## KaiOS Jio 2.5 quoin Release Note

Date Release non-KaiOS APP tag for JIO Qwerty phone non-KaiOS APP tag for JIO Candy Bar phone Type

4-26-2021 kaios\_jio\_quoin\_2\_5\_20181106\_R3\_ER20\_production jio\_apps\_2.5\_250321\_3.23\_qwerty jio\_apps\_2.5\_250321\_3.22\_candybar **TA Candidate Release** 

## **Integration Dependencies**

1. Integration based on Qualcomm Grease releaseAU LINUX GECKO LF.BR.1.2.8.C2.00.00.000.106

2. [ODM - MANDATORY] Add Reverie RT9/QWERTY Library to manifest:

For candy bar:

revision="refs/tags/kaios\_jio\_quoin\_2\_5\_20181106\_R3\_ER20\_production"/>

For awerty:

revision="refs/tags/kaios\_jio\_quoin\_2\_5\_20181106\_R3\_ER20\_production"/>

3. [ODM - Optional] Additional repo for MMI Test source is made available to ODMs: revision="refs/tags/kaios\_jio\_quoin\_2\_5\_20181106\_R3\_ER20\_production"/>

4. [ODM - MANDATORY /NFC] For NFC Devices Add nfcd project from KaiOS:

5. [ODM] Needed for altering Jio Store server settings - add below project:

<project name="kaios-plus.kaiostech.com" path="apps/kaios-plus.kaiostech.com" remote="quoin"</p> revision="refs/tags/kaios\_jio\_quoin\_2\_5\_20181106\_R3\_ER20\_production"/>

- 6. [ODM MANDATORY] Add Jio Sales Tracker from Adups (ODMs to get username & password from Adups):
- 6.1 clone project from Adups into external/sales-tracker/ directory:
- 1. Go to web: http://rgit.adups.com/customer/Sales Tracker.git
- 2. Login with user name: odm (password is same as before)
- 6.2 add below line in device/qcom/common/common.mk:

\$(call inherit-product-if-exists, external/sales-tracker/sales-tracker.mk)

6.3 Aduns Sales Tracker version: v9-20190327 7. [ODM – MANDATORY] for Metrics Daemon:

- 7.1 Add two repositories in manifest

revision="refs/tags/kaios\_jio\_quoin\_2\_5\_20181106\_R3\_ER20\_production"/>

revision="refs/tags/kaios\_jio\_quoin\_2\_5\_20181106\_R3\_ER20\_production"/>

7.2 Take below system\_core patch

https://github.com/kaiostech/platform\_system\_core/commit/c30d1b4202dccd4243755226085cb6eaecc8b86a

7.3 if RJIO requests to NOT share performance and usage data to Cloud, please change SHARE\_PERF\_USAGE in gaia/Makefile from 1 to 0 like below:

- # Share performance and usage data
  8. Since R3\_ER10, ODM needs to take 2 new repo which already in manifest to build software. It's KaiOS release process optimization to avoid build mistake in KaiOS release.
- <!-- Prebuilt modules for release -->

project name="prebuilt-apps" path="prebuilt-apps" />

opect name="prebuilt-b2g" path="objdir-gecko" />

## Notes

- 1. Launch log manager with \*#\*#0574#\*#\*
- 2. Launch MMITest app with \*#2886#
- 3. Please contact NXP for release note and information on NFC\_NCIx\_KRC0.2.15.0 release
- 4. revert api-daemon to commit https://git.kaiostech.com/quoin/api-daemon/commit/14cb78c04981d0fea6ebd3705f23dec28090901c to fix bug57083
- 5. revert patch of bug44287 and bug50171 to remove 2000 contacts sync limitation and fix bug57502/51303

ODM Config	
Model Name	ro.product.model
KaiOS version	ro.product.version_tag = kaios_jio_quoin_2_5_20181106_R3_ER20_production
ODM version	ro.build.version.incremental
Chipset version	ro.product.base_version
SAR Value	ro.product.sar_value
	e.g. ro.product.sar_value=1.23
Network types UI	ro.moz.ril.0.network_types
	e.g. ro.moz.ril.0.network_types=gsm,wcdma,lte
Torch LED	ro.kaios.torch_node=/sys/class/leds/flashlight/brightness
	ro.kaios.torch_enable_value=127
Enable NFC	Include NXP/KaiOS projects
Eliable INFC	2. set ro.moz.nfc.enabled = true

