



Enabling Rapid Introduction of new Value-add Services with IBM Mobility Solutions

George Billman, Business Development for Service Providers

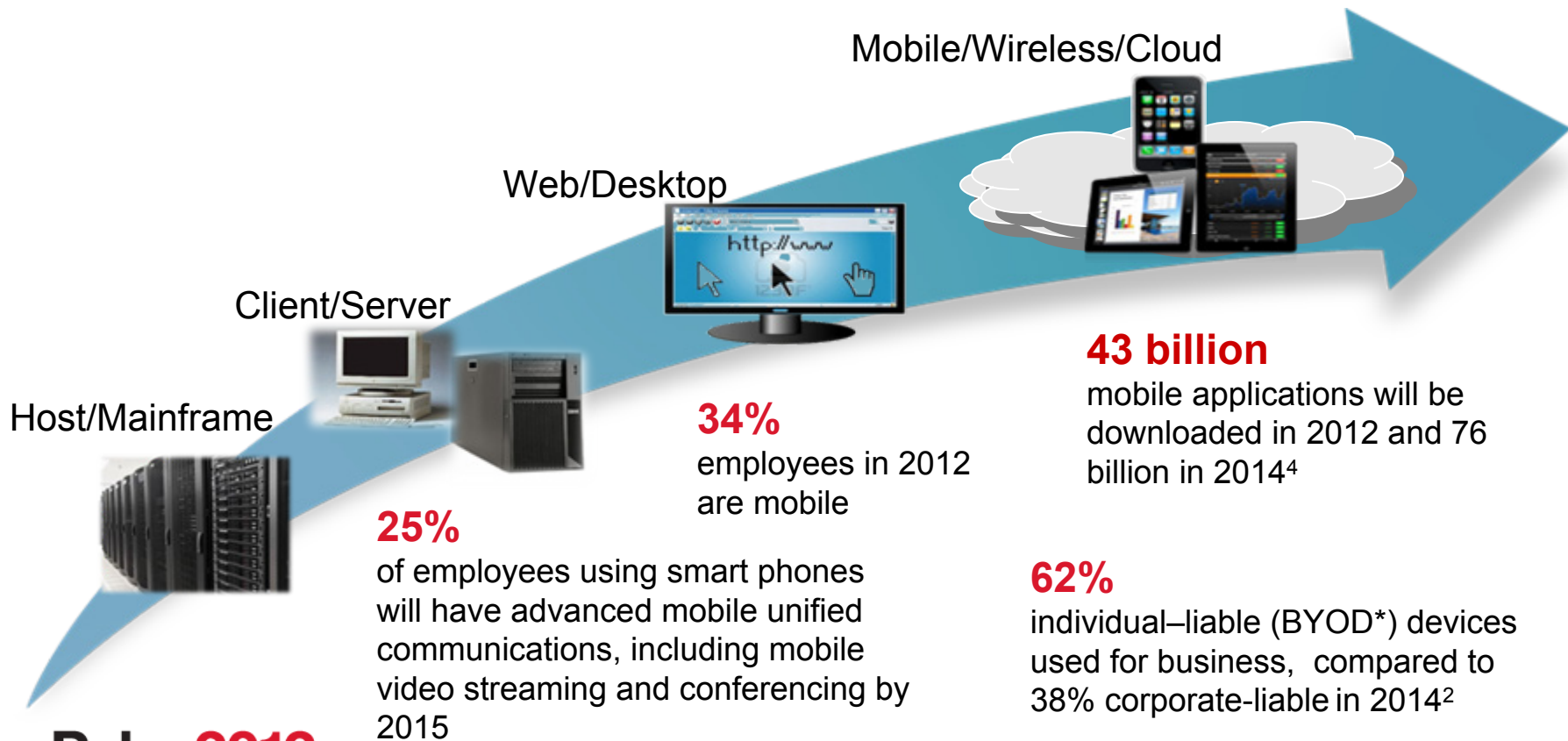
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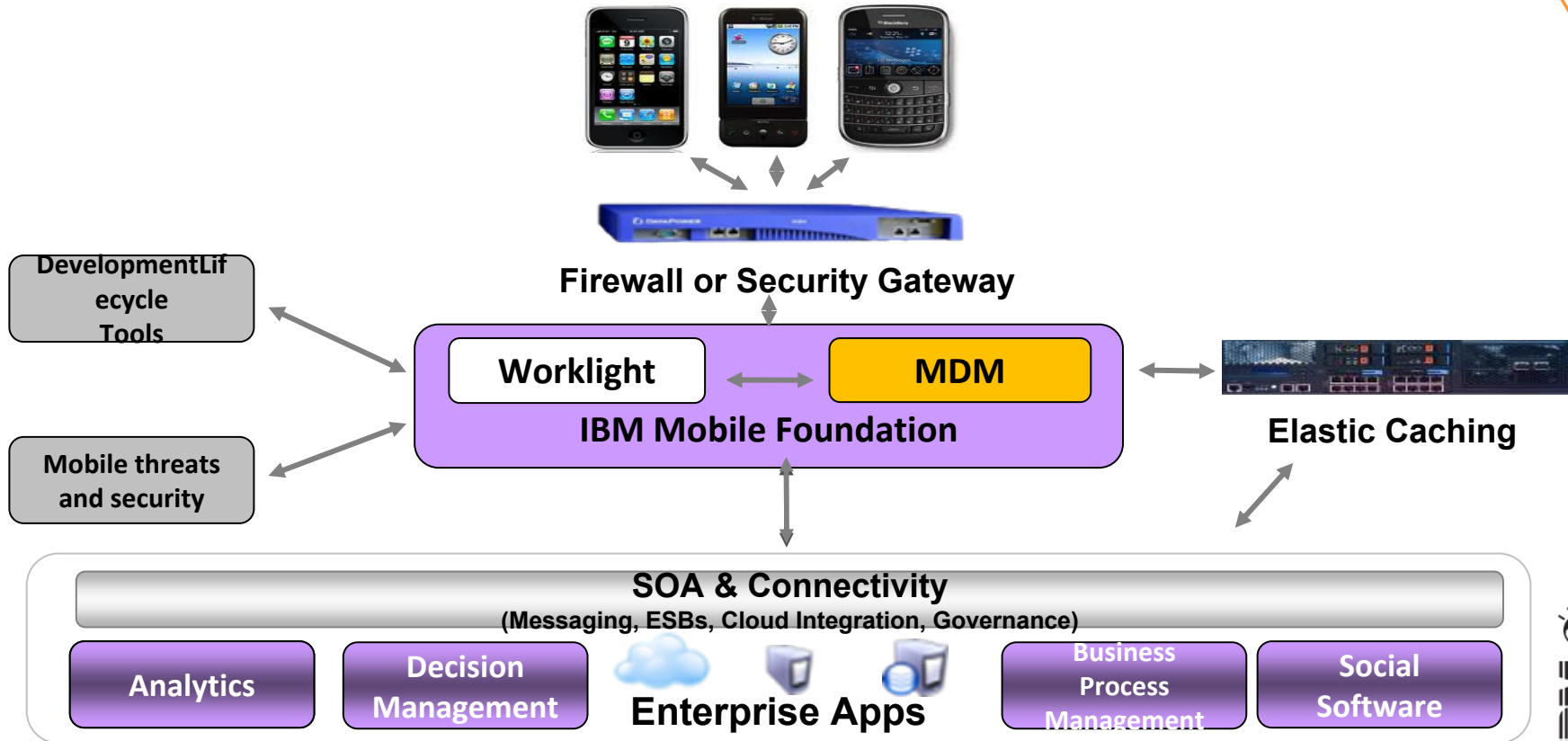
May 31 – June 1

