

Kofax Mobile SDK

2.1.0

Release Notes



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Release Notes

Please read these notes carefully because they contain information that is not included in the SDK documentation.

Version Information

The Kofax Mobile SDK version can be found by looking in the `versions.txt` file that is included in delivered product.

Changes in This Release

Major new features and enhancements in this release include:

- Added a bar code reader engine to perform page level bar code reads.
- Added the ability to cancel image processing functions already in progress.
- Improved overall image processing performance.
- Added support for 64 bit processing (iOS only).
- Added support for hybrid applications based on PhoneGap.
- Added hybrid sample hybrid application using PhoneGap.
- Added the ability to collect usage and other metrics via the App Statistics interface.
- Improved page detection under sub-optimal lighting conditions (glare).
- Added the ability to specify image resolution (within the limits of the device).
- Enhancements to the BankRight sample app:
 - Improved driver license recognition to use both extracted and bar code data.
 - The sample app was largely rewritten to reflect platform specific best practices.
 - Reduced dependencies on interactions with external servers.
 - Added the ability to check for MICR when photographing the back side of a check, as a check to make sure it is not the front of the check.
- Multiple bug fixes.

Known Issues

This section contains information about potential problems that you could encounter while using the SDK. Workarounds are provided as applicable.

Certain ASUS Transformer TF101 Tablets May Freeze When Specifying Resolutions

The camera on ASUS Transformer TF101 tablets with the following kernel version may freeze when specifying resolutions. (346009)

- Kernel Version: 2.6.39.4

- Build Number: IML74K.US_epad-9.2.1.24-20120503

This issue has not been observed on the following:

- Kernel: 2.6.36.3-00001-g9a21gc1
- Build: HTK75.US_epad-8.6.5.21-20111216

Affected platforms and/or devices:

- Android
- ASUS Transformer TF101

Workaround: Don't rapidly switch between resolutions on affected devices.

Level Indicator Sluggish With Continuous Page Detection

On the iPhone 4, the motion of the level indicator becomes quite choppy and is difficult to use. In addition, it may jump back to the center of the screen, even if the device is not level. This happens when continuous page is on in either video or capture mode. (346683)

Affected platforms and/or devices:

- iOS
- iPhone 4

Workaround: Don't use continuous page detection with this device, use auto page detection instead.

Blue Overlay Obscures Viewer At Certain Sizes

A blue overlay obscures the viewfinder at certain custom X and Y values (both dimensions must be from 200 to 215). This issue has only been observed on the LG Lucid. (346319)

Affected platforms and/or devices:

- Android
- LG Lucid

Workaround: If you experience this issue, try changing the size.

Flash Fires Continuously on Some Devices

After abruptly switching from a dark to light environment (such as picking the tablet up from a table), the flash fires repeatedly, resulting in a washed out image. This happens when the flash is set to "Auto". (345226)

If the user moves the device, the flash will pause. As soon as the device is stable again, the flash resumes firing, making it almost impossible to take a properly exposed image.

Affected platforms and/or devices:

- Android
- Samsung S4
- Samsung S3

Workaround: Ensure that the flash is set to "Off".

Certain Screen Resolutions Problematic

Under poor lighting conditions, when the below resolutions are used with the image capture view, the iPhone 4 camera repeatedly seeks focus for a prolonged period of time (up to thirty seconds). When using the video capture frame, camera focus becomes unresponsive. Also, the level indicator remains yellow, and even if the view in the preview screen becomes focused, the camera still does not take a picture. (343578)

Note that this is not unique to the Kofax Mobile SDK and could occur in any app that attempts to use these resolutions on an iPhone4.

The resolutions causing these problems are:

- Preset 1280x720
- PresetHigh
- iFrame 1280x720
- InputPriority

Affected platforms and/or devices:

- iOS
- iPhone 4

Avoid using these resolutions with the iPhone 4 unless you can ensure ideal lighting. Also, you can disable the video mode and instead use the image capture frame with Photo resolution to capture high resolution images. Other iOS devices do not exhibit this issue.

Extreme DPI Settings Not Supported

On the low side, setting a DPI below 30 is not supported. On the high side, problems appear when the dpi is set in the thousands, the exact value depending on the device and its configuration. (306154, 306152, 345439, 345420)

Specific problems may vary, for example there may be memory alerts, parts of the screen may turn black, and in the worst case the application may crash. As a general rule of thumb, try to use a DPI value between 200 and 300.

Affected platforms and/or devices:

- Android
- iOS

App should include logic to confirm to enforce minimum and maximum DPI settings.

