

IBM Software = \$\$\$

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Security Systems & Tivoli Technical Consultant
IBM East Africa, Software Group



IBM software fights crime—breaking cases faster through trend analysis

Smarter government

The New York City Police Department (NYPD) implements a real-time crime information warehouse that integrates siloed precinct data systems to proactively assess crime patterns.

The solution can rapidly alert officers responding to a crime scene of potential suspects, helping to close cases faster and driving more public safety per tax dollar.



IBM software heads off congestion— tripling performance capacity

Smarter Cities

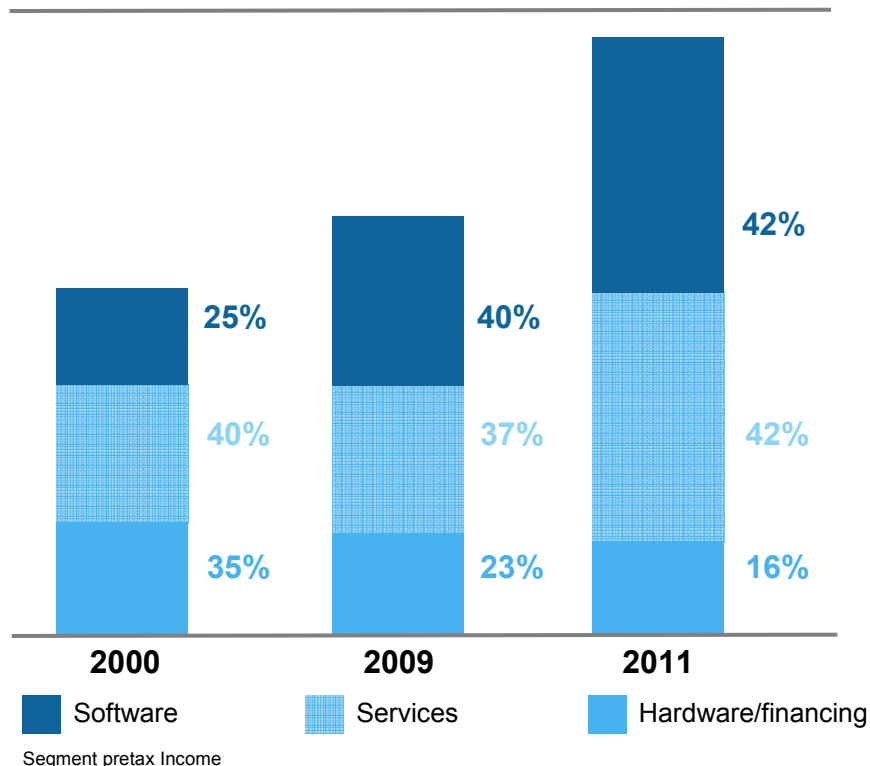
Singapore Land Transport Authority (LTA) used insights drawn from rider data to configure more convenient routes, schedules and fares—making public transportation more attractive and increasing long-term ridership.

The result is a tripled ridership while reducing revenue leakage from “lost” transactions by 80 percent.



How is IBM software helping deliver better business outcomes? Massive investments, **leading innovations**

