# RDK-B rdk-next Yocto 3.1 dunfell build for Raspberrypi 3B+ Host Setup

How to Build#SettinguptheHostEnvironment

# **Build Setup**

## build setup

repo init -u https://code.rdkcentral.com/r/manifests -b rdk-next -m rdkb-extsrc.xml

Once repo init was done, Please follow the below instructions,

- Go to .repo/manifests/
- open the oe-layers.xml
- Delete all the lines in the file
- · Update the below lines in the oe-layers.xml file

#### oe-layers.xml

```
<?xml version='1.0' encoding='UTF-8'?>
<!-- AUTOGENERATED - PLEASE DO NOT MODIFY -->
<manifest>
 project name="meta-gplv2" remote="yocto" revision="dunfell"/>
 <project name="rdk/components/opensource/oe/meta-java" path="meta-java" revision="dunfell"/>
 cproject name="rdk/components/opensource/oe/meta-jz-mips" path="meta-jz-mips" revision="master"/>
 <project name="rdk/components/opensource/oe/meta-raspberrypi" path="meta-raspberrypi" revision="dunfell"/>
 dunfell"/>
 </manifest
```

#### Build - setup

repo sync -j4 --no-clone-bundle

#### **Apply Bug Fixes**

- 1. Go to meta-cmf-raspberrypi layer and cherry-pick the below change-set, git fetch "https://code.rdkcentral.com/r/components/generic/rdk-oe/meta-cmf-raspberrypi" refs/changes/60/48460/3 && git cherry-pick FETCH\_HEAD
- 2. Go to below path and place the wireless tools recipe manually ~/openembedded-core/meta/recipe-connectivity/
- 3. Please create the wireless-tools folder
- 4. Download the wireless tools recipe from below link and placed inside the wireless-tools folder, http://cgit.openembedded.org/openembedded-core/tree/meta/recipes-connectivity/wireless-tools/wireless-tools\_30.pre9.bb?h=fido

Note: The above bug fixes changes are temporary given as instructions. This is not required once the change is get merged into the appropriate repo

#### **BroadBand Gateway**

### image build

 ${\tt MACHINE=} raspberrypi-rdk-broadband-dunfell \ source \ {\tt meta-cmf-raspberrypi/setup-environment} bitbake \ rdk-generic-broadband-image$ 

# **Validated Functionalities**

Basic functions are validated in dunfell branch,

- 1. RPI 3B+ Board was successfully up
- 2. Able to browse the internet
- 3. Able to get the erouter0 ip
- 4. dmcli commands are working as expected
- 5. All ccsp process and hostapd process are up
- 6. Able to connect the wireless clients
- 7. In wireless clients, Captive Portal page was launched for initial set-up
- 8. Re-connect the wifi clients with updated password and SSID
- 9. Able to browse the internet successfully in Connected clients
- 10. WebUI was launched in Web Browser
- 11. Able to login successfully
- 12. Factory\_reset , Password change , Advanced functionalities are worked as expected
- 13. iptables rules are properly updated.
- 14. reboot and poweroff are working as expected.

# **Known Issues**

- 1. In WebUI, toggle the sub-menu is not happening .
- 2. Public wifi 2g support is not available in dunfell branch due to rtl8192eu driver source code is not compatibility in latest kernel version of 5.4.72
- 3. Default password pop-up change is not happening in WebUI.