PM90 (Android 9) Release Notes

- 90.16 (Sep 18 2023)
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90.16 (Sep 18 2023)

- SDK: v3.25.01
- Security Patch: 2023-08-05

Release Notes

PM90 Android 9 VoC

(IMPROVED)	Requested to change the camera shutter sound same as the sound of PM80. → Added options to select the shutter sound between old (PM80's) and new (PM90's) in the Developer options > More. Find **Camera Shutter Sound** and turn on the switch to use old shutter sound.
(FIXED)	Requested to fix the invalid network error during authentication between the backend server. → Applied the fix that executes the PAC processor properly even when the screen lock is set.

ScanSettings

(NEW)	Added **Intercharacter delay** setting to deliver a delay time between each character of the decoded data. **More>** ScanSettings User Guide - Basic
	Added new PEW action, **Change to lower case,** to change all characters to lower case. **More>** ScanSettings User Guide - Extended Wedge (PEW)
(IMPROVED)	PEW > Send Delay action can be applied between the other actions.

Network

(IMPROVED)	Improved the private mobile network setting to have ability to automatic setting. **More>** Mobile Data Frequently Disconnects on Private LTE network

Operating System

(NEW)	Added a feature that displays device information when scanning a special barcode. **More >** Check Device Information by Scanning Special Barcodes
	Added new battery health index in **Settings > Battery** for more accurate battery lifetime estimation. Added an ability to calculate the battery lifetime indexes by OS itself.
(IMPROVED)	Updated Iran Standard Time, IRST (Tehran) to UTC+03:30. **More>** Changed Iran Standard Time (Abolished Daylight Saving Time, DST)
	System restricts setup wizard proceeding when a provisioning configuration exists in the enterprise storage to wait for the automatic provisioning.
	Improved system update (FOTA) to display an error message to check why the update failed.

	System restricts not display of the power menu when the side scan button and power button are pressed at about the same time. (To prevent inconvenience caused by mis-pressing.)

90.15 (Apr 07 2023)

- SDK: v3.24.00
- Security Patch: 2023-02-05

Release Notes

EmKit

(NEW)	**EmSettings:**
	1) Added settings for controlling the navigation bar, Hide navigation bar & Control button order.
	More > Hide On-Screen Navigation Bar
	2) Categorized settings and improved UI for intuitive recognition.
	System Information: Added radio generation & antenna information in Radio > WLAN section.
	Scan2Set: Added ability to use alias for Wi-Fi certificate when provisioning using QR code.
	More> Set Wi-Fi Certificate Alias When Generating QR Code for Provisioning
(IMPROVED)	**Scan2Set:** Improved to display an error message to check why the provisioning is failed.

Scanner / ScanSettings

(NEW)	Added a setting to adjust the size of TouchScan button.
	More> ScanSettings User Guide - Basic - TouchScan
	Added a setting to exit the auto scan mode by button.
	More> ScanSettings User Guide - Basic - Auto Scan
	Added a setting to make the trigger always turned on.
	More> ScanSettings User Guide - Basic - Always trigger enable
	Added an option to read a QR code with no quiet zone (low-contrast background) → **No Quiet Zone**

Device Settings

(NEW)	Added an option to select whether to use or not the manual screen rotation icon on the navigation bar.
	More> Disable Manual Screen Rotation Icon on Navigation Bar
(IMPROVED)	Improved system update (FOTA) to display an error message to check why the update failed.

Operating System

(NEW)	Added ability to allow applications which use CPU resource a lot through Scan2Stage.

90.14 (Dec 27 2022)

- SDK: v3.22.02
- Security Patch: 2022-11-05

Release Notes

PM90 Android 9 VoC

(FIXED)	Fixed the symptom that the camera app causes device lock up intermittently after closing the app using back button on the device, by applying a patch.
(FIXED)	Fixed to maintain the Wi-Fi direct name even after rebooting.

EmKit

(IMPROVED)	**Program Buttons:** New smart remap feature and improved UI helps you remap and control the button functions easier. • More> Program Buttons (V2)
(NEW)	**Smart Charging**: Added smart charging feature to charge the device with various charging mode (fast charging mode, Life-X mode). • More> Smart Charging (Log-in required)

Scanner / ScanSettings

(NEW)	Added new PEW action, **Change to upper case** that change all characters to upper case.

