BlackBerry Smartphone Simulator

Version: 4.7

User Guide

BlackBerry

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Overview

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The BlackBerry® Smartphone Simulator enables you to run BlackBerry device applications on your computer.

The BlackBerry Smartphone Simulator includes the BlackBerry device applications that are typically available on BlackBerry devices and enables you to load and test your own applications. You can simulate and test various connectivity and state changes using the BlackBerry Smartphone Simulator. When you use the BlackBerry Smartphone Simulator to perform testing, you might need to simulate additional BlackBerry services. The BlackBerry MDS Simulator and the BlackBerry Email Simulator are available for this purpose.

Changing configuration options

By default, after you specify the BlackBerry® device model, the BlackBerry Smartphone Simulator runs using the configuration options that are typical for that BlackBerry device. However, you can manually set or change many of the configuration options, such as the screen size, the communication port numbers, and the locale.

Configuration method	Description
From the BlackBerry® Integrated Development Environment (BlackBerry IDE)	You can configure many of the simulator options from the BlackBerry IDE interface and save them as a new device simulator profile. See the *BlackBerry Integrated Development Environment Online Help* for more information about setting and saving BlackBerry Smartphone Simulator options using the BlackBerry IDE.
From the command prompt	You can use command prompt options to set how the BlackBerry Smartphone Simulator operates. At the command prompt, type **fledge /help**.

Managing BlackBerry device profiles

Create a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Create a new simulator profile**.
3. In the **Software version** drop-down list, select the software version.
4. In the **Handheld model** drop-down list, select the BlackBerry® device you want to use.
5. In the **Profile name** field, type a name for this profile.
6. Click **Configure**.

7. In the **Edit simulator profile** dialog box, on the **Hardware** tab, specify the hardware settings for this BlackBerry Smartphone Simulator.
8. On the **Network** tab, specify the network settings.
9. On the **Advanced** tab, specify advanced settings such as LCD timeout, and add command line arguments for the BlackBerry Smartphone Simulator.
10. Click **OK**.

Edit a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator directory, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Manage existing simulator profiles**.
3. In the **Profile** list, select the profile you want to edit.
4. Click **Edit**.
5. In the **Edit simulator profile** dialog box, change the settings.
6. Click **OK**.

Copy a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator directory, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Manage existing simulator profiles**.
3. In the **Profile** list, select the profile you want to copy.
4. Click **Copy**.

Rename a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator directory, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Manage existing simulator profiles**.
3. In the **Profile** list, select the profile you want to copy.
4. Click **Rename**.
5. Type a new name.
6. Press **Enter**.

Delete a BlackBerry device profile

1. In the BlackBerry® Smartphone Simulator directory, double-click the **fledgelauncher.exe** file.
2. In the drop-down list, select **Manage existing simulator profiles**.

3. In the **Profile** list, select the profile you want to delete.
4. Click **Delete**.

Starting the BlackBerry Smartphone Simulator

The BlackBerry® Smartphone Simulator is available either as a part of the BlackBerry® Java® Development Environment or as a standalone installation of the BlackBerry simulator package. Visit www.blackberry.com/developers on page for more information about downloading the BlackBerry Smartphone Simulator.

Start the BlackBerry Smartphone Simulator from the BlackBerry Smartphone Simulator launcher

1. In the BlackBerry® Smartphone Simulator directory, launch **fledgelauncher.exe**.
2. In the drop-down list, select **Launch a simulator**.
3. In the **Profile** list, select the profile.
4. Click **Go**.

Start the BlackBerry Smartphone Simulator from the BlackBerry JDE

On the taskbar, click **Start** --> **Programs** --> **Research In Motion** --> **BlackBerry JDE 4.7.x** --> **Device Simulator**

Start the BlackBerry Smartphone Simulator from a Simulator Package

On the taskbar, click **Start** --> **Programs** --> **Research In Motion** --> **BlackBerry Smartphone Simulators 4.3.x** --> **Device Simulators 4.3.x** --> ***device_name***.

