Applied Intelligence for Effective Risk Management

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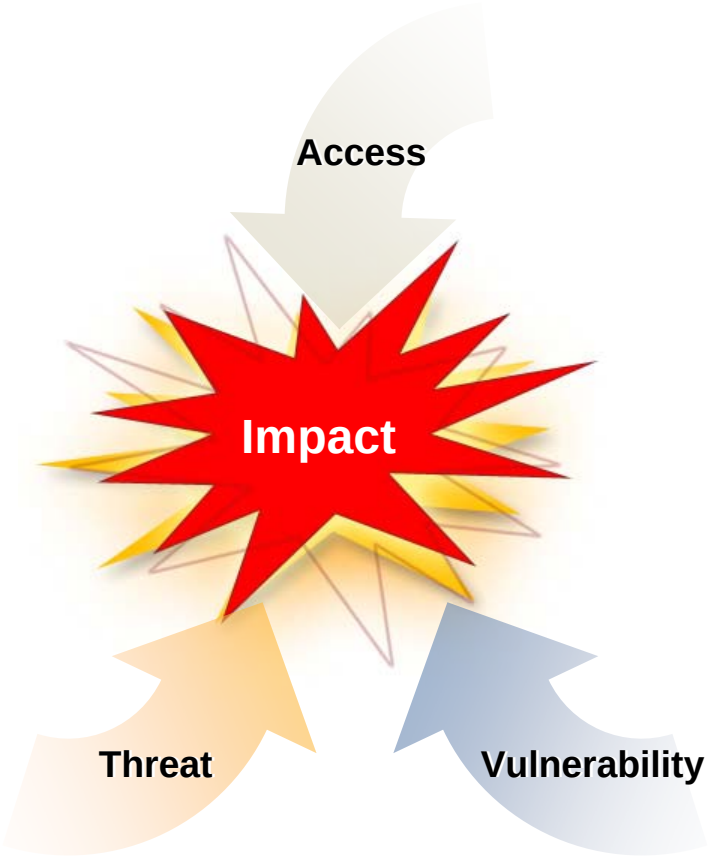
Director of Product Strategy

Where it all comes together.

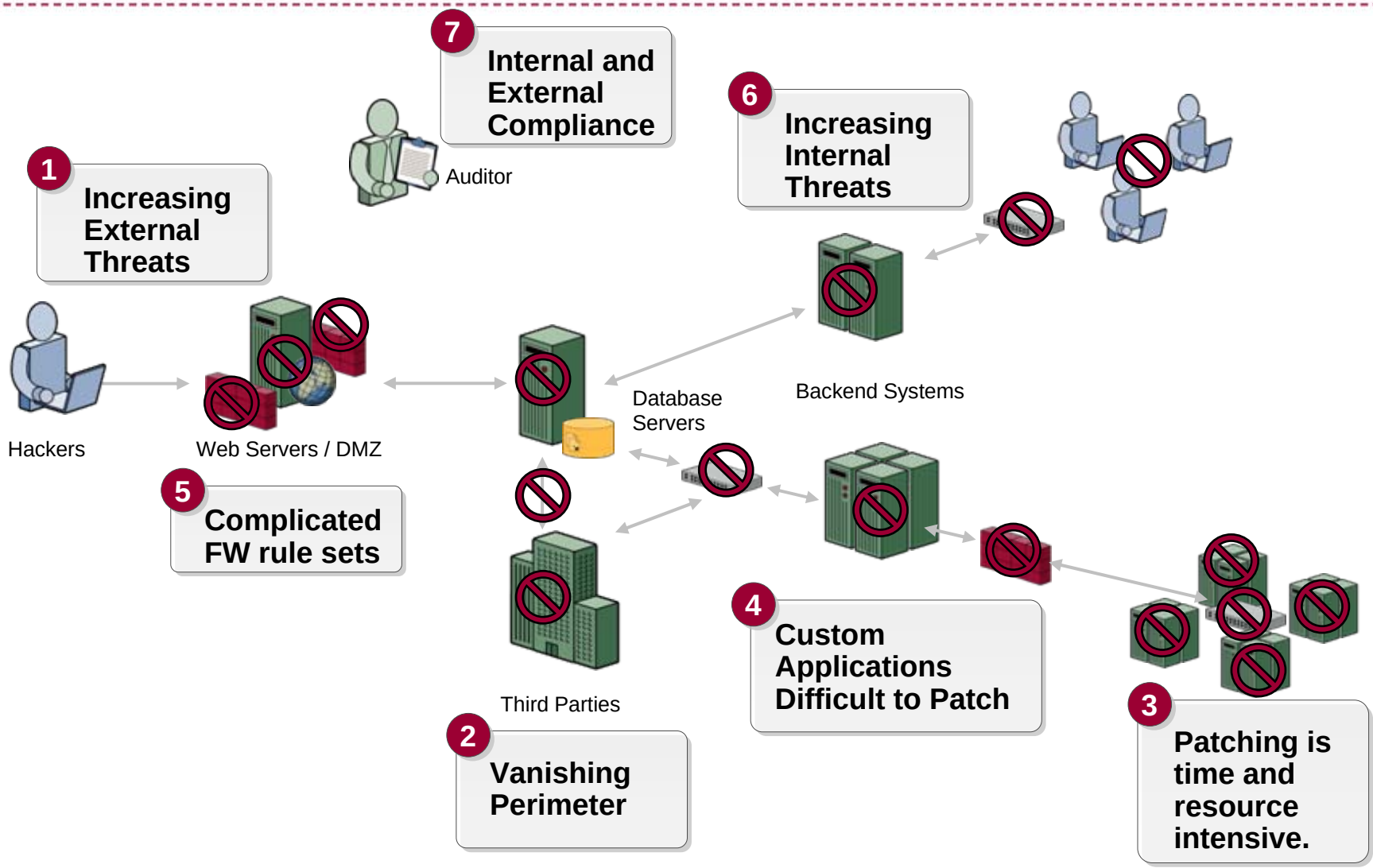
How Do We View Risk?

