

**NAME**

**mld** - Multicast Listener Discovery Protocol

**SYNOPSIS**

```
#include <sys/types.h>
#include <sys/socket.h>
#include <netinet/in.h>
#include <netinet/in_systm.h>
#include <netinet/ip6.h>
#include <netinet/icmp6.h>
#include <netinet6/mld6.h>
```

*int*

```
socket(AF_INET6, SOCK_RAW, IPPROTO_ICMPV6);
```

**DESCRIPTION**

MLD is a control plane protocol used by IPv6 hosts and routers to propagate multicast group membership information. Normally this protocol is not used directly, except by the kernel itself, in response to multicast membership requests by user applications. Multicast routing protocol daemons may open a raw socket to directly interact with **mld** and receive membership reports.

As of FreeBSD 8.0, MLD version 2 is implemented. This adds support for Source-Specific Multicast (SSM), whereby applications may communicate to upstream multicast routers that they are only interested in receiving multicast streams from particular sources. The retransmission of state-change reports adds some robustness to the protocol.

**SYSCTL VARIABLES**

net.inet6.mld.ifinfo

This opaque read-only variable exposes the per-link MLDv2 status to ifmcstat(8).

net.inet6.mld.gsrdelay

This variable specifies the time threshold, in seconds, for processing Group-and-Source Specific Queries (GSR). As GSR query processing requires maintaining state on the host, it may cause memory to be allocated, and is therefore a potential attack point for Denial-of-Service (DoS). If more than one GSR query is received within this threshold, it will be dropped, to mitigate the potential for DoS.

net.inet6.mld.v1enable

If this variable is non-zero, then MLDv1 membership queries (and host reports) will be processed by this host, and backwards compatibility will be enabled until the v1 'Older Version

Querier Present' timer expires. This sysctl is normally enabled by default.

**SEE ALSO**

netstat(1), sourcefilter(3), icmp6(4), inet(4), multicast(4), ifmcstat(8)

**HISTORY**

The **mld** manual page appeared in FreeBSD 8.0.