Zebra RFID SDK for Android WS50

This document summarizes the Zebra RFID SDK for Android V4.0.0.10 release:

Application Release Number	Release Date	See page
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Zebra RFID SDK for Android V 4.0.0.10:

RELEASE DATE: 2-JUNE-2023

The Zebra RFID SDK for Android provides a powerful set of APIs to take full advantage of the WS50 performance, functionality, and versatility. Please refer to respective Zebra RFID demo API application that can be used as reference to develop new applications or to port existing applications to take advantage of the reader features.

The SDK provides APIs to connect, disconnect, perform inventory, and access operations like read, write, lock & kill memory banks.

Updates in V4.0.0.10
- Maximum Transmit power restricted to 20dBm for Taiwan.

Updates in V4.0.0.9 (base 2.0.2.100)
- API interface is like Zebra Android RFID SDK for fixed & handheld readers.
- Supports only smart periodic inventory to save battery life.
- Power Management API added as part of reader.config. PowerManagement class:
  - sleepAfterStart
  - Sleep
  - wakeup
  - isPowerManagementEnabled
- The API's / functions which are not applicable to WS50 report OperationFailure Exception along with reason as "Not Supported."
- RFID operations are not allowed during the following conditions.
  - Airplane mode on
  - Device Charging
  - Low Battery
  The API will throw reader appeared/disappeared event.
- reader.actions.inventory.perform() function is not supported. Recommend to use "perform" overloaded function with start trigger as smart periodic and stop trigger as duration.
- Regulatory APIs are available ReaderRegion class to configure the region/country where WS50 operates.
- Software update function is supported via ReaderManagement class.
- RFID CSP (https://techdocs.zebra.com/stagenow/5-7/csp/rfidmgr/)

- The following countries are not supported:
    - ANDORRA
    - BHUTAN
    - BOSNIA_HERZENGOVINA
    - CAMBODIA
    - GUAM
    - LAOS_EU
    - LAOS_FCC
    - MACAU
    - MACEDONIA
    - MONACO
    - MOTENEGRO
    - PAKISTAN
    - PANAMA
    - PARAGUAY
    - SRI_LANKA
    - VIRGINIA_ISLAND
    - ETSI302.208compliantgeneric
    - FCCPart-16compliantgeneric
    - ISRAEL
    - ALGERIA
    - ARMENIA
    - AZERBAIJAN
    - BAHRAIN
    - EGYPT
    - JORDAN
    - KAZAKHSTAN
    - KUWAIT
    - OMAN
    - QATAR
    - SERBIA
    - TUNISIA
    - UKRAINE
    - ANGUILLA
    - MOROCCO
- RFID operations are not allowed during the following conditions.
    - Airplane mode on
    - Device Charging
    - Low Battery
- Recommended to use JS PDF417 2D barcode for StageNow.

Device Compatibility

- WS50 (Android 11)

Components

- The zip file contains the following components:
  - API3_LIB-release-4.0.0.9.aar
  - RFID demo utility source
    - RfidUtility_v1.21.0.zip

Installation

Supported operating systems:

- Android 11.x and later

Developer system requirements:

- Developer Computers: Windows 10 or above/ 64-bit
- Android: Android Studio (2.3 or later), and Android API Level 30 or later

Notes

For RFID API documentation, refer the Zebra Techdocs in the following link.

https://techdocs.zebra.com/dcs/rfid/android/4-0-0-9/tutorials/

For WS50, refer the section "Applicable devices: All" and section "Applicable devices: Wearable Readers."