

Atalsoft MobileImage PhoneGap Plugin Developer's Guide

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Preface

This guide includes the information you need to successfully integrate the Atalsoft MobileImage PhoneGap Plugin into your mobile project.

Getting help for Kofax products

Kofax regularly updates the Kofax Support site with the latest information about Kofax products.

To access some resources, you must have a valid Support Agreement with an authorized Kofax Reseller/ Partner or with Kofax directly.

Use the tools that Kofax provides for researching and identifying issues. For example, use the Kofax Support site to search for answers about messages, keywords, and product issues. To access the Kofax Support page, go to www.kofax.com/support.

The Kofax Support page provides:

- Product information and release news
Click a product family, select a product, and select a version number.
- Downloadable product documentation
Click a product family, select a product, and click **Documentation**.
- Access to product knowledge bases
Click **Knowledge Base**.
- Access to the Kofax Customer Portal (for eligible customers)
Click **Account Management** and log in.

To optimize your use of the portal, go to the Kofax Customer Portal login page and click the link to open the *Guide to the Kofax Support Portal*. This guide describes how to access the support site, what to do before contacting the support team, how to open a new case or view an open case, and what information to collect before opening a case.

- Access to support tools
Click **Tools** and select the tool to use.
- Information about the support commitment for Kofax products
Click **Support Details** and select **Kofax Support Commitment**.

Use these tools to find answers to questions that you have, to learn about new functionality, and to research possible solutions to current issues.

Chapter 1

Overview

The *Atalsoft MobileImage PhoneGap Plugin Developer's Guide* provides an overview of developing Cordova applications using the Atalsoft Mobile Plugin for SDK. By adding the plugin to your mobile app, it can be used to capture, process bar code data received from mobile devices.

Note The earliest Cordova version supported by the Atalsoft MobileImage PhoneGap Plugin is version 5.0. The latest Cordova version supported by the Atalsoft MobileImage PhoneGap Plugin is version 6.3

Chapter 2

The Atalasoftware MobileImage PhoneGap Plugin for SDK

PhoneGap is an open source mobile application development framework, based upon the Apache Cordova project. See cordova.apache.org for documentation for details. The Atalasoftware MobileImage PhoneGap Plugin for the mobile SDK in your mobile application can be used to capture and process images and bar code data received from mobile devices.

Note PhoneGap is the Adobe branded version. Cordova is the generic open source Apache version. For the purposes of this guide, all references to "PhoneGap" can apply to either PhoneGap, or Cordova.

The plugin exposes much of the Atalasoftware Mobile functionality, within a Cordova application. The plugin code calls existing SDK methods and sends the response back to the `KofaxCordovaPlugin` JavaScript code. `KofaxCordovaPlugin` contains native methods that are called from a hybrid application via `kfxMobilePlugin.js`

The following PhoneGap related files are provided:

File Name	Description
<code>kfxMobilePlugin.js</code> Note There are many additional Javascript files included in the <code>www</code> directory, which contain the classes referred to from the main Javascript file.	The plugin APIs are exposed via <code>kfxMobilePlugin.js</code> . All operations are exposed via the plugin objects: <ul style="list-style-type: none">• Licensing• Image Capture Control• Bar Code Capture Control• Image Review Edit Control• Image• Image Processor• Document Capture• Application Statistics• Logging
<code>KofaxMobileSdkPlugin.jar</code>	This is the native part of the Android plugin. This part is responsible for interacting with native libraries.
<code>kfxMobileCordova.framework</code>	This is the native part of the iOS plugin. This part is responsible for interacting with native libraries.
<code>Plugin.xml</code>	This is the main part of the plugin. By using this, Cordova will install the plugin for the iOS and Android platforms.

Note Refer to the Kofax compatibility matrix at [compatibility matrix](#) to ensure you are using supported versions of all the required components. Upgrade components to the correct versions as necessary.

