

Continuous Compliance with IBM Tivoli Endpoint Manager





Who was BigFix?

- Headquartered in Emeryville, California, with more than 200 employees with annual turnover in excess of \$100m
- Hold 10 technology patents, with 17 patents pending worldwide
- □ The BigFix customer list counts many of the world's largest and most prestigious organizations in every industry including financial services, healthcare, retail, education, manufacturing, and public sector agencies
- More than 8,000,000 PCs, servers, and mobile devices under management
- Previous OEM partnership with IBM (Proventia ESC)
- Now a core part of IBM Tivoli Group's strategy





Endpoint management: The Three Cs

Complexity

- Manage Complexity, Simplify and Automate
 - Coordination across business processes through the organization
 - Heterogeneous endpoints, networks, applications and OSes

Compliance

- Ensure Compliance, Reduce Risk
 - Security vulnerabilities
 - Rapidly correct compliance "drift"
 - Industry regulation compliance and auditing (COBIT, SOX, PCI, and more)

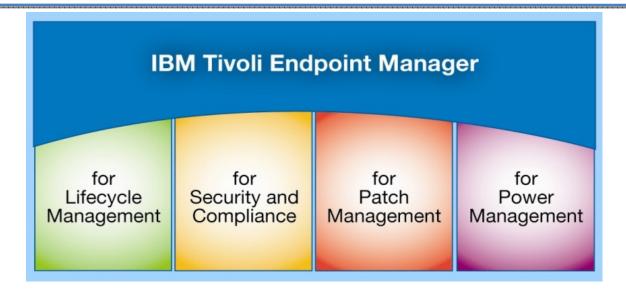
Cost

- Reduce TCO & Operational Costs
 - Remove manual intervention
 - Remove unnecessary configuration diversity
 - Improve efficiency





Tivoli Endpoint Manager, Built on BigFix Technology



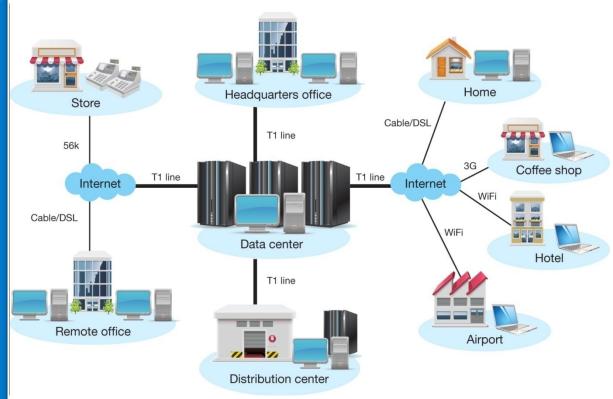
Using Tivoli Endpoint Manager (TEM), clients can:

- Discover all endpoints: physical, virtual, fixed or mobile
- Fix issues anywhere in **minutes**, regardless of bandwidth or connectivity
- Deploy in days, over any network or geography
- Achieve continuous compliance across platforms
- Simplify operations and enjoy rapid time to value



TEM Lifecycle Management: Smarter, Faster Endpoint Management

- Network Asset Discovery
- Endpoint HW, SW
 Inventory
- Patch Management
- Software Distribution
 - OS Deployment
 - Remote Desktop
 Control
- Software Use Analysis
- Power Management

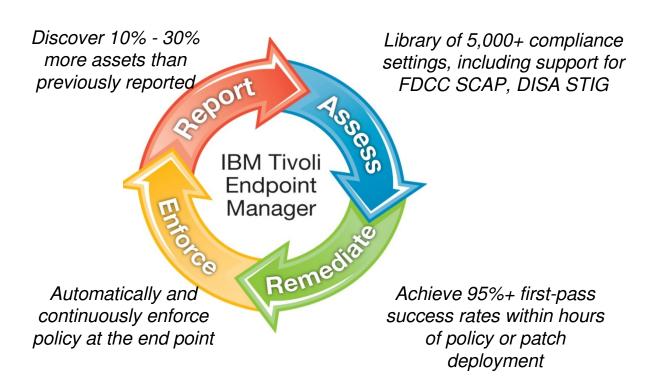


Whether it's a Mac connecting from hotel wi-fi, or a Windows laptop at 30K feet, or even a Red Hat Linux Server in your data center, Tivoli Endpoint Manager has it covered. In real-time, at any scale.



TEM – Security & Compliance: See More, Secure More

- Patch Management
- Security Configuration
 Management
 - Vulnerability Management
 - Asset Discovery
 - Network Self Quarantine
- Multi-Vendor Endpoint
 Protection
 Management
- Anti-Malware & Web Reputation Service...





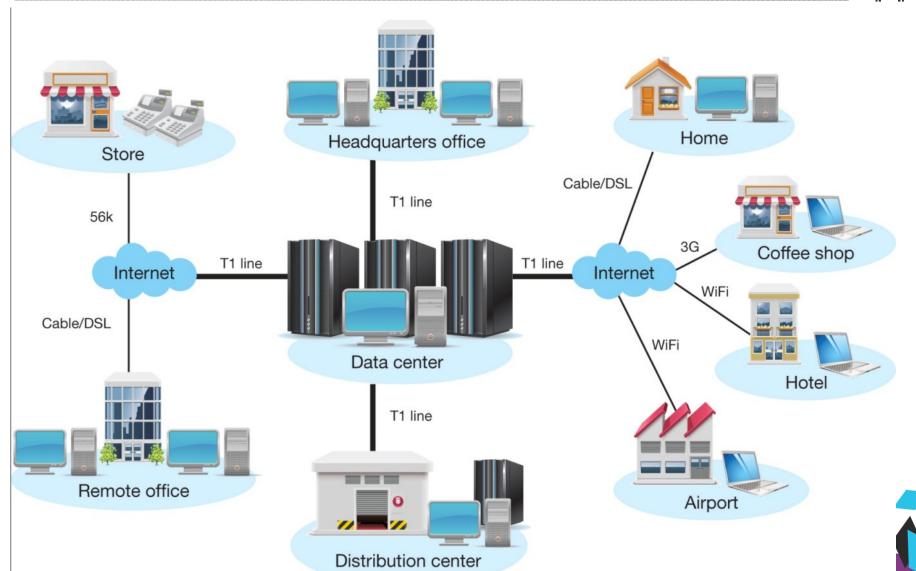








Endpoint Management Architecture





Tivoli Endpoint Manager: Low TCO, Real Savings

	Previous Approach	With TEM		
90K device deployment	6 months	1 week		
# of Management Servers	25	1		
Annual Electricity Costs	\$6.9M	\$4M		
Patch Cycle	7 Days	5 minutes		
Software Inventory Cycle (license "true-up")	3 weeks	20 minutes		
Vulnerability Assessment Cycle	6 months	3 days		
Security Configuration Cycle	5 months, 6 FTEs	2 weeks, 1 FTE		

