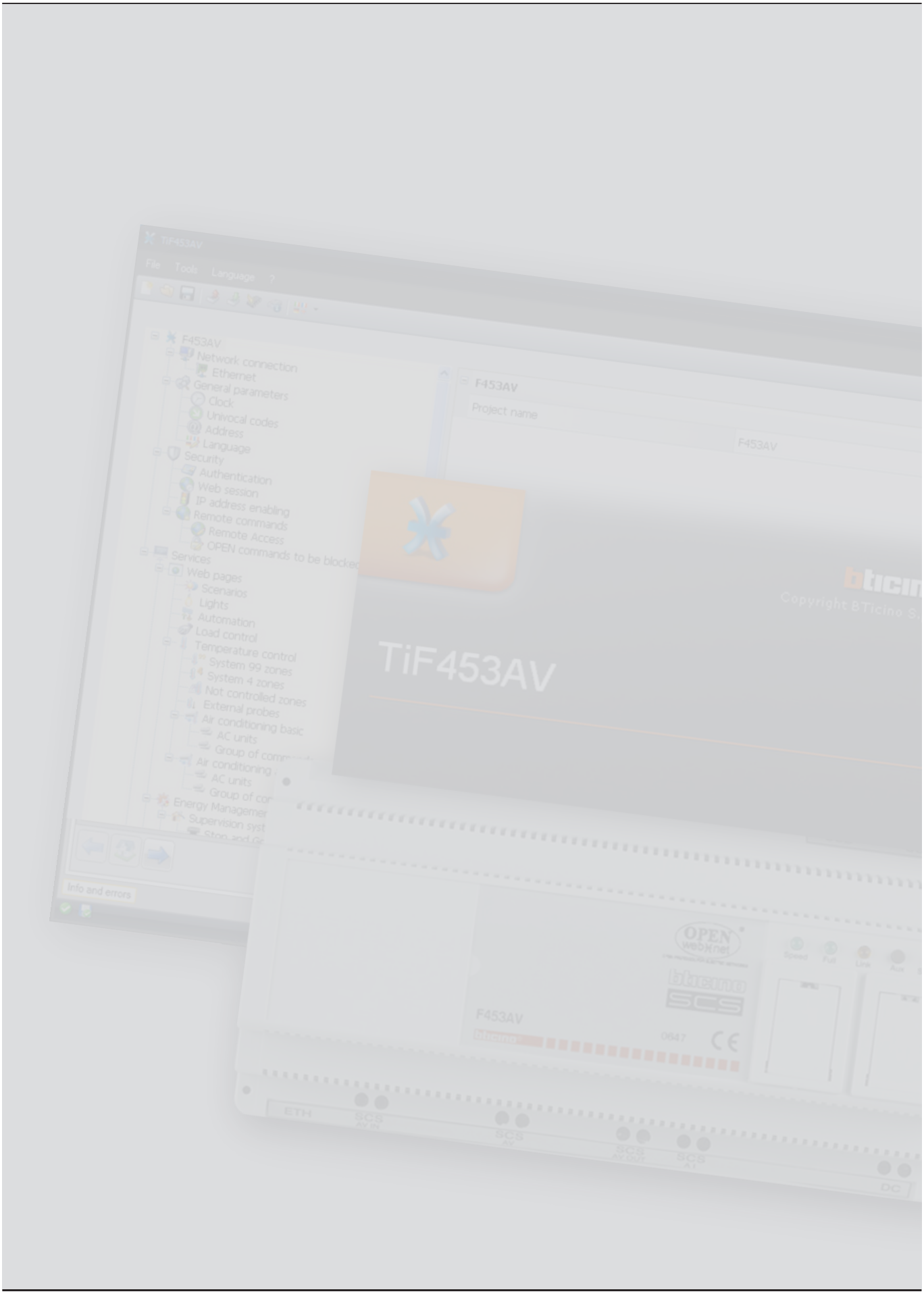
TiF453AV

User guide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1. Hardware and Software requirements

Warning: The TiF453AV software is the fundamental tool for the configuration of the F453AV Web Server, which, for convenience, will be referred to as device in this manual. This software is protected by exclusive rights, owned by the company BTicino SpA

1.1 Minimum Hardware requirements

- PC with Pentium 2 GHz or similar.
- 1 GB RAM memory (XP).
- Video resolution 800 x 600, 256 colours.
- CD-ROM or DVD reader
- Hard Disk: 500 MB minimum free space available.

1.2 Minimum Software requirements

- Windows XP SP2 (32 bit), Windows Vista (32 bit o 64 bit) or Windows 7 (32 bit o 64 bit)
- The .NET 3.5 SP1 framework is required for correct operation of the application.
- Minimum browser requirements for correct display of the web pages: Internet Explorer ver. 7, Firefox ver. 3, Chrome ver. 9, Safari ver. 4.
- However, for the energy supervision function higher Internet Explorer requirements are necessary: ver.8 + Google Frame plug-in or better.

The updated requirements can be found on the www.bticino.com website

2. Installation

To install the TiF453AV program proceed as described:

1. Put the Cd-Rom into its drive.
2. After the main page is displayed in the web format, select "Software" and then "Install TiF453AV".
3. The installation program will copy the system files needed to run the TiF453AV program.

3. Fundamental concepts

The TiF453AV software can create and edit a project containing the device configuration to manage My Home systems remotely.
The created project must be sent to the device. This is done by connecting the device to the PC using a "cross-over" cable connected to the device LAN connector and to the PC's Ethernet card. As an alternative you can update the device remotely if you know the IP address and OPEN password (for more details see the user manuals supplied with the device).
In the same way the project file can be received from the device to check and/or edit the configuration it contains.
The TiF453AV program also lets you update the version of the device's permanent base software (firmware) by means of new revisions distributed by Bticino.

To create a new design

- Run TiF453AV.
- Make a new design.
- Send the data to the device

Attention: for the TiF453AV software to work correctly, the device must be installed in agreement with the indications given in the instruction sheet supplied with the device.

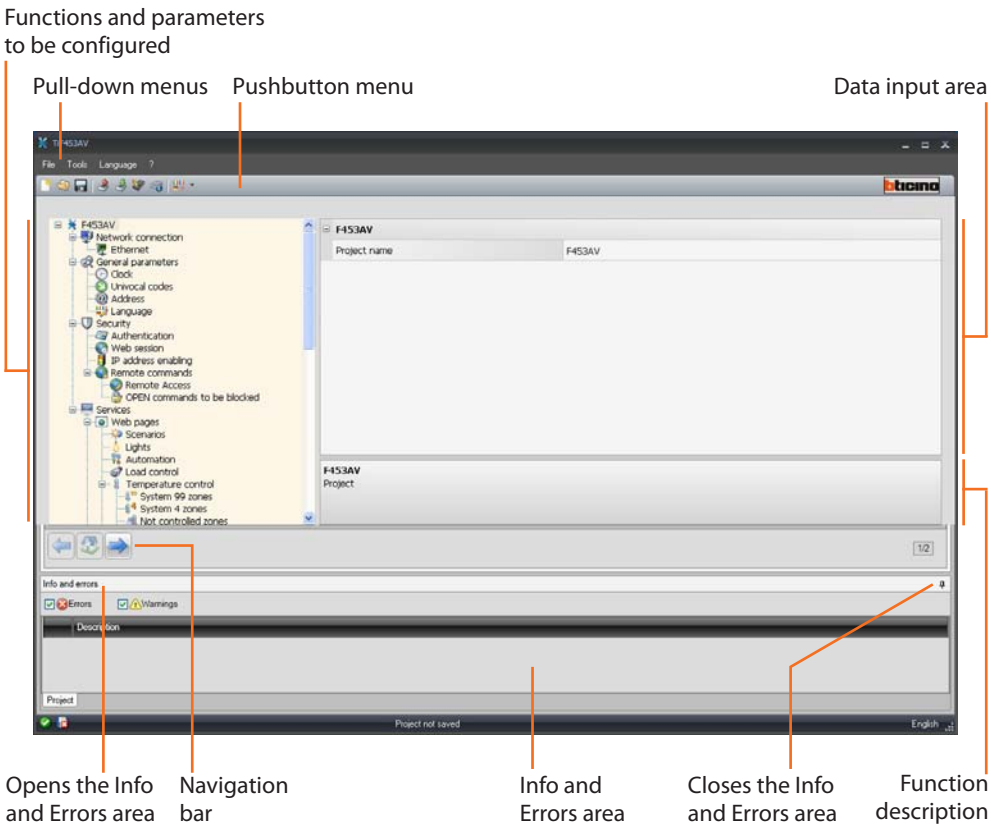
To edit an existing design

- Receive the current confi guration data from the device.
- Make any modifi cations.
- Send the data of the design made to the device

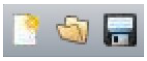
With TiF453AV you can update the device firmware version (Add fi rmware) with new revisions issued by Bticino.

3.1 Function selection menus and pushbuttons

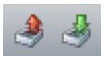
On opening the program, the start screen is displayed, which contains all the configuration parameters listed in hierarchical order. The configuration details are entered in the area on the right.



All the functions which can be run with TiF453AV can be selected by means of the icons in the tool bar, or by opening the pull-down menus and selecting the various items.
The tool bar has the following options:



Creation, Open and Save configuration file



Receive, Send the configuration

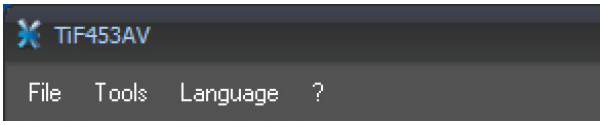
Update device firmware

Request device info

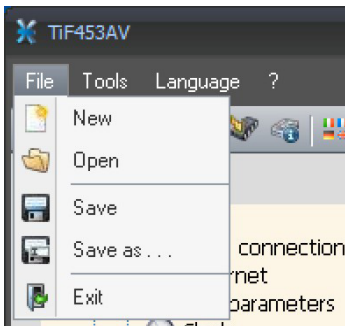
Selection of the application language

Connection to the www.bticino.com site

The pull-down menu has the following options:

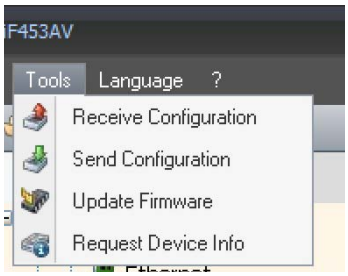


3.1.1 "File" menu



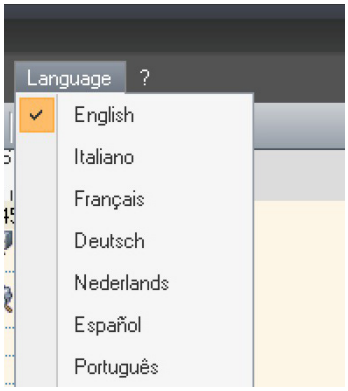
- **New**
  Creates a new project
- **Open**
  Opens an existing configuration file
- **Save**
  Saves the current project
- **Save as . . .**
  Saves the current project asking for a name for the file
- **Exit**
  Exits the program

3.1.2 “Tools” menu



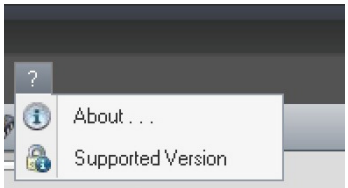
- **Receive Configuration**
  Runs the upload function of the configuration from the device
- **Send Configuration**
  Downloads the configuration to the device
- **Update Firmware**
  Updates the device firmware
- **Request device info**
  Displays the technical information

3.1.3 “Language” menu



- **Language**
  Can select the application language

3.1.4 “?” menu

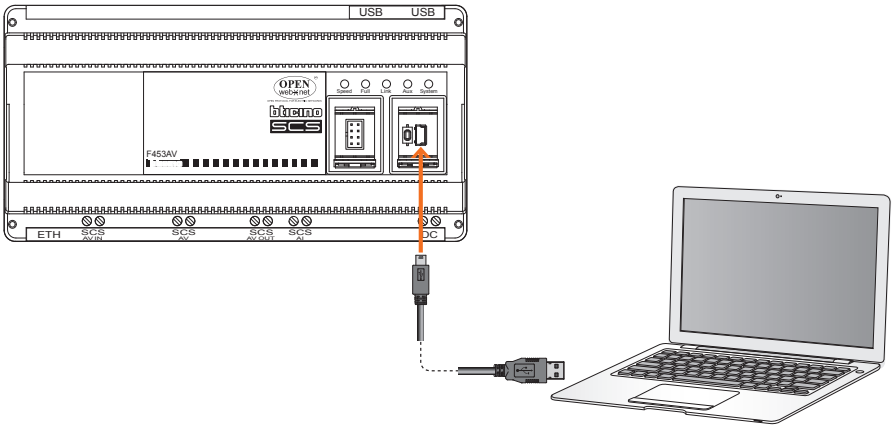


- **About . . .**
  Displays some information on the TiF453AV program
- **Supported Version**
  In a table displays the devices firmware versions managed by the TiF453AV program

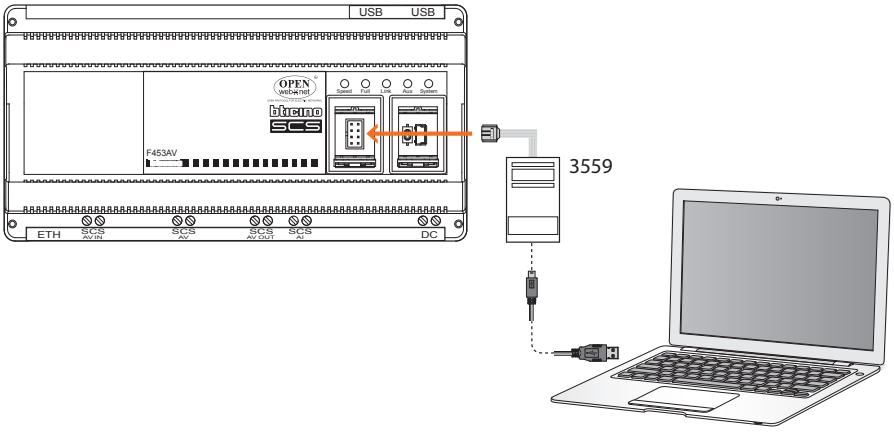
3.2 Connecting the device to a PC

To receive/send the configuration completed using the TiF453AV software, or to update the firmware, connect the device to the PC using a USB/miniUSB cable, the serial-USB adapter (3559), or an Ethernet cable.

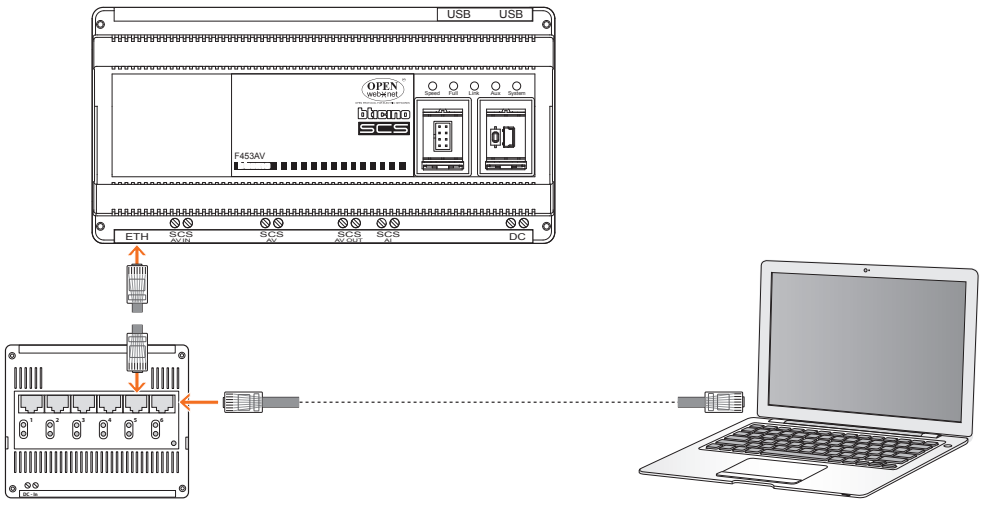
USB connection



Serial connection



Ethernet connection



3.3 Send the configuration

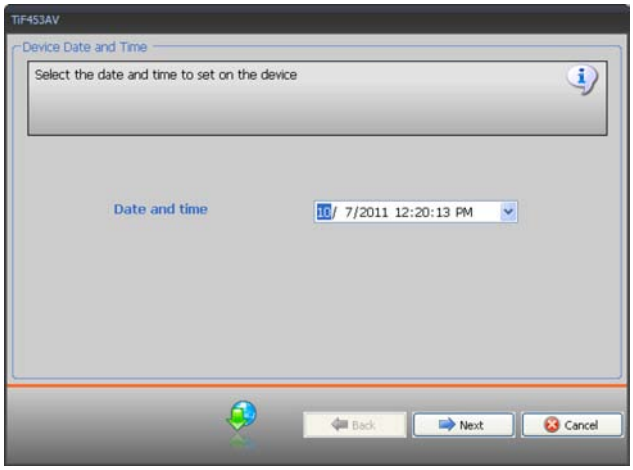
It allows the user to send the project created to the device.

Procedure:

> Connect the device to a PC as shown in the corresponding section.

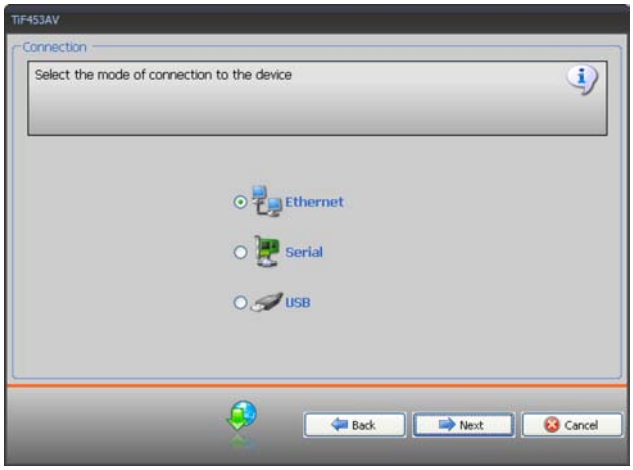
> From the **Tools** pull-down menu select **Send Configuration**.

The following window appears:

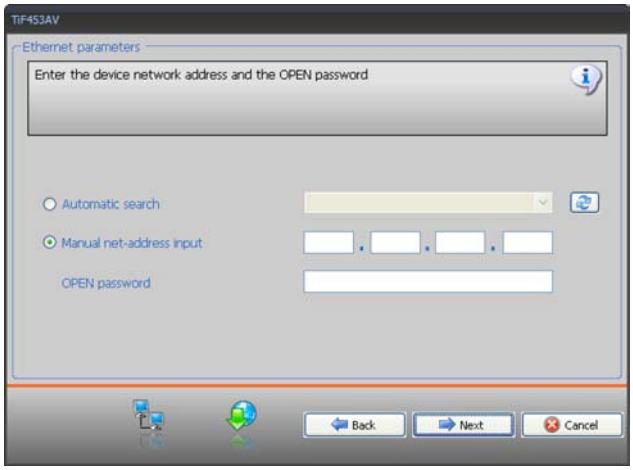


> Click **Next** to display the window for the selection of the mode of connection with the device. The sending operation can be performed using three different types of connection:

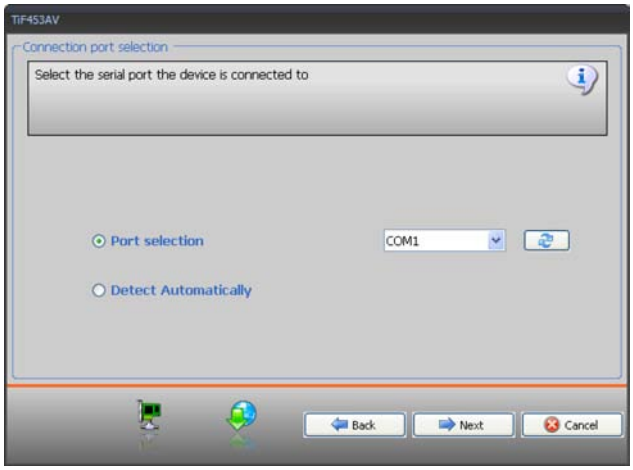
- **Ethernet**: by entering the network address, or by automatic search.
- **Serial**: by selecting the port (COM), or through automatic detection.
- **USB**: through automatic detection of the connected items.



