

# MobileIron AppConnect 9.2.0 for Android Release Notes and Upgrade Guide

March 17, 2021

For complete product documentation see:

<u>AppConnect for Android Product Documentation Home Page</u>

Copyright © 2012 - 2021 MobileIron, Inc. All Rights Reserved.

Any reproduction or redistribution of part or all of these materials is strictly prohibited. Information in this publication is subject to change without notice. MobileIron, Inc. does not warrant the use of this publication. For some phone images, a third-party database and image library, Copyright © 2007-2009 Aeleeta's Art and Design Studio, is used. This database and image library cannot be distributed separate from the MobileIron product.

"MobileIron," the MobileIron logos and other trade names, trademarks or service marks of MobileIron, Inc. appearing in this documentation are the property of MobileIron, Inc. This documentation contains additional trade names, trademarks and service marks of others, which are the property of their respective owners. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, these other companies.



# Contents

Contents	3
About AppConnect for Android	4
New features and enhancements summary	4
Apps that MobileIron provides with AppConnect 9.2.0 for Android	5
Support and compatibility	6
Support policy	6
MobileIron end of sale and support policy	6
Secure Apps Manager support and compatibility	6
Secure Apps Manager for AppStation support and compatibility	9
Wrapping tool support and compatibility	10
Android device processor support	10
Resolved issues	10
Known issues	11
Limitations	11
AppConnect for Android upgrade notes for MobileIron Core	11
Upgrading the Secure Apps Manager	11
Upgrading a secure app	12
Upgrading when using the automatically created app configuration	12
Upgrading when using a manually created AppConnect app configuration	13
Documentation resources	13



# About AppConnect for Android

MobileIron AppConnect for Android containerizes apps to protect corporate data-at-rest without touching personal data. Apps wrapped with the MobileIron AppConnect wrapper become integrated into the secure container on the device. The secure container can include secure email, secure documents, and secure apps, including Web@Work, a secure browser. The apps' data and documents are encrypted in the container, which requires authorized access. The apps can interact only with other AppConnect apps.

MobileIron provides a set of AppConnect apps. Also, third-party apps and your in-house apps can be AppConnect apps. You can choose which AppConnect apps are appropriate for different sets of device users. On the device, the apps are known as secure apps.

You can wrap apps to make them AppConnect apps by using either one of the following:

- The MobileIron AppConnect Wrapping Portal
- The MobileIron AppConnect for Android Wrapping Tool

AppConnect Secure Apps for Android are supported with the following MobileIron EMM and client app:

- MobileIron Core and Connected Cloud and Mobile@Work for Android
- MobileIron Cloud and MobileIron Go for Android
- MobileIron Cloud and MobileIron AppStation for Android

# New features and enhancements summary

The following new features and enhancements are provided with this release:

- ThumbnailUtils support: The following ThumnailUtils methods and their deprecated versions are supported: createAudioThumbnail, createImageThumbnail, createVideoThumbnail. However, thumbnails are not created if the audio file uses embedded art. See "Generation 1 and Generation 2 support for commonly used app capabilities" in the MobileIron AppConnect for Android App Developers Guide.
- Firebase Crashlytics support: If the -enableCrashlytics option is used when wrapping an app, the app crash data is available on the Firebase Crashlytics console. To use the feature, the app must support Firebase Crashlytics and wrapped with the 9.2.0 wrapper. The crash reports appear for the unwrapped app package name on the console. However, the reports include the text label (wrapped app), which identifies the report as an AppConnect wrapped app crash report. For more information, see "Firebase Cloud Messaging and Crashlytics support" in the MobileIron AppConnect for Android App Developers Guide.



- AppConnect Passcode history update: Support for the following AppConnect Passcode history option updates in the AppConnect Global policy in MobileIron Core:
  - The value options are updated to 12. This means that you can restrict device users from reusing any password up to the past 12 passwords.
  - The passcode reuse is case insensitive. This means that the passcode case is not considered for reuse. Devices users cannot change the case for past passcodes and reuse them. *Password* and *passWord* are considered the same.

This feature requires Core 11.1.0.0 and Secure Apps Manager 9.2.0 for Android.

For more information, see the description for Passcode history in the AppConnect Global policy field description table in the *MobileIron AppConnect Guide for Core*.

 Command line interface (CLI) support with the AppConnect wrapping tool: CLI support for wrapping Android app using the AppConnect wrapping tool. For more information see "Using the AppConnect for Android Wrapping Tool in CLI mode" in the MobileIron AppConnect for Android App Developers Guide.

