

Colin Quinn

The screenshot shows the Bless Hex Editor interface. At the top, a terminal window displays the following commands and output:

```
[01/22/20]seed@VM:~/Pictures$ rm out1Picture.png
[01/22/20]seed@VM:~/Pictures$ cd ..
[01/22/20]seed@VM:~$ ls
android      Downloads    Music        Public
bin          examples.desktop  out1.bin     source
Customization get-pip.py    out2.bin     Templates
Desktop      host         Pictures     Videos
Documents    lib          prefix.txt

[01/22/20]seed@VM:~$ bless out1.bin
Unexpected end of file has occurred. The following elements are
not closed: pref, preferences. Line 22, position 36.
Directory '/home/seed/.config/bless/plugins' not found.
Directory '/home/seed/.config/bless/plugins' not found.
Directory '/home/seed/.config/bless/plugins' not found.
Could not find file "/home/seed/.config/bless/export_patterns".
Could not find file "/home/seed/.config/bless/history.xml".
Document does not have a root element
```

Below the terminal, the hex editor view shows the file `out1.bin` with the following hex data:

```
00000000 68 65 6C 6C 6F 0A 00 00 00 00 00 00 00 00 00 00 hello.....
00000012 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....
00000024 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....
00000036 00 00 00 00 00 00 00 00 00 00 34 D0 B2 7D 2E 5E F7 38 .....4..}.^.8
00000048 0D 8A BF 23 40 6D 85 D8 8B 2D 4B 85 8B A0 26 68 5A 56 ...#@m...-K...&hZV
0000005a 3A 7A 4C 80 91 1D FB 03 01 EF BE 03 53 64 8B EE 6B 5B :zL.....Sd..k[
0000006c 97 47 55 81 90 2A CD 4D 3B 34 FD 16 70 68 2B 80 79 4D .GU...*.M;4..ph+.yM
0000007e CD CB 5F B7 DB C8 10 3E CE ED B1 60 15 1B 70 2D 3C BD ..>...`..p-<.
00000090 57 99 3F 63 CF 31 13 EA 6C ED 7B 4B 4B 20 A7 41 30 80 W.?c.1..l.{KK .A0.
000000a2 AC A9 94 0C 9B 1E A6 90 EB 30 53 4E D3 42 24 9A 50 05 .....0SN.B$.P.
000000b4 AB 7B BC 6C 07 8C 48 0D C8 05 51 24                .{.1..H...Q$
```

The bottom section of the editor shows various conversion options and the current selection:

Signed 8 bit:	104	Signed 32 bit:	1751477356	Hexadecimal:	68 65 6C 6C
Unsigned 8 bit:	104	Unsigned 32 bit:	1751477356	Decimal:	104 101 108 108
Signed 16 bit:	26725	Float 32 bit:	4.333688E+24	Octal:	150 145 154 154
Unsigned 16 bit:	26725	Float 64 bit:	7.81948651778672E+194	Binary:	01101000 01100101 01

Additional options include ☐ Show little endian decoding, ☐ Show unsigned as hexadecimal, and ASCII Text: hell. The status bar at the bottom shows Offset: 0x0 / 0xbf, Selection: None, and INS.

Bless Hex Editor

Terminal

```
Document does not have a root element.
Sharing violation on path /home/seed/.config/bless/preferences.xml
Sharing violation on path /home/seed/.config/bless/preferences.xml
Sharing violation on path /home/seed/.config/bless/preferences.xml
Document does not have a root element.
[01/22/20]seed@VM:~$ bless out2.bin
Unexpected end of file has occurred. The following elements are
not closed: pref, preferences. Line 22, position 36.
Directory '/home/seed/.config/bless/plugins' not found.
Directory '/home/seed/.config/bless/plugins' not found.
Directory '/home/seed/.config/bless/plugins' not found.
Could not find file "/home/seed/.config/bless/export_patterns".
Could not find file "/home/seed/.config/bless/history.xml".
Document does not have a root element.
Sh /home/seed/out2.bin - Bless
```

out2.bin

00000000	68 65 6C 6C 6F 0A 00 00 00 00 00 00 00 00 00 00	hello.....
00000012	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00000024	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00000036	00 00 00 00 00 00 00 00 00 00 34 D0 B2 7D 2E 5E F7 384..}.^.8
00000048	0D 8A BF 23 40 6D 85 D8 8B 2D 4B 05 8B A0 26 68 5A 56	...#m...-K...&hZV
0000005a	3A 7A 4C 80 91 1D FB 03 01 EF BE 03 53 64 8B EE 6B 5B	:zL.....Sd..k[
0000006c	97 C7 55 81 90 2A CD 4D 3B 34 FD 16 70 68 2B 00 79 4D	..U..*.M;4..ph+.yM
0000007e	CD CB 5F B7 DB C8 10 3E CE ED B1 60 15 1B 70 2D 3C BD	.._...>...`...p-<.
00000090	57 99 3F E3 CF 31 13 EA 6C ED 7B 4B 4B 20 A7 41 30 80	W.?..1..1.{KK .A0.
000000a2	AC A9 94 0C 9B 1E A6 90 EB 30 53 CE D2 42 24 9A 50 050S..B\$.P.
000000b4	AB 7B BC 6C 07 8C 48 8D C8 05 51 24	..{.1..H...Q\$

