Contents

1 Related resources .........................................................................................................................................................5

2 Requirements ...............................................................................................................................................................6
   Hardware requirements: BlackBerry Enterprise Server .................................................................................................. 6
   Hardware requirements: All BlackBerry Enterprise Server for Microsoft Office 365 components on one computer ....6
   Hardware requirements: BlackBerry Enterprise Server for Microsoft Office 365 distributed deployment for up to
   1000 users....................................................................................................................................................................7
   Hardware requirements: BlackBerry Enterprise Server for Microsoft Office 365 distributed deployment for up to
   5000 users....................................................................................................................................................................8
   System requirements: Messaging environment..................................................................................................................9
   System requirements: Instant messaging server.......................................................................................................... 10
   System requirements: Firewall........................................................................................................................................10
   System requirements: Network resources.....................................................................................................................10
   System requirements: BlackBerry Enterprise Server and BlackBerry Enterprise Server components..............................11
   System requirements: BlackBerry Enterprise Server................................................................................................... 11
   System requirements: Browsers for BlackBerry Administration Service users and BlackBerry Web Desktop
   Manager users............................................................................................................................................................ 12

3 Preinstallation tasks: Messaging environment ..............................................................................................................16
   Create a Microsoft Office 365 service account...............................................................................................................16
   Reset the password for the Microsoft Office 365 service account and set it to never expire.........................................16
   Start a remote Windows PowerShell session..................................................................................................................17
   Assign application impersonation rights to the Microsoft Office 365 service account.......................................................17
   Permit meeting requests from outside of your organization when users use Microsoft Exchange Web Services.............18
   Activate the Microsoft Office 365 service account........................................................................................................18

4 Preinstallation tasks: BlackBerry Enterprise Server ......................................................................................................19
   Retrieving BlackBerry Enterprise Server CAL key and SRP information.......................................................................19
   Preparing your organization’s environment....................................................................................................................19
   Preparing the computer that you install the BlackBerry Enterprise Server on.................................................................20
   Configure permissions for the BlackBerry Enterprise Server Windows account.........................................................20

5 Install the BlackBerry Enterprise Server for Microsoft Office 365 ..............................................................................22
   Install the BlackBerry Enterprise Server software (basic installation) ............................................................................22
   Install the BlackBerry Enterprise Server software (advanced installation).......................................................................23

6 Postinstallation tasks .......................................................................................................................................................26
To read the following guides or additional related material, visit www.blackberry.com/go/serverdocs.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Information</th>
</tr>
</thead>
</table>
| BlackBerry Enterprise Server for Microsoft Office 365 Feature and Technical Overview | • Architecture diagrams  
• Descriptions of features and components  
• Data flows |
| BlackBerry Enterprise Server for Microsoft Office 365 Release Notes       | • Descriptions of known issues and potential workarounds                   |
| BlackBerry Enterprise Server for Microsoft Office 365 Administration Guide | • Instructions for creating user accounts, groups, and administrator accounts  
• Instructions for activating devices  
• Instructions for creating and assigning IT policies and profiles  
• Instructions for managing applications on devices |
| BlackBerry Web Desktop Manager User Guide                                | • User instructions for activating devices  
• User instructions for protecting a lost device |
• Using IT policies and application control policies |
| BlackBerry Enterprise Transporter for Microsoft Office 365 Installation and Administration Guide | • Installation and configuration instructions  
• Instructions for migrating existing users to the BlackBerry Enterprise Server for Microsoft Office 365 |
Requirements

Hardware requirements: BlackBerry Enterprise Server

You must consider the memory and disk space requirements for the BlackBerry Enterprise Server for Microsoft Office 365 deployment option that you choose. The requirements are for a BlackBerry Enterprise Server for Microsoft Office 365 environment that includes users that receive 50 to 100 email messages each day, and excludes the BlackBerry Collaboration Service.

Note: If your organization uses Microsoft SQL Server 2012 Express, BlackBerry Enterprise Server for Microsoft Office 365 supports a maximum of 350 users.

For higher reliability, you can host the BlackBerry Configuration Database and the Messaging State Database on a computer that has RAID drives. Disk space requirements for the BlackBerry Configuration Database and the Messaging State Database vary based on the number of email messages received each day and the amount of email history that is stored. It is a best practice to monitor the disk space and growth closely and make adjustments as the needs grow.