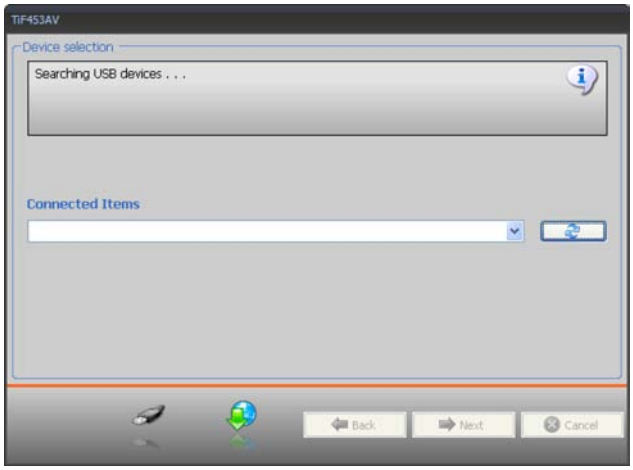
ETHERNET CONNECTION



SERIAL CONNECTION

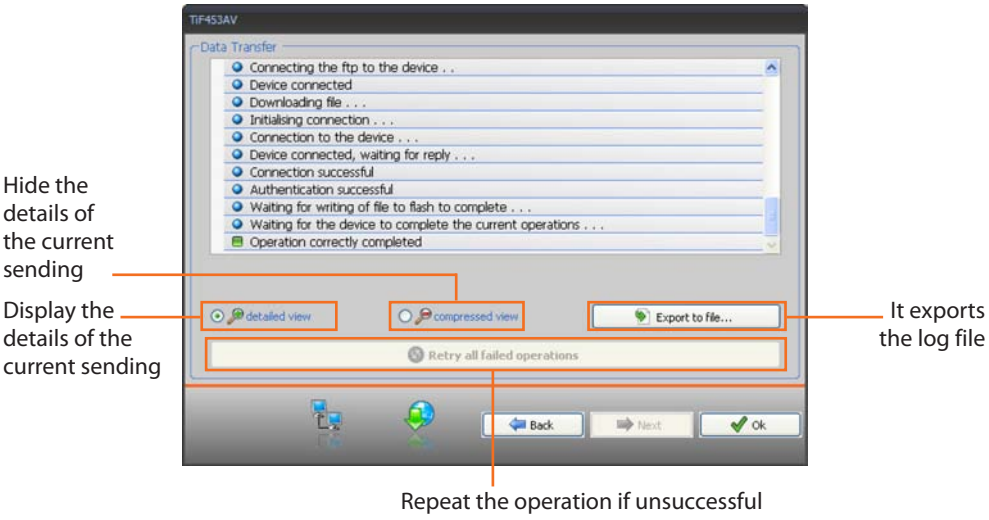


USB CONNECTION



In this mode the device is recognised automatically.

> After clicking **Next** the project is transferred to the device.



3.4 Receive the configuration

It allows the user to receive the configuration from the device; once the configuration has been acquired, this can be changed and saved, or it can be resent to the device.

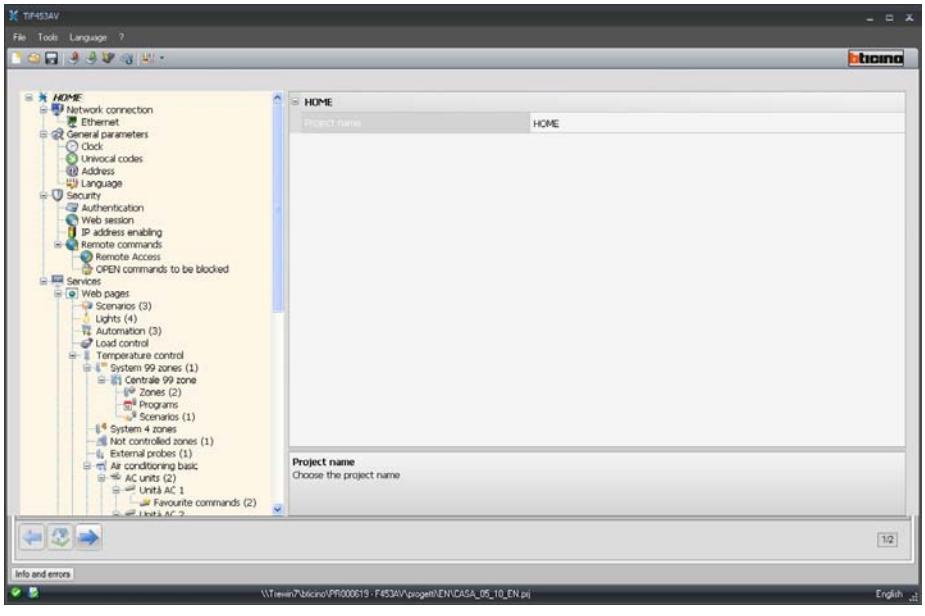
Procedure:

> Connect the device to a PC as shown in the corresponding section.

> From the **Tools** pull-down menu select **Receive Configuration**.

A mask is displayed, for the selection of the mode of connection to the device (for the connection procedures see the **Send the Configuration** section).

After selecting the connection mode, click **Next** to load the project currently installed on the device.



3.5 Update the Firmware

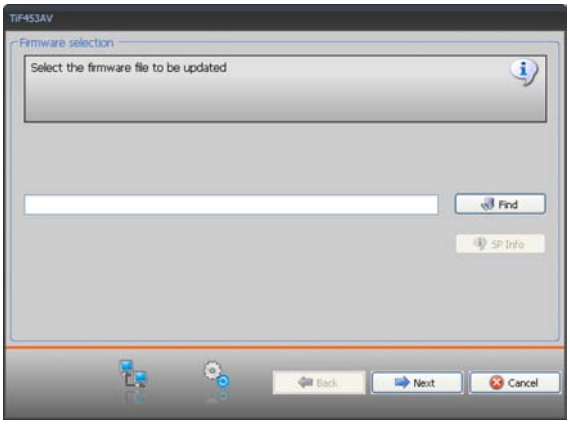
It allows the user to update the device firmware.

Procedure:

> Connect the device to a PC as shown in the corresponding section.

> From the **Tools** pull-down menu select **Update Firmware**.

The following screen appears, prompting the user to search for the folder containing the firmware file with extension .fwz (compressed file).



> Select the file and click **Open** to continue.

This action will open a mask for the selection of the mode of connection to the device (for the connection procedures see the **Send Configuration** section).

3.6 Request device info

It displays some information on the device connected to the PC.

Procedure:

> Connect the device to a PC as shown in the corresponding section.

> From the **Tools** pull-down menu select **Request Device Info**.

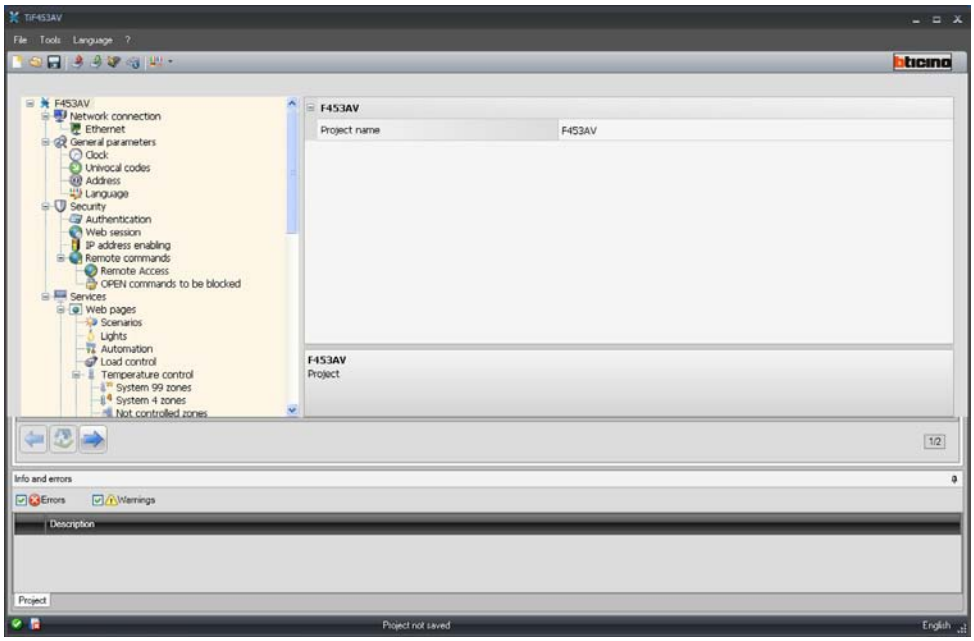
This action will open a mask for the selection of the mode of connection to the device (for the connection procedures see the **Send Configuration** section).
After selecting the connection mode, click **Next** to open a screen showing the device hardware and software features.

4. Project configuration

This section can be used to configure a new project, or to change an existing one.

> From the File menu select **New**.

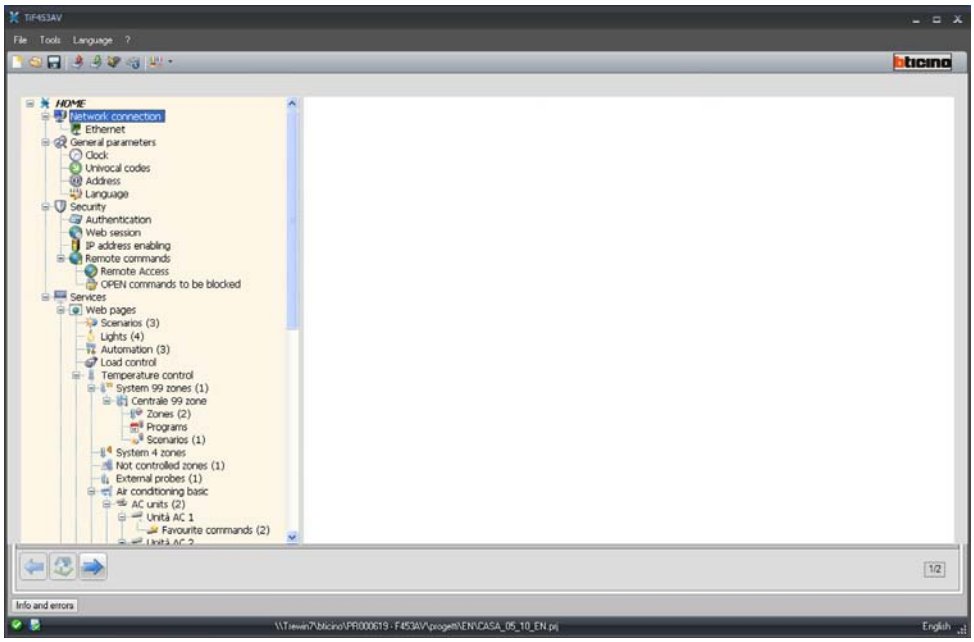
The following window appears:



> Enter the configuration data in the various sections.

4.1 Network connections

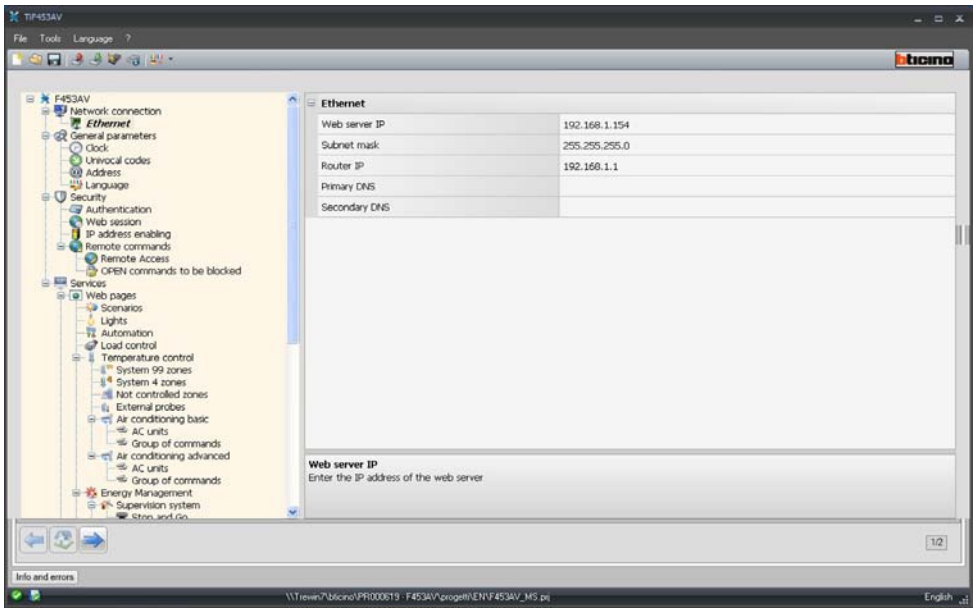
The technical parameters for the network connections are configured in this section.



4.1.1 Ethernet

Here we find the mask for entering the connection parameters to the Ethernet network.

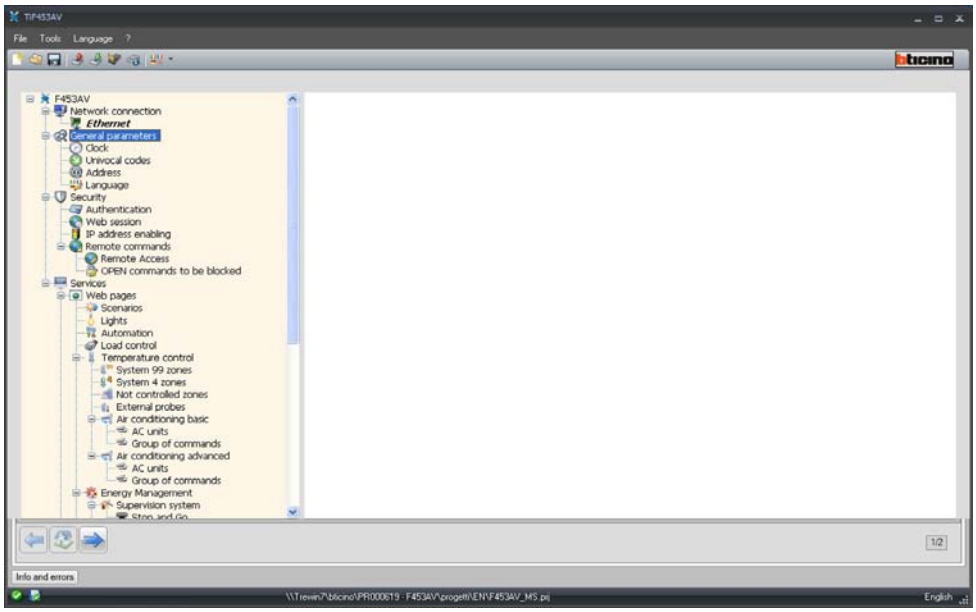
Before editing the default values, contact the network administrator. Incorrect values, as well as making the service inactive, could cause malfunctions in the communication of other network equipment.



If you want to enable the connection to the device via Ethernet network, the following items must be configured, or the default values used.

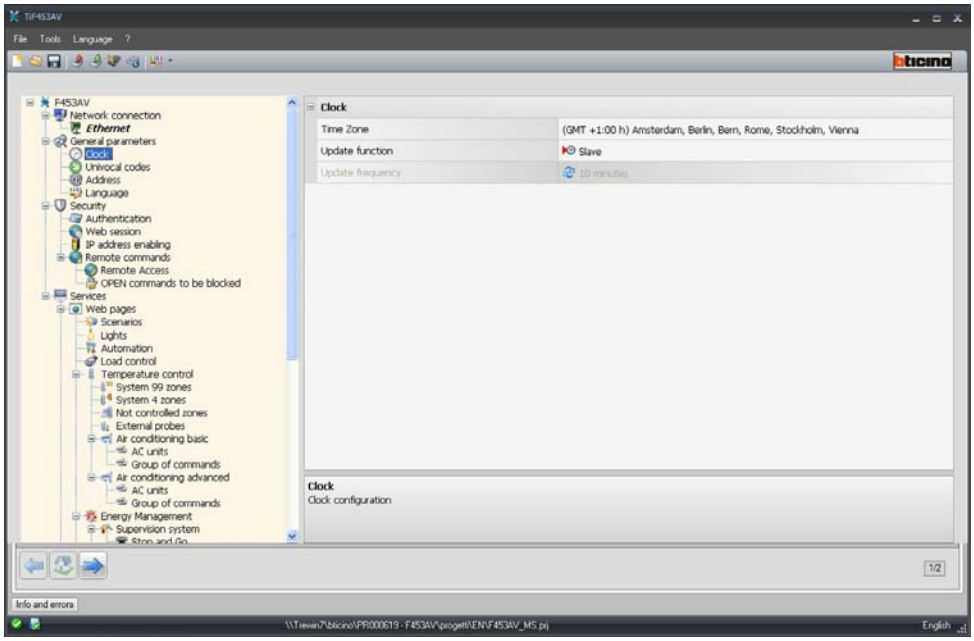
- **Web server IP and Subnet mask**
  Typical parameters of networks with TCP/IP protocol. They are used to identify the device inside the local network. Remember that the device needs a "static" (fixed and unique) IP address to be able to work correctly.
- **Router IP**
  Router IP address, if there is one. If there is a router the field must be filled in, to guarantee outgoing Services, such as sending e-mail.
- **Primary DNS and Secondary DNS**
  Primary and secondary IP address of the Internet Service Provider (ISP), supplied when the subscription is taken out.

4.2 General parameters



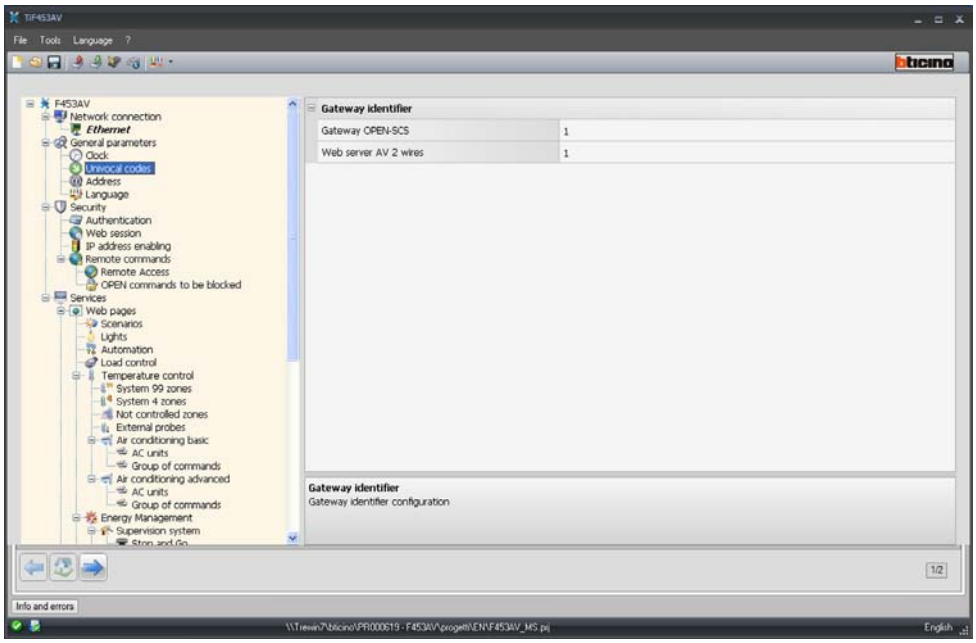
4.2.1 Clock

This function can define the local time zone and whether the device is the time synchronisation "Master".
If it is set as Master clock, other devices in the My Home system use the internal clock of the device in programming as reference for the time.
The frequency of updating the time for all the devices can be selected in the box.