Start the BlackBerry Smartphone Simulator from the command prompt

At the command prompt, type:

```
fledge /handheld=<model_number>
```

Start the BlackBerry Smartphone Simulator and open a web page

At the command prompt, type:

```
fledge /handheld=<model_number> /app-param=url:<URL> /app=jvm.dll
```

Redirect debug messages to a specified file

At the command prompt, type:

```
fledge /handheld=<model_number> /app-param=JvmDebugFile:<file_name>
```

Changing BlackBerry Smartphone Simulator display options

Show or hide the faceplate

By default, the BlackBerry® Smartphone Simulator displays the BlackBerry device faceplate. You can hide the faceplate so that only the screen is visible.

On the **View** menu, click **LCD Only**.

Display the device in full-screen mode

Full-screen mode allows you to maximize the view of the BlackBerry® Smartphone Simulator. You can view either the full BlackBerry device faceplate or only the screen in full-screen mode. Since the BlackBerry Smartphone Simulator only uses integral multiples of the simulated screen resolution, different screen resolution settings may result in full-screen images that cover a larger percentage of the computer screen.

If you are viewing the LCD screen in full-screen mode, the LCD screen stretches to its optimal zoom-level and is padded with a black background. If you view the BlackBerry device image in full-screen mode, the BlackBerry device image is centered and is padded with a white background.

1. On the **View** menu, click **Full Screen**.
2. To access menu options, move the mouse to the top of the computer screen. The menu appears when the cursor is near the top of the screen.
3. To exit full-screen mode, on the **View** menu, click **Full Screen**.

Magnify the BlackBerry device image

The percentage value determines the pixel-to-pixel ratio between the simulated LCD screen and the computer screen. For example, at 200 percent zoom level, 4 pixels on the monitor display 1 pixel of the simulated LCD screen.

1. On the **View** menu, click **Zoom**.
2. Click a percentage.
3. On the **View** menu, click **Smooth Magnified LCD**.

Capturing screen shots

The BlackBerry® Smartphone Simulator can save an image of the BlackBerry device that you simulate including the faceplate, or the screen only.

By default, the BlackBerry Smartphone Simulator saves the screen shot as the most suitable file type for the content of the image. The BlackBerry Smartphone Simulator saves a screen shot of the BlackBerry device image as a .jpg file, and a screen shot of the LCD as a .png file. You can override the default if you click **Browse** and set a different file type in the **Save as type** field.

Save a screen shot

On the **Edit** menu, click **Save Device Snapshot** or **Save LCD Snapshot**.

Copy a screen shot to the clipboard

On the **Edit** menu, click **Copy Device Snapshot** or **Copy LCD Snapshot**.

Using the BlackBerry Smartphone Simulator

2

Simulating BlackBerry device interaction

Click the screen

Use the BlackBerry® Smartphone Simulator to simulate a screen click.

Click the left mouse button anywhere within the device screen area.

Touch the screen

Use the BlackBerry® Smartphone Simulator to simulate a screen touch.

Click the right mouse button anywhere within the device screen area.

Perform simultaneous screen touches

Use the BlackBerry® Smartphone Simulator to simulate multiple screen touches at the same time.

1. On the **Simulate** menu, click **Multitouch Mode**.
2. Click and drag using either the left or right mouse buttons anywhere within the device screen area.
3. Perform the same action elsewhere on the screen to complete the multitouch action.

After you complete the second touch, both touches are simulated as if they started at the same time.

Changing the BlackBerry device orientation

BlackBerry® Storm™ 9500 smartphones support displaying screen information in either landscape or portrait mode, depending on how the physical device is oriented.

Orientation mode	Description
Top-Side-Up	The device is oriented normally.
Left-Side-Up	The device is rotated 90 degrees to the right.
Right-Side-Up	The device is rotated 90 degrees to the left.
Bottom-Side-Up	The device is rotated 180 degrees, upside-down.
Front-Side-Up	The device screen is facing upward.

Orientation mode	Description
Back-Side-Up	The device screen is facing downward.

Change screen orientation

Use the BlackBerry® Smartphone Simulator to simulate a screen orientation change.

1. On the **Simulate** menu, click **Tilt BlackBerry**.
2. Select an orientation mode for the BlackBerry® screen.

Use the trackball

Use the BlackBerry® Smartphone Simulator trackball to simulate using the trackball on a BlackBerry® device.