Hardware requirements: All BlackBerry Enterprise Server for Microsoft Office 365 components on one computer

The following guidelines apply to the computer that you install the BlackBerry Enterprise Server for Microsoft Office 365 and BlackBerry Enterprise Server for Microsoft Office 365 components on, including the BlackBerry Configuration Database and the Messaging State Database.

<table>
<thead>
<tr>
<th>Number of users</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 200</td>
<td>• One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)</td>
</tr>
<tr>
<td></td>
<td>• 6 GB of memory</td>
</tr>
</tbody>
</table>
Hardware requirements: BlackBerry Enterprise Server for Microsoft Office 365 distributed deployment for up to 1000 users

The following guidelines apply to a distributed deployment of the BlackBerry Enterprise Server for Microsoft Office 365 with up to 1000 users.

## Requirements for two computers

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
</table>
| BlackBerry Enterprise Server for Microsoft Office 365 and BlackBerry Administration Service | • One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)  
• 7 GB of memory  
• 10 GB disk space |
| BlackBerry Configuration Database and Messaging State Database | • One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)  
• 7 GB of memory  
• 10 GB disk space |
Requirements for three computers

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
</table>
| BlackBerry Enterprise Server for Microsoft Office 365 | • One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)  
• 6 GB of memory  
• 10 GB disk space |
| BlackBerry Administration Service | • One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)  
• 3 GB of memory  
• 10 GB disk space |
| BlackBerry Configuration Database and Messaging State Database | • One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)  
• 7 GB of memory  
• 10 GB disk space |

Hardware requirements: BlackBerry Enterprise Server for Microsoft Office 365 distributed deployment for up to 5000 users

The following guidelines apply to a distributed deployment of the BlackBerry Enterprise Server for Microsoft Office 365 with up to 5000 users.

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
</table>
| BlackBerry Enterprise Server for Microsoft Office 365 | • 1 server per 1000 users  
• One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)  
• 6 GB of memory  
• 10 GB disk space  
• 0.03 IOPS/user |
<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>BlackBerry Administration Service</td>
<td>• One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)</td>
</tr>
<tr>
<td></td>
<td>• 3 GB of memory</td>
</tr>
<tr>
<td></td>
<td>• 10 GB disk space</td>
</tr>
<tr>
<td>BlackBerry Configuration Database and Messaging State Database</td>
<td>• One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)</td>
</tr>
<tr>
<td></td>
<td>• 10 GB of memory</td>
</tr>
<tr>
<td></td>
<td>• 32 GB disk space</td>
</tr>
<tr>
<td></td>
<td>• 0.05 IOPS/user</td>
</tr>
<tr>
<td>BlackBerry Attachment Service</td>
<td>• One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)</td>
</tr>
<tr>
<td></td>
<td>• 3 GB of memory</td>
</tr>
<tr>
<td></td>
<td>• 10 GB disk space</td>
</tr>
<tr>
<td>BlackBerry MDS Connection Service</td>
<td>• One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)</td>
</tr>
<tr>
<td></td>
<td>• 3 GB of memory</td>
</tr>
<tr>
<td></td>
<td>• 10 GB disk space</td>
</tr>
<tr>
<td>BlackBerry Collaboration Service</td>
<td>• One processor, 1.86 GHz Intel Xeon 3000 Series (Dual Core)</td>
</tr>
<tr>
<td></td>
<td>• 3 GB of memory</td>
</tr>
<tr>
<td></td>
<td>• 10 GB disk space</td>
</tr>
</tbody>
</table>

**System requirements: Messaging environment**

- Microsoft Exchange Online
• Autodiscover DNS records for Microsoft Exchange Online (information about creating DNS records at any DNS hosting provider is available in the Microsoft Office 365 online help)

**System requirements: Instant messaging server**

To install the BlackBerry Collaboration Service, any of the following instant messaging servers:

• IBM Sametime 8.5.x
• Microsoft Lync Server 2010
• Microsoft Office Communications Server 2007
• Microsoft Office Communications Server 2007 R2
• Novell GroupWise Messenger 2.0.x

**System requirements: Firewall**

To install the BlackBerry Enterprise Server, a firewall or proxy firewall with the following conditions:

• A connection to Microsoft Office 365 on port 443
• 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

**System requirements: Network resources**

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directory service</td>
<td>The computer that the BlackBerry Enterprise Server is installed on must be a member of a Microsoft Active Directory domain.</td>
</tr>
</tbody>
</table>
Network services
If you configure single sign-on authentication for the BlackBerry Administration Service and the BlackBerry Web Desktop Manager, 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

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: BlackBerry Enterprise Server and BlackBerry Enterprise Server components

System requirements: BlackBerry Enterprise Server

The following system requirements apply to the computer that you install the BlackBerry Enterprise Server and BlackBerry Enterprise Server components on.