"I just wanted to share this with you and the guys.... The April Microsoft Patch push began at 5:00 AM on 4/20 with 579,047 affected patch instances to push, the largest push to date. At 3:00 PM on 4/20 a total of 527,916 affected patch instances were fixed. This gives us a 91.17% affected patch instances fixed in only 10 hours!

I don't believe any other product could have accomplished what Tivoli Endpoint Manager accomplished here today." --IT Manager, Large Healthcare Organization



Why Customers Choose Tivoli Endpoint Manager

- Real-time visibility
 - Single agent sees all, does all
- Unprecedented scalability
 - One server for > 250K endpoints
- Broad coverage
 - Multi-platform, multi-purpose, on-network, off-network
- Rapid time-to-value
 - Installs in hours, remediates in minutes
- Reporting

Fast Facts:

 Every day, trillions of \$\$\$ flow through Tivoli Endpoint Manager managed computers

•Each year, over \$350B in retail transactions is enabled by Tivoli Endpoint Manager technology

•Tens of thousands of hotel reservations are made every day on Tivoli Endpoint Manager-managed computers



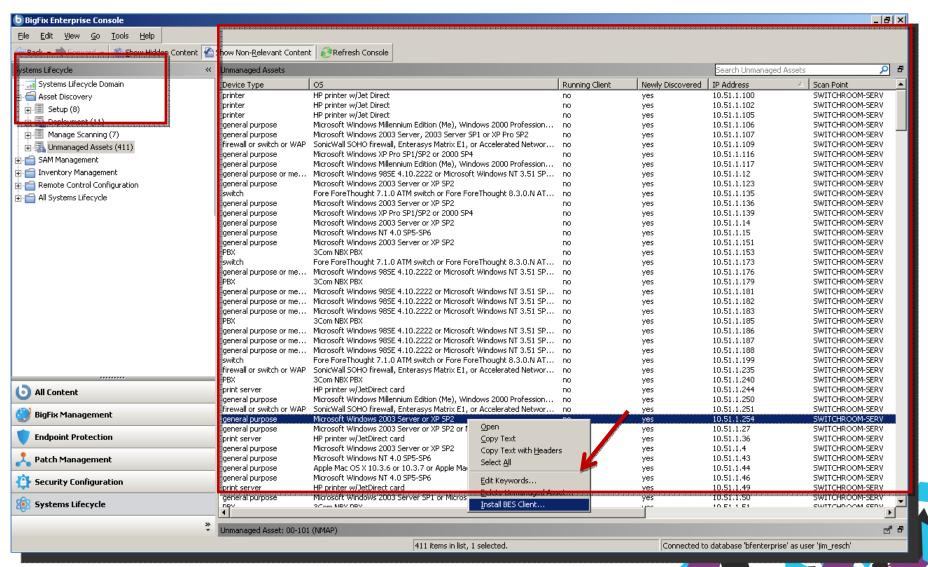
Demo



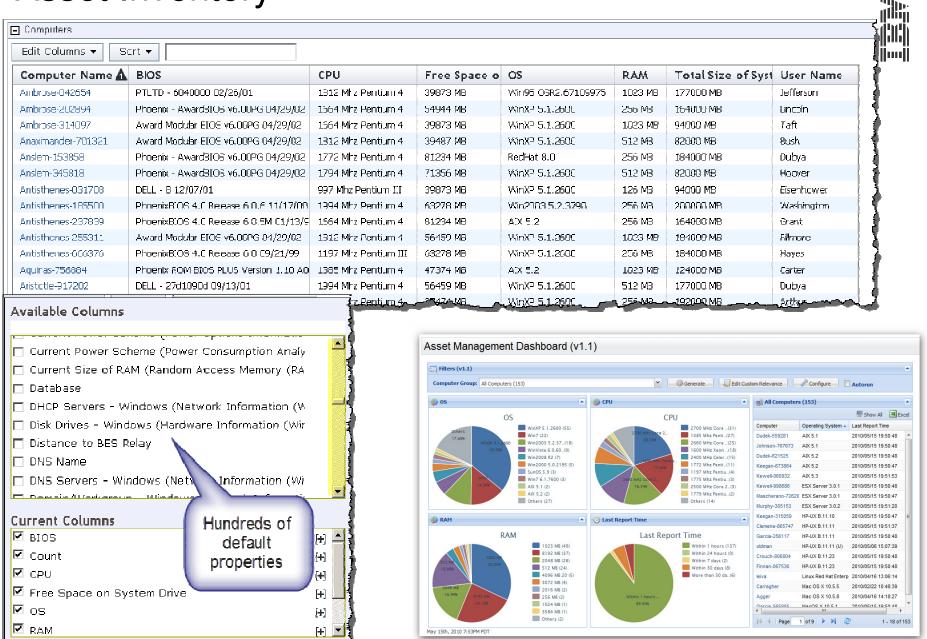
Asset Discovery

Right click to Install Agent and bring endpoint under management



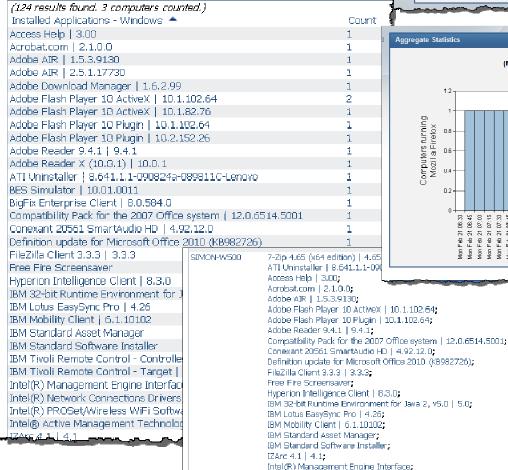


Asset Inventory



Software Inventory

□ Results

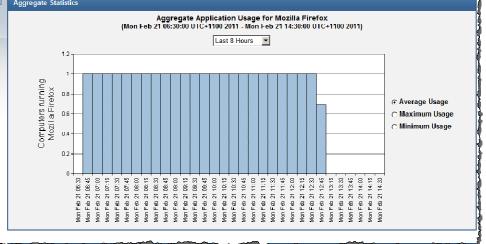


Intel(R) Network Connections Drivers:

Intel® Active Management Technology; Java(TM) 6 Update 21 (64-bit) | 6.0.210; Java(TM) 6 Update 21 | 6.0.210; Lenovo Auto Scroll Utility | 1.00; Lenovo System Interface Driver | 1.02;

Intel(R) PROSet/Wireless WiFi Software | 13.02.0000;



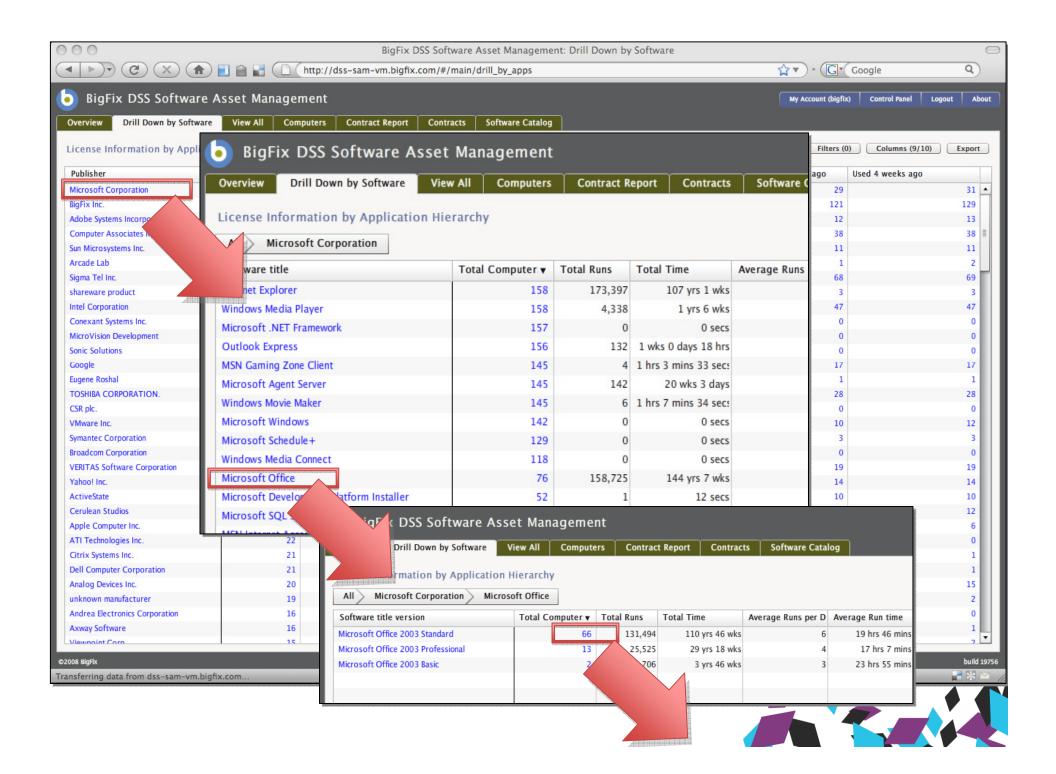


<u>2</u>
<u>1</u>
2
4
5 days, 06:01:09
10 days, 12:02:19
Tue, 08 Feb 10:27:18 AM
Mon, 21 Feb 12:55:21 PM