	deviceinfo.cu needs to be defined in/gaia/distribution/settings.json;
CU Reference (Please consult Jio)	Please check with Reliance JIO team on the value of CU Reference, in general, it is same as CU Ref used by FOTA which means deviceinfo.cu shares same value as ro.fota.cu_ref;
	+ "deviceinfo.cu" : "XXXX-YYYZZZ",
KaiOS FOTA Parameters (Please consult Jio)	ro.fota.cu_ref: ro.fota.sw_ver: ro.fota.SUMaster: ro.fota.network_type: ro.fota.network_port: (default 80)
	Please kindly get associated FOTA diff tool from git server which is under/fota_tools; I BLOCK FOTA is needed, the version information of FOTA diff tool is under/fota_tools/blob/quoin/block/release.txt and the version for this release is v1.6.8 which fix Bug 71856 - Move modem upgrade ahead of bootloader upgrade.
KaiOS FOTA diff tool	Taking BLOCK FOTA diff tool as an example, following steps can be used to make full modem diff package:
	put source and target softwares into softeware/src and softeware/tgt     then run ./prepare_pkg_start.sh and ./gen_update_pkg_start.sh
	Create a new directory under device directory with the name "default-prefs" (e.g. /device/qcom/msm8909_512)
Device Pref (see options below)	2. created a new file name "dev-pref.js" inside the directory "default-prefs" Add below preferences into this file
	3. In the Device mk file (e.g. device/qcom/msm8909_512/msm8909_512.mk) add EXPORT_DEVICE_PREFS line: e.g. EXPORT_DEVICE_PREFS := /device/qcom/msm8909_512/default-prefs
Browser UA String	<pre>pref("general.useragent.use_device", true); pref("general.useragent.device_string", "[Device String]");</pre>
Internal FM Antenna	pref('dom.fmradio.antenna.internal', true);
Jio Push Server	pref("dom.push.serverURL", "wss://push.kai.jiophone.net:443/");
IPv6	If JIO requests to turn on IPv6 tethering, please add new flag in makefile such as/msm8909_512.mk as: # Enable IPv6 tethering ENABLE_RADVD := true
VILTE (IR94)	If JIO requests to turn on or off IR94, please go to/dev-pref.js and set following flag as true of false accordingly: device.capability.vilte turn off by default as per RJIO request in ticket 43670 comment 20
VoWiFi (IR51)	If JIO requests to turn on or off IR51, please go to/dev-pref.js and set following flag as true of false accordingly: device.capability.vowifi turn off by default as per RJIO request in ticket 43670 comment 31
eMBMS	1. The board config "TARGET_ENABLE_EMBMS" can only be configured by Kai, default is TRUE.  2. The pref "dom.embms.enabled" is proposed to work as a confirming toggle for OEMs to disable EMBMS on demand in case "TARGET_ENABLE_EMBMS" is true in prebuilt gecko. Here is the code piece of b2g/app/b2g.js:  // Disable eMBMS by default.  +#ifdef ENABLE_EMBMS  +pref("dom.embms.enabled", false);  +#endif  If OEM doesn't get source from KaiOS, please toggle pref "dom.embms.enabled" in procprefs.js or dev-pref,js file instead of b2g.js. ex: in /device/qcom/msm8909_512/default-prefs/proc-prefs.js, put pref("dom.embms.enabled", true);
	3. If "TARGET_ENABLE_EMBMS" is false, EMBMS will be definitely disabled regardless of the value of "dom.embms.enabled".