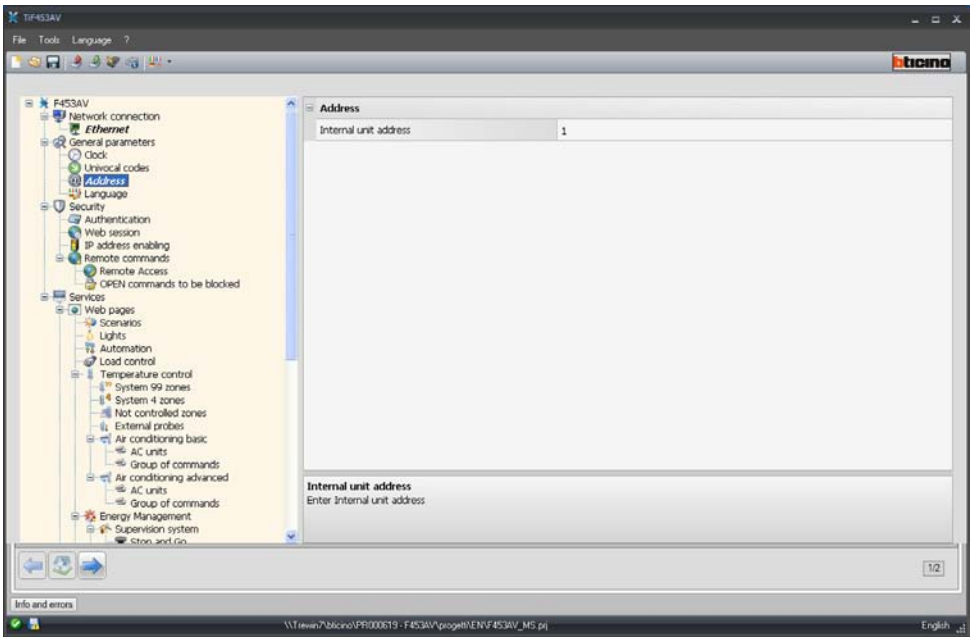
4.2.2 Univocal codes

This function gives an identification number to the gateway.



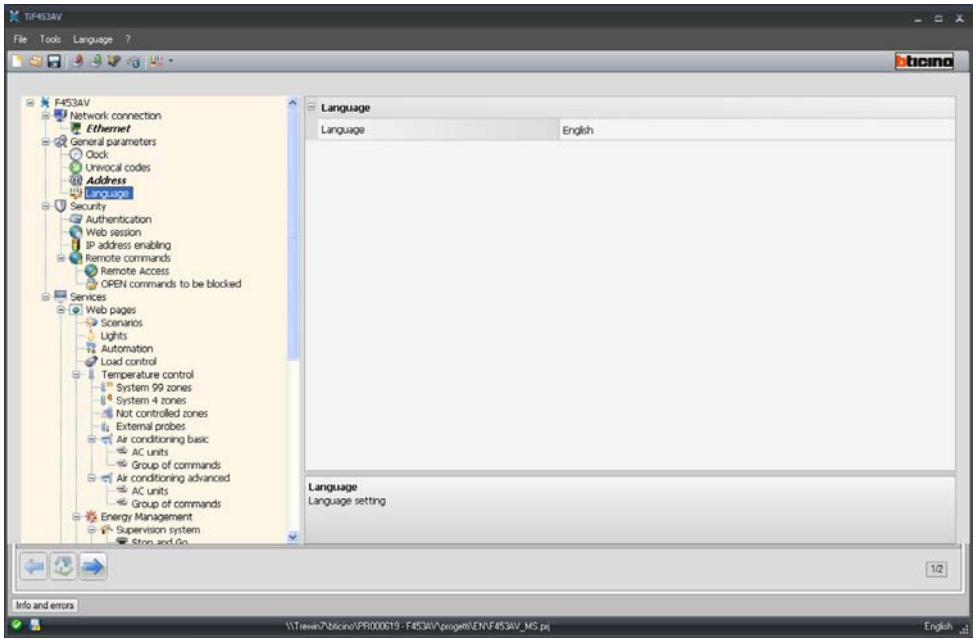
4.2.3 Address

Enter the internal Post address. The field can assume values between 0 and 99.



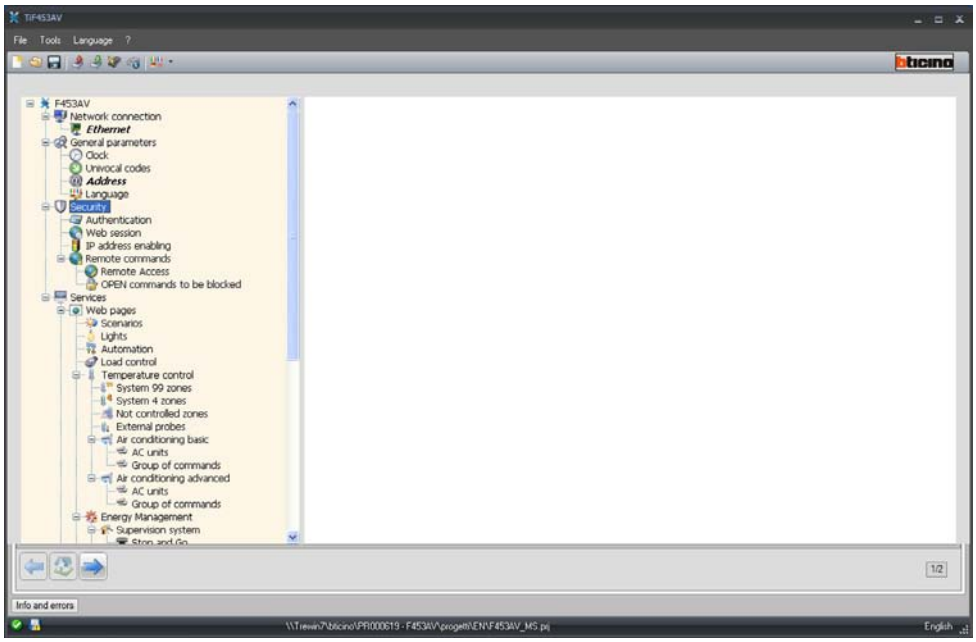
4.2.4 Language

This function can select the language for the control web pages and remote system management.



4.3 Security

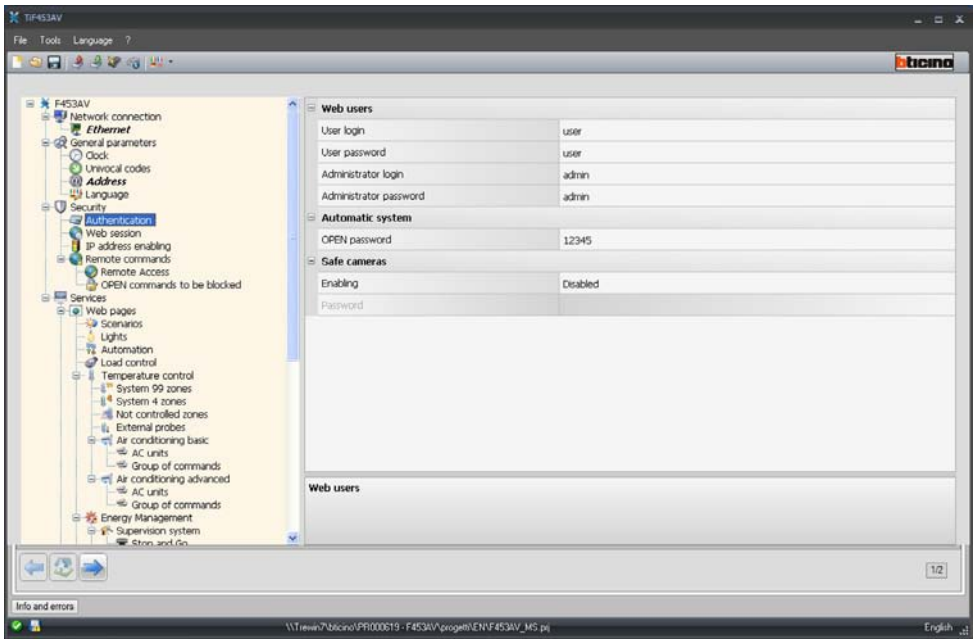
This section is used to set the safety parameters.



4.3.1 Authentication

Web users

In this section you are asked to enter the name and password which the user will use for authentication, enabling and access to the services offered by the device selected.



The following must be defined in the mask:

- **User Login and User password**
  Enter the user Login and Password (default: user.user)
- **Administrator login and Administrator password**
  Enter the administrator Login and Password (default: admin.admin)

Automatic system

- **OPEN Password**
  Enter the OPEN password whenever the device is used for remote control of the My Home system via programs for PC.

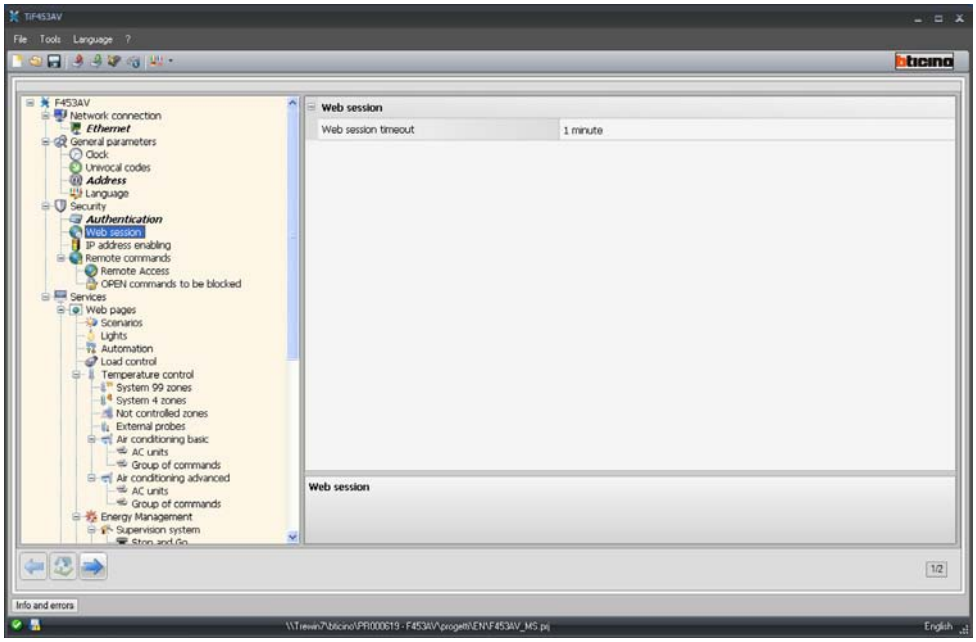
Attention: The default OPEN password in the devices is 12345.

Safe cameras

Enable and enter a password to display the images sent by the cameras.

4.3.2 Web session

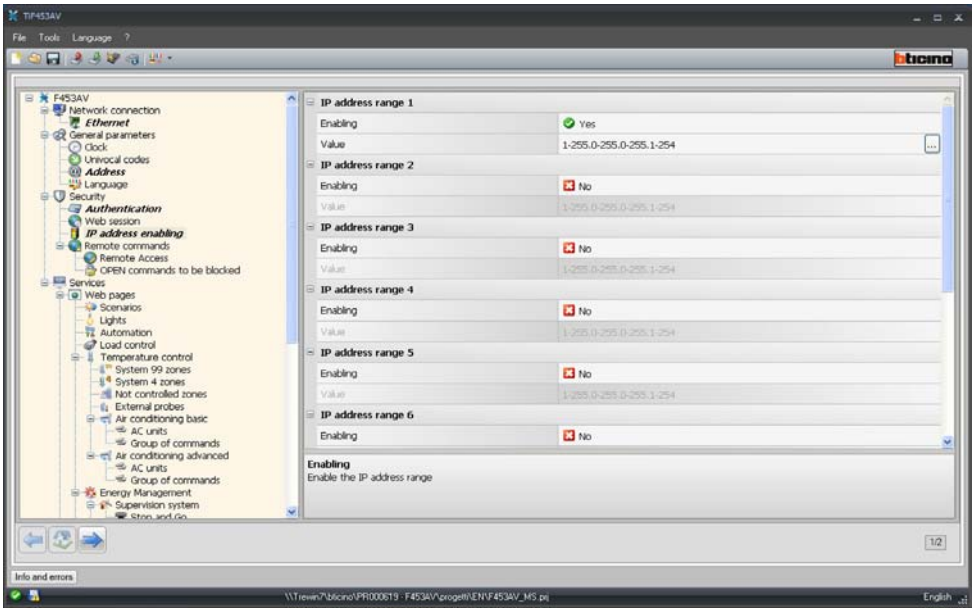
The inactivity time on the web page, after which the device returns the user to the identification page, can be defined in this section.



- **Web session timeout**
  Select the interval of inactivity on the web page from 1, 2, 5 or 15 minutes.

4.3.3 IP address enabling

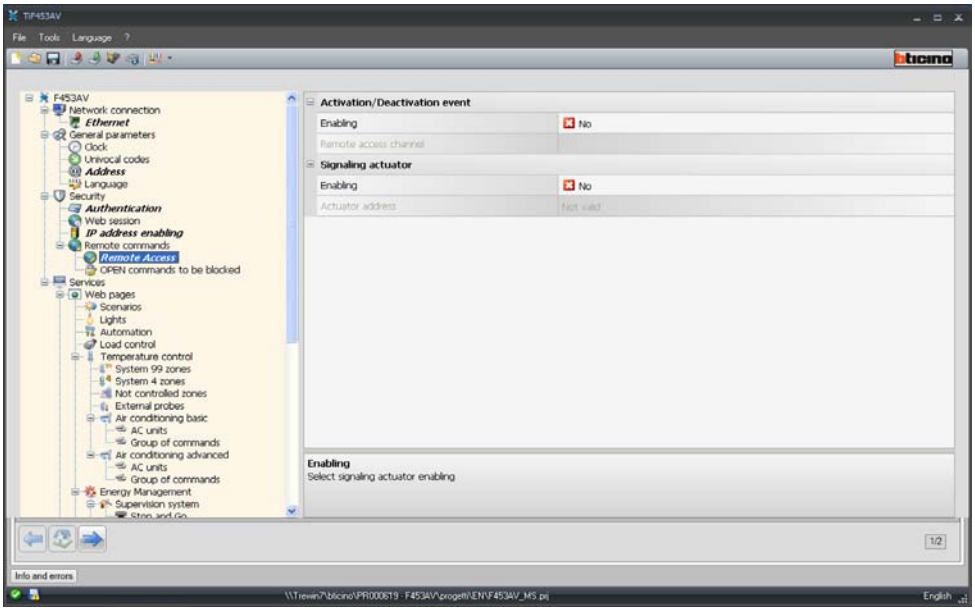
This window can be used to enter up to 10 IP address ranges with connection to the device enabled, without the need for entering the login ID or password.



> Enable the IP address.
> Click [...] to enter the ranges.

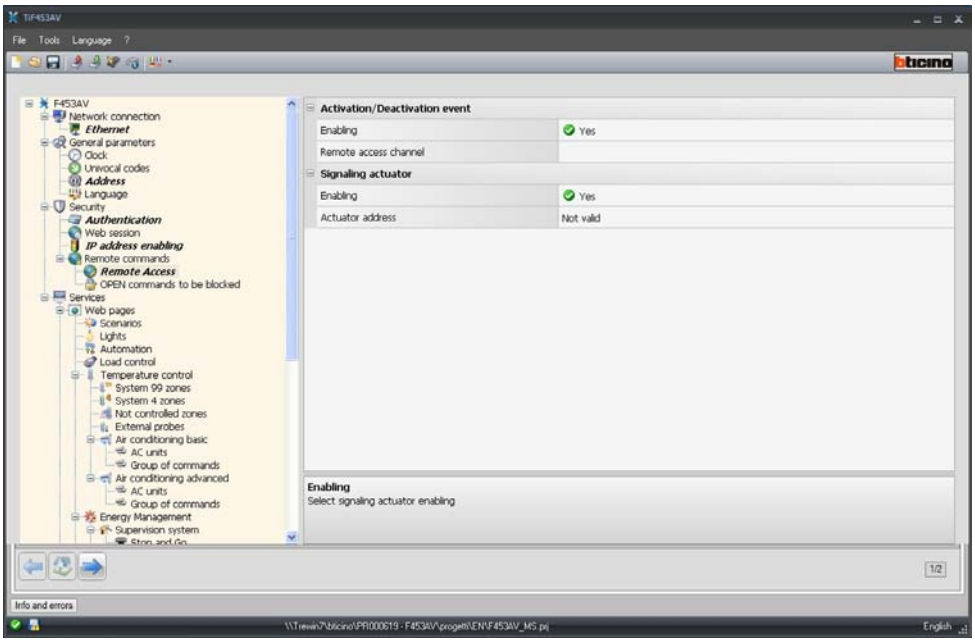
4.3.4 Remote commands

This section is used to set the parameters for remote access adjustment.



Remote access

Activate this function to, if required, disable remote connection to the device. This is done by setting the auxiliary channel from which the command is received.



The following must be defined in the mask:

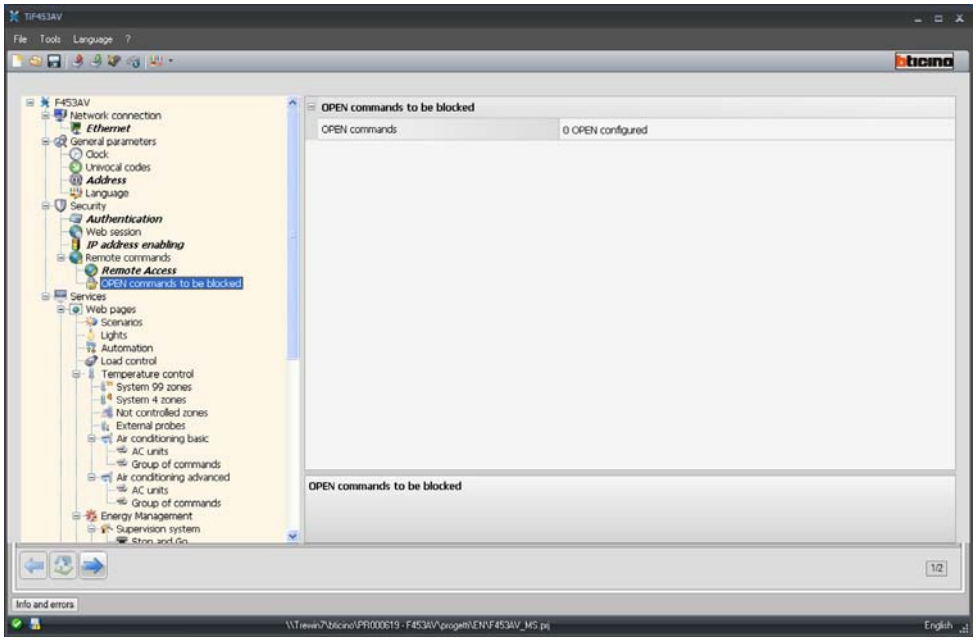
- **Activation/deactivation event**
  Enter the auxiliary channel dedicated to activating/deactivating the remote access.

- **Signalling actuator**
  Enable a light point to use as signalling actuator.
  The state of the connection can be displayed by the lighting up of a light signal controlled by an Automation system actuator; the configuration of this device must be given by setting the parameters in the box.

> Click to enter the SCS address.

OPEN commands to be blocked

This function can be used, if required, to disable the forwarding of certain commands from the device. The definition of the forbidden commands (max. 20) is done by entering them in the appropriate area, following the "Open Web Net" protocol.

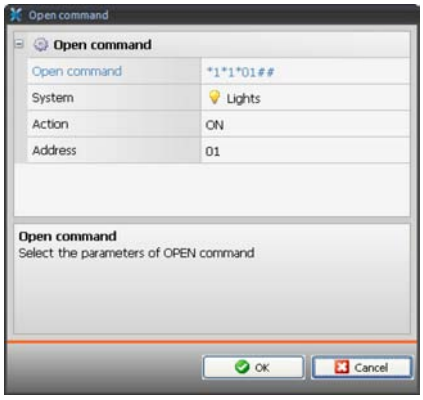


On enabling the function a window to enter the commands is displayed.