Sheraton on the Park Hotel, Sydney

Mobile is a significant component of the evolution of computing

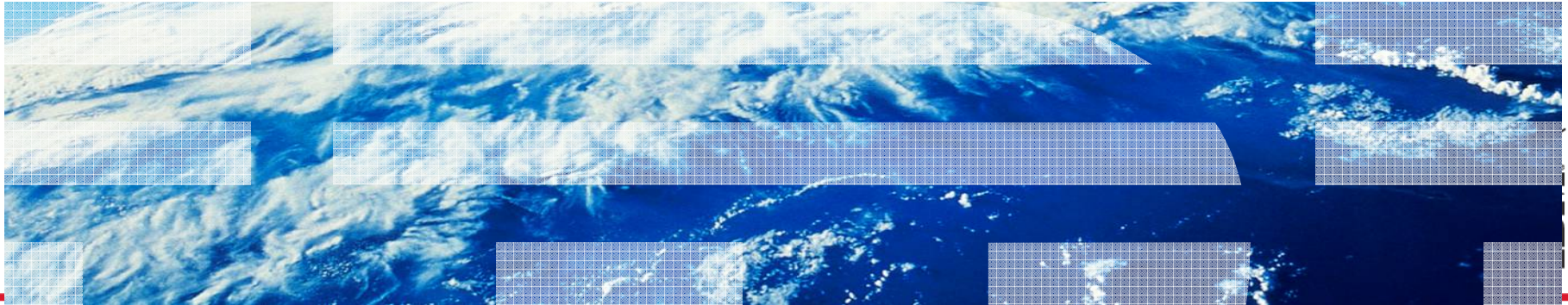


Extended IBM Software for Mobile Devices



IBM Endpoint Manager for *Mobile Devices*

Built on BigFix technology



Benefits of Endpoint Manager's Mobile Device Management

- “Organizations...would prefer to **use the same tools across PCs, tablets and smartphones**, because it's increasingly the same people who support those device types”
– *Gartner, PCCLM Magic Quadrant, January 2011*
- Although at some level mobile is unique, **the devices are just another form of endpoints in your infrastructure**. This means whichever technologies you procure should have a road map for integration into your broader endpoint protection strategy.
– *Forrester, Market Overview: Mobile Security, Q4, 2011*

Reduces Hardware & Administration Costs

- “Single pane” for mobile devices, laptops, desktops, and servers
- Single TEM Server scales to 250,000+ devices
- Unified infrastructure administration model reduces FTE requirements

Fast Time-to-Value

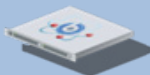
- Enterprise-grade APIs enable integration with service desks, CMDBs, etc (Integrated Service Management)
- Cloud-based delivery model allows for rapid updates with no software upgrade or installation required



Mobile devices and laptops have a lot of common needs....

Traditional Endpoint Management

- OS provisioning
- Patching
- Power Mgmt
- Anti-Virus Mgmt



Mobile Device Management

- Device inventory
- Security policy mgmt
- Application mgmt
- Device config (VPN/Email/Wifi)
- Encryption mgmt
- Roaming device support
- Integration with internal systems
- Scalable/Secure solution
- Easy-to-deploy
- Multiple OS support
- Consolidated infrastructure
- Device Wipe
- Location info
- Jailbreak/Root detection
- App store
- Service portal



Solution Sets = pre-Packaged Knowledge “out of the box”

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)



Endpoint Manager delivers a unified Systems and Security management solution for all enterprise devices



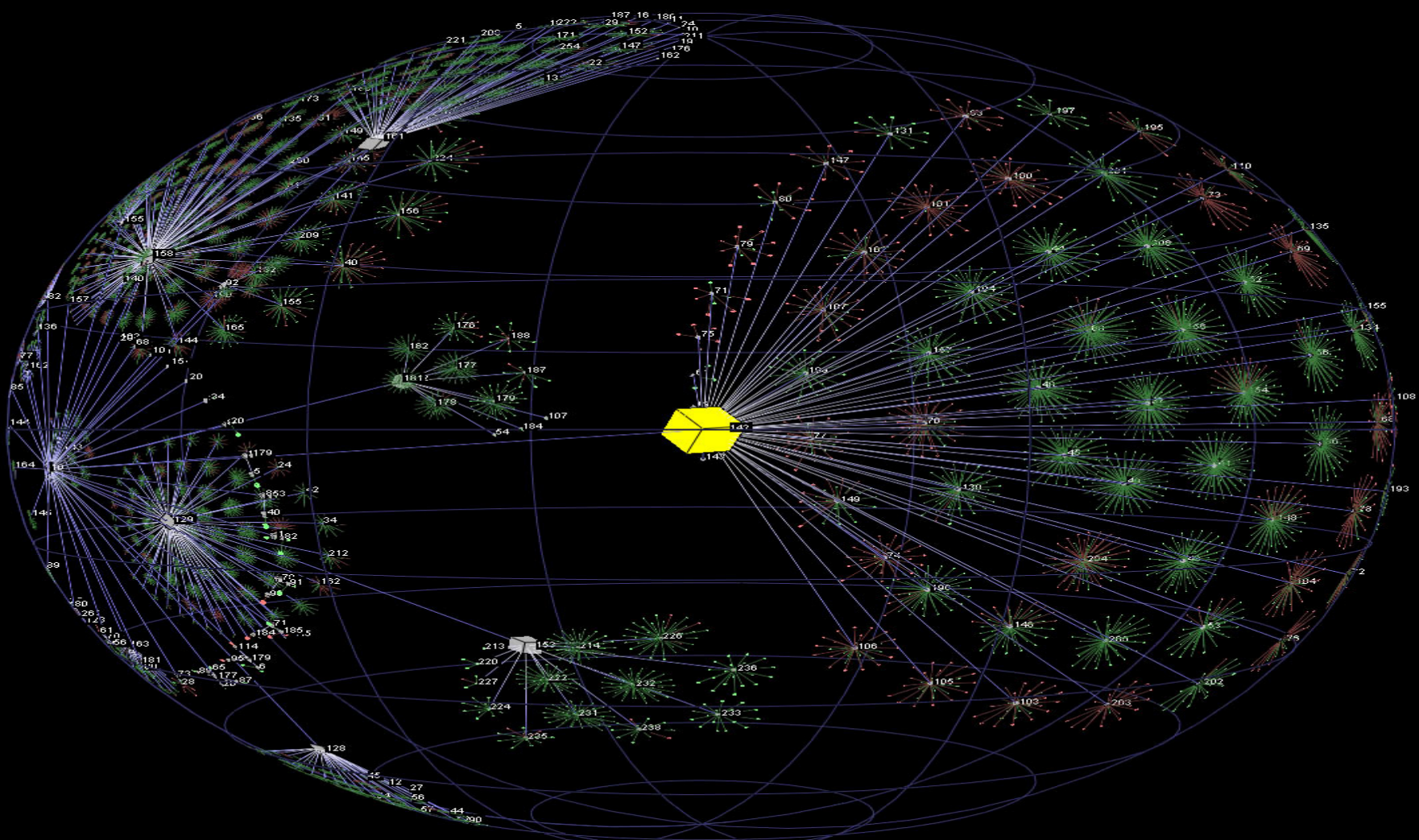
Windows & Mac
Desktops/Laptops

Unix / Linux Servers

Windows Mobile / Kiosks /
POS devices

Android / iOS / Symbian /
Windows Phone devices

Question: Why not offer services for managing all these devices?



How CSPs Leverage IEM (BigFix)

Endpoint Manager is Proven in Service Provider Operations



Offers both SaaS (hosted) and Managed Services
Branded as **“Secure My Device”**



Offers Managed Service for Remote Access PCs
Branded as **“Mobility as a Service”** MaaS 360

