

Defending the Enterprise Against Spyware and Adware

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RSA Conference 2005

Outline

- Losses from Spyware, Adware, etc.
- Limitations of Traditional Security Products
- Enterprise Anti-Spyware Shopping Criteria
- Trends in Spyware & Anti-Spyware



Spyware as Mainstream Problem

- Spyware = Any Unwanted Software = Malware
 - Key Logger, Screen Capture, Ad-ware, Pop-Up Storms, Extra Links, Hijack Search Page, Window Over Page, etc.
- Wide Media Attention



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Microsoft Spyware Movie



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Enterprise Spyware Losses

- Lost Productivity of Employees
 - Performance and Usability
- IT Cost of Fixing
 - Repairing, Replacing
- Rare Yet Major Liabilities
 - ID Theft (Passwords, Digital Identity)
 - Theft of Enterprise Product Plans, Trade Secrets, Customer Data
 - Eavesdropping on Corporate Conversations, Email, Net-Meetings
 - Courtroom Embarrassments



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Traditional Security Products

- Norton Desktop Suite
- McAfee Desktop Suite
- Email Filters on Servers
- Network Firewalls
- Microsoft Security Utilities



Backup & Restore

- Backup System State, User Files and Programs
- Restore to Previous State
 - Hopefully Safe State
 - Could Restore Spyware
- Partial Restore Tricky Without Losing User Data
 - Spyware Inside User File
 - Registry Entries
 - Programs Tied To Registry



- Automatic Checkpoints
 - System & User Data
- Restore in Windows or Pre-OS
- Storage Outside Windows File Sys



Internet Explorer Security Enhancements

- Browser and Email are Major Infection Vectors
 - Some Threats Reduced by Switching Browsers or Email
- IE has Controls for Blocking Images, Pop-Ups, Downloads
- IE has White-Lists (Trusted Sites) and Black-Lists (Restricted Sites)
 - Hard: User Training, Configuration Updating
 - Lost Productivity when Websites Don't Work Right
- End User can Still Decide to Download “Cute” Application, Add-On or Toolbar That is Spyware



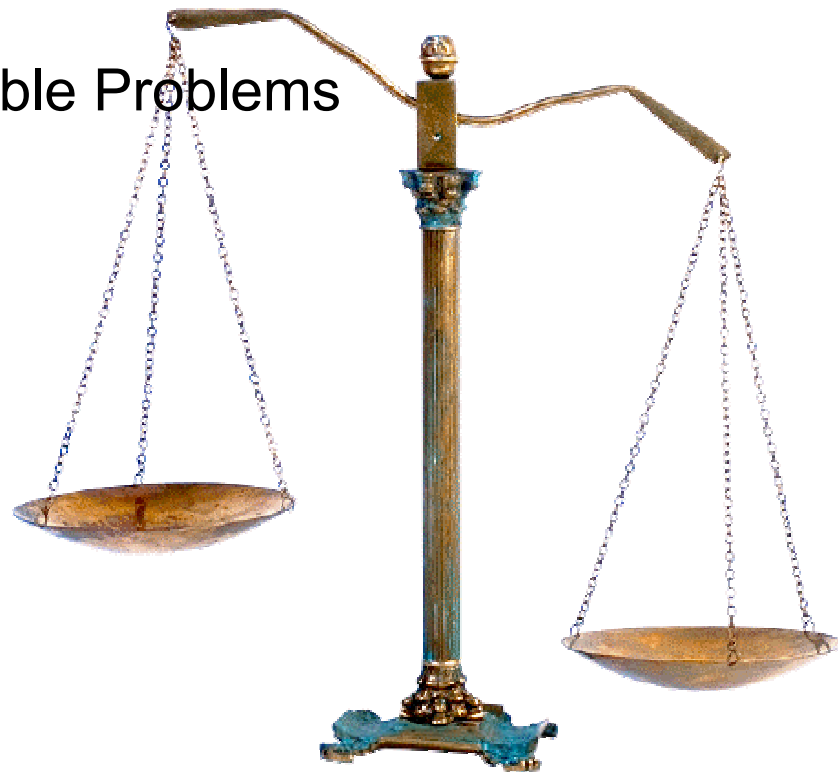
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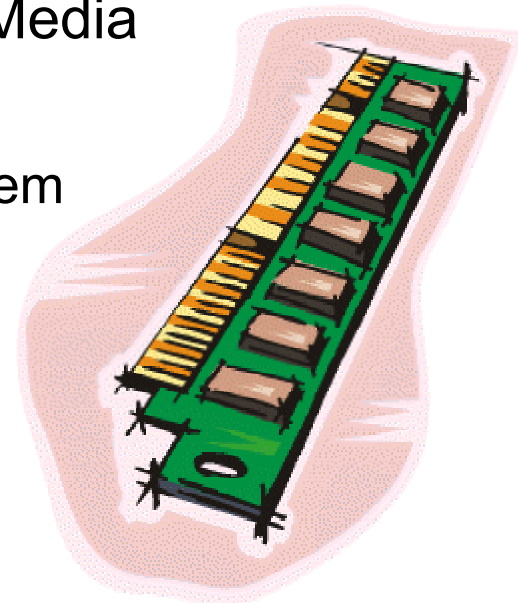
Enterprise Anti-Spyware Criteria

