



OPEN PROTOCOL FOR ELECTRICAL NETWORKS

TRUSTED IP RANGE

Brand	Item
Legrand	573992, 03565
BTicino	MH200, MH200N F453, F453AV, F452, F452V

Document History

Version	Date	Author
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INTRODUCTION

This tutorial will explain how to set the trusted IP range, used by the unofficial software BTicino and Legrand to communicate with My Home Gateways (Web Server; Scenario Scheduler).

The Gateway must know the IP addresses of all the devices, such as smartphones, tablets, pc, etc., which want to establish a connection.

Up to now it isn't expected any authentication service.

Official software uses an authentication service to let, only certified people, procedure with the configuration or modifying it. Due to this fact that the certification is based on a private key isn't allowed its diffusion.

WHAT IS AN IP ADDRESS

The IP (Internet Protocol) address is a numerical label assigned to every devices in order to enable communication into an Ethernet network.

TRUSED IP RANGE

The IP range enables communication among the devices, used by the users, and the My Home gateways. Deeply, the trusted IP range is an aggregate of IP addresses which allows the connection to the network without the authentication service.

NOTES

Open the IP range is not only a choice that simplifies the communication among the users and the Gateway but also a necessity to converse with third part system, such as the Bang & Olufsen gateway.

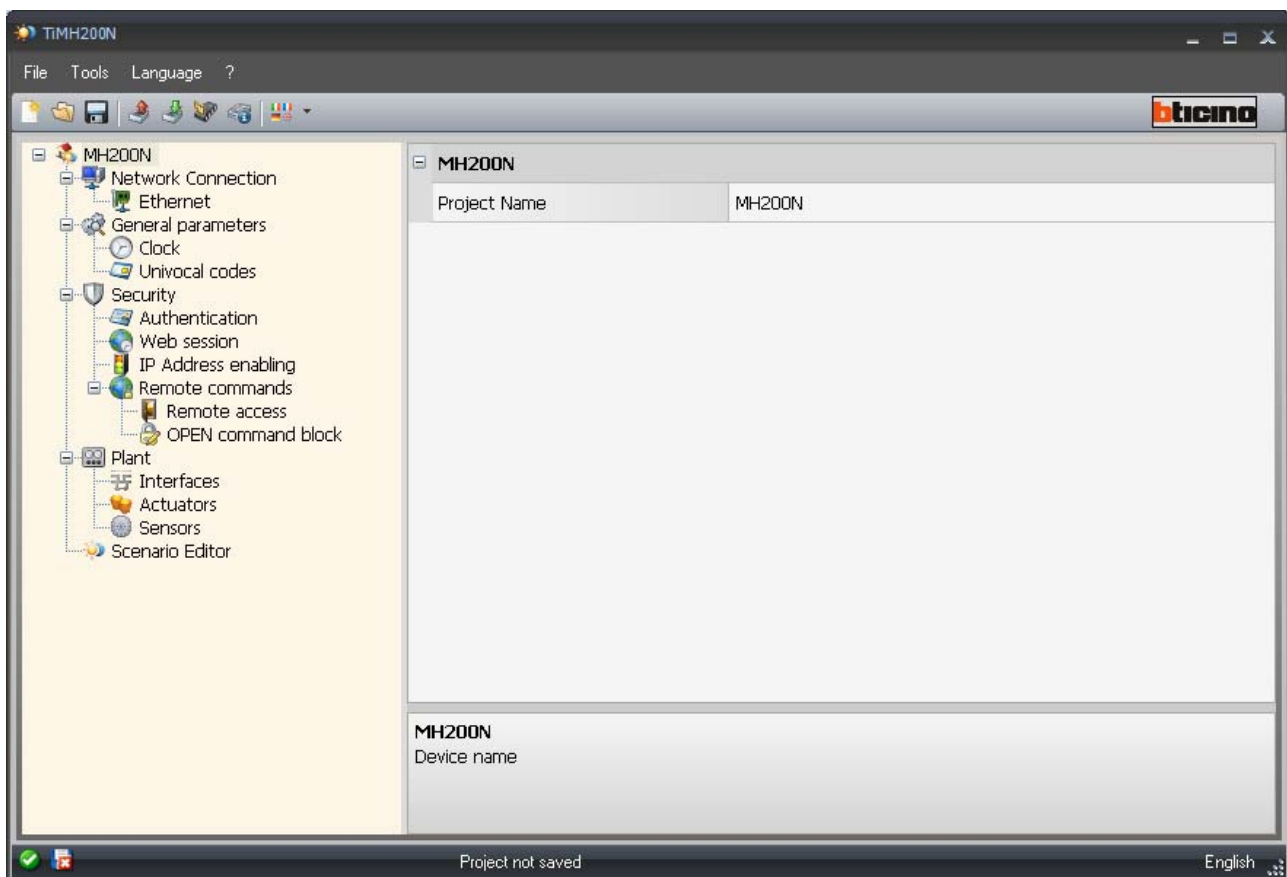
RANGE CONFIGURATION

It is possible to add IP addresses in two different ways: through the configuration software or via Administration Web Pages.

SOFTWARE CONFIGURATION

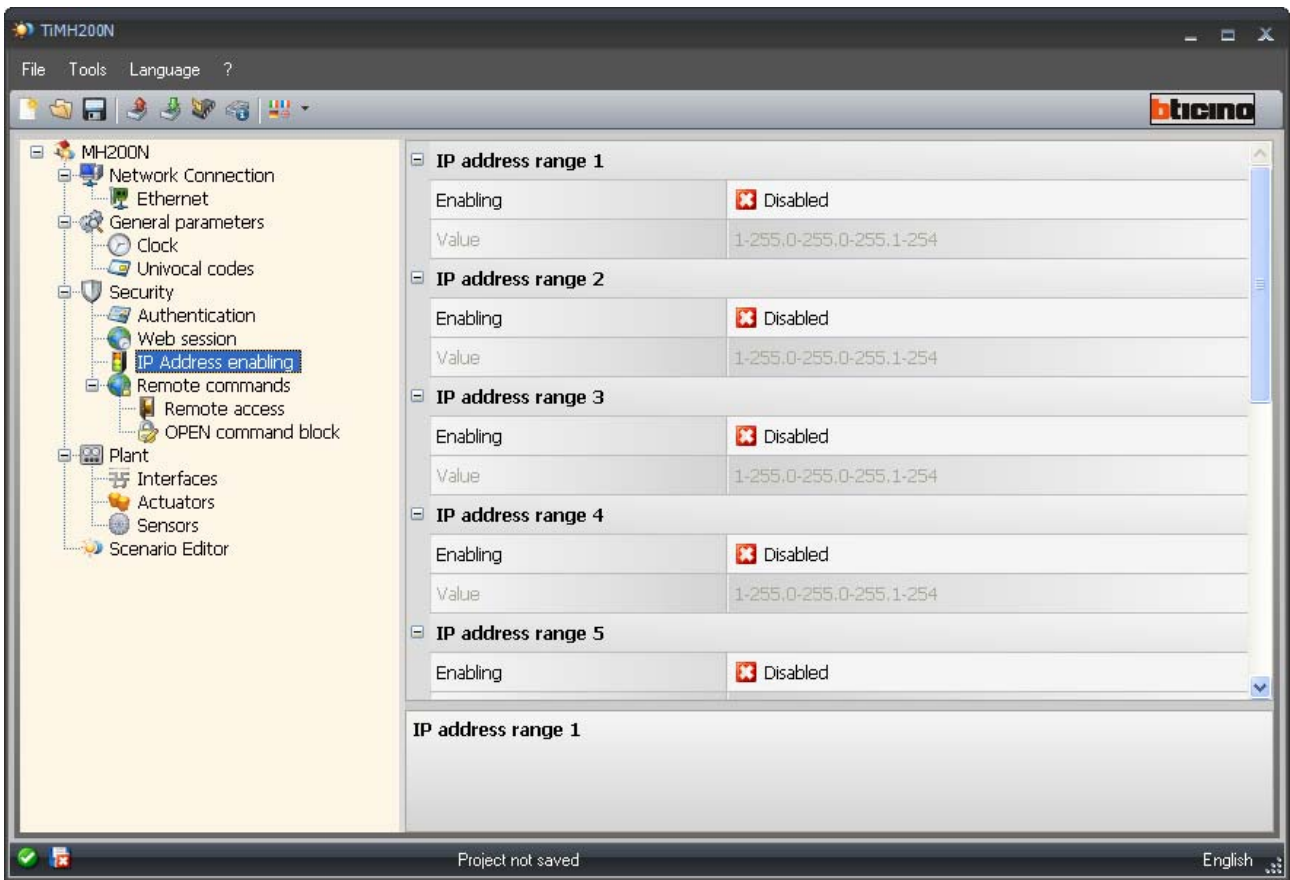
This procedure can be done in all the software corresponding to the gateways. In this section it's described the MH200N configuration software (the procedure it's same for every gateways).

