Request for Information (RFI)
On
Mobile E-mail

RFI Deadline: **August 22, 2007**
Publication Date*: *October, 2007

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Introduction

This RFI (Request for Information) is proprietary to Network Computing, Information Week and CMP Media, LLC. It is drafted and disseminated for the sole purpose of generating information on Mobile E-mail for publication in Network Computing.com and/or InformationWeek in October, 2007. Participating vendors must agree that any information returned to Network Computing in response to this RFI may be published in print and electronic form on our Web site, www.networkcomputing.com. Information obtained for this RFI may also be reprinted in whole or in part within InformationWeek or on the InformationWeek website at www.informationweek.com

Instructions

The following questions are designed to provide direct comparisons among major vendors within the mobile e-mail space. We have endeavored to provide as much detail about our proposed scenario below in "Business Overview." However, if you feel that any points need clarification, please contact the author, Sean Ginevan, via e-mail at SGinevan@nwc.com. If points are clarified we will send those clarifications to all participating vendors to ensure that everyone is operating with the same information. The answers obtained from this RFI, in addition to previous completed testing, will be used to provide all analysis for this article.

If you respond to the RFI, please note that all responses *must* be received by August 22, 2007 for inclusion in this review. We suggest you read through the entire RFI before answering questions. You can reference answers to other questions in the RFI using the section title. Please do not reference materials outside the RFI; incorporate them into your answers.

Essay-type questions include word-count limits. Any submission beyond the limit may be ignored.

A. Business Overview

NWC Inc. is a medium sized company specializing in the development and manufacturer of specialty Widgets and Sprockets. The company has three major offices; a headquarters in suburban Washington, DC and branch offices in Syracuse, NY and Kansas City, MO. The company also has just opened a European sales office in Dublin, Ireland.

NWC Inc.'s mobile strategy has been limited thus far. Cellular phones and plans have been subsidized for executives, sales staff and critical operations (on call) staff. However the company has been slow to move into any other mobile service beyond voice. Executives at NWC Inc. have read numerous articles on the benefits of mobile e-mail but have been concerned about costs as well as complexity for supporting a new mobile e-mail initiative.

NWC Inc. has decided to start with a 100 user deployment, focusing on executives, top-tier sales staff and select operations employees in each of our worldwide offices. The company has standardized on Microsoft Exchange and has recently completed an upgrade to Exchange 2007. NWC Inc. has its e-mail servers distributed between Washington, DC; Syracuse, NY; and Kansas City, MO for increased scale and reliability.

While our focus is on an initial 100 user deployment, NWC Inc. wants to eventually scale to include the entire IT operations, sales and management staffs for a total of about 1000 people. The ability to scale up to larger deployments, particularly as the company grows, is important. NWC Inc is also interested in applications beyond mobile e-mail. Our CIO has read numerous articles about how enterprises are creating applications beyond mobile e-mail. The company is thus curious with how our mobile e-mail software provider can also help us mobilize applications or whether we would have to partner with another vendor. Our CIO is also very security conscious, so we want to understand what the device management and security posture is for the vendors

Objectives

NWC Inc's initial goal is to provision select staff across our worldwide offices with a mobile e-mail solution to more effectively communicate with our more nomadic employees. While our initial goal is to focus on mobile e-mail, we want to ensure that whatever solution we choose has a robust enough security and device management framework in place. We also want to make sure that we can expand into other types of applications. Our goal is to be strategic, rather than tactical, in developing our mobility strategy. We are flexible in device platform selection and we're looking to vendors to provide us with insight as to pros and cons with our available selections (Windows Mobile, BlackBerry, Symbian, etc).

Targets:

- Initial deployment date is: Sept 5th, 2007
  - Mobile e-mail gateway installed in all locations
  - Handsets configured and loaded with software
  - 2 weeks troubleshooting
  - Employee training if needed
- Live on Sept 24th, 2007

Selection Criteria

During our analysis period, we will be reviewing all the RFI's looking for the best solutions that fit our needs. We will most likely have additional clarifying questions that will need to be answered. We will be using the following list of items (in alphabetical order) to perform our assessment.

- Client software cost (if any)
- Depth of client support
- Depth of management features
- Depth of security features
- Mobile e-mail client features
- Mobile e-mail client ease of use
- Geographical Coverage (i.e. Where service(s) can be used)
- Middleware software cost (if any)
- Service contract cost

Mobile E-mail Vendors Questions

Server Support

Please define what e-mail platform(s) your mobile e-mal platform supports. Examples would include Microsoft Exchange, Lotus Notes, etc.

Answer Guidance

Reason For Question

While NWC Inc uses an Exchange environment, we want to understand if the vendor supports platforms outside of Microsoft Exchange.

Mandatory Response Format:

Word count: Summary **not exceeding one page**

The following versions of Microsoft Exchange Server are supported by BlackBerry Enterprise Server:

- Exchange 5.5
- Exchange 2000
- Exchange 2003
- Exchange 2003 Service Pack 2
- Exchange 2007
- Exchange 2007 Service Pack 1

In comparison, Microsoft's mobile solution only offers support for Exchange 2003 with Service Pack 2 and Exchange 2007.

BlackBerry Enterprise Server also supports IBM Domino and Novell GroupWise which provides NWC with the option to safely invest in other email/messaging platforms in the future, knowing that you can count on a similar BlackBerry experience on these platforms.

The following versions of the IBM Domino Mail Server are supported by BlackBerry Enterprise Server:

- Domino 4.6.x
- Domino 5.x.x
- Domino 6.0.0
- Domino 6.0.1
- Domino 6.0.2
- Domino 6.0.3
- Domino 6.0.4
- Domino 6.5.0
- Domino 6.5.1
- Domino 6.5.2
- Domino 6.5.3
- Domino 6.5.4
- Domino 6.5.5
- Domino 6.5.6
- Domino 7.0.0
- Domino 7.0.1
- Domino 7.0.2
- Domino 7.0.3 (currently in development and not yet released to the market)
- Domino 8.0.0 (currently in development and not yet released to the market)
- Domino Express (Small Business Version of Domino)

The following versions of the Novell GroupWise Mail Server are supported by BlackBerry Enterprise Server:

- GroupWise Server 6.5.1:
- GroupWise Server 7.0
- GroupWise Server 7.0.1
- GroupWise Server 7.0.2
- GroupWise Server 8.0 (currently in development and not yet released to the market)

As indicated above, RIM has integrated the BlackBerry Enterprise Server with a broad range of versions of the various Email Servers – Microsoft Exchange, IBM Lotus Notes Domino, and Novell GroupWise.

In addition to RIM's integration with the above-mentioned platforms, third party companies (including Notify Technology Corporation) have extended the number of server platforms that can synchronize with BlackBerry smartphones. Notify in particular offers the following email and messaging platforms:

- Scalix
- Oracle
- CommuniGate Systems
- FirstClass
- Mirapoint
- MeetingMaker
- Sun
- Alt-n technologies
- Kerio
- Zimba
- Novell NetMail
- Merak
- Cyrus
- First Class
- IPSWitch
- SendMail

Client Support

Please define what client platform(s) your product supports. Examples would include Microsoft Windows Mobile, Symbian, etc. If your product supports non smartphone platforms (e.g. J2ME or BREW), please note this. Please note if your product uses its own e-mail client or integrates with the handheld's native e-mail client.

If possible, please provide screenshots of the e-mail client on each platform supported by your product.

Answer Guidance

Reason For Question

NWC Inc has office locations around the globe. Windows Mobile is the most popular within the United States however our European counterparts prefer Symbian, so we are curious to know what we can support. Screenshots help us to get a feeling for the look & feel of your product and if there are major differences in the user experience between handset platforms.

Mandatory Response Format:

Word count: Summary **not exceeding one page** excluding screenshots.

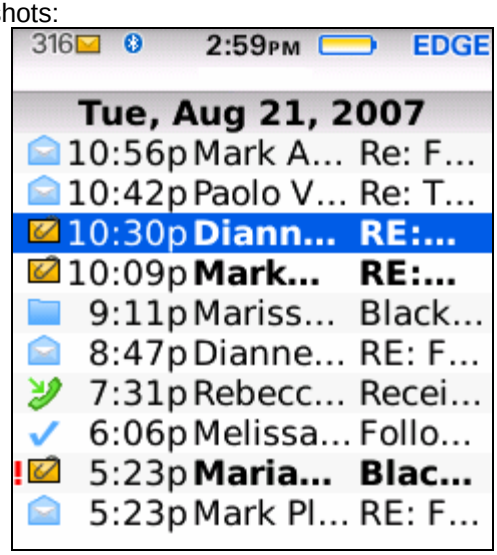
The BlackBerry Java Virtual Machine (JVM) is the BlackBerry client platform. The platform is Java ME compliant, and supports native BlackBerry Java applications such as the BlackBerry email client, as well as third-party Java Micro Edition (Java ME) applications. It should be noted that the BlackBerry client platform is a proven Enterprise smartphone platform. In addition to the proven native 'out-of-the-box' BlackBerry applications, the platform has enabled over 600 Independent Software Vendors (ISV's) who have developed thousands of Enterprise-focused applications and solutions specifically for the BlackBerry.

The JVM, the native email client, and the other native BlackBerry 'out-of-the-box' applications are standardized on over twenty in-market BlackBerry smartphones (as well as the BlackBerry Application Suite on Windows Mobile 6), and represent one of the most intuitive, easy-to-use, and functional user interfaces in the wireless market today.

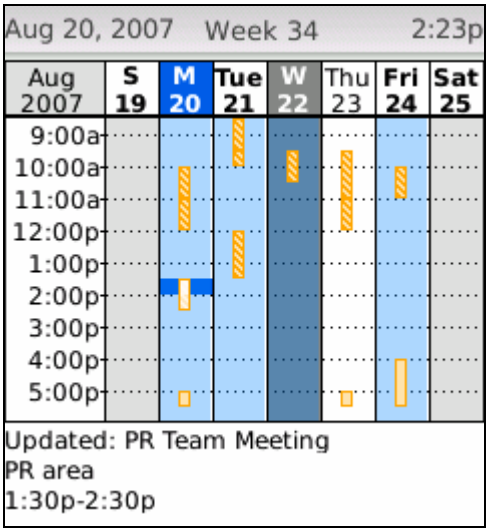
Basing the BlackBerry client platform on Java ME has also enabled RIM to provide customers with a secure client platform. The BlackBerry Enterprise Solution (of which the BlackBerry JVM is a key piece), has been approved by some of the world's most security-conscious organizations, and has received more security accreditations than other wireless offerings.

