



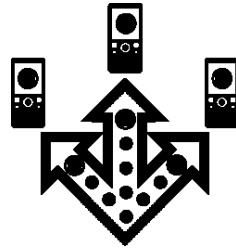
# Manage & Secure Your Mobile Enterprise: *Delivering Visibility & Confidence*

Neil Warburton  
Security Architect

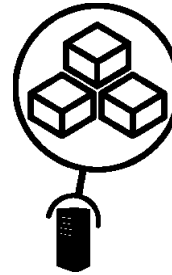
**Innovate2013**  
The IBM Technical Summit

# A deeper look at **Manage & Secure** capabilities

**Extend & Transform**



**Build & Connect**



## **Manage & Secure**

*Manage* mobile devices,  
services and applications

*Secure* my mobile business

### **Key Capabilities**

- Mobile lifecycle management
- Device analytics and control
- Secure network communications & management

# Mobile Devices: Unique Management & Security Challenges

## Mobile devices are shared more often

- Personal phones and tablets shared with family
- Enterprise tablet shared with co-workers
- Social norms of mobile apps vs. file systems



## Mobile devices have multiple personas

- Work tool
- Entertainment device
- Personal organization
- Security profile per persona?



## Mobile devices are diverse

- OS immaturity for enterprise mgmt
- BYOD dictates multiple OSs
- Vendor / carrier control dictates multiple OS versions



## Mobile devices are used in more locations

- A single location could offer public, private, and cell connections
- Anywhere, anytime
- Increasing reliance on enterprise WiFi



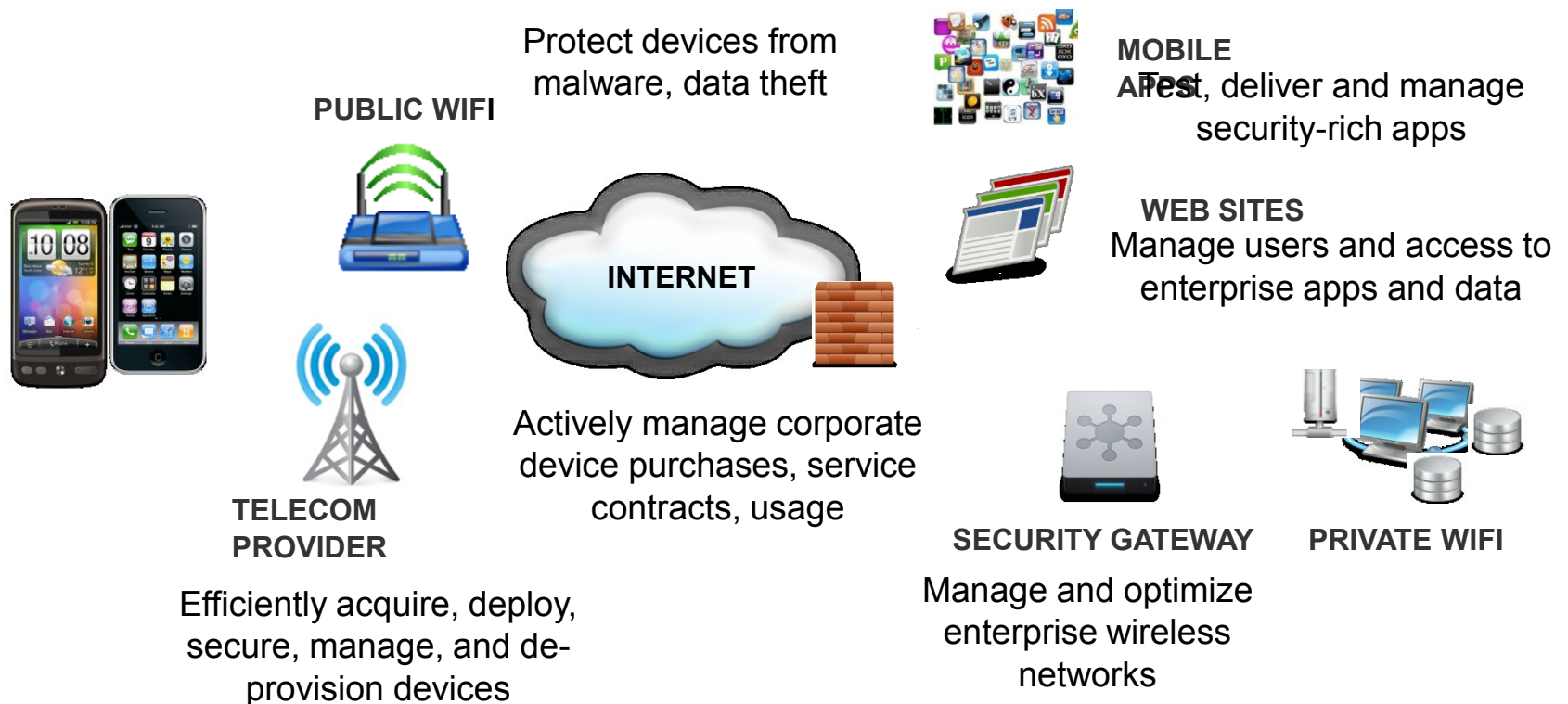
## Mobile devices prioritize the user

- Conflicts with user experience not tolerated
- OS architecture puts the user in control
- Difficult to enforce policy, app lists



# A Holistic Approach to Managing & Securing the Mobile Environment

## Develop and Communicate Formal Mobile Strategy, Policies



## Deliver an Adaptive Security Posture

# Solutions for Managing & Securing the Mobile Environment

*Global Business, Technology, & Security Services*

## Develop and Communicate Formal Mobile Strategy, Policy

**Issue:** Mobile devices have been growing in their importance to employees and partners for over a decade, ahead of an enterprise-wide strategy, resulting in an inconsistent approach from department to department.