Overexposed Images if Lighting Changes from Dark to Bright

When attempting to capture a driver license, check, or bill, if the device camera is in a dark area, the camera compensates for the darkness by setting the exposure to high. If the lighting suddenly changes to bright, the camera does not reset the exposure to compensate when the flash fires as a focus aid. This causes the view to be stuck in an overexposed state, resulting in a badly washed out image. (344839)

This may happen, for example, when setting the device on a table top such that virtually all the light entering the lens is blocked by the table surface. When the device is lifted from the table the flash fires, and light floods the lens, but the image does not adjust.

Affected platforms and/or devices:

- Android
- Galaxy Note Pro 12.2

Workaround: Make sure the flash is off. Or, force the camera to reset the exposure by rotating the device or by relaunching the capture control.

Removed Images Still Visible in Gallery

After using the SDK to delete images from the image gallery, thumbnails may still be visible when subsequently viewing the gallery. (342182)

Affected platforms and/or devices:

- Android

Workaround: Make sure your app refreshes the image gallery after removing an image. You can do this by rescanning the media programmatically.

Unable to Capture with Pitch Set to 180

Setting certain pitch (declination) values may prevent the device from capturing an image. The SDK allows a range of declination values based on the limits of the device, and does not prohibit values within that range, even when those values lead to problems, such as setting the pitch to 180 (which would be the equivalent of taking a picture while upside down). It is up to the app to enforce what the developer considers to be a reasonable range of values for the pitch. In general, any value from 0 (horizontal) to 90 (vertical) should work without issues. (344237)

Affected platforms and/or devices:

- Android
- iOS

Workaround: Restrict the pitch range to something reasonable.

iOS: Unfocused Images Captured Despite the Camera Reporting Focused

It is possible to capture an out of focus image with the Image Capture Control even though the camera reports that the lens is focused. This normally happens when page detect is set to automatic or continuous and when all the stability/levelness settings are satisfied but the camera physically cannot focus because the lens is too close to the document. Despite this, eventually the camera incorrectly reports that it is focused. If the user then gently moves the device far enough away from the document for it to normally be able to focus, the resulting image is still out of focus. In order for this to happen, the device must be moved gently enough that the settings are continuously satisfied. If the settings are exceeded, even if just for an instant, the camera will refocus at the new distance. (343400)

Affected platforms and/or devices:

- iOS

Workaround: None

In Video Mode, LED Inconsistent Across Devices

During Capture with Video Mode On and Flash On, there is inconsistent flash lamp behavior across devices. For some devices the lamp is on and for other devices the lamp is off. (322722)

Affected platforms and/or devices:

- Android

Workaround: None

No Initialization Method in SDK

There is no initialization method in the SDK. On android this sometimes causes an app to load with objects in the wrong state. (325397)

Affected platforms and/or devices:

- Android

Workaround: None

Nexus 10: Flash Does Not Work in Capture Mode

On the Nexus 10, when in capture mode with the flash setting on, the flash does not fire. (324897)

Affected platforms and/or devices:

- Android
- Nexus 10

Workaround: Do not use the flash in capture mode on this device.

Cannot Use Flash on Certain Samsung Devices

During image capture with the flash enabled, the level indicator freezes and the image capture view is sluggish. (324740)

Affected platforms and/or devices:

- Android
- Samsung 12.2
- Samsung Note 10.1

Workaround: Do not enable the flash on these devices.

Cannot Capture Backside of Check

When using a LenovoYoga, an app may not be able to capture the backside of certain checks. The issue occurs when a check does not have enough data on it for the LenovoYoga camera to focus successfully. (324517)

Affected platforms and/or devices:

- Android

- LenovoYoga

Workaround: None.

Tilt Not Required in Image Capture Control

On Android devices, while in continuous capture mode, before recapturing an image, the user should be required to tilt the device away from level to reset the levelness and stability thresholds. This is not happening, resulting in a continuous stream of images. (324703)

Affected platforms and/or devices:

- Android

Workaround: To work around this, your application can implement logic that disables continuous capture after an image is captured, and then reenables it once the device has been tilted outside of the levelness threshold range.

```
package com.kofax.mobile.sdk.capturesample;

import android.app.Activity;
import android.os.Bundle;

import com.kofax.kmc.kui.uicontrols.ImageCaptureView;
import com.kofax.kmc.kui.uicontrols.ImageCapturedEvent;
import com.kofax.kmc.kui.uicontrols.ImageCapturedListener;
import com.kofax.kmc.kui.uicontrols.LevelnessEvent;
import com.kofax.kmc.kui.uicontrols.LevelnessListener;
import com.kofax.kmc.kui.uicontrols.data.PageDetectMode;
import com.kofax.kmc.kut.utilities.AppContextProvider;
import com.kofax.kmc.kut.utilities.Licensing;

public class CaptureActivity extends Activity implements ImageCapturedListener,
LevelnessListener {

    private ImageCaptureView captureView;
    private boolean capturing;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);

        Licensing.setMobileSDKLicense("license"); // Use your SDK license string here
        AppContextProvider.setContext(getApplicationContext());
        setContentView(R.layout.new_activity);

        captureView = (ImageCaptureView) findViewById(R.id.captureView);
        captureView.setLevelIndicator(true);

        captureView.addOnImageCapturedListener(this);
        captureView.addLevelnessListener(this);

        captureView.returnCameraEvents(true);

        capturing = true;
        captureView.doContinuousMode(true);

        captureView.setPageDetectMode(PageDetectMode.AUTOMATIC);
    }

    @Override
    public void onImageCaptured(ImageCapturedEvent event) {
        // We've captured an image, disable continuous capture until the camera is
        // tilted outside of its threshold range
        captureView.doContinuousMode(false);
        // Set a flag indicating that we are not trying to capture an image.
        capturing = false;
    }

    @Override
    public void onLevelness(LevelnessEvent event) {
```

```

        // We're already trying to capture an image, ignore the event.
        if (capturing) {
            return;
        }

        // We're not taking a picture, check to see if either pitch or roll are out of
range
        // If they are, start trying to take a picture again.
        int pitch = Math.abs(event.getPitch());
        int roll = Math.abs(event.getRoll());

        // Check to see if pitch or roll exceed 45, if so, assume we are out of the
        levelness threshold.
        // Also check to see if the pitch or roll exceed the threshold set on the view
by
        20 units. This
        // prevents capturing an image when on the threshold boundary.
        if (pitch >= 45 || pitch >= captureView.getLevelThresholdPitch() + 20 ||
            roll >= 45 || roll >= captureView.getLevelThresholdRoll() + 20) {
            // Set the flag indicating that we are attempting to capture an image.
            capturing = true;
            // Enable continuous capture mode
            captureView.doContinuousMode(true);
        }
    }
}

```

returnCameraEvents Method

The Android implementation of the SDK contains a `returnCameraEvents` method that must be set to `True` in order for an app to take advantage of page detect, levelness and stability threshold events. If this is left at the default or set to `False`, these threshold events are not returned. (324720)

Note This method does not exist in the iOS version of the SDK, where threshold events are always enabled.

Affected platforms and/or devices:

- Android

Workaround: None.

Camera Feed Upside Down on Landscape Tablets

Some tablets (those which are designed such that landscape mode is the natural orientation) may exhibit a problem where the camera view appears inverted in the tablet screen. (306611)

This occurs when rapidly rotating the device 180 degrees one or more times.

Affected platforms and/or devices:

- Android
- Asus Transformer
- Galaxy Tab 10.1
- Nexus 10
- Possibly others

Workaround: When rotating the tablet, pause for a few moments every 90 degrees. Alternatively, disable the auto-rotate screen option.

MICR Data Extracted From Image With No MICR Line

MICR data is returned in metadata when processing an image without a MICR line. (283904)

Affected platforms and/or devices:

- Android

App should include logic to confirm that returned MICR data is valid.

SDK Does Not Report KFS Out of Disk Space

KFS will reject new jobs when hard disk free space falls below a configurable limit. When the free space on the server falls below this limit, all devices connecting to KFS are supposed to report a server low disk space message at login, so that the end user will know that new jobs cannot be submitted. (23824)

Mobile devices currently do not report this message at login. Instead, the following error messages will appear when attempting to submit a job: "An error occurred submitting the case - Unknown transaction ID: [GUID]" or "Unknown transaction ID: [GUID] (Code 3)."

Affected platforms and/or devices:

- KMC Library

Resolved Issues

This section contains information about issues that have been resolved in prior releases of this product.

