FAGOR ELECTRÓNICA

Flow

Advanced configuration guide

Index page

1. INTRODUCTION

Ikusi Flow headend allows a quick and agile configuration through the Service wizard. However, there are situations where this configuration must be customized. In those cases, advanced menu available options must be used. In that menu, we will also find additional information about the status of the headend.

This documents explains the possibilities offered by the advanced menu, including the changes that affect to the Service wizard options.

NOTE: this manual assumes that the headend uses a 2.5.0 software version or higher. In other case, please, upgrade the headend.

2. IKUSI FLOW CONFIGURATION DESCRIPTION

Ikusi Flow user interface has been designed giving priority to the simplicity. In this line, the Service wizard allows to configure the headend in a extremely easy manner. Configuration is performed in a guide way, following the steps proposed by the headend.

The configuration of the headend through the Service wizard is described in Installation and Setting Ikusi Flow Headend Guide.

Besides this guided installation, Ikusi Flow allows to visualize the status of the headend, to perform maintenance actions, to modify the main parameters of the instalation and to customize the configuration. All these actions are performed using MENU button, located in the right-upper part of the screen. Unlike SERVICE WIZARD button, only visible in Home screen, MENU button is always accesible from any screen of the user interface, except from the wizard.

3. MENU

In this section, all the submenus and options of the Ikusi Flow advanced menu are described. To access to the advanced menu, push MENU button located in the rigth-upper part of any screen of the used interface (except in the Wizard).

3.1 Home

Home option allows to return to Home screen from any point where you are.

NOTE: you can also return to Home screen pushing FAGOR, icon, located in the central-upper zone of any screen of the user interface, except in the Wizard.

3.2 Status

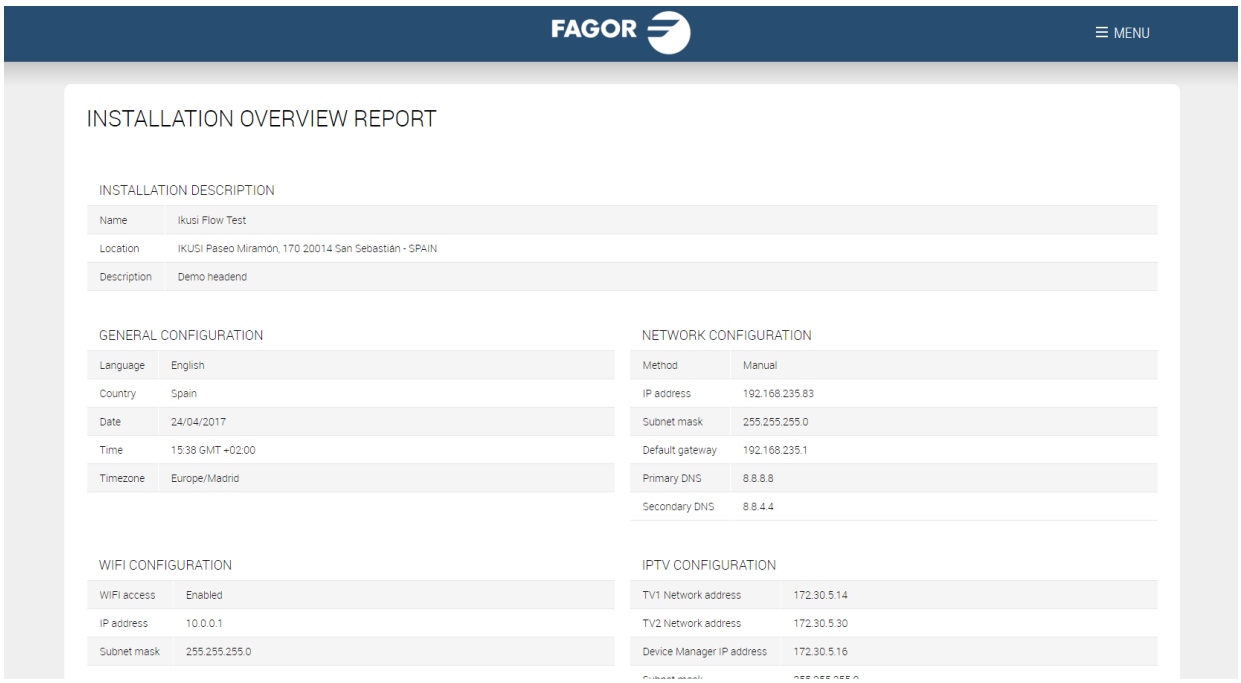
Status menu allows to obtain complete information of the headend, besides offering statistics about the content that it is broadcasting.

3.2.1 Overview

Overview option shows, in a grouped way, all the information of the headend. In this report you can find:

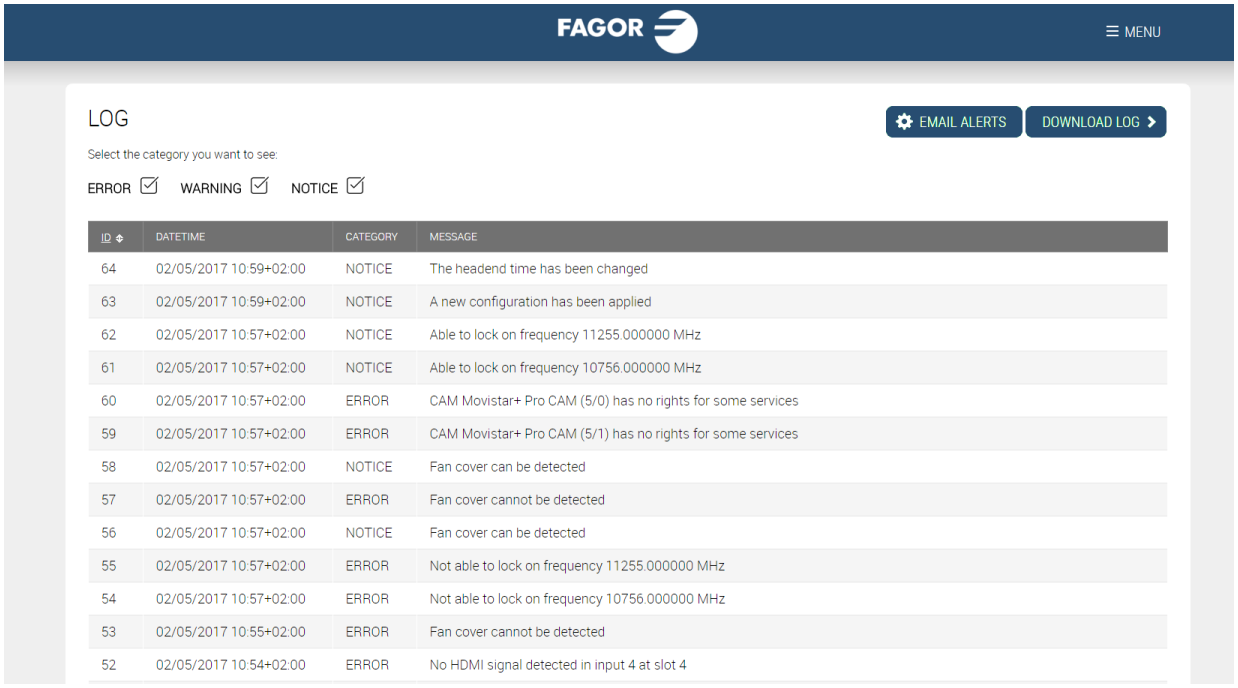
- Installation description.
- Data, hour and country information.
- Information about IP connectivity.
- Headend composition.
- Relevant information of each module, such as serial number, sw version, hw version, temperature or working hours.
- Information about the services that are processed by each module.

- Specific information of each module, such as tuned frequencies (FLOW IN), inserted CAMs (FLOW SEC), or connected HDMI sources (FLOW ENC).
- Description of the signals that are connected to FLOW BASE.
- Complete information of the configured channel lineup (either IP or RF, or both).



3.2.2 Log

Pushing Log option, a window will open where a list of the events that have happened in the headend are shown.

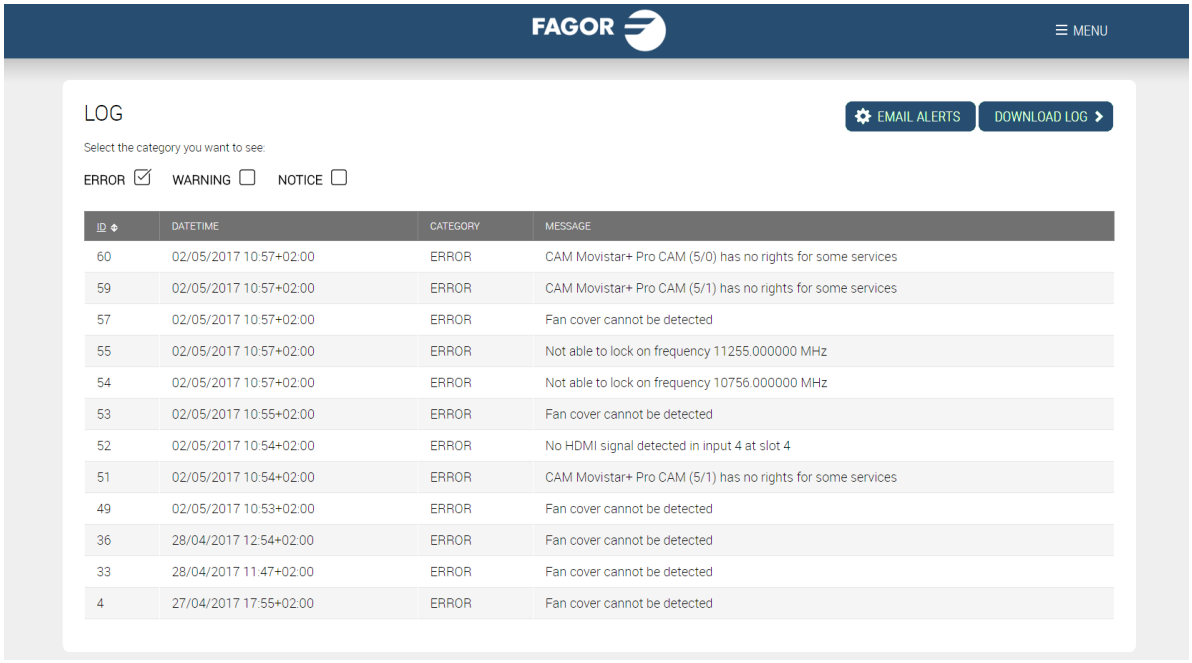


ID	DATETIME	CATEGORY	MESSAGE
64	02/05/2017 10:59+02:00	NOTICE	The headend time has been changed
63	02/05/2017 10:59+02:00	NOTICE	A new configuration has been applied
62	02/05/2017 10:57+02:00	NOTICE	Able to lock on frequency 11255.000000 MHz
61	02/05/2017 10:57+02:00	NOTICE	Able to lock on frequency 10756.000000 MHz
60	02/05/2017 10:57+02:00	ERROR	CAM Movistar+ Pro CAM (5/0) has no rights for some services
59	02/05/2017 10:57+02:00	ERROR	CAM Movistar+ Pro CAM (5/1) has no rights for some services
58	02/05/2017 10:57+02:00	NOTICE	Fan cover can be detected
57	02/05/2017 10:57+02:00	ERROR	Fan cover cannot be detected
56	02/05/2017 10:57+02:00	NOTICE	Fan cover can be detected
55	02/05/2017 10:57+02:00	ERROR	Not able to lock on frequency 11255.000000 MHz
54	02/05/2017 10:57+02:00	ERROR	Not able to lock on frequency 10756.000000 MHz
53	02/05/2017 10:55+02:00	ERROR	Fan cover cannot be detected
52	02/05/2017 10:54+02:00	ERROR	No HDMI signal detected in input 4 at slot 4

In each line, the event is described, using the following fields:

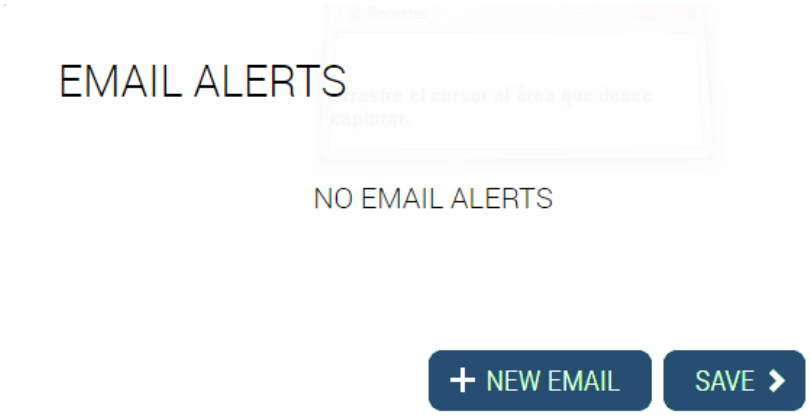
- ID: event identifier. It is a numeric identifier, unique for each event. It is assigned in a correlative way.
- DATETIME: informs about the instant in which the event arises, The indicated hour corresponds with the local hour of the headend. Besides, the time zone information is added.
- CATEGORY: there are three categories of events, error, warning and notice, depending on the severity of the event.
- MESSAGE: is the description of the event.

The event list can be filtered based on the category. Select the categories you want to view, clicking over the associated box (in the example below, only ERROR category has been selected).

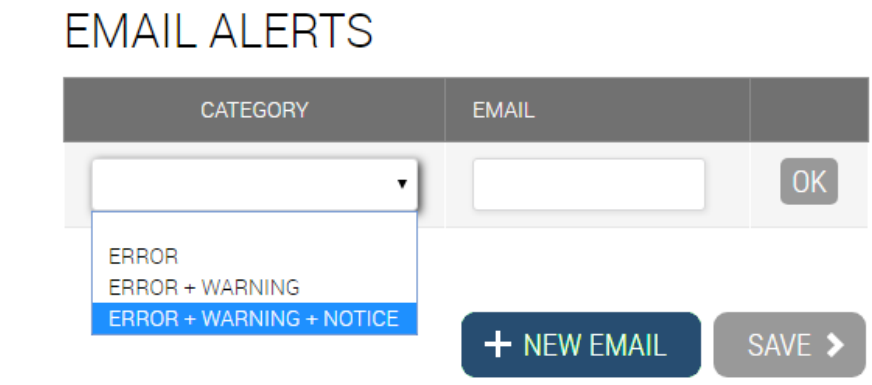


ID	DATETIME	CATEGORY	MESSAGE
60	02/05/2017 10:57+02:00	ERROR	CAM Movistar+ Pro CAM (5/0) has no rights for some services
59	02/05/2017 10:57+02:00	ERROR	CAM Movistar+ Pro CAM (5/1) has no rights for some services
57	02/05/2017 10:57+02:00	ERROR	Fan cover cannot be detected
55	02/05/2017 10:57+02:00	ERROR	Not able to lock on frequency 11255.000000 MHz
54	02/05/2017 10:57+02:00	ERROR	Not able to lock on frequency 10756.000000 MHz
53	02/05/2017 10:55+02:00	ERROR	Fan cover cannot be detected
52	02/05/2017 10:54+02:00	ERROR	No HDMI signal detected in input 4 at slot 4
51	02/05/2017 10:54+02:00	ERROR	CAM Movistar+ Pro CAM (5/1) has no rights for some services
49	02/05/2017 10:53+02:00	ERROR	Fan cover cannot be detected
36	28/04/2017 12:54+02:00	ERROR	Fan cover cannot be detected
33	28/04/2017 11:47+02:00	ERROR	Fan cover cannot be detected
4	27/04/2017 17:55+02:00	ERROR	Fan cover cannot be detected

From this window, you can also configure the sending of an e-mail each time an event appears. To do that, push EMAIL ALERTS button. A window will open as follows.



Push +NEW EMAIL button. Select the type of the event that will provoke the sending of the e-mail (ERROR, ERROR+WARNING or ERROR+WARNING+NOTICE).



Enter the e-mail address to which you want to send the events in EMAIL field and press OK.

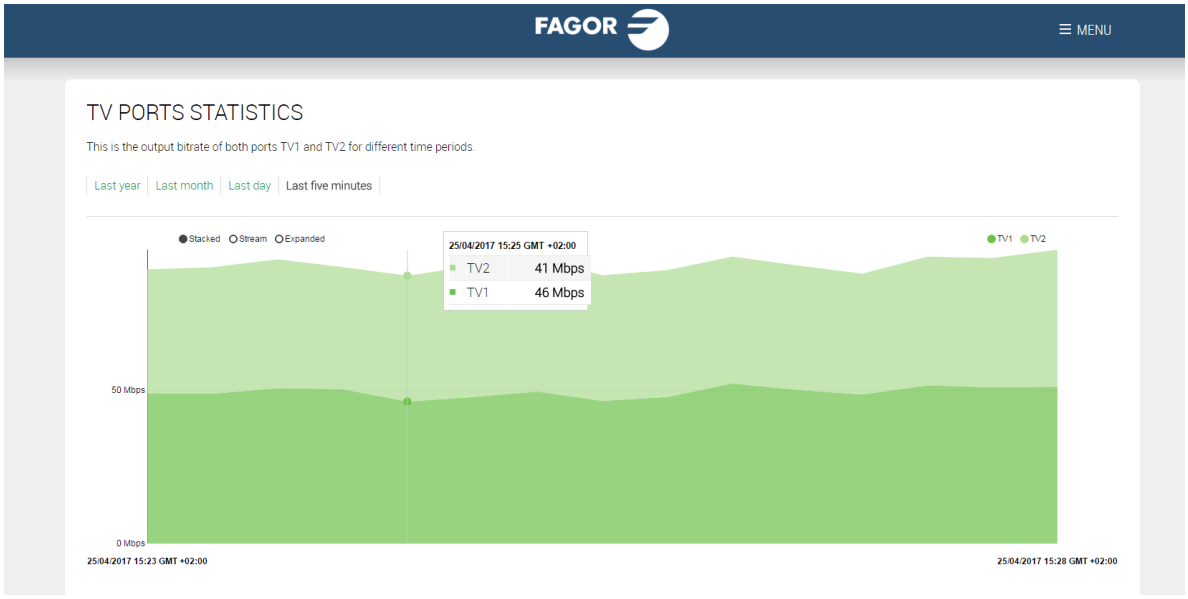
You can add as many e-mail addresses as they are needed. To finish, press SAVE.

