

NAME

acct - execution accounting file

SYNOPSIS

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

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

DESCRIPTION

The kernel maintains the following *acct* information structure for all processes. If a process terminates, and accounting is enabled, the kernel calls the `acct(2)` function call to prepare and append the record to the accounting file.

```
#define AC_COMM_LEN 16
```

```
/*
```

```
 * Accounting structure version 3 (current).
```

```
 * The first byte is always zero.
```

```
 * Time units are microseconds.
```

```
*/
```

```
struct acctv3 {
```

```
    uint8_t ac_zero;           /* zero identifies new version */
```

```
    uint8_t ac_version;       /* record version number */
```

```
    uint16_t ac_len;          /* record length */
```

```
    char    ac_comm[AC_COMM_LEN]; /* command name */
```

```
    float   ac_utime;          /* user time */
```

```
    float   ac_stime;          /* system time */
```

```
    float   ac_etime;          /* elapsed time */
```

```
    time_t  ac_btime;          /* starting time */
```

```
    uid_t   ac_uid;           /* user id */
```

```
    gid_t   ac_gid;           /* group id */
```

```
    float   ac_mem;           /* average memory usage */
```

```
    float   ac_io;            /* count of IO blocks */
```

```
    __dev_t ac_tty;           /* controlling tty */
```

```
    uint16_t ac_len2;          /* record length */
```

```
    union {
```

```
        uint32_t ac_align; /* force v1 compatible alignment */
```

```

#define AFORK 0x01 /* forked but not exec'ed */
/* ASU is no longer supported */
#define ASU 0x02 /* used super-user permissions */
#define ACOMPAT 0x04 /* used compatibility mode */
#define ACORE 0x08 /* dumped core */
#define AXSIG 0x10 /* killed by a signal */
#define ANVER 0x20 /* new record version */

```

```

uint8_t ac_flag; /* accounting flags */
} ac_trailer;

```

```

#define ac_flagx ac_trailer.ac_flag
};

```

If a terminated process was created by an `execve(2)`, the name of the executed file (at most ten characters of it) is saved in the field `ac_comm` and its status is saved by setting one of more of the following flags in `ac_flag`: `AFORK`, `ACOMPAT`, `ACORE` and `ASIG`. `ASU` is no longer supported. `ANVER` is always set in the above structure.

SEE ALSO

`lastcomm(1)`, `acct(2)`, `execve(2)`, `sa(8)`

HISTORY

A `acct` file format appeared in Version 7 AT&T UNIX. The current record format was introduced on May 2007. It is backwards compatible with the previous format, which is still documented in `<sys/acct.h>` and supported by `lastcomm(1)` and `sa(8)`.