Software Usage Analysis





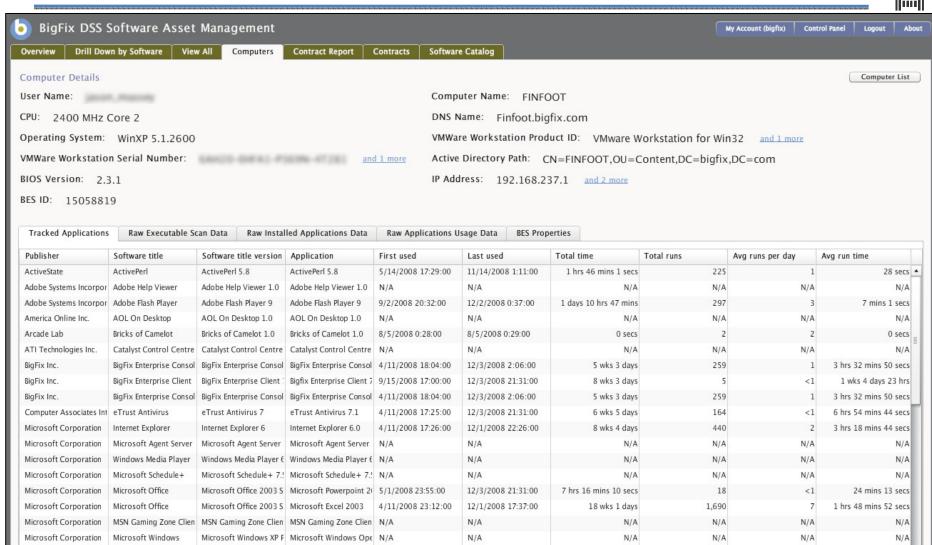


verview Drill I	Down by Software	View All Comp	uters Contract Re	port Contracts	Software Catalog					
icanca Informat	ion by Applicatio	n Hiorarchy	*	7/2				264 records	Filters (3) Col	umns (11/38) Export
	ion by Application							201100103	Titters (3)	unins (11/30) Export
All Microsoft			rosoft Office 2003 Sta	ndard Computers						
Application	IP Address	Computer Name	DNS Name	Operating System	First used	Last used	Total time	Total runs	Avg runs per day	Avg run time
Microsoft Excel 2003		MCLOVIN	McLovin.bigfix.com	WinXP 5.1.2600	7/26/2008 1:08:00	12/3/2008 1:22:00	5 wks 0 days	510		1 hrs 41 mins 19 secs
Microsoft Excel 2003		LUK003	luk003	WinXP 5.1.2600	7/9/2008 21:18:00	12/3/2008 17:22:00	8 wks 3 days	900	6	1 hrs 35 mins 45 secs
Microsoft Excel 2003	192.168.104.63	SKUA	Skua.bigfix.com	WinXP 5.1.2600	6/12/2008 16:59:00	12/3/2008 17:54:00	9 wks 3 days	1,630	9	58 mins 28 secs
Microsoft Excel 2003	192.168.104.115	DESMARESTII	desmarestii.bigfix.cor	WinXP 5.1.2600	12/1/2008 18:28:00	12/1/2008 18:29:00	15 mins 50 secs	10	10	1 mins 35 secs
Microsoft Excel 2003	192.168.15.40	KIWI	Kiwi.bigfix.com	WinXP 5.1.2600	10/22/2008 15:29:0	12/3/2008 6:38:00	11 wks 0 days	60	1	1 days 6 hrs 52 mins
Microsoft Excel 2003	192.168.105.22	INDIGOBIRD	Indigobird.bigfix.com	WinXP 5.1.2600	N/A	N/A	N/A	N/A	N/A	N/A
Microsoft Excel 2003	192.168.104.138	SCREAMER	Screamer.bigfix.com	WinXP 5.1.2600	6/10/2008 17:59:00	12/3/2008 18:24:00	1 yrs 45 wks	5,480	31	2 hrs 59 mins 14 sec
Microsoft Excel 2003	166.129.153.62	JAYBIRD	Jaybird.bigfix.com	WinXP 5.1.2600	7/23/2008 16:43:00	12/3/2008 21:03:00	9 wks 3 days	2,690	20	35 mins 36 sec
licrosoft Excel 2003	172.16.1.34	WIDGEON	WIDGEON.bigfix.com	WinXP 5.1.2600	7/7/2008 15:06:00	12/3/2008 1:17:00	2 wks 0 days 16 hrs	1,530	10	13 mins 49 sec
icrosoft Excel 2003	192.168.104.224	TREESWIFT	Treeswift.bigfix.com	WinXP 5.1.2600	10/13/2008 16:06:0	12/2/2008 20:56:00	2 wks 1 days 10 hrs	180	4	2 hrs 3 mins 21 sec
licrosoft Excel 2003	192.168.1.65	WARBLER	Warbler.bigfix.com	WinXP 5.1.2600	6/6/2008 18:39:00	10/3/2008 22:32:00	2 wks 5 days 14 hrs	1,390	12	20 mins 19 sec
icrosoft Excel 2003	192.168.104.71	COCHONS	cochons.bigfix.com	WinXP 5.1.2600	N/A	N/A	N/A	N/A	N/A	N/A
icrosoft Excel 2003	192.168.105.159	WHIMBRELMA	Whimbrelma.bigfix.co	WinXP 5.1.2600	4/22/2008 19:37:00	12/2/2008 3:22:00	6 wks 3 days	1,990	9	33 mins 2 sec
icrosoft Excel 2003	10.71.0.200	DOWITCHER	dowitcher.bigfix.com	WinXP 5.1.2600	8/6/2008 0:17:00	12/3/2008 15:00:00	6 wks 1 days	1,450	12	42 mins 47 sec
icrosoft Excel 2003	192.168.0.185	SNIPE	Snipe.bigfix.com	WinXP 5.1.2600	N/A	N/A	N/A	N/A	N/A	N/A
icrosoft Excel 2003	192.168.104.68	TWEETY	Tweety.bigfix.com	WinXP 5.1.2600	11/11/2008 1:13:00	11/12/2008 22:02:0	5 hrs 6 mins 0 secs	20	10	15 mins 18 sec
icrosoft Excel 2003	192.168.105.181	ASTRAPIA	Astrapia.bigfix.com	WinXP-2003 5.2.379	9/14/2008 20:09:00	12/2/2008 22:45:00	6 wks 2 days	150	2	7 hrs 10 mins 11 sec
licrosoft Excel 2003	192.168.104.122	JOBI	Jobi.bigfix.com	WinXP 5.1.2600	8/7/2008 16:15:00	12/3/2008 18:11:00	7 wks 3 days	2,180	18	34 mins 21 sec
icrosoft Excel 2003	192.168.104.65	ARACARI	Aracari.bigfix.com	WinXP 5.1.2600	4/30/2008 23:47:00	12/3/2008 21:39:00	1 yrs 32 wks	140	<1	4 days 4 hrs 53 min
licrosoft Excel 2003	192.168.105.103	HERMES	HERMES.bigfix.com	WinXP 5.1.2600	5/1/2008 3:00:00	12/2/2008 1:33:00	14 wks 4 days	750	3	3 hrs 16 mins 17 sec
licrosoft Excel 2003	192.168.164.1	STARLING	Starling.bigfix.com	WinXP 5.1.2600	4/2/2008 20:48:00	10/14/2008 21:13:0	2 yrs 14 wks	640	3	1 days 7 hrs 1 min
licrosoft Excel 2003		BUFFY	Buffy	WinXP 5.1.2600	N/A	N/A	N/A	N/A	N/A	
licrosoft Excel 2003		FIRECREST	Firecrest.biqfix.com	WinXP 5.1.2600	7/24/2008 18:23:00	12/2/2008 21:27:00	7 wks 3 days	1,090		
icrosoft Excel 2003		MARIO64	Mario64	WinXP 5.1.2600	N/A	N/A	N/A	N/A	N/A	
icrosoft Excel 2003		TOUCANET	Toucanet.bigfix.com	WinXP 5.1.2600	(194.00)	6/24/2008 20:47:00	43 mins 30 secs	30		
icrosoft Excel 2003		APOSTLEBIRD	Apostlebird.biqfix.cor			12/3/2008 2:22:00	1 yrs 23 wks	640		19 hrs 55 min.
icrosoft Excel 2003		TERATORN	teratorn.bigfix.com	WinXP 5.1.2600	7/15/2008 21:19:00		1 yrs 47 wks	120		
licrosoft Excel 2003		JACAMAR	lacamar	WinXP-2003 5.2.379		8/5/2008 19:42:00	7 wks 1 days	50		

