

BlackBerry Enterprise Server Resource Kit

Version: 5.0 | Service Pack: 1

Installation Guide

Contents

1	Overview	3
	Download options	3
	BlackBerry Enterprise Server User Administration Tool	3
	BlackBerry Analysis, Monitoring, and Troubleshooting Tools	4
	Available BlackBerry Analysis, Monitoring, and Troubleshooting Tools	4
	Log analysis tools	5
2	Requirements	7
	System requirements: BlackBerry Enterprise Server User Administration Tool	7
	System requirements: BlackBerry Analysis, Monitoring, and Troubleshooting Tools	8
	System requirements: BlackBerry Application Reporting Tool	8
	System requirements: BlackBerry Domain Administration History Reporting Tool	9
	System requirements: BlackBerry Message Receipt Confirmation Tool	9
	System requirements: BlackBerry System Log Monitoring and Reporting Tool	10
	System requirements: Log analysis tools	10
	System requirements: BlackBerry Enterprise Server Log Monitoring Tool	11
3	Installing a BlackBerry Enterprise Server Resource Kit tool	12
	Installation files	12
	Install the BlackBerry Enterprise Server User Administration Tool	13
	Verify that the BlackBerry Enterprise Server User Administration Tool was installed correctly	13
	Install the BlackBerry Analysis, Monitoring, and Troubleshooting Tools	14
4	Upgrading from a previous version of a BlackBerry Enterprise Server Resource Kit tool	15
	Upgrading from a previous version of the BlackBerry Enterprise Server User Administration Tool	15
	Upgrading from a previous version of the BlackBerry Analysis, Monitoring, and Troubleshooting Tools	15
5	Troubleshooting	16
	Removing a BlackBerry Enterprise Server Resource Kit tool	16
	Remove the BlackBerry Enterprise Server User Administration Tool	16
	Remove the BlackBerry Analysis, Monitoring, and Troubleshooting Tools	16
6	Glossary	17
7	Provide feedback	18

8	Legal notice.....	19
---	-------------------	----

Overview

1

The BlackBerry® Enterprise Server Resource Kit is a collection of tools that can help you extend your ability to manage and monitor the BlackBerry® Enterprise Solution. You can download the BlackBerry Enterprise Server Resource Kit from www.blackberry.com/support/downloads.

The BlackBerry Enterprise Server Resource Kit contains the following tool packages:

- BlackBerry Enterprise Server User Administration Tool
- BlackBerry Analysis, Monitoring, and Troubleshooting Tools
- BlackBerry Enterprise Transporter

Download options

You have the following download options for the BlackBerry® Enterprise Server Resource Kit:

- You can download the BlackBerry Enterprise Server User Administration Tool only or the BlackBerry Enterprise Transporter only.
- You can download a setup application that you can use to install any of the BlackBerry Analysis, Monitoring, and Troubleshooting Tools.

BlackBerry Enterprise Server User Administration Tool

You can use the BlackBerry® Enterprise Server User Administration Tool to manage user accounts on the BlackBerry® Enterprise Server on a large scale. For example, you can add, find, move, and remove user accounts, or change user account configurations.

You can run the BlackBerry Enterprise Server User Administration Tool from a command prompt to perform BlackBerry Enterprise Server administration tasks or to gather management and monitoring information.

The BlackBerry Enterprise Server User Administration Tool connects to the BlackBerry Administration Service to retrieve information from and store information in the BlackBerry Configuration Database. If the BlackBerry Enterprise Server User Administration Tool is version 5.0 SP1 or later, you can use the BlackBerry Enterprise Server User Administration Tool with any version of the BlackBerry Enterprise Server that is version 5.0 SP1 or later.

The tool includes commands that are classified as server options or client options. Server options are commands that are dependent on the BlackBerry Enterprise Server version, not the version of the BlackBerry Enterprise Server User Administration Tool. If new server options are introduced in a new version of the BlackBerry Enterprise Server, you are not required to update the BlackBerry Enterprise Server User Administration Tool to the same version as the BlackBerry Enterprise Server to use the server options. Client options are commands that are dependent on the version of the BlackBerry Enterprise Server User Administration Tool. New client options are available only if you update to the latest version of the BlackBerry Enterprise Server User Administration Tool.

