



Beyond Perimeter Defence
***Delivering Unprecedented Visibility
and Security***

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Guidance Software

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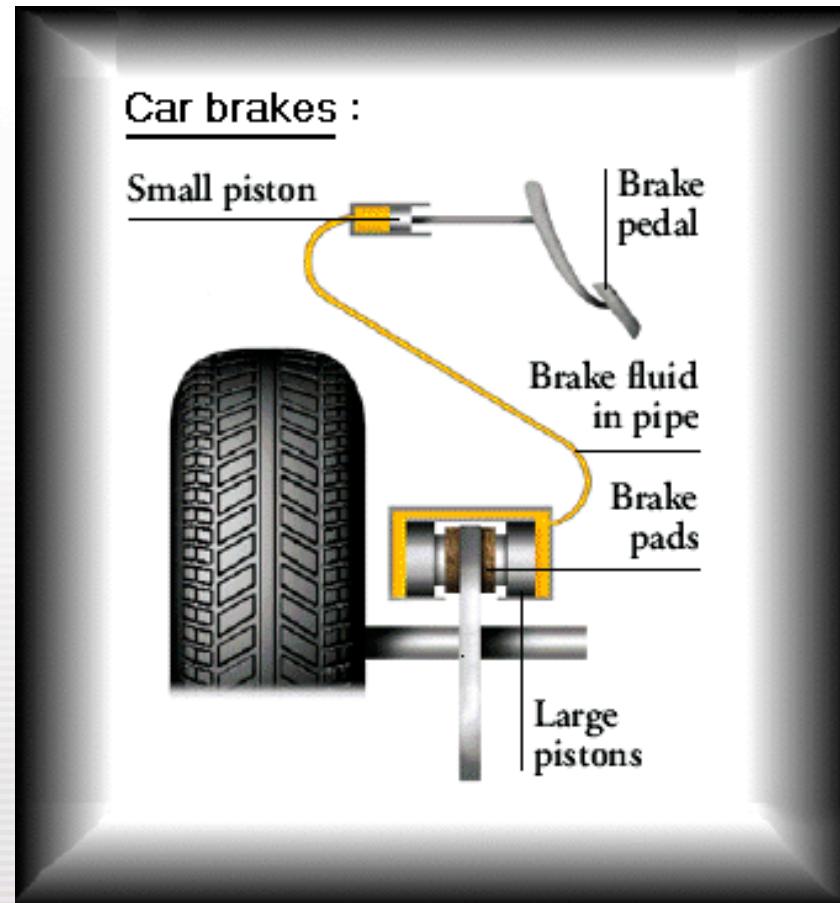
Session Agenda

- ✓ Session objectives
- ✓ Threats – What are they and where do they come from ??
- ✓ Business Challenges and Drivers
- ✓ The Guidance Software Proposition
- ✓ Fraud Detection
- ✓ Incident Response
- ✓ Session Summary & Close

Session objectives

To provide a high level overview and insight into identifying, managing and controlling computer fraud & security threats through innovative techniques and legally accepted process. This session will cover some of the challenges faced by HR, Legal and Information Technology Security teams within Corporate Organizations today, with a focus on how Guidance Software helps its customers address, manage and add value to these challenges, working alongside industry best practices and regulatory requirements such as ISO17799, Basel Accord and Sarbanes Oxley.

But First Why do cars have brakes ?



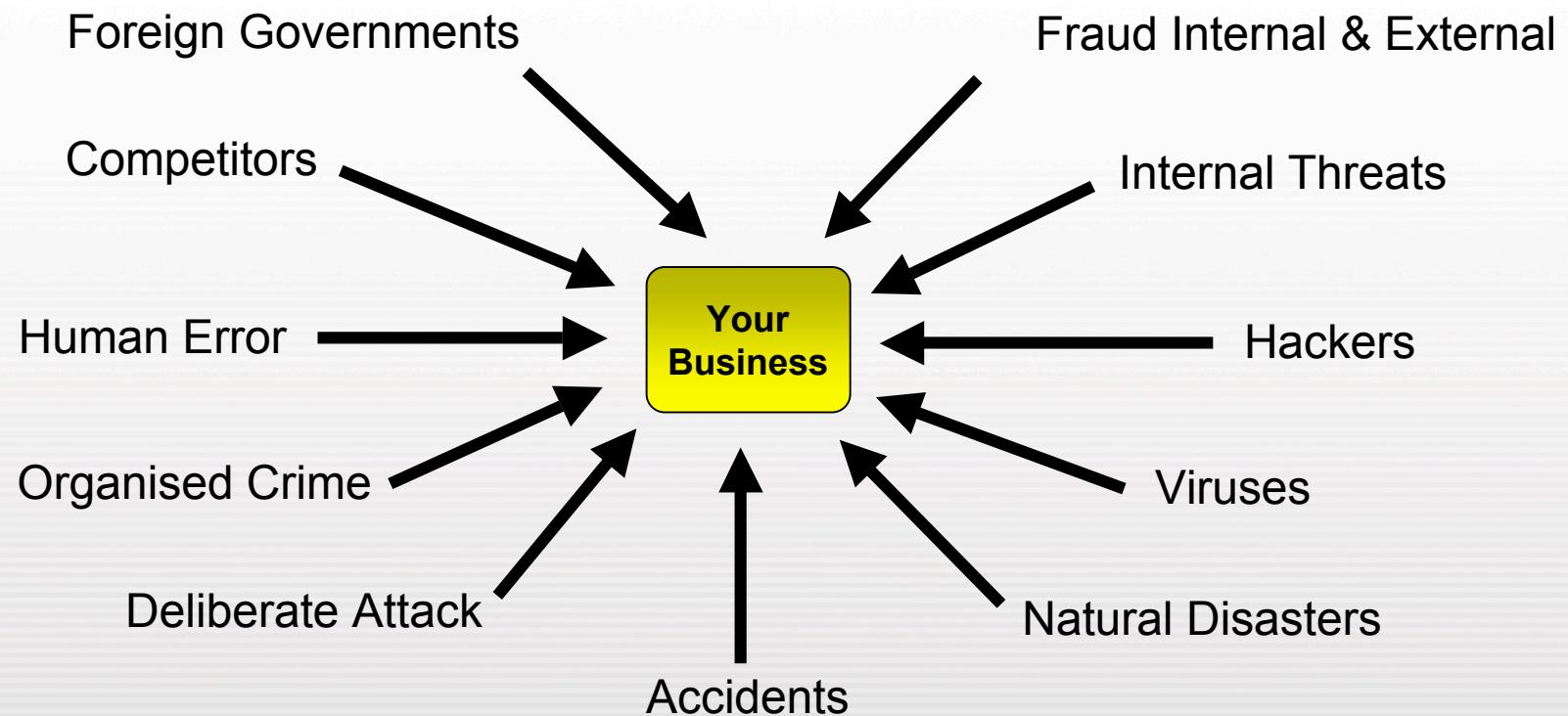
Why do cars have brakes ?



