EMDK for Android 11.0
Release Notes – July 2023

Highlights

> **July 2023 UPDATE:**
>
> - **Support added for Android Studio 2022.2.1 (Flamingo) release.**
>   (Requires update to EMDK Android Studio plug-in 11.0.4, which supports Android Studio 2021.2.1 (Chipmunk) or later only)
> - **Supports TC21, TC22, TC27, TC53 and TC73 devices running Android 13.**
> - **Supports MX versions:**
>   - **MX 11.9**
>   - **MX 11.8**

Previously added in EMDK for Android 11.0

- **Supports ET40, ET45, TC53, TC58, TC73, TC78 and WS50 devices running Android 11**
- **Support for RS6100 Bluetooth scanners added to Barcode and Notification APIs.**
- **Supports the following MX versions:**
  - **MX 11.6**
  - **MX 11.5**
  - **MX 11.4**
  - **MX 11.3**
  - **MX 11.2**
  - **MX 11.1**
  - **MX 10.5**
  - **MX 10.4**

Device Support

- New device support added in this release: Supports TC21, TC22, TC27, TC53 and TC73 devices running Android 13.

See all supported devices

New in EMDK for Android 11.0

NOTE: MX 11.x is supported only on devices running Android 11 or later.

Support for MX 11.9

- Access Manager adds the ability to:
  - Allow Grant permission to some Zebra apps to read app logs.

- Cellular Manager adds the ability to:
    - Block incoming and/or outgoing calls.
    - Override call blocking after an emergency call from the device.
- Network Connection Manager is a new CSP that allows an administrator to set preferences for connecting to cellular (WWAN) and Wi-Fi (WLAN) networks to help ensure that devices use the optimal network at all times.
- UI Manager adds the ability to:
    - Create Workflows to auto-launch one or more apps.
    - Allocate screen-sharing percentage for Workflow apps.
- Wi-Fi adds the ability to:
    - Allow an administrator to select the FTM Location Update Mode, a preference for the frequency of updates to the Fine Timing Measurement Location on a device.

Support for MX 11.8

- Clock adds the ability to:
    - Allow an administrator to set a sync threshold, specifying the maximum difference between the time on the device clock and that of its selected NTP server.
- Touch Manager adds the ability to:
    - Set the Touch and Hold Delay required for a key-press to be considered a long-press.

Support for MX 11.6

- Audio UI Volume Manager adds the ability to:
    - Control mute/vibrate usage, which limits the device user's ability to turn the features on and off.
- Battery Manager adds the ability to:
    - Set Charging Mode to schedule days and times to fully charge a device.
    - Specify a Maximum Charge percentage for a device battery.
- UI Manager adds the ability to:
    - Configure an external keyboard num-lock key and assign shortcut actions.
- USB Manager adds the ability to:
    - Configure USB Host Mode with rules for connecting peripherals without prompting the device user, for granting apps permission to access peripherals and for auto-launching apps on connection.
- Wi-Fi adds the ability to:
    - Control whether to mandate a server certificate and whether the device user is permitted to bypass validation when configuring a network in the Android Settings panel.
    - Select the certificate Action to use system certs or user-installed certs.

Support for MX 11.5

- Access Manager adds the ability to:
    - Control permission to bind the notification listener, the Android service that receives system calls relating to notifications.
- Bluetooth Manager adds the ability to:
    - Select the default set of peripherals to consider when the device evaluates Silent Pairing Rules created with the Remote Device Action parameter.
- Enterprise Keyboard Manager adds the ability to:

- - Display the microphone tab for selecting voice input.
  - Select the microphone tab as the Preferred Tab whenever EKB is invoked.
  - Control the keyboard width and keyboard height when the soft input panel is displayed on an external monitor.
- Hosts Manager adds the ability to:
  - Set a Device Name for a device to simplify identification by apps, device users, administrators, etc.
- SD Card Manager adds the ability to:
  - Control the SD Card pop-up, which prompts the device user to interact with an SD Card newly inserted into the device.
- Settings Manager adds the ability to:
  - Control whether the device user can change the browser app used for viewing web pages.
- Touch Manager adds the ability to:
  - Set the Device Type as 6375 platform and set Touch Modes for 6375-platform devices such as the ET40 and ET45.
- USB Manager adds the ability to:
  - Control whether to allow all USB peripherals to be used when the device is in USB Host Mode or to restrict usage to peripherals as defined in Rules created by the administrator using the Custom Rules List parameter.
- Wi-Fi adds the ability to:
  - Select Country codes for Azerbaijan, Bangladesh, Ghana, Gibraltar, Guernsey, Kosovo, Kyrgyzstan, Moldova, Senegal and Uganda.
  - Set RF Band Selection to enable 2.4GHz and 6.0GHz bands to operate on the device.
  - Select an RSSI Roaming Threshold and RSSI Delta Value to help improve the Wi-Fi user experience while roaming.
- UI Manager adds the ability to:
  - Select the Role Action for the default browser app on the device.
- Wireless Manager adds the ability to:
  - Control an Airplane Mode Timer and set a length of time (in minutes) after which Airplane Mode will be automatically turned off on the device.