You can use the `-?` parameter to view the complete list of server options and client options that are available in the BlackBerry Enterprise Server User Administration Tool.

BlackBerry Analysis, Monitoring, and Troubleshooting Tools

You can use the BlackBerry® Analysis, Monitoring, and Troubleshooting Tools to streamline management tasks, monitor events, collect statistics, and troubleshoot issues with the BlackBerry® Enterprise Server components.

Available BlackBerry Analysis, Monitoring, and Troubleshooting Tools

Name	Description
BlackBerry® Application Reporting Tool (HHAppReport.exe)	This tool lists the applications that are installed in the BlackBerry Domain. You can use this tool to audit the BlackBerry Domain and find unapproved applications.
BlackBerry Domain Administration History Reporting Tool (AdminHistory.exe)	This tool reads the ServerConfigHistory table in the BlackBerry Configuration Database and displays configuration changes, such as newly added user accounts, in a .csv file. The tool records the date and time of each change and the name of the administrator who made the change.
BlackBerry IT Policy Import and Export Tool (ITPolicyImportExport.exe)	This tool exports IT policy information from a BlackBerry Configuration Database. The global IT policy rules are a specific set of IT policy rules that apply to all user accounts on a BlackBerry® Enterprise Server.
BlackBerry Message Receipt Confirmation Tool (MessageConfirmService.exe)	This tool verifies that the BlackBerry Enterprise Server is sending messages to BlackBerry devices. At an interval that you specify, the BlackBerry Message Receipt Confirmation Tool sends a message to the specified user account, monitors the status of that message, and checks for confirmation that the BlackBerry device receives the message.
BlackBerry System Log Monitoring and Reporting Tool (BESSysLog.exe)	This tool monitors the BlackBerry Enterprise Server log events as they are written to the log file. You can specify which BlackBerry Enterprise Server components to monitor, the events that the tool tracks, and the types of notifications and reports that the tool sends to administrators.
BlackBerry System Requirements Tool (BBCheck.exe)	This tool provides a set of tests that can help you determine whether you can successfully run a BlackBerry Enterprise Server component on a computer.

Log analysis tools

You can use the following log analysis tools to check the log files and create output files with information about user accounts, message flow, BlackBerry® Enterprise Server performance, or historical statistics, depending on the tool that you use.

Name	Description
BlackBerry Delayed Notifications Monitoring Tool (DelayedNotifications.exe)	<p>This tool detects when the BlackBerry Enterprise Server is no longer receiving notifications promptly for new email messages and calendar items.</p> <p>The tool analyzes the MAGT log file.</p> <p>You can use the tool in a Microsoft® Exchange environment only.</p>
BlackBerry Enterprise Server Log Monitoring Tool (LogMonitor.exe)	<p>This tool monitors the text that is written to the end of a text file, typically a log file. You can specify events by typing numeric event IDs or text strings at the command prompt or by using an input file. You can specify actions that the tool performs after it finds a value that meets the specified criteria.</p>
BlackBerry Historical Statistics Tool (HistoricalStats.exe)	<p>This tool provides statistics about use patterns for each user account for each day.</p> <p>The tool analyzes the MAGT and DISP log files.</p>
BlackBerry MAPI and CDO Error Monitoring Tool (MapiCdoErrors.exe)	<p>This tool identifies common MAPI and CDO errors and custom events.</p> <p>The tool analyzes the MAGT log file.</p> <p>You can use the tool in a Microsoft Exchange environment only.</p>
BlackBerry MDS Services Data Monitoring Tool (MDSPushvsPull.exe)	<p>This tool determines whether the BlackBerry MDS Connection Service processes more data from push applications or from BlackBerry® Browser requests.</p> <p>The tool analyzes the MDAT log file.</p>
BlackBerry Message Flow Reporting Tool (Messageflow.exe)	<p>This tool tracks the flow of messages from the messaging and collaboration server through the BlackBerry Enterprise Server to the BlackBerry device.</p> <p>The tool analyzes the MAGT, DISP, and ROUT log files.</p>
BlackBerry Message Pending Delivery Tool (Pending.exe)	<p>This tool tracks user accounts that have a pending message count that is higher than the pending message count that you specify.</p> <p>The tool analyzes the MAGT log file.</p>
BlackBerry Thread Analyzer Tool (NoResponseCheck.exe)	<p>This tool identifies threads that are reporting as nonresponsive and distinguishes true nonresponsive threads from slow threads.</p>

