RDK-B 20180220

This is the summary page that describes the CMF iteration rdkb-20180220. Below are links to the relevant documents for the release.

Note: The latest rdkb iteration addresses licensing issues so users are advised to move to the latest iteration.

- rdkb-20180220 Emulator Test Report (Gerrit)
- rdkb-20180220 RaspberryPi Test Report (Gerrit)

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

A detailed changelog since the last iteration RDK-B_20180123 can be found here.

Baseline

Baseline	nightly/20180220	20180220 baseline.
Post-baseline updates		
TDK	M55	https://wiki.rdkcentral.com/display/TDK/TDK+Release+M55
Manifest	rdkb-20180220	

Highlights since RDK-B_20180123

- Opensourced components:
 - o rdk/components/generic/rdm, rdk/components/generic/xconf-simulator, rdk/components/generic/dcm
- · Components updated:
 - crashupload, rdk_logger, sys_resource, CcspCMAgent, CcspCommonLibrary, CcspLMLite, CcspMisc, CcspPandM, CcspPsm, CcspSnmpPa, CcspTr069Pa, CcspWifiAgent, GwProvApp, GwProvApp-ePON, TestAndDiagnostic, Utopia, Xconf, hal, halinterface, hotspot, sysint, webui, rdkb/devices/rdkbemu/ccsp/rdkb, rdkb/devices/rdkbemu/rdkbemu_xb3
- Patches:
 - Separate patch files for the open-source OE layers are no longer maintained. Instead, mirrors of the OE layers used by RDK are maintained at CMF, containing rdk branches that contain the patches already applied. The RDK build scripts and recipes now all use these instead of the previous patches.
- · Community contributions:
 - O A detailed changelog since the last iteration RDK-B_20180123 can be found here.

Getting the code

Note: The manifests repository is only available to RDK licensees.

```
$ mkdir rdkb
$ cd rdkb
$ repo init -u https://code.rdkcentral.com/r/manifests -m rdkb.xml -b rdkb-20180220
$ 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-20180220 in the build sequence above specifies the branch to use.
- If you omit the -b rdkb-20180220 entirely, you will get the master (HEAD) of each component.
- At any time, the community can build latest master by dropping the -b rdkb-20180220 option in the repo init command.

Building for the emulator

```
$ source meta-cmf-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-qemux 86 broadband/tmp/deploy/images/qemux 86 broadband/rdk-generic-broadband-tdk-image-qemux 86 broadband.vmdk broadband/tdk-generic-broadband-tdk-image-qemux 86 broadband.vmdk broadband-tdk-image-qemux 86 broadband

TDK documentation is available here: release M55

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-20180220-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

Running on the RaspberryPi

Please see RDK Broadband (RaspberryPi)

Documentation for RDK-B on RaspberryPi

RDK Broadband (RaspberryPi)

RaspberryPi Sanity Testing

Sanity tests include:

- · Wifi 2.4Ghz and 5Ghz hotspot testing.
- Login, menu navigation, parameter modification, e.g. Wifi SSID/password change and re-connection, changing admin password.

Known Issues

TDK M53 or later must be used to test this release as prior versions of TDK Manager are not compatible with the TDK Agent in this release due to a recent change in the TDK JSON RPC version

RPI Issues:

- TDK-409 RDKB RPI TS WIFIHAL 5GHzGetRadioStandard Failure
- TDK-434 RDKB RPI WIFIAGENT 2.4 and 5 IsSSIDDown Failures
- TDK-522 RDKB TS_Sanity Tests Failing
- REFPLTB-3 TDK WIFI The HAL api wifi_getRadioMaxBitRate() is returning empty string for 2.4GHz
- REFPLTB-4 TDK WIFI The HAL api wifi_getRadioMaxBitRate() is returning an empty string for WiFi 5GHz
- REFPLTB-5 TDK WIFI Set operation failing with HAL api wifi_setRadioOperatingChannelBandwidth() for 2.4GHz
- REFPLTB-6 TDK WIFI Set operation failing with HAL api wifi_setRadioOperatingChannelBandwidth() for 5GHz
 REFPLTB-7 TDK WIFI Setting Device.WiFi.AccessPoint.SSIDAdvertisementEnabled is false is broadcasting the SSID in network
- REFPLTB-8 TDK WIFI WiFi Clients are holding the IP even after the SSIDs "Device.WiFi.SSID.Enable" are disabled
- REFPLTB-12 TDK RPI WIFI Device.WiFi.SSID.1.Status not changing the status as "Down" after disabling Device.WiFi.SSID.1.Enable REFPLTB-13 TDK RPI WIFI Device.WiFi.SSID.2.Status not changing the status as "Down" after disabling Device.WiFi.SSID.2.Enable
- REFPLTB-21 TDK WIFIHALwifi_getSSIDMACAddress() API returns a null value
- REFPLTB-22 TDK WIFI HAL wifi_getApRetryLimit call fails for all access points except access point 1
- REFPLTB-23 TDK WIFIHALAuthentication Mode is hard coded in wifi_getApBasicAuthenticationMode()
- REFPLTB-24 TDK WIFI AutoChannelEnable is not disabling when radio channel is changed for 5GHz REFPLTB-25 TDK WIFI AutoChannelEnable is not disabling when radio channel is changed for 2.4GHz
- REFPLTB-26 TDK WIFI HAL wifi_getRadioExtChannel returns an empty string for 2.4Ghz
- REFPLTB-27 TDK WIFIHALMismatch between the values returned by wifi_getRadioStandard() and wifi_getRadioSupportedStandards() for
- REFPLTB-29 TDK WIFI WiFi SSIDs are broadcasting in Bridge mode
- REFPLTB-31 TDK RPI The DNS server value in RPI gateway is not consistent with the DNS server ip in its LAN client
- REFPLTB-32 Clarification on the support for 40MHZ/80MHZ OperatingChannelBandwidth

- REFPLTB-33 Unable to Ping or Traceroute in Test and Diagnostic
- REFPLTB-79 TDK SelfHeal lighttpd process is not getting restarted automatically once the process is crashed/killed
- REFPLTB-93 LMLIte Connected devices are not displayed on management portal under connected device list
- REFPLTB-107 TDK WIFI Not able to change the operating standard value of 2.4GHZ
- REFPLTB-108 TDK WIFI Not able to change the operating standard value of 5GHZ

Emulator Issues:

- TDK-368 RDKB-EMU Intermittent Segfault in CcspWiFiAgent.service
- TDK-425 RDKB EMU failure setting Device.X_RDKCENTRAL-COM_Report.NetworkDevicesStatus.ReportingPeriod
- TDK-432 RDKB EMU WIFIHAL GetSSIDStatus Failures
- TDK-522 RDKB TS_Sanity Tests Failing
- RDKBEMU-558 TDK LMLite Reporting period not reverting back to default value after OverrideTTLseconds
- RDKBEMU-606 TDK WIFI Enabling Device.DeviceInfo.X_COMCAST_COM_xfinitywifiEnable as true goes for timeout
- RDKBEMU-609 TDK WIFI Setting Device.WiFi.X_CISCO_COM_FactoryReset as true crashes the WIFI process
- RDKBEMU-613 TDK WIFI HAL]wifi_getApWpaEncryptoinMode API has textual error in the name
- RDKBEMU-622 TDK Bridge Mode Setting Device.X_CISCO_COM_DeviceControl.LanManagementEntry.1.LanMode to router mode goes for timeout
- RDKBEMU-627 TDK WIFI Clients are not able to connect to WIFI SSIDs after changing the OperatingChannelBandwidth to 40MHZ
- RDKBEMU-638 TDK Ethernet Device. Ethernet. Interface. 1. Enable failing to disable the Ethernet interface
- RDKBEMU-640 TDK WIFIHAL wifi_getSSIDNumberOfEntries HAL API is returning the SSID entries as 6
- RDKBEMU-641 TDK WIFIHAL wifi_getApName HAL API returns incorrect name for both 2.4 and 5GHZ
- RDKBEMU-642 TDK WIFIHAL wifi_getIndexFromName HAL API returns failure (-1) when "ath0" or "ath1" is passed as interface name
- RDKBEMU-643 TDK WIFIHAL wifi_setRadioEnable API returns false success and changed value is not reflected when queried using wifi_getRadioEnable

Generic TDK Issues:

- RDKB-9915 TDK Port Triggering Master CcspPandMSsp process crashes when trying to enable a rule added for port triggering
- RDKB-14126 TDK Getting invalid parameter error on setting parameter values for a new PortMapping rule