

The TRITON Solution

Nordics, October 2012

TRITON™

Web security

Email security

Data security

Mobile security

- John Enger (Senior Sales Engineer)
 - 14 year Industry Veteran
 - 7 Years with Websense
 - Scandinavian Ancestors!
 - Focused on Channel Partner Enablement

- A Quick Recap
- The Websense TRITON Solution
- Ask the Panel (Q&A)

A Quick Recap...

TRITON™

- Web security
- Email security
- Data security
- Mobile security

Legacy Defences are full of holes!



“Signature based tools (anti-virus, firewalls, and intrusion prevention) are **only effective against 30-50% of current security threats**. Moreover, customers expect the effectiveness of signature-based security to continue to decline rapidly.”

IDC Threat Intelligence Update, 14-Feb-2012

Managing many independent systems is HARD! websense



**WE MUST
REDUCE
COMPLEXITY**

The Enemy is in your **Blind Spots**

- SSL
- Spear Phishing
- AD, SAM, Password extraction
- Custom Encryption
- Malware



Seven Advanced Threat Stages

websense



Recon



Lure



Redirect



**Exploit
Kit**



**Dropper
File**



**Call
Home**



**Data
Theft**

4 Reasons Why Current Defenses Fail

1 PRIMARILY BASED ON SIGNATURE & REPUTATION



History is not a reliable indicator of future behavior.
Signature creation cannot keep up with the dynamic creation of threats

2 LACK OF REAL-TIME INLINE CONTENT ANALYSIS



Collect samples for lab analysis using background processes
Producing new signatures (network/file) and reputations (URL/file)

3 FORWARD FACING ONLY, LACK OUTBOUND PROTECTION



Not data-aware, lack contextual analysis, minimal to no forensic visibility

4 MORE OF THE SAME IN NEW DEPLOYMENT OPTIONS



UTMs, NGFWs, IDSs, Network Threat Monitors
SSL severely impacts performance, or blind to it

The Websense TRITON Solution

TRITON™

— Web security

— Email security

— Data security

— Mobile security

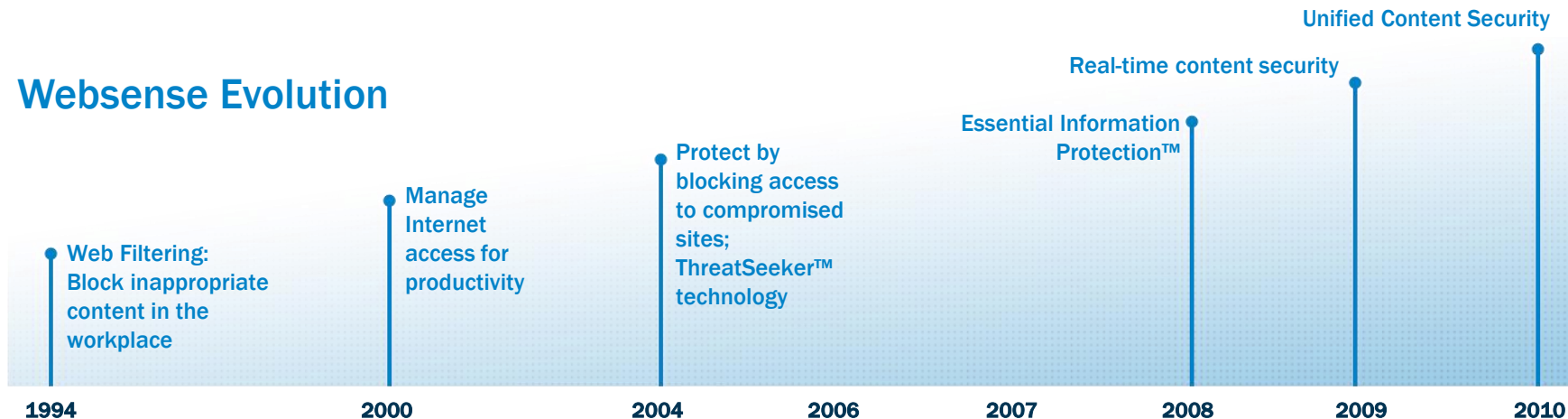


websense®
TRITON™

- Unified architecture
- Unified security intelligence
- Unified console
- Unified policy & reporting

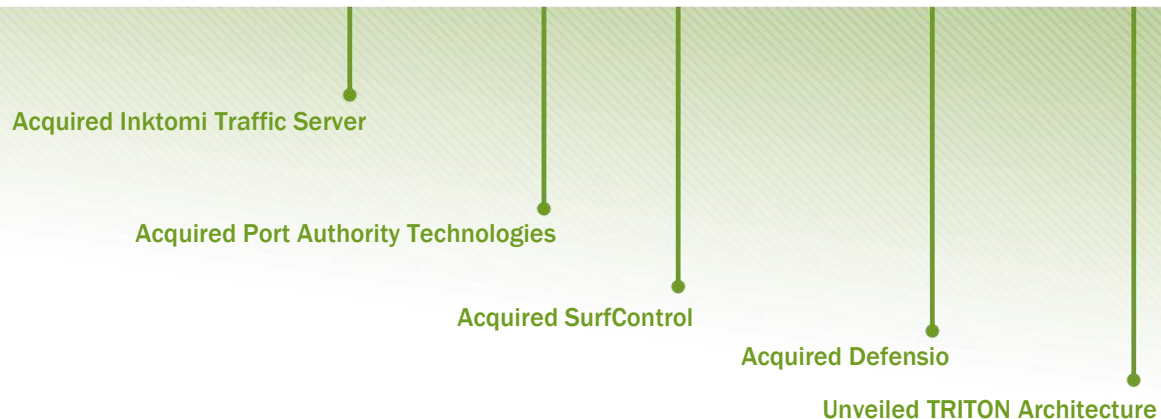
Once Upon a Time...