- To navigate between fields, icons, and menu items, roll the trackball.
- To select a field or a menu item, click the trackball.

BlackBerry Smartphone Simulator for BlackBerry devices that support the trackball assign the BlackBerry Wireless Handheld keyboard and mouse actions to the following BlackBerry Wireless Handheld functionality:

Task	Keyboard steps	Mouse steps with trackball mode on	Mouse steps with trackball mode off
Turn trackball mode on or off.	Press F12.	1.On the **Edit** menu, click **Map Middle Mouse Button** --> **Toggle Trackball Mode**. 2.Click the middle mouse button.	1. On the **Edit** menu, click **Map Middle Mouse Button** --> **Toggle Trackball Mode**. 2. Click the middle mouse button.
Click the trackball.	Press F9.	Click the left mouse button.	Click the middle mouse button on the trackball.
Roll the trackball.	Press the arrow keys.	Move the mouse.	Click and drag the mouse on the trackball.
Press the Escape button.	Press ESC.	Click the right mouse button.	Click the right mouse button on the trackball.

Note: Rolling the mouse wheel generates trackwheel rolls not trackball rolls. Although the BlackBerry Smartphone Simulator will appear to be receiving trackball rolls, it is actually a trackwheel event.

Simulating convenience keys

Some BlackBerry® smartphones contain additional keys that are not present on other BlackBerry models. The BlackBerry Smartphone Simulator assigns the device keys to the following computer keyboard procedures:

Active Key	Steps
Front Convenience key	Press Insert.
Side Convenience key	Press PAGE UP.
Currency symbol key (BlackBerry® 8700 Series only)	Press F5.
Speaker phone key (BlackBerry® 8700 Series only)	Press F6.

Simulating convenience keys

Some BlackBerry® smartphones contain additional keys that are not present on other BlackBerry models. The BlackBerry Smartphone Simulator assigns the device keys to the following computer keyboard procedures:

Active Key	Steps
Menu key	Press Insert.
Right Side Convenience key	Press \.
Left Side Convenience key	Press PAGE UP.
Volume Up key	Press F8
Volume Down key	Press F7.

Assign a key to the Escape key

BlackBerry® Smartphone Simulator for BlackBerry® devices that do not support the trackball enable you to map the cursor key to the Escape key.

1. On the **Edit** menu, click **Map Cursor Key to Escape**.
2. Select **Left** or **Right**.

Use the trackwheel and keys

Use the BlackBerry® Smartphone Simulator trackwheel to simulate using the trackwheel on a BlackBerry® device. Note that not all BlackBerry devices use the keys listed.

- To navigate between fields, icons, and menu items, roll the trackwheel.

- To set a field or select a menu item, click the trackwheel.

The BlackBerry Smartphone Simulator assigns BlackBerry device functionality to the following computer keyboard and mouse procedures:

Task	Keyboard steps	Mouse steps
Roll the trackwheel.	Press the UP ARROW or DOWN ARROW key.	Roll the mouse wheel button.
Click the trackwheel.	Press the LEFT ARROW key.	Click the mouse wheel button.
Press the Escape key.	Press ESC or the RIGHT ARROW key.	Click the right mouse button.
Turn on BlackBerry device backlighting.	Press PAGE DOWN.	Click the Power button on the BlackBerry Smartphone Simulator keyboard.
Press the Symbol key.	Press DELETE.	Click the Symbol key on the BlackBerry Smartphone Simulator keyboard.
Press the Alt key.	Press CTRL.	Click the Alt key on the BlackBerry Smartphone Simulator keyboard.
Press the BlackBerry device keys.	Press the keys on your computer keyboard.	Click the keys on the BlackBerry Smartphone Simulator keyboard.
Press the phone/PTT (Push to Talk) button.	Press PAGE UP.	—

Note: If you press a key on your computer keyboard that does not have directly correspond to a key on the BlackBerry device (such as the number or symbol keys), the BlackBerry Smartphone Simulator inserts the character as it appears on the computer keyboard.

