

Moving From a Reactive to a Proactive Security Model

Carlos Sanz
Lumension Security





State of Endpoint Security Market

- Customer Challenges
- Industry Trends

A New Age of End-Point Security

- Taking a Positive, Proactive Approach
- Highly Secure, Highly Operational



State of Endpoint Security Technology Market



How much would you pay for this USB stick?





Some would pay

\$15 BILLION



would!

18 Year Employee Steals Over 320,000 Files

A King County jury began deliberations today in the case of a Boeing employee charged with leaking sensitive company

Boeing claimed that 16 stories in The Seattle Times contained information from downloaded documents

The host might feel the guest "violated his trust," she told jurors. "Maybe he kicks you out. But you don't get prosecuted."



Can you guarantee that your CEO's laptop is not compromised?

High Paid CEOs Targeted by Keyloggers

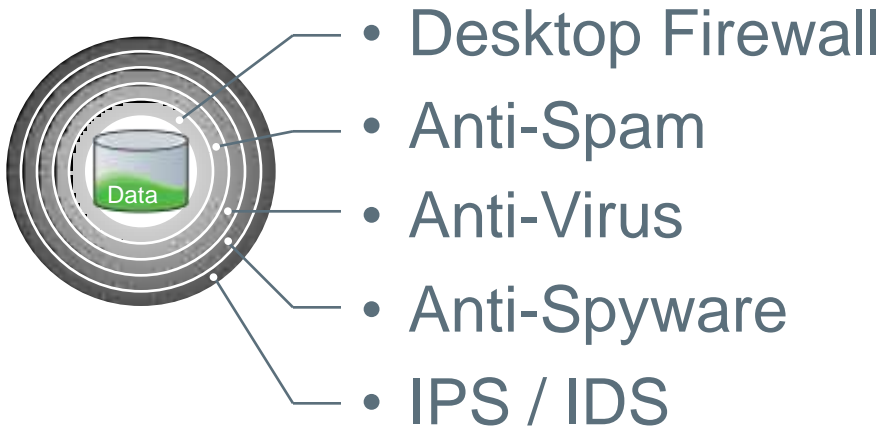
A King County jury began deliberations today in the case of a Boeing employee charged with leaking sensitive company information.

Boeing claimed that 16 stories in The Seattle Times contained information from downloaded documents.

The host might feel the guest "violated his trust," she told jurors. "Maybe he kicks you out. But you don't get prosecuted."



Traditional Reactive Security has failed to stop these situations.



Reactive Security POP QUIZ

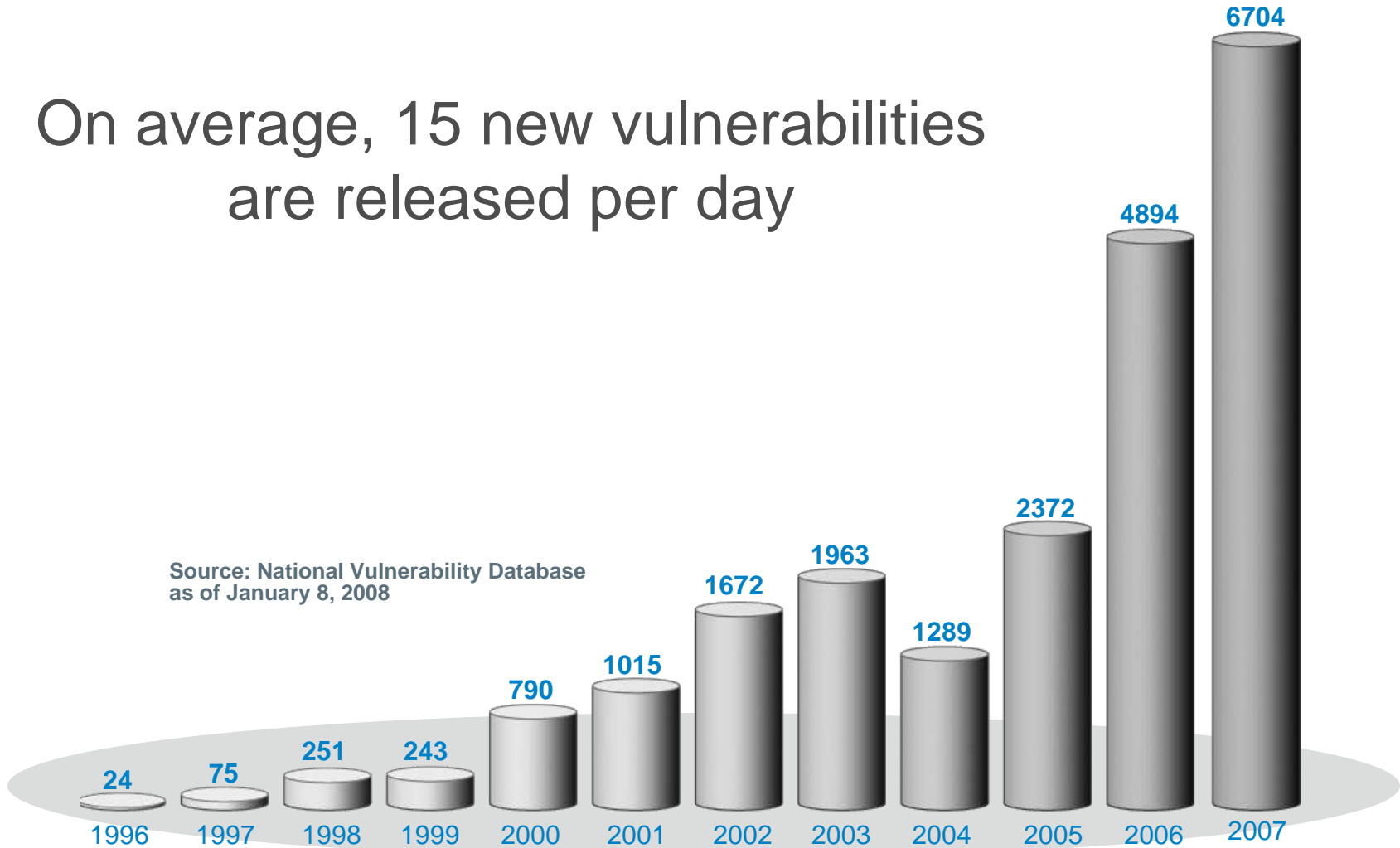
When tested against 660,000 signatures, how many did “The Big 2” miss?