IBM has changed the mix of the business

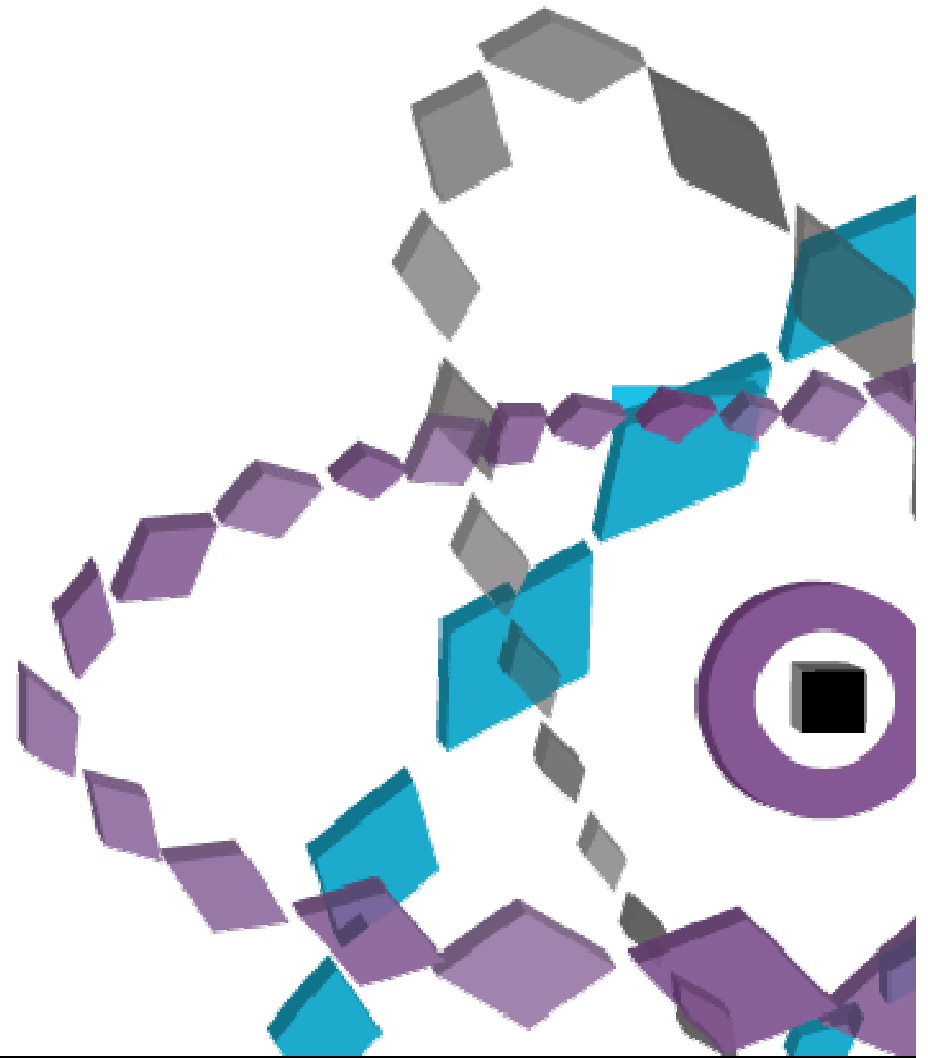


Segment pretax income

IBM investment has shifted the company toward software

- More than **US\$8 billion** in acquisitions and **US\$9 billion** in research and development (R&D) from 2007–2011
- **US\$20 billion** in future acquisitions
- **53** software acquisitions since 2001
- **40** innovation centers, **80** R&D labs, **33,000** developers, more than **30,000** IBM Business Partners
- Focus on **software solutions** and **business process** transformation
- More than **2,500 government agencies** around the world have selected **business analytics solutions from IBM**

