OEMConfig 11.9 Powered by MX
Release Notes – May 2023

Highlights

- Now includes an ALL-NEW schema (see below)
- Supports the Google iFrame specification*
- Supports all features through MX 11.9
- OEMConfig Managed Configurations have been simplified and restructured
- New OEMConfig application icon

* Requires “com.zebra.oemconfig.release” package

Device Support

- Supports all Zebra devices running Android 11 and later

New in OEMConfig 11.9 Powered by MX

The new version of Zebra OEMConfig (com.zebra.oemconfig.release) is for Zebra devices running Android 11 and LATER. It delivers numerous enhancements built by Zebra, and includes an all-new schema designed according to changes mandated by Google. It is NOT compatible with Android 10 or older.

To target devices with Android versions prior to Android 11, please use “Legacy Zebra OEMConfig” (com.zebra.oemconfig.common), which is for devices with Android versions up to and including Android 11.

If OEMConfig is being used with a mixed population of Android versions:
- Devices running A10 and earlier MUST use “Legacy Zebra OEMConfig” (com.zebra.oemconfig.common)
- Devices running A11 and later MUST use “OEMConfig Powered by MX” (com.zebra.oemconfig.release)

- Added in MX 11.9

Access Manager adds the ability to:
  - Grant permission to some Zebra apps to read app logs.
Cellular Manager adds the ability to:
  - Control whether the administrator has access to configuration of call blocking features, which can be used to prevent the device from receiving incoming calls and its user making outgoing, non-emergency calls. Emergency calls are always allowed regardless of this setting.
  - Select whether to allow the device to receive incoming calls.
  - Select whether to allow the device to make outgoing non-emergency calls. Emergency calls are always allowed.
  - Enter the length of time (in minutes) to allow incoming calls after an emergency call is made from the device, overriding call blocking. This parameter is intended to allow the user to receive calls back from law enforcement authorities, emergency services or other parties contacted during an emergency.
- 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.

- **Added in 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 keypress to be considered a long press.

- **Added in MX 11.7**

  Access Manager adds the ability to:
  Control System Settings access to accessibility features.

  Cellular Manager adds the ability to:
  Select from a list of Network Modes and assign preferred network types to a SIM slot.

  UI Manager adds the ability to:
  Control use of device volume Up/Down buttons to toggle Talkback, which vocalizes words on the device to aid the visually impaired.

- **Added in 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.

- **Also New**

  - Logically structured to simplify display and navigation by EMM systems and IT administrators
Per Google requirements, all "actions" are removed from managed configurations and restructured to behave as parameters

Usage Notes

- OEMConfig 11.9 with new schema (com.zebra.oemconfig.release) is available now at Google Play.
- EMM developers in partnership with Google must download the OEMConfig app from Google Play, from which they can extract the OEMConfig application restrictions to Zebra devices.
- OEMConfig is built with Android API level 31.
- OEMconfig can be tested using this broadcast intent:
  
  ```
  adb shell am broadcast -a
  com.android.vending.APPLICATION_RESTRICTIONS_CHANGED -n
  com.zebra.oemconfig.release/.BootCompleteReceiver
  ```

Important Links

- OEMConfig documentation
- MX documentation

Known Issues

- Encrypt SD Card feature fails with an error.
- Delete File(s) After Reboot scenario does not work as expected

About OEMConfig

Zebra OEMConfig is an administrative tool for configuring Zebra Android devices using Android Managed Configurations developed by Google and the Android community. To configure a feature for which no Android Enterprise API is available, use of Managed Configurations is the only available method based on publicly available specifications. OEMConfig interfaces with Zebra's Mobility Extensions Management System (known simply as MX), a non-XML, non-proprietary communication framework for managing the capabilities and behaviors of Zebra devices running Android.

Over time, many of the capabilities once available only through proprietary mechanisms such as MX have been added by the Android development community. Starting as "Android for Work," these capabilities are now available as "Android Enterprise" APIs or Android Managed Configurations, both of which are based on publicly available specifications. Zebra is adopting both as part of the natural evolution of its device management system.

OEMConfig provides a single interface for managing Zebra Android devices regardless of the underlying APIs required to get the job done. OEMConfig works through Android Enterprise APIs when possible and uses Managed Configurations when no Android Enterprise API is available.

OEMConfig and the Zebra schema are available from the Google Play Store and must be used together to configure Zebra Android devices. The Schema defines the functions available for configuration and provides the data necessary to present the corresponding data-driven UI for configuring those functions. This mechanism allows Zebra to make a new Schema available as soon as new features are developed.