**Simple sample of getting IP address information**

**#include <stdio.h>**

**#include <string.h> /\* for strncpy \*/**

**#include <sys/types.h>**

**#include <sys/socket.h>**

**#include <sys/ioctl.h>**

**#include <netinet/in.h>**

**#include <net/if.h>**

**int**

**main()**

**{**

**int fd;**

**struct ifreq ifr;**

**fd = socket(AF\_INET, SOCK\_DGRAM, 0);**

**/\* I want to get an IPv4 IP address \*/**

**ifr.ifr\_addr.sa\_family = AF\_INET;**

**/\* I want IP address attached to "eth0" \*/**

**strncpy(ifr.ifr\_name, "eth0", IFNAMSIZ-1);**

**ioctl(fd, SIOCGIFADDR, &ifr);**

**close(fd);**

**/\* display result \*/**

**printf("%s\n", inet\_ntoa(((struct sockaddr\_in \*)&ifr.ifr\_addr)->sin\_addr));**

**return 0;**

**}**

On Linux platform, you can use ioctl to obtain the IP address information.

To use ioctl, you must create a socket.

The important thing is that the socket family used is AF\_INET.

You can use either TCP(SOCK\_STREAM) or UDP(SOCK\_DGRAM) socket.

This sample uses an UDP socket.

The socket used to get the IP address information can be closed after obtaining the IP address information.

You can use it as a normal socket to communicate too.