



BlackBerry Dynamics SDK for Android

Release Notes

12.0

Contents

- BlackBerry Dynamics SDK for Android version 12.0.1.79..... 4
- BlackBerry Dynamics SDK for Android version 12.0.0.57..... 6
- Installing or upgrading the software..... 9
- Reference for all deprecated interfaces, classes, and methods..... 10
- Legal notice..... 11

BlackBerry Dynamics SDK for Android version 12.0.1.79

What's new in the BlackBerry Dynamics SDK for Android version 12.0.1.79

This release of BlackBerry Dynamics SDK for Android introduces bug fixes that are described in the fixed issues below.

BlackBerry Dynamics Launcher Library

This release uses BlackBerry Dynamics Launcher Library version 12.0.0.253

Fixed issues

When authenticating with BlackBerry Enterprise Identity, a connection error may have occurred. (GD-63351)

Known Limitations

On Samsung devices with Android 10, when a user copies color formatted text and pastes it into a non-GDTextView (android.widget.TextView) field, while the DLP policy "Do not allow copying data from non BlackBerry Dynamics apps into BlackBerry Dynamics apps" is turned off, the text will not maintain the color format. (GD-60975)

Users cannot upload files from Google Drive by selecting the file from the native Android file picker. (GD-60021)

Known Behavior

The Android runtime permission *POST_NOTIFICATIONS* is no longer required by BlackBerry Dynamics SDK for Android 11.0. However, if permission has been requested by the app and granted by the user, mobile threat detections will be alerted via push notification. For apps still using BlackBerry Dynamics SDK 10.2 or earlier, the end user is prompted to grant this permission after they upgrade to Android 13. (GD-58740)

If a user opens a BlackBerry Dynamics app on an insecure Wi-Fi network while the **Unsafe Wi-Fi detected** compliance action is enabled, they will receive a dialog stating that the application is blocked for this network. If the user opens the network settings on Android 13, the network settings panel will be blank until the user taps the **Settings** button from the panel. (GD-59357)

Known issues

On devices running Android 14, if a user turns on airplane mode during the retrieving policies stage of the app provision, the app will stop responding. (GD-62564)

If a BlackBerry Dynamics app is sent to the background and returned to the foreground, various UI issues may appear on the password screen. (GD-62380) (GD-62273)

In some instances, the cancel button will not display on the certificate enrollment screen. (GD-62302)

If a user enables biometric log in from the BlackBerry Dynamics Launcher settings but dismisses the biometric activation prompt, the biometric log in toggle will still be enabled. (GD-62284)

In some instances, the biometric login screen may display even after it was dismissed by the user. (GD-62275) (GD-62269)

On devices running Android14, if a user uses the BlackBerry Dynamics Launcher to switch between BlackBerry Dynamics apps, the screen may appear blank after navigating to a new app. (GD-62182)

In some cases, if a user opens the docs section of the BlackBerry Dynamics Launcher on a BlackBerry Dynamics app, sends the app to the background, and returns it to the foreground, the app may stop responding. (GD-62135)

Activating an app on an Android 14 emulator will fail if you provision the app with biometric log in. (GD-61557)

Play Integrity attestation will fail during app provision on an Android emulator. (GD-61278)

If you configured the BlackBerry Dynamics profile to require users to enter their password when a BlackBerry Dynamics app returns to the foreground, on Android 12 devices, the app does not prompt the user for their password when it returns to the foreground. (GD-56162)

If a user with Android 11 or later is activating a BlackBerry Dynamics app using a QR code and selects the "Only this time" option when prompted to grant permissions, certificate import issues might occur if the app remains in the background for longer than one minute during the import process. BlackBerry recommends that users select the "While using the app" option when prompted. (GD-54972)

Workaround: Instruct users to force close the app and open it again.

If a BlackBerry Dynamics app uses Kerberos authentication and the app tries to access a web page using an IP address, after the user enters their credentials, the web page does not load as expected and the user is prompted for their credentials again in a loop. (GD-54481)

Workaround: When developing BlackBerry Dynamics apps, do not hard code URLs that use IP addresses. If users can manually enter a URL, instruct users to avoid URLs that use an IP address.

If battery saving mode is enabled and an app tries to open a BlackBerry Dynamics app that was not already open using [AppKinetics](#), the BlackBerry Dynamics app might not come to the foreground. (GD-54205)

Workaround: The user can start the BlackBerry Dynamics app and leave it running in the background before performing the AppKinetics operation.

