

BlackBerry Internet Service

Version: 4.4



Feature and Technical Overview

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Overview: BlackBerry Internet Service

1

The BlackBerry Internet Service is an email and Internet service for BlackBerry devices running BlackBerry 7.1 and earlier. It is designed to provide subscribers with automatic delivery of email messages, mobile access to email message attachments, and convenient access to Internet content.

This document describes all of the available features for the BlackBerry Internet Service email platform. Not all features are available for certain products. For more information about each product, view the online help for the product.

Overview: BlackBerry Internet Service email

Depending on the messaging service plan, subscribers can add up to ten existing email addresses to their BlackBerry Internet Service accounts. The BlackBerry Internet Service is designed to retrieve email messages from these email accounts, deliver the email messages to subscribers' BlackBerry devices, and provide wireless email reconciliation for supported email accounts. Subscribers may be able to synchronize contacts and calendar entries between their email accounts and their devices.

Subscribers can also set up a BlackBerry email address that they can use to send and receive email messages on their device.

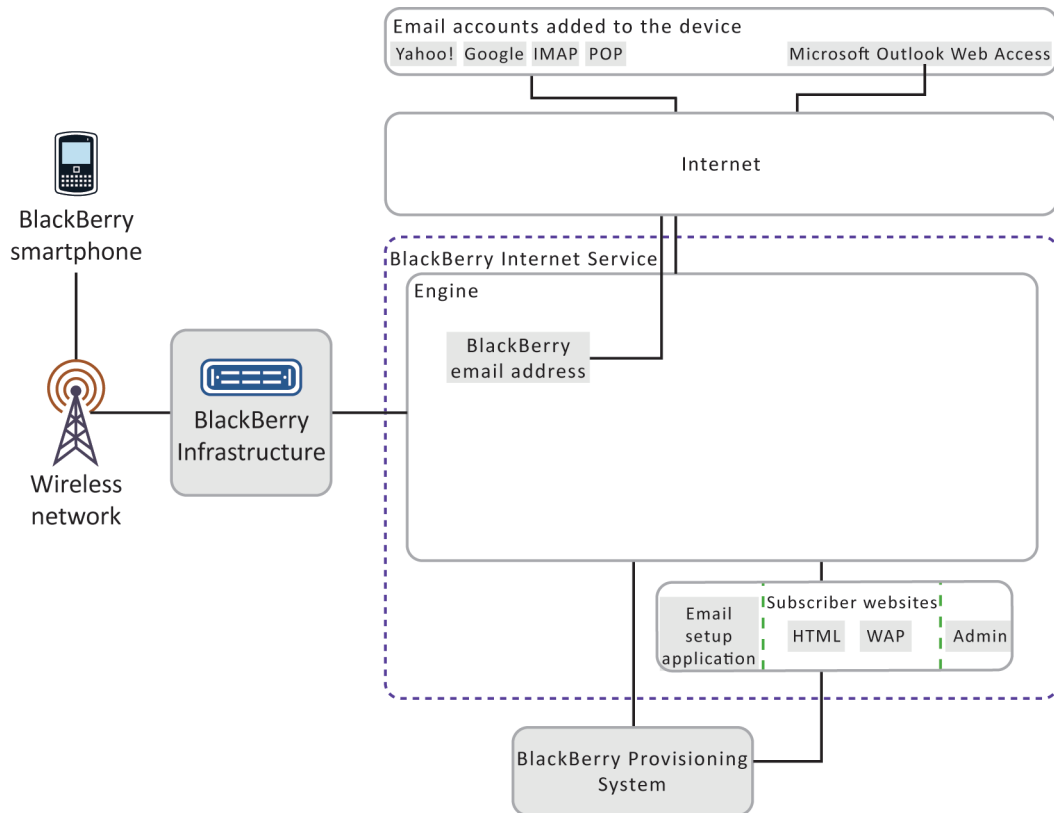
Subscribers can automatically access the BlackBerry Internet Service using a browser on their device or using the email setup application on their device. Subscribers must have a user name and password for their BlackBerry Internet Service account to log in using a browser on their computers. Subscribers who create BlackBerry Internet Service accounts on a device that is running BlackBerry 7 cannot create a user name and password to log in to their BlackBerry Internet Service accounts using a browser on a computer.

This feature is supported only on BlackBerry devices that are running or earlier. BlackBerry 10 devices use different technology.