Device Settings

(IMPROVED)	Added an option, 3 seconds, in the PNO (Wi-Fi preferred network offload) Scan Interval setting.

90.13 (Aug 30 2022)

- SDK: v3.22.01
- Security Patch: 2022-08-05

Release Notes

PM90 VoC

(IMPROVED)	Requested to fix that failed to get the module information of IrDA. → Supported Smart RTF IRDA module that connects with a device using 3.5mm ear jack.
(FIXED)	Requested to fix that the return data of SAM APDU command is different from actual data. → Fixed extended APDU read and write features to work properly.

EmKit

(IMPROVED)	**Direct Clone:**
	• Improved to support backup for Quick Settings panel tiles.
	• Improved backup category name for better understanding of the listed applications.
	○ SYSTEM SETTINGS → Pre-installed Enterprise Apps and System Settings
	○ USER APPLICATIONS → Additionally Installed Enterprise and User Apps
(NEW)	**Program Buttons:** Meta option for mapping the Ctrl and Shift key combination behavior easily.
	• **More>** Map Direct Input Feature to Button (Including Meta Option)

Scanner / ScanSettings

(NEW)	Added IP Send function that sends the barcode data to an IP address through TCP/UDP protocol.
	• **More>** IP Send & RemoteWedge
(NEW)	Added new PEW actions, **Send up to char / string** that send only the part before a specific character or string.
	• **More>** [PEW] Send Data Up to Specific Character / String
(NEW)	Added QR Code symbology's detail option, **Non square decoding** to improve the scan performance when the QR code's finder pattern is slightly out of standard.
(FIXED)	Fixed the issue that the multiple barcode settings are reset when turning the scanner or the device on again.

Enterprise Storage

(NEW)	Added availability to custom boot animation using enterprise storage.
	• **More>** Custom Boot Animation

Network

(NEW)	Added a setting for PNO (Wi-Fi preferred network offload) Scan Interval.
	• **More>** Instruction of WLAN Detail Settings

90.12 (May 17 2022)

- SDK: v3.21.06
- Security Patch: 2022-04-05

Release Notes

Find the VoC related to 90.12 version on the below table.

Location	VoC	Improvements
Korea	Requested to prevent occuring KeyEvent twice after changing key via KCM file	Improved not to occur KeyEvent twice when the key is set as fallback behavior (KeyEvent Occurs Twice After Changing Key with KCM File)
	Requested smooth restoration KCM file through Direct Clone	Supported by making the appropriate directory for KCM file when the directory is not existing
Europe	Requested to apply keystroke method when transmitting the decoded data	Available to choose between Keyboard Event (Multiple) and Keyboard Event (Single) (Keyboard Event, Single and Multiple)

	Requested to transmit all response data of APDU command at once without split	Improved the transmission of long response data to send all data at once
U.S.	Requested to support the scanner wedge function that trims the last digits of the data	Added **Remove back to** action to PEW ([[PEW] Removing Last Digits from Barcode Data](#))

<New / Improved Functions on PM90 >

Added / Improved Functions

• **(EmLogTool)** Expanded available log types (see below list) and improved user experience design (Refer to [EmLogTool Guide](#))
  ○ Logcat with configurable buffers
  ○ Kernel message
  ○ Snapshot
  ○ Traces
  ○ WLAN Driver
  ○ TCPDump

• **(Scanner)** Segmented the result type of Keyboard Event to Keyboard Event (Multiple) and Keyboard Event (Single), to ScanSettings to meet more various scanner use cases (Refer to [Keyboard Event, Single and Multiple](#))

90.11 (Feb 22 2022)

- SDK: v3.21.01
- Security Patch: 2022-01-05

Release Notes

Find the VoC related to 90.11 (Feb 22 2022) on the below table.

