BlackBerry Enterprise Server Express for Microsoft Exchange

Version: 5.0 | Service Pack: 2

System Requirements Reference Guide

::: BlackBerry.

Contents

Hardware requirements: BlackBerry Enterprise Server Express

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The following are requirements for a BlackBerry® Enterprise Server Express and the BlackBerry Enterprise Server Express components that you install on a single computer that uses Microsoft® Exchange. The requirements are for a BlackBerry Enterprise Server Express environment that includes users that receive 100 to 200 email messages each day.

You can improve the performance and reliability of the BlackBerry Enterprise Server Express by installing the BlackBerry Enterprise Server Express components on multiple computers. If you install all BlackBerry Enterprise Server Express components on the same computer as the messaging server, it is a best practice to support up to 75 users only on the BlackBerry Enterprise Server Express. If you want to support more than 75 users on the BlackBerry Enterprise Server Express, it is a best practice to install the BlackBerry Enterprise Server Express components on computers that are separate from the computer that hosts the messaging server.

If your BlackBerry Enterprise Server Express environment supports up to 1000 users, install the BlackBerry Configuration Database on a computer that is separate from the computer that hosts the BlackBerry Enterprise Server Express. If your BlackBerry Enterprise Server Express environment supports up to 2000 users, install the BlackBerry Configuration Database and the BlackBerry Administration Service on computers that are separate from the computer that hosts the BlackBerry Enterprise Server Express.

Item	Requirement
BlackBerry Enterprise Server Express that supports up to 75 users on the same server as Microsoft Exchange or Windows® Small Business Server	• Visit www.microsoft.com to see the requirements for Microsoft Exchange or Windows® Small Business Server • Add 1.5 GB memory for BlackBerry Enterprise Server Express services
BlackBerry Enterprise Server Express that supports up to 200 users	• Single processor, 2.0 GHz Intel® Xeon® (two processors recommended) • 2 GB of memory • 64-bit operating system: Two 64 GB drives (minimum), RAID 1 • 32-bit operating system: Two 36 GB drives (minimum), RAID 1
BlackBerry Enterprise Server Express that supports up to 500 users	• Two processors, 2.0 GHz Intel Xeon • 2 GB of memory • 64-bit operating system: Two 64 GB drives (minimum), RAID 1 • 32-bit operating system: Two 36 GB drives (minimum), RAID 1
BlackBerry Enterprise Server Express that supports up to 1000 users	• Two processors, 2.0 GHz Intel Xeon • 3 GB of memory • 64-bit operating system: Two 64 GB drives (minimum), RAID 1 • 32-bit operating system: Two 36 GB drives (minimum), RAID 1

Item	Requirement
BlackBerry Enterprise Server Express that supports up to 2000 users	• Two processors, 2.8 GHz Intel Xeon or two processors, 1.86 GHz Intel Xeon 5100 Series (Dual Core) • 6 GB of memory • 64-bit operating system: Two 64 GB drives (minimum), RAID 1 or four 64 GB drives (minimum), RAID 1+0 • 32-bit operating system: Two 36 GB drives (minimum), RAID 1 or four 36 GB drives (minimum), RAID 1+0

System requirements

For information about calculating hardware requirements, visit www.blackberry.com/go/serverdocs to see the *BlackBerry Enterprise Server Capacity Calculator* and *BlackBerry Enterprise Server Performance Benchmarking Guide.*

System requirements: BlackBerry Enterprise Server Express

Item	Requirement
operating system	Any of the following operating systems: • Windows Server® 2003 SP2 (32-bit or 64-bit) • Windows Server 2003 R2 SP2 (32-bit or 64-bit) • Windows Server 2008 SP2 (32-bit or 64-bit) • Windows Server 2008 R2 • Windows® Small Business Server 2003 • Windows Small Business Server 2008
Microsoft® Exchange system tools	Any of the following system tools: • Microsoft® Exchange 2003 SP2 System Manager • Microsoft® Exchange Server MAPI client and CDO 1.2.1 To support Microsoft Exchange Server 2010, you must install version 6.5.8147.0 or later of Microsoft Exchange Server MAPI client and CDO 1.2.1. For more information about the the versions of the Microsoft Exchange Server MAPI client and CDO 1.2.1 that are supported by the BlackBerry Enterprise Server Express, visit www.blackberry.com/go/compatibility to see the BlackBerry Enterprise Server Express compatibility matrix. For more information about installing MAPI and CDO patches on your organization's BlackBerry® Enterprise Server Express, visit http://support.microsoft.com to read article 917481 and visit http://www.blackberry.com/btsc to read article KB15779.
Microsoft Exchange organization of the system tools for the messaging server	The same Microsoft Exchange organization that the messaging server uses