Missed Over
30,000

Missed Over
80,000



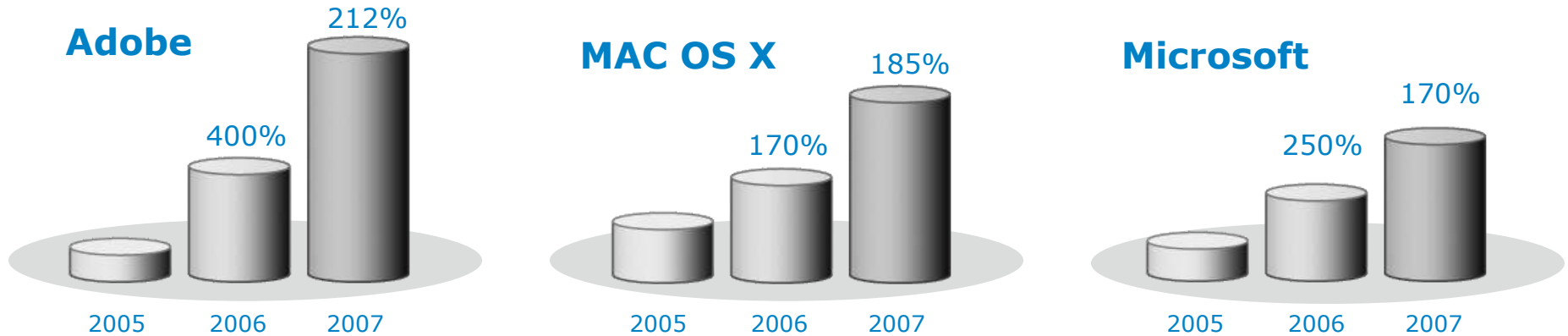
On average, 15 new vulnerabilities are released per day



Hackers find New Avenues of Attack



▣ NVD reported 13,270 vulnerable applications as of 01/08/08



Source: National Vulnerability Database

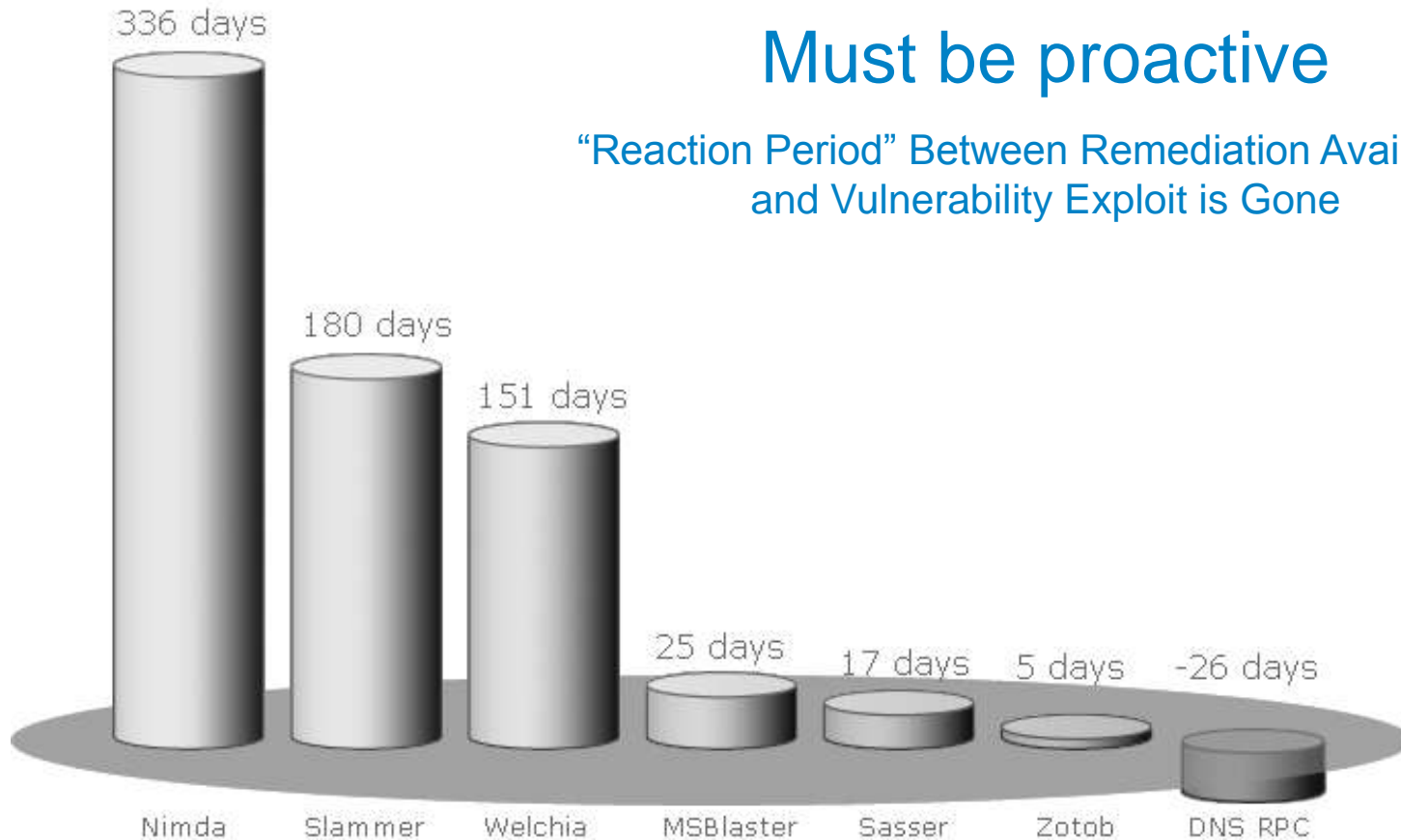
“Adobe Acrobat/Reader PDF documents can be used to compromise your Windows box. Completely!!!”

