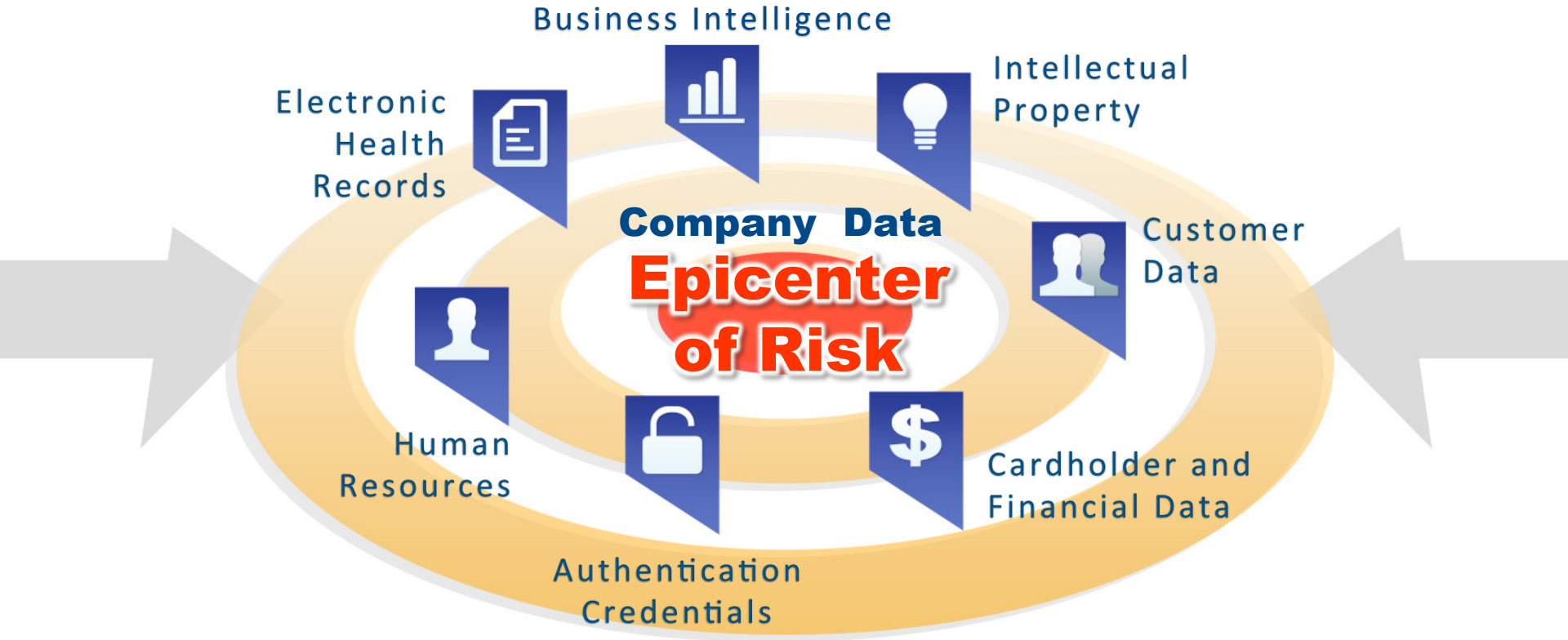


Let's Get Right To The Endpoint

**Leveraging Endpoint Data to Expose, Validate,
Triage, and Remediate Security Breaches**

Ultimate Goal of Security



- **Securing company assets and data in an every changing world**
- **Understanding where company sensitive data resides**
- **Keeping up with the ever changing landscape of threats**
- **Increasing number of alerts**
- **Prioritizing and responding to alerts**
- **Controlling post-breach consulting costs**
- **Auditing against and enforcing sensitive data policies**
- **Being right 100% of the time...**



Would it be valuable to have a view of what was occurring on potentially affected endpoints?