If you use direct references to the BlackBerry Dynamics SDK .aar files in your build.gradle repositories (for example, `implementation name:'android_handheld_platform-$DYNAMICS_SDK_VERSION', ext:'aar'`) instead of using Maven linkage (for example, `implementation 'com.blackberry.blackberrydynamics:android_handheld_platform:$DYNAMICS_SDK_VERSION'`), errors may occur in the AndroidManifest file in the Gradle caches directory. To resolve this, use Maven linkage or specify `android_handheld_resources` and `android_handheld_platform` in the build.gradle file. (GD-51938)

The Android certificate import API for the BlackBerry Dynamics SDK is no longer supported. BlackBerry recommends using certificates from the Android Native Keystore if it is acceptable that the key material is protected by the device and not by BlackBerry Dynamics. (GD-51742)

BlackBerry Dynamics SDK for Android version 12.0.0.57

What's new in the BlackBerry Dynamics SDK for Android version 12.0.0.57

Changes to the SDK and software requirements:

Feature	Description
Android 14 readiness	<p>Android 14 is now supported in this release.</p> <p>BlackBerry recommends upgrading to BlackBerry Dynamics SDK for Android 12.0. If you do not upgrade from version 11.2, you may experience performance issues and battery drain on Android 14, as Android 14 will now queue all events and deliver them when apps are in the foreground. For more information, see Behavior changes: all apps in the Android documentation.</p>
Security enhancements	<p>The BlackBerry Dynamics SDK for Android now includes security enhancements to improve rooted detection, hooking detection, and emulator detection.</p>
Enhancements to user passwords	<p>The BlackBerry Dynamics SDK for Android has been updated to improve the flow of changing a user's password. If a user attempts to change their password from a non-authentication delegated app, the device will open an authentication delegated app and will prompt the user to change their password from the authentication delegated app. For more information, see Authentication delegation in the BlackBerry Dynamics SDK for Android development guide.</p>
UX enhancements	<p>The BlackBerry Dynamics SDK for Android has been updated with enhanced UX to improve iconography, consistency, and clarity on SDK screens. The following updates are new in this release:</p> <ul style="list-style-type: none">• Icons, forms, and UI elements have been updated to use the Material Design icons.• The UI has been updated with improved consistency for assets. For example, consistency has been improved for buttons, asset placement, headings, text alignment, etc.• The instructions for changing a user's password has been improved, giving users better clarity on the change password flow.• Old strings and templates have been updated to improve clarity.
CURL upgrade	<p>CURL has been updated to version 8.0.0 in this release.</p>
Heimdall upgrade	<p>Heimdall has been upgraded to version 7.80.0 in this release.</p>
Changes to BBWebView	<p>The deprecated API <code>BBWebChromeClient.onReachedMaxAppCacheSize</code> has been removed from BBWebView in this release.</p>
BlackBerry Persona compatibility	<p>The BlackBerry Dynamics SDK for Android will be ending support for BlackBerry Persona in the 12.1 release. You must remove any instances of BlackBerry Persona APIs after the 12.1 release.</p>

BlackBerry Dynamics Launcher Library

This release uses BlackBerry Dynamics Launcher Library version 12.0.0.253

Fixed issues

There are no fixed issues in this release.

Known Limitations

On Samsung devices with Android 10, when a user copies color formatted text and pastes it into a non-GDTextView (android.widget.TextView) field, while the DLP policy "Do not allow copying data from non BlackBerry Dynamics apps into BlackBerry Dynamics apps" is turned off, the text will not maintain the color format. (GD-60975)

Users cannot upload files from Google Drive by selecting the file from the native Android file picker. (GD-60021)

Known Behavior

The Android runtime permission *POST_NOTIFICATIONS* is no longer required by BlackBerry Dynamics SDK for Android 11.0. However, if permission has been requested by the app and granted by the user, mobile threat detections will be alerted via push notification. For apps still using BlackBerry Dynamics SDK 10.2 or earlier, the end user is prompted to grant this permission after they upgrade to Android 13. (GD-58740)

If a user opens a BlackBerry Dynamics app on an insecure Wi-Fi network while the **Unsafe Wi-Fi detected** compliance action is enabled, they will receive a dialog stating that the application is blocked for this network. If the user opens the network settings on Android 13, the network settings panel will be blank until the user taps the **Settings** button from the panel. (GD-59357)

Known issues

On devices running Android 14, if a user turns on airplane mode during the retrieving policies stage of the app provision, the app will stop responding. (GD-62564)