Transferring data from dss-sam-vm.bigfix.com...







12/3/2008 21:31:00

1 yrs 8 wks

1.575

Microsoft Office 2003 S Microsoft Word 2003 4/11/2008 17:25:00

Transferring data from dss-sam-vm.bigfix.com

Microsoft Office

Microsoft Corporation

6 hrs 25 mins 2 secs ▼



TEM for Patch Management

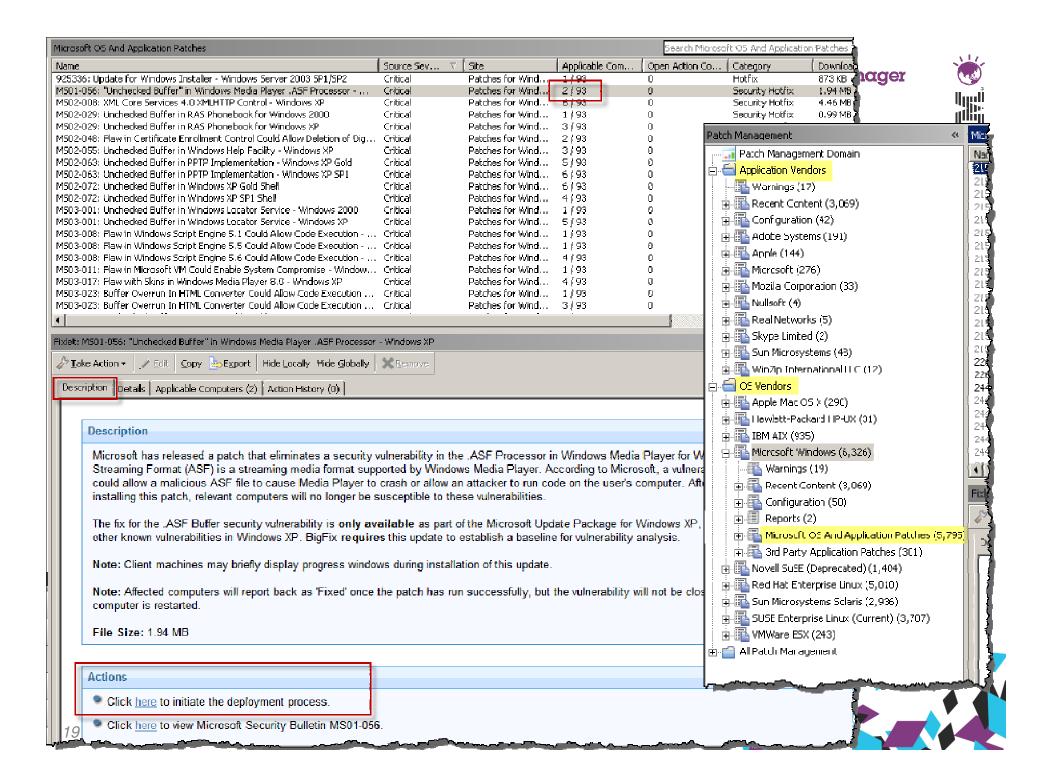
Product Benefits

- Reduction in patch and update times from weeks and days to hours and minutes
- •Increase first-pass success rates from 60-75% to 95-99+%
- System administrator workload reductions of 75% or more
- Assured compliance with internal and external standards/requirements
- Rapid deployment across entire fleet regardless of AD/Domain/Workgroup membership

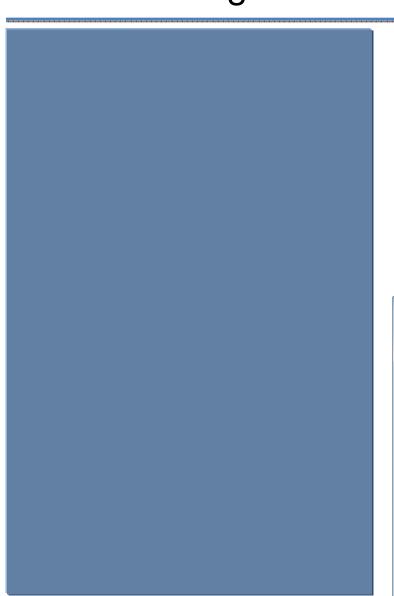
Product Features

- Patch capabilities for multiple platforms: Windows, Linux, UNIX and Mac OS X
- Automated self-assessment, no centralized or remote scanning required
- Real-time reporting on patch deployment: when deployed, who deployed them, and to which endpoints
- Ability for custom patches for in-house or other vendor patches
- Pre-Caching, Bandwidth Throttling,
 Staggered Distribution, Reboot Suppression

