Release Notes - EMDK for Android v6.0

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**Important News**

- **EMDK for Android support for all Jelly Bean (Android 4.1.2) and TC70 KitKat (Android 4.4.2) BSP version 112414 devices is terminated** - EMDK for Android v6.0 and higher will support KitKat and higher OS versions (except TC70 KitKat BSP version 112414). EMDK for Android v5.0 will continue to support Jelly Bean and TC70 KitKat BSP version 112414 devices.

- **EMDK for Android support for Payment APIs is terminated** - With EMDK for Android v6.0, the support for Payment APIs is terminated. Even though this feature is available in this release, it must not be used in production environment. EMDK for Android v5.0 will continue to support Payment APIs.

- **Support for ProfileConfig class is deprecated** - The ProfileConfig class which can be used to access the profile data has been deprecated. It is recommended to use the name-value pair function of Profile Manager feature. The Profile XML can also be directly modified. Refer to the Clock Sample for information on modifying Profile XML data.

- **Online Help**: The EMDK for Android Help documentation is now available only online. The EMDK installation will no longer install the documentation on the development computer.

- **Online Samples**: The EMDK Samples are now available only online. The EMDK installation will no longer install the samples on the development computer. The online samples can be downloaded and used on the development computer.

Introduction
The EMDK for Android provides developers with a comprehensive set of tools to easily create powerful line of business applications for enterprise mobility devices and is designed for use with Google Android Studio. The EMDK for Android includes enterprise mobility 'Android' class libraries such as Barcode, sample applications with source code, as well as all of the associated documentation to help your applications take full advantage of what our devices have to offer. It also includes an exclusive Profile Manager Technology within the Android Studio IDE, providing a GUI based development tool. This allows you to write fewer lines of code resulting in reduced development time, effort and errors.

Description

1. Added support for TC51 Marshmallow (Android 6.0.1) devices.
2. Added support for ET5X, TC70, TC75 and TC8000 Lollipop (Android 5.1.1) devices.
3. Terminated support for all Jelly Bean (Android 4.1.2) and TC70 KitKat (Android 4.4.2) BSP version 112414 devices - EMDK for Android v6.0 and higher will support KitKat and higher OS versions (except TC70 KitKat BSP version 112414). EMDK for Android v5.0 will continue to support Jelly Bean and TC70 KitKat BSP version 112414 devices.
4. Terminated support for Payment APIs - With EMDK for Android v6.0, the support for Payment APIs is terminated. Even though this feature is available in this release, it must not be used in production environment. EMDK for Android v5.0 will continue to support Payment APIs.
5. Added support for MX v6.1 in Profile Manager:
   - Threat Manager – Added new feature to configure the detection of rooting and to apply a countermeasure when the device is detected as being rooted.
   - UI Manager – Added new feature to allow or disallow network monitored messages/notifications.
   - Bluetooth Manager – Added new feature to enable or disable the mobile device discoverability.
   - GPRS Manager – Added new capability to add APN and set certain parameters such as proxy, server, port.
   - Wi-Fi – Added new feature to enable or disable the password protected encryption.
Device Administrator – Added new feature to select the type of screen lock such as no password, password, pattern and swipe.

Wireless Manager – Added new feature to specify balance between accuracy and battery life when using GPS.

KeyMapping Manager – Added key mapping support for Rear Button and Grip Trigger 2.

6. Enhanced Barcode Manager APIs with the following features: **The following enhanced features available in this release are for beta use only. They must not be used in production environment. A future version of EMDK will formally support these features.**

   o Added new decoder parameter in Code128, Code39, I2of5 and UpcEan decoders in ScannerConfig.DecoderParams:
     i. reducedQuietZone - Flag to enable or disable the decoding of margin less barcodes.

   o Added new parameter to ScannerConfig.DecoderParams.Gs1DatabarLim:
     i. securityLevel - Sets the four levels of decode security for GS1 Databar Lim barcodes.

   o Added new reader parameters in ScannerConfig.ReaderParams.ReaderSpecific.ImagerSpecific:
     i. oneDQuietZoneLevel - This parameter sets the effort at which the decoder will attempt to decode margin-less barcodes.
     ii. poorQualityDecodeEffortLevel - This parameter permits selection of enhancement modes for decoding barcodes of poor or degraded quality.

   o Added new reader parameters in ScannerConfig.ReaderParams.ReaderSpecific.CameraSpecific:
     i. viewfinderSize - Sets the View Finder window size in camera scanner as a percentage of full width and full height.
     ii. viewfinderOffsetX - Sets the X axis position of the top left corner of the view finder.
     iii. viewfinderOffsetY - Sets the Y axis position of the top left corner of the view finder.
     iv. oneDQuietZoneLevel - This parameter sets the effort at which the decoder will attempt to decode margin-less barcodes.
v. poorQualityDecodeEffortLevel - This parameter permits selection of enhancement modes for decoding barcodes of poor or degraded quality.