- Risk is the potential harm that may arise from some present process or from some future event
- We define information security risk as the probability that a threat will exploit a vulnerability and cause an impact
- Risk Management: A vulnerability is not an issue per se unless a threat exploits it and causes an impact. Risk management therefore ultimately involves minimizing the impacts.



Source: Holton, Glyn A. (2004). Defining Risk, Financial Analysts Journal.

Information Security in the Real World = Uncertain Risk



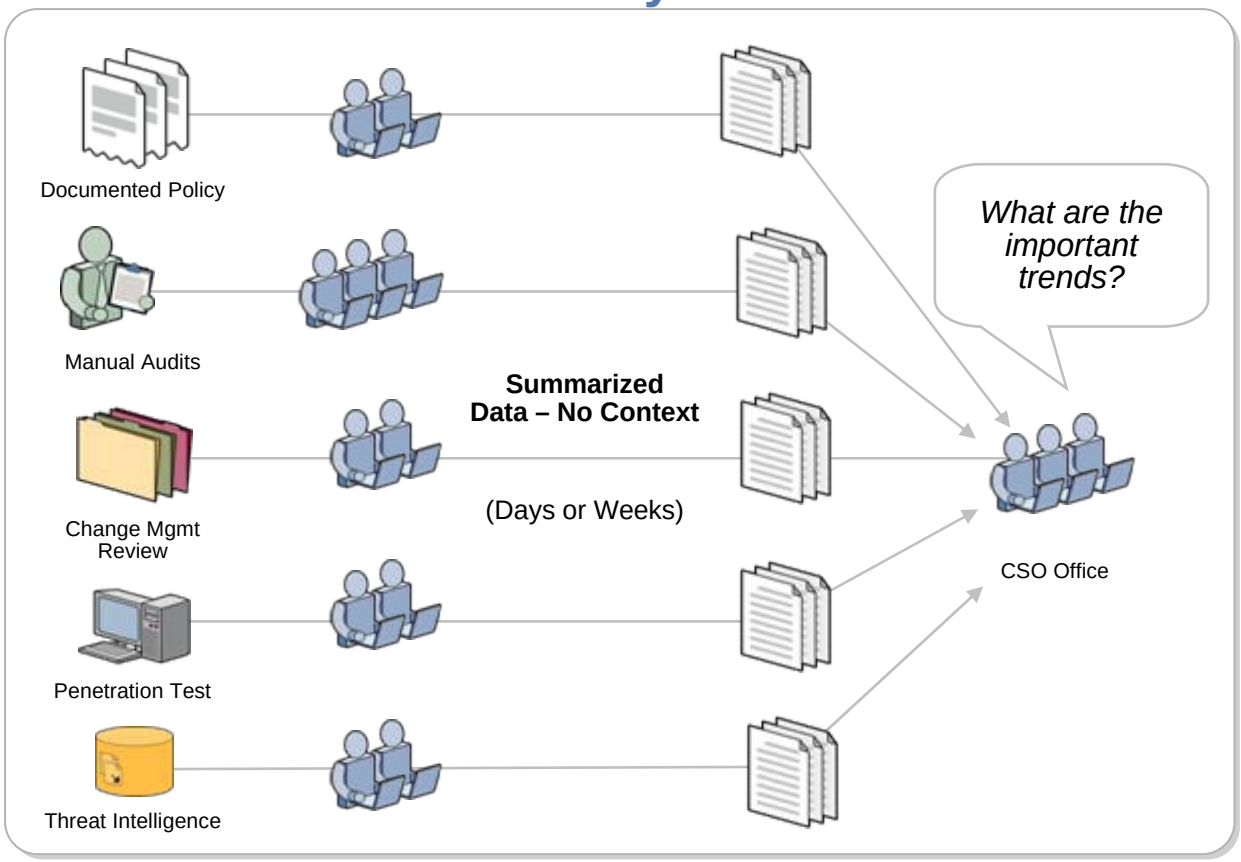
Is Your Information Security Risk Being Managed?

