

Online Transactions:

Filling Security Loopholes

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Agenda

1 Information Security Overview in Vietnam

- a Vietnam Online Businesses Today*
- b Developing Ecology & Security*
- c Drivers for Online Security*
- d Ways & More Ways to Lose Data*

2 SonicWALL: Where Do We Fit

- a SonicWALL Profile*
- b Protecting Data in Motion*
- c Protecting Data in Use*
- d Protecting Data at Rest*
- e SonicWALL for Online Security*

Vietnam Online Businesses Today ...

VIET NAM BUSINESS NEWS

HOME BANKING-FINANCE IMPORT-EXPORT INDUSTRY

E-commerce to blossom



Posted by VBN on Dec 7th, 2010 and filed under [Technology](#). You can follow at [VBN](#). You can leave a response or trackback to this entry

E-commerce transaction values in Vietnam will sky rocket in the next five years

Nguyen Ngoc Diep, director of Vatgia.com, estimated that the e-commerce

Vietnam Online Game Market to Reach 10 Million Players by 2011

Posted by IESherpa

A research report by [Pearl Research](#) has data on the Vietnam market for online games. Here are the figures:

- 10 million players by 2011
- 21 million Internet users in Vietnam = Internet penetration rate of 23.5%.
- Top online games in Vietnam can attract 200,000 users
- Many Vietnamese gamers were spending \$3 – \$6 per month
- Current popular online games include First Myth, JX Online, and Boom Online

Banking & Finance

Standing apart

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Mr Shirish Apte, CEO of Citi Asia Pacific.

• HA ANH
19:11 (GMT+7) - Tuesday, November 16, 2010

With Citi expanding its retail banking services in Vietnam by opening a Hanoi outlet in October, Mr Shirish Apte, CEO of Citi Asia Pacific.

Why is Citi opening a retail banking outlet in Hanoi at this time?

We have always said we are looking to expand in Vietnam, one of the most

promising markets in an exceptionally important region for Citi. The retail outlet in Hanoi comes on the back of our first in Ho Chi Minh City, which we opened last year. Opening an outlet in the capital is also significant for us this year because Citi celebrates its 15th anniversary in Vietnam. We want to build on that milestone and position ourselves to become the leader in retail banking, just as we are in transaction services and corporate and institutional banking.

How do you view the retail banking sector in Vietnam over the last five years and now?

Anyone looking at retail banking in Vietnam over the last five years will agree that the sector has seen transformational growth. Consumers now have more choices to manage their income, conduct transactions, and grow their wealth. The influx of foreign competitors and the evolution of strong local banks mean consumers are the ultimate winners.

GAINING MOMENTUM !!

Breeding Ground for Attackers

VIET NAM

BUSINESS NEWS

HOME BANKING-FINANCE IMPORT-EXPORT INDUSTRY

2010 Network Security: Emerging Dangers



Posted by VBN on Apr 10th, 2010 and filed under [Technology](#). You can follow an RSS feed for this entry or You can leave a response or trackback to this entry

Vietnam Foreign Investment [Asia-Monitor.com...](#)

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Ads by Google

According to major-general and Dr. Nguyen Viet The, the head of the Information Technology Department, Ministry of Public Security in the context of booming information technology development, network crimes have become increasingly complex. IT solutions and human factors must combine to confront such kind of crimes. He made the statement at the fifth national symposium

showcase on information security (Security World 2010) on March 23-24, 2010 in Hanoi.

Latent risks

There are 23,068,441 internet subscribers in Vietnam at present, accounting 26.9 percent of the population, said Dr. Nguyen Viet The. A great many businesses and organizations have established websites to promote their products and services (136,953 domain names ending with .vn and millions of commercial websites are now available). Many companies have introduced online payment business transactions.

Vietnam 2010 Information Security Stats

24 Million Internet Users, 1/4 of the entire population

140000 registered business domain names

500% increment of websites with malicious codes

More than 1000 websites attacked and increasing

More than 300 websites attacked were by foreigners

Most of these attacked were Bank, Service Provider and Online Transaction related businesses

WHEN SECURITY IS NOT OPTIMAL !!

Source: <http://vietnambusiness.asia/2010-network-security-emerging-dangers/>

"...I don't have to outrun the grizzly bear. I just have to outrun YOU."

As security threats increase
don't become the slowest hiker
in the forest.

Improved security raises threat to the unimproved

- Don't fall behind in your security measures, or you'll become a target.
- Bring this up the next time your boss argues that your organization hasn't been hit by hackers / industrial spies / angry employees / identity thieves / competitors yet, so there's no point in spending money on improving security.
- As poorly protected organizations fall further behind the rising standards of security, they will become more interesting targets for criminals of all kinds who are looking for an easy mark.

■ Network World Magazine: Improved security raises threat to the unimproved; M. E. Kabay, PhD, CISSP-ISSMP; June 26, 2008



The Need to Secure Online Transactions

The growing online community drives:

Digitization of Data

- CC, SSN, Healthcare records, Personal Identifiable Information
- Gain cost savings and efficiency
- Rapid data sharing

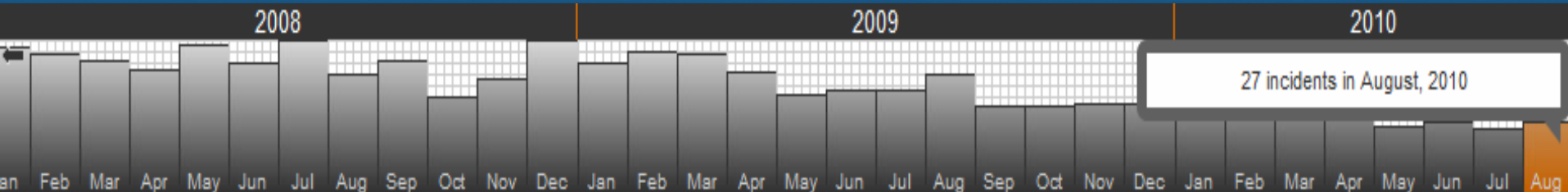
Security Breaches

- Financial Loss
- Intellectual Property Loss
- Operational Impact
- Competitive Information (customer lists)

Regulatory

- HIPPA, PCI, SOX, Etc

Documented Data Breaches



Largest Incidents

| RECORDS | DATE | ORGANIZATIONS |
|--------------------|------------|---|
| <u>130,000,000</u> | 2009-01-20 | Heartland Payment Systems, Tower Federal Credit Union, Beverly National Bank |
| <u>94,000,000</u> | 2007-01-17 | TJX Companies Inc. |
| <u>90,000,000</u> | 1984-06-01 | TRW, Sears Roebuck |
| <u>76,000,000</u> | 2009-10-05 | National Archives and Records Administration |
| <u>40,000,000</u> | 2005-06-19 | CardSystems, Visa, MasterCard, American Express |
| <u>26,500,000</u> | 2006-05-22 | U.S. Department of Veterans Affairs |
| <u>25,000,000</u> | 2007-11-20 | HM Revenue and Customs, TNT |
| <u>17,000,000</u> | 2008-10-06 | T-Mobile, Deutsche Telekom |
| <u>16,000,000</u> | 1986-11-01 | Canada Revenue Agency |
| <u>12,500,000</u> | 2008-03-26 | LaSalle Bank, BNY Mellon Shareowner Services, Archive Systems Inc, The Walt Disney Company, SYNOVUS |

Heartland, Tower Federal CU, Beverly National Bank, TJM, TRW, Sears Roebuck numbers continue to rise until this day.

