Subject: [PATCH] Clean the ip_sockglue.c from some ugly ifdefs
Posted by Pavel Emelianov on Thu, 01 Nov 2007 15:52:34 GMT
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The #idfed CONFIG_IP_MROUTE is sometimes places inside the if-s,
which looks completely bad. Similar ifdefs inside the functions
looks a bit better, but they are also not recommended to be used.

Provide an ifdef-ed ip_mroute_opt() helper to cleanup the code.

Signed-off-by: Pavel Emelyanov <xemul@openvz.org>

```
diff --git a/include/linux/mroute.h b/include/linux/mroute.h
index 7da2cee..200fbb2 100644
--- a/include/linux/mroute.h
+++ b/include/linux/mroute.h
@@ -128,6 +128,18 @@ struct igmpmsg
 #ifdef __KERNEL__
 #include <net/sock.h>

+#ifdef CONFIG_IP_MROUTE
+static inline int ip_mroute_opt(int opt)
+{
+ return (opt >= MRT_BASE) && (op <= MRT_BASE + 10);
+}
+#else
+static inline int ip_mroute_opt(int opt)
+{
+ return 0;
+}
+#endif
+
 extern int ip_mroute_setsockopt(struct sock *, int, char __user *, int);
 extern int ip_mroute_getsockopt(struct sock *, int, char __user *, int __user *);
 extern int ipmr_ioctl(struct sock *sk, int cmd, void __user *arg);
diff --git a/net/ipv4/ip_sockglue.c b/net/ipv4/ip_sockglue.c
index f51f20e..82817e5 100644
--- a/net/ipv4/ip_sockglue.c
+++ b/net/ipv4/ip_sockglue.c
@@ -437,10 +437,8 @@ static int do_ip_setsockopt(struct sock *sk, int level,

  /* If optlen==0, it is equivalent to val == 0 */

-#ifdef CONFIG_IP_MROUTE
- if (optname >= MRT_BASE && optname <= (MRT_BASE + 10))
+ if (ip_mroute_opt(optname))
```

```
   return ip_mroute_setsockopt(sk,optname,optval,optlen);
-#endif

  err = 0;
  lock_sock(sk);
@@ -909,11 +907,9 @@ int ip_setsockopt(struct sock *sk, int level,
 #ifdef CONFIG_NETFILTER
  /* we need to exclude all possible ENOPROTOOPTs except default case */
  if (err == -ENOPROTOOPT && optname != IP_HDRINCL &&
-  optname != IP_IPSEC_POLICY && optname != IP_XFRM_POLICY
-#ifdef CONFIG_IP_MROUTE
-  && (optname < MRT_BASE || optname > (MRT_BASE + 10))
-#endif
-    ) {
+   optname != IP_IPSEC_POLICY &&
+   optname != IP_XFRM_POLICY &&
+   !ip_mroute_opt(optname)) {
   lock_sock(sk);
   err = nf_setsockopt(sk, PF_INET, optname, optval, optlen);
   release_sock(sk);
@@ -935,11 +931,9 @@ int compat_ip_setsockopt(struct sock *sk, int level, int optname,
 #ifdef CONFIG_NETFILTER
  /* we need to exclude all possible ENOPROTOOPTs except default case */
  if (err == -ENOPROTOOPT && optname != IP_HDRINCL &&
-     optname != IP_IPSEC_POLICY && optname != IP_XFRM_POLICY
-#ifdef CONFIG_IP_MROUTE
-     && (optname < MRT_BASE || optname > (MRT_BASE + 10))
-#endif
-    ) {
+   optname != IP_IPSEC_POLICY &&
+   optname != IP_XFRM_POLICY &&
+   !ip_mroute_opt(optname)) {
   lock_sock(sk);
   err = compat_nf_setsockopt(sk, PF_INET, optname,
         optval, optlen);
@@ -967,11 +961,8 @@ static int do_ip_getsockopt(struct sock *sk, int level, int optname,
  if (level != SOL_IP)
   return -EOPNOTSUPP;

-#ifdef CONFIG_IP_MROUTE
- if (optname >= MRT_BASE && optname <= MRT_BASE+10) {
+ if (ip_mroute_opt(optname))
   return ip_mroute_getsockopt(sk,optname,optval,optlen);
- }
-#endif

  if (get_user(len,optlen))
   return -EFAULT;
```

```
@@ -1171,11 +1162,8 @@ int ip_getsockopt(struct sock *sk, int level,
  err = do_ip_getsockopt(sk, level, optname, optval, optlen);
 #ifdef CONFIG_NETFILTER
  /* we need to exclude all possible ENOPROTOOPTs except default case */
- if (err == -ENOPROTOOPT && optname != IP_PKTOPTIONS
-#ifdef CONFIG_IP_MROUTE
-  && (optname < MRT_BASE || optname > MRT_BASE+10)
-#endif
-    ) {
+ if (err == -ENOPROTOOPT && optname != IP_PKTOPTIONS &&
+   !ip_mroute_opt(optname)) {
   int len;

   if (get_user(len,optlen))
@@ -1200,11 +1188,8 @@ int compat_ip_getsockopt(struct sock *sk, int level, int optname,
  int err = do_ip_getsockopt(sk, level, optname, optval, optlen);
 #ifdef CONFIG_NETFILTER
  /* we need to exclude all possible ENOPROTOOPTs except default case */
- if (err == -ENOPROTOOPT && optname != IP_PKTOPTIONS
-#ifdef CONFIG_IP_MROUTE
-     && (optname < MRT_BASE || optname > MRT_BASE+10)
-#endif
-    ) {
+ if (err == -ENOPROTOOPT && optname != IP_PKTOPTIONS &&
+   !ip_mroute_opt(optname)) {
   int len;

   if (get_user(len, optlen))
--
1.5.3.4
```