WebSense Evolution



\$600m Investment in R&D: more than doubled over last three years

Investment & Innovation



Websense Evolution

websense

2007

2008

2009

2010

2011

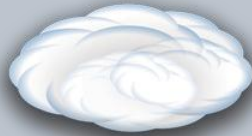
2012 and Beyond

DISCRETE PRODUCTS

UNIFIED ARCHITECTURE

UNIFIED SOLUTION

eXtending THE PLATFORM



websense
TRITON[™]
Unified Security



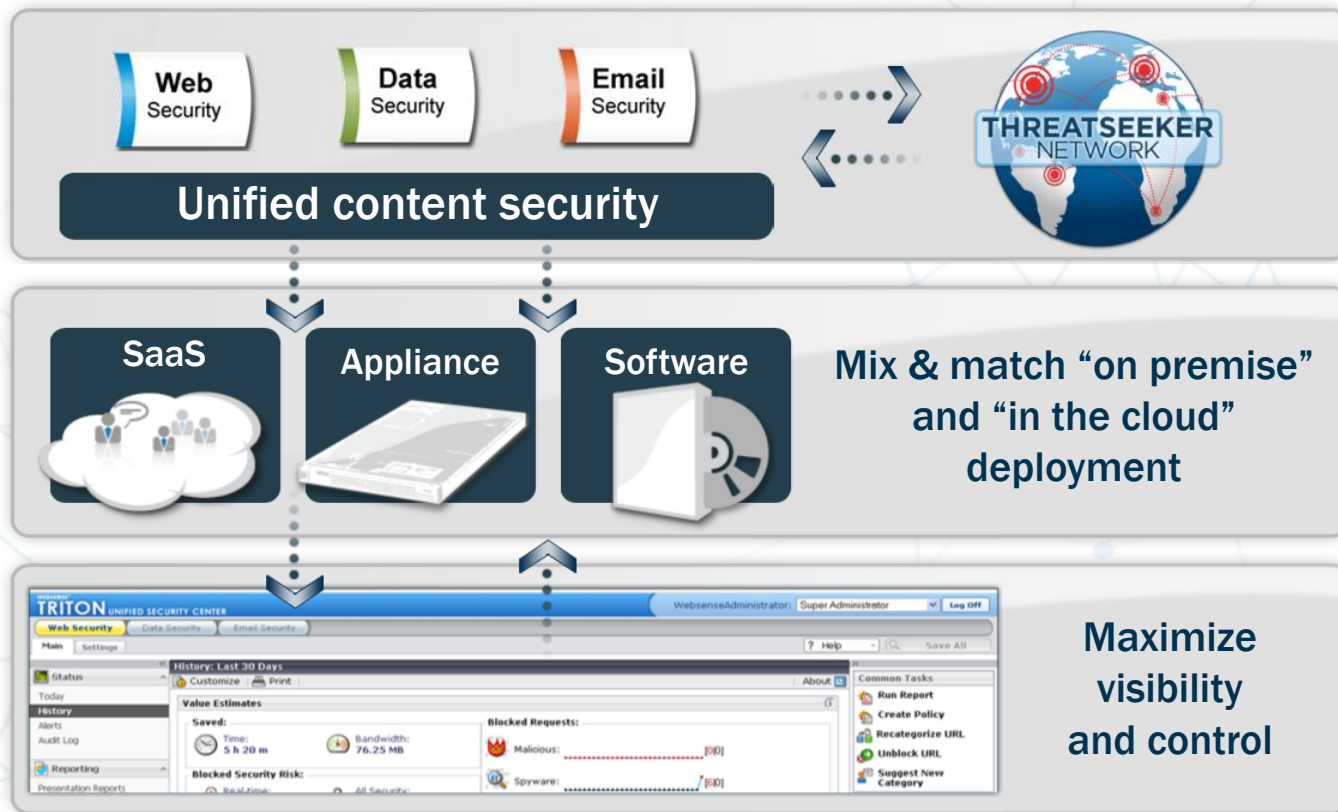
CLOUD



MOBILE



SCALE





websense®
THREATSEEKER NETWORK

Unites over 850M research points.
Analyzes 3-5B requests per day.



websense®
ACE ADVANCED
CLASSIFICATION
ENGINE

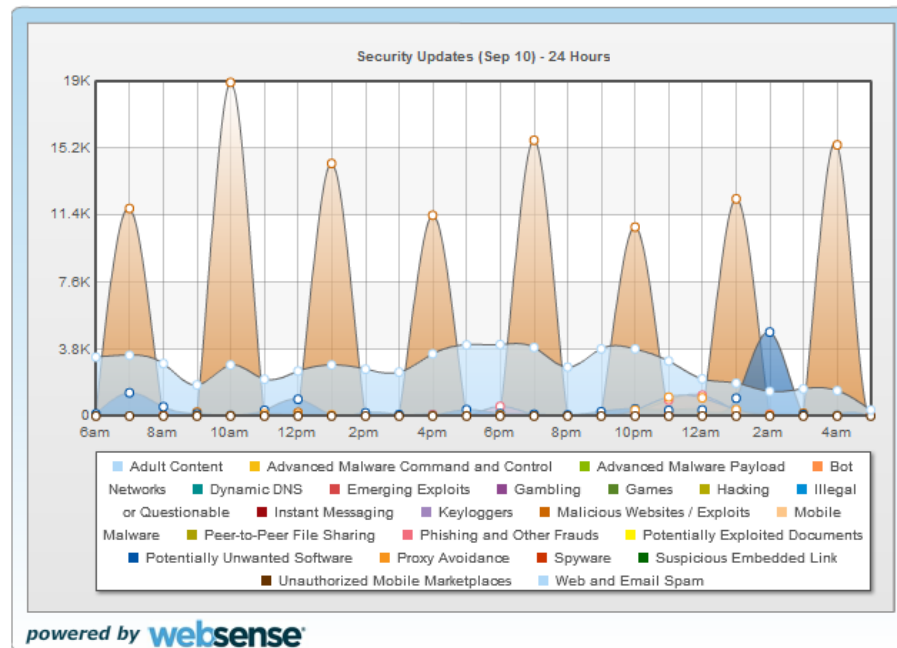


websense®
SECURITY LABS

- Real-time Threat Engines
 - Security, Data, Content
 - Over 10,000 Analytics
- Three Anti-Malware Engines
 - Commercial AV Engine
 - Heuristic Analysis Engine
 - Malicious PDF Engine
- Spear-Phishing, Reputation and Web Link defenses
- Composite Scoring Model



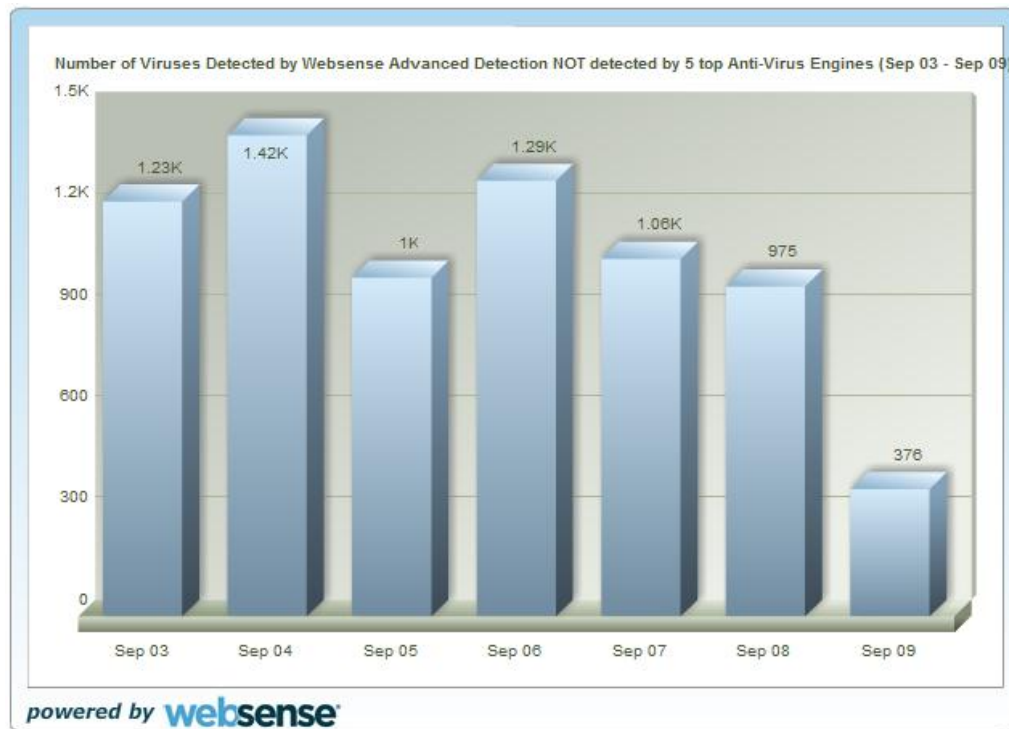
- ThreatSeeker Network Intelligence
 - Over 900M Endpoints, 3-5B Requests/day
 - Facebook Partnership
- Websense Security Labs
 - Global locations working 24/7
- Real-time Updates to ACE
- Predictive Defense
 - Composite scoring inputs
 - Determine defense analysis
 - Convicts via prediction