Qwerty device related config.	Please add BOARD_HAVE_QWERTY := true into board config makefile, each hardware has its own board configfile such as device/qcom/msm8909_512/msm8909_512.mk, please check with your HW supplier on which board is used for this project;
	Please add pref("device.capability.qwerty", true) and APP developer can use code such as"navigator.hasFeature("device.capability.qwerty") == true" to know that current device is under landscapemode;
	Please set "orientation": "landscape-primary" in the manifest.webapp of concerned web APP such as MMITest module;
	Please add ENABLE_REVERIE_QWERTY := true to board config makefile;
	Please add pref("device.capability.endcall-key", true) to/dev-pref.js;
	pref("device.capability.endcall-key", true) be added to/dev-pref.js as by default setting in qwerty;
Dual SIM	Please add following new proprety to board config makefile, each hardware has its own board configfile such as device/qcom/msm8909_512/msm8909_512.mk, please check with your HW supplier on which board is used for this project;
	+persist.radio.multisim.config=dsds
	Please kindly check with Reliance JIO whether SIM1 needs to be fixed as JIO SIM only (LTE only) and SIM2 need to be fixed as GSM only, if so, please set
	- ro.moz.ril.0.network_types=gsm,wcdma,lte + ro.moz.ril.0.network_types=lte
	+ ro.moz.ril.1.network_types=gsm
	If api-dameon needs to be turn-on per the request of JIO, please kindly:  1. please make sure that following two git repositories has been correctly synchronized based on manifest: <pre></pre>
	KaiOS adds following line of code to/gonk-misc/b2g.mk and ODM can double check:  PRODUCT_PACKAGES += api-daemon ads-sdk
api-dameon	KaiOS adds following line of code to/gonk-misc/init.b2g.rc and ODM can double check: service api-daemon /system/kaios/api-daemon /system/kaios/config.toml class main user root
	4. please check that QCOM code,/system/core/libcutils/fs_config.c, includes following: { 00775, AID_ROOT, AID_ROOT, 0, "system/kaios/api-daemon" },
	Please note, ODM can check with QCOM if ODM would like to understand how new Linux process can be added to system SW. By 09:00am, GMT+8, May, 18, 2018, reference code developed by QCOM for this purpose can be found on CodeAurora at https://source.codeaurora.org/quic/la/platform/system/core/tree/libcutils/fs_config.c?h=LF.BR.1.2.8.c2-06900-8x09.0#n114, ODM can check with QCOM if further clarification is needed;
	If ODM needs to display HW version by phone UI to end user, ODM can add one new system property as listed as following to makefile, please note, string length of HW version needs to b less than 91 characters: + ro.hardware=;
ODM hardware version	For instance, ODM may set ro.hardware=ODM name_SKU name_DVTx as HW version;
	Once the new system property is added and a clean SW build is done, end user can find HW version from phone UI from Settings APP at "Settings -> Device Information -> More information -> Hardware Version";
ODM phone ROM size	Please kindly add ROM size of device in Mbyte to device folder as preference; For instance, if ROM size is 4GByte, please add pref("device.storage.size", 4096); if ROM size is 512MByte, please add pref("device.storage.size", 512);

Enable Marionette for MTBF	If a SW build is needed for MTBF testing, please kindly:  1, use no production SW tag, for instance, TA2_R2, not TA2_R2_production;  2, make a userdebug build;
KaiOS API version	Please kindly double confirm with Reliance JIO on KaiOS API version and add one new preference to/dev-pref.js accordingly. In general, it should be v2.0 and if it is v2.0, the new added preference will be:  + pref("app.kaiapi.version", "2.0")
Bug 66376 - Allow to disable Verify the installed apps on boot	please kindly double confirm with Reliance JIO on pref apps.disable_boot_verify value in the final build.
Jio Store	In/gaia/build/config/common-settings.json, you can set: "deviceinfo.cu": "your string here", (ex. deviceinfo.cu: "4044O-2BAQUS1-R",) "apps.serviceCenterUrl": "server url here", (ex. "apps.serviceCenterUrl": "https://api.kaiostech.com/v2.0",)

	Issues Fixed
D 400400	100000111100
Bug 102400	Devices reporting more than 4 GB of device memory in the production data.
	Dependent Issues
Following ti	ckets are needed by
	[ViLTE / VoWIFI] VoWiFi Phonebook: Device shall display correct icons during call in status bar & call logs to
.0002	differentiate Normal call, VoLTE call, VoWiFi call [CLM ID-706225] => it needs QCOM release
	AU LINUX GECKO LE BR.1.2.8.C2.00.00.000.106
47970	[DATA] Hipri type state is incorrect when WIFI is on. => QCOM needs to release a patch as per bug47970 comment
	115, as a follow up patch for bug37523
44350	API to detect device is rooted or not => need to take below diff in QCOM AU106 sepolicy/domain.te file
	# Don't allow raw read/write/open access to block_device
	# Rather force a relabel to a more specific type
	- neverallow { domain -kernel -init -recovery -vold -uncrypt -install_recovery -fsck } block_device:blk_file { open read
	write };
	+ neverallow { domain -kernel -init -recovery -vold -uncrypt -install_recovery -fsck -b2g } block_device:blk_file { open
	read write };

	Known issue
63885	[F61F][Calendar][Crash]The first time you delete a Google event, the Carsh phenomenon occurs in Calendar. => patch ready