BlackBerry Device Software applications

Use the contact list

1. Open **Address Book**.
2. On the **Address Book** menu, click **New Address**.
3. Type contact information in the appropriate fields.
4. Open the menu.
5. Click **Save**.

Use the calendar

1. Open **Calendar.**
2. In the **Calendar** menu, click **New**.
3. Type appointment information in the appropriate fields the **New Appointment** screen.
4. Open the menu.
5. Click **Save**.

Compose an email

1. Open **Messages.**
2. In the **Messages** menu, click **Compose Email**.
3. In the **To** field, type an email address.
4. Set the **Cc**, **Subject**, and **Body** fields.
5. Open the menu.
6. Click **Save Draft**

After you finish: The BlackBerry® Email Simulator is required to simulate sending an email message.

Simulate an incoming call

1. On the **Simulate** menu, click **Incoming Voice Call**.
2. In the **New Incoming Call** dialog box, for the originating phone number, type a new phone number or the phone number of an existing contact.
3. Set one of the following **Caller ID** options:

Option	Description
Allowed	The BlackBerry® device can display the phone number of the originating phone.
Private	The phone number of the originating phone is blocked and not available for display on the BlackBerry device.
Unknown	The BlackBerry device cannot determine the phone number of the originating phone.

4. To place the phone call to the BlackBerry Smartphone Simulator, click **Create Call**.
5. Click **Answer** or **Ignore.**
6. End the call by performing one of the following actions:

Task	Steps
Simulate the termination of the call by the originating phone.	Click Disconnect.
Simulate a network failure.	Set a reason for failure. Click Fail.

Simulate an outgoing call

1. Open **Call Log**.
2. In the **Call Log** menu, click **Call From Address Book**.
3. In the **Call** field, type a new phone number or set a contact.
4. Press the **Enter** key.
5. Open the menu.
6. Click **Continue.**
7. In the **Call** to dialog box, perform one of the following actions:
   - Click **Answer.**
   - To simulate a failed connection, set a reason for failure. Click **Fail.**

Using voice activated dialing

Use voice activated dialing to make a call

1. Click the **VoiceActivatedDialing** icon.
2. Say "**Call**" and a contact name or number.
3. When the BlackBerry® Smartphone Simulator prompts you to verify the phone number, perform one of the following actions:
   - Set the correct phone number from the list and click the trackball.
   - Say "**Yes**" when the BlackBerry Smartphone Simulator reads the correct phone number. Say "**No**" when the BlackBerry Smartphone Simulator reads an incorrect phone number. Say "**Repeat**" to hear the phone number again. Say "**Cancel**" if the correct phone number does not appear in the list.

Use voice activated dialing to turn voice prompts on or off

1. Click the **VoiceActivatedDialing** icon.
2. If prompts are turned on, say "**Turn prompts off**".
3. If prompts are turned off, say "**Turn prompts on**".

Use voice activated dialing to check the device status

When you say "**Check Status**" the BlackBerry® Smartphone Simulator displays the status of battery, coverage, and signal strength.

1. Click the **VoiceActivatedDialing** icon.
2. Say "**Check**" and say one of the following:
   - "**Battery**"
   - "**Coverage**"
   - "**My Phone Number**"
   - "**Signal strength**"
   - "**Status**"

Use the touch screen

BlackBerry® Storm™ 9500 Series smartphones support a number of touch actions, including screen touches, clicks, and simultaneous touches.

Screen touch	Description
Click	A screen click is performed by gently pressing the screen until you feel a tactile response.
Touch	A screen touch is performed by touching the screen without pressing down on it.
Multiple touch	A multitouch action is performed by touching two areas on the screen at the same time. Each individual touch might also involve sliding your finger across the screen.
Slide	A slide is performed by sliding your finger across the screen during a touch action. You can perform a slide action along with touch or multitouch actions.

Use text messaging

You can use the BlackBerry® Smartphone Simulator to simulate sending an SMS text message to a server side application. Verify that you have installed the BlackBerry® Java® Development Environment.

1. Click the **Call Log** icon.
2. Type the destination phone number for the SMS text message.
3. Open the menu.
4. Click **SMS** ***<number>***.
5. Type your message.
6. Open the menu.
7. Click **Send**.

