Bug 1911441 (CVE-2020-35495) - CVE-2020-35495 binutils: NULL pointer dereference in bfd_pef_parse_symbols function in bfd/pef.c

Keywords: Security × Reported: 2020-12-29 13:33 UTC by Guilherme de Almeida Suckevicz Modified: 2021-11-14 22:29 UTC (History) Status: NEW CC List: 23 users (show) Fixed In Version: binutils 2.34 Alias: CVF-2020-35495 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 the objdump program could cause a null pointer dereference. The greatest threat from this flaw is to application availability. Component: vulnerability **=** 🔾 Version: unspecified Hardware: All Clone Of: OS: Linux **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 13:33:21 UTC

GNU Binutils before 2.34 has a NULL pointer deference vulnerability in function bfd_pef_parse_symbols (file bfd/pef.c) which could allow attackers to cause a denial of service.

Reference: https://sourceware.org/bugzilla/show_bug.cgi?id=25306

Guilherme de Almeida Suckevicz 2020-12-29 13:33:44 UTC

Comment 1

Created mingw-binutils tracking bugs for this issue:

Affects: fedora-all [

Todd Cullum 2020-12-30 00:45:18 UTC

Comment 2

Flaw technical summary:

In `bfd_pef_parse_symbols()` of bfd/pef.c, a call is made to `bfd_malloc()` and the return pointer is dereferenced and written to in a call to `bfd_bread()` without first checking to ensure that the pointer does not point to NULL. Due to the fact that a crafted file could cause this allocation to fail, it's possible for an attacker to trigger a NULL pointer dereference.

Todd Cullum 2020-12-30 00:52:38 UTC

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 20:44:48 UTC

Comment 5

Upstream commit: https://sourceware.org/git/gitweb.cgi?p=binutils-gdb.git; h=7a0fb7be96e0ce79elae429bclba913e5244d537

Note -

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