Finally, you can download all log messages in a csv file. To do that, push DOWNLOAD LOG button. The headend will create a file with all the log messages and it will download it to your terminal.

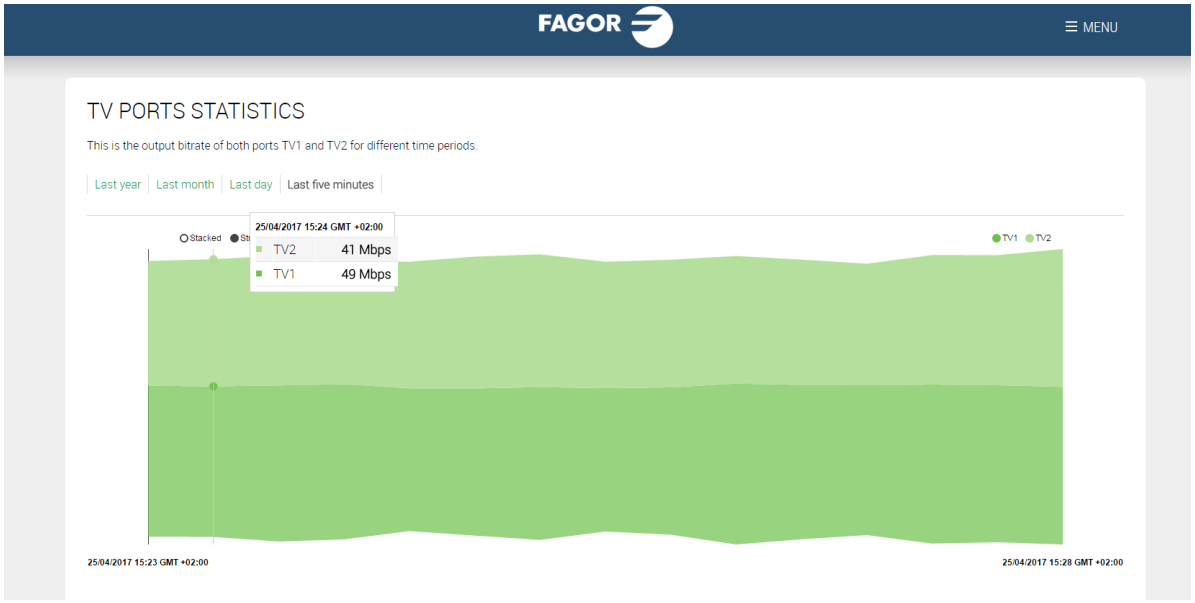
3.2.3 Statistics by TV port

This option shows graphically the outbound traffic generated by the headend, in the last five minutes, last day, last month or last year. There are three visualization options:

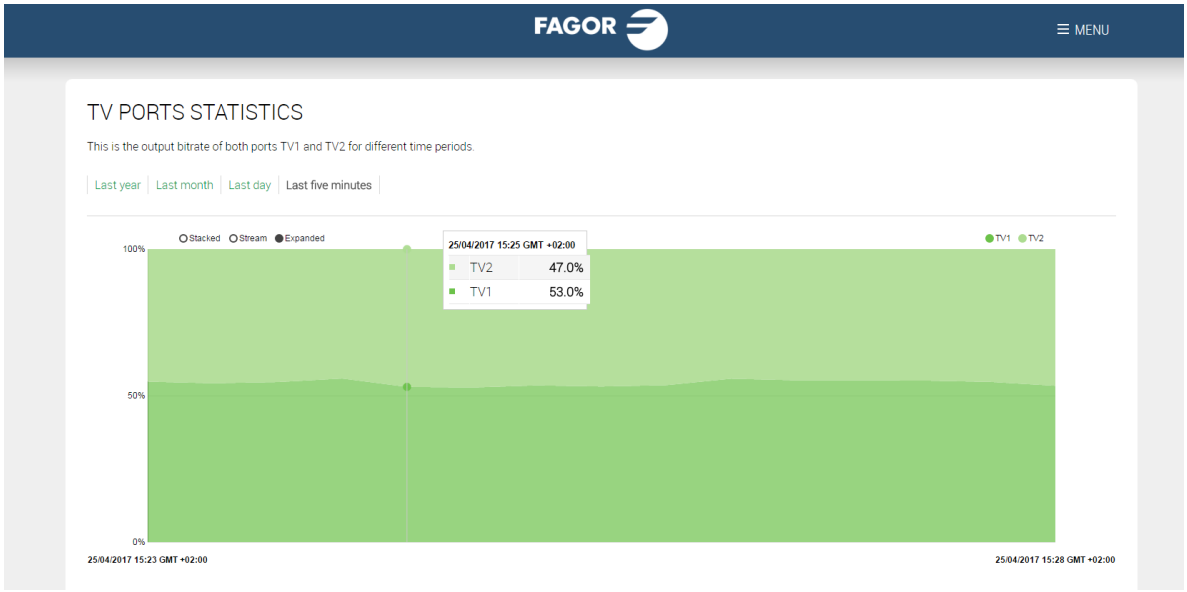
- Stacked. The measurement of the traffic generated by TV1 and TV2 is shown one on top of the other, in Mbps.



- Stream. It is the same chart above but centered on the value of average traffic.

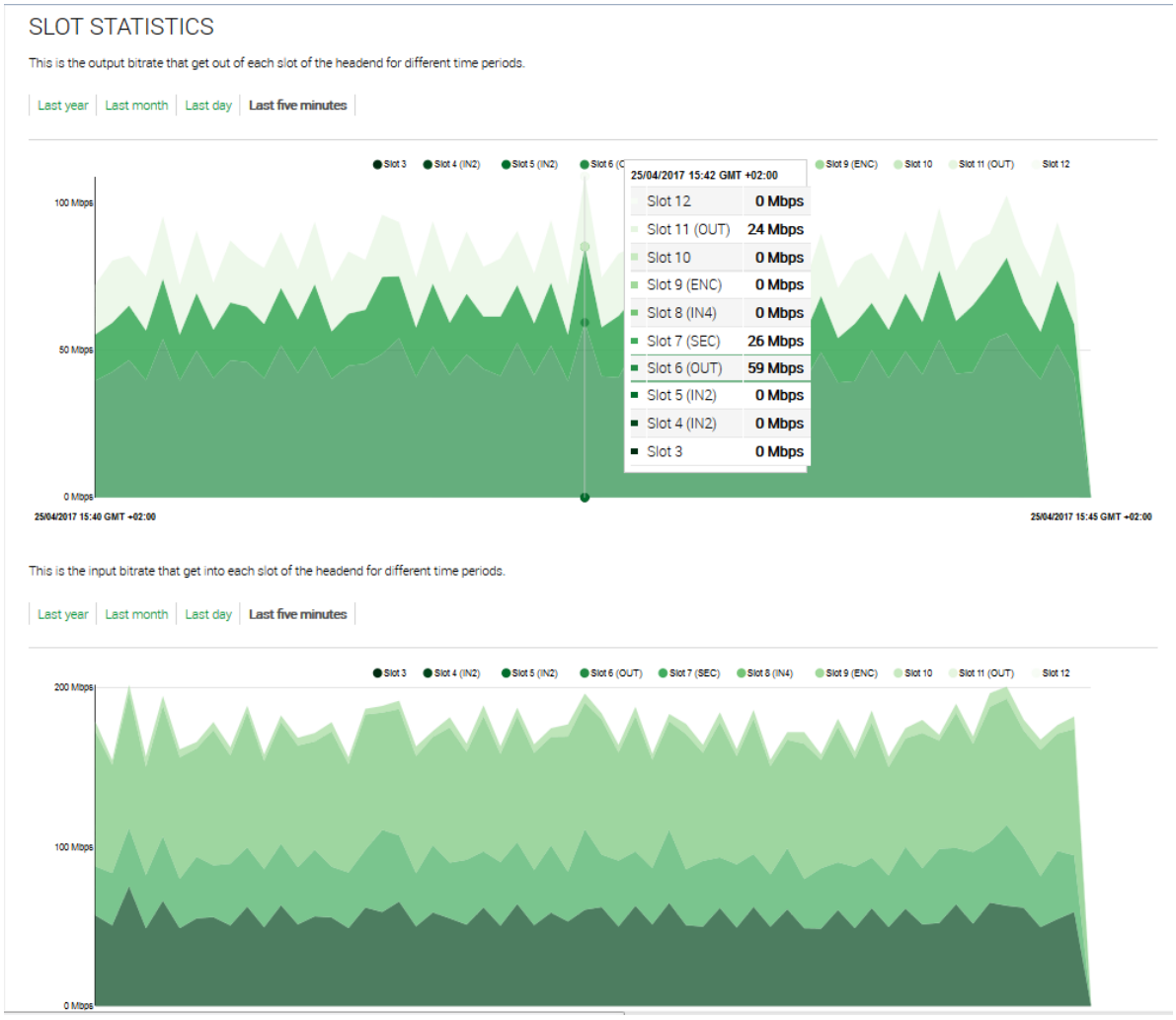


- Expanded. The measurement of the traffic generated by TV1 and TV2 appears expressed in percentages of the total traffic.



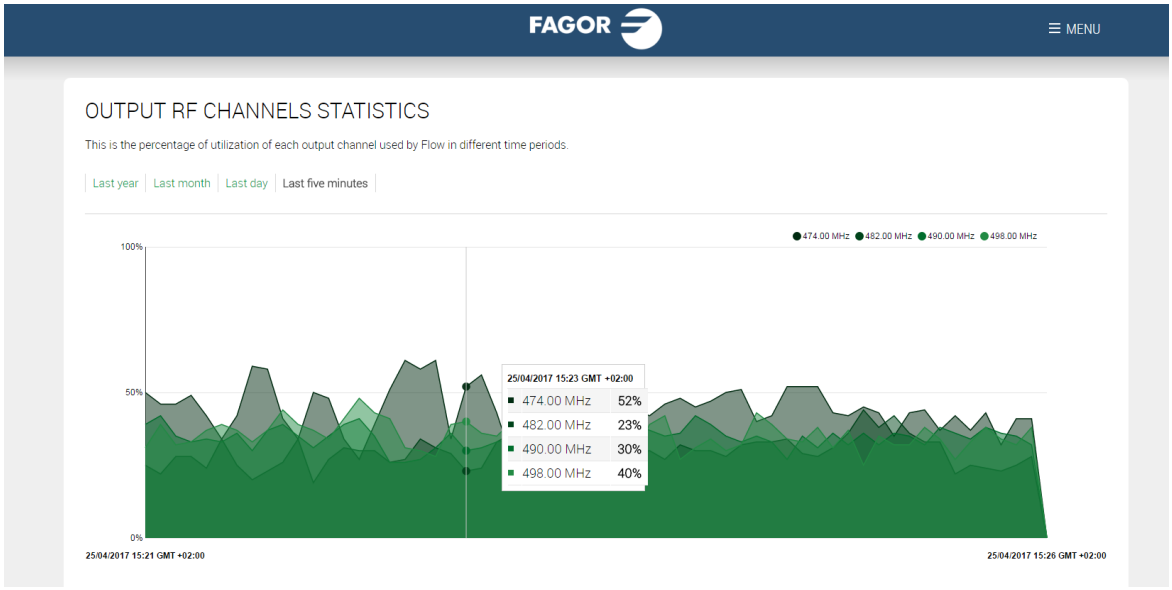
3.2.4 Statistics by SLOT

This option shows two graphs. On the first one, outbound traffic generated by each slot of the headend is displayed. On the second one, incoming traffic received by each slot is displayed. Both figures can modify its time scale (last five minutes, last day, last month or last year).



3.2.5 Statistics by output channel

This option shows on a graph the occupancy level of the RF carrier generated by the FLOW OUT modules, as a percentage. As in previous graphs, you can choose to display the values for the last five minutes, last day, last month or last year.

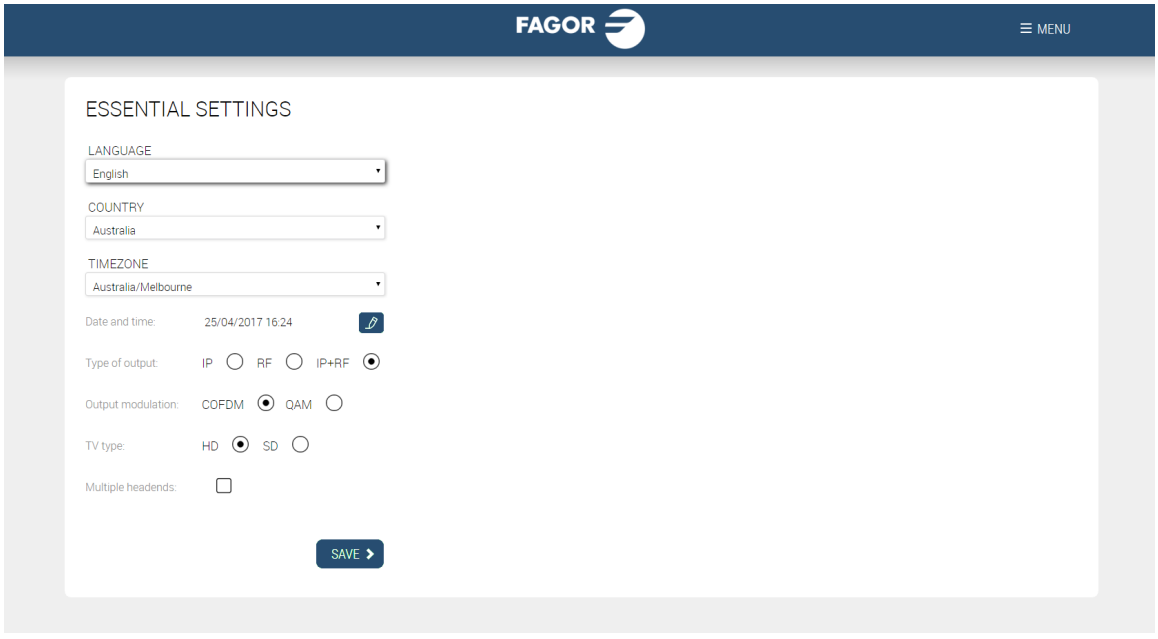


3.3 Configuration

Through Configuration menu you can change the basic configuration of the headend, such as the parameters defined during the first connection to the headend or the network configuration. You can also launch a scan of the input signal.

3.3.1 Essential settings

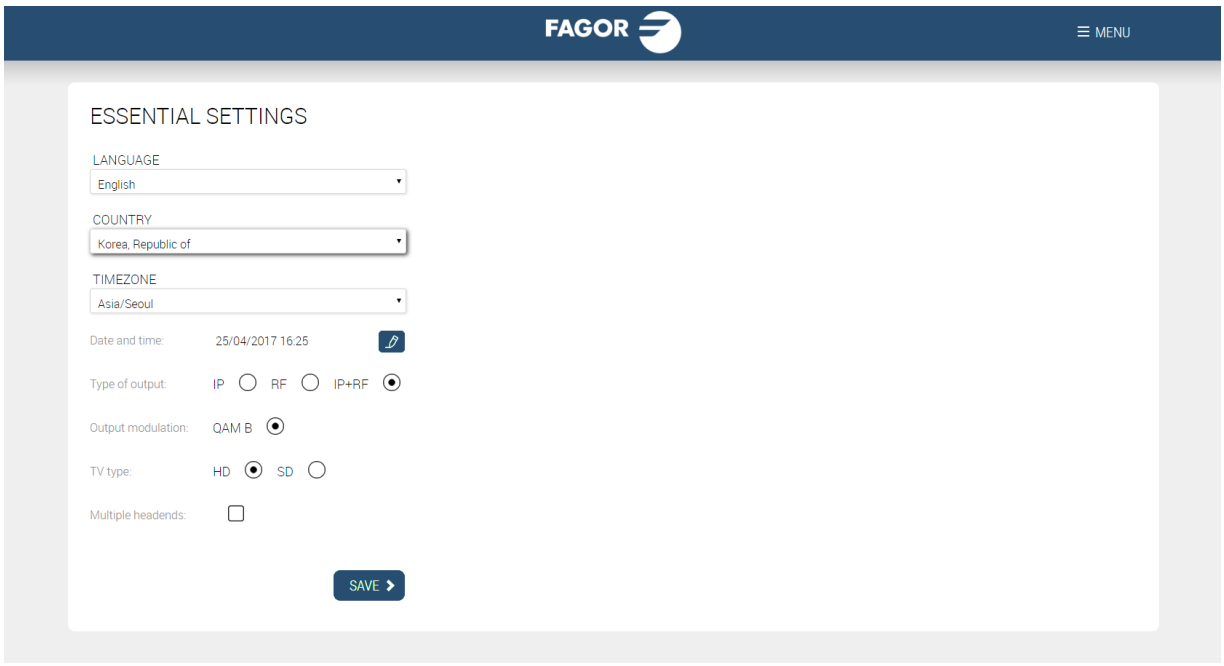
On this screen the basic installation parameters are defined.