Why do cars have brakes ?



Where do the threats originate from?



Business challenges & drivers

Intellectual property

- ✓ Corporate espionage
- ✓ Organised crime / Planted employees / Sabotage
- ✓ Control of Quarterly Financials and Marketing plans
- ✓ Unauthorised software and / or rootkits**
- ✓ Mergers and Acquisitions**
- ✓ Document or data leakage to competitors / Intellectual property rights theft (IPR)**

Employees

- ✓ Harassing co workers
- ✓ Not doing their job (performance issues)
- ✓ Violent acts
- ✓ Inappropriate content**
- ✓ Contractor employment controls**
- ✓ Reliance upon contractors and individuals with required expertise**

Corporate Policy

- ✓ Internal use
- ✓ Inappropriate Conduct
- ✓ Interdepartmental knowledge and information sharing, policies & process
- ✓ Identifying and locating the risks to the organisation**

Regulatory compliance

- ✓ SOX
- ✓ ISO17799
- ✓ BASEL II
- ✓ Reducing risk / Increasing efficiencies**
- ✓ Leveraging regional initiatives and knowledge share between key national infrastructure organisations**

Sarbanes Oxley, ISO 17799, Basel II– Why enterprise computer forensics?

Enterprise Computer Forensics Required for Effective Internal Investigations

Congress enacted the Sarbanes-Oxley Act of 2002 (“Sarbanes-Oxley”) to protect investors by combating corporate crime and improving corporate governance.² **Sarbanes-Oxley requires companies to implement extensive corporate governance policies to prevent and respond to fraudulent activity** within the company, including vigilant self-policing to deter and quickly investigate and contain internal financial fraud.³ For example, Sarbanes-Oxley expressly requires publicly traded companies to create anonymous hotlines for the reporting of fraud, to investigate those instances of fraud, and certify that they have disclosed any instances of fraud involving management and other key employees to the Board of Directors.

Well before the enactment of Sarbanes-Oxley, courts recognized the importance of preserving electronic data in connection with litigation, including securities fraud investigations. For example, in *In re Bristol-Myers Squibb Securities Litigation*,¹² the court determined that the discovery of computer evidence was critical to ensure a proper investigation of alleged corporate fraud. The court noted that as the vast majority of documentation now exists in electronic form, **electronic evidence discovery should be considered a standard and routine practice** going forward.¹³ The provisions of Sarbanes-Oxley will certainly induce courts and auditors to look closely at a company’s ability to forensically preserve and analyze electronic data.

Other agencies and groups have also adopted standards regarding computer forensics. The leading international information security best practices standard, **ISO 17799, calls on enterprises to use computer forensics to preserve the admissibility of evidence.**

Enterprise Products

Data at rest



Forensic concurrent connections let you:

- ✓ Discreetly investigate and analyze many machines simultaneously at a disk level
- ✓ Acquire and preserve data in a forensically sound (court-accepted) manner
- ✓ Proactively audit groups of machines for sensitive information

