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# 1.gnome桌面系统编译

## 3、GNOME问题

目前gnome桌面还没进展，加入`packagegroup-gnome-desktop.bb`会导致`yocto`在编译的时候`polkit`和`gobject-introspection-data`会报错。

解决方法：

参考：<https://github.com/bulwahn/meta-ros/commit/c640112ded940d206fa5394c35663956a1a938d6>

```
add distro_feature to ci setup (ros#389)
ci
bulwahn committed on 26 Jun 2016
1 parent 6bb2420 commit c640112ded940d206fa5394c35663956a1a938d6
Showing 1 changed file with 1 addition and 0 deletions.
ci/yocto-docker-meta-ros-exp.sh
@@ -42,4 +42,5 @@ docker run \
42 42     echo -e "INHERIT += \"rm_work\"" >> /data/src/openembedded-core/build/conf/local.conf && \
43 43     echo -e "FETCHCMD_wget = \"/usr/bin/env wget -t 2 -T 360 -nv --passive-ftp --no-check-certificate\"" >> /data/src/openembedded-core/build/conf/local.conf
44 44     echo -e "LICENSE_FLAGS_WHITELIST = \"commercial\"" >> /data/src/openembedded-core/build/conf/local.conf && \
45 +     echo -e "DISTRO_FEATURES = \"opengl\"" >> /data/src/openembedded-core/build/conf/local.conf && \
45 46     bitbake core-image-ros-world'
```

0 comments on commit c640112

packagegroup-gnome-desktop.bb 存放位置：

./meta-openembedded/meta-gnome/recipes-

support/packagegroups/packagegroup-gnome-desktop.bb

解决方法：

```
vim riscv-yocto/thead-build/ice-xfce/conf/auto.conf +21
DISTRO_FEATURES_append = " largefile opengl ptest multiarch wayland pam
systemd
    polkit gobject-introspection-data"
bitbake packagegroup-gnome-desktop
```

此外，recipes-gnome的配置，参考：

<https://github.com/Baltix/ubuntu-meta/blob/master/desktop-recommends-armhf>

<https://github.com/scibian/scibian-meta-gnome3/blob/scibian/stretch/debian/control>

<https://github.com/ubinux/yocto-ubinux/blob/ubinuxv2021.02/meta-ubinux/recipes-ubinux/packagegroups/packagegroup-ubinux-all.bb>

<https://github.com/Angstrom-distribution/meta-angstrom>

## 2. 软件包编译问题

### 4、软件包编译问题

1) 无法找到`rpc/rpc.h`，涉及软件包：`ltp`和`xhost`

临时解决方法：

从工具链目录`~/thead/host/riscv64-buildroot-linux-gnu/sysroot/usr/include/rpc/`目录下拷贝.h文件到对应软件包的`rpc`目录，例：

```
`thead-build/ice-xfce/tmp-glibc/work/riscv64-oe-linux/ltp/20200930-r0/recipe-sysroot/usr/include/rpc`
```

2) 编译报错，涉及软件包：`man-db`和`gcc`

`man-db`的解决方法：

```
在`man-db_2.9.3.bb`中增加`flex-native, +DEPENDS = "libpipeline gdbm groff-native base-passwd flex-native"`
```

`gcc`的解决方法：

```
....
openembedded-core/meta/recipes-devtools/gcc/gcc-10.2.inc:
NATIVEDEPS = "mpfr-native gmp-native libmpc-native zlib-native flex-native"
+INSANE_SKIP_${PN} += "installed-vs-shipped"
....
```

3) 解决目前已有bb文件映像编译不过问题

统计路径：

```
....
https://gitee.com/thead-yocto/meta-thead-conf/tree/master/ice-base
https://gitee.com/thead-yocto/meta-thead-conf/tree/master/ice-xfce
....
```

