CHECK CISCO QOS PANDORA PLUGIN

INTRODUCTION

This plugin is responsible for displaying the number of bits / s drop by or send a Cisco router interfaces configured with qos.
We can choose a particular interface or all interfaces (in this case will-i ALL).
We can also choose whether the data shows bits / s drop or send for a particular interface or all.
This data is observed for all classes.

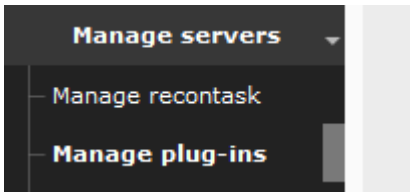
The following figure shows the different possibilities of the plugin:

As we see in this example the first two monitors act for all interfaces (one drop and another send) and the other two act on a specific interface.

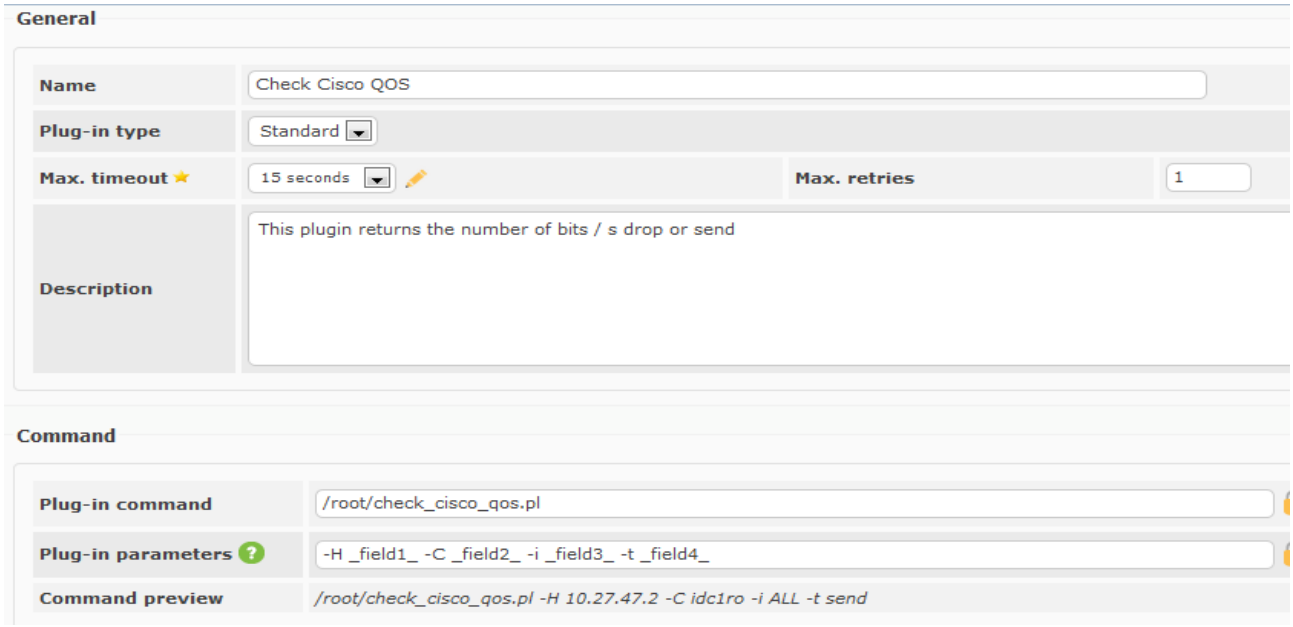
INSTALLATION.

In principle, the plugin has execute permissions, but to avoid problems make sure recommend it.

Copy the plugin in the folder you want.
Now pandora fms side menu go to manage servers → Manage plug-ins



In the screen that shows we give the add button.