**IBM:** Brings together a unique combination of business advisory, technology, and security services with the right software solutions to help clients devise and implement the most appropriate strategy for their organization

### Device Lifecycle

*IT Operations*

**Issue:** Frequent turnover increases asset management, service desk, security costs

**IBM:** Reduce total cost of ownership (TCO) with integrated device management, self-service capabilities that automates the complete device lifecycle

### Data Protection

*IT Security*

**Issue:** Mobile malware up 155% small device used everywhere, user-centric OS architecture all increase security risk

**IBM:** Prevent infections, data loss with hosted or on-premise mobile anti-malware + MDM

### Cost Management

*Finance*

**Issue:** Unmanaged device & service plan procurement, incorrect billing and inventories results in overpayment

**IBM:** Reduce mobile costs by up to 35% through integrated asset, procurement, and expense management solutions

# Solutions for Managing & Securing the Mobile Environment

## Security-rich Apps

*App Dev / R&D*

**Issue:** Lack of deep security knowledge in development and test teams results in application vulnerabilities

**IBM:** Eliminate most app vulnerabilities during the dev cycle with automated, integrated development and testing tools

## Authenticated Access

*IT Security*

**Issue:** Devices that are easily lost or borrowed, insecure data connections increases unauthorized access risks

**IBM:** Ensure only authorized users and devices are connected to enterprise resources and that data is encrypted in transit.

## Network Optimization

*Network Operations*

**Issue:** Increased load, dependency on corporate wireless networks

**IBM:** Improve uptime, problem resolution time with the only solution that combines data from roaming endpoints with deep network mapping and access point monitoring

## Deliver an Adaptive Security Posture

*Security Intelligence and Analytics*

**Issue:** lack of Visibility of security events across the enterprise, to stay ahead of the threat and respond to real time threats

**IBM:** provides fully integrated security intelligence from monitoring data and enterprise event collection

# IBM Office of the CIO



## Extending Corporate Access

*“IBM's BYOD program “really is about supporting employees in the way they want to work. They will find the most appropriate tool to get their job done. I want to make sure I can enable them to do that, but in a way that safeguards the integrity of our business.”*

**Jeanette Horan, IBM VP CIO**

### Customer Needs

- Support BYOD for a variety of mobile platforms securely for a highly mobile population
- Scale to hundreds of thousands of devices

### Key Features & Outcomes

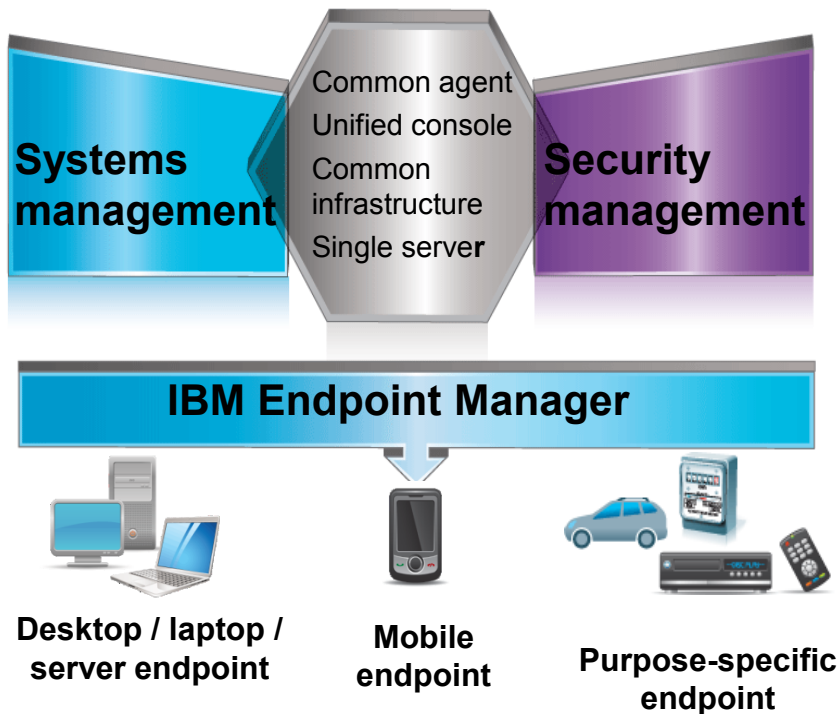
- 120,000 mobile devices, 80,000 personally owned, supported in months
- Integrated Lotus Traveler, IBM Connections, IBM Sametime, and IBM Endpoint Manager

# Device Lifecycle, Data Protection

## *IBM Endpoint Manager for Mobile Devices*

A highly-scalable, unified solution that delivers device management and security across device types and operating systems for superior visibility and control.

### Managed = Secure



### Client Challenge

Managing and securing enterprise and BYOD mobile devices without additional resources.

