Open Source Vulnerability Report

BLACKDUCK

C Demo Project>3.4

Phase: DEVELOPMENT | Distribution: EXTERNAL

Vulnerability Status Filter: All Vulnerabilities

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vulnerability Status Filter: All Vulnerabilities								
VULNERABLE COMPONENTS SUMMARY								
BlueZ 5.23	0	10	0					
Condor 7.6.10	1	0	1					
GNU C Library 2.22	9	11	2					
GnuWin32 1.2.37	36	34	0					
OpenSSL 1.0.1d	20	76	8					

VULNERABLE COMPONENTS DETAILS

BlueZ 5.23

GNU Lesser General Public License v2.1 or later (weak reciprocal)

GNU General Public License v2.0 or later (reciprocal)

Vulnerability Name	Severity	Base	Exploitability	Impact	Status	Published
CVE-2016-9797	MEDIUM	5.0	2.9	10.0	NEW	12/07/2016

In BlueZ 5.42, a buffer over-read was observed in "l2cap_dump" function in "tools/parser/l2cap.c" source file. This issue can be triggered by processing a corrupted dump file and will result in hcidump crash.

<u>CVE-2016-9798</u> MEDIUM 5.0 2.9 10.0 NEW 12/07/2016

In BlueZ 5.42, a use-after-free was identified in "conf_opt" function in "tools/parser/l2cap.c" source file. This issue can be triggered by processing a corrupted dump file and will result in hcidump crash.

CVE-2016-9799 MEDIUM 5.0 2.9 10.0 NEW 12/07/2016

In BlueZ 5.42, a buffer overflow was observed in "pklg_read_hci" function in "btsnoop.c" source file. This issue can be triggered by processing a corrupted dump file and will result in btmon crash.

CVE-2016-9800 MEDIUM 5.0 2.9 10.0 NEW 12/07/2016

In BlueZ 5.42, a buffer overflow was observed in "pin_code_reply_dump" function in "tools/parser/hci.c" source file. The issue exists because "pin" array is overflowed by supplied parameter due to lack of boundary checks on size of the buffer from frame "pin_code_reply_cp *cp" parameter.

CVE-2016-9801 MEDIUM 5.0 2.9 10.0 NEW 12/07/2016

In BlueZ 5.42, a buffer overflow was observed in "set_ext_ctrl" function in "tools/parser/l2cap.c" source file when processing corrupted dump file.

<u>CVE-2016-9802</u> <u>MEDIUM</u> 5.0 2.9 10.0 <u>NEW</u> 12/07/2016

In BlueZ 5.42, a buffer over-read was identified in "l2cap_packet" function in "monitor/packet.c" source file. This issue can be triggered by processing a corrupted dump file and will result in btmon crash.

<u>CVE-2016-9803</u> MEDIUM 5.0 2.9 10.0 NEW 12/07/2016

In BlueZ 5.42, an out-of-bounds read was observed in "le_meta_ev_dump" function in "tools/parser/hci.c" source file. This issue exists because 'subevent' (which is used to read correct element from 'ev_le_meta_str' array) is overflowed.

<u>CVE-2016-9804</u> MEDIUM 5.0 2.9 10.0 NEW 12/07/2016

In BlueZ 5.42, a buffer overflow was observed in "commands_dump" function in "tools/parser/csr.c" source file. The issue exists because "commands" array is overflowed by supplied parameter due to lack of boundary checks on size of the buffer from frame "frm->ptr" parameter. This issue can be triggered by processing a corrupted dump file and will result in hcidump crash.

<u>CVE-2016-9917</u> MEDIUM 5.0 2.9 10.0 NEW 12/23/2016

In BlueZ 5.42, a buffer overflow was observed in "read_n" function in "tools/hcidump.c" source file. This issue can be triggered by processing a corrupted dump file and will result in hcidump crash.

CVE-2016-9918

MEDIUM

5.0

2.9

NEW

12/23/2016

In BlueZ 5.42, an out-of-bounds read was identified in "packet_hexdump" function in "monitor/packet.c" source file. This issue can be triggered by processing a corrupted dump file and will result in btmon crash.

Condor 7.6.10

Apache License 2.0 (permissive)

Vulnerability Name	Severity	Base	Exploitability	Impact	Status	Published
CVE-2012-3416	HIGH	10.0	10.0	10.0	NEW	10/03/2012

Condor before 7.8.2 allows remote attackers to bypass host-based authentication and execute actions such as ALLOW_ADMINISTRATOR or ALLOW_WRITE by connecting from a system with a spoofed reverse DNS hostname.

CVE-2013-4255

LOW

3.5

2.9

6.8

10.0

NFW

10/15/2013

The policy definition evaluator in Condor 7.5.4, 8.0.0, and earlier does not properly handle attributes in a (1) PREEMPT, (2) SUSPEND, (3) CONTINUE, (4) WANT_VACATE, or (5) KILL policy that evaluate to an Unconfigured, Undefined, or Error state, which allows remote authenticated users to cause a denial of service (condor startd exit) via a crafted job.

GNU C Library 2.22

GNU Lesser General Public License v2.1 or later (weak reciprocal)

GNU General Public License v2.0 or later (reciprocal)

Vulnerability Name	Severity	Base	Exploitability	Impact	Status	Published
<u>133568</u>	MEDIUM	6.4	4.9	10.0	DUPLICATE	05/17/2017

GNU C Library (glibc) contains an out-of-bounds read flaw in the strftime() function that is triggered when handling time values. This may allow a context-dependent attacker to crash a process linked against the library or potentially disclose memory contents.

133572

LOW

2.1

2.9

3.9

DUPLICATE

12/09/2016

GNU C Library (glibc) contains a flaw that is triggered as LD_POINTER_GUARD is not properly handled in some circumstances. This may potentially allow a local attacker to bypass security restrictions.

133574

HIGH

7.5

6.4

10.0

DUPLICATE

05/17/2017

GNU C Library (glibc) contains an integer overflow flaw that is triggered as hcreate and hcreate_r do not properly fail when handling large element counts. This may allow a context-dependent attacker to cause an out-of-bounds write that will allow the attacker to execute arbitrary code.

133577

HIGH

7.5

6.4

10.0

DUPLICATE

05/17/2017

GNU C Library (glibc) contains an overflow condition in the catopen() function. The issue is triggered as user-supplied input is not properly validated when handling strings. This may allow a context-dependent attacker to cause a stack-based buffer overflow, resulting in a denial of service or potentially allowing the execution of arbitrary code.

133580

HIGH

7.5

6.4

10.0

DUPLICATE

05/17/2017

GNU C Library (glibc) contains an overflow condition in multiple nan functions, such as nanf() and nanl(). The issue is triggered as user-supplied input is not properly validated when handling a crafted string. This may allow a context-dependent attacker to cause a stack-based buffer overflow, resulting in a denial of service or potentially allowing the execution of arbitrary code.

134584

HIGH

9.3

10.0

8.6

DUPLICATE

02/15/2017

GNU C Library (glibc) contains an overflow condition in the send_dg() and send_vc() functions in libresolv resolv/res_send.c. The issue is triggered as user-supplied input is not properly validated when looking up domain names via the getaddrinfo() call. This may allow a remote attacker to cause a stack-based buffer overflow, resulting in a denial of service or potentially allowing the execution of arbitrary code.

142436

MEDILIM

5.0

2.9

10.0

NEW

04/20/2017

GNU C Library (glibc) contains a flaw in the name resolution function call handling. The issue is triggered when initializing a partial internal resolver data structure. With a specially crafted request, an attacker can cause a memory leak. It is not immediately clear is this is a memory information disclosure or a memory leak leading to a denial of service.

