

Table of Contents

Multiple sessions 3

Multiple sessions

Starting with SSG version 8.3, multi-session support (Acct-Multi-Session-Id) is introduced. This is due to the fact that one fastPCRF server can work with several fastDPI servers, and the same subscriber (his IP address) can be processed on different fastDPI servers. For example, it can be a transfer of the subscriber's traffic from the main fastDPI server to the standby one: in this case the subscriber's traffic can go through two fastDPI servers for a certain period of time. Alternatively, the balancer can be configured so that the subscriber's traffic flow is routed via one fastDPI server, and the other flows via another fastDPI server. In both cases, it means that the flow for the subscriber goes from different fastDPI servers to the same fastPCRF server. To support such modes, the concept of multi-session is introduced in RFC 2866.

For a given IP address there can be only one multi-session, but many different accounting sessions - one from each fastDPI server. The Accounting-Request always includes, along with the Acct-Session-Id attribute, the Acct-Multi-Session-Id attributes and the NAS attributes that identify a particular fastDPI server.

In the "one fastPCRF - multiple fastDPI" mode, the identification of the fastDPI server, the source of the accounting, becomes especially important. In SSG 8.3 the principle of NAS-IP-Address and NAS-Identifier attributes formation has been significantly changed: previously these attributes were set statically in fastpcrf.conf and were the same for all fastDPIs (actually fastPCRF acted as NAS), now these attributes are set separately for each fastDPI server in the `fdpi_server` fastpcrf.conf file. Thus, the fastDPIs now act as NAS servers. The attributes that identify NAS are included in all RADIUS requests, both Access-Request and Accounting-Request. Only one of the attributes NAS-IP-Address or NAS-Identifier can be included in a request: the `attr_nas_ip` explicit setting in the `fdpi_server` parameter has the highest priority:

```
fdpi_server=127.0.0.1%lo:29000;attr_nas_ip=10.20.30.40;attr_nas_id=DPI-1
```

The NAS-IP-Address=10.20.30.40 attribute will be applied to requests from this server.

If `attr_nas_ip` is not specified, but `attr_nas_id` is, then the requests will include NAS-Identifier=DPI-1.

If no NAS attributes are specified in `fdpi_server`, then the NAS-IP-Address will be the IP address of the server, for example, for this description:

```
fdpi_server=192.168.27.56%eth1:29000
```

NAS-IP-Address=192.168.27.56.

It is possible to include both attributes NAS-IP-Address and NAS-Identifier into the request. To do this, set the parameter in fastpcrf.conf:

```
# Allow to add NAS-IP-Address AND NAS-Identifier attributes
# According to the RFC, either NAS-IP-Address or NAS-Identifier can be
present in the request.
# If both options are set, the NAS-IP-Address option takes precedence.
# The value of this parameter 1 allows both attributes to be added to
```

```
the request.  
radius_add_all_nas_ids=1
```