Table of Contents

FastPCRF installation and configuration	3
Change settings on update	 4

FastPCRF installation and configuration

- 1. Authorization Pending Queue
- 2. FastPCRF Logs
- 3. Full List of Parameters
- 4. Persistent queue
- 5. RADIUS Servers Reservation

Starting from SSG version 14, all connections between fastDPI and fastPCRF are equivalent; an error on any of them leads to reconnection of all connections and switching to another PCRF.



Added CLI commands:

- pcrf connect show
- pcrf connect switch

FastPCRF provides proxying of requests from fastDPI towards the RADIUS server and is included in the default SSG installation package: by default, fastPCRF is installed on the same server as fastDPI.

The configuration is set in the file /etc/dpi/fastpcrf.conf. Minimal configuration:

```
# For SSG 8.3+: two fastDPI servers work with one fastpcrf

fdpi_server=127.0.0.1%lo:29000;attr_nas_ip=10.20.30.40

fdpi_server=192.168.20.10%eth2:29000

# For SSG up to version 8.3

#fdpi_server_list=127.0.0.1%lo:29000;192.168.20.10%eth2:29000

radius_server=secret@192.168.10.20%eth1:1812

radius_server=secret2@192.168.10.21%eth1:1812
```

Here:

- fdpi_server [SSG 8.3+] specifies one fastdpi server. Each fastdpi server is described by a separate parameter. Format: fdpi server=ip%dev:port[;name=value]*, where
 - ip fastDPI server IP address;
 - dev on which local interface to create a connection with fastDPI;
 - port management port fastDPI (usually 29000)
 - name=value additional attributes of this fastdpi server:
 - attr_nas_ip IPv4 address for RADIUS attribute NAS-IP-Address; if not set, the fastdpi IP address is used (ip);
 - attr nas ipv6 the value of the NAS-IPv6-Address RADIUS attribute for this fastdpi;
 - attr_nas_id the value of the NAS-Identifier attribute for this fastdpi
- fdpi_server_list [SSG prior to version 8.3] list of fastDPI servers served by this fastpcrf. You can specify up to 16 different servers.

Server job format: ip%dev:port, where:

- ip fastDPI server IP address,
- dev on which local interface to create a fastDPI connection,
- port management port fastDPI (usually 29000).



The control port must be the same in fastdpi.conf (parameter ctrl_port) and in fastpcrf.conf.



FastDPI only listens on the control port on the interface specified by the ctrl_dev parameter in the fastdpi.conf configuration file. If fastPCRF is being installed on a standalone server, the ctrl_dev parameter must be properly configured with an interface name other than lo for fastDPI and fastPCRF communication

- radius_server specifies one RADIUS server. Each RADIUS server (usually two of them main and backup) is specified in a separate radius_server parameter. Format: secret@ip%dev:port where:
 - secret RADIUS secret.
 - ip RADIUS server IP address,
 - dev name of the local interface on which to establish a connection,
 - port RADIUS auth port. It is possible to specify up to 16 RADIUS servers, while the first one in the order of declaration in fastpcrf.conf is considered the main one, the rest are reserve ones.



A connection is created with only one RADIUS server from the list, backup servers are activated only when the main one is unavailable.

fastpcrf.conf has many other configuration parameters related to fine-tuning the interaction with RADIUS servers.

Full list of options



After configuring, don't forget to enable fastPCRF autorun when starting the server with the command:

systemctl enable fastpcrf

Change settings on update



In SSG version 8.5+ attr_nas_id or attr_nas_ip respectively must be declared in the fdpi_server parameter for NAS-Identifier or NAS-IP-Address availability for the selected fastDPI server (even for only one).