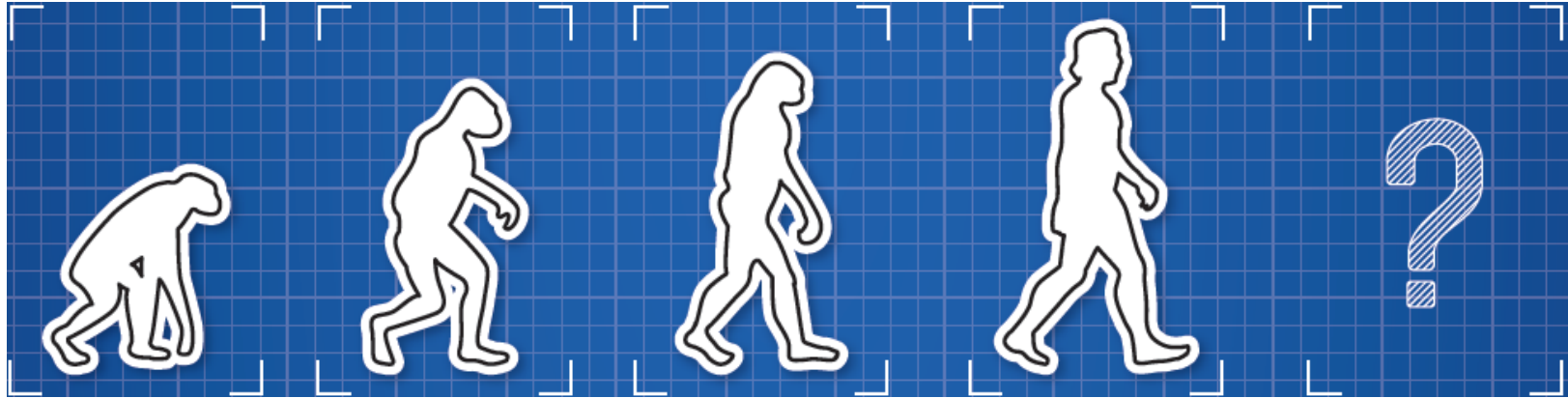
**This is where SIEM begins and basic log management ends!**

# What is SIEM?

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- Security and Event Management (SIEM)
  - Coined by Gartner in 2005
- An approach that combines:
  - SIM (Security Information Management)
    - Collecting, monitoring and analyzing security related data from logs
  - SEM (Security Event Management)
    - Alerting on specific triggers in log data
- Pronounced “sim” with a silent e

# The Evolution of SIEM?



## Centralized Log Management

Centralized log collection and storage is used to fulfill an operational need.

## SIEM

The technology began to extract intelligence from logs to meet a compliance or security need.

## SIEM ++

SIEM vendors add adjacent technologies like VAS, IDS, flow analysis and deception (honeynet), for greater security and compliance

## SIEM-As-A-Service

With greater intelligence comes the need for more monitoring and analysis, but a skills shortage creates a market for managed or co-managed options that help provide a better SIEM ROI.