Item	Requirement
CDO library	To support the latest version of Microsoft Exchange Server in your organization's environment, the latest version of the CDO library that applies to the Microsoft Exchange Server version
Unicode support for calendars	To support Microsoft Exchange Server 2003, the following Microsoft hotfixes: • 913643 on the messaging server • 923537 on the computer that hosts the BlackBerry Enterprise Server Express
browser	Windows® Internet Explorer® 7.0 to 8.0 with language preferences configured to display encoded web pages
media player	One of the following: • if using Windows Server 2008, to support audio attachments, Windows Media® Format SDK (for more information, visit http://support.microsoft.com to read article 972098) • if using Windows Server 2003, to support audio attachments, Windows Media Player 9 or later
network proximity	A high-speed, switched connection between the BlackBerry Enterprise Server Express and messaging servers

System requirements: BlackBerry Administration Service and BlackBerry Web Desktop Manager

The following system requirements apply when you install the BlackBerry® Administration Service and BlackBerry® Web Desktop Manager on a computer that is separate from the computer that hosts the BlackBerry® Enterprise Server Express.

Item	Requirement
operating system	Any of the following operating systems: • Windows Server® 2003 SP2 (32-bit or 64-bit) • Windows Server 2003 R2 SP2 (32-bit or 64-bit) • Windows Server 2008 SP2 (32-bit or 64-bit) • Windows Server 2008 R2 • Windows® Small Business Server 2003 • Windows Small Business Server 2008

Item	Requirement
	• Microsoft hotfix 955839 installed on the computer that hosts the BlackBerry Administration Service and BlackBerry Web Desktop Manager
memory	A minimum of 1.2 GB of memory

System requirements: BlackBerry Enterprise Server Express databases

Item	Requirement
database management system	Any of the following database management systems: • Microsoft® SQL Server® 2005 SP3 (32-bit or 64-bit) • Microsoft SQL Server 2005 Express Edition SP3 • Microsoft SQL Server 2008 SP1 (32-bit or 64-bit) • Microsoft SQL Server 2008 Express Edition SP1 (32-bit or 64-bit) • Microsoft SQL Server 2008 R2 (32-bit or 64-bit)
collation setting	To configure collation settings, the following conditions: • database server collation configured to default case-insensitive • BlackBerry® Configuration Database collation configured to default case-insensitive • collation must be the same for the Microsoft SQL Server instance and the database server that hosts the BlackBerry database notification system (BlackBerry Configuration Database) • default collations are suggested though non-default collations are supported (for more information, visit http://www.blackberry.com/btsc/ to read articles KB04785 and KB15534)
database connectivity	TCP/IP network protocols turned on
database transactional replication	To support database transactional replication for the BlackBerry Configuration Database , the following conditions: • the database server must be Microsoft SQL Server 2005 SP3 or later • the database server that hosts the replicated database must use the same version and build as the database server that hosts the primary database

System requirements: BlackBerry Attachment Service

The following system requirements apply when you install the BlackBerry® Attachment Service on a computer that is separate from the computer that hosts the BlackBerry® Enterprise Server Express.

Item	Requirement
operating system	Any of the following operating systems: • Windows Server® 2003 SP2 (32-bit or 64-bit) • Windows Server 2003 R2 SP2 (32-bit or 64-bit) • Windows Server 2008 SP2 (32-bit or 64-bit) • Windows Server 2008 R2 • Windows® Small Business Server 2003 • Windows Small Business Server 2008
media player	One of the following: • if using Windows Server 2008, to support audio attachments, Windows Media® Format SDK (for more information, visit http://support.microsoft.com to read article 972098) • if using Windows Server 2003, to support audio attachments, Windows Media Player 9 or later
browser	Windows® Internet Explorer® 7.0 to 8.0 with language preferences configured to display encoded web pages

System requirements: BlackBerry MDS Connection Service

The following system requirements apply when you install the BlackBerry® MDS Connection Service on a computer that is separate from the computer that hosts the BlackBerry® Enterprise Server Express.