Below are some sample BlackBerry client screenshots:

Home Screen

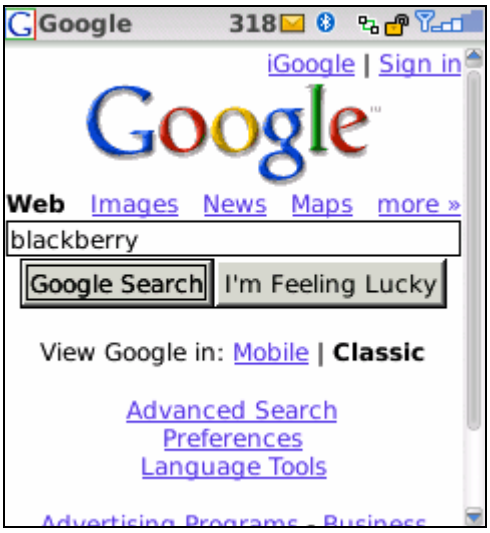


Message Box



Calendar

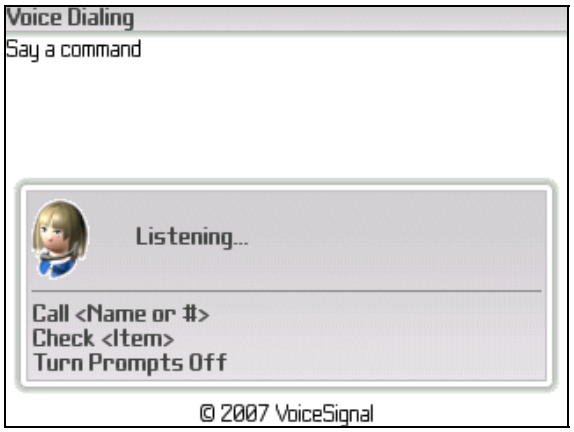
BlackBerry Maps



Browsing

Browsing, page overview mode

Multimedia



Voice Activated Dialing

Recently, RIM announced the BlackBerry Application Suite for Windows Mobile 6 handhelds. The BlackBerry Application Suite can be installed on select Windows Mobile 6 devices in order to provide a “virtual BlackBerry” experience (the BlackBerry Application Suite will be available later in 2007). The BlackBerry Application Suite provides all of the main BlackBerry applications like BlackBerry email, phone, calendar, address book, tasks, memos, browser, instant messaging and other applications developed for the BlackBerry platform. Devices running the BlackBerry application suite will be able to connect to BlackBerry services via BlackBerry® Enterprise Server as well as BlackBerry® Internet Service. Support is also provided for the BlackBerry® Mobile Data System (BlackBerry MDS) allowing organizations to develop their own BlackBerry applications or deploy third-party BlackBerry applications that can run on BlackBerry Application Suite-based devices as well as BlackBerry smart phones. The Windows Mobile applications are preserved in order to provide the customer the choice between using BlackBerry applications and Windows Mobile applications. The touch screen navigation is also preserved in the Windows Mobile 6 device.

In addition RIM also supports a broad assortment of third party hardware via the BlackBerry® Connect solution. BlackBerry Connect enables mobile device manufacturers to equip their handsets with key BlackBerry® functionality that allows users to connect to BlackBerry® Internet Service (a service that Carriers can provide to access non-enterprise email) and BlackBerry® Enterprise Server with their preferred devices. BlackBerry Connect also allows organizations to standardize on the award-winning BlackBerry platform. BlackBerry-enabled devices that feature

BlackBerry Connect technology are available from leading manufacturers including HTC, Motorola, Nokia, Palm, Inc., Samsung and Sony Ericsson, and on the Palm OS®, Symbian OS™ and Microsoft® Windows Mobile® platforms. BlackBerry Connect works seamlessly with the built-in email and calendar applications on the device so customers can benefit from proven BlackBerry push technology while maintaining the native device experience and functionality.

Client Features –

Please detail the features available from your client (e.g. send/receive e-mail, create calendar appointments, synchronize Outlook contacts, corporate directory lookup, etc.). If necessary, please reference screenshots from the previous section to provide better detail of the available features.

Answer Guidance

Reason For Question

The breadth and depth of client features available for each product is one of the grading criteria. We are thus looking for detail in this category.

Mandatory Response Format:

Word count: Not to exceed three pages

The BlackBerry® client feature set is very extensive and comprises the below native applications. It is important to note that all of the applications listed below can be controlled by IT policies that can govern which employees can use the outlined applications – for example, those companies that are concerned about the camera application for intellectual property security can easily disable this functionality for their employees.

(Note that some of the features outlined below are not available on all BlackBerry smartphones. The handset may not support the functionality, and the feature set deployed on a particular BlackBerry smartphones is sometimes determined by the Carrier in each specific market.)

A) STAY IN TOUCH

1) Wireless email

Integration with Existing Email

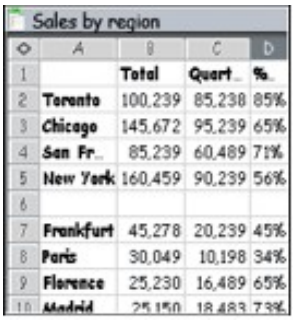
The BlackBerry® smartphone is a wireless extension of the users' email mailbox that allows the user to send, receive, forward and reply to messages at their convenience. It integrates seamlessly with the existing enterprise email account and/or personal email account.

Push Email

BlackBerry smartphones are designed to remain on and continuously connected to the wireless network, allowing inbound messages to be automatically delivered to the smartphone as messages arrive in the users' inbox. .

Attachment Viewing

In addition to the text in email, users can use BlackBerry smartphones to get access to attachments in popular file formats. Attachment support includes:


Sales by region

	A	B	C	D
1		Total	Quart..	%..
2	Toronto	100,239	85,238	85%
3	Chicago	145,672	95,239	65%
4	San Fr..	85,239	60,489	71%
5	New York	160,459	90,239	56%
6				
7	Frankfurt	45,278	20,239	45%
8	Paris	30,049	10,198	34%
9	Florence	25,230	16,489	65%
10	Madrid	25,150	18,483	73%

- Microsoft® Word
- Microsoft Excel
- Microsoft PowerPoint®
- Corel® WordPerfect®
- Adobe® PDF
- ASCII documents
- HTML attachments
- Images: JPG, BMP, GIF, PNG and TIFF
- File types listed above archived in .zip format

Manage Growing Inboxes

BlackBerry smartphones allow users to answer email and communicate with others whenever it's convenient, access the critical information needed, and filter the rest. The filtering engine in BlackBerry software gives users complete control over their email. Limit the number of messages received on the device by setting filters that monitor key words and message fields including From:, To:, Cc:, Bcc:, Subject: and message body.

2) Phone

Comfort, Clarity and Convenience

BlackBerry smartphones feature an integrated earpiece/microphone designed for comfort and clarity when held to the ear. Other features designed to maximize your comfort include:

- *Built-in speakerphone* – perfect for hands-free phone calls and convenient conference calls.
- *Bluetooth® enabled* – allows hands-free dialog via headsets and car kits.
- *Intuitive call management* – Use speed dial, call forwarding and the mute button to easily manage calls

Voice Activated Dialing (VAD)
With Voice Activated Dialing, you just say the word and your BlackBerry smartphone can initiate a call with anyone in the contact list. Plus, VAD can be used along with the built-in speakerphone or with a Bluetooth headset for hands-free dialing.

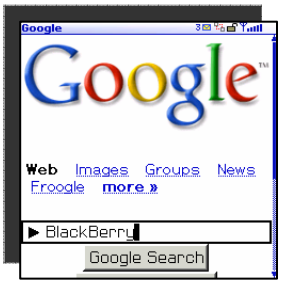
3) Text Messaging
Text messaging or Short Messaging Service (SMS) enables users to easily send and receive short text messages using the BlackBerry® smartphone without adding email messages to an inbox. Messages can be quickly exchanged with other SMS-enabled devices using the PC-style keyboard or with the SureType® keyboard technology featured on BlackBerry smartphones.

4) Instant Messaging
Instant messaging applications on BlackBerry® smartphones are designed to keep users in touch with their instant messaging community of contacts when connected to the wireless network. BlackBerry smartphones support the following instant messaging platforms:

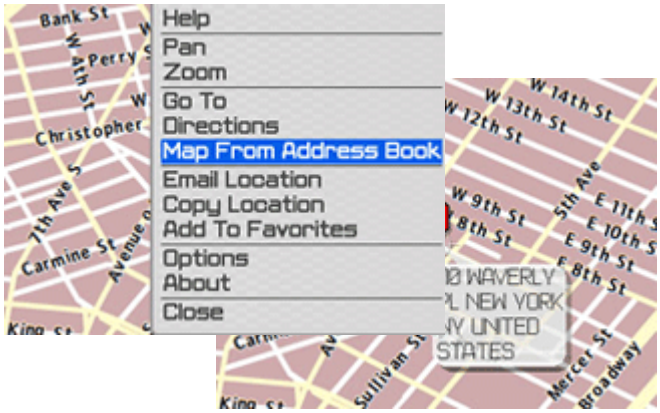
- BlackBerry Messenger
- Yahoo!® Messenger for BlackBerry® Smartphones
- Google Talk™ for BlackBerry® Smartphones
- AOL Instant Messenger
- IBM® Lotus® Sametime
- Microsoft® Office Communicator and Live Communications Server 2005
- Novell® GroupWise® Messenger

B) FIND THE INFO YOU NEED

1) Organizer
BlackBerry also provides a set of Personal Information Manager (PIM) functions including: Calendar, Address Book, Task List, MemoPad and Calculator
Synchronizing - BlackBerry® smartphones synchronize with many popular desktop organizer packages. PIM information can be synchronized between the BlackBerry smartphone and the users' computer, so they have one reliable, up-to-date organizer. And with the BlackBerry® Enterprise Server, this information can be wirelessly synchronized.

2) Browser


The browser included with the BlackBerry smartphone can be used to access the Internet -- browse Web sites, get up-to-date stock quotes, read the latest news, check weather reports and more more – as well as access intranet portals and applications. Users can navigate web pages and follow links using the click and scroll trackwheel or trackball and type in urls quickly and easily with the keyboard on the BlackBerry smartphone. URLs are kept in the browser history for quick reference and bookmarks can be quickly saved for future use. An increasing variety of optional third party Internet services are also available.

3) BlackBerry Maps


Users can view maps and receive directions on the BlackBerry smartphone using BlackBerry® Maps, or alternatively use mapping software available from Third Party application providers. Find businesses, restaurants and more by entering addresses and viewing their locations on maps, quickly and conveniently from virtually wherever you are. Visual route and step-by-step instructions are also available. The user can also view the current location with greater accuracy and track a route to a target destination with a GPS-enabled BlackBerry smartphone or Bluetooth-enabled GPS receiver.

4) Corporate Data Access
Through wireless connectivity, businesses can extend their enterprise applications, providing their mobile workforce with access to corporate data. The BlackBerry® Enterprise Solution leverages the same proven, push delivery architecture used for BlackBerry® smartphone email to provide mobile users with access to data from applications and systems, such as customer details, pricing data, order information and inventory updates.
(Note that the BlackBerry Enterprise Server implementation is required to take advantage of this client functionality.)

In addition to all of the standard BlackBerry applications, RIM has also officially partnered with over 600 application providers (via the BlackBerry ISV Alliance program) who have developed applications for the BlackBerry platform including but not limited to:

- Global Positioning Systems (GPS) / Location Based Services (LBS)
- Financial dashboards
- Forms and Data Collection Remote Network & Systems Management Continuity of Operations
- Various industry applications for Financial, Medical, Insurance, Manufacturing
- Entertainment and games
- Personal Productivity

ENJOY LIFE
1) Media Player
With the media player included on many BlackBerry smartphones, the fun goes with you.