Signed 8 bit: 104 Signed 32 bit: 1751477356 Hexadecimal: 68 65 6C 6C

Unsigned 8 bit: 104 Unsigned 32 bit: 1751477356 Decimal: 104 101 108 108

Signed 16 bit: 26725 Float 32 bit: 4.333688E+24 Octal: 150 145 154 154

Unsigned 16 bit: 26725 Float 64 bit: 7.81948651778672E+194 Binary: 01101000 01100101 01

☐ Show little endian decoding ☐ Show unsigned as hexadecimal ASCII Text: hell

Offset: 0x0 / 0xbf Selection: None INS

1. If the length of prefix.txt is not a multiple of 64, then there will be padding characters added so that it meets 64, 128, 256...
3. There are slight differences in the hashes of the 64 byte version, despite being the same text within the file used to generate the hashes.

out1.bin ✖		
00000000	74 68 65 72 65 20 61 72 65 20 36 34 20 62 79 74 65 73	there are 64 bytes
00000012	20 69 6E 20 74 68 69 73 20 66 69 6C 65 20 54 48 45 52	in this file THER
00000024	45 20 41 52 45 20 36 34 20 42 59 54 45 53 20 49 4E 20	E ARE 64 BYTES IN
00000036	54 48 49 53 20 46 49 4C 0A 00 81 4A A7 57 0E 08 3F 4B	THIS FIL...J.W..?K
00000048	06 71 B6 3F 72 8B 95 0D C6 14 47 E9 0F F6 18 27 62 82	.q.?r.....G....'b.
0000005a	7F 5D 0E A0 C2 EA B1 CB DF EC 6E 68 1A FF EF 61 D7 BA	.].....nh....a..
0000006c	AA 09 0C 7D D2 14 D8 A9 40 DC 94 0F 78 E1 AC 5B 98 01	...}....@...x...[..
0000007e	34 96 93 05 81 21 8B F3 53 D7 63 39 1E E5 DF 84 00 6B	4.....!...S.c9.....k
00000090	8E D8 5B A5 C0 01 35 EE F8 38 66 27 CA 78 15 BF 2D 5F	..[...5...8f'.x...- _
000000a2	B3 4F 61 0D 94 88 32 8F 35 42 9B 5C 01 1F EE AC DF 40	.Oa...2.5B.\.....@
000000b4	74 C8 F3 61 CE 1F FC 6B 87 42 BA 14	t..a....k.B..

out2.bin ✖		
00000000	74 68 65 72 65 20 61 72 65 20 36 34 20 62 79 74 65 73	there are 64 bytes
00000012	20 69 6E 20 74 68 69 73 20 66 69 6C 65 20 54 48 45 52	in this file THER
00000024	45 20 41 52 45 20 36 34 20 42 59 54 45 53 20 49 4E 20	E ARE 64 BYTES IN
00000036	54 48 49 53 20 46 49 4C 0A 00 81 4A A7 57 0E 08 3F 4B	THIS FIL...J.W..?K
00000048	06 71 B6 3F 72 8B 95 0D C6 14 47 69 0F F6 18 27 62 82	.q.?r.....Gi....'b.
0000005a	7F 5D 0E A0 C2 EA B1 CB DF EC 6E 68 1A FF EF 61 D7 BA	.].....nh....a..
0000006c	AA 89 0C 7D D2 14 D8 A9 40 DC 94 0F 78 E1 AC DB 98 01	...}....@...x.....
0000007e	34 96 93 05 81 21 8B F3 53 D7 63 39 1E E5 DF 84 00 6B	4.....!...S.c9.....k
00000090	8E D8 5B 25 C0 01 35 EE F8 38 66 27 CA 78 15 BF 2D 5F	..[%...5...8f'.x...- _
000000a2	B3 4F 61 0D 94 88 32 8F 35 42 9B DC 00 1F EE AC DF 40	.Oa...2.5B.....@
000000b4	74 C8 F3 61 CE 1F FC EB 87 42 BA 14	t..a.....B..