BlackBerry Internet Service architecture

2

Architecture: BlackBerry Internet Service



| Component | Description |
|--|--|
| Engine | The engine is a core component of the BlackBerry Internet Service that polls subscriber email accounts at specific intervals, retrieves new email messages, and sends them to the BlackBerry device. The engine also manages email reconciliation with email addresses that subscribers have added to the BlackBerry Internet Service. |
| Email accounts added to the device | Email accounts added to the device are existing email accounts that subscribers add to the BlackBerry Internet Service. Supported email accounts include Yahoo! Mail, Google Mail, IMAP, POP, and accounts that use Microsoft Outlook Web Access. When a subscriber adds an existing email address to a BlackBerry Internet Service account, the BlackBerry Internet Service checks the email account and sends the new email messages to the device. Depending on the email service provider's implementation, the BlackBerry Internet Service either polls the subscriber's email account for new email messages approximately every 15 minutes, or the email service provider's system notifies the BlackBerry Internet Service when new email messages arrive. |
| BlackBerry email address | BlackBerry Internet Service subscribers can set up an email address for their device. The engine receives new email messages for the BlackBerry email address and sends them to the subscriber's device. |
| BlackBerry Internet Service subscriber UIs | <p>The BlackBerry Internet Service subscriber UIs provide subscribers with access to settings for managing their email addresses.</p> <ul style="list-style-type: none"> • Email setup application: The application automatically logs subscribers in when they open the application on their devices. • WAP: The interface automatically logs subscribers in when they access the website using the browser on their devices. • Browser on a computer: The interface requires subscribers to log in with a user name and password when they access the website using a browser on a computer. |
| BlackBerry Internet Service administration website | The BlackBerry Internet Service administration website provides access to administrators for managing subscriber accounts using a browser on a computer. |
| BlackBerry Infrastructure | The BlackBerry Infrastructure belongs to Research In Motion and manages email messages on various wireless networks sent to and from the device through the BlackBerry Internet Service. |
| BlackBerry Provisioning System | The BlackBerry Provisioning System controls access to BlackBerry services based on the services available from the wireless service provider. For example, when a subscriber tries to set up a BlackBerry Internet Service account using the BlackBerry Internet Service website, the BlackBerry Provisioning System verifies that the subscriber has permission to set up the account. |

| Component | Description |
|--|---|
| Subscriber's computer with BlackBerry Desktop Software | <p>The subscriber's computer with BlackBerry Desktop Software provides subscribers with a connection to their devices. Subscribers can perform any of the following actions:</p> <ul style="list-style-type: none">• Synchronize organizer data such as contacts, calendar entries, tasks, and memos between their BlackBerry device and their computers• Back up and restore device data• Transfer files between their device and their computers• Add applications to their device• Set up and manage email message forwarding or wireless calendar synchronization if their administrator advises them to do so <p>For more information, see the online help that is available in the BlackBerry Desktop Software.</p> |

BlackBerry Internet Service features

Setup features

BlackBerry Internet Service setup

| Feature | Description |
|------------------|--|
| Simple setup | In a few steps, subscribers can set up email messaging with the BlackBerry Internet Service using the email setup application, a browser on their BlackBerry devices, or a browser on a computer. |
| Language support | <p>Subscribers can view the BlackBerry Internet Service website or email setup application in the following languages:</p> <ul style="list-style-type: none">• Arabic• Basque• Brazilian Portuguese• Catalan• Czech• Danish• Dutch• English - US• English - UK (email setup application only)• European Portuguese• Finnish (email setup application and administration website only)• French• Galician• German |

| Feature | Description |
|-----------------------|--|
| | <ul style="list-style-type: none">• Greek• Hebrew• Hindi• Hungarian• Indonesian• Italian• Japanese• Korean• Norwegian• Polish• Romanian• Russian• Simplified Chinese• Spanish• Swedish• Thai• Traditional Chinese• Turkish• Vietnamese |
| Switching devices | Subscribers can switch the device that is associated with their BlackBerry Internet Service accounts if they decide to use a new device. |
| BlackBerry ID | Subscribers with BlackBerry 7 installed on their devices create or enter an existing BlackBerry ID when they set up the device. The BlackBerry Internet Service uses the BlackBerry ID to uniquely identify the subscriber's BlackBerry Internet Service account and simplify switching to a new device. |
| Character set support | The BlackBerry Internet Service supports ISO-2022-JP and UTF-8. |

Support for multiple email addresses

Depending on their messaging service plan, subscribers can receive email messages from up to ten email accounts on their BlackBerry device.

