IBM MobileFirst Protect:
Secure & Manage your mobile enterprise

SolutionsConnect Vietnam March 2015

Stephen Downie – Growth Markets, Unified Endpoint Management

Digital and mobile technologies are making your customers and employees more empowered than ever…

40% of smartphone users search for an item while in a store

38% yearly increase in revenue from people using mobile devices to purchase items.
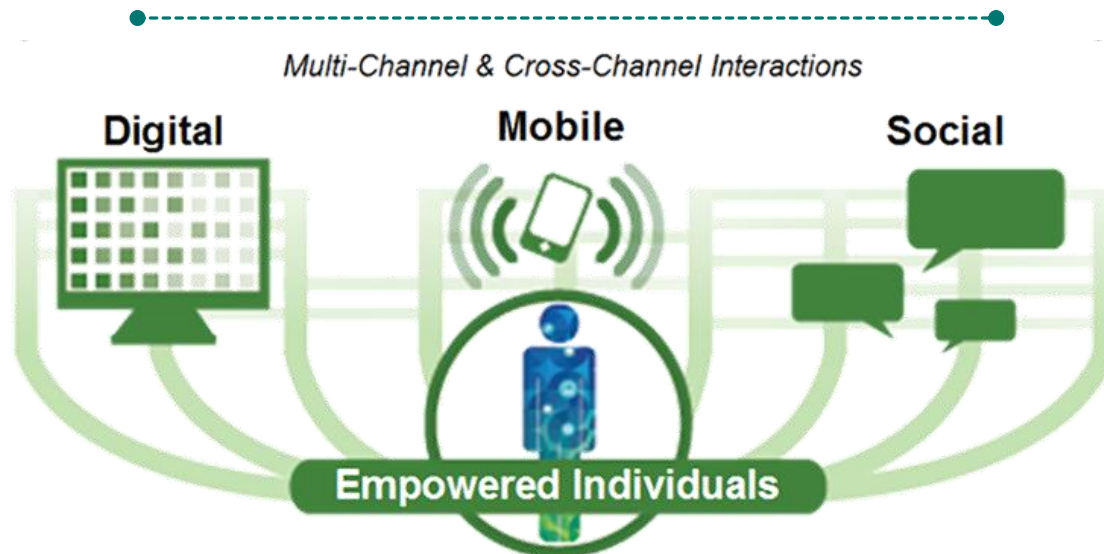
80% of individuals will exchange personal information for a personalized offering

200 million Mobile workers will use at least one business-focused app this year

81% of employed adults use at least one personally-owned mobile device for business

Multi-Channel & Cross-Channel Interactions

Digital **Mobile** **Social**

Empowered Individuals

But security threats are ever present

Threats on your customers

Threats on your employees

53% of financial apps on Android have been hacked

100% of Top 100 Android apps have been hacked

8.9 billion annual cost of crime

Access to enterprise	10%
Fraudulant transactions	11%
Data leak/share	14%
Data loss/stolen	32%

Mobile OS BYOD Support

IOS	Android	Blackberry	Windows
63%	50%	38%	24%
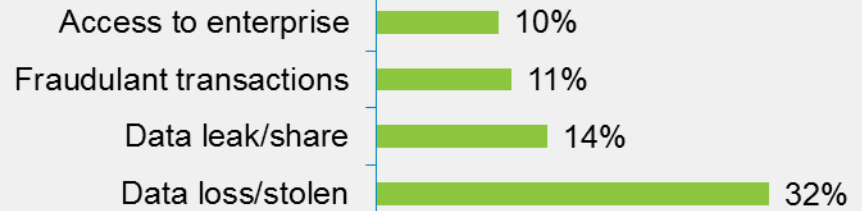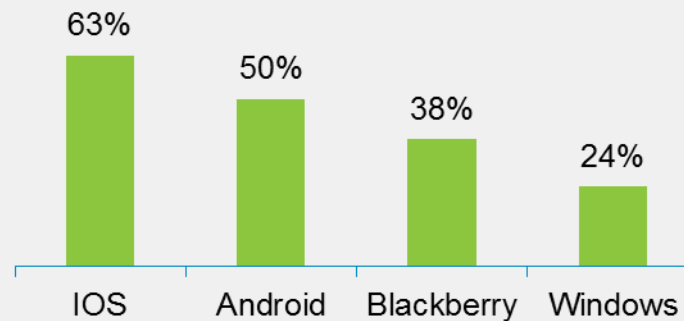
CIOs and CISOs want to deliver a great user experience on leading devices but cannot compromise on best-of-breed security

Chief Information Officer

How do I manage rapid deployment of devices in a cost-effective way?

How do I enable my workforce with the right apps with the right user experience at the right time?

What do I do with all of our old devices? I need to protect my investment!

Chief Information Security Officer

How do I ensure all devices accessing our network are secured and encrypted?

How do I ensure proper authorized access to private customer data and protect against fraud?

