BlackBerry Enterprise Server Express System Requirements

Hardware requirements: BlackBerry Enterprise Server Express

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 Microsoft Exchange or Windows® Small Business 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 Microsoft Exchange or Windows® Small Business 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 Microsoft Small Business Server	 Visit www.microsoft.com to see the requirements for Microsoft Exchange or Microsoft 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 2 drives, RAID 1
BlackBerry Enterprise Server Express that supports up to 500 users	 Two processors, 2.0 GHz Intel Xeon 2 GB of memory 2 drives, RAID 1
BlackBerry Enterprise Server Express that supports up to 1000 users	 Two processors, 2.0 GHz Intel Xeon 3 GB of memory 2 drives, RAID 1
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 2 drives, RAID 1 or 4 drives, 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® 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 2010, you must install Microsoft Exchange Server MAPI client and CDO 1.2.1 version 6.5.8146.0 or higher.
	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.
Microsoft Exchange organization of the system tools for the messaging server	The same Microsoft Exchange organization that the messaging server uses
CDO library	To support the latest version for Microsoft Exchange in your organization's environment, the latest version of the CDO library that applies to that version
Unicode support for calendars	 To support Microsoft Exchange 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® 6.0 to 8.0 with language preferences configured to display encoded web pages
media player	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® Small Business Server 2003
	 Windows Small Business Server 2008
	• 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
browser	Windows® Internet Explorer® version 6.0 to 8.0 with the following settings:
	 language preferences configured to display encoded web pages
	• the BlackBerry Administration Service and BlackBerry Web Desktop Manager
	web sites assigned to the local intranet or trusted sites security zone

System requirements: BlackBerry Enterprise Server Express databases

Item	Requirement
database management system	 Any of the following database management systems: MSDE 2000 SP3 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) For all versions of the Microsoft SQL Server earlier than Microsoft SQL Server 2005 SP3, Microsoft Security Bulletin MS09-004 (for more information, visit http://technet.microsoft.com to read article KB960082).
collation setting	 The following conditions on the database server: collation set to default case-insensitive BlackBerry® Configuration Database collation set to default case-insensitive BlackBerry® database notification system and Microsoft SQL Server collation must be the same default collations are recommended though non-default collations are supported (for more information, visit http://technet.microsoft.com to read articles KB04785 and KB15534)
remote database conditions database transactional replication	TCP/IP network protocols turned on 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 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® Small Business Server 2003Windows Small Business Server 2008
media player	To support audio attachments, Windows Media® Player version 9 or later
browser	Windows® Internet Explorer® version 6.0 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® Small Business Server 2003
	 Windows Small Business Server 2008
RSA® Authentication Agent	To support enhanced network authentication (optional), RSA® Authentication Agent version 5.0 for Windows®
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)

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

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® Small Business Server 2003
	 Windows Small Business Server 2008
browser	Windows® Internet Explorer® version 6.0 to 8.0
browser settings	The following conditions must be met:
	 the BlackBerry Web Desktop Manager and BlackBerry Administration Service web sites assigned to the local intranet or trusted sites security zone 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 ActiveX controls Download signed Microsoft ActiveX controls Run ActiveX controls and plug-ins
	Script ActiveX controls marked safe for scripting
	• support for JavaScript®
	support for TLS or SSL
	• the SSL certificate installed to permit trusted connections with the BlackBerry Administration Service
	 if using Windows Vista, the BlackBerry Administration Service web address added as a trusted site and Enable protected mode cleared

System requirements: Messaging server

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

- Microsoft® Exchange 2010 and Microsoft Exchange 2010 Update Rollup 1
- Microsoft Exchange 2007 SP2
- Microsoft Exchange 2003 SP2
- Microsoft Exchange mixed environment (Microsoft Exchange 2003 and 2007)

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
virtual environment	The BlackBerry® Enterprise Server Express and BlackBerry Enterprise Server Express components support VMware® Infrastructure version 3.5.
enhanced network authentication	The BlackBerry Enterprise Server Express and BlackBerry Enterprise Server Express components support RSA® Authentication Agent version 5.0 for Windows®.
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.
messaging server	The BlackBerry Enterprise Server Express and BlackBerry Enterprise Server Express components support installation on the same computer as the messaging server.

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.
BlackBerry database notification system	The BlackBerry database notification system does not support installation on a computer that hosts Microsoft® SQL Server® and runs Windows Server® 2008.
BlackBerry Attachment Service	If the BlackBerry Attachment Service is hosted on a computer that uses 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 a computer that uses Windows Server 2003 if you want the BlackBerry Attachment Service to support .mp3 audio files on BlackBerry 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
mixed environment	The BlackBerry Enterprise Server Express does not support the connection of BlackBerry Enterprise Server Express and the BlackBerry Enterprise Server to the same domain. You can, however, configure a domain for BlackBerry Enterprise Server Express for one group of users, and another domain for the BlackBerry Enterprise Server for a different group of users.