### Key Capabilities

- A unified systems and security management solution for all enterprise devices
- Near-instant deployment of new features and reports to customer's environments
- Platform to extend integrations with Service Desk, CMDB, SIEM, and other information-gathering systems to mobile devices
- Advanced mobile device management capabilities for iOS, Android, Symbian, and Windows Mobile, Windows Phone
- Security threat detection and automated remediation



# Electricity Provider



## Adding Mobile Devices Without Adding Infrastructure

*Serving 4.5 million customers in the southwestern region of the United States, this electric company of 25,000 employees is a leader in clean energy while exceeding reliability standards and keeping consumer costs below average. They are experiencing a migration from traditional endpoints to mobile devices.*

### Customer Needs

- Support 20,000+ mobile devices
- Corporate and employee-owned, many platforms and OS versions
- High availability for certain devices used in the field
- Adherence to Internal security policies, external regulations

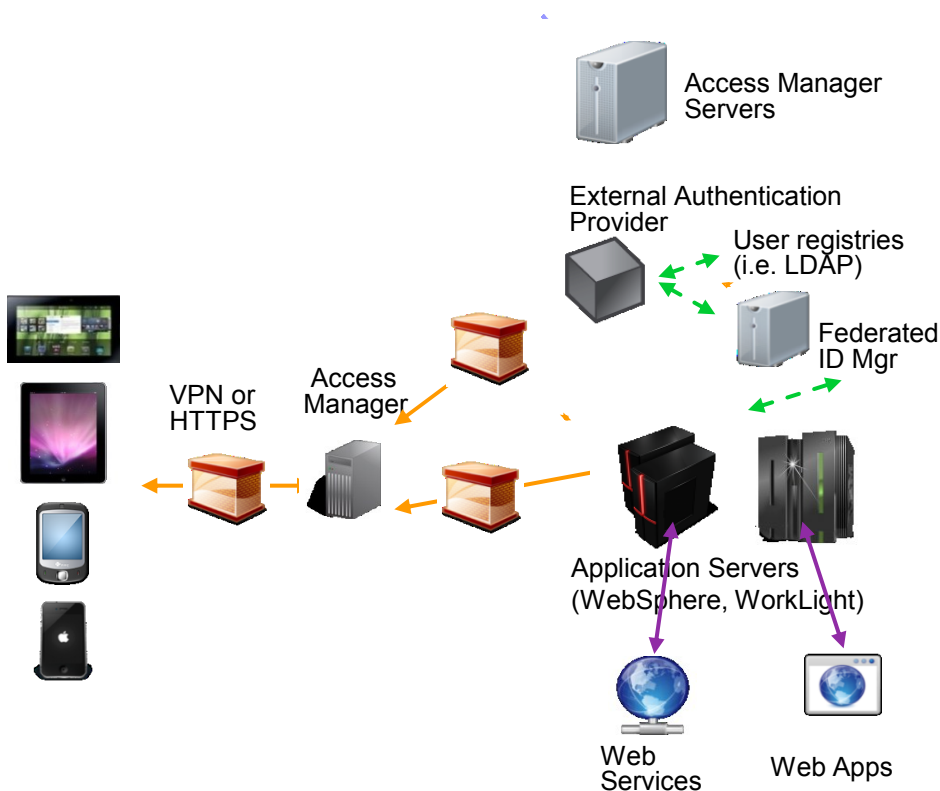
### Key Features & Outcomes

- Scalability to 250,000 endpoints provides room to grow
- Added mobile devices to existing IEM deployment in days
- Ability to integrate with Maximo, Remedy
- Responsiveness and agility of product and product team

# User Management & Access

## IBM Security Access Manager for Mobile

Delivers user security by authenticating and authorizing the user and their device.



### Client Challenge

Ensuring users and devices are authorized to access enterprise resources from that specific device.

### Key Capabilities

- Satisfy complex authentication requirements
- Reverse proxy, authentication, authorization, and federated identity
- Mobile native, hybrid, and web apps
- Flexibility in authentication: user id/password, basic auth, certificate, or custom
- Supports open standards applicable to mobile such as OAuth



## European Bank to Deliver Secure Mobile Internet Banking

*AimArs needed to reduce operational complexity and cost with a single, scalable infrastructure to secure access to various back-end services from multiple mobile apps. A customized authentication mechanism empowered the bank to guarantee the security of its customers while safeguarding the trust relationship with a safe app platform that encrypts local data and delivers app updates immediately.*

### Customer Needs

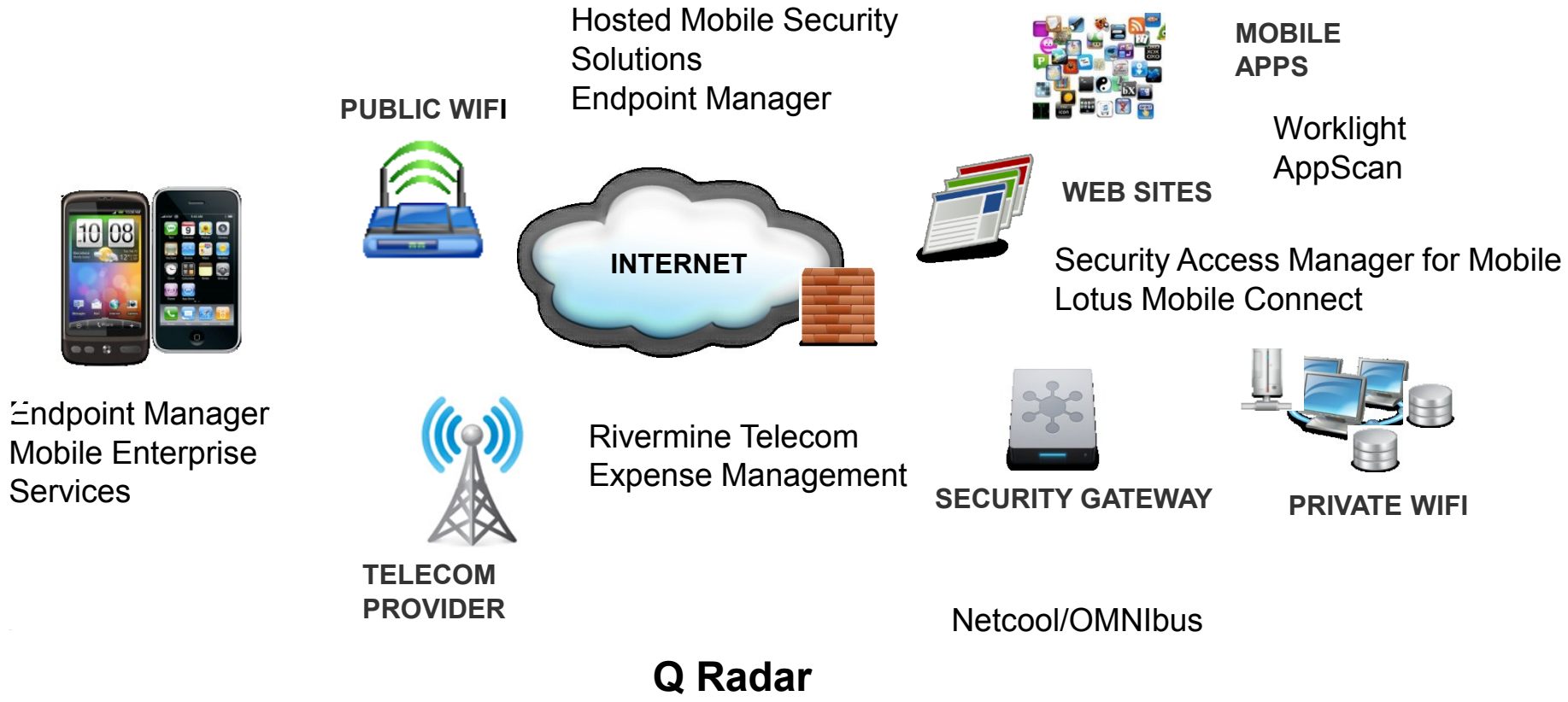
- Extend secure access to banking apps to mobile customers
- Enhance productivity of employees to perform secure banking transactions via mobile devices
- Support for iOS, Android, and Windows Mobile