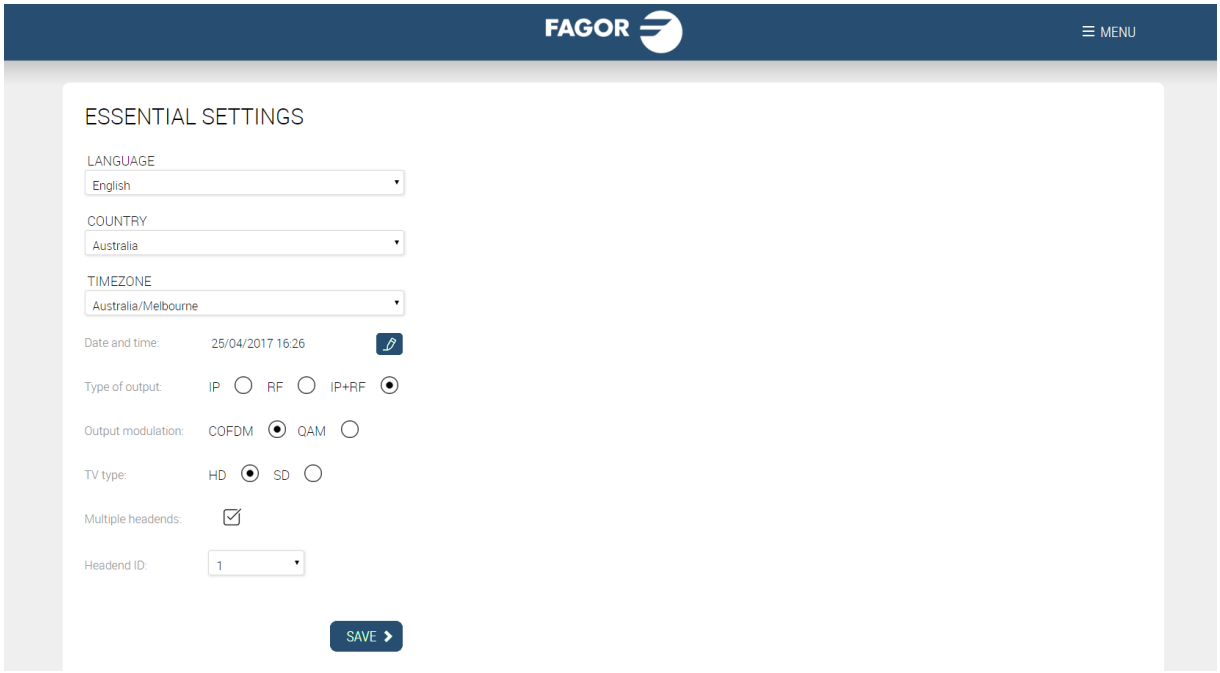
- LANGUAGE: select the language you want the interface will be shown.
- COUNTRY: select the country where the headend is installed. In the case the country doesn't appear in the list, you can select "Other".
- TIMEZONE: select the time zone where the headend is located.
- Date and time: by default, the date and time are configured automatically. In the case you need other date and time, different to the proposed one, push button to edit them.
- Type of output: choose IP when the TV distribution network is pure IP, RF when it is pure RF, or IP+RF when the distribution network is mixed.
- Output modulation: select the type of modulation used in the RF distribution.
- TV type: select the type of TVs that are being used in the installation (HD or SD) This parameter will be used by the headend in order to choose the codecs that will be employed by the FLOW ENC modules. In the case both type of TVs are present, select SD.

● Multiple headends: turn on this option in the case there were more than one Ikusi Flow headend in the same facility.

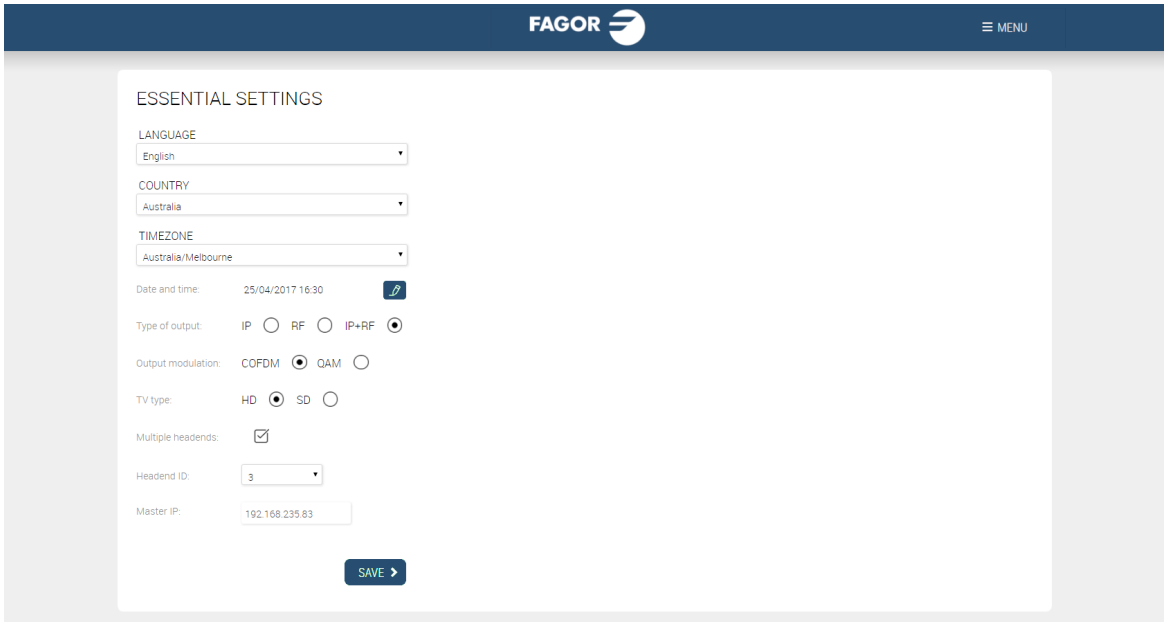
In the case of selecting a country like Mexico or South Korea, the output RF standard is J.83B with ATSC signalling. Therefore, the modulation shown is QAM B.



In case there is more than one headend in the same facility, you must enable Multiple headends option. After doing this, you must enter the headend identifier (from 1 to 10). One of the headends acts as Master and you must assign it the ID 1.

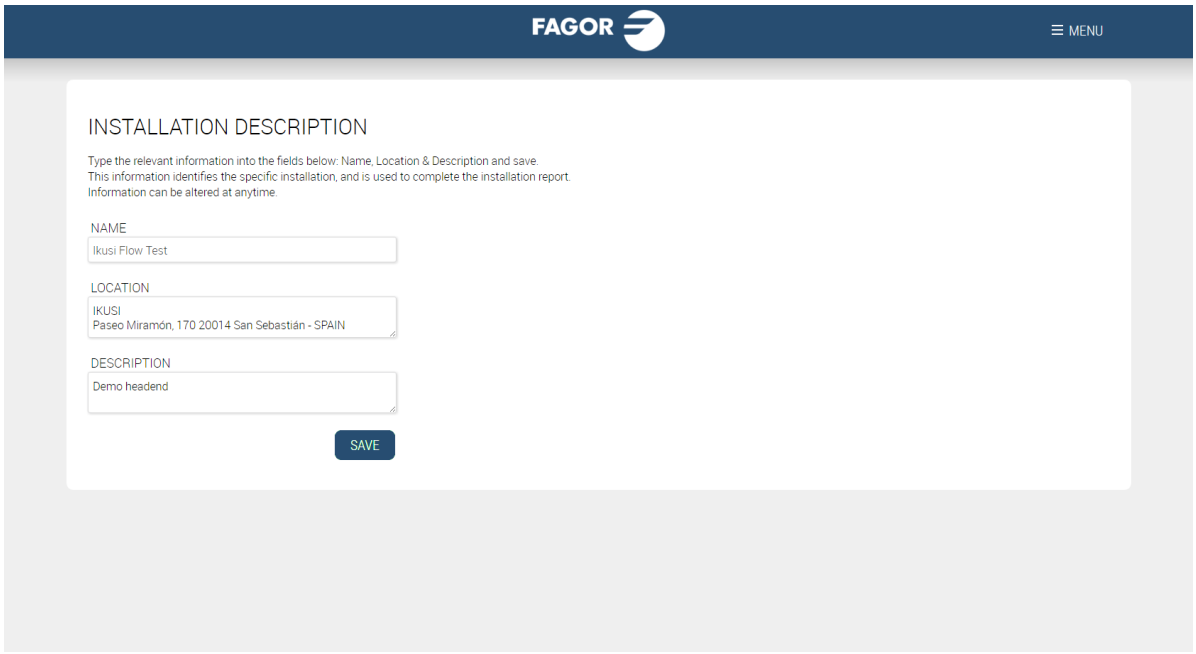


The rest of the headends will act as slaves. You must assign a unique identifier for each headend other than 1. You must also enter the IP address of the headend that acts as Master.



3.3.2 Installation description

On this screen you can enter information about the headend to easily differentiate this particular headend over others. This information will appear in the Overview report of the facility.

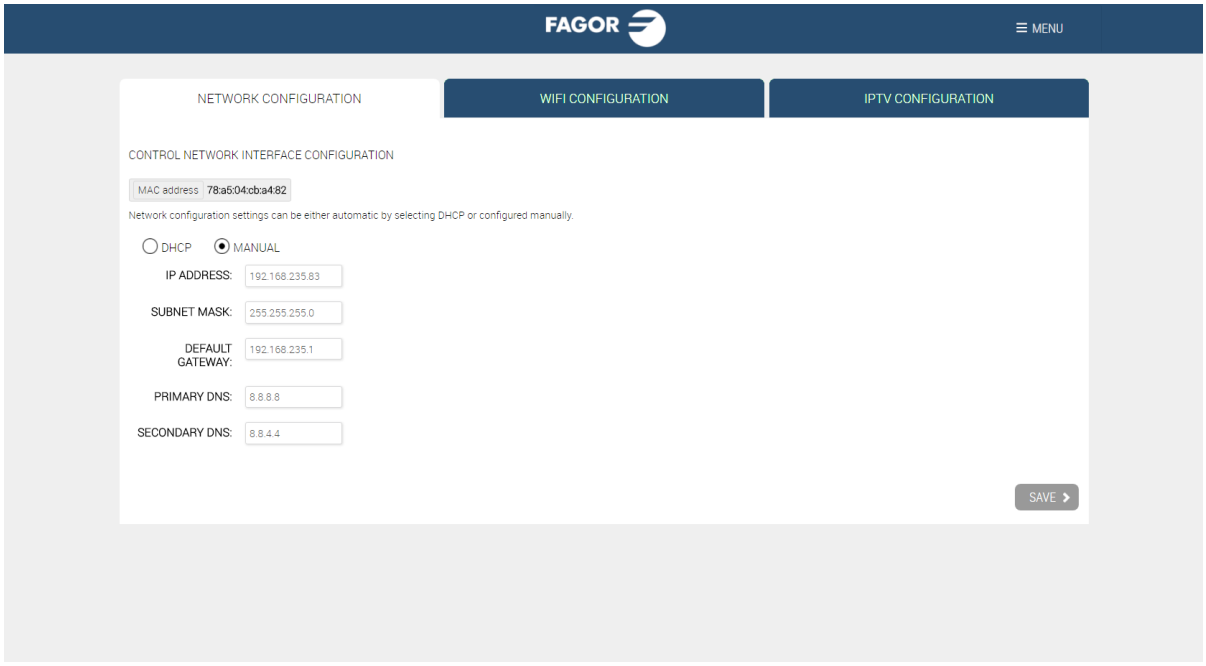


Enter the details of name, location and description of the facility (free text).

3.3.3 Network

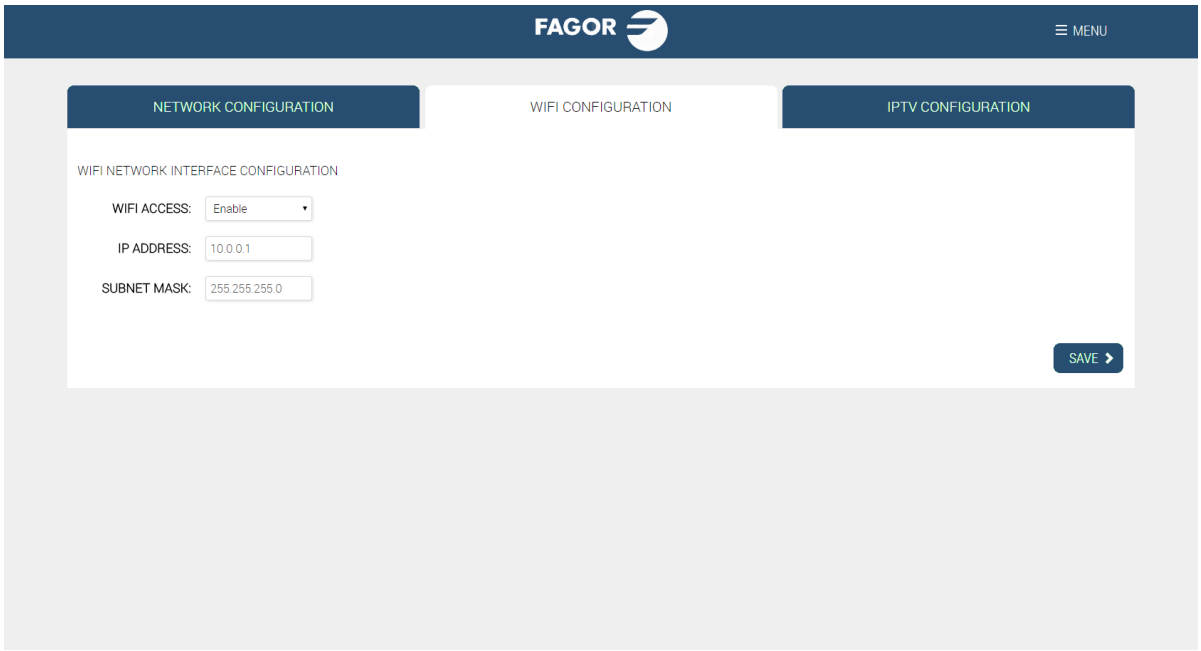
This option allows you to set the parameters related to connectivity both of the control port, WiFi network and IP streaming.

To configure the parameters related to the control port, select NETWORK CONFIGURATION tab.



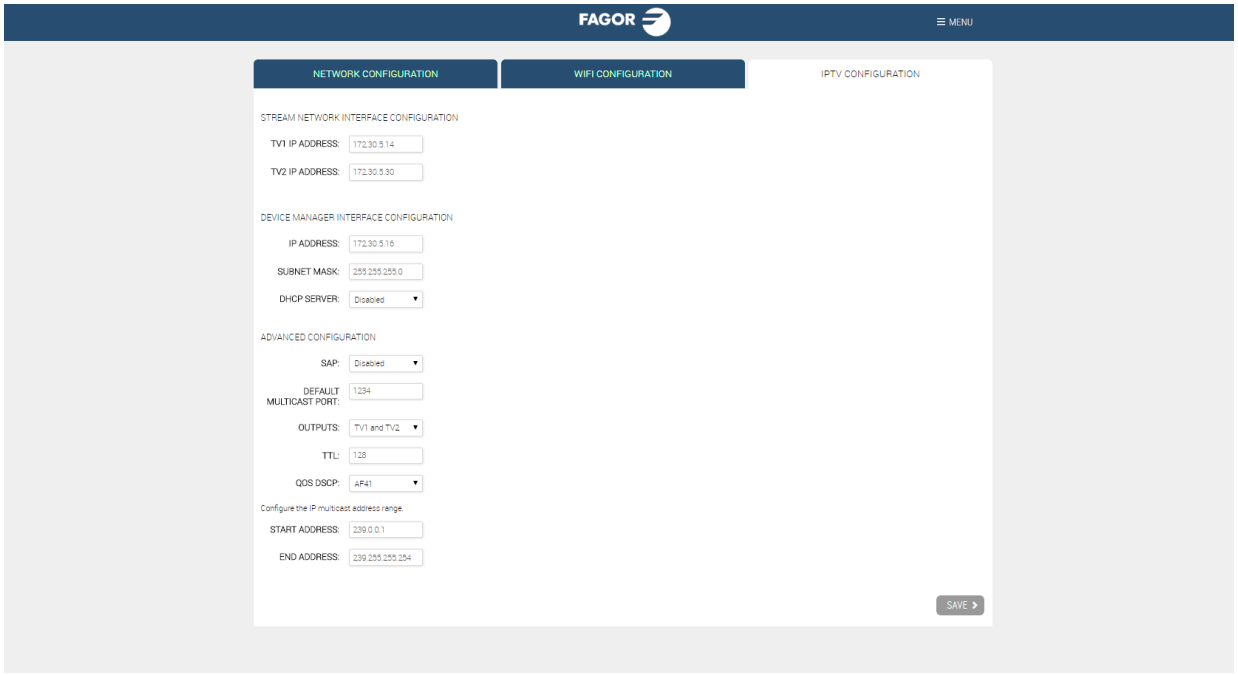
Select DHCP option if the network settings will be automatically provided by a DHCP server. Otherwise, select MANUAL and manually enter the settings (IP ADDRESS, SUBNET MASK, DEFAULT GATEWAY, PRIMARY DNS, SECONDARY DNS). Consult network manager to get those parameters. Push SAVE button to save the changes.