TECHWORLD

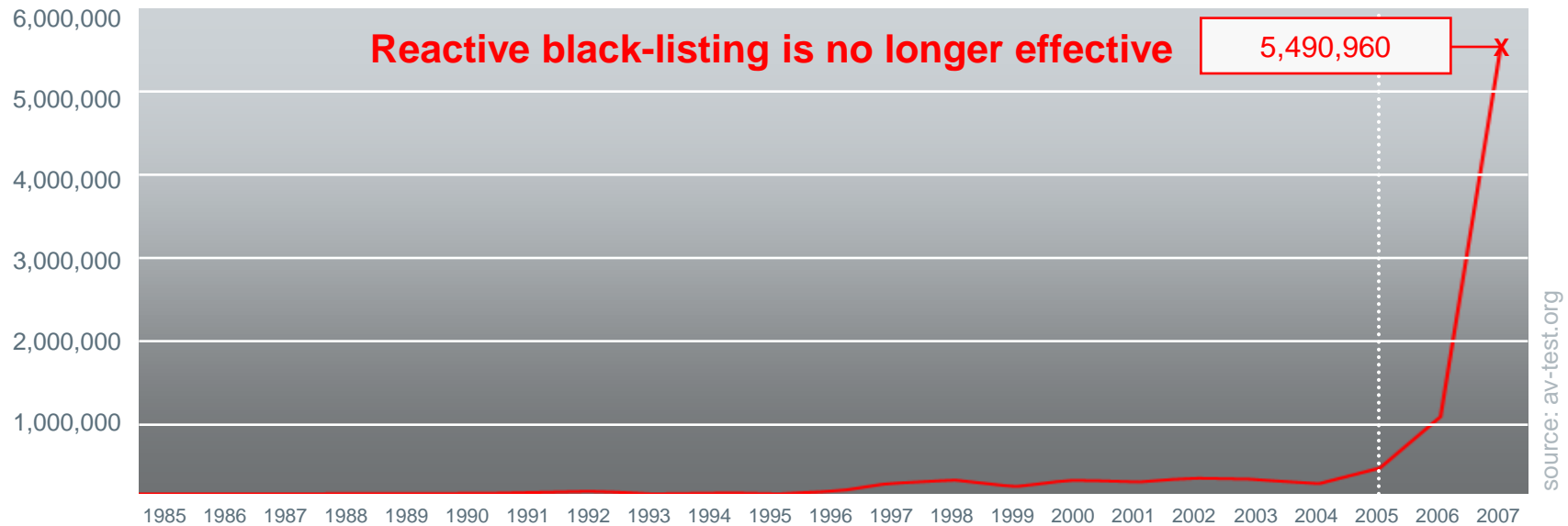


Must be proactive

“Reaction Period” Between Remediation Availability and Vulnerability Exploit is Gone



An Inconvenient Truth: Growth of Malware



Traditional endpoint technology stacks do not solve this issue:

Anti-virus / Anti-malware / Heuristics / HIPS

- Resource intensive
- Susceptible to false-positives
- Can't defend against targeted attacks
- Won't scale with current threat rate
- Do not address underlying vulnerabilities



What has changed

in today's environment that make:

Traditional Security Approaches Fail

a single USB stick worth

\$15 BILLION

and allows targeted Malware to affect even

YOUR CEO?

What has changed?

Three things have changed that make reactive security obsolete.

The
Borderless
Enterprise

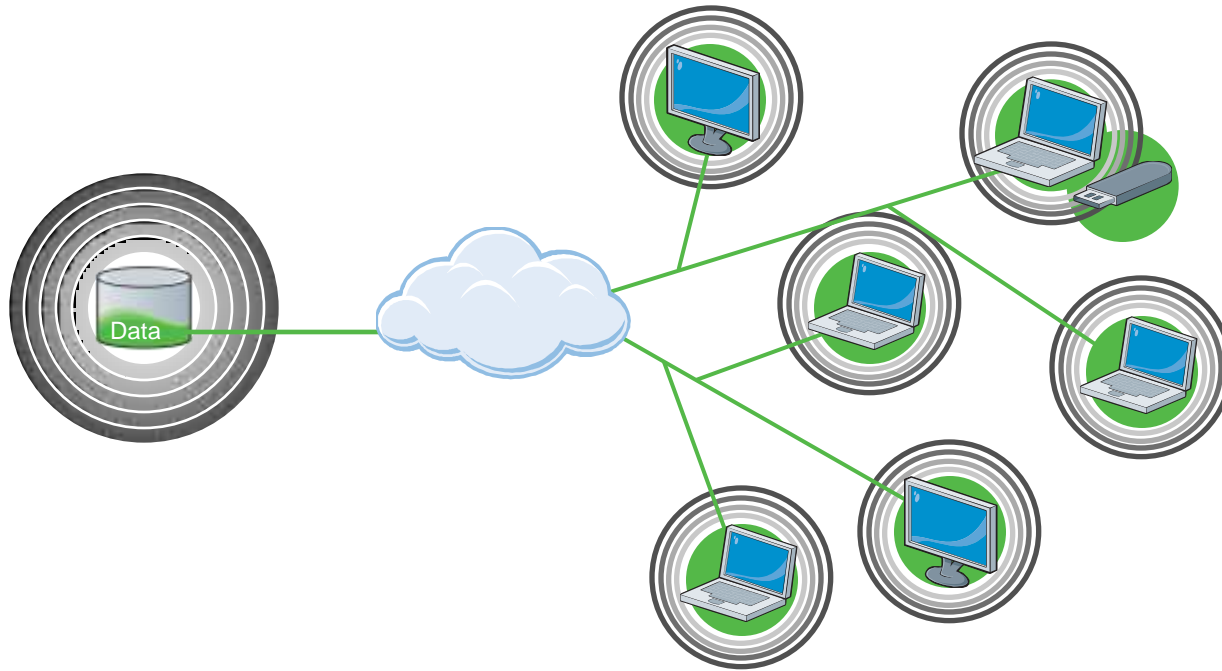
Increased
Internal
Risks

Organized
External
Threats

The Borderless Enterprise

Remote users and mobile technology.