Name	Description
	The tool analyzes all BlackBerry log files except the MDAT and BlackBerry® Instant Messaging log files.
BlackBerry Usage Monitoring Tool (OutOfCoverage.exe)	This tool checks for BlackBerry devices that do not send or receive data in a specified period of time. The tool analyzes the DISP log file.
BlackBerry User Activity Reporting Tool (AvailIndex.exe)	This tool produces a snapshot report of user account activity over a period of days. The tool analyzes the MAGT log file. You can use the tool in a Microsoft Exchange environment only.
BlackBerry Calendar Synchronization Reporting Tool (CalSync.exe)	This tool collects data about the calendar synchronization process that you can turn on using the BlackBerry Enterprise Trait Tool. The tool analyzes the MAGT log file.

Requirements

2

System requirements: BlackBerry Enterprise Server User Administration Tool

Item	Requirement
operating system	<p>Any of the following 32-bit operating systems:</p> <ul style="list-style-type: none"> • Windows® XP Professional SP2 • Windows Server® 2000 SP4 • Windows Server 2003 SP1 or later • Windows Server 2003 R2 • Windows Server 2003 R2 SP2 • Windows Server 2008 <p>Any of the following 64-bit operating systems:</p> <ul style="list-style-type: none"> • Windows Server 2003 • Windows Server 2003 SP1 or later • Windows Server 2008
memory	minimum 2 GB of memory
browser	Windows® Internet Explorer® version 6.0 or version 7.0 with language preferences configured to display encoded web pages
BlackBerry® Administration Service	<p>The following conditions:</p> <ul style="list-style-type: none"> • connection from the BlackBerry Administration Service to the BlackBerry Enterprise Server User Administration Tool • the BlackBerry Enterprise Server User Administration Tool is compatible with BlackBerry® Enterprise Server 5.0 SP1 or later
Running the BlackBerry Enterprise Server User Administration Tool from a remote computer	In the BlackBerry Enterprise Server User Administration Tool 5.0 SP2 and later, running the BlackBerry Enterprise Server User Administration Tool from a remote computer using the UNC path is not supported. If you did not run the setup application for the tool on the computer, the computer might not have the security requirements to run the tool.

System requirements: BlackBerry Analysis, Monitoring, and Troubleshooting Tools

Item	Requirement
BlackBerry® Enterprise Server	You must install some of the BlackBerry® Analysis, Monitoring, and Troubleshooting Tools on the same computer as a BlackBerry® Enterprise Server component, as specified in the requirements for each tool. Running a tool can affect the performance of the BlackBerry Enterprise Server component.

System requirements: BlackBerry Application Reporting Tool

Item	Requirement
database management system for the BlackBerry Configuration Database	<p>Any of the following 32-bit database management systems:</p> <ul style="list-style-type: none">• MSDE 2000 SP3• Microsoft® SQL Server® 2000 SP3 or SP4• Microsoft SQL Server 2005• Microsoft SQL Server 2005 SP2• Microsoft SQL Server 2005 Express• Microsoft SQL Server 2005 Express SP2 <p>Any of the following 64-bit database management systems:</p> <ul style="list-style-type: none">• Microsoft SQL Server 2005• Microsoft SQL Server 2005 SP2