There are two ways of compiling the command:

- **Manual**
  allows direct entry of a command

- **Guided**
  The command can be defined automatically, selecting the configuration and type of command to be blocked in the menu.

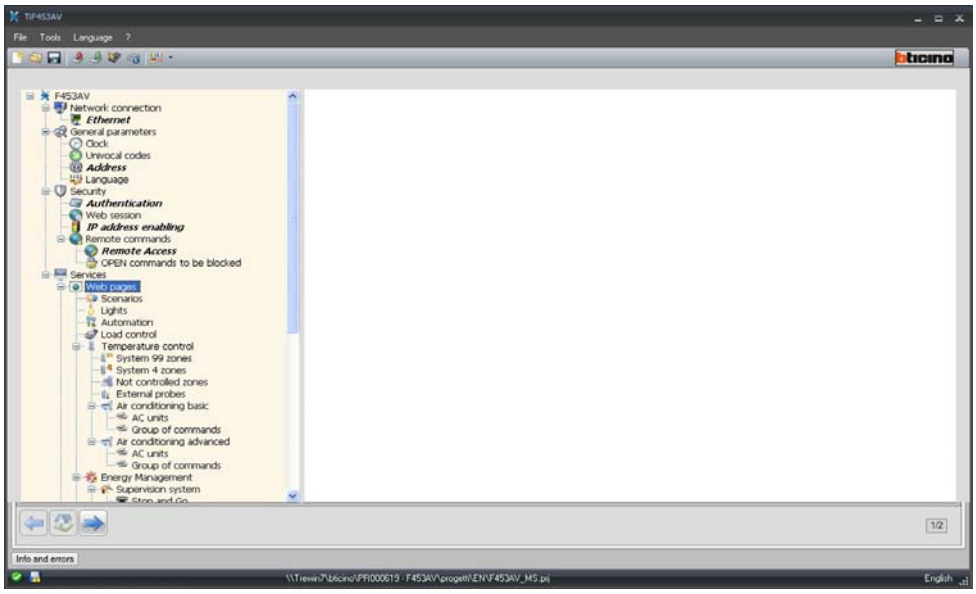


4.4 Services

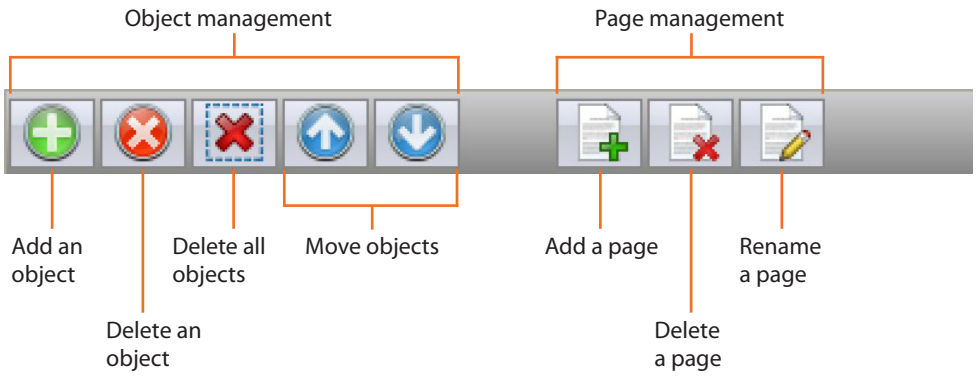
The web pages of the My Home applications are configured in this section.

4.4.1 Web pages

In this page the display of the sections corresponding to the My Home applications in the system can be enabled or disabled in the web pages.

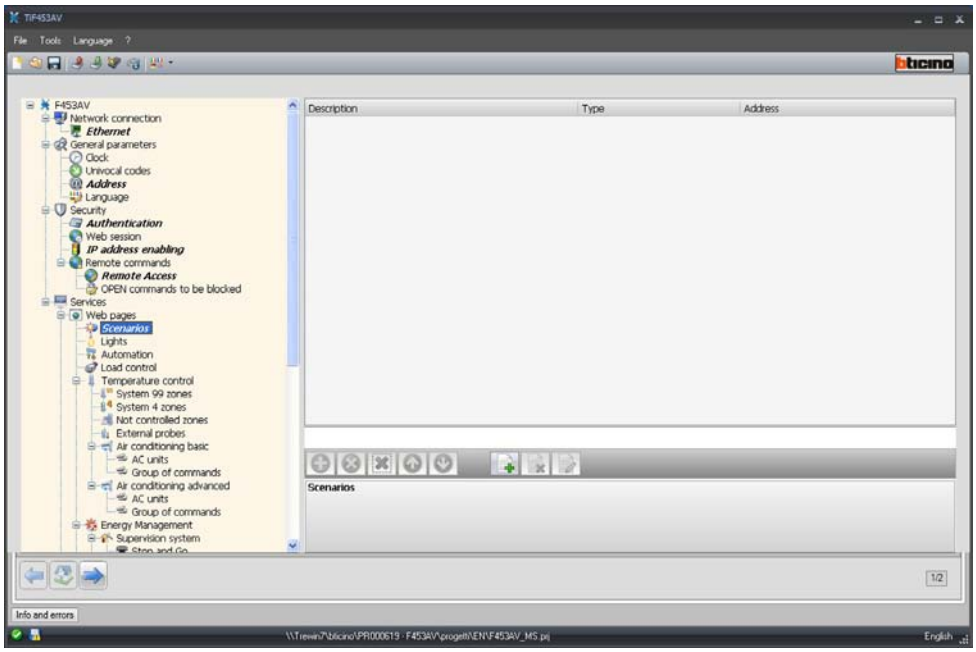


All the pages of this section have a bar used for adding individual objects and pages. Before adding an object, a page must be added.



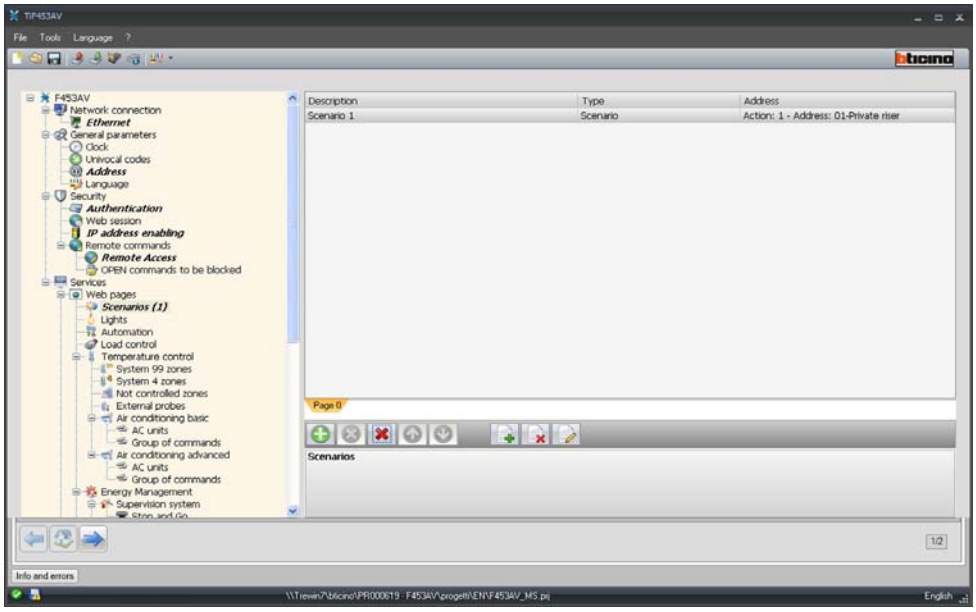
Scenarios

This section is used to define the objects for the activation of the scenarios managed by the central unit or the scenario module of the My Home system.
It is possible to configure up to 9 Web pages with 10 objects each, one of which at least correctly configured.



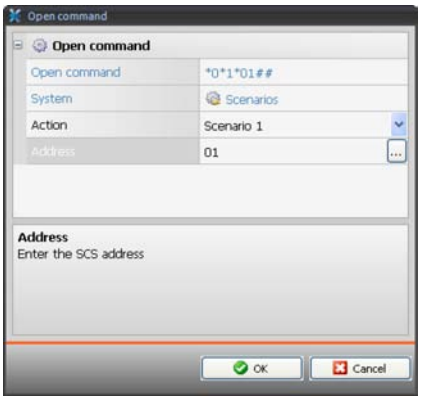
Click to assign a description to the Web page (15 characters maximum).

After adding an object, a window appears where the user can enter the specific scenario data.



The following must be defined in the mask:

- **Object description**
  Enter the description of the object – 15 characters max.
- **Scenario Type**
  Select if the scenario is a Normal or a Plus scenario.
- **Scenario address**
  Click to select the address of the scenario to perform, saved in a scenario module.

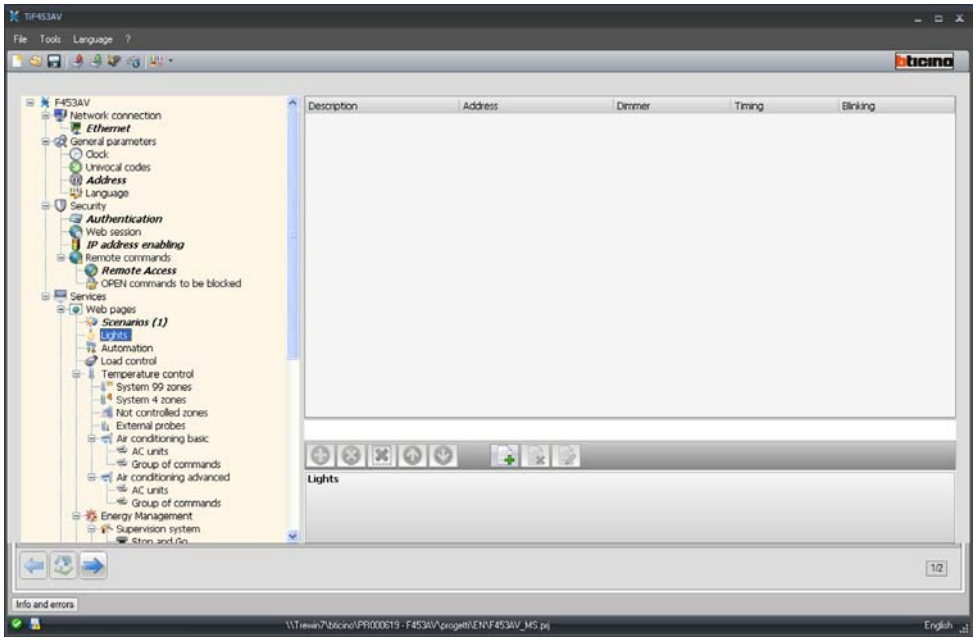


> Click in the **Action** field to select the scenario.

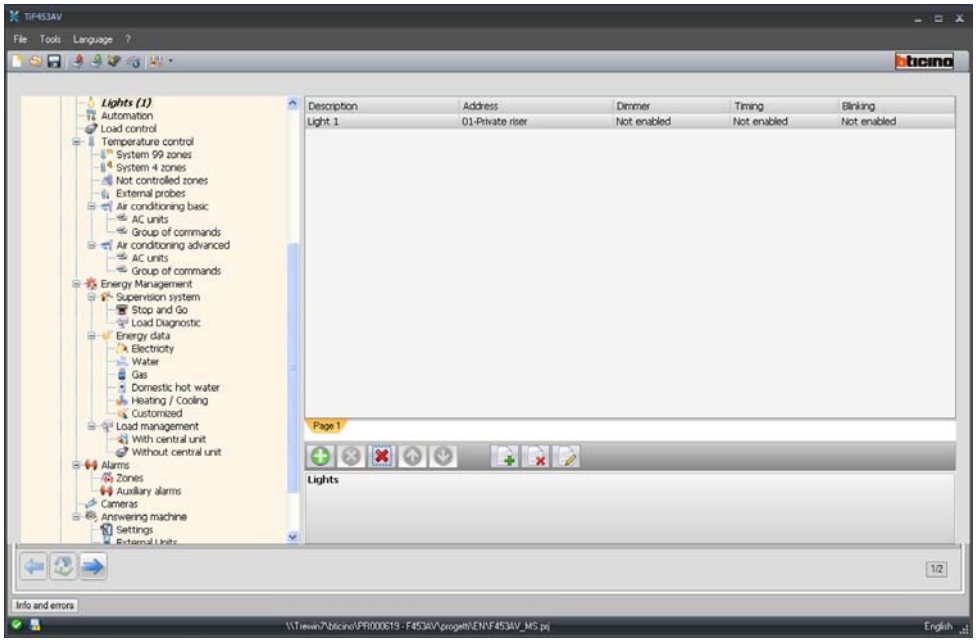
> Click in the **Address** field to select the address of the devices the scenario must be sent to.

Lights

This section is used to define the objects that will be included in the "**Lights**" function web page. It is possible to configure up to 9 Web pages with 10 objects each, one of which at least correctly configured.



After adding an object, a window appears, where the user can enter the specific lighting data.



The following must be defined in the mask:

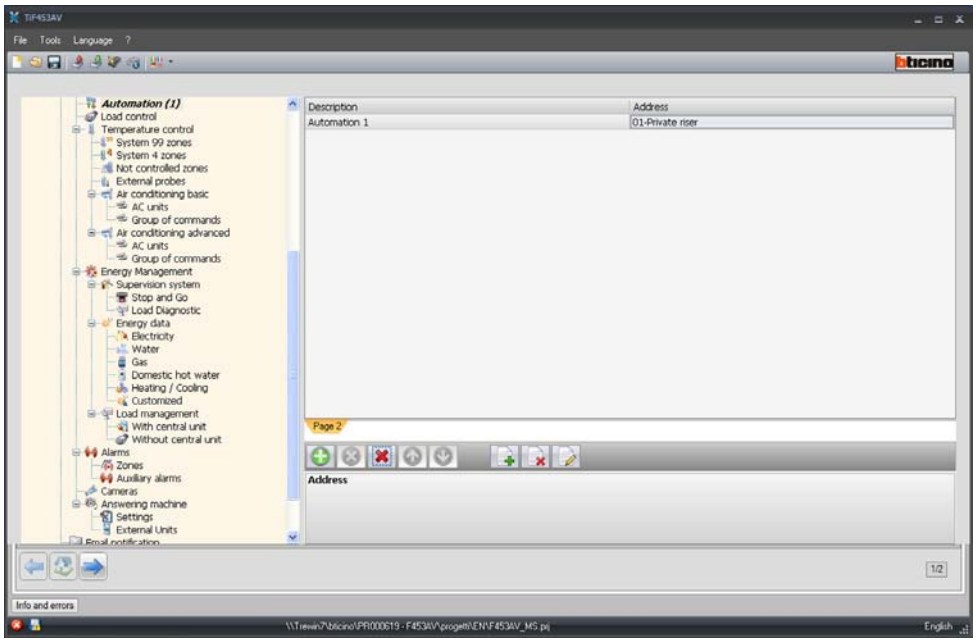
- **Description**
  Enter the description of the object – 15 characters max.
- **Address**
  Click to enter the SCS address

- **Dimmer**
  Select Not Enabled or Dimmer 10/100 levels
- **Timing**
  select Not enabled or ON (from 1 min to 0.5 sec)
- **Blinking**
  select Not enabled or Blinking (from 0.5 sec to 5 sec)

Automation

This section is used to define the objects that will be included in the "Automation" function web page.
It is possible to configure up to 10 Web pages with 10 objects each, one of which at least correctly configured.

After adding an object, a window appears where the user can enter the specific automation data.

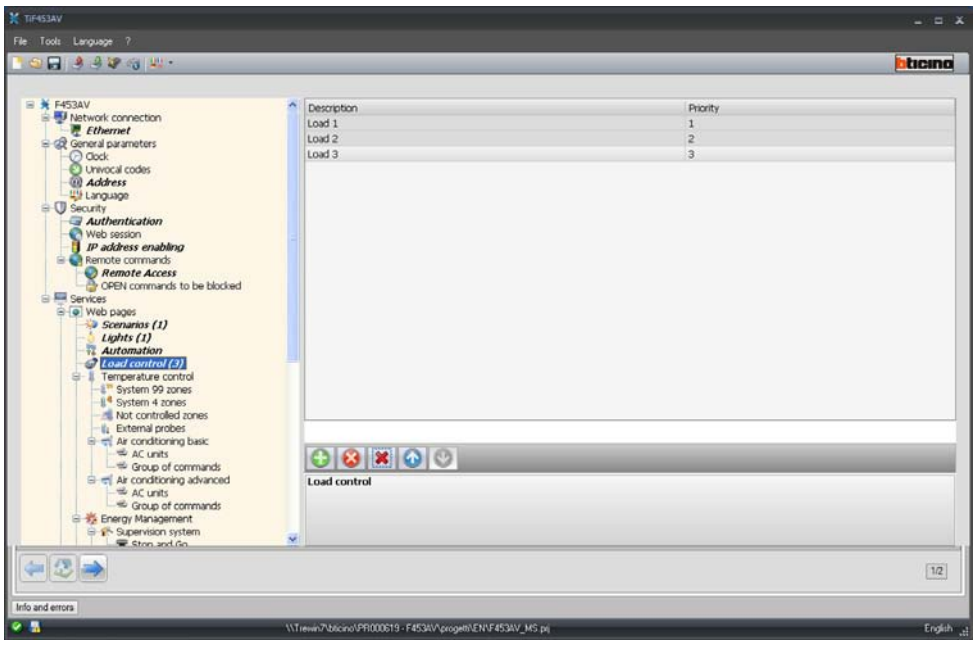


The following must be defined in the mask:

- **Description**
  Enter the description of the object – 15 characters max.
- **Address**
  Click to enter the SCS address.

Loads control

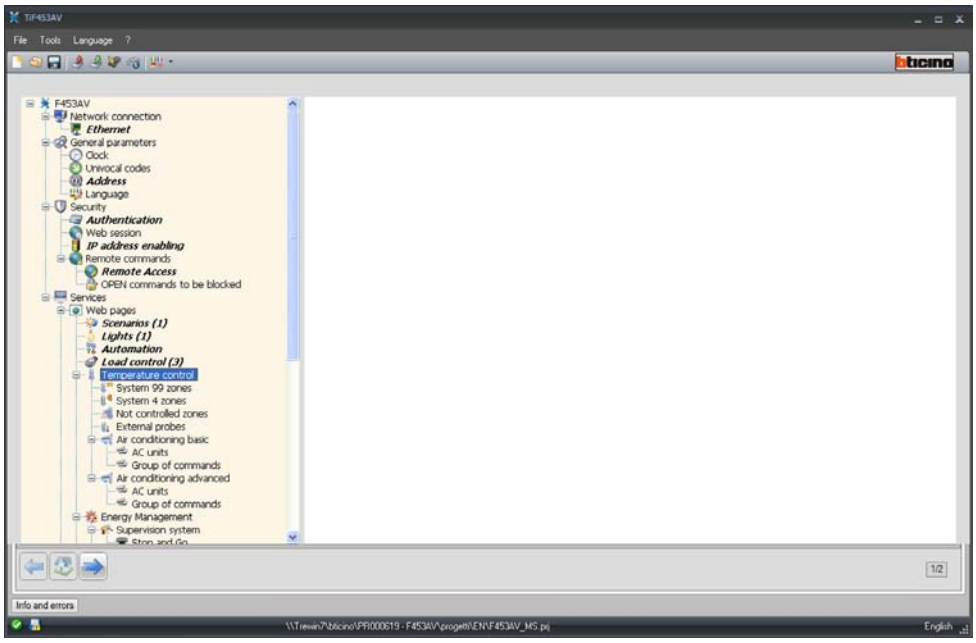
This page can be used to assign a description and the priority to the controlled loads that will be available in the "**Load Control**" Web page.
To re-enable a disconnected load following a tripping of the Energy Management central unit, it will be necessary to operate on the corresponding object displayed in the Web page.
The priority associated to the load is that defined when configuring the Power Management System by means of the numbered configurators (1 – 8) put into position CC of the actuators.