Volatile data

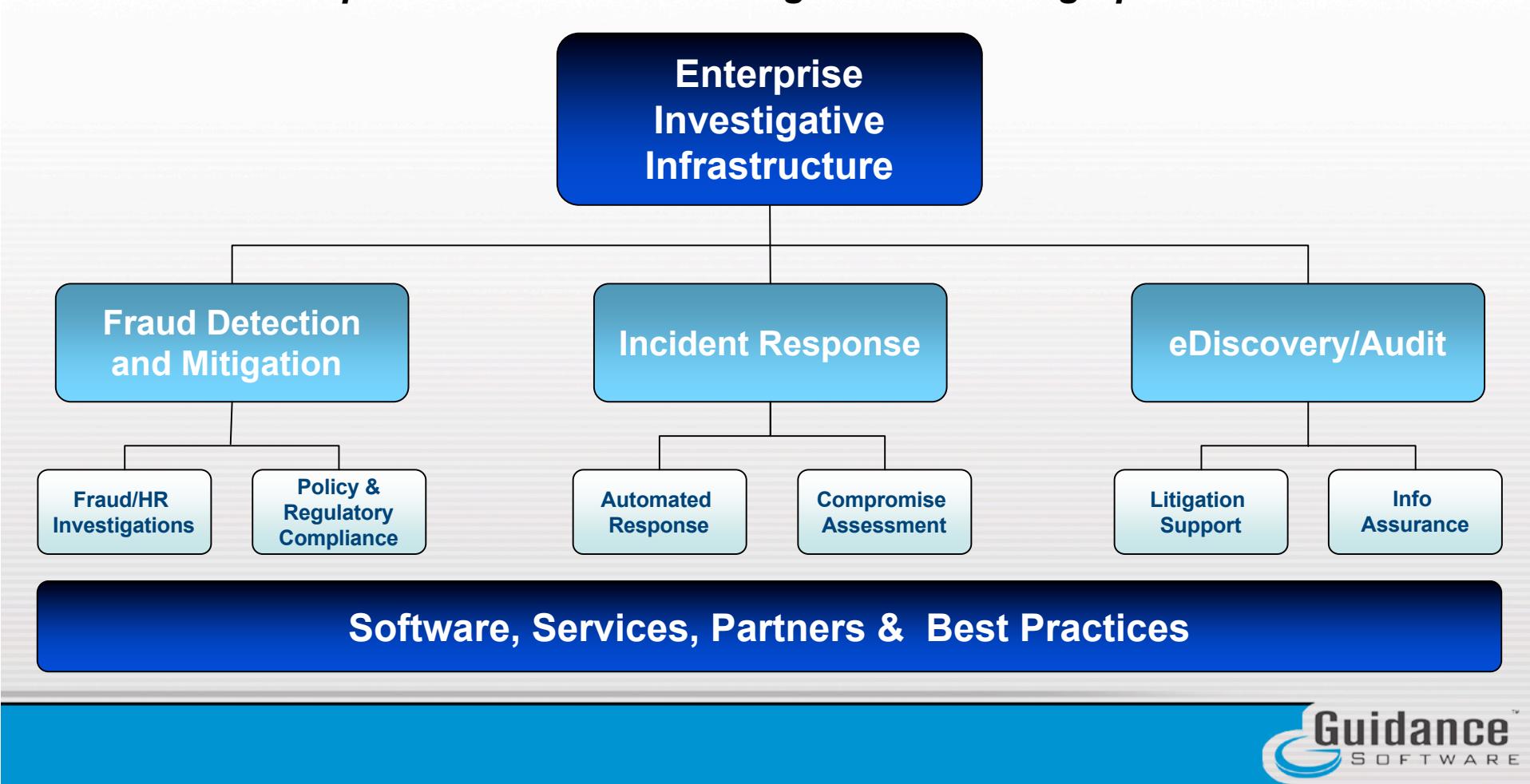


Snapshot concurrent connections let you:

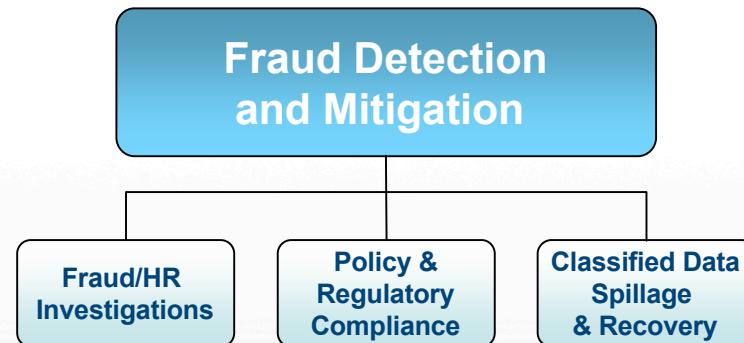
- ✓ Scan more than 10,000 machines in 30 minutes
- ✓ Rapidly identify all trusted, untrusted and unknown data
- ✓ Integrate with IDS/SIM tools to provide actionable real time incident response capabilities

The Guidance Software Proposition

"We provide an Investigative Infrastructure that lowers the cost and response time while increasing the breadth and depth of computer related investigations and incident response...with the overall goal of reducing operational risk"



Fraud Detection and Mitigation



Intellectual property issues such as:

- ✓ Corporate espionage
- ✓ Quarterly Financials and Marketing plans
- ✓ Mergers and Acquisitions
- ✓ Drug research

Employee integrity

- ✓ Harassing co workers
- ✓ Not doing their job (performance issues)
- ✓ Violent acts
- ✓ Inappropriate content

Corporate Policy

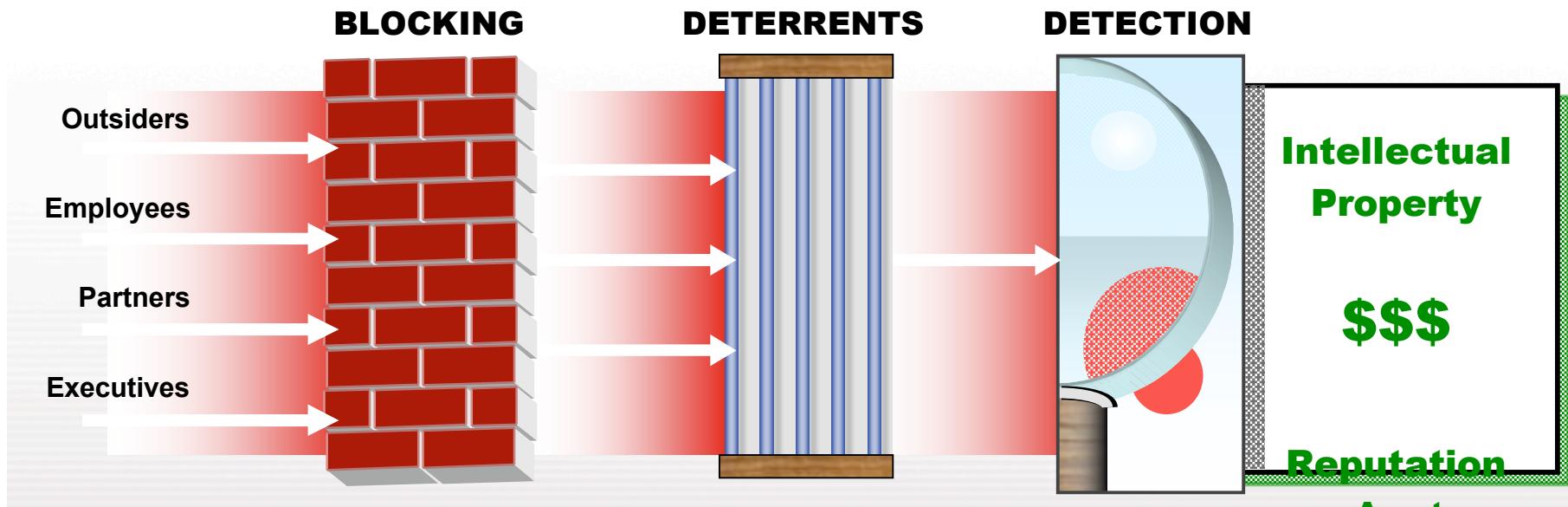
- ✓ Internal use
- ✓ In appropriate Conduct
- ✓ Organizational Deterrent

