

NAME

sg_get_mem_stats, sg_get_swap_stats – get VM statistics

SYNOPSIS

```
#include <statgrab.h>
```

```
sg_mem_stats *sg_get_mem_stats(void);
```

```
sg_swap_stats *sg_get_swap_stats(void);
```

DESCRIPTION

Memory statistics are accessed through the `sg_get_mem_stats` function. It returns a pointer to a static `sg_mem_stats`.

The `sg_get_swap_stats` returns swap statistics. It returns a pointer to a static `sg_swap_stats`.

On the FreeBSD operating system elevated privileges are required to access the swap statistics. Making the program setgid `kmem` should be sufficient. Programs running as root will not have this problem.

RETURN VALUES

The VM system calls can return a pointer to either a `sg_mem_stats` or a `sg_swap_stats`.

```
typedef struct{
    long long total;
    long long free;
    long long used;
    long long cache;
}sg_mem_stats;
```

total The total amount of memory in bytes.

free The total free memory in bytes.

used The total used memory in bytes.

cache The amount of cache used in bytes.

```
typedef struct{
    long long total;
    long long used;
    long long free;
}sg_swap_stats;
```

total The total swap space in bytes.

used The used swap in bytes.

free The free swap in bytes.

TODO

Add a function to hold open the file descriptor to the kernel memory structures. Doing this would allow the elevated privileges to be dropped early on.

SEE ALSO

statgrab(3)

WEBSITE

<http://www.i-scream.org/libstatgrab/>