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2 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