
Subject: Re: [PATCH 1/2] virtualized ipt_REDIRECT

Posted by [dev](#) on Thu, 16 Mar 2006 13:07:02 GMT

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

Jason,

I fixed error path in do_ve_iptables().
Here is the patch which is committed in 2.6.8.
It will be also committed in coming 2.6.16.

Thanks,
Kirill

> Missed two defines when bringing the patch forward from 2.6.8.
> How embarrassing...
>
> Patch from Jason (jstubbs@work-at.co.jp):
> This patch virtualizes the ipt_REDIRECT iptables module.
>
> --
> Jason Stubbs
>
>
> -----
>
> diff -ur linux-2.6.15-openvz-025.014.orig/include/linux/nfcalls.h
linux-2.6.15-openvz-025.014/include/linux/nfcalls.h
> --- linux-2.6.15-openvz-025.014.orig/include/linux/nfcalls.h 2006-03-03 14:36:32.560909760
+0900
> +++ linux-2.6.15-openvz-025.014/include/linux/nfcalls.h 2006-03-03 15:20:12.223660488 +0900
> @@ -143,6 +143,7 @@
> DECL_KSYM_MODULE(iptable_nat);
> DECL_KSYM_MODULE(ip_nat_ftp);
> DECL_KSYM_MODULE(ip_nat_irc);
> +DECL_KSYM_MODULE(ipt_REDIRECT);
>
> struct sk_buff;
>
> @@ -170,6 +171,7 @@
> DECL_KSYM_CALL(int, init_iptable_nat, (void));
> DECL_KSYM_CALL(int, init_iptable_nat_ftp, (void));
> DECL_KSYM_CALL(int, init_iptable_nat_irc, (void));
> +DECL_KSYM_CALL(int, init_iptable_REDIRECT, (void));
> DECL_KSYM_CALL(void, fini_iptable_nat_irc, (void));
> DECL_KSYM_CALL(void, fini_iptable_nat_ftp, (void));
> DECL_KSYM_CALL(void, fini_iptable_nat, (void));
> @@ -194,6 +196,7 @@
> DECL_KSYM_CALL(void, fini_iptable_mangle, (void));

```

> DECL_KSYM_CALL(void, fini_iptables, (void));
> DECL_KSYM_CALL(void, fini_nfqueue, (void));
> +DECL_KSYM_CALL(void, fini_iprule_REDIRECT, (void));
>
> DECL_KSYM_CALL(void, ipt_flush_table, (struct ipt_table *table));
> #endif /* CONFIG_VE_IPTABLES */
> diff -ur linux-2.6.15-openvz-025.014.orig/include/linux/ve_proto.h
linux-2.6.15-openvz-025.014/include/linux/ve_proto.h
> --- linux-2.6.15-openvz-025.014.orig/include/linux/ve_proto.h 2006-03-03 14:36:32.560909760
+0900
> +--- linux-2.6.15-openvz-025.014/include/linux/ve_proto.h 2006-03-03 14:38:42.914093064
+0900
> @@ -55,6 +55,7 @@
> extern int init_iptable_multiport(void);
> extern int init_iptable_tos(void);
> extern int init_iptable_REJECT(void);
> +extern int init_iptable_REDIRECT(void);
> extern void fini_nfqueue(void);
> extern int fini_iptables(void);
> extern int fini_iprule_filter(void);
> @@ -62,6 +63,7 @@
> extern int fini_iptable_multiport(void);
> extern int fini_iptable_tos(void);
> extern int fini_iptable_REJECT(void);
> +extern int fini_iprule_REDIRECT(void);
> #endif
>
> #define VE_HOOK_INIT 0
> diff -ur linux-2.6.15-openvz-025.014.orig/include/linux/vzcalluser.h
linux-2.6.15-openvz-025.014/include/linux/vzcalluser.h
> --- linux-2.6.15-openvz-025.014.orig/include/linux/vzcalluser.h 2006-03-03 14:36:32.561909608
+0900
> +--- linux-2.6.15-openvz-025.014/include/linux/vzcalluser.h 2006-03-03 14:39:39.544483936
+0900
> @@ -80,6 +80,7 @@
> #define VE_IP_NAT_MOD (1U<<20)
> #define VE_IP_NAT_FTP_MOD (1U<<21)
> #define VE_IP_NAT_IRC_MOD (1U<<22)
> +#define VE_IP_TARGET_REDIRECT_MOD (1U<<23)
>
> /* these masks represent modules with their dependences */
> #define VE_IP_IPTABLES (VE_IP_IPTABLES_MOD)
> @@ -125,6 +126,8 @@
>     | VE_IP_NAT | VE_IP_CONNTRACK_FTP)
> #define VE_IP_NAT_IRC (VE_IP_NAT_IRC_MOD \
>     | VE_IP_NAT | VE_IP_CONNTRACK_IRC)
> +#define VE_IP_TARGET_REDIRECT (VE_IP_TARGET_REDIRECT_MOD \
> +    | VE_IP_NAT)