Some questions to ask:

1. Do you know your current level of risk exposure? Is it improving or getting worse?
2. Can you identify your top security risks including which assets are at risk and top violations?
3. How susceptible are you to the latest worm or virus outbreak?
4. Are you in compliance with your documented security policies?
5. How effective are your security initiatives and investments?

Risk Management Methodology

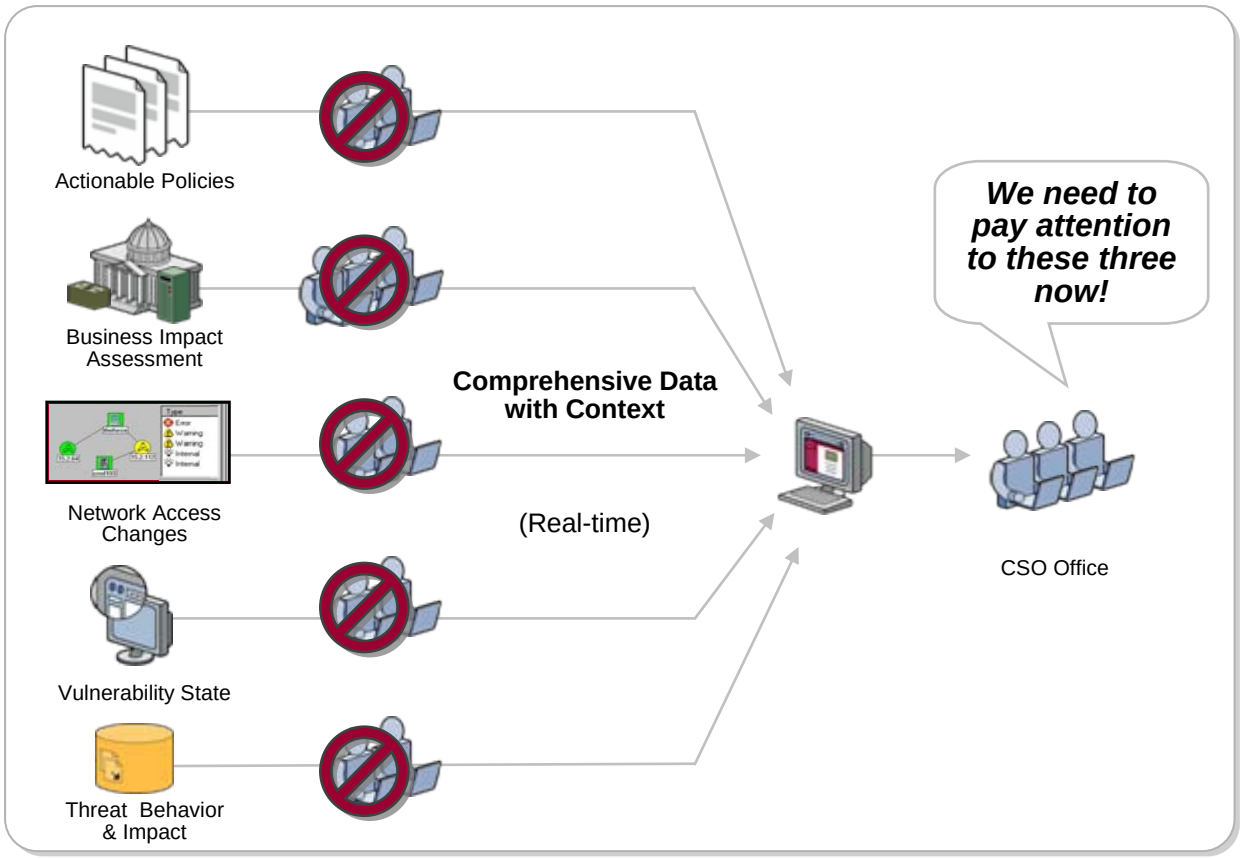
Today



+ Point in time projects
+ Disparate activities in unconnected silos
+ Extremely labor intensive
+ Multiple outputs with little context
+ Decision-making is extremely difficult and highly reactive

Risk Management Methodology

What it Can Be



+ Information gathered in real time
+ Information consolidated from various sources
+ Analysis dynamically generated with minimal labor
+ Consolidated Analysis
+ Better, more proactive decision-making

A Comprehensive Approach Is Required

A risk-based approach

+ ***Quantifies*** asset value to the business
+ ***Identifies*** likely attack sources and access paths;
+ Helps ***Visualize*** business-impact view of threats and vulnerabilities
+ ***Addresses*** compliance requirements with regulations such as Sarbanes-Oxley, HIPAA, Gramm-Leach-Bliley, Basel II, etc.

Effective risk management

+ Integrates security intelligence to ***identify*** threats
+ Maps risk prioritization based on asset values to ***quantify*** risk
+ Adheres corporate information security policies, procedures, and standards
+ Allows organizations to ***visualize*** impact before and after network and system changes and once newly discovered vulnerabilities or threats are identified

Security Risk Profiling Service Announcement

VeriSign Introduces the first Comprehensive Service to Help Enterprises Identify, Visualize and Quantify Information Security Risks in order to Make Better Operational and Financial Decisions.

