

Smartphones, Security, and Telework

David Coley – dcoley@rim.com
Director, Technical Services
Public Sector, US & Canada

Research In Motion (RIM)
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BlackBerry® Enterprise Solution Platform

Mobilize Email, Business Applications, Voice

Desktop (email/PIM)

- Microsoft Exchange
- Lotus Notes Domino
- Novell Groupwise

Real Time Collaboration

- Lotus Sametime
- Microsoft Live
- Communication Server
- Novell GroupwiseIM

Intranet/Web Services

- SAP
- IBM WebSphere
- JAVA Client•Web Services
- SOAP, WSDL
- Secure Browser
- Oracle/Siebel
- .NET
- XML, CHTML



Voice Systems

- Legacy PBX
- IP PBX
- Hybrid Systems

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Smartphone Capabilities

1999 Wireless Push for Business

- BlackBerry pushed important data to a personal device (IT controlled)
- Data was text, networks were slow, devices were functional
- Slow devices, minimal memory, slow processors.
- PDA's were not connected via wireless.
- Many “wireless” solutions requires users to dial an ISP and wait to download messages.



BlackBerry Today 2009 (Push and Pull)

- Today we have “push” and “pull”.
 - Wireless “push” delivery of mail, PIM, and enterprise data.
 - Fast wireless reach back to “pull” data on demand from public web sites like Google or private DBMS like (NCIC)
- No longer wireless text only. Capabilities include video, graphics, images, and new applications all now viable on demand.
- Fast voice and data networks, fast processors, dramatically more memory, audio/video processors, etc.
- Wireless “push” has become ***the*** standard for mobile smartphone solutions.
- Huge increase in capabilities means security of mobile solutions is more important than ever.



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Smartphones for Telework

Smartphones for Situational Telework

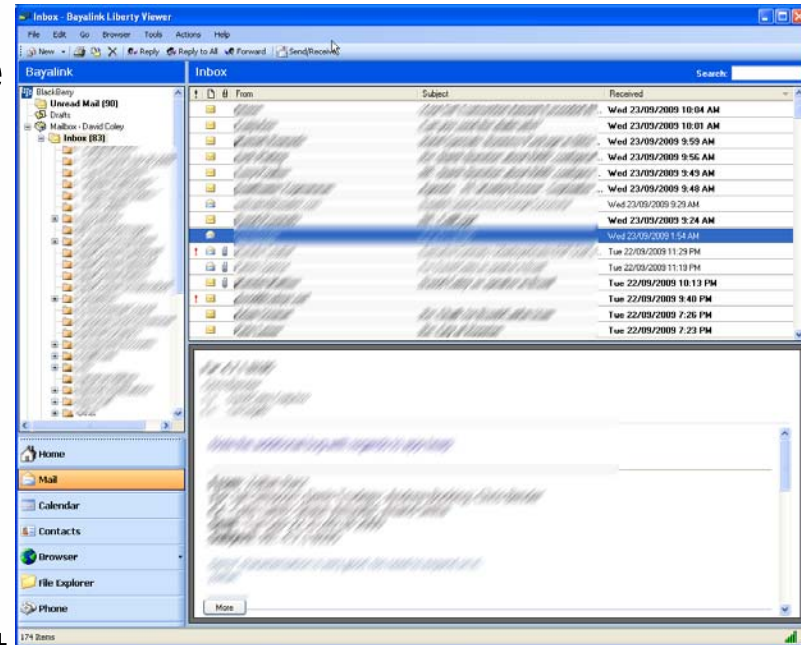
Short Term Work Entirely from a Smartphone

- The Most Obvious Role
 - Keep in touch with the office while working from home periodically.
 - Easily communicate with email, enterprise instant messaging, and via phone.
 - No need to buy or loan a computer to employees.
 - Perfect solution for snow days or parents who need to stay home with a sick child.