To configure the parameters related with the WiFi network, select WIFI CONFIGURATION tab.



To disable the WiFi network, select Disable in WIFI ACCESS. By contrast, if you select Enable you can configure the WiFi network parameters, such as IP ADDRESS and SUBNET MASK.

Finally, IPTV CONFIGURATION tab allows you to modify the parameters related to the streaming performed by the headend. This tab doesn't appear if RF has been configured as output type in the initial configuration. Moreover, advanced configuration must be enabled, as explained in section 3.4.1.



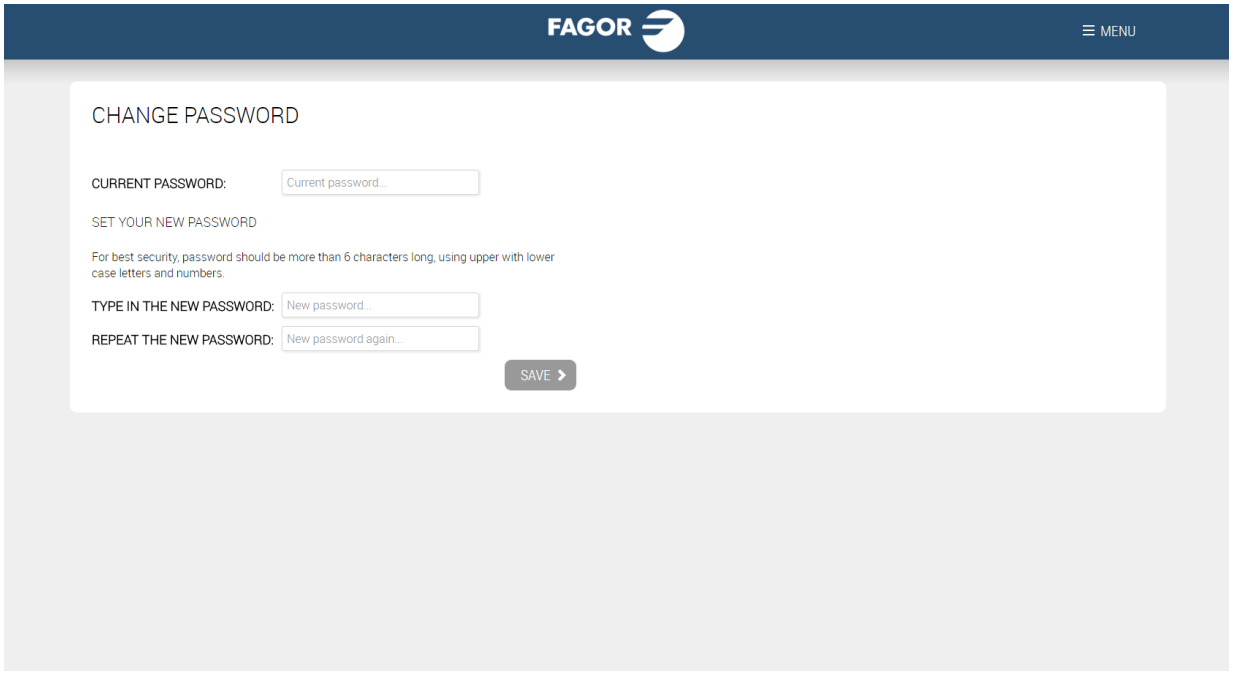
In this tab you can configure several parameters, grouped into three blocks:

- STREAM NETWORK INTERFACE CONFIGURATION
  - TV1 IP ADRESS: is the address set as a source IP in the packets broadcasted through TV1 port.
  - TV2 IP ADRESS: is the address set as a source IP in the packets broadcasted through TV2 port.
- DEVICE MANAGER INTERFACE CONFIGURATION (it only appears if the Device Manager is enabled)
  - IP ADDRESS: is the IP address used by the Device Manager to communicate with the devices (STBs or TVs). By default, this address is 172.30.5.6. Change it if this IP is not usable or if it causes conflicts in your IP network.
  - SUBNET MASK: is the subnet mask that is applied to the Device Manager server.
  - DHCP SERVER: This server distributes network configuration parameters (e.g., IP address) automatically to devices. There are 3 setup options:
    - Disabled: you must use it when the devices already have an IP address assigned.
    - Enabled: you must use it when the devices are not FLOW STBs, and do not have an IP address assigned.

      NOTE: DHCP server will assign IP address to all clients located in the network (not only to TVs or STBs).
    - Only supported devices: you must use it when the devices are FLOW STBs and they do not have IP address assigned (it is the most common case). DHCP server only will assign IP address to FLOW STBs, ignoring the rest of the clients that could be in the network.
- ADVANCED CONFIGURATION
  - SAP: use this option to enable or disable SAP messages sending (by default, it is disabled).
  - DEFAULT MULTICAST PORT: is the multicast port on which TV channels are sent by default, if it is not changed through the Service wizard.
  - OUTPUTS: use this option to choose if outbound traffic is distributed between the TV1 and TV2 ports, or sent only through TV1.
  - TTL: is the TTL (Time To Live) to be indicated in the multicast packets.
  - QOS DSCP: it allows you to set the value of Quality of Service to be indicated on the multicast packets to allow prioritization by the network electronics.
  - START ADDRESS: : it is the start address of the range of IP addresses that can be used to send multicast packets.
  - END ADDRESS: it is the final address of the range of IP addresses that can be used to send multicast packets.

3.3.4 Password

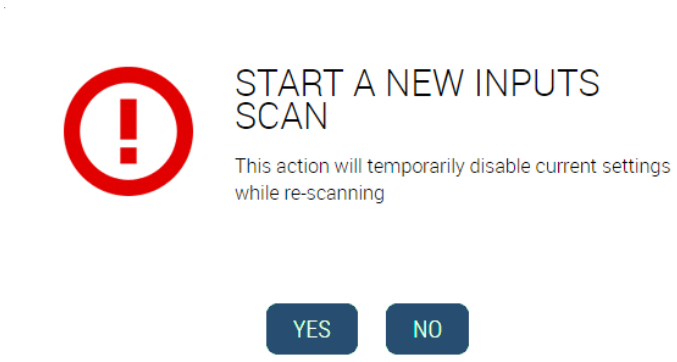
This screen allows you to change the password of the headend.



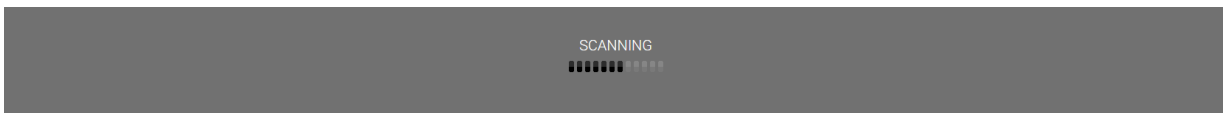
Follow the instructions on the screen to make the change the password (enter the current password, enter the new password and repeat the new password) . Finally, push SAVE button.

3.3.5 Start a new inputs scan

Use this option to force a new scan of the input signal. A message like the following one, indicating that, while scanning, the headend can not process the television channels, will appear:



Press YES to start the scan. During the duration of the scanning process, the following message appears at the top of the Home screen.



3.4 Advanced configuration

The advanced configuration menu provides access to options that are not commonly used or require a license for use.

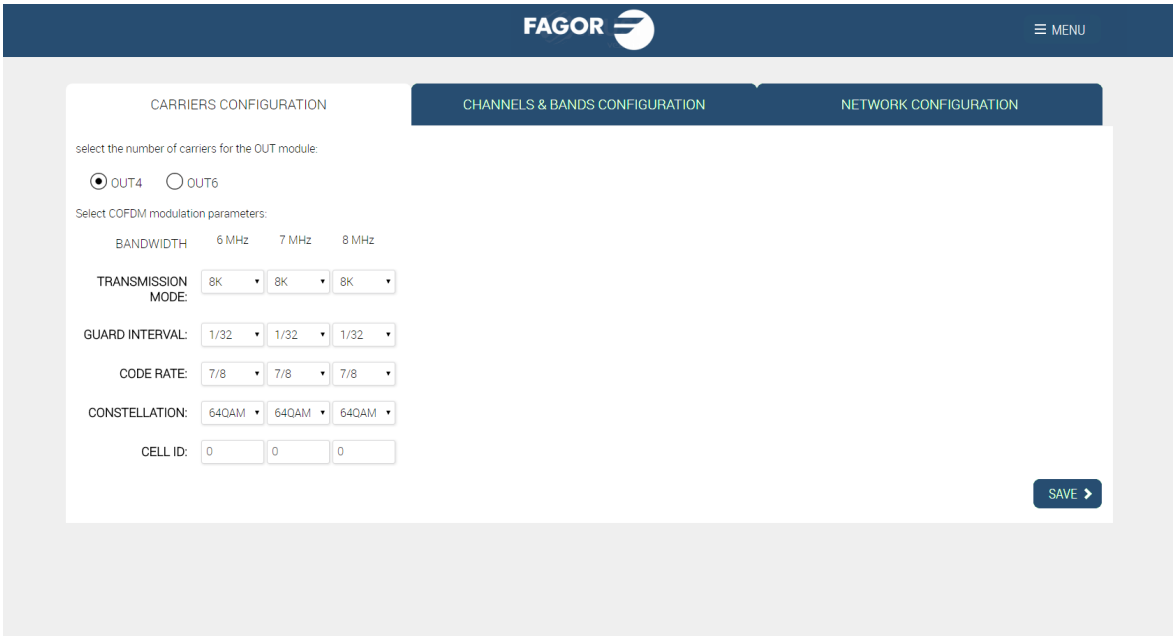
3.4.1 Enable/disable advanced configuration

By default, the advanced options are disabled. Clicking the Enable advanced configuration option, the rest of the menus, which were previously hidden, will appear. In addition, the Service wizard will allow to perform some advanced settings, as explained in section 4.

Press Disable advanced configuration if you want to disable them again.

3.4.2 COAX network Configuration

This option allows you to modify the modulation parameters, frequency plan and signalling used in the RF output. It doesn't appear if IP has been configured as output type in the initial configuration.



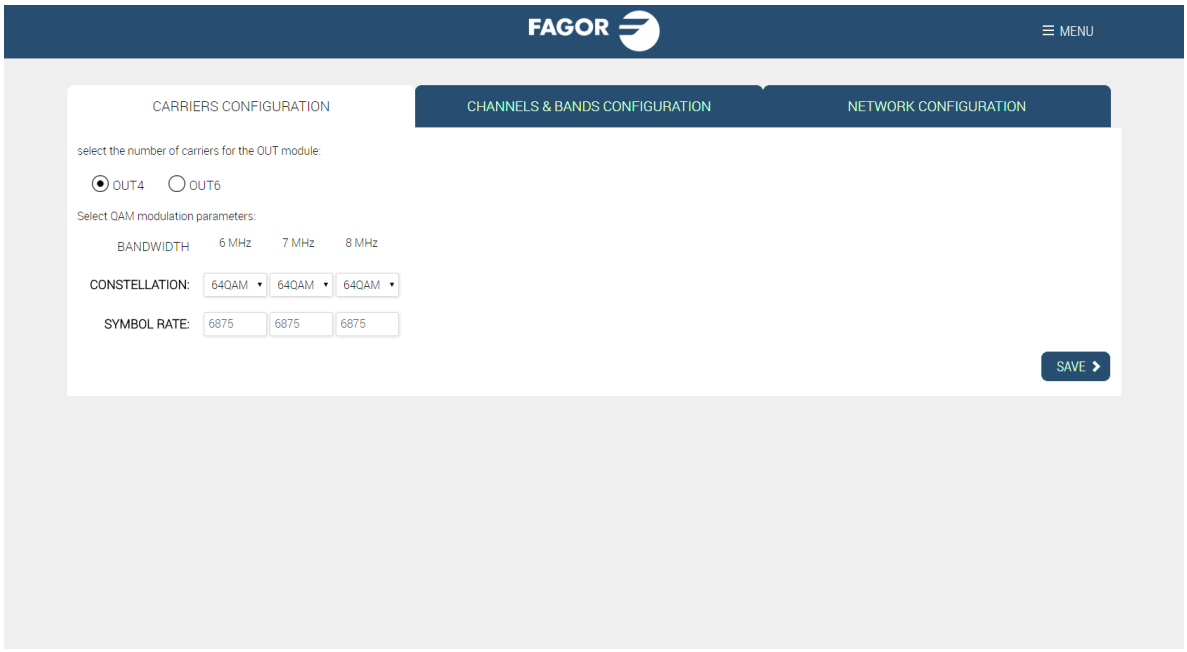
At the top of the screen you will find the selection of the number of carriers of the OUT module. You can choose between two options:

- OUT4: Each FLOW OUT module will generate 4 RF carriers, each one capable of convey up to 8 services.
- OUT6: Each FLOW OUT module will generate 6 RF carriers, each one capable of convey up to 6 services.

NOTE: OUT6 mode is not available in FLOW OUT modules with hardware version 0.

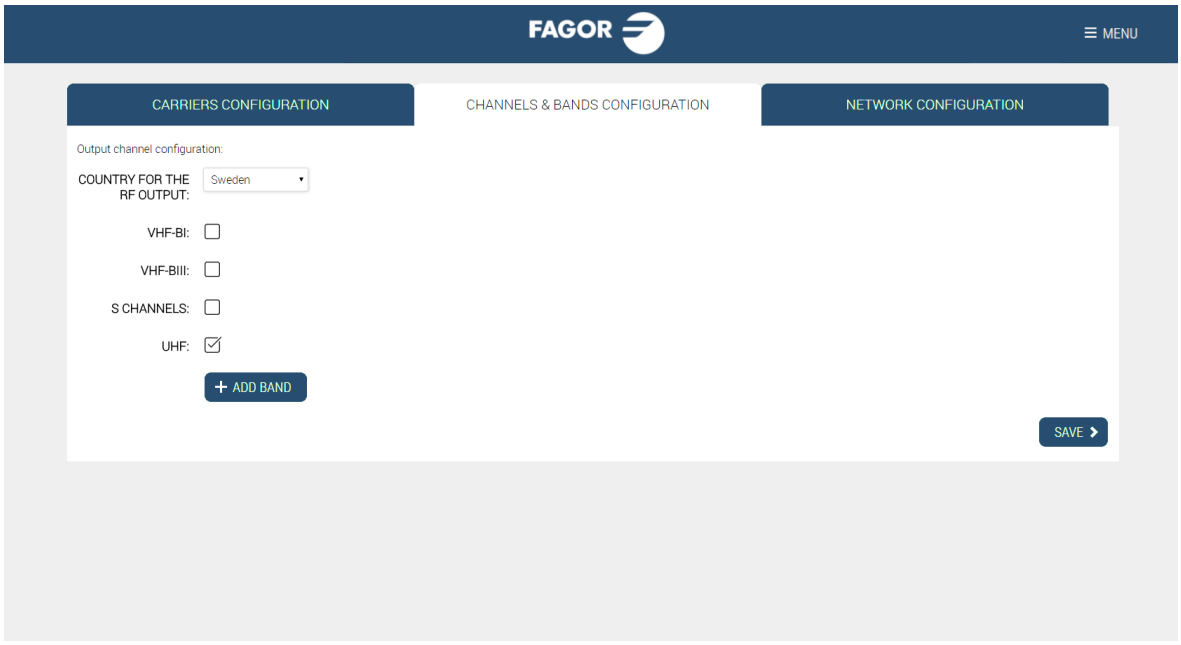
The rest of the parameters differ depending on the selected modulation output. In the above example, the parameters related with COFDM output are shown. Select the desired TRANSMISION MODE, GUARD INTERVAL, CODE RATE, CONSTELLATION and CELL_ID values for each of the possible bandwidths (6, 7 or 8 MHz).

