

NAME

vm_fault_prefault - cluster page faults into a process's address space

SYNOPSIS

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

```
#include <vm/vm.h>
```

```
#include <vm/pmap.h>
```

void

```
vm_fault_prefault(pmap_t pmap, vm_offset_t addra, vm_map_entry_t entry);
```

DESCRIPTION

The **vm_fault_prefault()** function provides a means of clustering pagefaults into a process's address space. It operates upon the physical map *pmap*. The *entry* argument specifies the entry to be prefaulted; the *addra* argument specifies the beginning of the mapping in the process's virtual address space.

It is typically called by **vm_fault()** after the first page fault. It benefits the `execve(2)` system call by eliminating repetitive calls to **vm_fault()**, which would otherwise be made to bring the process's executable pages into physical memory.

IMPLEMENTATION NOTES

This is a machine-independent function which calls the machine-dependent `pmap_is_prefaultable(9)` helper function to determine if a page may be prefaulted into physical memory.

SEE ALSO

`execve(2)`, `pmap_is_prefaultable(9)`

AUTHORS

This manual page was written by Bruce M Simpson <bms@spc.org>.