System requirements: BlackBerry Domain Administration History Reporting Tool

Item	Requirement
BlackBerry® Enterprise Server	You must run the BlackBerry Domain Administration History Reporting Tool on a computer that is separate from the BlackBerry Enterprise Server components.
database management system for the BlackBerry Configuration Database	<p>Any of the following 32-bit database management systems:</p> <ul style="list-style-type: none"> • MSDE 2000 SP3 • Microsoft® SQL Server® 2000 SP3 or SP4 • Microsoft SQL Server 2005 • Microsoft SQL Server 2005 SP2 • Microsoft SQL Server 2005 Express • Microsoft SQL Server 2005 Express SP2 <p>Any of the following 64-bit database management systems:</p> <ul style="list-style-type: none"> • Microsoft SQL Server 2005 • Microsoft SQL Server 2005 SP2
BlackBerry Configuration Database	connection from the BlackBerry Configuration Database to the BlackBerry Domain Administration History Reporting Tool

System requirements: BlackBerry Message Receipt Confirmation Tool

Item	Requirement
BlackBerry® Enterprise Server	You must run the BlackBerry Message Receipt Confirmation Tool on a computer that is separate from the BlackBerry Enterprise Server components.
BlackBerry Message Receipt Confirmation Tool service and client	You must run the BlackBerry Message Receipt Confirmation Tool service (messageconfirmservice.exe) and the BlackBerry Message Receipt Confirmation Tool client (messageconfirmconfig.exe) on the same computer.

System requirements: BlackBerry System Log Monitoring and Reporting Tool

Item	Requirement
BlackBerry® Enterprise Server	You must run the BlackBerry System Log Monitoring and Reporting Tool on a computer that is separate from the computer or computers that host the BlackBerry Enterprise Server components.
multiple BlackBerry Enterprise Server platforms (optional)	In an environment that includes more than one BlackBerry Enterprise Server platform, the following conditions: <ul style="list-style-type: none"> • you must install and configure a separate copy of the BlackBerry System Log Monitoring and Reporting Tool for each platform • you can run only one instance of the BlackBerry System Log Monitoring and Reporting Tool on a computer
Windows® service	You must run the BlackBerry System Log Monitoring and Reporting Tool as a Windows service.
version compatibility	BESSysLog.exe and BESSysLogConfig.exe must be the same version and must be installed in the same folder on the same computer.
logging level	You must set the logging level for the log files for the BlackBerry Dispatcher and the BlackBerry Messaging Agent to a minimum level of 3.

System requirements: Log analysis tools

Item	Requirement
operating system	Any of the following 32-bit operating systems: <ul style="list-style-type: none"> • Windows® XP Professional SP2 • Windows Server® 2000 SP4 • Windows Server 2003 SP1 or later • Windows Server 2003 R2 • Windows Server 2003 R2 SP2 • Windows Server 2008 Any of the following 64-bit operating systems:

Item	Requirement
	<ul style="list-style-type: none"> Windows Server 2003 Windows Server 2003 SP1 or later Windows Server 2008
memory	minimum 2 GB of memory
disk space	The computer that you install the log analysis tools on must have a large volume of available disk space to accommodate the size of the log files for the BlackBerry® Enterprise Server components and the log analysis output files.
BlackBerry Enterprise Server	You must run the log analysis tools on a computer that is separate from the computers that host the BlackBerry Enterprise Server components.
BlackBerry Enterprise Server log files	You must store or copy the log files for the BlackBerry Enterprise Server components that you plan to analyze on the same computer as the log analysis tools.
version compatibility	The log analysis tools and the BlackBerry Enterprise Server components must be the same version.

System requirements: BlackBerry Enterprise Server Log Monitoring Tool

Item	Requirement
BlackBerry® Enterprise Server	You must run the BlackBerry Enterprise Server Log Monitoring Tool on the computer that hosts the BlackBerry Enterprise Server component.
log files	The BlackBerry Enterprise Server Log Monitoring Tool can monitor only one log file at a time.