152759

HIGH

7.1

6.9

8.6

NEW

03/01/2017

GNU C Library (glibc) contains a flaw that is triggered during the handling of specially crafted multi-byte sequences. This may allow a context-dependent attacker to trigger an infinite loop and cause a process linked against the library to hang. 98836 5.0 2.9 10.0 NFW 04/20/2017 GNU C Library (glibc) contains an overflow condition in the gethosts function in sysdeps/posix/getaddrinfo.c. The issue is triggered as user-supplied input is not properly validated during the handling of domain conversion results. This may allow a remote attacker to cause a stack-based buffer overflow, crashing a process linked against the library. CVE-2014-9761 HIGH 7.5 6.4 10.0 **NEW** 11/28/2016 Multiple stack-based buffer overflows in the GNU C Library (aka glibc or libc6) before 2.23 allow context-dependent attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a long argument to the (1) nan, (2) nanf, or (3) nanl function. 6.8 8.6 CVE-2015-7547 6.4 **NEW** 02/16/2017 Multiple stack-based buffer overflows in the (1) send dg and (2) send vc functions in the libresolv library in the GNU C Library (aka glibc or libc6) before 2.23 allow remote attackers to cause a denial of service (crash) or possibly execute arbitrary code via a crafted DNS response that triggers a call to the getaddrinfo function with the AF UNSPEC or AF INET6 address family, related to performing "dual A/AAAA DNS gueries" and the libnss dns.so.2 NSS module. CVE-2015-8776 6.4 4.9 10.0 **NEW** 12/02/2016 The strftime function in the GNU C Library (aka glibc or libc6) before 2.23 allows context-dependent attackers to cause a denial of service (application crash) or possibly obtain sensitive information via an out-of-range time value. CVE-2015-8777 LOW 2.1 2.9 3.9 12/05/2016 The process_envvars function in elf/rtld.c in the GNU C Library (aka glibc or libc6) before 2.23 allows local users to bypass a pointer-guarding protection mechanism via a zero value of the LD_POINTER_GUARD environment variable. CVE-2015-8778 HIGH 7.5 10.0 **NEW** 6.4 12/02/2016 Integer overflow in the GNU C Library (aka glibc or libc6) before 2.23 allows context-dependent attackers to cause a denial of service (application crash) or possibly execute arbitrary code via the size argument to the __hcreate_r function, which triggers outof-bounds heap-memory access. CVE-2015-8779 HIGH 7.5 10.0 **NEW** 64 12/02/2016 Stack-based buffer overflow in the catopen function in the GNU C Library (aka glibc or libc6) before 2.23 allows contextdependent attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a long catalog name. CVE-2016-10228 4.3 2.9 8.6 **NEW** 03/03/2017 The iconv program in the GNU C Library (aka glibc or libc6) 2.25 and earlier, when invoked with the -c option, enters an infinite loop when processing invalid multi-byte input sequences, leading to a denial of service. CVE-2016-1234 5.0 2.9 10.0 **NEW** 11/28/2016 Stack-based buffer overflow in the glob implementation in GNU C Library (aka glibc) before 2.24, when GLOB ALTDIRFUNC is used, allows context-dependent attackers to cause a denial of service (crash) via a long name. CVE-2016-3075 5.0 2.9 10.0 **NEW** 11/28/2016 Stack-based buffer overflow in the nss_dns implementation of the getnetbyname function in GNU C Library (aka glibc) before 2.24 allows context-dependent attackers to cause a denial of service (stack consumption and application crash) via a long name. CVE-2016-3706 5.0 2.9 10.0 Stack-based buffer overflow in the getaddrinfo function in sysdeps/posix/getaddrinfo.c in the GNU C Library (aka glibc or libc6) allows remote attackers to cause a denial of service (crash) via vectors involving hostent conversion. NOTE: this vulnerability exists because of an incomplete fix for CVE-2013-4458. HIGH 7.5 6.4 10.0 NFW 02/01/2017 CVE-2016-4429 Stack-based buffer overflow in the clntudp_call function in sunrpc/clnt_udp.c in the GNU C Library (aka glibc or libc6) allows remote servers to cause a denial of service (crash) or possibly unspecified other impact via a flood of crafted ICMP and UDP packets. 5.0 2.9 CVE-2016-5417 10.0 **NEW** 02/17/2017 Memory leak in the __res_vinit function in the IPv6 name server management code in libresolv in GNU C Library (aka glibc or

libc6) before 2.24 allows remote attackers to cause a denial of service (memory consumption) by leveraging partial initialization of internal resolver data structures.

10.0

CVE-2016-6323

MEDIUM

5.0

2.9

NEW

02/01/2017

The makecontext function in the GNU C Library (aka glibc or libc6) before 2.25 creates execution contexts incompatible with the unwinder on ARM EABI (32-bit) platforms, which might allow context-dependent attackers to cause a denial of service (hang), as demonstrated by applications compiled using gccgo, related to backtrace generation.

GnuWin32 1.2.37

GnuWin32 - Libarchive License (BSD -) (permissive)

Vulnerability Name	Severity	Base	Exploitability	Impact	Status	Published
CVE-2007-2754	MEDIUM	6.8	6.4	8.6	NEW	10/30/2012

Integer signedness error in truetype/ttgload.c in Freetype 2.3.4 and earlier might allow remote attackers to execute arbitrary code via a crafted TTF image with a negative n_points value, which leads to an integer overflow and heap-based buffer overflow.

<u>CVE-2007-3506</u> **HIGH** 7.5 6.4 10.0 **NEW** 09/05/2008

The ft_bitmap_assure_buffer function in src/base/ftbimap.c in FreeType 2.3.3 allows context-dependent attackers to cause a denial of service and possibly execute arbitrary code via unspecified vectors involving bitmap fonts, related to a "memory buffer overwrite bug."

<u>CVE-2009-0946</u> **HIGH** 10.0 10.0 10.0 NEW 11/18/2010

Multiple integer overflows in FreeType 2.3.9 and earlier allow remote attackers to execute arbitrary code via vectors related to large values in certain inputs in (1) smooth/ftsmooth.c, (2) sfnt/ttcmap.c, and (3) cff/cffload.c.

<u>CVE-2009-2624</u> MEDIUM 6.8 6.4 8.6 NEW 11/18/2010

The huft_build function in inflate.c in gzip before 1.3.13 creates a hufts (aka huffman) table that is too small, which allows remote attackers to cause a denial of service (application crash or infinite loop) or possibly execute arbitrary code via a crafted archive. NOTE: this issue is caused by a CVE-2006-4334 regression.

<u>CVE-2010-2497</u> MEDIUM 6.8 6.4 8.6 NEW 12/18/2012

Integer underflow in glyph handling in FreeType before 2.4.0 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted font file.

CVE-2010-2498 MEDIUM 6.8 6.4 8.6 NEW 12/18/2012

The psh_glyph_find_strong_points function in pshinter/pshalgo.c in FreeType before 2.4.0 does not properly implement hinting masks, which allows remote attackers to cause a denial of service (heap memory corruption and application crash) or possibly execute arbitrary code via a crafted font file that triggers an invalid free operation.

<u>CVE-2010-2499</u> MEDIUM 6.8 6.4 8.6 NEW 12/18/2012

Buffer overflow in the Mac_Read_POST_Resource function in base/ftobjs.c in FreeType before 2.4.0 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted LaserWriter PS font file with an embedded PFB fragment.

<u>CVE-2010-2500</u> <u>MEDIUM</u> 6.8 6.4 8.6 <u>NEW</u> 12/18/2012

Integer overflow in the gray_render_span function in smooth/ftgrays.c in FreeType before 2.4.0 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted font file.

CVE-2010-2519 MEDIUM 6.8 6.4 8.6 NEW 12/18/2012

Heap-based buffer overflow in the Mac_Read_POST_Resource function in base/ftobjs.c in FreeType before 2.4.0 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted length value in a POST fragment header in a font file.

<u>CVE-2010-2520</u> <u>MEDIUM</u> 5.1 6.4 4.9 <u>NEW</u> 12/18/2012

Heap-based buffer overflow in the Ins_IUP function in truetype/ttinterp.c in FreeType before 2.4.0, when TrueType bytecode support is enabled, allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted font file.

<u>CVE-2010-2527</u> MEDIUM 6.8 6.4 8.6 NEW 12/18/2012

Multiple buffer overflows in demo programs in FreeType before 2.4.0 allow remote attackers to cause a denial of service