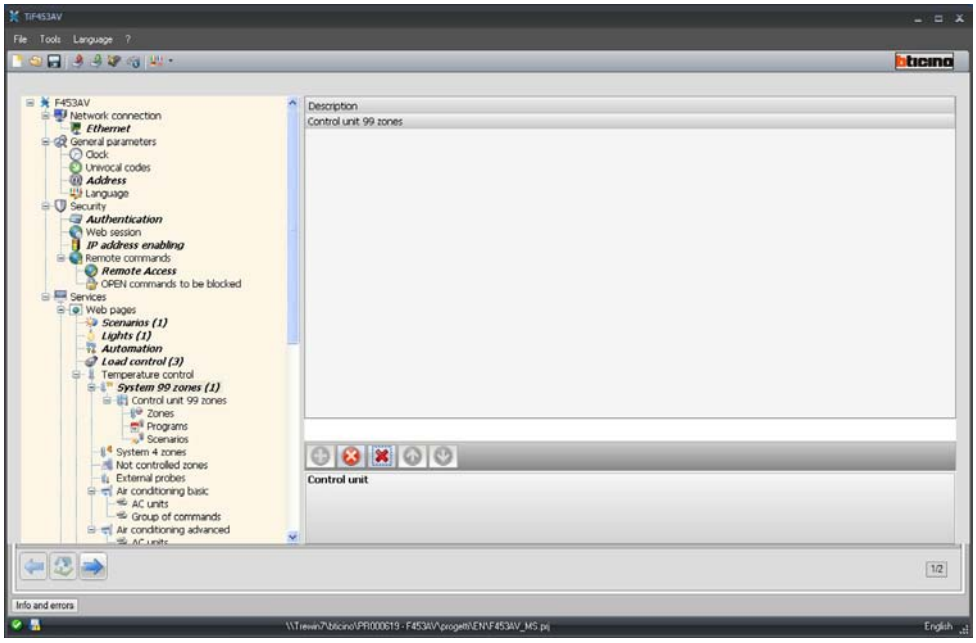
The following must be defined in the mask:

- **Description**
  Enter the description of the object – 15 characters max.
- **Priority**
  Enter the priority associated to the selected load.

Temperature control
This section can be used to set the Temperature control system details.

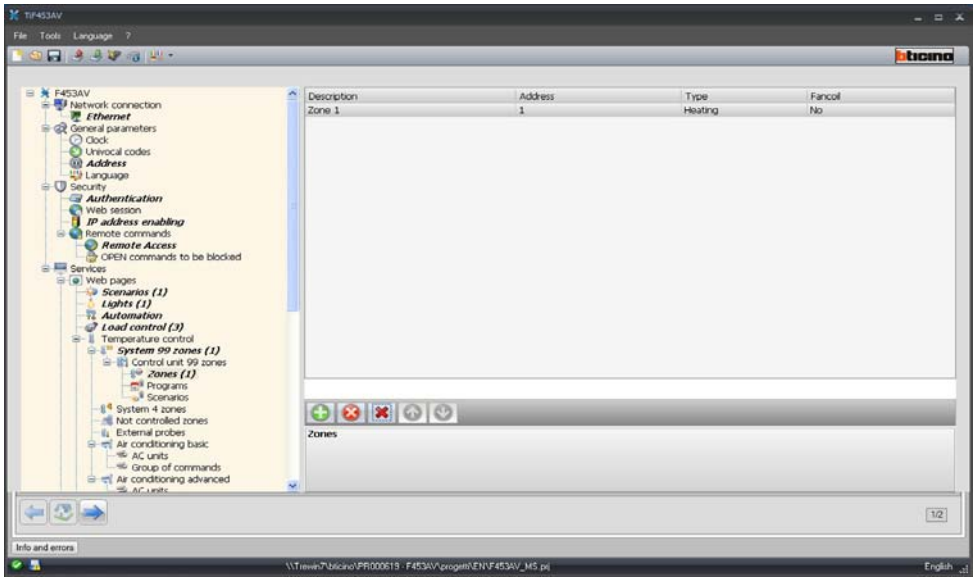


System 99 zones
This section can be used to insert a 99 zone central unit and customise its description.



ZONES

For each of the 99 zones the configuration parameters must be entered.

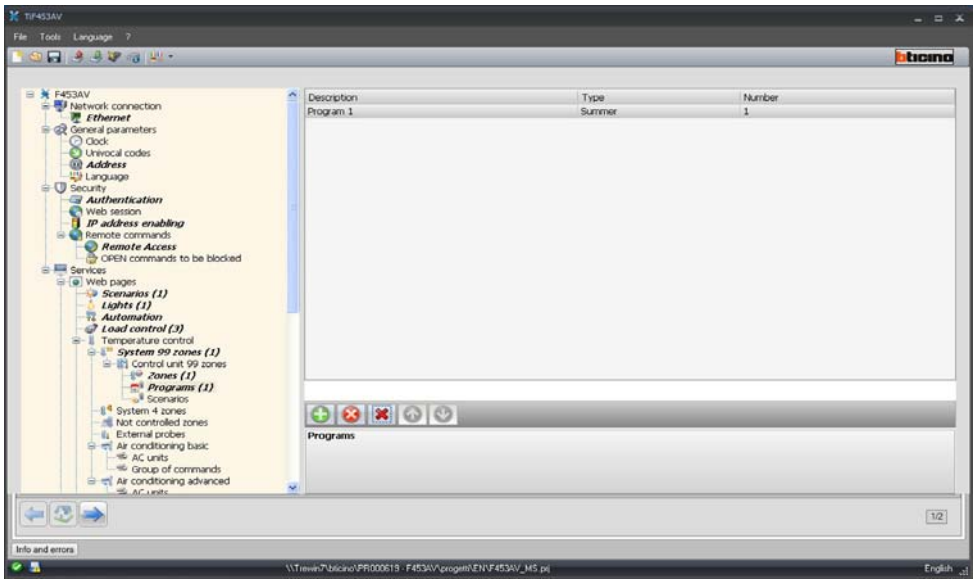


The following must be defined in the mask:

- **Object description**
  Enter the description of the object – 15 characters max.
- **Address**
  Enter the zone address.
- **Management type**
  Enter the type of management performed (heating, cooling, or both).
- **Fan-coil**
  Specify if the type of management performed is a Fan-coil type management

PROGRAMS

For each of the two types of operation (winter/summer) up to 3 programs can be enabled and their description customised.

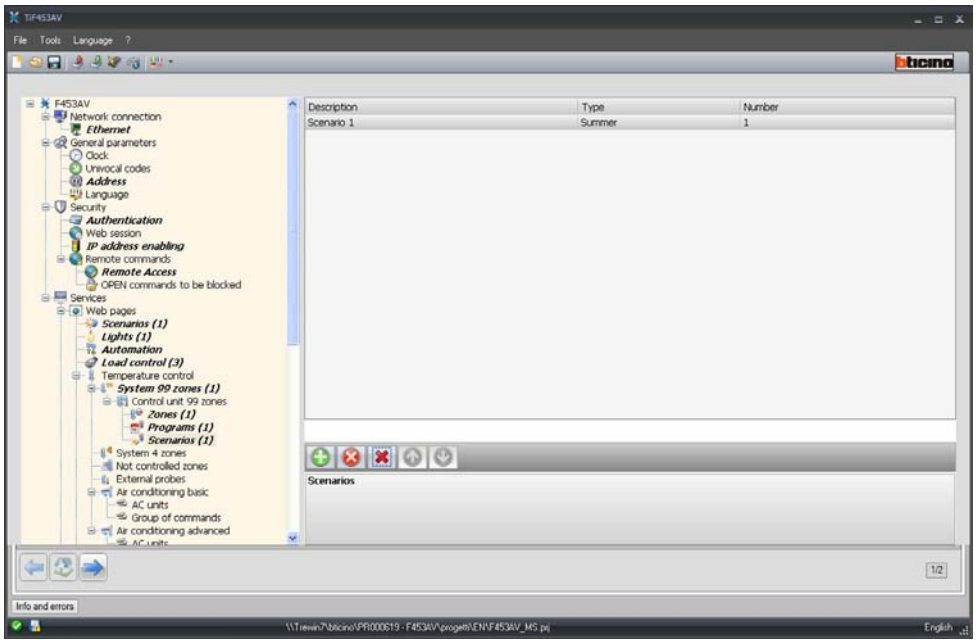


The following must be defined in the mask:

- **Object description**
  Enter the description of the object – 15 characters max.
- **Type**
  Enter the type of operation (summer/winter).
- **Number**
  Enter the program number

SCENARIOS

For each of the two types of operation (winter/summer) up to 16 scenarios can be enabled and their description customised.

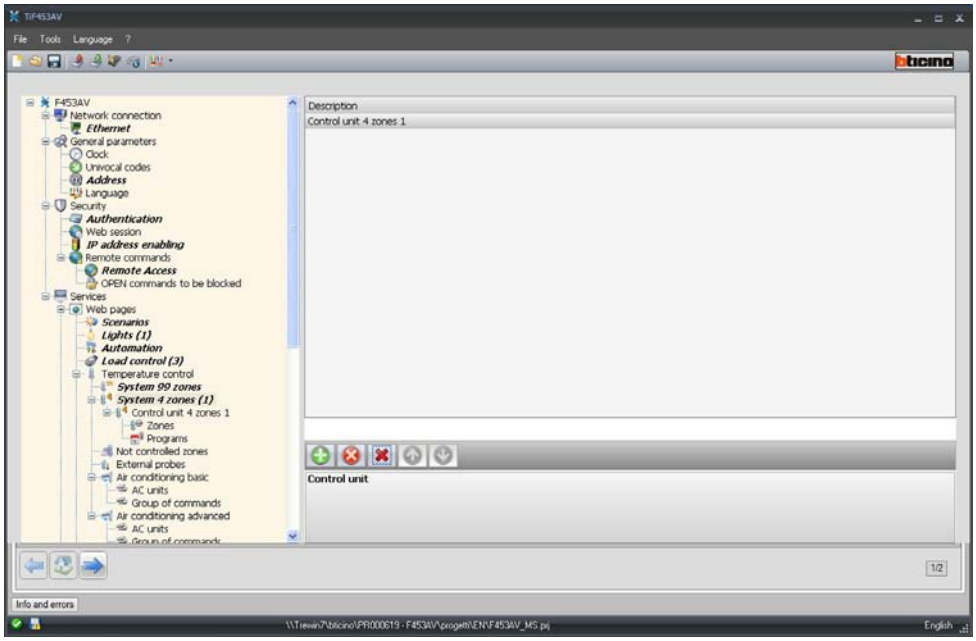


The following must be defined in the mask:

- **Object description**
  Enter the description of the object – 15 characters max.
- **Type**
  Enter the type of operation (summer/winter).
- **Number**
  Enter the scenario number

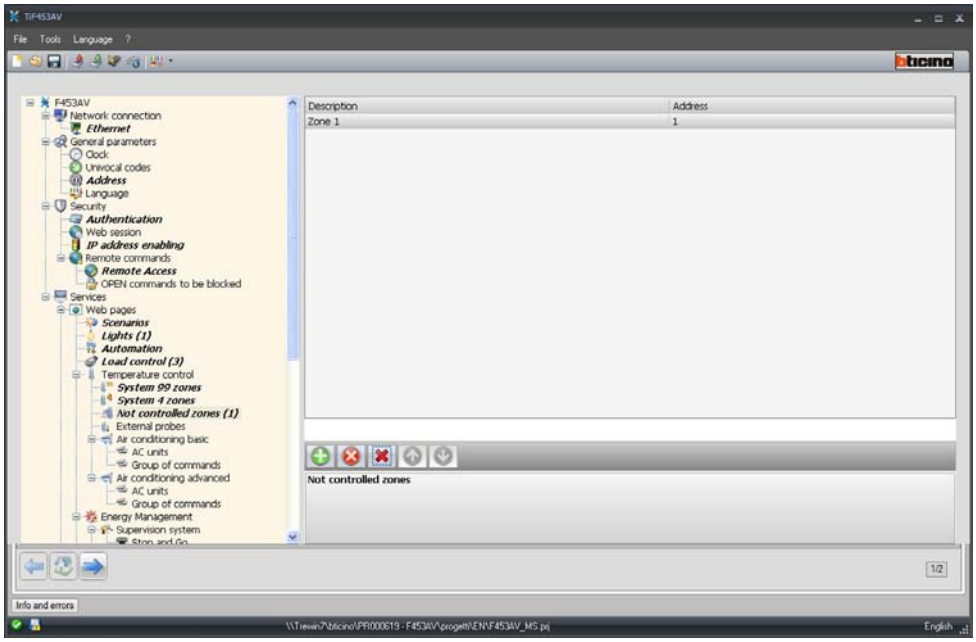
System 4 zones

This section can be used to insert a 4 zone central unit and customise its description.



For the configuration of the “Zones” and “Programs” items see “System 99 zones”. For this type of central unit the scenario item is not included.

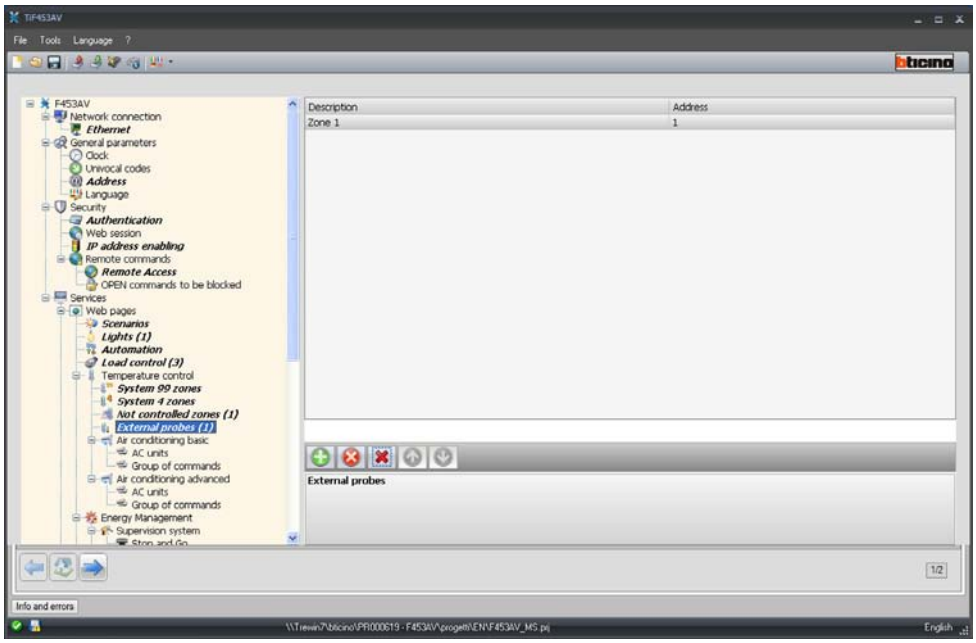
Not controlled zones
This section can be used to configure the zones not controlled by the central unit.



The following must be defined in the mask:

- **Object description**
  Enter the description of the object – 15 characters max.
- **Address**
  Enter the zone address.

External probes
This section can be used to configure external probes.

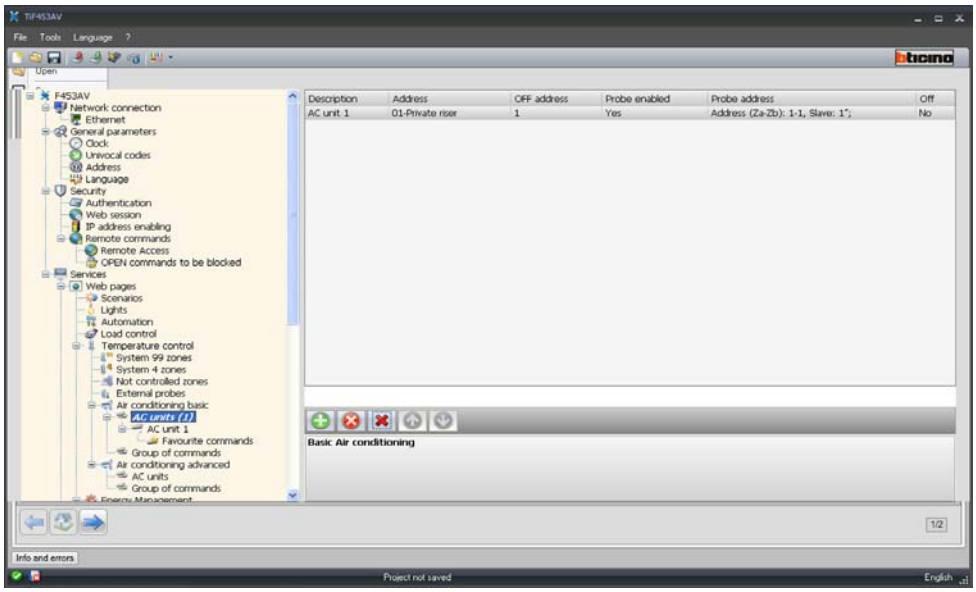


The following must be defined in the mask:

- **Object description**
  Enter the description of the object – 15 characters max.
- **Address**
  Enter the address of the external probe.

Basic climate control
This section can be used to configure the AC units and the groups of commands that will be available in the temperature control/air conditioning function page. In the case of basic climate control, the management function is performed only through the 20 commands saved on the 3456 interface.

AC UNITS
This section can be used to configured the AC unit.

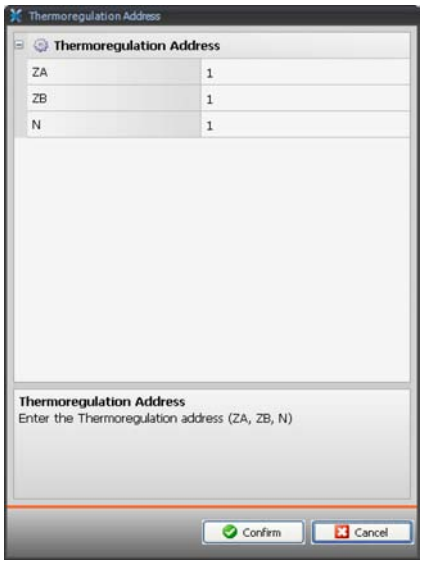


The following must be defined in the mask:

- **Description**
  Enter the description of the object – 15 characters max.
- **Address**
  Click to enter the 3456 interface address.

- **Off address**
  Enter the number of the command configured as OFF on the 3456 interface.
- **Probe enabled**
  Enable/disable the temperature probe.

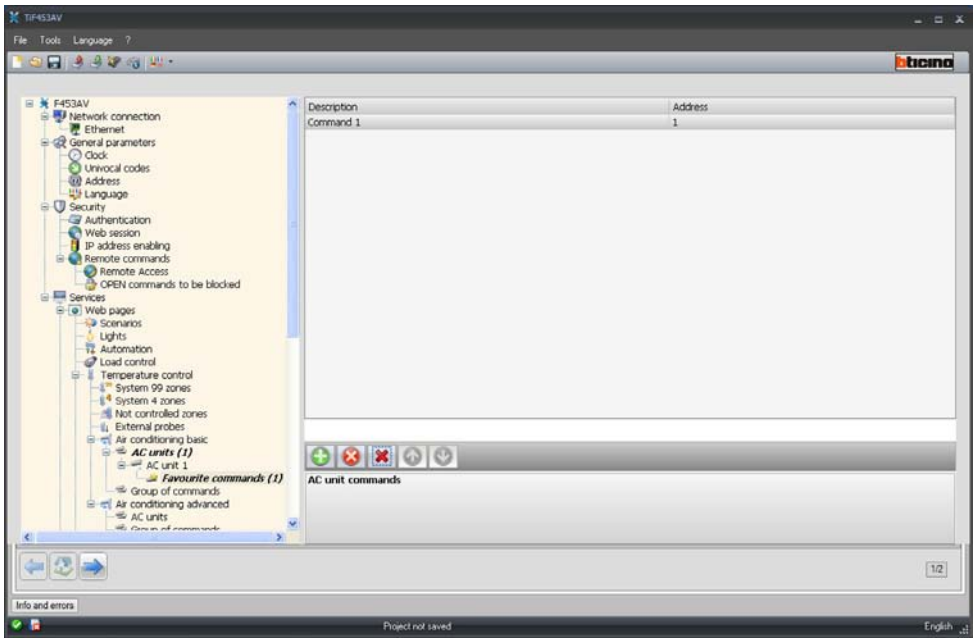
- **Probe address**
  Click to enter the address of the slave probe



- **Off**
  Enable/disable the Off command.