```

```

>
> /* safe iptables mask to be used by default */
> #define VE_IP_DEFAULT \
> diff -ur linux-2.6.15-openvz-025.014.orig/kernel/ve.c linux-2.6.15-openvz-025.014/kernel/ve.c
> --- linux-2.6.15-openvz-025.014.orig/kernel/ve.c 2006-03-03 14:36:33.253804424 +0900
> +++ linux-2.6.15-openvz-025.014/kernel/ve.c 2006-03-03 14:41:02.759833280 +0900
> @@ -75,6 +75,7 @@
> INIT_KSYM_MODULE(iptable_nat);
> INIT_KSYM_MODULE(ip_nat_ftp);
> INIT_KSYM_MODULE(ip_nat_irc);
> +INIT_KSYM_MODULE(ipt_REDIRECT);
>
> INIT_KSYM_CALL(int, init_netfilter, (void));
> INIT_KSYM_CALL(int, init_iptables, (void));
> @@ -100,6 +101,7 @@
> INIT_KSYM_CALL(int, init_iphtable_nat, (void));
> INIT_KSYM_CALL(int, init_iphtable_nat_ftp, (void));
> INIT_KSYM_CALL(int, init_iphtable_nat_irc, (void));
> +INIT_KSYM_CALL(int, init_iphtable_REDIRECT, (void));
> INIT_KSYM_CALL(void, fini_iphtable_nat_irc, (void));
> INIT_KSYM_CALL(void, fini_iphtable_nat_ftp, (void));
> INIT_KSYM_CALL(void, fini_iphtable_nat, (void));
> @@ -124,6 +126,7 @@
> INIT_KSYM_CALL(void, fini_iphtable_mangle, (void));
> INIT_KSYM_CALL(void, fini_iptables, (void));
> INIT_KSYM_CALL(void, fini_netfilter, (void));
> +INIT_KSYM_CALL(void, fini_iphtable_REDIRECT, (void));
>
> INIT_KSYM_CALL(void, ipt_flush_table, (struct ipt_table *table));
> #endif
> diff -ur linux-2.6.15-openvz-025.014.orig/kernel/vecalls.c
linux-2.6.15-openvz-025.014/kernel/vecalls.c
> --- linux-2.6.15-openvz-025.014.orig/kernel/vecalls.c 2006-03-03 14:36:33.253804424 +0900
> +++ linux-2.6.15-openvz-025.014/kernel/vecalls.c 2006-03-03 14:42:35.671708528 +0900
> @@ -1592,6 +1592,13 @@
> if (err < 0)
> goto err_iphtable_length;
> #endif
> +#if defined(CONFIG_IP_NF_TARGET_REDIRECT) || \
> + defined(CONFIG_IP_NF_TARGET_REDIRECT_MODULE)
> + err = KSYMIPTINIT(init_mask, ve, VE_IP_TARGET_REDIRECT,
> + ipt_REDIRECT, init_iphtable_REDIRECT, ());
> + if (err < 0)
> + goto err_iphtable_REDIRECT;
> +#endif
> return 0;
>
> /* ----- */