- Locks on Doors and Windows



- Alarm System



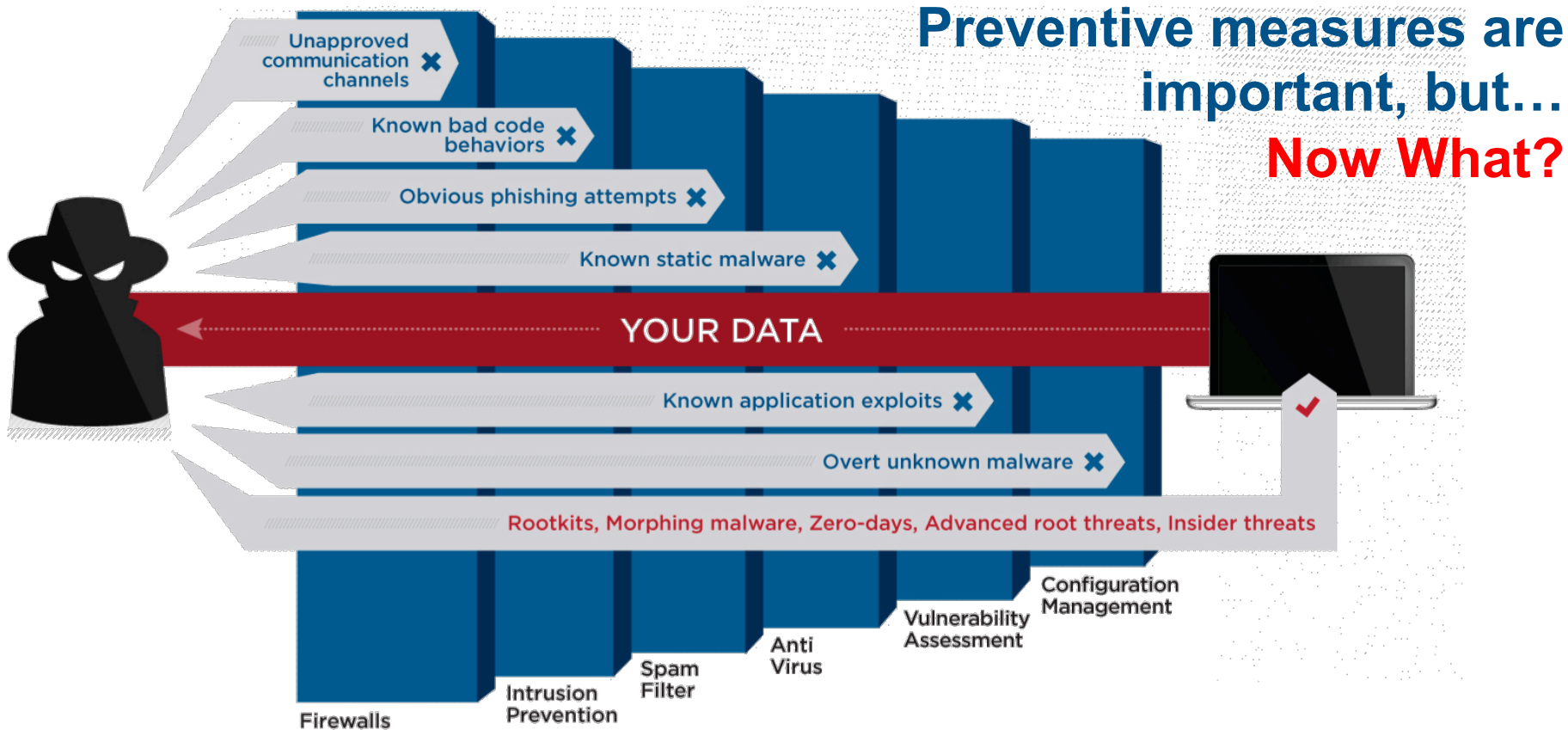
- Video Surveillance System



- Signage, Fences, etc.



How Effective Is Your Security Posture?



USA TODAY NEWS SPORTS LIFE MONEY **TECH** TRAVEL OPINION 73°

Cyberattackers learn targeted advertising tricks

Borrowing targeting technology from the advertising industry, the bad guys are also customizing when — and to whom — they deliver malvertisement.

Shop for bass guitar on Google

Ad related to bass guitar

Bass Guitar - guitarcenter.com
www.guitarcenter.com/bass - ★★★★★ 16,333 seller reviews
Shop Bass Guitars at Guitar Center. Free Shipping on 1000's of items!
Guitar Center has 3,932 followers on Google+
Every Occasion Gift Cards
Flash Deals-Limited Time & Quantity

Bass guitar - Wikipedia, the free encyclopedia
on wikipedia.org/wiki/Bass_guitar
The **bass guitar** is a stringed instrument played by plucking, slapping, popping, tapping, thumping, or
Bass guitar tuning - List of bass guitar manufacturers

Bass Guitars | Guitar Center
www.guitarcenter.com/Bass.gc
Shop our huge selection of Bass Guitars and gear at GuitarCenter.com. Most orders ship free!
Electric Bass Guitars - Acoustic Bass Guitars - F

