RDK-B_20180123

This is the summary page that describes the CMF RDK-B iteration rdkb-20180123.

Below are links to the relevant documents for the iteration.

- RDK-B 20180123 Emulator Test Report (Gerrit)
- RDK-B 20180123 RaspberryPi Test Report (Gerrit)
- A detailed changelog since the last iteration (RDK-B-20171228) 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	nightly/20180123	2018-01-23 baseline.
Post-baseline updates		
TDK	M54	https://wiki.rdkcentral.com/display/TDK/TDK+Release+M54
Manifest	rdkb-20180123	

Highlights since 20171228

- Components updated:
  - breakpad_wrapper, crashupload, CcspCommonLibrary, CcspLMLite, CcspMoCA, CcspMtaAgent, CcspPandM, CcspPsm, CcspTr069Pa, CcspWifiAgent, PowerManager, TestAndDiagnostic, Utopia, Xconf, hal, halinterface, sysint, webui, rdkb/devices/raspberrypi/hal, rdkb/devices/rdkbemu/ccsp/rdkb.
- Patches:
  - Separate patch files for the open-source OE layers are no longer maintained. Instead, from this iteration, 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:
  - Please refer to the changelog since the last iteration (RDK-B_20171228) here (Gerrit).

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-20180123
$ 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-20180123` in the build sequence above specifies the branch to use. If you omit the `-b rdkb-20180123` entirely, you will get the master (HEAD) of each component.
- At any time, the community can build latest master by dropping the `-b rdkb-20180123` 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-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+M54

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-20180123-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

RPI Issues:

- TDK-409 RDKB RPI TS_WIFIHAL_5GHzGetRadioStandard Failure
- TDK-434 RDKB RPI WIFIAGENT 2.4 and 5 IsSSIDDown Failures
- RPI-41 TDK SelfHeal lighttpd process is not getting restarted automatically once the process is crashed/killed
- 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-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-131 Cannot get admin password from backend.
- RPI-138 RDKB WiFi Get Extension channel not returning desired outputs
- RPI-147 WiFi HAL api wifi_getRadioSupportedFrequencyBands() returning a null string
- RPI-148 TAD LMLite Device.Hosts.HostNumberOfEntries is not zero in Bridge mode
- RPI-173 TDK WIFI WiFi SSIDs are broadcasting in Bridge mode
- 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 WIFIHAL wifi_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 WIFIHAL Authentication 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 WIFIHAL Mismatch between the values returned by wifi_getRadioStandard() and wifi_getRadioSupportedStandards() for radioIndex 0

Emulator Issues:

- TDK-368 RDKB-EMU Intermittent Segfault in CcspWiFiAgent.service
- TDK-375 RDKB EMU TS_TAD UDPEcho Test Failures
- TDK-425 RDKB EMU failure setting Device.X_RDKCENTRAL-COM_Report.NetworkDevicesStatus.ReportingPeriod
- TDK-432 RDKB EMU WIFIHAL GetSSIDStatus Failures
- TDK-445 RDKB EMU TS_SNMP_Get2.4SSIDWithDisabledXfinityWifi Failure
- TDK-450 RDKB EMU TS_TAD Regressions
- RDKBEMU-380 TDK SNMP SNMP Query to get the System Description details is not returning the mandatory fields like HW_REV,SW_REV
- RDKBEMU-502 Parameters like BytesReceived, PacketsReceived are not getting populated after a successful UDP echo command executed
- RDKBEMU-558 TDK LMLite Reporting period not reverting back to default value after OverrideTTLseconds
- RDKBEMU-589 TDK WIFI HAL wifi_getRadioMaxBitRate returns NULL for 2.4GHz and 5GHz
- RDKBEMU-594 TDK WiFi Set operation with HAL api wifi_setApEnable() is failing for 2.4GHz
- 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-621 TDK TAD Device.IP.Diagnostics.IPPing.DiagnosticsState returns the error value as "Error_Other" while trying to ping using Device.IP.Diagnostics.IPPing. parameters
- RDKBEMU-622 TDK Bridge Mode Setting Device.X_CISCO_COM_DeviceControl.LanManagementEntry.1.LanMode to router mode goes for timeout
- RDKBEMU-623 TDK WIFI HAL] wifi_getSSIDName HAL API is returning incorrect SSID Name

Generic TDK Issues:

- RDKB-9915 TDK Port Triggering Master CcspPandMSsp process crashes when trying to enable a rule added for port triggering
- RDKB-10750 TDK PAM Master Fails to set the value as "Requested" for Device.IP.Diagnostics.DownloadDiagnostics.DiagnosticsState
- RDKB-14126 TDK Getting invalid parameter error on setting parameter values for a new PortMapping rule