For new features and enhancements provided in previous AppConnect for Android releases, see the release notes for those releases at AppConnect for Android Product Documentation Home Page.

# Apps that MobileIron provides with AppConnect 9.2.0 for Android

With AppConnect 9.2.0 for Android, MobileIron provides:

- Secure Apps Manager 9.2.0.
- The MobileIron AppConnect for Android Wrapping Tool, updated to support the latest wrapper version
- The AppConnect Wrapping Portal, updated to support the latest wrapper version, and updated to support the AppStation option for wrapping apps for use with AppStation.

MobileIron also provides the following AppConnect (secure) apps wrapped with Secure Apps wrapper version 9.2.0. Two versions of each of these apps are provided: one wrapped without the AppStation option and another wrapped with the AppStation option:

• File Manager version 2.26

NOTE: FileManager 2.26 is wrapped with the Generation 2 wrapper. Previous versions were wrapped with the Generation 1 wrapper. Although upgrading from a Generation 1 wrapped app to a Generation 2 wrapped version of the app is not generally supported, upgrading to this version of FileManager wrapped with Generation 2 is supported.

· AppConnect sample apps for Android

These apps are available at https://help.mobileiron.com in the Software tab.



# Support and compatibility

The information in this section includes the following:

- Support policy
- MobileIron end of sale and support policy
- Secure Apps Manager support and compatibility
- Secure Apps Manager for AppStation support and compatibility
- Wrapping tool support and compatibility
- Android device processor support

NOTE: This information is current at the time of this release. For MobileIron product versions released after this release, see that product version's release notes for the most current support and compatibility information.

# Support policy

MobileIron defines supported and compatible as follows:

TABLE 1. DEFINITIONS FOR SUPPORT AND COMPATIBLE

Term	Definition	
Supported product versions	The functionality of the product and version with currently supported releases was systematically tested as part of the current release and, therefore, will be supported.	
Compatible product versions	The functionality of the product and version with currently supported releases has not been systematically tested as part of the current release, and therefore not supported. Based on previous testing (if applicable), the product and version is expected to function with currently supported releases.	

# MobileIron end of sale and support policy

For the MobileIron End of Sale and Support Policy, see MobileIron End of Sale and Support Policy.

# Secure Apps Manager support and compatibility

The following table provides the product versions that Secure Apps Manager supports for the release.



TABLE 2. SECURE APPS MANAGER SUPPORT AND COMPATIBILITY

Product	Supported versions	Compatible versions
Wrapper version (apps wrapped with this wrapper version)	9.0.0.0, 9.1.0.0, 9.2.0.0	8.4.0.0, 8.5.0.0, 8.6.0.0, 8.7.0.0, 8.8.0.1
Base SAM version, which can be upgraded to the new Secure Apps Manager from:	8.9.0.0, 9.0.0.0, 9.1.0.0	8.4.0.0, 8.5.1.0, 8.6.0.0, 8.7.0.0, 8.8.0.1
Base wrapper version, which can be upgraded to the new wrapper, if existing wrapper version is:	8.9.0.0, 9.0.0.0, 9.1.0.0	8.4.0.0, 8.5.0.0, 8.6.0.0, 8.7.0.0, 8.8.0.1
Mobile@Work for Android	10.8.0.1, 11.0.0.0, 11.1.0.0	10.4.1.0, 10.4.1.2, 10.5.1.0, 10.7.0.0
MobileIron Core and Connected Cloud	10.5.1.0, 10.6.0.0, 10.8.0.0, 11.0.0.0, 11.1.0.0	9.7.0.1, 9.7.0.2, 10.0.0.1, 10.0.0.2, 10.0.0.3, 10.0.1.0, 10.1.0.0, 10.1.0.1, 10.2.0.0, 10.3.0.0, 10.4.0.3, 10.5.0.0
Standalone Sentry	9.8.1, 9.9.0	9.4.0, 9.4.1, 9.5.0, 9.6.0, 9.7.0, 9.7.2, 9.8.0
Android OS	5, 5.1, 6, 7, 7.1, 7.1.1, 7.1.2, 8, 8.1, 9, 10, 11	Not applicable
MobileIron Cloud and	See the MobileIron Cloud Release Notes.	Not applicable
MobileIron Go	<ul> <li>Note The Following:</li> <li>Each release of MobileIron Go includes a specific version of the Secure Apps Manager.</li> <li>Each release of MobileIron AppStation includes a specific version of the Secure Apps Manager for AppStation.</li> </ul>	

#### Note The Following:

• Secure Apps Manager supports apps wrapped with prior wrapper versions as given in the table. Therefore, you do not need to re-wrap apps wrapped with those prior versions.