This is the initial page:

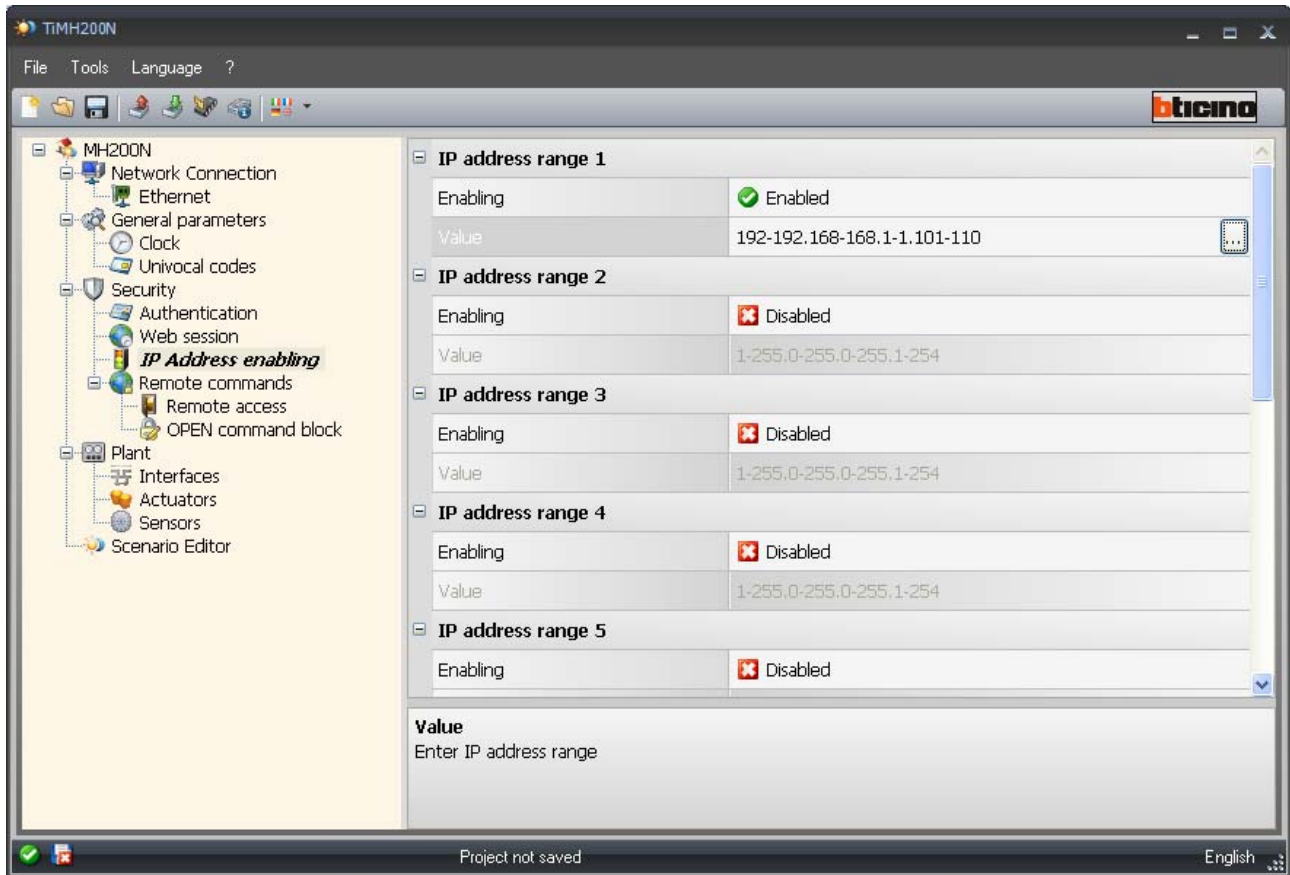



In the left part there is a tree menu where the most important