

NAME

arp - address resolution display and control

SYNOPSIS

```
arp [--libxo options] [-n] [-i interface] hostname  
arp [--libxo options] [-n] [-i interface] -a  
arp -d hostname [pub]  
arp -d [-i interface] -a  
arp -s hostname ether_addr [temp] [blackhole | reject] [pub]  
arp -S hostname ether_addr [temp] [blackhole | reject] [pub]  
arp -f filename
```

DESCRIPTION

The **arp** utility displays and modifies the Internet-to-Ethernet address translation tables used by the address resolution protocol (arp(4)). With no flags, the program displays the current ARP entry for *hostname*. The host may be specified by name or by number, using Internet dot notation.

Available options:

--libxo

Generate output via libxo(3) in a selection of different human and machine readable formats. See xo_parse_args(3) for details on command line arguments.

-a The program displays or, if it is used with the **-d** flag, deletes all of the current ARP entries.

-d A super-user may delete an entry for the host called *hostname* with the **-d** flag. If the **pub** keyword is specified, only the "published" ARP entry for this host will be deleted.

Alternatively, the **-d** flag may be combined with the **-a** flag to delete all entries.

-i interface

Limit the operation scope to the ARP entries on *interface*. Applicable only to the following operations: display one, display all, delete all.

-n Show network addresses as numbers (normally **arp** attempts to display addresses symbolically).

-s hostname ether_addr

Create an ARP entry for the host called *hostname* with the Ethernet address *ether_addr*. The Ethernet address is given as six hex bytes separated by colons. The entry will be permanent unless the word **temp** is given in the command. If the word **pub** is given, the entry will be

"published"; i.e., this system will act as an ARP server, responding to requests for *hostname* even though the host address is not its own. In this case the *ether_addr* can be given as **auto** in which case the interfaces on this host will be examined, and if one of them is found to occupy the same subnet, its Ethernet address will be used.

If the **reject** keyword is specified the entry will be marked so that traffic to the host will be discarded and the sender will be notified the host is unreachable. The **blackhole** keyword is similar in that traffic is discarded but the sender is not notified. These can be used to block external traffic to a host without using a firewall.

-S *hostname ether_addr*

Is just like **-s** except any existing ARP entry for this host will be deleted first.

-f *filename*

Cause the file *filename* to be read and multiple entries to be set in the ARP tables. Entries in the file should be of the form

```
hostname ether_addr [temp] [blackhole | reject] [pub]
```

with argument meanings as given above. Leading whitespace and empty lines are ignored. A '#' character will mark the rest of the line as a comment.

SEE ALSO

inet(3), libxo(3), xo_parse_args(3), arp(4), ifconfig(8), ndp(8)

HISTORY

The **arp** utility appeared in 4.3BSD.