libosmocore - Bug #3867

Some older Osmocom program releases don't build against current master libosmo*

03/27/2019 03:44 PM - osmith

Status:	New	**Start date:**	03/27/2019
Priority:	Normal	**Due date:**	
Assignee:	osmith	**% Done:**	0%
Category:			
Target version:			
Spec Reference:			

Description

From https://jenkins.osmocom.org/jenkins/job/Osmocom-build-tags-against-master/13/console:

```
Building old tags against libraries from current master... (ERR: new error, err: known error)
 * libosmo-abis           0.5.0           0.5.1           0.6.0
 * libosmocore          0.12.1           1.0.0           1.0.1
 * libosmo-netif          0.2.0           0.3.0           0.4.0
 * libosmo-sccp           0.9.0          0.10.0           1.0.0
 * openbsc                1.0.0 (err)     1.1.0           1.2.0
 * osmo-bsc               1.2.1 (err)     1.3.0           1.4.0 (err)
 * osmo-bts               0.8.0           0.8.1           1.0.0 (ERR)
 * osmo-ggsn              1.2.1           1.2.2           1.3.0
 * osmo-hlr               0.2.0           0.2.1           1.0.0
 * osmo-iuh               0.2.0           0.3.0           0.4.0
 * osmo-mgw               1.3.0 (err)     1.4.0 (err)     1.5.0
 * osmo-msc               1.2.0           1.3.0 (err)     1.3.1
 * osmo-pcu               0.5.0 (err)     0.5.1           0.6.0
 * osmo-sgsn              1.2.0 (err)     1.3.0 (err)     1.4.0 (err)
 * osmo-sip-connector     1.1.0           1.1.1           1.2.0
 * osmo-trx               0.3.0           0.4.0           1.0.0
```

The osmo-bts 1.0.0 error is resolved in 1.0.1 (patch).

Related issues:

Related to libosmocore - Feature #3765: Build old (at least latest) releases ...	**Resolved**	**01/22/2019**

History

#1 - 03/27/2019 03:47 PM - osmith

- Related to Feature #3765: Build old (at least latest) releases of programs against "master of the day" libosmo added*

#2 - 03/27/2019 04:00 PM - osmith

Of the tested tags, three fail to build:

- osmo-bsc 1.2.1: depends on libosmo-legacy-mgcp
- osmo-msc: 1.3.0: -Werror and deprecated gsm0480_create_ussd_release_complete()
- osmo-sgsn 1.2.0: sgsn_test.c: gtp.h: No such file or directory

For the rest marked with "(err)", the testsuites don't pass. I am not sure what to do with the testsuites. If we update the expected output to pass on master, then it doesn't pass anymore when building against previous library releases.

Any ideas?

#3 - 03/27/2019 05:00 PM - laforge

Hi Oliver,

On Wed, Mar 27, 2019 at 04:00:22PM +0000, osmith [REDMINE] wrote:

> Of the tested tags, three fail to build:

- osmo-bsc 1.2.1: depends on libosmo-legacy-mgcp

probably difficult to resolve?

- osmo-msc: 1.3.0: -Werror and deprecated gsm0480_create_ussd_release_complete()

I guess we could simply tag an 1.3.1 patch release to remove that. Also, we could build without "-Werror"

furthermore, I thought that we had some magic at work to ensure that the OSMO_DEPRECATED warnings would **not** break -Werror?

- osmo-sgsn 1.2.0: sgsn_test.c: gtp.h: No such file or directory

probably just some include path issue? Could you have a quick look if it's something as simple as that? This would probably also justify a patch release as it's quick to do.

> For the rest, the testsuites don't pass. I am not sure what to do with the testsuites. If we update the expected output to pass on master, then it doesn't pass anymore when building against previous library releases.

It would be interesting to see exactly where the testsuites fail to determine why that is the case.

#4 - 03/28/2019 03:54 PM - osmith

> - osmo-bsc 1.2.1: depends on libosmo-legacy-mgcp
>
> probably difficult to resolve?