CIOs and CISOs are looking for a modern mobile security solution

Legacy Mobile Security Experience	IBM's Mobile Security Experience
End-to-end proprietary architecture	Leverage best-of-breed systems and partners (Identity, Email, Network Security, EMM, Apps)
Email and messaging-oriented solutions	Apps and Content in addition to secure email
On-premises deployment only	Choice of simple cloud, on-premises or hybrid deployment options depending on customer needs
Complex deployment and integration project measured in months	Fast and easy deployment task measured in days
Dedicated IT headcount needed to support	Just a task for an IT administrator – set and forget

IBM MobileFirst Protect delivers exceptional end user experience with:

✓ **Best-in-Class**   ✓ **Simplified Security**   ✓ **Ease of Deployment**

IBM MobileFirst

IBM MobileFirst Protect safeguards my data and my company's data

When my work tablet – containing my credit card information and patients' data – was being attacked by malware without my knowledge, it could have been devastating for me and my practice. Luckily, my company discovered it immediately and was able to secure the data, protecting me and my patients.

IBM **MobileFirst**

While accessing Jane's customer information. Special care is taken to ensure her customer data is protected.

Customer data is protected on the device and through secured transmission.

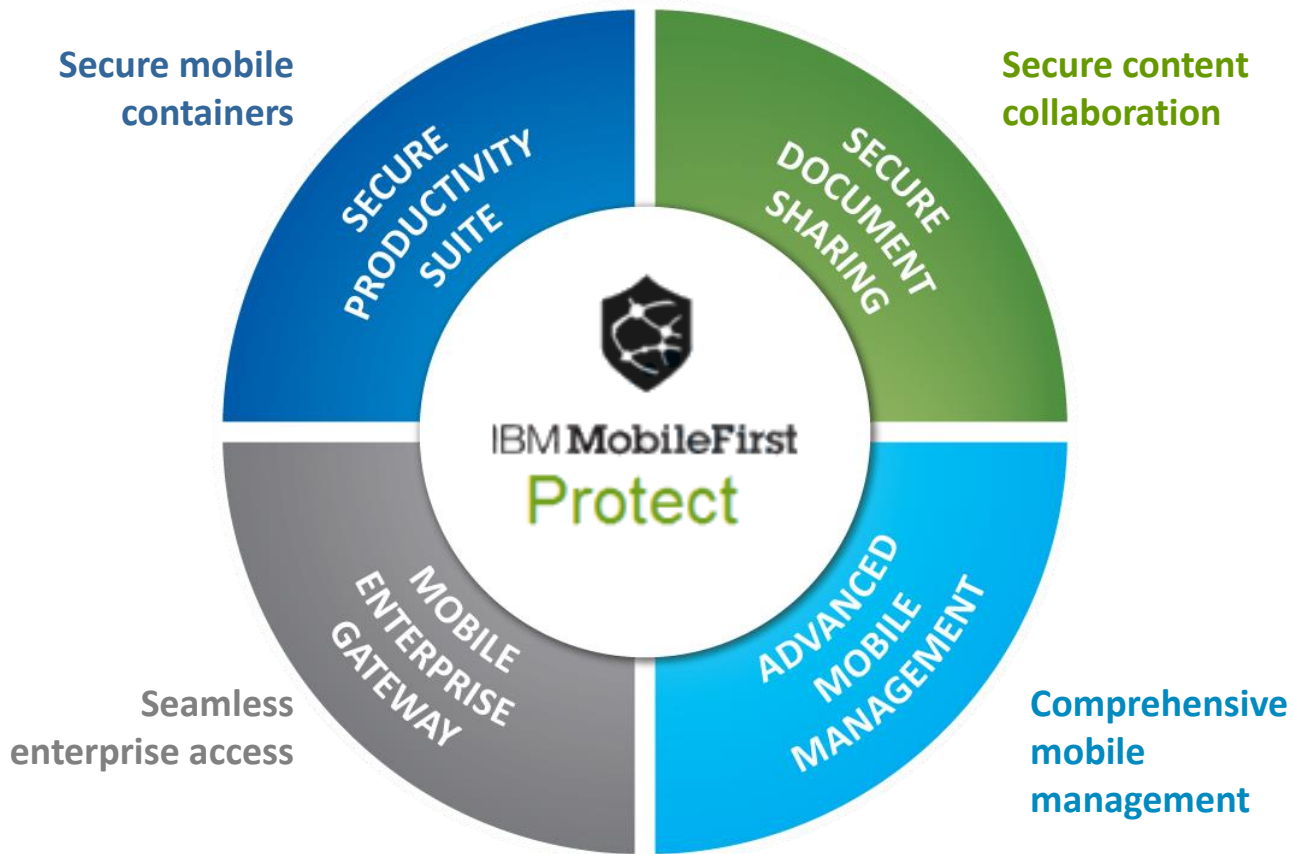Katy is a retail associate working to find the perfect gift for Jane's son.