| Feature | Description |
|---|---|
| Support for existing Microsoft Outlook Web Access email addresses | <p>Subscribers can add email addresses that use a Microsoft Exchange server that the subscriber accesses using Microsoft Outlook Web Access to the BlackBerry Internet Service. When subscribers use Microsoft Outlook Web Access, the BlackBerry Internet Service can access subscribers' email messages from the Microsoft Exchange server.</p> <p>The BlackBerry Internet Service polls email accounts at specific intervals and retrieves new email messages when they arrive.</p> |
| Support for existing IMAP and POP email addresses | <p>Subscribers can add email addresses for existing, supported email accounts that use IMAP4 and POP3 protocols.</p> <p>When subscribers send email messages using their Google Mail, Yahoo! Mail, AOL or Windows Live Hotmail email addresses, the BlackBerry Internet Service sends these email messages using near real-time delivery.</p> <p>The BlackBerry Internet Service supports the Enhanced Google Mail plug-in, which allows subscribers to add stars to and label email messages and conversations, report email messages as spam email messages, and search the inbox.</p> <p>Note: Depending on the wireless service provider, Windows Live Hotmail might not be supported.</p> |
| Simple setup of supported email addresses | <p>When subscribers add an email address, for most supported email accounts, they are not required to submit detailed server information (for example, port number, servers, SSL/no SSL). Subscribers only need to provide their email address and password.</p> |
| BlackBerry email address | <p>Subscribers can set up a BlackBerry email address that they can use to send or receive email messages on their devices. When subscribers send email messages using their BlackBerry email addresses, the BlackBerry Internet Service sends these email messages in near real-time.</p> |
| Specific settings for each email address | <p>When subscribers add more than one email address to the BlackBerry Internet Service they can set options such as a signature, a display name, or email message filters for each email address. Subscribers can specify the email address that they want to use to send an email message before they send the email message.</p> |
| Multiple message lists on the device | <p>Subscribers can view all of their email messages in the main message list on their devices. If subscribers want to view only the email messages for a specific email address, they can open the message list for that email address.</p> |

Email messaging features

Features of wireless email reconciliation

| Feature | Description |
|--|---|
| Wireless email reconciliation from the BlackBerry device | <p>The BlackBerry Internet Service is designed to reconcile email messages between subscribers' BlackBerry devices and supported email accounts over the wireless network.</p> <p>The BlackBerry Internet Service supports near real-time delivery of email to the following supported email accounts:</p> <ul style="list-style-type: none">• Microsoft Outlook Web Access• Yahoo! Mail• Google Mail (POP3 and GIMAP)• Windows Live Hotmail• AOL Mail• POP3 email accounts• IMAP4 email accounts <p>For supported email accounts, the BlackBerry Internet Service automatically makes the following updates in the email account when changes are made on the device:</p> <ul style="list-style-type: none">• Moves email messages to the deleted items folder• Marks email messages as read or unread (excluding POP3 email accounts)• Copies email messages to the sent items folder (excluding AOL Mail, POP3, and some IMAP4 email accounts) <p>Note: If subscribers file email messages in their email accounts, subscribers cannot use the forward, reply, more, or attachment viewing requests on the device for the filed email messages because the BlackBerry Internet Service treats the filed email messages as deleted email messages.</p> |
| Wireless email reconciliation from the email account | <p>For existing email accounts that support the synchronization of deleted items, subscribers can delete an email message from the inbox on the messaging server, and the email message is also deleted from the device. By default, email reconciliation for deleted email messages is turned on. Subscribers can turn off email reconciliation for deleted email messages from their BlackBerry Internet Service accounts.</p> |

| Feature | Description |
|------------------------------------|--|
| | <p>The BlackBerry Internet Service marks email messages as read or unread on the device when changes are made to email in the following email accounts:</p> <ul style="list-style-type: none">• Yahoo! Mail• Google Mail <p>The BlackBerry Internet Service copies email messages to the sent items folder on the device when changes are made to email in the Google Mail email accounts.</p> <p>If subscribers add an enhanced Yahoo! Mail email account, they can open, delete, or send an email message from their Yahoo! Mail email accounts and the change is reflected on their devices.</p> |
| Notification of new email messages | <p>The BlackBerry Internet Service is designed to continually check for new email messages for the subscriber, and to automatically send new email messages to the subscriber's device. The subscriber does not have to request new email messages.</p> |