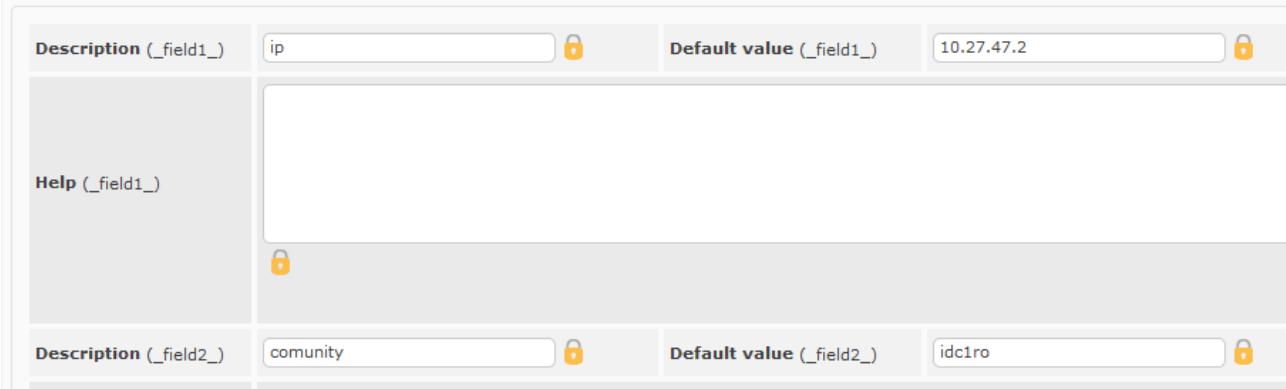


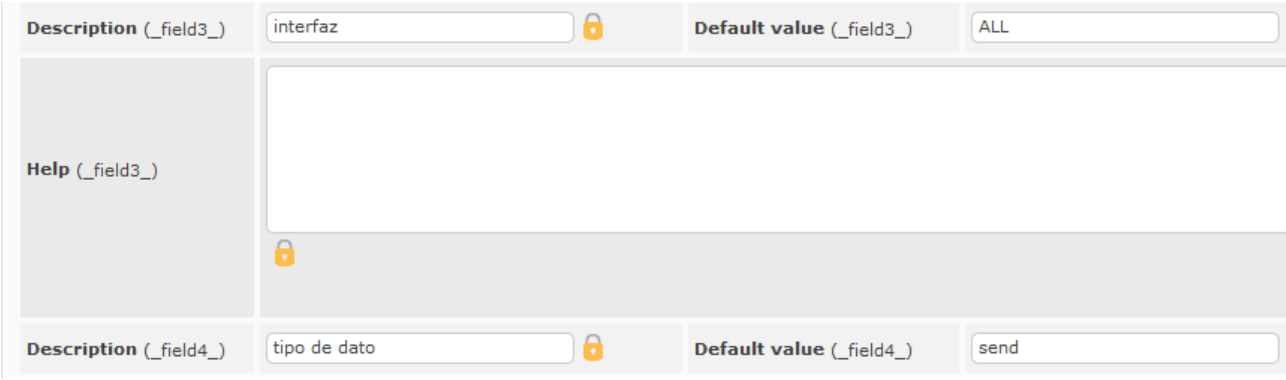
In this screen we name the plugin as you want. In the example: Check Cisco QOS.
Plugin type: Standard. (Being plugin pandora).

The most important areas to consider are:
Plug-in command: here we put the plugin path. This is the folder where the file check_cisco_qos.pl

Plug-in parameters: Here we must place the four fields shown in the figure above. Which coincide with the parameters explained in paragraph OPERATION.

We deployed the macro parameters option and add the name of the parameter and its default value.





We press the button to create and the plugin is now available.

To monitor an agent must create and add the monitors (in the examples we see some monitors with this plugin).

OPERATION

For command line put the name of the command and a number of parameters that are detailed below.

```
root@slpandora13:~# ./check_cisco_qos.pl -H 10.27.47.2 -t send -C idc1ro -i Fa0/0
280
```

To launch the plugin in command line we need to consider the following fields:

ip router : -H <router>. IP Address or Hostname of the router

community : -C <comunity>. SNMP Community String

interface : -i <interface> . What interface do you want to check.

data type : -t . This parameter defines what type of data we want to return (DROP or SEND)

help : -h. Print help.

IMPORTANT → Interface names:
This plugin identifies interface names based on their short name like "Fa0/0". If we check all interfaces pass the ALL parameter.

Bit rate calculation:

The first time you run the plugin it will create a temporary file in /tmp
This file contains 3 lines:
- the last drop counter in bits (lastDrop=XXXXXXX)
- the last sent counter in bits (lastPost=XXXXXXX)
- the last epoch time in seconds (lastEpoch=XXXXXXX)

The second time you run the plugin, it will compare actual values against the previous ones and calculate the rates as follows:
- dropRate=(current drop counter - last drop counter) / (current epoch - last epoch)
- sentRate=(current post counter - last post counter) / (current epoch - last epoch)

EXAMPLES

In terminal:

Example 1. Monitors bits / s drop in all the interfaces.

```
root@slpandora13:~# ./check_cisco_qos.pl -H 10.27.47.2 -t drop -C idc1ro -i ALL
0
```

