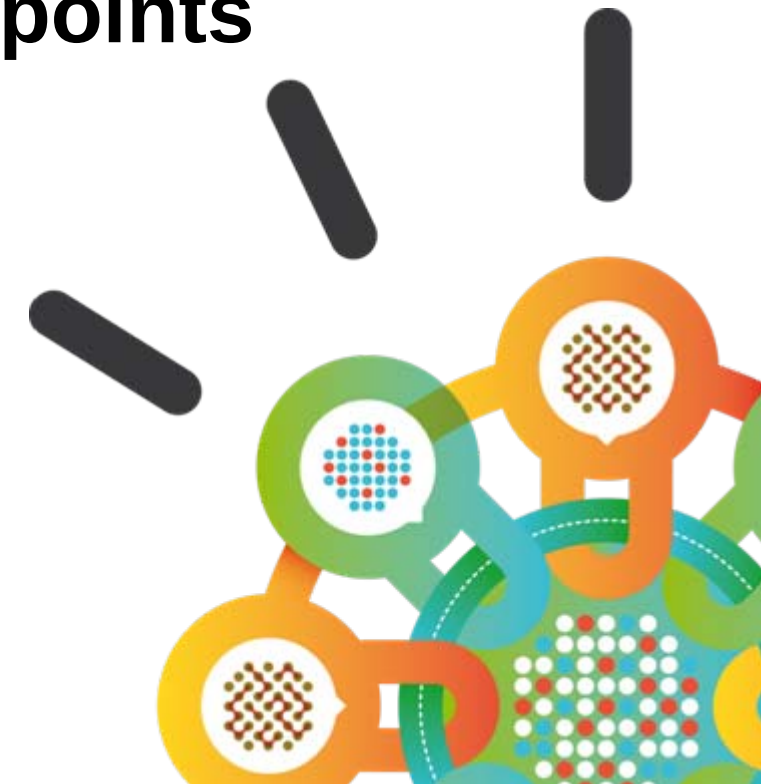
David Merrill, Matthew Johnson
Senior Technical Staff Members
IBM Security Division/IBM CIO

From Servers to Smartphones: Global Management and Security of All Your Distributed Endpoints



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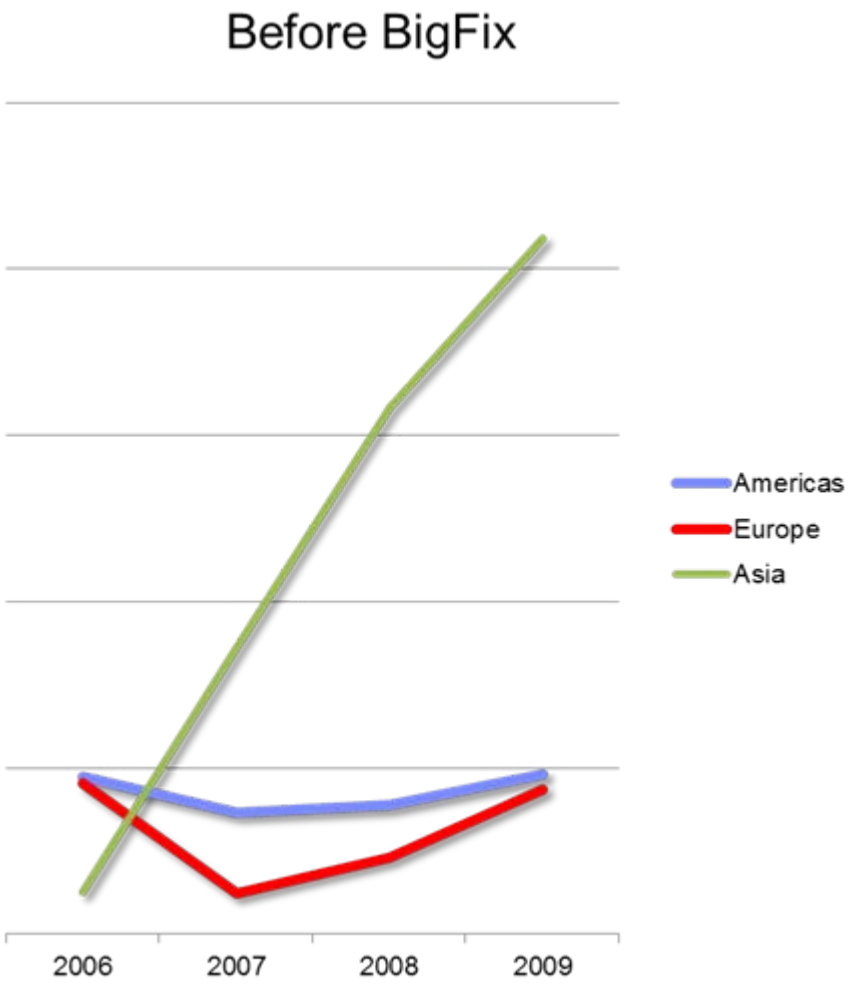
Endpoint security issues by GEO