Table 1:

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system</td>
<td>Any of the following operating systems:</td>
</tr>
<tr>
<td></td>
<td>• Windows Server 2008 SP2</td>
</tr>
<tr>
<td></td>
<td>• Windows Server 2008 R2</td>
</tr>
<tr>
<td></td>
<td>• Windows Server 2008 R2 SP1</td>
</tr>
<tr>
<td>Software framework</td>
<td>Microsoft .NET Framework 3.5 SP1 (for Windows Server 2008 SP2)</td>
</tr>
<tr>
<td>Database management system</td>
<td>For the basic installation option, the following conditions:</td>
</tr>
</tbody>
</table>
You must host the database server on the computer that hosts the BlackBerry Enterprise Server and BlackBerry Enterprise Server components.

The setup application installs a new database instance of Microsoft SQL Server 2008 R2 Express, and if the software is not already installed on the computer, Microsoft SQL Server 2008 R2 Express (64-bit).

The advanced installation option supports the following versions of SQL Server:

- Microsoft SQL Server 2008 SP3 (32-bit or 64-bit)
- Microsoft SQL Server 2008 R2 SP2 (32-bit or 64-bit)
- Microsoft SQL Server 2012 (32-bit or 64-bit)
- Microsoft SQL Server 2012 Express (32-bit or 64-bit)

**Note:** The 32-bit versions support remote database servers only.

**Note:** Microsoft SQL Server 2012 Express supports a maximum of 350 users.

---

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Browser</strong></td>
<td>• Windows Internet Explorer 8.0</td>
</tr>
<tr>
<td></td>
<td>• Mozilla Firefox 10 and later</td>
</tr>
<tr>
<td></td>
<td>• Google Chrome 12 and later</td>
</tr>
<tr>
<td></td>
<td>The BlackBerry Enterprise Server for Microsoft Office 365 does not support USB device management on Mozilla Firefox and Google Chrome.</td>
</tr>
<tr>
<td><strong>Browser settings for Windows Internet Explorer</strong></td>
<td>To support browser access, the following settings:</td>
</tr>
<tr>
<td></td>
<td>• Language preferences configured to display encoded web pages</td>
</tr>
<tr>
<td>Item</td>
<td>Requirement</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>• Microsoft hotfix 955839 installed on the users' computers to make</td>
<td>• The following settings turned on to support Microsoft ActiveX:</td>
</tr>
<tr>
<td>sure the correct time zones are displayed</td>
<td>• Automatic prompting for Microsoft ActiveX controls</td>
</tr>
<tr>
<td>• The following settings turned on to support Microsoft ActiveX:</td>
<td>• Download signed Microsoft ActiveX controls</td>
</tr>
<tr>
<td>• Automatic prompting for Microsoft ActiveX controls</td>
<td>• Start Microsoft ActiveX controls and plug-ins</td>
</tr>
<tr>
<td>• Download signed Microsoft ActiveX controls</td>
<td>• Script Microsoft ActiveX controls marked safe for scripting</td>
</tr>
<tr>
<td>• Start Microsoft ActiveX controls and plug-ins</td>
<td>• Support for JavaScript</td>
</tr>
<tr>
<td>• Script Microsoft ActiveX controls marked safe for scripting</td>
<td>• Cookies turned on</td>
</tr>
<tr>
<td>• Support for TLS or SSL</td>
<td>• Support for TLS or SSL</td>
</tr>
<tr>
<td>• The SSL certificate is installed to permit trusted connections to</td>
<td>• If using Windows Vista, the BlackBerry Administration Service web address is added as a trusted web site and Enable protected mode is cleared</td>
</tr>
<tr>
<td>the BlackBerry Administration Service</td>
<td>• For single sign-on authentication for the BlackBerry Administration Service</td>
</tr>
<tr>
<td>• If using Windows Vista, the BlackBerry Administration Service</td>
<td>• The BlackBerry Web Desktop Manager and BlackBerry Administration Service web sites assigned to the local intranet zone</td>
</tr>
<tr>
<td>web address is added as a trusted web site and Enable protected</td>
<td>• Enable Integrated Windows Authentication selected</td>
</tr>
<tr>
<td>mode is cleared</td>
<td>• If you do not configure single sign-on authentication for the BlackBerry Administration Service, the BlackBerry Web Desktop Manager and</td>
</tr>
<tr>
<td>• For single sign-on authentication for the BlackBerry Administration</td>
<td>BlackBerry Administration Service web sites are assigned to the local intranet or trusted sites security zone</td>
</tr>
<tr>
<td>Service</td>
<td>Browser settings for Mozilla Firefox and Google Chrome</td>
</tr>
<tr>
<td>• The BlackBerry Web Desktop Manager and BlackBerry Administration</td>
<td>To support browser access, you must configure the following settings:</td>
</tr>
<tr>
<td>Service web sites assigned to the local intranet zone</td>
<td>• support for JavaScript</td>
</tr>
<tr>
<td>• Enable Integrated Windows Authentication selected</td>
<td></td>
</tr>
<tr>
<td>• If you do not configure single sign-on authentication for the</td>
<td></td>
</tr>
</tbody>
</table>
### Installation Guide

