

Atalasoftware MobileImage PhoneGap Plugin

Developer's Guide

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Table of Contents

Preface	4
Getting Help for Atalasoft Products.....	4
Chapter 1: Overview	5
Chapter 2: The Atalasoft MobileImage PhoneGap Plugin for SDK	6
How to use the plugin.....	7
Creating a new PhoneGap application.....	7
Adding the plugin to an existing compatible PhoneGap application.....	7
Required library and framework files.....	7

Preface

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

Getting Help for Atalasoft Products

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

Use the tools that Atalasoft provides for researching and identifying issues. For example, use the Atalasoft Support site to search for answers about messages, keywords, and product issues. To access the Atalasoft Support page, go to www.atalasoft.com/support, where you can find a variety of resources and contact information.

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 Atalasoftware MobileImage PhoneGap Plugin *Developer's Guide* provides an overview of developing Cordova applications using the Atalasoftware 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 Atalasoftware MobileImage PhoneGap Plugin is version 5.0.

Chapter 2

The Atalsoft 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 Atalsoft 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 Atalsoft 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:
<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.

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 (`contentType`) 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.

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.
 - 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 aar libs, including the `*.so` files. You can find these libs under `...\Android\MobileSDK_libs\aar` and `...\Hybrid\PhoneGap\Plugins\com.kofax.mobile.plugins.sdk\lib\Android`.

Also update gradle file to include aar and jar files into build path.