
Subject: Re: [PATCH 5/5] Fix race between cat /proc/slab_allocators and rmmod
Posted by [Andrew Morton](#) on Wed, 04 Apr 2007 00:08:27 GMT

[View Forum Message](#) <> [Reply to Message](#)

On Mon, 2 Apr 2007 19:03:16 +0400

Alexey Dobriyan <adobriyan@sw.ru> wrote:

```
> +int lookup_module_symbol_attrs(unsigned long addr, unsigned long *size,
> +    unsigned long *offset, char *modname, char *name)
> +{
> +    struct module *mod;
> +
> +    mutex_lock(&module_mutex);
> +    list_for_each_entry(mod, &modules, list) {
> +        if (within(addr, mod->module_init, mod->init_size) ||
> +            within(addr, mod->module_core, mod->core_size)) {
> +            const char *sym;
> +
> +            sym = get_ksymbol(mod, addr, size, offset);
> +            if (!sym)
> +                goto out;
> +            if (modname)
> +                strlcpy(modname, mod->name, MODULE_NAME_LEN + 1);
> +            if (name)
> +                strlcpy(name, sym, KSYM_NAME_LEN + 1);
> +            mutex_unlock(&module_mutex);
> +            return 0;
> +        }
> +    }
> +out:
> +    mutex_unlock(&module_mutex);
> +    return -ERANGE;
> +}
> +
```

The functions `lookup_symbol_name()` and `lookup_symbol_attrs()` are quite general and are likely to be used for other applications in the future.

Could we please pick better names for them? The names you've chosen are far too general-sounding - we have a lot of different types of "symbol" in the kernel! Perhaps `module_lookup_symbol_attrs()` and `kallsyms_lookup_symbol()` and `kallsyms_lookup_attrs()` or something. But something prefixed with `kallsyms_` and `module_`.

Also, as these general-use functions are exported to all of vmlinux, a little bit of documentation for them would be good.