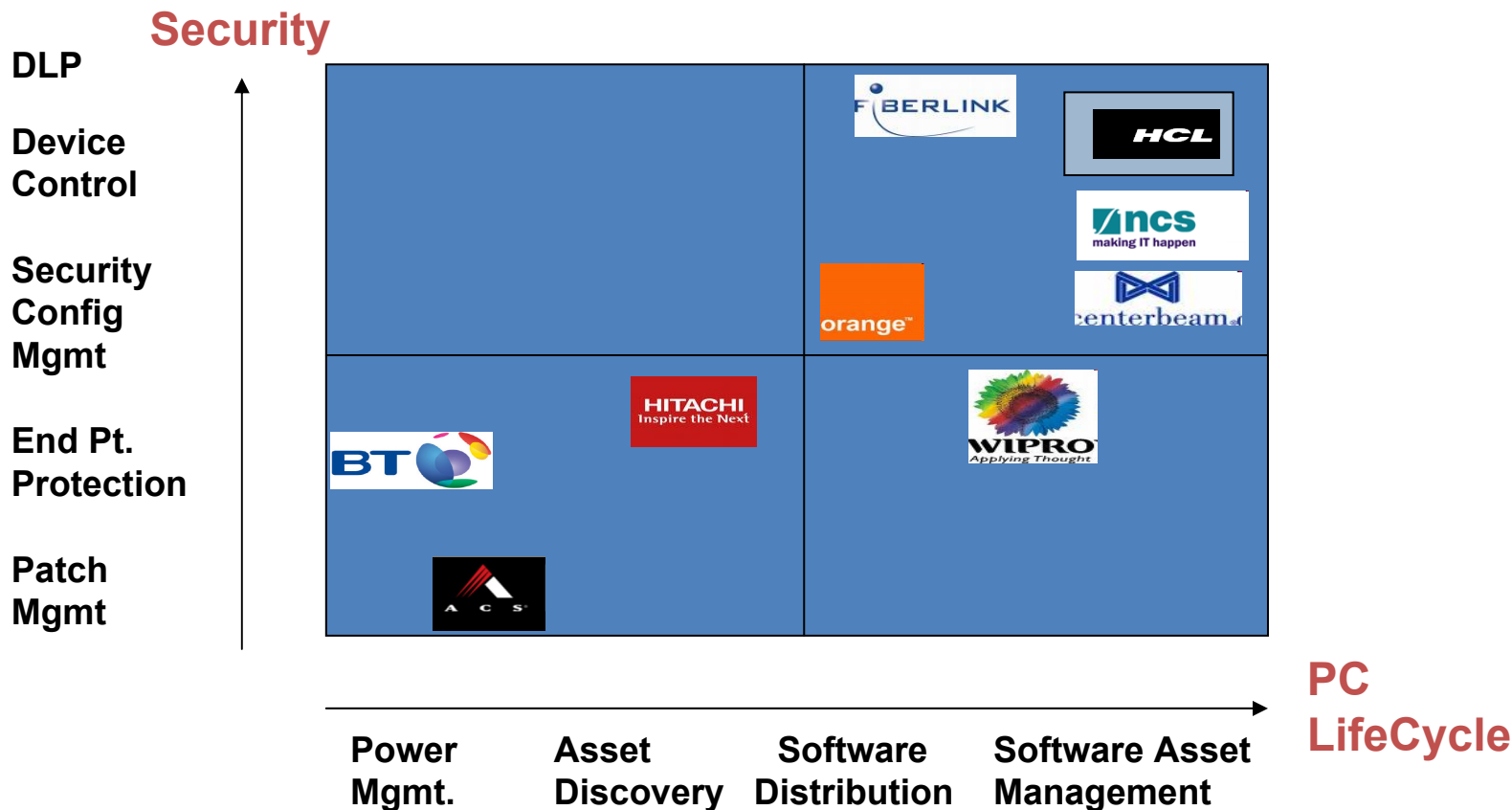


Offers Managed Service for Remote Access PCs
Branded as **“Managed Endpoint Services”**



Offers Cloud (SaaS) Service for PC Management
Branded as **“MobileXpress Desktop Management”**

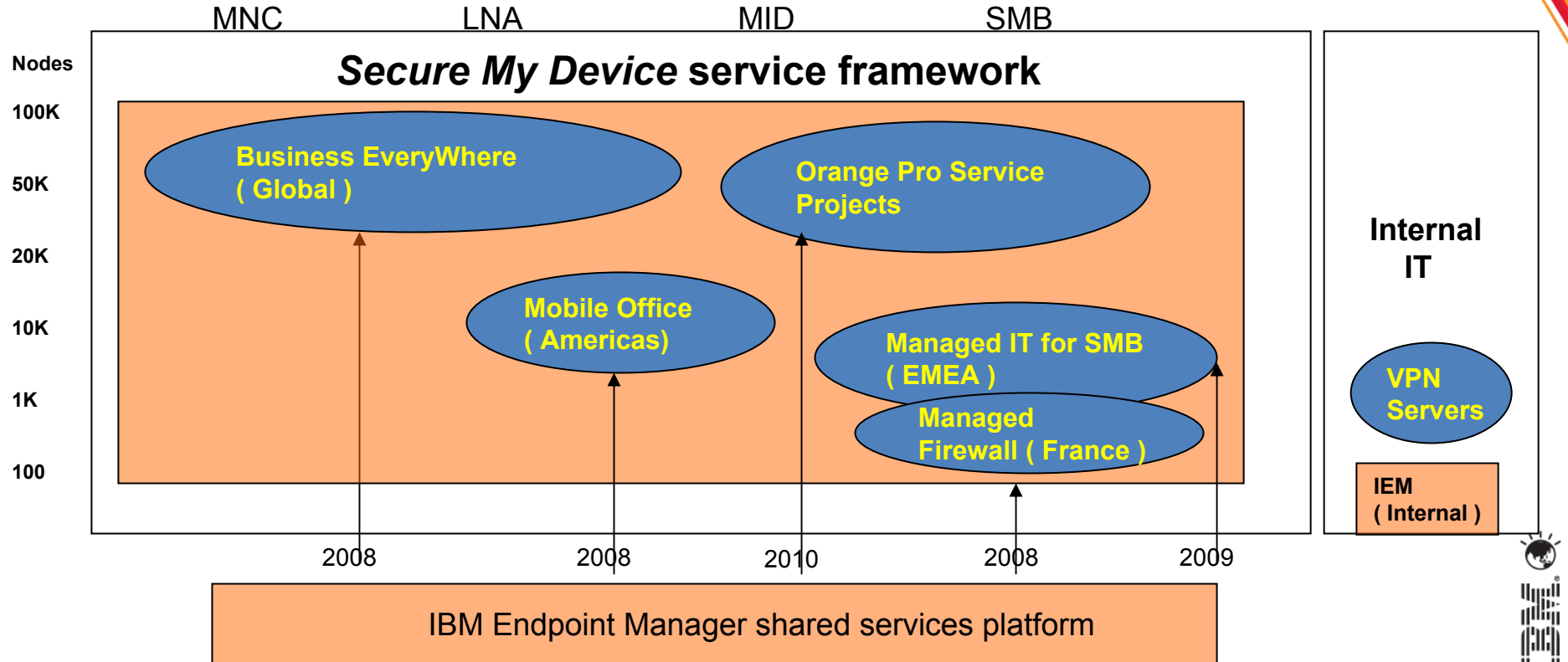
CSP can Rapidly Gain New Services Margin



PC
LifeCycle

- Orange planned to introduce their 'SecureMyDevice' service for mobile endpoint management (laptops and now smartphones)
 - Initially they had selected several different point solutions for
 - Patch Management * Anti-Malware * Endpoint Firewall
 - Security Configuration * License Inventor * Software Distribution
 - With IEM, they were able to consolidate onto one unifying platform for delivery of all these solutions, and attained
 - Much lower complexity & costs for development and operations
 - A platform with high leverage – multiple solutions & multi-tenancy
 - Capability for rapid delivery of new services
 - Un-rivaled real-time visibility & control