However, if the selected output modulation is QAM or QAM B, the screen will be as follows:



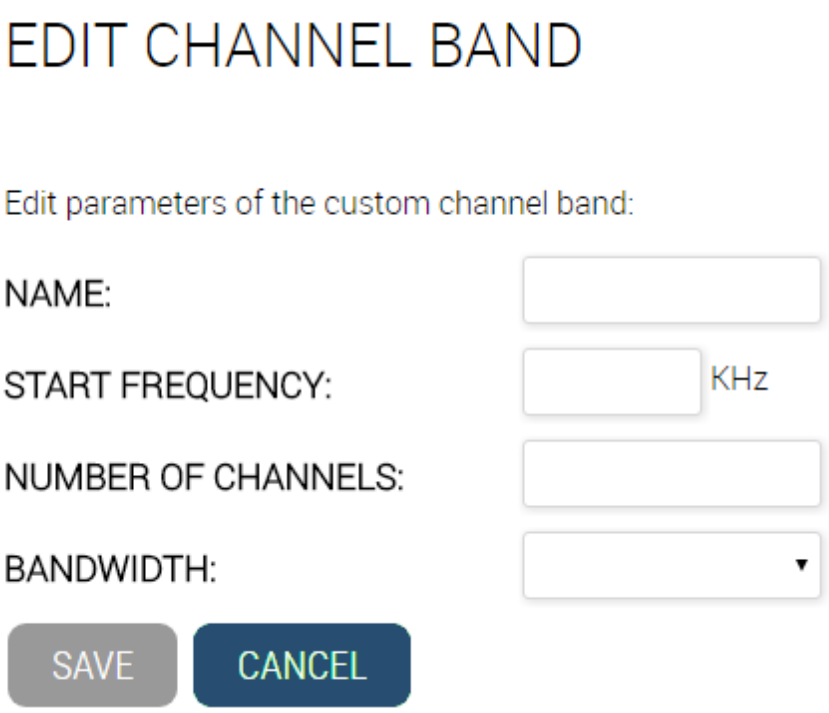
In this case, the configurable parameters will be CONSTELLATION and SYMBOL RATE.

To change the output frequency plan, select CHANNELS & BANDS CONFIGURATION tab.



Through this screen you can modify the frequency plan used in the output carriers. By default, the used profile comes defined by the selected country. If you want to use the profile corresponding to another country, select the country in COUNTRY FOR THE RF OUTPUT dropdown list.

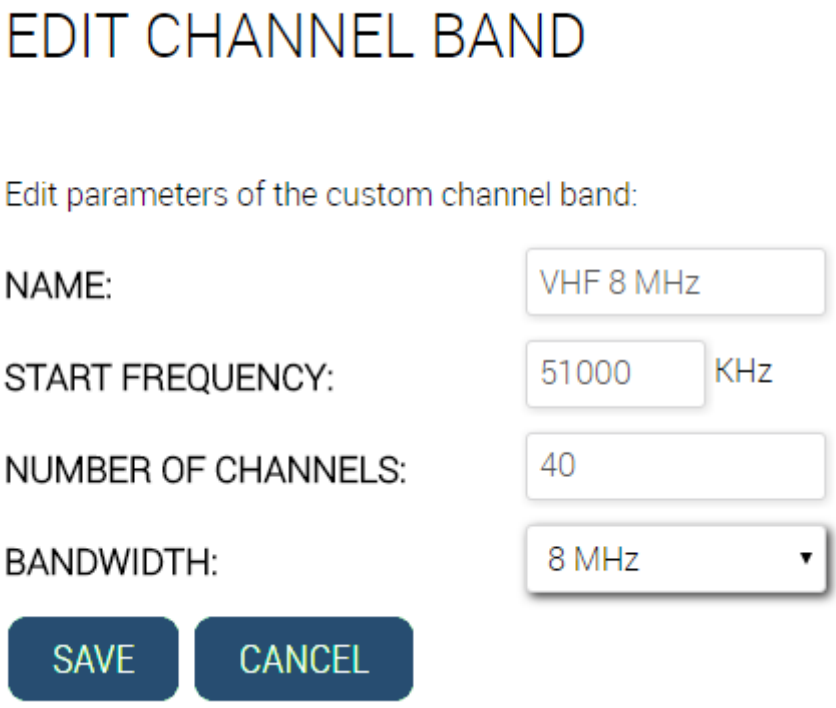
If, furthermore, you want to use another band different from the default marked channels, click the check box associated with that band. If the band is not one of the preconfigured in Ikusi Flow, you can define it by clicking ADD BAND button. A window will open as follows:



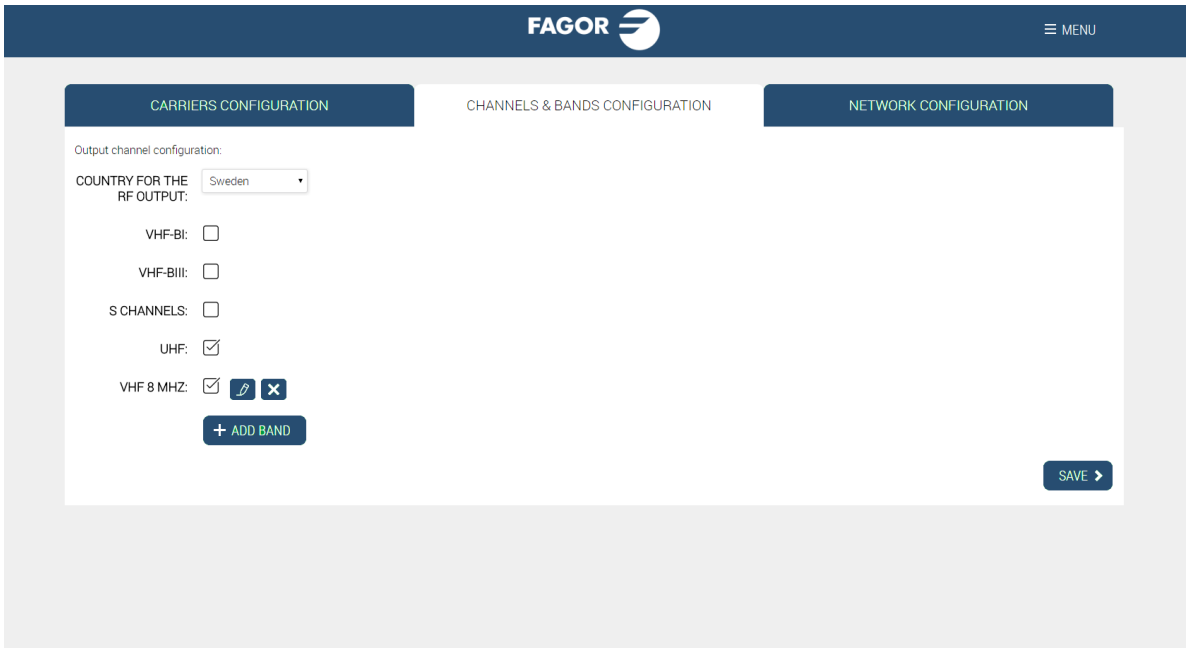
The following fields must be filled:

- NAME: Name with which you want to identify the channel band.
- START FREQUENCY: frequency from which the band starts.
- NUMBER OF CHANNELS: number of channels that form the band.
- BANDWIDTH: bandwidth of each channel.

For example, in the following image a VHF band is defined, but with a bandwitdh of 8 MHz. The band starts at 51 MHz and is formed by 40 channels.



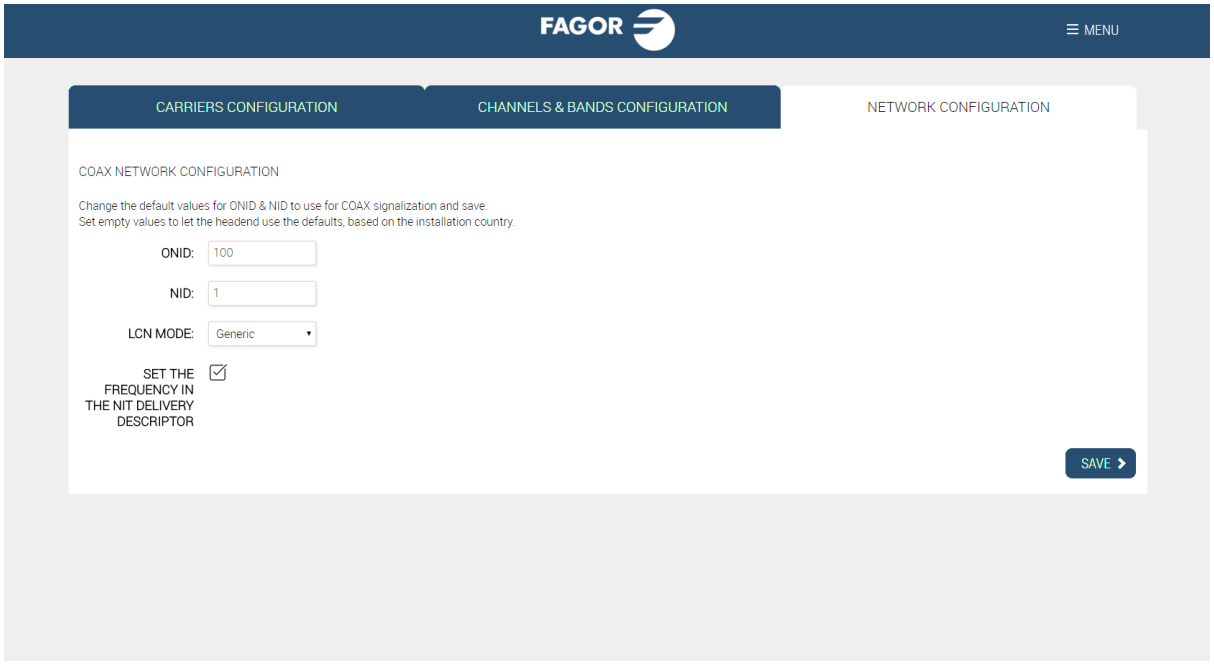
Push SAVE button.



To save the changes click SAVE.

Finally, select the NETWORK CONFIGURATION tab to change the parameters associated with the NIT table.

NOTE: NETWORK CONFIGURATION tab only appears in case of using DVB signalling. Therefore, if the selected country is one of those using ATSC signalling with PSIP tables, such as Mexico or South Korea, this tab will not appear.



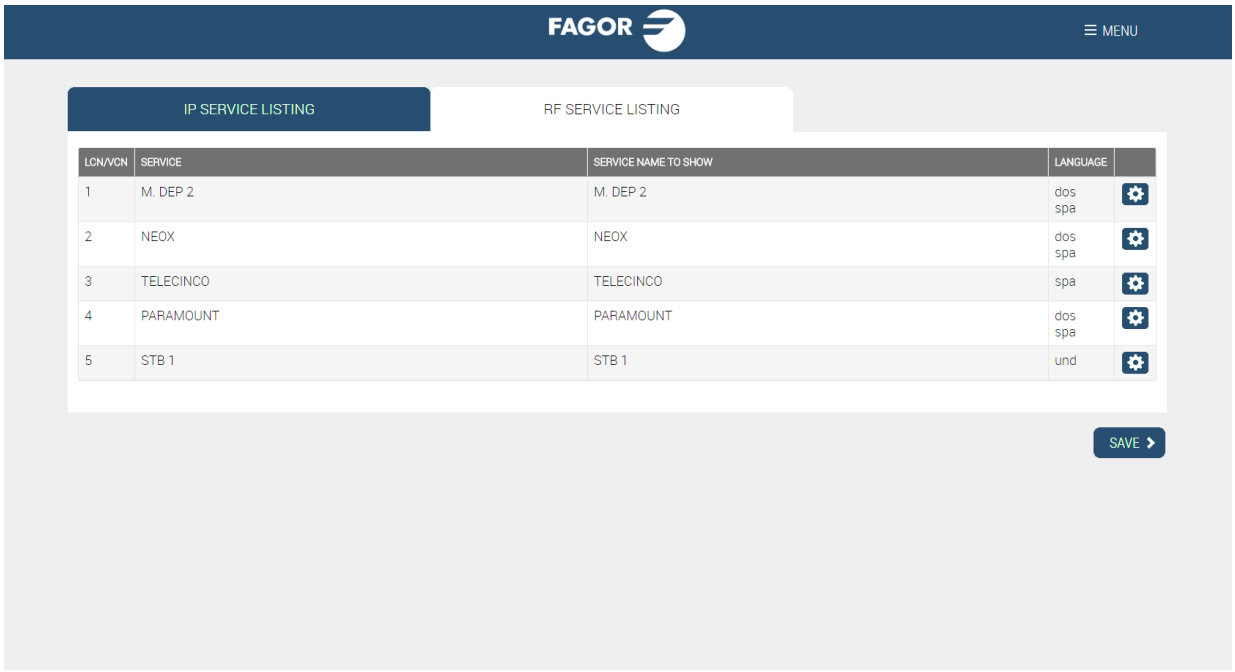
In this tab you can modify the following parameters:

- ONID: is the value of the Original Network Identifier that will be signalled in the NIT table.
- NID: is the value of the Network Identifier that will be signalled in the NIT
- LCN MODE: if you do not want to send LCN, select Off . Otherwise, select the LCN mode used by the TVs of the facility.
- SET THE FREQUENCY IN THE NIT DELIVERY DESCRIPTOR: : if you select this option, the NIT table will include the value of the frequency in which is being broadcasted each carrier. Otherwise, the frequency field will be empty in the NIT.

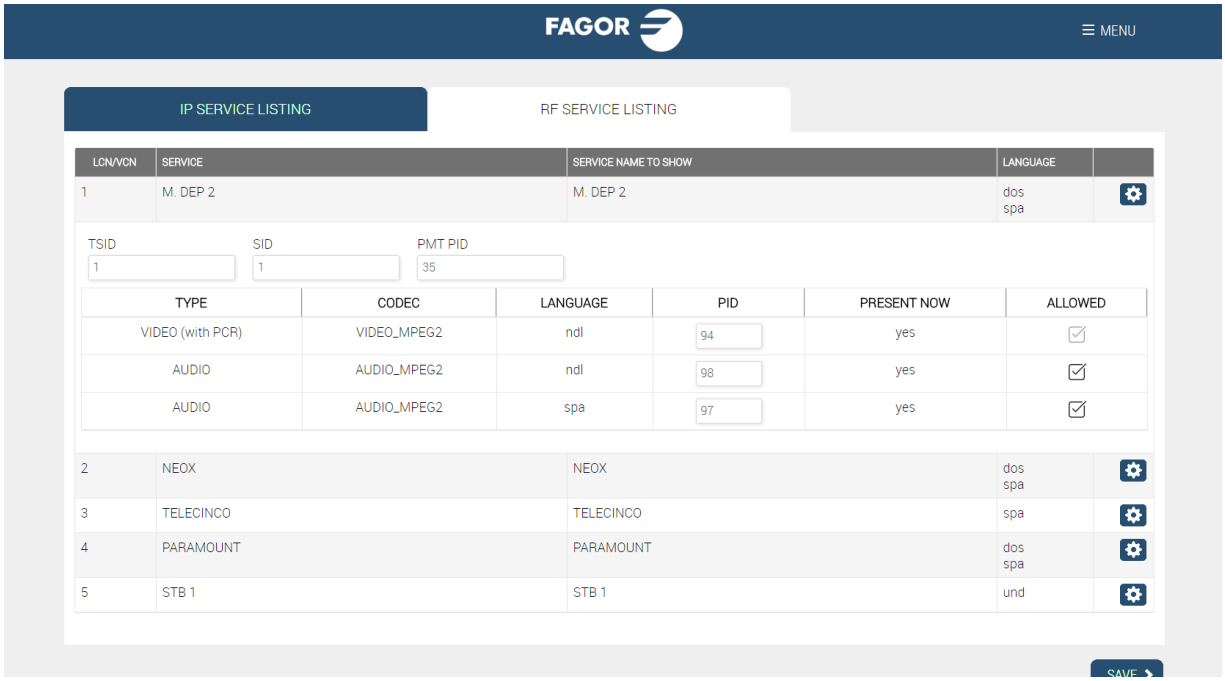
Push SAVE button to save the changes.

3.4.3 Elementary streams selection

This option will allow to select which elementary streams are included in the output, blocking those are not needed. Also, it alows the edition of the PIDs of each elementary stream, as well as the DVB / ASTC identifiers associated to each service.



To edit the elementary streams or the identifiers of a specific service, push the icon associated to that service. A window will open as follows:



At service level, the configurable parameters are the following ones:

- VCN Major: Virtual Channel Number, major field. This parameter only will appear in case the selected country is one of those using ATSC signalling with PSIP tables (e.g. Mexico or South Korea).
- TSID: Transport Stream Identifier.
- SID: Service Identifier.
- PMT PID: identifier of the packet where the PMT of the selected service is been conveyed.

Additionally, there is a list with the elementary streams that form the service. This list will content the following fields:

- TYPE: it indicates the type of the elementary stream.
- CODEC: it indicates the codec used.
- LANGUAGE: it indicates the language of the elementary stream. In those streams where speaking about language has no sense, it will appear as ndl (not defined language).
- PID: identifier of the packet where the elementary streams is been conveyed.This field can be edited by the user.
- PRESENT NOW: it indicates if the elementary stream is present currently in the input signal.
- ALLOWED: when it is enabled, it indicates that the stream can pass to the output. When it is disabled, it indicates that the stream is been blocked and it will not appear in the output.

After making the necessary changes, push SAVE button.

3.4.4 Device Manager Configuration

Through this option you can enter the license of the Device Manager, enable Device Manager App, configure the register mode of the TVs/STBs and block STB configuration from the remote control. Additionally, you can define users who can access directly to the Device Manager application without having to go through the rest of the options of the headend.

For more information, see Installation and Setting Device Manager Guide.

3.4.5 Device Manager App

Device Manager App is used to command the devices (TVs or STBs). Device Manager App can send 4 different commands:

- POWEROFF/POWERON: it is used to switch off or switch on one or several devices remotely.
- SERVICES LISTING: it is used to publish a service listing to one or several devices, allowing the control of the content available in each TV. The final user only will be able to make channel hopping among the channels of the service listing.
- SET SERVICE: it is used to set remotely the content to be reproduced in each TV.
- MUTE: it is used to mute or unmute one or several devices remotely.