- Must Detect Wide Range of Problems
 - Ad-Ware, Pop-Ups, Hijacking, Keystroke logger, Tracking Cookies, ActiveX Objects, Brower Extensions, Start-up, Reconfiguration, etc.
- Quantity and Timeliness of Detectable Problems
- Quality of Fixing Problems
- Scanning
- Prevention and Protection
- Management Features



Enterprise Anti-Spyware Criteria Scanning

- Running Programs
- Registry
 - Browser Settings
 - Application Settings
 - System Settings
- File System
 - Compressed
 - Attachments
 - Scripts and Macros
- Removable Media
 - Drivers
 - File System



Enterprise Anti-Spyware Criteria Prevention and Protection

- Trigger Events
 - File Downloads
 - Email Receipt
 - Auto-installed Drivers
 - Process Launch
 - ActiveX Control Install
 - Kill Bits
 - Browser Helper Object Install
- Monitor Configuration Settings
 - System Startup
 - HOSTS Files
 - Winsock LSP Chain
 - Browser Hijacks
 - IE Restricted and Trusted Sites



Enterprise Anti-Spyware Criteria Management Features

- Silent Install
- Enterprise Configuration Control
- Enterprise Update Hosting
- Centralized Reporting of Scanning, Finding, Fixing
- Support All Installed Versions of Windows



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Anti-Spyware Comparison Matrix

Feature Set Product	Scanning	Prevention	Management
SpyBot Search & Destroy	◆ ◆ ◆ ◆	◆ ◆ ◆ ◆	◆ ◆
Giant AntiSpyware (Microsoft)	◆ ◆ ◆	◆ ◆ ◆	◆ ◆ ◆
Webroot Spy Sweeper	◆ ◆ ◆ ◆	◆ ◆ ◆ ◆	◆ ◆ ◆
CA Pest Patrol	◆ ◆ ◆ ◆	◆	◆ ◆
Ad-Aware (Pro)	◆ ◆ ◆	◆ ◆	◆ ◆