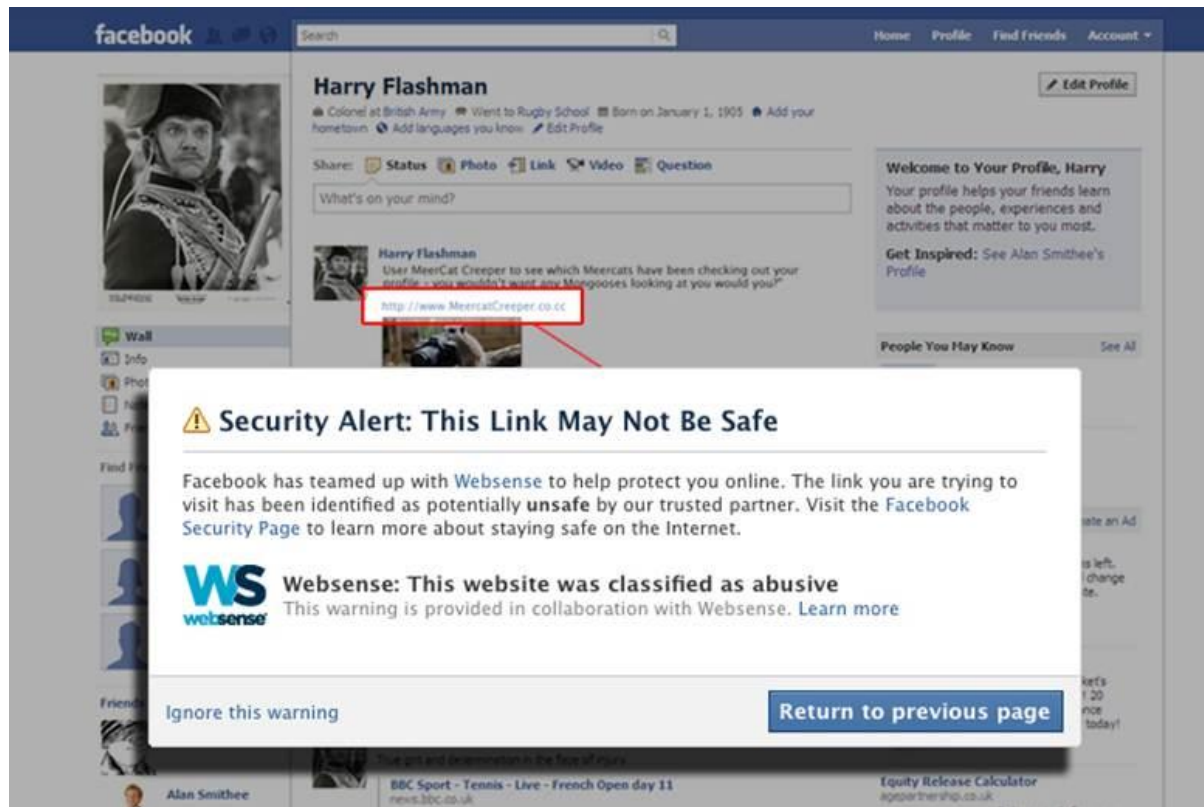


- Five Top AV Engines
- Results Posted Daily
- Security Labs Site
 - AV Test Results
 - Real-time Updates
 - Requests Analyzed
 - Security Blog



websense®
SECURITY LABS





OUR FACEBOOK INTEGRATION

- Exclusive Partnership Protecting Facebook Users since October 2011
- All Facebook users protected
- Free Defensio Facebook App for Consumers
- Provides Websense with visibility into the Facebook private network
- **Unparalleled Intelligence Enhancing ThreatSeeker**

WEB

The **most effective anti-malware protection** from **advanced threats** and **data theft**.

EMAIL

The **most advanced email defenses** against **blended & targeted** attacks (APTs).

DATA

Enterprise DLP with **proven risk reduction** in **5-6 weeks** with user and destination awareness.

CLOUD

The **best protection** for web and email for **any location** at the **lowest TCO & easiest deployment**.

MOBILE

Uniquely effective protection for mobile data from **theft , loss, malicious apps,** and **malware**.



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THREATSEEKER NETWORK
Unites over 850M research points.
Analyzes 3-5B requests per day.



websense®
ACE ADVANCED
CLASSIFICATION
ENGINE



websense®
SECURITY LABS

WEB

- ✓ Advanced threats
- ✓ Modern malware
- ✓ TruWeb DLP
- ✓ Containment
- ✓ Forensic data
- ✓ Social media
- ✓ Cloud apps
- ✓ Viral videos
- ✓ Visibility
- ✓ Productivity
- ✓ Compliance
- ✓ TruHybrid

EMAIL

- ✓ Targeted attacks
- ✓ Blended threats
- ✓ URL sandboxing
- ✓ Anti-malware
- ✓ Anti-spam
- ✓ TruEmail DLP
- ✓ Cloud cleansing
- ✓ Encryption services
- ✓ Archiving
- ✓ Image analysis
- ✓ Compliance
- ✓ TruHybrid

DATA

- ✓ DLP methodology
- ✓ Risk reduction
- ✓ Data registration
- ✓ 1,100+ policies
- ✓ Data-in-motion
- ✓ Data-in-use
- ✓ Data-at-rest
- ✓ Scan/remediate
- ✓ User/dest. aware
- ✓ End-point agent
- ✓ Portable encrypt.
- ✓ Compliance

CLOUD

- ✓ Web & email
- ✓ Advanced threats
- ✓ Targeted attacks
- ✓ URL sandboxing
- ✓ Social media
- ✓ Cloud apps
- ✓ Viral videos
- ✓ Monitor & protect web presence
- ✓ Visibility/productivity
- ✓ Global ops centers
- ✓ ISO 27001

MOBILE

- ✓ Cloud service
- ✓ Malicious apps
- ✓ Mobile malware
- ✓ Mobile DLP (email)
- ✓ Web security
- ✓ App controls
- ✓ Device mgmt.
- ✓ BYOD programs
- ✓ Corporate devices
- ✓ Reporting/inventory
- ✓ Global ops centers
- ✓ ISO 27001



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THREATSEEKER NETWORK
Unites over 850M research points.
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ACE ADVANCED
CLASSIFICATION
ENGINE