Additional controls are used to ensure the device has not been compromised

Context-aware security protects all customer data and transactions across devices, apps, and the enterprise, which improves usability. Separating customer data on the device ensures no other apps can access it, ensuring customer privacy.

IBM MobileFirst Protect:

One security and management platform for all your mobile assets

Secure mobile containers

Secure content collaboration

SECURE PRODUCTIVITY SUITE

SECURE DOCUMENT SHARING

IBM **MobileFirst** Protect

MOBILE ENTERPRISE GATEWAY

ADVANCED MOBILE MANAGEMENT

Seamless enterprise access

Comprehensive mobile management

New in Q4

- Threat Protection / Prevention
- Zero-day iOS 8 support
- Content Management Updates
- Content access from End User Portal
- Shared folders
- Gmail integration for device discovery & access controls
- Windows Phone
- Certificates for Email and Wi-Fi configuration
- Kiosk mode
- Secure Container / Secure Mail
- iOS Notifications for Exchange 2013

IBM MobileFirst Protect: Comprehensive security to enhance employee productivity and protect sensitive enterprise data

Manage and secure enterprise-owned and personal BYO devices

- Mobile device management
- Mobile application management
- Mobile expense management

Simple, secure access to behind-the-firewall resources

- Mobile enterprise gateway for browser
- Mobile enterprise gateway for docs
- Mobile enterprise gateway for apps

Advanced Mobile Management

Secure Productivity Suite

Secure Gateway Access

Secure Document Sharing

IBM MobileFirst Protect

Isolate and contain work emails, Web access and app data to prevent data leaks:

- Secure mail
- Secure browser
- Application security

Securely view, distribute, create, edit and share documents via mobile device:

- Mobile content management
- Secure editor
- Secure document sync

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IBM MobileFirst Protect: Easiest to Deploy and Scale

Mobile Device, App, and Content Management & Security platform

For organizations that are…

- Embracing multi-OS environments (iOS, Android, Windows Phone)
- Allowing Bring-Your-Own-Device (BYOD) programs
- Developing and deploying mobile apps (public and private)
- Enabling corporate content on mobile devices securely (push and pull)
- AND MORE….

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IBM MobileFirst Protect: Dual Persona to Separate Work and Personal