features are presented.

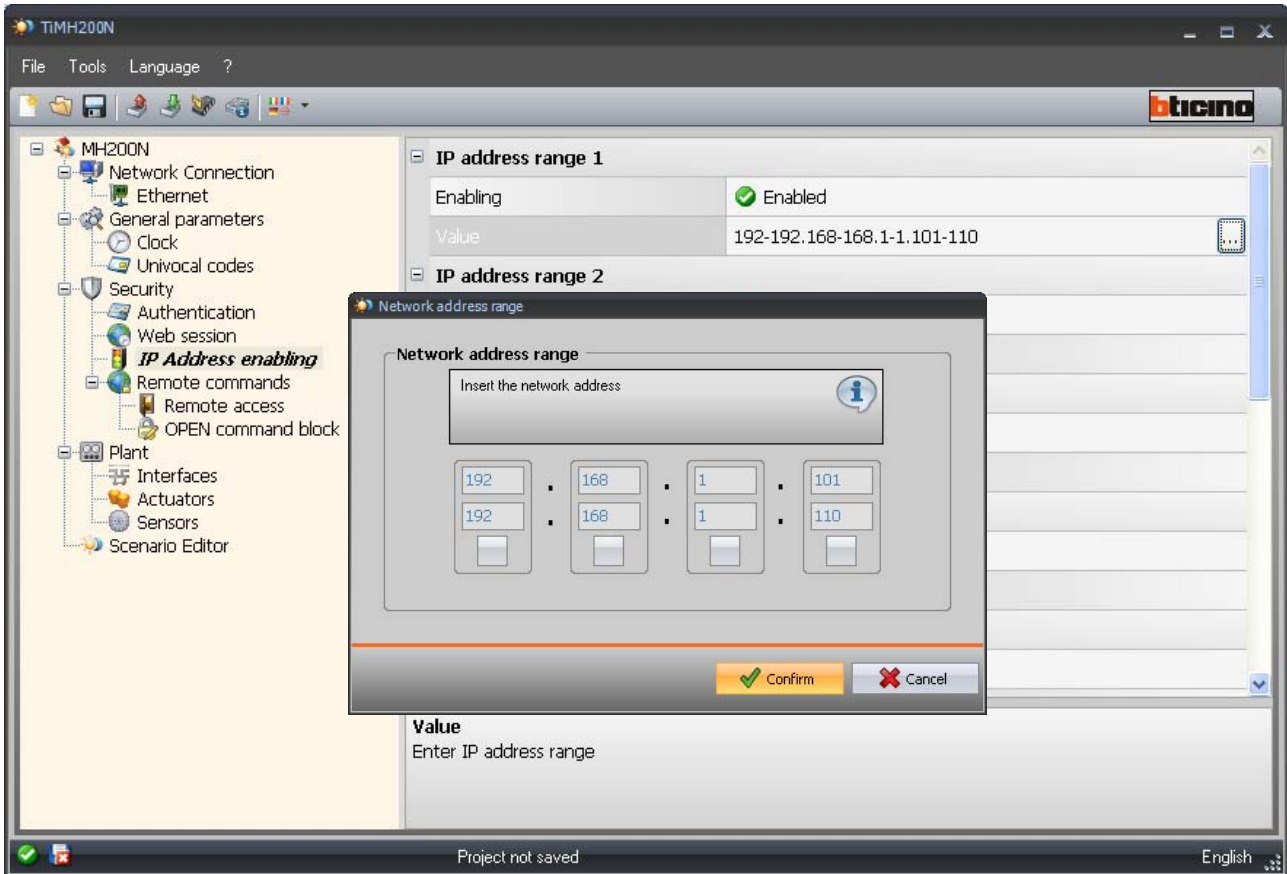
Enlarge the security section and choose “IP address enable”