- Play video and music files in vivid color and rich sound
- Plug in a stereo headset, or pair up any Bluetooth® stereo accessory
- Shuffle your songs or enjoy your favorite playlist while you reply to messages
- Watch a news or sports clip while catching the train to work

Plus, the included BlackBerry® Desktop Media Manager allows for quick CD ripping, converting and transferring music and video files to the device. BlackBerry smartphones with a media player also allow for use of a microSD card for expandable storage.
2) Camera
The BlackBerry® Curve™ and BlackBerry® Pearl™ smartphones feature a built-in camera with the following specifications:

- Digital zoom
- Built-in flash
- 1.3 MP (with the BlackBerry Pearl) or 2 MP (with the BlackBerry Curve)
- Self-portrait mirror

Pictures can be easily transferred between the device and desktop computer using the USB cable that comes with the smartphone, or via Bluetooth technology. The BlackBerry® Desktop Media Manager lets users drag and drop their pictures from the device to their computer.

MAXIMIZE CONVIENCE
1) SureType and QWERY Keyboards
SureType® is an innovative keyboard technology that effectively combines a traditional phone keypad and a familiar QWERTY keyboard. SureType allows users to quickly and accurately dial or type either using single-handed operation or two-handed thumb-typing. To help facilitate easy spelling and composition, SureType includes a word list of over 30,000 words.
2) Tethered Modem
Some BlackBerry smartphones can be used as high-speed, wireless modems for your laptop when you're on the road.
3) Bluetooth
Supports ***Bluetooth® 2.0*** and the Bluetooth stereo audio profile (A2DP/AVRCP) for use with stereo headphones, car kits, headsets and other Bluetooth peripherals.

4) Wi-Fi

With support for 802.11a/b/g Wi-Fi standards the BlackBerry® 8820 smartphones enable data access over Wi-Fi connections in the enterprise as well as through public hotspots and wireless home networks. This device also supports UMA, so for carrier networks that support UMA, it can seamlessly switch voice calls between a wireless carrier's cellular network and a Wi-Fi network.

Pricing

Please define server and/or client pricing for your product for both our initial deployment (100 users) and final deployment (1000 users) based on any volume discounts available.

Answer Guidance

Reason For Question

Price is a grading criteria and we have asked vendors to submit information for this area accordingly.

Mandatory Response Format:

Word count: Summary **not exceeding two pages**. Pricing charts are allowed for submission to this question.

RIM is pleased for provide the following indicative pricing consideration for NCW. For a complete configuration and proposal, RIM recommends that NWC and RIM work together on a more detailed proposal and develop a configuration that both parties are comfortable with.

BlackBerry Software and Training Indicative Pricing – NWC Initial Deployment:

Note – Due to the small number of users (100), and assuming reasonable network latency between offices, RIM recommends that 1 BlackBerry Enterprise Server interface with all three of NWC's Microsoft Exchange Servers. RIM recommends the following BlackBerry Enterprise Server and Client Access Licensing (CAL) pricing model:

BlackBerry Enterprise Server and CALs	
BlackBerry Enterprise Server 4.1 for Microsoft Exchange – 20 User ($3,999 per server x QTY 1)	$3,999
An additional 80 Client Access Licenses are required to meet the 100 user requirement	
i) BlackBerry Enterprise Server Client Access License (CAL) – 50 user	$3,299
ii) 3 x CAL 10 packs x $699	$2,097
Total BlackBerry Enterprise Server and CAL price	***$9,395***
RIM Professional Services	
A custom quote would need to be generated based upon discussions between NWC and RIM.	
RIM Education Services	
RIM offers courses for both users and IT Administrators. Two one day courses for IT Administrators are recommended at cost $849 USD per day. RIM can also provide on-site training to suite the needs of NWC – this requirement would result in a separate quotation to NWC.	$1698

BlackBerry Software and Training Indicative Pricing – NWC Final Deployment:

With the final number of users projected to be 1,000, RIM recommends that NWC continue to retain just one BlackBerry Enterprise Server. This recommendation is based upon the level of information that is available in the NWC RFI, and assumes NWC has typical IT configurations, for example, reasonably low network latency between the offices, and reasonably sized user mailboxes. This BlackBerry Enterprise Server should also be able to support a small number of users in Dublin, Ireland, assuming the users are connecting to a US-based Exchange server. A BlackBerry Enterprise Server can be easily added to the Dublin office if required, however, RIM recommends a single BlackBerry Enterprise Server deployment. The following chart outlines the incremental costs for the final deployment.

BlackBerry Enterprise Server and CALs	
BlackBerry Enterprise Server 4.1 for Microsoft Exchange – 20 User ($3,999 per server x QTY 0)	$0
An additional 900 Client Access Licenses are required to meet the 1,000 user requirement	
i) Add 1 x BlackBerry Enterprise Server Client Access License 500 user	$27,499
ii) Add 4 x BlackBerry Enterprise Server Client Access License 100 user = 4 x $5,999	$23,996
Total BlackBerry Enterprise Server and CAL price	***$51,495***
RIM Professional Services	

A custom quote would need to be generated based upon discussions between NWC and RIM.	
RIM Education Services	
RIM offers courses for both users and IT Administrators. Two one day courses for IT Administrators are recommended at cost $849 USD per day. RIM can also provide on-site training to suite the needs of NWC – this requirement would result in a separate quotation to NWC.	$1698 (cost only applicable if felt training is required beyond training completed in Initial Deployment timeframe.)

BlackBerry Return on Investment – Ipsos Reid Study
Providing the pricing for a BlackBerry solution is only one side of the equation. The other side of the equation – the economic benefits – is extremely attractive and the BlackBerry solution ROI has been well documented by third parties.

According to a detailed study by Ipsos Reid, the BlackBerry ROI is proven and demonstrable. For example, the following key metrics were discovered in the ROI study:

- Average end user converts 60 minutes of downtime into productive time per day
- Average BlackBerry user reports that BlackBerry increases the efficiency of the teams that they work with by 38%, equating to over US$28,000 per BlackBerry user per year based on international productivity per employee data
- BlackBerry Net TCO per user totals US$1315
- BlackBerry ROI is conservatively calculated at a minimum of 238%, for a payback period of 154 days

Comparative TCO
To ensure that the entire TCO (Total Cost of Ownership) is calculated, and not just the upfront costs, when evaluating alternative solutions please keep in mind that the BlackBerry Enterprise Solution is a complete, end-to-end solution. NWC would need to consider that often with other solutions if users want superior manageability, the ability secure devices, protect against viruses, securely browse the Intranet, and/or access applications, etc., they must purchase additional servers/software in order to match the features that come included in with the BlackBerry Enterprise Solution.

RIM would be happy to share more detailed Total Cost of Ownership comparisons upon completion of a non-disclosure agreement.

DEVICE PRICING
Devices are purchased through the Carrier, not directly from RIM. The below pricing has been supplied by the Carriers for consideration by NWC. In some cases volume discounts may apply – please contact the Carrier for further details. *Please note the T-Mobile International does not offer service in Ireland, and therefore pricing from this company has not been included in this RFI.*

AT&T Device Pricing:

	BlackBerry 8800	**BlackBerry Curve (8300)**	**BlackBerry Pearl (8100)**	**Palm Treo 680** (with BlackBerry Connect)	**Nokia E62** (with BlackBerry Connect)
Regular price:	$499.99	$449.99	$399.99	$449.99	$319.99
2-yr contract price:	$349.99	$299.99	$249.99	$299.99	$169.99

Sprint Device Pricing:

	***BlackBerry 8830* World Edition** (can roam on GSM networks)**:**	***BlackBerry 8703e***	***BlackBerry 7130e***	***BlackBerry 7100i***
Regular price:	$549.99	$449.99	$399.99	$349.99
2-yr contract price:	$199.99 *	$149.99 *	$149.99 *	$199.99 **

* Price after savings and mail-in rebate available with two-year subscriber agreement.
** Price after savings available with two-year subscriber agreement.

Verizon Wireless Device Pricing:

BlackBerry 8830 World Edition (can roam on GSM networks) - 2-yr contract price: $299.99
Note: Customers may be able to get an additional $100 off if they purchase a voice and data plan when they purchase the device. OR they could qualify for a New Every Two discount and depending upon their existing plan get either $50 or $100 credit toward the purchase of this device.

Vodafone Device Pricing:

Device pricing through Vodafone is variable dependant on the service plan chosen. As such please refer to the Data Plan Pricing section for more details on the below pricing.

BlackBerry 8100	**BlackBerry 8707v**	**Nokia E50** (with BlackBerry connect)	**Nokia E61** (with BlackBerry connect)	**Nokia 9300** (with BlackBerry connect)
€169 to €229	€239 to €299	€39 to €99	€139 to €199	Please contact Vodafone directly for pricing on this device

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Support Costs

Please define service contract costs for your product for both our initial deployment (100 users) and final deployment (1000 users) based on any volume discounts available.

Answer Guidance

Reason For Question

Price is a grading criteria and we have asked vendors to submit information for this area accordingly.

Mandatory Response Format:

Word count: Summary **not exceeding two pages**. Pricing charts are allowed for submission to this question.

Overall Support Overview:

BlackBerry® Technical Support Services provides comprehensive technical support and software maintenance services for the BlackBerry® Enterprise Solution through a flexible, annual subscription-based program.

BlackBerry Technical Support Services includes five levels of support (Tx1-Tx5) that allow an organization to contact RIM directly for a degree of support that meets their needs. Each program level is comprised of support services designed to help customers make more efficient and productive use of the BlackBerry Enterprise Solution, and as the level of support increases so do the support features and relationship based support options that can be taken advantage of.

RIM recommends that NWC begin with Tx2, our second level of support services. This level of support provides:

- 24 x 7 technical support by telephone or electronically
- BlackBerry® Enterprise Server version upgrades are included to keep NWC up to date
- Up to four named callers from the NWC organization can contact the BlackBerry Technical Support team
- Comprehensive technical support for all components of the BlackBerry Enterprise Solution
- Support for BlackBerry enabled smartphones
- Access to the Enhanced Technical Knowledge Center, including self-service tools and resources
- A reduced rate for open session BlackBerry Enterprise Server Advanced Administration Training

BlackBerry Technical Support Services Pricing

A BlackBerry Technical Support Services Tx2 subscription consists of two pricing components:

- **BlackBerry Enterprise Server fee.** A fee applies for each server covered under a support subscription.
- **Active Client Access License (CAL) fee.** A fee applies for each active CAL covered under a support subscription. The pricing is volume based — so as the number of CALs go up, the cost per CAL goes down:

Active CAL Fee Discount	
Active CALs Supported	**Discount**
100-499	10%
500-999	20%

1,000-4,999	30%
5,000-9,999	40%
10,000-19,999	50%
20,000-49,999	60%
50,000 or more	70%

Support Costs for the NWC Initial Deployment:

The parameters for the initial NWC deployment are:

- 1 BlackBerry Enterprise Server
- 100 users

Tx2 cost calculation:
a) BlackBerry Enterprise Server fee - $625 USD
b) Active CAL fee - $22.50/per CAL x 100 = $2,250 USD

Total Support Cost for Initial Deployment = $2,875 USD/year

Support Costs for the NWC Final Deployment:

The parameters for the final deployment are:

- 1 BlackBerry Enterprise server (with the potential for possible future additional BlackBerry Enterprise Server deployment)
- 1,000 users

Tx2 cost calculation:
a) BlackBerry Enterprise Server fee = $625 USD
b) Active CAL fee - $17.50 per CAL x 1,000 = $17,500 USD

Total Support Cost for Final Deployment = $18,125 USD/year

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Data Plans

We understand that some vendors require special data plans for their mobile e-mail product. With so many data plans available, please detail which data plan (if any) is required for your product from the following carriers: AT&T, Sprint, Verizon Wireless, Vodafone, T-Mobile (Europe)

Answer Guidance

Reason For Question

Data plans are a major point of confusion for NWC Inc.'s CEO. Some carriers charge differently if a particular mobile e-mail product is used than if another is used. We are looking for guidance from our vendors to determine which data plan(s) we will need to ensure that our mobile e-mail solution works.