- Secure Mail

- Application Security

- Secure Browser

- Secure Document Sharing
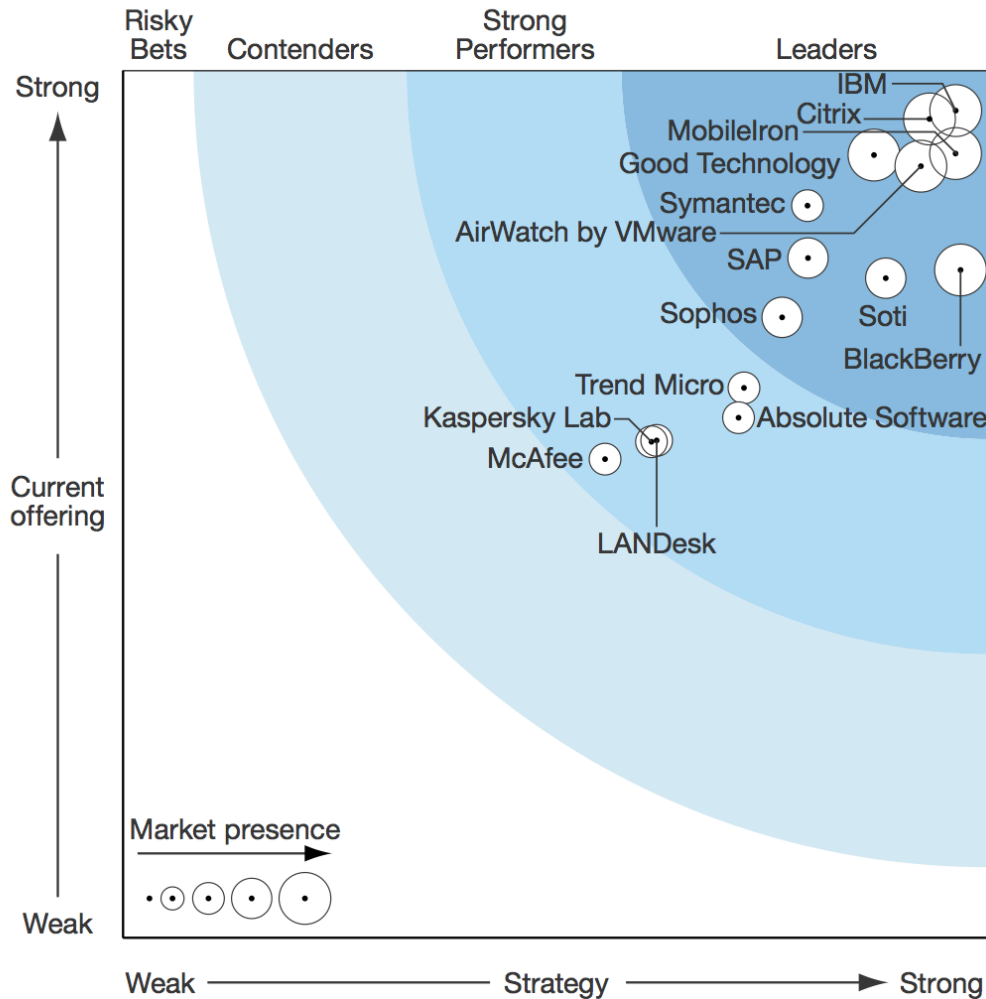

WorkPlace Container for Mobile Collaboration

Seamless Enterprise Integration
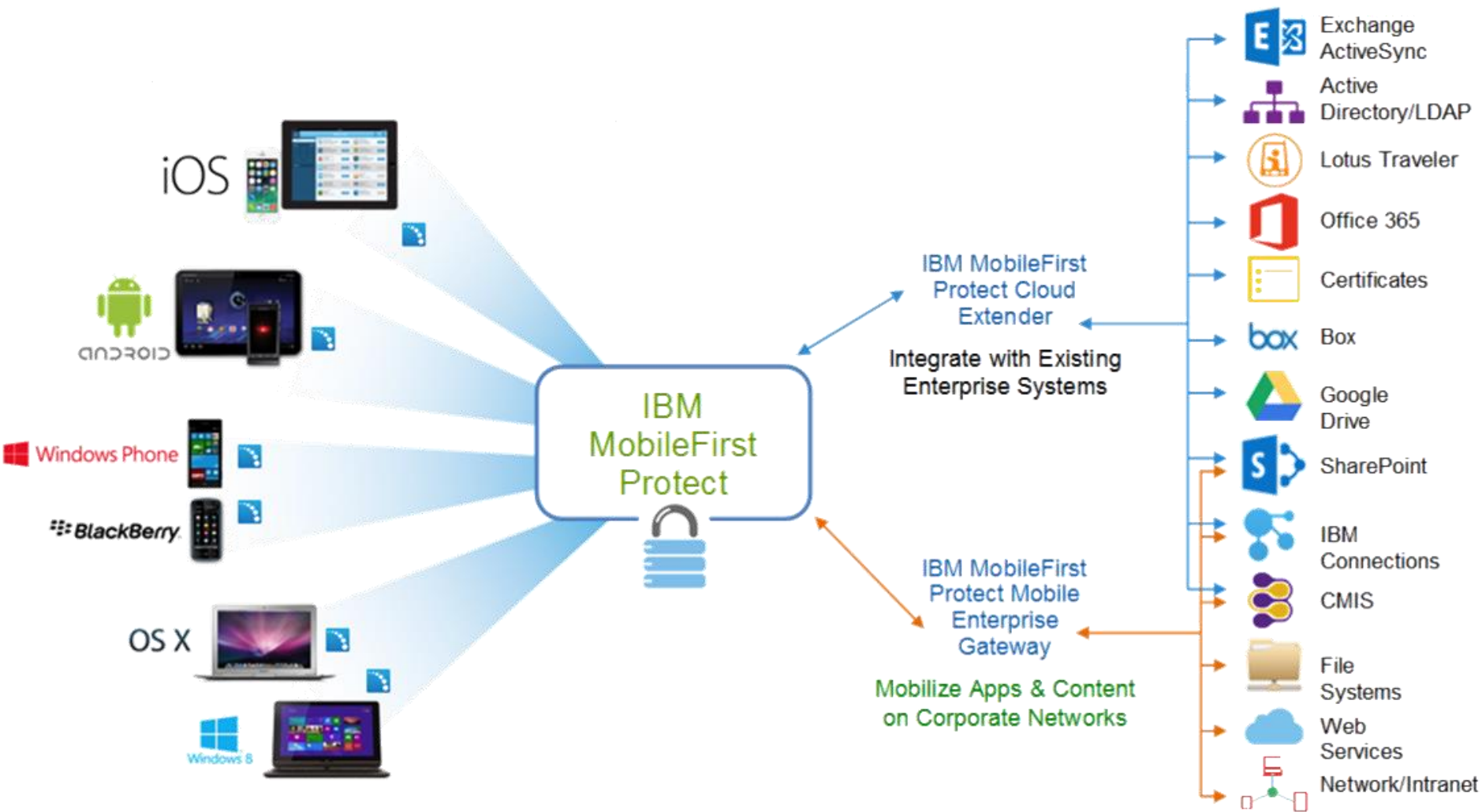
Best-in-Class Devices and Management

Figure 2 Forrester Wave™: Enterprise Mobile Management, Q3 '14

IBM:
A Leader in Enterprise Mobility Management

IBM is a Leader in the 2014 Forrester Wave for Enterprise Mobile Management, ranked Highest in Current Offering and received top scores in 20 out of 27 categories.