### 2.1 ltp和xhost

错误信息：

```
| make -C lib -f "/home/lidq/5_ali/riscv_yocto/thead-build/ice-xfce/tmp-
glibc/work/riscv64-oe-linux/ltp/20200930-
r0/git/testcases/network/rpc/basic_tests/rpc01/lib/Makefile" all
| In file included from librpc01.c:19:
```

```
| /home/lidq/5_ali/riscv_yocto/thead-build/ice-xfce/tmp-glibc/work/riscv64-oe-  
linux/ltp/20200930-r0/git/testcases/network/rpc/rpc-  
tirpc/tests_pack/lib/./include/rpc.h:11:10: fatal error: rpc/rpc.h: No such file or  
directory
```

```
| #include <rpc/rpc.h>  
|      ^~~~~~  
| compilation terminated.
```

解决办法:

vim riscv\_yocto/openembedded-core/meta/recipes-extended/ltp/ltp\_20200930.bb  
+80

```
1 do_compile_prepend(){  
2   cp -r ${EXTERNAL_TOOLCHAIN_SYSROOT}/usr/include/rpc \  
3   ${STAGING_DIR_HOST}/usr/include  
4 }
```

## 2.2 man-db和gcc

编译错误和下方类似:

ERROR: opensbi-0.8-r0 do\_package: QA Issue: opensbi: Files/directories were installed but  
not shipped in any package

Summary: 1 task failed:

/home/lidq/3\_yocto/riscv\_yocto/openembedded-core/meta/recipes-  
bsp/opensbi/opensbi\_0.8.bb:do\_package

解决办法:

在对应模块bb 或者 bbappend文件增加一行:

```
vim riscv_yocto/openembedded-core/meta/recipes-bsp/opensbi/opensbi_0.8.bb  
INSANE_SKIP_${PN} += "installed-vs-shipped"
```

## 2.3 其他编译报错问题

### 1. gcc路径找的不

添加gcc路径即可, 如下:

```

lidq@etgserver:~/10_ali/riscv_yocto/meta-external-toolchain$ git status
Not currently on any branch.
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   recipes-external/gcc/libgcc-external.bb

no changes added to commit (use "git add" and/or "git commit -a")
lidq@etgserver:~/10_ali/riscv_yocto/meta-external-toolchain$ git diff recipes-external/gcc/libgcc-external.bb
diff --git a/recipes-external/gcc/libgcc-external.bb b/recipes-external/gcc/libgcc-external.bb
index 2bc1746..239e0e3 100644
--- a/recipes-external/gcc/libgcc-external.bb
+++ b/recipes-external/gcc/libgcc-external.bb
@@ -4,6 +4,7 @@ SECTION = "devel"
DEPENDS += "virtual/${TARGET_PREFIX}binutils"
PROVIDES += "libgcc-initial"
PV = "${GCC_VERSION}"
+STRIP = "${EXTERNAL_TOOLCHAIN}/bin/${TARGET_PREFIX}strip"
inherit external-toolchain

```

## 2.tracker\_2.3.4.bb编译错误

| ../tracker-2.3.4/src/tracker-store/tracker-dbus.vala:227.4-227.24: error: Argument 7: Cannot convert from `void Tracker.DBus.name\_owner\_changed\_cb (GLib.DBusConnection, string, string, string, string, GLib.Variant)' to `void GLib.DBusSignalCallback (GLib.DBusConnection, string?, string, string, string, GLib.Variant)'

```

|         name_owner_changed_cb);
|         ^^^^^^^^^^^^^^^^^^^^^

```

| Compilation failed: 1 error(s), 2 warning(s)ERROR: Task (/home/lidq/10\_ali/riscv\_yocto3/meta-openembedded/meta-gnome/recipes-gnome/tracker/tracker\_2.3.4.bb:do\_compile) failed with exit code '1'