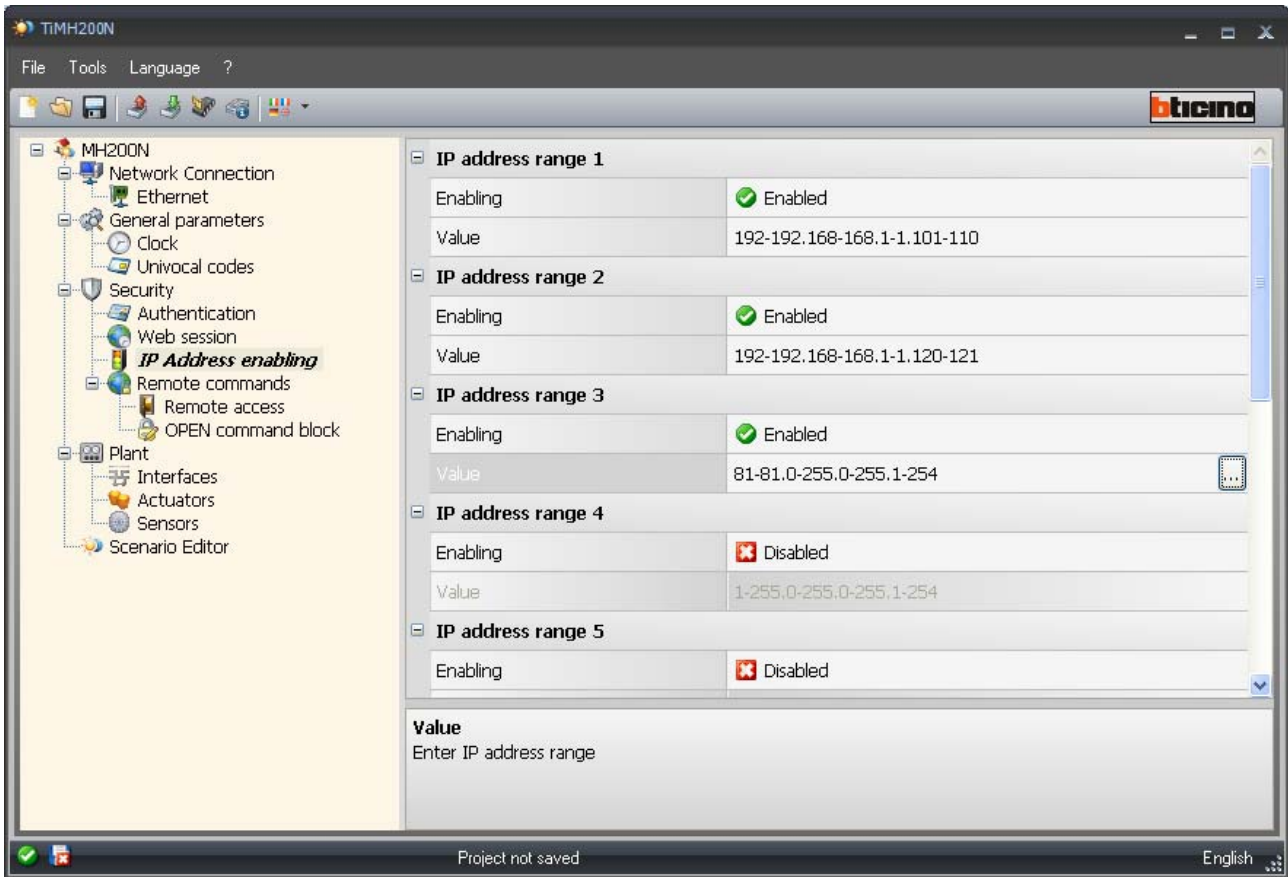
The default setting puts all the IP addresses as disabled; to enable them you have to click on the red icon and automatically it will change on a green tick followed by the word “Enabled”.