By taking a holistic view of threats, vulnerabilities, network access policies, and potential business impacts, the service allows customers to dynamically generate a risk score including financial impacts, to simulate and model the effects of changes, and to measure compliance with both internal and external policies and regulations.

VeriSign and SkyBox Security

VeriSign delivers world class services to enterprise customers by leveraging industry-leading technology, trained, experienced experts, structured processes, and unique intelligence.

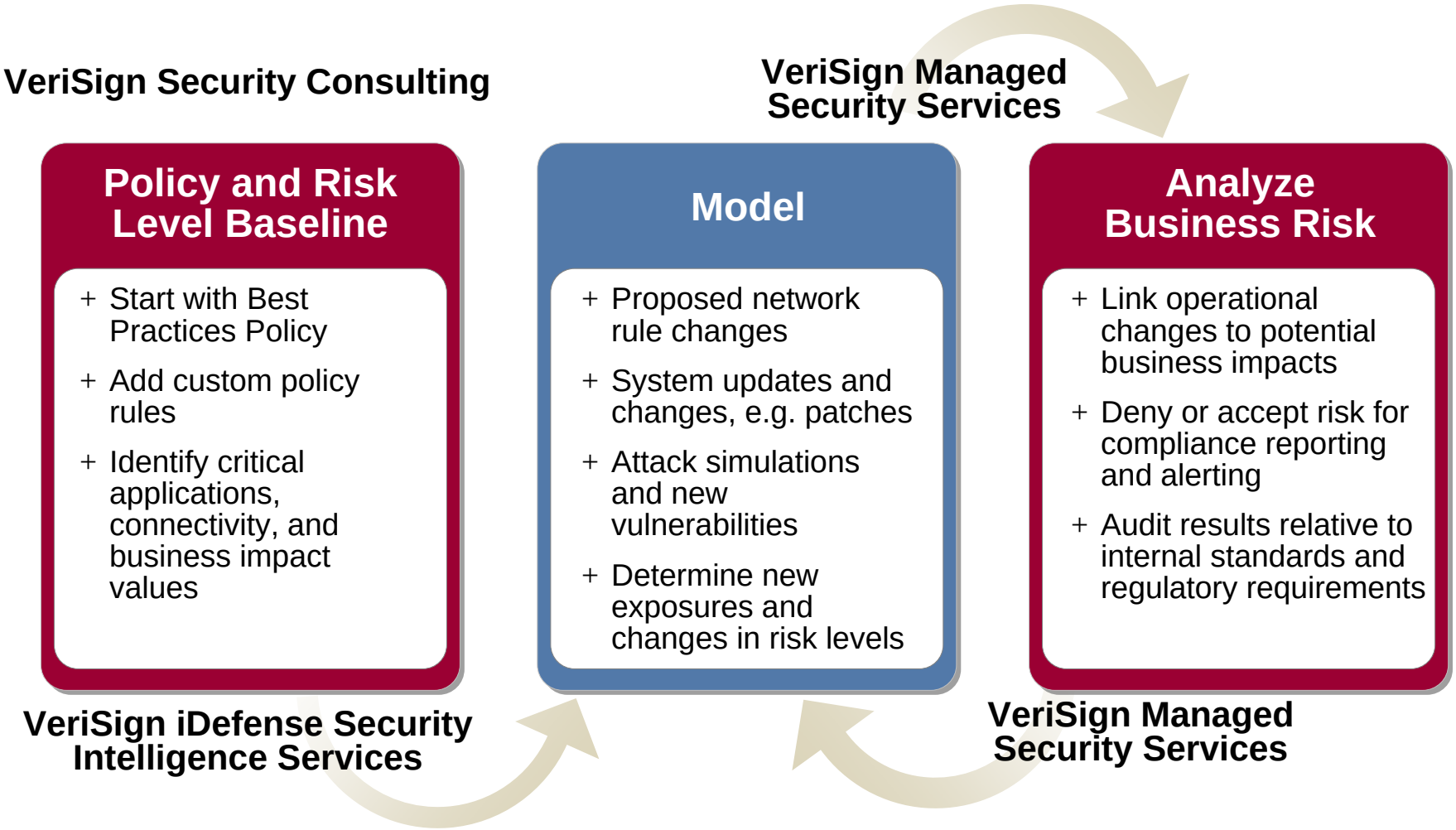
VeriSign

- Global Security Consultants that perform hundreds of annual risk and compliance assessments
- MSS service and delivery model that dramatically simplifies implementation and ongoing management
- Unique ability to identify and understand evolving threats including iDefense Security Intelligence
- Leverages Atlas infrastructure that supports .com and .net
- Best-in class Security Portal

