

Table of Contents

FastPCRF installation and configuration	3
Change settings on update	4

FastPCRF installation and configuration

1. [Authorization Pending Queue](#)
2. [The FastPCRF logs](#)
3. [Full list of settings](#)
4. [Persistent queue](#)
5. [RADIUS Servers Reservation](#)

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.



To implement the [BNG/BRAS reservation](#) scheme, it is necessary to [move the fastPCRF process to a separate virtual machine](#) to ensure fault tolerance and manage multiple fastDPI (BRAS).

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).