Using the camera

Make sure your webcam is connected and functioning properly. If the BlackBerry® Smartphone Simulator does not detect a connected webcam, a prompt appears and you can select a picture file from your hard drive.

Take a picture

1. Click the **Camera** icon.
2. If prompted, to save pictures to the media card on the BlackBerry® Smartphone Simulator, click **Yes**. To save pictures to the BlackBerry Smartphone Simulator device memory, click **No.**
3. To take a picture, click the trackball.
4. To take another picture, click **Take Another Picture**.

View a picture

When an application switches to camera viewfinder mode, the viewfinder displays the picture that you select using the **Camera Image** menu item. The viewfinder displays the file selector if no picture has been selected before. For best results, select an image of equal or greater resolution than the camera's maximum resolution of 1280 by 1024. If you select a picture with a higher resolution or different aspect ratio than the camera, the Camera application displays only the center of the picture.

1. On the **Simulation** menu, click **Camera Image**.
2. Select a .jpg file to view.

After you finish: The last picture that you select becomes the default picture that is displayed the next time you start the BlackBerry Smartphone Simulator.

Set a picture as the caller ID

1. Click **Set As**.
2. Click **Set As Caller ID**.
3. In the **Username** field, type the user name.
4. In the **Domain** field, type the domain.
5. In the **Password** field, type the password.
6. Click **OK**.

Set a picture as your Home screen background

1. Click **Set As**.
2. Click **Set As Home Screen Image**.

Rename a picture

1. Click **Rename Picture**.
2. In the **Name** field, type a new name.
3. Click **OK**.

Delete a picture

1. Click **Delete Picture**.
2. Click **Delete** to confirm.

Send a picture in an email message

1. Click **Send Picture**.
2. Click **Send As Email**.
3. Compose the email message.

Recording video

Before you being, ensure that your webcam is connected and functioning properly. If the BlackBerry® Smartphone Simulator does not detect a connected webcam, a prompt appears and you can select a jpeg file from your hard drive. You can then click on the LCD an drag the image around to record the movements as a video.

Record a video

1. Click the **Video Camera** icon.
2. If prompted, to save videos to the media card on the BlackBerry® Smartphone Simulator, click **Yes**. To save pictures to the BlackBerry Smartphone Simulator device memory, click **No**.
3. To start recording a video, click the trackball.
4. To stop recording, click the trackball.

View a video

1. Click the **Video Camera** icon.
2. Click the **Menu** key.
3. Click **View Videos**.

Set video recording options

1. Click the **Video Camera** icon.
2. Click the **Menu** key.
3. Click **Options**.
4. Perform any of the following actions:

Task	Steps
Set the video light.	Specify the **Video Light** option.
Set the color effect	Specify the **Color Effect** option.
Set the video resolution.	Specify the **Video Format** action.

Simulate a GPS receiver

A GPS receiver is a device that receives GPS information and transmits it to the BlackBerry® device through a Bluetooth® connection. Devices must be running applications with JSR179 in order for this functionality to work properly.

To simulate a BlackBerry device that is close enough to a Bluetooth GPS receiver to receive data from the receiver, perform the following actions:

1. On the **Simulate** menu, click **GPS Location**.
2. Set **Bluetooth GPS Receiver In Range**.

Simulating GPS location information

You can simulate movement between fixed GPS locations, create and save several locations along a route. Once you save the route, run the simulation.

A location represents one end point of a path. A route can contain one or more paths. The BlackBerry® Smartphone Simulator emulates movement between locations on a route across one or more paths. You can create and save multiple locations that you can simulate.

Add a GPS location

1. In the **Location** section, click **Add**.
2. In the **Name** field, type a name.
3. In the **Latitude** and **Longitude** fields, type a latitude and longitude.
4. In the **Altitude** field, type an altitude.

5. The BlackBerry® Smartphone Simulator specifies the altitude in metres above (or below) the WGS84 ellipsoid. Visit http://w3sli.wcape.gov.za/Surveys/Mapping/wgs84.htm on page for more information.
6. In the **Satellites** field, type the number of satellites that are visible from that location.
7. Click **Save**.

