

NAME

elf_aux_info - extract data from the elf auxiliary vector of the current process

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

```
#include <sys/auxv.h>
```

int

```
elf_aux_info(int aux, void *buf, int buflen);
```

DESCRIPTION

The **elf_aux_info()** function retrieves the auxiliary info vector requested in *aux*. The information is stored into the provided buffer if it will fit. The following values, defined in `<sys/elf_common.h>` can be requested (corresponding buffer sizes are specified in parenthesis):

- | | |
|-----------------|--|
| AT_CANARY | The canary value for SSP (arbitrary sized buffer, as many bytes are returned as it fits into it, rest is zeroed). |
| AT_EXECPATH | The path of executed program (MAXPATHLEN). This may not be present if the process was initialized by <code>fexecve(2)</code> and the namecache no longer contains the file's name. |
| AT_HWCAP | CPU / hardware feature flags (sizeof(u_long)). |
| AT_HWCAP2 | CPU / hardware feature flags (sizeof(u_long)). |
| AT_NCPUS | Number of CPUs (sizeof(int)). |
| AT_OSRELDATE | The OSRELDATE of the kernel or jail the program is running on (sizeof(int)). |
| AT_PAGESIZES | Vector of page sizes (arbitrary sized buffer, as many elements of the pagesizes array are returned as it fits). |
| AT_PAGESZ | Page size in bytes (sizeof(int)). |
| AT_TIMEKEEP | Pointer to VDSO timehands (for library internal use, sizeof(void *)). |
| AT_USRSTACKBASE | |

Top of the user stack for main thread.

AT_USRSTACKLIM

Limit for grow of the user stack for main thread.

RETURN VALUES

Returns zero on success, or an error number on failure.

ERRORS

[EINVAL] An unknown item was requested.

[EINVAL] The provided buffer was not the right size for the requested item.

[ENOENT] The requested item is not available.

HISTORY

The `elf_aux_info()` function appeared in FreeBSD 12.0.

BUGS

Only a small subset of available auxiliary info vector items are accessible with this function. Some items require a "right-sized" buffer while others just require a "big enough" buffer.