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IP source guard

FastDPI BRAS allows you to control the correspondence of VLAN tags and IP addresses for subscribers. When assigning IP addresses using DHCP the fastDPI BRAS stores VLAN/QinQ subscriber tags in its [UDR](#) database and and then uses this data to control whether the source IP address and VLAN tag match.

To enable IP source guard mode you should set the value of `bras_ip_source_guard` option in the fastdpi.conf:

- 0 – IP source guard is disabled. It is the default value.
- 1 – IP source guard is enabled and is only applicable to active sessions. If the session resides in unknown state (after the fastDPI is restarted), then the IP source guard will not be used,so a packet will be forwarded.
- 2 – strict: IP source guard is enabled and is applicable to sessions resided in `active` and unknown states. In this case VLAN tags stored in the UDR are used for sessions that resides in unknown state.

The packet will be forwarded in the following cases:

- `bras_ip_source_guard=1`: conditions are met
    - Session is active and packet VLAN tags are the same as registered in DHCP request ones
    - Session state is unknown
- `bras_ip_source_guard=2` (strict):
    - Session is active and VLAN tags are the same as registered in DHCP request ones
    - Session state is unknown and VLAN tags are the same as stored in the UDR

If the conditions are not met the package will be dropped.

IP source guard is used just in case of outbound traffic (from LAN to WAN).

Stingray Service Gateway 7.4+: the [AS termination](#) mode is added. The IP source guard is used only to those source IPs, where AS is marked as `term` .