If a BlackBerry Dynamics app is sent to the background and returned to the foreground, various UI issues may appear on the password screen. (GD-62380) (GD-62273)

In some instances, the cancel button will not display on the certificate enrollment screen. (GD-62302)

If a user enables biometric log in from the BlackBerry Dynamics Launcher settings but dismisses the biometric activation prompt, the biometric log in toggle will still be enabled. (GD-62284)

In some instances, the biometric login screen may display even after it was dismissed by the user. (GD-62275) (GD-62269)

On devices running Android14, if a user uses the BlackBerry Dynamics Launcher to switch between BlackBerry Dynamics apps, the screen may appear blank after navigating to a new app. (GD-62182)

In some cases, if a user opens the docs section of the BlackBerry Dynamics Launcher on a BlackBerry Dynamics app, sends the app to the background, and returns it to the foreground, the app may stop responding. (GD-62135)

Activating an app on an Android 14 emulator will fail if you provision the app with biometric log in. (GD-61557)

Play Integrity attestation will fail during app provision on an Android emulator. (GD-61278)

If you configured the BlackBerry Dynamics profile to require users to enter their password when a BlackBerry Dynamics app returns to the foreground, on Android 12 devices, the app does not prompt the user for their password when it returns to the foreground. (GD-56162)

If a user with Android 11 or later is activating a BlackBerry Dynamics app using a QR code and selects the "Only this time" option when prompted to grant permissions, certificate import issues might occur if the app remains in the background for longer than one minute during the import process. BlackBerry recommends that users select the "While using the app" option when prompted. (GD-54972)

Workaround: Instruct users to force close the app and open it again.

If a BlackBerry Dynamics app uses Kerberos authentication and the app tries to access a web page using an IP address, after the user enters their credentials, the web page does not load as expected and the user is prompted for their credentials again in a loop. (GD-54481)

Workaround: When developing BlackBerry Dynamics apps, do not hard code URLs that use IP addresses. If users can manually enter a URL, instruct users to avoid URLs that use an IP address.

If battery saving mode is enabled and an app tries to open a BlackBerry Dynamics app that was not already open using [AppKinetics](#), the BlackBerry Dynamics app might not come to the foreground. (GD-54205)

Workaround: The user can start the BlackBerry Dynamics app and leave it running in the background before performing the AppKinetics operation.

If you use direct references to the BlackBerry Dynamics SDK .aar files in your build.gradle repositories (for example, `implementation name:'android_handheld_platform-$DYNAMICS_SDK_VERSION', ext:'aar'`) instead of using Maven linkage (for example, `implementation 'com.blackberry.blackberrydynamics:android_handheld_platform:$DYNAMICS_SDK_VERSION'`), errors may occur in the AndroidManifest file in the Gradle caches directory. To resolve this, use Maven linkage or specify `android_handheld_resources` and `android_handheld_platform` in the build.gradle file. (GD-51938)

The Android certificate import API for the BlackBerry Dynamics SDK is no longer supported. BlackBerry recommends using certificates from the Android Native Keystore if it is acceptable that the key material is protected by the device and not by BlackBerry Dynamics. (GD-51742)

Installing or upgrading the software

For complete installation instructions, upgrade guidance, and software requirements, see the [BlackBerry Dynamics SDK for Android Development Guide](#). The Development Guide also provides instructions for implementing the SDK libraries as .aar files that can be published to an internal repository.

If you installed the SDK using Android Studio SDK manager and you made changes to the sample apps, the update might override the sample apps, discarding your changes.

Note: The BlackBerry Dynamics SDK for Android 5.0 and later includes a compliance enhancement to protect against malicious attempts to add a debugger to deployed BlackBerry Dynamics apps. Your options for configuring this feature depend on the version of BlackBerry UEM and the BlackBerry Dynamics SDK. For more information, see [Configure compliance settings so you can debug your app](#) in the BlackBerry Dynamics SDK Development Guide.

Reference for all deprecated interfaces, classes, and methods

This document specifies the interfaces, classes, and methods that were deprecated in this release of the SDK (if any). For a full list of all deprecated objects, view the [API reference for your platform](#) and open the deprecated list in the appendix.

You should plan to stop using any interfaces, classes, and methods that are included in the deprecated list.