Source: <http://datalossdb.org>

Latest Incidents

| RECORDS | DATE | ORGANIZATIONS |
|----------------|------------|--|
| <u>22,000</u> | 2010-08-30 | Aon Consulting, State of Delaware |
| <u>0</u> | 2010-08-28 | University of Auckland |
| <u>150,000</u> | 2010-08-27 | Schlecker |
| <u>200</u> | 2010-08-26 | The Regional Medical Center of Orangeburg & Calhoun Counties |
| <u>492</u> | 2010-08-25 | Moffitt Cancer Center |
| <u>0</u> | 2010-08-23 | Eastmoreland Surgical Clinic & Vein Center |
| <u>7,000</u> | 2010-08-20 | Cook County Health & Hospitals System |
| <u>2,027</u> | 2010-08-19 | University of Kentucky |
| <u>10,174</u> | 2010-08-19 | University of Connecticut |
| <u>80,000</u> | 2010-08-18 | MATCH Services, FIFA |

Over 270K records have been lost this month alone.

The SC Magazine recently published a report from Cenzic that reveals that Web applications account for 80 percent of Internet vulnerabilities.[<http://www.scmagazineus.com/web-apps-account-for-80-percent-of-internet-vulnerabilities/article/129027/>]

Non-Compliance Consequences

Risks, Fines, Fees, Costs, Loss

A non-compliant, compromised business could expect the following:

- | | |
|---|---|
| <ul style="list-style-type: none">■ Damage to brand/reputation■ Investigation costs■ Increased auditing requirements■ Remediation costs■ Fines & fees<ul style="list-style-type: none">■ Non-compliance (each brand issues separate fines) up to \$500,000 per incident■ Card re-issuance (\$20 - \$30/card)■ Fraud loss■ Victim notification costs■ Cost of breach at \$300/compromised card * | <ul style="list-style-type: none">■ Financial loss■ Data loss■ Charge-backs for fraudulent transactions■ Operations disruption■ Sensitive info disclosure■ Denial of service to customers■ Individual executives held liable■ Possibility of business closure■ Printing charges for mail notifications■ Decreased sales due to failed public image |
|---|---|

**2008 Gartner estimate for data breach remediation for compromised cards*

Ways to Lose Data

■ **Accidental**

- Sending an email to the wrong person
- P2P Mis-configuration
- Malware/Trojan Installation

■ **On purpose as part of work**

- Copy everybody
- Sending out too much data

■ **On purpose as part of life**

- Employee sending work product to home email address

■ **On purpose**

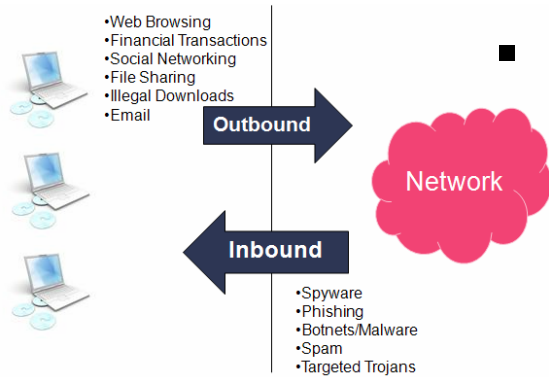
- Theft – Employee, Contractor, Hacker...

95% of email data
leaks are
accidental

www.csoonline.com

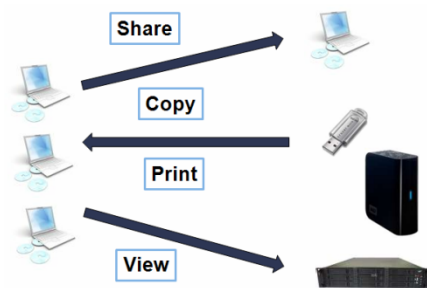
Study: Companies Struggle to Keep
Data Safe – August 5, 2008

More Ways to Lose Data



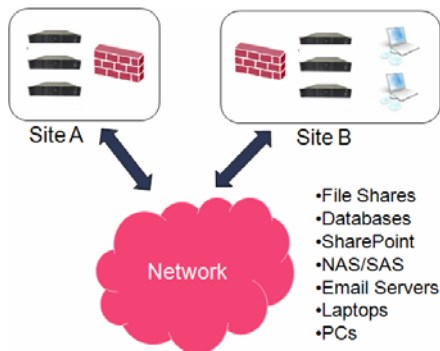
- **Data transport over unsecured channels**

- internet - public network
- Wireless guest network



- **Data usage with poorly written applications**

- no data protection
- is not written with security in mind
- application bugs



- **Data on Endpoint without Adequate Security**

- affects any devices
- Apple – Ipad | Iphone | IOS Devices
- Windows – XP | Vista | 7
- Windows Server – 2003 | 2008
- Linux | Unix | ANYTHING !!!

SonicWALL: *Where Do We Fit ?*

SonicWALL Profile

Dynamic Security for the Global Network

U.S. Based Security Solutions Provider

Established in 1991 and Public Listed in NASDAQ in 1999

A leader in Unified Threat Management technology

Provides effective, innovative and high performance solutions



Over 125 countries and 100+ enterprises shipped

SonicWALL – The Company

The LEADER in Security Solutions providing Businesses with Complete Breadth and Depth of Protection

- SonicWALL® engineers high-performance solutions by delivering a wide range of intelligent security services on scalable hardware platforms.
- When combined, these services provide integrated and comprehensive defense-in-depth for businesses of all sizes.
- Our solutions are deployed worldwide in SMB and Mid-Enterprise Networks, Distributed Networks and Data Centers to protect Financial, Government, Education, Healthcare and Retail environments.