Change a GPS location

The valid range for latitude is -90 to 90. The valid range for longitude is -180 to 180.

1. In the **Location** drop-down list, select a location.
2. Click **Edit** and change the values in the appropriate fields.
   Renaming a location will cause routes that contain that location to fail.
3. Click **Save**.

Delete a GPS location

1. In the **Location** drop-down list, click a location to delete.
2. Click **Delete**.

Managing GPS routes

To simulate movement between different GPS locations, set up a route with one or more paths. Each path represents a straight line between two adjacent locations. Each path contains information about the rate of speed used to travel between the path start and end locations.

You can use the following rates of speed: metres per second (m/s), kilometres per hour (km/h), metres per hour (m/h), and feet per second (f/s). The speed limit in terms of metres per second is 655 m/s, with respective limits set for other rates.

Create a GPS route using existing locations

1. On the **Simulate** menu, click **GPS Location**.
2. In the **Route** section, click **Add**.
3. Click **existing locations**.
4. Type a name for the new route
5. Select the starting location of the route.
6. Type a speed value and set the rate of speed for the path.
7. Click **Insert** to insert this location into the route.
8. To add additional locations to the route, repeat steps 3 through 5.
9. Save the route.

Create a GPS route using a data file

1. On the **Simulate** menu, click **GPS Location**.
2. In the **Route** section, click **Add**.
3. Click data from a file.
4. From the **Import Route** dialog-box, select a data file.
5. Type a name for the data file.
6. Save the route.

Create a GPS route using random data

1. On the **Simulate** menu, click **GPS Location**.
2. In the **Route** section, click **Add**.
3. Select **Create route using random route generator**.
4. Click **OK**.
5. In the new dialog, specify the route name, the number of legs, the duration of the route (in seconds), as well as a start and end location. If you generated the route successfully, the New Route dialog displays the route information that you typed in step 3.

Change a GPS route

1. On the **Simulate** menu, click **GPS Location**.
2. Set a route to change.
3. Perform one or more of the following procedures:

Task	Steps
Change the route name.	In the **Name** field, type a new name for the route.
Add a location to the route.	a. Click **Insert.** b. In the **Start Location** drop-down list, click a location. c. Type a speed value and set the rate of speed for the path.
Change a location.	a. In the text box, under the **Name** field, set the location you want to change. b. In the **Start Location** drop-down list, click the location you want to change to.

Task	Steps
	c. Type a speed value and set the rate of speed for the path.
Remove a location.	a. From the text box, under the **Name** field, set a location. b. Click **Delete**.

4. In the **Name** field, type a new name for the route.
5. Click **Save**.

Delete a GPS route

1. On the **Simulate** menu, click **GPS Location**.
2. In the **Route** drop-down list, click a route to delete.
3. Click **Delete**.

Simulate a GPS route

Route simulation uses the Haversine formula to calculate the changing GPS coordinates and updates the location, the direction, and the coordinates every second.

1. On the **Simulate** menu, click **GPS Location**.
2. Perform one of the following actions:

Task	Steps
Play a route.	In the **Route** section, click the **Play** (right arrow) icon.
Stop a route.	In the **Route** section, click the **Stop** (black square) icon.

3. To restart the route, stop the simulation. Press the **Play Route** button.

Changing BlackBerry device operating conditions

Use a single button headset

Perform one of the following actions:

Task	Steps
Connect a single button headset.	a. On the **Simulate** menu, click **Headset Connected**. b. In the **Headset** dialog box, select the **One button headset inserted** option.

Task	Steps
Click the button on a single button headset.	In the **Headset** dialog box, click **Click**.

Use a multiple button headset

Perform one of the following actions:

Task	Steps
Connect a multibutton headset.	a. On the **Simulate** menu, click **Headset Connected**. b. In the **Headset** dialog box, select the **Multibutton headset inserted** option.
Click a button on a multibutton headset.	Under the **Multibutton headset inserted** option, click one of buttons.

Disconnect a headset

1. On the **Simulate** menu, click **Headset Connected**.
2. In the **Headset** dialog box, select the **No headset** option.