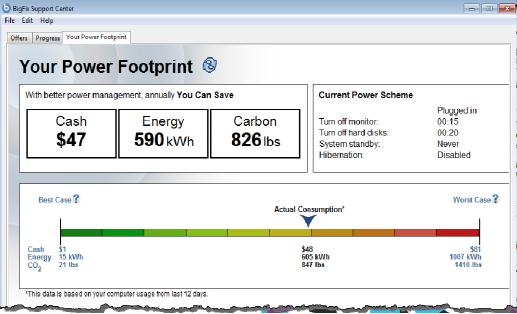




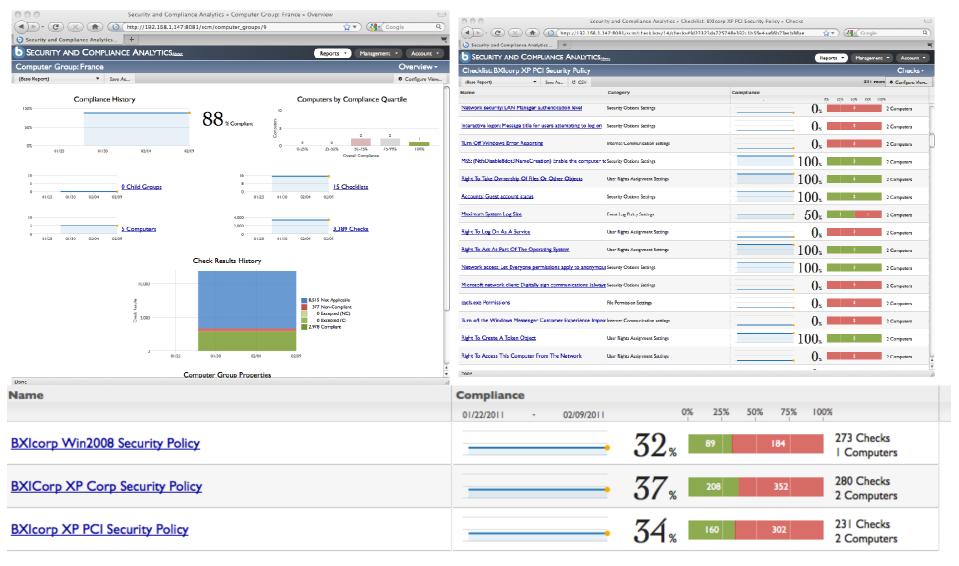
Power Management





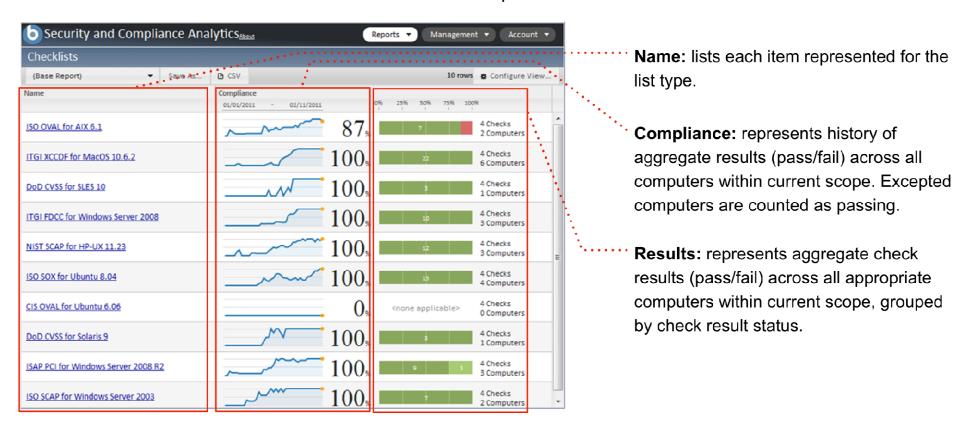


Security Compliance Analytics





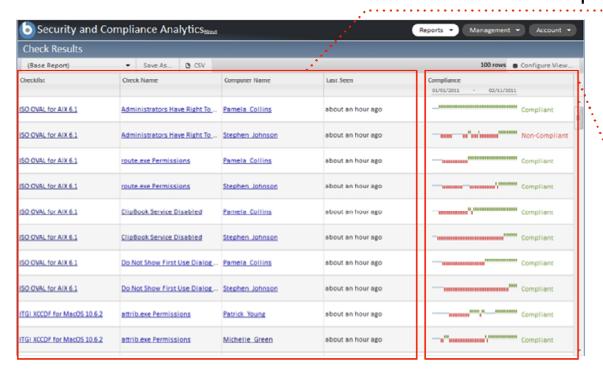
List Reports



List Report types: Checklists list, Checks list, Computers list, Computer Groups list



Check Results Report



Descriptive columns: Each row represents a single check on a single computer. Columns show information about each computer-check pair. Columns are managed using the "Configure View..." option.

Compliance: pass/fail status for each computer-check pair. Hash marks are scaled within the displayed time range.