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SECURITY LABS

TRITON Security in Action

Threat & Solution Examples

TRITON™

— Web security

— Email security

— Data security

— Mobile security

Example #1

Email Security Evasion

TRITON™

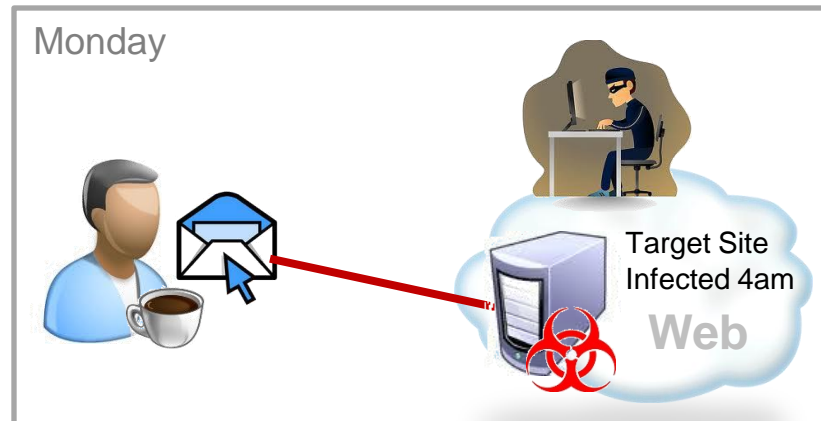
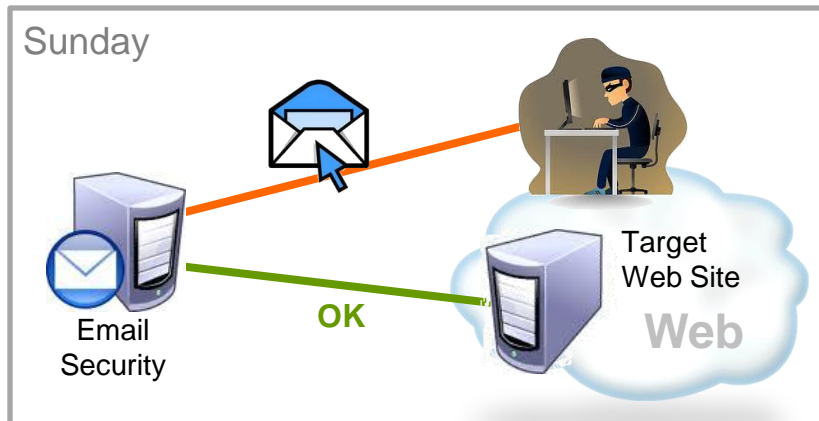
— Web security

— Email security

— Data security

— Mobile security

- Spear-phishing technique
 - Embedded web link in email lure
 - Time malware infection after delivery
 - Email security sees a clean link



Example #2

Network Invasion / Privilege Escalation

TRITON™

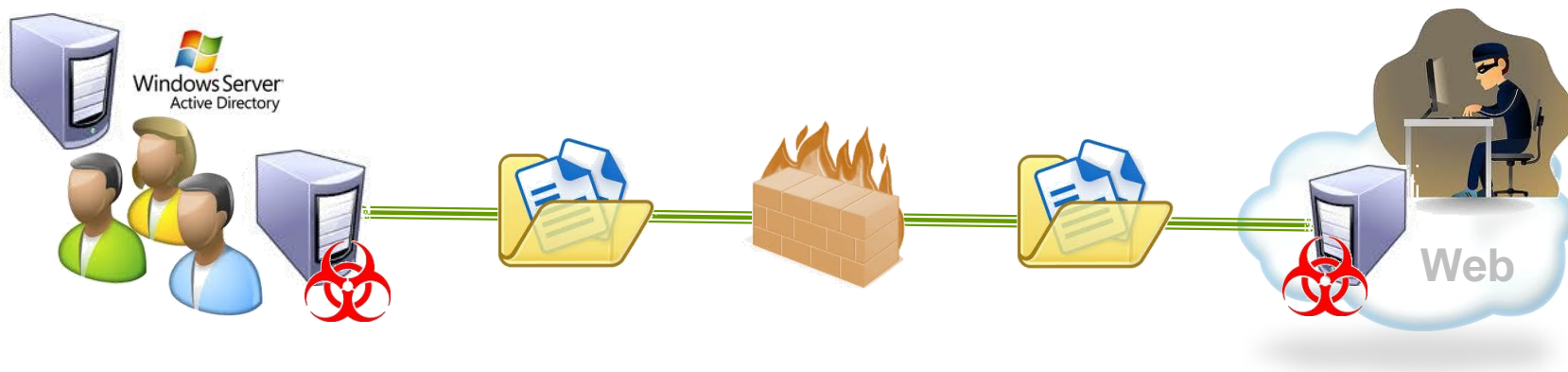
— Web security

— Email security

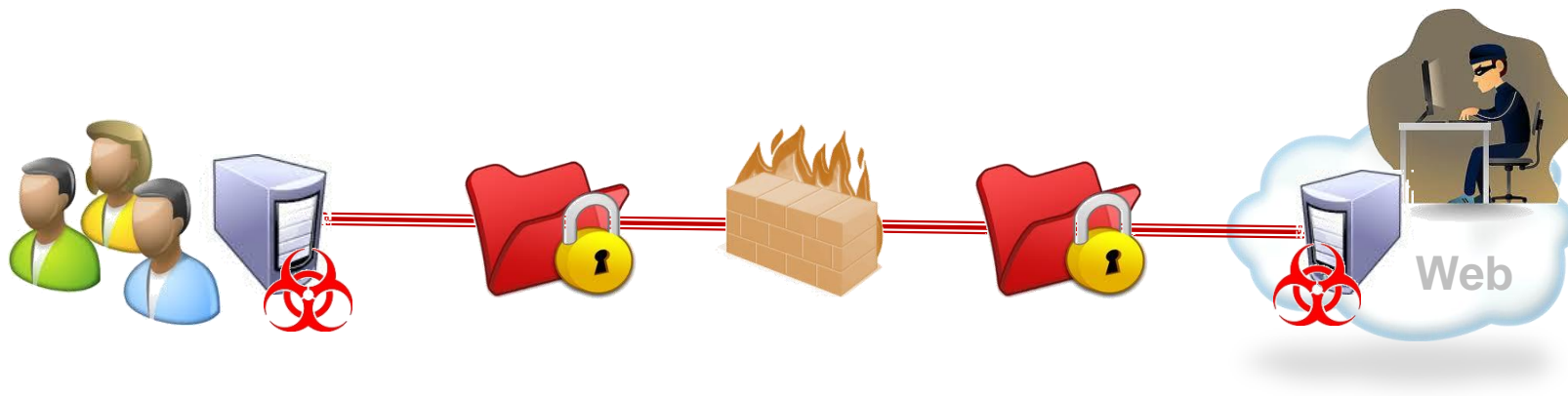
— Data security

— Mobile security

- Password files
- Active Directory/SAM database
- Expand reach/control within target
- First priority once inside



- Proprietary encryption
- Cloak comms & data theft
- Crimeware toolkit enabled
- Blind spot for defenses





Advanced Classification Engine

Predictive
Inline
Analytical
Engine

10 New Defenses in ACE to protect against Advanced Threats & Data Theft

New ACE Analytics/Defenses:

Advanced Malware Payloads ←

Potentially Exploited Documents ←

Mobile Malware ←

Criminal Encrypted Uploads →

Files Containing Passwords →

Advanced Malware Command & Control →

Unauthorized Mobile Marketplaces →

OCR (Optical Character Recognition) →

Behavioral (Drip) DLP →

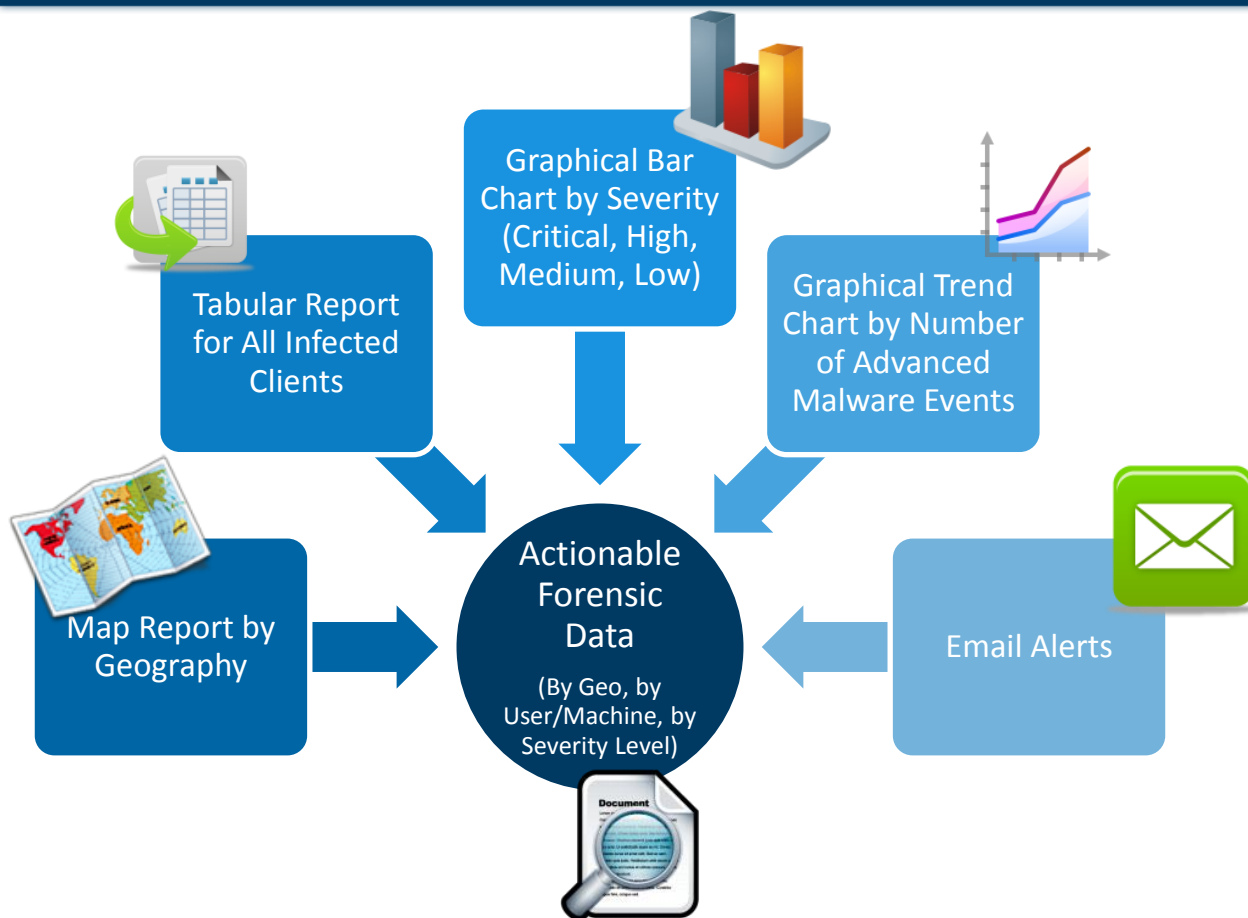
Geo-Location →

**INBOUND
WSG**

**OUTBOUND
WSG**

**OUTBOUND
WSGA**

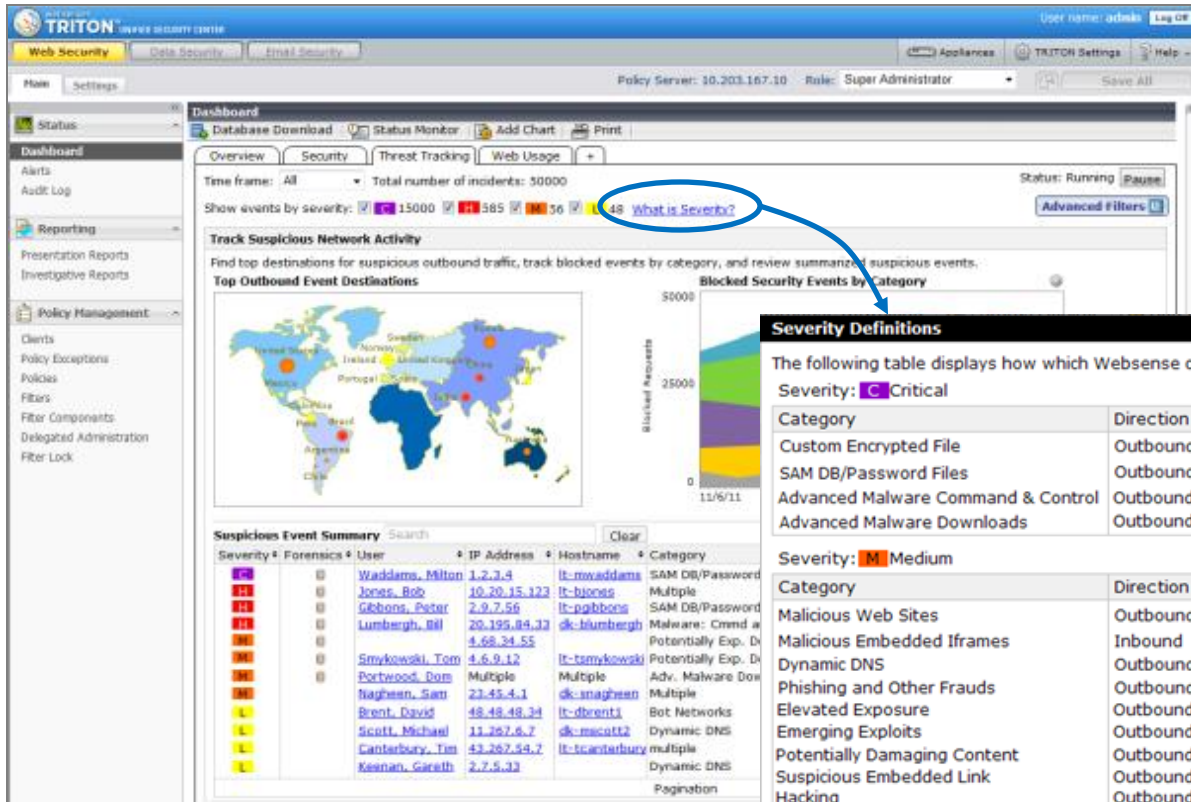
Advanced Malware Reporting Flow



Designed to draw you to actionable data

- Identifies client to be remediated
- Captures data that was attempted to be stolen
- Reports to raise awareness of attacks in progress

Threat Dashboard



Severity Definitions

The following table displays how which Websense categories trigger malicious activity and how they are mapped.