Example 2. Monitors bits / s send in all the interfaces.

```
root@slpandora13:~# ./check_cisco_qos.pl -H 10.27.47.2 -t send -C idc1ro -i ALL
0
```

Example 3. Monitors bits / s drop in the Fa0 / 0

```
root@slpandora13:~# ./check_cisco_qos.pl -H 10.27.47.2 -t drop -C idc1ro -i Fa0/0
0
```

Example 4. Monitors bits / is send in the Fa0 / 0

```
root@slpandora13:~# ./check_cisco_qos.pl -H 10.27.47.2 -t send -C idc1ro -i Fa0/0
280
```

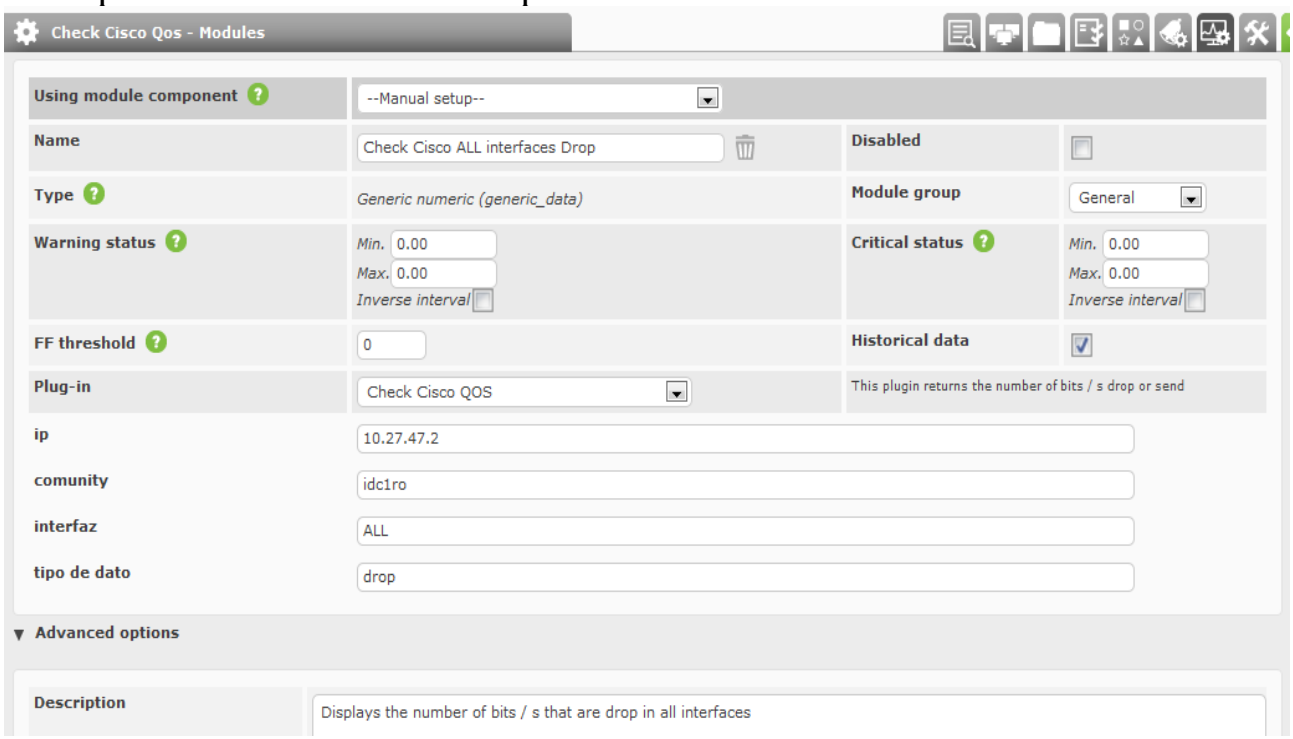
Ejemplo5. Show the help (only in terminal)

```
root@slpandora13:~# ./check_cisco_qos.pl -h
usage:  ./check_cisco_qos.pl [-h] -H <hostname> -C <community> -i <interface> -t <data_type>

Nagios check for Cisco IP SLAs.
Checks for probe status and returns execution time
as perf data (multi-line output)

[-h]              :       Print this message
[-H] <router>     :       IP Address or Hostname of the router
[-C] <community>  :       SNMP Community String  (default = "public")
[-i] <interface>  :       What interface do you want to check
                          ( "-i ALL" to check all interfaces)
[-t] <data_type>  :   data type to return (drop|send)
```