Change holster conditions

When the BlackBerry® device is in the holster, the screen display turns off. By default, the BlackBerry device uses different notifications when in the holster.

On the **Simulate** menu, click **In Holster**.

Use a flip device

When the BlackBerry® 8200 Series smartphone is flipped, the screen display turns off. The BlackBerry device uses the flip screen to display notifications.

On the **Simulate** menu, click **Flipped**.

Simulate battery conditions

1. On the **Simulate** menu, click **Battery Properties**.
2. Set one of the following options:

Option	Description
Full	The battery level is sufficient for BlackBerry® device and network use.
Low	The BlackBerry device alerts the user, but remains turned on and can still use the network.
Very Low	The BlackBerry device cannot access the network, but the device remains turned on. Camera flash is disabled.
Dead	The BlackBerry device turns off immediately. If you select this option, the BlackBerry Smartphone Simulator shuts down.
Other	This option enables you to specify the battery level as a percentage.

Simulate the absence of a SIM card

The BlackBerry® Smartphone Simulator for BlackBerry devices with SIM cards allow you to simulate the absence of a SIM card. By default, the BlackBerry Smartphone Simulator simulates the SIM card being present.

At the command prompt, type the following command when you start the device:

```
fledge /handheld=<model_number> /no-sim-present
```

Simulating network conditions

The BlackBerry® Smartphone Simulator can simulate various states of network coverage, from a strong signal to a very weak signal. The BlackBerry Smartphone Simulator can also simulate a loss of network coverage.

Add a network

1. On the **Simulate** menu, click **Network Properties**.
2. Click **Add**.
3. Type the network properties in the dialog.
4. Click **OK**.

Set the network signal strength

1. On the **Simulate** menu, click **Network Properties**.
2. Select the network you want to simulate from the **Networks** list.
3. If you want to edit the network properties, click **Edit** and type new values. Click **OK**.
4. Select or clear the **In coverage** check box.
5. Move the **Signal strength (RSSI)** slide bar to set a value. The signal strength can be between -120 dBm and -40dBm.

Simulate supplementary services

A number of supplementary services, such as call forwarding or call waiting, might be available on a BlackBerry® device. You can simulate the availability of these services. The BlackBerry Smartphone Simulator is set up with all supplementary services by default.

1. On the **Simulate** menu, click **Provision Supplementary Services**.
2. In the **Supplementary Services Provisioned** dialog box, enable or disable services.

Reset the flash memory

1. Close the BlackBerry® Smartphone Simulator.
2. Restart the BlackBerry Smartphone Simulator using the `/clear-flash` command prompt option. For example, type the following:
   ```
   fledge /handheld=7730 /serial-port=2 /comm=serial /clear-flash
   ```

After you finish: See *BlackBerry Integrated Development Environment Online Help* for more information on how to set this option using the BlackBerry Integrated Development Environment.

Simulating flash memory

For each flash session, the BlackBerry® Smartphone Simulator creates several files named `<session_name>*.dmp`. Each .dmp file corresponds to a different region of flash memory. By default, the session name represents the model number of the BlackBerry device that you are simulating. For example, the flash session files for a BlackBerry 7100 Series device simulator have names such as 7100-fs.dmp, 7100-nv.dmp, and 7100-as.dmp.

When the BlackBerry Smartphone Simulator starts, it loads the flash memory for the device profile; if no flash memory files exist, the BlackBerry Smartphone Simulator creates new files. When the BlackBerry Smartphone Simulator exits, it saves flash memory contents to the .dmp files.

The BlackBerry Smartphone Simulator saves changes to flash memory as you make them. To keep changes from overwriting the original file system, use the `/load-filesystem=<session-name>-fs`.dmp option. The file system will be saved to `<session-name>-fs`.dmp. To specify a unique session name, use the `/session` command prompt option.

When you reset the flash memory, the BlackBerry Smartphone Simulator removes application data and clears the .dmp files for the session.