Mandatory Response Format:

Word count: Summary **not exceeding two pages**. Charts are allowed as a response to this question.

Data plans are purchased through the Carrier, not directly from RIM. The below pricing has been supplied by the Carriers for consideration by NWC.

Please note the T-Mobile International does not offer service in Ireland, and therefore pricing from this company has not been included in this RFI.

AT&T Data Plans:

Data Plan	Monthly Service Charge	Domestic Included Data Usage	Additional Domestic Data per KB	Monthly Service Charge without Voice
BlackBerry Enterprise	$44.99‡	Unlimited	N/A	$49.99
BlackBerry Enterprise - Tethering	$59.99‡	Unlimited	N/A	$74.99
BlackBerry Enterprise (4MB)	$34.99‡	4 MB	$.005/KB	$39.99
BlackBerry International	$64.99‡	Unlimited	N/A	$69.99
PDA Enterprise (for BlackBerry Connect devices)	$44.99‡	Unlimited	N/A	$49.99

‡ require eligible wireless voice plan be activated and maintained on the same device

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Sprint Data Plans:

Data Plan	Monthly Service Charge	Additional Data Usage
10 MB/month	$39.99/month	$.001/kb
Unlimited Data	$49.99/month†	N/A

†This plan is available for $39.99/month if customer is on a two year service agreement

Please note that the Phone as Modem capability is included in the BlackBerry data plans. These data plans can be combined with any available voice plan.

Verizon Wireless Data Plans:

Data Plan	Monthly Anytime Minutes	Monthly Access	Per-Minute Rate After Allowance	Plan Includes
BlackBerry America's Choice Email	450	$79.99	$0.45	• Unlimited Data and Email usage • Unlimited IN calling
	900	$99.99	$0.40	
	1350	$109.99	$0.35	
BlackBerry America's Choice Email and Messaging	450	$99.99	$0.45	• Unlimited Data and Email usage • Unlimited IN calling • Unlimited Text, Picture, Video Messaging to anyone on any network in the U.S.
	900	$119.99	$0.40	
	1350	$129.99	$0.35	

Vodafone Data Plans:

Price Plans	Monthly Fee *includes unlimited email, IM and browsing*	Free Call Minutes	BlackBerry 8100	BlackBerry 8707v	Nokia E50 (with BlackBerry connect)	Nokia E61 (with BlackBerry connect)
Vodafone Perfect Fit 30 Flat-rate charge of 35c per minute.	€19	30 anytime any network call minutes	€229	€299	€99	€199
Vodafone Perfect Fit 100 Flat-rate charge of 30c per minute.	€29	100 anytime any network call minutes	€229	€299	€99	€199
Vodafone Perfect Fit 200 Flat-rate charge of 25c per minute.	€49	200 anytime any network call minutes	€199	€269	€69	€169
Vodafone Perfect Fit 400 Flat-rate charge of 20c per minute.	€69	400 anytime any network call minutes	€189	€259	€59	€159
Vodafone Perfect Fit 600 Flat-rate charge of 18c per minute.	€99	600 anytime any network call minutes	€169	€239	€39	€139

Communications Model

Please detail how messages are relayed from our corporate e-mail servers to a client handheld (i.e. via a NOC, direct connection to the handheld, etc). Please explain why this model is best compared to your competitors (i.e. if a direct connection is used, explain why this is better than a NOC relay).

Answer Guidance

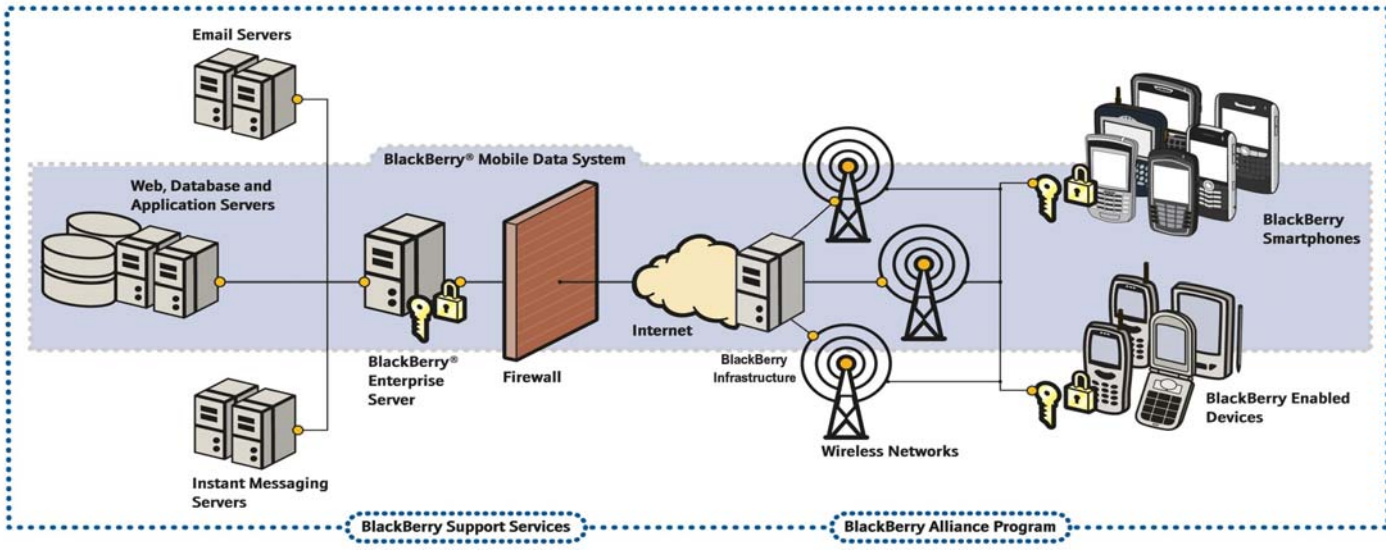
Reason For Question

We are curious as to what the technical differences are between each product; these differences may sway our overall impression for each product.

Mandatory Response Format:

Word count: Not to exceed three pages including a high level summary and a technical description. A maximum of **two** pages of graphical diagrams are ok to enhance your technical description and will not impact the overall word count. (I.e. five pages maximum).

BlackBerry wireless data traffic flows as per the diagram below: from device, to wireless network, to the BlackBerry Infrastructure (Network Operations Center or NOC), over the Internet to the corporate firewall , then to the BlackBerry Enterprise Server, which connects to the email server (and other back-end systems).



The BlackBerry NOC-based system provides numerous benefits over a direct connection model:

- True Push: The BlackBerry Infrastructure maintains a continuous connection to each BlackBerry smartphone. As a result, the BlackBerry Infrastructure can send a message from a BlackBerry service to a BlackBerry smartphone without the user requesting it explicitly. Users do not have to initiate a connection to the network, nor does the handheld have to synchronize or poll for new messages. This provides a true “push” experience, and is also more efficient, which saves battery life on the handsets compared to most “direct connection” models.

- Reliability: If users are in fringe wireless network coverage, the BlackBerry Infrastructure delivers pending data to users as soon as they are in an area of sufficient wireless network coverage. This reliable delivery minimizes the impact of occasional intermittent connectivity, wireless network reception, or network performance on application usage.

- Security: Customers set up a single, secure outbound connection from the BlackBerry Enterprise Server over the Internet to the BlackBerry Infrastructure (i.e. a known IP address), which then manages the connections to geographically diverse wireless networks on behalf of the corporation.
- Security: The NOC-based architecture provides protection against Denial of Service attacks, and packet tampering.
- Security: Data sent between the BlackBerry smartphone and the BlackBerry Enterprise Server is encrypted end-to-end (256bit AES by default), and sent over secure tunnels. The BlackBerry Infrastructure acts as a pass-through channel, and does not decrypt the data at any point. Security is enhanced not compromised with a NOC-based solution.
- Ease of Administration: The NOC-based solution enhances data roaming between global wireless networks, and organizations can deploy a variety of devices globally without undue complexity.
- Application development: The BlackBerry Infrastructure simplifies the creation and deployment of third-party applications and wireless web services. The same application or service can operate on multiple wireless networks, using standard protocols, such as HTTP, for network communication. The underlying wireless transport and its inherent complexities are abstracted for the application developer, whereas this expertise is often required with competing solutions.

Security

Please detail how messages are secured during transport. Please detail how messages are secured on the client handheld.

Answer Guidance

Reason For Question

Security is a crucial concern not just for NWC Inc. but in many surveys is a leading concern for enterprises considering mobile deployments. We would thus like to determine the security features available for each product.

Mandatory Response Format:

Word count: Not to exceed three pages including a high level summary and a technical description. A maximum of **two** pages of graphical diagrams are ok to enhance your technical description and will not impact the overall word count. (I.e. five pages maximum).

BlackBerry Security Overview

The BlackBerry® Enterprise Solution is built with corporate data security in mind. It features an end-to-end security model designed to seamlessly protect your corporate information from attack as users send and receive email and access data wirelessly.

The BlackBerry Enterprise Solution safeguards the integrity, confidentiality and authenticity of your corporate data with a strong encryption scheme that keeps data encrypted while it is in transit between the BlackBerry® Enterprise Server and BlackBerry® smartphones and while at rest.

As a market leader in the area of information assurance and compliance, RIM is committed to independent, third party approvals and certifications of BlackBerry® security. The BlackBerry® Enterprise Solution has been approved for storing and transmitting sensitive data by the North Atlantic Treaty Organization (NATO) as well as government organizations in the United States, Canada, the United Kingdom, Austria, Australia and New Zealand.

Securing messages during transport:

BlackBerry wireless messaging security

The BlackBerry Enterprise Solution works seamlessly with existing corporate networks while enabling a BlackBerry smartphone user to securely send and receive messages while away from their computer. Email messages remain encrypted at all points between the BlackBerry smartphone and the BlackBerry Enterprise Server.

The BlackBerry Enterprise Solution offers two transport encryption options, Advanced Encryption Standard (AES) and Triple Data Encryption Standard (Triple DES), for all data transmitted between BlackBerry® Enterprise Server and BlackBerry smartphones.

