RDK-B_20170929

This is the summary page that describes the CMF RDK-B iteration rdkb-20170929.

Below are links to the relevant documents for the release.

- RDK-B 20170929 Emulator Test Report (Gerrit)
- RDK-B 20170929 RaspberryPi Test Report (Gerrit)
- A detailed changelog since the last iteration (RDK-B-20170830) can be found here (Gerrit).

For the Gerrit links, you need to log in before you will be able to see the contents.

The latest RDK-B iteration addresses licensing issues so users are advised to move to the latest iteration.

Baseline

Baseline	CMF-20170929	2017-09-29 baseline.
Post-baseline updates	webui cc93f1d	
TDK	M51	https://wiki.rdkcentral.com/display/TDK/TDK+Release+M51
Manifest	rdkb-20170929	

Highlights since 20170830

- New components: None.
- Components updated:
  - crashupload, rdk_logger, CcspCMAgent, CcspCommonLibrary, CcspCr, CcspHomeSecurity, CcspLMLite, CcspMisc, CcspMoCA, CcspPandM, CcspPsm, CcspSnmpPa, CcspTr069Pa, CcspWifiAgent, CcspXDNS, TestAndDiagnostic, Utopia, Xconf, hal, halinterface, hotspot, sysint, webui, rdkb/devices/raspberrypi/hal, rdkb/devices/rdkbemu/ccsp/rdkb.
- Community contributions:
  - Please refer to the changelog since the last iteration (RDK-B_20170830) here (Gerrit).

Getting the code

```
$ mkdir rdkb
$ cd rdkb
$ repo init -u https://code.rdkcentral.com/r/manifests -m rdkb.xml -b rdkb-20170929
$ repo sync -j4 --no-clone-bundle
```

- The `-m rdkb.xml` in the build sequence above is important. If this is not specified, you will get an RDK-V tree by default.
- The `-b rdkb-20170929` in the build sequence above specifies the branch to use. If you omit the `-b rdkb-20170929` entirely, you will get the master (HEAD) of each component.
- At any time, the community can build latest master by dropping the `-b rdkb-20170929` option in the repo init command.
- We have verified that this iteration boots to a login prompt and that you can log in, and that you can connect with a web browser to the web admin page.

Building for the emulator

```
$ source meta-cmf-rdkb-bsp-emulator/setup-environment (select qemux86broadband)
$ bitbake rdk-generic-broadband-image
```

The image path will be: `build-qemux86broadband/tmp/deploy/images/qemux86broadband/rdk-generic-broadband-image-qemux86broadband.vmdk`

To build TDK, follow the steps as for a normal build, above, but use the following bitbake command:

```
$ bitbake rdk-generic-broadband-tdk-image
```

The image path will be: `build-qemux86broadband/tmp/deploy/images/qemux86broadband/rdk-generic-broadband-tdk-image-qemux86broadband.vmdk`

TDK documentation is available here: https://wiki.rdkcentral.com/display/TDK/TDK+Release+M51

Running the emulator

1. Start VirtualBox.
2. Click `New` -> Enter name -> Select type `Linux` -> Select version `Other Linux (32 bit)` -> Click `Next`
3. Select `Memory size - 512MB` -> Click `Next`
4. Select option `Use an existing virtual hard drive` -> Select the built image above -> Click `Create`

5. Once the VM has been created, select the new image and click `Settings` -> `Network` -> Select `Attached to: 'Bridged Adapter'` -> Click `Ok`
6. Click `Start`. This will bring up the emulator with the initial splash screen

Building for RaspberryPi

```
$ mkdir <workspace dir>
$ cd <workspace dir>
$ repo init –u https://code.rdkcentral.com/r/manifests -m rdkb.xml –b rdkb-20170929-rpi
$ repo sync -j4 --no-clone-bundle
$ source meta-cmf-raspberrypi/setup-environment
```

Select option `raspberrypi-rdk-broadband.conf`

```
$ bitbake rdk-generic-broadband-image
```

Note. The kernel Image and root filesystem will be created under the `./tmp/deploy/images/raspberrypi-rdk-broadband` folder

Documentation for RDK-B for RaspberryPi is available here: https://wiki.rdkcentral.com/display/DEVTOOLS/RDK+Broadband+(RaspberryPi)+-Krogoth

Running on the RaspberryPi

Please see RDK Broadband (RaspberryPi) -Krogoth.

Known Issues

General:

- For emulator increased the execution time in some LMLite and WiFi Tests (TDK-396/408)
- On emulator: RDKBEMU-539 intermittently CcspCr.service & CcspPsm.service and other critical ccsp services may fail due to a tmp-ccsp_msg.cfg.service failure, if it occurs emulator will need a reboot to recover

RPI Issues:

- TDK-404 RDK-B RPI : LMLite Test Failures
- TDK-409 RDKB RPI WiFiHAL Failures

- RPI-41 lighttpd process is not getting restarted automatically once the process is crashed/killed
- RPI-54 TDK LMLite In Connected Device page, Device Type is shown as Ethernet instead of WIFI when client is connected via WIFI
- RPI-61 port triggering is not working for RaspberryPi device
- RPI-63 LMLIte Connected devices are not displayed on management portal under connected device list
- RPI-73 RPI RDKB Krogoth NIGHTLY Unable to connect to portal
    - ***This issue is worked around in this release***
- RPI-78 WiFi HAL api wifi_getRadioOperatingChannelBandwidth() is returning invalid channel bandwidth value for 2.4GHz
- RPI-79 WiFi HAL api wifi_getRadioOperatingChannelBandwidth() is returning invalid channel bandwidth value for 5GHz
- RPI-80 WiFi HAL api wifi_getRadioSupportedFrequencyBands() returning invalid value for 2.4GHz
- RPI-81 WiFi HAL api wifi_getRadioOperatingFrequencyBand() returning invalid value for 2.4GHz
- RPI-82 WiFi HAL api wifi_getRadioOperatingFrequencyBand() returning invalid value for 5GHz
- RPI-83 WiFi HAL api wifi_getRadioSupportedFrequencyBands() returning invalid value for 5GHz
- RPI-84 TDK WIFI 2.4 and 5GHZ WIFI SSIDs stops broadcasting once the channel number of 5GHZ is set to 40
- RPI-85 TDK WIFI Not able to change the operating standard value of 2.4GHZ
- RPI-86 TDK WIFI Not able to change the operating standard value of 5GHZ
- RPI-88 TDK WIFI Set operation on Operating ChannelBW is failing after ApplySetting

Emulator Issues:

- TDK-368 RDKB-EMU Intermittent Segfault in CcspWiFiAgent.service
- TDK-375 RDKB EMU TS_TAD UDPEcho Test Failures
- TDK-395 RDKB EMU TS_SNMP_SetSSIDEnableWithRadioDisabled Fail
- TDK-396 RDKB EMU Reboots During LMLite Tests
- TDK-408 RDKB EMU WiFi Script Timeouts

- RDKBEMU-380 TDK SNMP SNMP Query to get the System Description details is not returning the mandatory fields like HW_REV,SW_REV
- RDKBEMU-393 RDKB Emulator When firewall config is set to high, low or medium, the traffic from wlan client to lan client is blocked
- RDKBEMU-458 CcspPandMSsp service/process segfaulting on startup after a crash/reboot during test runs
- RDKBEMU-477 PAM process crashes when setting the port triggering parameters after a port forwarding set operation
- RDKBEMU-498 TDK SSIDs of WiFi 2.4GHz and 5GHZ are retrieved as OutOfService
- RDKBEMU-502 Parameters like BytesReceived, PacketsReceived are not getting populated after a successful UDP echo command executed
- RDKBEMU-503 TDK TAD Fails to set the value of Device.DNS.Diagnostics.NSLookupDiagnostics.DiagnosticsState as Requested if the DNSServer value as empty
- RDKBEMU-506 TDK WIFI Reset of WIFI is not happening through snmp
- RDKBEMU-508 TDK WEBUI Not able to login to the Xfinity page. Throws error as "Can not get password for admin from backend"
- RDKBEMU-517 TDK WIFI Not detecting WIFI with Tenda 300Mbps Dual Band Wireless N USB Adapter (W522U: Ralink driver
- RDKBEMU-521 TDK WIFI Randomly observing WIFI crash while doing WIFI factory reset
- RDKBEMU-526 TDK WiFi Radio.2.Enable state automatically changing as True when SSID.2.Enable state is set as true
- RDKBEMU-532 TDK WIFI Segmentation fault observed when enabling/disabling SSID using HAL API wifi_setSSIDEnable()
- RDKBEMU-533 TDK WIFI The expected value for radioIndex is different for different api.

- RDKBEMU-534 TDK PAM Randomly emulator crashes when trying to toggle the device between bridge and router mode
- RDKBEMU-536 Create a reference implementation that uses WebPA server
- RDKBEMU-539 PSM Segfault on Boot/Reboot
- RDKBEMU-540 TDK WIFI Device.WiFi.Radio.ChannelsInUse is not listing the current radio channel number.
- RDKBEMU-541 TDK WIFI Unable to set the operating standard as "ac" for 5GHZ
- RDKBEMU-542 TDK WIFI No support for 80MHz OperatingChannelBandwidth in WIFI 5GHZ

Generic TDK Issues:

- RDKB-9915 TDK Port Triggering Master CcspPandMSsp process crashes when trying to enable a rule added for port triggering
- RDKB-10573 TDK WIFI Master WiFi agent crashes when trying to set values for MAC Filter table
- RDKB-10750 TDK PAM Master Fails to set the value as "Requested" for Device.IP.Diagnostics.DownloadDiagnostics.DiagnosticsState
- RDKB-10977 TDK TAD Master Fails to set the value as "Requested" for Device.DNS.Diagnostics.NSLookupDiagnostics.DiagnosticsState
- RDKB-12488 TDK Logger RDKB does not support the option to override the debug.ini file location from the standard /etc path as supported in RDK-V
- RDKB-12555 TDK LmLite Reporting period not reverting back to default value after OverrideTTLseconds.
- RDKB-13274 TDK LmLite Polling period not reverting back to default value after OverrideTTLseconds.
- RDKB-14126 TDK Getting invalid parameter error on setting parameter values for a new PortMapping rule