Data has moved beyond the enterprise firewall:
Laptops / Home Offices
USB Sticks / WiFi / VPN
and more...



New Technology - New Sources of Risk



Easy of Connectivity = Risk Increases

Increased Storage Capacity = Risk Increases





- Removable media stores more at lower cost than ever before and fits in your pocket

Physical Size	Storage Size	Per MB Price

- Plug and Play offers seamless support for removable media
- Removable media is significant to daily business operations
- Professional and personal use of removable media has merged

Increasing Internal Risk

Insiders have direct access to your most sensitive data.

70% of all serious incidents are sparked by insiders.

IDC Worldwide Security Products and Services
2007 Top 10 Predictions



**Lost Laptops
& Devices**



**Disgruntled
Employees**



**P2P File Sharing
Software**

48% of users utilize company tools for personal usage.



- John's iPod might have 80 GB of his favorite music and video's or it might contain:
 - software he brought from home to install
 - malicious software, such as malware, spyware, crime ware
 - a virus or Trojan



- When John leaves at night it might have:
 - your customer database
 - financial data
 - intellectual property

53% of organizations would NEVER know what data was on a lost USB device ¹

Source:

1- Ponemon Institute, 2006 Cost of Data Breach Study

External Threats

The hackers you face are no longer just Gary and Wyatt...



Organized External Threats

Well Funded.
Organized.
Financially Motivated.





Data is not just going out on Mobile Devices.

Malware coming in on Mobile Devices as Well

New form of Social Engineering

Leaving USB drives in parking lots of Targeted Companies with Malware installed



What do these removable devices all have in common?



All came pre-installed with viruses capable of stealing passwords and opening doors for hackers

Data Leakage Costs On the Rise



☐ Data breaches remain the leading cause of financial losses ¹

☐ Data breach costs continue to increase ²

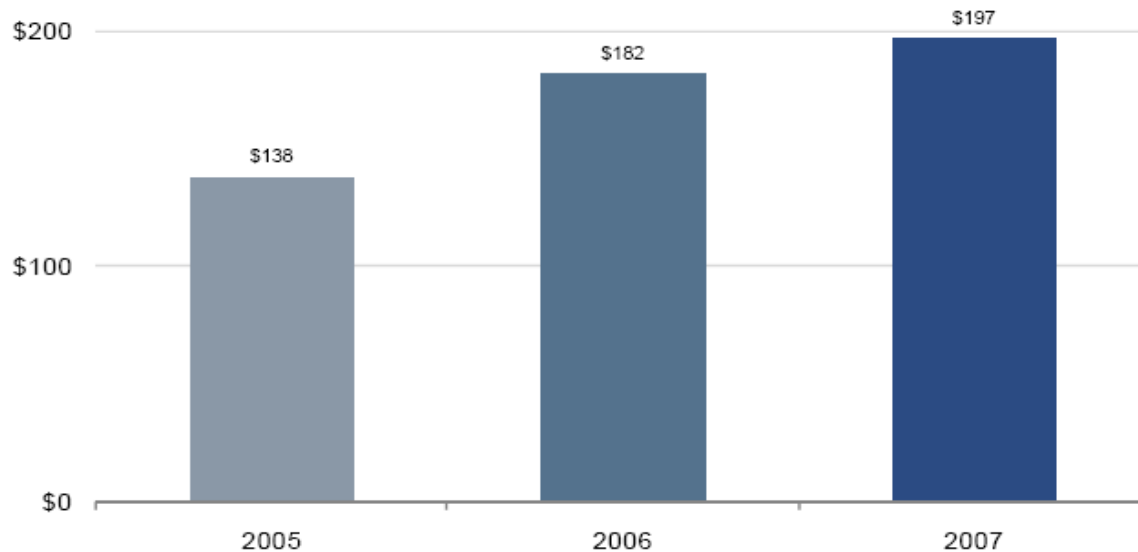


Figure 1: Average per-record cost of a data breach, 2005–2007

Source:

1 - 2006 CSI/FBI Computer Crime and Security Survey

2 - Ponemon Institute, 2007 Cost of Data Breach Study



☐ Lost business accounts for 65% of data breach costs

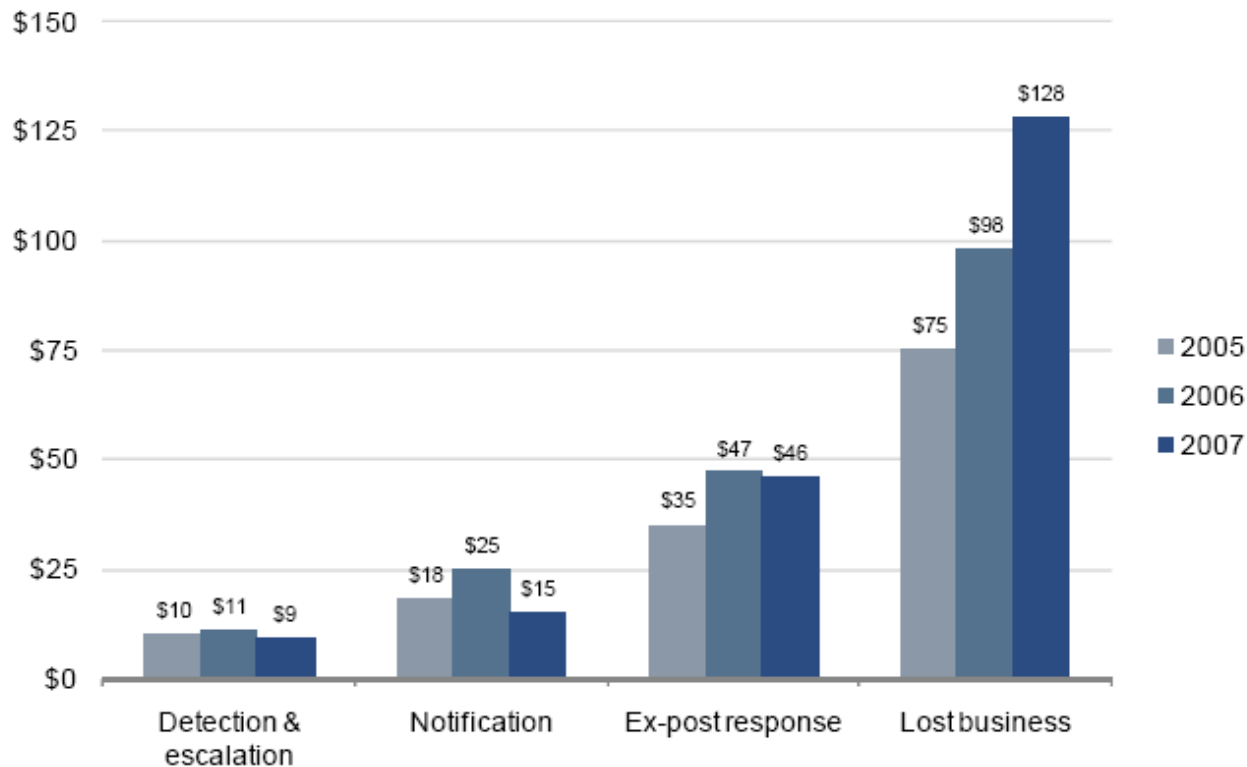


Figure 2: Data breach costs by center per record compromised, 2005–2007

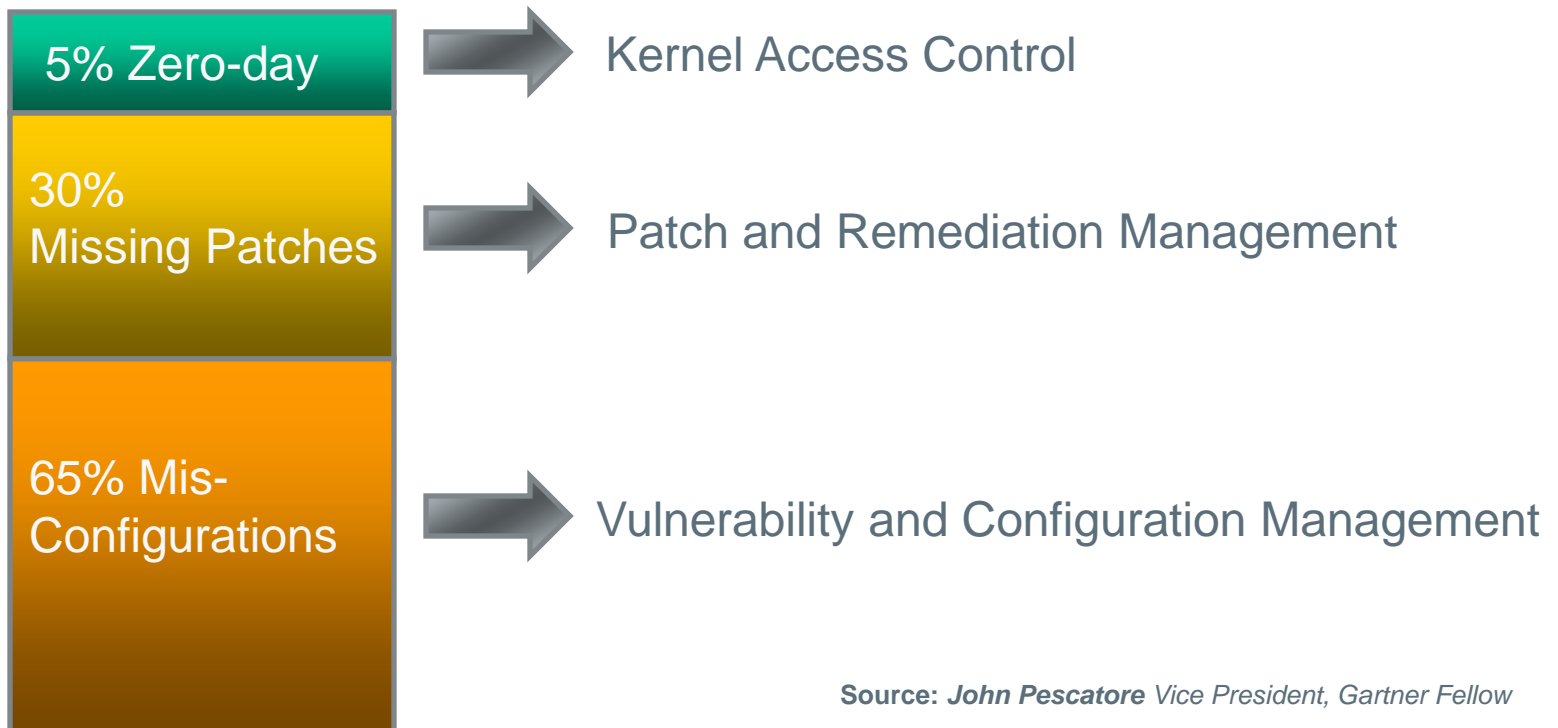
Source:
Ponemon Institute, 2007 Cost of Data Breach Study