(application crash) or possibly execute arbitrary code via a crafted font file. CVE-2010-2541 6.8 6.4 8.6 **NEW** 12/18/2012 Buffer overflow in ftmulti.c in the ftmulti demo program in FreeType before 2.4.2 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted font file. CVE-2010-2805 6.8 64 8.6 **NEW** 12/18/2012 The FT Stream EnterFrame function in base/ftstream.c in FreeType before 2.4.2 does not properly validate certain position values, which allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted font file. CVE-2010-2806 6.8 8.6 **NEW** 01/12/2011 Array index error in the t42_parse_sfnts function in type42/t42parse.c in FreeType before 2.4.2 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via negative size values for certain strings in FontType42 font files, leading to a heap-based buffer overflow. CVE-2010-2807 12/10/2010 FreeType before 2.4.2 uses incorrect integer data types during bounds checking, which allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted font file. CVE-2010-2808 6.8 NFW 01/12/2011 Buffer overflow in the Mac_Read_POST_Resource function in base/ftobjs.c in FreeType before 2.4.2 allows remote attackers to cause a denial of service (memory corruption and application crash) or possibly execute arbitrary code via a crafted Adobe Type 1 Mac Font File (aka LWFN) font. CVE-2010-3053 4.3 2.9 86 NEW 12/18/2012 bdf/bdflib.c in FreeType before 2.4.2 allows remote attackers to cause a denial of service (application crash) via a crafted BDF font file, related to an attempted modification of a value in a static string. CVE-2010-3311 HIGH **NEW** 9.3 10.0 8.6 12/18/2012 Integer overflow in base/ftstream.c in libXft (aka the X FreeType library) in FreeType before 2.4 allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted Compact Font Format (CFF) font file that triggers a heap-based buffer overflow, related to an "input stream position error" issue, a different vulnerability than CVE-2010-1797. 6.8 6.4 CVE-2010-3814 8.6 **NEW** 12/18/2012 Heap-based buffer overflow in the Ins_SHZ function in ttinterp.c in FreeType 2.4.3 and earlier allows remote attackers to execute arbitrary code or cause a denial of service (application crash) via a crafted SHZ bytecode instruction, related to TrueType opcodes, as demonstrated by a PDF document with a crafted embedded font. CVE-2010-3855 MEDIUM 6.8 6.4 8.6 **NEW** 12/18/2012 Buffer overflow in the ft var readpackedpoints function in truetype/ttgxvar.c in FreeType 2.4.3 and earlier allows remote attackers to cause a denial of service (application crash) or possibly execute arbitrary code via a crafted TrueType GX font. CVE-2011-0226 HIGH 9.3 10.0 8.6 **NEW** 10/25/2011 Integer signedness error in psaux/t1decode.c in FreeType before 2.4.6, as used in CoreGraphics in Apple iOS before 4.2.9 and 4.3.x before 4.3.4 and other products, allows remote attackers to execute arbitrary code or cause a denial of service (memory corruption and application crash) via a crafted Type 1 font in a PDF document, as exploited in the wild in July 2011. HIGH 10.0 12/28/2012 CVE-2012-1126 10.0 10.0 **NEW** FreeType before 2.4.9, as used in Mozilla Firefox Mobile before 10.0.4 and other products, allows remote attackers to cause a denial of service (invalid heap read operation and memory corruption) or possibly execute arbitrary code via crafted property data in a BDF font. CVE-2012-1127 **HIGH** 9.3 10.0 8.6 **NEW** 12/28/2012 FreeType before 2.4.9, as used in Mozilla Firefox Mobile before 10.0.4 and other products, allows remote attackers to cause a denial of service (invalid heap read operation and memory corruption) or possibly execute arbitrary code via crafted glyph or bitmap data in a BDF font. CVE-2012-1128 HIGH 9.3 10.0 86 **NEW** 12/18/2012

FreeType before 2.4.9, as used in Mozilla Firefox Mobile before 10.0.4 and other products, allows remote attackers to cause a

denial of service (NULL potent.	ointer dereferend	ce and memo	ry corruption) o	r possibly execute ark	oitrary code via a crafted	TrueType
CVE-2012-1129	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid h in a Type 42 font.						
CVE-2012-1130	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid h in a PCF font.						
CVE-2012-1131	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as attackers to cause a denia vectors related to the cell	al of service (inv					
CVE-2012-1132	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid h data in a Type 1 font.						
CVE-2012-1133	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid hbitmap data in a BDF font	neap write opera					
CVE-2012-1134	HIGH	9.3	10.0	8.6	NEW	07/14/2013
FreeType before 2.4.9, as denial of service (invalid h dictionary data in a Type	neap write opera					
CVE-2012-1135	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid h NPUSHB and NPUSHW i	neap read operat	ion and mem	ory corruption)			
CVE-2012-1136	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid hbitmap data in a BDF font	neap write opera	tion and mem	ory corruption)	and other products, a or possibly execute a	allows remote attackers t rbitrary code via crafted	o cause a glyph or
CVE-2012-1137	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid hBDF font.						
CVE-2012-1138	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid h MIRP instruction in a True	neap read operat					
CVE-2012-1139	HIGH	9.3	10.0	8.6	NEW	12/28/2012
Array index error in FreeT attackers to cause a denia crafted glyph data in a BD	al of service (inva					

CVE-2012-1140 HIGH 9.3 10.0 8.6 NEW 12/18/2012

FreeType before 2.4.9 as used in Mozilla Firefox Mobile before 10.0.4 and other products, allows remote attackers to cause a

FreeType before 2.4.9, as used in Mozilla Firefox Mobile before 10.0.4 and other products, allows remote attackers to cause a denial of service (invalid heap read operation and memory corruption) or possibly execute arbitrary code via a crafted PostScript

font object.						
CVE-2012-1141	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid h in a BDF font.						
CVE-2012-1142	HIGH	9.3	10.0	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (invalid h data in a font.						
CVE-2012-1143	MEDIUM	4.3	2.9	8.6	NEW	12/28/2012
FreeType before 2.4.9, as denial of service (divide-by				4 and other products, a	allows remote attackers	to cause a
CVE-2012-1144	HIGH	9.3	10.0	8.6	NEW	12/18/2012
FreeType before 2.4.9, as denial of service (invalid h font.						
CVE-2012-5668	MEDIUM	4.3	2.9	8.6	NEW	12/06/2016
FreeType before 2.4.11 al vectors related to BDF for						and crash) via
CVE-2012-5669	MEDIUM	4.3	2.9	8.6	NEW	12/06/2016
The _bdf_parse_glyphs fu (crash) and possibly execution bounds read.						
CVE-2012-5670	MEDIUM	4.3	2.9	8.6	NEW	12/06/2016
The _bdf_parse_glyphs fu of-bounds write and crash						service (out-
CVE-2014-2240	HIGH	7.5	6.4	10.0	NEW	04/01/2014
Stack-based buffer overflocause a denial of service (te attackers to
CVE-2014-2241	MEDIUM	6.8	6.4	8.6	NEW	04/01/2014
The (1) cf2_initLocalRegic properly check if a subrout demonstrated by a crafted	tine exists, which					
CVE-2014-9656	HIGH	7.5	6.4	10.0	NEW	01/02/2017
The tt_sbit_decoder_load_ which allows remote attack crafted OpenType font.						
CVE-2014-9657	HIGH	7.5	6.4	10.0	NEW	01/02/2017
The tt_face_load_hdmx fu allows remote attackers to TrueType font.						
CVE-2014-9658	HIGH	7.5	6.4	10.0	NEW	01/02/2017
The tt_face_load_kern fun remote attackers to cause TrueType font.						
CVE-2014-9659	HIGH	7.5	6.4	10.0	NEW	11/22/2016
cff/cf2intrp.c in the CFF Cl been computed, which allo						

overflow) via a crafted OpenType font. NOTE: this vulnerability exists because of an incomplete fix for CVE-2014-2240. CVE-2014-9660 HIGH 7.5 64 10.0 **NEW** 01/02/2017 The bdf parse glyphs function in bdf/bdflib.c in FreeType before 2.5.4 does not properly handle a missing ENDCHAR record, which allows remote attackers to cause a denial of service (NULL pointer dereference) or possibly have unspecified other impact via a crafted BDF font. HIGH 7.5 64 NFW CVE-2014-9661 10.0 01/02/2017 type42/t42parse.c in FreeType before 2.5.4 does not consider that scanning can be incomplete without triggering an error, which allows remote attackers to cause a denial of service (use-after-free) or possibly have unspecified other impact via a crafted Type42 font. CVE-2014-9662 HIGH 7.5 10.0 **NEW** 6.4 01/02/2017 cff/cf2ft.c in FreeType before 2.5.4 does not validate the return values of point-allocation functions, which allows remote attackers to cause a denial of service (heap-based buffer overflow) or possibly have unspecified other impact via a crafted OTF font. CVE-2014-9663 HIGH 7.5 The tt_cmap4_validate function in sfnt/ttcmap.c in FreeType before 2.5.4 validates a certain length field before that field's value is completely calculated, which allows remote attackers to cause a denial of service (out-of-bounds read) or possibly have unspecified other impact via a crafted cmap SFNT table. CVE-2014-9664 6.8 8.6 NFW 01/02/2017 FreeType before 2.5.4 does not check for the end of the data during certain parsing actions, which allows remote attackers to cause a denial of service (out-of-bounds read) or possibly have unspecified other impact via a crafted Type42 font, related to type42/t42parse.c and type1/t1load.c. CVE-2014-9665 HIGH 7.5 6.4 10.0 **NEW** 01/02/2017 The Load SBit Png function in sfnt/pngshim.c in FreeType before 2.5.4 does not restrict the rows and pitch values of PNG data, which allows remote attackers to cause a denial of service (integer overflow and heap-based buffer overflow) or possibly have unspecified other impact by embedding a PNG file in a .ttf font file. 01/02/2017 CVE-2014-9666 6.8 6.4 8.6 **NEW** The tt_sbit_decoder_init function in sfnt/ttsbit.c in FreeType before 2.5.4 proceeds with a count-to-size association without restricting the count value, which allows remote attackers to cause a denial of service (integer overflow and out-of-bounds read) or possibly have unspecified other impact via a crafted embedded bitmap. CVE-2014-9667 8.6 **NEW** 01/02/2017 6.8 64 sfnt/ttload.c in FreeType before 2.5.4 proceeds with offset+length calculations without restricting the values, which allows remote attackers to cause a denial of service (integer overflow and out-of-bounds read) or possibly have unspecified other impact via a crafted SFNT table. HIGH CVE-2014-9668 7.5 6.4 10.0 **NEW** 01/02/2017 The woff open font function in sfnt/sfobis.c in FreeType before 2.5.4 proceeds with offset+length calculations without restricting length values, which allows remote attackers to cause a denial of service (integer overflow and heap-based buffer overflow) or possibly have unspecified other impact via a crafted Web Open Font Format (WOFF) file. MEDIUM CVE-2014-9669 6.8 6.4 8.6 **NEW** 01/02/2017 Multiple integer overflows in sfnt/ttcmap.c in FreeType before 2.5.4 allow remote attackers to cause a denial of service (out-ofbounds read or memory corruption) or possibly have unspecified other impact via a crafted cmap SFNT table. CVE-2014-9670 4.3 2.9 8.6 01/02/2017 Multiple integer signedness errors in the pcf_qet_encodings function in pcf/pcfread.c in FreeType before 2.5.4 allow remote attackers to cause a denial of service (integer overflow, NULL pointer dereference, and application crash) via a crafted PCF file that specifies negative values for the first column and first row. 8.6 CVE-2014-9671 4.3 2.9 **NEW** 01/02/2017 Off-by-one error in the pcf_get_properties function in pcf/pcfread.c in FreeType before 2.5.4 allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted PCF file with a 0xffffffff size value that is improperly incremented. MEDIUM 5.8 4.9 8.6 NFW 01/02/2017 CVE-2014-9672