Installing a BlackBerry Enterprise Server Resource Kit tool 3

Installation files

Tool	Installation file name	Environment
BlackBerry® Enterprise Server User Administration Tool	• brk- besuseradminclient<version>.msi	All
BlackBerry Enterprise Transporter	brk- bbenterprisetransporter<version>.msi	All
BlackBerry Application Reporting Tool	brk-amt<version>.msi	All
BlackBerry Domain Administration History Reporting Tool	brk-amt<version>.msi	All
BlackBerry IT Policy Import and Export Tool	brk-amt<version>.msi	All
BlackBerry Message Receipt Confirmation Tool	brk-amt<version>.msi	All
BlackBerry System Log Monitoring and Reporting Tool	brk-amt<version>.msi	All
BlackBerry System Requirements Tool	brk-amt<version>.msi	All
Log analysis tools		
BlackBerry Delayed Notifications Monitoring Tool	brk-amt<version>.msi	Microsoft Exchange only
BlackBerry Enterprise Server Log Monitoring Tool	brk-amt<version>.msi	All
BlackBerry Historical Statistics Tool	brk-amt<version>.msi	All
BlackBerry MAPI and CDO Error Monitoring Tool	brk-amt<version>.msi	Microsoft Exchange only
BlackBerry MDS Services Data Monitoring Tool	brk-amt<version>.msi	All
BlackBerry Message Flow Reporting Tool	brk-amt<version>.msi	All
BlackBerry Message Pending Delivery Tool	brk-amt<version>.msi	All
BlackBerry Thread Analyzer Tool	brk-amt<version>.msi	All
BlackBerry Usage Monitoring Tool	brk-amt<version>.msi	All
BlackBerry User Activity Reporting Tool	brk-amt<version>.msi	Microsoft Exchange only

Install the BlackBerry Enterprise Server User Administration Tool

1. On the computer where you plan to install the BlackBerry Enterprise Server User Administration Tool, create a folder to store the installation files.
2. In a browser, visit www.blackberry.com/support/downloads, and navigate to the **Downloads** area for the BlackBerry® Enterprise Server Resource Kit.
3. Download the installation package for the version of the BlackBerry Enterprise Server User Administration Tool that is compatible with your organization's version of the BlackBerry® Enterprise Server.
4. Extract the contents of the installation package to the folder you created.
5. Double-click the .msi file for the tool.
6. Complete the instructions on the screen.

After you finish:

- Verify that the BlackBerry Enterprise Server User Administration Tool was installed correctly.
- If you specified incorrect information when you ran the setup application for the BlackBerry Enterprise Server User Administration Tool, you can edit the information in the BESUserAdminClient.exe.config file.

Verify that the BlackBerry Enterprise Server User Administration Tool was installed correctly

Before you begin:

Verify that you have the required permissions to manage users in the BlackBerry® Administration Service.

1. On the computer that hosts the BlackBerry Enterprise Server User Administration Tool, on the taskbar, click **Start > All Programs > BlackBerry Enterprise Server Resource Kit > BlackBerry Enterprise Server User Administration Tool**.
2. Click **BlackBerry Enterprise Server User Administration Tool**.
3. Using the BlackBerry Enterprise Server User Administration Tool, add a user account to the BlackBerry® Enterprise Server. For instructions on how to perform this task, visit www.blackberry.com/go/serverdocs to read the *BlackBerry Enterprise Server User Administration Tool Administration Guide*.
4. In the BlackBerry Administration Service, verify that the user account was added correctly and that you can perform all the tasks for managing the user account in the BlackBerry Administration Service. These tasks include adding the user account to a group, assigning an IT policy or a software configuration to the user account, and assigning a BlackBerry device to the user account.
For instructions on how to perform these tasks, visit www.blackberry.com/go/serverdocs to read the *BlackBerry Enterprise Server Administration Guide*.

Install the BlackBerry Analysis, Monitoring, and Troubleshooting Tools

You can download a setup application that you can use to install any of the BlackBerry Analysis, Monitoring, and Troubleshooting Tools.