INTRODUCING IBM ENDPOINT MANAGER, BUILT ON BIGFIX TECHNOLOGY



Tivoli Endpoint Manager Value Across the Organization

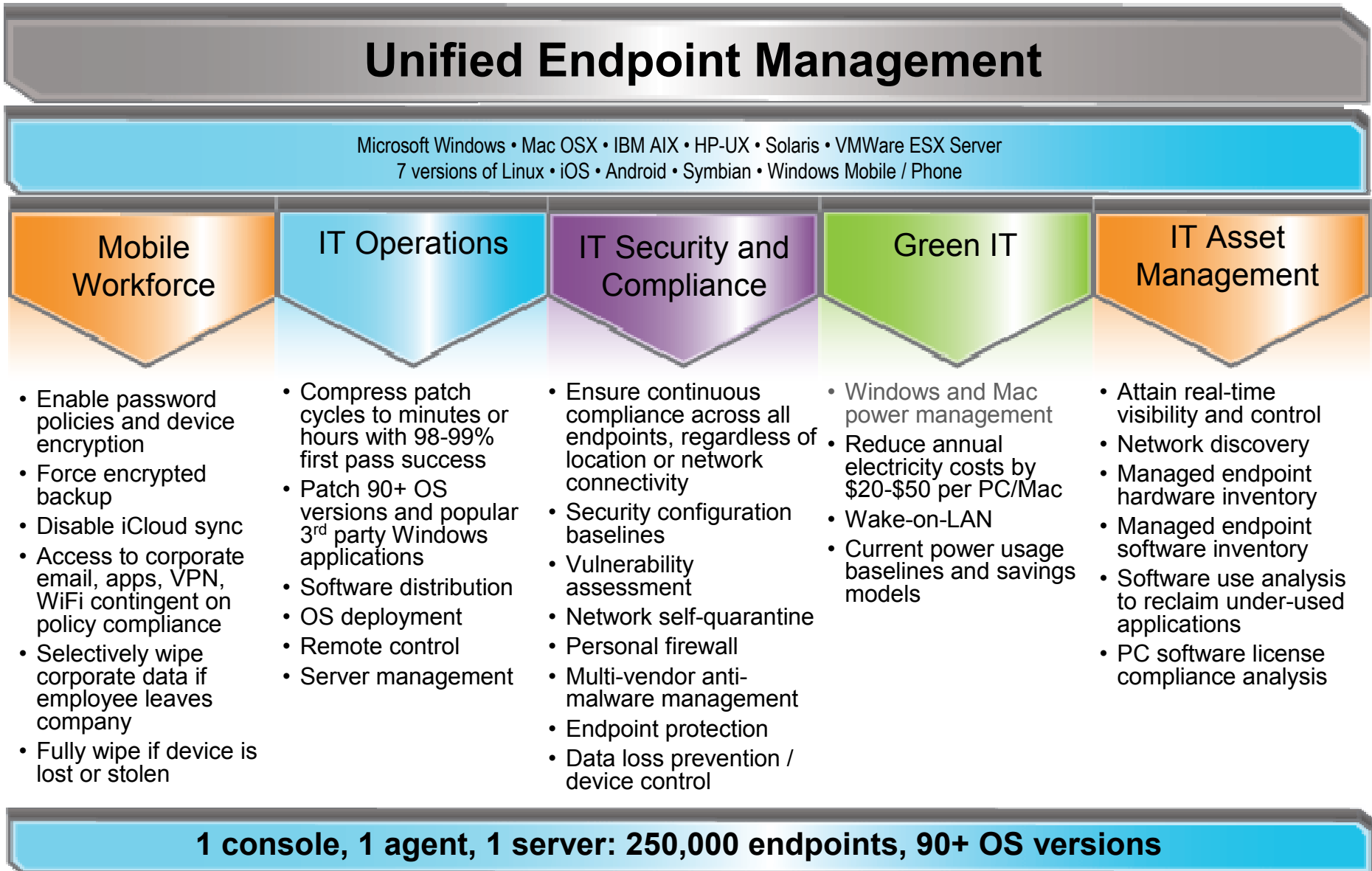
Unified Endpoint Management

Tivoli Endpoint Manager combines endpoint and security management into a single solution that enables mid-market organizations to see and manage physical and virtual endpoints' servers, desktops, roaming laptops, and specialized equipment such as point-of-sale devices, ATMs and self-service kiosks.

The **Tivoli Endpoint Manager** solution is packaged and sold as four products and can be deployed in days for any network size or configuration, providing a very rapid return on investment.

1 console, 1 agent, 1 server: 250,000 endpoints, 90+ OS versions

Tivoli Endpoint Manager Value Across the Organization



Solution Modules

IBM Endpoint Manager

Network Discovery, Global Properties Inventory, Custom Fixlets, Wake-on-LAN, n-Tier Relay Architecture, Dynamic Bandwidth Throttling
SOAP APIs for integration with Service Desk, CMDB, SIEM, GRC, and other IT management, security, and compliance solutions



Lifecycle Management



Software Use Analysis



Power Management



Mobile Devices




Patch Management




Security and Compliance



Core Protection

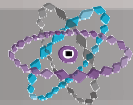
-  Patch Management
- Hardware, Software, Configuration Inventory
- Software Distribution
- OS Deployment
- Remote Control

- Patch Management 
- Security Configuration Management
- Vulnerability Assessment
- Compliance Analytics
- 3rd Party Endpoint Protection Management

- Anti-Malware
- Firewall
- DLP / Device Control (add on)

Unified multi-platform, multi-application endpoint management

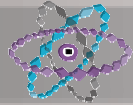




IBM Tivoli Endpoint Manager

What Customers Struggle With:

- ◆ Managing, simplifying and automating complex heterogeneous endpoints, networks, applications and operating systems
- ◆ Ensuring compliance with security level mandates and reducing risk
- ◆ Need to reduce TCO & Operational Costs
- ◆ Limited IT budget & staff already stretched
- ◆ Inability to remediate and report on compliance issues across the environment, regardless of OS, network connection, etc

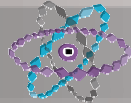


IBM Tivoli Endpoint Manager

A good entry point for customers is to start with **Tivoli Endpoint Manager for Patch Management**

TEM for Patch Management appeals to both IT and LOB. IT Operations can realize significant cost savings in the management of endpoints, and IT Security can realize significant improvement in endpoint security and compliance.

TEM for Patch Management automates and simplifies the patching process, addressing the challenges above and reducing staffing efforts by as much as 20:1.



IBM Tivoli Endpoint Manager

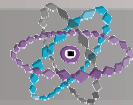
TEM for Patch Management delivers Microsoft, UNIX, Linux and Mac patches, as well as third-party application patches, through a single console

One management server per 250,000 endpoints reduces dedicated infrastructure by up to a 40:1 ratio

Reduce routine administration labor requirements by up to 80%

IBM Endpoint Manager: **Low TCO, real savings**

	Previous approach	With IBM Tivoli Endpoint Manager
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

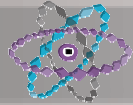


IBM Tivoli Endpoint Manager

Who Is Interested & Why

Target Industries: Cross industry, particularly Banking, Government, Insurance, Telcos

Client Size: Mid-market & Large companies (1 – 250,000 endpoints).

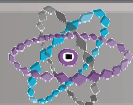


IBM Tivoli Endpoint Manager

Who Is Interested & Why

Businesses with:

- ✓ Distributed, remote, mobile – Multiple locations, large audience of remote, or mobile computers; distributed servers
- ✓ Multi-platform environments – desktops, laptops, servers; Windows, UNIX, Linux, Macintosh
- ✓ Without efficient Patch Management solution
- ✓ Compliance requirements – Need for regulatory and IT standards compliance; security compliance; license compliance audits



IBM Tivoli Endpoint Manager

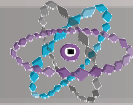
Starting Questions:

What do you do for patch distribution/management?

What does your patch remediation process look like and how many people does it take to deploy patches?

What compliance reports are you responsible for and how long before you are certain that all endpoints have successfully deployed the new security patches?

What tools do you currently use to assure patch compliance and do you have to use a number of sources to gather that information?

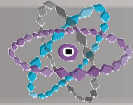


IBM Tivoli Endpoint Manager

Average Deal Size/Pricing

TEM for Patch Management pricing is \$17 per client device and \$12.50 per managed server core on RVU. For a mid-market customer with 100 endpoints, the entry level price point is about \$1,750.

Mid-market customers can seamlessly add additional Tivoli Endpoint Manager products at a later time.