Location	VoC	Improvements
Korea	Requested to add a function to restrict USB module connection	Added API to the system Also supported through Scan2Stage (From v10.1.2 and compatible client app)
U.S.	Requested to add WLAN log option	Added WLAN log menu in EmLogTool
	Requested to remove the File Download dialog during provisioning through Scan2Set	Removed the dialog when the file overwrite checking is not required
Japan	Requested to prevent writing a wrong string to an NFC tag URI type	Changed inappropriate URI record byte

<New / Improved Functions on PM90 >

Added / Improved Functions
• **(Enterprise Storage)** Added a function to reset the enterprise storage
• **(Enterprise Storage)** Supports AutoInstall feature for apk file in enterprise storage [Related article](#)

- **(Phone)** Added automatic call answer function while Bluetooth (headset) is connected (Default: Disable)

  [Related article]

90.10 (Nov 22 2021)

- SDK: v3.21.00
- Security Patch: 2021-10-05

Release Notes

Find the VOC related to 90.10 (Nov 22 2021) on the below table.

Location	VoC	Improvements
U.S.	Requested to simplify the QR code provisioning process in Setup Wizard screen	Provisioning process will be started once scanning the QR code, without launching Scan2Set manually
	Requested to support Enterprise storage	Added **/enterprise/usr/** storage which can be used for backup the provisioning data [Related article]
	Requested a way to identify information that barcode data came from	Added new intent field, **Source of Scanner**

<New / Improved Functions on PM90>

Added / Improved Functions
- **(Scanner)** Improved scanner to read 1D barcode with narrow quiet zone on either end
- **(Scanner)** Disabled power save mode by default to prioritize performance
- **(RFID)** Supported RF900
- **(WLAN)** Updated Detail Settings for 5G preference roaming

90.09 (Aug 24 2021)

- SDK: v3.19.29
- Security Patch: 2021-07-05

Release Notes

Find the VOC related to 90.09 (Aug 24 2021) on the below table.

Location	VOC & Improvement

U.S.	
	Added "Telstra.internet" APN name (Telstra internet doesn't work)

Check the new and improved functions on PM90

Added / Improved Functions
• Added a **Scheduled Power Off** function on EmSettings
• Removed **MobiControl** application on EmKit
• **[WLAN]** Applied patch for FragAttacks to strengthen security vulnerabilities that affect Wi-Fi network
• **[WLAN]** Added a Wi-Fi Scan throttling function (Wi-Fi Scan Throttling Setting)

90.08 (May 17 2021)

- SDK: v3.19.27
- Security Patch: 2021-04-05

Release Notes

Find the VOC related to 90.08 on the below table.

Location	VOC	Improvements
U.S.	Scan beam keeps on when pressing the Scan Button while entering the suspend mode by pressing the power key	Changed to perform the scanner suspend process right after screen-off

Check the improved and added functions on PM90.

New Functions / Improvements
• Support checking OS version on Setup wizard
• Blinking LED 5 times and power-off when trying to power on with low-battery
• Display trigger enable status on notification icon of scanner   (Trigger Enable / Disable Indication)
• Added **back button** on pages of System Information in EmKit

• Add GPS information on System information by adding GPS module	
• Changed UI setting to show **IMEI/IMSI** information on **EmKit > System Information**	
• Improved Scan Success beep sound to remove static	

90.07 (Apr 15 2021)

- SDK: v3.19.26

Release Notes

Issued OS version	Inquiry/Issue	Improvements
90.05	The Alpha Numeric Keypad appears occasionally while the Numeric Keypad should always appear when reading barcodes.	Modified to appear only Numeric Keypad by adding an action to delay focus when window token doesn't exist while view exists.
90.06	SIP doesn't pop up after setting Function Key to SoftKeyboardKey on Program Buttons in EmKit.	Added option on Settings > System > Langueages & input > Built-in Keypad Mode • SIP function will work after enable the added option above
90.06	Hard to access setting on the Quick Setting Panel	Adjusted the Setting icon size to display the setting icon properly

Refer to the following table to see the newly updated features on PM90.07.

Added/Updated Features
• Improved to display power button menu on dark theme
• Added Korean & Chinese (Pinyin) language pack for Gboard
• Modified low temperature warning message