1. In a browser, visit www.blackberry.com/support/downloads, and navigate to the **Downloads** area for the BlackBerry Enterprise Server Resource Kit.
2. Download the latest installation package of the BlackBerry Analysis, Monitoring, and Troubleshooting Tools.
3. Extract the contents of the installation package.
4. Run the setup application.
5. Complete the instructions on the screen.

Upgrading from a previous version of a BlackBerry Enterprise Server Resource Kit tool

4

Upgrading from a previous version of the BlackBerry Enterprise Server User Administration Tool

If the BlackBerry® Enterprise Server User Administration Tool is already installed in your environment, you do not have to remove it before you install a new version of the tool.

The installation process does not overwrite previous versions of the tool. As a result, if your environment includes a previous version of the BlackBerry® Enterprise Server, you can maintain the corresponding version of the BlackBerry Enterprise Server User Administration Tool.

Upgrading from a previous version of the BlackBerry Analysis, Monitoring, and Troubleshooting Tools

You can install some of the BlackBerry® Analysis, Monitoring, and Troubleshooting Tools in the same environment as a previous version of the tools.

Except for the BlackBerry System Log Monitoring and Reporting Tool and the BlackBerry Message Receipt Confirmation Tool, the installation process does not overwrite previous versions of tools.

As a result, if your environment includes a previous version of the BlackBerry® Enterprise Server, you can maintain the corresponding versions of the remaining BlackBerry Analysis, Monitoring, and Troubleshooting Tools.

Troubleshooting

5

Removing a BlackBerry Enterprise Server Resource Kit tool

Remove the BlackBerry Enterprise Server User Administration Tool

1. On the computer that hosts the BlackBerry® Enterprise Server User Administration Tool, on the taskbar, click **Start > Program Files > BlackBerry Enterprise Server Resource Kit > BlackBerry Enterprise Server User Administration Tool Client**.
2. Click **Uninstall**.
3. Complete the instructions on the screen.

Remove the BlackBerry Analysis, Monitoring, and Troubleshooting Tools

1. On the computer that hosts the BlackBerry® Analysis, Monitoring, and Troubleshooting Tools, on the taskbar, click **Program Files > BlackBerry Enterprise Server Resource Kit > BlackBerry Analysis Monitoring and Troubleshooting Tools > Uninstall or Modify Installation**.
2. Complete the instructions on the screen.

Glossary

6

BlackBerry Enterprise Server databases

The BlackBerry® Enterprise Server databases are the BlackBerry Configuration Database, the BlackBerry MDS Integration Service database, and the BlackBerry Monitoring Service database.

BlackBerry Domain

A BlackBerry Domain consists of the BlackBerry Configuration Database with its users and any BlackBerry® Enterprise Server instances that connect to it.

BlackBerry MDS

BlackBerry® Mobile Data System

CDO

Collaboration Data Object

.csv

comma-separated values

DNS

Domain Name System

JRE

Java® Runtime Environment

MAPI

Messaging Application Programming Interface

messaging server

A messaging server sends and processes messages and provides collaboration services, such as updating and communicating calendar and address book information.

SSL

Secure Sockets Layer

Provide feedback

7

To provide feedback on this deliverable, visit www.blackberry.com/docsfeedback.

Legal notice

8

©2010 Research In Motion Limited. All rights reserved. BlackBerry®, RIM®, Research In Motion®, SureType®, SurePress™ and related trademarks, names, and logos are the property of Research In Motion Limited and are registered and/or used in the U.S. and countries around the world.

IBM, Domino, and Lotus are trademarks of International Business Machines Corporation. Java and JRE are trademarks of Oracle America, Inc. Microsoft, Internet Explorer, SQL Server, Windows, and Windows Server are trademarks of Microsoft Corporation. All other trademarks are the property of their respective owners.

