

Klever - Bug #9847

Klever incorrectly shows coverage in libraries at visualization of error traces

10/04/2019 04:00 PM - Ilja Zakharov

Status: Closed	Start date: 10/04/2019
Priority: Urgent	Due date:
Assignee: Vladimir Gratinskiy	% Done: 0%
Category: Bridge	Estimated time: 0.00 hour
Target version: 3.0	Published in build:
Detected in build: svn	
Platform:	
Description	
Motivation example: drivers/uwb/hwa-rc.ko (linux:memory safety)	
There is a library function "interface_to_usbdev" in source files/include/linux/usb.h at 613-616 lines.	
Actual coverage from CPAchecker says that both lines and the function are covered but coverage JSON does not contain the coverage for this file at all. Thus, a user see misleading results.	
Related issues:	
Precedes Klever - Feature #9866: Show warning when users will reach source fi...	Closed 10/07/2019 12/03/2019

History

#1 - 10/07/2019 03:14 PM - Ilja Zakharov

- Assignee set to Vladimir Gratinskiy
- Category changed from Results processing to Bridge

Seems that reason of this issue is a bug in Bridge. Bridge at error trace visualization should not highlight with the red color any files which are not referred in coverage report. But it does it both for header files and outside C files which are not included into the verification task.

#2 - 10/07/2019 03:51 PM - Evgeny Novikov

Yes, we agreed that Bridge should show empty code coverage just for those source files that are presented in coverage statistics and for which there are zeroes. Other source files, that are reachable through cross references, should not be shown as non-covered. Otherwise, users do not understand code coverage semantics easily.

#3 - 10/07/2019 04:50 PM - Evgeny Novikov

Moreover, I suggest to show an explicit warning when users will reach source files without code coverage. This warning may be the following: "You can try another code coverage type to get code coverage for a given source file".

#4 - 10/12/2019 02:51 PM - Vladimir Gratinskiy

- Priority changed from Urgent to Normal

Implemented in klever-3.0, but without an explicit warning.

#5 - 10/13/2019 10:09 AM - Evgeny Novikov

- Priority changed from Normal to Urgent
- Status changed from New to Resolved

Okay, let's think about warnings one day later. There are many other places where some help for users is strictly necessary as well.

#6 - 10/13/2019 10:12 AM - Evgeny Novikov

- Precedes Feature #9866: Show warning when users will reach source files without code coverage added

#7 - 01/16/2020 05:25 PM - Evgeny Novikov

- Status changed from Resolved to Closed

In master.

Files

coverage.info	63 KB	10/04/2019	Ilja Zakharov
coverage-verification.zip	1.57 KB	10/04/2019	Ilja Zakharov