

DragonFlyBSD - Bug #1897

SIOCGIFADDR doesn't work

11/03/2010 01:23 PM - steve

Status:	Feedback	Start date:	
Priority:	Low	Due date:	
Assignee:	tuxillo	% Done:	0%
Category:	Networking	Estimated time:	0.00 hour
Target version:	3.8.0		
Description			
Hi,			
I found this while trying to get ushare to work - the SIOCGIFADDR ioctl doesn't set the IP address (at least for re devices), what you get is whatever was in the struct ifreq before the call.			
Running v2.9.0.105.gba1cb-DEVELOPMENT - but it's been going on for a while I just haven't got to the bottom of the problem until now.			
My test code (below) always prints 0.			
<pre>#include <stdio.h> #include <stdlib.h> #include <string.h> #include <sys/socket.h> #include <sys/sysctl.h> #include <net/if_dl.h> #include <net/if.h> #include <sys/ioctl.h> #include <netinet/in.h> int main (int argc, char **argv) { int sock; int32_t ip; struct ifreq ifr; memset (&ifr, 0, sizeof ifr); sock = socket (AF_INET, SOCK_STREAM, 0); if (sock < 0) { perror ("socket"); exit(1); } strcpy(ifr.ifr_name, "re0"); ifr.ifr_addr.sa_family = AF_INET; if (ioctl (sock, SIOCGIFADDR, &ifr) < 0) { perror("ioctl"); exit(1); } ip = ((struct sockaddr_in *) &ifr.ifr_addr)->sin_addr.s_addr; printf("%x\n", ip); }</pre>			

History

#1 - 05/05/2012 12:15 AM - raitech

- Description updated

I had the same issue here, detected while trying do run the NO-IP daemon. It works fine under FreeBSD, so I thought that it should work too under DragonFlyBSD.

I took this as a solution:

(based on the test posted by Steve)

(basically bypass the ioctl and use getifaddrs(3) - is, therefore, SIOGIFADDR and the like deprecated?!)

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>

#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <ifaddrs.h>

int main (int argc, char **argv) {
    struct ifaddrs *ifa = NULL;
    char inaddr[INET_ADDRSTRLEN];

    if(getifaddrs(&ifa) != 0) {
        printf("Error while trying to get ifaddrs...\n");
        exit(1);
    }

    while(ifa) {
        inet_ntop(AF_INET, (struct in_addr *)&((struct sockaddr_in *)ifa->ifa_addr->sin_addr), inaddr, INET_ADDRSTRLEN);
        printf("Dev: %s IP %s --> %d\n", ifa->ifa_name, inaddr, ifa->ifa_addr->sa_family);
        ifa = ifa->ifa_next;
    }

    freeifaddrs(ifa);

    return(0);
}
```

Now, working on the NO-IP patch.

#2 - 05/29/2012 01:21 AM - sepherosa

On Sat, May 5, 2012 at 3:15 PM, Raimundo Santos via Redmine

<bugtracker-admin@leaf.dragonflybsd.org> wrote:

```
>
> Issue #1897 has been updated by Raimundo Santos.
>
> Description updated
>
> I had the same issue here, detected while trying do run the NO-IP daemon. It works fine under FreeBSD, so I thought that it should work too under
DragonFlyBSD.
>
> I took this as a solution:
>
> (based on the test posted by Steve)
> (basically bypass the ioctl and use getifaddrs(3) - is, therefore, SIOGIFADDR and the like deprecated?!)
```

```
>
> #include <stdio.h>
> #include <stdlib.h>
> #include <string.h>
>
>
> #include <sys/types.h>
> #include <sys/socket.h>
> #include <netinet/in.h>
> #include <ifaddrs.h>
>
> int main (int argc, char **argv) {
>     struct ifaddrs *ifa = NULL;
>     char inaddr[INET_ADDRSTRLEN];
>
>     if(getifaddrs(&ifa) != 0) {
>         printf("Error while trying to get ifaddrs...\n");
>         exit(1);
>     }
>
>     while(ifa) {
>         inet_ntop(AF_INET, (struct in_addr *)&((struct sockaddr_in *)ifa->ifa_addr->sin_addr), inaddr, INET_ADDRSTRLEN);
>         printf("Dev: %s IP %s --> %d\n", ifa->ifa_name, inaddr, ifa->ifa_addr->sa_family);
```

```
> ifa = ifa->ifa_next;
> }
>
> freeifaddrs(ifa);
>
> return(0);
> }
>
```

> Now, working on the NO-IP patch.