Private encryption keys are generated in a secure, two-way authenticated environment and are assigned to each BlackBerry smartphone user. Each secret key is stored only in the user's secure enterprise account (i.e., Microsoft® Exchange, IBM® Lotus® Domino® or Novell® GroupWise®) and on their BlackBerry smartphone and can be regenerated wirelessly by the user.

Data sent to the BlackBerry smartphone is encrypted by BlackBerry Enterprise Server using the private key retrieved from the user's mailbox. The encrypted information travels securely across the network to the smartphone where it is decrypted with the key stored there.

Data remains encrypted in transit and is never decrypted outside of the corporate firewall.

BlackBerry Message Encryption

Standard BlackBerry encryption is designed to encrypt messages that the BlackBerry smartphone sends or that the BlackBerry Enterprise Server forwards to the BlackBerry smartphone. Standard BlackBerry encryption encrypts the message:

- from the time a user sends an email message from the BlackBerry smartphone until the BlackBerry Enterprise Server receives the message
- from the time the BlackBerry Enterprise Server receives a message sent to a BlackBerry smartphone user until that user reads the message on the BlackBerry smartphone

Standard BlackBerry message encryption process

When a user sends a message from the BlackBerry smartphone, the BlackBerry smartphone and BlackBerry Enterprise Server use symmetric key cryptography to encrypt and decrypt the message, using the following process:

1. The BlackBerry smartphone compresses the message.
2. The BlackBerry smartphone encrypts the message using the message key.
3. The BlackBerry smartphone encrypts the message key using the master encryption key, which is unique to that BlackBerry smartphone.
4. The BlackBerry smartphone sends the encrypted message key and the encrypted message.
5. The BlackBerry Enterprise Server receives the encrypted message key and the encrypted message from the BlackBerry smartphone.
6. The BlackBerry Enterprise Server decrypts the message key using the BlackBerry smartphone master encryption key.
7. The BlackBerry Enterprise Server decrypts the message using the message key.
8. The BlackBerry Enterprise Server decompresses the message, and then forwards the message to the intended recipient.

When a BlackBerry smartphone user receives a message, the following occurs:

1. The BlackBerry Enterprise Server receives the message.
2. The BlackBerry Enterprise Server compresses the message.
3. The BlackBerry Enterprise Server encrypts the message using the message key.
4. The BlackBerry Enterprise Server encrypts the message key using the user's BlackBerry smartphone master encryption key.
5. The BlackBerry Enterprise Server sends the encrypted message and the encrypted message key to the user's BlackBerry smartphone.
6. The BlackBerry smartphone receives the encrypted message and the encrypted message key.
7. The BlackBerry smartphone decrypts the message key using the master encryption key, which is unique to that BlackBerry smartphone.
8. The BlackBerry smartphone decrypts the message using the message key.
9. The BlackBerry smartphone decompresses the message, rendering it readable by the BlackBerry smartphone user.

S/MIME Support Package for BlackBerry smartphones

The S/MIME Support Package for BlackBerry smartphones is designed to enable BlackBerry smartphone users who are already sending and receiving S/MIME messages using their computer email application to send and receive S/MIME protected messages using their

BlackBerry smartphones. The S/MIME Support Package for BlackBerry smartphones is designed to work with S/MIME email clients including Microsoft Outlook® and Microsoft Outlook Express, and with popular PKI components, including Netscape®, Entrust® Authority™ Security Manager version 5 and later, and Microsoft certificate authorities.

Stored Data Security:
The BlackBerry Enterprise Solution extends corporate security to the wireless smartphone and provides administrators with tools to manage this security. To secure information stored on BlackBerry smartphones, password authentication can be made mandatory through over 380 customizable IT policies of the BlackBerry® Enterprise Server. By default, password authentication is limited to ten attempts after which the smartphone's memory is erased.

Local encryption of all data (messages, address book entries, calendar entries, memos and tasks) – including files stored on removable memory can also be enforced via IT policy. An IT policy also allows the administrator to "lock' removable memory to a specific handset or disable the use of removable memory.

And with the Password Keeper application, Advanced Encryption Standard (AES) encryption technology allows password entries to be stored securely on the smartphone (e.g., banking passwords, PINs, etc.).

Additionally, system administrators can create and send wireless commands to remotely change BlackBerry smartphone passwords and lock or delete information from lost or stolen BlackBerry smartphones.

Protected storage of user data on a locked BlackBerry smartphone
If content protection is turned on, BlackBerry smartphone content is always protected with the 256-bit AES encryption algorithm. Content protection of BlackBerry smartphone user data is designed to:

- use 256-bit AES to encrypt stored data when the BlackBerry smartphone is locked
- use an ECC public key to encrypt data that the BlackBerry smartphone receives when it is locked

When the BlackBerry Enterprise Server administrator or a BlackBerry smartphone user turns on content protection on the BlackBerry smartphone, the BlackBerry smartphone uses content protection to encrypt the following user data items:

BlackBerry smartphone application	BlackBerry smartphone user data
Email	• subject • email addresses • message body • attachments
Calendar	• subject • location • organizer • attendees • notes included in the appointment or meeting request
MemoPad	• title • information included in the body of the note
Tasks	• subject • information included in the body of the task

Contacts (in the address book)	all information except the contact title and category
AutoText	all text that automatically replaces the text a BlackBerry smartphone user types
BlackBerry Browser	• content that web sites or third-party applications push to the BlackBerry smartphone • web sites that the BlackBerry smartphone user saves on the BlackBerry smartphone • browser cache
OMA DRM applications	a key identifying the BlackBerry smartphone and a key identifying the SIM card (if available) that the BlackBerry smartphone adds to DRM forward-locked applications

Security – Part 2

NWC Inc's Exchange server is located behind the corporate firewall. We are reluctant to open any holes into our firewall to allow for mobile clients to gain access. Please detail how your product can integrate into our DMZ (i.e. use of a proxy, via middleware server's integration to Exchange via OWA, etc). Please also detail what firewall ports NWC Inc would need to open, if any, in order to facilitate communication between mobile clients, your mobile e-mail server and Exchange.

Answer Guidance

Reason For Question

Security is a crucial concern not just for NWC Inc. but in many surveys is a leading concern for enterprises considering mobile deployments. We would thus like to determine the security features available for each product.

Mandatory Response Format:

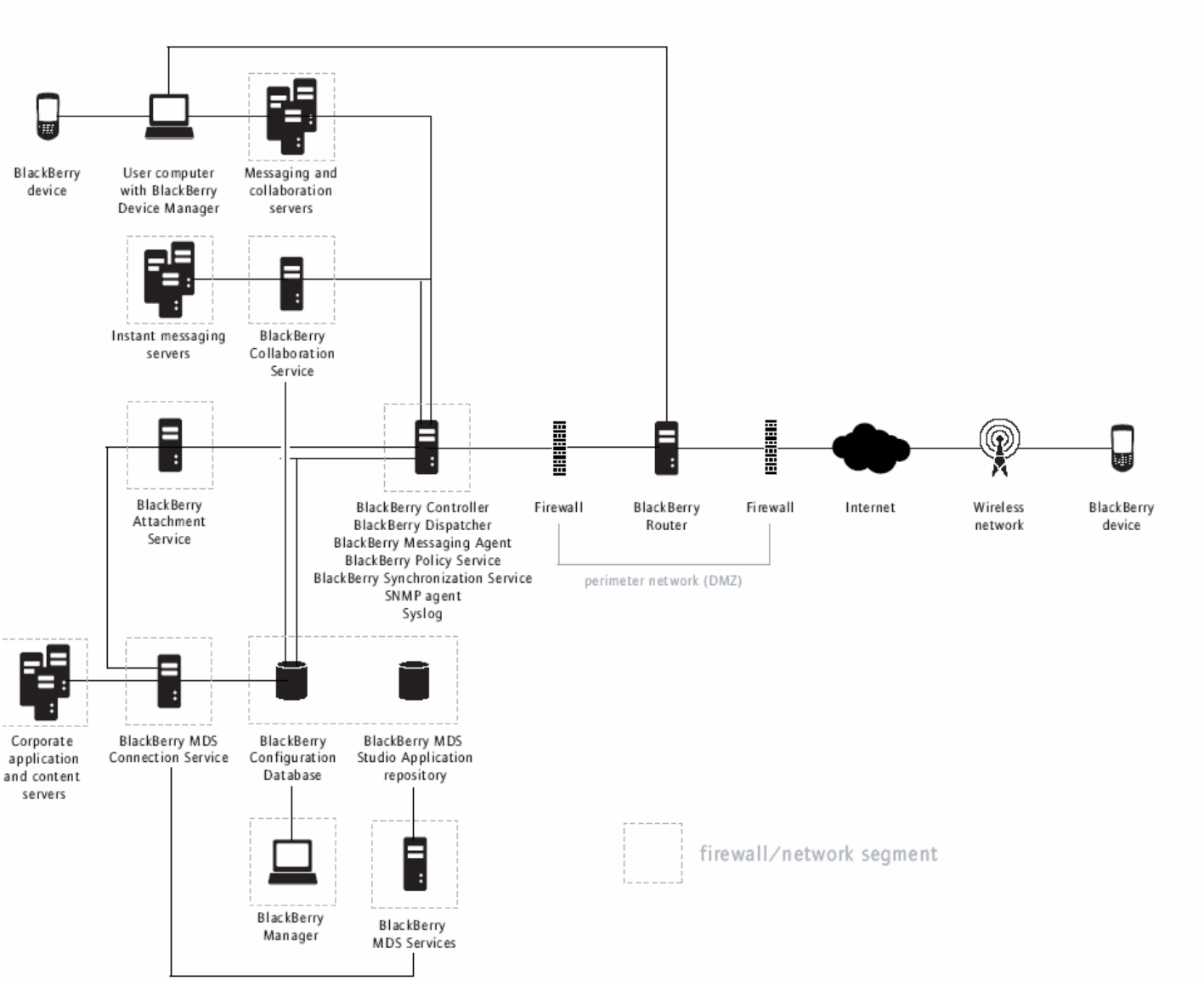
Word count: Not to exceed three pages including a high level summary and a technical description. A maximum of **two** pages of graphical diagrams are ok to enhance your technical description and will not impact the overall word count. (I.e. five pages maximum).

The end-to-end security of the BlackBerry Enterprise Solution is a key differentiator for RIM.

Segmented network architecture

Using a firewall, you can separate a network or LAN into multiple components to create segmented network architecture. The firewall blocks data that is not destined for a particular segment, and might block all protocol ports except those that that segment specifically requires. Thus each segment contains filtered and isolated network traffic, which might improve the security and performance of the network. A particular department or a specific group of servers in your organization can use a segment of the corporate LAN while a bridge, router, or switch separates that segment from the rest of the corporate LAN.

If your corporate security policies enforce the use of segmented network architecture, you can place the BlackBerry® Enterprise Solution components in network segments.



Protecting BlackBerry components

The port connections to all BlackBerry components are authenticated over a TCP/IP or UDP/IP connection using Secure Sockets Layer (SSL) or Transport Layer Security (TLS).