SonicWALL Rule of Thumb



Multi-defense
Strategy



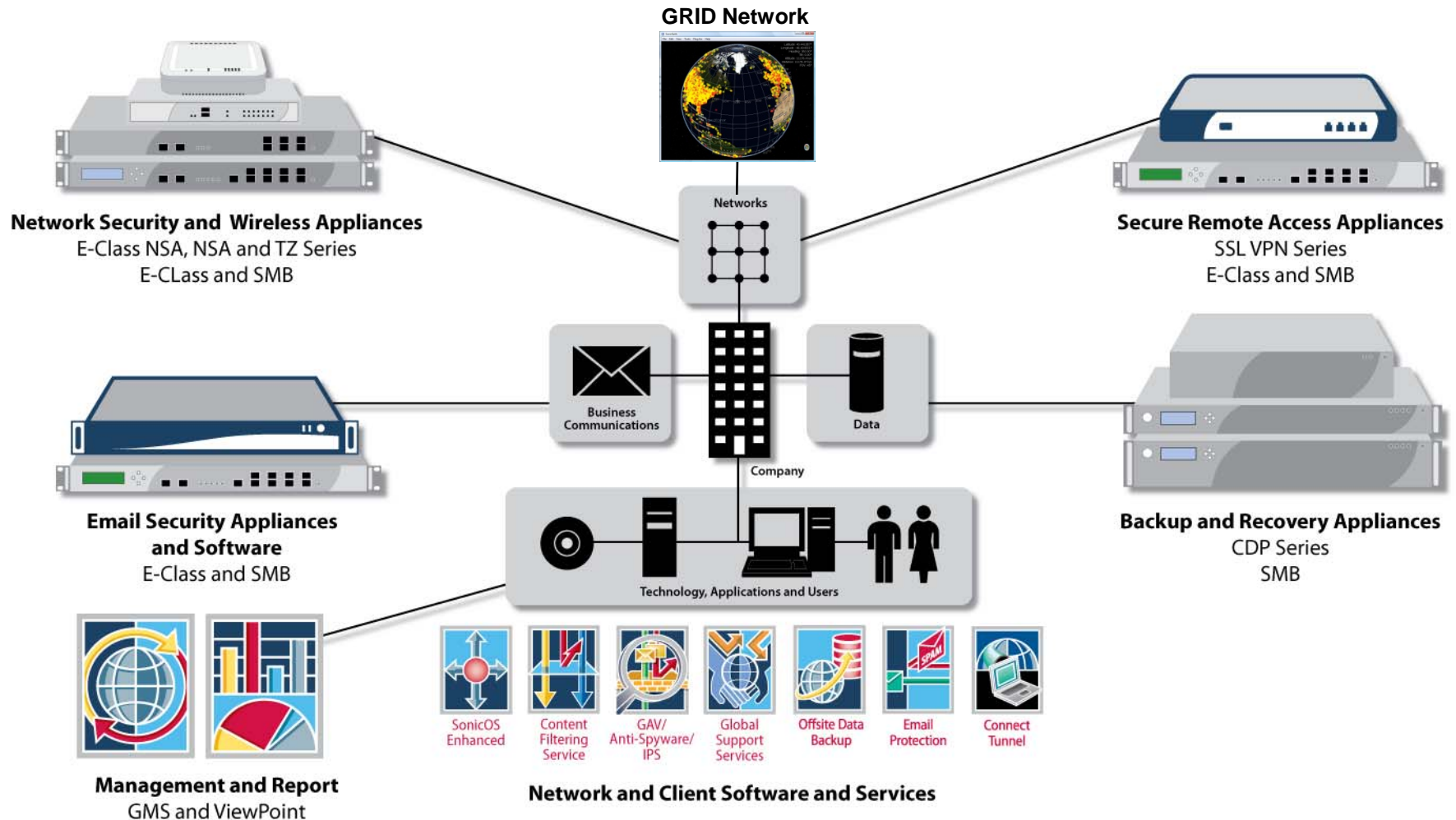
In-House and
proven
expertise



Scalable/Multi-
platform

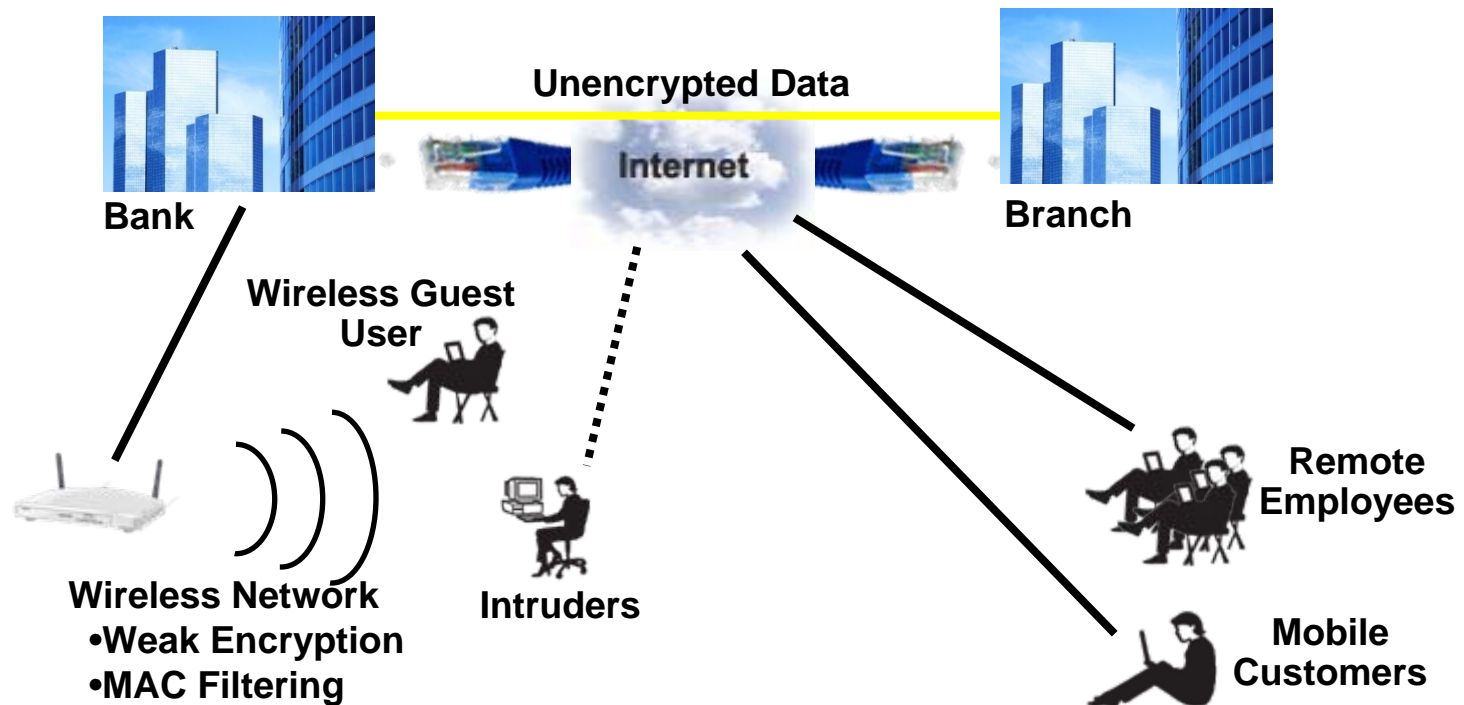
Ease of Use & Support

SonicWALL Product Suite



Transaction Risk over Public Network

An intruder can easily retrieve information that is sent over an unsecure network



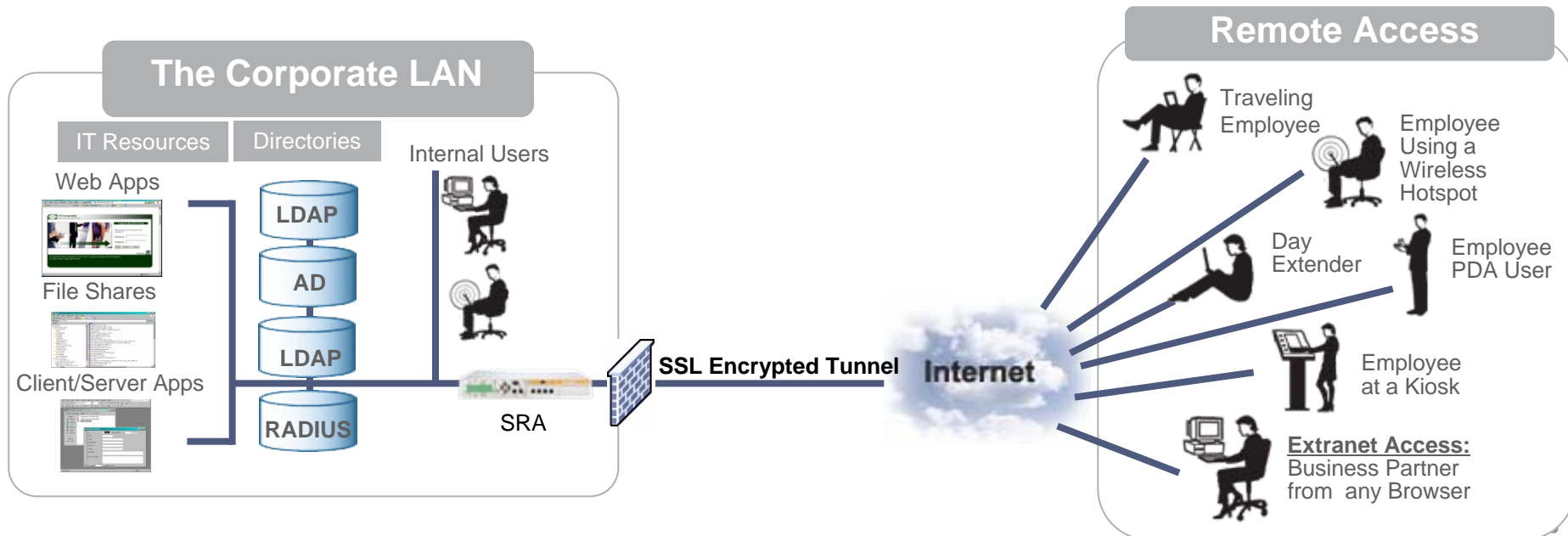
Transport channels can include the Internet or wireless guest networks