This option is available only if previously the Device Manager App has been enabled.

Through this option you can enter the license of the Device Manager, enable Device Manager App, configure the register mode of the TVs/STBs and block STB configuration from the remote control. Additionally, you can define users who can access directly to the Device Manager application without having to go through the rest of the options of the headend.

For more information, see Installation and Setting Device Manager Guide.".

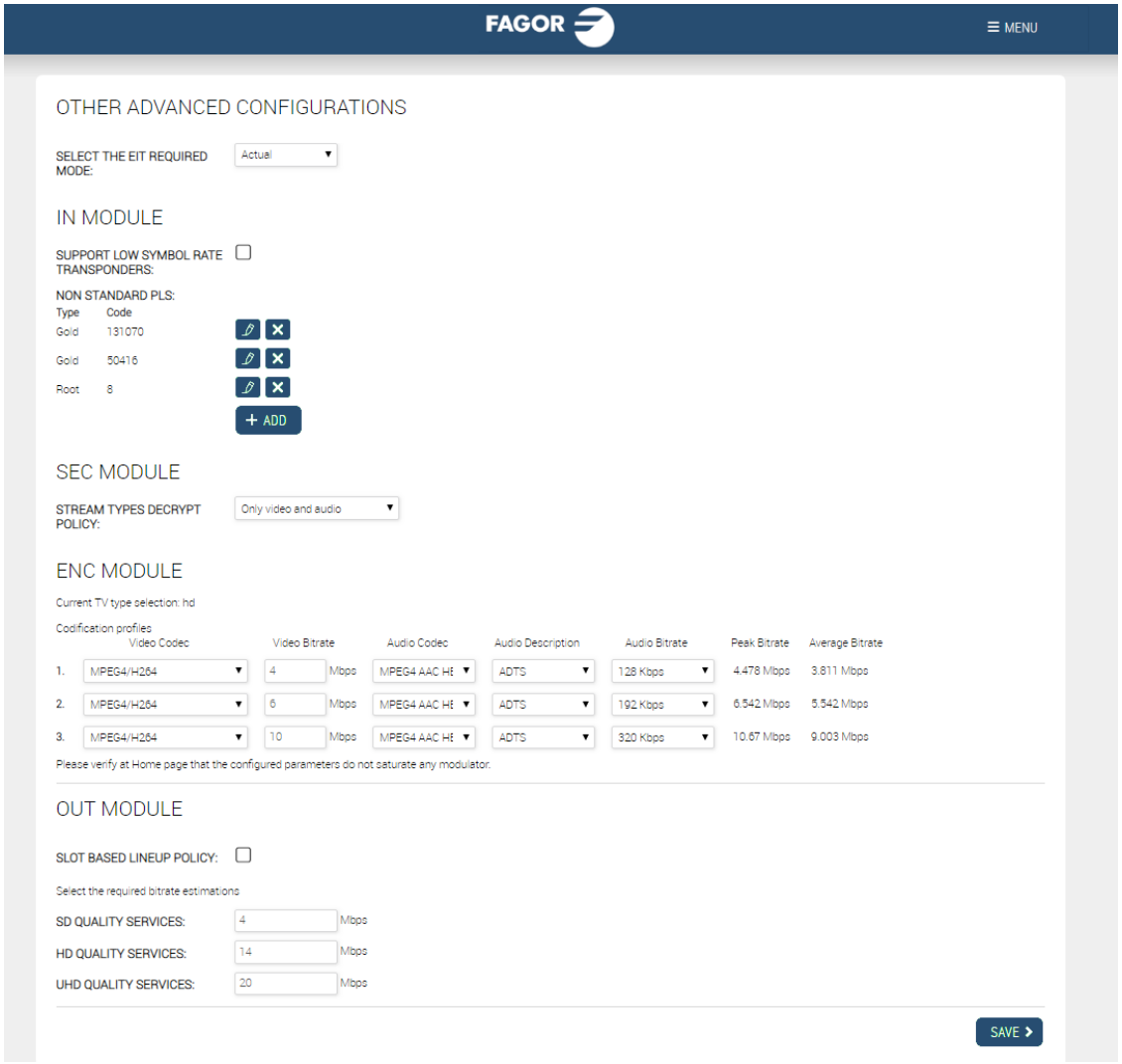
3.4.6 DRM Configuration

Through this option you can configure the contents protection system included in Ikusi Flow (Samsung Lynk or Philips VSecure Hospitality DRMs) or the simulcrypt interface for communication with an external CAS server.

For more information, see Installation and Setting DRM System Guide and Simulcrypt Interface Configuration Guide, respectively.

3.4.7 Other advanced configurations

This options allows to modify other advanced configurations, related to EIT insertion, FLOW OUT module, FLOW IN module and FLOW ENC module.



The configurable parameters are the following ones:

- EIT MODE: in SELECT THE EIT REQUIRED MODE dropdown list, you can choose how the EITs are sent. There are three options:

☐ Off: EITs are not sent.

☐ Actual: each output multiplex (or SPTS in IP) includes only the EITs corresponding to the services conveyed in that multiplex (or STPS en IP).

☐ Actual and others: each output multiplex (or SPTS in IP) include the EITs of all the services generated by the headend. By enabling the insertion of EIT_others tables, the insertion of SDT_others is also enabled.

- SUPPORT LOW SYMBOL RATE TRANSPONDERS: check this box in the case the satellite transponders you want to receive have a symbol rate lower than 20 MSymb/s. In this way, you will ensure its proper reception. Otherwise, leave the box unchecked to not penalize the scanning time.
- Terrestrial input bands configuration: through this screen you can modify the frequency plan of the terrestrial input. By default, the used frequency plan comes defined by the selected country. If you want to use other frequency plan, first select country "Other" in the Essential settings menu. The selection of bands is carried out in a similar way to that of the output bands described in section 3.4.2, CHANNELS & BANDS CONFIGURATION tab.
- NON STANDARD PLS: it shows the set of non-standard PLS that the headend will use to receive multistream services. If you want to add a new PLS, push ADD button and select the type of PLS and the encryption code. Add all necessary PLS

NOTE: for the headend to receive multistream services based on the PLS defined in this window, after entering them, a scan of the input signals must be launched.

- STREAM TYPES DECRYPT POLICY: In this drop-down list you can select the elementary stream types that will be decrypted by the SEC. You can choose between three options:

☐ Only video and audio: only video and audio streams will be decrypted

☐ Include subtitling: video, audio and subtitling streams will be decrypted

☐ Include teletext: video, audio, subtitling and teletext streams will be decrypted

- ENC CODIFICATION: in this table, you can define the codecs used by the ENC module, both video and audio, and peak bit rates of each coding . Three quality levels are defined. From the Service wizard you can choose which of the three levels is applied to code any service.
- SLOT BASED LINEUP POLICY: Check this box to be able to create reserved TV channels ("Slots"). Later, these channels could be used to increase the lineup with new contents, that could be reproduced by the TVs without rescanning them. Slots creation and configuration is done through the Service Wizard, as it is described in the Ikusi Flow Slots Configuration Guide.
- QUALITY OF SERVICES: is the value used by the headend to distribute the services among the output RF carriers. Ikusi Flow differentiates between services with SD, HD and UHD quality. From the value entered here, Ikusi Flow decides whether an output RF carrier has space to carry more services or not.

ATENTION: this data is used only to estimate the occupation of the RF carrier. The FLOW OUT module does not perform any transrating process, but modulates the services with the same quality as they arrive.

After making the necessary changes, push SAVE button.

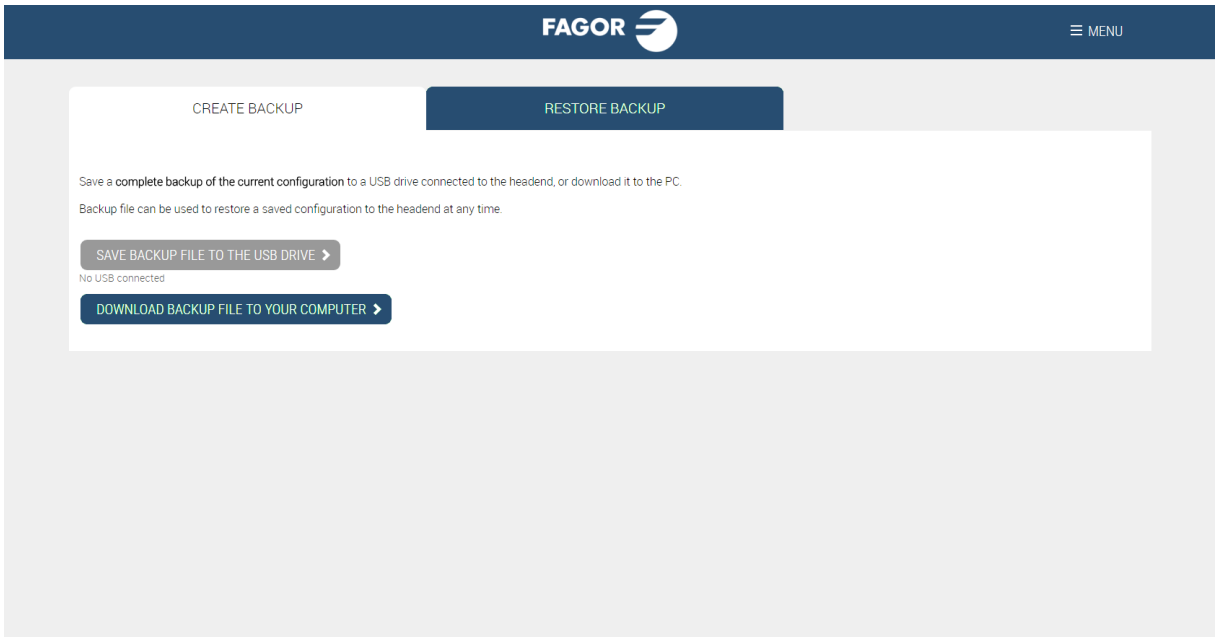
3.5 Maintenance

Maintenance menu allows to manage the configuration of the headend globally, either downloading/uploading a backup or restoring all modules to factory settings. It also allows to upgrade the firmware of the headend and to download debug traces that can be used by the Ikusi developers in case of problems.

3.5.1 Backup

The backup option is used to download or upload a copy of the complete configuration of the headend. Thus, you can replicate the configuration of a headend over another one (or over the same, if, for any mishandling, it reaches to an undesired state).

By choosing the Backup option, a window will open as follows:

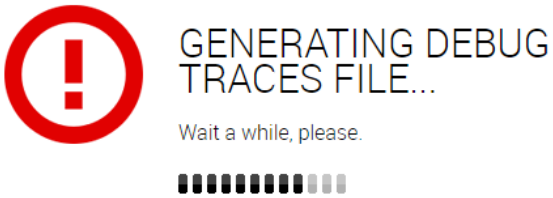


Select CREATE BACKUP tab to download a file with the complete configuration of the headend. The file can be downloaded on a USB drive or on the computer itself.

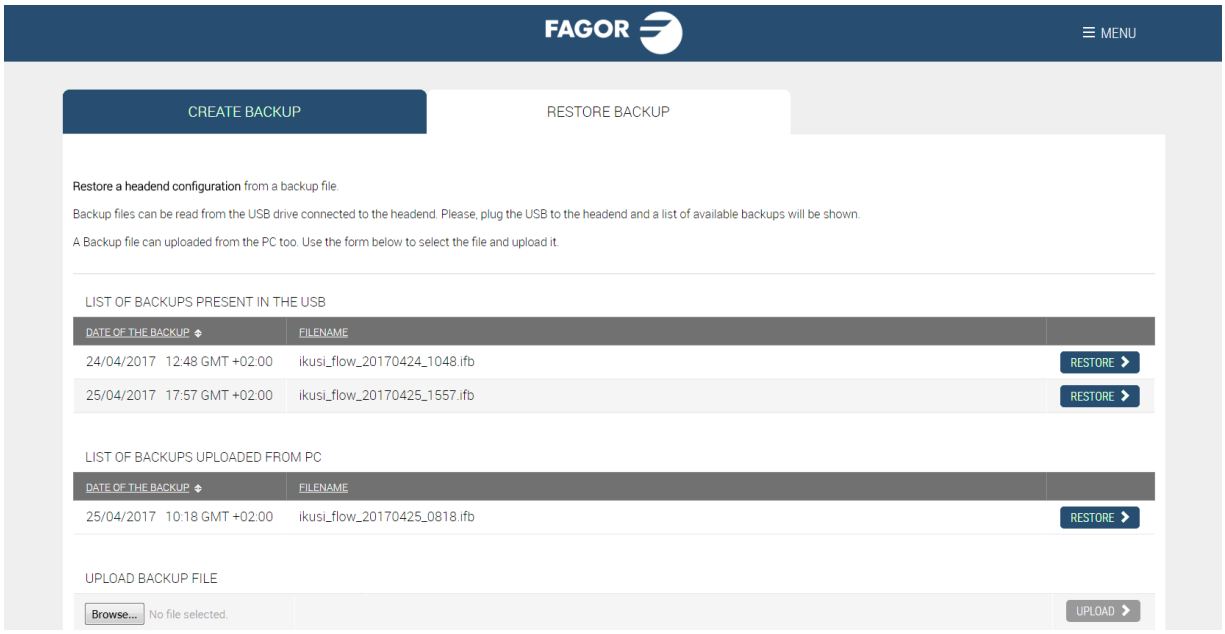
To download the file on a USB drive, check that the USB drive is inserted into the FLOW HUB module and push SAVE BACKUP FILE TO THE USB DRIVE button. In case the USB drive was not inserted, this button would be disabled.

To download the file on the computer itself, click the DOWNLOAD BACKUP FILE TO YOUR COMPUTER button.

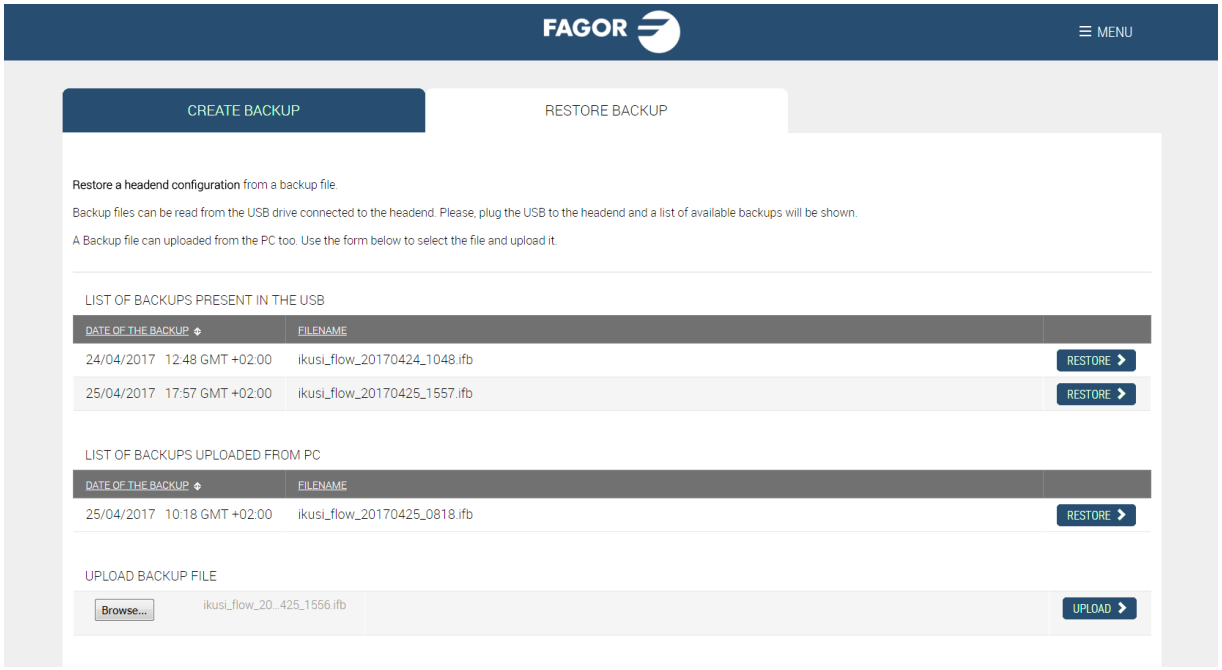
In both cases, a message like the following one will appear, indicating that a backup is being created:



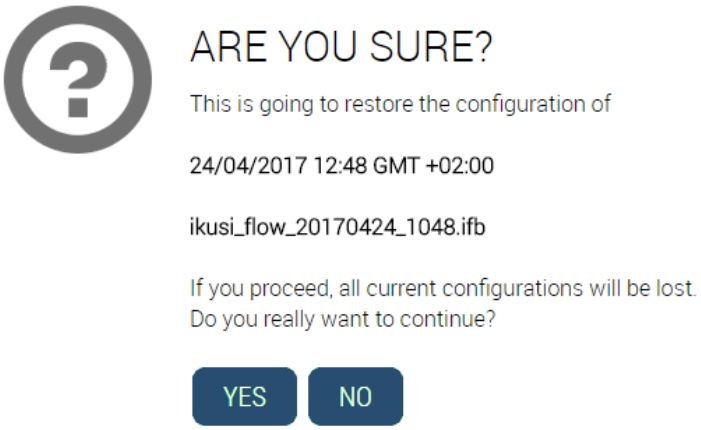
To restore a backup, select RESTORE BACKUP tab.



