

Caribbean Solutions Lab, London Security Solutions, The Walt Disney Company, and McAfee: Deep Dive – Endpoint Protection Tips and Tricks

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Objectives



- Product awareness tour of a popular suite: Endpoint Protection Advanced (EPA)
- Highlight key features within point products that will improve security and compliance
- Use cases and real life examples of the point products combined





Gartner Research



Midsize Businesses Should Invest in Information Security

ID Number: G00136396, 9 December 2005

- Focus on ease of installation and deployment
- Look for ease of manageability
- Exploit integrated solutions
- Limit technology providers
- Look for extensibility of functionality
- Automation
- Consistency of policy creation and behavior



Endpoint Protection Advanced





ePolicy Orchestrator 4.6

VirusScan Enterprise 8.8

Host IPS 8

SiteAdvisor Enterprise 3.5

Web Reporter 5.2

Device Control 9.2

Policy Auditor 5.3



Perspective



- Very diverse customers base ranging from 7-nodes offshore financial services, 27,000-node government to 65,000 nodes commercial
- Full range of the security purchasing lifecycle: presales, services, instruction

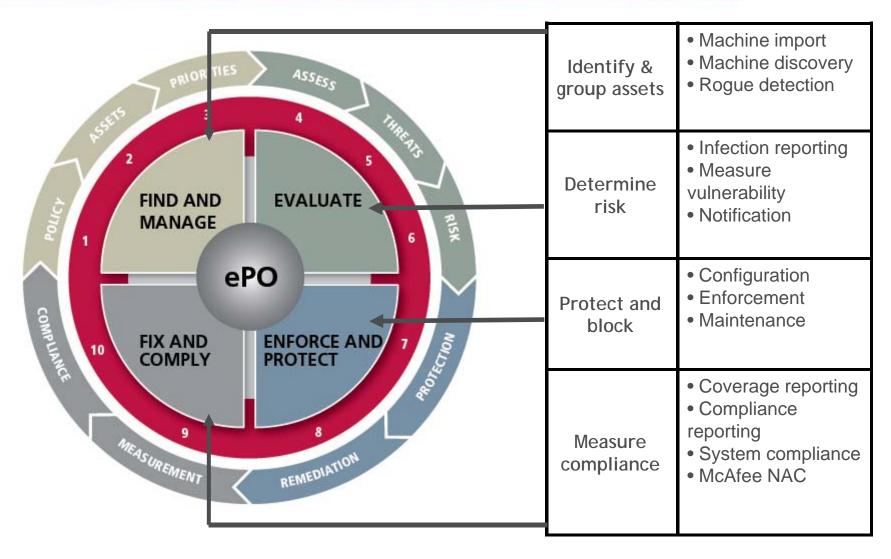




Security is continual process

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Audience Poll

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- How many are IT generalists who must divide their time between security and other responsibilities?
- Who wants to manage fewer security consoles, fewer policies?
- Who is relatively new to McAfee solutions?
- What is the average size of your installations? Under 50? 500? 5000? Anyone greater than 10,000?



ePolicy Orchestrator



Building and Maintaining a Strong Foundation

- To have good management you need a manageable infrastructure
- Agent is king
- Nothing happens unless you tell it to
- Backup your server, security keys, policies, etc
- Periodically purge the logs via server task
- Keep up with McAfee versions, patches and hotfixes



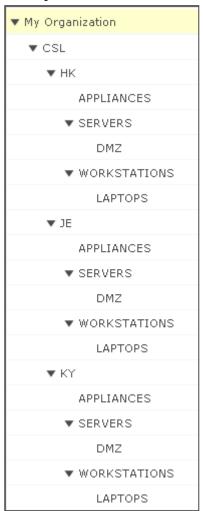
Periodically audit your system by generating some events and verify logs and notifications e.g. test files at www.eicar.org or www.eicar.org for endpoints or www.csm-testcenter.org for web.