Securing Data in Motion

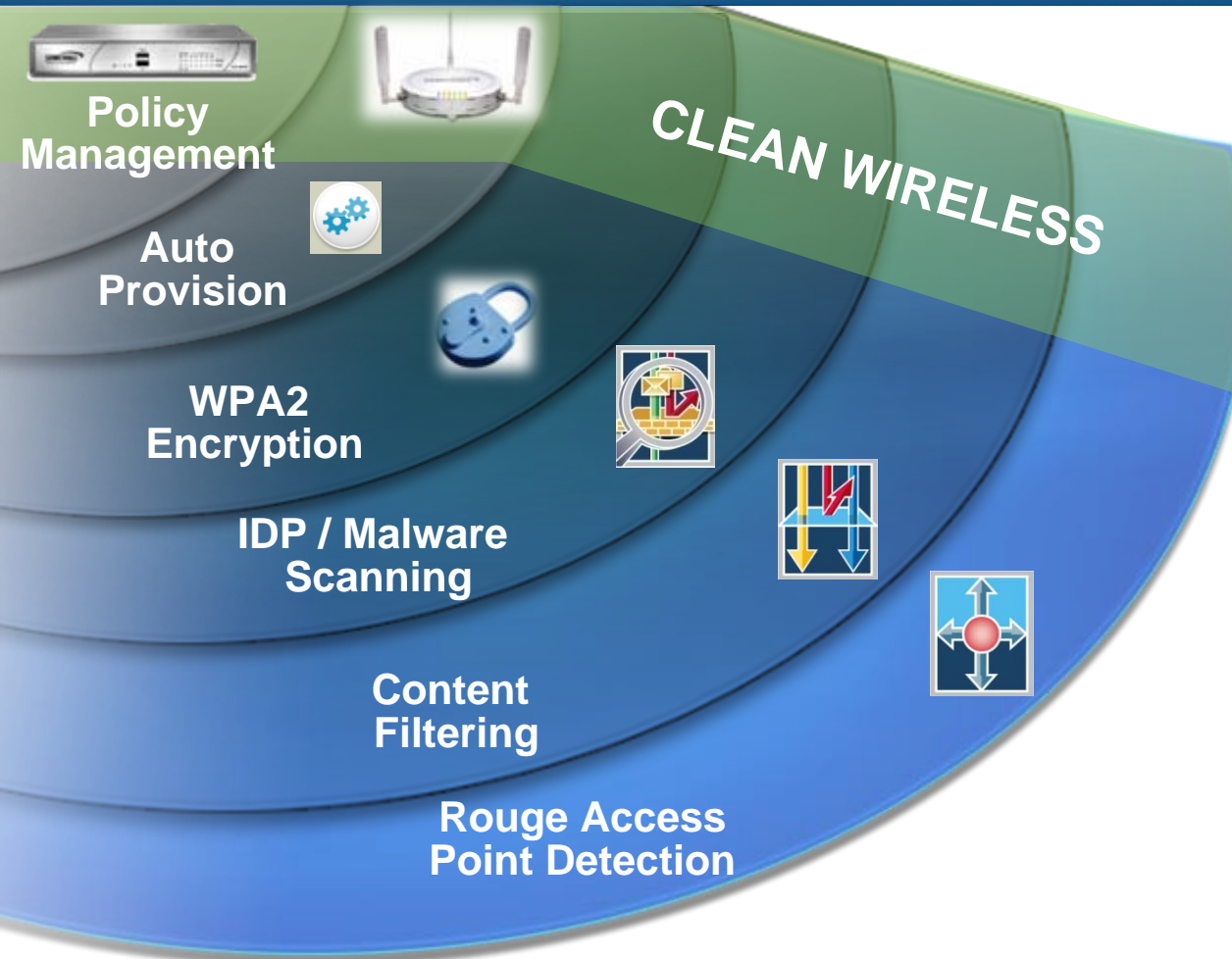
1. Site-To-Site IPsec VPN for secure data transport over any networks



2. SSL VPN for Remote Clients accessing to corporate resources



Securing Data in Motion



- **Clean Wireless**
 - Beyond encryption, provides threat detection and prevention scanning for all wireless traffic
- **High performance “N” connectivity**
 - Act as a replacement for wired connectivity, with speed and extended range
- **Simplified Deployment & Lowered TCO**
 - Centralized management and auto-provision to remove the complexity of high speed secure wireless

3. *Clean Wireless* delivers breakthrough threat inspection technology, is auto provisioned & managed, and integrates security policy across wired and wireless networks

Application has its Risk

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Financial firm fined \$25M for hiding software glitch that cost investors \$217M

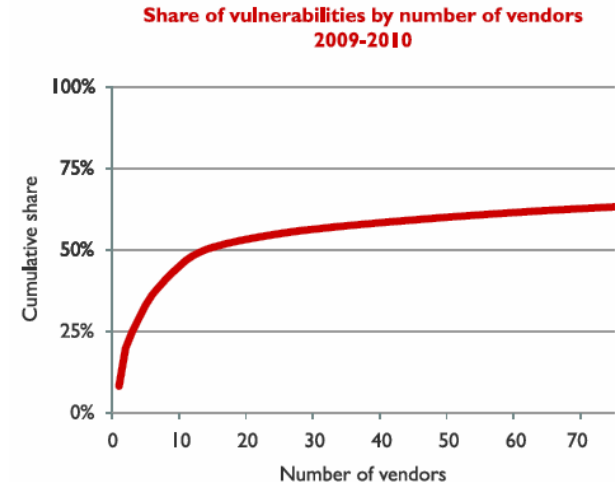
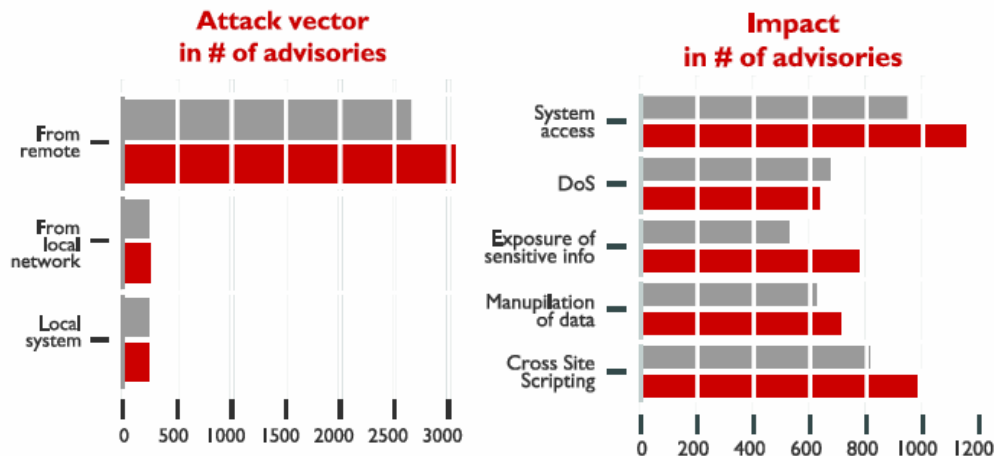
AXA Rosenberg Group investment fund is fined \$25M by SEC for hiding a software glitch

By [Tim Greene](#), Network World
February 04, 2011 05:00 PM ET

Comment Print

Recommend Be the first of your friends to recommend this.