The BlackBerry Enterprise Server encrypts data between specific BlackBerry components that share a secure communication password that is known only to them. When one of these components initiates a connection to the BlackBerry Dispatcher, RIM proprietary protocol establishes an encryption key, and the BlackBerry Enterprise Server uses that key to encrypt data that is transmitted to any components that store the same secure communication password.

Some organizations require that the BlackBerry components be placed in a segmented network to help prevent the spread of potential attacks from one BlackBerry component installed on a remote computer to another computer within the corporate LAN. Segmented network architecture is designed to isolate attacks and contains them on one computer. When each BlackBerry

component resides in its own network segment, you make remote communications possible by opening only the port connections that the BlackBerry components use.

To place the BlackBerry Enterprise Solution in network segments, you must install each component on a remote computer and then place each component in its own network segment.

BlackBerry Router

The BlackBerry® Router is the component of the BlackBerry Enterprise Server® that connects to the wireless network. It also routes data to BlackBerry smartphones that are connected using the BlackBerry Handheld Manager.

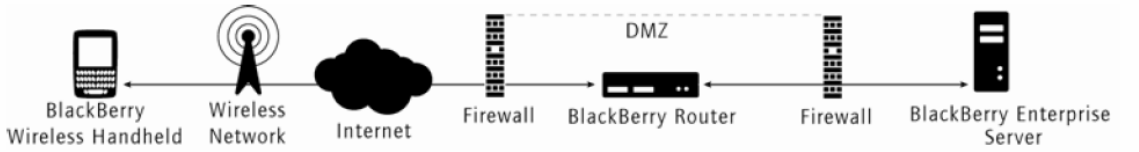
The BlackBerry Enterprise Server distinguishes between a BlackBerry Router and a direct Server Routing Protocol (SRP) connection. When it detects a BlackBerry Router, it identifies the IP addresses, writes them to the configuration database, and when a BlackBerry device that is running BlackBerry Handheld Software version 4.0+ is provisioned, sends that information in a wireless service book packet to the BlackBerry device.

If the BlackBerry Router is replaced at any time, the BlackBerry Router address changes, but the BlackBerry smartphones do not need to be reconnected to the administration or desktop computer to receive a new service book and BlackBerry Router address. The change is automatically detected by the BlackBerry device.

Placing the BlackBerry Router in the DMZ

The BlackBerry Router is designed so that you can securely place it in the DMZ, a neutral subnetwork that you separate from the corporate LAN by a firewall. An authentication protocol that is unique to the BlackBerry Router authenticates the connections between the BlackBerry Enterprise Server and the BlackBerry device. The BlackBerry Router uses this authentication protocol to verify that the BlackBerry device has the correct master encryption key. The value of the master encryption key that the BlackBerry device and the BlackBerry Enterprise Server share is not available to the BlackBerry Router; therefore, no master encryption key information is stored in or transferred through the BlackBerry Router.

When you create segmented network architecture, you can place the BlackBerry Router in the DMZ to control BlackBerry data that passes through your corporate LAN. You configure the BlackBerry Router so that all BlackBerry data bypasses the Server Relay Protocol (SRP) authenticated connection to the BlackBerry Infrastructure and travels through the DMZ location to the BlackBerry smartphones.



BlackBerry Router implemented in the DMZ

Remote implementation

If installed on a remote computer, the BlackBerry Router continues to route BlackBerry traffic to and from the BlackBerry Infrastructure for one or more BlackBerry Enterprise Servers that must

all point to the same SRP address. You must use the BlackBerry Configuration Panel to configure the BlackBerry Enterprise Server connection through the BlackBerry Dispatcher to the BlackBerry Router. The BlackBerry Router is designed to have minimal impact on performance, so most organizations that choose this configuration do so for ease of deployment in their environment.

Firewall Port 3101

The BlackBerry Enterprise Server maintains a constant direct TCP/IP level connection to the wireless network. To do this, it requires a configuration change at the firewall to allow an outgoing connection on port 3101. This is an outbound-initiated connection initiated by the BlackBerry Enterprise Server, which Firewall Administrators are typically quite comfortable with, particularly in comparison to an inbound connection so often required by competing solutions.

To establish this connection, the BlackBerry Enterprise Server contacts the wireless network. If the authentication parameters are false, authentication will fail and the connection will not be established. Once the connection is established, it remains a persistent session created for communication only between the BlackBerry Enterprise Server and the wireless network to the BlackBerry Wireless Handheld.

Outbound traffic from the BlackBerry Enterprise Server has no destination through the wireless network other than the BlackBerry smartphone. Any inbound traffic to the BlackBerry Enterprise Server from any other destination will be discarded.

- The connection to the wireless network is outbound-initiated by the BlackBerry Enterprise Server and must be authenticated. No inbound traffic is permitted from any other source host.
- The BlackBerry Enterprise Server is only a redirector of messages to and from the mail server: it stores no messages and therefore has no access to messaging or corporate information of any kind.
- All messaging traffic between the BlackBerry Enterprise Server and the user's BlackBerry smartphone is encrypted using Triple-DES or AES encryption. All messages remain encrypted along the entire path from source to destination. There is no staging location where the message is decrypted and encrypted again. All communications between the BlackBerry Enterprise Server and the wireless network are fully protected from unwanted third parties.

Management

Please detail the handheld management features available from your product or from products available from your company. If no product is available, please detail if any products are available from partner vendors. If management features are available as a separate product, please detail the change in the price defined above, if any.

Answer Guidance

Reason For Question

When companies start to load corporate data (like e-mail) onto their handhelds, it's imperative that these handhelds be able to be managed from the IT department. We are curious to know if we will need to implement a separate management solution or if we can leverage management features from our mobile e-mail investment.

Mandatory Response Format:

Word count: Not to exceed three pages

When NWC adopts the BlackBerry wireless solution, you will also be inheriting comprehensive IT administration and management offerings. The BlackBerry Enterprise Solution has been designed from the ground up to deliver a lower overall Total Cost of Ownership (TCO) for your mobility solution. One of the key elements of this lower TCO is with the unquestionable best of breed manageability of the BlackBerry solution.

The BlackBerry solution is the only offering that is delivered as a complete solution – this includes the device hardware, the device software, and the enterprise middleware. Also bundled into the overall solution are the wireless transport, the security elements and all aspects of BlackBerry administration.

A single management console is provided in order to control and manage the entire system. This includes Over-the-Air (OTA) provisioning, support, and device application updates.

Some key tasks that IT Managers can perform easily in the BlackBerry environment are as follows:

- Wirelessly activate, manage and support user devices
- Comprehensively control user devices with IT policy (there are now over 380 different IT policies that can be applied within the BlackBerry Enterprise Server):
  - Including phone, SMS, and PIN to PIN logging to provide a better understanding of how the various modes of communications are being applied in the enterprise
- Apply global, group or user settings and policies
- Track and report device settings & loaded 3rd Party applications

With the BlackBerry Enterprise Solution, organizations can benefit from deployment and management features that simplify its administration.

- Role- and group-based administration capabilities — reduce security and operational risks and administrative overhead by delegating permissions by role and creating administrative user groups.
- Over-the-air wireless IT policy enforcement — provides a fast, cost-effective method for supporting users and managing corporate policies remotely so users don't have to go without their devices and IT does not have to have devices in hand to make changes.
- Track key device statistics — easily monitor third party applications loaded, IT policies applied, device models, PIN, software versions and serial numbers. Thresholds can be set in order to automate monitoring of the BlackBerry deployment.

- Remote BlackBerry Enterprise Server and network management — manage the BlackBerry Enterprise Solution and network infrastructure from wireless devices with available third party applications.

All of these IT Administration and Manageability features are inherent in the BlackBerry Enterprise Server product and pricing – no additional modules are required - no third party applications are required.

The complete power of managing the BlackBerry solution is in the hands of NWC's IT group. The following are the major categories of items that can be managed:

- Controlling which BlackBerry devices or device types can connect to the BlackBerry Enterprise Server
- Controlling the behavior of BlackBerry devices and BlackBerry Desktop Software
- Controlling custom applications via Application Control Policy
- Assigning an IT policy to a user account or group
- Managing IT policies by customizing beyond the default template

In addition to supporting native BlackBerry applications, IT Administrators can manage the additional applications that are typically an important part of a BlackBerry deployment. The various tasks for the IT Administrator include:

- Creating and assigning Software Configurations
- Making applications available to users
- Sending applications to BlackBerry devices over the wireless network

Managing a large number of BlackBerry smartphones would be challenging if RIM did not build in the key manageability aspects into the solution. For example, reclaiming or controlling any lost or stolen devices with sensitive company data. RIM has provided a vast set of tools that allow IT Administrators to remotely:

- Load owner and contact information onto the display of BlackBerry smartphones
- Protecting lost or stolen BlackBerry smartphones – devices can be wiped clean via over the air technologies to help ensure that sensitive company data is not compromised
- Issuing existing BlackBerry smartphones to new users

The BlackBerry solution also provides the capability to customize BlackBerry for the users including:

- Managing message redirection – folder by folder
- Applying global filters
- Managing wireless message reconciliation
- Enforcing secure messaging using classifications
- Using signatures and disclaimers in messages
- Managing the wireless backup and restore of organizer data
- Setting address book fields for synchronization and lookups
- Sending All Point Bulletin or individual messages to users

Attachments within emails are a critical element in business. Therefore, RIM has designed attachment administration into the overall manageability offer including:

- Allowing users to download full attachment only on demand
- Controlling how the BlackBerry Attachment Service converts attachments
- Configuring support for attachment file formats
- Controlling attachment file sizes to minimize conversion resource requirements
- Controlling attachment file sizes to minimize upload resource requirements

BlackBerry provides a number of options to customize the access to enterprise applications. These IT policies are key as more users grow beyond email usage and move into the Internet applications space. Examples of these options include:

- Customize how BlackBerry devices authenticate with web servers
- Restricting users' access to web content
- Restricting user access to types of media
- Control how the BlackBerry MDS Connection Service manages web requests from BlackBerry devices
- Permitting push applications to make trusted connections to the BlackBerry MDS Connection Service
- Customizing how applications make trusted connections to web servers
- Restricting the resources that push applications can access
- Managing push application requests
- Configure how the BlackBerry MDS Connection Service connects to BlackBerry devices

It is clear that the manageability of a BlackBerry solution and the multitude of BlackBerry devices is much simpler with all of the administration features built into the RIM solution. A key consideration is that no third party applications or modules are required in order to achieve the level of manageability of BlackBerry – this cannot be said of competitive solutions.

Application Support

Please detail how NWC Inc. can leverage your company to help us mobilize applications

Answer Guidance

Reason For Question

Mobile e-mail is a good way to get our foot in the door to create a larger mobile applications strategy. We are interested in ways we can create CRM, field force automation and other mobile applications for our company. We are thus interested in understanding how we can

Mandatory Response Format:

Word count: Not to exceed four pages. Please detail products available from your company and how they help create mobile applications. Please also detail any mobile application companies you are partnered with.

The BlackBerry Enterprise Solution is bundled with the BlackBerry Mobile Data System (MDS), which is an application development framework that provides the tools required to build and deploy wireless applications. It allows organizations to quickly create their own corporate applications that can securely access applications and databases behind the corporate firewall, and it allows Independent Software Vendors (ISV's) and System Integrators (SI's) to create powerful wireless solutions for corporations. Note that RIM's own Professional Services can also help integrate wireless application solutions for customers.