Part Time Telework

Short Term Work Partially with Smartphone

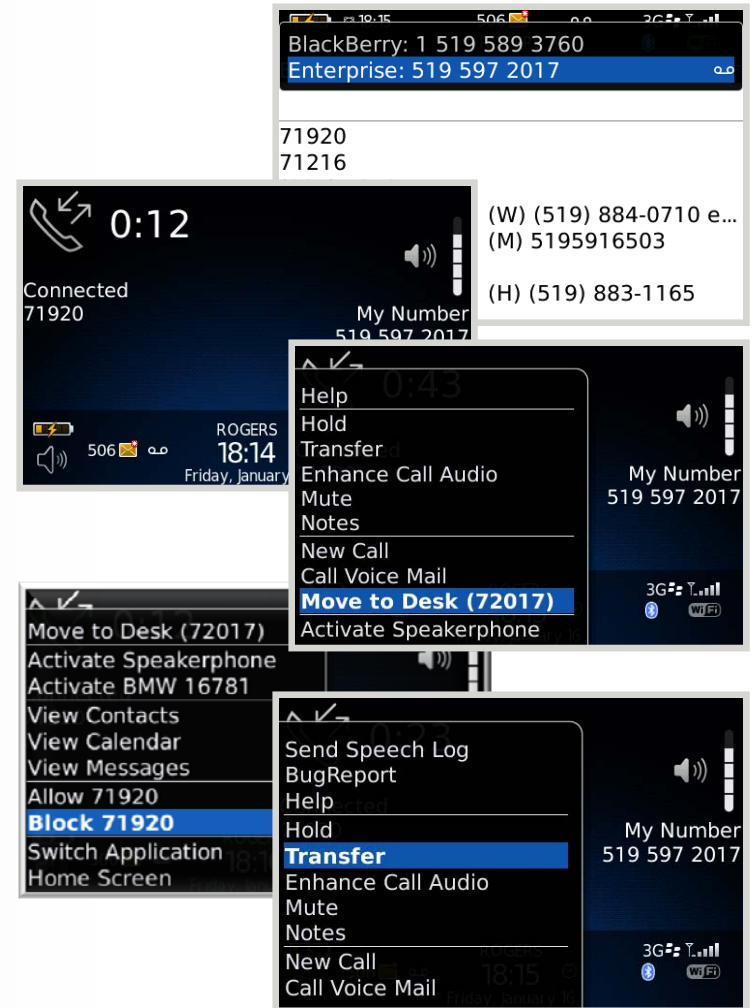
- Augment communications with the office via email, enterprise instant messaging and phone.
- Bayalink Liberty
 - Use BlackBerry with a full size screen and keyboard.
 - Use any computer with no enterprise data residing on that computer.
 - No requirement for government furnished equipment for home users.



Full Time Telework

Long Term Work Blending PC/Laptop and Smartphone

- Laptop/PC as primary workstation.
- Smartphone to enhance email and enterprise instant messaging experience.
- Smartphone as office desk phone for unified communications.
 - One phone number, one voicemail
 - Consistent caller identity
 - Transfer a call
 - Call filtering
 - Experience Office Desk Phone Capabilities from a Smartphone.





Smartphone Security

Security Certification

- FIPS 140-2
- Common Criteria
- Third Party Certifications



United States
Sensitive but unclassified,
FIPS 140-2



EAL 4+



Institut
Sichere Informations-
Technologie



NATO Approved For
NATO RESTRICTED
Communications



United Kingdom
CAPS Approved

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Smartphone Security

- Enterprise Management is a Must
 - Centrally manage, manage software wirelessly, apply security policies, and remotely wipe devices.
- Appropriate Policies for Federal Requirements and Agency/ Department Specific Needs
 - 30 Minute Maximum Inactivity Timeout
 - Data At Rest Protection (User Data Encryption)
 - Two Factor Authentication
 - RSA Tokens
 - Smart Cards