- Added new reader parameters in ScannerConfig.ReaderParams.ReaderSpecific.LaserSpecific:
  i. adaptiveScanning - This parameter enables or disables the adaptive scanning.
  ii. beamWidth - Controls the beam width of the laser scanner. Laser beam width can be shortened or widened using this parameter.
  iii. oneDQuietZoneLevel - This parameter sets the effort at which the decoder will attempt to decode margin-less barcodes.
  iv. poorQualityDecodeEffortLevel - This parameter permits selection of enhancement modes for decoding barcodes of poor or degraded quality.

- Added new enums in ScannerConfig:
  i. OneDQuietZoneLevel - Describes the effort at which the decoder will attempt to decode margin-less barcodes.
  ii. PoorQualityDecodeEffortLevel - Describes the selection of enhancement modes for decoding barcodes of poor or degraded quality.
  iii. AdaptiveScanning - Enable or Disable Adaptive scanning.
  iv. BeamWidth - Controls the beam width of the laser scanner.
  v. GS1LimitedSecurityLevel - Security level addition of GS1 DataBar lim decoder.

7. Enhanced DataCapture feature in the Profile Manager:

- Added new reader parameters:
  i. Aim Timer - Sets the duration (in ms) for timed aim modes.
  ii. Viewfinder Size - Sets the View Finder window size in camera scanner as a percentage of full width and full height.
  iii. Viewfinder X Offset - Sets the X axis position of the top left corner of the view finder.
  iv. Viewfinder Y Offset - Sets the Y axis position of the top left corner of the view finder.
  v. Character Set Selection - Allows the user to convert the barcode data if different from default encoding type.

- Added new values for Aim Type:
i. Timed Hold - Once trigger is pressed, an aiming session is started for a time specified by Aim Timer. When this time expires, a decode session is started and scan beam will be visible. The decode session will remain active until the Beam Timer expires, the trigger is released or a barcode is decoded.

ii. Timed Release - Once the trigger is pressed, an aiming session is started and will continue until the trigger is released. If the Aim Timer is expired when the trigger is released, a decode session will be started with scan beam visible for a remaining time equal to Beam Timer or a barcode is decoded.

iii. Press And Release - The scan beam starts when the trigger is pressed and released. The decode session will remain active until the Beam Timer expires or a barcode is decoded.

- Added new values for Character Set Selection:
  i. ISO-8859-1 - Allows the user to convert the barcode data using ISO-8859-1 character encoding type.
  ii. Shift_JIS - Allows the user to convert the barcode data using Shift_JIS character encoding type.
  iii. UTF-8 - Allows the user to convert the barcode data using UTF-8 character encoding type.


9. The ProfileConfig class which can be used to access the profile data has been deprecated. It is recommended to use the name-value pair function of Profile Manager feature. The Profile XML can also be directly modified. Refer to the Clock Sample for information on modifying Profile XML data.

10. Fixed: Toggling Hard trigger and soft trigger sometimes results into cancel read exception.

11. Fixed: In earlier versions, selecting EMDK APIs as Compile Sdk Version in the Android Studio project would result in a compilation error. This issue is now fixed.

Device Compatibility

This software release has been approved for use with the following devices.
### Installation Requirements

The following software must be installed prior to using the EMDK for Android.

- Microsoft® Windows 7 (32-bit and 64-bit) or Microsoft® Windows 8 (32-bit and 64-bit) or Microsoft® Windows 8.1 (32-bit and 64-bit)
- Java Development Kit (JDK) v7u45 or higher
- Android Studio v2.x or higher.

**Notes:**

1. The appropriate Android SDK Platform package must be installed on the development machine in order to target the right EMDK APIs SDK add-on. For example, Android 6.0 (API 23) must be installed for targeting EMDK APIs (API 23) as Compile SDK Version in Android Studio.
2. For building EMDK samples, the Android SDK Build-tools rev.23.0.x or higher must be installed.
3. All the Android Studio sessions must be closed if already running.

### Device Updates

Before using the EMDK for Android features on your Zebra Android device, you must update it with the EMDK device runtime using EMDK OS update.

Please note that upon installing the EMDK OS update, the following components on the device (if the version is lower) will be updated to the below versions.
<table>
<thead>
<tr>
<th>Component</th>
<th>Version (Android Lollipop and KitKat)</th>
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<tr>
<td>EMDK API</td>
<td>6.0.7.307</td>
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<td>DataWedge</td>
<td>6.0.16</td>
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<td>MX MF</td>
<td>6.1.0.9</td>
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Note: The EMDK OS update distributed with the EMDK installation does not support installation on TC8000 KitKat devices and Marshmallow devices such as TC51.

Usage Notes

None.

Known Issues

None.

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