Multiple Solutions, Multiple Segments, One Platform



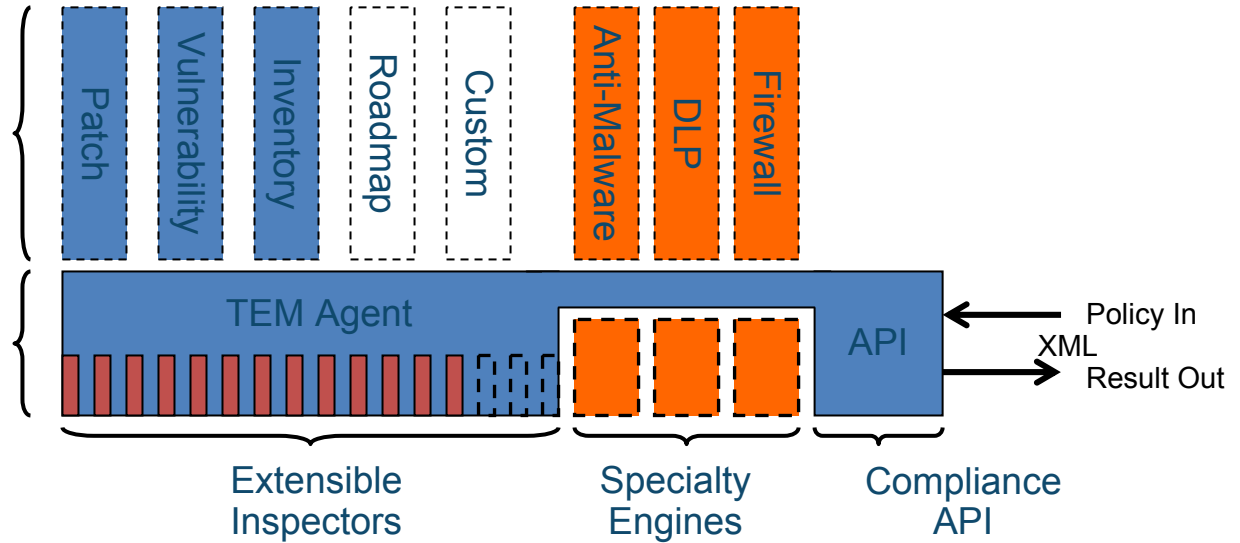
IEM “Extensible” Architecture

Fixlet message libraries

- Ongoing updates
- Lightweight
- Instant-on
- Dynamic
- Secure

BigFix Agent

- Low impact
- Small footprint
- Bandwidth frugal
- Secure



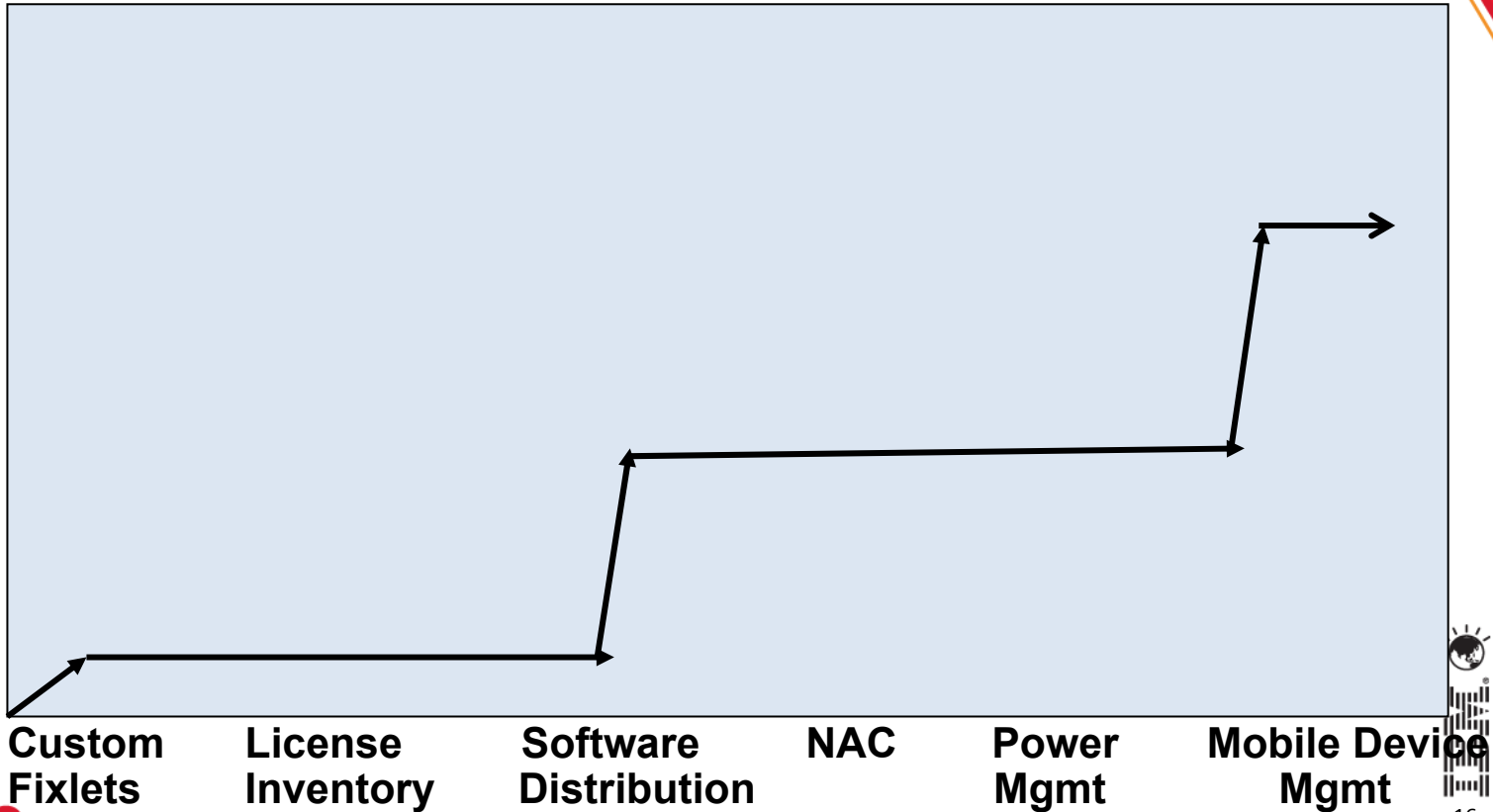
Centerbeam's Progression of IEM Solutions