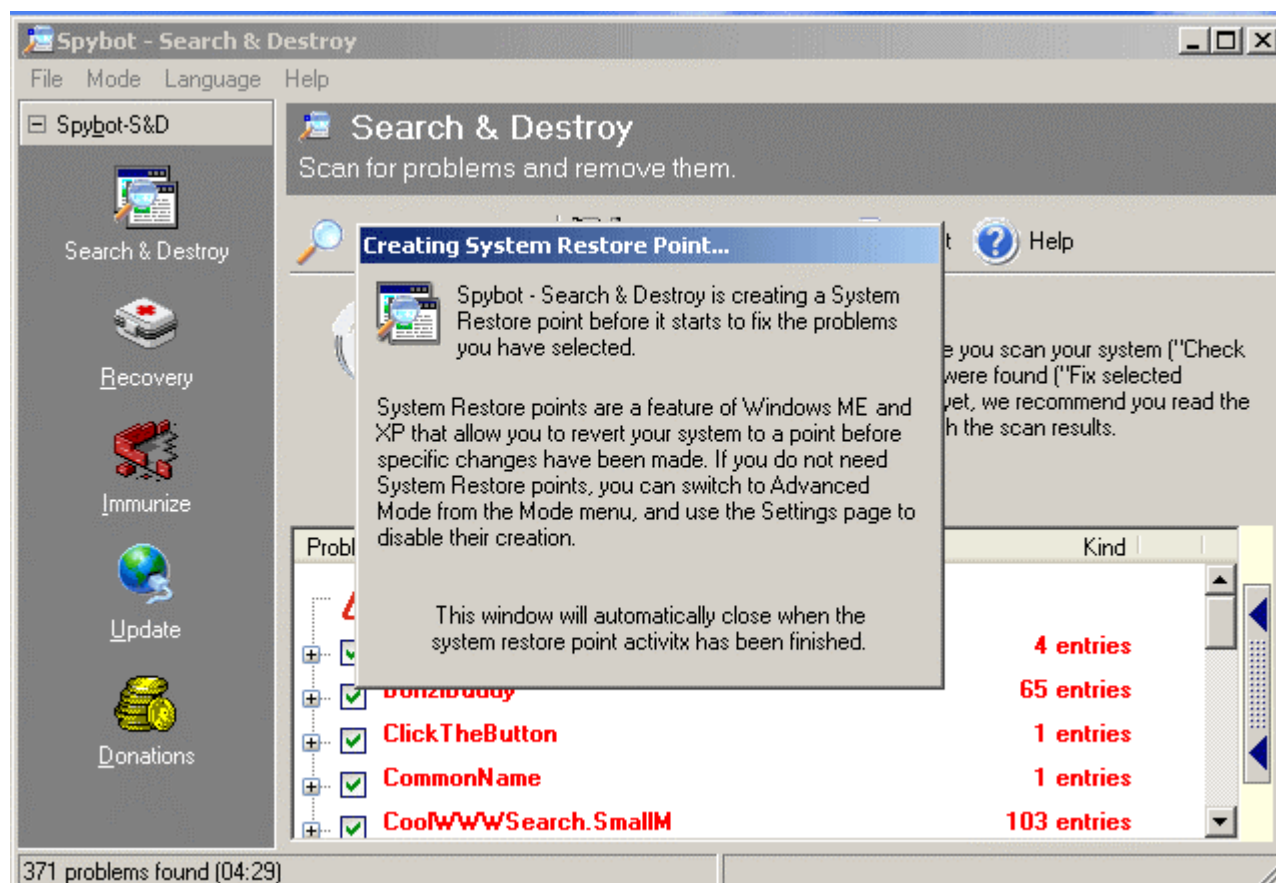
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SpyBot Search and Destroy

- Leading Free Tool to Find & Fix Spyware
- Geek Friendly



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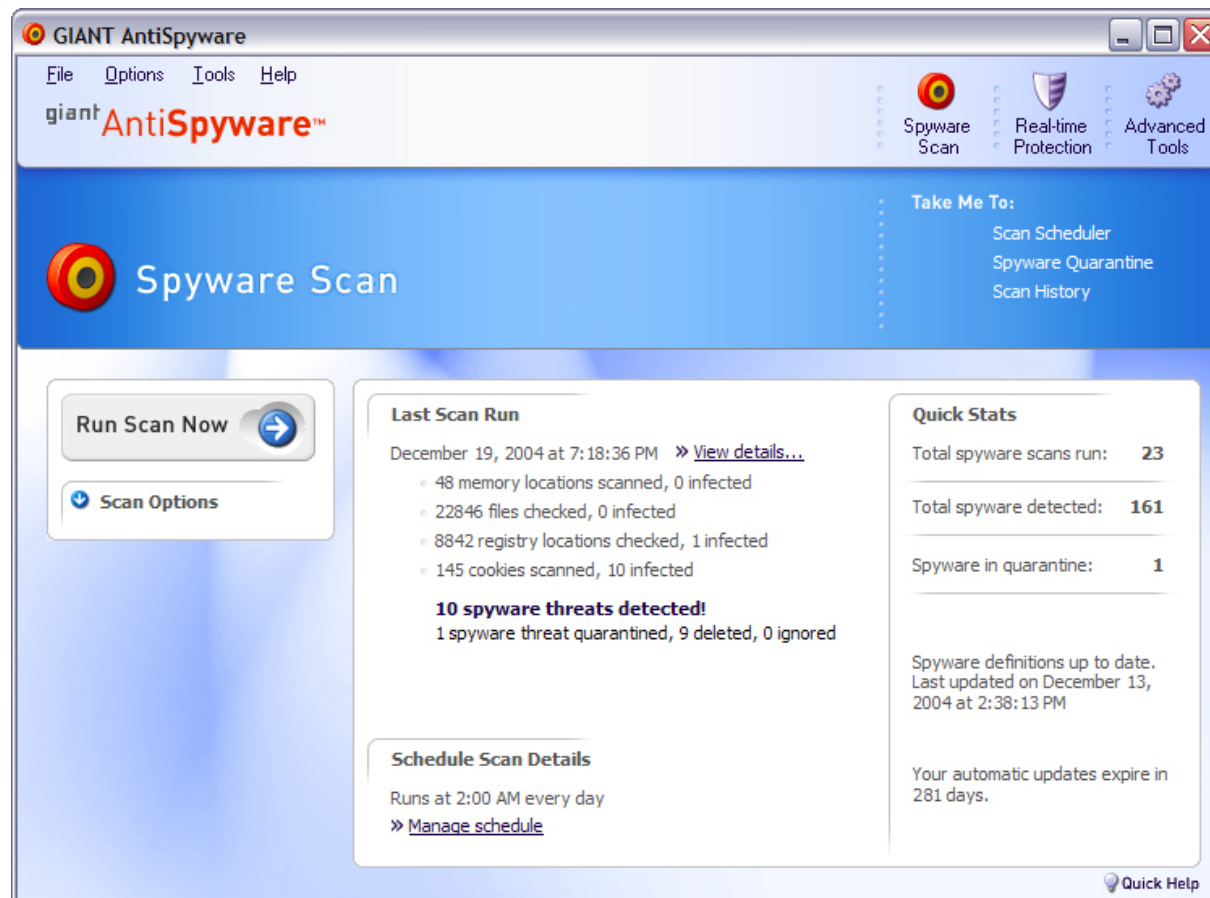


