



Linux Ubuntu 26.04 Manual Pages on command 'cachestat.2'

\$ man cachestat.2

cachestat(2) System Calls Manual cachestat(2)

NAME

cachestat - query the page cache statistics of a file

SYNOPSIS

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

int cachestat(unsigned int fd, struct cachestat_range *cstat_range,
               struct cachestat *cstat, unsigned int flags);

struct cachestat_range {
    __u64 off;
    __u64 len;
};

struct cachestat {
    __u64 nr_cache;
    __u64 nr_dirty;
    __u64 nr_writeback;
    __u64 nr_evicted;
    __u64 nr_recently_evicted;
};
```

DESCRIPTION

cachestat() queries the number of cached pages, dirty pages, pages marked for writeback, evicted pages, and recently evicted pages in the byte range specified by .off and .len in the cachestat_range structure.

An evicted page is one that was previously in the page cache but has since been evicted. A

page is considered recently evicted if its reentry into the cache would indicate active use under memory pressure.

The results are returned in a `cachestat` structure, pointed to by the `cstat` argument.

The `.off` and `.len` fields must be non-negative. If `.len > 0`, the queried range is `[.off, .off+.len]`. If `len == 0`, the range is from `.off` to the end of the file.

The `flags` argument is reserved for future use and must be set to 0.

Currently, `hugetlbfs` files are not supported.

RETURN VALUE

On success, `cachestat()` returns 0. On error, -1 is returned, and `errno` is set to indicate the error.

ERRORS

`EFAULT` `cstat` or `cstat_range` point to an invalid address.

`EINVAL` Invalid flags value.

`EBADF` Invalid file descriptor.

`EOPNOTSUPP`

The file descriptor refers to a `hugetlbfs` file, which is unsupported.

STANDARDS

Linux.

HISTORY

Linux 6.5.

CAVEATS

Note that the status of a page may change after `cachestat()` retrieves it but before the values are returned to the application; thus, the values may be slightly outdated.