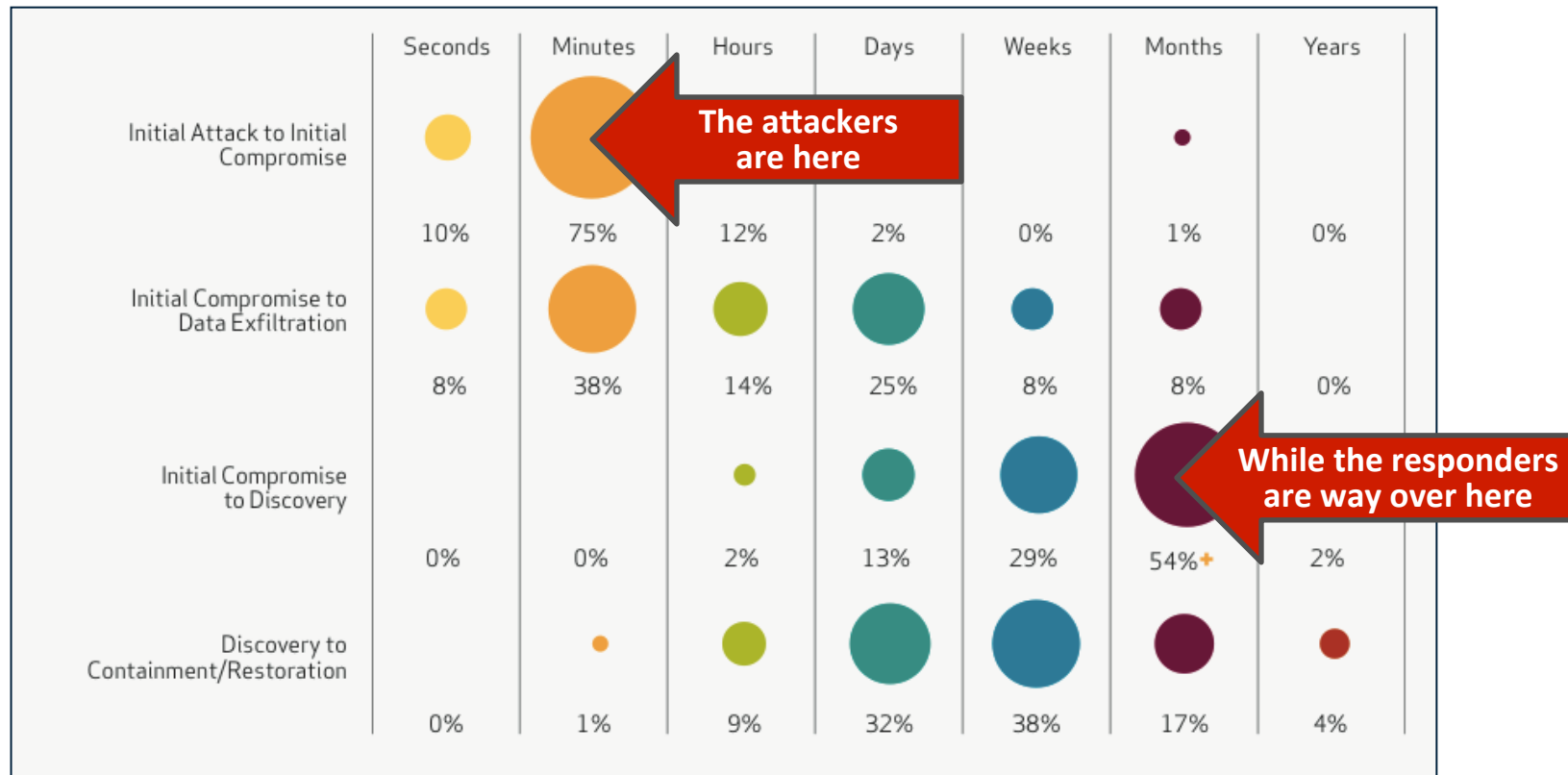
Reported and p
Byron V. Aconido

Bass Guitars | Musician's Friend
www.musicianfriend.com/Bass

Of course, the bad guys have swiftly jumped ahead. The latest Web infections are designed to play possum when a search engine or antivirus Web crawler comes calling. Bad guys do this by employing a black list of their own, one that contains the known IP addresses of the good-guy crawlers.

SOURCE: <http://www.usatoday.com/story/cybertruth/2013/07/15/how-cyberattackers-use-targeted-advertising-methodologies/2518897/>

And Time is of the Essence!



*Source: 2012 Verizon DBIR

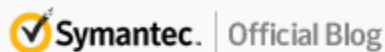
Don't Ignore the Warnings

Created: 16 Jul 2013 22:18:14 GMT | Translations available: 日本語



Candid Wueest  SYMANTEC EMPLOYEE

+1
1 Vote



Be honest. Do you really read the warning messages that your browser displays to you? Or do you blindly click the phishing site warnings or the SSL mismatch dialog away? Apparently most users don't seem to care too much about those warnings and click through them quickly. And I doubt that they have memorized the meaning of the warnings and reflect on the consequences each time.