Array index error in the parse_fond function in base/ftmac.c in FreeType before 2.5.4 allows remote attackers to cause a denial of service (out-of-bounds read) or obtain sensitive information from process memory via a crafted FOND resource in a Mac font file.

CVE-2014-9673

MEDIUM

6.8

NEW

01/02/2017

Integer signedness error in the Mac_Read_POST_Resource function in base/ftobjs.c in FreeType before 2.5.4 allows remote attackers to cause a denial of service (heap-based buffer overflow) or possibly have unspecified other impact via a crafted Mac font.

CVE-2014-9674

HIGH

7.5

6.4

6.4

01/02/2017

The Mac_Read_POST_Resource function in base/ftobjs.c in FreeType before 2.5.4 proceeds with adding to length values without validating the original values, which allows remote attackers to cause a denial of service (integer overflow and heap-based buffer overflow) or possibly have unspecified other impact via a crafted Mac font.

CVE-2014-9675

MEDIUM

5.0

2.9

10.0

10.0

86

NEW

NEW

01/02/2017

bdf/bdflib.c in FreeType before 2.5.4 identifies property names by only verifying that an initial substring is present, which allows remote attackers to discover heap pointer values and bypass the ASLR protection mechanism via a crafted BDF font.

CVE-2014-9745

MEDIUM

5.0

2.9

10.0

NEW

12/07/2016

The parse_encoding function in type1/t1load.c in FreeType before 2.5.3 allows remote attackers to cause a denial of service (infinite loop) via a "broken number-with-base" in a Postscript stream, as demonstrated by 8#garbage.

CVE-2014-9746

HIGH

7.5

6.4

10.0

NEW

06/07/2016

The (1) t1_parse_font_matrix function in type1/t1load.c, (2) cid_parse_font_matrix function in cid/cidload.c, (3) t42_parse_font_matrix function in type42/t42parse.c, and (4) ps_parser_load_field function in psaux/psobjs.c in FreeType before 2.5.4 do not check return values, which allows remote attackers to cause a denial of service (uninitialized memory access and application crash) or possibly have unspecified other impact via a crafted font.

CVE-2014-9747

MEDIUM

5.0

2.9

10.0

NEW

06/08/2016

The t42_parse_encoding function in type42/t42parse.c in FreeType before 2.5.4 does not properly update the current position for immediates-only mode, which allows remote attackers to cause a denial of service (infinite loop) via a Type42 font.

CVE-2016-10244

MEDIUM

6.8

6.4

8.6

NEV

04/07/2017

The parse_charstrings function in type1/t1load.c in FreeType 2 before 2.7 does not ensure that a font contains a glyph name, which allows remote attackers to cause a denial of service (heap-based buffer over-read) or possibly have unspecified other impact via a crafted file.

CVE-2017-8105

HIGH

7.5

6.4

10.0

NEW

04/28/2017

FreeType 2 before 2017-03-24 has an out-of-bounds write caused by a heap-based buffer overflow related to the t1_decoder_parse_charstrings function in psaux/t1decode.c.

OpenSSL 1.0.1d

SSLeay License (weak reciprocal)

OpenSSL Combined License (permissive)

Vulnerability Name	Severity	Base	Exploitability	Impact	Status	Published
101347	MEDIUM	4.3	2.9	8.6	DUPLICATE	11/02/2016

OpenSSL contains a flaw in the ssl_get_algorithm2() function in ssl/s3_lib.c that is triggered when determining the TLS version and which hash to use during the handling of specially crafted traffic. This may allow a remote attacker to crash an application linked against the library.

101597

MEDIUM

5.4

6.9

4.9

DUPLICATE

08/25/2016

OpenSSL contains a flaw in the DTLS (Datagram Transport Layer Security) protocol implementation that is triggered when a handshake renegotiation packet is lost or discarded. This may allow an attacker capable of intercepting communication between a client and server (i.e. Man-in-the-Middle) to crash the DTLS client or server application.

101843

MEDIUM

4.3

2.9

8.6

DUPLICATE

12/12/2016

OpenSSL contains a NULL pointer dereference flaw in the ssl3_take_mac() function in ssl/s3_both.c that is triggered when handling handshakes with tampered TLS records. With a specially crafted request, a remote attacker can cause a service to crash.

104810 LOW 1.9 2.9 3.4 DUPLICATE 05/10/2017

					ementation that is triggered process to recover ECDSA	
<u>105465</u>	MEDIUM	5.0	2.9	10.0	DUPLICATE	03/09/2017
allows a remote attacker which would allow decryp	function in ssl/t to disclose up to tion of all traffic	t1_lib.c. The is o 64k of memon to and from the	sue is triggered ory at a time, w ne server. This	d during the handlir hich may contain so will affect any serv	in ssl/d1_both.c and ig of TLS heartbeat extensi ensitive information includir ice that uses TLS and is no nally, both servers and clier	ng secret keys, It limited to
107729	MEDIUM	6.8	6.4	8.6	DUPLICATE	05/10/2017
	g material. This	can then be le	everaged to co	nduct a Man-in-the-	a remote attacker can forc Middle (MitM) attack allowi	
113373	HIGH	7.1	6.9	8.6	DUPLICATE	12/13/2016
					en handling a specially crain r to cause a denial of servic	
113374	HIGH	7.1	6.9	8.6	DUPLICATE	12/13/2016
	verified, which				dling a session ticket that her of invalid session tickets,	
113377	MEDIUM	4.3	2.9	8.6	DUPLICATE	12/21/2016
OpenSSL contains a flaw insecure SSL 3.0 handsh				is not properly hor	ored by the program, which	n can cause
113829	LOW	2.6	2.9	4.9	NEW	06/25/2016
	t on the MD5 ha	ash function. T			t is due to half of the estab asily conduct attacks relate	
122875	MEDIUM	6.8	6.4	8.6	DUPLICATE	02/17/2017
	ded client while	attempting to			d when a NewSessionTicker allow a remote attacker to	
123172	MEDIUM	4.3	2.9	8.6	DUPLICATE	02/07/2017
	polynomial fiel	d when parsin	g a ECParame	ters structure. This	to/bn/bn_gf2m.c. The issue may allow a remote attack sources.	
123173	MEDIUM	4.3	2.9	8.6	DUPLICATE	02/07/2017
	ings is not prop	erly checked. \	With a specially	y crafted certificate	o/x509/x509_vfy.c that is tri or CRL, a remote attacker	
123174	MEDIUM	5.0	2.9	10.0	DUPLICATE	02/07/2017
	ASN.1-encoded				on in crypto/pkcs7/pk7_doit. allow a remote attacker to d	
<u>123175</u>	MEDIUM	5.0	2.9	10.0	DUPLICATE	02/07/2017
					during the verification of a emote attacker to cause a	
123176	HIGH	7.5	6.4	10.0	DUPLICATE	02/07/2017
OpenSSL contains a flaw	that is triggere	d as user-supp	olied input is no	ot properly validated	d when a DTLS peer handle	es application