Data Leak
Prevention

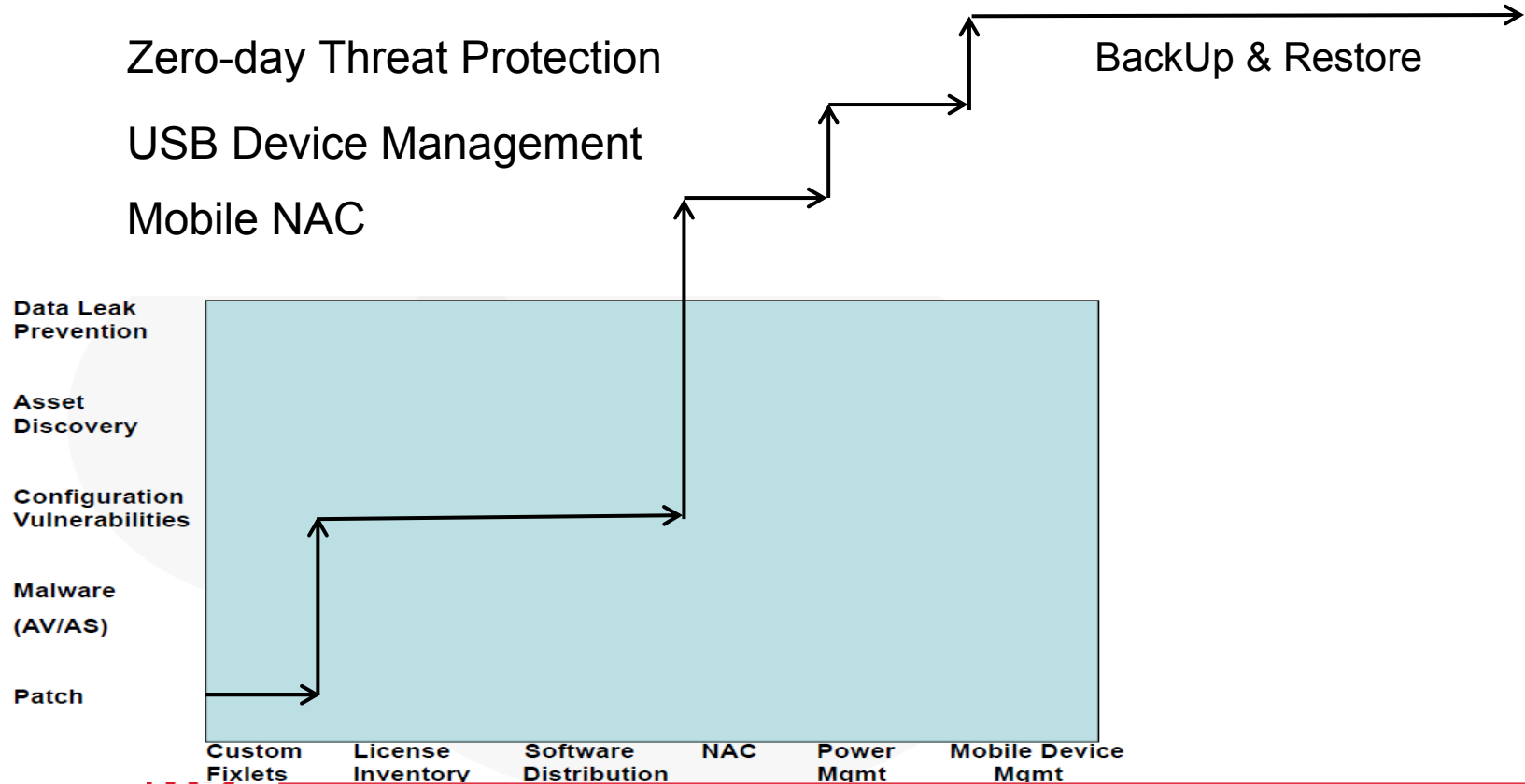
Asset
Discovery

Configuration
Vulnerabilities

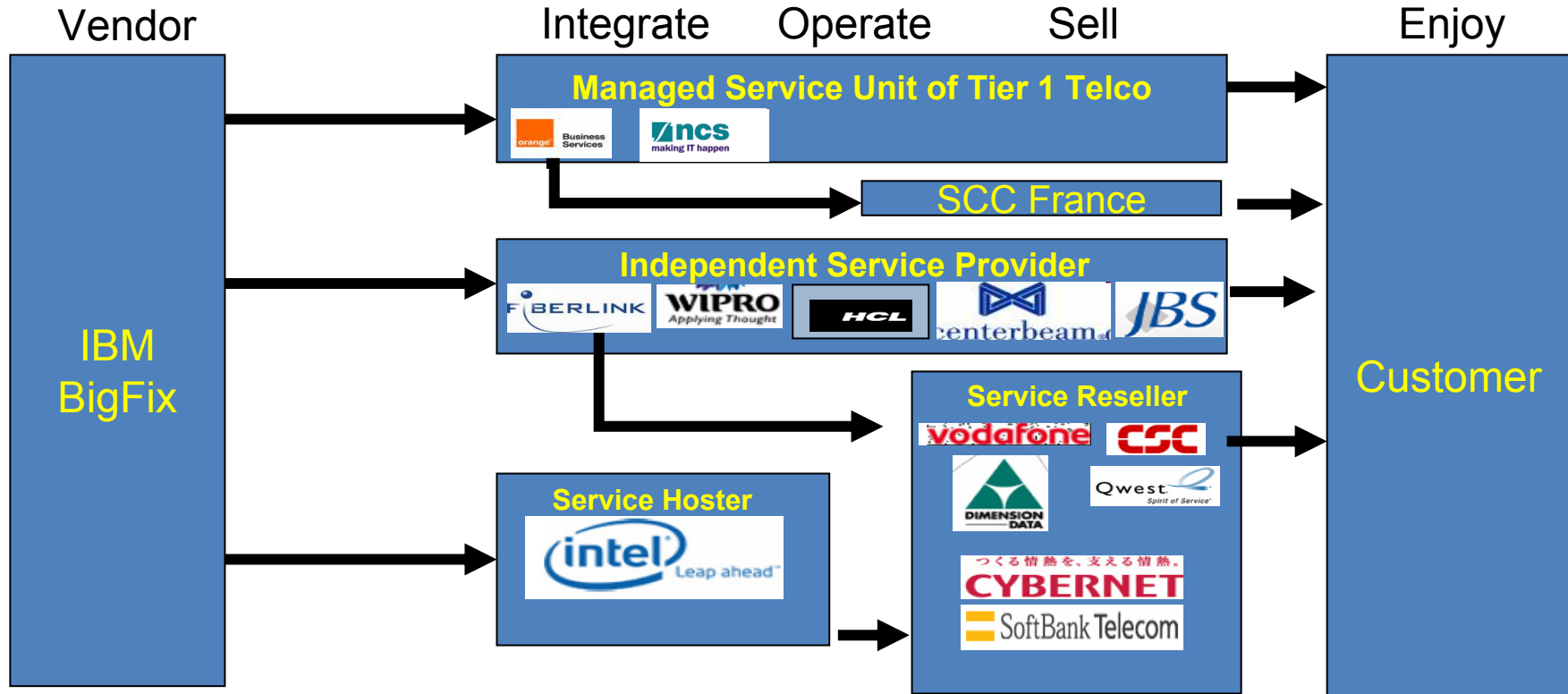
Malware
(AV/AS)



Fiberlink Aggressively Leveraged IEM Extensibility

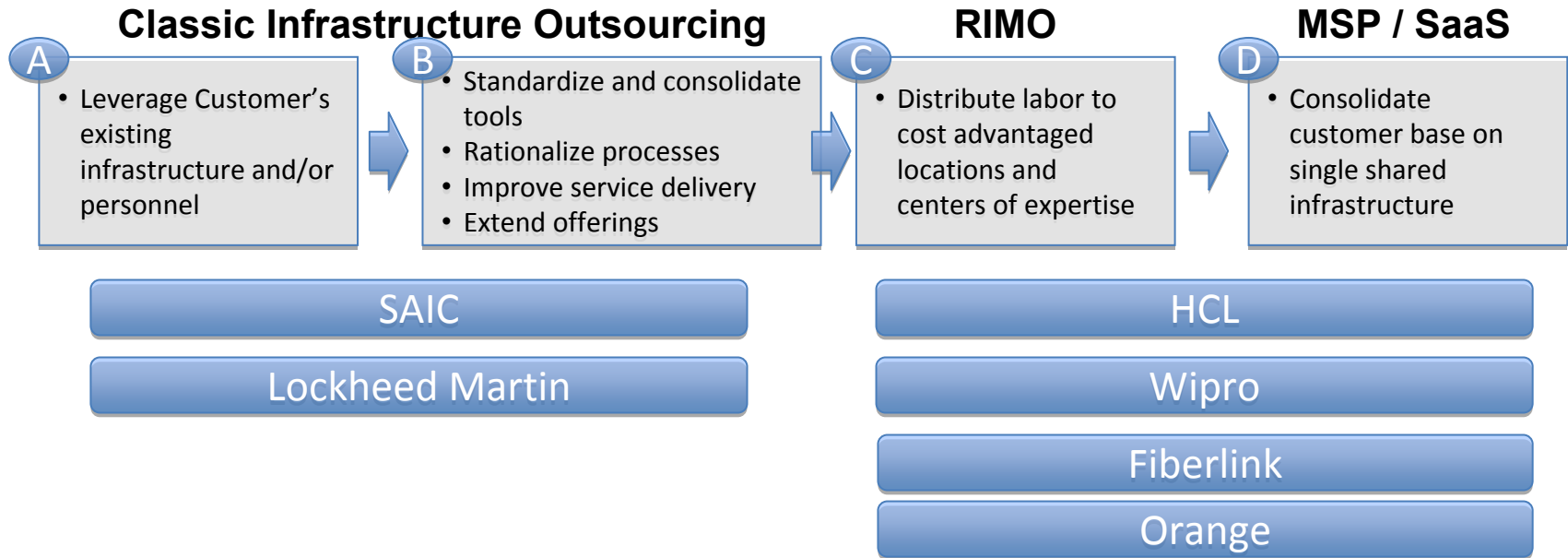


Routes to Market for EndPoint Management Services



Examples of IEM Service Providers by Delivery Model

Transformation and Optimization



Leveraging IBM Mobile Foundation

Mobile is a growing challenge, but there is help

- Enterprise customers are challenged and concerned how they can keep control of enterprise devices but also take advantage of the many apps now available for mobile devices.
- The solution is for service providers too meet two basic requirements.
 - They need to **host and manage multiple apps** and versions for a variety of customers
 - They need to **manage endpoint mobile devices**, keeping them secured with software and patches updates
- IBM Mobile Foundation platform that enables **PaaS** and **IaaS** solutions to increase development efficiency and resource utilization and management
 - PaaS Offering
 - Enables the development of HTML5, hybrid and native apps for all leading smartphones and tablets.
 - Developers can build from the simplest of apps to the most complex by utilizing nothing but HTML, CSS and JavaScript – commonly available resources in any organization that require very short learning curves.
 - IaaS Offering
 - Provides unified endpoint management, with integrated mobile security



Services Providers need to build PaaS and IaaS offerings for Application Development & Mobile Device Management

END-USER OR ISV MOBILE NEEDS

- Building and testing mobile applications without impacting own IT environment
- Creating new business opportunities
- Managing mobile devices and applications
- Connecting to and running backend systems in support of mobile
- Securing my mobile business

SERVICES PROVIDER MOBILE SOLUTIONS

PaaS Solution
Mobile application
development and testing
environment

IaaS Solution
Mobile device management
services

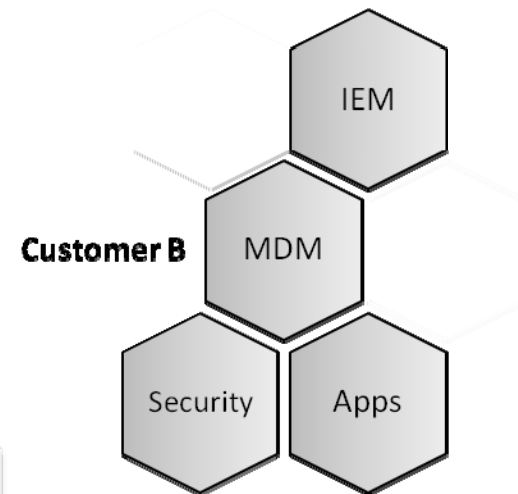
IBM SOFTWARE PLATFORM

IBM Worklight: *an open, complete, and advanced mobile application platform for HTML, hybrid, and native applications*

IBM Endpoint Manager for Mobile Devices: *unified endpoint management, with integrated mobile security*

IBM Mobile Solution Bundles

- Opportunity for service provider to create service bundles for their enterprise clients.
- Customers often look to purchase several related solutions to solve their mobility needs
- IBM can provide different solutions for service provider clients.
- Solutions can be added to meet the changing needs of the mobile enterprise



Thank you!