Android Applications Crash With Invalid License

Attempting to run an Android application without a valid license caused the app to crash. (322330)

Affected platforms and/or devices:

- Android

BankRight: Unable to Capture Multiple Driver Licenses

Capturing the front of a driver license, selecting Use, and then navigating back to the Home screen caused the app to crash if you immediately tried to capture the next image. (307418)

Affected platforms and/or devices:

- iOS
- iPhone 4
- BankRight

Quick Analysis Did Not Consistently Indicate Blurred Images

When requesting a quick analysis with the image processor API, the app may or may not have requested a reference image. When requesting a quick analysis without an image, the “blurry” setting was missed, and consequently the Quick Analysis Results object was not correctly setup. (323424)

Affected platforms and/or devices:

- iOS

Some Devices Captured Full Size Images in Video Mode

On some devices, using `takePicture` while in video mode resulted in capturing a full size image. (324939)

Affected platforms and/or devices:

- Android

The following devices are known to exhibit this behavior. There may be others.

- HTC One
- LG G Pad 8.3
- Nexus 10
- Samsung Mega
- Samsung S3

Android: Level Indicator Switching Phases Rapidly

On the Motorola Moto G, the level indicator rapidly switched between states. (322233)

Affected platforms and/or devices:

- Android
- Moto G

BankRight: Selecting Certain Bar Code Types

When scanning for bar codes on the back of a driver license, the app occasionally inappropriately recognized Code 39 bar codes. When this happened, no data was returned from the bar code. (307667)

Affected platforms and/or devices:

- Android
- BankRight

Pressing BankRight Back Button Causes Login Failure

If the Back button was repeatedly pressed immediately after the Check Deposit viewer screen appears, the app failed to log out of the server after returning to the Welcome screen. This made it impossible to log in again. (307433)

Affected platforms and/or devices:

- Android
- BankRight

Asus Transformer Camera Feed not Centered

Asus Transformer tablets (which are designed such that landscape mode is the natural orientation) exhibited a problem where the camera view appears off center in the tablet screen. (306608)

This was a known issue with the device firmware. To solve this problem ensure that your tablet has been upgraded to the most current version of the firmware.

Affected platforms and/or devices:

- Android
- Asus Transformer

Asus Transformer Camera Feed not Centered

Asus Transformer tablets (which are designed such that landscape mode is the natural orientation) exhibited a problem where the camera view appears off center in the tablet screen. (306608)

This was a known issue with the device firmware. To solve this problem ensure that your tablet has been upgraded to the most current version of the firmware.

Affected platforms and/or devices:

- Android
- Asus Transformer

Motorola MotoX Sensor Handling

There is a hardware compatibility issue for level detection when using the SKD ImageCaptureView class with the Motorola Moto X. When creating an App for this device, use the setMotionSensorType API method to bypass this compatibility issue. (293678)

Usage example:

```
((ImageCaptureView) preview).setMotionSensorType(MotionSensorType.RAW); // to force use raw sensors (accelerometer and magnetic sensors) for motion detect.
```

Note This API method is only supported for this device, do not use with other devices.

Affected platforms and/or devices:

- Android
- Motorola Moto X

Race Condition May Cause iPhones to Crash

A race-condition occurs during bar code capture when removing the bar code control from view. This most frequently causes the iPhone 4with iOS 7.1 to crash. However, in rare instances, this may also be seen on newer iPhones and older versions of iOS. (316394)

Affected platforms and/or devices:

- iPhone
- iOS

Unable to Select Certain Cases from Case List

If a personal shortcut has been configured in KFS 4.0.1, cases in the mobile application cannot be selected if they follow the personal shortcut in the list of cases. Also, that shortcut will be visible to all members of the same group. (SPR00116929)

Affected platforms and/or devices:

- iOS

Review Image Screen Doesn't Appear when Review is ON

The Review Image screen doesn't appear even though Review is set to ON but Auto-processing and Quality Feedback are both OFF. (SPR00116621)

When auto-processing and image quality feedback are OFF and review image is ON, after selecting a document from the camera roll or after capturing a document from the camera source, the review image is shown briefly and is then automatically dismissed without giving the user a chance to review the image.

Affected platforms and/or devices:

- iOS

“Use Kofax Server” Switch Blocks Custom URL

This issue occurs when an application is launched using a custom URL and the “Use Kofax Server” setting is also “ON.” Under these conditions, the application ignores the login credentials in the custom URL. (SPR00116376)

Affected platforms and/or devices:

- iOS KMC Library

In iOS, Multiple Deprecation Errors when Compiling for iPad2

Developers are likely to see numerous deprecation errors when using XCode to compile the application for iPad2. These errors have no known impact on running the application and can be safely ignored.(SPR00115355)

Affected platforms and/or devices:

- iOS Sample Apps

Some Android Models May Have Imaging Issues

In some cases, pictures taken with some Android phone models may have poor resolution. (SPR00112259, SPR00115464)

If you experienced such issues, they should be resolved now.

Affected platforms and/or devices:

- Android