If the IP addresses are wrong, by clicking the button  it is possible to change them setting the true ones.

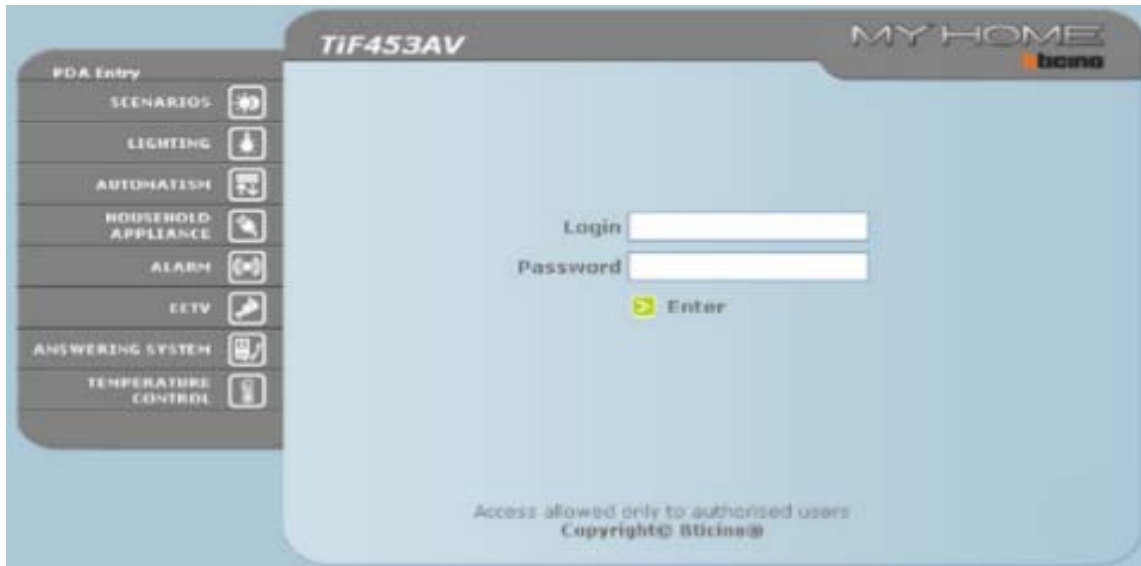


This procedure can be repeated until you have enabled all the IP you need.