#### Requirements

<table>
<thead>
<tr>
<th>Item</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• cookies turned on</td>
</tr>
<tr>
<td></td>
<td>• support for TLS or SSL</td>
</tr>
<tr>
<td></td>
<td>• to permit trusted connections to the BlackBerry Administration Service, the SSL certificate installed</td>
</tr>
</tbody>
</table>

Single sign-on authentication for the BlackBerry Administration Service is not supported by Google Chrome.

---

### Installation considerations

### Supported features and environments

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virtual environment</td>
<td>For more information about supported virtual environments, visit <a href="http://www.blackberry.com/go/kbhelp">www.blackberry.com/go/kbhelp</a> to read article KB29661.</td>
</tr>
<tr>
<td>IP</td>
<td>BlackBerry Enterprise Server for Microsoft Office 365 components support only IPv4 for TCP/IP connections.</td>
</tr>
<tr>
<td>Remote access</td>
<td>The BlackBerry Enterprise Server for Microsoft Office 365 and BlackBerry Enterprise Server for Microsoft Office 365 components support remote access by administrators who use Remote Desktop Connection.</td>
</tr>
</tbody>
</table>
## Unsupported environments

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMZ</td>
<td>The BlackBerry Enterprise Server for Microsoft Office 365 and BlackBerry Enterprise Server for Microsoft Office 365 components, with the exception of the BlackBerry Router, do not support installation in a DMZ.</td>
</tr>
<tr>
<td>Instant messaging server</td>
<td>A BlackBerry Enterprise Server for Microsoft Office 365 that connects to multiple instances of the BlackBerry Collaboration Service does not support more than one type of instant messaging server. You must use the same type of instant messaging server for each local or remote BlackBerry Collaboration Service that you connect to a BlackBerry Enterprise Server for Microsoft Office 365.</td>
</tr>
<tr>
<td>Remote Desktop Services or Terminal Services</td>
<td>The BlackBerry Enterprise Server for Microsoft Office 365 and BlackBerry Enterprise Server for Microsoft Office 365 components do not support installation on a computer that you installed Remote Desktop Services or Terminal Services on.</td>
</tr>
</tbody>
</table>
Preinstallation tasks: Messaging environment

Create a Microsoft Office 365 service account

To allow the BlackBerry Enterprise Server to access the mailboxes in your Microsoft Office 365 organization, you must create a Microsoft Office 365 account that has a Microsoft Exchange Online mailbox and assign ApplicationImpersonation rights to the account.

1. On the computer that you use to access Microsoft Office 365, log in using an administrator account that has permission to create accounts.

2. Create a new Microsoft Office 365 user account to be used as a service account to access other Microsoft Office 365 users.
   Ensure that the service account is assigned a license for Microsoft Exchange Online.

Reset the password for the Microsoft Office 365 service account and set it to never expire

Before you begin: Install the Microsoft Online Services Sign-In Assistant and the Microsoft Online Services Module for Windows PowerShell. For more information, visit onlinehelp.microsoft.com to read Use Windows PowerShell to manage Office 365.

1. Open a Windows PowerShell prompt and type `Import-Module MSOnline`.

2. Type `$Cred = Get-Credential` and enter the credentials for the Microsoft Office 365 service account.
3. To connect to Microsoft Office 365, type `Connect-MsolService -Credential $Cred`.