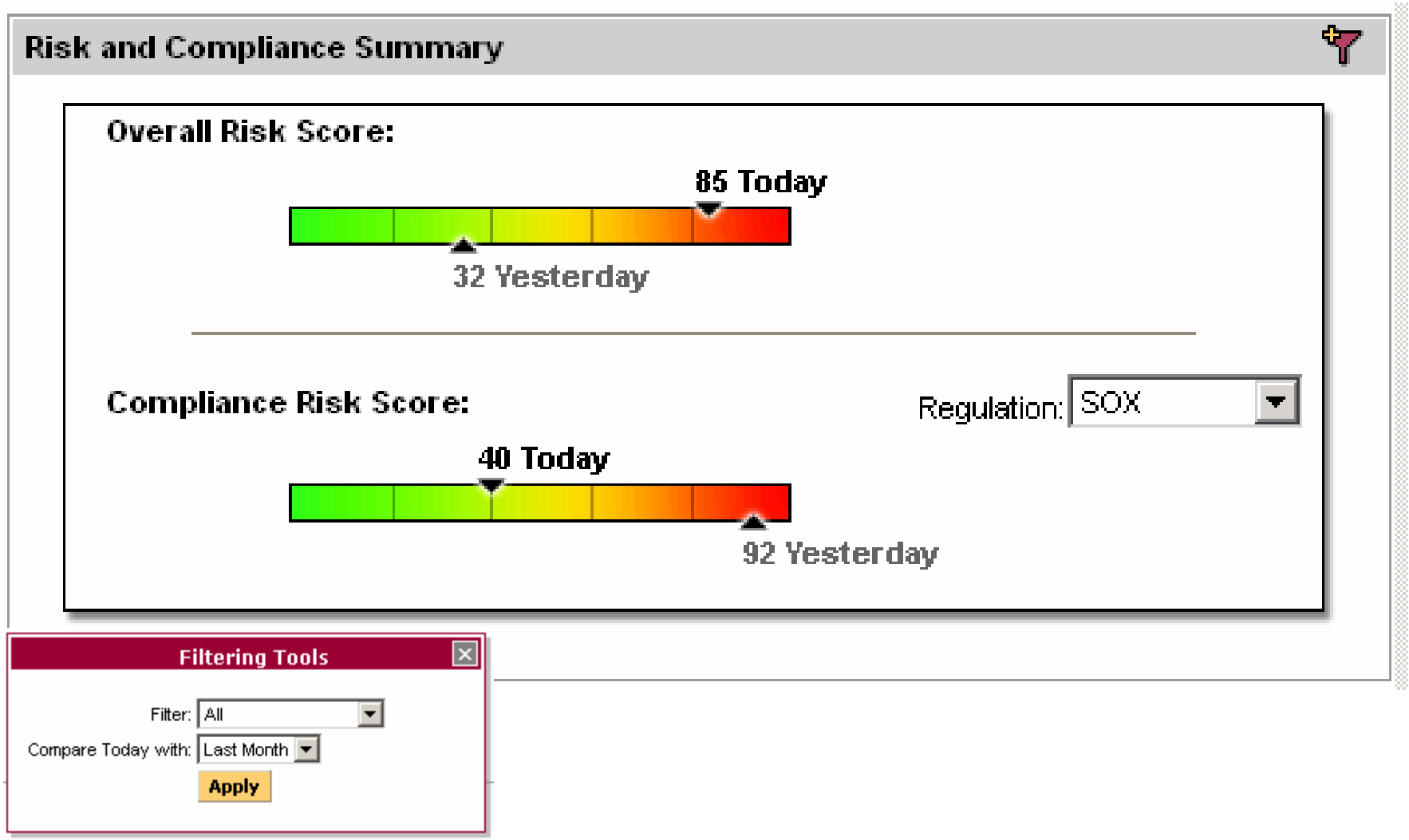
skybox security

- Recognized industry-leading technology with a variety of unique capabilities including:
  - The ability to take feeds from a variety of technologies and vulnerability management tools
  - Sophisticated modeling, simulation, and visualization capabilities
  - Modules designed to track compliance with best standards and with a number of government and industry regulations