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It’s all about reducing business risk – initial BigFix challenges

- Evolving IT business models have increased risk to clients and infrastructure
  - Partnering with other companies for Joint Development projects
  - Outsourcing of internal network
  - Increased pace of Acquisitions and Divestitures
  - Increased mobility / more employees working from unprotected environments
- Continual increase in risk and sophistication of malware attacks
- Need to secure more platforms (beyond Windows)
- Migrate from compliance-based endpoint program to automated enforcement program

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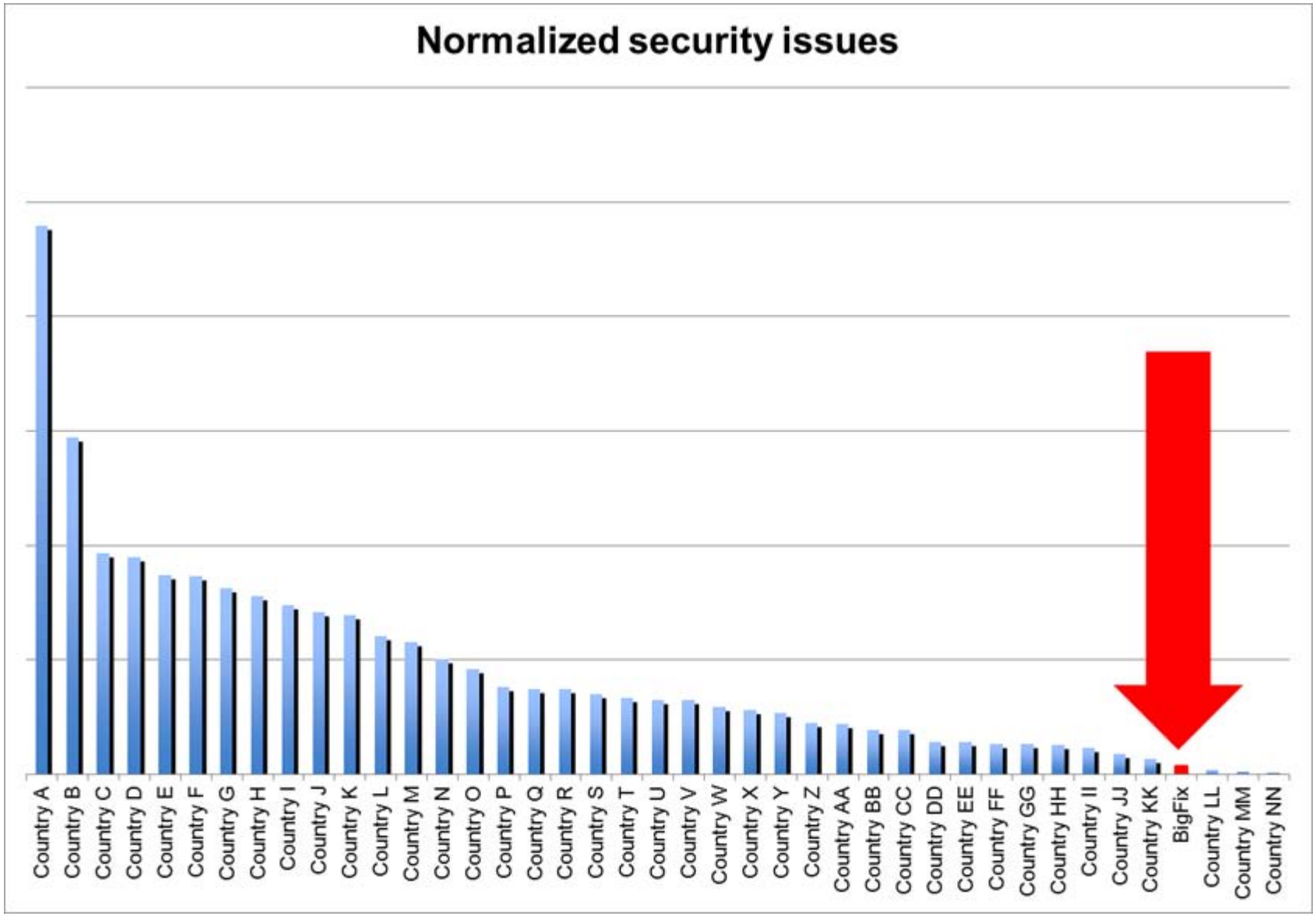