```

```

> @@ -1732,6 +1739,12 @@
>     ip_tables, fini_ipTables, ());
> err_ipTables:
> #endif
> +#if defined(CONFIG_IP_NF_TARGET_REDIRECT) || \
> +  defined(CONFIG_IP_NF_TARGET_REDIRECT_MODULE)
> + KSYMIPTFINI(ve->_ipTables_modules, VE_IP_TARGET_REDIRECT,
> +  ipt_REDIRECT, fini_ipTable_REDIRECT, ());
> +err_ipTable_REDIRECT:
> +#endif
> ve->_ipTables_modules = 0;
>
> return err;
> diff -ur linux-2.6.15-openvz-025.014.orig/net/ipv4/netfilter/ipt_REDIRECT.c
linux-2.6.15-openvz-025.014/net/ipv4/netfilter/ipt_REDIRECT.c
> --- linux-2.6.15-openvz-025.014.orig/net/ipv4/netfilter/ipt_REDIRECT.c 2006-03-03
14:36:33.952698176 +0900
> +--- linux-2.6.15-openvz-025.014/net/ipv4/netfilter/ipt_REDIRECT.c 2006-03-03
14:47:44.502759072 +0900
> @@ -17,6 +17,7 @@
> #include <linux/inetdevice.h>
> #include <net/protocol.h>
> #include <net/checksum.h>
> +#include <linux/nfcalls.h>
> #include <linux/netfilter_ipv4.h>
> #include <linux/netfilter_ipv4/ip_nat_rule.h>
>
> @@ -25,7 +26,7 @@
> MODULE_DESCRIPTION("iptables REDIRECT target module");
>
> #if 0
> -#define DEBUGP printk
> +#define DEBUGP ve_printk
> #else
> #define DEBUGP(format, args...)
> #endif
> @@ -119,14 +120,36 @@
> .me = THIS_MODULE,
> };
>
> +int init_ipTable_REDIRECT(void)
> +{
> +    return virt_ipt_register_target(&redirect_reg);
> +}
> +
> +void fini_ipTable_REDIRECT(void)
> +{
> +    virt_ipt_unregister_target(&redirect_reg);

```

```

> +}
> +
> static int __init init(void)
> {
> - return ipt_register_target(&redirect_reg);
> + int err;
> +
> + err = init_iphtable_REDIRECT();
> + if (err < 0)
> + return err;
> +
> + KSYMRESOLVE(init_iphtable_REDIRECT);
> + KSYMRESOLVE(fini_iphtable_REDIRECT);
> + KSYMMODRESOLVE(ip_table_REDIRECT);
> + return 0;
> }
>
> static void __exit fini(void)
> {
> - ipt_unregister_target(&redirect_reg);
> + KSYMMODUNRESOLVE(ip_table_REDIRECT);
> + KSYMUNRESOLVE(init_iphtable_REDIRECT);
> + KSYMUNRESOLVE(fini_iphtable_REDIRECT);
> + fini_iphtable_REDIRECT();
> }
>
> module_init(init);
>
>
> -----
>
--- ./include/linux/nfcalls.h.iptredir 2006-03-03 14:43:05.000000000 +0300
+++ ./include/linux/nfcalls.h 2006-03-16 16:06:33.000000000 +0300
@@ -155,6 +155,7 @@ DECL_KSYM_MODULE(ip_table_helper);
DECL_KSYM_MODULE(ip_table_nat);
DECL_KSYM_MODULE(ip_nat_ftp);
DECL_KSYM_MODULE(ip_nat_irc);
+DECL_KSYM_MODULE(ip_table_REDIRECT);
#endif

struct sk_buff;
@@ -182,6 +183,7 @@ DECL_KSYM_CALL(int, init_iphtable_helper,
DECL_KSYM_CALL(int, init_iphtable_nat, (void));
DECL_KSYM_CALL(int, init_iphtable_nat_ftp, (void));
DECL_KSYM_CALL(int, init_iphtable_nat_irc, (void));
+DECL_KSYM_CALL(int, init_iphtable_REDIRECT, (void));
DECL_KSYM_CALL(void, fini_iphtable_nat_irc, (void));
DECL_KSYM_CALL(void, fini_iphtable_nat_ftp, (void));