Regulatory compliance

- ✓ SOX
- ✓ ISO17799

Detection and Prevention

PERCEPTION



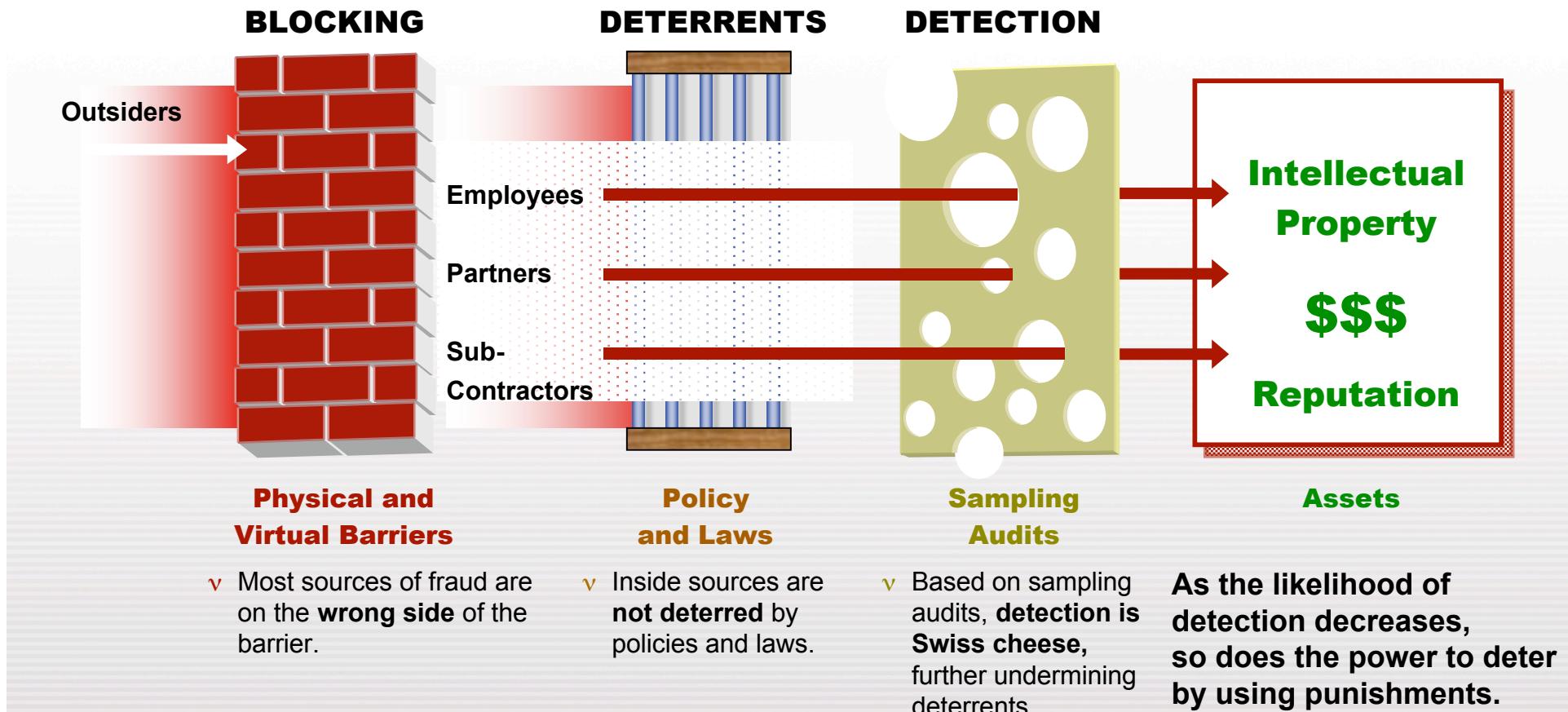
- Barriers prevent access to all but the **most skilled**

- Deterrents prevent access to all but the **most determined**

- Detection prevents access to all but the **most stealthy**

Detection and Prevention

REALITY



Case Study:

Synopsys (IP Theft)

Issue:

Synopsys believed that a former employee removed files containing corporate secrets from their network and used these secrets to establish 'Nassda' and creating a competitive product.

Problem:

Synopsys needed to prove that the former employees had in fact removed the sensitive data from their network and then used it to build Nassda's business.

Size of the challenge:

Nassda was for obvious reasons less than cooperative and by the time Guidance Software got involved the case was more than two years old a lots of computer evidence had been lost or erased.

Our solution:

Using EnCase Enterprise and a court order Guidance Software was able to search through Nassda systems and locate documents identical to those on Synopsys' network.

Result:

"The terms of the deal call for Synopsys to acquire Nassda (including its \$100 million cash reserves) for \$192 million, and for Nassda's co-founders – all of whom were one-time Synopsys employees – to pay Synopsys a \$61 million settlement. The net purchase price of \$30 million compares favorably to Nassda's earlier market cap of \$500 million"

— CBS MarketWatch

Case Study:

Network Associates (M&A)

Customer:

Network Associates

Issue:

Contracted to sell its Sniffer Technologies unit for \$275 million.

Problem:

The contractual terms required Network Associates to ensure that none of Sniffer's source code remained on Network Associates' computer systems.

Size of the challenge:

5,000 computers in 20 different locations worldwide (100 TB).

Our solution:

Guidance Software Professional Services used the eDiscovery suite containing all the relevant search terms.

Result:

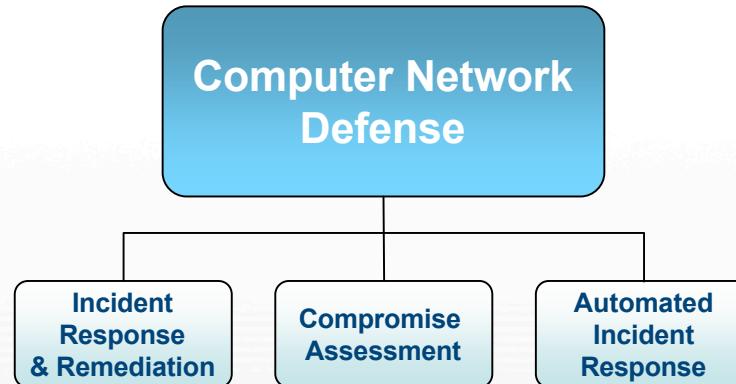
Guidance Software completed the engagement in 4 weeks and significantly under budget. 105 dirty machines were found.

