

BlackBerry Dynamics SDK for Android

Release Notes

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BlackBerry Dynamics SDK for Android version 10.2

What's new in the BlackBerry Dynamics SDK for Android version 10.2

Changes to the SDK and software requirements:

Feature	Description
Changes to Android 8 support	Support for Android 8 has been removed in this release.
Changes to Android custom keyboard support	Support to enable or disable Android custom keyboards using a BlackBerry Dynamics profile setting has been added in this release. This setting is disabled by default and administrators will need to enable it to block the use of Android custom keyboards.
BlackBerry WebView Library	The following changes have been made to BlackBerry WebView in this release:
	File downloading into the secure container is now supported.The following APIs have been added to the BBWebView library:
	BBWebView.getDownloadDirectoryPathBBWebView.showDownloadDirectory

BlackBerry Dynamics Launcher Library

This release uses BlackBerry Dynamics Launcher Library version 3.4.0.228.

Fixed issues

The following issues are fixed in this release:

A compliance alert message now will display the date in the correct language on the device. (FIRST-17793)

An issue where profiles were still being displayed in UEM after the device credentials were reset, has been resolved. (GD-57966)

After a user credential profile is successfully enrolled, the app now refreshes and updates the profile on the KeyManager **Assigned Profiles** page. (GD-57964)

An issue where apps built with BlackBerry Dynamics SDK would get stuck at the splash screen after setting the password following the app provision process, has been resolved. (GD-57952)

An issue where screenshots and videos could be captured while the **Do not allow screen capture and insecure video output on Android and Windows 10 devices** policy was enabled in the users BlackBerry Dynamics profile, has been resolved. Video and screenshot capturing can only be done while the policy is disabled. (GD-57757)

An issue where data could be copied from BlackBerry Dynamics apps to non-BlackBerry Dynamics apps, despite the BlackBerry UEM user policy preventing it, has been resolved.(GD-57756)

An issue has been resolved where if the user force closes an app during the easy activation process, they will receive a notification stating **Failed to Connect to Push Channel**. The app will now begin the activation process from the beginning when the app is started again. (GD-57221)

Known Limitations

If a user switches from a third-party keyboard to the system keyboard, in some deployment configurations the application may take a minute to detect the change and remove the **Custom Keyboards Restricted** notification. (GD-57693)

Workaround: When the user restarts the app they can use the system keyboard immediately.

Known issues

If you use direct references to the BlackBerry Dynamics SDK .aar files in your build.gradle repositories (for example, compile(name:'android_handheld_platform-8.1.0.57', ext:'aar')) instead of using Maven linkage (for example, api "com.blackberry.blackberrydynamics:android_handheld_platform:8.1.0.57"), errors may occur in the AndroidManifest file in the Gradle caches directory. To resolve, use Maven linkage or specify android_handheld_resources and android_handheld_platform in the build.gradle file.

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.

If a user is prompted to activate a BlackBerry Dynamics app using their password for another BlackBerry Dynamics app that they have previously activated (also known as Easy Activation), then cancels out of the prompt, the lock screen for the previously activated app displays instead of the screen to enter their activation credentials. (GD-56598)

If "Allow Android biometric authentication" is enabled in the BlackBerry Dynamics profile, when the user activates a BlackBerry Dynamics app on an Android 12 emulator, fingerprint authentication fails for the app with the error message "Internal error: Retry or restart". (GD-56289)

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, this functionality does not work as expected (the app does not prompt the user for their password when it returns to the foreground). (GD-56162)

If a user upgrades a BlackBerry Dynamics app that uses SDK version 9.x or earlier to a new version that uses SDK 10.1 or later, the app will not retain any cookies. (GD-55766)

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 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.

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.

Limitations for OkHttp Support

Note: The OkHttp API is currently available as a beta feature release that is subject to further testing and changes.

Support for OkHttp API as a beta feature is new in the 10.1 release of BlackBerry Dynamics SDK. The following table outlines limitations in the initial release:

Limitation	Description
Get, set, and clear cookies	Cookies are supported and are always stored in the secure container, however, there are currently no methods to get, set, or clear them.
Caching	Caching is not supported in this release.
Proxy	Proxy servers are supported, but there is no API to set a proxy. It will work if proxies are set in UEM, either using a PAC file or manually. If proxy authentication is required, this will be done automatically as is the case for the existing HttpClient API. Otherwise, a 407 HTTP status will be returned.
Authentication	 Basic authentication will work if an authentication interceptor is used and included before the BBCustomInterceptor when building the OkHttpClient. Use of OkHttp authenticators is not supported, and is unlikely to be supported due to constraints imposed by OkHttp. See the following for a simple example of an interceptor:
	<pre>public class ReactiveBasicAuthInterceptor : Interceptor {</pre>
	<pre>val credentials = Credentials.basic("username", "password")</pre>
	<pre>@NotNull override public fun intercept(chain: Chain): Response { val request = chain.request() val response = chain.proceed(request) return if (response.code == 401)</pre>
	<pre>chain.proceed(request.newBuilder().header("Authorization" credentials).build()) else</pre>
	 Third-party authentication interceptors might support NTLM authentication. Kerberos authentication using PKINIT or KCD is supported, but Kerberos using user-supplied credentials is not supported. SPNEGO is not supported.
Timeouts	Timeouts in OkHttp are separated into connection timeouts, read timeouts, and write timeouts. BlackBerry Dynamics OkHttp only supports connection timeouts, and it is not currently possible to change the timeout value.

Limitation	Description
Certificates	It is not currently possible to disable HTTPS host/peer certificate verification, or to enforce pinned certificates.

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