Why IBM

1 Best in Class Security Solution:
- We are leaders in MDM
- Best in class – Apple Devices & MDM
- Offered on-prem/cloud
- Ease and speed of migration

2 Security is more than encryption:
- Risk-aware applications
- Anti-malware
- Fraud protection

3 Enterprises need complete **Security and Management solutions for** both employee- and customer-facing app opportunities

IBM's Industry-leading MobileFirst Portfolio

200+ IBM SOFTWARE APPS are available today in App Stores, with almost 1,000,000 downloads

IBM named A LEADER among Global Digital Marketing Agencies

IBM named A LEADER **for application security testing**

100% OF THE TOP 100 communication service providers use IBM software

IBM named A LEADER **in Mobile Application Development Platforms**

IBM named the only LEADER **for managed mobility services**

IBM is cited as A LEADER in app design and managed services

IBM LEADS in Worldwide Mobile Application Development, Testing, Management & Infrastructure Services

Software & Information Industry Association (SIIA) honored IBM for Best Mobile Development Solution (May 2013)

//CODiE// 2013 SIIA CODiE WINNER

Thank You!

Learn: ibm.com/mobilefirst

Try: ibm.com/bluemix

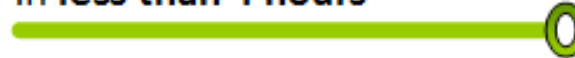Watch: youtube.com/IBMMobileEnterprise
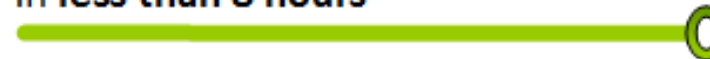
Why IBM MobileFirst Protect?

Fastest Time to Trust

60% deployed IBM MobileFirst Protect in **less than 4 hours**

75% deployed IBM MobileFirst Protect in **less than 8 hours**

0%   100%

Sales & customer support at no additional charge

24x7 customer support by phone, chat or email

Community, forums, blogs, on-demand webinars

Gartner

A LEADER 2014
Mobile Enterprise
Mobility Management
Gartner Magic Quadrant

FORRESTER

A LEADER 2014
Enterprise
Mobile Management
The Forrester Wave™

CHAMPION
INFO-TECH

A CHAMPION 2014
Mobile Device
Management
**Info-Tech Research
Vender Landscape Award**

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As Jane prepares to purchase a present for her son at a retail store...

Jane is sent a "one time password via text" to add extra security without alarming her.

The threat goes unnoticed to Jane, improving her mobile experience while simplifying her shopping experience.

Her bank notices potential fraudulent activity happening overseas.

Security and Protection extends beyond employees to customers. Ensuring personal information is secured and accessed by only the people who are allowed to access it helps enterprises manage threats on customers.
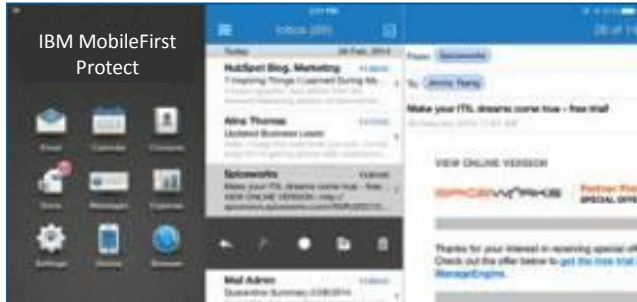
IBM MobileFirst

Protect User, Device, Data and Transactions with IBM Security Access Manager

1 — **Context Aware** security means you authenticate when you need to, which provides a better user experience

2 — **Protect** against targeted attacks and web vulnerabilities

3 — **Detect Insider Fraud**

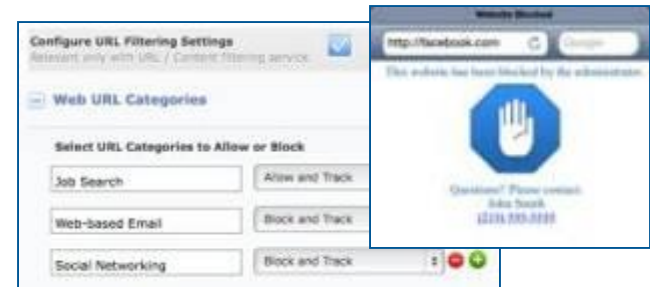# IBM MobileFirst Protect: Secure Productivity Suite

Secure Mail

- Contain email text & attachments to prevent data leakage
- Enforce authentication, copy/paste & forwarding restrictions
- FIPS 140-2 compliant, AES-256 bit encryption for data at rest

Secure Browser

- Enable secure access to intranet sites & web apps w/o VPN
- Define URL filters based on categories & whitelisted sites
- Restrict cookies, downloads, copy/paste & print features

Application Security

- Contain enterprise apps with a simple app wrapper or SDK
- Enforce authentication & copy/paste restrictions
- Prevent access from compromised devices