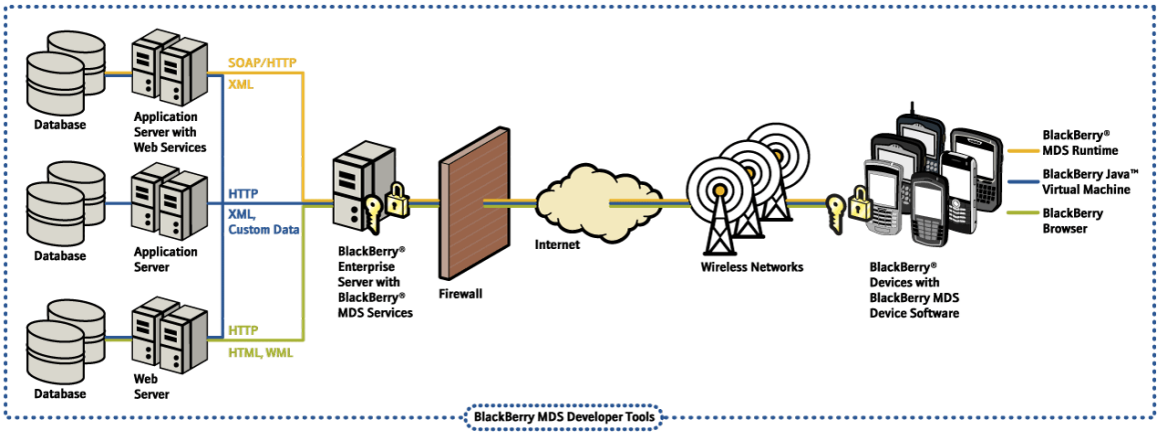
Of the over 100,000 BlackBerry Enterprise Servers in-market today, over 70% leverage MDS services in some manner. Many companies do in fact get their "foot in the door" with mobile email, and then quickly progress to implementing mobile applications, many of which have tremendous utility for the users, and a compelling ROI for the corporation. There are currently over 600 enterprise ISVs (Independent Software Vendors) building several thousand mobile applications for the BlackBerry eco-system, demonstrating the maturity and robustness of MDS.

The following chart shows a sample of the BlackBerry partners – as can be seen from the chart there are a wide variety of application providers who provide robust and industry-leading applications for the various industry verticals and for various industry applications. Many of the largest, back-end systems that corporations throughout the world depend upon to run their businesses, have been BlackBerry-enabled.

From an industry perspective, the BlackBerry partner community is also very strong providing solutions for verticals such as Financial, Insurance, Government and Public Sector, Healthcare among others:

Mobile Data System Architecture

Even if NWC decides to make use of 3rd party wireless applications, it is important to understand the architecture, functionality, manageability, and development tools that provide such a compelling development platform. The architecture is outlined in the below diagram:



Application Development Platform

Leveraging the Java ME client platform on the smartphone, BlackBerry MDS provides flexibility by enabling three different application development environments:

1) **Browser model – BlackBerry MDS browser applications** - To provide mobile access to intranet content and to create web-based applications that BlackBerry users can access over the wireless network through the BlackBerry Browser, the recommendation is to use existing web content development tools. Extend existing web-based applications over the wireless network with little custom development.
2) **Rapid Development Model** – **BlackBerry MDS Runtime Applications** - To create lightweight forms-based applications that provide mobile access to enterprise web services, it is recommended to use the BlackBerry MDS Studio, or the BlackBerry Plug-in for Microsoft Visual Studio . The BlackBerry MDS Studio is a powerful visual application design and assembly tool that enables application developers to quickly create rich-client applications that integrate with enterprise web services using a component-based drag-and-drop approach. Application developers can create robust functionality without Java programming using the BlackBerry MDS Studio or the BlackBerry Plug-in for Microsoft Visual Studio.
3) **Rich Java Client model** – **BlackBerry MDS Java Applications** - Application developers can create custom Java ME applications with sophisticated user interfaces for data entry and searching, multithreading, internationalization, network communication, and local data storage. Application developers can also create custom applications that integrate tightly with core BlackBerry device programs, such as the messages list, personal information management (PIM) programs, phone, and browser. In addition to the BlackBerry JDE, RIM supports industry-standard application development platforms including Eclipse and Microsoft Visual Studio .

One of the most important aspects of MDS is its ability to simplify application development over the wireless network by making the complexities of wireless networking transparent to application developers. The specific elements that developers do not need to rebuild from scratch, and do not require third party components are:

- **Corporate Connectivity** – As applications and content typically reside on servers behind the corporate firewall, the BlackBerry MDS Services manage those connections between the application and content servers, and BlackBerry smartphones using industry-standard communication protocols, namely: Simple Object Access Protocol (SOAP) and HTTP, Custom data and HTTP, Extensible Markup Language (XML) and HTTP, HTML and HTTP, Wireless Markup Language (WML) and HTTP.
- **Security** - Communication between BlackBerry smartphones and the BlackBerry Enterprise Server in the corporate network is encrypted using Triple Data Encryption

Standard (Triple DES) or Advanced Encryption Standard (AES). This encrypted communication channel is leveraged by BlackBerry MDS applications. Security standards that are supported include but are not limited to Transfer Layer Security (TLS), Secure Sockets Layer (SSL), Secure Multipurpose Internet Mail Extensions (S/MIME), IT security policies, code signing, and certificates.

- **Data Push** - The architecture that is used for BlackBerry wireless email is also available for transferring custom wireless application data via BlackBerry MDS, which can retrieve content from corporate web servers, application servers, or databases, and then send content proactively to BlackBerry smartphone users.
- **Wireless Interoperability** - The BlackBerry MDS solution provides connectivity to multiple wireless networks globally on a common architecture. This is an important consideration for NWC as your organization looks to grow internationally in the upcoming years.

Application Management: System administrators can use centralized tools to wirelessly deploy third party applications or NWC-developed applications to specific BlackBerry users. For example, applications on specific BlackBerry user's smartphones can be limited to a set of approved applications, or specific applications can be black-listed, or applications can be disallowed completely,

In summary, RIM provides a robust, extensible, and secure development and deployment platform for wireless applications. It abstracts the complexity of developing wireless applications, offers a choice of industry-standard development tools, and provides IT Administrators with full control over the deployment of applications to users. For corporations who do not wish to create their own applications, the BlackBerry Mobile Data (MDS) platform has spawned 1000's of enterprise-focused applications developed by third parties offering an extremely broad set of applications, most of which securely access business-critical data from behind the corporate firewall. Many companies have documented significant return on investments when critical information reaches or is submitted by employees in an accurate and timely manner.

Geographic Coverage

Please detail the countries your product works in.

Answer Guidance

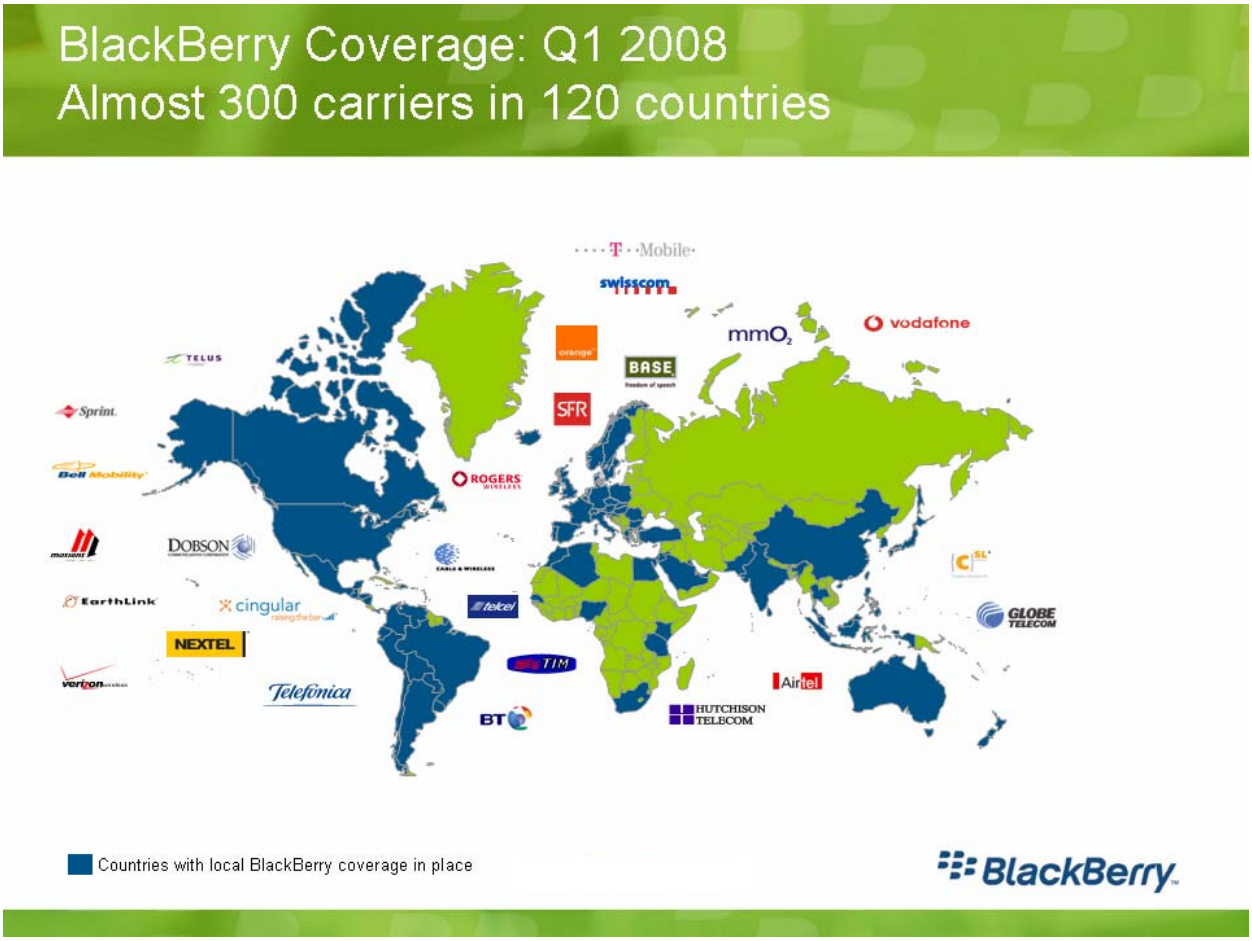
Reason For Question

As NWC Inc looks to expand globally, we want to understand where your mobile e-mail product will work.

Mandatory Response Format:

Word count: Not to exceed one page, a chart is acceptable to answer this coverage

BlackBerry networks operate all over the world. The BlackBerry solution has now been deployed in all the major continents, in over 120 countries and through over 300 Carriers.