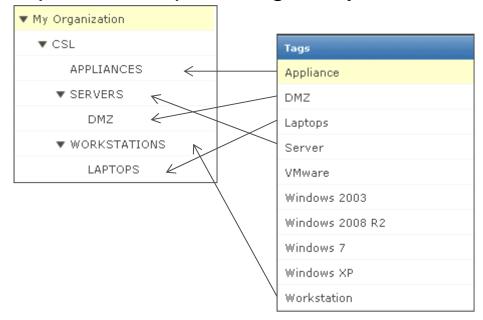


KISS – Keep it Stupid & Simple



System Tree – Complex vs Simple – Tags – System Tree Sorting





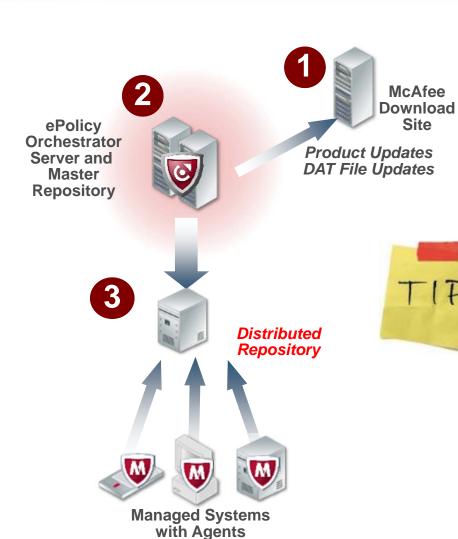


For pilot deployments, associate a manual tag e.g. pilot with a targeted deployment task



Distributing Applications & Content





Place Distributed Repositories on remote ends of slower network links. Branch office domain controllers are good candidates.

FOCUS"

Super Agent Repositories

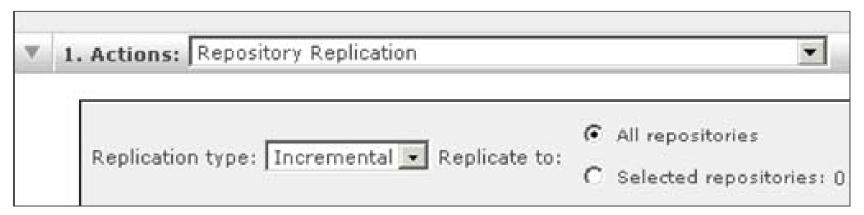


Configure via Agent Policy

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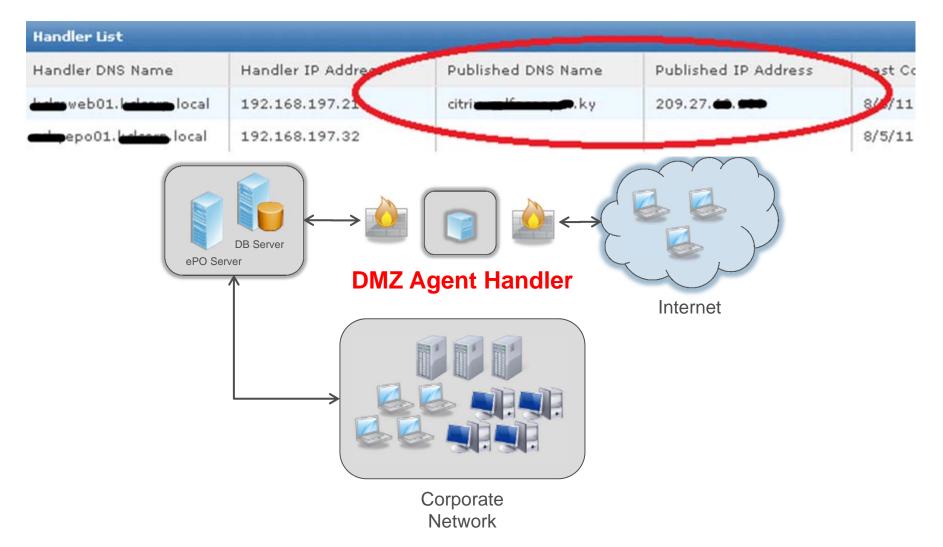
Create server task to replicate or use Global Updating





