

Klever - Feature #10550

Feature # 8119 (Closed): Develop preset tags

Develop preset tags for CPAChecker BAM

10/21/2020 12:39 PM - Evgeny Novikov

Status:	Closed	Start date:	10/21/2020
Priority:	Urgent	Due date:	
Assignee:	Pavel Andrianov	% Done:	0%
Category:	Preset jobs, marks and tags	Estimated time:	0.00 hour
Target version:	3.0		
Published in build:			
Description			
CPAChecker BAM reports false alarms either due to specific configuration options used for optimization purposes or due to some internal inaccuracies. As a result of this feature request I expect a subtree of corresponding tags with appropriate descriptions in any suitable form.			

History

#1 - 10/21/2020 01:55 PM - Pavel Andrianov

- Predicate Analysis (Problems with predicate CPA)
 - Arrays (Predicate analysis considers only the first element by default in uf encoding)
 - Unallocated memory (Predicate analysis considers initialized, but unallocated memory as having any value)
 - Dynamic structures (Predicate analysis have certain troubles considering lists and other dynamic structures)
 - mem-functions (Memset, memcpy, and so on are not completely supported)
 - Bit precise (There are bit operations which are not completely supported by default)
- Function Pointer Analysis (Problems with FunctionPointerCPA)
- BAM (Problems with BAM CPA)
- Value analysis (Problems with ValueCPA)
- Assembler code (Verifier does not consider assembler code)

I may miss some cases, as I did not mark sequential launches long ago. Thus, better that someone takes a look.

#2 - 12/16/2020 08:26 PM - Evgeny Novikov

- Status changed from New to Resolved

I added these tags to preset ones in branch `bridge_9396`.

#3 - 12/16/2020 08:32 PM - Evgeny Novikov

- Status changed from Resolved to Closed

I merged this branch to master in [2625e7311](#) after CI passed test cases. This change is not backward compatible. Moreover, you should migrate your marks manually using preset tags as most as possible.