An investment fund that hid flaws in a computer application that set the fund's strategy for making trades has agreed to pay a [\\$25 million SEC fine](#) and pay back \$217 million in losses suffered by investors because of the problem.



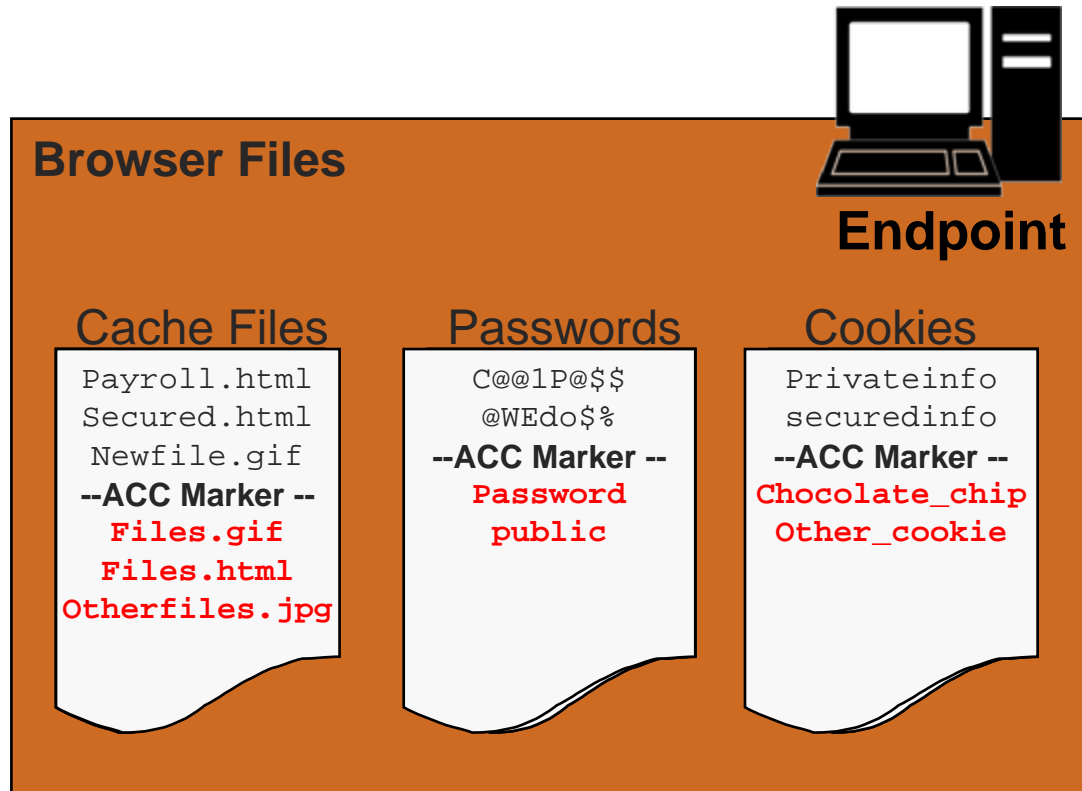
½ of all vulnerabilities found in either Operating System or software from last 2 years were from these vendors :

Adobe Systems, Apache Software Foundation, Apple, Cisco, Google, HP, IBM, Kernel.org, Microsoft, Mozilla Organization, Novell, Oracle2, RealNetworks, and VMware.

Are you or the company one of its many users ?

SONICWALL

Securing Application Data in Use



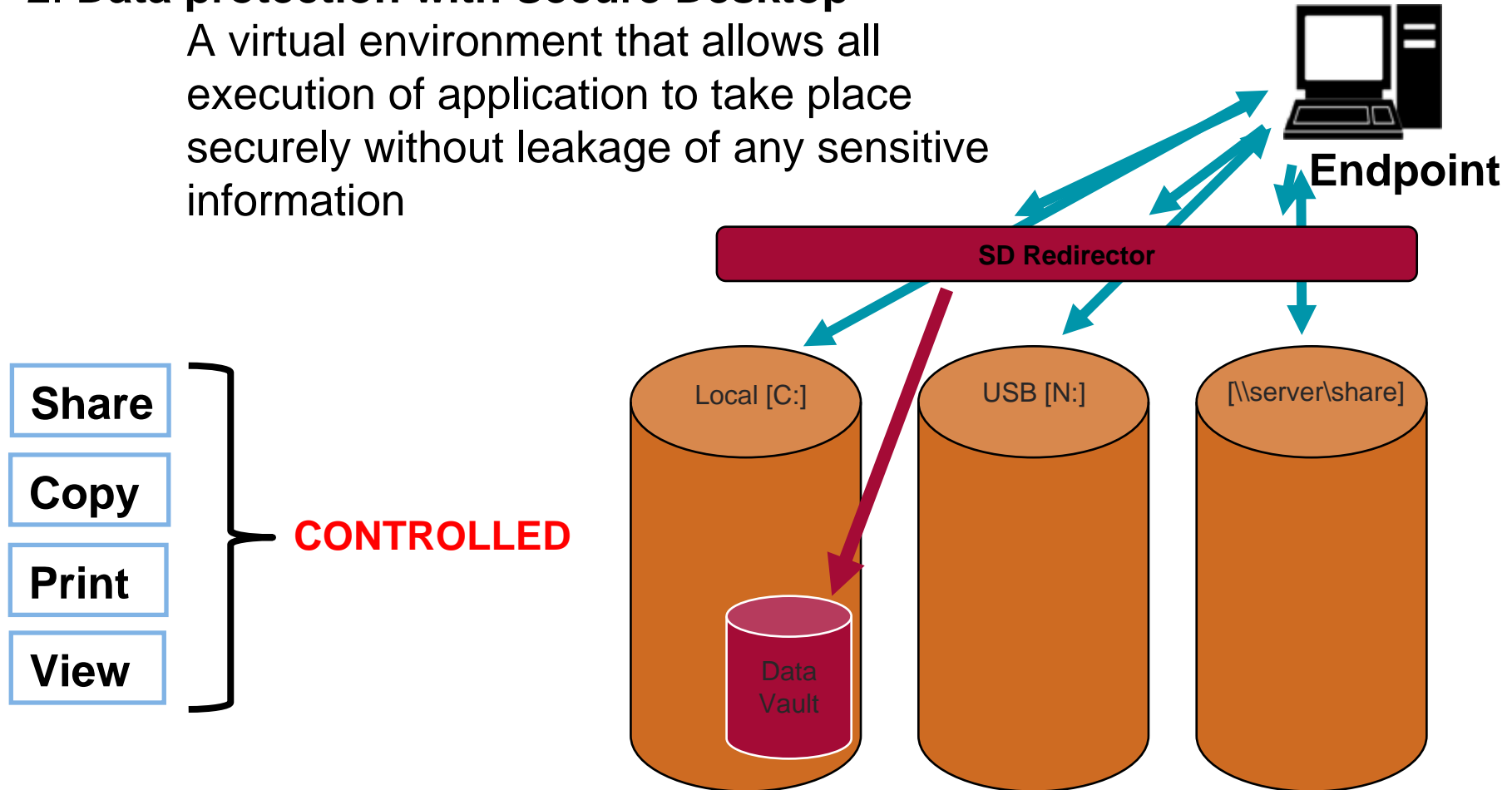
1. Data protection with Cache Cleaner

Creates a marker that allows application residues to be cleared once the session ends