```

```

DECL_KSYM_CALL(void, fini_iptable_nat, (void));
@@ -205,6 +207,7 @@ DECL_KSYM_CALL(void, fini_iptable_filter
DECL_KSYM_CALL(void, fini_iptable_mangle, (void));
DECL_KSYM_CALL(void, fini_iptables, (void));
DECL_KSYM_CALL(void, fini_netfilter, (void));
+DECL_KSYM_CALL(void, fini_iptable_REDIRECT, (void));

DECL_KSYM_CALL(void, ipt_flush_table, (struct ipt_table *table));
#endif /* CONFIG_VE_IPTABLES */
--- ./include/linux/vzcalluser.h.iptredir 2006-03-03 14:43:11.000000000 +0300
+++ ./include/linux/vzcalluser.h 2006-03-16 16:05:46.000000000 +0300
@@ -82,6 +82,7 @@ struct vzctl_ve_netdev {
#define VE_IP_NAT_MOD (1U<<20)
#define VE_IP_NAT_FTP_MOD (1U<<21)
#define VE_IP_NAT_IRC_MOD (1U<<22)
+#define VE_IP_TARGET_REDIRECT_MOD (1U<<23)

/* these masks represent modules with their dependences */
#define VE_IP_IPTABLES (VE_IP_IPTABLES_MOD)
@@ -127,6 +128,8 @@ struct vzctl_ve_netdev {
    | VE_IP_NAT | VE_IP_CONNTRACK_FTP)
#define VE_IP_NAT_IRC (VE_IP_NAT_IRC_MOD \
    | VE_IP_NAT | VE_IP_CONNTRACK_IRC)
+#define VE_IP_TARGET_REDIRECT (VE_IP_TARGET_REDIRECT_MOD \
+   | VE_IP_NAT)

/* safe iptables mask to be used by default */
#define VE_IP_DEFAULT \
--- ./kernel/ve.c.iptredir 2006-03-03 14:43:05.000000000 +0300
+++ ./kernel/ve.c 2006-03-16 16:05:46.000000000 +0300
@@ -75,6 +75,7 @@ INIT_KSYM_MODULE(ipt_helper);
INIT_KSYM_MODULE(iptable_nat);
INIT_KSYM_MODULE(ip_nat_ftp);
INIT_KSYM_MODULE(ip_nat irc);
+INIT_KSYM_MODULE(ipt_REDIRECT);

INIT_KSYM_CALL(int, init_netfilter, (void));
INIT_KSYM_CALL(int, init_ipTables, (void));
@@ -99,6 +100,7 @@ INIT_KSYM_CALL(int, init_iptable_helper,
INIT_KSYM_CALL(int, init_iptable_nat, (void));
INIT_KSYM_CALL(int, init_iptable_nat_ftp, (void));
INIT_KSYM_CALL(int, init_iptable_nat irc, (void));
+INIT_KSYM_CALL(int, init_iptable_REDIRECT, (void));
INIT_KSYM_CALL(void, fini_iptable_nat irc, (void));
INIT_KSYM_CALL(void, fini_iptable_nat_ftp, (void));
INIT_KSYM_CALL(void, fini_iptable_nat, (void));
@@ -122,6 +124,7 @@ INIT_KSYM_CALL(void, fini_iptable_filter
INIT_KSYM_CALL(void, fini_iptable_mangle, (void));