IBM MobileFirst Protect: Secure Document Sharing

Mobile Content Management

- Contain documents & files to prevent data leakage
- Enforce authentication, copy/paste & view-only restrictions
- Access IBM MobileFirst Protect distributed content & repositories such as SharePoint, Box & Google Drive

Secure Editor

- Create, edit & save content in a secure, encrypted container
- Collaborate on Word, Excel, PowerPoint & text files
- Change fonts & insert images, tables, shapes, links & more
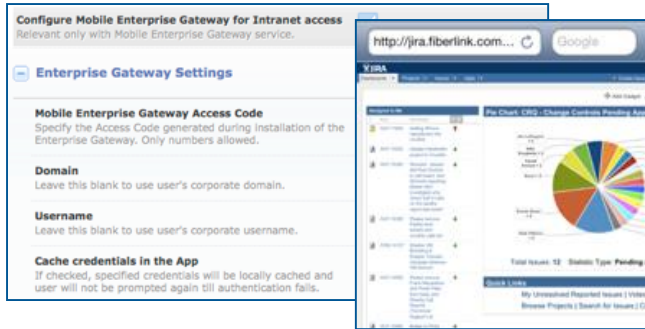
Secure Document Sync

- Synchronize user content across managed devices
- Restrict copy/paste & opening in unmanaged apps
- Store content securely, both in the cloud & on devices

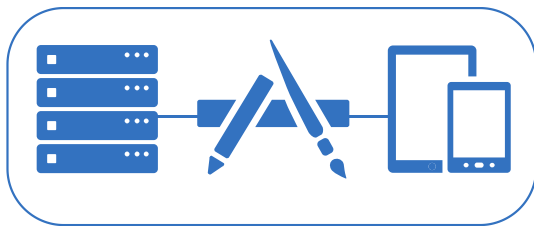# IBM MobileFirst Protect: Mobile Enterprise Gateway

Mobile Enterprise Gateway for Browser

- Enable IBM MobileFirst Protect Secure Browser to access enterprise intranet sites, web apps & network resources
- Access seamlessly & securely without needing a VPN session on mobile device

Mobile Enterprise Gateway for Docs

- Enhance MaaS360 Mobile Content Management with secure access to internal files, e.g. SharePoint & Windows File Share
- Retrieve enterprise documents without a device VPN session

## Mobile Enterprise Gateway for Apps

- Add per app VPN to IBM MobileFirst Protect Application Security to integrate behind-the-firewall data in private apps
- Incorporate enterprise data without a device VPN session

IBM MobileFirst Protect: Mobile Enterprise Gateway

Mobile Device Management

- Manage smartphones, tablets & laptops featuring iOS, Android, Windows Phone, BlackBerry, Windows PC & OS X
- Gain complete visibility of devices, security & network
- Enforce compliance with real-time & automated actions
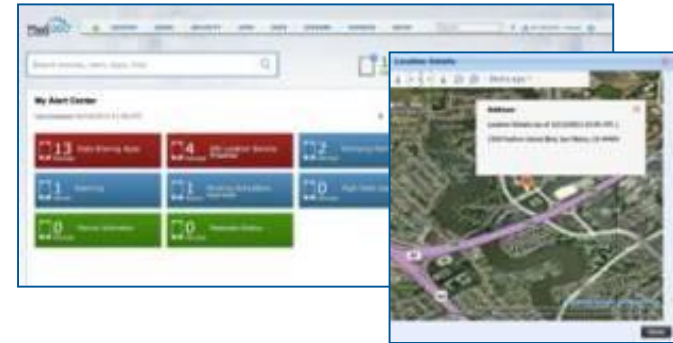
Mobile Application Management