Email messaging options

| Feature | Description |
|---------------|---|
| Email filters | <p>Subscribers can create email filters for their BlackBerry email addresses or any other email addresses that they have added to the BlackBerry Internet Service.</p> <p>Subscribers can use email filters to specify which email messages the BlackBerry Internet Service sends to their BlackBerry devices. Subscribers can change settings for email filters based on who sent the email, how the email addresses them, or what level of importance the contact assigned to the email.</p> <p>Note: The BlackBerry Internet Service does not apply email filters that subscribers create for one email address to other email addresses.</p> |
| Email storage | <p>When subscribers send an email message from their devices, the BlackBerry Internet Service files the sent email message in the sent items folder in the subscriber's email account. When subscribers delete an email message from their devices, the BlackBerry Internet Service files the deleted email message in the deleted items folder in the subscriber's email account.</p> <p>Note: Some email account types might not support these features.</p> |
| Display names | <p>Subscribers can specify a display name as a user-friendly label for their email addresses. For example, if a subscriber's email address is jjones@example.com, the display name might be Justin Jones. When Justin sends an email message to a contact, the contact's email application displays the display name instead of the email address in the From field.</p> |

| Feature | Description |
|------------------------------|--|
| Send using email addresses | <p>When subscribers compose email messages, they can choose to send the email message using any of the email addresses that they have added to the BlackBerry Internet Service.</p> <p>If subscribers want to specify an email address to send an email message from, the device must be running BlackBerry Device Software 3.7 or later.</p> <p>Note: This feature is only available for some protocols. For example, subscribers cannot specify the email address to send an email message from for Microsoft Outlook Web Access 5.5 email addresses.</p> |
| Reply-to email addresses | <p>Subscribers might not want contacts to send replies to the subscriber's BlackBerry email address; instead, they can specify an alternate Reply-to email address and send email messages to another email address that they have added to the BlackBerry Internet Service.</p> |
| Auto forward email addresses | <p>Subscribers can specify an Auto forward email address so that the BlackBerry Internet Service automatically forwards a copy of the full content of email messages (including any attachments) that they receive using their BlackBerry email addresses on their devices to a specified email address.</p> |
| Auto BCC email addresses | <p>Subscribers can specify an Auto BCC email address so that the BlackBerry Internet Service automatically forwards a copy of the email messages that they send from their devices to a specified email address.</p> |
| Signatures | <p>Subscribers can specify a signature for their BlackBerry email address or any other email address that they have added to the BlackBerry Internet Service. The signature appears at the end of the email messages that subscribers send from their devices.</p> |

Attachment viewing features

To use the following attachment features, BlackBerry devices must be running BlackBerry Device Software 3.8 or later. For RTF attachments, devices must be running BlackBerry Device Software 4.2 or later.

| Feature | Microsoft Word | Microsoft Excel | Microsoft PowerPoint | Corel WordPerfect | Adobe PDF | HTML | RTF | OpenDocument text files | OpenDocument spreadsheets | OpenDocument presentations |
|-----------|----------------|-----------------|----------------------|-------------------|-----------|------|-----|-------------------------|---------------------------|----------------------------|
| Bookmarks | X | X | | X | | X | X | X | | |

| Feature | Microsoft Word | Microsoft Excel | Microsoft PowerPoint | Corel WordPerfect | Adobe PDF | HTML | RTF | OpenDocument text files | OpenDocument spreadsheets | OpenDocument presentations |
|----------------------------|----------------|-----------------|----------------------|-------------------|-----------------|------|-----|-------------------------|---------------------------|----------------------------|
| Color support | X | X | X | X | | X | | X | X | X |
| Comments | X | | | | | | | X | | |
| Email links | X | X | X | X | X | X | | X | X | X |
| Embedded pictures | X | | | | .tif files only | | X | X | | |
| Embedded tables | X | | | | | | X | X | | |
| Endnotes | X | | | | | | | X | | |
| Font size | X | X | X | X | X | | | X | | X |
| Font style | X | | X | X | X | X | | X | X | X |
| Footnotes | X | | | | | | | X | | |
| Internal hyperlinks | X | | | X | | X | X | X | | |
| Internal table of contents | X | | | X | | | | X | X | |
| Password | | | | | X | | | | | |
| Phone links | X | X | X | X | X | X | | X | X | X |
| Text box | X | | X | | | | | X | | X |
| Track changes | X | | | X | | | | X | | |
| URL links | X | X | X | X | X | X | | X | X | X |

Viewing attachments in their original formats

The BlackBerry Internet Service supports downloading attachments in their original formats. Subscribers can preview or download attachments. When subscribers download an attachment, the BlackBerry Internet Service sends the attachment to the BlackBerry device. Subscribers might be able to view or edit the attachment by using supported third-party applications or applications that are already installed on the device. The types of attachments that subscribers can edit and the types of changes that they can make depends on the third-party applications that are installed on the device.

Attachments downloaded and viewed in an original file format from an application that is installed on a device cannot exceed 3 MB for devices running BlackBerry Device Software 5.x or earlier. Attachments in an original format cannot exceed 8 MB for devices running BlackBerry 6 or later.

Attachments not downloaded but viewed using the View option on devices cannot exceed 6 million bytes, which is slightly smaller than 6 MB.

