

New issue

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# Some heap\_overflow bug #190

Closed skyvast404 opened this issue on Jan 16, 2020 · 5 comments

Assignees

Labels bug fuzzing

Milestone 0.11

skyvast404 commented on Jan 16, 2020

Hi, I got some bugs which you can reproduce `dx2dwg $PoC -o /dev/nu11` .Thses bugs work on version `0.10.1.2685` and earlier .

skyvast404 commented on Jan 16, 2020 • edited Author

## Heap over flow1

```
==9430==ERROR: AddressSanitizer: heap-buffer-overflow on address 0x6020000515c8 at pc 0x7f0679221526 bp 0x7fff931e9240 sp 0x7fff931e9230
READ of size 8 at 0x6020000515c8 thread T0
#0 0x7f0679221525 in add_MLINE /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:4637
#1 0x7f06792532d4 in new_object /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:5930
#2 0x7f067925fcbd in dxf_blocks_read /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:6955
#3 0x7f067926989a in dwg_read_dxf /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:7679
#4 0x7f0678382ee7 in dxf_read_file /home/skyvast/Documents/libredwg-0.10.1.2677/src/dwg.c:319
#5 0x55ef2f125465 in main /home/skyvast/Documents/libredwg-0.10.1.2677/programs/dx2dwg.c:255
#6 0x7f0677a8db96 in __libc_start_main (/lib/x86_64-linux-gnu/libc.so.6+0x21b96)
#7 0x55ef2f124489 in _start (/home/skyvast/Documents/asan_libredwg/bin/dx2dwg+0x2489)

0x6020000515c8 is located 8 bytes to the left of 16-byte region [0x6020000515d0,0x6020000515e0)
freed by thread T0 here:
#0 0x7f06798117b8 in __interceptor_free (/usr/lib/x86_64-linux-gnu/libasan.so.4+0xde7b8)
#1 0x7f06791e3788 in dxf_free_pair /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:285
#2 0x7f067925ccd6 in new_object /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:6699
#3 0x7f067925fcbd in dxf_blocks_read /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:6955
#4 0x7f067926989a in dwg_read_dxf /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:7679
#5 0x7f0678382ee7 in dxf_read_file /home/skyvast/Documents/libredwg-0.10.1.2677/src/dwg.c:319
#6 0x55ef2f125465 in main /home/skyvast/Documents/libredwg-0.10.1.2677/programs/dx2dwg.c:255
#7 0x7f0677a8db96 in __libc_start_main (/lib/x86_64-linux-gnu/libc.so.6+0x21b96)

previously allocated by thread T0 here:
#0 0x7f0679811d38 in __interceptor_calloc (/usr/lib/x86_64-linux-gnu/libasan.so.4+0xded38)
#1 0x7f06791e1465 in xmalloc /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:76
#2 0x7f06791e37b0 in dxf_read_pair /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:292
#3 0x7f067925cce5 in new_object /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:6700
#4 0x7f067925fcbd in dxf_blocks_read /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:6955
#5 0x7f067926989a in dwg_read_dxf /home/skyvast/Documents/libredwg-0.10.1.2677/src/in_dxf.c:7679
#6 0x7f0678382ee7 in dxf_read_file /home/skyvast/Documents/libredwg-0.10.1.2677/src/dwg.c:319
#7 0x55ef2f125465 in main /home/skyvast/Documents/libredwg-0.10.1.2677/programs/dx2dwg.c:255
#8 0x7f0677a8db96 in __libc_start_main (/lib/x86_64-linux-gnu/libc.so.6+0x21b96)
```

SUMMARY: AddressSanitizer: heap-buffer-overflow /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:4637 in add\_MLINE

Shadow bytes around the buggy address:

0x0c0480002260: fa fa fd fd fa fa fd fd fa fa fd fd  
0x0c0480002270: fa fa fd fd fa fa fd fd fa fa fd fd  
0x0c0480002280: fa fa fd fd fa fa fd fd fa fa fd fd  
0x0c0480002290: fa fa fd fd fa fa fd fd fa fa fd fd  
0x0c04800022a0: fa fa fd fd fa fa fd fd fa fa fd fd  
=>0x0c04800022b0: fa fa fd fd fa fa fd fd fa[fa]fd fd fa fa fd fd  
0x0c04800022c0: fa fa 00 00 fa fa fa fa fa fa fa fa  
0x0c04800022d0: fa fa fa fa fa fa fa fa fa fa fa fa  
0x0c04800022e0: fa fa fa fa fa fa fa fa fa fa fa fa  
0x0c04800022f0: fa fa fa fa fa fa fa fa fa fa fa fa  
0x0c0480002300: 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

