NAME

a64l, l64a − convert between long and base-64

LIBRARY

Standard C library (*libc*, *−lc*)

SYNOPSIS

```
#include <stdlib.h>

long a64l(const char *str64);
char *l64a(long value);
```

Feature Test Macro Requirements for glibc (see **feature_test_macros**(7)):

a64l(), **l64a**():

```
_XOPEN_SOURCE >= 500
    || /* glibc >= 2.19: */ _DEFAULT_SOURCE
    || /* glibc <= 2.19: */ _SVID_SOURCE
```

DESCRIPTION

These functions provide a conversion between 32-bit long integers and little-endian base-64 ASCII strings (of length zero to six). If the string used as argument for **a64l**() has length greater than six, only the first six bytes are used. If the type *long* has more than 32 bits, then **l64a**() uses only the low order 32 bits of *value*, and **a64l**() sign-extends its 32-bit result.

The 64 digits in the base-64 system are:

'.'	represents a 0
'/'	represents a 1
0-9	represent 2-11
A-Z	represent 12-37
a-z	represent 38-63

So 123 = 59*64^0 + 1*64^1 = "v/".

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes**(7).

Interface	Attribute	Value
l64a()	Thread safety	MT-Unsafe race:l64a
a64l()	Thread safety	MT-Safe

STANDARDS

POSIX.1-2001, POSIX.1-2008.

NOTES

The value returned by **l64a**() may be a pointer to a static buffer, possibly overwritten by later calls.

The behavior of **l64a**() is undefined when *value* is negative. If*value* is zero, it returns an empty string.

These functions are broken before glibc 2.2.5 (puts most significant digit first).

This is not the encoding used by **uuencode**(1).

SEE ALSO

uuencode(1), **strtoul**(3)