An [interesting study](#) from Google and Berkeley University analyzed 25.4 million warnings from the Google Chrome and Mozilla Firefox browsers. According to their research, on average, 15.1 percent of the users click through the warning for malware-infected sites. Interestingly enough, Mozilla Firefox users on Windows have a click-through rate of only 7.1 percent compared to Google Chrome users on Windows with a 23.5 percent click-through rate, about three times as click-happy.

For phishing site warnings, the average click-through rate is 20.4 percent. In this phishing category, Linux users, with 32.9 percent, click through the warnings a lot more often than the others. Maybe they are more tech-savvy and

SOURCE: <http://www.symantec.com/connect/blogs/don-t-ignore-warnings>

“...it's apparent that we need to review our firewalls to ensure that basic configuration settings such as antispoofing and anti-DDoS are enabled...”

al: Suddenly, our

enterprise-class server that an R&D
at his desk -- which is a no-no . . .

EnCase . . . found something consistent with malware that was previously identified as opening connections to a server in Vietnam from multiple spoofed IP addresses . . . Running a companywide inventory, we found the same malware on some other overseas machines, and on some in our corporate office.”

Computerworld: At
list of priorities. The
wasn't as bad as it c

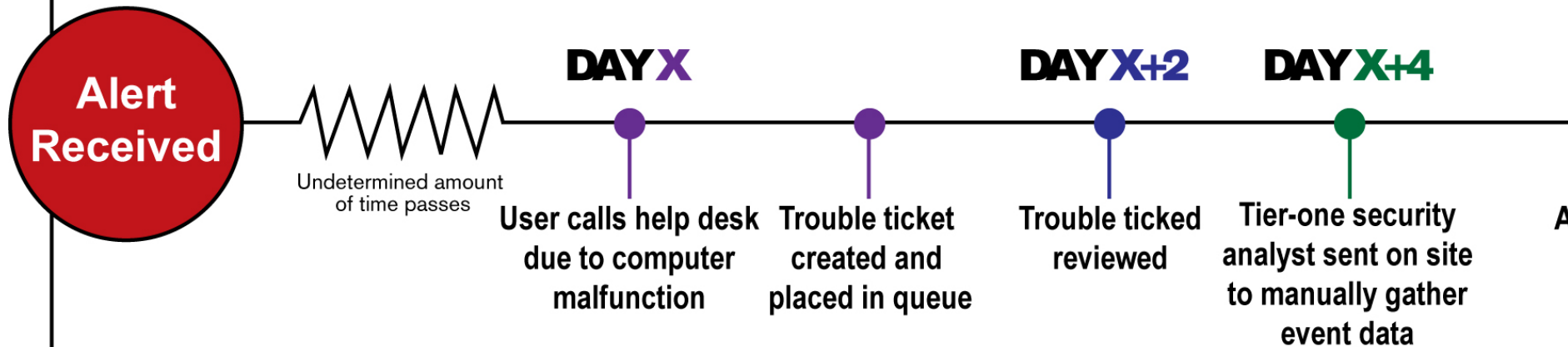
“[T]he incident also makes clear that we need to address some inconsistencies in our endpoint protection compliance...”

SOURCE: http://www.computerworld.com/s/article/9240737/Security_Manager_s_Journal_Suddenly_our_firewall_audit_cant_wait

Improving Your Security Response

Important Things To Consider

Traditional Incident Response Timeline



- **Broad Encryption support**
- **Broad OS support**
- **Ease, Speed and Flexibility of deployment and configuration**
- **Forensic-grade visibility**
- **Review capability**
- **Policy enforcement mechanism**



- **Protecting Company Data Is Number One Goal!**
- **Compliance**
 - HIPAA, PCI-DSS, Data breach notification laws, risk mitigation
 - Intellectual Property handling policies
 - Proliferation of laptops/tablets has increased risk of data loss
- **Eliminate risk of sensitive data in unauthorized locations**
- **Prioritize incident response**
- **Enable definitive policy enforcement**



Help Is Available

For The “Now What?”

■ Endpoint Incident Response

- **Mitigate the RISK** of successful attacks through rapid validation, comprehensive scope assessment, and containment of security incidents
- **Reduce the TIME** delay between compromise, detection and response
- **Reduce the COST** and overhead of incident response leveraging existing people and technologies

■ Endpoint Sensitive Data Discovery

- **Mitigate the RISK** of sensitive data in unauthorized locations
- **Reduce the TIME** it takes to locate sensitive data and enforce regulatory and policy compliance
- **Reduce the COST** associated with data discovery processes that don't easily scale and lack definitive enforcement