Turns out this is quite feasible:

- Patch to build libosmo-legacy-mgcp in the CI job (installs into a different temp dir): https://gerrit.osmocom.org/#/c/osmo-ci/+/13454/
- Patch to properly use LIBOSMOLEGACYMGCP_CFLAGS, so we can use the lib from the other temp dir: https://gerrit.osmocom.org/#/c/osmo-bsc/+/13451/

> - osmo-msc: 1.3.0: -Werror and deprecated gsm0480_create_ussd_release_complete()
>
> I guess we could simply tag an 1.3.1 patch release to remove that.

In fact, there is already a 1.3.1 version, which does just that :)

> Also, we could build without "-Werror"
>
> furthermore, I thought that we had some magic at work to ensure that the OSMO_DEPRECATED warnings would **not** break -Werror?

Looking at the build log again, I've not read the error message properly:

https://jenkins.osmocom.org/jenkins/job/Osmocom-build-tags-against-master/15/artifact/_temp/log/osmo-msc-1.3.0.txt

```
gsm_04_80.c: In function â€˜msc_send_ussd_rejectâ€™:
gsm_04_80.c:62:2: error: implicit declaration of function â€˜msgb_wrap_with_TLâ€™ [-Werror=implicit-function-d
eclaration]
  msgb_wrap_with_TL(msg, GSM0480_IE_FACILITY);
  ^~~~~~~~~~~~~~~~~
gsm_04_80.c: In function â€˜msc_send_ussd_release_completeâ€™:
gsm_04_80.c:83:9: warning: â€˜gsm0480_create_ussd_release_completeâ€™ is deprecated: Use gsm0480_create_releas
e_complete() instead. [-Wdeprecated-declarations]
  struct msgb *msg = gsm0480_create_ussd_release_complete();
         ^~~~
```

It fails because "msgb_wrap_with_TL" is unknown, not because of the deprecated function.

- osmo-sgsn 1.2.0: sgsn_test.c: gtp.h: No such file or directory

> probably just some include path issue? Could you have a quick look if it's something as simple as that? This would probably also justify a patch release as it's quick to do.

I can look into that soon, currently there is some MSC handover related stuff that I can help with.

> > For the rest, the testsuites don't pass. I am not sure what to do with the testsuites. If we update the expected output to pass on master, then it doesn't pass anymore when building against previous library releases.
>
> It would be interesting to see exactly where the testsuites fail to determine why that is the case.

Good idea, I'll look into that as well (possibly update the script to attach the testsuite logs to the build artifacts).

#5 - 03/28/2019 04:30 PM - laforge

Hi Oliver,

On Thu, Mar 28, 2019 at 03:54:39PM +0000, osmith [REDMINE] wrote:

> > Also, we could build without "-Werror"
> >
> > furthermore, I thought that we had some magic at work to ensure that the OSMO_DEPRECATED warnings would **not** break -Werror?
>
> Looking at the build log again, I've not read the error message properly:
>
> https://jenkins.osmocom.org/jenkins/job/Osmocom-build-tags-against-master/15/artifact/_temp/log/osmo-msc-1.3.0.txt

```
> gsm_04_80.c: In function â€˜msc_send_ussd_rejectâ€™:
> gsm_04_80.c:62:2: error: implicit declaration of function â€˜msgb_wrap_with_TLâ€™ [-Werror=implicit-func
tion-declaration]
>   msgb_wrap_with_TL(msg, GSM0480_IE_FACILITY);
>   ^~~~~~~~~~~~~~~~~
> gsm_04_80.c: In function â€˜msc_send_ussd_release_completeâ€™:
> gsm_04_80.c:83:9: warning: â€˜gsm0480_create_ussd_release_completeâ€™ is deprecated: Use gsm0480_create_
release_complete() instead. [-Wdeprecated-declarations]
>   struct msgb *msg = gsm0480_create_ussd_release_complete();
>          ^~~~
>
```

> It fails because "msgb_wrap_with_TL" is unknown, not because of the deprecated function.

Normally one would be able to solve this with a weak symbol, but unfortunately it is (or rather was) an inline function, so it's not that simple. A possible solution would be to use autoconf macros to detect if it is present or not and then have related #ifdef in the code to make it use msgb_push_tl in absence of msgb_wrap_with_TL (and then tag a patch release).

See also Change-Id: If1e851ac605c8d2fde3da565b0bd674ea6350c2e for background on that change.

> I can look into that soon, currently there is some MSC handover related stuff that I can help with.

sure, no rush here.