**How do you address
the new security challenges
in today's environment?**



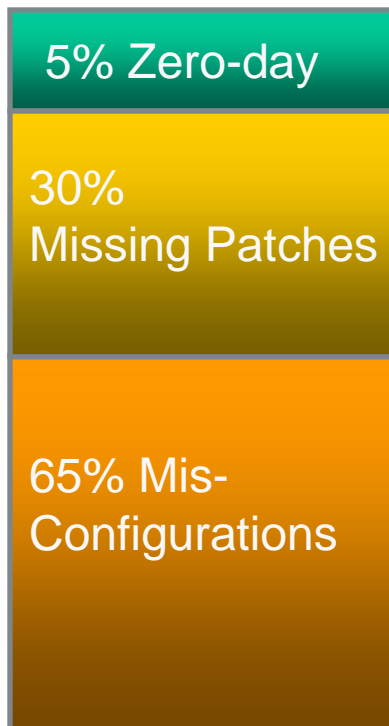
Attacks Exploit
Risks at the Core



Source: *John Pescatore* Vice President, Gartner Fellow



Attacks Exploit
Risks at the Core



The OS / Sources of Risk



UPC – Traditional Approaches



Traditional Depth in Defense Security Add-on Solutions

The OS / Sources of Risk

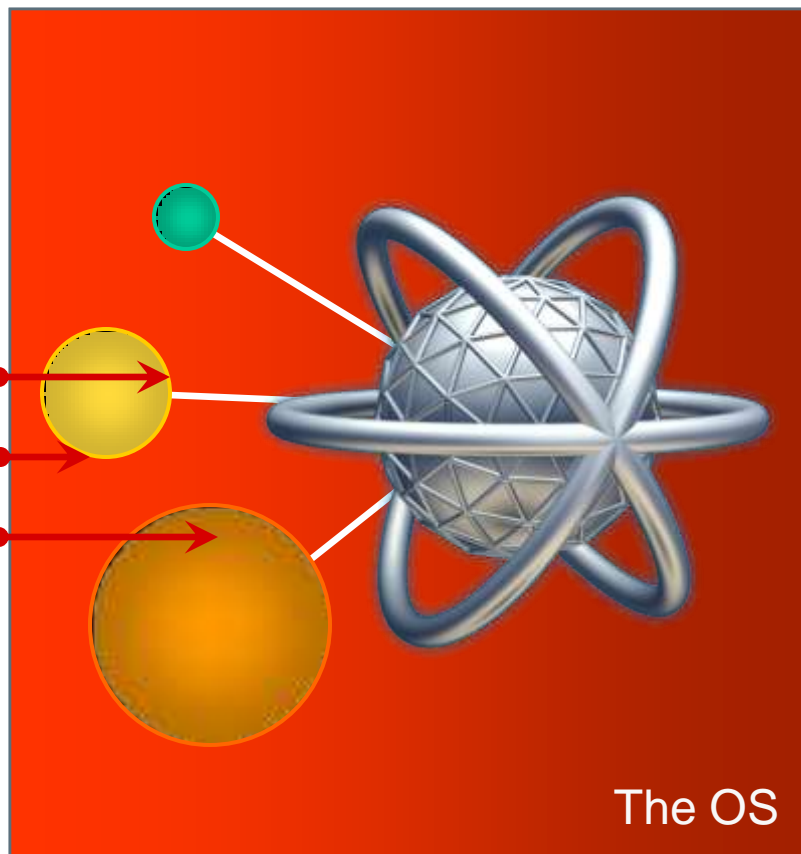
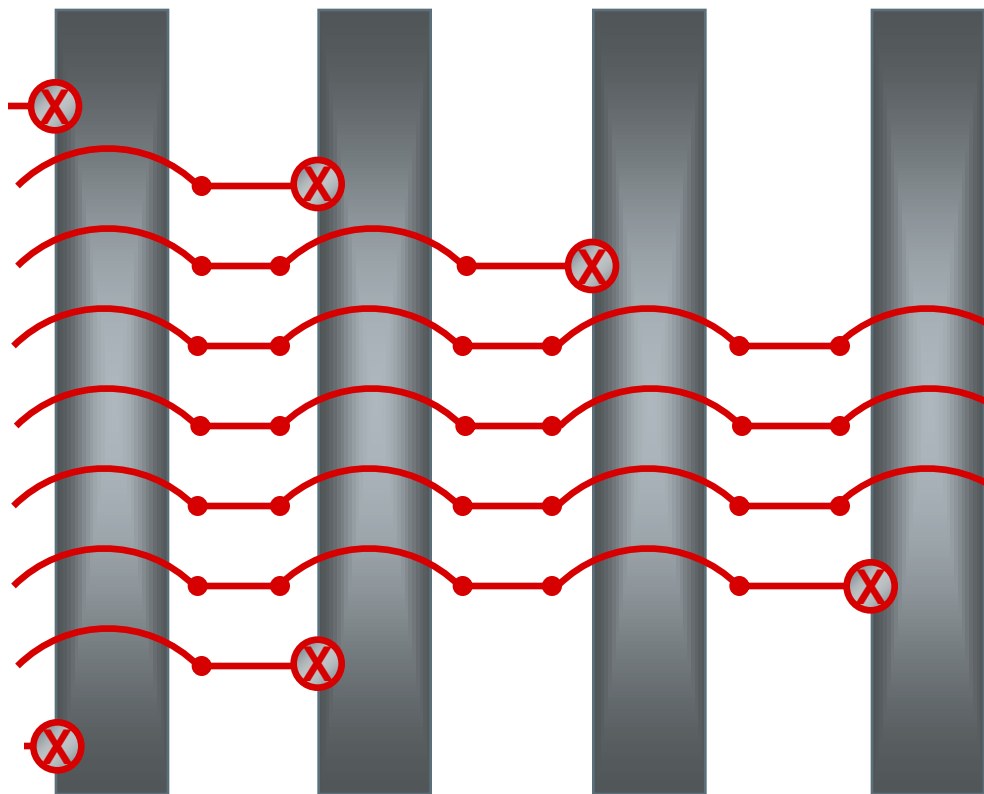
Desktop
Firewall