Securely Handling Remote Systems







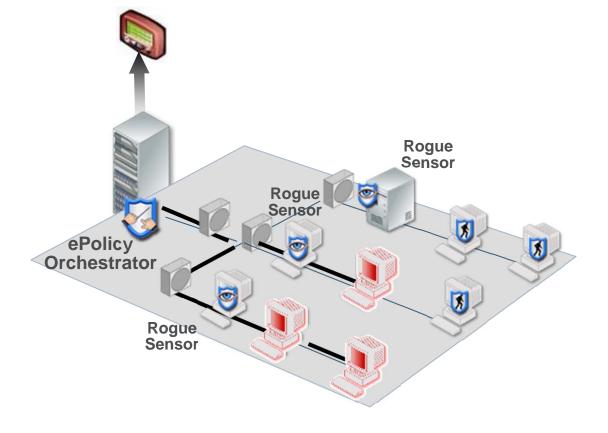
Detecting and Managing Rogue Systems



 Rogue System Sensors – one per broadcast domain or on DHCP server

Automatic Response – Add Deploy Agent and Alert Administrator

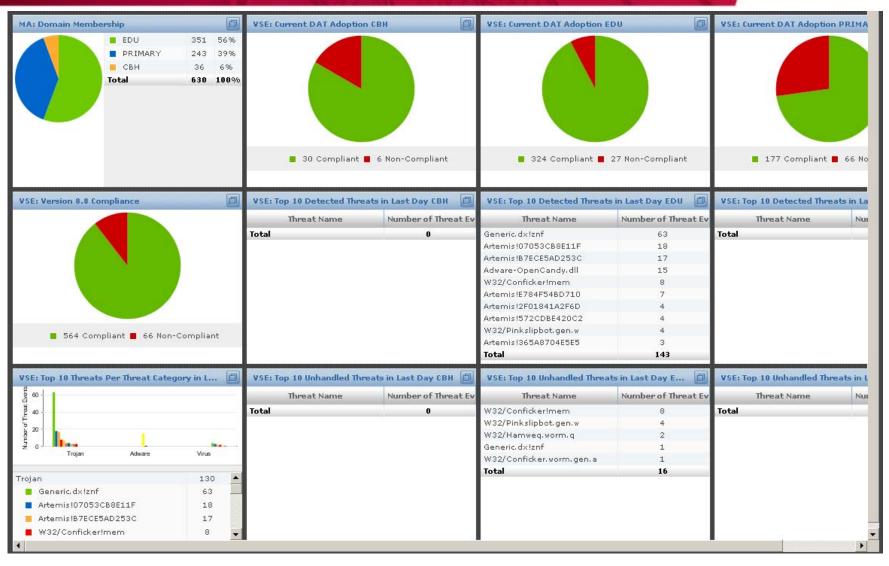
actions





Monitoring and Reporting

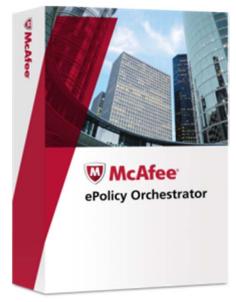






Intermission



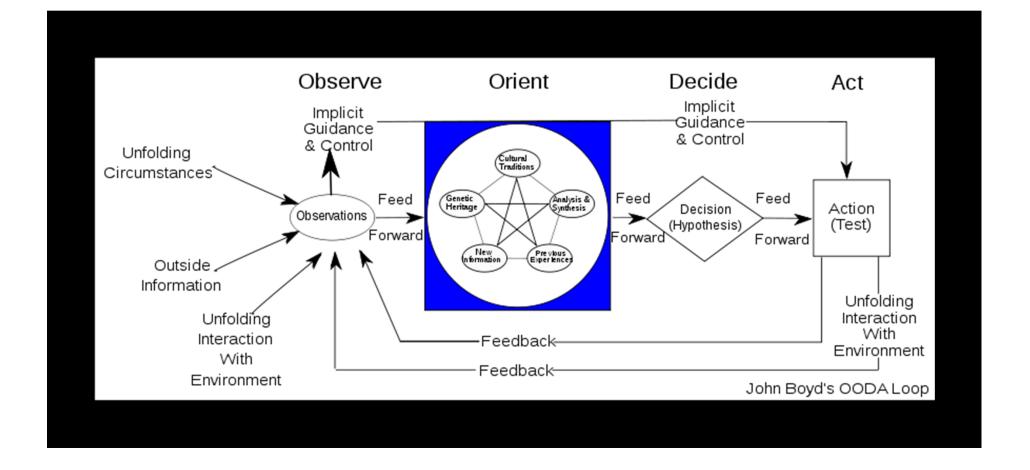


Question about ePO?



What is O.O.D.A.







Using the O.O.D.A. Loop with VirusScan



Observe

- What are the problems in your environment?
- Is your only solution VSE "what can an AV scanner do?"

Orient

Unlock the true potential of VSE 8.8

Decide

- What is more important?
 - Your user's access or your security

Act

 Review your logs, decide your actions, test configurations, and deploy

NOTE – this can be done with just about every McAfee technology



True Potential of VirusScan Enterprise



Regain desktop control from users

Enforce change controls

Provide real Zero-Day protection

You can Prevent FakeAV

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Learn to Exclude – Not disable



VSE – Users with Admin Privileges



Users were granted Admin privileges years ago

Regain control regardless of permissions

Consumerization of IT

• Users can purchase better equipment

Easier for user to do updates

May be easier but not necessarily safer



Best Practices



Removing local administrative rights from users mitigates against:

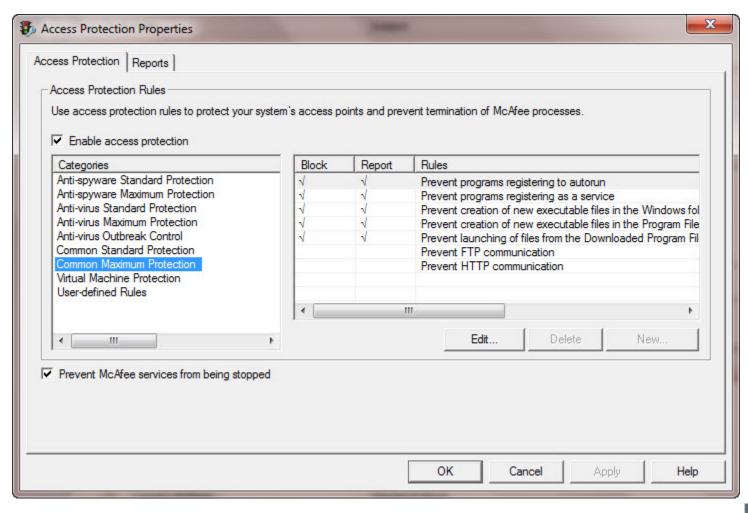
- 75% of the Critical Windows 7 vulnerabilities reported by Microsoft to date
- 100% of Microsoft Office vulnerabilities reported in 2010
- 100% of Internet Explorer and IE 8 vulnerabilities reported in 2010
- 64% of <u>ALL</u> Microsoft vulnerabilities reported in 2010



Enforcing Change Control with VSE 8.8



Change Control Management, Zero-Day Protection





Combating FakeAV with VSE 8.8



McAfee has released the following documents with detailed information about FakeAlert characteristics, symptoms, prevention, and mitigation.

PD23178 - Threat Advisory: Combating FakeAlerts https://kc.mcafee.com/corporate/index?page=content&id=P D23178

PD23177 - Threat Advisory: FakeAlert System Defender https://kc.mcafee.com/corporate/index?page=content&id=P
D23177



Combating FakeAV and regain Endpoint Control



By using the Access Protection rules explained in the McAfee Labs report, you will have a few additional benefits besides preventing FakeAV:

- No more unauthorized applications
- Regain control of the Change Control process
- -End the "multi-clicker" issues
- And many more advantages



VirusScan Enterprise



- Reports and Queries
 - Top 10's
 - Schedule reports for reoccurring dates/times
 - Trend Analysis
- Dashboards
 - Are combined views of queries and reports
 - Defaults are good but don't always meet your specific needs
 - Customize per individual (CIO, CISO, VP-IT, DIR, MGR, you)
- Automatic Responses
 - Are you using any or do you run in a knee-jerk reactionary state?



VirusScan Enterprise - Exclusions



KB66909

Master KB Article for Exclusions

You need to study it, know it, and bookmark it. "Learn to exclude – not disable" – Dennis London



Intermission





Question about VirusScan?



To Patch or Not to Patch?



Host IPS Buffer Overflow Protection mitigates:

- 100% of current Critical Adobe and Apple Vulnerabilities
- 100% of current Critical Severity and 81% of current High Severity Microsoft Vulnerabilities
- 80% of current Critical Google Chrome Vulnerabilities
- 85% of Mozilla High Severity Vulnerabilities

Source: McAfee Labs, valid as of publishing date: 1 August 2011



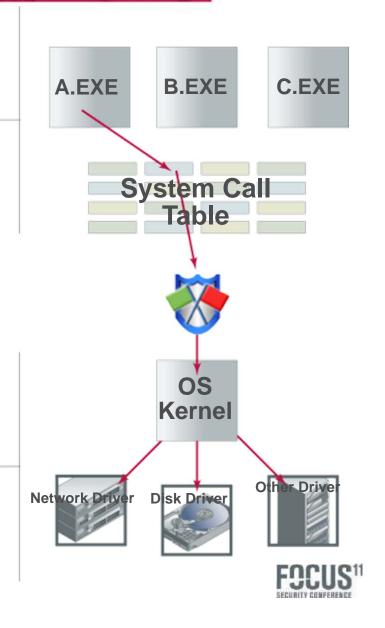
How Does HIPS Work?



 McAfee Host IPS validates system calls made into the different layers of the OS and kernel

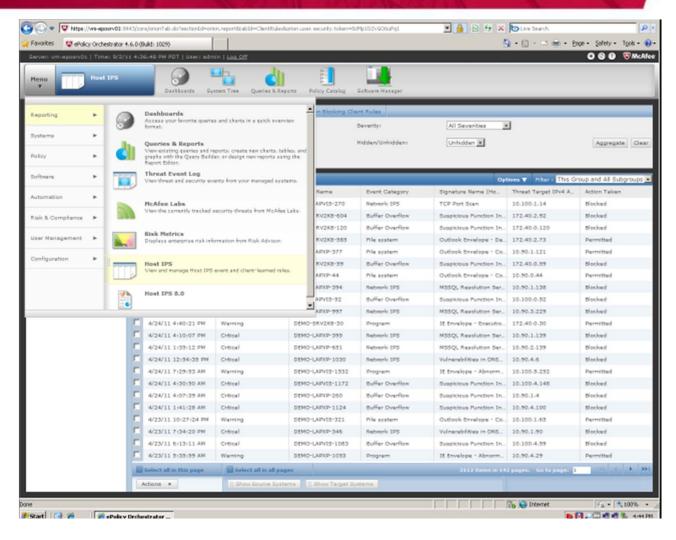
User Mode

- Calls are matched to a constantly updated database of both specific and generic attack behaviors
- If an attack is found, pre-emptive action is automatically taken ranging from 'Log Event' to 'Prevent'
- All activity on the host is seen and analyzed, and is not impaired by encryption, switched data or reliance^{Kernel Mode} on system log information