data between the ChangeCipherSpec and Finished messages. This may allow a remote attacker to cause an invalid free, which will corrupt memory and cause a denial of service or potentially execute arbitrary code. 137577 HIGH 7.8 6.9 10.0 **DUPLICATE** 05/19/2017 OpenSSL contains a flaw in crypto/asn1/a d2i_fp.c that is triggered during the handling of large length fields in ASN.1 BIO. This may allow a remote attacker to exhaust memory resources, potentially crashing a process linked against the library. LOW 2.9 **DUPLICATE** 2.6 05/19/2017 OpenSSL contains a flaw in the aesni_cbc_hmac_sha1_cipher() function in crypto/evp/e_aes_cbc_hmac_sha1.c and aesni cbc hmac sha256 cipher() function in crypto/evp/e aes cbc hmac sha256.c. The issue is triggered when a connection uses an AES CBC cipher and AES-NI is supported by the server. This may allow a MitM (Man-in-the-Middle) attacker to conduct a padding oracle attack to potentially decrypt traffic. 137897 4.9 10.0 **DUPLICATE** 05/19/2017 OpenSSL contains an out-of-bounds read flaw in the X509 NAME oneline() function in crypto/x509/x509 obj.c that is triggered when handling overly long ASN1 strings. This may allow a remote attacker to potentially disclose arbitrary stack memory contents. 137898 5.0 2.9 10.0 **DUPLICATE** 05/19/2017 OpenSSL contains an overflow condition in the EVP_EncryptUpdate() function in crypto/evp_enc.c that is triggered when handling a large amount of input data after a previous call to the same function with a partial block. This may allow a contextdependent attacker to cause a heap-based buffer overflow, crashing a process linked against the library or potentially resulting in the execution of arbitrary code. 137899 5.0 2.9 10.0 **DUPLICATE** 05/19/2017 OpenSSL contains an overflow condition in the EVP_EncodeUpdate() function in crypto/evp/encode.c that is triggered when handling a large amount of input data. This may allow a context-dependent attacker to cause a heap-based buffer overflow, crashing a process linked against the library or potentially resulting in the execution of arbitrary code. 137900 HIGH 10.0 10.0 10.0 **DUPLICATE** 05/19/2017 OpenSSL contains an underflow condition in the ASN.1 encoder that is triggered when attempting to encode the value zero represented as a negative integer. This may allow a remote attacker to corrupt memory and potentially execute arbitrary code. CVE-2010-5298 4.0 4.9 01/26/2017 Race condition in the ssl3_read_bytes function in s3_pkt.c in OpenSSL through 1.0.1g, when SSL_MODE_RELEASE_BUFFERS is enabled, allows remote attackers to inject data across sessions or cause a denial of service (use-after-free and parsing error) via an SSL connection in a multithreaded environment. 4.3 2.9 CVE-2013-4353 8.6 **NEW** 01/06/2017 The ssl3_take_mac function in ssl/s3_both.c in OpenSSL 1.0.1 before 1.0.1f allows remote TLS servers to cause a denial of service (NULL pointer dereference and application crash) via a crafted Next Protocol Negotiation record in a TLS handshake. CVE-2013-6449 4.3 2.9 8.6 The ssl get algorithm2 function in ssl/s3 lib.c in OpenSSL before 1.0.2 obtains a certain version number from an incorrect data structure, which allows remote attackers to cause a denial of service (daemon crash) via crafted traffic from a TLS 1.2 client.

CVE-2013-6450 5.8 4.9 8.6 **NEW**

The DTLS retransmission implementation in OpenSSL 1.0.0 before 1.0.0l and 1.0.1 before 1.0.1f does not properly maintain data structures for digest and encryption contexts, which might allow man-in-the-middle attackers to trigger the use of a different context and cause a denial of service (application crash) by interfering with packet delivery, related to ssl/d1 both.c and ssl /t1 enc.c.

CVE-2014-0160 5.0 2.9 10.0 01/06/2017 **NEW**

The (1) TLS and (2) DTLS implementations in OpenSSL 1.0.1 before 1.0.1g do not properly handle Heartbeat Extension packets, which allows remote attackers to obtain sensitive information from process memory via crafted packets that trigger a buffer overread, as demonstrated by reading private keys, related to d1 both, c and t1 lib.c, aka the Heartbleed bug.

6.4 01/06/2017 CVE-2014-0195

The dtls1_reassemble_fragment function in d1_both.c in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h does not properly validate fragment lengths in DTLS ClientHello messages, which allows remote attackers to execute arbitrary code or cause a denial of service (buffer overflow and application crash) via a long non-initial fragment.

<u>CVE-2014-0198</u> <u>MEDIUM</u> 4.3 2.9 8.6 <u>NEW</u> 01/18/2017

The do_ssl3_write function in s3_pkt.c in OpenSSL 1.x through 1.0.1g, when SSL_MODE_RELEASE_BUFFERS is enabled, does not properly manage a buffer pointer during certain recursive calls, which allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via vectors that trigger an alert condition.

<u>CVE-2014-0221</u> MEDIUM 4.3 2.9 8.6 NEW 01/06/2017

The dtls1_get_message_fragment function in d1_both.c in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h allows remote attackers to cause a denial of service (recursion and client crash) via a DTLS hello message in an invalid DTLS handshake.

<u>CVE-2014-0224</u> MEDIUM 6.8 6.4 8.6 NEW 01/18/2017

OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h does not properly restrict processing of ChangeCipherSpec messages, which allows man-in-the-middle attackers to trigger use of a zero-length master key in certain OpenSSL-to-OpenSSL communications, and consequently hijack sessions or obtain sensitive information, via a crafted TLS handshake, aka the "CCS Injection" vulnerability.

<u>CVE-2014-3470</u> MEDIUM 4.3 2.9 8.6 NEW 01/18/2017

The ssl3_send_client_key_exchange function in s3_clnt.c in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1 h, when an anonymous ECDH cipher suite is used, allows remote attackers to cause a denial of service (NULL pointer dereference and client crash) by triggering a NULL certificate value.

<u>CVE-2014-3505</u> <u>MEDIUM</u> 5.0 2.9 10.0 <u>NEW</u> 01/06/2017

Double free vulnerability in d1_both.c in the DTLS implementation in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote attackers to cause a denial of service (application crash) via crafted DTLS packets that trigger an error condition.

<u>CVE-2014-3506</u> MEDIUM 5.0 2.9 10.0 NEW 01/06/2017

d1_both.c in the DTLS implementation in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote attackers to cause a denial of service (memory consumption) via crafted DTLS handshake messages that trigger memory allocations corresponding to large length values.

<u>CVE-2014-3507</u> MEDIUM 5.0 2.9 10.0 NEW 01/06/2017

Memory leak in d1_both.c in the DTLS implementation in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote attackers to cause a denial of service (memory consumption) via zero-length DTLS fragments that trigger improper handling of the return value of a certain insert function.

CVE-2014-3508 MEDIUM 4.3 2.9 8.6 NEW 01/06/2017

The OBJ_obj2txt function in crypto/objects/obj_dat.c in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1 i, when pretty printing is used, does not ensure the presence of '\0' characters, which allows context-dependent attackers to obtain sensitive information from process stack memory by reading output from X509_name_oneline, X509_name_print_ex, and unspecified other functions.

CVE-2014-3509 MEDIUM 6.8 6.4 8.6 NEW 01/06/2017

Race condition in the ssl_parse_serverhello_tlsext function in t1_lib.c in OpenSSL 1.0.0 before 1.0.0n and 1.0.1 before 1.0.1i, when multithreading and session resumption are used, allows remote SSL servers to cause a denial of service (memory overwrite and client application crash) or possibly have unspecified other impact by sending Elliptic Curve (EC) Supported Point Formats Extension data.

CVE-2014-3510 MEDIUM 4.3 2.9 8.6 NEW 01/06/2017

The ssl3_send_client_key_exchange function in s3_clnt.c in OpenSSL 0.9.8 before 0.9.8zb, 1.0.0 before 1.0.0n, and 1.0.1 before 1.0.1i allows remote DTLS servers to cause a denial of service (NULL pointer dereference and client application crash) via a crafted handshake message in conjunction with a (1) anonymous DH or (2) anonymous ECDH ciphersuite.

CVE-2014-3511 MEDIUM 4.3 2.9 8.6 NEW 01/06/2017

The ssl23_get_client_hello function in s23_srvr.c in OpenSSL 1.0.1 before 1.0.1i allows man-in-the-middle attackers to force the use of TLS 1.0 by triggering ClientHello message fragmentation in communication between a client and server that both support later TLS versions, related to a "protocol downgrade" issue.