How EnCase Helps Mitigate the Risks of a Breach



- **System Integrity Assessments** – Expose unknowns and known bad via scheduled audits
- **Large scale volatile data analysis** – Discover system anomalies and similarities, expose attack artifacts
- **Near-match analysis** – expose iterations of morphed code and variations of detected threats
- **Deep forensic analysis** – completely and thoroughly investigate any anomaly or breach
- **Remediation** – immediate address risk by killing running process and wiping related disk artifacts
- **Integration with SIEM and alerting systems** – visibility into potentially affected hosts the moment an alert is generated



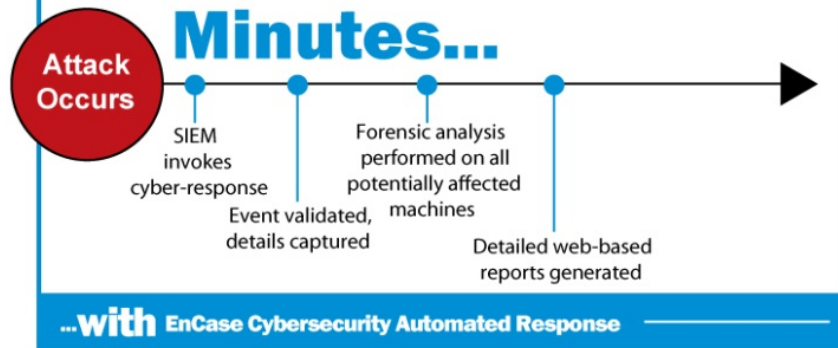
Automating Incident Response Data Collection



Incident Response Timeline **without** EnCase Cybersecurity Automated Response



Minutes...



- Entire process takes minutes
- All potentially affected machines analyzed
- Critical data preserved
- Full extent of breach realized

■ Comprehensive visibility

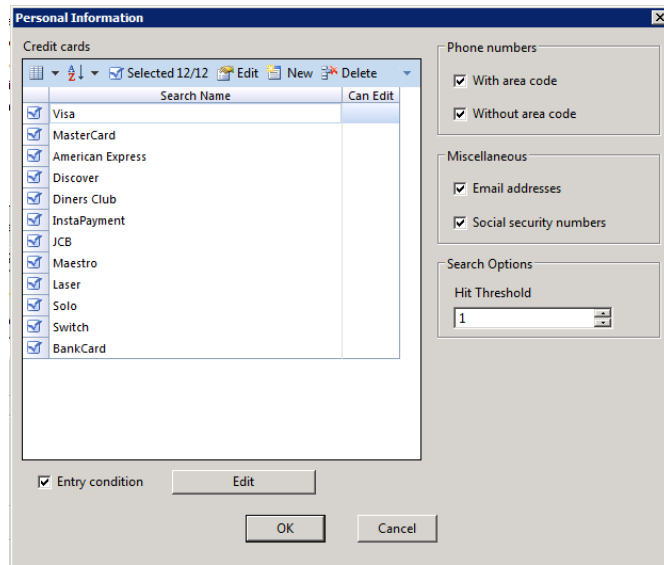
- Covers multiple operating and file systems, including email and document repositories
- Kernel level scans – locates deleted, in use and otherwise hard to see data locations
- Analyze metadata to quickly determine origin and where else errant sensitive data may reside

■ Built in templates for PCI and PII data, configurable for other data formats (account numbers, electronic health records, IP, etc.)