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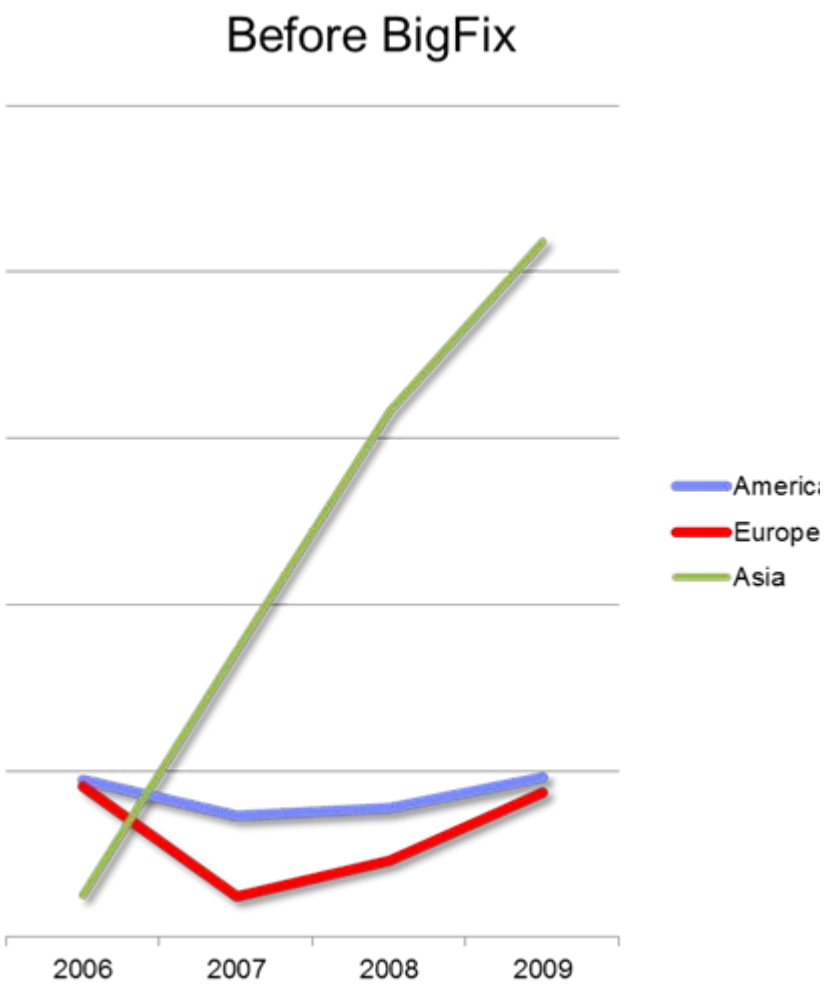

