

Mar2022 tagged dunfell build for RPI4 extender

Host Setup

- For Host SetUp details refer this link - [How to Build#SettinguptheHostEnvironment](#)

NOTE: Observing fetch errors in VMs with Ubuntu14.x. Thus, suggesting to use VMs with Ubuntu16.x or higher.

Repo Configuration

In order to use Yocto build system, the repo tool must be properly installed on the machine.

To install Repo make sure you have a /bin directory in your home directory and that it is included in your path

```
$ mkdir ~/bin

$ PATH=~/.bin:$PATH

$ curl http://commondatastorage.googleapis.com/git-repo-downloads/repo > ~/bin/repo

$ chmod a+x ~/bin/repo
```

Note: it is also recommended to put credentials in ~/.netrc when interacting with repo.

A sample ~/.netrc file is illustrated below

```
machine code.rdkcentral.com login YOUR_USERNAME password YOUR_PASSWORD
```

Building

Note: Cloning the code before login once to [code.rdkcentral.com](#), user would get the Authentication error, even though the account is in good standing and has all the required access. Please login to [code.rdkcentral.com](#) before attempting to clone.

Create workspace directory

```
$ mkdir <workspace dir>

$ cd <workspace dir>
```

Follow below instructions,

```
$ repo init -u https://code.rdkcentral.com/r/reference/manifests -m rpi-tags/rpi4_rdkb_extender_4Apr2022.xml -b master

$ repo sync -j4 --no-clone-bundle

$ MACHINE=raspberrypi4-rdk-extender source meta-cmf-raspberrypi/setup-environment

$ bitbake rdk-generic-extender-image
```

Note. The kernel Image and root filesystem will be placed under <workspace dir>/build-*/tmp/deploy/images/*extender/ directory

Flashing Procedure

Following command can be used to flash the RPI image to sd card using linux machine . bmap tool should be available in linux

```
bzip2 -d <path to ImageName.wic.bz2>  
sudo -E bmaptool copy --nobmap <path to ImageName.wic> <path to SD card space>
```

Example:

```
$ bzip2 -d rdk-generic-extender-image-raspberrypi4-rdk-extender.wic.bz2  
$ sudo -E bmaptool copy --nobmap rdk-generic-extender-image-raspberrypi4-rdk-extender.wic /dev/sdb
```