Securing Application Data in Use

2. Data protection with Secure Desktop

A virtual environment that allows all execution of application to take place securely without leakage of any sensitive information



Securing Data with HTTPs Inspection

3. **HTTPs Inspection** allows encrypted traffic to be scanned and applied with security policies

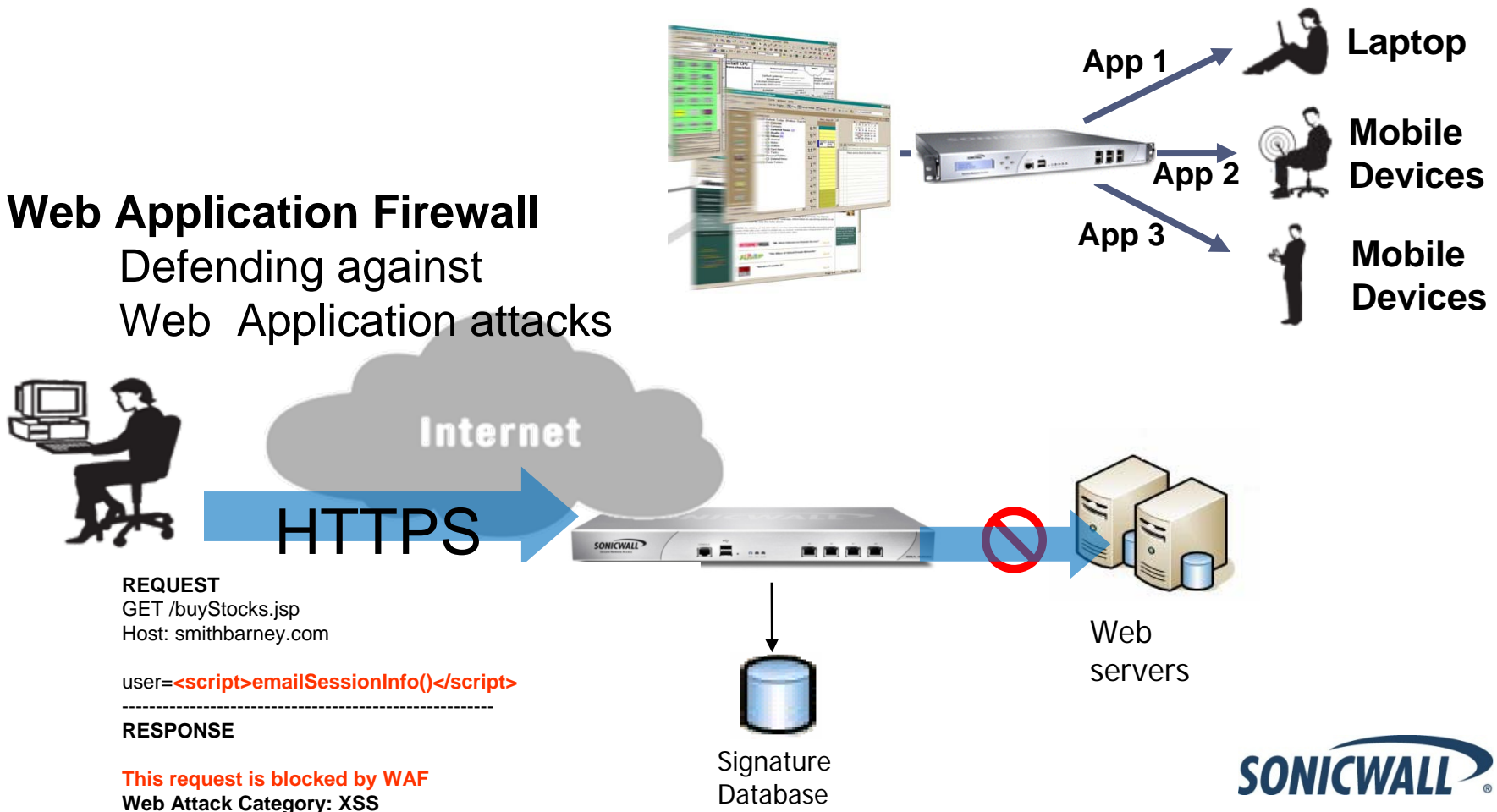
<https://mail.google.com>



Securing Application Access & Services

4. **Unified Policy** to allow very granular access control base on authentication credentials & Device profiles

5. **Web Application Firewall**
Defending against
Web Application attacks



Securing Application Data with Visibility & Control

6. Application Intelligence

- Visualize Application Traffic
 - Signature-Based
 - Discover Apps in Real-time
 - Identify User and Apps with drilldown capability
- Control Application Traffic
 - Manage App Bandwidth
 - Data Loss Prevention
 - Deny Non-Business Related Apps
 - Prioritize Application Bandwidth
 - Deny All Threats
 - Know Application Threat Rating
- And So Much More.....



Agent Awareness



Endpoints are Getting Out of Control

InfoWorld

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Researcher cracks Mac in 10 seconds

Security researcher Charlie Miller won CanSecWest's PWN2OWN hacking contest for the second straight year, improving his time and winning a \$5,000 cash prize

By Gregg Keizer, Computerworld
March 19, 2009 | [Comments: \(0\)](#)



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SONICWALL

Ensuring the Endpoint is Clean

1. Enforced Client AV at the Gateway

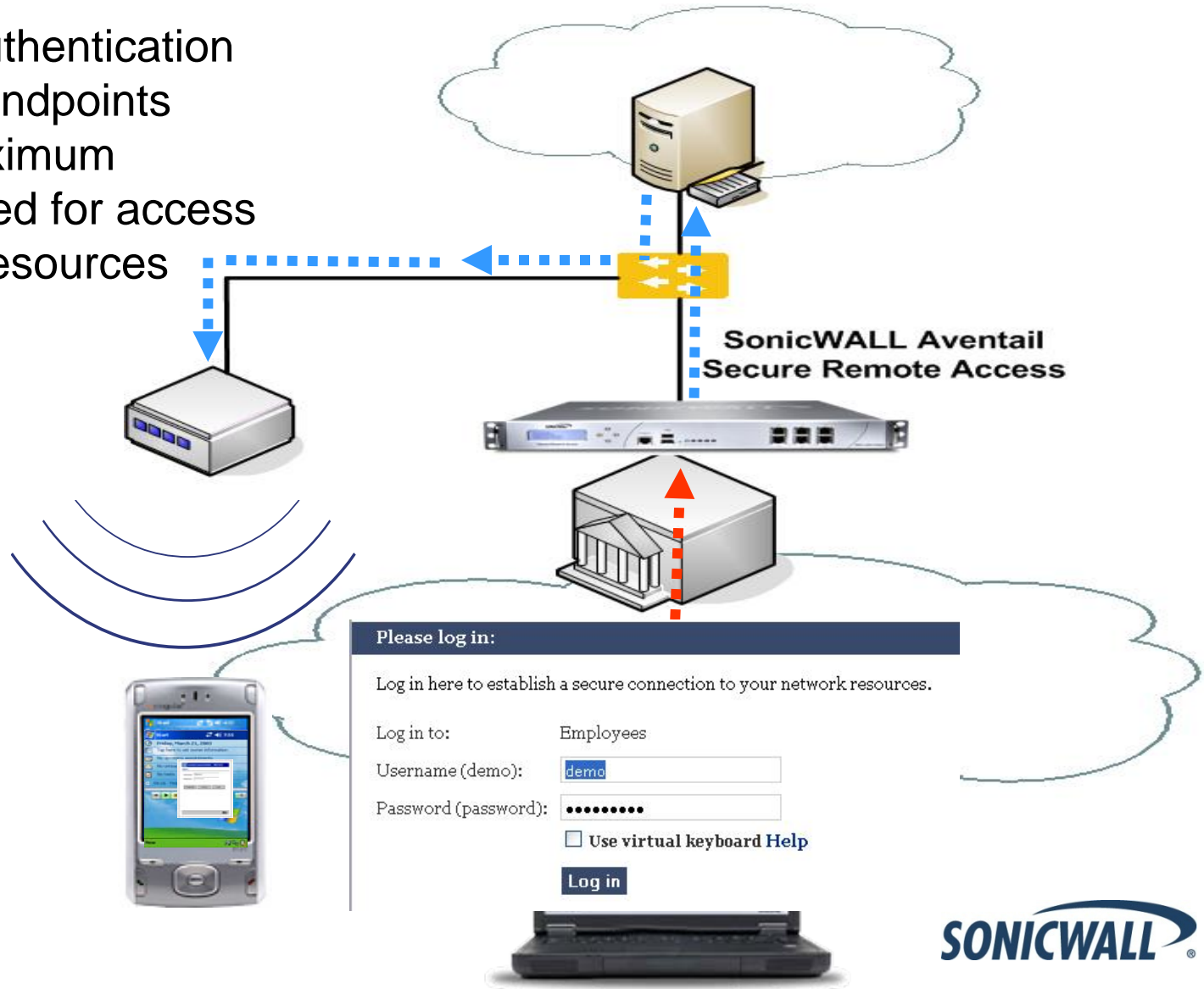
- verifies and ensure clients are running SonicWALL Anti-Virus with latest DAT files
 - Clients not in compliance are redirected to automatically download updates
 - Internet access is blocked until clients comply with Anti-Virus policy