<u>CVE-2014-3512</u> **HIGH** 7.5 6.4 10.0 **NEW** 01/06/2017

Multiple buffer overflows in crypto/srp/srp_lib.c in the SRP implementation in OpenSSL 1.0.1 before 1.0.1i allow remote attackers to cause a denial of service (application crash) or possibly have unspecified other impact via an invalid SRP (1) g, (2) A, or (3) B

parameter. **HIGH** 7.1 6.9 8.6 **NEW** 01/02/2017 CVE-2014-3513 Memory leak in d1 srtp.c in the DTLS SRTP extension in OpenSSL 1.0.1 before 1.0.1 allows remote attackers to cause a denial of service (memory consumption) via a crafted handshake message. CVE-2014-3566 4.3 2.9 8.6 **NEW** 03/23/2017 The SSL protocol 3.0, as used in OpenSSL through 1.0.1i and other products, uses nondeterministic CBC padding, which makes it easier for man-in-the-middle attackers to obtain cleartext data via a padding-oracle attack, aka the "POODLE" issue. CVE-2014-3567 7.1 6.9 01/02/2017 HIGH Memory leak in the tls_decrypt_ticket function in t1_lib.c in OpenSSL before 0.9.8zc, 1.0.0 before 1.0.0o, and 1.0.1 before 1.0.1j allows remote attackers to cause a denial of service (memory consumption) via a crafted session ticket that triggers an integritycheck failure.

4.3 2.9 CVE-2014-3568 8.6 **NEW** 01/02/2017

OpenSSL before 0.9.8zc, 1.0.0 before 1.0.0o, and 1.0.1 before 1.0.1j does not properly enforce the no-ssl3 build option, which allows remote attackers to bypass intended access restrictions via an SSL 3.0 handshake, related to s23_clnt.c and s23_srvr.c.

CVE-2014-3570 5.0 10.0 01/02/2017

The BN_sqr implementation in OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k does not properly calculate the square of a BIGNUM value, which might make it easier for remote attackers to defeat cryptographic protection mechanisms via unspecified vectors, related to crypto/bn/asm/mips.pl, crypto/bn/asm/x86_64-gcc.c, and crypto/bn/bn_asm.c.

CVE-2014-3571 5.0 29 10.0 **NEW** 01/02/2017

OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a crafted DTLS message that is processed with a different read operation for the handshake header than for the handshake body, related to the dtls1_get_record function in d1_pkt.c and the ssl3_read_n function in s3_pkt.c.

CVE-2014-3572 5.0 2.9 10.0 **NEW** 01/02/2017

The ssl3_get_key_exchange function in s3_clnt.c in OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k allows remote SSL servers to conduct ECDHE-to-ECDH downgrade attacks and trigger a loss of forward secrecy by omitting the ServerKeyExchange message.

2.9 CVE-2014-5139 4.3 8.6 01/06/2017 NEW

The ssl_set_client_disabled function in t1_lib.c in OpenSSL 1.0.1 before 1.0.1i allows remote SSL servers to cause a denial of service (NULL pointer dereference and client application crash) via a ServerHello message that includes an SRP ciphersuite without the required negotiation of that ciphersuite with the client.

CVE-2014-8176 **HIGH** 7.5 6.4 10.0 **NEW** 12/30/2016

The dtls1 clear gueues function in ssl/d1 lib.c in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h frees data structures without considering that application data can arrive between a ChangeCipherSpec message and a Finished message, which allows remote DTLS peers to cause a denial of service (memory corruption and application crash) or possibly have unspecified other impact via unexpected application data.

CVE-2014-8275 5.0 2.9 10.0 **NEW** 01/02/2017

OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k does not enforce certain constraints on certificate data, which allows remote attackers to defeat a fingerprint-based certificate-blacklist protection mechanism by including crafted data within a certificate's unsigned portion, related to crypto/asn1/a verify.c, crypto/dsa/dsa asn1.c, crypto/ecdsa/ecs vrf.c, and crypto /x509/x_all.c.

CVE-2015-0204 4.3 2.9 8.6 **NEW** 01/02/2017

The ssl3 get key exchange function in s3 clnt.c in OpenSSL before 0.9.8zd, 1.0.0 before 1.0.0p, and 1.0.1 before 1.0.1k allows remote SSL servers to conduct RSA-to-EXPORT_RSA downgrade attacks and facilitate brute-force decryption by offering a weak ephemeral RSA key in a noncompliant role, related to the "FREAK" issue, NOTE; the scope of this CVE is only client code based on OpenSSL, not EXPORT_RSA issues associated with servers or other TLS implementations.

CVE-2015-0205 **NEW** 01/02/2017

The ssl3_get_cert_verify function in s3_srvr.c in OpenSSL 1.0.0 before 1.0.0p and 1.0.1 before 1.0.1k accepts client authentication with a Diffie-Hellman (DH) certificate without requiring a CertificateVerify message, which allows remote attackers to obtain access without knowledge of a private key via crafted TLS Handshake Protocol traffic to a server that recognizes a Certification Authority with DH support.

CVE-2015-0206

MEDIUM

5.0

2.9

10.0

NEW

01/02/2017

Memory leak in the dtls1_buffer_record function in d1_pkt.c in OpenSSL 1.0.0 before 1.0.0p and 1.0.1 before 1.0.1k allows remote attackers to cause a denial of service (memory consumption) by sending many duplicate records for the next epoch, leading to failure of replay detection.

CVE-2015-0207

MEDIUM

5.0

2.9

10.0

NEW

01/02/2017

The dtls1_listen function in d1_lib.c in OpenSSL 1.0.2 before 1.0.2a does not properly isolate the state information of independent data streams, which allows remote attackers to cause a denial of service (application crash) via crafted DTLS traffic, as demonstrated by DTLS 1.0 traffic to a DTLS 1.2 server.

CVE-2015-0208

MEDIUM

4.3

2.9

8.6

NEW

01/02/2017

The ASN.1 signature-verification implementation in the rsa_item_verify function in crypto/rsa/rsa_ameth.c in OpenSSL 1.0.2 before 1.0.2a allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via crafted RSA PSS parameters to an endpoint that uses the certificate-verification feature.

CVE-2015-0209

MEDIUM

6.8

6.4

8.6

NFW

01/02/2017

Use-after-free vulnerability in the d2i_ECPrivateKey function in crypto/ec/ec_asn1.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0 r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a might allow remote attackers to cause a denial of service (memory corruption and application crash) or possibly have unspecified other impact via a malformed Elliptic Curve (EC) private-key file that is improperly handled during import.

CVE-2015-0285

MEDIUM

4.3

2.9

8.6

NEW

01/02/2017

The ssl3_client_hello function in s3_clnt.c in OpenSSL 1.0.2 before 1.0.2a does not ensure that the PRNG is seeded before proceeding with a handshake, which makes it easier for remote attackers to defeat cryptographic protection mechanisms by sniffing the network and then conducting a brute-force attack.

CVE-2015-0286

MEDIUM

5.0

2.9

10.0

NEW

01/02/2017

The ASN1_TYPE_cmp function in crypto/asn1/a_type.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a does not properly perform boolean-type comparisons, which allows remote attackers to cause a denial of service (invalid read operation and application crash) via a crafted X.509 certificate to an endpoint that uses the certificate-verification feature.

CVE-2015-0287

MEDIUM

5.0

2.9

10.0

NEW

01/02/2017

The ASN1_item_ex_d2i function in crypto/asn1/tasn_dec.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a does not reinitialize CHOICE and ADB data structures, which might allow attackers to cause a denial of service (invalid write operation and memory corruption) by leveraging an application that relies on ASN.1 structure reuse.

CVE-2015-0288

MEDIUM

5.0

2.9

10.0

NEW

01/02/2017

The X509_to_X509_REQ function in crypto/x509/x509_req.c in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a might allow attackers to cause a denial of service (NULL pointer dereference and application crash) via an invalid certificate key.

CVE-2015-0289

MEDIUM

5.0

2.9

10.0

NFW

01/02/2017

The PKCS#7 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a does not properly handle a lack of outer ContentInfo, which allows attackers to cause a denial of service (NULL pointer dereference and application crash) by leveraging an application that processes arbitrary PKCS#7 data and providing malformed data with ASN.1 encoding, related to crypto/pkcs7/pk7_doit.c and crypto/pkcs7/pk7_lib.c.

CVE-2015-0290

MEDIUM

5.0

2.9

10.0

NFW

01/02/2017

The multi-block feature in the ssl3_write_bytes function in s3_pkt.c in OpenSSL 1.0.2 before 1.0.2a on 64-bit x86 platforms with AES NI support does not properly handle certain non-blocking I/O cases, which allows remote attackers to cause a denial of service (pointer corruption and application crash) via unspecified vectors.

