

NAME

getifmaddrs - get multicast group memberships

SYNOPSIS

```
#include <ifaddrs.h>
```

int

```
getifmaddrs(struct ifmaddrs **ifmap);
```

void

```
freeifmaddrs(struct ifmaddrs *ifmp);
```

DESCRIPTION

The **getifmaddrs()** function stores a reference to a linked list of the multicast memberships on the local machine in the memory referenced by *ifmap*. The list consists of *ifmaddrs* structures, as defined in the include file *<ifaddrs.h>*. The *ifmaddrs* structure contains at least the following entries:

```
struct ifmaddrs  *ifma_next;   /* Pointer to next struct */
struct sockaddr  *ifma_name;   /* Interface name (AF_LINK) */
struct sockaddr  *ifma_addr;   /* Multicast address */
struct sockaddr  *ifma_lladdr; /* Link-layer translation, if any */
```

The *ifma_next* field contains a pointer to the next structure on the list. This field is NULL in last structure on the list.

The *ifma_name* field references an AF_LINK address structure, containing the name of the interface where the membership exists.

The *ifma_addr* references the address that this membership is for.

The *ifma_lladdr* field references a link-layer translation for the protocol-level address in *ifma_addr*, if one is set, otherwise it is NULL.

The data returned by **getifmaddrs()** is dynamically allocated and should be freed using **freeifmaddrs()** when no longer needed.

RETURN VALUES

The **getifmaddrs()** function returns the value 0 if successful; otherwise the value -1 is returned and the global variable *errno* is set to indicate the error.

ERRORS

The `getifmaddrs()` may fail and set *errno* for any of the errors specified for the library routines `malloc(3)` or `sysctl(3)`.

SEE ALSO

`sysctl(3)`, `networking(4)`, `ifconfig(8)`

HISTORY

The `getifmaddrs()` function first appeared in FreeBSD 5.2.

BUGS

If both `<net/if.h>` and `<ifaddrs.h>` are being included, `<net/if.h>` *must* be included before `<ifaddrs.h>`.