■ Scheduling capability to keep you covered

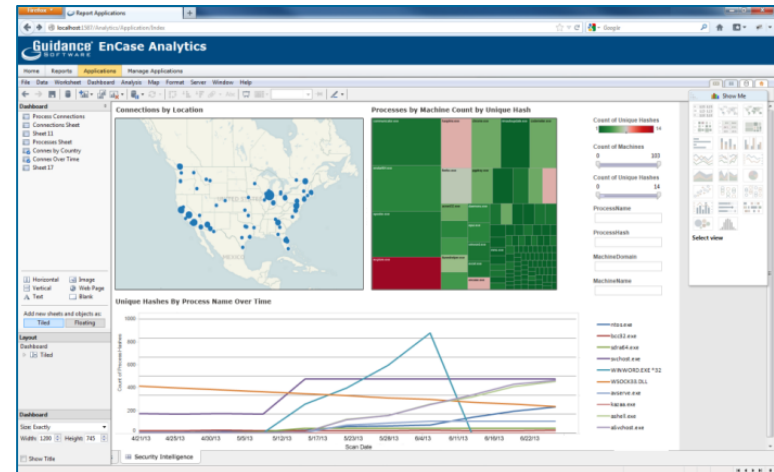
■ Web-based review and tagging

■ Securely wipe non-compliant data



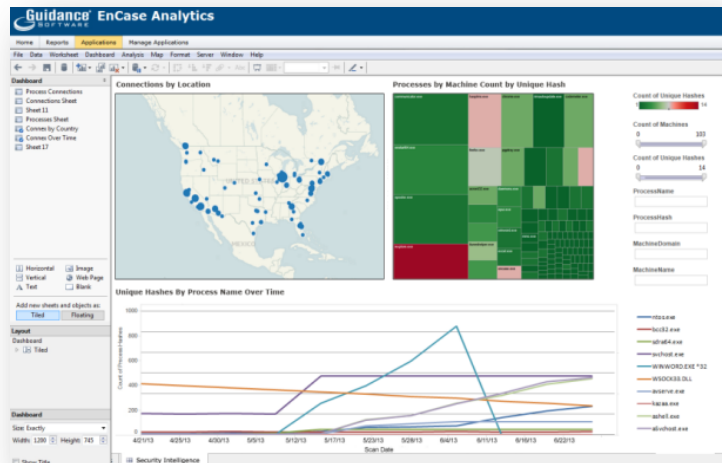
- **EnCase forensic capabilities will investigate how the malware compromised the endpoint(s).**
- **What was the delivery mechanism (e.g., USB drive, web page, email, etc.).**
- **What activity occurred before the compromise, during and after.**
- **What type of data was possibly exposed or compromised.**
- **Have we identified all of the compromised systems?**

What About A Different Approach?



- **“Rule” based security is limited**
- **Knowledge of what to look for is required**
- **Endpoint visibility is lacking**
- **Historical trends are not considered**
- **Correlation of endpoint data points is overlooked or missing**
- **Time required to manually audit system configurations**
- **Overall, too much data to analyze**

What If You Had A Bird's-eye View to Security Info



- Not constrained by signatures, indicators, behaviors, or heuristics
- Looking across all endpoints and servers, where threats ultimately hide
- Providing multi-dimensional analysis of unstructured endpoint data
- Exposing gaps in security posture

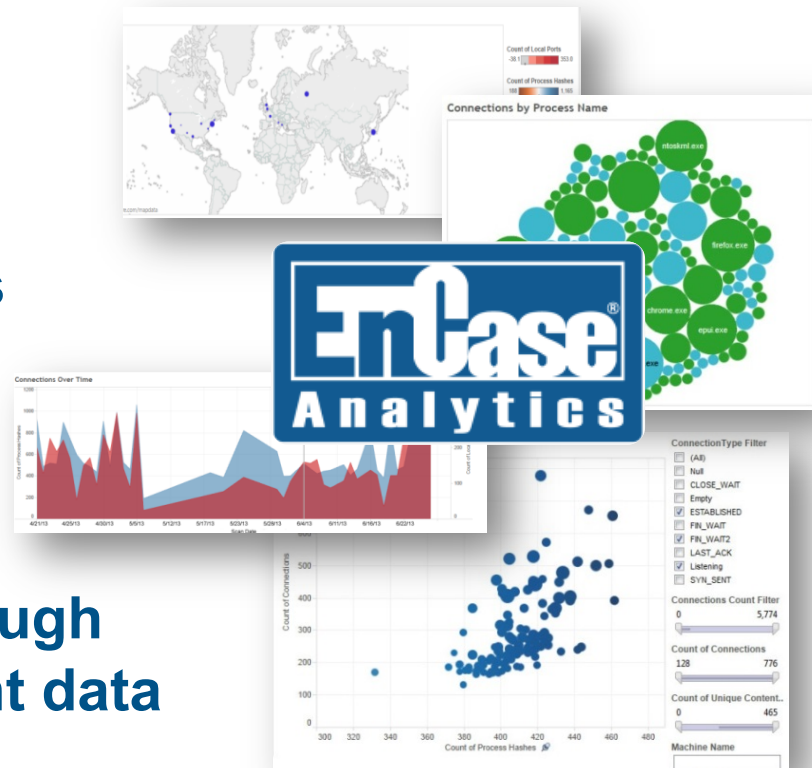
■ Allowing quick visualization of undetected risks or threats

- Exposing suspicious patterns, commonalities and anomalies
- Spotting unusual changes over time

