NAME

ForwHeader − Click element; encapsulates IP packets in Forwarding Header with the hop list being looked up in a routing table maintained by **ForwHeader**

SYNOPSIS

ForwHeader(HOPS, METHOD, OPTIONS)

Ports: 1 input, 1 output
Processing: push
Package: local (core)

DESCRIPTION

encapsulates each packet in the Forwarding Header. The METHOD and OPTIONS 8-bit fields in the Forwarding Header will be set with the values of METHOD and OPTIONS. The hop list written into the Forwarding Header will be looked up in a routing table maintained by **ForwHeader**. If no entry for the destination IP is found, the packet will be enqueued until an entry for the destination IP is added.

HOPS will be used to initialize the routing table with one row. The first IP is the destination, the remaining IPs the hop list. This is for testing purposes, the preferred way to set up the routing table is through the handlers.

EXAMPLES

ForwHeader(192.168.151.1 192.168.152.1 192.168.175.1,1,10)

will initialize the routing table so that IP packets with destination 192.168.151.1 are encapsulated in a Forwarding Header with hop list 192.168.152.1 192.168.175.1.

ELEMENT HANDLERS

set_route (write-only)
: Sets the hop list for a destination in the routing table. Expects a list of IP addresses, the first one is the destination, the remaining ones the hop list.

clear (write-only)
: Clears the routing table

dump_routes (read-only)
: Lists the routing table. Each row first lists the destination IP, then the hop list.

queued (read-only)
: Lists the destination IPs of all IP packets which are queued because their destination IP was not in the routing table.

SEE ALSO

ForwHeaderPrint(n), *NextHop*(n), *RevRoute*(n)