Item	Requirement
operating system	Any of the following operating systems: • Windows Server® 2003 SP2 (32-bit or 64-bit) • Windows Server 2003 R2 SP2 (32-bit or 64-bit) • Windows Server 2008 SP2 (32-bit or 64-bit) • Windows Server 2008 R2

Item	Requirement
	• Windows® Small Business Server 2003
	• Windows Small Business Server 2008
RSA® Authentication Agent	To support enhanced network authentication (optional), RSA Authentication Agent 6.1 for Windows Server 2003 or RSA Authentication Agent 7.0.1 for Windows Server 2008.
memory	One of the following:
	• if you install a central push server and less than 1000 user accounts, a minimum of 1024 MB
	• if you install a central push server and more than 1000 user accounts, a minimum of 3 GB
	• if you do not install a central push server, a minimum of 512 MB

System requirements: BlackBerry Router

To install the BlackBerry® Router on a computer that is separate from the computer that hosts the BlackBerry® Enterprise Server Express, any of the following operating systems:
- Windows Server® 2003 SP2 (32-bit or 64-bit)
- Windows Server 2003 R2 SP2 (32-bit or 64-bit)
- Windows Server 2008 SP2 (32-bit or 64-bit)
- Windows Server 2008 R2
- Windows® Small Business Server 2003
- Windows Small Business Server 2008

System requirements for your organization's environment

The following system requirements apply when you configure single sign-on authentication for the BlackBerry® Administration Service and BlackBerry® Web Desktop Manager or configure the BlackBerry MDS Connection Service to support Integrated Windows® authentication.

Item	Requirement
network services	Microsoft® Active Directory® running at Windows Server® 2003 domain functional level or higher
application server	For the BlackBerry MDS Connection Service to support Integrated Windows authentication, Microsoft® IIS 6.0 or 7.0 using Integrated Windows authentication

Item	Requirement
file server	For the BlackBerry MDS Connection Service to support Integrated Windows authentication, Windows Server 2003 file services or Windows Server 2008 file services

System requirements: Computers for BlackBerry Web Desktop Manager and BlackBerry Administration Service users

Item	Requirement
browser	- Windows® Internet Explorer® 7.0 to 8.0 - Mozilla® Firefox® 3.6 - Safari 4 for Mac - Google Chrome™ 4 Windows Internet Explorer 7 or later provides optimal support for BlackBerry® Web Desktop Manager features and BlackBerry Administration Service features. Depending on the browser that you use, the BlackBerry Web Desktop Manager and BlackBerry Administration Service might not recognize BlackBerry devices and the browser might prevent you from activating devices that are connected to the computer, backing up and restoring device data, or adding or updating device applications.
browser settings for Windows Internet Explorer	To support browser access, you must configure the following settings: - language preferences configured to display encoded web pages - Microsoft hotfix 955839 installed on the users' computers to make sure the correct time zones are displayed - the following settings turned on to support Microsoft® ActiveX®: - Automatic prompting for Microsoft ActiveX controls - Download signed Microsoft ActiveX controls - Run Microsoft ActiveX controls and plug-ins - Script Microsoft ActiveX controls marked safe for scripting - support for JavaScript® - cookies turned on - support for TLS or SSL

Item	Requirement

	• the SSL certificate installed to permit trusted connections to the BlackBerry Administration Service
	• if using Windows Vista™, the BlackBerry Administration Service web address added as a trusted web site and Enable protected mode cleared
	• if you configure single sign-on authentication for the BlackBerry Administration Service
	    • the BlackBerry Web Desktop Manager and BlackBerry Administration Service web sites assigned to the local intranet zone
	    • Enable Integrated Windows Authentication selected
	• if you do not configure single sign-on authentication for the BlackBerry Administration Service
	    • the BlackBerry Web Desktop Manager and BlackBerry Administration Service web sites assigned to the local intranet or trusted sites security zone

browser settings for Firefox, Safari, and Google Chrome	To support browser access, you must configure the following settings: • support for JavaScript • cookies turned on • support for TLS or SSL • to permit trusted connections to the BlackBerry Administration Service, the SSL certificate installed Single sign-on authentication for the BlackBerry Administration Service is not supported by Google Chrome.