4. To set a new password for the Microsoft Office 365 service account, type `Set-MsolUserPassword -UserPrincipalName <service account email address> -NewPassword <password> -ForceChangePassword:$false`. The `UserPrincipalName` must correspond to the `UserPrincipalName` of the service account you created (this is usually the account’s email address). The best practice is to change the password for the Microsoft Office 365 service account to a long and secure value.

5. To set the password for the Microsoft Office 365 service account to never expire, type `Set-MsolUser -UserPrincipalName <service account email address> -PasswordNeverExpires:$true`.

### Start a remote Windows PowerShell session

1. Open a Windows PowerShell prompt and type `$s = New-PSSession -ConfigurationName Microsoft.Exchange -ConnectionUri https://ps.outlook.com/powershell -Credential $Cred -Authentication Basic – AllowRedirection`. A warning appears, noting that the session was redirected.

2. To import the remote Windows PowerShell session into your local Windows PowerShell session so that you can run commands on the remote server, type `Import-PSSession $s`.

### Assign application impersonation rights to the Microsoft Office 365 service account

Use the remote Windows PowerShell session to assign the ApplicationImpersonation right to the Microsoft Office 365 service account so that it can access all mailboxes in your Microsoft Office 365 organization.

1. To allow custom management roles to be created in your Microsoft Office 365 organization, type `Enable-OrganizationCustomization`. If you already ran the `Enable-OrganizationCustomization` cmdlet in your Microsoft Office 365 organization, this step is not necessary.

2. To assign application impersonation rights to the Microsoft Office 365 service account, type `New-ManagementRoleAssignment –Name:<service account name>-ApplicationImpersonation –Role:ApplicationImpersonation –User:<service account name>`. The name and user must be the same as the service account you created.
Permit meeting requests from outside of your organization when users use Microsoft Exchange Web Services

By default, the BlackBerry Enterprise Server uses Microsoft Exchange Web Services to manage calendars on BlackBerry devices. Each time you add a new Microsoft Exchange Online mailbox, you must configure the calendar settings in Microsoft Exchange Online to permit users to receive meeting requests from outside of your organization when they use Microsoft Exchange Web Services.

Type `Get-Mailbox | Set-CalendarProcessing -ProcessExternalMeetingMessages $true`. After this initial setup, each time you add a new Microsoft Exchange Online mailbox, use the command `Get-Mailbox newuser | Set-CalendarProcessing -ProcessExternalMeetingMessages $true`.

Activate the Microsoft Office 365 service account

1. Log in to Microsoft Office 365 using the service account that you created and the password that you set.
2. Open the Microsoft Outlook inbox for the service account.
3. Log out of Microsoft Office 365.
Preinstallation tasks: BlackBerry Enterprise Server

Retrieving BlackBerry Enterprise Server CAL key and SRP information

When you install the BlackBerry Enterprise Server software, you must specify the BlackBerry Enterprise Server CAL key and SRP information for the BlackBerry Enterprise Server. Each BlackBerry Enterprise Server instance must use an SRP authentication key and a unique SRP identifier. If the SRP identifier that you specify during the installation process is used by another BlackBerry Enterprise Server, the BlackBerry Enterprise Server software that you are installing might not function correctly.

To obtain the BlackBerry Enterprise Server CAL key, SRP identifier, and SRP authentication key, you must perform one of the following actions:

• For electronic software distribution, you must follow the instructions that are included in the email message that you received when you ordered the BlackBerry Enterprise Server software.
• For physical software distribution, you must refer to the documents and installation files that you received with the BlackBerry Enterprise Server software.

Preparing your organization's environment

Before you install the BlackBerry Enterprise Server, you must perform the following actions to permit the BlackBerry Enterprise Server to access resources in your organization’s environment:

• Add the blackberry.net domain to the permitted lists in the antivirus application or anti-spam application that the gateway uses.
• If your organization uses a proxy server for Internet access, get the computer name, port number, and credentials for the proxy server.
• If your organization uses an instant messaging server, get the computer name and port number for the instant messaging server (for Microsoft Office Live Communications Server 2005 and Microsoft Office Communications Server 2007, use the virtual server name and port number where the AJAX service is installed).