解决方法:

vim thead-build/ice-gnome/tmp-glibc/work/riscv64-oe-linux/tracker/2.3.4-r0/tracker-2.3.4/src/tracker-store/tracker-dbus.vala +125

```

125     static void name_owner_changed_cb (DBusConnection connection, string? sender_name, string
126     rs) {
127         unowned string name, old_owner, new_owner;
128         parameters.get ("(&s&s&s)", out name, out old_owner, out new_owner);
129
130         if (old_owner != "" && new_owner == "") {
131             /* This means that old_owner got removed */
132             resources.unreg_batches (old_owner);
133         }
134     }

```

## 3.ibus.bb编译错误

错误日志:

application.vala:52.37-52.56: error: Argument 7: Cannot convert from `void Application.bus\_name\_acquired\_cb (GLib.DBusConnection, string, string, string, string, GLib.Variant)' to `void GLib.DBusSignalCallback (GLib.DBusConnection, string?, string, string, string, GLib.Variant)'

```

        bus_name_acquired_cb);

```

^^^^^^^^^^^^^^^^^^^^^^^^^^^^

application.vala:59.37-59.52: error: Argument 7: Cannot convert from `void Application.bus\_name\_lost\_cb (GLib.DBusConnection, string, string, string, string, GLib.Variant)' to `void GLib.DBusSignalCallback (GLib.DBusConnection, string?, string, string, string, GLib.Variant)'

```
bus_name_lost_cb);
^^^^^^^^^^^^^^^^^^^^^^^^
```

Compilation failed: 2 error(s), 14 warning(s)

ERROR: Task (/home/lidq/10\_ali/riscv\_yocto3/meta-openembedded/meta-gnome/recipes-support/ibus/ibus.bb:do\_compile) failed with exit code '1'

解决方法:

vim thead-build/ice-gnome/tmp-glibc/work/riscv64-oe-linux/ibus/1.5.21-r0/git/ui/gtk3/application.vala

```

71 private void bus_name_acquired_cb(DBusConnection connection,
72                                 string? sender_name,
73                                 string object_path,
74                                 string interface_name,
75                                 string signal_name,
76                                 Variant parameters) {
77     debug("signal_name = %s", signal_name);
78     m_panel = new Panel(m_bus);
79     m_panel.load_settings();
80 }
81
82 private void bus_name_lost_cb(DBusConnection connection,
83                               string? sender_name,
84                               string object_path,
85                               string interface_name,
86                               string signal_name,
87                               Variant parameters) {
88     // "Destroy" dbus method was called before this callback is called.

```

#### 4.gdb-external-cross-canadian.bb编译错误

执行命令:

bitbake core-image-gnome -c populate\_sdk

错误信息:

```

Initialising tasks: 100% |#####| Time: 0:00:06
Sstate summary: Wanted 341 Found 0 Missed 341 Current 1723 (0% match, 83% complete)
NOTE: Executing Tasks
ERROR: gdb-external-cross-canadian-riscv64-8.2.50.20190202-git-r0 do_package: QA Issue: gdb-external-cross-canadian-riscv64: Files/directories were installed but not shipped in any package:
/usr/local/oe-core-x86_64/sysroots/x86_64-oesdk-linux/riscv64-linux
Please set FILES such that these items are packaged. Alternatively if they are unneeded, avoid installing them or delete them within do_install.
gdb-external-cross-canadian-riscv64: 1 installed and not shipped files. [installed-vs-shipped]
ERROR: gdb-external-cross-canadian-riscv64-8.2.50.20190202-git-r0 do_package: Fatal QA errors found, failing task.
ERROR: Logfile of failure stored in: /home/lidq/10_ali/riscv_yocto3/thead-build/ice-gnome/tmp-glibc/work/x86_64-native-sdk-oesdk-linux/gdb-external-cross-canadian-riscv64/8.2.50.20190202-git-r0/temp/log.do_package.18081
ERROR: Task (/home/lidq/10_ali/riscv_yocto3/meta-external-toolchain/recipes-external/gdb/gdb-external-cross-canadian.bb:do_package) failed with exit code '3'

```

解决方法:

```
1 INSANE_SKIP_${PN} += "dev-so staticdev installed-vs-shipped"
```

#### 5.core-image-gnome.bb:do\_populate\_sdk错误

错误日志:

dpkg: nativesdk-packagegroup-sdk-host: dependency problems, but configuring anyway as you requested:

nativesdk-packagegroup-sdk-host depends on nativesdk-shadow; however:  
Package nativesdk-shadow is not configured yet.