"EnCase Enterprise saved us more than \$1 million in the first six months of its use. It also allowed us to complete a critical M&A discovery issue that would have been impossible with any other software or services options in the market today."

- Ted Barlow, CSO & VP, Risk Management, Network Associates



Computer Related Incident Response



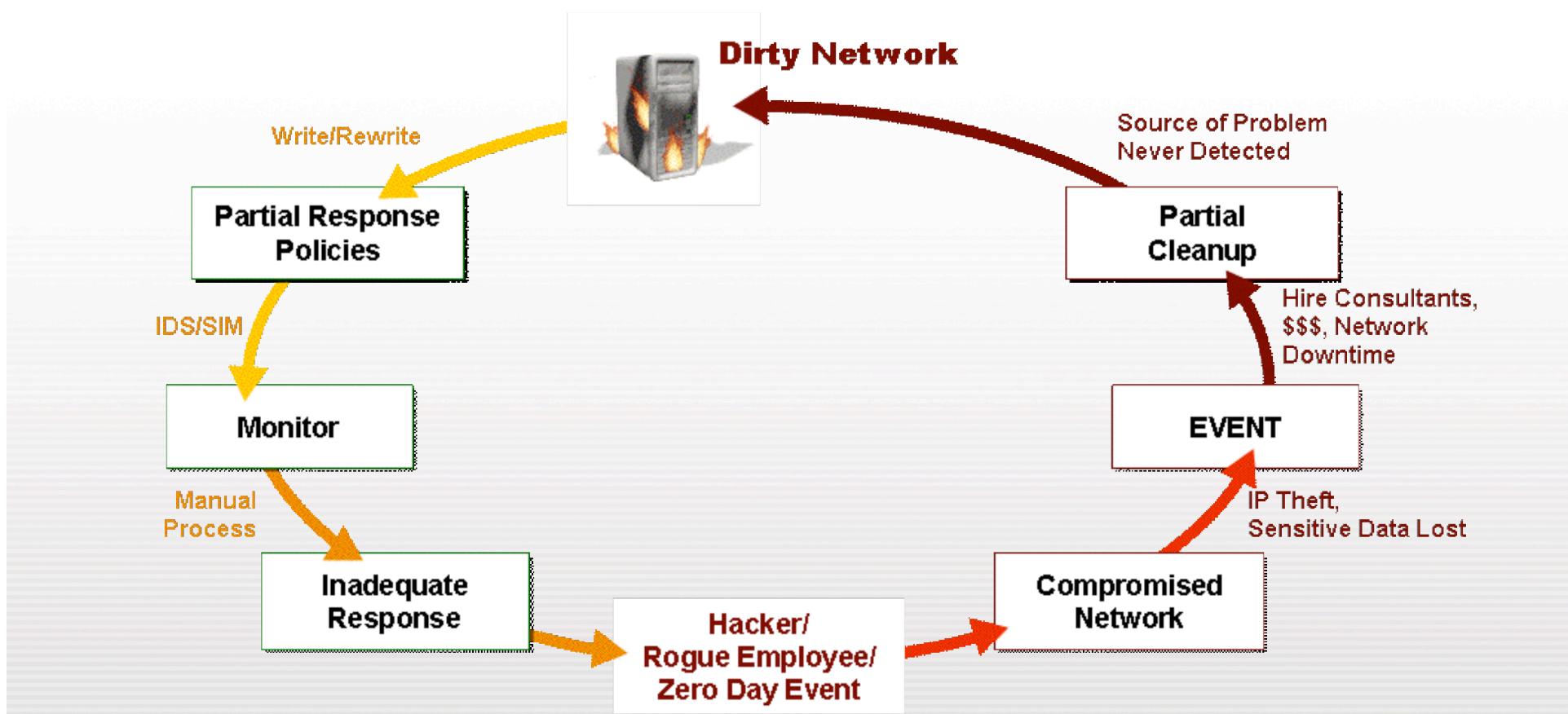
Automated Incident Response

- ✓ Single Machine Incident response (confirm/deny an event took place)
- ✓ Automatically responding to events from IDS and SIMs
- ✓ Automatically responding to events from content management systems
- ✓ Enables complete remediation

