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Subject: [PATCH 2/2] Module for ip utility to support veth device  
Posted by [Pavel Emelianov](#) on Thu, 19 Jul 2007 09:33:56 GMT  
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The link\_veth.so itself.

Signed-off-by: Pavel Emelyanov <xemul@openvz.org>  
Acked-by: Patrick McHardy <kaber@trash.net>

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```
Makefile |  6 +----  
link_veth.c| 63 +++++++++++++++++++++++++++++++++++++++++++++++++++++++  
veth.h    | 12 ++++++++  
3 files changed, 80 insertions(+), 1 deletion(-)
```

```
diff --git a/ip/Makefile b/ip/Makefile  
index 9a5bfe3..b46bce3 100644  
--- a/ip/Makefile  
+++ b/ip/Makefile  
@@ -8,8 +8,9 @@ RTMONOBJ=rtmon.o  
ALLOBJ=$(IPOBJ) $(RTMONOBJ)  
SCRIPTS=ifcfg rtpr routel routef  
TARGETS=ip rtmon  
+LIBS=link_veth.so
```

```
-all: $(TARGETS) $(SCRIPTS)  
+all: $(TARGETS) $(SCRIPTS) $(LIBS)
```

```
ip: $(IPOBJ) $(LIBNETLINK) $(LIBUTIL)
```

```
@@ -24,3 +25,6 @@ clean:
```

```
LDLIBS += -ldl  
LDFLAGS += -Wl,-export-dynamic  
+  
+%.so: %.c  
+ $(CC) $(CFLAGS) -shared $< -o $@  
diff --git a/ip/link_veth.c b/ip/link_veth.c  
new file mode 100644  
index 0000000..ded2cdd  
--- /dev/null  
+++ b/ip/link_veth.c  
@@ -0,0 +1,63 @@  
+/*  
+ * link_veth.c veth driver module  
+ *  
+ * This program is free software; you can redistribute it and/or
```

```

+ * modify it under the terms of the GNU General Public License
+ * as published by the Free Software Foundation; either version
+ * 2 of the License, or (at your option) any later version.
+ *
+ * Authors: Pavel Emelianov <xemul@openvz.org>
+ *
+ */
+
+#include <string.h>
+
+#include "utils.h"
+#include "ip_common.h"
+#include "veth.h"
+
+#define IFNAMSIZ 16
+
+static void usage(void)
+{
+ printf("Usage: ip link add ... type veth "
+ "[peer <peer-name>] [mac <mac>] [peer_mac <mac>]\n");
+}
+
+static int veth_parse_opt(struct link_util *lu, int argc, char **argv,
+ struct nlmsghdr *hdr)
+{
+ char *name, *type, *link, *dev;
+ int err, len;
+ struct rtattr * data;
+
+ if (strcmp(argv[0], "peer") != 0) {
+ usage();
+ return -1;
+ }
+
+ data = NLMSG_TAIL(hdr);
+ addattr_l(hdr, 1024, VETH_INFO_PEER, NULL, 0);
+
+ hdr->nlmsg_len += sizeof(struct ifinfomsg);
+
+ err = iplink_parse(argc - 1, argv + 1, (struct iplink_req *)hdr,
+ &name, &type, &link, &dev);
+ if (err < 0)
+ return err;
+
+ if (name) {
+ len = strlen(name) + 1;
+ if (len > IFNAMSIZ)
+ invarg("\\"name\\" too long\n", *argv);

```

```
+ addattr_l(hdr, 1024, IFLA_IFNAME, name, len);
+ }
+
+ data->rta_len = (void *)NLMSG_TAIL(hdr) - (void *)data;
+ return argc - 1 - err;
+}
+
+struct link_util veth_link_util = {
+ .id = "veth",
+ .parse_opt = veth_parse_opt,
+};
diff --git a/ip/veth.h b/ip/veth.h
new file mode 100644
index 0000000..aa2e6f9
--- /dev/null
+++ b/ip/veth.h
@@ -0,0 +1,12 @@
+#ifndef __NET_VETH_H__
+#define __NET_VETH_H__
+
+enum {
+ VETH_INFO_UNSPEC,
+ VETH_INFO_PEER,
+
+ __VETH_INFO_MAX
+#define VETH_INFO_MAX (__VETH_INFO_MAX - 1)
+};
+
+#endif
```

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