Setting up nativesdk-packagegroup-sdk-host (1.0-r12) ...

Errors were encountered while processing:

nativesdk-shadow

W: chown to \_apt:root of directory /home/lidq/10\_ali/riscv\_yocto3/thead-build/ice-gnome/tmp-glibc/work/ice-oe-linux/core-image-gnome/1.0-r0/recipe-sysroot-native/var/cache/apt/archives/partial failed - SetupAPTPartialDirectory (1: Operation not permitted)

W: chmod 0700 of directory /home/lidq/10\_ali/riscv\_yocto3/thead-build/ice-gnome/tmp-glibc/work/ice-oe-linux/core-image-gnome/1.0-r0/recipe-sysroot-native/var/cache/apt/archives/partial failed - SetupAPTPartialDirectory (1: Operation not permitted)

W: Could not open file '/home/lidq/10\_ali/riscv\_yocto3/thead-build/ice-gnome/tmp-glibc/work/ice-oe-linux/core-image-gnome/1.0-r0/recipe-sysroot-native/var/log/apt/term.log' - OpenLog (13: Permission denied)

E: Sub-process dpkg returned an error code (1)

ERROR: Logfile of failure stored in: /home/lidq/10\_ali/riscv\_yocto3/thead-build/ice-gnome/tmp-glibc/work/ice-oe-linux/core-image-gnome/1.0-r0/temp/log.do\_populate\_sdk.13486

ERROR: Task (/home/lidq/10\_ali/riscv\_yocto3/meta-openembedded/meta-gnome/recipes-core/images/core-image-gnome.bb:do\_populate\_sdk) failed with exit code '1'

bitbake W: chown to \_apt:root of directory apt/archives/partial failed - SetupAPTPartialDirectory (1: Operation not permitted)

chmod 0700 of directory partial failed - SetupAPTPartialDirectory (1: Operation not permitted)

解决方法:

编译方法中屏蔽一行依赖;

```
1 lqg@etgserver:~/al_yocto/temp/riscv_yocto/openembedded-core$ git diff met
a/classes/populate_sdk_base.bbclass
2 diff --git a/meta/classes/populate_sdk_base.bbclass b/meta/classes/popula
te_sdk_base.bbclass
3 index 49b1833265..83bc5d1214 100644
4 --- a/meta/classes/populate_sdk_base.bbclass
5 +++ b/meta/classes/populate_sdk_base.bbclass
6 @@ -65,7 +65,7 @@ python () {
7 }
8
9 SDK_RDEPENDS = "${TOOLCHAIN_TARGET_TASK} ${TOOLCHAIN_HOST_TASK}"
10 -SDK_DEPENDS = "virtual/fakeroot-native ${SDK_ARCHIVE_DEPENDS} cross-loc
aledef-native nativesdk-qemuwrapper-cross ${@' '.join(["%s-qemuwrapper-cros
s" % m for m in d.getVar("MULTILIB_VARIANTS").split()])} qemuwrapper-cross"
11 +#SDK_DEPENDS = "virtual/fakeroot-native ${SDK_ARCHIVE_DEPENDS} cross-lo
caledef-native nativesdk-qemuwrapper-cross ${@' '.join(["%s-qemuwrapper-cro
ss" % m for m in d.getVar("MULTILIB_VARIANTS").split()])} qemuwrapper-cros
s"
12 PATH_prepend = "${STAGING_DIR_HOST}${SDKPATHNATIVE}${bindir}/crossscrip
ts:${@' ':'.join(all_multilib_tune_values(d, 'STAGING_BINDIR_CROSS').split
())}:"
13 SDK_DEPENDS += "nativesdk-glibc-locale"
14
```