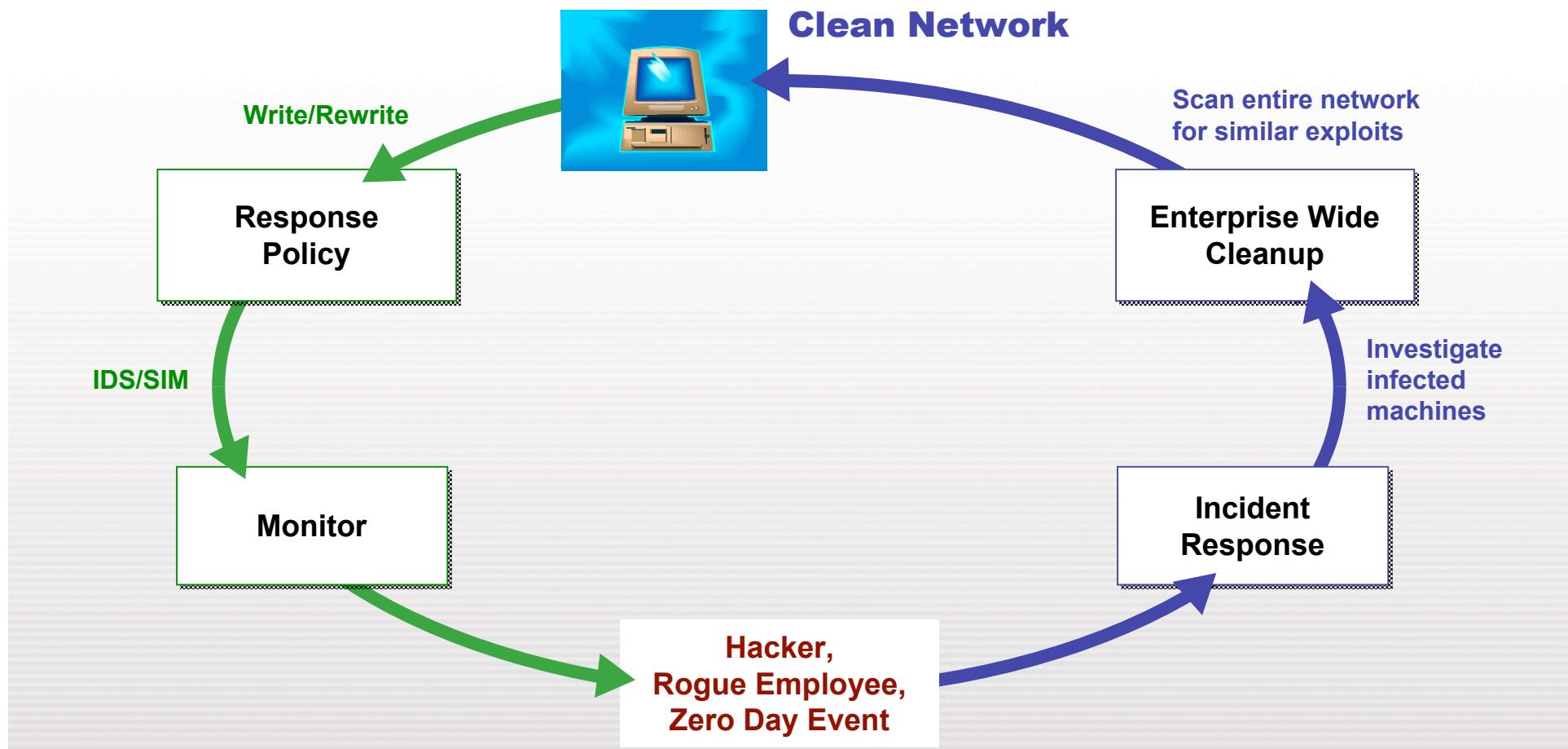
Compromise Assessment

- ✓ Breadth of the compromise
- ✓ Remediation
- ✓ Documentation / closing the response loop (future controls and best practices)