IBM Tivoli Endpoint Manager

Current Clients:

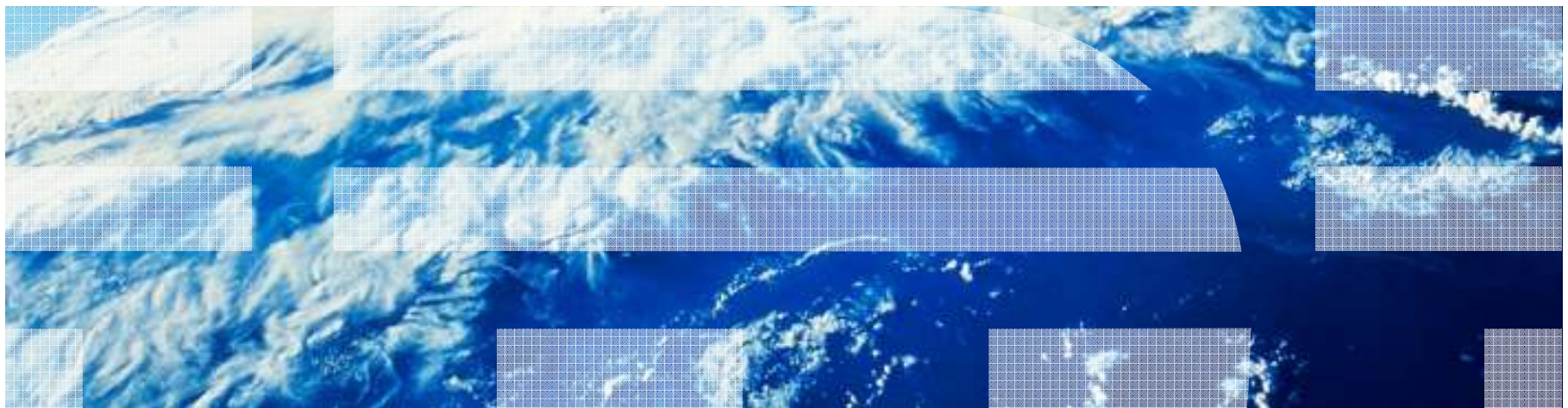
Large Government Organization

Regional Airline

2 Telco's

Regional Bank

IBM Tivoli Endpoint Manager for Mobile Devices

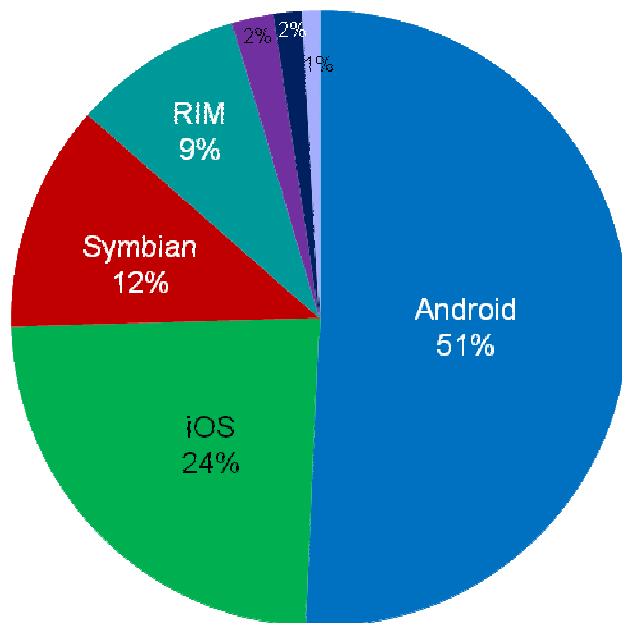


Executive Summary

- Android and iOS devices have quickly penetrated the enterprise, bringing productivity gains, along with increased risk and cost
- IBM Endpoint Manager for Mobile Devices delivers strong MDM capabilities in an infrastructure that enables unified management of all enterprise devices – desktops, laptops, servers, smartphones, and tablets
- IBM is uniquely positioned to deliver end-to-end app and mobile device lifecycle management with Mobile Enterprise Application Platform (MEAP), Mobile Device Management (MDM), and Telecom Expense Management capabilities

Google, Apple, and corporate employees are the big winners; Nokia, RIM, and IT departments are facing challenges