Smartphone Security – Anti-Virus & Malware

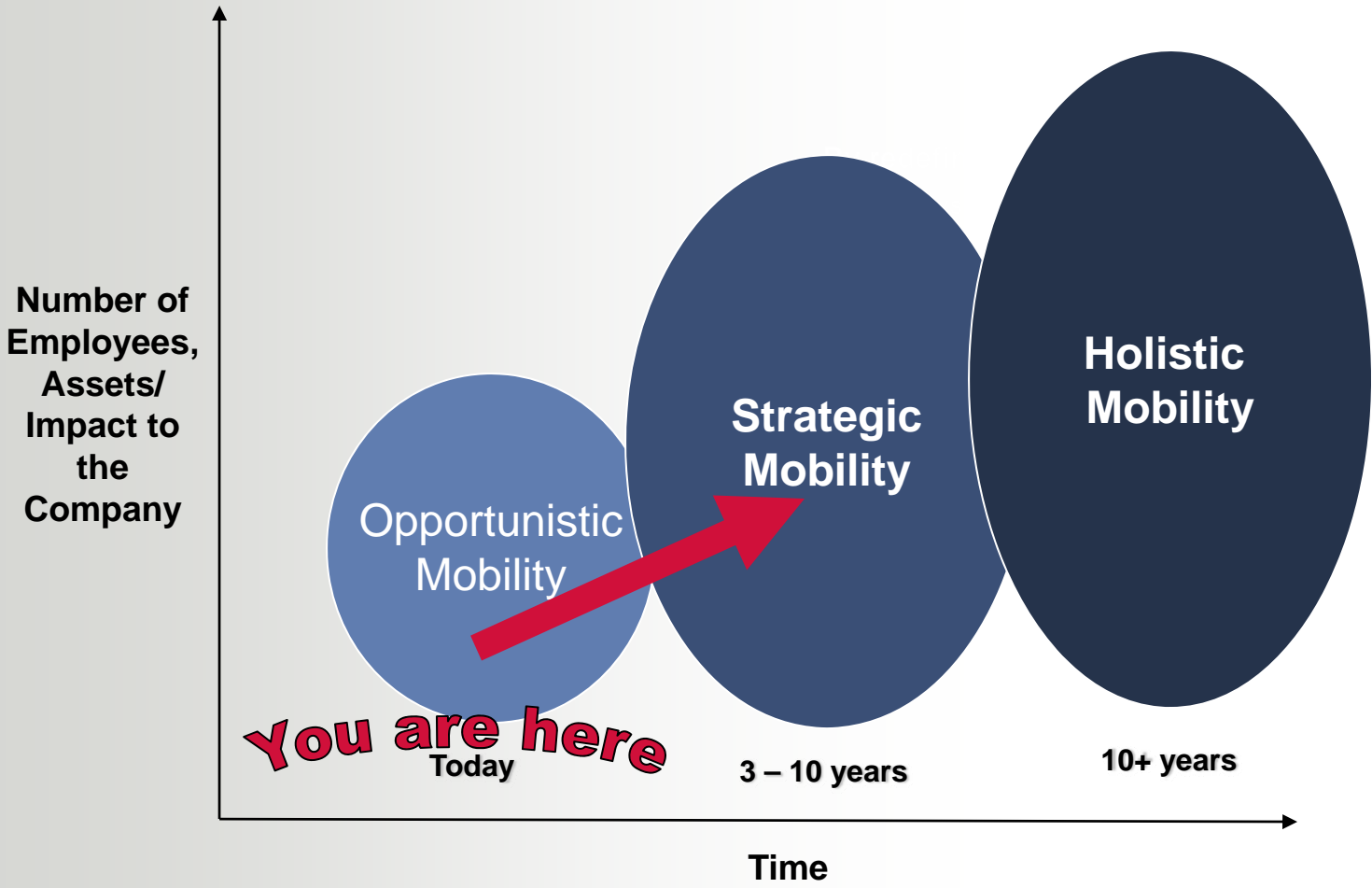
- Unfortunate reality of computer systems. Must focus on containment or detection.
 - **Containment** is the means to prevent viruses or malware from getting on systems and then contain them in their own memory space if they somehow do make it onto the system.
 - **Detection** relies on signatures to identify malware or viruses. Tends to be very difficult to keep signatures up to date on smartphones and constant scanning results in high battery life impact.

Policy Changes and Software Patching

- Smartphone deployments can be rather large today; and they are only growing larger...
 - Many have hundreds to tens of thousands today.
- Telework users may not come to the home office or plug-in to the wired network.
 - Security policy changes must be wirelessly applied.
 - Software upgrades must be delivered wirelessly. Complete OS and Application upgrades.



Evolution of Mobility Through BlackBerry



Source: Yankee Group 2006



Questions?

David Coley

dcoley@rim.com

540-822-3003



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Resources

- BlackBerry Enterprise Solution
 - <http://www.BlackBerry.com/go/enterprise>
- BlackBerry Security
 - <http://www.BlackBerry.com/go/security>
 - <http://www.BlackBerry.com/go/securitycertifications>
- BlackBerry Mobile Voice System
 - <http://www.BlackBerryGovernment.com>
- BlackBerry Devices
 - <http://www.BlackBerry.com/go/devices>
- Bayalink Liberty
 - <http://www.bayalink.com>