### Key Features & Outcomes

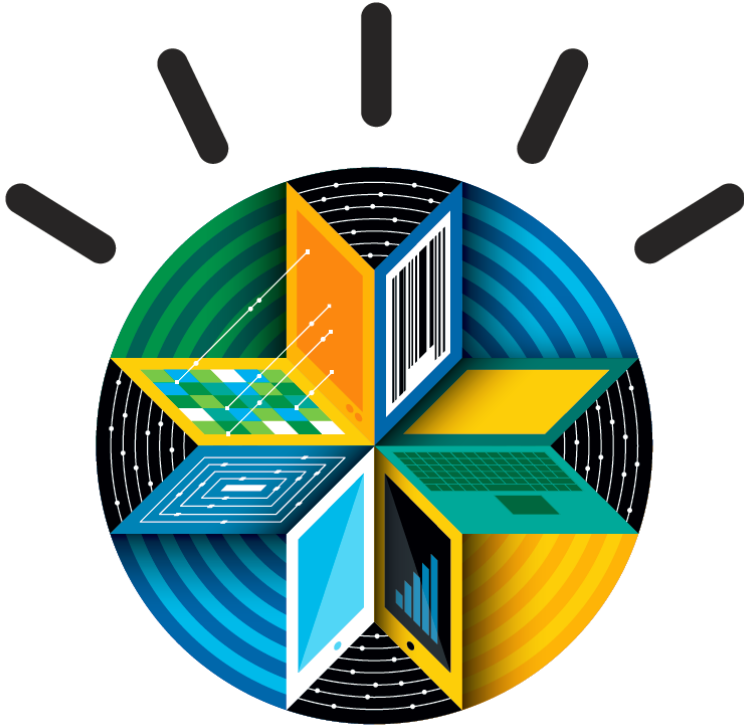
- Authenticates requests made via HTTPS from hybrid mobile apps running on WorkLight platform to back-end services
- A custom certificates-based authentication mechanism implemented to secure back-end banking application

# Holistic Approach to Managing & Securing Mobile Environments

## IBM Global Business, Technology, & Security Services



# Next Steps



Learn more at:

[www.ibm.com/mobile-enterprise](http://www.ibm.com/mobile-enterprise)

- Access white papers and webcasts
  - Get product and services information
  - Download and begin using IBM Endpoint Manager
- Talk with your IBM representative or IBM Business Partner to find the right next step for you

# Questions



# Thank You

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# BACKUP

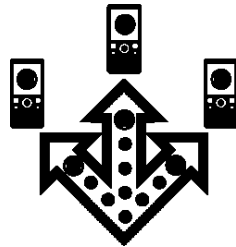


# Device Lifecycle, Security, Data Protection Services

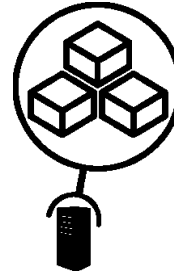
## IBM Services

From strategy to application platform and development, to device and application management and security, and secure connectivity to the network.

### Extend & Transform



### Build & Connect



### Manage & Secure

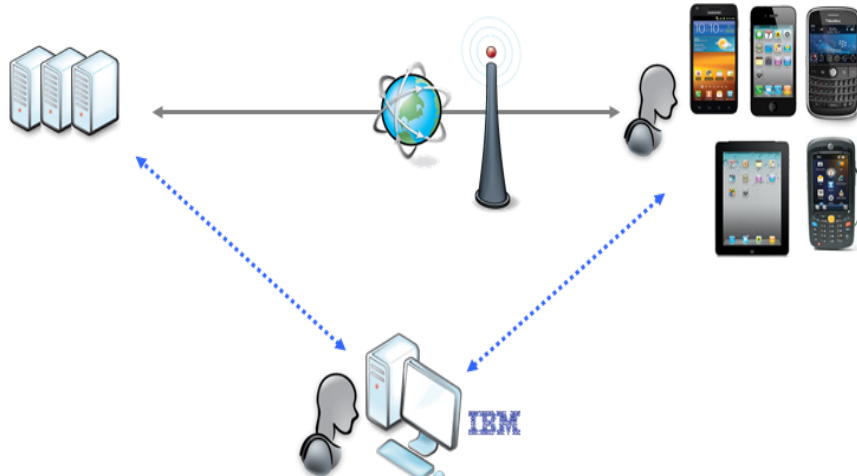
#### Key Services Capabilities

- Mobile device lifecycle, expense management and help desk
- Cloud-based mobile device security management
- Data and wireless network security
- Mobile application management including native, web, hybrid and virtual applications