- Apps wrapped with wrapper version 9.2.0 require Secure Apps Manager 9.2.0. Therefore, upgrade to Secure Apps Manager 9.1.0.0 if you deploy an app with the 9.2.0 wrapper.
- Apps that are to run with the Secure Apps Manager, not the Secure Apps Manager for AppStation, must not be wrapped with the AppStation option.
- Android version support for each app can vary.
- Support for specific features of AppConnect for Android depends on the version of various MobileIron components and the Android OS version. See the MobileIron Core AppConnect and AppTunnel Guide for MobileIron Core and Connected Cloud deployments, and the MobileIron Cloud Administrator Guide for MobileIron Cloud deployments.



# Secure Apps Manager for AppStation support and compatibility

The following table provides the product versions that Secure Apps Manager for AppStation supports for the release.

NOTE: Secure Apps Manager for AppStation is packaged with MobileIron AppStation. A new version of Secure Apps Manager for AppStation is not provided with this release of AppConnect. Apps wrapped with AppConnect 9.1.0 will not work with AppStation 72.

TABLE 3. SECURE APPS MANAGER FOR APPSTATION SUPPORT AND COMPATIBILITY

Product	Supported versions	Compatible versions
Wrapper version	8.9.0.0, 9.0.0.0	8.6.0.0, 8.7.0.0, 8.8.0.1
(apps wrapped with this wrapper version)		
Can upgrade to the new Secure Apps Manager for AppStation <b>from</b> :	Not applicable since SAM is built into AppStation	Not applicable
Can upgrade a wrapped app to the new wrapper if it was wrapped with:	8.7.0.0, 8.8.0.0, 8.9.0.0	8.6.0.0
AppStation for Android	72	63
	NOTE: Each release of MobileIron AppStation includes a specific version of the Secure Apps Manager for AppStation.	
MobileIron Cloud	75	74
Standalone Sentry	9.8.0, 9.9.0	9.4.0, 9.4.1, 9.5.0, 9.6.0, 9.7.0
Android OS	5, 5.1, 6, 7, 7.1, 7.1.1, 7.1.2, 8, 8.1, 9, 10, 11	Not applicable

#### Note The Following:

- Apps wrapped with the AppStation option with wrapper version 9.1.0.0 can run only with Secure Apps Manager 9.1.0.0 for AppStation.
- Android version support for each app can vary.
- Support for specific features of AppConnect for Android depends on the version of various
   MobileIron components and the Android OS version. See the MobileIron Core AppConnect and
   AppTunnel Guide for MobileIron Core and Connected Cloud deployments, and the MobileIron
   Cloud Administrator Guide for MobileIron Cloud deployments.



# Wrapping tool support and compatibility

The following table provides the product versions that the AppConnect for Android Wrapping Tool supports for the release.

TABLE 4. WRAPPING TOOL SUPPORT AND COMPATIBILITY

Product	Supported versions	Compatible versions
macOS	10.14	10.9 - 10.13
Windows	Windows 7 Professional SP1 Windows 10	Any Windows 7 version
Android SDK tools	28.0, 29, 30	24.0.1 - 27.0.3
Server JRE (Jave SE Runtime Environment)	1.8.0_65 (8u65) 1.8.0_101 (8u101)	Any Server JRE 8 or 9 version

# Android device processor support

Secure Apps Manager, Secure Apps manager for AppStation, and AppConnect apps work only on Android devices with ARM processors (32-bit or 64-bit).

## Resolved issues

This release includes the following resolved issues.

- LP-11929: Fixed stack overflow in wrapped apps when calling the default interface method from an overridden method.
- LP-11922: Fixed zipalign error when wrapping some APKs.
- LP-11920: Fixed the error on writing the output APK if the input APK has several empty ZIP entries.
- LP-11894: Fixed null pointer exception in RandomAccessFile when opening "/proc/self/exe".
- LP-11871: Fixed an issue due to which an app could not be wrapped.

For resolved issues in prior Android Secure Apps releases, see the release notes for those releases at AppConnect for Android Product Documentation Home Page.



## **Known** issues

This release contains the following new known issue:

LP-11872: DLP Copy/Paste policy is not applied on some Kyocera DuraForce Pro2 devices.

For known issues found in prior Android Secure Apps releases, see the release notes for those releases at AppConnect for Android Product Documentation Home Page.