- Deploy custom enterprise app catalogs
- Blacklist, whitelist & require apps
- Administer app volume purchase programs
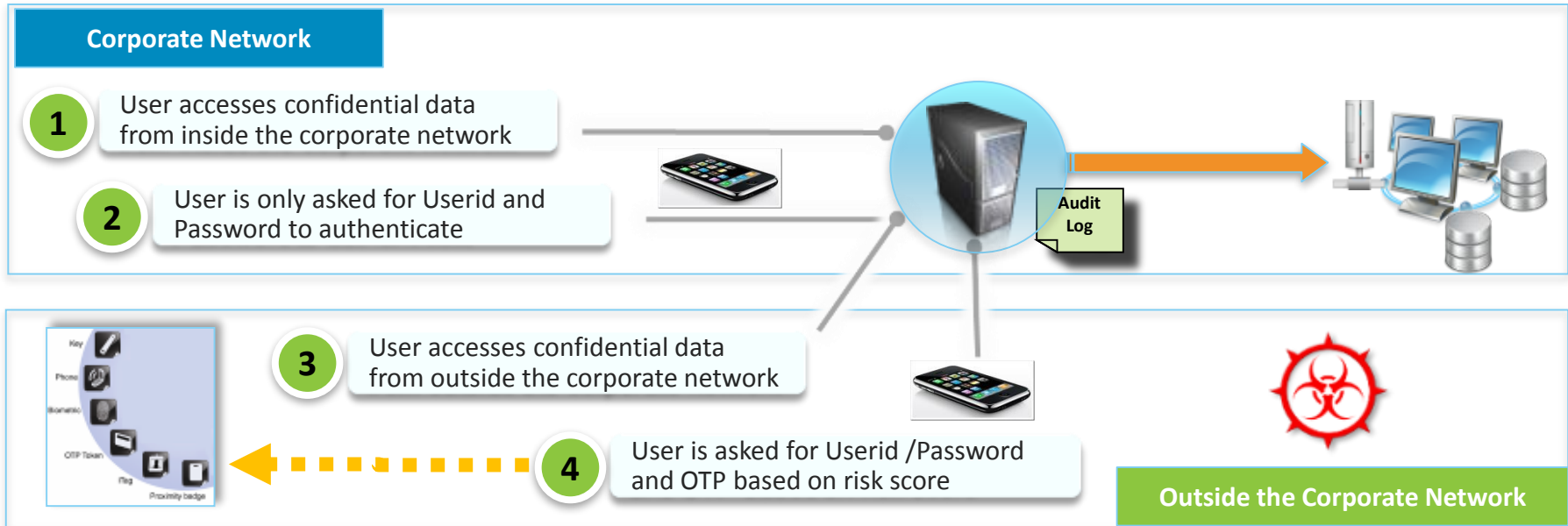
Mobile Expense Management

- Monitor mobile data usage with real-time alerts
- Set policies to restrict or limit data & voice roaming
- Review integrated reporting and analytics

Context-aware access to secure mobile user access

Corporate Network

1 User accesses confidential data from inside the corporate network

2 User is only asked for Userid and Password to authenticate

Audit Log

3 User accesses confidential data from outside the corporate network

4 User is asked for Userid /Password and OTP based on risk score

Key
Phone
Biometric
OTP Token
Ring
Proximity badge

Outside the Corporate Network

- Risk-based Access feature to determine and score risk levels using user attributes and real-time context (e.g. location, device)

- Enforce mobile user access based on risk-level (e.g. permit, deny, step-up authenticate)

- Support mobile authentication with built-in One-Time Password (OTP) and provide ability to integrate with 3rd party strong authentication vendors, as needed

Secure access and protect the content against targeted attacks and web vulnerabilities

**IBM Security Access Manager
Proxy Appliance (AMP 5100)**

External, Mobile users

**Portal, Web Applications
(e.g. Java, .NET, more)**
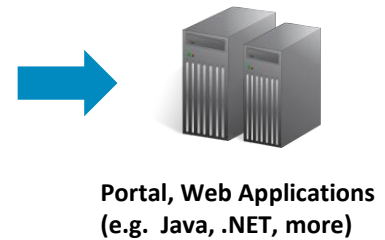
Access Operations	Grant/Deny
An authorized user requests access to the portal and SSO	Grant
Password is stolen, session is hijacked and HTTP content is compromised	Deny
HTTP content contains common vulnerabilities such as SQL Injection, Cross site scripting, Cross-site request forgery	Deny
Enforce step-up authentication or risk-based access to restore authorized user access	Grant

Access Management in a multi-perimeter world
**Integrated Web Access and Web Content Protection in a Single Appliance
(Powered by X-Force)**

Detect insider fraud

Potential Data Loss

Who? What? Where?

Magnitude	
Description	Potential Data Loss/Theft Detected
Attacker/Src	10.103.14.139 (dhcp-workstation-103.1.139.acme.org)
Target(s)/Dest	Local (2) Remote (1)
Network(s)	Multiple (3)
Notes	Data Loss Prevention Use Case. Demonstrates QRadar DL authentication ...

	Event Name	Source IP (Unique Count)	Log Source (Unique Count)	Username (Unique Count)	Category (Unique Count)
☐	Authentication Failed	10.103.14.139	OracleDbAudit @ 10.101.145.198	Multiple (2)	Misc Login Failed
☐	Misc Login Succeeded	10.103.14.139	OracleDbAudit @ 10.101.145.198	scott	Misc Login Succeeded
☐	DELETE failed	10.103.14.139	OracleDbAudit @ 10.101.145.198	scott	System Action Deny
☐	SELECT succeeded	10.103.14.139	OracleDbAudit @ 10.101.145.198	scott	System Action Allow
☐	Misc Logout	10.103.14.139	OracleDbAudit @ 10.101.145.198	scott	Misc Logout
☐	Suspicious Pattern Detec	10.103.14.139	Custom Rule Engine-8 :: qradar-vm	N/A	Suspicious Pattern Detected
☐	Remote Access Login Fa	10.103.14.139	Custom Rule Engine-8 :: qradar-vm	N/A	Remote Access Login Failed

