NAME

ng_eiface - generic Ethernet interface netgraph node type

SYNOPSIS

#include <netgraph/ng_eiface.h>

DESCRIPTION

The *eiface* netgraph node implements the generic Ethernet interface. When an *eiface* node is created, a new interface appears which is accessible via ifconfig(8). These interfaces are named "ngeth0", "ngeth1", etc. When a node is shut down, the corresponding interface is removed, and the interface name becomes available for reuse by future *eiface* nodes. New nodes always take the first unused interface.

HOOKS

An *eiface* node has a single hook named *ether*, which should be connected to the Ethernet downstream, for example, to the ng_vlan(4) node. Packets transmitted via the interface flow out this hook. Similarly, packets received on the hook go to the protocol stack as packets received by any real Ethernet interface.

CONTROL MESSAGES

This node type supports the generic control messages, plus the following:

NGM_EIFACE_SET (**set**)
: Set link-level address of the interface. Requires *struct ether_addr* as an argument. This message also has an ASCII version, called "set", which requires as an argument an ASCII string consisting of 6 colon-separated hex digits.

NGM_EIFACE_GET_IFNAME (**getifname**)
: Return the name of the associated interface as a NULL-terminated ASCII string.

NGM_EIFACE_GET_IFADDRS
: Return the list of link-level addresses associated with the node.

SHUTDOWN

This node shuts down upon receipt of a NGM_SHUTDOWN control message. The associated interface is removed and its name becomes available for reuse by future *eiface* nodes.

Unlike most other node types, an *eiface* node does *not* go away when all hooks have been disconnected; rather, an explicit NGM_SHUTDOWN control message is required.

SEE ALSO

netgraph(4), ng_ether(4), ng_iface(4), ng_vlan(4), ifconfig(8), ngctl(8)

HISTORY

The *eiface* node type was implemented in FreeBSD 4.6.

AUTHORS

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