Viewing HTML email messages

The BlackBerry Internet Service permits subscribers to view HTML email messages on a BlackBerry device. The HTML email message feature must be turned on separately for each email address. To view HTML messages on a device, subscribers must be running BlackBerry Device Software 4.5 or later. HTML messages cannot exceed 32 KB for devices running BlackBerry Device Software 4.5 to BlackBerry 6, and 300 KB for devices running BlackBerry 7 or later.

Note: Depending on the wireless service provider, HTML email messages might not be supported.

Synchronization features

| Feature | Description |
|--------------------------|---|
| Contact synchronization | <p>If subscribers add some types of email accounts, including Google Mail accounts, Yahoo! Mail accounts, and Windows Live Hotmail accounts to their BlackBerry Internet Service accounts, they can synchronize contacts between their email accounts and the Contacts application on their BlackBerry devices. Subscribers can add, change, and delete contacts from their devices or from their email accounts and the BlackBerry Internet Service synchronizes the changes.</p> <p>This feature is supported only on BlackBerry devices that are running BlackBerry Device Software 5.0 to BlackBerry 7.1. BlackBerry 10 devices use different technology.</p> |
| Calendar synchronization | <p>If subscribers add a Google Mail account to their BlackBerry Internet Service accounts, they can synchronize calendar entries between their email accounts and the</p> |

| Feature | Description |
|---------|---|
| | <p>Calendar application on their devices. Subscribers can add, change, and delete calendar entries from their device or from their email account and the BlackBerry Internet Service synchronizes the changes.</p> <p>This feature is supported only on BlackBerry devices that are running BlackBerry Device Software 5.0 to BlackBerry 7.1. BlackBerry 10 devices use different technology.</p> |

BlackBerry device features

| Feature | Description |
|----------------------------|--|
| vCard contact attachments | The BlackBerry Internet Service converts vCard contact attachments to contacts on BlackBerry devices. If subscribers send the contact information to an email address that is not a BlackBerry email address, the BlackBerry Internet Service converts the contact information to a vCard contact attachment so that the information appears correctly in the recipient's email account. |
| Delivery confirmation | Subscribers can receive delivery confirmations for email messages that they send from their devices. When an email message is delivered successfully, the icon beside the sent message in the message list on the device changes. |
| Read confirmation | Subscribers can respond to read confirmation requests. Subscribers can also change the settings for read confirmations on their devices. |
| Notification sound profile | Subscribers can change the notification sound profile settings for their BlackBerry Internet Service accounts using their devices. |
| Meeting invitations | Subscribers can send and receive, and accept or decline iCalendar, meeting invitations from other BlackBerry Internet Service subscribers. |
| HTML email messages | Subscribers can view items such as pictures, signatures, and bullets in HTML email messages using BlackBerry Device Software 4.5 through 7.1 . |

Security features

BlackBerry Internet Service security features

| Feature | Description |
|--|--|
| Protection for online transactions | The BlackBerry Internet Service uses SSL to help protect connections to mobile shopping and mobile banking websites for BlackBerry devices. |
| Email message encryption for email accounts a subscriber added | The BlackBerry Internet Service encrypts email messages that it sends and receives using SSL if the external messaging server (POP over SSL, IMAP over SSL, or Microsoft Outlook Web Access) supports SSL encryption. External messaging servers use a standard TCP connection if an SSL connection is not supported. |
| Instant messaging encryption | If the instant messaging server supports SSL encryption, the BlackBerry Internet Service encrypts instant messages that it sends and receives over the SSL connection that the BlackBerry device uses to connect to the instant messaging server. |
| Encryption of login information and changes to personal information or login credentials | <p>When subscribers log in to the BlackBerry Internet Service website using a browser on a computer, the BlackBerry Internet Service is designed to encrypt login information from the BlackBerry Internet Service login webpage using SSL and send it to the BlackBerry Infrastructure using HTTPS. This encryption is designed to protect user names, passwords, and other BlackBerry Internet Service account information from unauthorized access. This encryption applies to changes to login information that the subscriber submits after logging in to the BlackBerry Internet Service website.</p> <p>When subscribers access the BlackBerry Internet Service from the email setup application on the device, the BlackBerry Internet Service encrypts device identifiers, (for example, PIN and IMEI) on the device then sends it to the BlackBerry Infrastructure using HTTP. If subscribers are running a version of BlackBerry Device Software that is earlier than BlackBerry 6, the email setup application also encrypts login credentials on the device and then sends that information to the BlackBerry Infrastructure using HTTP.</p> <p>When subscribers access the BlackBerry Internet Service website using a browser on their devices, the BlackBerry Internet Service encrypts device identifiers on the device and then sends it to the BlackBerry Infrastructure using HTTPS.</p> |
| Protection from spam email messages | The anti-spam system for the BlackBerry Internet Service uses a reputation scoring system to evaluate the relative reputation of the IP addresses of incoming email messages. If the anti-spam system determines that the email message is a |

| Feature | Description |
|---------|---|
| | <p>spam email message, the anti-spam system blocks the email message before it can reach BlackBerry Internet Service subscribers.</p> <p>For additional control of spam email messages, subscribers can create email filters to file unwanted email messages or to prevent email messages from being delivered to their BlackBerry devices.</p> |