Share of global Q4 2011 smartphone sales to end users, by OS



■ Android ■ iOS ■ Symbian ■ RIM
■ Bada ■ Microsoft ■ Others

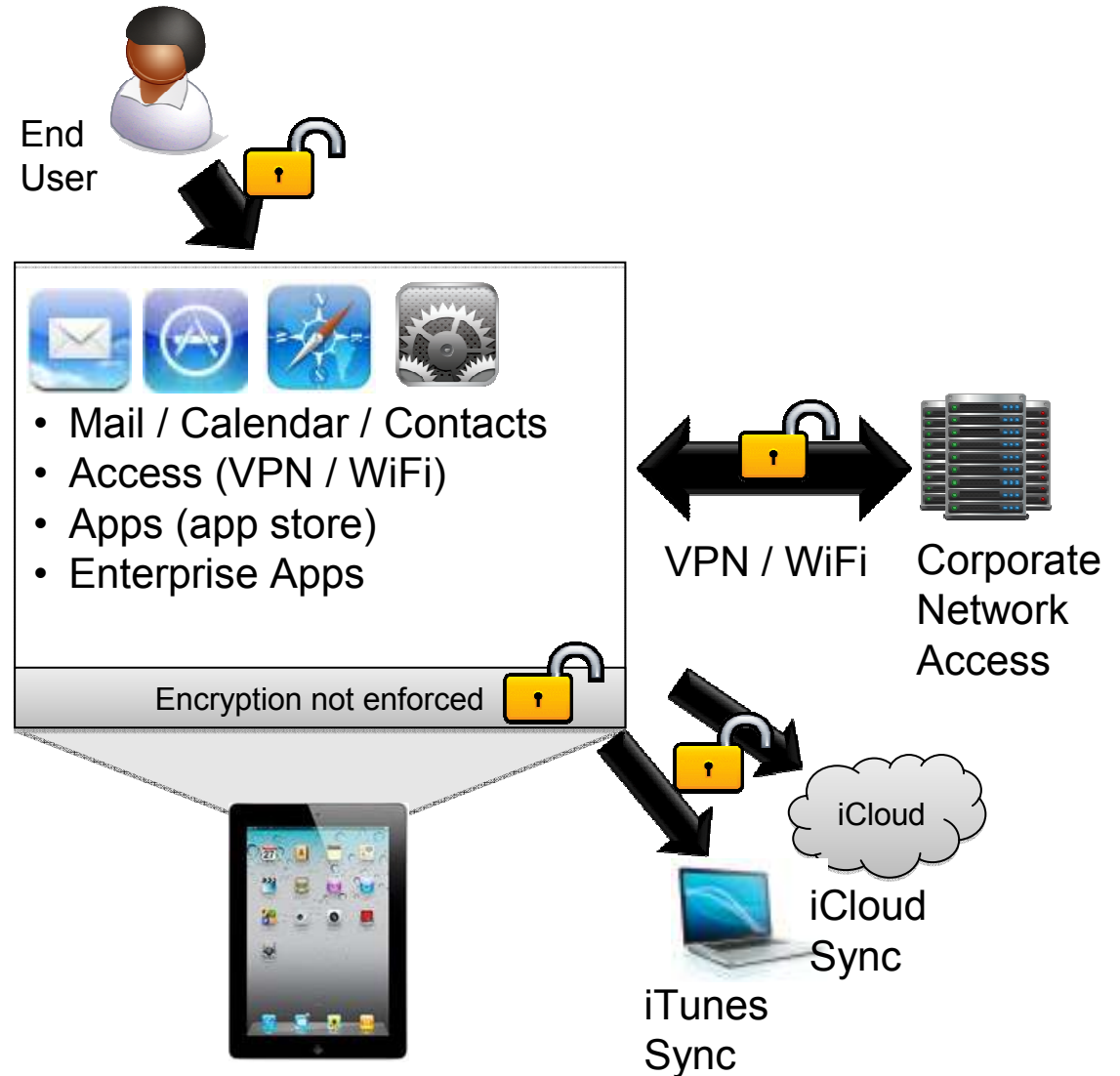
Source: Gartner 2012; does not include media tablets

- Android and iOS accounted for 75% of all smartphone shipments
- Consumer-oriented devices from Apple and Google have quickly penetrated the enterprise, but remain largely unmanaged