# Device Lifecycle

## *IBM Mobile Enterprise Services for Managed Mobility*

Managed service for iOS, Blackberry, Android, and Windows Mobile smartphones, tablets, and ruggedized devices.



*IBM recommends, installs, configures and manages the mobile devices and mobile infrastructure on an ongoing basis*

### Client Challenge

Delivering enterprise mobile services to increasing numbers of mobile workers, including BYOD, at less cost than delivering in house

### Key Capabilities

- Procurement, staging and kitting
- Mobile device management
- Mobile application management
- Mobile messaging (e.g. Lotus Domino, Microsoft Exchange)
- Help desk services
- Negotiated discounts with leading mobile hardware and software vendors
- Over 15 years world-wide experience

# Mobile Endpoint and Data Protection

## *IBM Hosted Mobile Device Security Management*

Turn-key security for employee-owned and corporate-liable mobile devices



### Client Challenge

Mobile threat protection without in-house skills or technology to own or manage

### Key Capabilities

- Mobile malware prevention (spyware, viruses, etc.)
- Simple, cloud-based delivery
- Policy compliance monitoring
- Device management and security for Apple, Android, BlackBerry, Windows Mobile, and Symbian devices
- End-user portal to locate/lock/wipe a lost or stolen device

# Enterprise Wireless Networks

## *IBM Mobility & Wireless Network Services*

A full lifecycle of project deployment services for enterprise networks: strategy, assess, design, integrate, deploy, maintain, and run



### Client Challenge

Secure, robust and high-bandwidth enterprise wireless network to support wireless network services such as voice, video, BYOD and real-time tracking

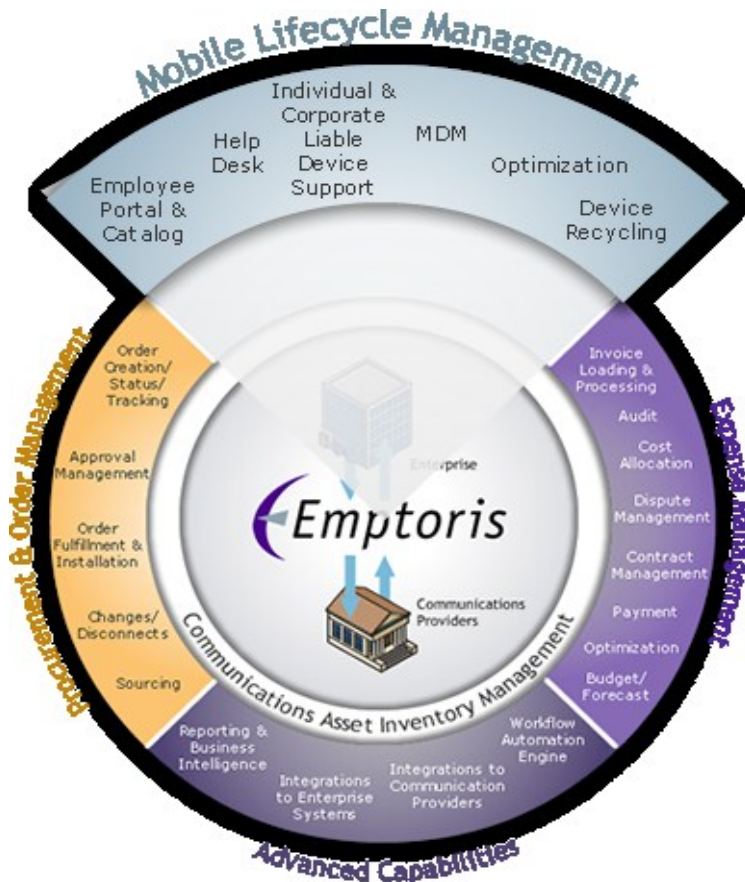
### Key Capabilities

- Wireless Campus Infrastructure and Mobile Connectivity
- Wireless Remote Network Management
- Wireless Network Security
- Wireless Communications and Collaboration
- Real-time Location
- Event-driven Notification

# Effectively Manage Mobile Costs

## *Emptoris Rivermine Telecom Expense Management*

Manage, track and optimize mobile spend while ensuring policies are enforced



### Client Challenge

Managing rapid proliferation of corporate and BYOD mobile devices to rein in costs and enforce policy compliance

### Key Capabilities

- Streamline mobile usage management with end-user portal
- Identify most cost effective rate plan for users with rate plan optimization and auditing
- Accelerate device issue resolution and corporate mobile policy enforcement
- Ensure bill accuracy and prevent overpayments with invoice processing
- Optimize contract costs, terms and conditions
- Personal vs. Business Call Tagging for tax legislation compliance
- Mobile Device Recycling for environmental compliance and possible rebates

# Fortune 500 financial services company

## Company Overview

- 200,000+ employees
- \$100 billion+ revenue
- Clients in 100+ countries

## Business Challenges

- \$300 million in annual telecom spend
- Inability to view various telecom spend categories across business units, carriers and service types, including voice, data, conferencing, and international
- Reconciling contracts with services
- Optimizing telecom infrastructure
- Identifying disconnected services