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Microsoft AntiSpyware

- Giant Acquired by Microsoft December 2004



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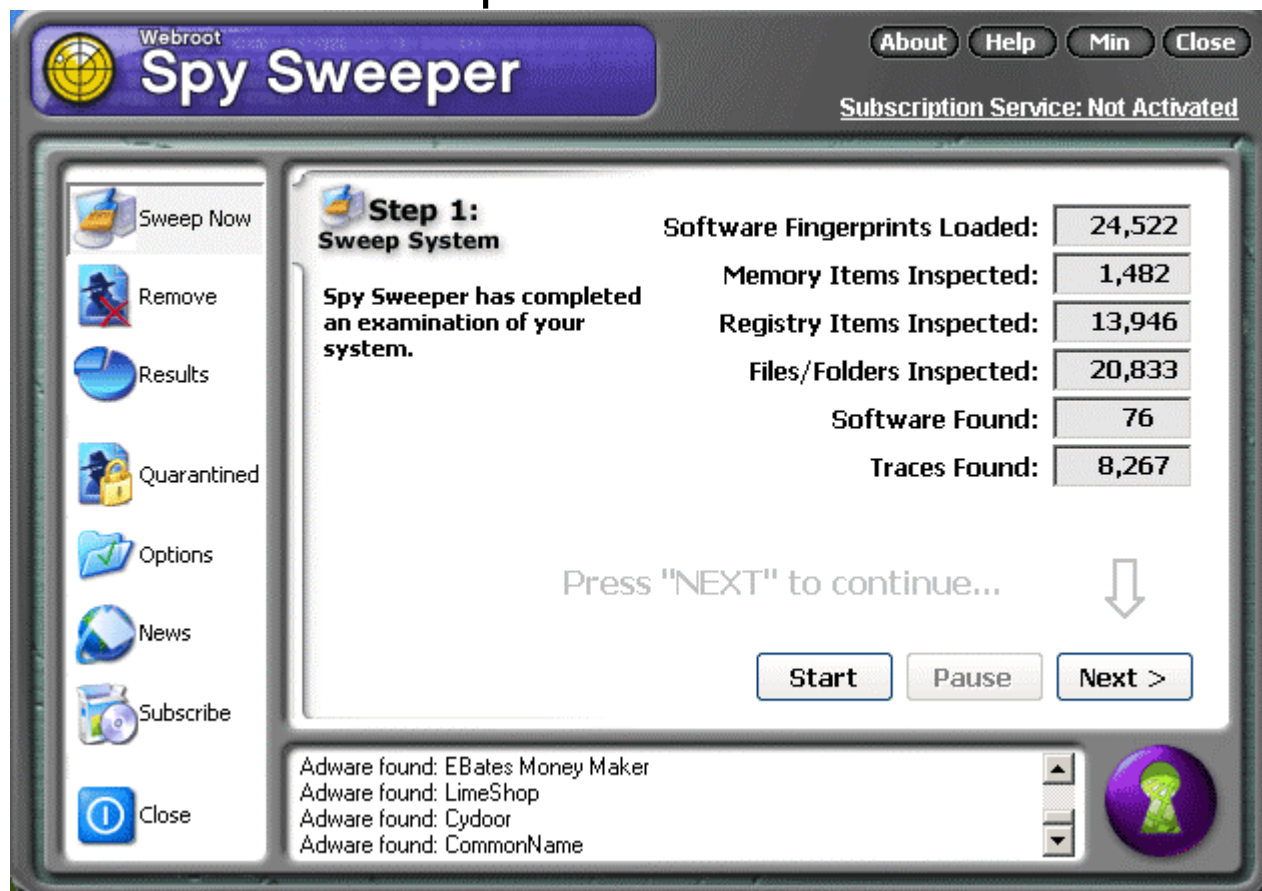