Anti-Virus
Spyware

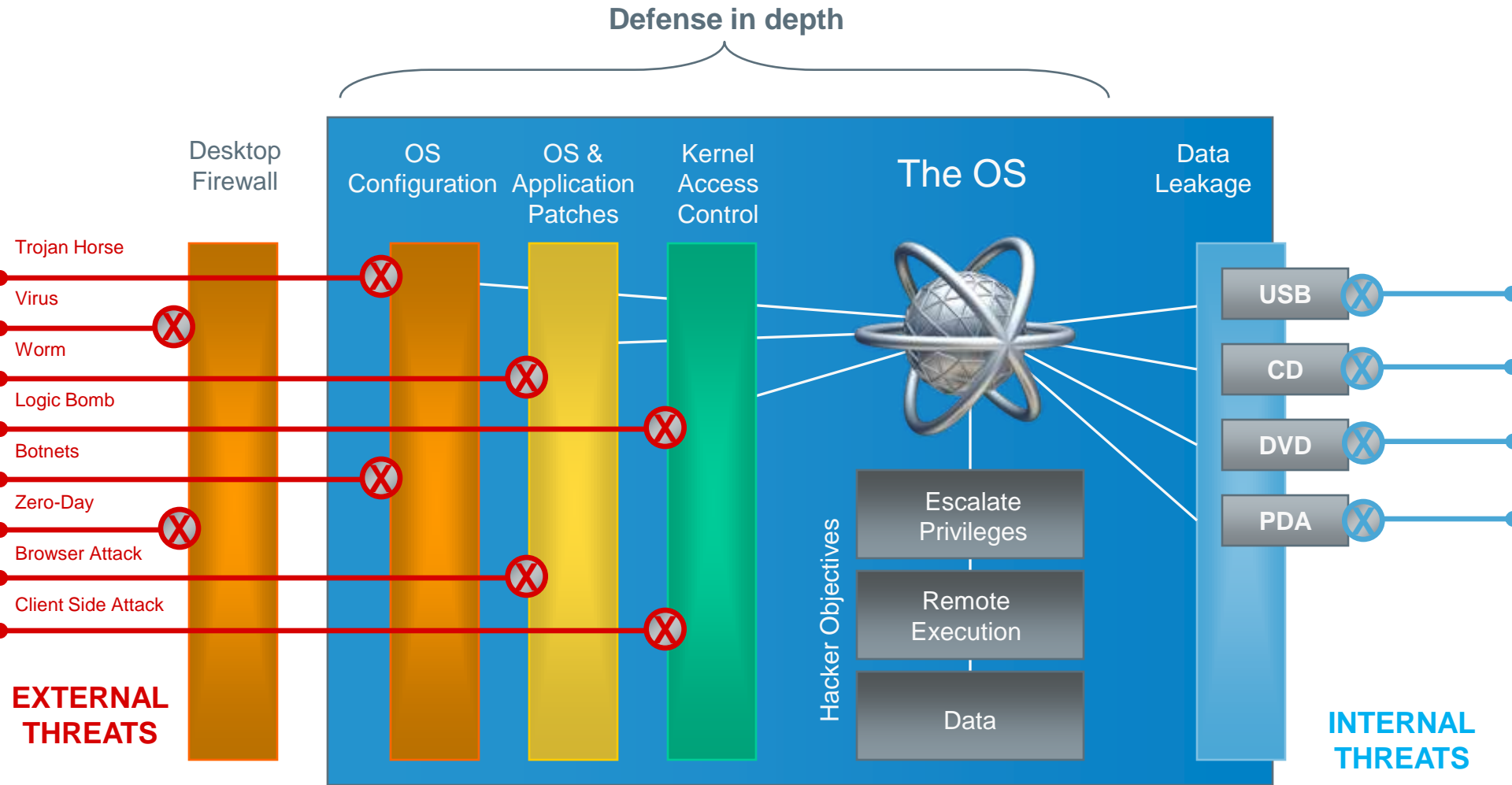
IPS
Heuristics

Application
Blacklist

EXTERNAL THREATS



Proactive, Operational End Point Security Approach



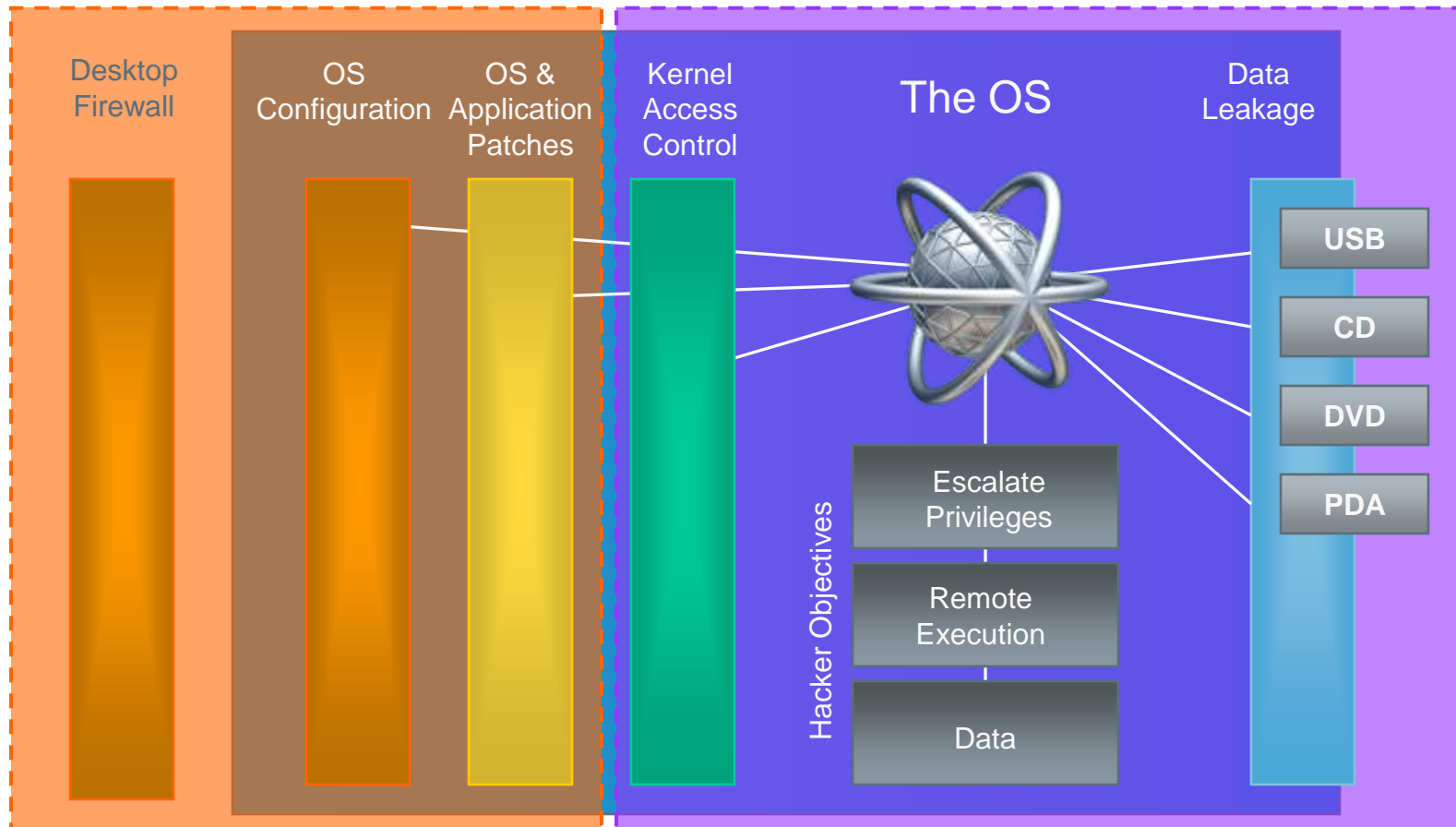


PatchLink Suite

Scan / Security Configuration Management / Update

Sanctuary Suite

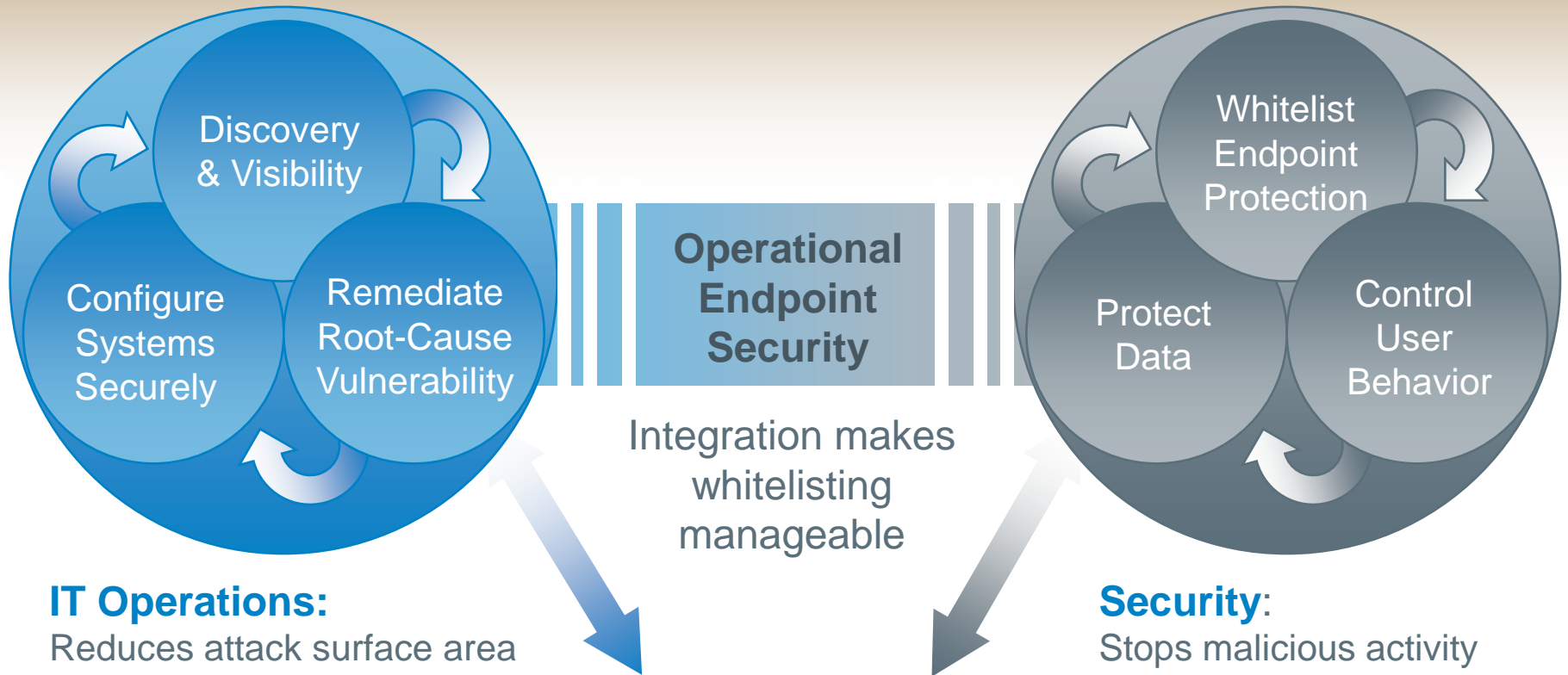
Application Control / Device Control



**YOU HAVE TO
Get Proactive.**



Policy Compliance Reporting



Integration = maximum security, flexibility and productivity

The Lumension Security Advantage

Stops Targeted Attacks
Eliminates Insider Threats
Prevents Data Loss
Defends Against Zero-Day Exploits

Get Proactive.



Check out Lumension's
Proactive Security Solutions.

or visit us at lumension.com



Every device isn't there to harm you, John might need a...

- USB drive

- to easily move large files
- to take work on the road with you
- it lets him modify files, unlike burning the files to a cd/dvd's
- he might carry a “toolkit” with him to support other users
- he can use it to backup data

- iPod's

- to watch a video training
- to listen to a company podcast
- to listen to a class he is taking





- ▣ Organizations need to ask themselves...”do we need to allow access to these devices?”

- ▣ If yes,
 - Who should have access – everyone, specific groups or users
 - What devices should be allowed – usb drives, mp3 players, etc.
 - When should access be allowed - 24/7, Mon. - Fri., 9 to 5
 - Where should they be used – every machine or specific machines
 - How should they be used – read only or read/write permission

- ▣ If not, how are you going to deny access to the devices



How would you control these devices?

- Order machines without USB ports
- Physically blocking the USB ports
- Disabling the USB ports in the Bios
- Disable the USB ports in the registry
- Ban portable storage devices
- Use a software based tool to control access
- Do nothing



Discovery

Know what applications and devices are in use on endpoints

Policy Establishment

Develop company-wide, group and/or user-specific policies that reduce, or eliminate endpoint security issues

Policy Enforcement

Enforce and administer endpoint security policies and the flexibility to seamlessly make policy changes as appropriate, reducing end users' need for involvement

Policy Monitoring and Compliance Reporting

Understand the effectiveness of endpoint policies and to know when they have been violated