==9430==ABORTING

skyvast404 commented on Jan 16, 2020

Author

## Heap\_overflow2

==9471==ERROR: AddressSanitizer: heap-buffer-overflow on address 0x6020000204a8 at pc 0x7f66ed6bc79e bp 0x7fff91c13050 sp 0x7fff91c13040

READ of size 8 at 0x6020000204a8 thread T0

#0 0x7f66ed6bc79d in add\_MLINE /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:4645  
#1 0x7f66ed6ee2d4 in new\_object /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:5930  
#2 0x7f66ed6facbd in dxf\_blocks\_read /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:6955  
#3 0x7f66ed70489a in dwg\_read\_dxf /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:7679  
#4 0x7f66ec81dee7 in dxf\_read\_file /home/skyvast/Documents/libredwg-0.10.1.2677/src/dwg.c:319  
#5 0x55a8060bf465 in main /home/skyvast/Documents/libredwg-0.10.1.2677/programs/dxf2dwg.c:255  
#6 0x7f66ebf28b96 in \_\_libc\_start\_main (/lib/x86\_64-linux-gnu/libc.so.6+0x21b96)  
#7 0x55a8060be489 in \_start (/home/skyvast/Documents/asan\_libredwg/bin/dxf2dwg+0x2489)

0x6020000204a8 is located 8 bytes to the left of 16-byte region [0x6020000204b0,0x6020000204c0)

allocated by thread T0 here:

#0 0x7f66edcacc38 in \_\_interceptor\_calloc (/usr/lib/x86\_64-linux-gnu/libasan.so.4+0xded38)  
#1 0x7f66ed67c465 in xmalloc /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:76  
#2 0x7f66ed67eb0d in dxf\_read\_pair /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:292  
#3 0x7f66ed6f7ce5 in new\_object /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:6700  
#4 0x7f66ed6facbd in dxf\_blocks\_read /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:6955  
#5 0x7f66ed70489a in dwg\_read\_dxf /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:7679  
#6 0x7f66ec81dee7 in dxf\_read\_file /home/skyvast/Documents/libredwg-0.10.1.2677/src/dwg.c:319  
#7 0x55a8060bf465 in main /home/skyvast/Documents/libredwg-0.10.1.2677/programs/dxf2dwg.c:255  
#8 0x7f66ebf28b96 in \_\_libc\_start\_main (/lib/x86\_64-linux-gnu/libc.so.6+0x21b96)

SUMMARY: AddressSanitizer: heap-buffer-overflow /home/skyvast/Documents/libredwg-0.10.1.2677/src/in\_dxf.c:4645 in add\_MLINE

Shadow bytes around the buggy address:

0x0c047ffc040: fa fa fd fd fa fa fd fd fa fa fd fd fa fa fd fd  
0x0c047ffc050: fa fa fd fd fa fa fd fd fa fa fd fd fa fa fd fd  
0x0c047ffc060: fa fa fd fd fa fa fd fd fa fa fd fd fa fa fd fd  
0x0c047ffc070: fa fa fd fd fa fa fd fd fa fa fd fd fa fa fd fd  
0x0c047ffc080: fa fa fd fd fa fa fd fd fa fa 01 fa fa fd fd  
=>0x0c047ffc090: fa fa fd fd fa[fa]00 00 fa fa fa fa fa fa  
0x0c047ffc0a0: fa fa fa fa fa fa fa fa fa fa fa fa fa fa  
0x0c047ffc0b0: fa fa fa fa fa fa fa fa fa fa fa fa fa fa  
0x0c047ffc0c0: fa fa fa fa fa fa fa fa fa fa fa fa fa fa  
0x0c047ffc0d0: fa fa fa fa fa fa fa fa fa fa fa fa fa fa  
0x0c047ffc0e0: 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

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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

==9471==ABORTING

skyvast404 commented on Jan 16, 2020

Author

PoC here.

[heap\\_overflow.zip](#)



rurban self-assigned this on Jan 16, 2020



rurban added the `bug` label on Jan 16, 2020



rurban added this to the `0.11` milestone on Jan 16, 2020

rurban commented on Jan 16, 2020

Contributor

Thanks, I can repro all



rurban added the `fuzzing` label on Jan 16, 2020



rurban added a commit that referenced this issue on Jan 16, 2020



`indxf: more NULL ptr protections` ...

41ff7af



rurban closed this as completed on Jan 16, 2020

skyvast404 commented on Jul 19, 2020

Author

These bugs credited by ADLab.

[CVE-2020-15807](#)

Assignees



rurban

Labels

`bug`

`fuzzing`

Projects

None yet

Milestone

0.11

Development

No branches or pull requests

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2 participants

