Table of Contents

BNG/BRAS reservation 3
Ways the data is applied on the DPI 3

BNG/BRAS reservation

The following replication scheme is used in the Stingray Service Gateway ver. 8.3+ to align subscriber data on all fastDPI servers: fastPCRF sends authorization responses and CoA requests to all the servers listed in the fdpi_server configuration parameters.

Authorization parameters are sent by using a persistent queue so even if some of the fastDPI servers are inactive at the time of data transmission, they will receive all the data missed during their idle time once they are activated.

Ways the data is applied on the DPI

When receiving authorization data, the fastDPI server identifies whether it was response to its own request or it was a response to another request (there is a special label in the packet for this purpose). If this is a response to its own request, the data will be applied completely: a DHCP or PPPoE session will be created in case of DHCP or PPPoE authorization request and the data will be stored in UDR. If this is an answer to another request, the fastDPI will simply store corresponding "extraneous" data in the UDR. Thus, when the main fastDPI server becomes unavailable all the load would be imposed on the backup fastDPI server and the latter will already have contain all the subscriber properties in its UDR: subscriver services, its policing, L2 properties - MAC address, VLAN, etc. That is, the UDR of the main and backup servers will essentially contain the consistent data.