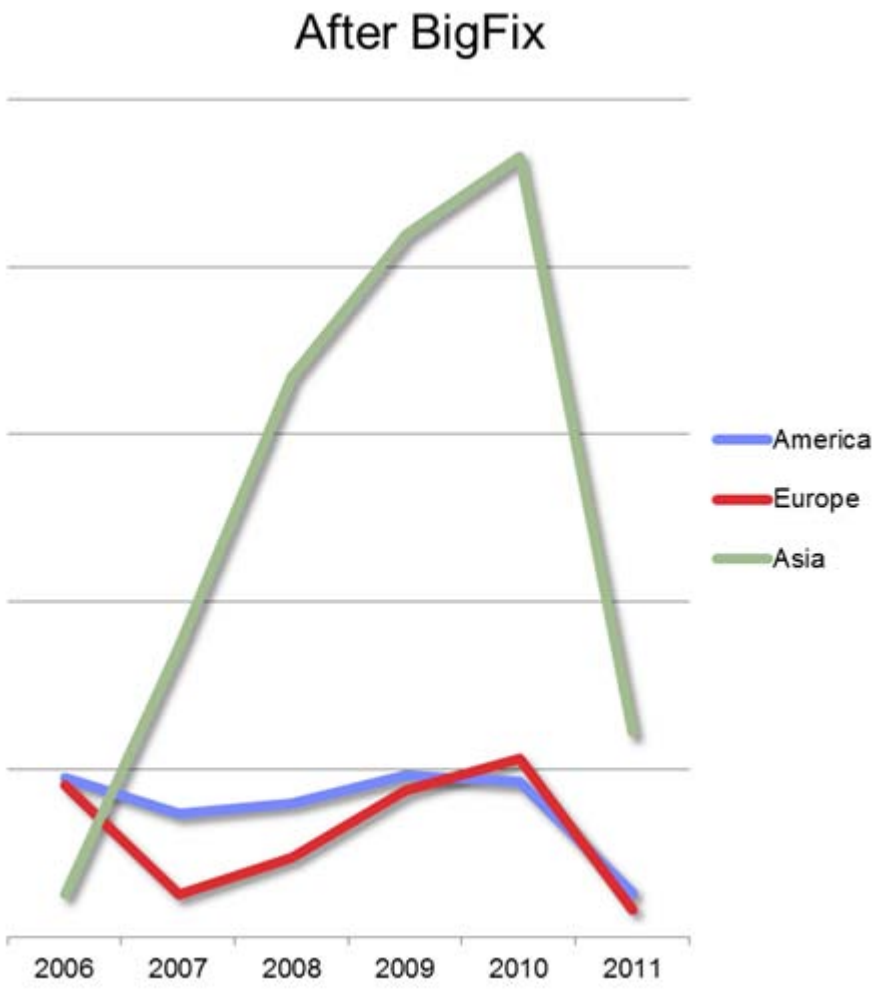

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IBM experience using BigFix

Before	After
Patch availability typically 3-14+ days	*Patch availability within 24 hours*
92% compliance within 5 days (ACPM only)	*98% within 48 hours*
EZUpdate sometimes misses application of patches on required machines	Detected about 35% of participants missing at least one previous patch
Compliance model, completely reliant on user	*90% of Windows requirements can be automatically remediated*
Exceptions at machine level	*Exceptions at setting level*

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Mobile is a major driver in the evolution of computing

Mobile/Wireless/Cloud

Web/Desktop

Client/Server

Host/Mainframe

Employees

34%

employees in 2012 are mobile
(Source: IDC*)

Security

8X

increase in security risk driven by proliferation of mobile data and devices

Mobile Applications

85 billion

mobile applications will be downloaded in 2012

(Source: IDC)

Unified Communications (UC)

78%

of multinational corporations plan to adopt mobile UC by 2015, including mobile video streaming and conferencing

"Consumerisation of IT"

62%

individual–liable (BYOD*) devices used for business, compared to 38% corporate-liable in 2012

(Source: IDC*)

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Getting started with Enterprise Mobile Security – the four questions to ask

- ✓eMail
- ✓Contacts
- ✓Calendar
- ✓Intranet Access
- ✓Sensitive Personal Information
- ✓Other?

What mobile apps and data are required?

What are associated required security controls?

- ✓Security Policy
- ✓Password
- ✓Device Timeout
- ✓Disk Encryption
- ✓Malware Protection
- ✓Other?

Data

What platforms are desired?

- Blackberry
- Windows Mobile
- Symbian
- iOS
- Android

What additional mobile controls?

- ✓Data Wipe
- ✓Device Kill
- ✓Other?

Endpoint Management Convergence Matters….