```
> -----
> Bug #1897: SIOCGIFADDR doesn't work
> http://bugs.dragonflybsd.org/issues/1897
```

```
>
> Author: Steve O'Hara-Smith
> Status: New
> Priority: Normal
> Assignee:
> Category:
> Target version:
```

> Hi,

```
>
> I found this while trying to get ushare to work - the SIOCGIFADDR
> ioctl doesn't set the IP address (at least for re devices), what you get is
> whatever was in the struct ifreq before the call.
```

It is due to wrongly numbered SIOCGIFDATA; it should have been fixed on master:
401c752a1960c193055c3ab3e6830eb2f259d1f4

Best Regards,
sephe

```
>
> Running v2.9.0.105.gba1cb-DEVELOPMENT - but it's been going on for
> a while I just haven't got to the bottom of the problem until now.
```

```
>
> My test code (below) always prints 0.
```

```
>
> #include <stdio.h>
> #include <stdlib.h>
> #include <string.h>
> #include <sys/socket.h>
> #include <sys/sysctl.h>
> #include <net/if_dl.h>
> #include <net/if.h>
> #include <sys/ioctl.h>
> #include <netinet/in.h>
>
> int main (int argc, char **argv)
> {
>     int sock;
>     int32_t ip;
>     struct ifreq ifr;
>
>     memset (&ifr, 0, sizeof ifr);
>     sock = socket (AF_INET, SOCK_STREAM, 0);
>     if (sock < 0) {
>         perror ("socket");
>         exit(1);
>     }
>
>     strcpy(ifr.ifr_name, "re0");
>     ifr.ifr_addr.sa_family = AF_INET;
>     if (ioctl (sock, SIOCGIFADDR, &ifr) < 0) {
>         perror("ioctl");
>         exit(1);
>     }
>     ip = ((struct sockaddr_in *) &ifr.ifr_addr->sin_addr.s_addr);
>     printf("%x\n", ip);
> }
>
>
> --
```

> You have received this notification because you have either subscribed to it, or are involved in it.

> To change your notification preferences, please click here: <http://bugs.dragonflybsd.org/my/account>

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Tomorrow Will Never Die

#3 - 08/14/2012 07:48 AM - alexh

- Status changed from New to Feedback
- Assignee deleted (0)

#4 - 09/09/2012 06:47 PM - y0n3t4n1

Hi, could someone please merge this fix to DragonFly_RELEASE_3_0?

Oh BTW, `sort -nk4,4 /sys/sys/sockio.h` reveals a few more duplicates; are these OK?

```
#define SIOCGETVIFCNT  _IOWR('r', 15, struct sioc_vif_req) /* get vif pkt cnt */
#define SIOCGETSGCNT  _IOWR('r', 16, struct sioc_sg_req) /* get s,g pkt cnt */
#define OSIOCGIFDSTADDR _IOWR('i', 15, struct ifreq) /* get p-p address */
#define SIOCSIFFLAGS  _IOW('i', 16, struct ifreq) /* set ifnet flags */
```

#5 - 03/31/2014 03:30 PM - tuxillo

- Description updated
- Category set to Networking
- Assignee set to tuxillo
- Priority changed from Normal to Low
- Target version set to 3.8.0

Hi,

Commit 401c752a1960c193055c3ab3e6830eb2f259d1f4 is already on latest stable (since it went to mater a year and a half ago or so). Let me check the other ones.

Cheers,
Antonio Huete