arp command (ARP protocol)

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Description

The "*arp*" command is used to manipulate with ARP tables. ARP protocol serves for IP to MAC address mapping and vice versa. For example in Ethernet it allows to transform IP destination address into its 48-bit Ethernet address for packet forwarding over LAN.

In common case ARP works automatically making address resolution as it is necessary. But there are some cases when ARP tables should be corrected manually and arp command solves this problem.

Syntax:

```
arp view [IP]
arp add IP {MAC | auto} [proxy]
arp del {IP | all} [proxy]
arp [-]freeze
arp [-]proxyall [$ACL]
```

Parameters

Parameter	Description
view [IP]	Displays the ARP table. • *"IP"* – IP address which records must be shown.
add IP {MAC | auto} [proxy]	Adds record into the ARP table. • "*IP*" – IP address to add a compliance. • *"MAC"* – MAC address which is mapped to IP address. • "*proxy*" – if specified then the system will announce this information as response to requests from other stations, acting as proxy ARP server, even if this IP address is not system own address. • "*auto*" – if specified, network interface MAC address from same subnetwork as the IP address will be set.
del IP|all [proxy]	Removes records from the ARP table. • *"IP"* – IP address which information need to be removed. • *"all"* – all records in the ARP table. • "*proxy*" – IP address for which system acting as proxy ARP server.
[-]freeze	Enables to freeze ARP table. No more automatically updates allowed. The command fixes only manual records and does not affect on the radio interface with active protocol MINT. Be careful when entering this command via telnet.
[-]proxyall [$ACL]	Enables/disables "*proxyall*" mode. In this mode the system will reply on all ARP requests, if respective target IP address resides in the routing tables and reachable via interface other than source MAC address. I.e. if there is a route to the target IP address then the device can be considered as a gateway. • "*$ACL*" – list of addresses/networks, which limits this command.

Title

Examples

Add the "*00:11:22:33:44:55*" MAC address which is mapped to "*10.10.10.10*" IP address to the table.

```
arp add 10.10.10.10 00:11:22:33:44:55
```

Make system act as proxy ARP server for the "*192.168.103.35*" IP address.

```
arp add 192.168.103.35 auto proxy
using interface svi1 for proxy with address 020435035E4E
```