Severity: **C** Critical

Category	Direction
Custom Encrypted File	Outbound
SAM DB/Password Files	Outbound
Advanced Malware Command & Control	Outbound
Advanced Malware Downloads	Outbound / Inbound

Severity: **H** High

Category	Direction
Potentially Exploited Documents	Outbound
Bot Networks	Outbound / Inbound
Keyloggers	Outbound / Inbound

Severity: **M** Medium

Category	Direction
Malicious Web Sites	Outbound / Inbound
Malicious Embedded Iframes	Inbound
Dynamic DNS	Outbound
Phishing and Other Frauds	Outbound / Inbound
Elevated Exposure	Outbound
Emerging Exploits	Outbound / Inbound
Potentially Damaging Content	Outbound / Inbound
Suspicious Embedded Link	Outbound
Hacking	Outbound / Inbound

Severity: **L** Low

Category	Direction
Illegal or Questionable	Outbound
Proxy Avoidance	Outbound / Inbound
URL Translation Sites	Outbound
Spyware	Outbound / Inbound
Potentially Unwanted Software	Outbound / Inbound
Web and Email Spam	Outbound / Inbound
Malicious Embedded Link	Inbound

Close

Dashboard > Threat Tracking > Event Details for Jones, Bob

573 incidents

Search [Clear]

Date Range: Last day
Last refresh: 29 Aug. 2011, 06:16:16 PM

Severity	Forensics	IP Address	Hostname	Destination	Category	Incident Time	Country	Direction
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Malware: Command and Control	29 Aug. 2011, 06:16:05 PM	China	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Advanced Malware Downloads	29 Aug. 2011, 06:16:02 PM	Russia	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Advanced Malware Downloads	29 Aug. 2011, 06:15:54 PM	Russia	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.botdetection.com	Bot Networks	29 Aug. 2011, 06:11:17 PM	Canada	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Malware: Command and Control	29 Aug. 2011, 06:02:05 PM	China	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Malware: Command and Control	29 Aug. 2011, 06:02:01 PM	China	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Malware: Command and Control	29 Aug. 2011, 06:01:15 PM	China	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Malware: Command and Control	29 Aug. 2011, 06:01:11 PM	China	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Malware: Command and Control	29 Aug. 2011, 06:01:08 PM	China	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Malware: Command and Control	29 Aug. 2011, 05:58:11 PM	China	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Malware: Command and Control	29 Aug. 2011, 05:58:06 PM	China	Outbound
[H]	[H]	10.20.15.123	lt-bjones	www.datatheft.com	Malware: Command and Control	29 Aug. 2011, 05:17:49 PM	China	Outbound

Incident Details

Severity: High
Category: Malware: Command and Control
Threat Name: China C&C 2011
Threat Intent: Network Invasion
Platform: Win32
Threat Type: Malware
Filtering Action: Block
Filtering Reason: Security Threat
Incident Time: 29 Aug. 2011, 06:16:05 PM

[See more information about this threat on Websense ACEInsight](#)

Forensic Data

Source: Jones, Bob
Destination: www.datatheft.com
File: \\10.20.15.123\c:\corporate files\finance social security numbers.doc (27 KB)
MIME Headers.txt (10 B)

Parameters and Body

Field	Value
EVENTTARGET	upload
_VIEWSTATE	/wEPDwUJODMxNTYNDExZGQpQWw
	/LYapv1CMcbNp82jHxzWNPQ==

Body:
_EVENTTARGET=upload_VIEWSTATE==/wEPDwUJODMxNTYNDExZGQpQWw
/LYapv1CMcbNp82jHxzWNPQ==

Policy Enforcement

User: bjones
Source IP Address: N/A
Port: 80
Hostname: lt-bjones
Destination IP Address: 231.233.12.13
Protocol: HTTP
Full URL: www.datatheft.com
Country: China

Request Origin and Destination

Active Policy: Default
Database Category: Advanced Malware Detection
Scanning Category: Malware: Command and Control
Role: SuperAdministrator

Return

- Know **WHO** was compromised
- Know **HOW** the malware operates (intent)
- Know **WHERE** the data was being sent
- Know **WHAT** was prevented from being stolen

Analysis Report:

- ⚠ HTTP traffic to server hosting malicious content
- ⚠ Downloads malicious executable file(s)
- ⚠ HTTP traffic shows characteristics of a malware family (Zeus)
- ⚠ Drops and runs executable file(s) in a directory of the user profile
- ⚠ Drops and runs executable file(s) in a Windows system directory
- ⚠ Injects and executes code in remote process
- ⚠ Adds a registry key to automatically start an executable when the system starts
- ⚠ HTTP traffic to server hosting potentially malicious content
- ⚠ Writes to the filesystem in a Windows system directory
- ⚠ Writes to the filesystem in a directory of the user profile often used by malware
- ⚠ Executes the Windows command shell program



Analysis Result:



Analysis Events:

List of requested HTTP URLs:

URL	IP	Method	Status	MIME	Analysis	Cat
s2.streamscene.cc/mspeed.exe	? 94.23.40.65	GET	200	application/x-msdos-program application/x-dosexec		⚠ Potentially Damaging Con
tradingcenter.cc/NOT_ZUES/gate.php	? 217.23.4.77	POST	200	text/html; charset=UTF-8 application/octet-stream		⚠ Malicious Web Sites
www.google.com/webhp	? 74.125.226.80	GET	200	text/html; charset=UTF-8 text/html		⚠ Search Engines and Portal
tradingcenter.cc/NOT_ZUES/config.bin	? 217.23.4.77	GET	200	application/octet-stream application/octet-stream		⚠ Malicious Web Sites
tradingcenter.cc/NOT_ZUES/gate.php	? 217.23.4.77	POST	200	text/html; charset=UTF-8 application/octet-stream		⚠ Malicious Web Sites
tradingcenter.cc/snapbn/ip.php	? 217.23.4.77	GET	200	text/html; charset=UTF-8 text/plain		⚠ Malicious Web Sites
tradingcenter.cc/NOT_ZUES/gate.php	? 217.23.4.77	POST	200	text/html; charset=UTF-8 application/octet-stream		⚠ Malicious Web Sites