Support for MX 11.4

- Key Mapping Manager adds the ability to:
  - Assign, configure and activate Double-trigger mode, which allows a key-code to be sent whenever a scan trigger is pressed twice during the specified time span.
- Power Key Manager adds the ability to:
  - Show/hide the "Power Off" button on the menu that appears after long-pressing the device power button
- Settings Manager adds the ability to:
  - Control whether the device user changes the app used for a given role, such as for making and taking calls.
- Touch Manager adds support for Zebra's TC53, TC58 and WS50 devices.
- UI Manager adds the ability to:
  - Turn on/off the proximity sensor on the device.
- Wi-Fi adds the ability to:
  - Select the 6.0GHz band to be used for device communications.
  - Select 6.0GHz channels to use for communications.
  - Control whether to use a Global Proxy server for all device communications.

Support for MX 11.3

- App Manager adds the ability to:
    - Install and upgrade "split" APKs containing multiple packages.
    - Select a Failure Mode, under which the device reports a failure and prevents a system Upgrade or Downgrade
- Cellular Manager adds ability to:
    - Lock device to a specific Mobile Network Operator (subsidy lock)
    - Work with Activation Certificates (changed from Activation Codes)
- DHCP Option Manager *removes* ability to:
    - Set DHCP Options 28 and 43
- Key Mapping Manager adds:
    - Support for new key identifiers DELETE and INSERT
- UI Manager adds the ability to:
    - Turn on/off Dark theme mode.
    - Control display and layout of Quick Tiles on the device
    - Control user access to Quick Tile editing
    - Enable/Disable Battery Saver

Support for MX 11.2

- AudioVolumeUI Manager adds the ability to:
    - Assign preset volume levels of STREAM_MUSIC for HDMI output.

Support for MX 11.1

- Bluetooth Manager adds the ability to:
    - Configure BLE channel blocking rules.
    - Configure RF-based BLE channel blocking rules.

- Cellular Manager adds the ability to:
    - Reset eSIM memory.
    - SIM Socket Usage is deprecated (always enabled from A11 and later)

- Display Manager adds the ability to:
    - Select display on which Media Projection and Key and Touch Injection operations are performed.

- Power Manager adds the ability to:
    - Cancel an ongoing OS upgrade or downgrade (when possible)

Support for MX 10.5

- BeaconMgr adds the ability to:
    - Enable/Disable Beaconing upon battery reinsertion into a device.
    - Enter a Manufacturer Byte or custom value in the beacon advertising packet.
    - Enter a Reference RSSI for extrapolating the relative distance to a device beacon.

- DevAdmin adds the ability to:

- Choose the Lock Screen Wallpaper
- Enable or limit Lock Screen Notifications from display.
- Select whether the device user receives notifications when apps are installed, uninstalled or upgraded.

• Display Manager adds ability to:

- Set a Secondary Display Mode for an external monitor.
- Select Allowed Orientations for a device.
- Select Locked Orientation positions for a device.
- Show/Hide a Lock Override button on a device.
- Force Resizable Windows for an app, overriding the manifest.
- Force Resizable Activities for an activity, overriding the manifest.

• UI Manager adds ability to:

- Set External Keyboard Layout (language) preference.
- Add or replace a Keyboard Layout (language) for an external keyboard.
- Enable/Disable Clipboard Share to control off-device data sharing.
- Select digital assistant app to use on the device.
- Specify a custom digital assistant app to use on the device.
- Select a Home Screen Wallpaper

Support for MX 10.4

• Access Manager:
- Grant installed apps permission to access USB and/or SD card storage.

- "Pre-grant" or "pre-deny" USB/SD card storage permission to apps yet to be installed.

• Key Mapping Manager:

- Mapping of "CL" and "FN" and "NAV_OK" keys found on some devices.

• USB Manager:

- Configure default USB behavior when connecting device with a host PC.

• Wireless Manager:

- BT Scanning Turn On/Off

- Wi-Fi Scanning Turn On/Off

- Location Service Turn On/Off

Enhanced Barcode API
• Added support for the new Bluetooth scanner RS6100.

- New BarcodeManager.DeviceIdentifier enum "Zebra Bluetooth Scanner" for selection of the RS6100 Bluetooth scanner as generic one.

Enhanced Notification API

- Added support for Bluetooth scanner RS6100:
  - New NotificationManager.DeviceIdentifier enum "Zebra Bluetooth Scanner" for selection of the RS6100 Bluetooth scanner as generic one.

Resolved Issues

- None

Usage Notes

- None

Known Issues

- None

Important Links

- Installation and setup instructions
- See all supported devices

About EMDK for Android

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