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ARP proxy

ARP-requests handling is enabled by the `bras_arp_proxy` configuration option which represents a set of bit flags:

- 0 - ARP proxy mode is disabled. In this mode, BRAS responds only to ARP requests being sent from an IP address specified in `bras_arp_ip` option;
- 0x0001 - specifies to respond to subscriber ARP-requests: if the desired IP-address is the subscriber address and the subscriber session status is not equal to "the session is closed";
- 0x0002 - specifies to respond to ARP requests being sent from user subnet gateways. The gateway addresses are extracted from the DHCP subscriber traffic.
- 0x0004 [in router mode] - respond if there is a route to the requested IP. This flag works only if the router mode is enabled. If a subscriber requests ARP for an address with a known route, fastDPI will respond with its own MAC address `bras_arp_mac`.

When the ARP proxy is enabled, BRAS responds with its MAC address (specified in the configuration bras_arp_mac) option. Note that fastDPI responds with the same MAC address to all the ARP requests with different IP addresses, it should be taken into account when you will configure a network.

The fastDPI BRAS checks the correctness of IP address of the ARP request source in accordance with IP source guard before to start the ARP request processing.

The fastDPI BRAS does not respond to gratuitous/announcement ARP requests.

> ⚠️ No ARP requests are forwarded outside, i.e. the fastDPI BRAS either responds to them, or drops it.

External ARP requests handling (from the boarder side)

To ensure that the boarder ARP table is not filled in with identical records the VAS Experts DPI does not respond using its MAC address to the ARP requests being sent from the subscriber IP addresses. A transit route through the VAS Experts DPI has to be defined for all the subscribers subnets served by the DPI, instead. It should be used value specified by the `bras_arp_ip` option as a destination address for all such routes.

> ⚠️ The only ARP request type the BRAS responds is its IP address (specified in the `bras_arp_ip` option) request .