

Bug 1891605 (CVE-2020-25664) - CVE-2020-25664 ImageMagick: heap-based buffer overflow in PopShortPixel in MagickCore/quantum-private.h

Keywords: Security ×

Status: CLOSED WONTFIX

Alias: CVE-2020-25664

Product: Security Response

Component: vulnerability 🛡️

Version: unspecified

Hardware: All

OS: Linux

Priority: medium

Severity: medium

Target: ---

Milestone: ---

Assignee: Red Hat Product Security

QA Contact:

Docs Contact:

URL:

Whiteboard:

Depends On: 4004205 4004206 🏠 1910565

Blocks: 1891602

TreeView+ depends on / blocked

Reported: 2020-10-26 19:48 UTC by Guilherme de Almeida Suckevicz

Modified: 2021-02-11 18:37 UTC (History)

CC List: 7 users (show)

Fixed In Version: ImageMagick 7.0.8-68, ImageMagick 6.9.10-68

Doc Type: 🚩 If docs needed, set a value

Doc Text: 🚩 A flaw was found in ImageMagick. A specially crafted image could cause an out-of-bounds memory write leading to a crash. The highest threat from this vulnerability is to system availability.

Clone Of:

Environment:

Last Closed: 2020-11-24 23:33:56 UTC

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

- Guilherme de Almeida Suckevicz 2020-10-26 19:48:51 UTC

Description

In ImageMagick, there is a heap-buffer-overflow at MagickCore/quantum-private.h:227:12 in PopShortPixel.
Reference:
<https://github.com/ImageMagick/ImageMagick/issues/1716>
Upstream patch:
<https://github.com/ImageMagick/ImageMagick/commit/1f450bb5ba53d275de6d1cd086c98a0b549ad393>
- Todd Cullum 2020-10-28 20:40:05 UTC

Comment 1

Flaw summary:
In WriteOnePNGImage() of the PNG coder at coders/png.c, an improper call to AcquireVirtualMemory() and memset() allows for an out-of-bounds write later when PopShortPixel() from MagickCore/quantum-private.h is called. The patch fixes the calls by adding 256 to rowbytes. An attacker who is able to supply a specially crafted image could affect availability with a low impact to data integrity.
- Todd Cullum 2020-10-28 21:13:09 UTC

Comment 2

Acknowledgments:
Name: Suhwan Song (Seoul National University)
- Todd Cullum 2020-10-29 19:10:26 UTC

Comment 3

Statement:
This flaw is out of support scope for Red Hat Enterprise Linux 5, 6, and 7. Inkscape is not affected because it no longer uses a bundled ImageMagick in Red Hat Enterprise Linux 8. For more information regarding support scopes, please see <https://access.redhat.com/support/policy/updates/errata> .
- Guilherme de Almeida Suckevicz 2020-11-24 18:57:40 UTC

Comment 4

Created ImageMagick tracking bugs for this issue:
Affects: epel-8 [[bug-1301620](#)]
Affects: fedora-all [[bug-1301620](#)]
- Product Security DevOps Team 2020-11-24 23:33:56 UTC

Comment 5

This bug is now closed. Further updates for individual products will be reflected on the CVE page(s):
<https://access.redhat.com/security/cve/cve-2020-25664>

Note
You need to [log in](#) before you can comment on or make changes to this bug.