

CrystaX NDK - Bug #1010

[clang] Thread-local variables are not supported

07/21/2015 11:10 AM - Dmitry Moskalchuk

Status:	Closed	Start date:	07/21/2015
Priority:	Normal	Due date:	
Assignee:	Dmitry Moskalchuk	% Done:	100%
Category:	toolchain	Estimated time:	0.00 hour
Target version:	11.0.0	Android version:	
CPU Architecture:		CrystaX Version:	10.3.1
Host OS:			
Toolchain:	clang-3.6		

Description

clang require `@tls_get_addr@` to be implemented on low level (libc) to support `@thread@` variables. Bionic doesn't provide it. GCC workaround it by using emulated TLS feature in libgcc. Clang don't support it yet, but "here": https://llvm.org/bugs/show_bug.cgi?id=23566 is corresponding ticket, with patches suggested.

History

#1 - 10/13/2015 05:00 PM - Dmitry Moskalchuk

- Target version changed from 10.3.0 to 11.0.0

#2 - 02/09/2016 02:01 AM - Dmitry Moskalchuk

- Status changed from Open to In Progress

- CrystaX Version set to 10.3.1

#3 - 02/09/2016 05:22 AM - Dmitry Moskalchuk

- Category set to toolchain

- Status changed from In Progress to Closed

- % Done changed from 0 to 100

Fixed by backporting support of emulated TLS from clang-3.8 (not yet released) to clang-3.7. It's much more difficult to backport it to clang-3.6 due to significant difference in code base between versions, so clang-3.6 will not receive this fix.

"llvm": <https://github.com/crystax/android-toolchain-llvm-3-7/commit/97c48680b2dca8685294d64a71aa72a3077bc1bd>

"clang": <https://github.com/crystax/android-toolchain-clang-3-7/commit/7837d53d7f13aefd3d384bde9d2fe5aa616222dd>