Follow-up materials:

- () IBM Case Study on Fiberlink
- () IBM Case Study on Centerbeam
- () Sample service brochures from Orange, NCS, etc.

Let me know if I can help you spin up TEM-based services ‘-)

Contacts: George Billman gbillman@us.ibm.com

PLEASE RATE THIS SESSION VIA THE PULSE 2012 MOBILE CONFERENCE GUIDE!

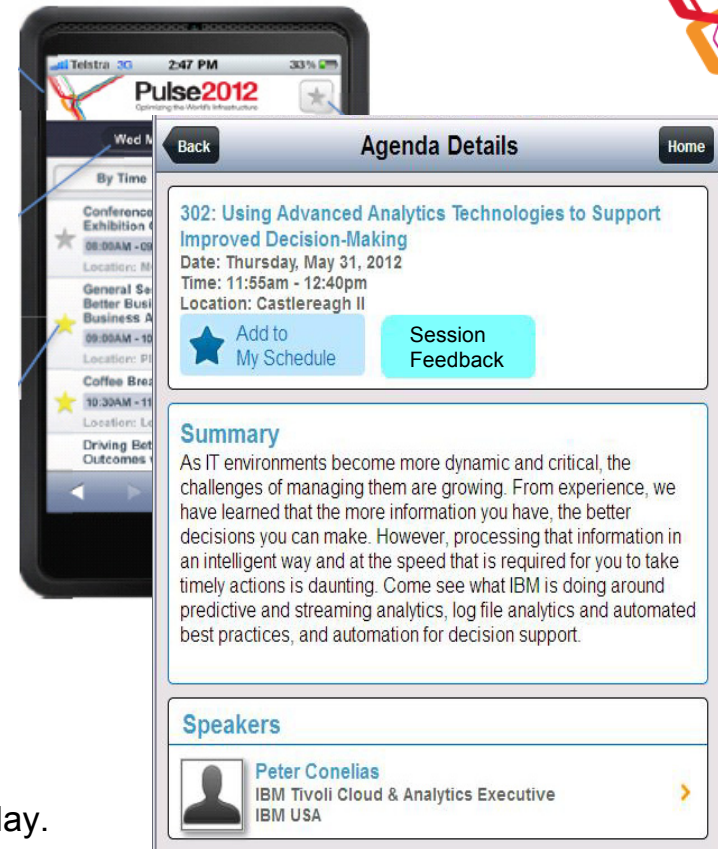
HTTP://PULSE2012.MOBI

username: <your email address>

password: pulse2012

Each session you rate gives you
an additional entry into the Pulse prize draw!

The winner will be announced during the conference close on Friday.



Driving Mobile Device Management & Application Requirements

Mobile Security Intelligence

Mobile Device Management

Mobile Device Management

- ✓ Acquire/Deploy
- ✓ Register
- ✓ Activation
- ✓ Content Mgmt
- ✓ Manage/Monitor
- ✓ Self Service
- ✓ Reporting
- ✓ Retire
- ✓ De-provision

Mobile Device Security Management

- ✓ Device wipe & lockdown
- ✓ Password Management
- ✓ Configuration Policy
- ✓ Compliance

Mobile Threat Management

- ✓ Anti-malware
- ✓ Anti-spyware
- ✓ Anti-spam
- ✓ Firewall/IPS
- ✓ Web filtering
- ✓ Web Reputation

Mobile Information Protection

- ✓ Data encryption (device, file & app)
- ✓ Mobile data loss prevention

Mobile Network Protection

- ✓ Secure Communications (VPN)
- ✓ Edge Protection

Mobile Identity & Access Management

- ✓ Identity Management
- ✓ Authorize & Authenticate
- ✓ Certificate Management
- ✓ Multi-factor

App/Test Development

Secure Mobile Application Development

- ✓ Vulnerability testing
- ✓ Mobile app testing
- ✓ Enforced by tools
- ✓ Enterprise policies

Mobile Applications

i.e. Native, Hybrid, Web Application

Platform Extension OS/ Application Layer (Optional)

i.e. Application Container (Sandboxing), Virtualization

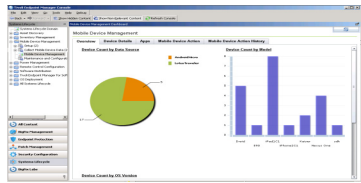
Device Platforms

30 device Manufacturers, 10 operating platforms

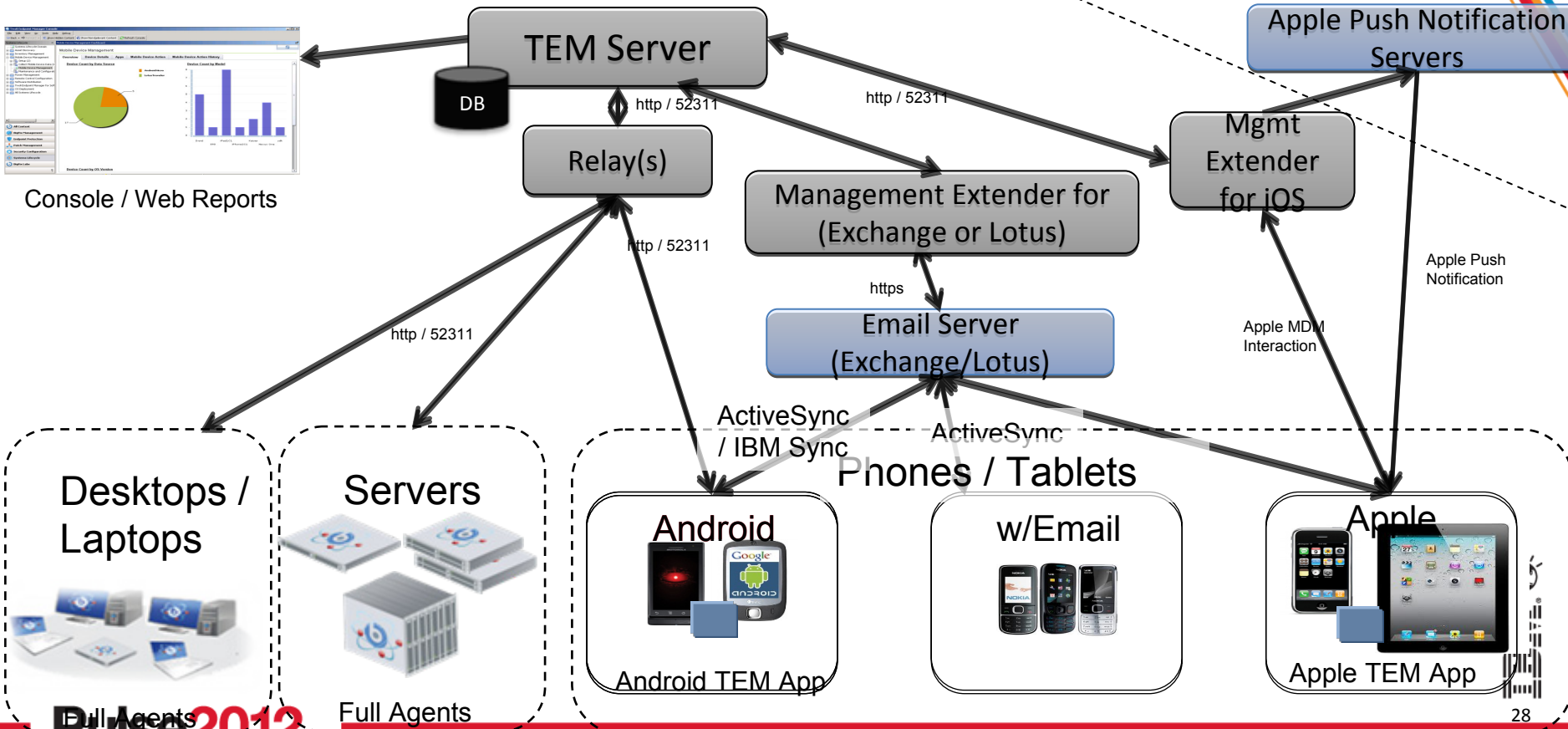
i.e. iOS, Android, Windows Mobile, Symbian, etc