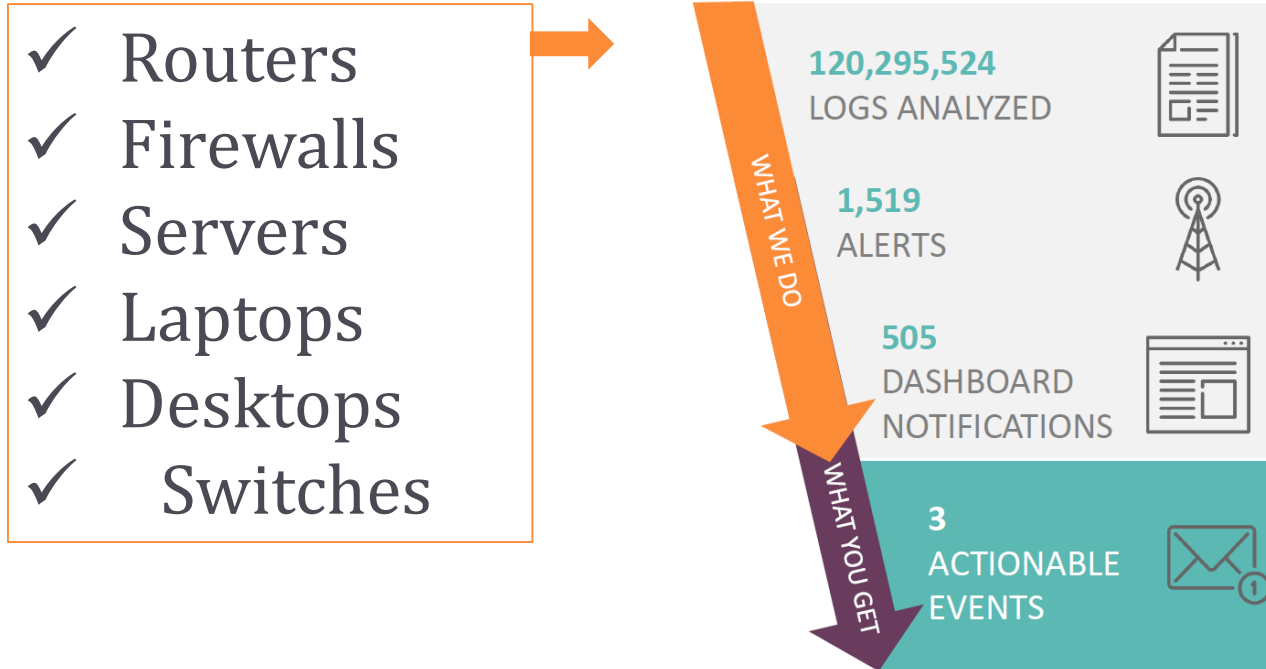
## SIEM-As-A-Utility (future)

In the future, security will be built into the foundation of the network devices.

# The Questions We Must Answer

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- The 4 W's
  - Who
    - Who is being attacked?
  - What
    - What is it trying to do?
  - Where
    - Where is the attack coming from?
  - When
    - When did it happen?





- ✓ No Hardware Required
- ✓ Over 2,100 Log Types / Sources
- ✓ Threat Response Capabilities

# Alerts (Monitored by Hi-Link/SOC/EventTracker)

A new TCP port started listening  
Active directory: group policy changed  
Admin interactive/remote login success  
Administrative logon success  
**Critical potential breach by unknown process from low reputation IP**  
**Critical potential breach from low reputation IP**  
Critical service is not running  
Disc space is critically low  
Excessive logon failures due to bad password/username  
Excessive logon (id 4625) failures from an IP address  
Media insert alert  
New Windows audit policy and account management activity  
New Windows software install activity  
New Windows user location affinity activity  
Out of ordinary IP address activity

Out of ordinary Windows interactive logon activity  
Out of ordinary Windows process activity  
Runaway CPU process - A process or system consuming high CPU  
Runaway memory process - A process or system is taking too much memory  
**Terminated connection to reputed bad IP**  
**Unknown or unsafe MD5 hash detected**  
User account disabled  
User added or deleted  
Users added to domain admin or local admin group  
User password set to never expire  
Windows: Audit log cleared

**Level 1=Automated termination of process and/or connection, and security operations center response**

# Default Reports for All Systems

Multiple logon failures by user(s)

Multiple logon failures from multiple remote IP addresses

New process connected to site or IP address with a bad reputation

New service started

New software has been installed on your network

New TCP entry point opened

Out of ordinary activities from IP address(es)

Out of ordinary activities from multiple process(es)

Out of ordinary activities from multiple users

Terminated connections to reputed bad IP addresses

Terminated process(es) having black listed hash

USB activities

User(s) added to admin group

User(s) created

User location affinity

Unsafe process or DLL executed



# Pricing

## SentinelOne

Advanced Endpoint Security

Workstation: \$4 - \$8 per month  
Server: \$9 - \$30 per month

## EventTracker

Managed SIEM for MSPs

Firewall/Switch/Server: \$50 - \$90 per month  
Workstation: \$5 - \$9 per month  
One-Time Setup Fee: \$499 - \$1199