## Results Achieved Using Emptoris

- Cumulative savings of \$125 million over 5 years
- One unified view of the entire telecom spend spectrum
- IEM program viewed as a profit center



# Fortune 500 medical supply company

## Company Overview

- Leader in healthcare for over 75 years
- 45,000 employees worldwide
- 65 facilities in the US; global presence in over 100 countries

## Business Challenges

- Mobile and wireline telecom spend over \$15 million and increasing
- Limited visibility into thousands of mobile devices
- Majority of invoices in paper format allowing for limited visibility and inefficient processes
- Exploding international costs

## Results Achieved Using Emptoris

- \$15 million in wireless and wireline spend under management
- Overall savings to date of close to \$4 million
- 5X ROI within 1 year
- Well-defined process for managing the entire telecom lifecycle





# Deliver and Manage Safe Mobile Apps

## IBM Worklight

Develop, deliver and deploy security-rich mobile apps to streamline business activities while also delivering a rich user experience

### Client Challenge

Efficiently and securely, create and run HTML5, hybrid and native mobile apps for a broad set of mobile devices

### Key Capabilities

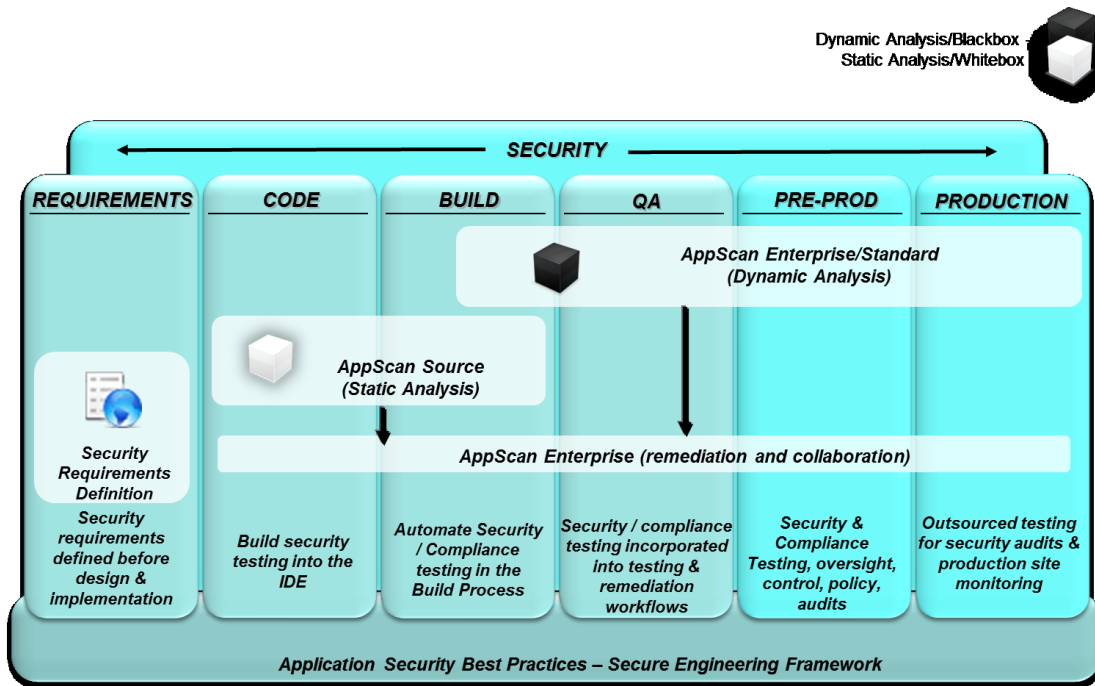
- Integrated secure access to backend application resources
- Secured by design - develop secure mobile apps using corporate best practices, code obfuscation
- Protect mobile app data with encrypted local storage for data, offline user access, app authenticity validation, and enforcement of organizational security policies
- Maximize mobile app performance with analytics, remote disabling of apps



# Deliver Security-Rich Apps

## Appscan

Application security testing and risk management.



