RDK-B_2017Q4

This is the summary page that describes the CMF RDK-B release rdkb-2017q4.

Below are links to the relevant documents for the release.

- RDK-B 2017q4 Emulator Test Report (Gerrit)
- RDK-B 2017q4 RaspberryPi Test Report (Gerrit)
- A detailed changelog since the last iteration (RDK-B-2017q3) 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 release addresses licensing issues so users are advised to move to the latest release.

Baseline

Baseline	nightly/20171228	2017-12-28 baseline.
Post-baseline updates		
TDK	M53	https://wiki.rdkcentral.com/display/TDK/TDK+Release+M53
Manifest	rdkb-2017q4	

Highlights since 2017q3

- This release is equivalent to the rdkb-20171228 iteration.
- Components updated:
  - crashupload, rdk_logger, sys_resource, CcspCMAgent, CcspCommonLibrary, CcspDmCli, CcspHomeSecurity, CcspLMLite, CcspMisc, CcspMoCA, CcspPandM, CcspPsm, CcspSnmpPa, CcspTr069Pa, CcspWifiAgent, GwProvApp, GwProvApp-ePON, PowerManager, TestAndDiagnostic, Utopia, Xconf, hal, halinterface, hotspot, sysint, webui, sysint, 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  - Separate patch files for the open-source OE layers are no longer maintained.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 release, 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 release (RDK-B_2017q3) 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-2017q4
$ 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-2017q4` in the build sequence above specifies the branch to use. If you omit the `-b rdkb-2017q4` entirely, you will get the master (HEAD) of each component.
- At any time, the community can build latest master by dropping the `-b rdkb-2017q4` 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+M53

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-2017q4-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

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
- 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-146 TDK WIFI HAL wifi_getRadioExtChannel returns an empty string for 2.4Ghz
- 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-149 TDK WIFIHAL mismatch between the values returned by wifi_getRadioStandard() and wifi_getRadioSupportedStandards() for radioIndex 0
- RPI-150 TDK WIFI AutoChannelEnable is not disabling when radio channel is changed for 5GHz
- RPI-151 TDK WIFI AutoChannelEnable is not disabling when radio channel is changed for 2.4GHz

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
- TDK-432 RDKB EMU WIFIHAL GetSSIDStatus Failures
- TDK-444 RDKB EMU TS_SNMP_SetSSIDEnableWithRadioDisabled Failure
- TDK-445 RDKB EMU TS_SNMP_Get2.4SSIDWithDisabledXfinityWifi Failure
- 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-569 TDK WIFI HAL wifi_getRadioExtChannel returns an empty string for 2.4Ghz
- RDKBEMU-570 TDK WIFI HAL Enabling or disabling wifi radio and ssid through hal api is not reflecting in emulator
- RDKBEMU-582 WIFI wlan0_0 missing following integration of NetworkManager
    - note network manager reverted from this release due to this issue
- RDKBEMU-585 TDK UserInterface] Device.UserInterface.X_CISCO_COM_RemoteAccess.Enable shows a different value when queried with Device.UserInterface.X_CISCO_COM_RemoteAccess
- RDKBEMU-586 TDK UserInterface Device.UserInterface.X_CISCO_COM_RemoteAccess.FromAnyIP shows a different value when queried with Device.UserInterface.X_CISCO_COM_RemoteAccess
- RDKBEMU-589 TDK WIFI HALwifi_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-595 TDK WiFi Set operation with HAL api wifi_setApEnable() is failing for 5GHz
- RDKBEMU-596 TDK WiFi The HAL api wifi_getBaseBSSID() is returning junk value for 2.4GHz

- RDKBEMU-597 TDK WiFi HAL api wifi_getRadioIfName() not returning expected value for 2.4GHz
- RDKBEMU-598 TDK WiFi HAL api wifi_getRadioIfName() not returning expected value for 5GHz

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