APPENDIX ON IEM (aka BigFix) MDM

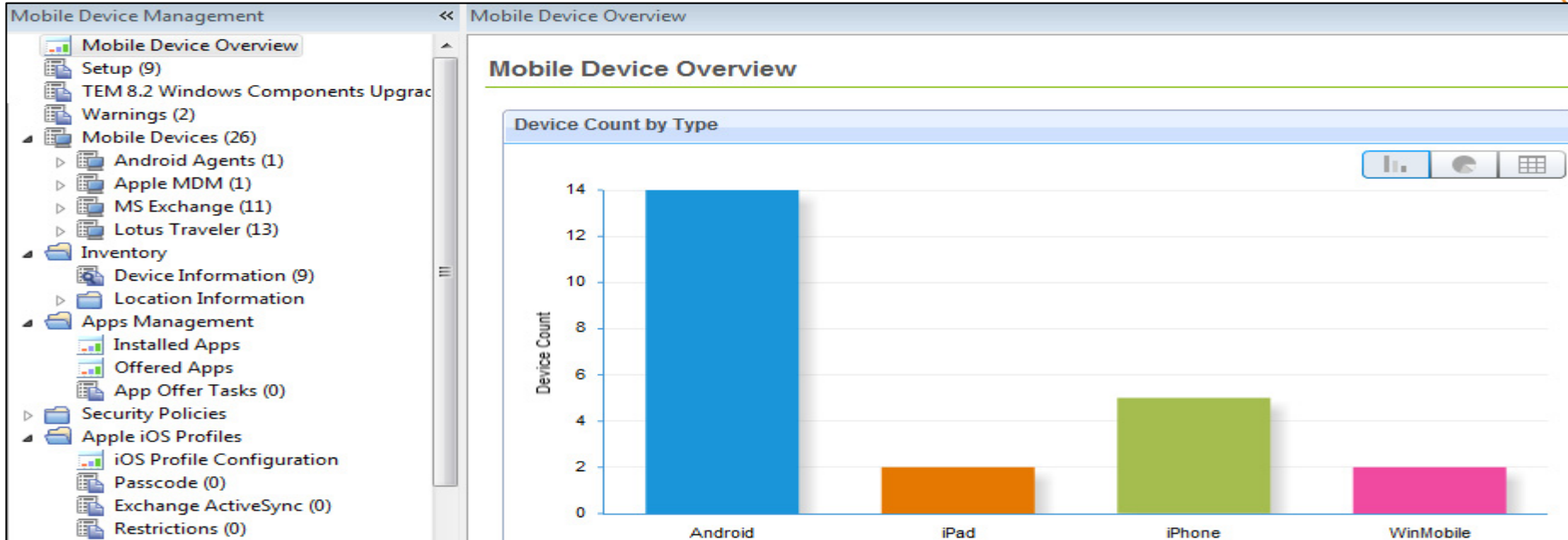
IBM Endpoint Manager for Mobile Devices Architecture



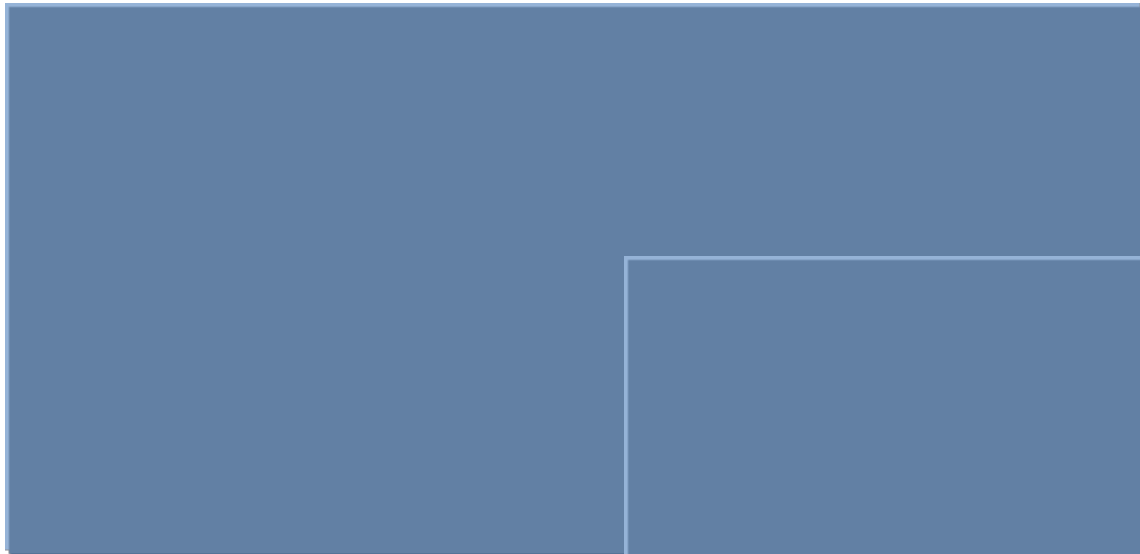
Console / Web Reports



Endpoint Manager for Mobile Devices Dashboard



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



A unified report of password policies across all mobile OS' makes it easy for administrators to identify non-compliant devices



An on-device app can be used to distribute enterprise apps and detect whether an iOS or Android device is jailbroken or rooted

Verizon 2:46 PM 92%

Server URL
mdm.ibm.com

Work Email Address
jsmith@ibm.com

Device Ownership
 I own this device
 My organization owns this device

Enroll

Verizon 2:46 PM 92%

Installing Profile

IBM BigFix Profile...
IBM BigFix
Verified

Description Install this profile to enroll for management by IBM BigFix.

Signed IBM BigFix Profile Service
Received Feb 9, 2012
Contains Device enrollment challenge

More Details

Verizon 2:47 PM 92%

IBM Endpoint Manager

There are no recommended apps available at this time.

You will receive a notification when the administrator recommends new apps for you. You can also press the refresh button on the top of the screen to check for new apps.

All Apps Categories Updates Info

Verizon 2:47 PM 91%

Info

Enrollment Information

About

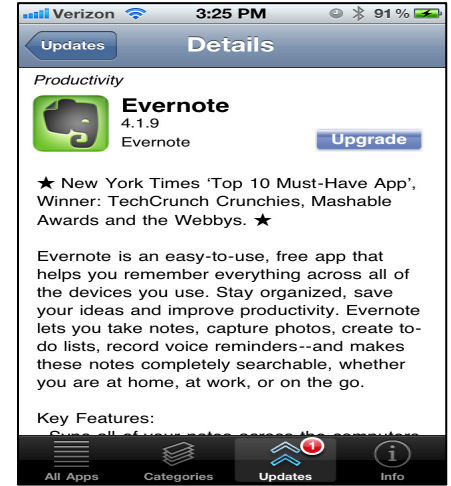
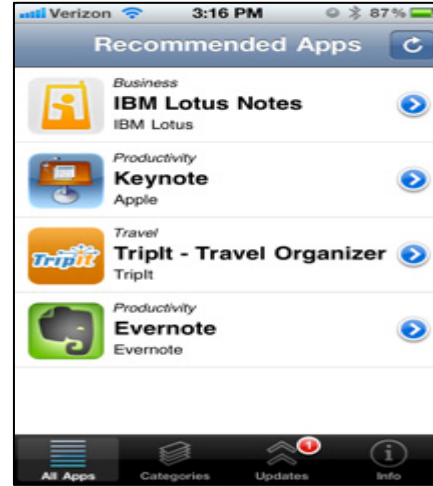
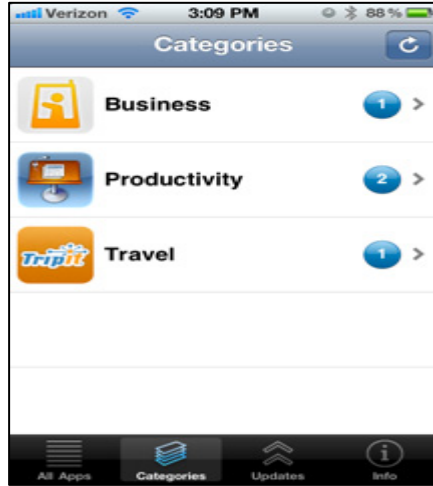
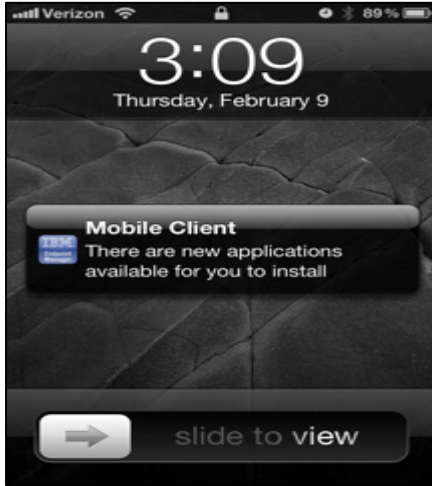
Email support