Accessing HIPS Events and Rules

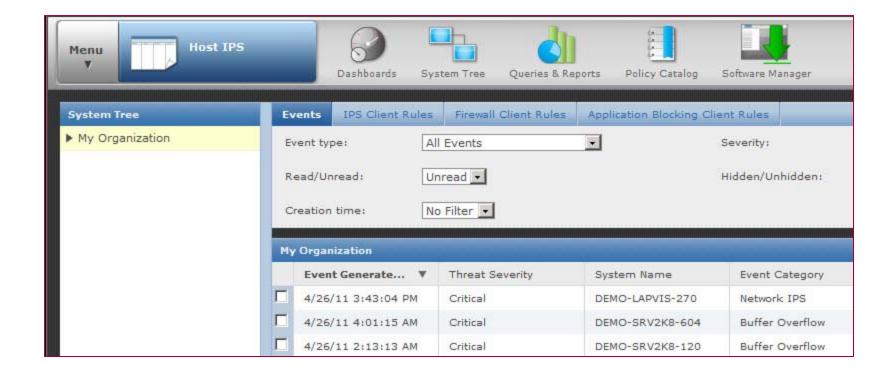






HIPS Client Events







HIPS Client Rules







HIPS Firewall Client Rules



Menu Host IPS		Dashboards	Sys	tem Tree Queries &	Reports Policy Cat	alog Software Manager
System Tree	Events	IPS Client	Rules	Firewall Client Rule	s Application Block	ding Client Rules
▼ My Organization	Creation	n time: No Fi	lter 💌	ĺ	7.	"
▼ DEMO	34.004.100.00					
DEMO-Laptops	Search:					
DEMO-Servers		12		- de		
DEMO-Workstations Lost&Found	My Orga	nization				
	Enal	bled		Effective Reaction	Direction	IP Protocol



HIPS Application Blocking Rules



Menu Host IPS		Dashboards Sys	stem Tree Queries & F	Reports Policy Catalog	Software Manager
System Tree	Events	IPS Client Rules	Firewall Client Rules	Application Blocking	Client Rules
▼ My Organization	Creation	n time: No Filter 💌	1		
▼ DEMO		\	.		
DEMO-Laptops	Search:				
DEMO-Servers					
DEMO-Workstations	-				
Lost&Found	My Orga Enal	BATTLE STREET,	Creation Date	▼ Modified Date	System Name
	Ellat	Jed .	Creation Date	mounted bate	System name



HIPS Policy Categories



Select this policy	For these options
Basic Protection (McAfee Default)	 Prevent high severity level signatures and ignore the rest
Enhanced Protection	 Prevent high and medium severity level signatures and ignore the rest
Maximum Protection	Prevent high, medium, and low severity level signatures and log the rest
Prepare for Enhanced Protection	 Prevent high and log medium severity level signatures and ignore the rest
Prepare for Maximum Protection	 Prevent high and medium severity level signatures, log low severity level signatures, and ignore the rest
Warning	Log high severity level signatures and ignore the rest

HIPS Adaptive Mode



Adaptive Mode is an extremely powerful tool for creating HIPS rules based on the host's activity...without admin interaction.

Application gets used

Rule is created to allow



Adaptive Mode Triggers



High Signatures get blocked

Triggered rules logged in ePO



HIPS Adaptive Mode



ns (All Platforms) > LSS Adaptive Mode								
Host IPS enabled Adaptive mode enabled (rules are learned automatically)								
Retain existing client rules when this policy is enforced								
Automatically block network intruders: (minutes): 10 ain blocked hosts omatically include network-facing and service-based applicat	ions in the a							
et et								



Intermission





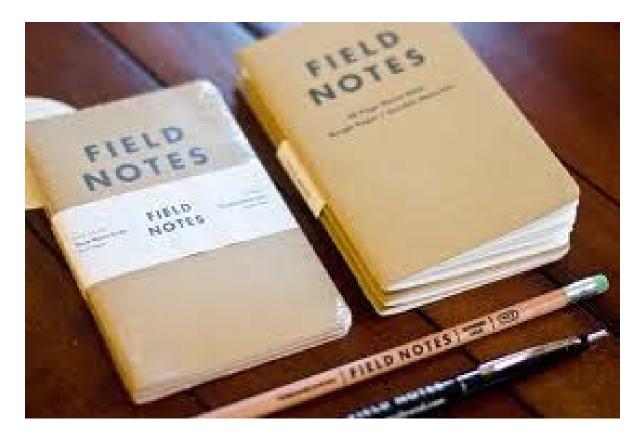
Question about Host IPS?