Managing Mobile Devices – The Problem

Security & Management Challenges

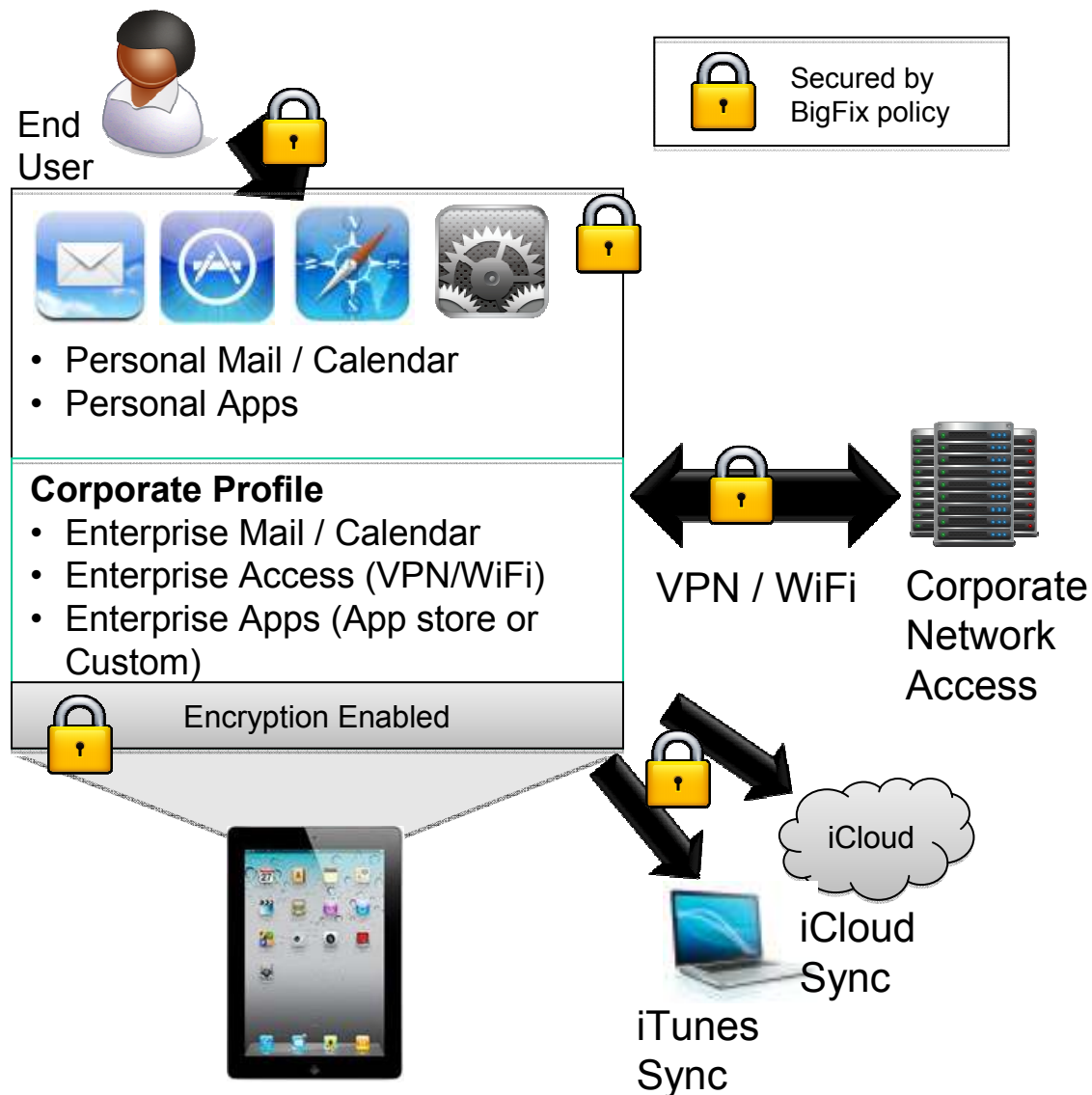
- Potential unauthorized access (lost, stolen)
- Disabled encryption
- Insecure devices connecting to network
- Corporate data leakage



Managing Mobile Devices – The Solution

Endpoint Manager for Mobile Devices

- Enable password policies
- Enable device encryption
- Force encrypted backup
- Disable iCloud sync
- Access to corporate email, apps, VPN, WiFi contingent on policy compliance!
- Selectively wipe corporate data if employee leaves company
- Fully wipe if lost or stolen

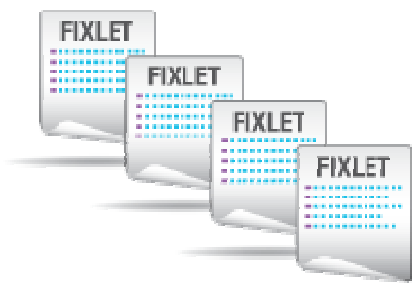


IBM Endpoint Manager elements



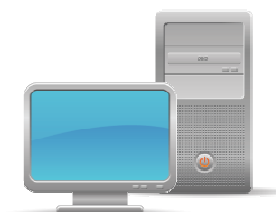
Single intelligent agent

- Continuous self-assessment
- Continuous policy enforcement
- Minimal system impact (<2% CPU, <10MB RAM)



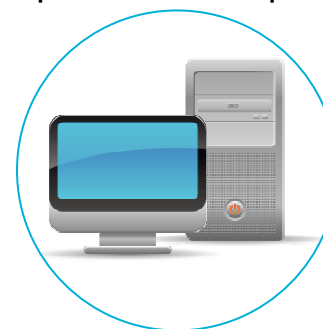
Flexible policy language (Fixlets)

- Thousands of out-of-the-box policies
- Best practices for operations and security
- Simple custom policy authoring
- Highly extensible/applicable across all platforms