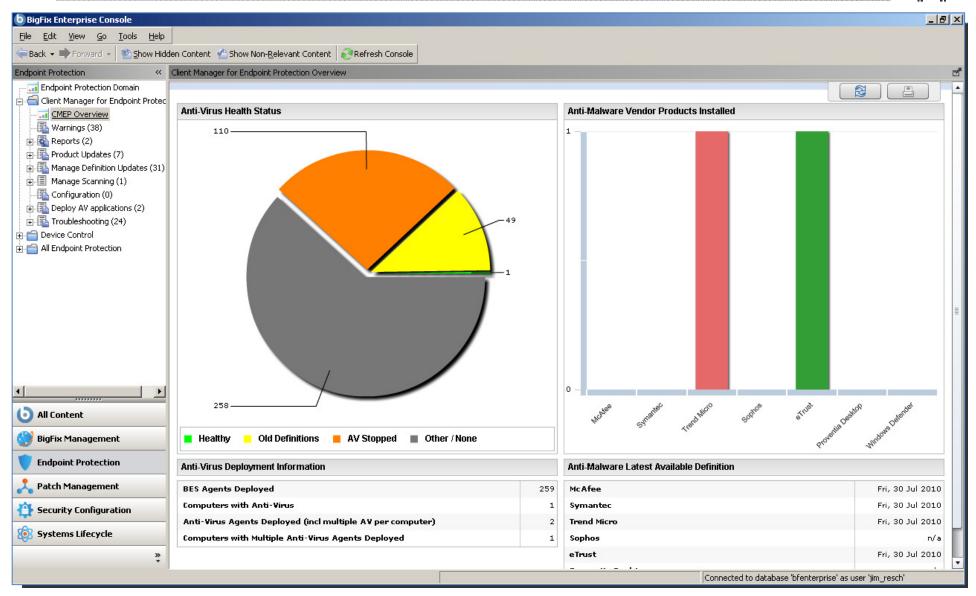




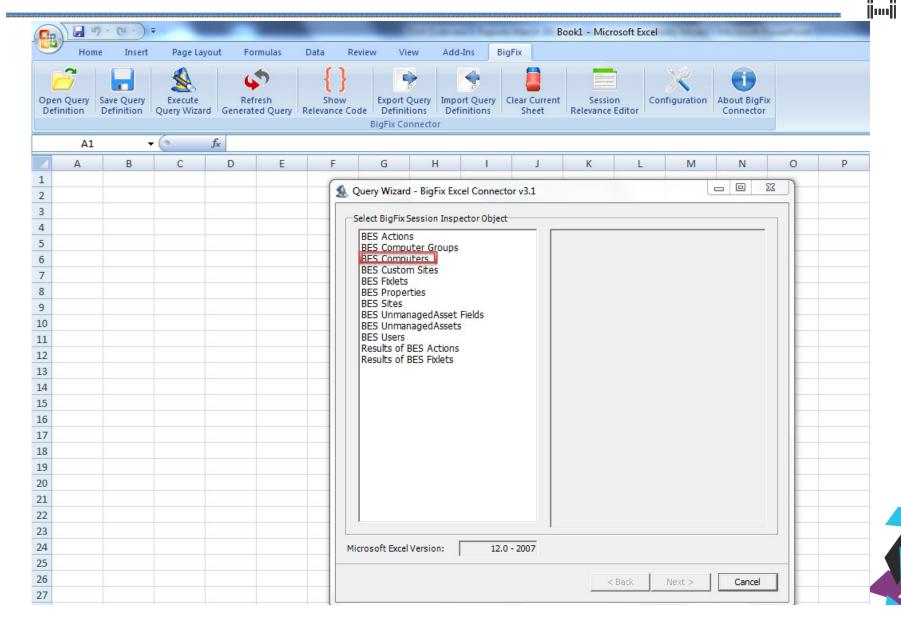


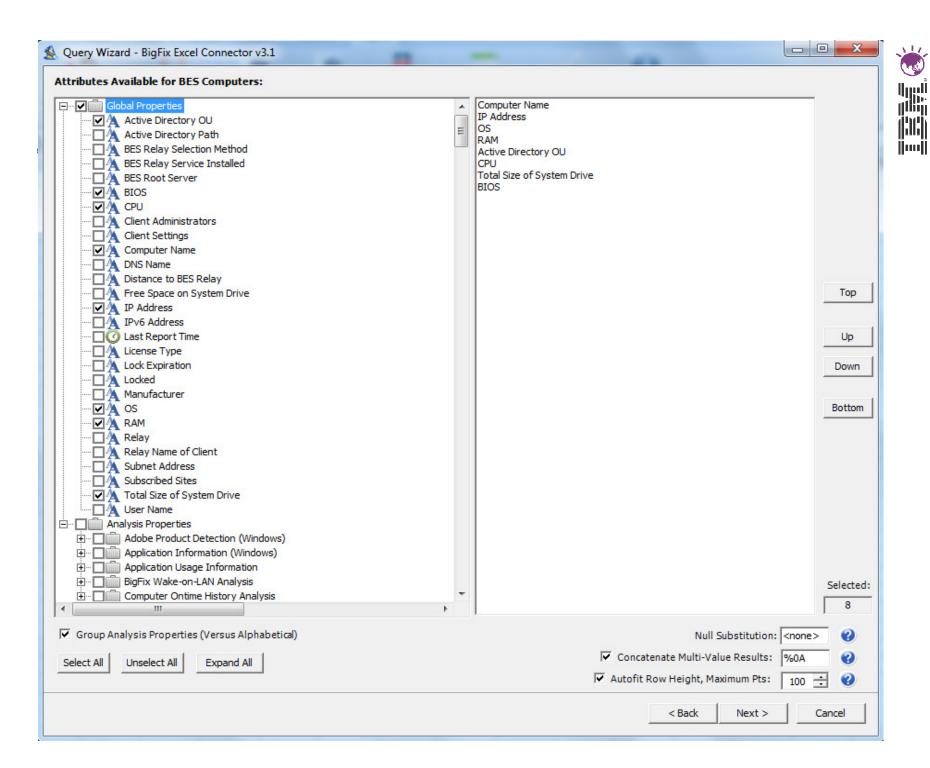


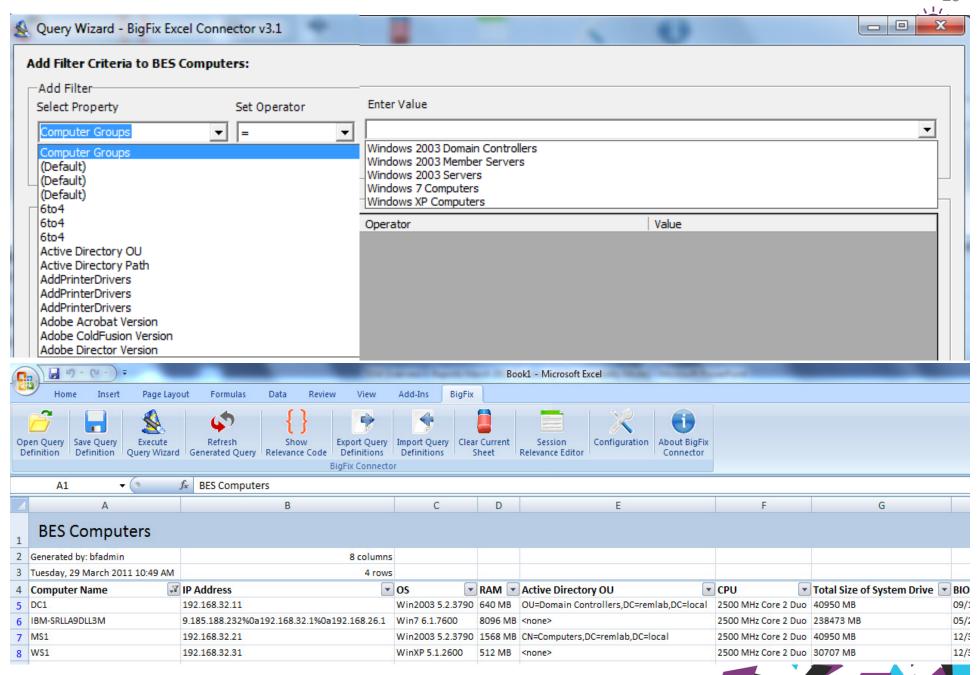
Endpoint Protection



Excel Connector









Case study



Real Customer Case Study

Miami-Dade County Public Schools

- 345,000 pupils
- 22,000 teachers
- Over 400 schools and administrative sites
- 4th largest school system in the U.S.
- 100,000 computers supporting class-rooms and administrative functions.
- Power costs to run these facilities in the millions of dollars

Business Challenges & Requirements

- To find creative ways to save tax payers money was a key priority.
- Need for a flexible conservation program to accommodate their diverse user community.
- Maximise conservation with impeding systems maintenance or health
- Remote power on capability critical for emergency security updates/patches.