Preparing the computer that you install the BlackBerry Enterprise Server on

Before you install the BlackBerry Enterprise Server, you must perform the following actions to configure the computer that you install the BlackBerry Enterprise Server on:

• Verify that you installed the appropriate languages and text services for Windows to support the language that is used in the BlackBerry Enterprise Server software that you are installing.

• If you are performing the installation process on a computer that has more than one NIC, verify that the production NIC is first in the bind order in the Windows network settings.

• Verify that the computer has access to www.blackberry.com (optional).

Configure permissions for the BlackBerry Enterprise Server Windows account

On each computer that you want to install the BlackBerry Enterprise Server components on, you must configure permissions for the Windows account that you want to use to install the BlackBerry Enterprise Server components and run the services for the BlackBerry Enterprise Server.

Without the correct permissions, the BlackBerry Enterprise Server cannot run.

**Before you begin:** In Microsoft Active Directory, create a Windows account that you name BESAdmin.

1. Right-click **My Computer**. Click **Manage**.
2. In the left pane, expand **Local Users and Groups**.
3. Navigate to the **Groups** folder.
4. In the right pane, double-click **Administrators**.
5. Click **Add**.
6. In the **Enter the object names to select** field, type the Windows account name that you want the services for the BlackBerry Enterprise Server to use (for example, BESAdmin).

7. Click **OK**.

8. Click **Apply**.

9. Click **OK**.

10. On the taskbar, click **Start > Programs > Administrative Tools > Local Security Policy**.

11. Configure the following permissions for the Windows account:
   - log on locally with local permissions (if not assigned by default)
   - log on as a service

12. On the taskbar, click **Start > Programs > Administrative Tools > Computer Management**.

13. Add the Windows account to the local administrators group.
Install the BlackBerry Enterprise Server for Microsoft Office 365

Install the BlackBerry Enterprise Server software (basic installation)

You can use the basic installation option to install a single BlackBerry Enterprise Server and any optional BlackBerry Enterprise Server components on one computer and to use the setup application to configure the BlackBerry Enterprise Server automatically in your organization’s environment. If you select the basic installation option, you must host the database server on the same computer.

1. Log in to the computer that you want to install the BlackBerry Enterprise Server on using the service account that you create and that has correct permissions. The service account runs the BlackBerry Enterprise Server services.

2. In the BlackBerry Enterprise Server installation files, double-click setup.exe.

3. In the Installation options dialog box, select the Basic installation option to install all the BlackBerry Enterprise Server components on the computer that you install the BlackBerry Enterprise Server on.

4. If you checked the instant messaging option, in the Instant messaging settings dialog box, perform the following actions:
   a. In the drop-down list, click the name of the instant messaging server that you want to use.
   b. In the Host field, type the host name of the instant messaging server.
   c. In the Port field, type the port number of the instant messaging server.

5. In the Accounts and folders dialog box, in the Password field, type the password for the service account that you used in step 1.

6. In the BlackBerry CAL and SRP information dialog box, perform the following actions:
   a. In the Key field, type the BlackBerry CAL key.
   b. In the SRP authentication information section, type the SRP identifier and SRP authentication key.
7. In the **Basic administration settings** dialog box, type a password for the BlackBerry Administration Service administrator account. You use this account information to log in to the BlackBerry Administration Service for the first time.

8. In the **Server Connector for Microsoft Exchange Online information** dialog box, type the email address and password for the Microsoft Office 365 service account.

9. Start the BlackBerry Enterprise Server services. The setup application waits until the BlackBerry Administration Service services are running before the setup application continues.

10. In the **Console addresses** dialog box, export the web addresses for the BlackBerry Enterprise Server components to a .txt file. You can use the web addresses to log in to the components that you installed.

**After you finish:**
- To verify that the BlackBerry Configuration Database and Messaging State Database on a Microsoft SQL Server use the appropriate collation setting, check that the collation setting for the BlackBerry Configuration Database and Messaging State Database is default case-insensitive.
- If you reinstalled the BlackBerry Administration Service, in Windows Internet Explorer, delete the cache.

**Install the BlackBerry Enterprise Server software (advanced installation)**

You can use the advanced installation option to install more than one BlackBerry Enterprise Server, install remote BlackBerry Enterprise Server components, and configure connections for the BlackBerry Enterprise Server databases.

1. Log in to the computer that you want to install the BlackBerry Enterprise Server on using the service account that you create and that has correct permissions. The service account runs the BlackBerry Enterprise Server services.