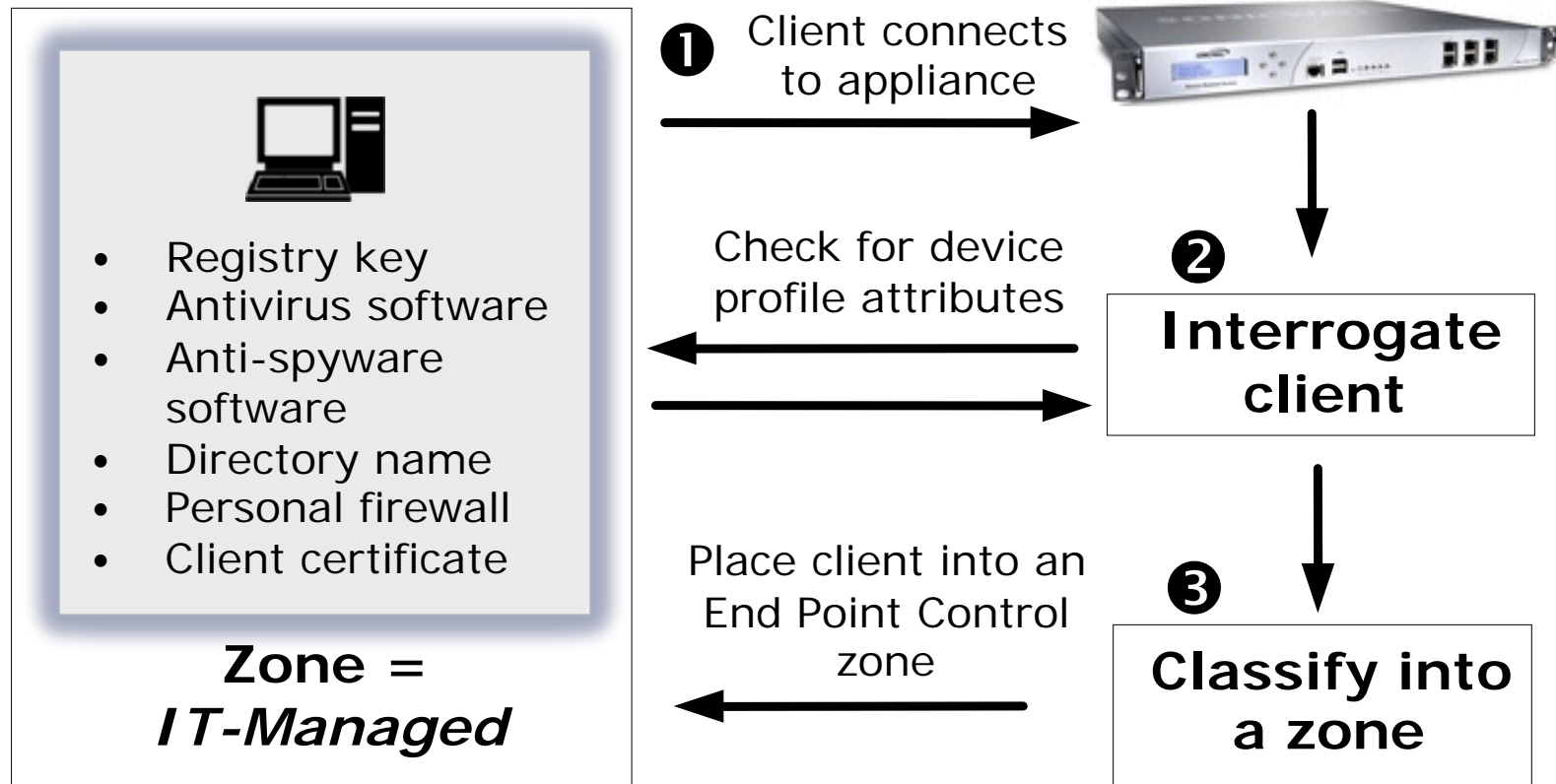
Prevent security breaches by ensuring up-to-date and active AV

Securing the EndPoint with Tokenless Two Factor Authentication

2. Two Factor Authentication for Users on all endpoints ensures that maximum security is required for access to all corporate resources



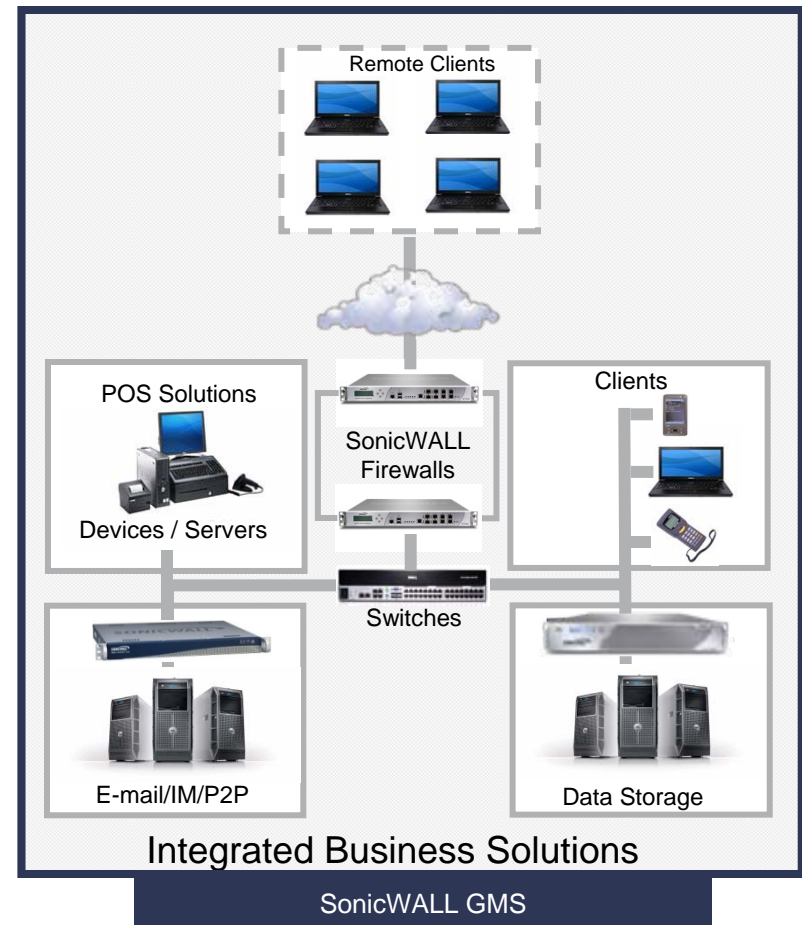
Securing the Endpoint for Compliance before Remote Access