- Why does this matter?
  - Cost
  - Compliance and reporting
  - Enablement of role-based security management
- Proliferation of tactical mobile security tools and point products
  - Served purpose
  - Ultimately inefficient and complex
- Consistency across all endpoints
  - Tablets and smartphones are really just computers
  - Same data at risk
  - Extend security standards ➔ Roles ➔ Configuration policies

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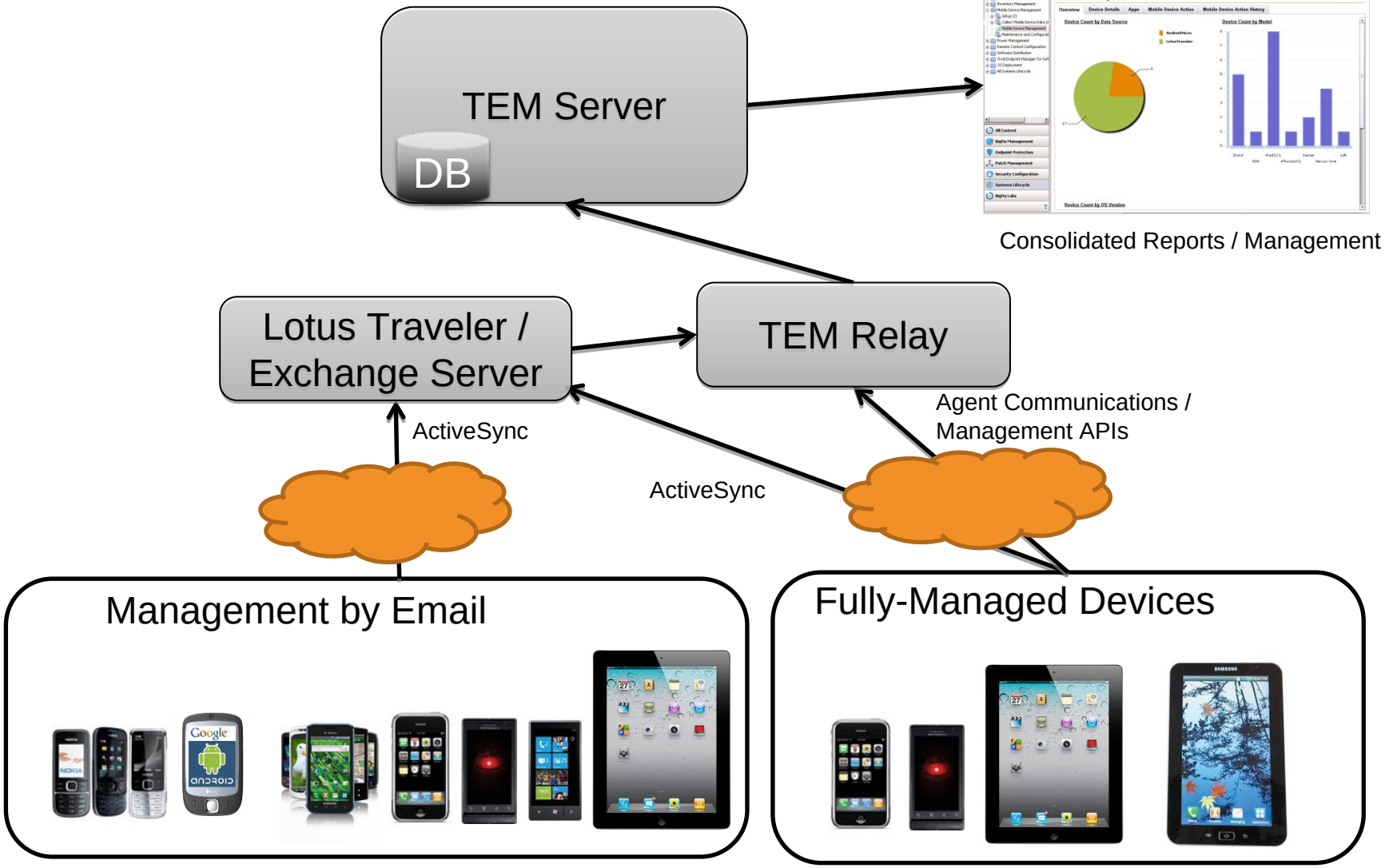
TEM MDM Architecture



