BlackBerry Dynamics SDK
for .NET
Release Notes

12.0

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BlackBerry Dynamics Bindings for Microsoft.iOS 12.0

What's new in BlackBerry Dynamics Bindings for Microsoft.iOS 12.0

This release includes updates from the BlackBerry Dynamics SDK for iOS version 12.0. For more information, see the BlackBerry Dynamics SDK for iOS Release Notes.

Feature	Description
Changes to SDK and software requirements	• Microsoft.iOS 16.4.7107 or later is required. • Microsoft Visual Studio for macOS 17.6.6 or later is required.
.NET upgrade	.NET has been upgraded to .NET 7.0 in this release.
Xcode 15 support	This release adds support for Xcode 15 on Microsoft.iOS 16.4.7107/7.0.100 and Microsoft Visual Studio for macOS 17.6.5 (build 417) or later.
Deployment support for iOS 17	This release adds deployment support for iOS 17.
Enhancements to BlackBerry Dynamics device security	The BlackBerry Dynamics SDK for iOS now includes security enhancements to improve jailbreak detection, hooking detection, and emulator detection.
Enhancements to user passwords	The BlackBerry Dynamics SDK for iOS 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 iOS development guide.
CURL upgrade	CURL has been updated to version 8.0.0 in this release.
Heimdal upgrade	Heimdal has been upgraded to version 7.8.0 in this release.
BlackBerry Persona API support	The BlackBerry Dynamics SDK for iOS 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.

BlackBerry Dynamics Launcher Library

This release uses BlackBerry Dynamics Launcher Library version 12.0.0.378.

Known issues and limitations

When building a BlackBerry Dynamics .NET app for an iOS simulator in Visual Studio, MT5209 native linking errors might occur.

Workaround: In the iOS build options, turn off "Enable device-specific builds".

BlackBerry Dynamics Bindings for Microsoft.Android 12.0

What's new in BlackBerry Dynamics Bindings for Microsoft.Android version 12.0

This release includes updates from the BlackBerry Dynamics SDK for Android version 12.0. For more information, see the BlackBerry Dynamics SDK for Android Release Notes.

Feature	Description
Changes to SDK and software requirements	• Microsoft.Android 33.0.95 or later is required. • Microsoft Visual Studio for macOS 17.6.6 or later is required.
.NET upgrade	.NET has been upgraded to .NET 7.0 in this release.
Rename of Launcher NuGet	Launcher NuGet has been renamed to GoodDynamics.Android.Launcher.<VERSION>.nupkg in this release.
Changes to NuGet ProGuard BlackBerry Dynamics library dependencies	BlackBerry Dynamics Bindings for Microsoft.Android now includes BlackBerry Dynamics AAR libraries containing it's own ProGuard rules file, so using a separate ProGuard file with BlackBerry Dynamics related rules on the application level is not required anymore. For more information, see the ProGuard rules file in the samples and https://developer.android.com/build/shrink-code#configuration-files.
Android 14 readiness	Android 14 is now supported in this release. BlackBerry recommends upgrading to BlackBerry Dynamics SDK for Android 12.0. If you do not upgrade from version 11.1, 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.
Security enhancements	The BlackBerry Dynamics SDK for Android now includes security enhancements to improve rooted detection, hooking detection, and emulator detection.
Enhancements to user passwords	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.

Feature	Description
UX enhancements	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: • 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	CURL has been updated to version 8.0.0 in this release.
Heimdal upgrade	Heimdal has been upgraded to version 7.80.0 in this release.
Changes to BBWebView	The deprecated API BBWebChromeClient.onReachedMaxAppCacheSize has been removed from BBWebView in this release.
BlackBerry Persona compatibility	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.

BlackBerry Dynamics Launcher Library

This release uses BlackBerry Dynamics Launcher Library version 12.0.0.253.

Known issues and limitations

Due to a Microsoft Visual Studio for Mac packaging issue, a runtime error might occur after switching to library level ProGuard dependencies.

Workaround: Clean bin/obj project folders, clean project, restore dependencies, rebuild, and then deploy the application. In addition, when switching between Microsoft Visual Studio for Mac and your terminal (CLI dotnet build), the bin/obj folders must be cleaned or the "--no-incremental" parameter must be used. A build time warning has been added to the sample applications to pay special attention to this issue.

BlackBerry Dynamics SDK for Microsoft.Maui 12.0

What's new in the BlackBerry Dynamics SDK for Microsoft.Maui version 12.0

This release was updated with the latest BlackBerry Dynamics Bindings for Microsoft.iOS and BlackBerry Dynamics Bindings for Microsoft.Android.

The BlackBerry Dynamics SDK supports Microsoft.Maui for Android and iOS. Microsoft.Maui is a framework that developers can use to create user interfaces that can be used across platforms. For more information, see About the BlackBerry Dynamics SDK for Microsoft.Maui in the BlackBerry Dynamics Bindings for .NET Development Guide and the BlackBerry Dynamics SDK for Microsoft.Maui API Reference.

Feature	Description
.NET upgrade	.NET has been upgraded to .NET 7.0 in this release.
Changes to NuGet ProGuard BlackBerry Dynamics library dependencies	BlackBerry Dynamics Bindings for Microsoft.Android now includes BlackBerry Dynamics AAR libraries containing its own ProGuard rules file, so using a separate ProGuard file with BlackBerry Dynamics related rules on the application level is not required anymore. For more information, see the ProGuard rules file in the samples and https://developer.android.com/build/shrink-code#configuration-files.
Support for Central Package Management	Central Package Management (CPM) is now supported, so you can handle all packages in one place and have better control over implicitly referenced Maui packages, solving NU1605 errors and NETSDK1023 warnings. For more information, see Directory.Packages.props and Directory.Build.props in the samples folder and https://learn.microsoft.com/en-us/nuget/consume-packages/central-package-management.
API updates	The BBDAppConfigKeyAllowWearable property was added to IBBDXamariniOS. For more information, see the BlackBerry API reference.

Known issues

On Android, if an app displays dialog from an activity that was already destroyed, the app will stop functioning. **Workaround**: Developers can use the custom Dialog and ActionSheet implementations found in the PageBase.cs file of the AppKineticsService and SampleAppSuite sample apps in the BlackBerry Dynamics SDK for Microsoft.Maui package. For more information, see https://github.com/dotnet/maui/issues/15024
The UI Preferences for Microsoft Visual Studio experiences issues for SingleProject type projects and projects where multiple or specific mobile OS target versions are specified. Developers should always use source code in the .csproj file for reference. For more information, see https://developercommunity.visualstudio.com/t/Library-projects-targeting-net60-and-Us/10316394.
User interface tests on iOS 16 are not yet working due to Xamarin packages incompatibility. For details, developers should refer to the information from Microsoft https://github.com/microsoft/appcenter/issues/2475 to see when this issue is resolved and they can update relevant packages.

Due to a Microsoft Visual Studio for Mac packaging issue, a runtime error might occur after switching to library level ProGuard dependencies.

Workaround: Clean bin/obj project folders, clean project, restore dependencies, rebuild, and then deploy the application. In addition, when switching between Microsoft Visual Studio for Mac and your terminal (CLI dotnet build), the bin/obj folders must be cleaned or the "--no-incremental" parameter must be used. A build time warning has been added to the sample applications to pay special attention to this issue.

Installing or upgrading the software

For complete installation instructions, upgrade guidance, and software requirements, see the BlackBerry Dynamics Bindings for Xamarin.iOS Development Guide and/or the BlackBerry Dynamics Bindings for Xamarin.Android Development Guide.

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