```

```

INIT_KSYM_CALL(void, fini_iptables, (void));
INIT_KSYM_CALL(void, fini_netfilter, (void));
+INIT_KSYM_CALL(void, fini_iphtable_REDIRECT, (void));

INIT_KSYM_CALL(void, ipt_flush_table, (struct ipt_table *table));
#endif
--- ./kernel/vecalls.c.iptredir 2006-03-03 16:16:06.000000000 +0300
+++ ./kernel/vecalls.c 2006-03-16 16:07:25.000000000 +0300
@@ @ -1577,11 +1577,24 @@ static int do_ve_iptables(struct ve_stru
    if (err < 0)
        goto err_iphtable_length;
#endif
+#if defined(CONFIG_IP_NF_TARGET_REDIRECT) || \
+  defined(CONFIG_IP_NF_TARGET_REDIRECT_MODULE)
+  err = KSYMIPTINIT(init_mask, ve, VE_IP_TARGET_REDIRECT,
+  ipt_REDIRECT, init_iphtable_REDIRECT, ());
+  if (err < 0)
+    goto err_iphtable_REDIRECT;
#endif
    return 0;

/* ----- */

cleanup:
+#if defined(CONFIG_IP_NF_TARGET_REDIRECT) || \
+  defined(CONFIG_IP_NF_TARGET_REDIRECT_MODULE)
+  KSYMIPTFINI(ve->_iptables_modules, VE_IP_TARGET_REDIRECT,
+  ipt_REDIRECT, fini_iphtable_REDIRECT, ());
+err_iphtable_REDIRECT:
#endif
#if defined(CONFIG_IP_NF_MATCH_LENGTH) || \
  defined(CONFIG_IP_NF_MATCH_LENGTH_MODULE)
  KSYMIPTFINI(ve->_iptables_modules, VE_IP_MATCH_LENGTH,
--- ./net/ipv4/netfilter/ipt_REDIRECT.c.iptredir 2004-08-14 14:55:10.000000000 +0400
+++ ./net/ipv4/netfilter/ipt_REDIRECT.c 2006-03-16 16:11:10.000000000 +0300
@@ @ -17,6 +17,7 @@
#include <linux/inetdevice.h>
#include <net/protocol.h>
#include <net/checksum.h>
+#include <linux/nfcalls.h>
#include <linux/netfilter_ipv4.h>
#include <linux/netfilter_ipv4/ip_nat_rule.h>

@@ @ -25,7 +26,7 @@ MODULE_AUTHOR("Netfilter Core Team <core
MODULE_DESCRIPTION("iptables REDIRECT target module");

#endif
#define DEBUGP printk

```

```

+#define DEBUGP ve_printf
#else
#define DEBUGP(format, args...)
#endif
@@ -115,14 +116,36 @@ static struct ipt_target redirect_reg =
    .me = THIS_MODULE,
};

+int init_iptable_REDIRECT(void)
+{
+    return visible_ipt_register_target(&redirect_reg);
+}
+
+void fini_iptable_REDIRECT(void)
+{
+    visible_ipt_unregister_target(&redirect_reg);
+}
+
static int __init init(void)
{
-    return ipt_register_target(&redirect_reg);
+    int err;
+
+    err = init_iptable_REDIRECT();
+    if (err < 0)
+        return err;
+
+    KSYMRESOLVE(init_iptable_REDIRECT);
+    KSYMRESOLVE(fini_iptable_REDIRECT);
+    KSYMMODRESOLVE(ipt_REDIRECT);
+    return 0;
}

static void __exit fini(void)
{
-    ipt_unregister_target(&redirect_reg);
+    KSYMMODUNRESOLVE(ipt_REDIRECT);
+    KSYMUNRESOLVE(init_iptable_REDIRECT);
+    KSYMUNRESOLVE(fini_iptable_REDIRECT);
+    fini_iptable_REDIRECT();
}

module_init(init);

```