This documentation including all documentation incorporated by reference herein such as documentation provided or made available at www.blackberry.com/go/docs is provided or made accessible "AS IS" and "AS AVAILABLE" and without condition, endorsement, guarantee, representation, or warranty of any kind by Research In Motion Limited and its affiliated companies ("RIM") and RIM assumes no responsibility for any typographical, technical, or other inaccuracies, errors, or omissions in this documentation. In order to protect RIM proprietary and confidential information and/or trade secrets, this documentation may describe some aspects of RIM technology in generalized terms. RIM reserves the right to periodically change information that is contained in this documentation; however, RIM makes no commitment to provide any such changes, updates, enhancements, or other additions to this documentation to you in a timely manner or at all.

This documentation might contain references to third-party sources of information, hardware or software, products or services including components and content such as content protected by copyright and/or third-party web sites (collectively the "Third Party Products and Services"). RIM does not control, and is not responsible for, any Third Party Products and Services including, without limitation the content, accuracy, copyright compliance, compatibility, performance, trustworthiness, legality, decency, links, or any other aspect of Third Party Products and Services. The inclusion of a reference to Third Party Products and Services in this documentation does not imply endorsement by RIM of the Third Party Products and Services or the third party in any way.

EXCEPT TO THE EXTENT SPECIFICALLY PROHIBITED BY APPLICABLE LAW IN YOUR JURISDICTION, ALL CONDITIONS, ENDORSEMENTS, GUARANTEES, REPRESENTATIONS, OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY CONDITIONS, ENDORSEMENTS, GUARANTEES, REPRESENTATIONS OR WARRANTIES OF DURABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, MERCHANTABILITY, NON-INFRINGEMENT, SATISFACTORY QUALITY, OR TITLE, OR ARISING FROM A STATUTE OR CUSTOM OR A COURSE OF DEALING OR USAGE OF TRADE, OR RELATED TO THE DOCUMENTATION OR ITS USE, OR PERFORMANCE OR NON-PERFORMANCE OF ANY SOFTWARE, HARDWARE, SERVICE, OR ANY THIRD PARTY PRODUCTS AND SERVICES REFERENCED HEREIN, ARE HEREBY EXCLUDED. YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY BY STATE OR PROVINCE. SOME JURISDICTIONS MAY NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES AND CONDITIONS. TO THE EXTENT PERMITTED BY LAW, ANY IMPLIED WARRANTIES OR CONDITIONS RELATING TO THE DOCUMENTATION TO THE EXTENT THEY CANNOT BE EXCLUDED AS SET OUT ABOVE, BUT CAN BE LIMITED, ARE HEREBY LIMITED TO NINETY (90) DAYS FROM THE DATE YOU FIRST ACQUIRED THE DOCUMENTATION OR THE ITEM THAT IS THE SUBJECT OF THE CLAIM.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW IN YOUR JURISDICTION, IN NO EVENT SHALL RIM BE LIABLE FOR ANY TYPE OF DAMAGES RELATED TO THIS DOCUMENTATION OR ITS USE, OR PERFORMANCE OR NON-PERFORMANCE OF ANY SOFTWARE, HARDWARE, SERVICE, OR ANY THIRD PARTY PRODUCTS AND SERVICES REFERENCED HEREIN INCLUDING WITHOUT LIMITATION ANY OF THE FOLLOWING DAMAGES: DIRECT, CONSEQUENTIAL, EXEMPLARY, INCIDENTAL, INDIRECT, SPECIAL, PUNITIVE, OR AGGRAVATED DAMAGES, DAMAGES FOR LOSS OF PROFITS OR REVENUES,