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Webroot Spy Sweeper

- Good for Home and Enterprise



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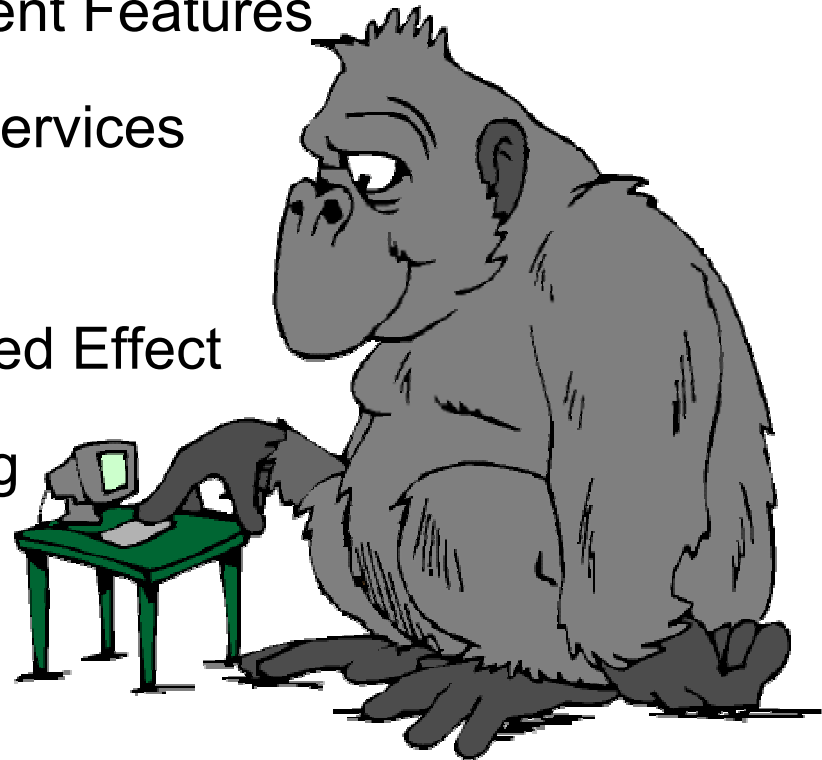
Trends in Spyware

- “Spyware” Now Broad Popular Term = “Unwanted Software”
 - Blurred with “Virus” and “Spam” and “Back-Doors”
- Growing Burden on Enterprise Productivity
- Automation of Social Engineering
- Financial Incentives Motivating New Tricks:
 - Steal Credit Card Numbers & PayPal ID
 - Drive Customers to Web Sites
 - Profit from Corporate Espionage



Trends in Anti-Spyware

- Microsoft Enters the Market
- Big Names Acquire Small Vendors
- Enterprise Deployment & Management Features
- ISPs Offering Re-branded Tools & Services
 - AOL, Yahoo, MSN
- More Legislation, Though With Limited Effect
- Improved Firewall and Email Filtering



For More Information

- www.SpywareInfo.com
- www.SpywareWarrior.com
- www.webroot.com/spywareinformation
- www.microsoft.com/spyware
- www.spynet.com (Microsoft)
- www.pcmag.com (Search “spyware”)
- For Current Version of This Presentation:
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