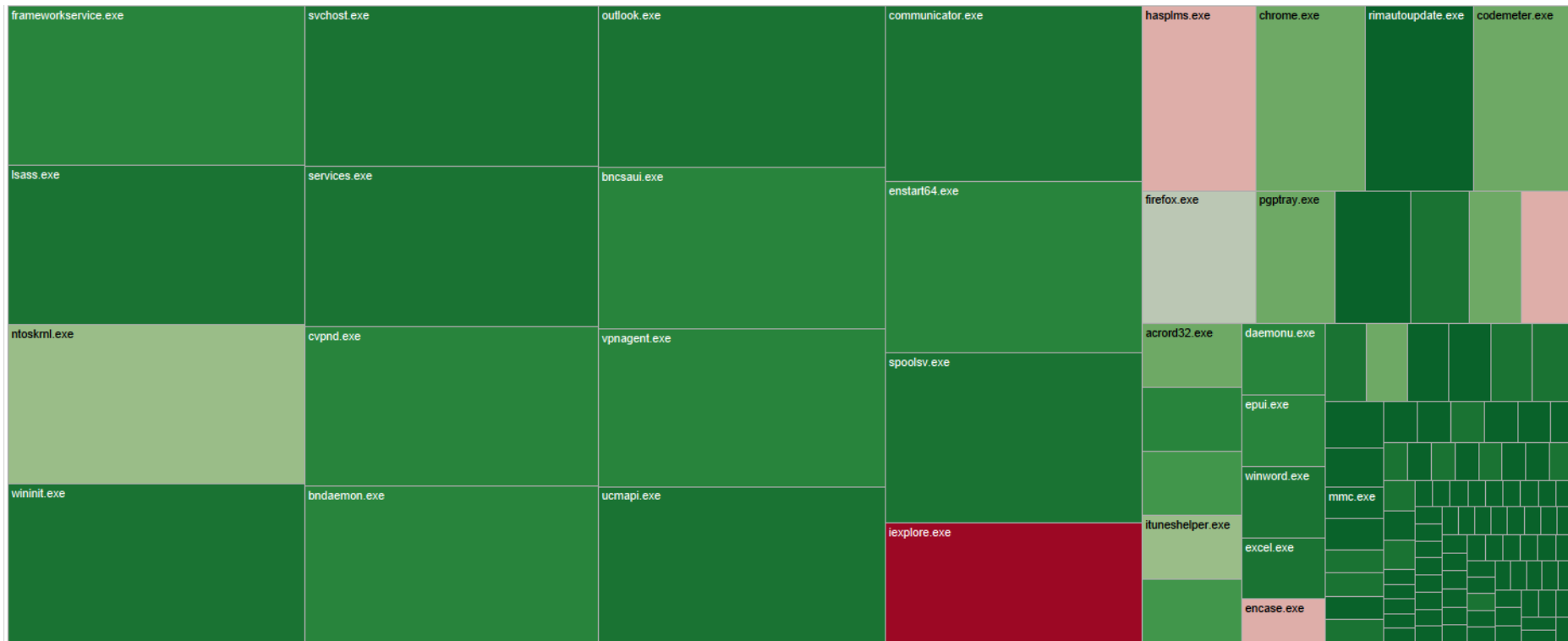
■ Interactive interface allowing on-the-fly adjustments so you can zero in on the threat



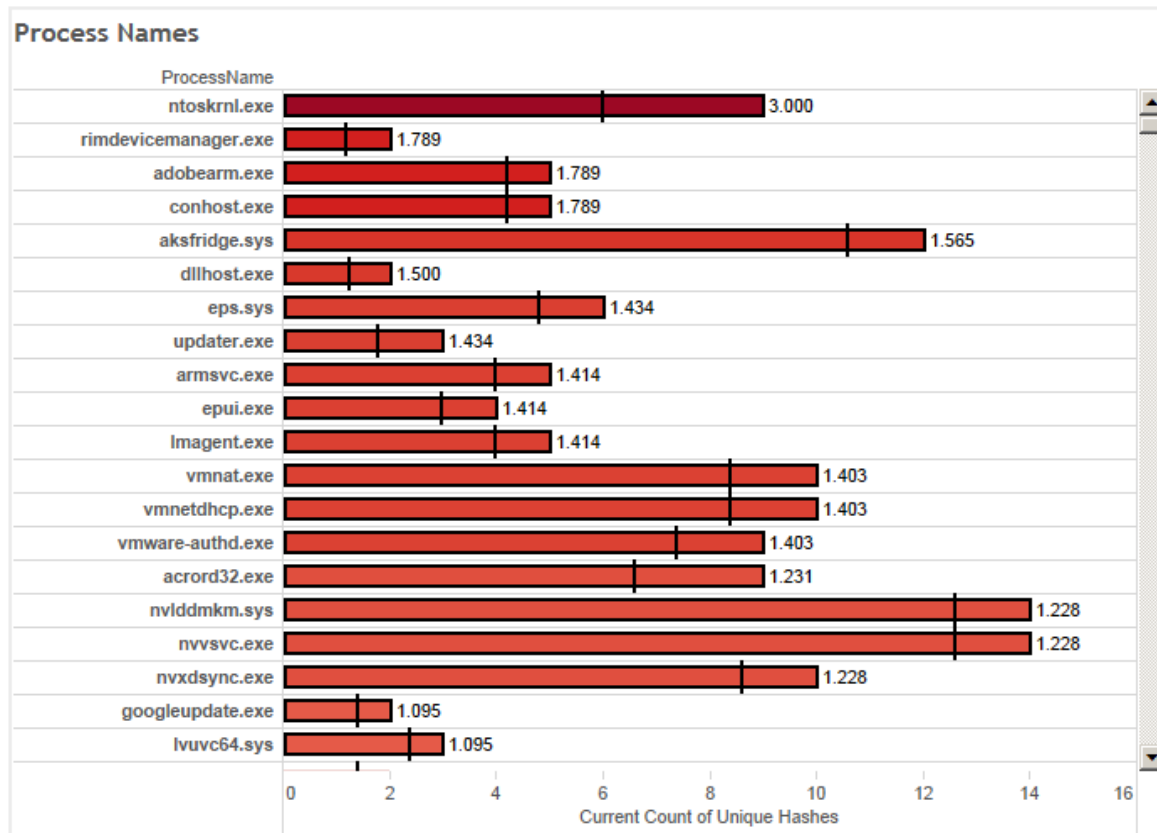
- Security insights via complete endpoint visibility
- Comprehensive view into security risks and threats
- Quickly derive insights from visual representations of data
- Expose unknown threats through statistical analysis of endpoint data