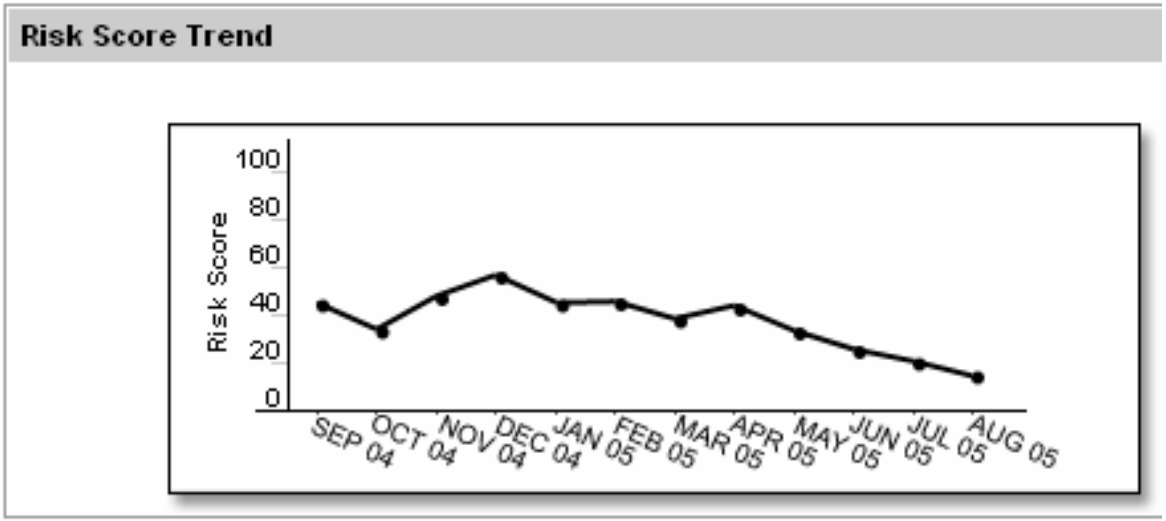
VeriSign Approach to Risk Management

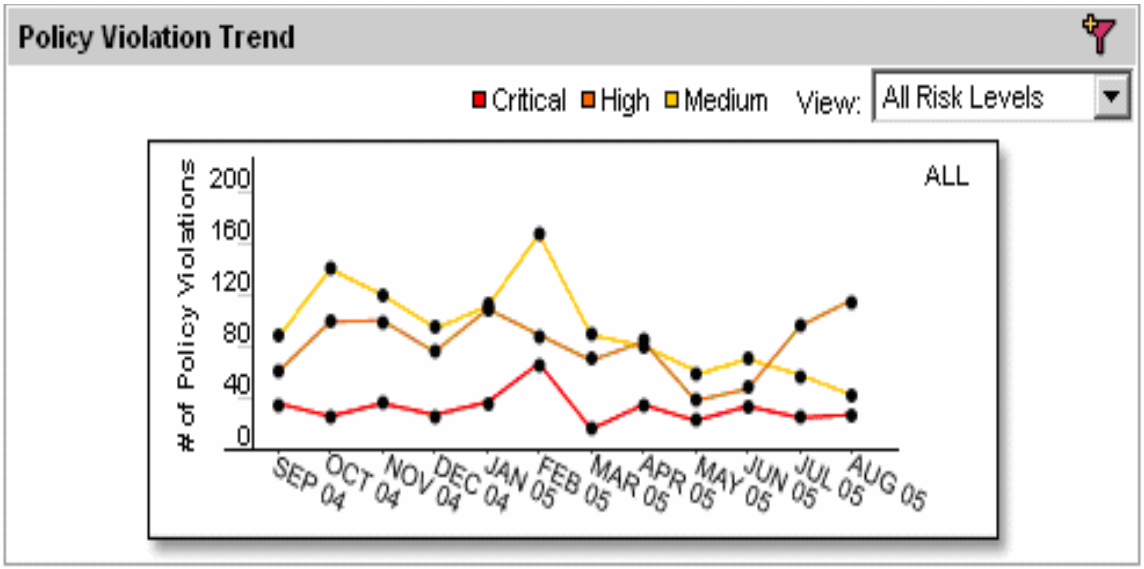


Question 1a. Do you know your current level of risk exposure?



Question 1b. Is it improving or getting worse?





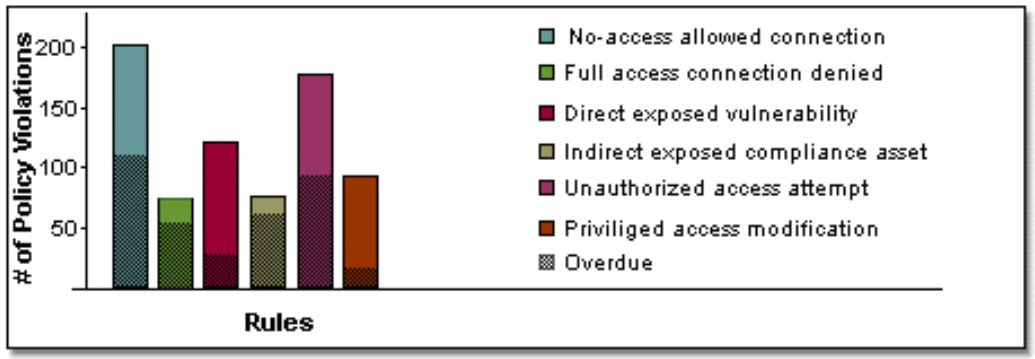
2. Can you identify your top security risks?

Top Risk Contributors

Asset	Risk Score
Firewall Systems	98
Production DB	97
Web Servers	95
Customer Data Store	94
DYNAMIC-UDP	76
Deny protocol	44
ICMP	41
Outbound NETBIOS	38
NETBIOS SMB-DS	37
Inbound TCP	12