### Limitations

This release contains the following new limitation:

- LP-11851: Native library compiled with GNU HASH type is not supported. If a shared native library (.so) is compiled with GNU HASH only, wrapped apps cannot load their native libraries.
  - Workaround: Re-compile the shared native library with the option: 'WI,-hash-style=both'.
- LP-11914: For audio files, due to the format of the embedded art, a thumbnail is not created.

For limitations found in prior Android Secure Apps releases, see the release notes for those releases at AppConnect for Android Product Documentation Home Page.

# AppConnect for Android upgrade notes for MobileIron Core

Upgrade the Secure Apps Manager to the latest version before:

- upgrading any secure apps to versions wrapped with the latest wrapper version.
- installing any new secure apps wrapped with the latest wrapper version.

The following provide additional upgrade notes for AppConnect for Android for MobileIron Core:

- · Upgrading the Secure Apps Manager
- Upgrading a secure app

# Upgrading the Secure Apps Manager

Upgrading to the current Secure Apps Manager from previous Secure Apps Manager versions is supported.

See Support and compatibility for:



- The versions of Secure Apps Manager you can upgrade to Secure Apps Manager 9.1.0.0.
- What wrapped apps are supported with Secure Apps Manager 9.1.0.0.

#### **Procedure**

- Upload the latest version of the Secure Apps Manager to the App Catalog.
   On the Admin Portal, go to Apps > App Catalog > Add+ > In-House and follow the instructions.
- 2. Apply the appropriate labels to the new Secure Apps Manager.
- 3. Once you have confirmed that the devices are correctly running the new Secure Apps Manager, remove the labels from the old Secure Apps Manager.

# Upgrading a secure app

Upgrading to an app wrapped with this Secure Apps Wrapper version from an app wrapped with a previous wrapper version is supported. See Support and compatibility for the wrapper versions you can upgrade from.

IMPORTANT: Upgrading a Generation 1 wrapped app to a Generation 2 wrapped version of the app is not supported.

When you upgrade a secure app, use the suggested upgrade procedure to ensure that:

- a device user always has the app on the device.
- the app remains authorized.
- the app's app configuration settings are preserved.

The upgrade procedure depends on the AppConnect app configuration that you use for the app. The AppConnect app configuration is either:

- One that MobileIron Core automatically created when you uploaded the secure app to the app distribution library. In the Admin Portal, in **Policies & Configs > Configurations**, the automatically created AppConnect app configuration's description is "Default AppConnect Configuration".
- An AppConnect app configuration that you manually created.

Depending on the type of AppConnect app configuration, choose the appropriate procedure from the following:

- Automatically created AppConnect app configuration: Upgrading when using the automatically created app configuration
- Manually created AppConnect app configuration: Upgrading when using a manually created AppConnect app configuration

### Upgrading when using the automatically created app configuration

If you are using the automatically created AppConnect app configuration for an app, do the following to upgrade the app.



#### **Procedure**

- 1. Upload the new version of the app to the app distribution library on Core. On the Admin Portal, go to Apps > App Catalog > Add+ > In-House and follow the instructions. The old version of the app now co-exists in the app distribution library with the new version of the app. Core preserves any modifications you made to the automatically created app configuration.
- 2. Apply the appropriate labels to the new version of the app. The Secure Apps Manager notifies the device user to update the app to the new version.
- 3. Once you have confirmed that the devices are correctly running the new version of the app, remove the labels from the old version of the app.

#### Upgrading when using a manually created AppConnect app configuration

If you are using (applying to devices) an AppConnect app configuration that you manually created do the following to upgrade the app.

#### **Procedure**

- 1. Upload the new version of the app to the app distribution library on Core. On the Admin Portal, go to Apps > App Catalog > Add+ > In-House and follow the instructions. The old version of the app now co-exists in the app distribution library with the new version of the app. However, if you had previously deleted the automatically created app configuration, Core recreates it.
- 2. Delete the automatically created app configuration.
- 3. Apply the appropriate labels to the new version of the app. These labels are the same ones you have applied to the manually created app configuration. When the devices with the applicable labels next check in, the new version of the app is pushed to the device. The Secure Apps Manager notifies the device user to update the app to the new version.
- 4. Once you have confirmed that the devices are correctly running the new version of the app, remove the labels from the old version of the app.

## Documentation resources

MobileIron product documentation is available at https://help.mobileiron.com/s/mil-productdocumentation.

The MobileIron Cloud Administrator Guide is also available from your instance of MobileIron Cloud by clicking on the **Help** link in the user interface.

MobileIron Support credentials are required to access documentation in the Support Community.

