Bug 1911439 (CVE-2020-35494) - CVE-2020-35494 binutils: usage of unitialized heap in tic4x_print_cond function in opcodes/tic4x-dis.c

Keywords: Reported: 2020-12-29 13:28 UTC by Guilherme de Almeida Suckevicz Security × Modified: 2021-11-14 22:29 UTC (History) Status: NEW CC List: 23 users (show) Fixed In Version: binutils 2.34 Alias: CVF-2020-35494 Product: Security Response Doc Type: 1 If docs needed, set a value Doc Text: ① A flaw was found in binutils. An attacker who is able to submit a crafted input file to be processed by binutils could cause usage of uninitialized memory. The highest threat is to application availability with a lower threat to data confidentiality. Component: vulnerability **=** 🔾 Version: unspecified Hardware: All OS: Linux Clone Of: **Priority:** low Last Closed: Severity: low Target ___ Milestone: Assignee: Red Hat Product Security QA Contact: Docs Contact: URL: Blocks: △ 1908372 △ 1911446 TreeView+ depends on / blocked

Attachments (Terms of Use)
Add an attachment (proposed patch, testcase, etc.)

Guilherme de Almeida Suckevicz 2020-12-29 13:28:49 UTC

Description

GNU Binutils before 2.34 has an uninitialized-heap vulnerability in function tic4x_print_cond (file opcodes/tic4x-dis.c) which could allow attackers to make an information leak.

Reference: https://sourceware.org/bugzilla/show_bug.cgi?id=25319

Guilherme de Almeida Suckevicz 2020-12-29 13:29:10 UTC

Comment 1

Created mingw-binutils tracking bugs for this issue:

Affects: fedora-all [bug 1911440]

Todd Cullum 2020-12-30 00:15:17 UTC Comment:

Statement:

binutils as shipped with Red Hat Enterprise Linux 8's GCC Toolset 10 and Red Hat Developer Toolset 10 are not affected by this flaw because the versions shipped have already received the patch.

Todd Cullum 2020-12-30 00:26:13 UTC Comment 4

Flaw technical summary:

In routine tic4x_print_cond() of opcodes/tic4x-dis.c, xmalloc() is called to allocate 32 bytes, 20 of which are initialized. It is possible for the uninitialized bytes to be reached in a subsequent call to `'(*info->fprintf func)'. This could cause a crash or print the uninitialized data. The upstream patch addresses this flaw by replacing the call to xmalloc() with xcalloc(), which O-initializes all of the bytes upon allocation.

Todd Cullum 2020-12-30 20:45:31 UTC Comment 6

 $\textbf{Upstream commit: } \texttt{https://sourceware.org/git/gitweb.cgi?} \\ \texttt{p=binutils-gdb.git;} \\ \texttt{h=2c5b6e1a1c406cbe06e2d6f77861764ebd01b9ce1} \\ \texttt{p=binutils-gdb.git;} \\ \texttt{h=2c5b6e1a1c406cbe06e2d6f77861764ebd01b9ce1} \\ \texttt{p=binutils-gdb.git;} \\ \texttt{h=2c5b6e1a1c406cbe06e2d6f77861764ebd01b9ce1} \\ \texttt{p=binutils-gdb.git;} \\ \texttt{p=bin$

- Note

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