Field Notes



 Artemis, AntiSpyware, Access Protection, Not Best Practices, Rogue System Detection and Host IPS





Endpoint Web Security



- What happened to my perimeter? Life happened.
- Why endpoint protection? Mobile users!
- Site Advisor Browser based Security Filtering for IE, Firefox, Chrome
- Web Filtering for Endpoints Content Filtering at the Browser
- Web Reporter (Separate Server Install)

Explicitly permit trusted sites e.g.



- .mcafee.com
- .nai.com
- .trustedsource.org

Installation notes: ePO extension and deployment package



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SiteAdvisor Enterprise



Explicitly Prohibit – Custom messaging





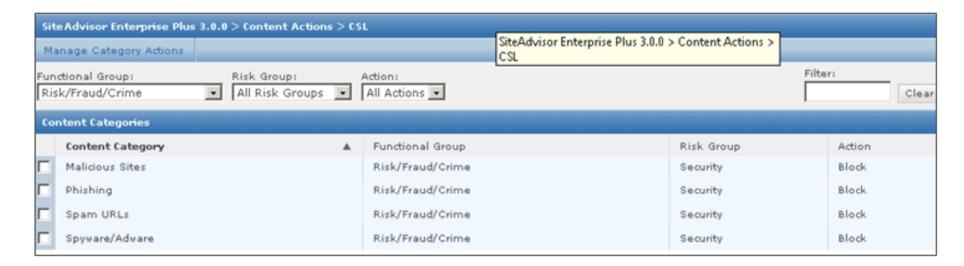
Syntax does not require * wildcard prefix. Include link to corporate logo



Web Filtering for Endpoints



- Content Actions
- Recommended for Blocking Risk/Fraud/Crime Functional Group





Content Filtering







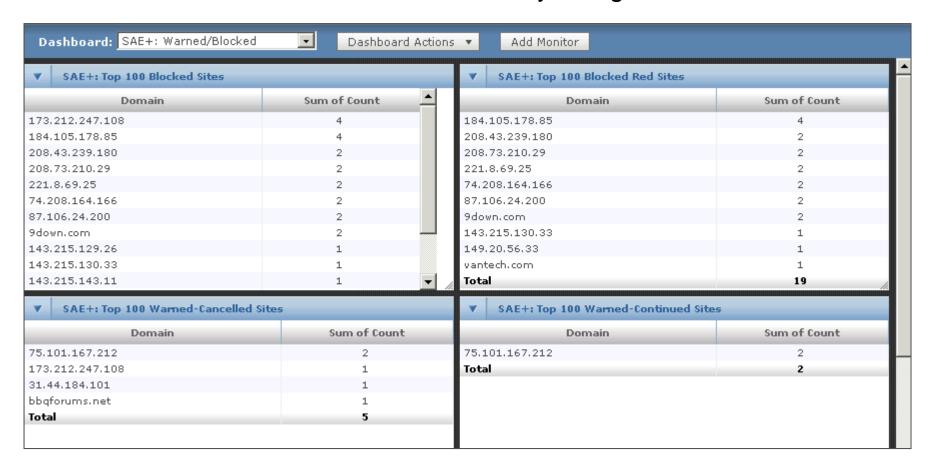
Content and Security filtering leverages the best of GTI



SiteAdvisor Enterprise in ePO



• ePO Dashboards are focused on security rating events

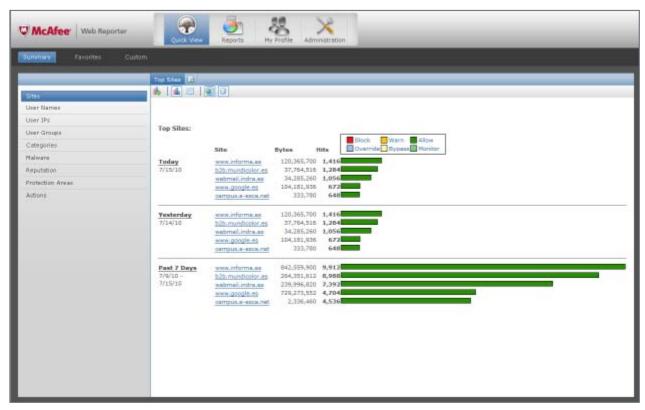




Web Reporter



- Web Reporter focus on Content Filtering Events
- Configure ePO client task to "Send Web Reporter Logs" when Idle 5m
- Automatic Email Reports to Heads of Department Top 10 Users, Top 10 Sites, Top 10 Sites Accessed By Top 10 Users, Top 10 Blocked





Intermission





Question about SiteAdvisor?