The following should be taken into account when building an application using the plugin:

- Size of the UI control displayed may not be the same across all devices.
- Plugin calls are asynchronous. Consequently, it is good practice to put actions like "take picture" and "read bar code" in the success callback of the corresponding `addXXXView` method. Otherwise, on low-end devices, the API may not work as expected.
- All UI Controls will float on top of CordovaWebview. The same thing is true for any native controls added to an application using any plugin SDK feature.
- The developer has to manage memory issues. The plugin maintains an image array. If the image array has more than about 3 elements (depending on device memory capacity) the application may crash. Developers must be sure to remove unused images.
- The output image setting `jpegQuality` specifies the compression quality for the output jpg file created during image processing. This setting is applied only when both the following are true:
 - The mime type setting (`mimeType`) is set to `MIMETYPE_JPEG`
 - Representation is set to `IMAGE_REP_FILE`, or `IMAGE_REP_BOTH`

How to use the plugin

Follow one of the sections below to add the PhoneGap plugin to a new or existing app. You will need to add the Mobile SDK frameworks and libraries to the application. There are a variety of ways to use the plugin in your mobile application depending on your usage.

- Create a new PhoneGap application and add the plugin.
- Add the plugin to an existing compatible PhoneGap application.
- Add PhoneGap and the plugin to an existing mobile application.

Creating a new PhoneGap application

First verify you are using a version of PhoneGap that is compatible with the Mobile Plugin. Read the PhoneGap documentation for instructions on how to create a new PhoneGap application and add a plugin to an application. After generating the application, add the `com.kofax.mobile.plugin.sdk` plugin by referencing the `plugin.xml` file located in `Hybrid\PhoneGap\Plugins\com.kofax.mobile.plugin.sdk\plugin.xml`.

Adding the plugin to an existing compatible PhoneGap application

First verify the PhoneGap application uses a compatible version of PhoneGap. If it does, follow the PhoneGap documentation instructions to add the `com.kofax.mobile.plugin.sdk` plugin by referencing the `plugin.xml` file located in `Hybrid\PhoneGap\Plugins\com.kofax.mobile.plugin.sdk\plugin.xml`.

Required library and framework files

Please refer to *Getting Started with the SDK* chapter of the *Mobile SDK Developers* guide, for specific library and frameworks to include in order to use the Mobile SDK with your application.

Requirements

Certain frameworks must be included in your project.

For iOS

For an iOS project, the following frameworks are required.

- MobileSDK.framework
- SDKStrings.bundle
- uiimage.bundle

In order to integrate the Mobile SDK into an iOS app, you must:

1. Update the application project file to link with MobileSDK.framework.
2. Update the application project file to copy uiimages.bundle and SDKStrings.bundle into bundle resources, so they will be available at run time.
3. (Required only if your application uses an older version of SDKAPI.) In order to successfully locate the `kfxLibEngines`, `kfxLibLogistics`, `kfxLibUIControls`, and `kfxLibUtilities` header files, the application project file needs to be update to specify the location of `MobileSDK.framework` in the Header SearchPaths section.
4. Required for Xcode 7 and above.
 - Set "Enable Bitcode" to NO.
 - If there are any existing dylib files, remove them and add the tbd equivalents.
 - Add a dictionary named 'App Transport Security Settings' and add a key value pair of 'Allow Arbitrary Loads' & 'YES' to the `info.plist` file.

For Android

If you want to apply this improvement for your PhoneGap app please update following files:

- Update the `libs` folder in the PhoneGap App with latest MobileSDK libs, including the *.so files.
- Hybrid/PhoneGap/Samples/SdkSample/platforms/android/libs/:
 - sdk-release.jar
 - isg-2.9.0.0.0.434.jar
- Hybrid/PhoneGap/Samples/SdkSample/platforms/android/libs/armeabi/:
 - libKfxEVRs.so
 - libEvrJniWrapper.so libsol_isg_mobile.so
- Hybrid/PhoneGap/Samples/SdkSample/platforms/android/libs/armeabi-v7a/:
 - libKfxEVRs.so
 - libEvrJniWrapper.so
 - libsol_isg_mobile.so
- Update the `plugin.xml` files:

- `Hybrid/PhoneGap/Plugins/com.kofax.mobile.plugins.sdk/plugin.xml`
- `Hybrid/PhoneGap/Samples/SdkSample/plugins/com.kofax.cordova/plugin.xml`