2. In the BlackBerry Enterprise Server installation files, double-click **setup.exe**.

3. In the **Installation options** dialog box, select the **Advanced installation** option to install more than one BlackBerry Enterprise Server, install remote BlackBerry Enterprise Server components, and configure connections for the BlackBerry Enterprise Server databases.

4. In the **Setup type** dialog box, select one of the following options:
   - If this installation process is the first installation of BlackBerry Enterprise Server software in a BlackBerry Enterprise Server domain, select **Create a BlackBerry Configuration Database**.
   - For all other installations of BlackBerry Enterprise Server software, select **Use an existing BlackBerry Configuration Database**.

5. In the **Setup options** dialog box, you can select or remove BlackBerry Enterprise Server components from the **Additional components** list.

6. If you checked the BlackBerry Collaboration Service option, in the **Instant messaging settings** dialog box, perform the following actions:
a. In the drop-down list, click the name of the instant messaging server that you want to use.
b. In the Host field, type the host name of the instant messaging server.
c. In the Port field, type the port number of the instant messaging server.

7. In the Accounts and folders dialog box, in the Password field, type the password for the service account that you used in step 1.

8. After the setup application installs the necessary components, click Continue.

9. In the BlackBerry Configuration Database information dialog box, if you configured the database server to use static ports, select the Static option. If the static port number is not 1433, in the Port field, type the port number.

10. In the Database mirroring options dialog box, if you want to configure database mirroring, select the Add support for database mirroring checkbox and in the Name of the mirror database server field, type the name of the database server that hosts the mirror database. The setup application does not create the BlackBerry Configuration Database on the mirror Microsoft SQL Server; it adds a registry key to the computer that includes the name of the mirror Microsoft SQL Server.

11. In the Messaging State Database information dialog box, if you configured the database server to use static ports, select the Static option. If the static port number is not 1433, in the Port field, type the port number.

12. In the BlackBerry CAL and SRP information dialog box, perform the following actions:
   a. In the Key field, type the BlackBerry CAL key.
   b. In the SRP authentication information section, type the SRP identifier and SRP authentication key.

13. In the Administration settings dialog box, in the Pool name field, type an FQDN that the setup application can use to create the BlackBerry Administration Service web address. If you install only one BlackBerry Administration Service instance in the BlackBerry Enterprise Server domain, you can accept the default pool name. If you install more than one BlackBerry Administration Service instance in the BlackBerry Enterprise Server domain, you must create a DNS entry for the pool name that is not the name of a computer and is mapped to the IP address of each BlackBerry Administration Service instance.

14. In the Microsoft Active Directory settings dialog box, in the Password field, type the password for the Microsoft Active Directory account (for example, BESAdmin) that the BlackBerry Enterprise Server uses to authenticate with Microsoft Active Directory. If you want to specify a different username and Windows domain, you must make sure that the Windows domain belongs to the same Microsoft Active Directory forest as the Microsoft Exchange organization.

15. In the Create an administrator account dialog box, perform one of the following actions:
   • If you select Use Microsoft Active Directory authentication, you can choose to use the Microsoft Active Directory account that you used in the previous step, or you can specify login information for a Microsoft Active Directory administrator.
   • If you select Use BlackBerry Administration Service authentication, type and confirm a password for the BlackBerry Administration Service service account. Consider using the minimum rules for password complexity when you create the password for the administrator account. The password should be at least eight characters in length and contain at least one number, letter, and special character, and should not contain dictionary words.

16. In the Server Connector for Microsoft Exchange Online information dialog box, type the email address and password for the Microsoft Office 365 service account.
17. Start the BlackBerry Enterprise Server services. The setup application waits until the BlackBerry Administration Service services are running before the setup application continues.

18. In the **Console addresses** dialog box, export the web addresses for the BlackBerry Enterprise Server components to a .txt file. You can use the web addresses to log in to the components that you installed.
Postinstallation tasks

Test the BlackBerry Enterprise Server installation

1. In the Windows Services, verify that the services for the BlackBerry Enterprise Server are running.
2. In the Windows Event Viewer and log files that are located in <drive>:\Program Files (x86)\Research In Motion \BlackBerry Enterprise Server\Logs, check for error messages.
3. In the BlackBerry Administration Service, add a test user account.
   If you can add a test user account, the connection from the BlackBerry Enterprise Server to the BlackBerry Configuration Database and Microsoft Office 365 is open.
   If the status page appears, the BlackBerry MDS Connection Service is running.