## Client Challenge

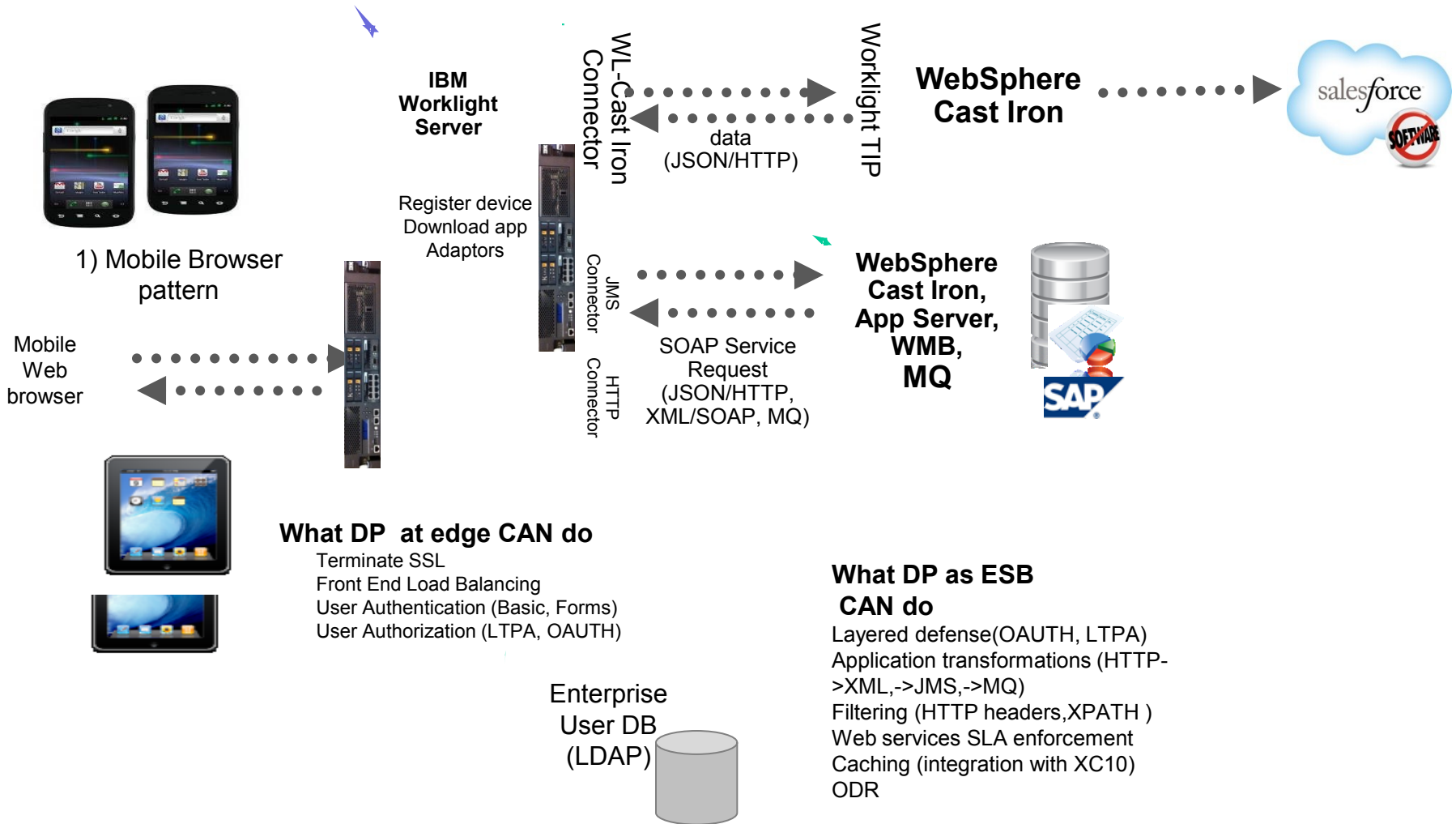
Applying patches and resolving application vulnerabilities after apps are Delivered and Deployed is a very costly and time consuming exercise

## Key Capabilities

- Leverage AppScan for vulnerability testing of mobile web apps and web elements (JavaScript, HTML5) of hybrid mobile apps
- Vulnerabilities and coding errors can be addressed in software development and testing
- Code vulnerable to known threat models can be identified in testing
- Security designed in vs. bolted on

# WebSphere products

## IBM Mobile Platform Foundation



# Security-rich Mobile Connectivity

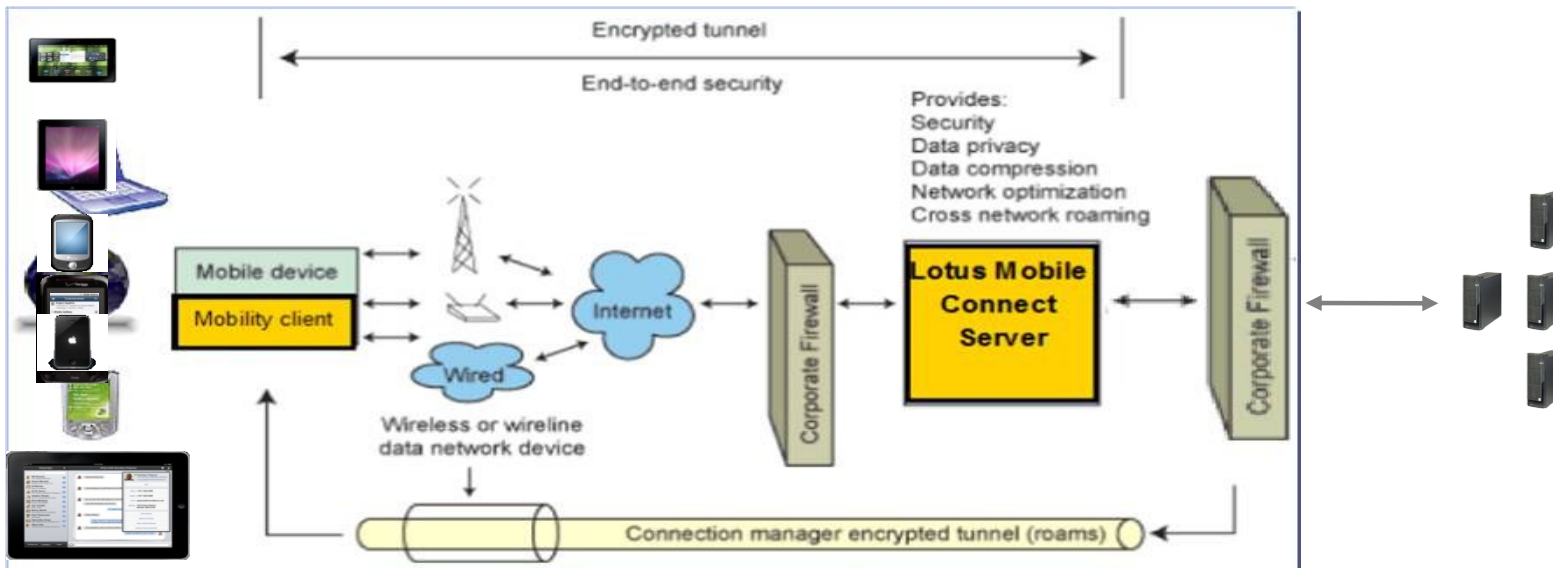
**IBM Lotus® Mobile Connect:** Provides features that help deliver a security-rich connection to enterprise resources from mobile devices.