Device Control



Rank	Top 5 Global Malware
1	Generic!atr
2	Exploit-CVE2009-3867.b
3	Generic.dx
4	W32/Conficker.worm!inf
5	Exploit-CVE2010-0840

McAfee Threats Report: First Quarter 2011

- 3rd common vector along with web and email
- Do you have removable storage policy?
 - If yes, use for enforcement.
 - If not, use data as evidence to drive policy creation
- Monitor and protect servers. Don't be another Wikileaks/US Army

Installation Note: ePO server installation and deployment packages



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Building Device Control Device Rules



- Policy Elements
 - Who to control: User Assignment Groups
 - What to control: Device Definitions
 - How to control:
 - Monitor
 - Block

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- Make Read Only
- Notify User
- Store Evidence



Example Device Control Device Rules



- Monitor who is using Apple iPad and iPhone 4
 - PnP Device Definition: VID:05AC, PID 129A, PID 1297
 - Action: Monitor
 - User Assignment Group: Domain Users, Domain Admins
- Block all Devices Except Optical for Guests
 - Device Definition:
 - Include: All Removable Storage
 - Exclude: Optical Devices
 - Action: Block

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User Assignment Group: Domain Guest



Content Protection Rule



- Monitor any file to removable storage
- Be careful about storing evidence with type of rule
- Monitor based upon file type (Adobe, Word, Excel) or source application Email Client, Explorer, Web Browsers

ID	Event Generated Time (UTC)	Event Type	User Name	Computer	Agent Action(s)	Destination	Severity	Associated Rules
13342	9/2/2011 4:02:58 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\stanny\		CSL Removable St
13341	9/2/2011 4:02:51 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\stanny\		CSL Removable St
13340	9/2/2011 4:02:48 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\stanny\		CSL Removable St
13339	9/2/2011 4:02:45 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\stanny\		CSL Removable St
13337	8/30/2011 7:00:08 PM	Devices: Device Plug	CSL\Stud	PC3	Block, Monitor	HL-DT-ST		Students Remova
13335	8/31/2011 4:52:24 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\dukoral\		CSL Removable St
13334	8/31/2011 4:52:23 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\dukoral\		CSL Removable St
13333	8/31/2011 4:52:23 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\dukoral\		CSL Removable St
13332	8/31/2011 4:52:10 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\		CSL Removable St
13331	8/31/2011 4:52:10 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\		CSL Removable St
13330	8/31/2011 4:52:05 AM	DLP: Removable Storage P	CSL\sslat	P3X-777	Monitor	f:\		CSL Removable St
13329	8/31/2011 4:51:56 AM	Devices: Device Plug	CSL\sslat	P3X-777	Monitor, Notif	Kingston		CSL Removable St



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DLP Monitor



Devices: Device Plug

Severity: Low

Additional details

Agent Version: 9.2.0.305

 Policy Name:
 DLP Security Policy

 Policy Time (UTC):
 8/27/2011 1:27:37 PM

Connection State: Online

Devices

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Device Class GUID: 4D36E967-E325-11CE-BFC1-08002BE10318

Device Class Name: Disk drives

Device Name: HP v100w USB Device

Device Compatible ID: USB\CLASS_08&SUBCLASS_06&PROT_50

Device Instance ID: USBSTOR\Disk&Ven_HP&Prod_v100w&Rev_1.00\35020213001F&0\{53f56307-b6bf-11d(

 Bus Type:
 USB

 Vendor ID:
 03F0

 Product ID:
 3207

USB Serial Number: 3S020213001F

USB Class: 08h - Mass Storage

Device File-System Access: Read - Write

Volume Label: HP

Volume Serial Number: BC7F-25A3
Device File System Type: FAT16

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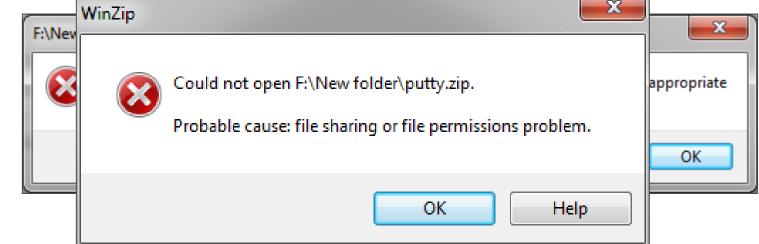


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Device Control File Access Rule



- Prevent access and execution of unknown files from removable storage
- Exe, com, bat, msi, cgi, cmd, jar, dll, scr, vbs and more
- Note that archives e.g. zip will be blocked





Create the rule but leave it disabled. Enable as necessary.