BlackBerry Internet Service requirements

Supported email accounts

Subscribers can add the following types of email accounts to the BlackBerry Internet Service:

- POP3/ISP
- IMAP4
- AOL Mail
- Google Mail
- Windows Live Hotmail
- Yahoo! Mail (POP3 or by proprietary Yahoo! integration protocol)
- Microsoft Exchange (using Microsoft Outlook Web Access)

Note: Depending on the wireless service provider, some supported options for email account integration might not be available.

Depending on the email service provider, subscribers might be required to subscribe to a premium email account to set up their email account with the BlackBerry Internet Service.

Requirements for wireless email reconciliation

| BlackBerry devices | Requirements |
|--------------------|-----------------------------------|
| C++ based devices | BlackBerry Device Software 2.6 to |
| Java based devices | BlackBerry Device Software 3.6 to |

Attachment requirements

Supported attachments

Subscribers can open email messages that contain supported attachments on their BlackBerry s. Subscribers can open the table of contents for an attachment, or they can open the complete attachment.

Attachments cannot exceed 8 MB (6 MB for the attachment and 2 MB for the message header and file encoding).

| Attachment type | Extension | Notes |
|----------------------------|-------------------------------------|---|
| Microsoft Word | .doc, .dot, .docx | — |
| Microsoft Excel | .xls, .xlsx | — |
| Microsoft PowerPoint | .ppt, .pptx | — |
| Corel WordPerfect | .wpd | — |
| OpenDocument text files | .odt, .ott | Supported only if files were created using 1.2 |
| OpenDocument spreadsheets | .ods | Supported only if files were created using Lotus Symphony 1.2 |
| OpenDocument presentations | .odp | Supported only if files were created using Lotus Symphony 1.2 |
| Adobe PDF | .pdf | — |
| ASCII text | ASCII text, .txt | — |
| vCard contact attachments | .vcf | — |
| HTML | .html, .htm | — |
| Zip archive | .zip | — |
| Color attachments | .doc, .xls, .ppt, .wpd | — |
| Picture attachments | .jpg, .bmp, .gif, .png, .tiff, .wmf | — |

| Attachment type | Extension | Notes |
|-----------------------|------------------------|---|
| iCalendar attachments | .icf | Supported with BlackBerry Device Software 4.2 to BlackBerry 7.1 |
| Voicemail attachments | .wav, .mp3, .wma, .amr | Supported with BlackBerry Device Software 4.2 to BlackBerry 7.1 |
| RTF | .rtf | Supported with BlackBerry Device Software 4.2 to BlackBerry 7.1 |

Supported functionality of email message attachments

| Action | Requirements |
|--|---|
| <ul style="list-style-type: none">• Pan, zoom, or rotate pictures• View embedded pictures in Microsoft Word documents• Save picture attachments to the media folder on the BlackBerry smartphone | BlackBerry Device Software 3.8 to |
| <ul style="list-style-type: none">• View footnotes | BlackBerry Device Software 3.8 to |
| <ul style="list-style-type: none">• View or hide track changes | BlackBerry Device Software version 3.8 to |
| <ul style="list-style-type: none">• Move to another part of a document instead of viewing the document sequentially | BlackBerry Device Software 3.8 to |
| <ul style="list-style-type: none">• View full picture | BlackBerry Device Software 4.1 to |
| <ul style="list-style-type: none">• Render pictures and text | BlackBerry Device Software 4.1 to |
| <ul style="list-style-type: none">• View inline thumbnail pictures in the message list | BlackBerry Device Software 4.1 to |

Supported BlackBerry devices

| BlackBerry device | Model |
|-------------------------|--|
| BlackBerry Bold devices | 9000, 9650, 9700, 9780, 9790, 9900, 9930, 9788 |

| BlackBerry device | Model |
|---------------------------|---|
| BlackBerry Curve devices | 8300, 8310, 8320, 8330, 8350i, 8520, 8530, 8900, 8910, 8980, 9220, 9300, 9310, 9320, 9330, 9350, 9360, 9370, 9380 |
| BlackBerry Pearl devices | 8100, 8110, 8120, 8130, 8220, 8230, 9100, 9105 |
| BlackBerry Storm devices | 9500, 9530 |
| BlackBerry Storm2 devices | 9520, 9550 |
| BlackBerry Style device | 9670 |
| BlackBerry Torch devices | 9800, 9810, 9850, 9860 |
| BlackBerry Tour device | 9630 |
| BlackBerry 8800 Series | 8800, 8830 |

For more information about BlackBerry devices, visit www.blackberry.com.