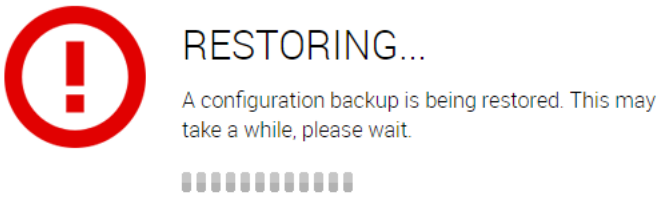
This screen displays a list with all available backups, either in the USB drive connected to the FLOW HUB module or the ones have been uploaded from your computer. In case you want to upload a new backup from the computer, push the Select file button and choose the file with the desired backup.



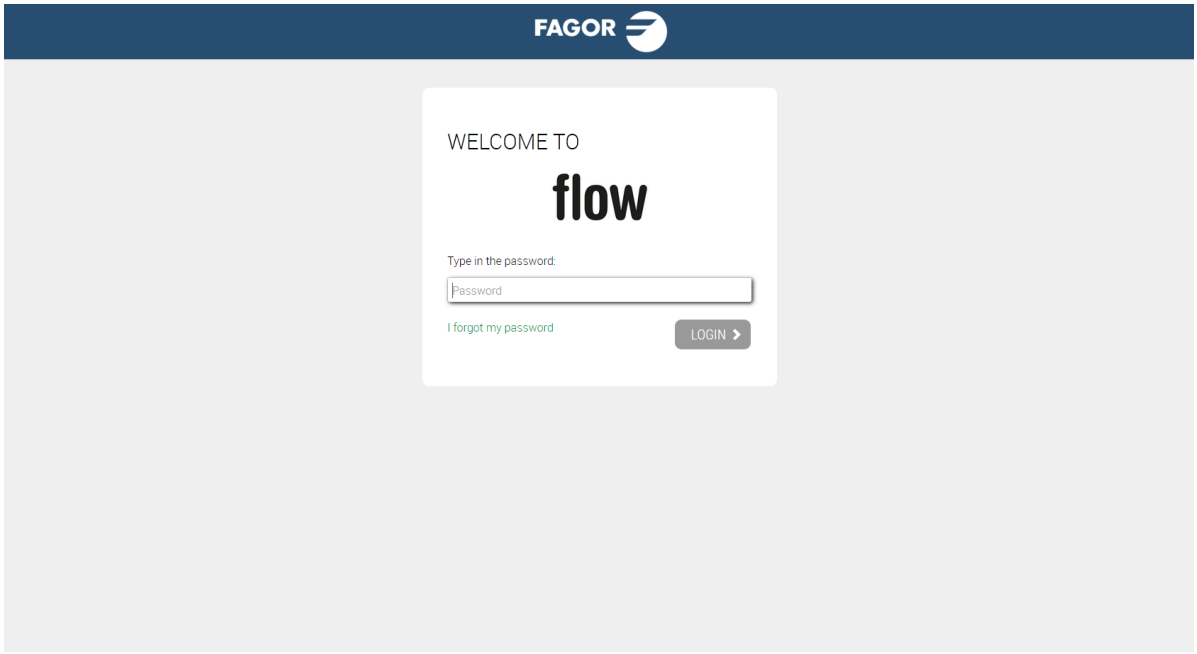
The UPLOAD button will change to green. Push it. The new backup will be added to the list of available files. Within the list, select the copy you want to restore and push RESTORE button. A confirmation window will open, indicating that the headend will lose the current configuration.



Push YES button to confirm restoring the backup. While the restoring process is performed, a message will be displayed as follows:



At the end of the process, the browser will redirect you to the welcome screen.



NOTE: FLOW HUB module will restart at the end of the restoration. This can cause your terminal loses WiFi communication with the headend. If that's the case, you will need to choose again the Ikusi Flow WiFi network in your terminal.

NOTE: the password of the headend will be changed to the one stored in the backup.

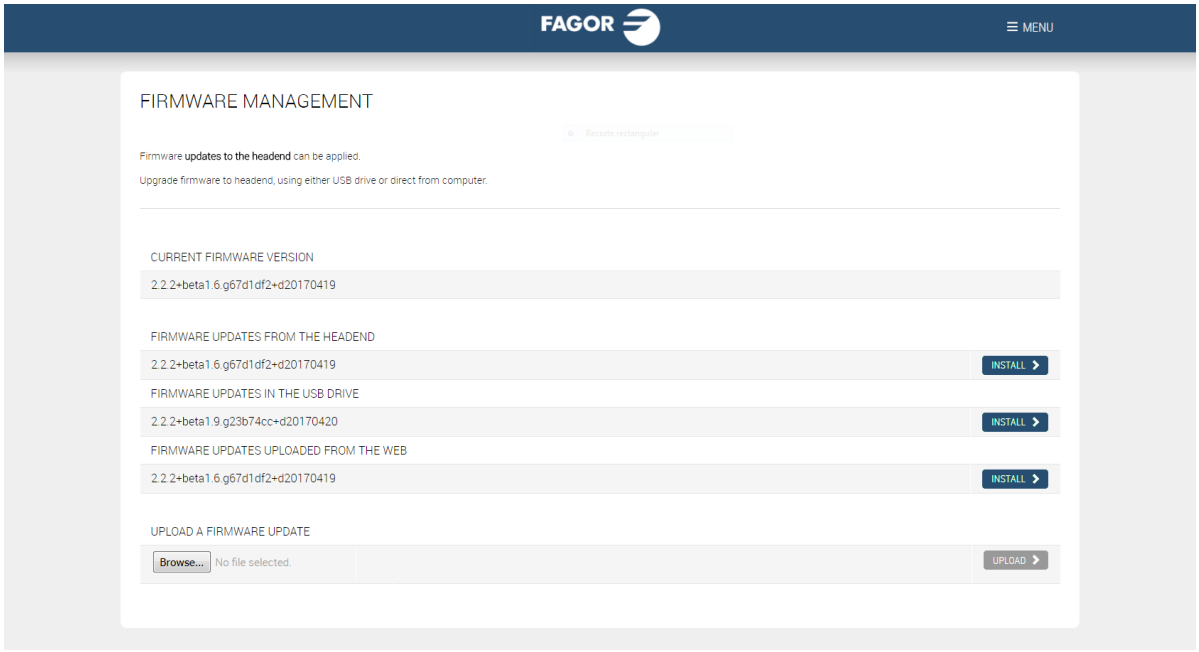
NOTE: the IP address of the headend does not change , i.e., it is the same to which it was configured before restoring the backup.

3.5.2 Firmware

Firmware option allows to upgrade the headend with a new firmware version.

NOTE: Ikusi Flow does not allow to downgrade the modules to an older version:

The screen to manage firmware files is as follows.

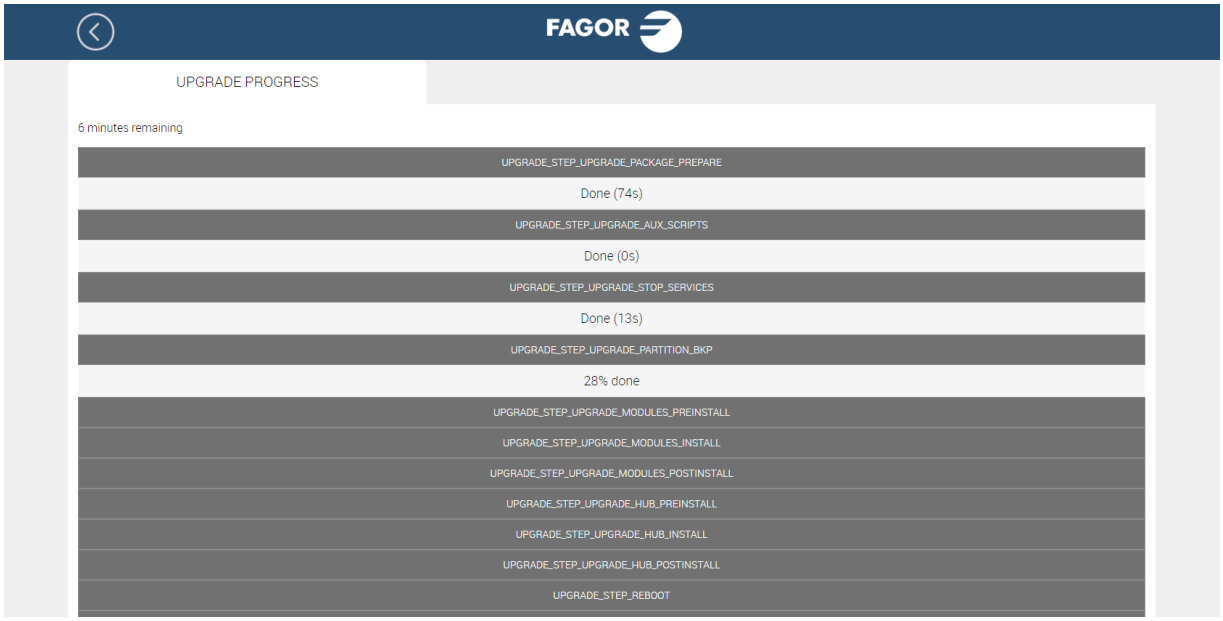


This screen is divided into five blocks:

- CURRENT FIRMWARE VERSION: it informs about the firmware version of FLOW HUB module.
- FIRMWARE UPDATES FROM THE HEADEND: it allows to upgrade the whole headend with the firmware version of FLOW HUB module. In case any of the modules is using an older firmware version, push INSTALL button to upgrade it with this version.
- FIRMWARE UPDATES IN THE USB DRIVE: it allows to upgrade the whole headend with a firmware version that is stored in the USB drive connected to FLOW HUB module. Push INSTALL button to upgrade them with this version.
- FIRMWARE UPDATES UPLOADED FROM THE WEB: it allows to upgrade the whole headend with a firmware version that, previously, has been uploaded from your PC. Push INSTALL button to upgrade them with this version.
- UPLOAD A FIRMWARE UPDATE: use this option to upload to the headend a firmware version. Select the firmware through Browse button. After that, push UPLOAD button. Once the firmware has been uploaded, it will appear in the FIRMWARE UPDATES UPLOADED FROM THE WEB list.

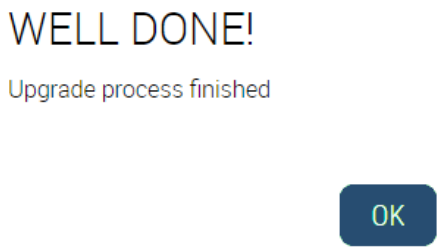
To update the headend, push the INSTALL button associated with the desired firmware version. If necessary, upload the version previously through the web interface, using UPLOAD A FIRMWARE UPDATE option.

After pushing INSTALL button, the upgrade progress screen will open.



This screen shows all the steps of the upgrade, indicating which have already been made, how long have needed and the percentage of progress of the current step.

At the conclusion of the upgrade, a message will appear as follows:



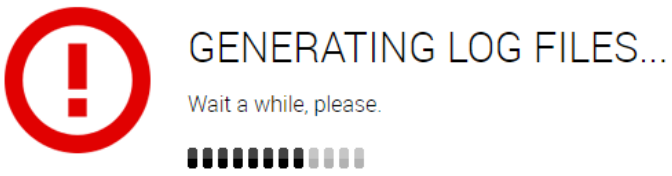
Push OK button. The web interface will redirect you to Home screen.

NOTE: FLOW HUB module will restart at the end of the upgrade. This can cause your terminal loses WiFi communication with the headend. If that's the case, you will need to choose again the Ikusi Flow WiFi network in your terminal.

3.5.3 Download Debug Traces

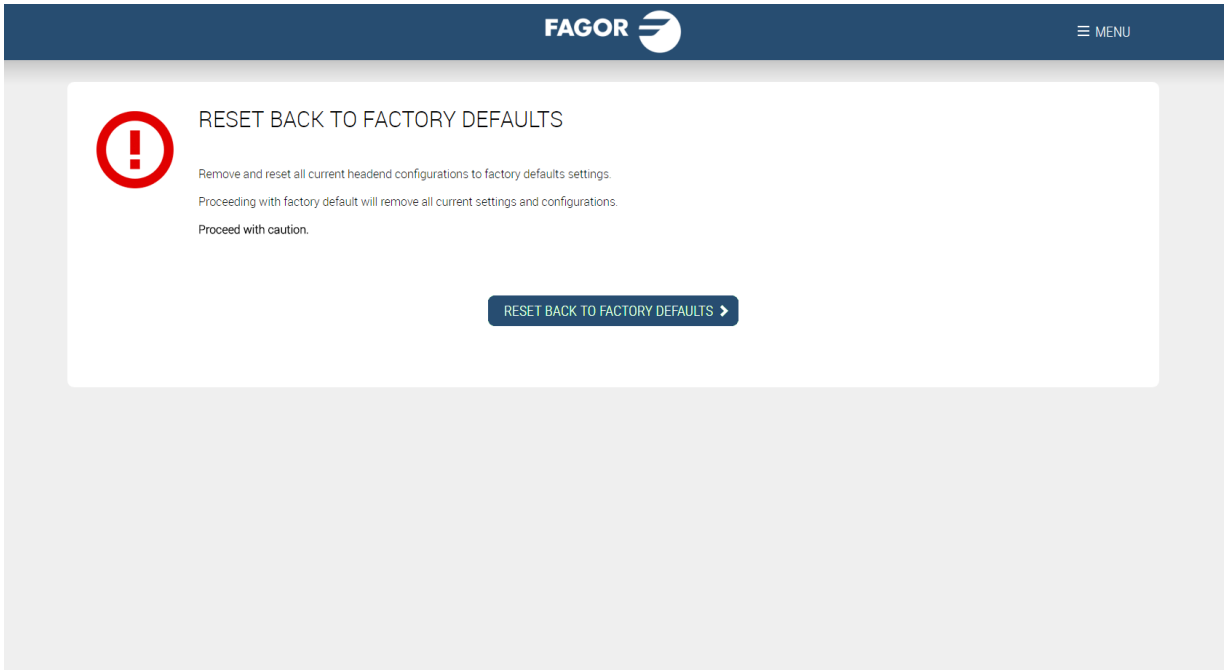
In some case, you need to obtain detailed information of the headend for debugging complex problems. Ikusi Flow allows to downlad debug traces files, which may be used by Ikusi technicians to analyze and solve a particular problem.

To download that debug traces file, select Download Debug Traces option. Your browser will launch the downloading of a file with name flow_dump_timestamp.tar.gz, where "timestamp" is an indication of the date and time when download has been performed. During this process, a message will be displayed as follows:

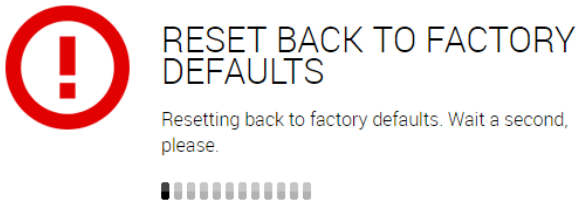


3.5.4 Reset to factory defaults

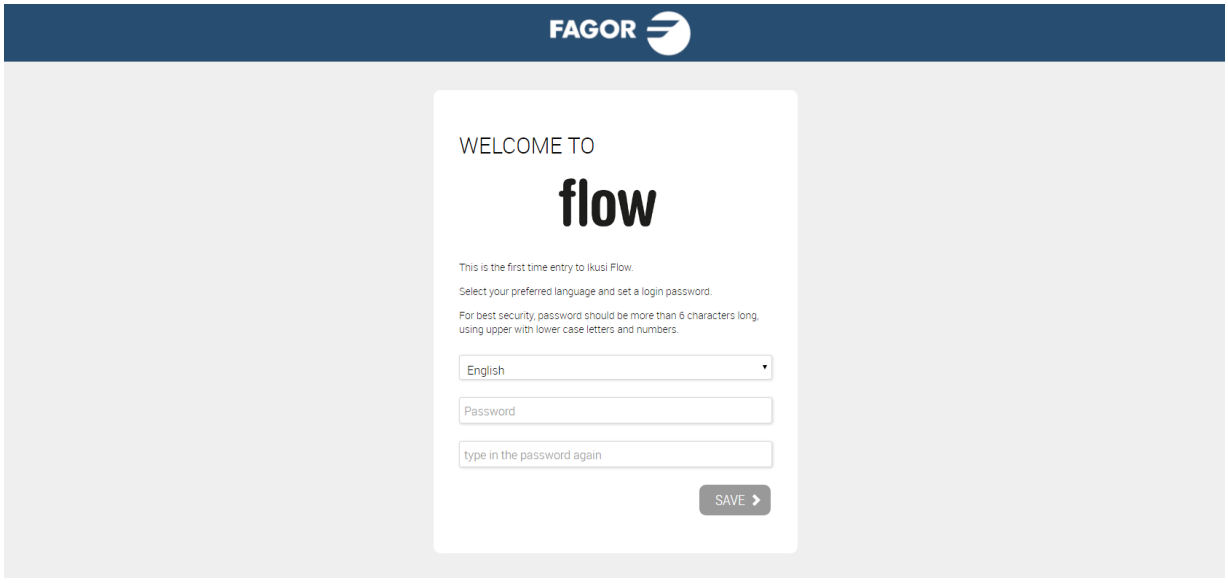
This option deletes the current configuration of the modules, loading them the default settings, as they left the factory. Use this option carefully as you will lose all previous configuration. By choosing this option, a confirmation window will open.