Single server and console

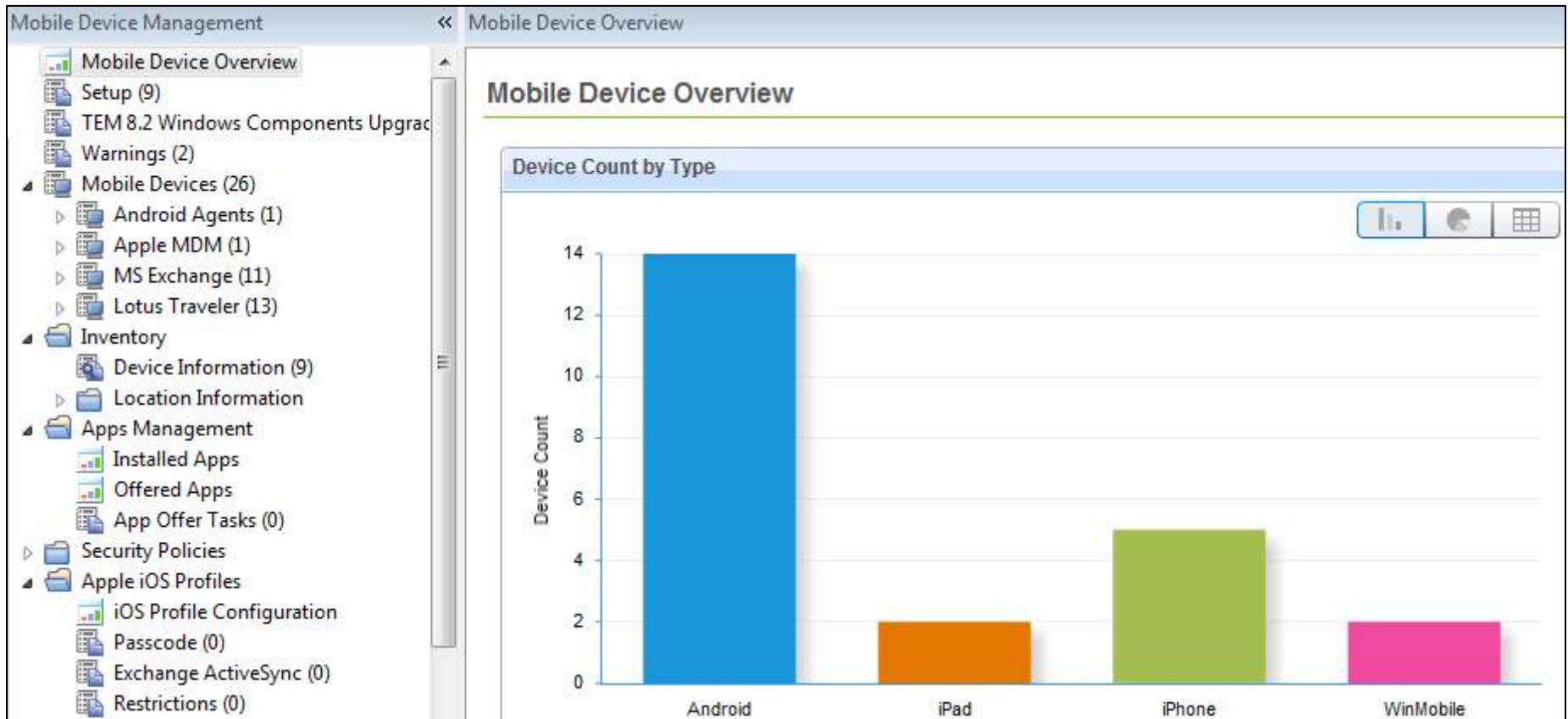
- Highly secure, highly available
- Aggregates data, analyzes and reports
- Manages up to 250K endpoints per server



Virtual infrastructure

- Designate IBM Endpoint Manager agent as a relay or discovery point in minutes
- Provides built-in redundancy
- Leverages existing systems/shared infrastructure

Endpoint Manager for Mobile Devices Dashboard



A “Single Device View” enables administrators and helpdesk personnel to easily view device details and take required action

The screenshot displays the IBM Mobile Management console interface. It features a central navigation pane with tabs for 'Device Details', 'Management Commands', 'Security Info', and 'Installed Apps'. The main content area is split into two sections: an Android device view on the left and an iPhone view on the right. The Android view includes a green Android robot icon, a 'Device Name' field with a long alphanumeric string, a 'User Name' field with '<none>', and an 'Operating System' field with 'Android (2.3.3)'. A yellow warning banner states 'This device has been rooted'. Below this is a table of device metadata. The iPhone view shows a black iPhone image, a 'Device Name' field with '7R049JM0A4S', an 'Operating System' field with 'Apple iOS 4.3.5 (iPhone3,1)', and a 'Model' field with 'iPhone'. It also includes a table of device metadata. The right-hand pane shows a detailed view for the iPhone, with tabs for 'Device Details', 'Management ...', 'iOS Profiles', 'Security Info', and 'Installed Apps'. The 'Device Details - Android / Apple iOS' section lists fields like 'Manufacturer', 'Last Server Communication', 'Carrier', 'Model', 'Name', 'Model ID', 'GUID / IMEI', 'Phone Number', and 'UUID / UDID'. A 'Storage Information' section is also visible at the bottom.

Last Report Time	Dec 01, 2011 12:32:14 PM
Manufacturer	unknown
Carrier	generic
LastSyncTime	n/a
Phone Number	n/a
Agent Version	8.2.967.0
Data Source	Native

Last Report Time	Oct 31, 2011 8:30:10 PM
Manufacturer	Apple
Carrier	AT&T
LastSyncTime	21 Oct 2011 09:00:52 +0000
Phone Number	+15106040334
Agent Version	0.1.2.0
Data Source	Apple MDM

Manufacturer	Apple
Last Server Communication	21 Oct 2011 09:00:52 +0000
Carrier	AT&T
Model	iPhone
Name	MDM's iPhone
Model ID	MC318LL
GUID / IMEI	01 253500 233561 1
Phone Number	+15106040334
UUID / UDID	bfee8da93696e9ed5971470f8338fa0b8e70c5d

Maximo Enterprise Asset Management (EAM)



The image shows the Maximo login interface. At the top left of the page is the 'Tivoli software' logo, and at the top right is the 'IBM' logo. The main content area is a white box with a blue gradient background. Inside this box, the text 'Welcome to Maximo' is displayed in a blue font. To the left of the login fields is a 3D rendered image of a silver hexagonal nut. To the right of the nut are two input fields: 'User Name:' and 'Password:'. Below the password field is a 'Sign In' button. At the bottom right of the white box, there are three links: 'Mobile Login', 'Forgot Password?', and 'New User? Register Now'. At the very bottom of the page, there is a copyright notice: '© Copyright IBM Corp. 2007-2011. All rights reserved. See product license for details.'