After you finish: For troubleshooting information, visit www.blackberry.com/support

Log in to the BlackBerry Administration Service

To open the BlackBerry Administration Service, you can use a browser on any computer that has access to the computer that hosts the BlackBerry Administration Service. You can set an administrator account to use Microsoft Active Directory or BlackBerry Administration Service credentials to log in to the BlackBerry Administration Service.

When you install the BlackBerry Enterprise Server, you specify the credentials that you use to log in to the BlackBerry Administration Service for the first time.

1. In the browser, type https://<server_name>/webconsole/app, where <server_name> is the name of the computer that hosts the BlackBerry Administration Service.
2. In the User name field, type your user name.
3. In the Password field, type your password.
4. Perform one of the following actions:
   - In the Log in using drop-down list, click BlackBerry Administration Service.
   - In the Log in using drop-down list, click Active Directory and type the Microsoft Active Directory domain in the Domain field.
5. Click Log in.
6. Install the RIMWebComponents.cab add-on if you are prompted to do so.

Create a Microsoft SQL Server job to run StateDbCleanUp stored procedure

With BlackBerry Enterprise Server for Microsoft Office 365, each item’s state information is now stored on a Microsoft SQL Server instead of a BlackBerry device user’s mailbox. These records are persistent but should be removed to verify that the size of the database doesn’t become unmanageable or cause performance-related issues on the Microsoft SQL Server. It is recommended that a Microsoft SQL Server job created to have the stored procedure run. For more information about creating a Microsoft SQL Server job to run StateDbCleanUp stored procedure, visit blackberry.com/support to read article KB32923.

Move user accounts to BlackBerry Enterprise Server for Microsoft Office 365

You can use the BlackBerry Enterprise Transporter for Microsoft Office 365 to move user accounts from an existing MDM domain to a new MDM domain that uses the BlackBerry Enterprise Server for Microsoft Office 365. The BlackBerry Enterprise Transporter is distributed with the installation media for the BlackBerry Enterprise Server for Microsoft Office 365. For more information about the tool and how to configure your source domain and destination domain for migration, visit www.blackberry.com/go/serverdocs to see the BlackBerry Enterprise Transporter for Microsoft Office 365 – Installation and Administration Guide.
Troubleshooting

It takes a long time to look up data in the BlackBerry Configuration Database

Possible cause
Fragmented indexes on the BlackBerry Configuration Database might be affecting the performance of the BlackBerry Enterprise Server, resulting in slow-running queries, and timeout or deadlock errors. Index fragmentation exists in any database that experiences multiple transactions such as updates, insertions, and deletions. The BlackBerry Enterprise Server generates a high number of transactions with the BlackBerry Configuration Database, resulting in Microsoft SQL Server index fragmentation.

Possible solution
Defragment the Microsoft SQL Server index as part of your organization’s regular maintenance plan.

For information, visit www.blackberry.com/support to read articles KB25463 and KB25586.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJAX</td>
<td>Asynchronous JavaScript and XML</td>
</tr>
<tr>
<td>CAL</td>
<td>Client Access License</td>
</tr>
<tr>
<td>DMZ</td>
<td>A demilitarized zone (DMZ) is a neutral subnetwork outside of an organization's firewall. It exists between the trusted LAN of the organization and the untrusted external wireless network and public Internet.</td>
</tr>
<tr>
<td>DNS</td>
<td>Domain Name System</td>
</tr>
<tr>
<td>FQDN</td>
<td>fully qualified domain name</td>
</tr>
<tr>
<td>IOPS</td>
<td>input/output operations per second</td>
</tr>
<tr>
<td>IP</td>
<td>Internet Protocol</td>
</tr>
<tr>
<td>MDM</td>
<td>mobile device management</td>
</tr>
<tr>
<td>NIC</td>
<td>network interface card</td>
</tr>
<tr>
<td>RAID</td>
<td>redundant array of independent (or inexpensive) disks</td>
</tr>
<tr>
<td>SRP</td>
<td>Server Routing Protocol</td>
</tr>
<tr>
<td>SSL</td>
<td>Secure Sockets Layer</td>
</tr>
<tr>
<td>TCP/IP</td>
<td>Transmission Control Protocol</td>
</tr>
<tr>
<td>TLS</td>
<td>Transport Layer Security</td>
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