If you understand and agree the implications, push RESET BACK TO FACTORY DEFAULTS button. During the restore process, a message will be displayed as follows:



At the end of the process, the browser will redirect you to the welcome screen.



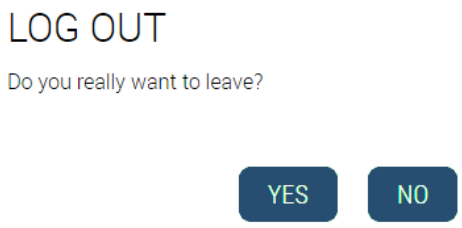
NOTE: FLOW HUB module will restart at the end of the restoration. This can cause your terminal loses WiFi communication

with the headend. If that's the case, you will need to choose again the Ikusi Flow WiFi network in your terminal.

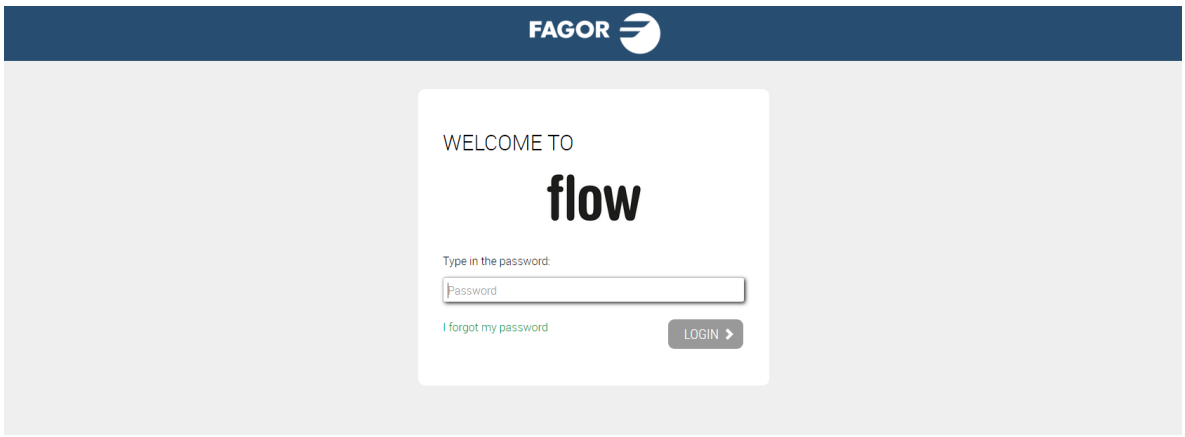
NOTE: the IP address of the headend will be the default IP address (10.0.0.1 in case of connection via WiFi and 192.168.1.100 in case of connection via ethernet cable).

3.6 Log out

Select this option to close the session with the headend. A confirmation screen will appear.



To disconnect, push YES button. The browser will redirect you to the welcome screen.

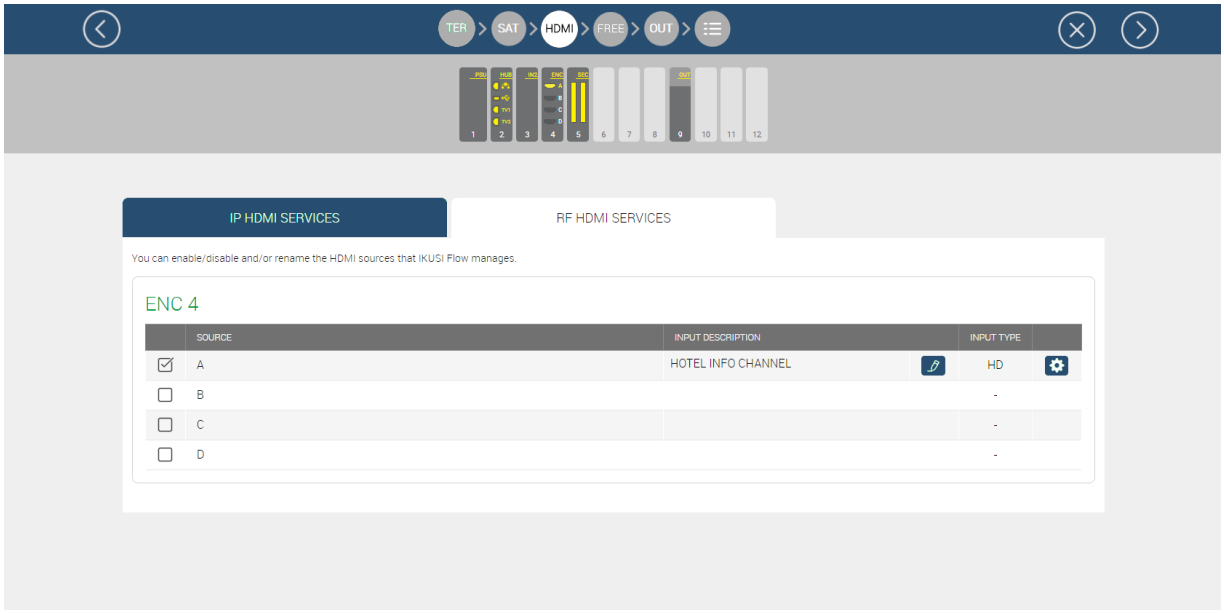


4. ADVANCED OPTIONS IN SERVICE WIZARD

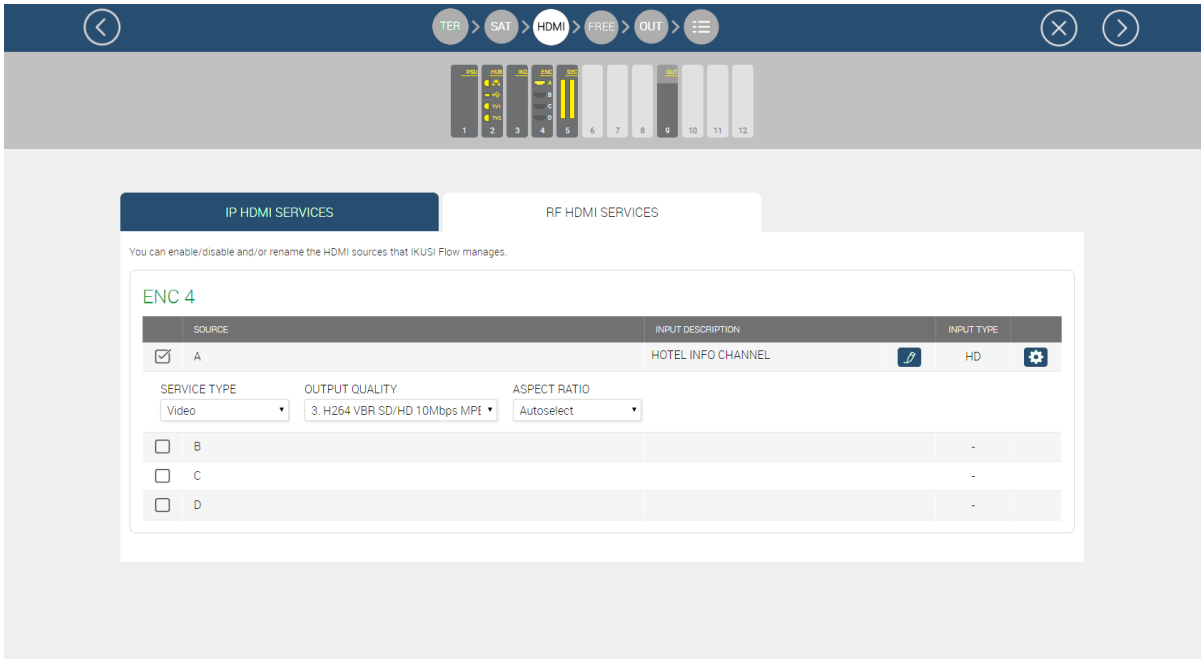
Activation of advanced options has two effects. On the one hand, several menus are activated, as described in section 3.4. On the other hand, several options are enabled in the Service wizard. This section describes the new options that appear in the Service wizard after activating the advanced options.

4.1 Advanced options in HDMI services selection step

After activating the advanced options, HDMI selection services step will be as follows:



Now there is  icon in each line corresponding to an HDMI input, allowing to access to advanced settings. Pushing it, these adjustments will be opened.



This screen allows you to configure the following advanced parameters:

- SERVICE TYPE: indication of the type of service . In the dropdown list, you can choose between Video and Radio.
- OUTPUT QUALITY: selection of output quality used by the encoder. The three qualities configured in section 3.4.3 appear in the dropdown.
- ASPECTO RATIO: indication of the aspect ratio of the image. Within the dropdown list, you can choose between 3 options.
  - Autoselection: aspect ratio is automatically signalled, depending on the resolution of the input signal.
  - 4:3: an aspect ratio of 4:3 is signalled.
  - 16:9: an aspect ratio of 16:9 is signalled

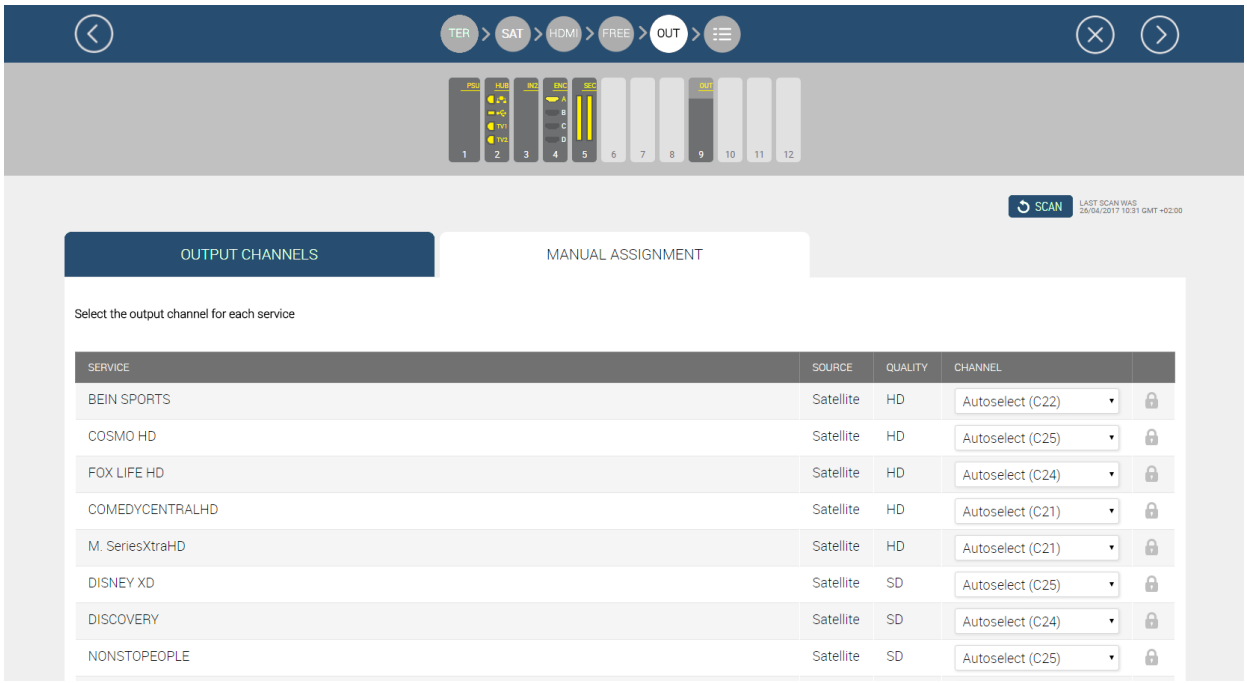
NOTE: The changes made in the IP tab affect the RF tab and vice versa.

4.2 Advanced options in Output RF channels selection step

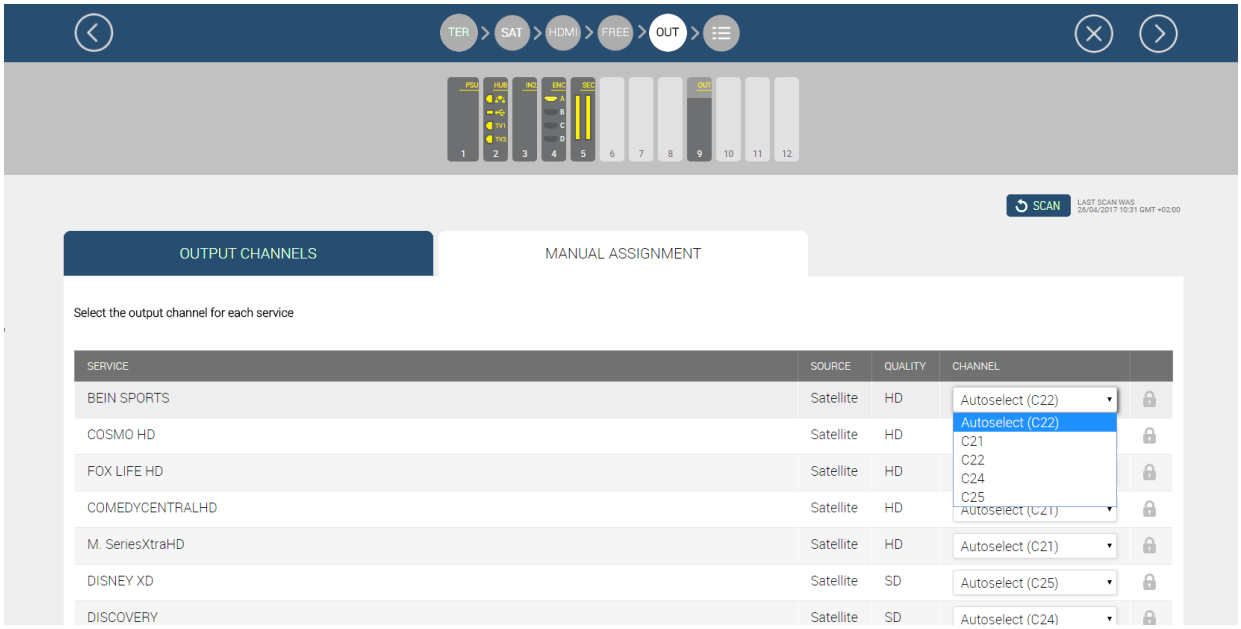
The advanced options shown in Output RF channels selection step will depend on the selection of the slot based lineup policy, done in "Other advanced configurations". In the case slots policy was disabled, RF channels manual assignation will be allowed. In the case slots policy was enabled, full configuration based on slots will be allowed.

4.2.1 Manual assignation of RF channels

By activating the advanced options with the slot based lineup policy option disabled, Output RF channels selection step includes an additional tab: MANUAL ASSIGNMENT.



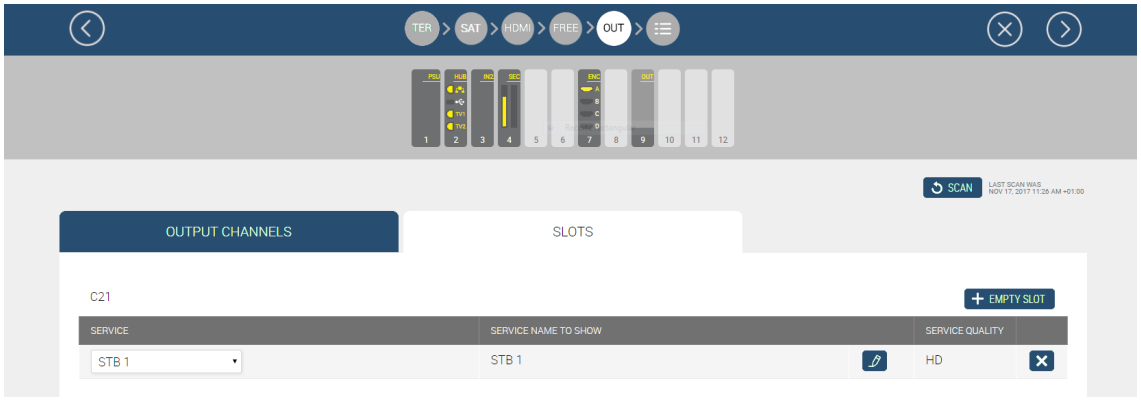
This tab allows to select manually the output RF channel where each service will be broadcasted. To do this, drop down the channel list associated with the service you want to configure.



All the channels generated by the headend will appear in the list, as well as the proposed allocation done by the headend, marked as Autoselect. Choose the desired channel.

4.2.2 Slot based configuration

By activating the advanced options with the slot based lineup policy option enabled, Output RF channels selection step includes an additional tab: SLOTS



This tab allows to assign which content is conveyed by each slot and what name will be displayed by the TV.

For more information, see Ikusi Flow Slots Configuration Guide.

FAGOR ELECTRÓNICA | IKUSI

Fagor Multimedia Solutions SL.
Araba hiribidea, 34
E-20500 Mondragón - Guipúzcoa
Tel: +34 943 71 25 26
e-mail: rf.sales@fagorelectronica.es
www.fagorelectronica.com

Donostia Ibilbidea, 28
E-20115 Astigarraga - Guipúzcoa
Tel:+34 943 44 89 44
e-mail: support@fagormultimedia.com
www.fagormultimedia.com

MONDRAGON
HUMANITY AT WORK
Finance
Industry
Retail
Knowledge