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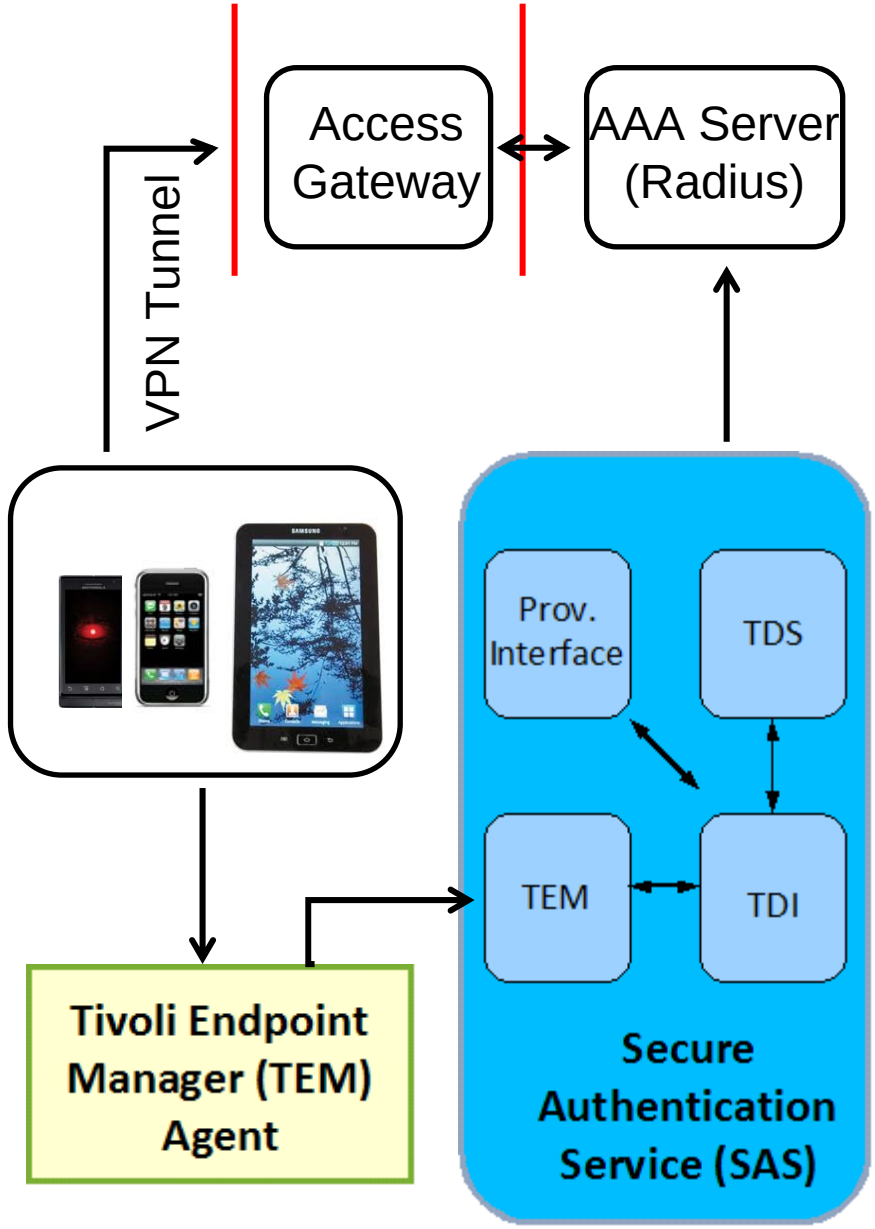
Secure Enterprise Remote Access

- Challenges
  - Current tools are application or infrastructure specific
  - Device posture validation can be circumvented
- Research Innovation
  - Provide an extensible architecture and access methodology applicable across any device
  - Ensures only compliant devices can access corporate internal networks
    - User identity
    - Device posture
- End-user simplicity
  - Automated device registration
  - Records based on user and respective devices



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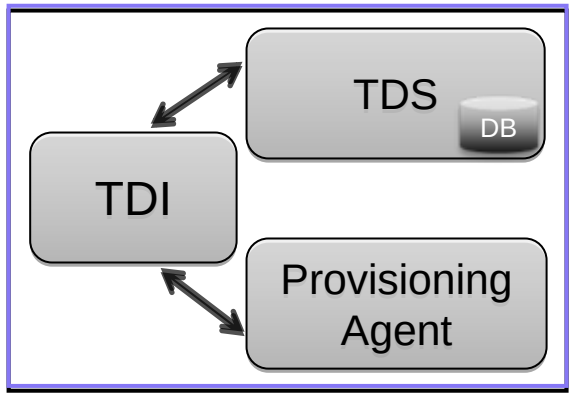
Secure Authentication Service Components