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Intermission





Question about Device Control?



Got Audit(or) Fatigue?



- 51% of large enterprises must meet over 10 regulations and standards
 - 15% report more than **75 annually**
- More than 50% spend over \$500K per year on auditing
 - 39% spend over \$1M

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- 57% of large companies have **not** automated 75% of their audit controls
- More than half of organizations use spreadsheets or no tools at all
- In Caribbean, we are often faced with simultaneously meeting compliance regulations from US, Canada, UK and Europe!



Policy Auditor Can Help



- Automation of:
 - Verification of Microsoft updates. Is Windows Updates working?
 - Verify the application Adobe patches
 - Verify compliance with PCI, SOX, ISO and other security templates.
- Deal with pesky auditors. Don't get stuck by being told you fail an audit but not how/why?

Installation Note: ePO server installation, deployment packages and server tasks to update content from McAfee



Policy Auditor and MS Patches

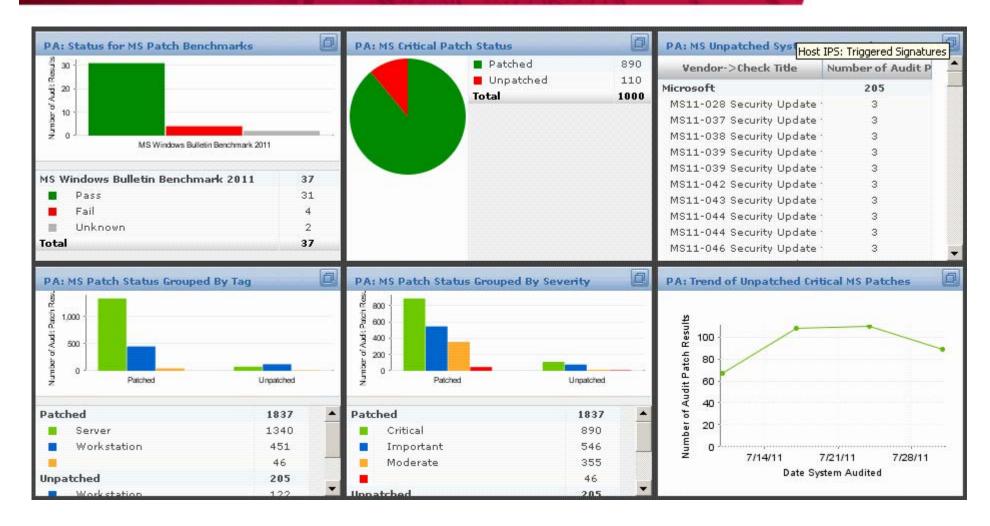






MS Patch Status Dashboard

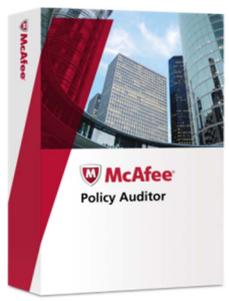






Intermission





Question about Policy Auditor?



What Else is in the EPA Suite?



- EPA is a great foundation for system security
- Security for Email Servers with McAfee Quarantine Manager
- McAfee Encrypted USB Management centrally enforce device policies and track usage
- McAfee NAC Software based NAC capable of performing selfenforcement and quarantine



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Get trained. You will be more effective at your job!



What Should You Worry About?



McAfee Threat Intelligence Service



NEW THREAT OVERVIEW | PREVIOUS THREATS UPDATES | THREAT DETAILS

EXECUTIVE SUMMARY

August 4, 2011 | MTIS11-141

Since the last McAfee® Labs Security Advisory (August 3), the following noteworthy event has taken place:

McAfee has released a report covering "Operation Shady RAT".

NEW THREAT OVERVIEW

Operation Shady RAT - Known Attack Components

MTIS11-141-A

IMPORTANCE: Medium

COVERED PRODUCTS: DAT | Web Gateway | Application Control

UNDER ANALYSIS: BOP | Host IPS | Network Security Platform | Firewall Enterprise

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What Should You Worry About?



McAfee Global Threat Intelligence iOS App





What Should You Worry About?



McAfee Security Vision iOS App





What's in our gear bag?







Questions?







FAQ



- How many ePO servers do I need?
- How often should I download DAT's from McAfee?
- How often should I perform deploy DAT's i.e. perform Agent Update?
- What are other good access protection rules?
 - Protect Network Settings
 - Block access to read and write access to all shares
 - Make all shares read-only
- What should I do in an outbreak?