Favourite commands

Enter the favourite commands selected among the 20 available on the IRSplit for the management of the AC unit.

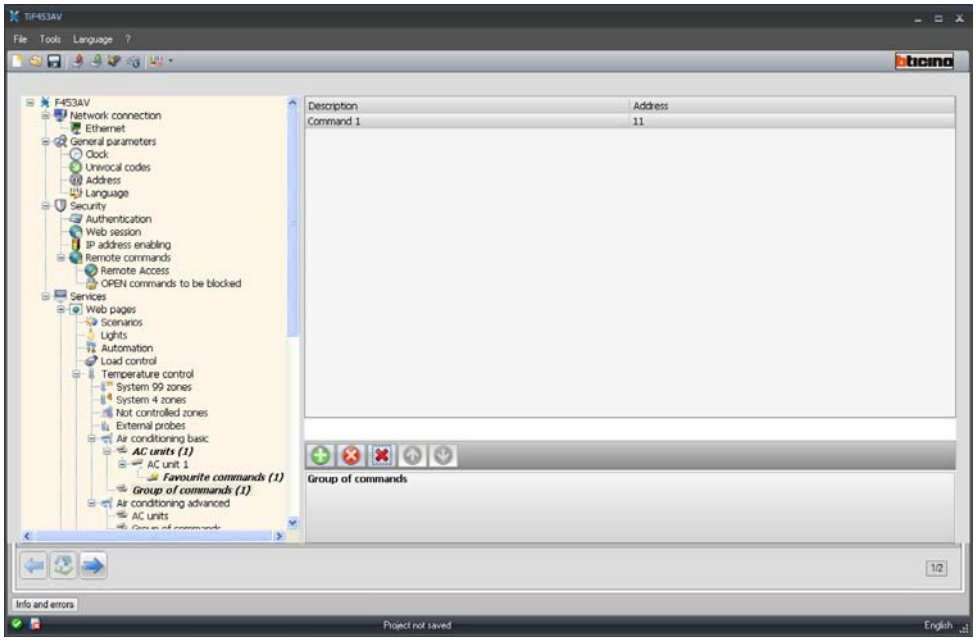


The following must be defined in the mask:

- **Description**
  Enter the description of the object – 15 characters max.
- **Address**
  Enter the address of the command on the 3456 interface.

GROUP OF COMMANDS

For the management of climate control it is possible to create a group of commands, selected among the ones saved on the 3456 interface.



The following must be defined in the mask:

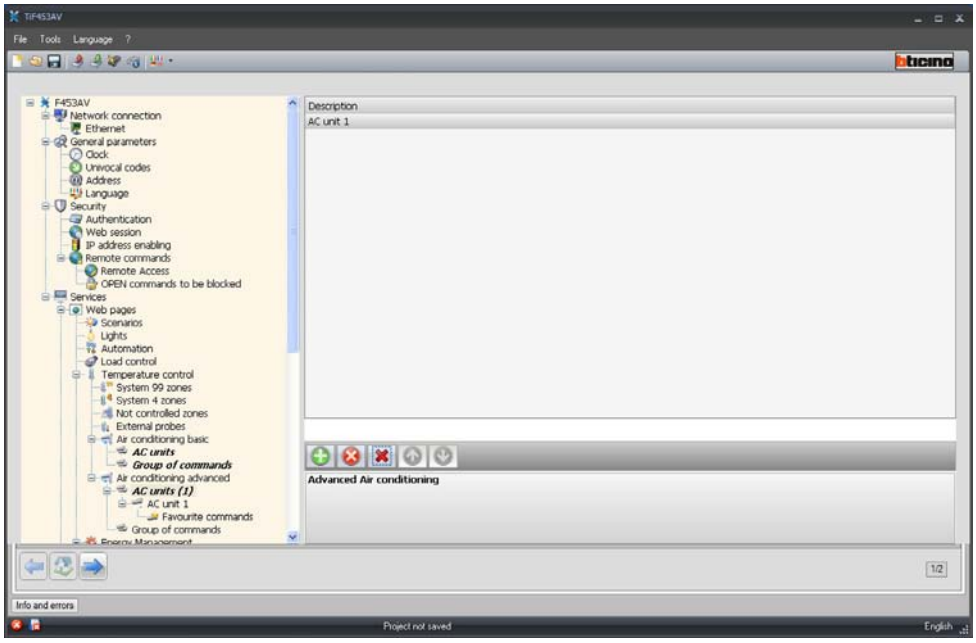
- **Description**
  Enter the description of the object – 15 characters max.
- **Address**
  Click to select the commands of the group.

The following must be defined in the mask:

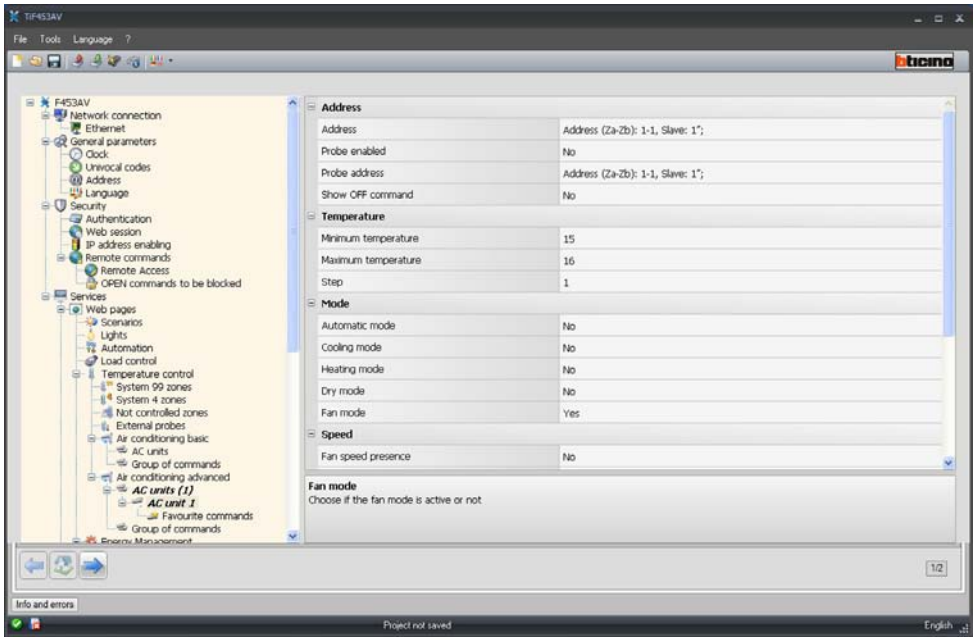
- **Address**
  Enter the 3456 interface address.
- **Command**
  Enter the command number.

Advanced Air Conditioning
This section can be used to configure the AC unit objects and the groups of commands that will be available in the temperature control/air conditioning function page.
The management is performed directly as if the remote control of the splitter was used, or in any cases using the 20 commands saved on the 3456 interface.

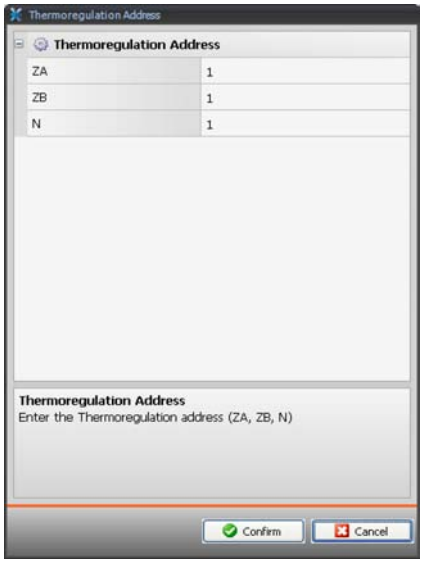
AC UNITS
Enter the AC units to configure.



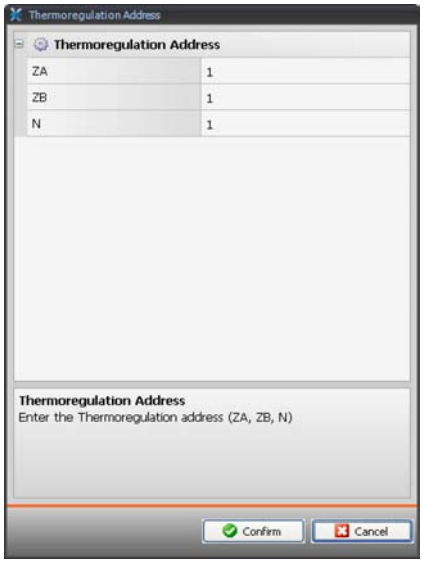
The following must be defined in the mask:



- **Address**
  Click to enter the 3456 interface address.



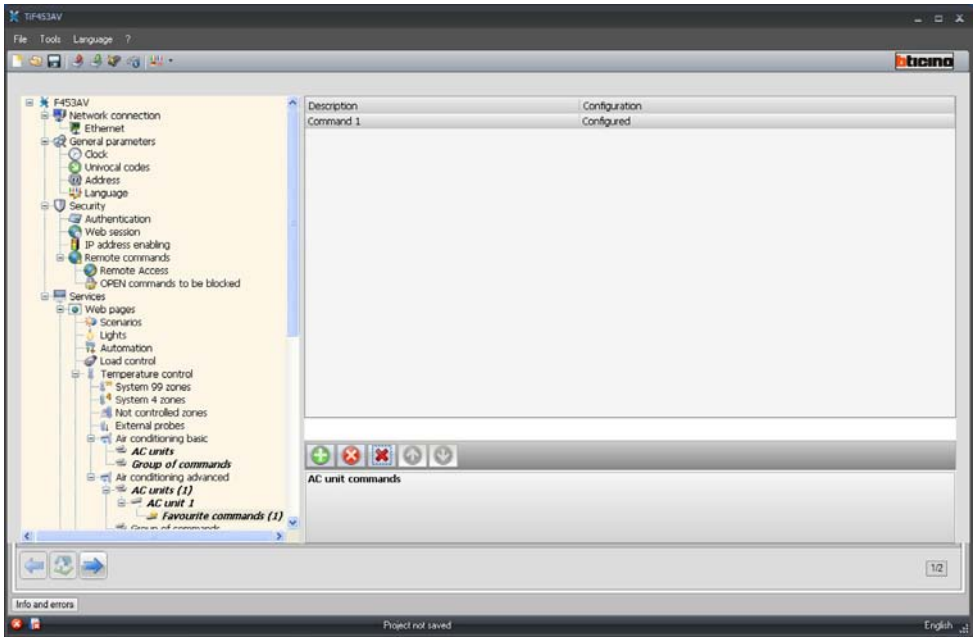
- **Probe enabled**
  Enable/disable the temperature probe.
- **Probe address**
  Click to enter the address of the slave probe.



- **Show Off control**
  Enable/disable the Off command.
- **Minimum temperature**
  Enter the minimum temperature that can be handled by the splitter
- **Maximum temperature**
  Enter the maximum temperature that can be handled by the splitter
- **Step**
  Enter the desired increase step, choosing between 0,5 °C e 1 °C.
- **For the Automatic, Cooling, Heating, Dry, Fan, Fan speed presence, Automatic, High, Medium, Low, Silent, Swing presence, ON, OFF modes:**
  Select Yes to make the function available in the corresponding page.

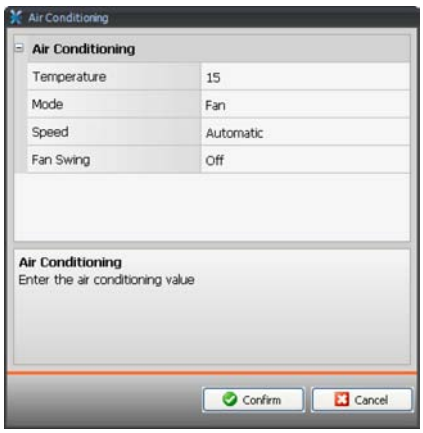
Favourite commands

Enter the favourite commands for the management of the AC unit.



The following must be defined in the mask:

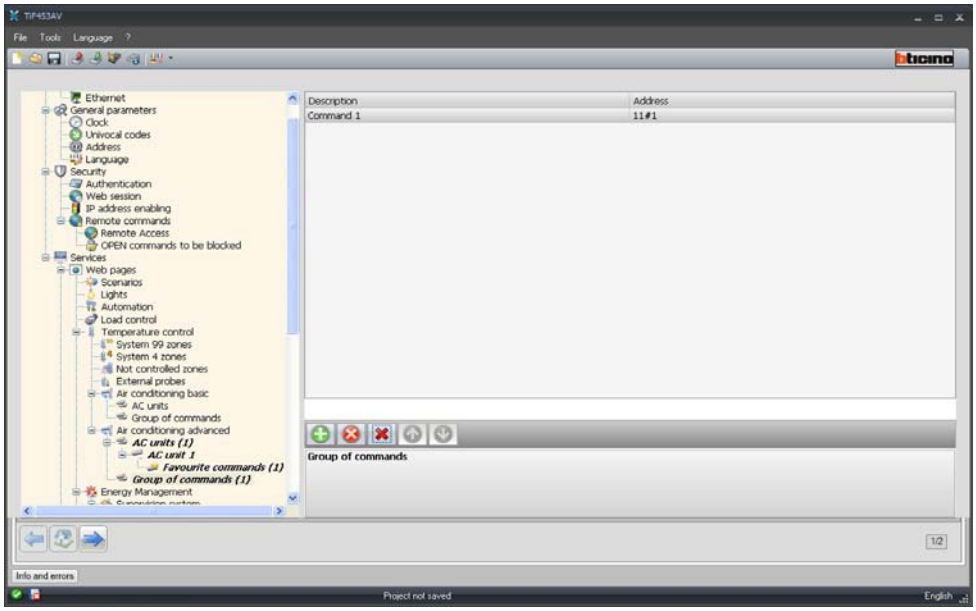
- **Description**
  Enter the description of the object – 15 characters max.
- **Configuration**
  Click to set the parameters that will be performed by the command configured.



- **Temperature**
  Select the temperature to set.
- **Mode**
  Select the operating mode.
- **Fan speed**
  Select the fan speed
- **Fan swing**
  Select the fan swing mode.

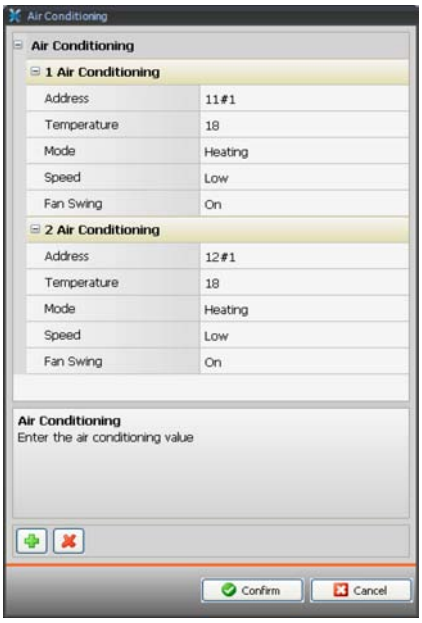
GROUP OF COMMANDS

For the management of climate control it is possible to create a group of commands that will be performed at the same time.



The following must be defined in the mask:

- **Description**
  Enter a description of the group of commands.
- **Address**
  Click to select the commands making up the group.



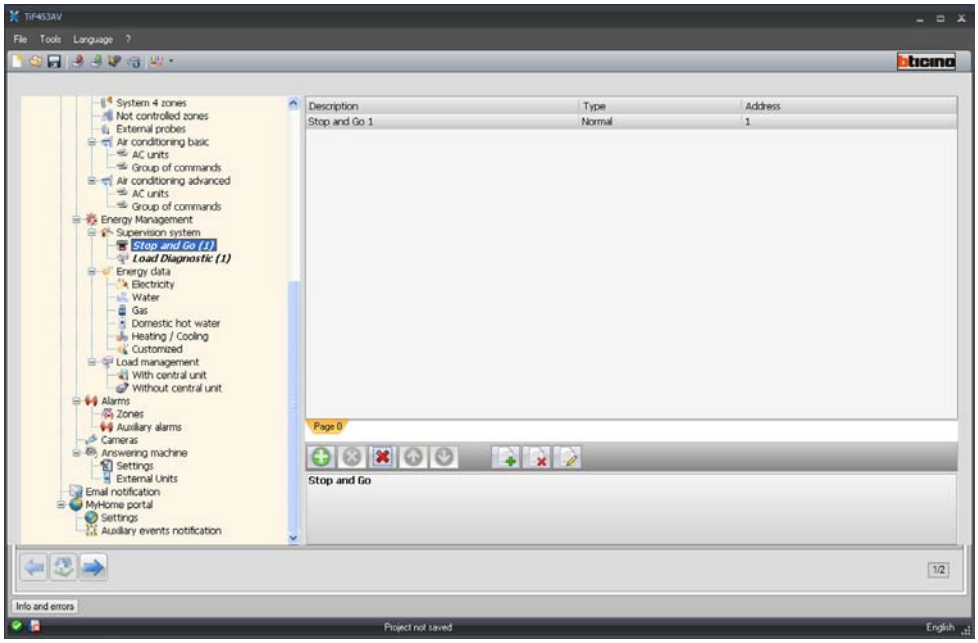
The following must be defined in the mask:

- **Address**
  Enter the 3456 interface address.
- **Temperature**
  Select the temperature to set.
- **Mode**
  Select the operating mode.
- **Fan speed**
  Select the fan speed
- **Fan swing**
  Select fan swing mode.

Energy Management
This section can be used to configure the functions that will be available in the "Energy Management" page.

Supervision system
This section can be used to configure the system supervision functions that will be available in the "Supervision" web page.

STOP & GO
This section can be used to configure Stop & Go switches for the control of the automatic earth leakage relay reset function, and other functions.

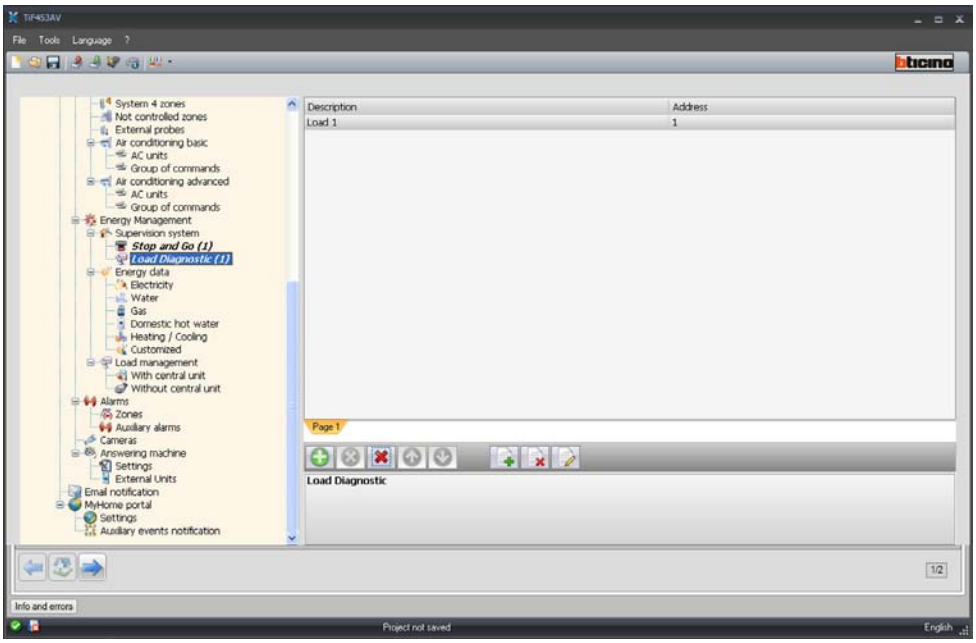


The following must be defined in the mask:

- **Description**
  Enter the description of the object – 15 characters max.
- **Type**
  Select the type of switch: Normal, Plus, or Btest.
- **Address**
  Enter the switch address.

