Table of Contents

List of dictionaries

Dictionary asnum_dic

Dictionary of network protocols. Cloud dictionary, loaded on schedule. Not editable.

Example of dictionary asnum_dic

```
0   -Reserved AS-, ZZ
1   LVLT-1, US
2   UDEL-DCN, US
3   MIT-GATEWAYS, US
4   ISI-AS, US
5   SYMBOLICS, US
6   BULL-HN, US
7   DSTL, GB
8   RICE-AS, US
...
```

Columns :

1. AS number
2. AS name

Для принудительной загрузки словаря, выполните:

```
sh /var/qoestor/backend/app_bash/cron_daily.sh
```

Dictionaries asnum_local_dic and subnets_local_dic

These dictionaries list your local ASs and local subnets. Dictionaries are used to determine the direction of traffic (relevant when DPI is set on the mirror) and filtering subscribers (so that IP addresses of hosts do not appear in reports on subscribers)

Example of dictionary **asnum_local_dic**

```
12345   LOCAL
65535   UNKNOWN
```

The first column is the AS number, second is title (displayed in reports) .

Example of dictionary **subnets_local_dic**

```
192.168.1.0/24  LOCAL
10.64.66.0/24   LOCAL
172.16.0.0  LOCAL
2a02:2168:aaa:bbbb::2   LOCAL
```

The first column is the IP address or CIDR, the second is the name (not displayed in reports, but the dictionary format requires).

To control filtering by these dictionaries, use the SUBSCRIBER_FILTER_MODE and TRAFFIC_DIR_DEF_MODE parameters. See section Configuration.


Do not add too large a subnet. Break it down into small pieces. Limit - 100,000,000

Dictionaries asnum_exclude_dic and subnets_exclude_dic

These dictionaries contain a list of your AS and subnets (or single IPs) that must be excluded from aggregated logs. Subnets specified in the directories will be ignored when writing to the aggregated log (which is used to generate reports). To control filtering by these dictionaries, use the SUBSCRIBER_EXCLUDE_MODE parameter. See section Configuration.

Example of dictionary **asnum_exclude_dic**

```
12345   LOCAL
65535   LOCAL
```

The first column is the AS number, second is title (not displayed in reports, but the dictionary format requires).

Example of dictionary **subnets_exclude_dic**

```
192.168.1.0/24  LOCAL
10.64.66.0/24   LOCAL
172.16.0.0  LOCAL
2a02:2168:aaa:bbbb::2   LOCAL
```

The first column is the IP address or CIDR, the second is the name (not displayed in reports, but the dictionary format requires).


Do not add too large a subnet. Break it down into small pieces. Limit - 100,000,000

Dictionary gtp_cells_locations_dic

The dictionary contains a list of the operator's cellular base stations with coordinates. The dictionary is used to build reports on maps.

Dictionary example

```
250 1    17774    4881420    55.783184763200005    37.525521418974996
cell_id_0    cell_name_0    cell_description_0
250 1    17716    3398401    55.86518562276    37.66309891922    cell_id_2
```

```
cell_name_2    cell_description_2
250 1    17716    3398411    55.86312193015    37.657007482905    cell_id_4
cell_name_4    cell_description_4
250 1    17782    2359297    55.86370294584    37.661393065359995
cell_id_5    cell_name_5    cell_description_5
250 1    1603    26057    55.80400515858    37.63568625476    cell_id_1
cell_name_1    cell_description_1
250 1    17781    2914571    55.799170861170005    37.6376949577
cell_id_6    cell_name_6    cell_description_6
250 1    1605    23895    55.869888445769995    37.64814730281    cell_id_3
cell_name_3    cell_description_3
```

Columns:

1. MCC - Mobile Country Code
2. MNC - Mobile Network Code
3. TAC/LAC - Location Area Code
4. CID/SAC/ECI - Cell ID
5. LAT - latitude
6. LON - longitude
7. CELL_ID - cell ID (set by the operator)
8. CELL_NAME - cell name (set by the operator)
9. CELL_DESCRIPTION - cell description (set by the operator)

Dictionary net_protocols_dic

Dictionary of network protocols protocols. Not editable, updated when QoE Stor is updated.

Example of dictionary **net_protocols_dic**

```
0   HOPOPT
1   ICMP
2   IGMP
3   GGP
4   IPv4
5   ST
6   TCP
7   CBT
8   EGP
9   IGP
10  BBN-RCC-MON
11  NVP-II
...
```

Columns:

1. Port number
2. Protocol name

Dictionaries protocols_dic and protocols_groups_dic

Dictionaries of application protocols and groups of application protocols. Cloud dictionaries loaded on schedule. Not editable.

Example of dictionary **protocols_dic**

```
1   tcpmux    1
2   compressnet    1
5   rje    1
7   echo    1
11  systat    7
13  daytime    7
17  qotd    7
18  msp    8
19  chargen    7
20  ftp-data    9
21  ftp    9
22  ssh    8
23  telnet    8
25  smtp    5
27  nsw-fe    7
...
```

Columns:

1. Port number
2. Protocol name
3. Protocol group ID

Example of dictionary **protocols_groups_dic**

```
1   Network services
2   Web browsing
3   P2P
4   Gaming
5   E-Mail
6   Instant messengers
...
```

Columns:

1. Protocol group ID
2. Group name

To force loading dictionaries run:

```
sh /var/qoestor/backend/app_bash/cron_daily.sh
```

Dictionary settings_dic

Service dictionary of settings. Formed by scripts based on configuration files. Not editable.