Maximo - Asset Management

Transportation Assets

Facilities

Production Equipment

IT Hardware & Software

Communications Infrastructure

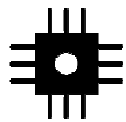


A smaller, flatter, faster and "smarter" planet

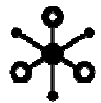


THE CHALLENGE: more complexity in assets and processes, more capabilities required, more reliance on management systems

THE OPPORTUNITY: More insight and collaboration, more efficiency, growth and profit, more innovation



INSTRUMENTED



INTERCONNECTED



INTELLIGENT

Maximo's role in a Smarter Planet:

- The IBM system to manage intelligent assets
- Leveraging asset intelligence to maximize their business value
- Reducing the cost of managing and operating intelligent assets

How Maximo does this:

- Visibility, control, and automation across IT and operational infrastructure
- Optimized operational and IT processes to achieve more with less
- Managing both the asset and the service to deliver customer value

Maximo Enterprise Asset Management (EAM)

Built on a single software platform, Maximo Asset Management delivers a comprehensive view across your enterprise of all asset types including manufacturing, transportation, infrastructure, production, facilities, communications and IT.

Who Is Interested & Why

Target Industries: Cross industry - Government, Transportation, Oil & Gas, Utilities i.e. Power & Water

Client Size: Mid-market & Large companies



Maximo Enterprise Asset Management (EAM)

What Customers Struggle With:

- Lack of visibility and control over critical assets that affect compliance and business performance
- Aging assets that increase costs and decrease Operational Equipment Efficiency (OEE), as well as ROA
- Aging assets that require higher levels of maintenance and upgrades to ensure availability
- Legacy IT systems and an aging workforce that decrease operational efficiency
- Increasing environmental, safety, regulatory and financial compliance requirements

Maximo Enterprise Asset Management (EAM)

What Customers Struggle With:

- Difficulty ensuring safe and reliable operations by managing and tracking asset information on availability, utilization and performance to help avoiding catastrophic events
- Loss of knowledge and experience of retiring long term employees
- Continuous pressure to reduce headcount without a sacrifice in service levels or quality
- Legacy information technology (IT) systems based on fragmented applications and platforms

Why Customers Are Looking At Maximo?



Environmental Trends

Regulatory Compliance

- Increasing environmental, safety & health regulations & reporting requirements
- Continued global deregulation
- Stricter visibility of regulatory compliance

Security & Safety

- Threats to critical assets, networks and energy infrastructure have significantly increased
- Safety requirements are increasing

Customer

- Increasing expectations for services as a driver for performance, optimization and innovation
- Increasing IT/OT intersections
- Increasing environmental consciousness – the “green” effect

Economical Trends

Profitability & Cost

- Cost containment is a high priority
- Need to optimize existing assets and infrastructure
- More industry specific requirements
- Cost of personnel is increasing
- Best practices ISO/ITIL

Competitive Differentiation

- Greater interest in offering services as competitive differentiator
- Continued focus on growth

Innovation

- Expand markets by providing additional services over existing infrastructure
- New business models – outsourcing

Time Marches On

- Aging of both infrastructure and personnel

Technological Trends

Embedded Computing

- Increasing intelligence and computing power in machines, appliances and devices

Next Generation Sensors

- Sensors and actuators making use of wireless communication
- Motes and Smart Dust getting interest in key industries
- RFID and GPS for asset, tool, people tracking and management

Network Technologies

- Broadband and VoIP over power lines becoming feasible and reliable
- Proliferation of wireless networks permits alternative (cost effective) data communication for the mobile platform

System Consolidation

- Common information model

Maximo Enterprise Asset Management (EAM)

Starting Questions:

- ✓ Does the company need to eliminate disparate applications and drive efficiency through standardization (managing all assets, services, corrective/preventive action, calibration, mobile and more)?
- ✓ Does the company need to improve agility to drive business improvement and growth – mergers, acquisitions?
- ✓ Is the company using a “homegrown” solution or a “bulky” ERP system?
- ✓ Does the company need a single standard for work-related processes; a common way of working, common support and implementation models and global standards, tools and methodology?

Maximo Enterprise Asset Management (EAM)

Average Deal Size/Pricing

The average software deal size is USD 90K software, services averaging two times software sales.

Solution sizes typically range from USD 100K to over USD 1M.

NAIROBI, Kenya - 26 Oct 2011: Kenya Petroleum Refineries Limited (KPRL), has implemented a new solution from IBM to increase the productivity and efficiency of the company's oil refinery operations in East Africa.

The solution, based on IBM Maximo asset management software, will allow KPRL to better utilize its production equipment, facilities and IT systems to reduce risk and control costs.

IBM software delivers virtually unmatched **capabilities**, integrated into **industry solutions** that yield quantifiable business benefits while making the planet **smarter**.

Next steps

Partner Portal & IBM Software Group for more info

www.ibm.com/security

www.ibm.com/tivoli

Thank
YOU