CVE-2015-0291

MEDIUM

5.0

2.9

10.0

NEW

01/02/2017

The sigalgs implementation in t1_lib.c in OpenSSL 1.0.2 before 1.0.2a allows remote attackers to cause a denial of service (NULL pointer dereference and daemon crash) by using an invalid signature_algorithms extension in the ClientHello message during a renegotiation.

CVE-2015-0292

HIGH

7.5

6.4

10.0

NEW

01/02/2017

Integer underflow in the EVP_DecodeUpdate function in crypto/evp/encode.c in the base64-decoding implementation in OpenSSL before 0.9.8za, 1.0.0 before 1.0.0m, and 1.0.1 before 1.0.1h allows remote attackers to cause a denial of service (memory corruption) or possibly have unspecified other impact via crafted base64 data that triggers a buffer overflow.

CVE-2015-0293

MEDIUM

5.0

2.9

10.0

NFW

01/02/2017

The SSLv2 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a allows remote attackers to cause a denial of service (s2_lib.c assertion failure and daemon exit) via a crafted CLIENT-MASTER-KEY message.

CVE-2015-1787

LOW

2.6

2.9

49

NEW

01/02/2017

The ssl3_get_client_key_exchange function in s3_srvr.c in OpenSSL 1.0.2 before 1.0.2a, when client authentication and an ephemeral Diffie-Hellman ciphersuite are enabled, allows remote attackers to cause a denial of service (daemon crash) via a ClientKeyExchange message with a length of zero.

CVE-2015-1788

MEDIUM

4.3

2.9

8.6

NEW

12/30/2016

The BN_GF2m_mod_inv function in crypto/bn/bn_gf2m.c in OpenSSL before 0.9.8s, 1.0.0 before 1.0.0e, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b does not properly handle ECParameters structures in which the curve is over a malformed binary polynomial field, which allows remote attackers to cause a denial of service (infinite loop) via a session that uses an Elliptic Curve algorithm, as demonstrated by an attack against a server that supports client authentication.

CVE-2015-1789

MEDIUM

4.3

2.9

86

NFW

12/30/2016

The X509_cmp_time function in crypto/x509/x509_vfy.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b allows remote attackers to cause a denial of service (out-of-bounds read and application crash) via a crafted length field in ASN1_TIME data, as demonstrated by an attack against a server that supports client authentication with a custom verification callback.

CVE-2015-1790

MEDIUM

5.0

2.9

10.0

NEW

12/30/2016

The PKCS7_dataDecodefunction in crypto/pkcs7/pk7_doit.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via a PKCS#7 blob that uses ASN.1 encoding and lacks inner EncryptedContent data.

CVE-2015-1791

MEDIUM

6.8

6.4

8.6

NEW

12/30/2016

Race condition in the ssl3_get_new_session_ticket function in ssl/s3_clnt.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b, when used for a multi-threaded client, allows remote attackers to cause a denial of service (double free and application crash) or possibly have unspecified other impact by providing a NewSessionTicket during an attempt to reuse a ticket that had been obtained earlier.

CVE-2015-1792

MEDILIM

5.0

2.9

10.0

NEW

12/30/2016

The do_free_upto function in crypto/cms/cms_smime.c in OpenSSL before 0.9.8zg, 1.0.0 before 1.0.0s, 1.0.1 before 1.0.1n, and 1.0.2 before 1.0.2b allows remote attackers to cause a denial of service (infinite loop) via vectors that trigger a NULL value of a BIO data structure, as demonstrated by an unrecognized X.660 OID for a hash function.

CVE-2015-3194

MEDILIM

5.0

2.9

10.0

NEW

05/08/2017

crypto/rsa/rsa_ameth.c in OpenSSL 1.0.1 before 1.0.1q and 1.0.2 before 1.0.2e allows remote attackers to cause a denial of service (NULL pointer dereference and application crash) via an RSA PSS ASN.1 signature that lacks a mask generation function parameter.

CVE-2015-3195

MEDIUM

5.0

2.9

10.0

NEW

05/08/2017

The ASN1_TFLG_COMBINE implementation in crypto/asn1/tasn_dec.c in OpenSSL before 0.9.8zh, 1.0.0 before 1.0.0t, 1.0.1 before 1.0.1q, and 1.0.2 before 1.0.2e mishandles errors caused by malformed X509_ATTRIBUTE data, which allows remote attackers to obtain sensitive information from process memory by triggering a decoding failure in a PKCS#7 or CMS application.

CVE-2015-3196

MEDIUM

4.3

2.9

8.6

NEW

05/08/2017

ssl/s3_clnt.c in OpenSSL 1.0.0 before 1.0.0t, 1.0.1 before 1.0.1p, and 1.0.2 before 1.0.2d, when used for a multi-threaded client, writes the PSK identity hint to an incorrect data structure, which allows remote servers to cause a denial of service (race condition and double free) via a crafted ServerKeyExchange message.

CVE-2015-3197

MEDIUM

4.3

2.9

8.6

NEW

05/09/2017

ssl/s2_srvr.c in OpenSSL 1.0.1 before 1.0.1r and 1.0.2 before 1.0.2f does not prevent use of disabled ciphers, which makes it easier for man-in-the-middle attackers to defeat cryptographic protection mechanisms by performing computations on SSLv2 traffic, related to the get_client_master_key and get_client_hello functions.

<u>CVE-2015-4000</u> MEDIUM 4.3 2.9 8.6 NEW 12/30/2016

The TLS protocol 1.2 and earlier, when a DHE_EXPORT ciphersuite is enabled on a server but not on a client, does not properly convey a DHE_EXPORT choice, which allows man-in-the-middle attackers to conduct cipher-downgrade attacks by rewriting a ClientHello with DHE replaced by DHE_EXPORT and then rewriting a ServerHello with DHE_EXPORT replaced by DHE, aka the "Logjam" issue.

<u>CVE-2016-0702</u> LOW 1.9 2.9 3.4 NEW 05/09/2017

The MOD_EXP_CTIME_COPY_FROM_PREBUF function in crypto/bn/bn_exp.c in OpenSSL 1.0.1 before 1.0.1s and 1.0.2 before 1.0.2g does not properly consider cache-bank access times during modular exponentiation, which makes it easier for local users to discover RSA keys by running a crafted application on the same Intel Sandy Bridge CPU core as a victim and leveraging cache-bank conflicts, aka a "CacheBleed" attack.

CVE-2016-0703 MEDIUM 4.3 2.9 8.6 NEW 05/09/2017

The get_client_master_key function in s2_srvr.c in the SSLv2 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a accepts a nonzero CLIENT-MASTER-KEY CLEAR-KEY-LENGTH value for an arbitrary cipher, which allows man-in-the-middle attackers to determine the MASTER-KEY value and decrypt TLS ciphertext data by leveraging a Bleichenbacher RSA padding oracle, a related issue to CVE-2016-0800.

CVE-2016-0704 MEDIUM 4.3 2.9 8.6 NEW 05/09/2017

An oracle protection mechanism in the get_client_master_key function in s2_srvr.c in the SSLv2 implementation in OpenSSL before 0.9.8zf, 1.0.0 before 1.0.0r, 1.0.1 before 1.0.1m, and 1.0.2 before 1.0.2a overwrites incorrect MASTER-KEY bytes during use of export cipher suites, which makes it easier for remote attackers to decrypt TLS ciphertext data by leveraging a Bleichenbacher RSA padding oracle, a related issue to CVE-2016-0800.

<u>CVE-2016-0705</u> **HIGH** 10.0 10.0 NEW 05/09/2017

Double free vulnerability in the dsa_priv_decode function in crypto/dsa/dsa_ameth.c in OpenSSL 1.0.1 before 1.0.1s and 1.0.2 before 1.0.2g allows remote attackers to cause a denial of service (memory corruption) or possibly have unspecified other impact via a malformed DSA private key.

<u>CVE-2016-0797</u> MEDIUM 5.0 2.9 10.0 NEW 05/09/2017

Multiple integer overflows in OpenSSL 1.0.1 before 1.0.1s and 1.0.2 before 1.0.2g allow remote attackers to cause a denial of service (heap memory corruption or NULL pointer dereference) or possibly have unspecified other impact via a long digit string that is mishandled by the (1) BN_dec2bn or (2) BN_hex2bn function, related to crypto/bn/bn.h and crypto/bn/bn_print.c.

<u>CVE-2016-0798</u> **HIGH** 7.8 6.9 10.0 **NEW** 05/09/2017

Memory leak in the SRP_VBASE_get_by_user implementation in OpenSSL 1.0.1 before 1.0.1s and 1.0.2 before 1.0.2g allows remote attackers to cause a denial of service (memory consumption) by providing an invalid username in a connection attempt, related to apps/s_server.c and crypto/srp/srp_vfy.c.