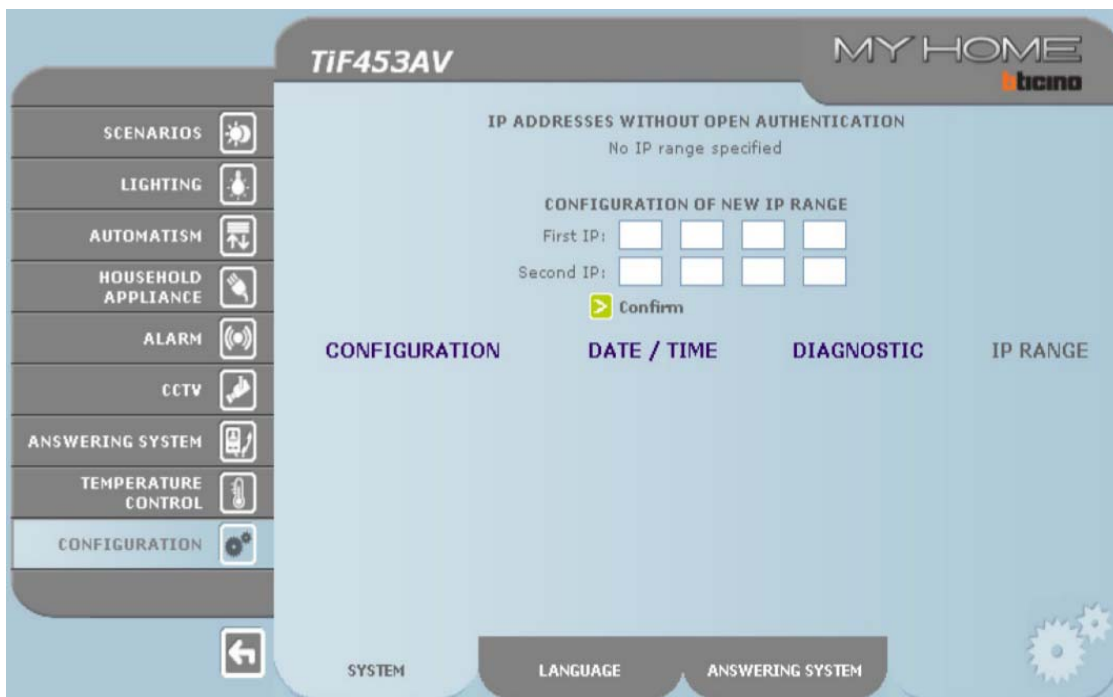
WEB PAGE CONFIGURATION

When the browser starts, digit the gateway IP address in the navigation bar. Simultaneously this page will be displayed.

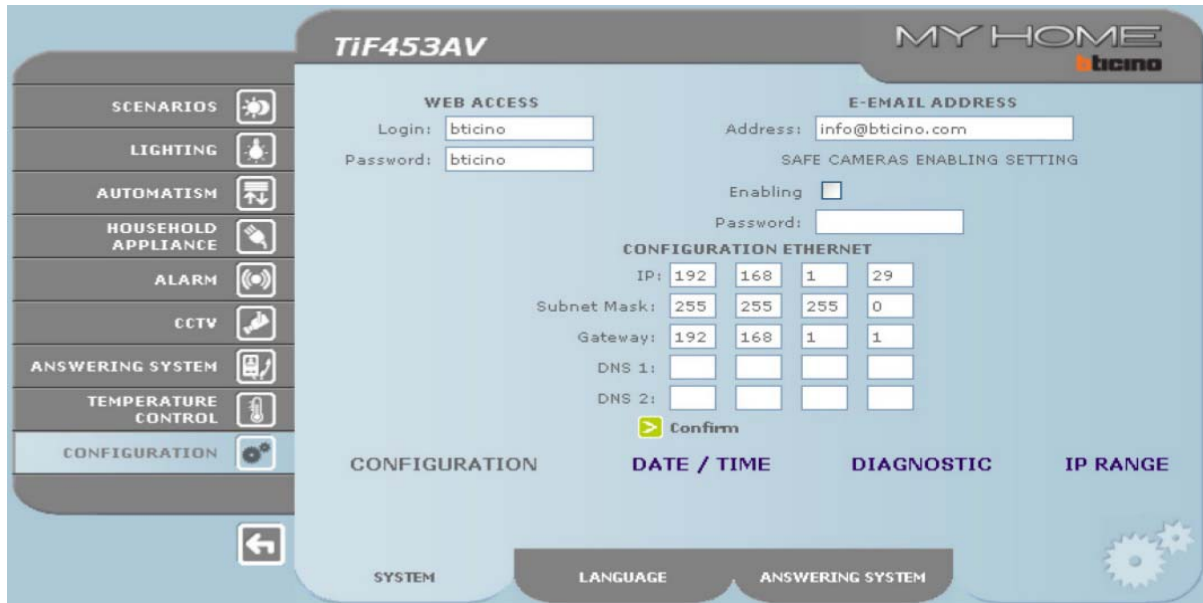


This procedure is reachable only if you are logged as administrator user. The Configuration box appears in the function bar developed in three pages:

- System
- Answering system (only for F453AV)
- Language



To open the page click on “IP RANGE” and insert the addresses which will enable connection without the need for a password.

