

Klever - Feature #9583

Update CPAchecker

04/03/2019 08:32 AM - Evgeny Novikov

Status: Closed	Start date: 04/03/2019
Priority: Urgent	Due date:
Assignee: Evgeny Novikov	% Done: 0%
Category: Addons	Estimated time: 0.00 hour
Target version: 3.0	
Published in build:	

Description

Pavel reported that one of optimizations in CPAchecker was broken, so that the currently used version can spend too much time for verification for programs with recursion. We need to update to r30896.

BTW, Pavel says, that at the moment CPAchecker is more precise with recursion, so, if one will need such the precision, it will be necessary to change configuration (as far as I understand, get rid of option `-skipRecursion`).

With this update we will likely get a fix of <https://gitlab.com/sosy-lab/software/cpachecker/issues/348>.

It will be great to update after <https://gitlab.com/sosy-lab/software/cpachecker/issues/571> will be investigated and fixed by somebody in our room.

Related issues:

Blocked by Klever - Feature #9609: Avoid recursion in simple tests	Closed	04/19/2019
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History

#1 - 04/06/2019 01:34 PM - Pavel Andrianov

Just a note. If you get rid from `-skipRecursion`, CPAchecker fails after it detects a recursion. So, to handle recursive procedures you need a special version of BAM algorithm. We experimented with it long ago and it was very slow. If you are interested in it, we may check its status now.

#2 - 04/06/2019 02:16 PM - Evgeny Novikov

Pavel Andrianov wrote:

Just a note. If you get rid from `-skipRecursion`, CPAchecker fails after it detects a recursion. So, to handle recursive procedures you need a special version of BAM algorithm. We experimented with it long ago and it was very slow. If you are interested in it, we may check its status now.

Thank you for the additional note. I'm not interested much in support of recursion, so, let's experiment one day later.

#3 - 04/18/2019 08:14 AM - Evgeny Novikov

<https://gitlab.com/sosy-lab/software/cpachecker/issues/571> seems to be fixed. Let's try to switch to r31020.

#4 - 04/18/2019 10:24 AM - Evgeny Novikov

I switched CPAchecker to r31020 in branch `update-cpachecker`. But tests demonstrated regressions. So, we have to wait for comments and likely for a new version of CPAchecker.

#5 - 04/18/2019 02:57 PM - Evgeny Novikov

Other two blocking issues are: <https://gitlab.com/sosy-lab/software/cpachecker/issues/579> and <https://gitlab.com/sosy-lab/software/cpachecker/issues/580>.

#6 - 04/19/2019 01:29 PM - Evgeny Novikov

- Blocked by Feature #9609: Avoid recursion in simple tests added

#7 - 04/19/2019 02:58 PM - Evgeny Novikov

<https://gitlab.com/sosy-lab/software/cpachecker/issues/580> was closed as irrelevant (before CPAchecker works a bit better with recursion, but that was a bug). We are looking forward for <https://gitlab.com/sosy-lab/software/cpachecker/issues/579>.

#8 - 05/02/2019 03:12 PM - Evgeny Novikov

Almost 2 weeks have gone, but the bug was not fixed. So, let's accept the current state of CPAchecker.

#9 - 05/02/2019 10:46 PM - Evgeny Novikov

- Status changed from New to Closed

Tests passed, so, I merged the branch to master in [1085dfa3c](#). Do not forget to re-build a build base for testing requirement specifications, populate updated configuration files and update existing ones.