Provide App Feedback

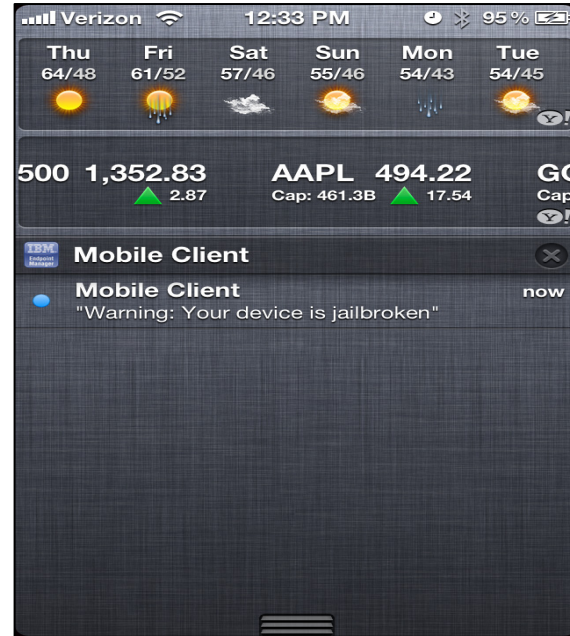
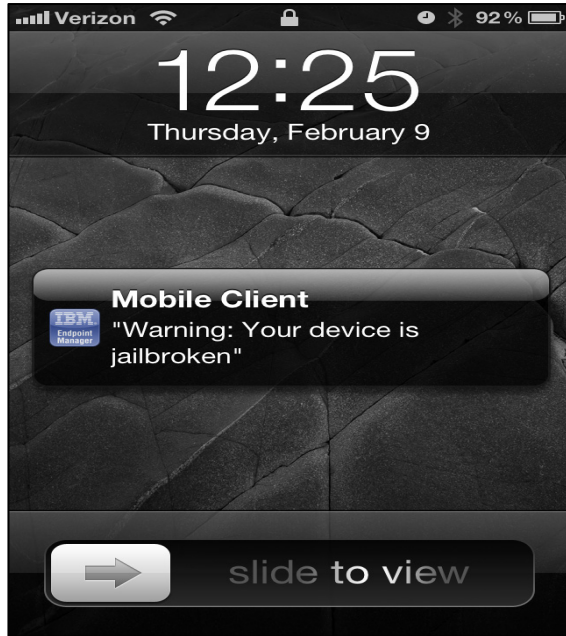
IBM Endpoint Manager for Mobile Devices v1.0

All Apps Categories Updates Info

App Management



iOS Jailbreak Notification



Configure and deploy Lotus Traveler policies directly from the Endpoint Manager Console

Lotus Traveler Device Security Settings - Configuration

Windows Mobile | Nokia | Apple | **Android**

Device Security	Violation Action
<input checked="" type="checkbox"/> Require device password	Enforce
<input type="checkbox"/> Prohibit ascending, descending and repeating sequences	
<input type="checkbox"/> Require alphanumeric value	
Minimum password length:	8
Minimum number of complex characters:	0
Auto lock period (maximum):	30 minutes
Password expiration period:	90 days
Password history count:	0
<input type="checkbox"/> Wrong passwords before wiping device	7
<input type="checkbox"/> Prohibit unencrypted devices	
<input checked="" type="checkbox"/> Prohibit camera	Enforce
<input checked="" type="checkbox"/> Prohibit devices incapable of security enablement	Enforce



A user-friendly iOS Profile Configuration Wizard exposes all of the configuration capabilities in Apple's MDM APIs

Profile Details

Identity | **Passcode**

Require passcode on device
Enforce the use of a passcode before using device

Allow simple value
Permit the use of repeating, ascending, and descending character sequences

Require alphanumeric value
Require passcodes to contain at least one letter

Minimum password length
Smallest number of passcode characters allowed

Minimum number of complex characters
Smallest number of non-alphanumeric characters allowed

Maximum passcode age (1-730 days, or none)
Days after which passcode must be changed

Auto-Lock (1-5) minutes, or 0 for none
Device automatically locks when time period elapses

Passcode history (1-50 passcodes, or 0 for none)
The number of unique passcodes required before reuse

Grace period for device lock
Amount of time device can be locked without prompting for passcode on unlock

Maximum number of failed attempts
Number of passcode entry attempts allowed before all data on device will be erased

[Exit New Profile Mode](#) [Save Profile](#)



Deny Email Access by Policy

Description

This task will deny targeted mobile devices access to their email server (Lotus Traveler or Microsoft Exchange). Use [Allow Email Access](#) to restore access.

Actions

Click [here](#) to deny email access.

Description	Details	Applicable Computers (13)	Action History (0)
Applicable Computers (13)			
By Retrieved Properties			
By Computer Name			
By OS			
By Agent Type			
By Last Report Time			
By User Name			
By Network Adapter - Windows			
By Locked			
By BES Relay Selection Method			
By Relay			
By Free Space on System Drive			
By Total Size of System Drive			
By Subnet Address			
By BES Relay Service Installed			
By Test OS			
By IP Address			
By Group			
		Computer Name	OS
		Android_bf48fac3f41d6e2e	Android 2.3.6
		Android_f32067a6cfd0088	Android 3.1
		AppI5K131B6DA4T	Apple-iPhone3C1/...
		Android_5514FCEDC0C948F08E9E1...	Android 2.2
		Android_354795044824958	Android 2.2
		Android_c4207440ef0a152d	Android 2.3.4
		AppI87938J5M3NR	Apple-iPhone2C1/...
		60A5B61B8144024A3698A9390933F...	PocketPC/6(5.2.19...
		AppI7W05224EA4S	Apple-iPhone3C1/...
		Android_8f166312739dc043	Android 2.3.3
		AppI9C80243A14P	Apple-iPod/705.18...
		Android_1292e80b9e00f5f9	Android 2.3.4
		AppI3049UUXA90	Apple-iPad1C1/81...

View installed apps on Android and iOS devices

Apps Management - Installed Apps

This dashboard reports back the applications that are installed on devices.

Android Apps | Apple Apps

Apps List

Tag checked as: --- Clear tag Search

<input type="checkbox"/>	Display Name	Tag	1 ▼ Package Name	Description	API Versions	Computer Count
<input type="checkbox"/>	TEM Agent	Enterprise	com.bigfix.engine	Tivoli Endpoint Manager 8.2	8	1
<input type="checkbox"/>	è* æ-Œæc¼éŸ²è³¼*â...¥æ	Blacklisted	com.android.inputmethod.p		10	1
<input type="checkbox"/>	TTS Service		android.tts		10	1
<input type="checkbox"/>	Contacts		com.android.contacts		10	1
<input type="checkbox"/>	Fallback		com.android.fallback		10	1
<input type="checkbox"/>	Calculator		com.android.calculator2		10	1
<input type="checkbox"/>	Custom Locale		com.android.customlocale		10	1
<input type="checkbox"/>	Settings Storage		com.android.providers.sett		10	1
<input type="checkbox"/>	Search		com.android.quicksearchbc		10	1
<input type="checkbox"/>	HTML Viewer		com.android.htmlviewer		10	1
<input type="checkbox"/>	Camera		com.android.camera		10	1
<input type="checkbox"/>	OpenWnn		jp.co.omronsoft.openwnn		10	1
<input type="checkbox"/>	DRM Protected Content Sto		com.android.providers.drm		10	1
<input type="checkbox"/>	Dev Tools		com.android.development		10	1
<input type="checkbox"/>	Pico TTS		com.svox.pico		10	1
<input type="checkbox"/>	Search Applications Provid		com.android.providers.app		10	1
<input type="checkbox"/>	System Access Helpe		com.android.defoma		10	1



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