

Bug 93015 - [10 Regression] Segmentation fault (ipcp_store_vr_results(void))

Status: RESOLVED FIXED

Alias: None

Product: gcc
Component: ipa (show other bugs)
Version: 10.0

Importance: P3 normal
Target Milestone: 10.0
Assignee: Martin Jambor

URL:
Keywords:

Depends on:
Blocks:

Reported: 2019-12-19 17:11 UTC by 吳建興
Modified: 2020-01-03 13:43 UTC (History)
CC List: 3 users (show)

See Also:
Host:
Target:
Build:
Known to work:
Known to fail:
Last reconfirmed: 2019-12-19 00:00:00

Attachments

Add an attachment (proposed patch, testcase, etc.)

Note
You need to log in before you can comment on or make changes to this bug.

吳建興 2019-12-19 17:11:17 UTC

Description

g++ -fipa-vrp -fipa-pta -fipa-cp -flto ./hi.c

INPUT :
./hi.c

int main() {
}

OUTPUT :

during IPA pass: cp
lto1: internal compiler error: Segmentation fault
0x268adb9 crash_signal
../././gcc/toplev.c:328
0x5394138 ipcp_store_vr_results
../././gcc/ipa-cp.c:5673
0x5394138 ipcp_driver
../././gcc/ipa-cp.c:5752

Version:
g++ (GCC) 10.0.0 20191218 (experimental)

Jakub Jelinek 2019-12-19 19:50:33 UTC

Comment 1

Works fine with 6/7/8/9 branches, as it is on the lto1 side, can't unfortunately bisect.

Martin Jambor 2019-12-20 09:29:21 UTC

Comment 2

Heh, ipcp_store_vr_results checks for flag ipa_vrp but not for flag ipa_cp or optimize, which means that it accesses info which has not been created. I suppose it's best to do what ipcp_store_bits_results does:

diff --git a/gcc/ipa-cp.c b/gcc/ipa-cp.c
index 243b064ee2c..a29e96613a3 100644
--- a/gcc/ipa-cp.c
+++ b/gcc/ipa-cp.c
@@ -5661,7 +5661,7 @@ ipcp_store_vr_results (void)
ipa_node_params *info = IPA_NODE_REF (node);
bool found_useful_result = false;

- if (!opt_for_fn (node->decl, flag_ipa_vrp))
+ if (!opt_for_fn (node->decl, flag_ipa_vrp) || !info)
{
if (dump_file)
fprintf (dump_file, "Not considering %s for VR discovery "

Martin Jambor 2019-12-20 15:46:38 UTC

Comment 3

I proposed a patch on the mailing list:

<https://gcc.gnu.org/ml/gcc-patches/2019-12/msg01451.html>

Martin Jambor 2019-12-21 11:25:36 UTC

Comment 4

Author: jamborm
Date: Sat Dec 21 11:25:05 2019
New Revision: 279695

URL: <https://gcc.gnu.org/viewcvs?rev=279695&root=gcc&view=rev>
Log:
Avoid segfault when doing IPA-VRP but not IPA-CF (PR 93015)

2019-12-21 Martin Jambor <mjambor@suse.cz>

pr-93015
* ipa-cp.c (ipcp_store_vr_results): Check that info exists

testsuite/
* gcc.dg/lto/pr93015_0.c: New test.

Added:
trunk/gcc/testsuite/gcc.dg/lto/pr93015_0.c
Modified:
trunk/gcc/ChangeLog
trunk/gcc/ipa-cp.c
trunk/gcc/testsuite/ChangeLog

Martin Jambor 2020-01-03 13:43:54 UTC

Comment 5

Should be fixed now.