## Client Challenge

Need to protect enterprise data in transit from mobile devices to back-end systems

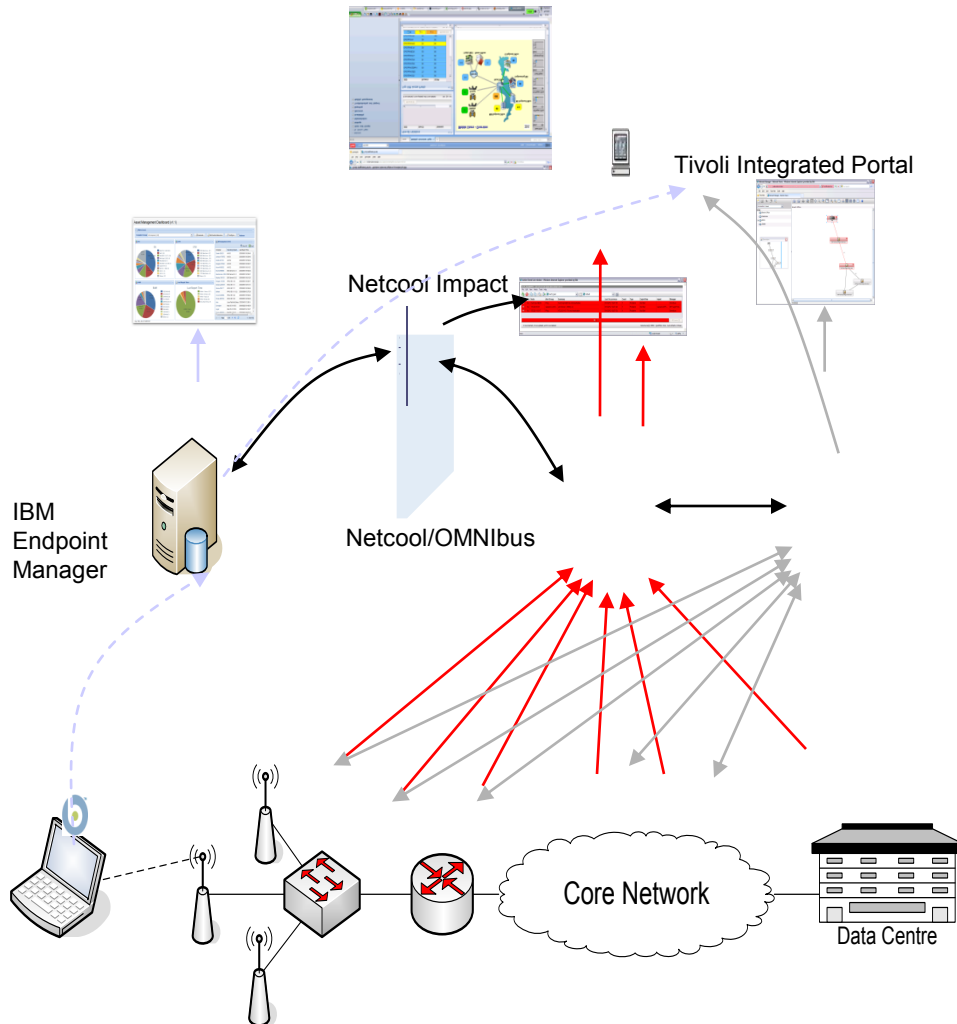
## Key Capabilities

- Clientless app-level Virtual Public Network (VPN) with a SSL-secured tunnel to specific HTTP application servers
- Strong authentication and encryption of data in transit



# Manage & Optimize Enterprise Wireless Networks

*Netcool / OMNibus: Operations management software that enables around-the-clock administration and automation of network management tasks for optimal performance and issue remediation*



## Client Challenge

Show in **REAL TIME** an enterprise wide view of the mobile workforce connecting through public and private networks.

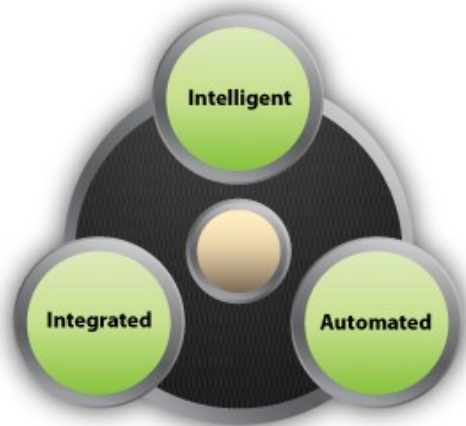
## Key Capabilities

- Easily identify the impact of any outages and highlight ongoing issues resulting from a lack of capacity or poor radio signals:
- View current locations and connection point of mobile devices
- Gain visibility of the network and service quality experienced by mobile users
- Management of exceptions reported by IBM Endpoint Manager

# Deliver An Adaptive Security Posture

## QRadar

Deliver mobile security intelligence by monitoring data collected from other mobile security solutions – visibility, reporting and threat detection



### Client Challenge

Visibility of security events across the enterprise, to stay ahead of the threat, show compliance and reduce enterprise risk

### Key Capabilities

- Integrated intelligent actionable platform for
  - Searching
  - Filtering
  - Rule writing
  - Reporting functions
- A single user interface for
  - Log management
  - Risk modeling
  - Vulnerability prioritization
  - Incident detection
  - Impact analysis tasks



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