IR process — Broken

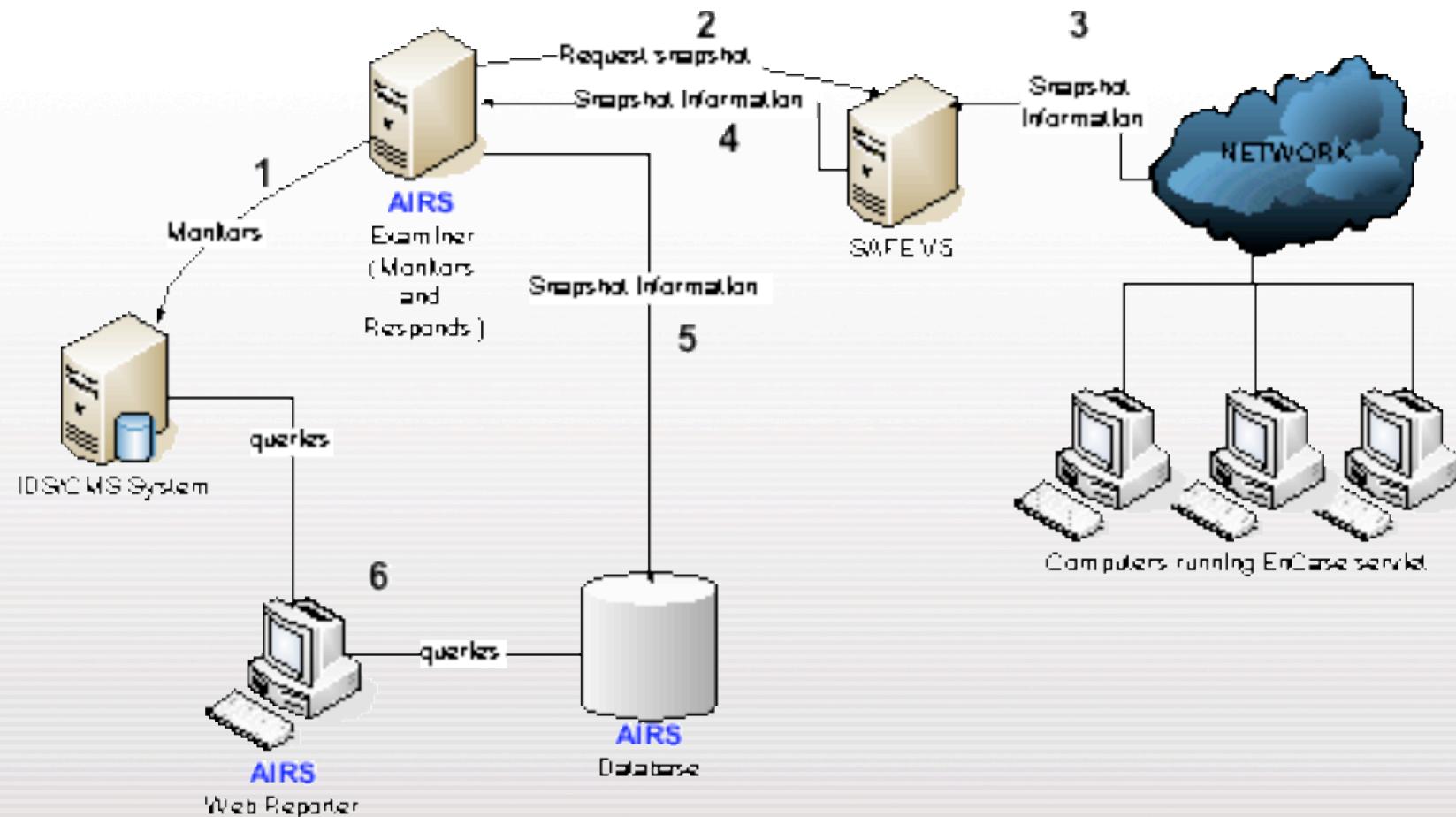


IR process — Best Practice



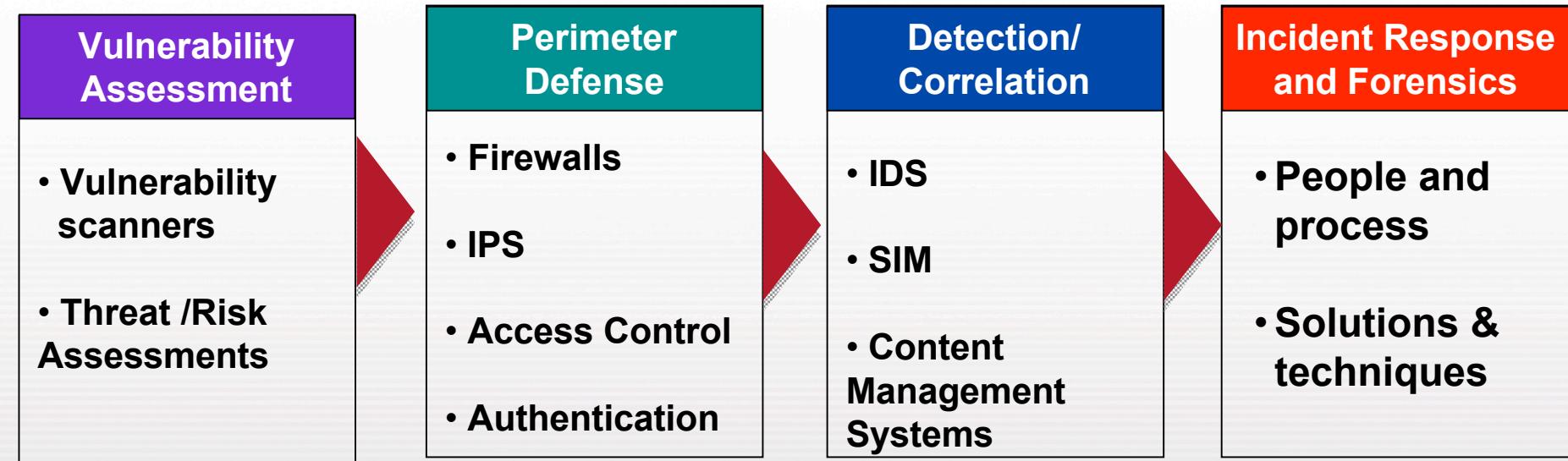
Automated Incident Response

AIRS Architecture



Incident Response

- Where EnCase Enterprise fits into the security landscape



Case Study:

The Hartford (Incident Response)

Issue:

Conducting efficient incident response on a large distributed network without disrupting operations

Problem:

During a zero day incident the Hartford needed to locate and remediate a worm prior to getting the signature from their anti-virus company

Size of the challenge:

30,000 node network

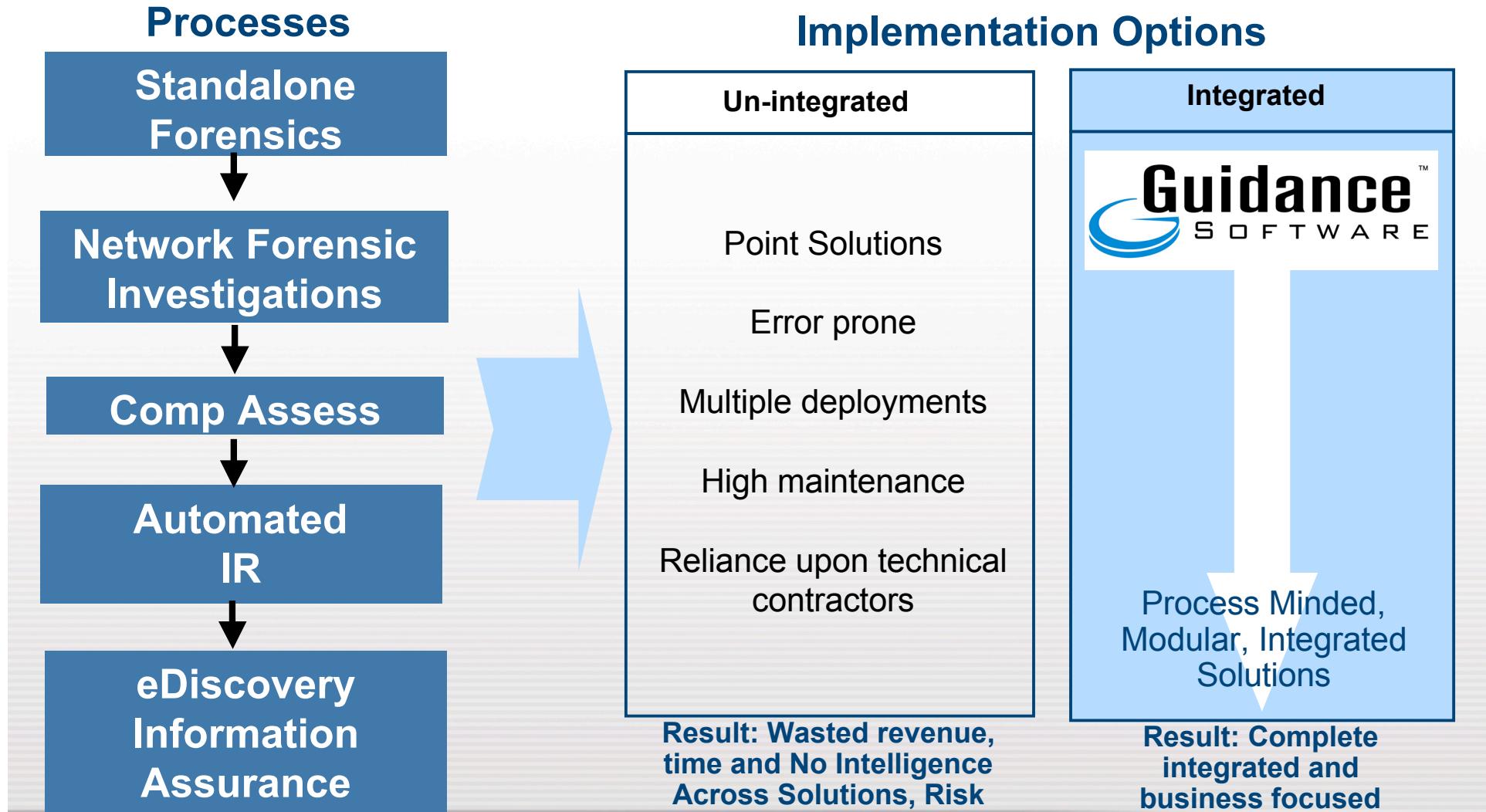
Our solution:

EnCase Enterprise with servlets deployed throughout their network.

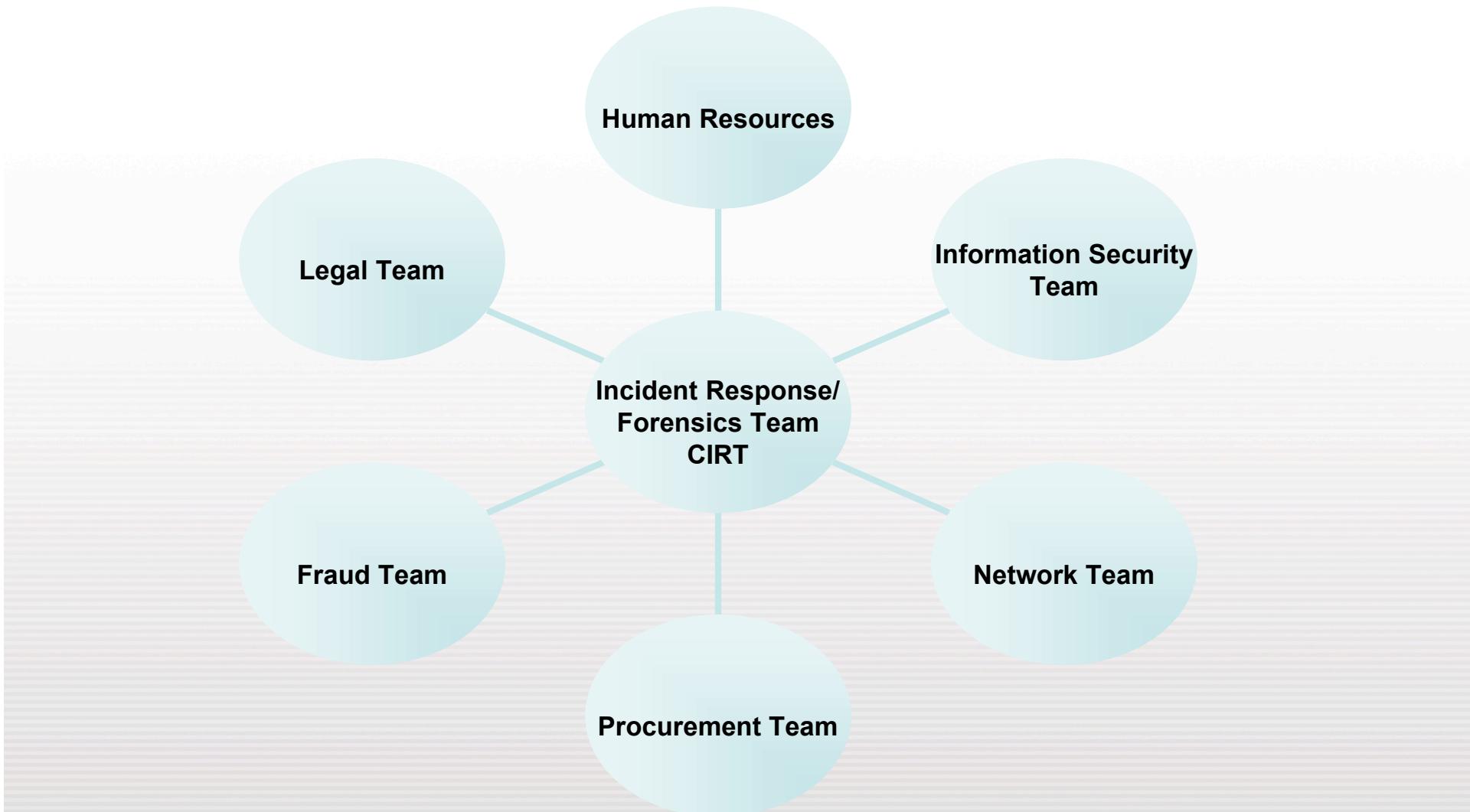
Result:

During a worm outbreak the Hartford was able to scan 30,000 nodes to identify compromised machines and establish a timeline of the machine that introduced the worm into their environment. After identifying compromised machines they were able to remediate the malicious worm quickly without disrupting business operations or quarantining workstations/servers.

The Enterprise Investigative Infrastructure



The power of One – a collective approach



Session Summary

✓ Identify and Mitigate Risks

- λ Conduct network-enabled forensic investigations for **anything, anywhere, anytime**
- λ Disqualify unnecessary investigations
- λ Conduct network-enabled HR investigations
- λ Contain and reduce corporate fraud

✓ Employ a Proactive Approach to Enterprise Investigations

- λ Conduct network-enabled document discovery
- λ Discovering documentation related to legal issues
- λ Support Information Assurance efforts in a much more cost effective manner with no business disruption

✓ Compliance

- λ Meet regulatory mandates to demonstrate due care and limit loss
- λ Effectively and efficiently validate and enforce corporate computer use policies
- λ Utilise regional directives and initiatives. Knowledge share to address common threats

✓ Automate Inefficient Processes

- λ Respond immediately to **Zero Day** events
- λ Perform a complete compromise assessments after a security intrusion
- λ Reducing business disruption and losses due to security breaches
- λ Respond to more security incidents with less manpower



Thank you

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