Supported features of BlackBerry devices

| BlackBerry device feature | Requirements |
|---|---|
| Delivery receipts | BlackBerry Device Software 4.2 to BlackBerry 7.1 |
| Read confirmation receipts | BlackBerry Device Software 4.2 to BlackBerry 7.1 |
| Notification profiles | BlackBerry Device Software 4.2 to BlackBerry 7.1 |
| Calendar meeting invitations | BlackBerry Device Software 4.2 to BlackBerry 7.1 |
| Branded icons for email addresses added to the device | BlackBerry Device Software 4.2 Service Pack 1 to BlackBerry 7.1 |
| Setup wizard for BlackBerry Internet Service accounts | BlackBerry Device Software 4.2 Service Pack 2 to BlackBerry 7.1 |
| Contact synchronization | BlackBerry Device Software 5.0 to BlackBerry 7.1 |
| Calendar synchronization | BlackBerry Device Software 5.0 to BlackBerry 7.1 |
| BlackBerry ID | BlackBerry 7 to BlackBerry 7.1 |

System requirements: Subscriber's computer

| Item | Requirement |
|------------------|---|
| Operating system | <ul style="list-style-type: none">• Windows XP• Windows Vista• Windows 7• Windows8• Mac OS X 10.0 or later |
| Browser | <ul style="list-style-type: none">• Windows Internet Explorer 7.0, 8.0, 9.0, or 10.0• Mozilla Firefox 13.0 or 16.0• Safari 5.0, 5.1, or 6.0• Opera 11 or 12• Google Chrome 22• Browser on the BlackBerry PlayBook tablet |

Data flows

5

Data flow: Sending an email message to a BlackBerry device that is associated with a BlackBerry email address

1. A contact sends an email message to the BlackBerry email address of a subscriber over the Internet.
2. The BlackBerry email address within the BlackBerry Internet Service receives the new email message for the subscriber.
3. The BlackBerry Internet Service delivers the email message to the subscriber's BlackBerry device over the wireless network.

Data flow: Sending an email message from a BlackBerry device using a BlackBerry email address

1. A subscriber sends an email message from the BlackBerry device using a BlackBerry email address.
2. The device sends the email message to the BlackBerry Internet Service over the wireless network.
3. The BlackBerry Internet Service delivers the email message to the contact over the Internet.

Data flow: Forwarding an email message from an email account to a BlackBerry email address

1. An email message arrives in the subscriber's email account that the subscriber has configured to forward email messages to the BlackBerry email address.
2. Email filters that the subscriber created in the email account forward the email message to the BlackBerry email address.
3. The BlackBerry email address within the BlackBerry Internet Service receives the new email message for the subscriber.
4. The BlackBerry Internet Service delivers the email message to the subscriber's BlackBerry device over the wireless network.

Data flow: Adding an email address to the BlackBerry Internet Service

1. A subscriber adds a new email address to the BlackBerry Internet Service account.
2. The BlackBerry Internet Service adds the new email address.
3. The BlackBerry Internet Service delivers an activation message to the subscriber's BlackBerry device to notify the subscriber that the email address has been successfully set up.

Data flow: Sending an email message to an integrated email address for delivery to a BlackBerry device (polling)

1. A contact sends an email message to the subscriber's integrated email account over the Internet.
2. The BlackBerry Internet Service polls the integrated email account approximately every 15 minutes to check for new email messages.
3. The BlackBerry Internet Service retrieves the new email message.
4. The BlackBerry Internet Service delivers the email message to the subscriber's BlackBerry device over the wireless network.

The approximate delivery time is 15 minutes or less.

Data flow: Sending an email message to an integrated email address for delivery to a BlackBerry device (real-time delivery)

1. A contact sends an email message to the subscriber's integrated email account over the Internet.
2. The integrated email account notifies the BlackBerry Internet Service that a new email message has arrived.
3. The BlackBerry Internet Service retrieves the new email message from the integrated email account.
4. The BlackBerry Internet Service delivers the new email message to the subscriber's BlackBerry device over the wireless network.

The approximate delivery time is seconds.

Data flow: Sending an email message from a BlackBerry device using an integrated email address

1. A subscriber uses a BlackBerry device to send an email message from an email address that the subscriber added to the BlackBerry Internet Service.
2. The device sends the email message to the BlackBerry Internet Service over the wireless network.
3. The BlackBerry Internet Service sends the email message to the contact over the Internet.