Example of dictionary

```
TRAFFIC_DIR_DEF_MODE    0
SUBSCRIBER_FILTER_MODE  0
SUBSCRIBER_EXCLUDE_MODE 0
URLS_CATEGORIES_DIC_AUTOLOAD_ENABLED    1
ASNUM_DIC_AUTOLOAD_ENABLED  1
ULR_REPLACE_LOGIN_WITH_VCHANNEL 0
ULR_USE_DIC_WHEN_REPLACING_LOGIN    0
ULR_VCHANNEL_NAME_DIC_AUTOLOAD_ENABLED  0
ULR_VCHANNEL_NAME_DIC_URL
NAT_AGG_LOG_FIELDS_TO_SAVE_BITMASK  0x654
NAT_IMPORT_FROM_FULLFLOW
NAT_AGG_LOG_GROUP_TIME_INTERVAL 15
FULLFLOW_AGG_LOG_FIELDS_TO_SAVE_BITMASK 0x39fff
FULLFLOW_AGG_LOG_GROUP_TIME_INTERVAL    15
CLICKSTREAM_AGG_LOG_FIELDS_TO_SAVE_BITMASK  0x30ff
CLICKSTREAM_AGG_LOG_GROUP_TIME_INTERVAL 15
CLICKSTREAM_ADD_INFO_FROM_FULLFLOW  1
SUBSCRIBER_BIND_MODE    1
FILL_IP_LOGIN_BINDING_FROM_FULLFLOW 1
NAT_ADD_LOGIN_FROM_IP_LOGIN_BINDING 1
APP_ID  qoestor
APP_VERSION 1.9.0
```

Columns:

1. Parameter
2. Value

Dictionaries subscribers_dic, switches_dic, crc_dic

subscribers_dic

Dictionary of subscribers.

Example of dictionary

```
10.64.66.100    login    5    port1    unit_vendor    cabel    contract
services    mac
10.64.66.101    login    2    port1    unit_vendor    cabel    contract
services    mac
10.64.66.102    login    3    port1    unit_vendor    cabel    contract
services    mac
10.64.66.103    login    4    port1    unit_vendor    cabel    contract
```

```
services    mac
10.64.66.104    login    5    port1    unit_vendor    cabel    contract
services    mac
10.64.66.105    login    5    port2    unit_vendor    cabel    contract
services    mac
10.64.66.106    login    5    port3    unit_vendor    cabel    contract
services    mac
```

Columns:

1. IP address
2. Login
3. Switch (Access) ID
4. Switch port
5. Subscriber equipment vendor
6. Cable
7. Contract
8. Services
9. MAC address of user equipment (reserved for future purposes)

switches_dic

Hierarchical dictionary of equipment (access switches and trunk switches)

Example of dictionary

```
1   Switch 1    Ethernet    Region1    Address 1    10.140.1.18    oper1
0    0
2   Switch 2    Ethernet    Region2    Address 2    10.140.2.18    oper1
0    0
3   Switch 3    Ethernet    Region3    Address 3    10.140.3.18    oper1
0    1    port1
4   Switch 4    Ethernet    Region4    Address 4    10.140.4.18    oper1
0    3    port1
5   Switch 5    Ethernet    Region5    Address 5    10.140.5.18    oper1
0    4    port1
```

Columns:

1. Hardware ID UInt64
2. Name
3. Type
4. Region
5. Address
6. Switch IP address
7. Operator
8. Flag: flag of the trunk switch (1 - if yes). Not used, you can leave 0 everywhere
9. UInt64 upstream switch id
10. Upstream Switch Port
11. Owner

crc_dic

Error dictionary (CRC) on switch ports

Example of dictionary

```
2   port1    450
5   port1    550
5   port2    500
4   port1    780
```

Columns

1. Switch ID
2. Switch port
3. CRC value

Dictionaries urlcats_dic and urlcats_host_dic

Host category dictionaries. Designed to determine whether a host belongs to a certain category. Cloud directories are loaded on schedule. Not editable.

Example of dictionary urlcats_dic

```
1   unknown
2   software_tools
3   search_engine
4   0_other
5   school
6   proxys
7   tabak_alkohol
8   religia
...
```

Columns:

1. Category ID
2. Category code

Example of dictionary urlcats_host_dic

```
iris06-gold-ssl.gameloft.com    1
satfrog-tv.ddns.net:5890        1
vs824.vcdn.biz  1
cs05.trafmag.com        1
...
```

Columns:

1. Host

2. Category ID

To force loading dictionaries run:

```
sh /var/qoestor/backend/app_bash/cron_daily.sh
```

Dictionary ulr_vchannel_name_dic

Dictionary of virtual circuit names. Designed to generate statistics for virtual channels.

Example of dictionary

```
0   1    vchan_0_1
0   2    vchan_0_2
0   3    vchan_0_3
0   4    vchan_0_4
1   1    vchan_1_1
1   2    vchan_1_2
1   3    vchan_1_3
1   4    vchan_1_4
```

Columns:

1. DPI number
2. Virtual channel number (vchannel)
3. Name