BlackBerry smart phones operate on the following cellular networks:

- CDMA2000® 1X Ev-DO Networks
- DataTAC® Network
- GSM™/GPRS/EDGE Networks
- Mike™ Network
- Mobitex Networks
- Nextel® Network

- Wireless Local Area Networks (based upon available WiFi in the BlackBerry smartphones and BlackBerry Enterprise Server)

The implication is that an international deployment of a BlackBerry solution will be easily accomplished by NWC. Since RIM has established relationships with over 300 carriers around the world, NWC will be able to quickly find the right partnership when you are ready to grow globally.

In addition to the vast global coverage for the BlackBerry solution, RIM also has implemented an overall wireless workflow solution that provides a much easier global deployment for companies like NWC. NWC can grow globally and still be able to leverage the key strengths that a BlackBerry solution provides including security, usability, availability, application development and deployment, and an industry-leading return on investment.

The BlackBerry architecture includes a Network Operations Center (NOC). One of the key advantages of a NOC-based architecture in relation to geographically dispersed organization is the enhancement of seamless data roaming around the world. The BlackBerry smartphone will be able to communicate with the BlackBerry Enterprise Server regardless of which of the 300+ networks RIM supports. A wireless solution model does not need to be re-created in each country that NWC enters. This in turn helps NWC rapidly roll out the BlackBerry solution around the world while ensuring that the overall Total Cost of Ownership is controlled.

Competitive Analysis

Please detail how your product compares, and what advantages it has, against your competition. Consider competing companies to be those on the right hand side of Gartner's mobile e-mail magic quadrant.

Answer Guidance

Reason For Question

We want to understand how vendors see themselves and how their product stacks up against competing products.

Mandatory Response Format:

Word count: Not to exceed five pages.

When evaluating the alternative solutions RIM encourages NWC to consider the following:

BlackBerry provides a complete, optimized, secure, manageable and extensible end-to-end solution. A full suite of deployment, management, and security tools are included in the core BlackBerry Enterprise Server offering at no additional cost, as is support for secure browsing, applications development and transport. In contrast, competing solutions may only include access to some data (ex. email and PIM) with a minimal set of security and management policies included. Often with other solutions if users want superior manageability, the ability secure devices, protect against viruses, securely browse the Intranet, and/or access applications, etc., they must purchase additional servers/software in order to match the features that come included in with the BlackBerry Enterprise Solution. These third party management applications tend to not be as tightly integrated with the mobile solution as the BlackBerry management component.

Also unlike BlackBerry, support for client-based applications (versus simple browsing applications) is also not available in some of other offerings on the market today; as well as other BlackBerry functionality such as PBX integration, which taken together, greatly impact the ROI comparison in favour of BlackBerry.

Some alternative solutions offer "direct connection" architecture (i.e. with no NOC) – with this type of architecture the device is often responsible for opening and maintaining a connection to the back-end server(s) via a triggered poke and pull method, which is not a true "push" solution. In order to accomplish this, a firewall port must be opened and configured to allow inbound traffic, which raises security concerns. This type of communication model also tends to have a detrimental effect on the battery life of the handsets. The inefficiencies in compressing and optimizing data traffic also adversely affects battery life while at the same time increasing wireless data consumption and costs.

The BlackBerry solution was designed from the ground up for wireless, and offers efficient use of wireless data bandwidth and longer battery life. For example, file attachments sent to a BlackBerry smartphone are rendered and compressed in order to minimize bandwidth requirements and maximize efficiency in transport. Sending a typical Microsoft Word document as an attachment to a smartphone via the BlackBerry solution can reduce the size of the document to about 11% of the original file size, whereas some competing solutions often send slightly more data wirelessly than the original size of the file.

The BlackBerry Mobile Data Service also uniquely abstracts a lot of the complexity of "wireless" so that developers can focus on the application versus the intricacies of wireless, push, or security. The BlackBerry Mobile Data Service is bundled with the BlackBerry Enterprise Server, and no additional 3rd party servers or software is required in order to enable applications access to behind the corporate firewall. RIM offers multiple development tools and connection choices for developers creating software for BlackBerry.

RIM has built all elements of the solution: smartphones, client platform, and middleware (BlackBerry NOC, BlackBerry Enterprise Server). This has enabled performance, manageability, reliability and security advantages over the competition, and ultimately a superior end-user experience. Many of these key optimizations cannot be achieved without complete control over all elements of the wireless solution. Finally, unlike many competitors, by owning the end-to-end solution RIM is able to offer one-stop and comprehensive technical support.

The BlackBerry Advantage

- Leaders In Innovation
  - A broad set of firsts in the wireless industry
- Solution Depth
  - Simultaneous excellence in hardware, software, services
- Superior Wireless Performance
  - Built from the ground up for wireless data
- User Experience
  - A device experience that is uniquely compelling to end users
- Value
  - Most complete and functional solution for the same or lower cost
- Leading Edge Wireless Applications
  - Optimized system for all types of wireless data
- Manageability and Control
  - Engineered for the needs of IT managers
- Security
  - No other solution comes close

Leaders in Innovation

Technical Leadership

- Almost $75 million spent on R&D investment in the most recent quarter alone.
- Market capitalization of more than $45 billion, a strong balance sheet, and rapid revenue and profit growth enables continuing strong investment in R&D

Market Leadership

- BlackBerry is the de facto standard for wireless data products, and the benchmark for all smartphones
- Over 100 “BlackBerry Killers” have been launched over the years, without success
- For hardware and software, the product that improves on BlackBerry is the next, more innovative, BlackBerry

Solution Depth

Simultaneous excellence in hardware, software, and services

- BlackBerry designed from its inception as a complete end-to-end solution (devices, software, middleware, NOC)
- Support for all major email environments
- Enterprise application support, whether extending, building or buying
- Solutions for a variety of market segments: Hosted BlackBerry Enterprise Server, BlackBerry Enterprise Server for MDS Applications, SME BlackBerry Enterprise Server, etc.
- Devices in a variety of form factors and feature sets for different mobile user and IT requirements
- Support for third-party device platforms

Superior Wireless Performance

Built from the ground up for wireless data

- BlackBerry works in harmony with carrier networks to provide superior wireless performance

- Compression of messages, attachments, Web pages, and application data to minimize wireless data consumption
- BlackBerry is 8 to 10 times more efficient than other competitive solutions.
    - An independent third party consultant, Rysavy Research, recently performed a detailed analysis on wireless bandwidth consumed and determined that a BlackBerry deployment always uses significantly less bandwidth than a competitive deployment. This translates into lower data consumption for NWC and therefore results in lower fees paid to the wireless carrier.
- BlackBerry wireless efficiency promotes lower bandwidth requirements resulting in:
    - Faster data download times
    - Better device battery life
    - Lower wireless service costs, particularly data roaming charges
    - Better connection stability and reliability
    - Excellent end user experience

User Experience
A device experience that is uniquely compelling to end users

- Iconic designs
- Superior ergonomics
- Robust and powerful feature set
- High quality
- Durable
- Exceptional battery life
- Intuitive user interface
- Responsive, stable OS
- Fast, reliable data delivery

Transparent and predictable TCO

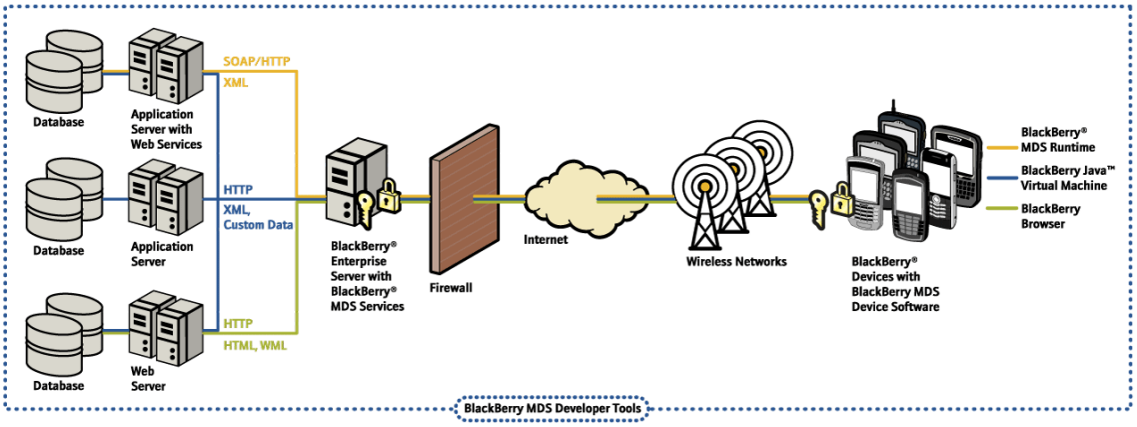
- Known costs for hardware and software
- Known wireless data costs
- Known support costs

Value
Proven and demonstrable ROI

- Average end user converts 60 minutes of downtime into productive time per day
- Average BlackBerry user reports that BlackBerry increases the efficiency of the teams that they work with by 38%, equating to over US$28,000 per BlackBerry user per year based on international productivity per employee data
- BlackBerry Net TCO per user totals US$1315
- BlackBerry ROI is conservatively calculated at a minimum of 238%, for a payback period of 154 days

Leading Edge Wireless Applications
BlackBerry is an optimized system for all kinds of enterprise wireless data

- Open, standards-based approach
- Choice of delivery model and transport
- Supports a variety of development environments; 600+ and growing developer community
- Applications leverage the same transport, security, and management capabilities as email



Manageability and Control
Engineered for the needs of IT managers

- BlackBerry single-vendor wireless solution: devices, software and enterprise middleware
- Wireless transport, security and administration are all included in one product
- Robust IT control for advanced solution customization, and exceptional solution uptime
- Single management console controls the entire system: OTA provisioning, support, updates
- BlackBerry provides one-stop, take charge, no worry support

Security
Robust end-to-end security model covers devices, software and data

- Used by some of the world's most security-conscious organizations
- Comprehensive suite of security policies for unsurpassed IT control and customization
- Unique architecture guards against malware and hacker intrusion
- One outbound trusted connection protects corporate firewall

APPROVED

United Kingdom
CAPS Certified by CESG

Austria
Approved by A-SIT

New Zealand
Approved by GCSB

United States
FIPS 140-2 Validated by NIST/CSE

Australia
Approved by DSD

Netherlands
Approval by DTO

Canada
FIPS 140-2 by NIST/CSE

NATO
Approved For *NATO RESTRICTED* Communications

IN PROGRESS

Canada
In progress For EAL-2+ Common Criteria

Germany
Full Security Assessment By Fraunhofer SIT

Germany
Applied for Common Criteria recognition with BSI

United States
Using Coverity tool for automated source code analysis

Only BlackBerry Is a BlackBerry
Competitors may emulate certain features of BlackBerry, but:

- BlackBerry is highly evolved – it has many features that other products miss
- No competitive solution is as complete as BlackBerry

- No one provides a better total wireless experience
- No competitor has adopted RIM's approach of pursuing simultaneous excellence in hardware, software and service
- No competitor has invested as much time and resources to perfect a wireless solution and its nuances

Standards-based Platform:
The BlackBerry solution is a standards-based solution:

- It integrates with three leading mail platforms representing the vast majority of the enterprise email market.
- In addition to BlackBerry smartphones, the solution works on multiple handsets and operating systems via the BlackBerry Connect program.
- A rich set of Java API's are enabled on the handset for 3rd party developers