



## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'sys\_resource.h.0p' command**

**\$ man sys\_resource.h.0p**

sys\_resource.h(0P) POSIX Programmer's Manual sys\_resource.h(0P)

### PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

### NAME

sys/resource.h ? definitions for XSI resource operations

### SYNOPSIS

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

### DESCRIPTION

The <sys/resource.h> header shall define the following symbolic constants as possible values of the which argument of `getpriority()` and `setpriority()`:

`PRIO_PROCESS` Identifies the who argument as a process ID.

`PRIO_PGRP` Identifies the who argument as a process group ID.

`PRIO_USER` Identifies the who argument as a user ID.

The <sys/resource.h> header shall define the following type through typedef:

`rlim_t` Unsigned integer type used for limit values.

The <sys/resource.h> header shall define the following symbolic constants, which shall have values suitable for use in `#if` preprocessing directives:

RLIM\_INFINITY A value of rlim\_t indicating no limit.

RLIM\_SAVED\_MAX A value of type rlim\_t indicating an unrepresentable saved hard limit.

RLIM\_SAVED\_CUR A value of type rlim\_t indicating an unrepresentable saved soft limit.

On implementations where all resource limits are representable in an object of type rlim\_t, RLIM\_SAVED\_MAX and RLIM\_SAVED\_CUR need not be distinct from RLIM\_INFINITY.

The <sys/resource.h> header shall define the following symbolic constants as possible values of the who parameter of getrusage():

RUSAGE\_SELF Returns information about the current process.

RUSAGE\_CHILDREN Returns information about children of the current process.

The <sys/resource.h> header shall define the rlimit structure, which shall include at least the following members:

rlim\_t rlim\_cur The current (soft) limit.

rlim\_t rlim\_max The hard limit.

The <sys/resource.h> header shall define the rusage structure, which shall include at least the following members:

struct timeval ru\_utime User time used.

struct timeval ru\_stime System time used.

The <sys/resource.h> header shall define the timeval structure as described in <sys/time.h>.

The <sys/resource.h> header shall define the following symbolic constants as possible values for the resource argument of getrlimit() and setrlimit():

RLIMIT\_CORE Limit on size of core file.

RLIMIT\_CPU Limit on CPU time per process.

RLIMIT\_DATA Limit on data segment size.

RLIMIT\_FSIZE Limit on file size.

RLIMIT\_NOFILE Limit on number of open files.

RLIMIT\_STACK Limit on stack size.

RLIMIT\_AS Limit on address space size.

The following shall be declared as functions and may also be defined as macros. Function prototypes shall be provided.

```
int getpriority(int, id_t);
int getrlimit(int, struct rlimit *);
int getrusage(int, struct rusage *);
int setpriority(int, id_t, int);
int setrlimit(int, const struct rlimit *);
```

The <sys/resource.h> header shall define the id\_t type through typedef, as described in <sys/types.h>.

Inclusion of the <sys/resource.h> header may also make visible all symbols from <sys/time.h>.

The following sections are informative.

#### APPLICATION USAGE

None.

#### RATIONALE

None.

#### FUTURE DIRECTIONS

None.

#### SEE ALSO

<sys\_time.h>, <sys\_types.h>

The System Interfaces volume of POSIX.1-2017, getpriority(), getrlimit(), getrusage()

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2017

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