- Tivoli Endpoint Manager (TEM)
  - Agent on client device
  - Set of fixlets to perform ITCS300 compliance testing
  - Fixlet generates device unique Remote Access credentials



- Tivoli Directory Integrator (TDI)
  - Integrates TEM, TDS, Bluepages and provisioning service
- Tivoli Directory Server (TDS)
  - Authoritative Remote Access authentication and authorization database
- Provisioning Agent
  - End-user, helpdesk support and administrator management interface to Remote Access user and device records

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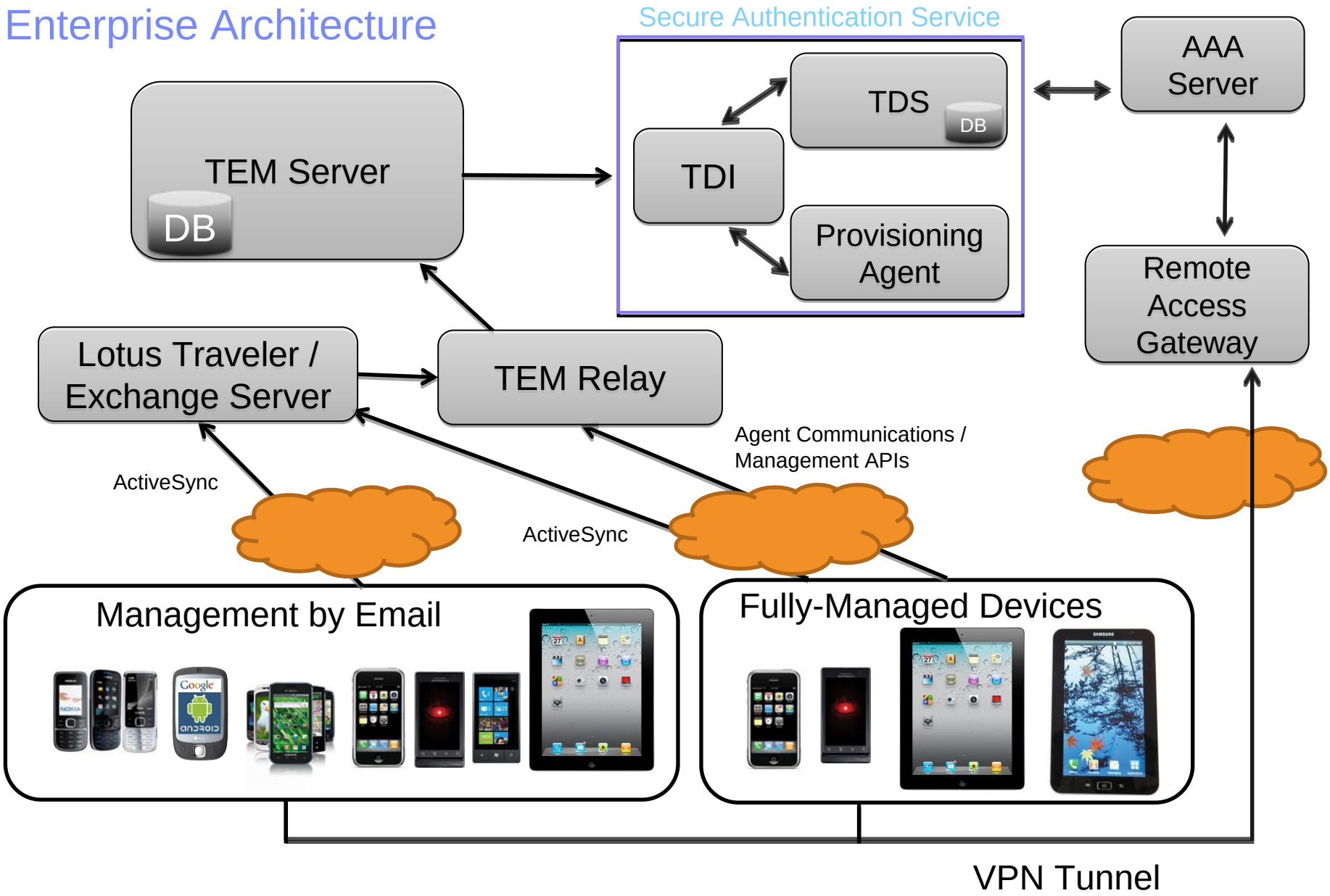
Enterprise Architecture



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