

SNMP-

SNMP- SNMP-. , , snmp-load.yml. . , .
snmp-load.yml.

```
operator_devices:
  50966001: {collect_type_id: 2097, community: private, in_oid_template: 1.3.6.1.2.1.31.1.1.1.6.$IFINDEX,
    ip_address: 217.13.214.10, out_oid_template: 1.3.6.1.2.1.31.1.1.1.10.$IFINDEX,
    port: 161, unit_id: 2049}
user_devices:
- firm_id: 100
  object_id: 4572678113591
  operator_obj_id: 50966001
  substs: {IFINDEX: '17'}
  user_id: 4572678110091
```

- 3 : load, save update. .
- load snmp.dat.%DATETIME%, %DATETIME% — . , snmp.dat, (hsnmp.conf) snmp.dat.%DATETIME%, . snmp.dat.lock, snmp.dat .
 - save . , , ,
 - update ifIndex , « SNMP». ifDescr ifIndex , . ifIndex, , . , update ifIndex. IfIndex In/Out, .

hsnmp.conf.

```
#
log_path: /var/log/hsnmp/hsnmp.log
# -
log_rotate_size: 1048576
# -
log_rotate_count: 25

#
database_name: dev
#
database_user: AIS_NET
#
database_password: password

#
datadir_path: /var/spool/hydra/hsnmp
# ,
datafile_buffer_size: 51200 # 50

#
load_threads_pool_size: 5
# SNMP-
snmp_request_timeout: 1
# SNMP-
snmp_request_retries: 5

#
hydra_service: 4573437479801
#
hydra_goods:
#
# in: 40213501
#
# out: 40213701
```

SNMP , .

« ». :

GOOD_SNMPInOIDTemplate		SNMP OID .	SNMP OID	
GOOD_SNMPOutOIDTemplate		SNMP OID .	SNMP OID	
GOOD_SNMPUnit			SNMP	
GOOD_SNMPCollectType		SNMP-	SNMP	

. « ».

« » :

Obj_SNMPIfIndex		SNMP ifIndex	ifIndex SNMP-	
Obj_SNMPTrafStat		SNMP	, SNMP	
Obj_SNMPIfIndexIn		SNMP ifIndex In	ifIndex SNMP-	
Obj_SNMPIfIndexOut		SNMP ifIndex Out	ifIndex SNMP-	

« ».

ifIndex In/Out , ifIndex .

(« » ,).

SNMP-

- .
- , (burstable).

SNMP OID .

ifIndex \$IFINDEX.
:

1.3.6.1.2.1.31.1.1.1.6.\$IFINDEX

ifIndex \$IFINDEX_OUT.
:

1.3.6.1.2.1.31.1.1.1.6.\$IFINDEX_OUT

SNMP OID .

ifIndex , .

Obj_SNMPIfIndexIn, \$IFINDEX_IN.
:

1.3.6.1.2.1.31.1.1.1.10.\$IFINDEX_IN

, .

SNMP- «». «» «». «», , hydra_service hsnmp.conf.

, . . .

«» («» ,).

, — . «», «» «».

ifIndex ifDescr

«» (), , « SNMP», «SNMP ifIndex» («SNMP ifIndex In» «SNMP ifIndex Out»), «» ifDescr .

«» . «» :

			TCP/UDP			/ISP
	SNMP v2c	<IP >	SNMP (161)		<SNMP community>	< >

hsnmp (*cron*). *-m* — *load, save update.* *cron -s, «» , .*

./hsnmp.py -h :

```
hsnmp@server:~/hsnmp/lib$ ./hsnmp.py -h
Usage: hsnmp.py [options]

Options:
  -h, --help                show this help message and exit
  -m MODE, --mode=MODE      Run mode: "load", "save", "update"
  -f CONFIG, --config=CONFIG
                             Config path (default:
                             "conf/hsnmp.conf;/etc/hsnmp/hsnmp.conf")
  -s, --silent              Silent mode
```

cron

, :

```
root@server:~# mkdir /var/spool/hydra/hsnmp/backup && \
    chown hsnmp:hsnmp /var/spool/hydra/hsnmp/backup
```

cron

cron :

```
root@server:~# crontab -e
```

cron :

```
# /etc/crontab: system-wide crontab
# Unlike any other crontab you don't have to run the `crontab'
# command to install the new version when you edit this file
# and files in /etc/cron.d. These files also have username fields,
# that none of the other crontabs do.

# m h dom mon dow user  command
*/15 * * * * sudo -u hsnmp -i cp /var/spool/hydra/hsnmp/snmp.dat.* /var/spool/hydra/hsnmp/backup/ && sudo -u
hsnmp -i /opt/hydra/hsnmp/lib/hsnmp.py -m save -s
*/5 * * * * sudo -u hsnmp -i /opt/hydra/hsnmp/lib/hsnmp.py -m update -s && sudo -u hsnmp -i /opt/hydra/hsnmp/lib
/hsnmp.py -m load -s
#
```

backup .

, « », , . « », . . .