
Subject: [PATCH] nf_sockopts list head cleanup
Posted by [Alexey Dobriyan](#) on Mon, 22 Oct 2007 12:19:05 GMT
[View Forum Message](#) <> [Reply to Message](#)

Code is using knowledge that nf_sockopt_ops::list list_head is first field in structure by using casts. Switch to list_for_each_entry() iterators while I am at it.

Signed-off-by: Alexey Dobriyan <adobriyan@sw.ru>

net/netfilter/nf_sockopt.c | 12 +++++-----
1 file changed, 4 insertions(+), 8 deletions(-)

```
--- a/net/netfilter/nf_sockopt.c
+++ b/net/netfilter/nf_sockopt.c
@@ -23,14 +23,13 @@ static inline int overlap(int min1, int max1, int min2, int max2)
 /* Functions to register sockopt ranges (exclusive). */
 int nf_register_sockopt(struct nf_sockopt_ops *reg)
 {
- struct list_head *i;
+ struct nf_sockopt_ops *ops;
 int ret = 0;

 if (mutex_lock_interruptible(&nf_sockopt_mutex) != 0)
 return -EINTR;

- list_for_each(i, &nf_sockopts) {
- struct nf_sockopt_ops *ops = (struct nf_sockopt_ops *)i;
+ list_for_each_entry(ops, &nf_sockopts, list) {
 if (ops->pf == reg->pf
 && (overlap(ops->set_optmin, ops->set_optmax,
 reg->set_optmin, reg->set_optmax)
@@ -65,7 +64,6 @@ EXPORT_SYMBOL(nf_unregister_sockopt);
static int nf_sockopt(struct sock *sk, int pf, int val,
 char __user *opt, int *len, int get)
{
- struct list_head *i;
 struct nf_sockopt_ops *ops;
 int ret;

@@ -75,8 +73,7 @@ static int nf_sockopt(struct sock *sk, int pf, int val,
 if (mutex_lock_interruptible(&nf_sockopt_mutex) != 0)
 return -EINTR;

- list_for_each(i, &nf_sockopts) {
- ops = (struct nf_sockopt_ops *)i;
+ list_for_each_entry(ops, &nf_sockopts, list) {
```

```
if (ops->pf == pf) {
    if (!try_module_get(ops->owner))
        goto out_nosup;
@@ -135,8 +132,7 @@ static int compat_nf_sockopt(struct sock *sk, int pf, int val,
if (mutex_lock_interruptible(&nf_sockopt_mutex) != 0)
    return -EINTR;

- list_for_each(i, &nf_sockopts) {
-     ops = (struct nf_sockopt_ops *)i;
+ list_for_each_entry(ops, &nf_sockopts, list) {
    if (ops->pf == pf) {
        if (!try_module_get(ops->owner))
            goto out_nosup;
```

Subject: Re: [PATCH] nf_sockopts list head cleanup

Posted by [Patrick McHardy](#) on Tue, 23 Oct 2007 12:39:12 GMT

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

Alexey Dobriyan wrote:

> Code is using knowledge that nf_sockopt_ops::list list_head is first
> field in structure by using casts. Switch to list_for_each_entry()
> iterators while I am at it.
>
>

Applied with a minor warning fix in the compat path, thanks Alexey.
