

RDK-V Media Client Hybrid (Raspberry Pi) Build Instructions



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Host Setup

The OpenEmbedded build system should be able to run on any modern distribution with the following versions for Git, tar, and Python.

- Git 1.8.3.1 or greater.
- tar 1.24 or greater.
- Python 2.7.3 or greater excluding Python 3.x, which is not supported

Note: You should also have about 50 Gbytes of free disk space for building images.

Ubuntu and Debian

The essential packages you need for a supported Ubuntu or Debian distribution are shown in the following command

```
$ sudo apt-get install make gcc g++ diffstat texinfo chrpath gcc-multilib git gawk build-essential autoconf libtool libncurses-dev gettext gperf lib32z1 libc6-i386 g++-multilib python-git
```

Building

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

Repo setup

In order 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
```

Download the repo tool and ensure that it is executable

```
$ 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

Initilaizing the Build Environment

#To build rdk-next follow the below build procedure

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

for ASP:

```
$ repo init -u https://code.rdkcentral.com/r/manifests -b rdk-next -m rdkv-asp-extsrc.xml
```

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

Choose hybrid to build image with default compositor

```
$ source meta-cmf-raspberrypi/setup-environment <select option raspberrypi-rdk-hybrid.conf>
```

```
$ bitbake rdk-generic-hybrid-wpe-image
```

for TDK-image

```
$ bitbake rdk-generic-hybrid-wpe-tdk-image
```

Choose hybrid-westeros to build image with westeros compositor

```
$ source meta-cmf-raspberrypi/setup-environment <select option raspberrypi-rdk-hybrid-westeros.conf>
```

```
$ bitbake rdk-generic-hybrid-westeros-wpe-image
```

for TDK-image

```
$ bitbake rdk-generic-hybrid-westeros-wpe-tdk-image
```



- 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.

Note: The Kernel image and root filesystem will be created under `./ build-raspberrypi-rdkmc/tmp/deploy/images/raspberrypi-rdk-mc` folder