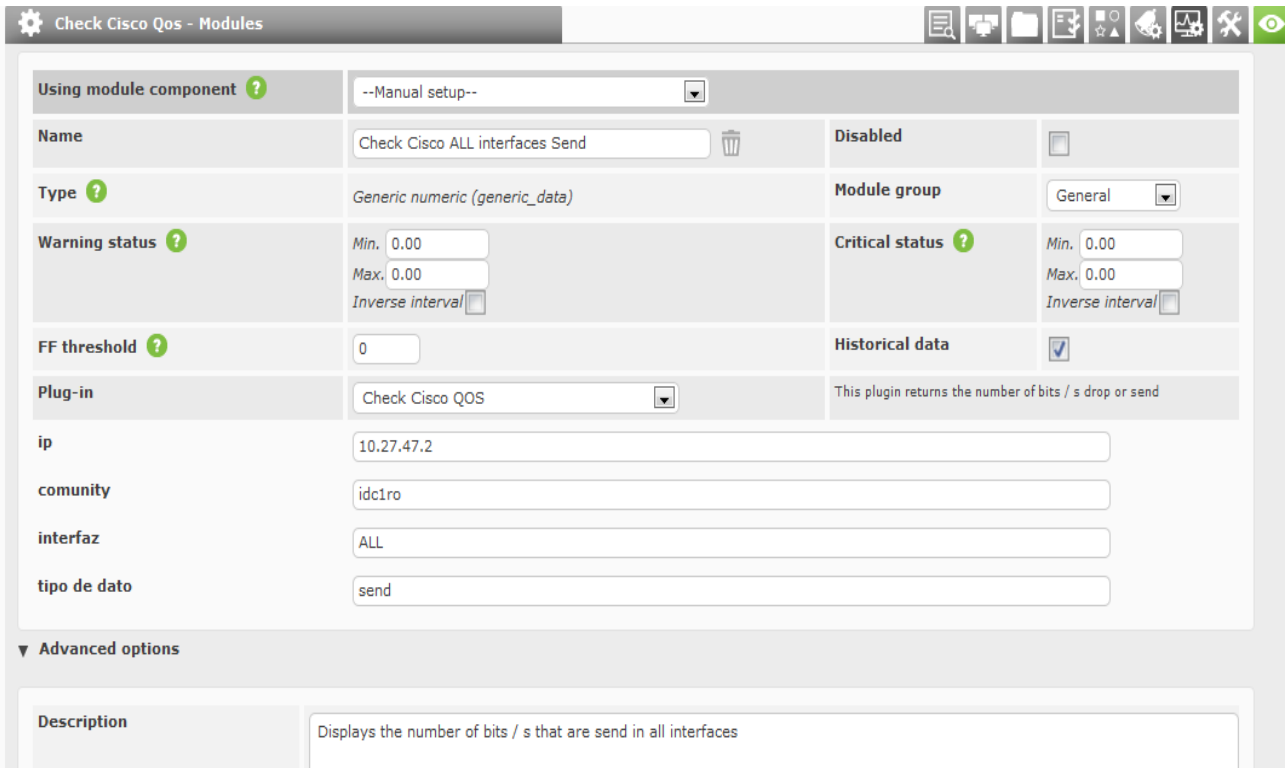
In Pandora FMS

In pandora once we add the module to the agent only have to populate fields that are choosing to plug-in the name we have put the plugin to install.
In the advanced options do not need to change anything for proper operation (This does not mean that you can not), but it is always interesting to add a description to the module.

