How to add a new OSS

Yocto system gathered more than 90% OSS libs of the world.

If a new OSS (Ex: libabc) is wanted, follow the steps:

Step 1: get recipes file.

1. Search if already exist.

   $ cd meta

   $ find –name *libabc*.bb

   > *./poky/meta/recipes-support/libabc/libabc_1.11.1.bb*

   > *./poky/meta/recipes-support/libabc/libabc_1.14.bb*

   Two libabc_*.bb recipes files were found, the latest version (1.14) will be chosen as default.

   If want to use *libabc_1.14 Goto Step2.*

   If want to use other version, continue.

2. If another OSS version is wanted, such as v1.12.

   ➢ Creat a private recipes file in your layer.

   $ cp ./poky/***/libabc_1.14.bb   meta-mediatek-aud/recipes-***/libabc/libabc_1.12.bb

   $ vim meta-mediatek-aud/recipes-***/libabc/libabc_1.12.bb

   > *SRC_URI:*
   >
   > > **.tar.gz: tar ball name, generally no need change.*
   > >
   > > **.patch: different version may have different patches, download patches what you*
   >
   > *need, put patch files according to old version, and list patch name here.*
   >
   > > *Md5sum: during download, system will notify the right sum, then replace it.*
   > >
   > > *Sha256sum: during download, system will notify the right sum, then replace it.*

```
SRC_URI = "${GNU_MIRROR}/${BPN}/${BPN}-${PV}.tar.gz \
           file://autoconf.patch \
           file://add-relocatable-module.patch \
         "
SRC_URI[md5sum] = "e34509b1623cec449dfeb73d7ce9c6c6"
SRC_URI[sha256sum] = "72b24ded17d687193c3366d0ebe7cde1e6b18f0df8c55438ac95be39e8
a30613"
```

   ➢ Set your layer's priority to "10"

   vim meta-mediatek-aud/conf/layer.conf

   BBFILE_PRIORITY_mediatek-aud = "10"

   :wq

   If want to use *libabc_1.12 Goto Step2.*

3. If OSS (Ex: libabc) not exist.

   ➢ Creat a private recipes file in your layer.

   $ cp   meta/meta-mediatek-aud/recipes-sample/bbsample/ossbbsample.bb   meta-mediatek-aud/recipes-***/libabc/libabc_1.0.bb

   $ vim ./***/libabc_1.0.bb

   > *Fill information:*
   >
   > > *"SUMMARY, DESCRIPTION, HOMEPAGE, SECTION,*
   > >
   > > *LICENSE, LICENSE_FILES_CHKSUM,*

SRC_URI, SRC_URI[md5sum], SRC_URI[sha256sum]"

Md5sum&sha256sum: during download, system will notify the right sum, then replace it.

Fill operation cmds:

"do_configure, do_compile, do_install "

Step 2: Add recipes to IMAGE_INSTALL

```
./meta
├── base
├── meta-mediatek
└── meta-mediatek-aud
    ├── conf
    │   └── layer.conf
    ├── LICENSE
    ├── recipes-apps
    │   ├── aud
    │   │   └── appmainprog.bb
    └── recipes-audio
        └── images
            └── mtk-image-aud-8516.bb
```

```
IMAGE_INSTALL_append = " \
    mdns\
    openssl \
    hostapd \
    wpa-supplicant \
    alsa-utils \
    alsa-lib \
    mtkcombo \
    hostapd \
    bluetooth \
    fuse \
    libabc \
```

Step 3: compile

Partial build:

$ bitbake libabc

$ bitbake libabc

// check version and build result in : build/tmp/work/aarch64***-poky-linux/libabc

Full build:

$ bitbake mtk-image-aud-8516

// will install libabc into Rootfs image.