Example #3

Insider Data Theft

TRITON™

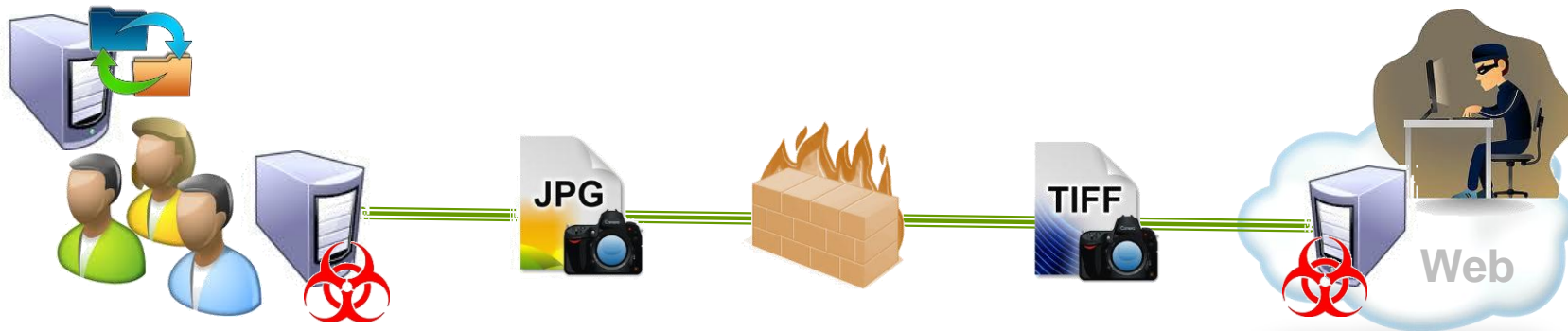
— Web security

— Email security

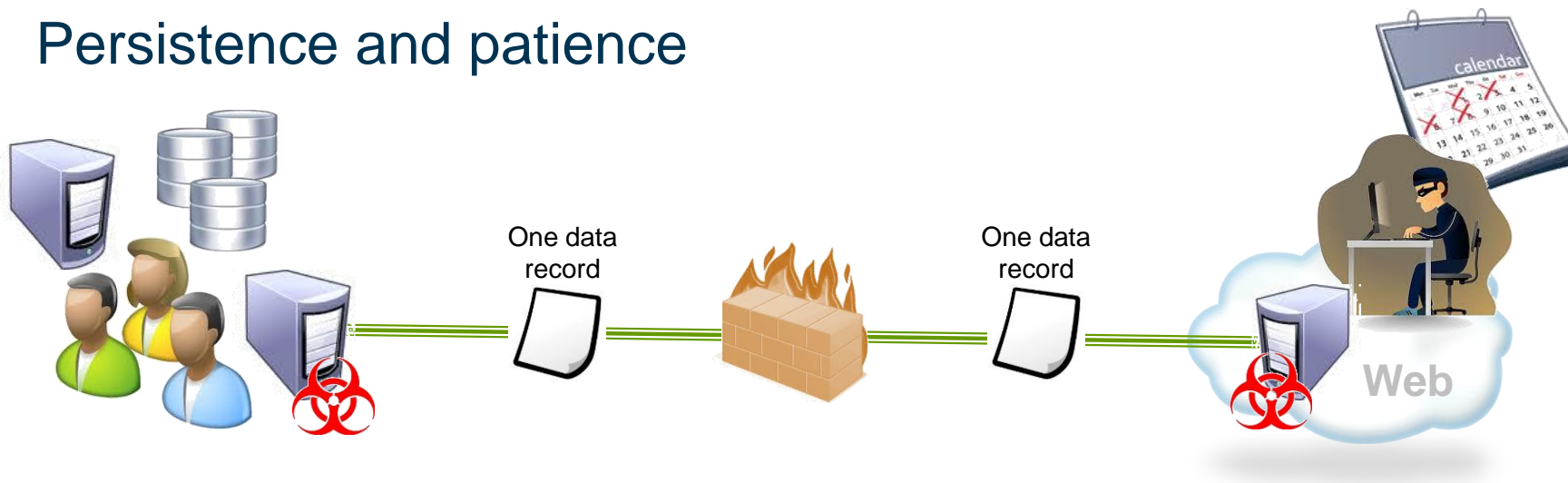
— Data security

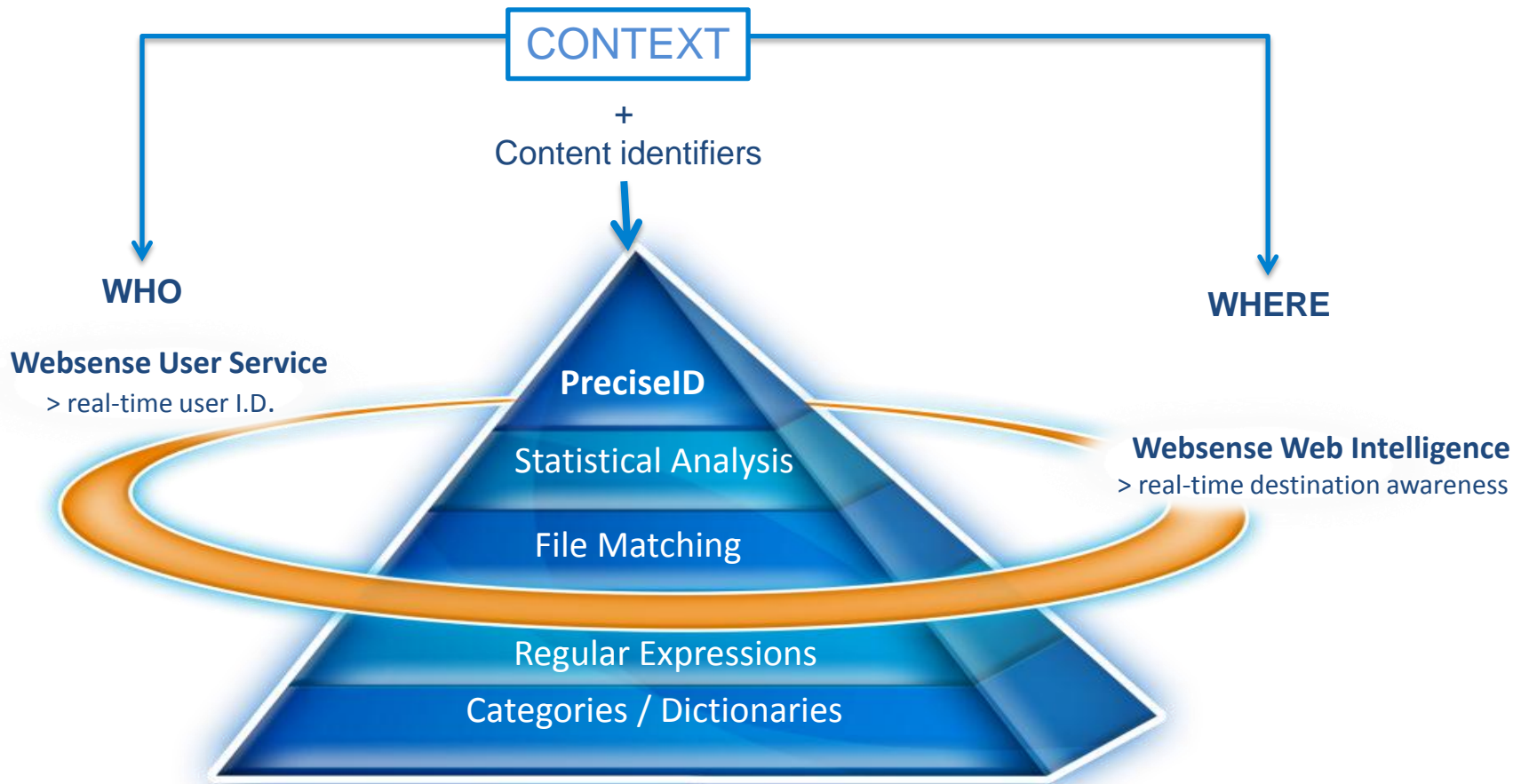
— Mobile security

- Image files
- Confidential information
- Smart phone pictures
- Blind spot for defenses



- Remain below the radar
- Low record count per request/incident
- Steal data in small chunks
- Persistence and patience





NEW in Data Security v7.7

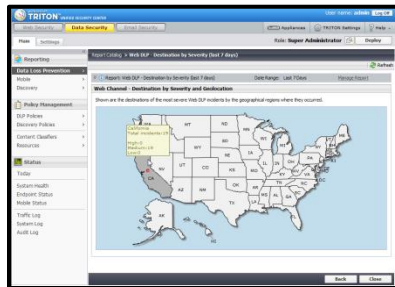
websense



Drip DLP

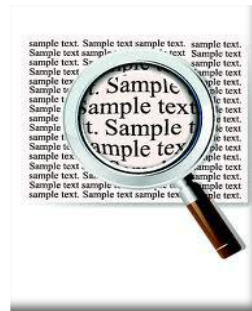
Detect suspicious
“low and slow”
movement of data

(e.g. 5 SSNs in
an hour)



Outbound by Geographic Destination

Create DLP policies
by geo for “high
profile targets” and
high risk geos



OCR

Extract text from
images and scanned
documents for
analysis

No other vendor
can do OCR for data
in motion!



