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Cvjark Create CVE-2022-35096.md

History

1 contributor



88 lines (78 sloc) | 4.54 KB

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## Product Link

<https://github.com/matthiaskramm/swftools>

## POC file

[https://github.com/matthiaskramm/swftools/files/9034357/id293\\_heap\\_buffer\\_overflow.zip](https://github.com/matthiaskramm/swftools/files/9034357/id293_heap_buffer_overflow.zip)

## Command to reproduce

```
./pdf2swf -G -f -t [sample file] -o /dev/null
```

## Product name & version

last github commit code : 772e55a

## Problem Type

heap-buffer-overflow

## Crash Detail

```
==60167==ERROR: AddressSanitizer: heap-buffer-overflow on address 0x604000003080
at pc 0x00000092ceba bp 0x7ffe40762c20 sp 0x7ffe40762c18
WRITE of size 8 at 0x604000003080 thread T0
#0 0x92ceb9 in draw_stroke
/home/bupt/Desktop/swftools/lib/gfxpoly/stroke.c:212:24
#1 0x92e224 in gfxpoly_from_stroke
/home/bupt/Desktop/swftools/lib/gfxpoly/stroke.c:226:5
#2 0x90989c in polyops_stroke
/home/bupt/Desktop/swftools/lib/devices/polyops.c:229:23
#3 0x7c1563 in VectorGraphicOutputDev::strokeGfxline(GfxState*, _gfxline*,
int) /home/bupt/Desktop/swftools/lib/pdf/VectorGraphicOutputDev.cc:612:9
#4 0x7cd69e in VectorGraphicOutputDev::stroke(GfxState*)
/home/bupt/Desktop/swftools/lib/pdf/VectorGraphicOutputDev.cc:1487:5
#5 0x6eeffa in Gfx::opStroke(Object*, int)
/home/bupt/Desktop/swftools/lib/pdf/xpdf/Gfx.cc:1415:12
#6 0x705f02 in Gfx::execOp(Object*, Object*, int)
/home/bupt/Desktop/swftools/lib/pdf/xpdf/Gfx.cc:693:3
#7 0x7049c1 in Gfx::go(int)
/home/bupt/Desktop/swftools/lib/pdf/xpdf/Gfx.cc:584:7
#8 0x703ea8 in Gfx::display(Object*, int)
/home/bupt/Desktop/swftools/lib/pdf/xpdf/Gfx.cc:556:3
#9 0x6b9401 in Page::displaySlice(OutputDev*, double, double, int, int, int,
int, int, int, int, Catalog*, int (*)(void*), void*)
/home/bupt/Desktop/swftools/lib/pdf/xpdf/Page.cc:317:10
#10 0x6b8cee in Page::display(OutputDev*, double, double, int, int, int, int,
Catalog*, int (*)(void*), void*)
/home/bupt/Desktop/swftools/lib/pdf/xpdf/Page.cc:264:3
#11 0x6099b0 in PDFDoc::displayPage(OutputDev*, int, double, double, int,
int, int, int, int (*)(void*), void*)
/home/bupt/Desktop/swftools/lib/pdf/xpdf/PDFDoc.cc:317:27
#12 0x5f87d5 in render2(_gfxpage*, _gfxdevice*, int, int, int, int, int, int)
/home/bupt/Desktop/swftools/lib/pdf/pdf.cc:164:14
#13 0x5f8e64 in pdfpage_rendersection(_gfxpage*, _gfxdevice*, double, double,
double, double, double, double) /home/bupt/Desktop/swftools/lib/pdf/pdf.cc:190:5
#14 0x501816 in main /home/bupt/Desktop/swftools/src/pdf2swf.c:832:3
#15 0x7f15d7322c86 in __libc_start_main /build/glibc-CVJwZb/glibc-
2.27/csu/../csu/libc-start.c:310
#16 0x420b99 in _start
(/home/bupt/Desktop/swftools/build/bin/pdf2swf+0x420b99)

0x604000003080 is located 0 bytes to the right of 48-byte region
[0x604000003050,0x604000003080)
allocated by thread T0 here:
#0 0x4b3160 in malloc /home/bupt/æjŒ/ tools/llvm-
12.0.1/llvm/projects/compiler-rt/lib/asan/asan_malloc_linux.cpp:145
#1 0x92c94f in draw_stroke
```

/home/bupt/Desktop/swftools/lib/gfxpoly/stroke.c:192:26

SUMMARY: AddressSanitizer: heap-buffer-overflow

/home/bupt/Desktop/swftools/lib/gfxpoly/stroke.c:212:24 in draw\_stroke

Shadow bytes around the buggy address:

```
0x0c087fff85c0: fa fa fd fd fd fd fd fd fa fa fd fd fd fd fd fd
0x0c087fff85d0: fa fa fd fd fd fd fd fd fa fa fd fd fd fd fd fd
0x0c087fff85e0: fa fa fd fd fd fd fd fd fa fa 00 00 00 00 00 00
0x0c087fff85f0: fa fa 00 00 00 00 00 00 fa fa 00 00 00 00 00 00
0x0c087fff8600: fa fa 00 00 00 00 00 00 fa fa fa 00 00 00 00 00 00
=>0x0c087fff8610: [fa]fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
0x0c087fff8620: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
0x0c087fff8630: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
0x0c087fff8640: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
0x0c087fff8650: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
0x0c087fff8660: fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa fa
```

Shadow byte legend (one shadow byte represents 8 application bytes):

Addressable:	00
Partially addressable:	01 02 03 04 05 06 07
Heap left redzone:	fa
Freed heap region:	fd
Stack left redzone:	f1
Stack mid redzone:	f2
Stack right redzone:	f3
Stack after return:	f5
Stack use after scope:	f8
Global redzone:	f9
Global init order:	f6
Poisoned by user:	f7
Container overflow:	fc
Array cookie:	ac
Intra object redzone:	bb
ASan internal:	fe
Left alloca redzone:	ca
Right alloca redzone:	cb
Shadow gap:	cc

==60167==ABORTING

## Crash summary

SUMMARY: AddressSanitizer: heap-buffer-overflow

/home/bupt/Desktop/swftools/lib/gfxpoly/stroke.c:212:24 in draw\_stroke