RDK-B_20171030

This is the summary page that describes the CMF RDK-B iteration rdkb-20171030.

Below are links to the relevant documents for the release.

- RDK-B 20171030 Emulator Test Report (Gerrit)
- RDK-B 20171030 RaspberryPi Test Report (Gerrit)
- A detailed changelog since the last iteration (RDK-B-20170929) 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-20171030	2017-10-30 baseline.
Post-baseline updates		
TDK	M52	https://wiki.rdkcentral.com/display/TDK/TDK+Release+M52
Manifest	rdkb-20171030	

Highlights since 20170929

- Components updated:
  - crashupload, rdk_logger, CcspCMAgent, CcspCommonLibrary, CcspHomeSecurity, CcspLMLite, CcspMisc, CcspMoCA, CcspPandM, CcspPsm, CcspSnmpPa, CcspTr069Pa, CcspWecbController, CcspWifiAgent, GwProvApp, GwProvApp-ePON, PowerManager, TestAndDiagnostic, Utopia, Xconf, hal, halinterface, hotspot, sysint, webui, rdkb/devices/raspberrypi/hal, rdkb/devices/rdkbemu/ccsp /rdkb, meta-westeros-raspberrypi.
- Community contributions:
  - Please refer to the changelog since the last iteration (RDK-B_20170929) 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-20171030
$ 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-2017030` in the build sequence above specifies the branch to use. If you omit the `-b rdkb-20171030` entirely, you will get the master (HEAD) of each component.
- At any time, the community can build latest master by dropping the `-b rdkb-20171030` 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+M52

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-20171030-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 WiFiHAL 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-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-110 Verify Restore WiFi Setting on Rpi for Captive Portal
- RPI-116 WiFi HAL api wifi_getRadioNumberOfEntries gives segmentation fault on passing invalid reference or null pointers to exposed HAL APIs
- RPI-117 WiFi HAL api wifi_getRadioOperatingChannelBandwidth() is returning invalid channel bandwidth value for 2.4 and 5GHz
- RPI-119 Cannot set the OperatingChannelBandwidth of WiFi.Radio.1 as 40MHz
- RPI-120 TDK WIFI 5GHz Radio status changes to "Down" when 2.4GHz Radio is disabled
- RPI-121 TDK WIFI 5GHz Radio status is "Up" after disabling Device.WiFi.Radio.2.Enable

Emulator Issues:

- TDK-368 RDKB-EMU Intermittent Segfault in CcspWiFiAgent.service
- TDK-375 RDKB EMU TS_TAD UDPEcho Test Failures
- TDK-424 RDKB EMU TS_WIFIHAL Failures
- TDK-425 RDKB EMU failure setting Device.X_RDKCENTRAL-COM_Report.NetworkDevicesStatus.ReportingPeriod
- 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-502 Parameters like BytesReceived, PacketsReceived are not getting populated after a successful UDP echo command executed
- 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-542 TDK WIFI No support for 80MHz OperatingChannelBandwidth in WIFI 5GHZ
- RDKBEMU-543 TDK WIFI Negative Scenario Getting segmentation fault when we pass invalid reference or null pointers to exposed HAL APIs in WIFI
- RDKBEMU-549 TDK WIFI HAL ChannelInUse Value for 5GHZ returned by HAL API wifi_getRadioChannelsInUse() and TR-181 parameter are different

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
- RDKB-14486 TDK TR-181 Details of TR-181 supported data model are displayed with dummy values.