LOAD DIAGNOSTIC

This section can be used to set which loads can be subjected to diagnostic, to control their operating status (advanced actuators only).



The following must be defined in the mask:

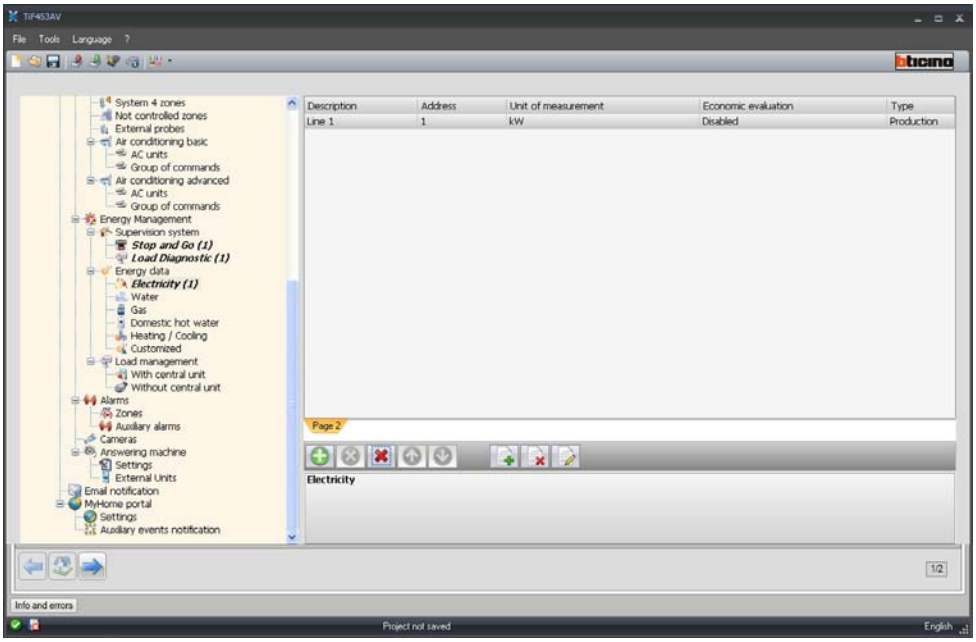
- **Description**
  Enter the description of the load – 15 characters max.
- **Address**
  Enter the load address.

Energy data

This section can be used to configure the parameters that enable displaying the data (consumption/production) measured on the system, and displayed in the "Energy data" web page.
Several measurement parameters are available:

Meter type	Description	Unit
Electricity	It display the electricity consumed or produced by the system.	Kw
Water	It measures the water consumed.	m^3
	Connect the meter to a water meter with impulse output.	
Gas	It displays gas consumption.	m^3
	Connect the interface to a gas meter with impulse output.	
DHW	It measures the hot water consumed.	Kw
	Connect to a hot water meter or to the corresponding impulse output of a heat measurement central unit that can be found in the apartment user modules (in case of central heating).	
Heating/ Cooling	It displays the calories/frigories measured on the heating/cooling system.	Kw
	Connect to a meter with heat impulse output (KWh)	

The configuration is the same for all meters.



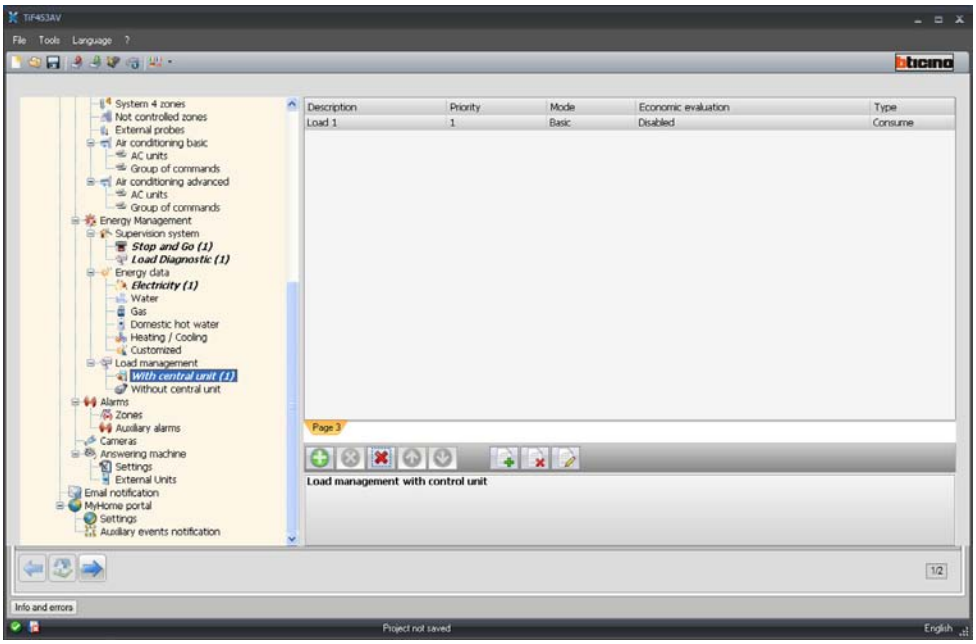
The following must be defined in the mask:

- **Description**
  Enter the description of the object – 15 characters max.
- **Address**
  Enter the meter address
- **Unit of measure**
  Select the unit of measure used to display the consumption.
- **Economic evaluation**
  Enable/disable the economic evaluation.
  Enable this function to create a row in the "Tariff setup" where the user can set the tariff to apply to the specific consumption.
- **Type**
  Define if the meter is a consumption or a production meter.

The economic evaluation is performed based on the tariff indicated in the "Tariff setup" section.

Load management
This section can be used to manage the new Load Management system, to display the status of a load, force the re-activation based on priorities, set the forcing time, and display the consumption.

WITH CENTRAL UNIT
In this mode, in addition to the above listed functions, it is also possible to reset the load.



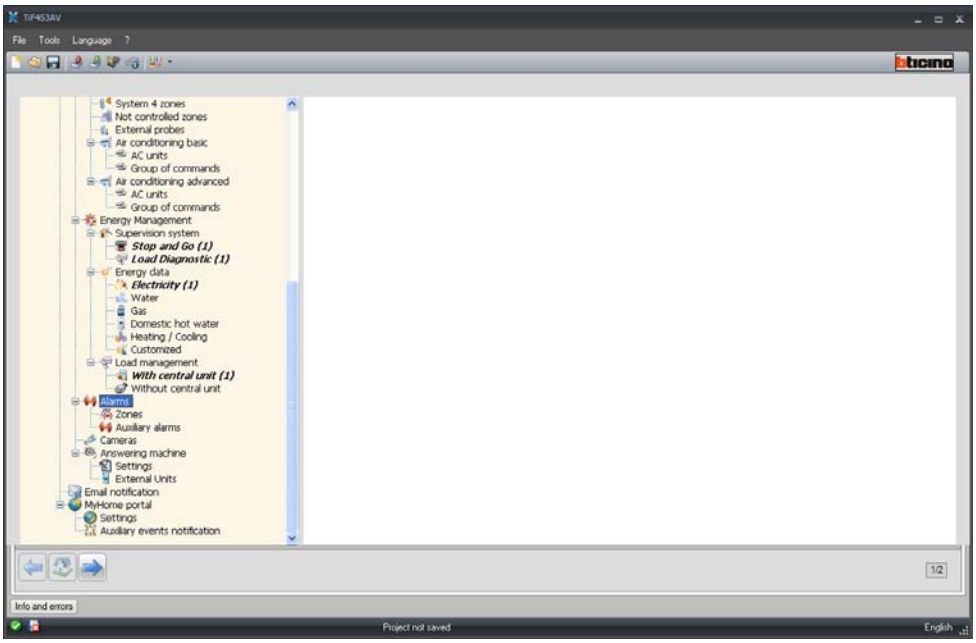
The following must be defined in the mask:

- **Description**
  Enter the description of the load – 15 characters max.
- **Priority**
  Select the load priority
- **Mode**
  Set if this is a basic or an advanced load. In the second case the instantaneous consumption can also be set.
- **Economic evaluation**
  Enable/disable the economic evaluation (Advanced mode only).
  The tariff is set in the "Tariff setup" section.

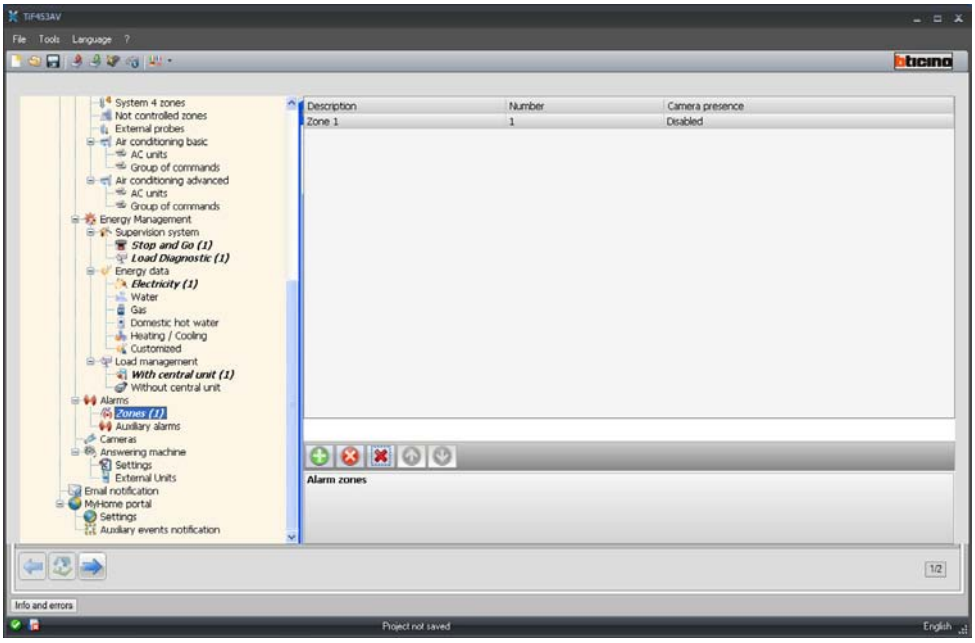
WITHOUT CENTRAL UNIT
The configurations for this mode are the same as the "With Central Unit" mode, with the exception of the "Mode" field, which is automatically set to "Advanced".
The object of this function is to display the consumptions of the loads, also without control/forcing.

Alarms

This page is always present and active on the devices.



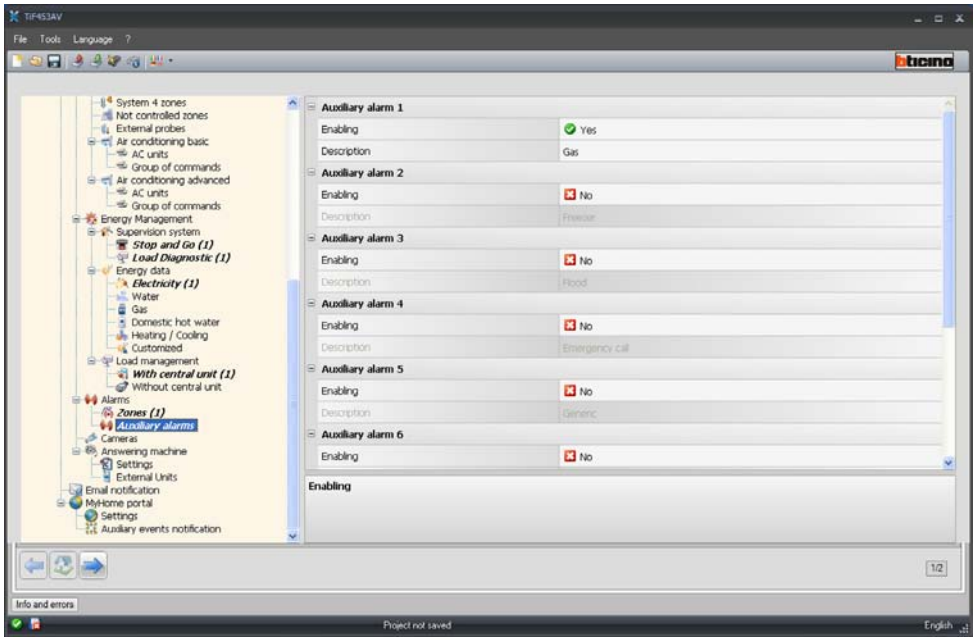
In this section you can customise the descriptions of zones 1 – 8 of the Burglar-alarm system.
The descriptions entered will appear in the messages which the device sends to the Web page every time there is a Burglar-alarm or Technical Alarm event in the system



When the "**Camera Presence**" field is enabled, if an e-mail is sent by the device following a burglar-alarm in the zone, a compressed file (.zip format) is also attached to the message, containing the images (.jpg) recorded by the camera.

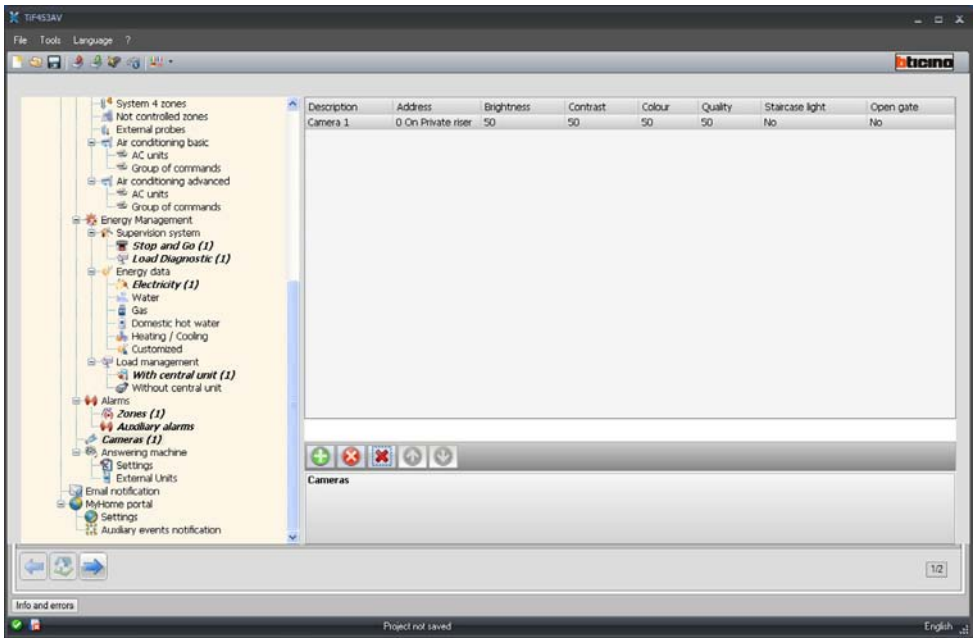
Example: if the intrusion sensor is configured with Z=2 (zone 2) it can automatically activate the camera configured in the interface with P=2 (the cameras in the entrance panels are excluded).

In the same way you can enable and customise the descriptions for the 9 auxiliary channels used to signal technical alarms (e.g. you can enable channel **Auxiliary 1** and assign the description "**Gas leak**").



Cameras

In this page the cameras (max 20) in the My Home CCTV system which you want to activate from the "**CCTV**" function web page can be enabled and configured.



In this mask, for each camera it will be necessary to define:

- **Description**
  Enter the camera description (max 15 characters)
- **Address**
  Click to select the camera address (00 to 99).

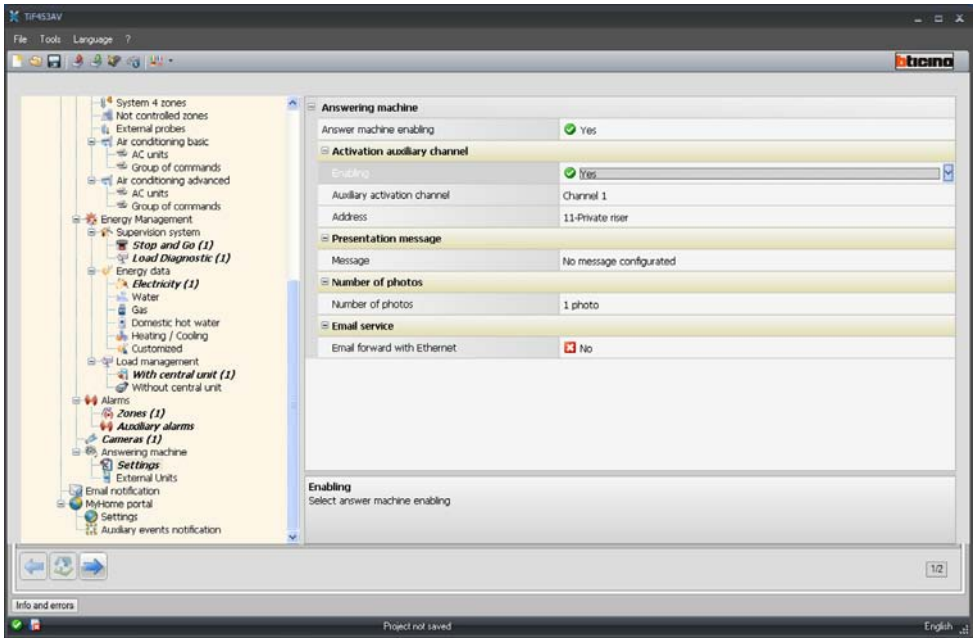
- **Brightness/Contrast/Color/Quality**
  Select the picture setting levels (from 0% to 100%)
- **Staircase light presence**
  Enable the staircase light presence
- **Open gate**
  Enable the open gate presence

Answering machine - settings

The Video door entry answering machine function in the web pages can be enabled and configured in this page.

The following must be defined in the mask:

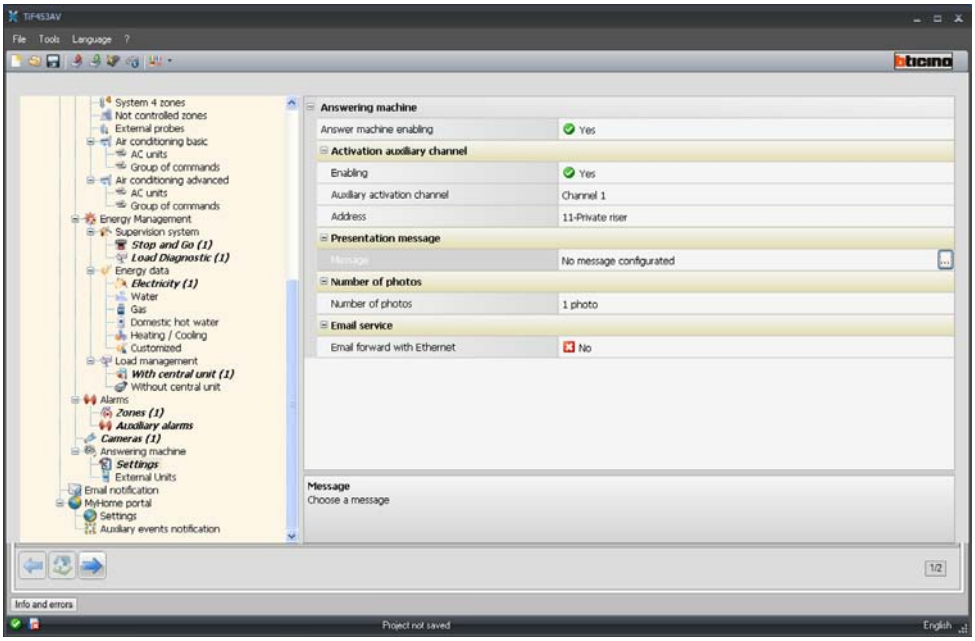
- **Answering machine enabling**
  Enable/disable the video answering machine function.