FAILURE TO REALIZE ANY EXPECTED SAVINGS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, LOSS OF BUSINESS OPPORTUNITY, OR CORRUPTION OR LOSS OF DATA, FAILURES TO TRANSMIT OR RECEIVE ANY DATA, PROBLEMS ASSOCIATED WITH ANY APPLICATIONS USED IN CONJUNCTION WITH RIM PRODUCTS OR SERVICES, DOWNTIME COSTS, LOSS OF THE USE OF RIM PRODUCTS OR SERVICES OR ANY PORTION THEREOF OR OF ANY AIRTIME SERVICES, COST OF SUBSTITUTE GOODS, COSTS OF COVER, FACILITIES OR SERVICES, COST OF CAPITAL, OR OTHER SIMILAR PECUNIARY LOSSES, WHETHER OR NOT SUCH DAMAGES WERE FORESEEN OR UNFORESEEN, AND EVEN IF RIM HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW IN YOUR JURISDICTION, RIM SHALL HAVE NO OTHER OBLIGATION, DUTY, OR LIABILITY WHATSOEVER IN CONTRACT, TORT, OR OTHERWISE TO YOU INCLUDING ANY LIABILITY FOR NEGLIGENCE OR STRICT LIABILITY.

THE LIMITATIONS, EXCLUSIONS, AND DISCLAIMERS HEREIN SHALL APPLY: (A) IRRESPECTIVE OF THE NATURE OF THE CAUSE OF ACTION, DEMAND, OR ACTION BY YOU INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY AND SHALL SURVIVE A FUNDAMENTAL BREACH OR BREACHES OR THE FAILURE OF THE ESSENTIAL PURPOSE OF THIS AGREEMENT OR OF ANY REMEDY CONTAINED HEREIN; AND (B) TO RIM AND ITS AFFILIATED COMPANIES, THEIR SUCCESSORS, ASSIGNS, AGENTS, SUPPLIERS (INCLUDING AIRTIME SERVICE PROVIDERS), AUTHORIZED RIM DISTRIBUTORS (ALSO INCLUDING AIRTIME SERVICE PROVIDERS) AND THEIR RESPECTIVE DIRECTORS, EMPLOYEES, AND INDEPENDENT CONTRACTORS.

IN ADDITION TO THE LIMITATIONS AND EXCLUSIONS SET OUT ABOVE, IN NO EVENT SHALL ANY DIRECTOR, EMPLOYEE, AGENT, DISTRIBUTOR, SUPPLIER, INDEPENDENT CONTRACTOR OF RIM OR ANY AFFILIATES OF RIM HAVE ANY LIABILITY ARISING FROM OR RELATED TO THE DOCUMENTATION.

Prior to subscribing for, installing, or using any Third Party Products and Services, it is your responsibility to ensure that your airtime service provider has agreed to support all of their features. Some airtime service providers might not offer Internet browsing functionality with a subscription to the BlackBerry® Internet Service. Check with your service provider for availability, roaming arrangements, service plans and features. Installation or use of Third Party Products and Services with RIM's products and services may require one or more patent, trademark, copyright, or other licenses in order to avoid infringement or violation of third party rights. You are solely responsible for determining whether to use Third Party Products and Services and if any third party licenses are required to do so. If required you are responsible for acquiring them. You should not install or use Third Party Products and Services until all necessary licenses have been acquired. Any Third Party Products and Services that are provided with RIM's products and services are provided as a convenience to you and are provided "AS IS" with no express or implied conditions, endorsements, guarantees, representations, or warranties of any kind by RIM and RIM assumes no liability whatsoever, in relation thereto. Your use of Third Party Products and Services shall be governed by and subject to you agreeing to the terms of separate licenses and other agreements applicable thereto with third parties, except to the extent expressly covered by a license or other agreement with RIM.

Certain features outlined in this documentation require a minimum version of BlackBerry® Enterprise Server, BlackBerry® Desktop Software, and/or BlackBerry® Device Software.

The terms of use of any RIM product or service are set out in a separate license or other agreement with RIM applicable thereto. NOTHING IN THIS DOCUMENTATION IS INTENDED TO SUPERSEDE ANY EXPRESS WRITTEN AGREEMENTS OR WARRANTIES PROVIDED BY RIM FOR PORTIONS OF ANY RIM PRODUCT OR SERVICE OTHER THAN THIS DOCUMENTATION.

Research In Motion Limited
295 Phillip Street

Waterloo, ON N2L 3W8
Canada

Research In Motion UK Limited
Centrum House
36 Station Road
Egham, Surrey TW20 9LF
United Kingdom

Published in Canada