CVE-2016-0799 HIGH 10.0 10.0 NEW 05/09/2017

The fmtstr function in crypto/bio/b_print.c in OpenSSL 1.0.1 before 1.0.1s and 1.0.2 before 1.0.2g improperly calculates string lengths, which allows remote attackers to cause a denial of service (overflow and out-of-bounds read) or possibly have unspecified other impact via a long string, as demonstrated by a large amount of ASN.1 data, a different vulnerability than CVE-2016-2842.

CVE-2016-0800 MEDIUM 4.3 2.9 8.6 NEW 05/09/2017

The SSLv2 protocol, as used in OpenSSL before 1.0.1s and 1.0.2 before 1.0.2g and other products, requires a server to send a ServerVerify message before establishing that a client possesses certain plaintext RSA data, which makes it easier for remote attackers to decrypt TLS ciphertext data by leveraging a Bleichenbacher RSA padding oracle, aka a "DROWN" attack.

CVE-2016-2105 MEDIUM 5.0 2.9 10.0 NEW 02/28/2017

Integer overflow in the EVP_EncodeUpdate function in crypto/evp/encode.c in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to cause a denial of service (heap memory corruption) via a large amount of binary data.

CVE-2016-2106 MEDIUM 5.0 2.9 10.0 NEW 02/28/2017

Integer overflow in the EVP_EncryptUpdate function in crypto/evp/evp_enc.c in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to cause a denial of service (heap memory corruption) via a large amount of data.

CVE-2016-2107 LOW 2.6 2.9 4.9 NEW 05/09/2017

The AES-NI implementation in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h does not consider memory allocation during a certain padding check, which allows remote attackers to obtain sensitive cleartext information via a padding-oracle attack against

CVE-2016-2108 **HIGH** 10.0 10.0 10.0 05/09/2017 The ASN.1 implementation in OpenSSL before 1.0.1o and 1.0.2 before 1.0.2c allows remote attackers to execute arbitrary code or cause a denial of service (buffer underflow and memory corruption) via an ANY field in crafted serialized data, aka the "negative zero" issue. HIGH 7.8 CVE-2016-2109 6.9 10.0 **NFW** 02/28/2017 The asn1_d2i_read_bio function in crypto/asn1/a_d2i_fp.c in the ASN.1 BIO implementation in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to cause a denial of service (memory consumption) via a short invalid encoding. CVE-2016-2176 6.4 4.9 10.0 02/28/2017 The X509 NAME oneline function in crypto/x509/x509 obi.c in OpenSSL before 1.0.1t and 1.0.2 before 1.0.2h allows remote attackers to obtain sensitive information from process stack memory or cause a denial of service (buffer over-read) via crafted EBCDIC ASN.1 data. CVE-2016-2177 HIGH 7.5 NFW 02/23/2017 OpenSSL through 1.0.2h incorrectly uses pointer arithmetic for heap-buffer boundary checks, which might allow remote attackers to cause a denial of service (integer overflow and application crash) or possibly have unspecified other impact by leveraging unexpected malloc behavior, related to s3_srvr.c, ssl_sess.c, and t1_lib.c. LOW CVE-2016-2178 2.1 2.9 NFW 02/23/2017 The dsa_sign_setup function in crypto/dsa/dsa_ossl.c in OpenSSL through 1.0.2h does not properly ensure the use of constanttime operations, which makes it easier for local users to discover a DSA private key via a timing side-channel attack. CVE-2016-2179 5.0 2.9 10.0 02/23/2017 The DTLS implementation in OpenSSL before 1.1.0 does not properly restrict the lifetime of queue entries associated with unused out-of-order messages, which allows remote attackers to cause a denial of service (memory consumption) by maintaining many crafted DTLS sessions simultaneously, related to d1_lib.c, statem_dtls.c, statem_lib.c, and statem_srvr.c. CVE-2016-2180 5.0 29 10.0 NEW 02/23/2017 The TS_OBJ_print_bio function in crypto/ts/ts_lib.c in the X.509 Public Key Infrastructure Time-Stamp Protocol (TSP) implementation in OpenSSL through 1.0.2h allows remote attackers to cause a denial of service (out-of-bounds read and application crash) via a crafted time-stamp file that is mishandled by the "openssI ts" command. 5.0 CVE-2016-2181 2.9 10.0 **NEW** 02/23/2017 The Anti-Replay feature in the DTLS implementation in OpenSSL before 1.1.0 mishandles early use of a new epoch number in conjunction with a large sequence number, which allows remote attackers to cause a denial of service (false-positive packet drops) via spoofed DTLS records, related to rec_layer_d1.c and ssl3_record.c. 7.5 CVE-2016-2182 HIGH 6.4 10.0 **NEW** 03/07/2017 The BN bn2dec function in crypto/bn/bn print.c in OpenSSL before 1.1.0 does not properly validate division results, which allows remote attackers to cause a denial of service (out-of-bounds write and application crash) or possibly have unspecified other impact via unknown vectors. 5.0 2.9 10.0 **NEW** 05/09/2017

an AES CBC session. NOTE: this vulnerability exists because of an incorrect fix for CVE-2013-0169.

CVE-2016-2183

The DES and Triple DES ciphers, as used in the TLS, SSH, and IPSec protocols and other protocols and products, have a birthday bound of approximately four billion blocks, which makes it easier for remote attackers to obtain cleartext data via a birthday attack against a long-duration encrypted session, as demonstrated by an HTTPS session using Triple DES in CBC mode, aka a "Sweet32" attack.

CVE-2016-2842 **HIGH** 10.0 10.0 10.0 **NEW** 05/09/2017

The doapr_outch function in crypto/bio/b_print.c in OpenSSL 1.0.1 before 1.0.1s and 1.0.2 before 1.0.2g does not verify that a certain memory allocation succeeds, which allows remote attackers to cause a denial of service (out-of-bounds write or memory consumption) or possibly have unspecified other impact via a long string, as demonstrated by a large amount of ASN.1 data, a different vulnerability than CVE-2016-0799.

CVE-2016-6302 5.0 2.9 10.0 **NEW** 02/23/2017

The tls_decrypt_ticket function in ssl/t1_lib.c in OpenSSL before 1.1.0 does not consider the HMAC size during validation of the ticket length, which allows remote attackers to cause a denial of service via a ticket that is too short.

<u>CVE-2016-6303</u> **HIGH** 7.5 6.4 10.0 **NEW** 02/23/2017

Integer overflow in the MDC2_Update function in crypto/mdc2/mdc2dgst.c in OpenSSL before 1.1.0 allows remote attackers to cause a denial of service (out-of-bounds write and application crash) or possibly have unspecified other impact via unknown vectors.

<u>CVE-2016-6304</u> **HIGH** 7.8 6.9 10.0 **NEW** 02/01/2017

Multiple memory leaks in t1_lib.c in OpenSSL before 1.0.1u, 1.0.2 before 1.0.2i, and 1.1.0 before 1.1.0a allow remote attackers to cause a denial of service (memory consumption) via large OCSP Status Request extensions.

<u>CVE-2016-6306</u> MEDIUM 4.3 2.9 8.6 NEW 02/01/2017

The certificate parser in OpenSSL before 1.0.1u and 1.0.2 before 1.0.2i might allow remote attackers to cause a denial of service (out-of-bounds read) via crafted certificate operations, related to s3_clnt.c and s3_srvr.c.

<u>CVE-2016-7055</u> LOW 2.6 2.9 4.9 NEW 05/17/2017

There is a carry propagating bug in the Broadwell-specific Montgomery multiplication procedure in OpenSSL 1.0.2 and 1.1.0 before 1.1.0c that handles input lengths divisible by, but longer than 256 bits. Analysis suggests that attacks against RSA, DSA and DH private keys are impossible. This is because the subroutine in question is not used in operations with the private key itself and an input of the attacker's direct choice. Otherwise the bug can manifest itself as transient authentication and key negotiation failures or reproducible erroneous outcome of public-key operations with specially crafted input. Among EC algorithms only Brainpool P-512 curves are affected and one presumably can attack ECDH key negotiation. Impact was not analyzed in detail, because pre-requisites for attack are considered unlikely. Namely multiple clients have to choose the curve in question and the server has to share the private key among them, neither of which is default behaviour. Even then only clients that chose the curve will be affected.

<u>CVE-2017-3733</u> MEDIUM 5.0 2.9 10.0 NEW 05/17/2017

During a renegotiation handshake if the Encrypt-Then-Mac extension is negotiated where it was not in the original handshake (or vice-versa) then this can cause OpenSSL 1.1.0 before 1.1.0e to crash (dependent on ciphersuite). Both clients and servers are affected.

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Fortify on Demand

NOTE: This report lists **only** the vulnerable components for this Hub project. To view a complete list of Open Source components identified, go to <u>C Demo Project 3.4</u>.