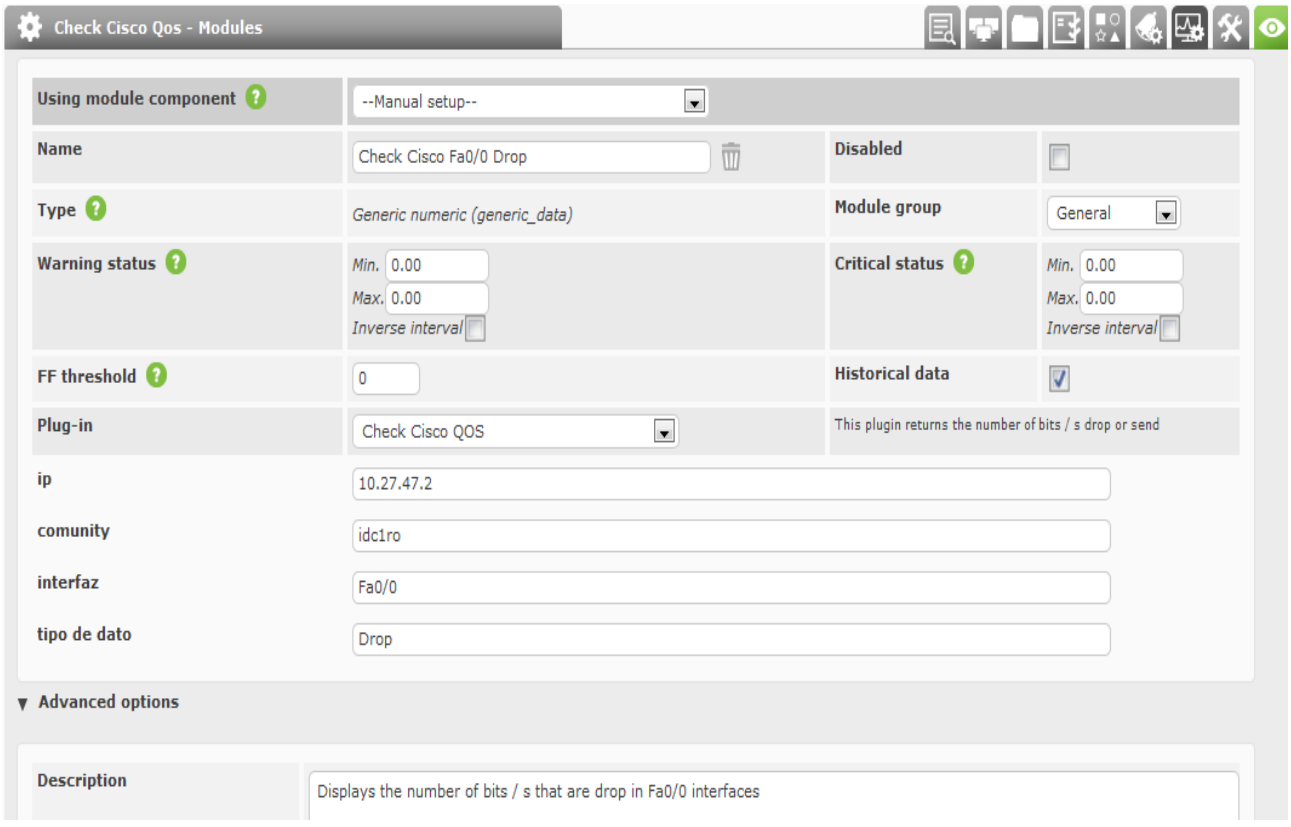
Example 1. Monitors bits / s drop in all the interfaces.



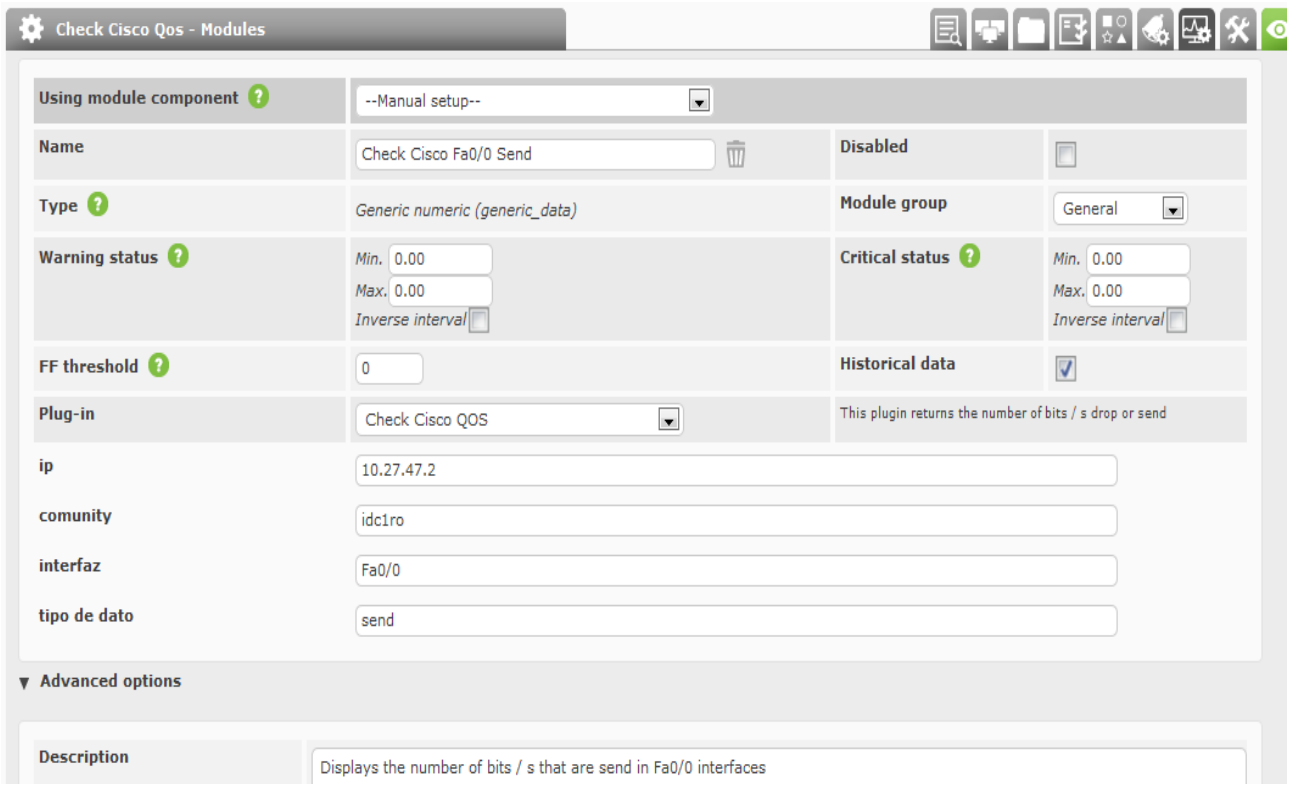
Example 2. Monitors bits / s send in all the interfaces.