3. Endpoint Control to enforce compliance and identify device and user for remote access to corporate resources

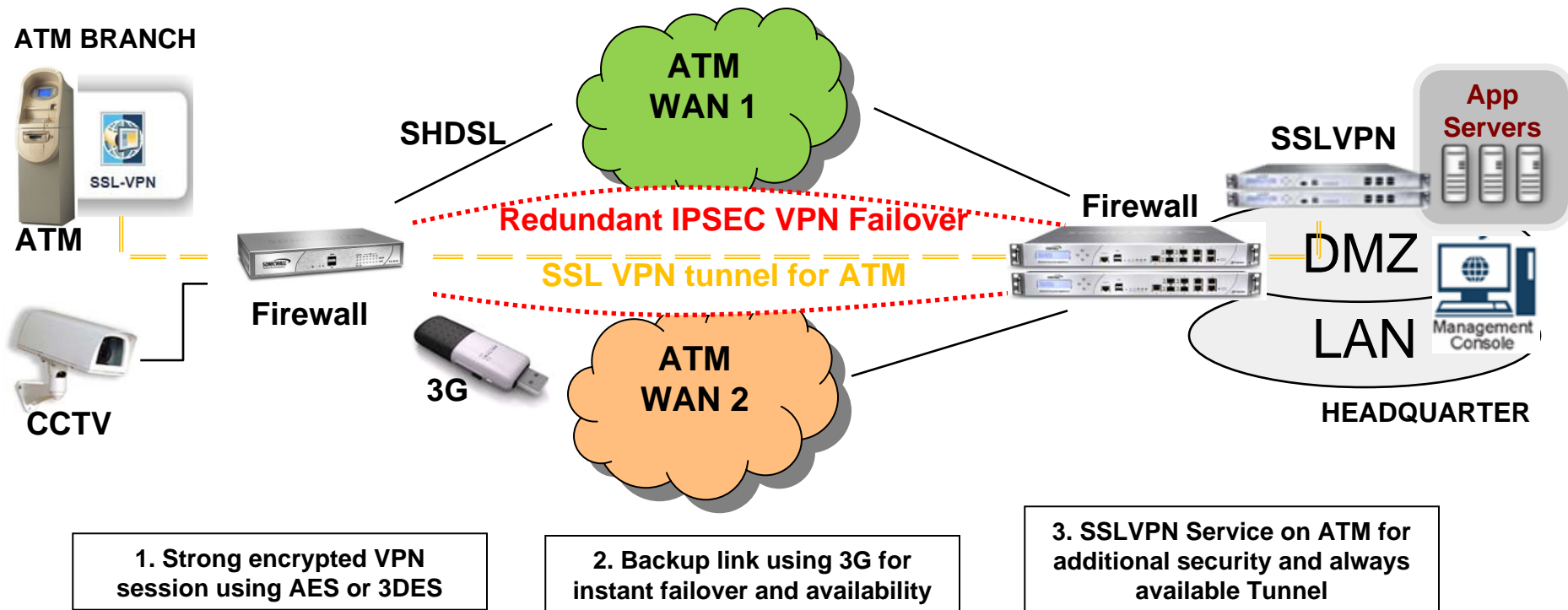
Enforcing PCI Compliance

- Secure Networking
 - AV, IDS/IPS
 - Anti-spyware (N/A - PCI)
 - Wireless Networking
 - Remote Access (SSL & IPSec)
- Secure Content Management
 - Endpoint (AV)
 - Email Security
 - Content Security (N/A - PCI)
- Business Continuity
 - Onsite Backup & Recovery
 - Offsite Storage & Recovery
- Policy and Management
 - Centralized Management
 - Strong Access Control
 - Comprehensive Audit Trails
 - Dynamic Vulnerability Management



Comprehensive PCI DSS Solutions Small, Medium & Distributed Networks

ATM & Mobile ATM Solutions



Data Security for Mobile ATMs with 3G



Mobile ATM

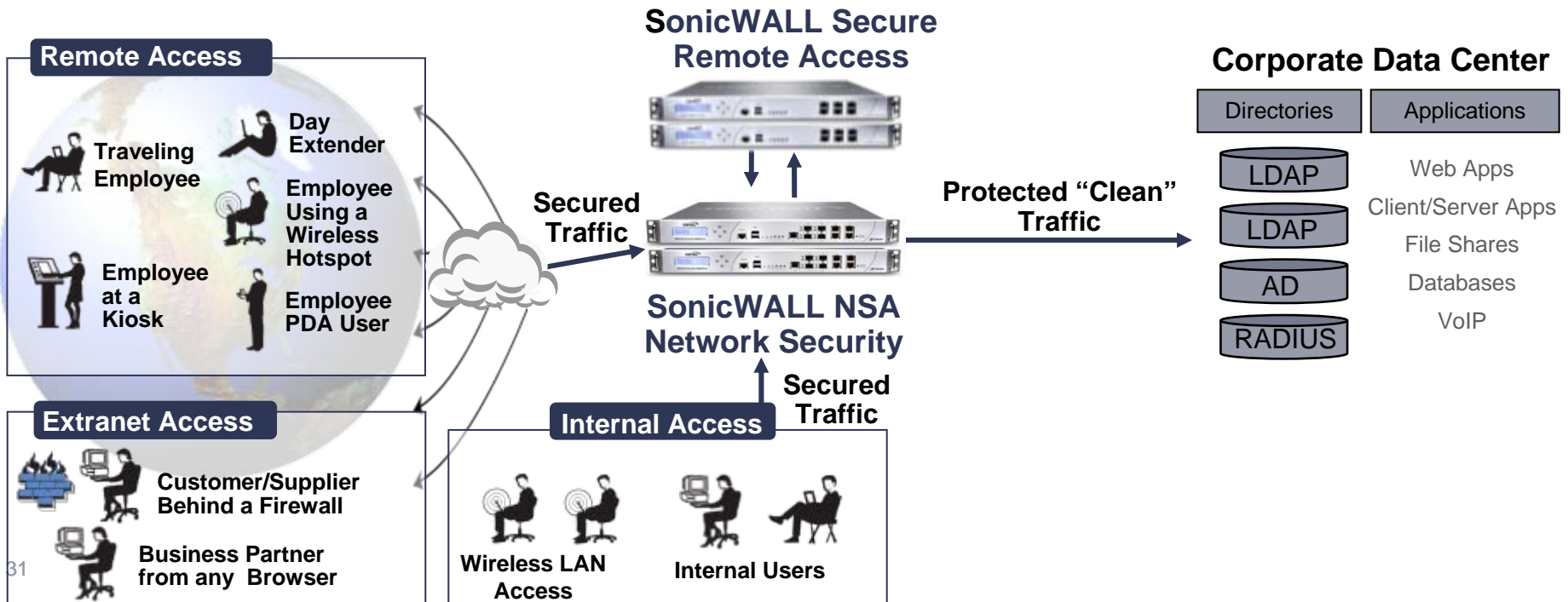


SonicWALL for Your Online Security

Detect

Protect

Connect





Protection at the speed of business