Who?
An internal user

What?
Oracle data

Navigate ▶   1
Information ▶   DNS Lookup
Resolver Actions ▶   WHOIS Lookup
TNC Recommendation   Port Scan
    Asset Profile
    Search Events
    Search Flows

QRadar Has Completed Your Request

Go to APNIC results

[Querying whois.arin.net]
[whois.arin.net]

OrgName: Google Inc.
OrgID: GOGL

Where?
Gmail

Threat detection in the post-perimeter world
User anomaly detection and application level visibility are critical to identify inside threats

Q1 Labs®
Total Security Intelligence | An IBM Company

Backup

An **IBM MobileFirst** Approach

Transform the value chain to drive growth and ROI

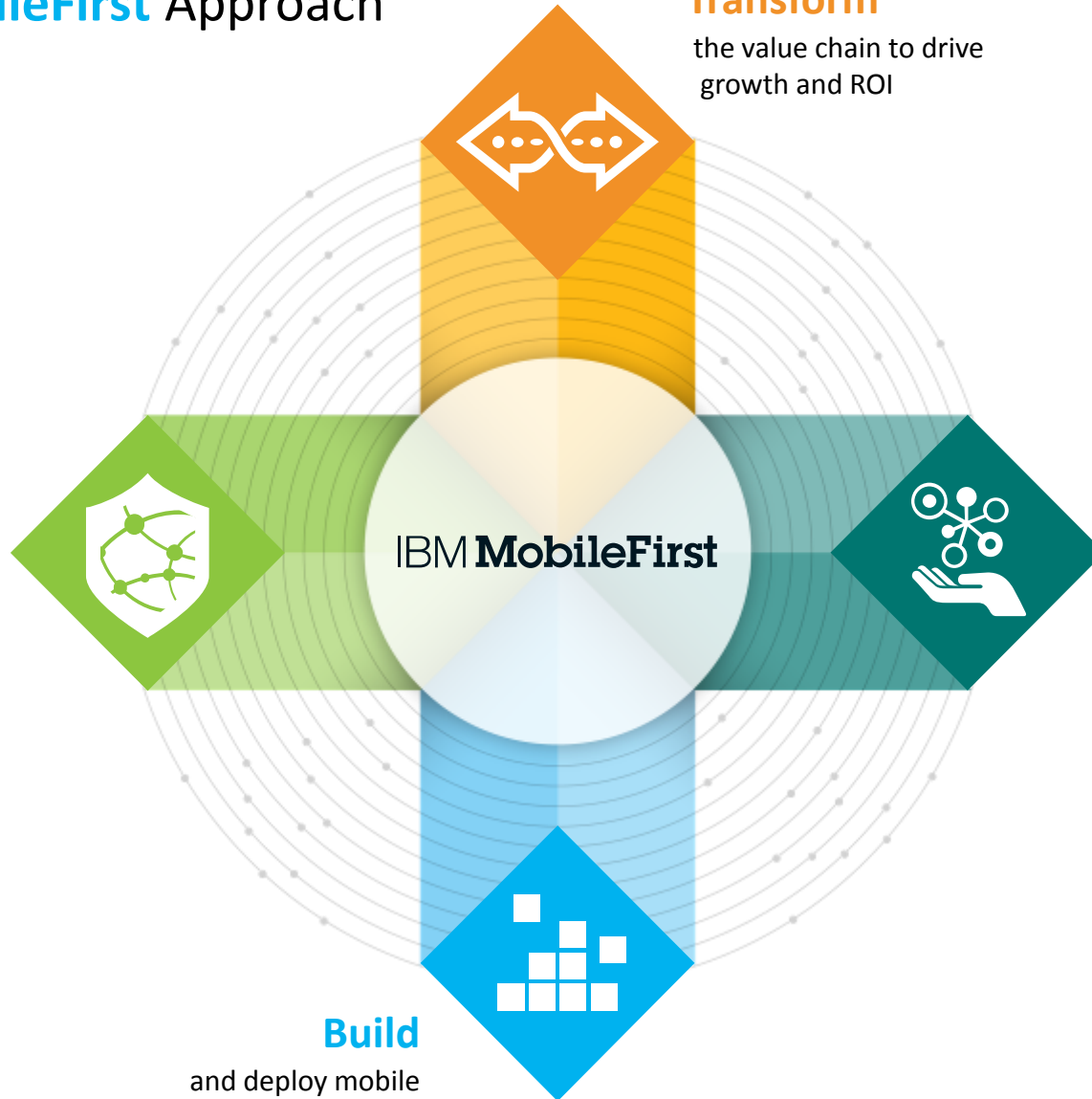**Engage** customers in context by leveraging mobile insights

Build and deploy mobile applications efficiently

Protect and manage the mobile infrastructure to optimize performance

IBM **MobileFirst**

IBM MobileFirst Protect:

+

IBM MobileFirst Protect

Best in Class
Experience & Security