- Scalability system must handle 100,000 endpoints
- Flexibility was critical to support varying student curricula (day & night schools), faculty and administrative programs, test labs etc.
- Ability to flag computers that should never be powered off.

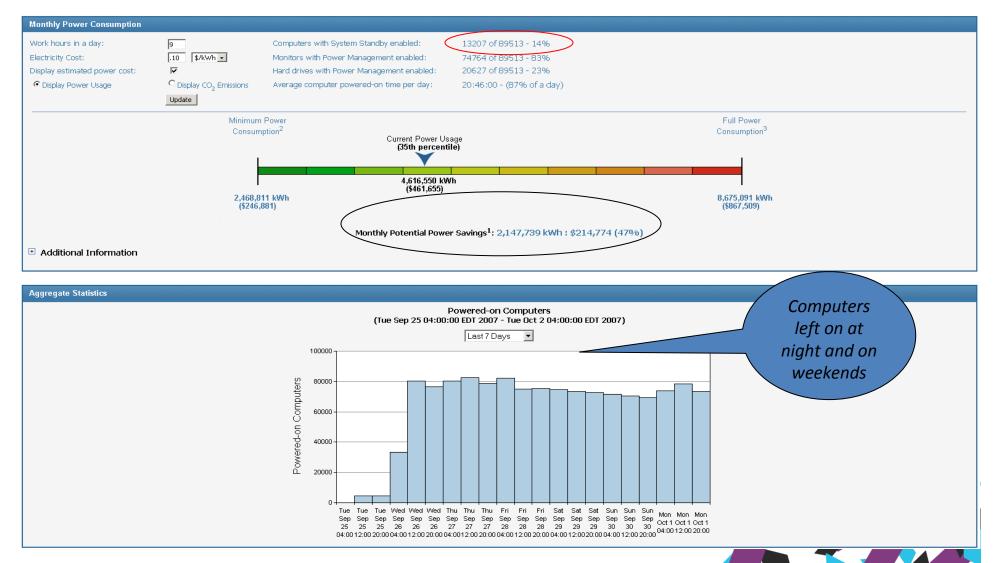
Result

 Initial estimates (based on power data collected by TEM) indicated a potential power saving of USD\$2.1M dollars. However after full implementation of BigFix PM controls, the actual savings were......

\$USD4.2M dollars per annum



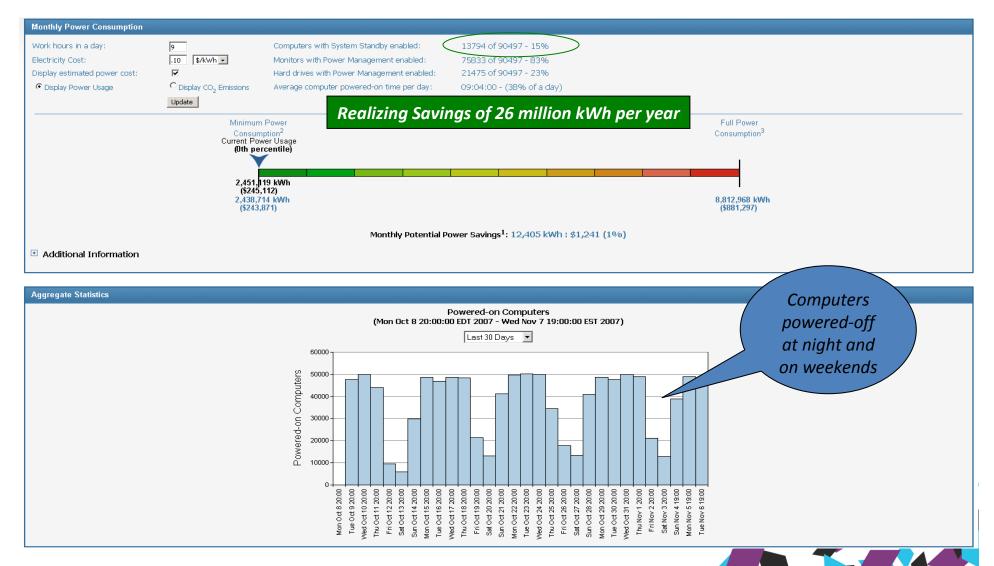
Real World Case Study – Before TEM Power Management







Real World Case Study – After TEM Power Management





Miami-Dade County Public Schools

"These \$4.2M savings [from Tivoli Endpoint Manager Power Management] are impressive, but they are just the beginning."

-- Tom Sims, Director of Network Systems