Business Unit A

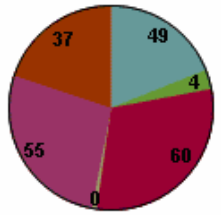
Policy Violations



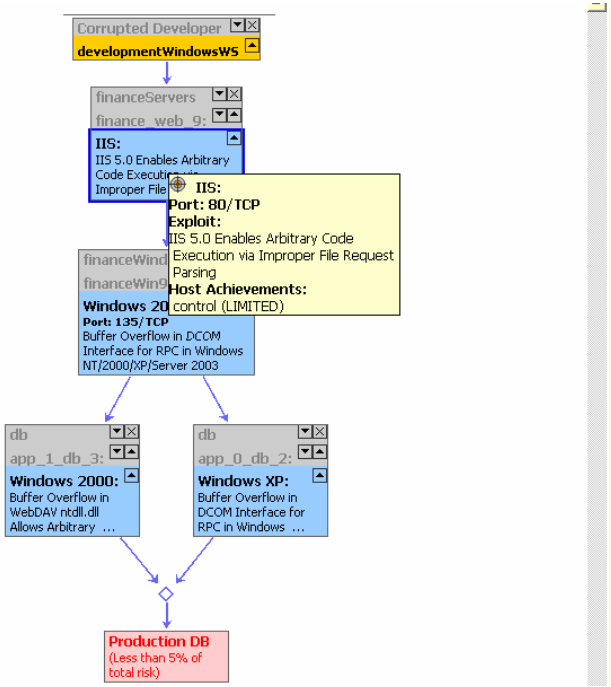
Business Unit A - 45 Firewalls

3. How susceptible are you to the latest worm or virus outbreak?

Exposed Vulnerabilities Report

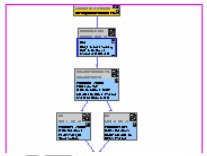


	Exposed		Not Exposed				
Severity	Direct	Indirect	Inaccessible	Potential	Excluded	Unknown	Total
Critical	8	0	16	0	1	0	**25**
High	0	4	8	0	15	2	**29**
Medium	14	0	10	0	26	20	**70**
Low	20	0	18	0	13	15	**66**
Info	7	0	8	0	0	0	**15**
Total	**49**	**4**	**60**	**0**	**55**	**37**	**205**



Skybox ID: SBV-00262
CVE: CVE-2000-0886
Discovery method:
Scanned by:
Severity: High
Host Achievements: Control (LIMITED)
Description:

IIS 5.0 allows remote attackers to execute arbitrary commands via a malformed request for an executable file whose name is appended with operating system commands, aka the "Web Server File Request Parsing" vulnerability.



4. Are you in compliance with your documented security policies?

1. Access Policy Compliance - Summary

Number of Rules in the scope: 22.

Policy success rate: 86% of the rules are compliant with Policy (19 rules out of 22).

Total number of Policy violations: 3 Rules.

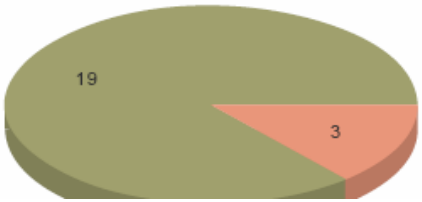
Number of critical Policy violations: 0 Rules.

Number of Access Queries: 0 Rules.

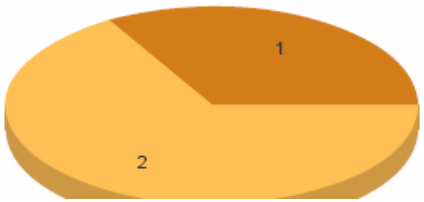
Last calculation time of the Policy: Thu Oct 20 14:36:08 EDT 2005.