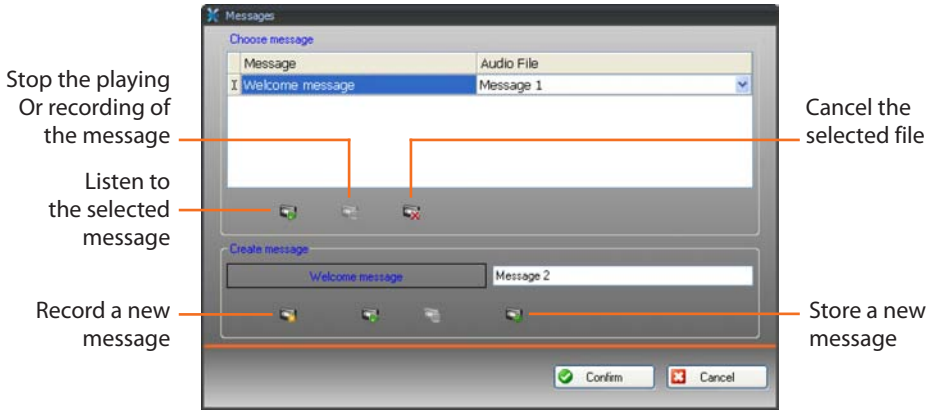
- **Activation auxiliary channel**
  Enabling the function, a mask is proposed where you can enter the address of the Automation system actuator used to switch ON a "**Answering machine active**" signal LED.
  Then select the auxiliary activation Channel used by the control device to activate the "**Video door entry answering machine**" locally.

> Click to enter the SCS address.

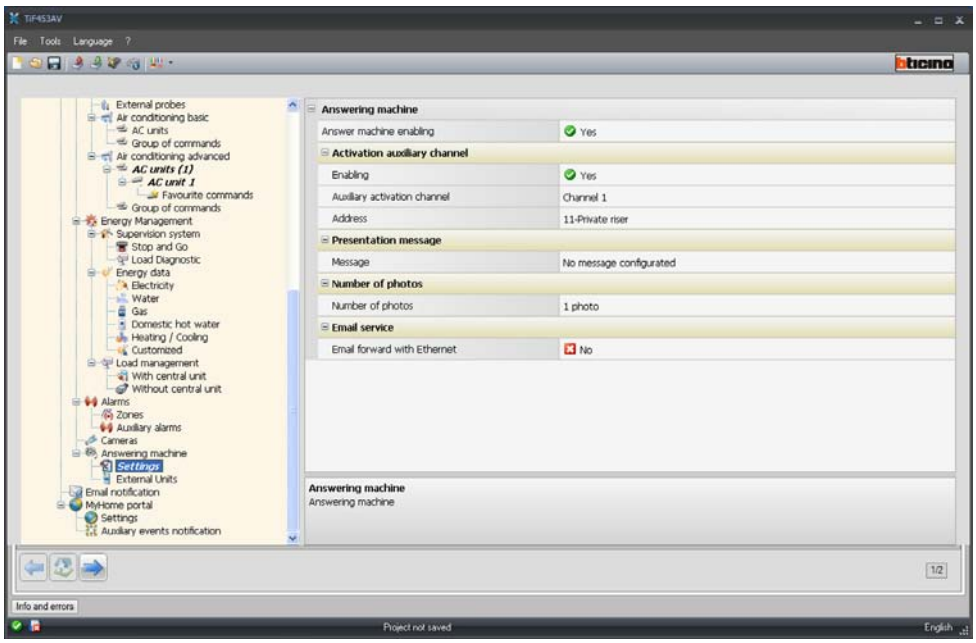
- **Presentation message**
  Here you can select one of the pre-recorded files (.wav) or record a new message.



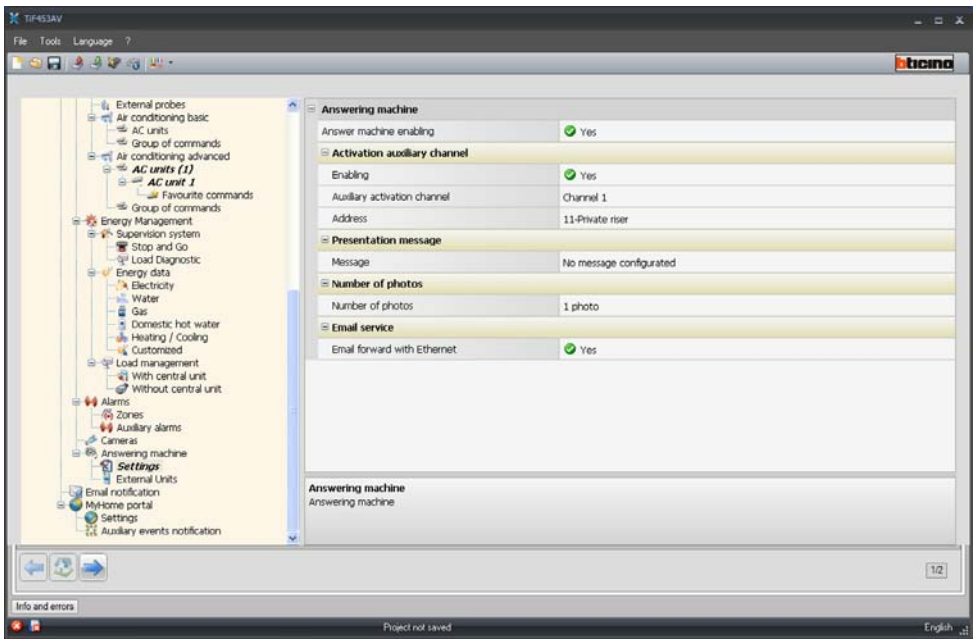
Use the pushbuttons in the window to:



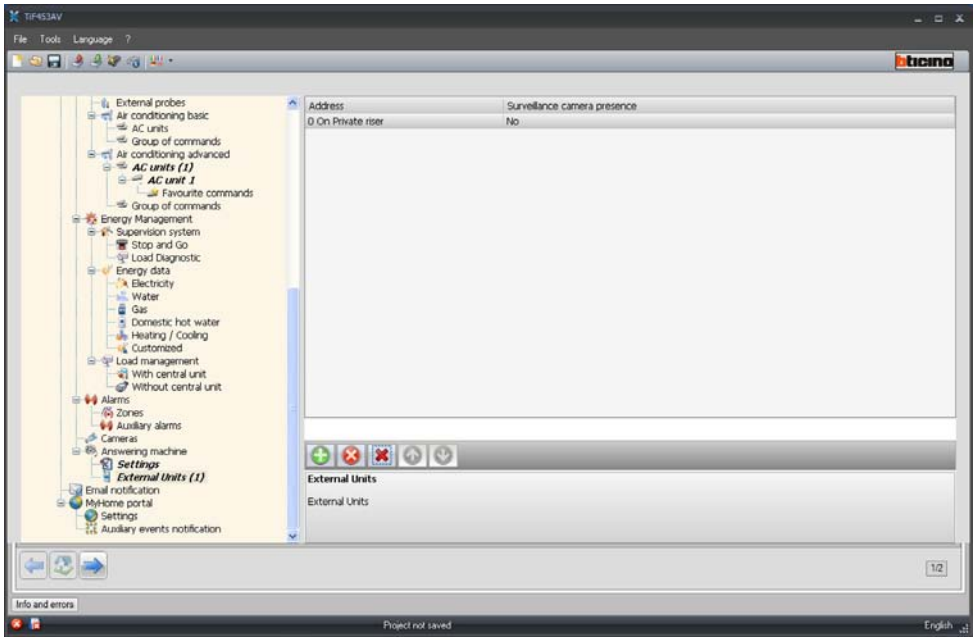
- **Number of photos**
  Select the number of pictures which the video door entry entrance panel camera will send to the device. You can choose from 1 to 16 photographs.
  If the "**Email service**" option is active, the pictures will reach the user as attachments to an email message.



- **Email service**
  Enable this service to receive the e-mail message containing the recorded pictures, selecting the Ethernet transmission method.



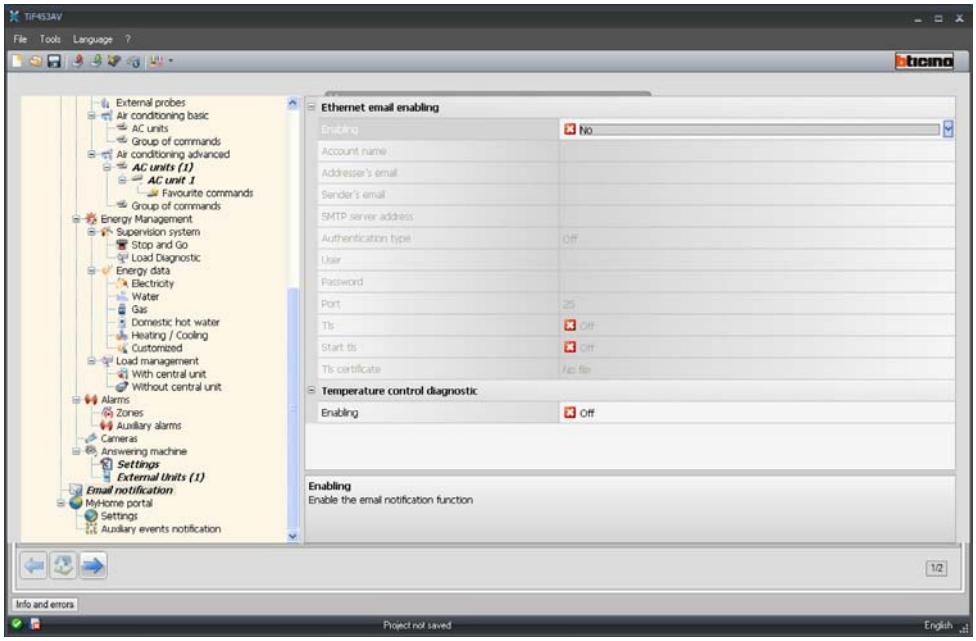
Entrance panels
In this section up to 10 video door entry system entrance panels can be enabled.



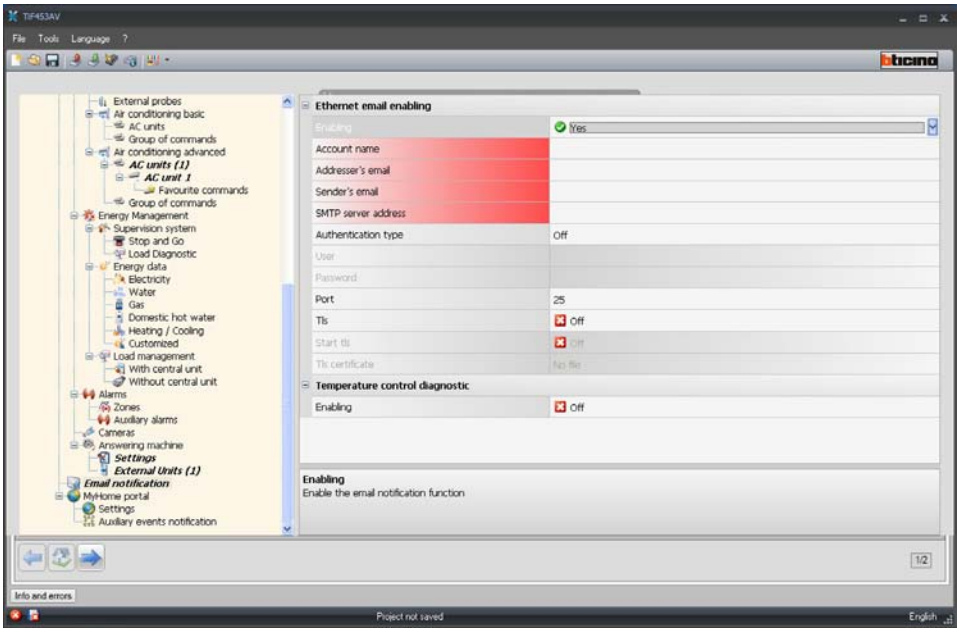
For each entrance panel enabled you must configure the **Address** and activate the **Camera presence**

4.4.2 Notification via e-mail

The sending of alarms for notification via email can be enabled in this page.



Ethernet email enabling

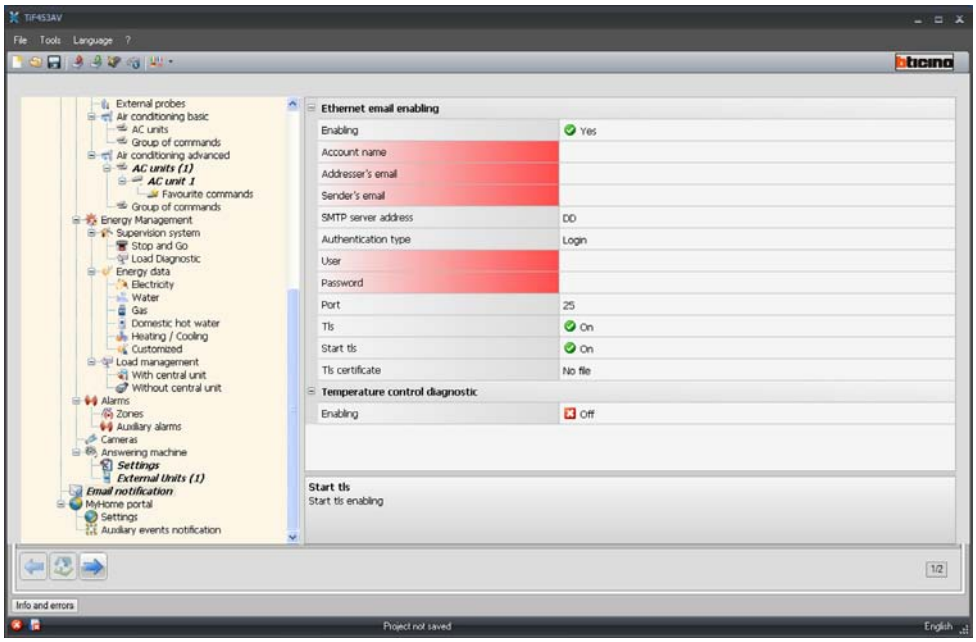


The following must be defined in the mask:

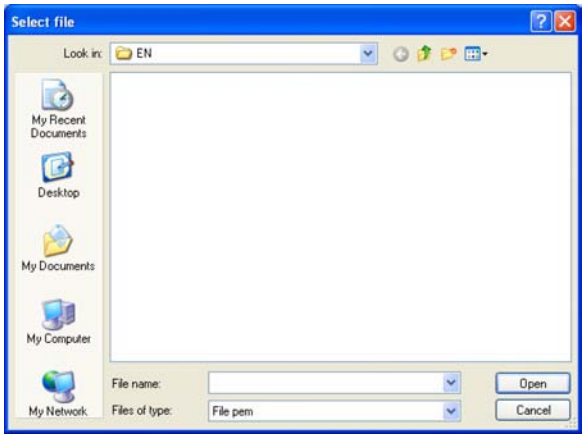
- **Enabling**
  Enable/Disable the notification via Ethernet email
- **Account name**
  Enter the name of account.
- **Addressee's email**
  Enter the electronic mail address to which the email will be sent
- **Sender's email**
  Enter the sender's e-mail address

- **SMTP server address**
  Enter the IP address of the mail server in numerical format or in text format (contact the network administration to obtain this information).

- **Authentication type, User, Password, Port, Tls, Start tls, Tls trust file**
  Enter the correct parameters of your own e-mail account

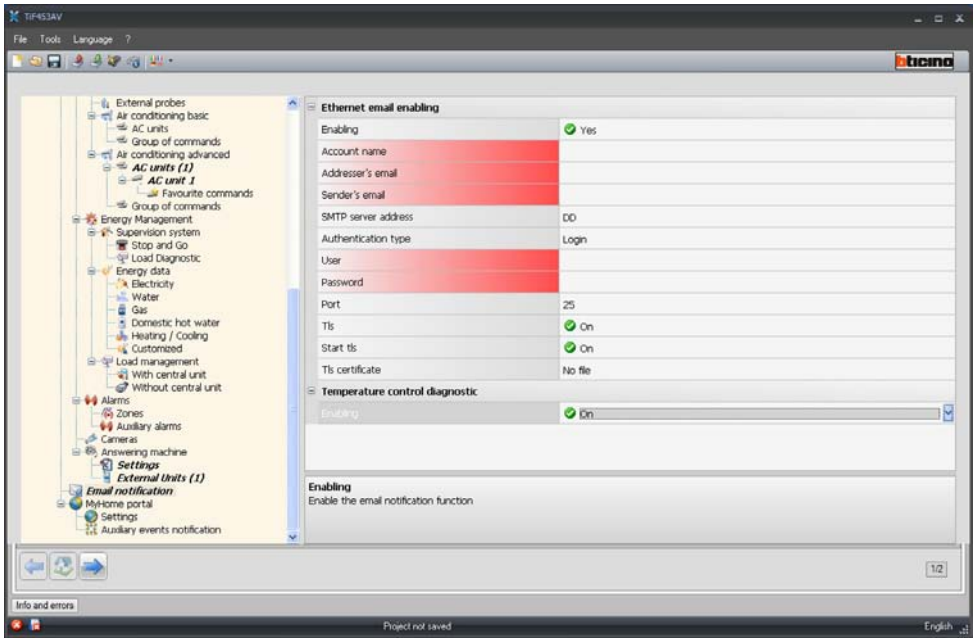


For Tls enter a certified file.



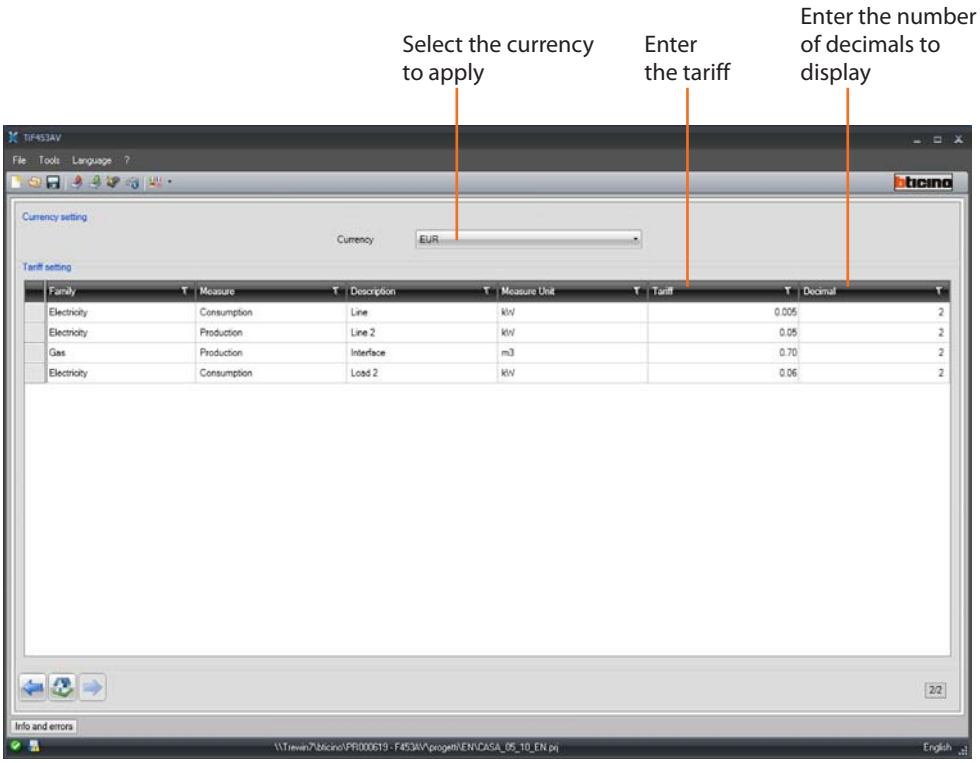
Temperature control diagnosis

Enabling this function, when there is a fault in the Temperature control system a message will be sent to the e-mail address provided.



5. Tariff settings

On completion of the project configuration, click the forward arrow on the bottom left to set the tariffs that will be applied to the consumptions set in the "Energy management" and "Load management" sections.



Select the currency, and enter the tariff and the number of decimals to display on the web page.

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Installer stamp

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