Machine Learning

Ease discovery
projects by
automatically
finding content that
is similar to the
content we have
learned in the past



Accidental



EMPLOYEE EDUCATION

Predefined Templates, Notifications/confirm,
Self Release



Intentional
(Non-Malicious)



VISIBILITY

Unique matches, Actions by Incident Severity, Source
and Destination Awareness, Drip DLP



Malicious Insider



ADVANCED DETECTION

Drip DLP, App control, OCR Detection



Malicious Outsider



WEBSENSE SECURITY LABS (ACE)

SSL Decryption, URL categories, Geo Location,
Unauthorized/Proprietary encryption

- Industrial Espionage
 - Malicious Insider
 - Targeted engineering blueprints
 - Stolen data sent to major rival over an extended period
 - Filed legal case in the UK High Court

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England Northern Ireland Scotland Wales UK Politics Education

Audi Service

24 October 2012 Last updated at 16:33 GMT 139 Share

Dyson claims rival Bosch placed mole within head office

Engineering firm Dyson has accused German rival Bosch of placing a mole within its headquarters in Wiltshire.

Sir James Dyson's company filed proceedings at the High Court claiming an employee passed company secrets to Bosch for up to two years.

The alleged spy was one of 100 engineers working on Dyson digital motors at its Malmesbury facility.

The motors are a key component in the firm's cordless technology and Airblade hand dryer.

Dyson also claims secrets were passed to Bosch's Chinese motor manufacturer and Bosch's vice president Dr Wolfgang Hirschburger was aware of the engineer's employment.



Dyson said it had spent more than £100m developing motors which powered its vacuums

Related Stories

British industry needs reinvention

Seven Advanced Threat Stages

websense®



Recon



Lure



Redirect



**Exploit
Kit**



**Dropper
File**



**Call
Home**



**Data
Theft**

Seven Advanced Threat Stages



Recon



Lure

AWARENESS

- Web & Email
- Facebook, Blogs, Tweets
- Spear-phishing
- Trusted entry
- Targeted
- Dynamic
- Timed



Redirect



**Exploit
Kit**

REAL-TIME ANALYSIS

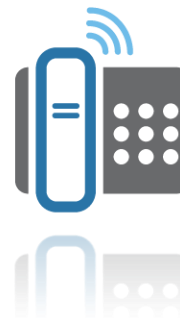
- Browser code & active scripts
- Link analysis
- Exploit analysis
- Composite scoring/ratings
- Predictive

INLINE DEFENSES

- App analysis
- Malicious PDFs
- Multiple AVs
- File compress.
- Dynamic DNS
- Botnet & CnC comms



**Dropper
File**



**Call
Home**

CONTAINMENT

- Data theft defenses
- Embedded DLP
- Data capture
- Geo-location
- Forensic details & reporting
- Alerts/severity



**Data
Theft**

Conclusion

Final Thoughts and Q&A

TRITON™

— Web security

— Email security

— Data security

— Mobile security



TRITON



**Advanced
Classification
Engine (ACE)**



**ThreatSeeker
Network**

Analysts Recognize Websense

websense

Gartner



2012 **Secure Web Gateway** MQ:
Leaders Quadrant



2011 **Content-Aware Data Loss Prevention**
MQ: Leaders Quadrant



Secure Web Gateway Software
2011 Worldwide Market Share Leader

INFO-TECH
ANALYTICS GROUP



2012 **WCF** Vendor Landscape:
Champion



2012 **DLP** Vendor Landscape:
Champion & Trend Setter Award

F R O S T & S U L L I V A N



2010 Global **Content Filtering** Products
Market Share Leadership of the Year Award



Web Filtering Products 2011 Competitive
Landscape: Market Leader



Web Filtering Products
2011 Market Share Leader

FORRESTER



Data Leak Prevention Suites
Wave, Q4 2010:
Recognized Leader

Gartner



2012 **Secure Email**
Gateway MQ:
Visionaries Quadrant

EMA



Hosted Message Security
Services Radar Report:
Value Leader
Best Hybrid Strategy Award

INFONETICS
RESEARCH



Integrated Content
Security Gateways
CY11 Worldwide
Market Share Leader

IDC
Analyze the Future



2012 IDC MarketScape:
WW Web Security
Products:
Leaders



Web Security:
2011 Overall Market
Share Leader



Web Security Appliance
2011 Market Leader



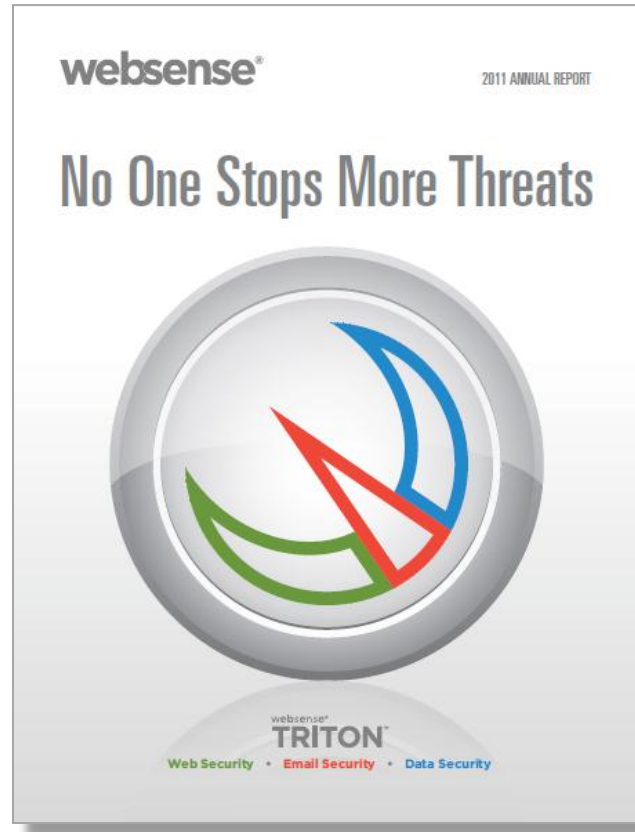
Web Security Software
2011 Market Leader



THE RADICATI GROUP, INC.
A TECHNOLOGY MARKET RESEARCH FIRM



2012 Corporate **Web Security**
Market Quadrant: Top Player



Thank You for Listening

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Any Questions?