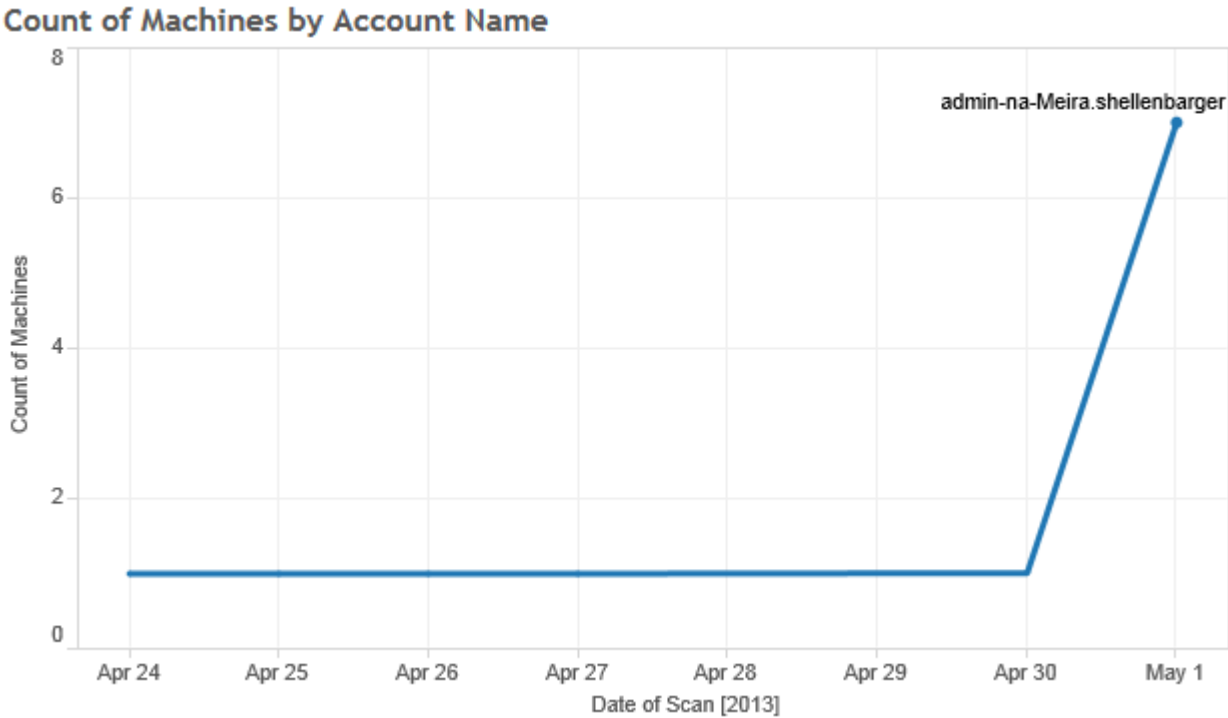


EnCase Analytics: Standard Configuration Variants



EnCase Analytics: Process Variant Anomalies





- **World Leader in Computer Forensics, eDiscovery and Incident Response**
 - Company Founded in 1997
 - Publicly Traded Company on NASDAQ (ticker symbol = GUID) Since 2006
 - 40,000 EnCase Customers World Wide
 - Over 1,500 EnCase Enterprise Customers
 - More than 65% of the Fortune 100
 - More than 40% of the Fortune 500
 - 300+ EnCase eDiscovery Customers, 200+ EnCase Cybersecurity Customers
 - 50,000 people trained on EnCase

Thank You

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