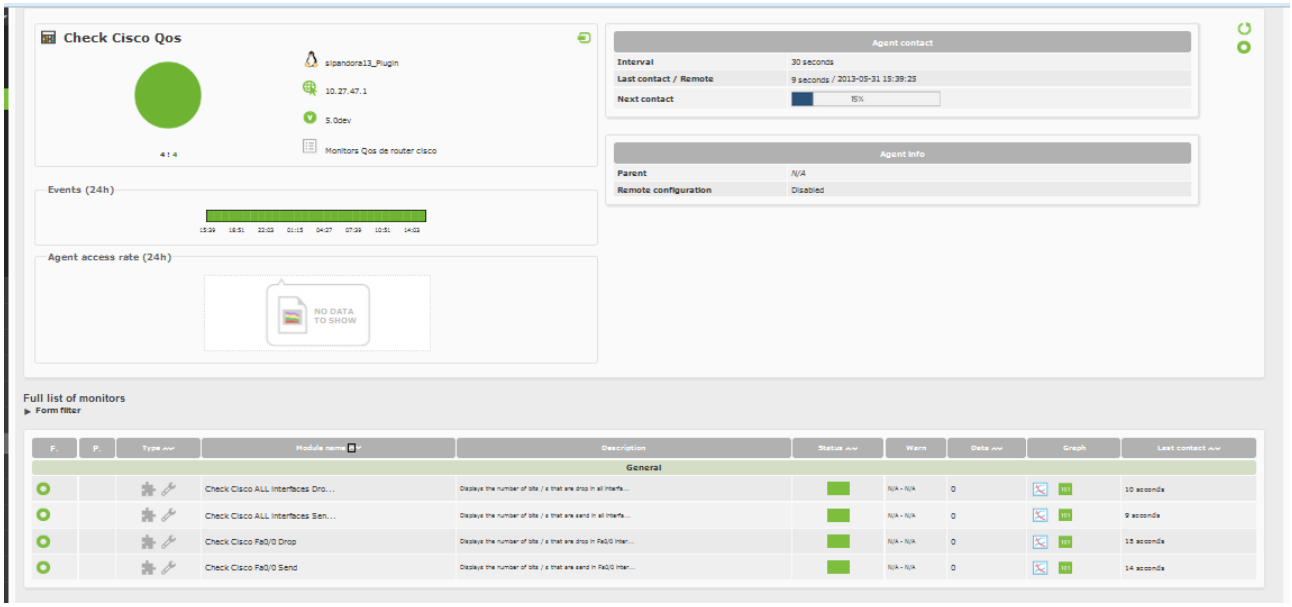
Ejemplo3. Monitoriza bits/s drop en la interfaz Fa0/0



Example 4. Monitors bits / is send in the Fa0 / 0



Example of a four-module qos agent.



Made for David Torres.