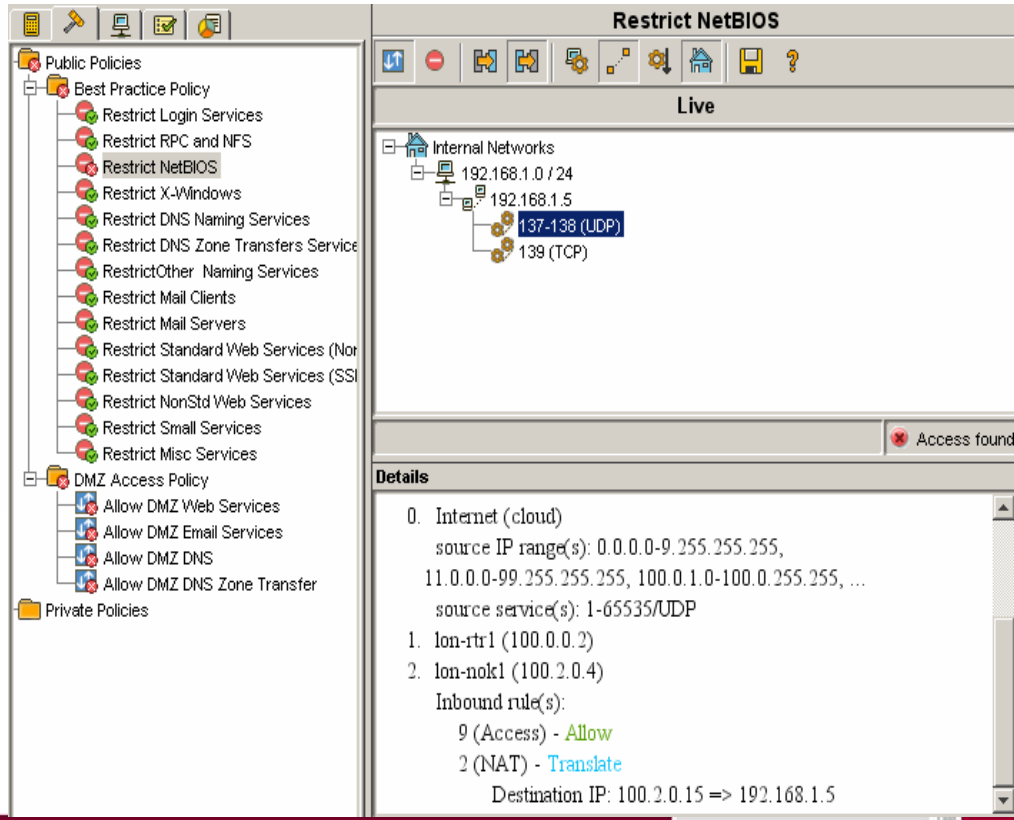
Access Policy Violations

Access Policy Rules by Compliance

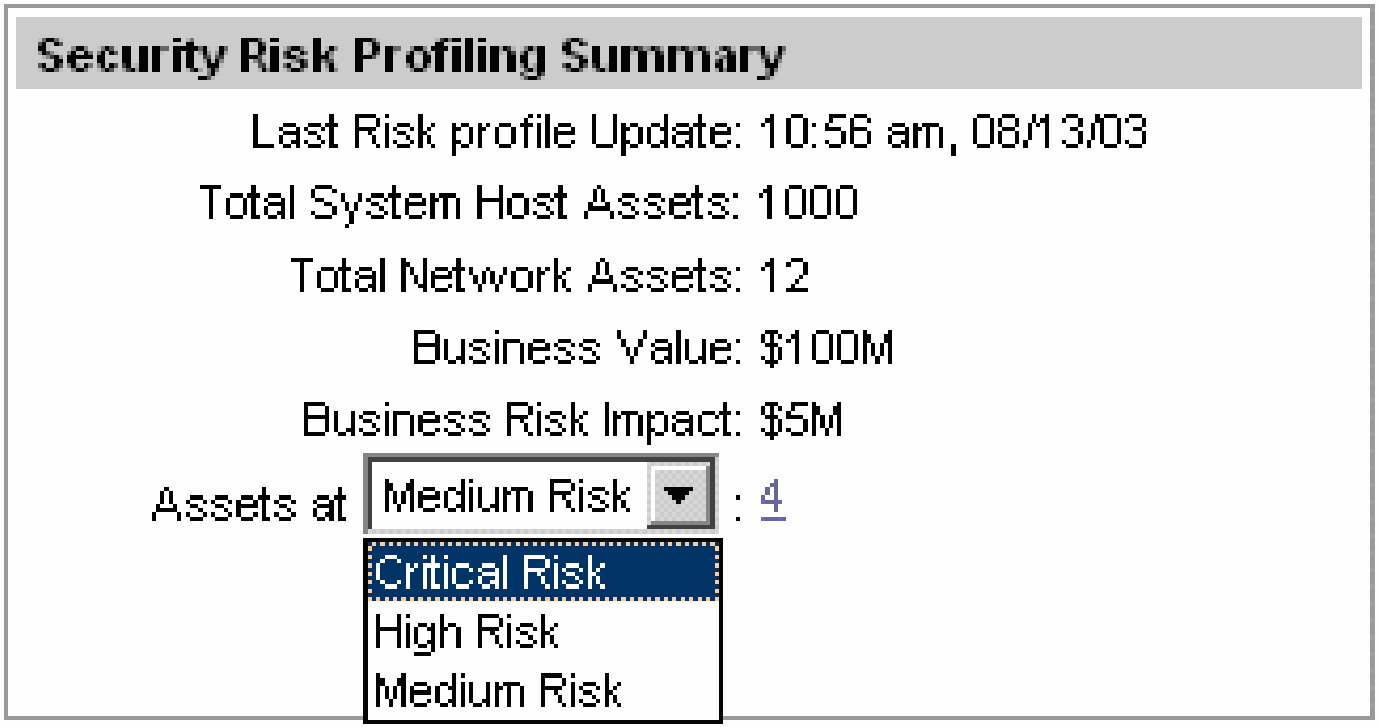


Access Policy Violations by Importance





5. How effective are your security initiatives and investments?



Security Risk Profiling Service

The service leverages industry-leading technology from Skybox Security and includes:

Automated IT security modeling

- To gain a complete network view that includes location of assets and all associated access paths.

Simulation and Visualization

- To understand the impact of and better prepare for potential threats.

Business impact analysis and risk metrics

- To help quantify the financial and operational impacts to help prioritize activities.

Early warning analysis

- To immediately identify and understand the impact of threats as they emerge.

Regulatory compliance risk management

- To understand whether you are in compliance with internal policies and external regulations.

Managed Security Approach

GLOBAL SECURITY CONSULTING

SOLUTION DESIGN & IMPLEMENTATION

24x7 SECURITY MONITORING

THREAT & VULNERABILITY RESEARCH