

```

// Thread uselib
844 static int load_elf_library(struct file *file)
845 {
...
905     if (bss > len)
906         do_brk(len, bss - len); ← Needs to be locked here!
...
1039 unsigned long do_brk(...){
1044     rb_node_t ** rb_link, * rb_parent;
...
1067     vma=find_vma_prepare(mm,addr,&prev,&rb_link,&rb_parent);
...
1094     vma=kmem_cache_alloc(...);
...
1108     vma_link(mm, vma, prev, rb_link, rb_parent);

// Thread mmap
394 unsigned long do_mmap_pgoff(...)
396 {
...
402     rb_node_t ** rb_link, * rb_parent;
...
491     vma = find_vma_prepare(mm,addr,&prev,&rb_link,&rb_parent);
...
584     vma_link(mm,vma,prev,rb_link,rb_parent);

```

The diagram illustrates a code flow between two functions. A dashed arrow originates from the `vma_link` call in the `do_brk` function (line 1108) and points to the `do_mmap_pgoff` function (line 394). Another dashed arrow originates from the `do_brk` function (line 1067) and points to the `do_mmap_pgoff` function (line 491). This indicates that the `do_mmap_pgoff` function relies on the state established by `do_brk`.