Simulating a media card

The BlackBerry® Smartphone Simulator loads and saves the media card image to `<session_name>*.sdcard` in the working directory, unless you have set the `/sdcard= <path>` option. When the BlackBerry Smartphone Simulator starts, it loads the media card image for the BlackBerry device profile. If no image exists or you have specified `/clear-sdcard`, the BlackBerry Smartphone Simulator creates a new media card image when the BlackBerry Smartphone Simulator starts. The size of the media card image is 32MB, unless you specify otherwise using `/sdcard-size=<size>` .

You must clear the existing card image using /clear-sdcard to create a new card with the specified size. If a media card image exists, its size will be retained even if you specify a different size using the `/sdcard-size` command.

The BlackBerry Smartphone Simulator inserts the media card when the BlackBerry Smartphone Simulator unless you specify `/no-sdcard-inserted`.

Change the media card

1. On the **Simulate** menu, click **Change SD Card**.
2. Click **Open Battery Door**.
3. Perform one of the following actions:

Task	Steps
Specify a new media card.	In the **Current SD Card** list, specify a new microSD card from the list. To specify no card, select **None**.
Add a media card to the Current SD Card list from a file.	a. Click **Add From File**. b. Navigate to the location of the media card image file. c. Click the media card image file. d. Click **Open**.
Create a new media card.	a. In the **Size (MB)** field, specify the size (in MB) of the new media card. b. Click **Create.** c. Navigate to the location where you want to save the media card image. d. Click **Save**.
Delete a media card	a. In the **Current SD Card** list, click the media card. b. Click **Delete**.

4. Click **Close Battery Door**.

5. Click **Close**.

Simulating a computer connection

Use the BlackBerry® Smartphone Simulator to simulate a serial or USB connection between the BlackBerry device and the BlackBerry® Desktop Software. Typically, you simulate a serial port connection for BlackBerry devices that use a cradle, and a USB connection for BlackBerry devices that do not use a cradle.

After you set this option, you can perform any of the BlackBerry® Desktop Manager operations, such as loading applications onto the BlackBerry device that you simulate.

Simulate a USB connection to the computer

Simulating a USB cable connection enables you to connect the BlackBerry® Smartphone Simulator to the BlackBerry® Desktop Manager. This option is only available for BlackBerry device models that do not use a cradle. By default, the USB cable is not connected.

1. In the BlackBerry Desktop Manager window, on the **Options** menu, click **Connection options**.
2. In the **Connection Type** drop-down list, click **USB**.
3. Click **Simulation**.
4. To connect or disconnect the USB cable, set the **USB cable connected** option.

Simulating BlackBerry Enterprise Server APIs and IT policies

To test applications that use BlackBerry® Enterprise Server Extension API, applied IT policies, email and browser messaging, HTTP/TCP connections, or push functionality, use the BlackBerry Smartphone Simulator to connect to an account on a BlackBerry Enterprise Server.

The BlackBerry Smartphone Simulator requires the BlackBerry Enterprise Server , BlackBerry® Desktop Manager and BlackBerry® Device Manager must be version 4.0 or later.

Using the BlackBerry Smartphone Simulator in secure mode

By default, the BlackBerry® Smartphone Simulator does not check for required code signatures and it does not prompt you before connecting to the network. Before you deploy your application, test it in secure mode using the BlackBerry Smartphone Simulator.

When you enable BlackBerry Smartphone Simulator security, you cannot use the .cod files that come with the BlackBerry Smartphone Simulator. You must use the .cod files that are installed on the actual BlackBerry device. To obtain the appropriate .cod files, copy BlackBerry device .cod files from your computer to the BlackBerry Smartphone Simulator installation folder.

By default, the installation folder exists in the following location: C:\Program Files\Common Files\Research In Motion\Shared \Loader Files\Handheld\Java.

Enable secure mode

Set the `/secure` option when you start the BlackBerry® Smartphone Simulator. For example, type the following command:

```
fledge /handheld=7730 /secure
```

View the event log

The event log window displays information about events that occur between a simulated BlackBerry® device and its environment. The BlackBerry Smartphone Simulator logs event messages for events including when you simulate playing audio files, placing a phone call, and blinking the LED screen.

From the **Tools** menu, click **Show Event Log**.

Provide feedback

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

Legal notice

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