System requirements: Messaging server

Any of the following messaging servers located in close proximity to where you want to install the BlackBerry® Enterprise Server Express:

• Microsoft® Exchange Server 2010 and Microsoft Exchange Server 2010 Update Rollup 1 (Microsoft Exchange Server MAPI Client and CDO 1.2.1 must be version 6.5.8147.0 or later to support Microsoft Exchange Server 2010)
• Microsoft Exchange Server 2007 SP2
• Microsoft Exchange Server 2003 SP2
• Microsoft® Exchange mixed environment (Microsoft Exchange Server 2003 and 2007 or Microsoft Exchange Server 2007 SP2 and 2010)

System requirements: Firewall

To install the BlackBerry® Enterprise Server Express, configure a firewall or proxy firewall with the following conditions:
* exclusive use of port 3101 to open and maintain an outbound, bidirectional TCP/IP connection to an external server
* support for resolving Internet addresses that use DNS
* for proxy firewalls, transparency of the proxy server

Supported features and environments

Item	Description
messaging server	The BlackBerry® Enterprise Server Express and BlackBerry Enterprise Server Express components support installation on the same computer as the messaging server.
upgrades	You can upgrade any version of the BlackBerry Enterprise Server Express to a later version without having to uninstall the current version.
BlackBerry Domain	Your organization's BlackBerry Domain can contain more than one BlackBerry Enterprise Server Express instance. The different BlackBerry Enterprise Server Express instances in the BlackBerry Domain can be different versions, but the BlackBerry Configuration Database must be the same version as the latest BlackBerry Enterprise Server Express instance. The version of the BlackBerry Administration Service that you use to manage the BlackBerry Enterprise Server Express instances must be the same version as the BlackBerry Configuration Database.

For example, if your organization's BlackBerry Domain contains a BlackBerry Enterprise Server Express 5.0 SP1 and a BlackBerry Enterprise Server Express 5.0 SP2, the BlackBerry Configuration Database must be version 5.0 SP2, and the BlackBerry Administration Service that you use to manage both BlackBerry Enterprise Server Express instances must be version 5.0 SP2. |
| virtual environment | The BlackBerry® Enterprise Server Express and BlackBerry Enterprise Server Express components support VMware® Infrastructure 3.5, VMware® vSphere™ 4, and Microsoft® Hyper-V® 2008. |

Item	Description
enhanced network authentication	The BlackBerry Enterprise Server Express and BlackBerry Enterprise Server Express components support RSA® Authentication Agent 6.1 for Windows Server® 2003 and RSA Authentication Agent 7.0.1 for Windows Server 2008.
SNMP monitoring	The BlackBerry Enterprise Server Express and BlackBerry Enterprise Server Express components support the SNMP service.
remote access	The BlackBerry Enterprise Server Express and BlackBerry Enterprise Server Express components support remote access by administrators who use Remote Desktop Connection.

Unsupported environments

Item	Description
DMZ	The BlackBerry® Enterprise Server Express and BlackBerry Enterprise Server Express components, with the exception of the BlackBerry Router, do not support installation in a DMZ.
email application	The BlackBerry Enterprise Server Express and BlackBerry Enterprise Server Express components do not support installation on computers that host email applications. Email applications use data files that can cause conflicts with the BlackBerry Enterprise Server Express components. As a result, the BlackBerry Enterprise Server Express components might not function as expected.
BlackBerry Attachment Service	If the BlackBerry Attachment Service is hosted on Windows Server® 2008, the BlackBerry Attachment Service does not support .mp3 audio files on BlackBerry devices, and the BlackBerry Attachment Service does not support any audio file formats on BlackBerry® 7100 Series devices that support CDMA networks. You must host the BlackBerry Attachment Service on Windows Server 2003 if you want the BlackBerry Attachment Service to support .mp3 audio files on devices and all audio formats on BlackBerry 7100 Series devices that support CDMA networks.
upgrades or migration	The BlackBerry Enterprise Server Express does not support upgrades or migration from the following products: • BlackBerry® Enterprise Server versions 5.x, 4.x, 3.x, or 2.x • BlackBerry® Professional Software version 4.1.4

Item	Description
mixed environment	You cannot connect both a BlackBerry Enterprise Server and a BlackBerry Enterprise Server Express to the same BlackBerry Configuration Database. To run both a BlackBerry Enterprise Server and a BlackBerry Enterprise Server Express in the same organization, you can configure one BlackBerry Configuration Database for the BlackBerry Enterprise Server instances, and another BlackBerry Configuration Database for the BlackBerry Enterprise Server Express instances.

Provide feedback

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