Subject: Re: [PATCH] Clean the ip_sockglue.c from some ugly ifdefs
Posted by Arnaldo Carvalho de M on Thu, 01 Nov 2007 16:31:13 GMT
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Em Thu, Nov 01, 2007 at 06:52:34PM +0300, Pavel Emelyanov escreveu:
> The #idfed CONFIG_IP_MROUTE is sometimes places inside the if-s,
> which looks completely bad. Similar ifdefs inside the functions
> looks a bit better, but they are also not recommended to be used.
>
> Provide an ifdef-ed ip_mroute_opt() helper to cleanup the code.
>
> Signed-off-by: Pavel Emelyanov <xemul@openvz.org>

Perhaps a better name would be ip_mroute_valid_opt()?

- Arnaldo

Subject: Re: [PATCH] Clean the ip_sockglue.c from some ugly ifdefs
Posted by Pavel Emelianov on Thu, 01 Nov 2007 16:38:24 GMT
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Arnaldo Carvalho de Melo wrote:
> Em Thu, Nov 01, 2007 at 06:52:34PM +0300, Pavel Emelyanov escreveu:
>> The #idfed CONFIG_IP_MROUTE is sometimes places inside the if-s,
>> which looks completely bad. Similar ifdefs inside the functions
>> looks a bit better, but they are also not recommended to be used.
>>
>> Provide an ifdef-ed ip_mroute_opt() helper to cleanup the code.
>>
>> Signed-off-by: Pavel Emelyanov <xemul@openvz.org>
>
> Perhaps a better name would be ip_mroute_valid_opt()?

No :) The _valid_ mrote opts are from 0 to 8, according to MRT_XXX
macros, not from 0 to 10 as checked. I suspect this was a kind of
reserve for future use and thus do not change this.

Correct me if I am wrong.

> - Arnaldo

Thanks,
Pavel

Subject: Re: [PATCH] Clean the ip_sockglue.c from some ugly ifdefs
Posted by davem on Tue, 06 Nov 2007 05:32:41 GMT
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From: Pavel Emelyanov <xemul@openvz.org>
Date: Thu, 01 Nov 2007 18:52:34 +0300

> The #idfed CONFIG_IP_MROUTE is sometimes places inside the if-s,
> which looks completely bad. Similar ifdefs inside the functions
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> Signed-off-by: Pavel Emelyanov <xemul@openvz.org>

Applied, thanks Pavel.