Legal notice

©2023 BlackBerry Limited. Trademarks, including but not limited to BLACKBERRY, BBM, BES, EMBLEM Design, ATHOC, CYLANCE and SECUSMART are the trademarks or registered trademarks of BlackBerry Limited, its subsidiaries and/or affiliates, used under license, and the exclusive rights to such trademarks are expressly reserved. All other trademarks are the property of their respective owners.

Patents, as applicable, identified at: www.blackberry.com/patents.

This documentation including all documentation incorporated by reference herein such as documentation provided or made available on the BlackBerry website provided or made accessible "AS IS" and "AS AVAILABLE" and without condition, endorsement, guarantee, representation, or warranty of any kind by BlackBerry Limited and its affiliated companies ("BlackBerry") and BlackBerry assumes no responsibility for any typographical, technical, or other inaccuracies, errors, or omissions in this documentation. In order to protect BlackBerry proprietary and confidential information and/or trade secrets, this documentation may describe some aspects of BlackBerry technology in generalized terms. BlackBerry reserves the right to periodically change information that is contained in this documentation; however, BlackBerry makes no commitment to provide any such changes, updates, enhancements, or other additions to this documentation to you in a timely manner or at all.

This documentation might contain references to third-party sources of information, hardware or software, products or services including components and content such as content protected by copyright and/or third-party websites (collectively the "Third Party Products and Services"). BlackBerry does not control, and is not responsible for, any Third Party Products and Services including, without limitation the content, accuracy, copyright compliance, compatibility, performance, trustworthiness, legality, decency, links, or any other aspect of Third Party Products and Services. The inclusion of a reference to Third Party Products and Services in this documentation does not imply endorsement by BlackBerry of the Third Party Products and Services or the third party in any way.

EXCEPT TO THE EXTENT SPECIFICALLY PROHIBITED BY APPLICABLE LAW IN YOUR JURISDICTION, ALL CONDITIONS, ENDORSEMENTS, GUARANTEES, REPRESENTATIONS, OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY CONDITIONS, ENDORSEMENTS, GUARANTEES, REPRESENTATIONS OR WARRANTIES OF DURABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, MERCHANTABILITY, NON-INFRINGEMENT, SATISFACTORY QUALITY, OR TITLE, OR ARISING FROM A STATUTE OR CUSTOM OR A COURSE OF DEALING OR USAGE OF TRADE, OR RELATED TO THE DOCUMENTATION OR ITS USE, OR PERFORMANCE OR NON-PERFORMANCE OF ANY SOFTWARE, HARDWARE, SERVICE, OR ANY THIRD PARTY PRODUCTS AND SERVICES REFERENCED HEREIN, ARE HEREBY EXCLUDED. YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY BY STATE OR PROVINCE. SOME JURISDICTIONS MAY NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES AND CONDITIONS. TO THE EXTENT PERMITTED BY LAW, ANY IMPLIED WARRANTIES OR CONDITIONS RELATING TO THE DOCUMENTATION TO THE EXTENT THEY CANNOT BE EXCLUDED AS SET OUT ABOVE, BUT CAN BE LIMITED, ARE HEREBY LIMITED TO NINETY (90) DAYS FROM THE DATE YOU FIRST ACQUIRED THE DOCUMENTATION OR THE ITEM THAT IS THE SUBJECT OF THE CLAIM.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW IN YOUR JURISDICTION, IN NO EVENT SHALL BLACKBERRY BE LIABLE FOR ANY TYPE OF DAMAGES RELATED TO THIS DOCUMENTATION OR ITS USE, OR PERFORMANCE OR NON-PERFORMANCE OF ANY SOFTWARE, HARDWARE, SERVICE, OR ANY THIRD PARTY PRODUCTS AND SERVICES REFERENCED HEREIN INCLUDING WITHOUT LIMITATION ANY OF THE FOLLOWING DAMAGES: DIRECT, CONSEQUENTIAL, EXEMPLARY, INCIDENTAL, INDIRECT, SPECIAL, PUNITIVE, OR AGGRAVATED DAMAGES, DAMAGES FOR LOSS OF PROFITS OR REVENUES, FAILURE TO REALIZE ANY EXPECTED SAVINGS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, LOSS OF BUSINESS OPPORTUNITY, OR CORRUPTION OR LOSS OF DATA, FAILURES TO TRANSMIT OR RECEIVE ANY DATA, PROBLEMS ASSOCIATED WITH ANY APPLICATIONS USED IN CONJUNCTION WITH BLACKBERRY PRODUCTS OR SERVICES, DOWNTIME COSTS, LOSS OF THE USE OF BLACKBERRY PRODUCTS OR SERVICES OR ANY PORTION THEREOF OR OF ANY AIRTIME SERVICES, COST OF SUBSTITUTE GOODS, COSTS OF COVER, FACILITIES OR SERVICES, COST OF CAPITAL, OR OTHER SIMILAR PECUNIARY LOSSES, WHETHER OR NOT SUCH DAMAGES