Data flow: Deleting an email message from a BlackBerry device using an integrated email address

1. A subscriber deletes an email message from the BlackBerry device.
2. The BlackBerry Internet Service deletes the same email message in the subscriber's integrated email account.

Data flow: Synchronizing contact information to a BlackBerry device (polling)

1. A subscriber adds, changes, or deletes contacts from an integrated email account.
2. The BlackBerry Internet Service polls the integrated email account at regular intervals to check for changes to contacts.
3. The BlackBerry Internet Service retrieves the updated contact information.

4. The BlackBerry Internet Service sends the updated contact information to the subscriber's BlackBerry device over the wireless network.

Data flow: Synchronizing contact information to a BlackBerry device (real-time delivery)

1. A subscriber adds, changes, or deletes contacts from an integrated email account.
2. The integrated email account notifies the BlackBerry Internet Service that updated contact information is available.
3. The BlackBerry Internet Service retrieves the updated contact information from the integrated email account.
4. The BlackBerry Internet Service sends the updated contact information to the subscriber's BlackBerry device over the wireless network.

Data flow: Synchronizing contact information from a BlackBerry device

1. A subscriber adds, changes, or deletes contacts from an integrated email account.
2. The BlackBerry device sends the updated contact information to the BlackBerry Internet Service over the wireless network.
3. The BlackBerry Internet Service sends the updated contact information to the subscriber's integrated email account.

Data flow: Synchronizing calendar data to a device

1. A subscriber adds, changes, or deletes calendar entries from an integrated account.
2. The BlackBerry Internet Service polls the integrated account at regular intervals to check for calendar changes.

3. The BlackBerry Internet Service retrieves the updated calendar data.
4. The BlackBerry Internet Service sends the updated calendar data to the subscriber's device over the wireless network.

Data flow: Synchronizing calendar data from a device

1. A subscriber adds, changes, or deletes calendar entries from a BlackBerry device.
2. The device sends the updated calendar data to the BlackBerry Internet Service over the wireless network.
3. The BlackBerry Internet Service sends the updated calendar information to the subscriber's integrated account.

Glossary

6

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|------------------------------------|--|
| ASCII | American Standard Code for Information Interchange |
| BlackBerry ID | <p>Subscribers can create a BlackBerry ID to log in to, or automatically access, any BlackBerry product that supports BlackBerry ID. A BlackBerry ID consists of a single email address and a password. Subscribers can use any email address for their BlackBerry ID; subscribers do not have to use an email address that they have added to their BlackBerry devices.</p> <p>A BlackBerry ID is designed to provide subscribers convenient access to multiple BlackBerry products including the BlackBerry Internet Service, BlackBerry Protect, and the BlackBerry App World storefront.</p> |
| BlackBerry Internet Service | The BlackBerry Internet Service is designed to provide subscribers with automatic delivery of email messages, mobile access to email message attachments and pictures, and access to Internet content. |
| CDMA | Code Division Multiple Access |
| CMIME | Compressed Multipurpose Internet Mail Extension |
| DNS | Domain Name System |
| EDGE | Enhanced Data Rates for Global Evolution |
| email service provider | An email service provider is an organization that provides individuals and organizations with access to email and other related services over a communications network. |
| GPRS | General Packet Radio Service |
| HTML | Hypertext Markup Language |
| HTTP | Hypertext Transfer Protocol over Secure Sockets Layer |
| IMAP | Internet Message Access Protocol |
| ISP | Internet service provider |
| LAN | local area network |
| PIN | personal identification number |
| POP | Post Office Protocol |
| real-time delivery | Real-time delivery refers to the process whereby the messaging and collaboration server receives and delivers items, such as messages or organizer data items, nearly simultaneously. |

| | |
|----------------------------------|---|
| RTF | Rich Text Format |
| service books | Service books determine which services are available on BlackBerry devices. |
| SMTP | Simple Network Management Protocol |
| SOAP | Simple Object Access Protocol |
| SSL | Secure Sockets Layer |
| TCP/IP | Transmission Control Protocol/Internet Protocol (TCP/IP) is a set of communication protocols that is used to transmit data over networks, such as the Internet. |
| UMTS | Universal Mobile Telecommunications System |
| UTF-8 | 8-bit UCS/Unicode Transformation Format |
| WAP | Wireless Application Protocol |
| wireless service provider | A wireless service provider is an organization, such as a telephone company, that owns or operates one or more telecommunications facilities and provides services to the public for a fee. |
| WML | Wireless Markup Language |

Provide feedback

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