WERE FORESEEN OR UNFORESEEN, AND EVEN IF BLACKBERRY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW IN YOUR JURISDICTION, BLACKBERRY SHALL HAVE NO OTHER OBLIGATION, DUTY, OR LIABILITY WHATSOEVER IN CONTRACT, TORT, OR OTHERWISE TO YOU INCLUDING ANY LIABILITY FOR NEGLIGENCE OR STRICT LIABILITY.

THE LIMITATIONS, EXCLUSIONS, AND DISCLAIMERS HEREIN SHALL APPLY: (A) IRRESPECTIVE OF THE NATURE OF THE CAUSE OF ACTION, DEMAND, OR ACTION BY YOU INCLUDING BUT NOT LIMITED TO BREACH OF CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY AND SHALL SURVIVE A FUNDAMENTAL BREACH OR BREACHES OR THE FAILURE OF THE ESSENTIAL PURPOSE OF THIS AGREEMENT OR OF ANY REMEDY CONTAINED HEREIN; AND (B) TO BLACKBERRY AND ITS AFFILIATED COMPANIES, THEIR SUCCESSORS, ASSIGNS, AGENTS, SUPPLIERS (INCLUDING AIRTIME SERVICE PROVIDERS), AUTHORIZED BLACKBERRY DISTRIBUTORS (ALSO INCLUDING AIRTIME SERVICE PROVIDERS) AND THEIR RESPECTIVE DIRECTORS, EMPLOYEES, AND INDEPENDENT CONTRACTORS.

IN ADDITION TO THE LIMITATIONS AND EXCLUSIONS SET OUT ABOVE, IN NO EVENT SHALL ANY DIRECTOR, EMPLOYEE, AGENT, DISTRIBUTOR, SUPPLIER, INDEPENDENT CONTRACTOR OF BLACKBERRY OR ANY AFFILIATES OF BLACKBERRY HAVE ANY LIABILITY ARISING FROM OR RELATED TO THE DOCUMENTATION.

Prior to subscribing for, installing, or using any Third Party Products and Services, it is your responsibility to ensure that your airtime service provider has agreed to support all of their features. Some airtime service providers might not offer Internet browsing functionality with a subscription to the BlackBerry® Internet Service. Check with your service provider for availability, roaming arrangements, service plans and features. Installation or use of Third Party Products and Services with BlackBerry's products and services may require one or more patent, trademark, copyright, or other licenses in order to avoid infringement or violation of third party rights. You are solely responsible for determining whether to use Third Party Products and Services and if any third party licenses are required to do so. If required you are responsible for acquiring them. You should not install or use Third Party Products and Services until all necessary licenses have been acquired. Any Third Party Products and Services that are provided with BlackBerry's products and services are provided as a convenience to you and are provided "AS IS" with no express or implied conditions, endorsements, guarantees, representations, or warranties of any kind by BlackBerry and BlackBerry assumes no liability whatsoever, in relation thereto. Your use of Third Party Products and Services shall be governed by and subject to you agreeing to the terms of separate licenses and other agreements applicable thereto with third parties, except to the extent expressly covered by a license or other agreement with BlackBerry.

The terms of use of any BlackBerry product or service are set out in a separate license or other agreement with BlackBerry applicable thereto. NOTHING IN THIS DOCUMENTATION IS INTENDED TO SUPERSEDE ANY EXPRESS WRITTEN AGREEMENTS OR WARRANTIES PROVIDED BY BLACKBERRY FOR PORTIONS OF ANY BLACKBERRY PRODUCT OR SERVICE OTHER THAN THIS DOCUMENTATION.

BlackBerry Enterprise Software incorporates certain third-party software. The license and copyright information associated with this software is available at <http://worldwide.blackberry.com/legal/thirdpartysoftware.jsp>.

BlackBerry Limited
2200 University Avenue East
Waterloo, Ontario
Canada N2K 0A7

BlackBerry UK Limited
Ground Floor, The Pearce Building, West Street,
Maidenhead, Berkshire SL6 1RL
United Kingdom

Published in Canada