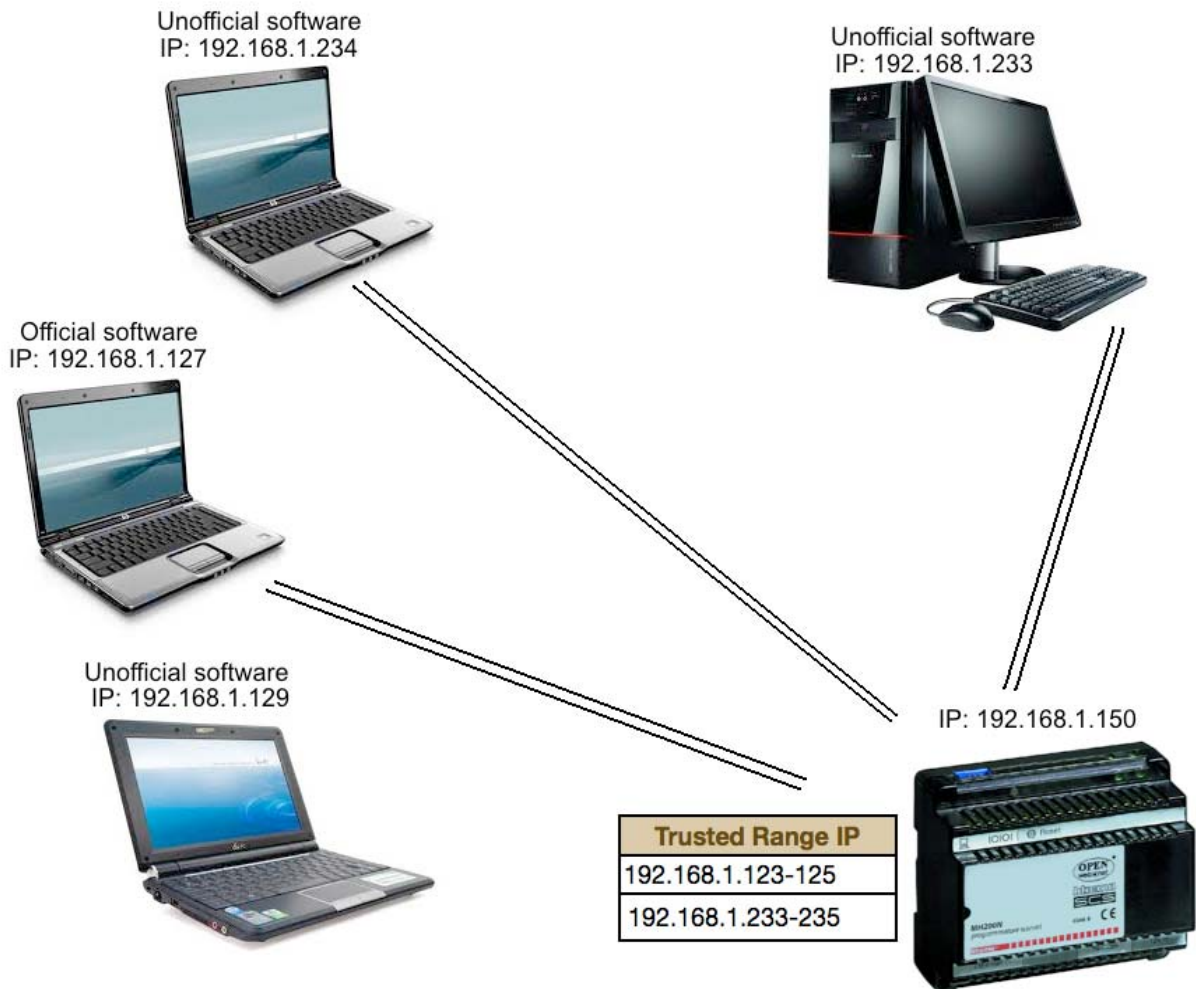


When you confirm you may be wait a little to let the system acquire the new range

EXAMPLE

PC LAN Network:

The picture below explains how computers can communicate with a My Home gateway inside a LAN network.

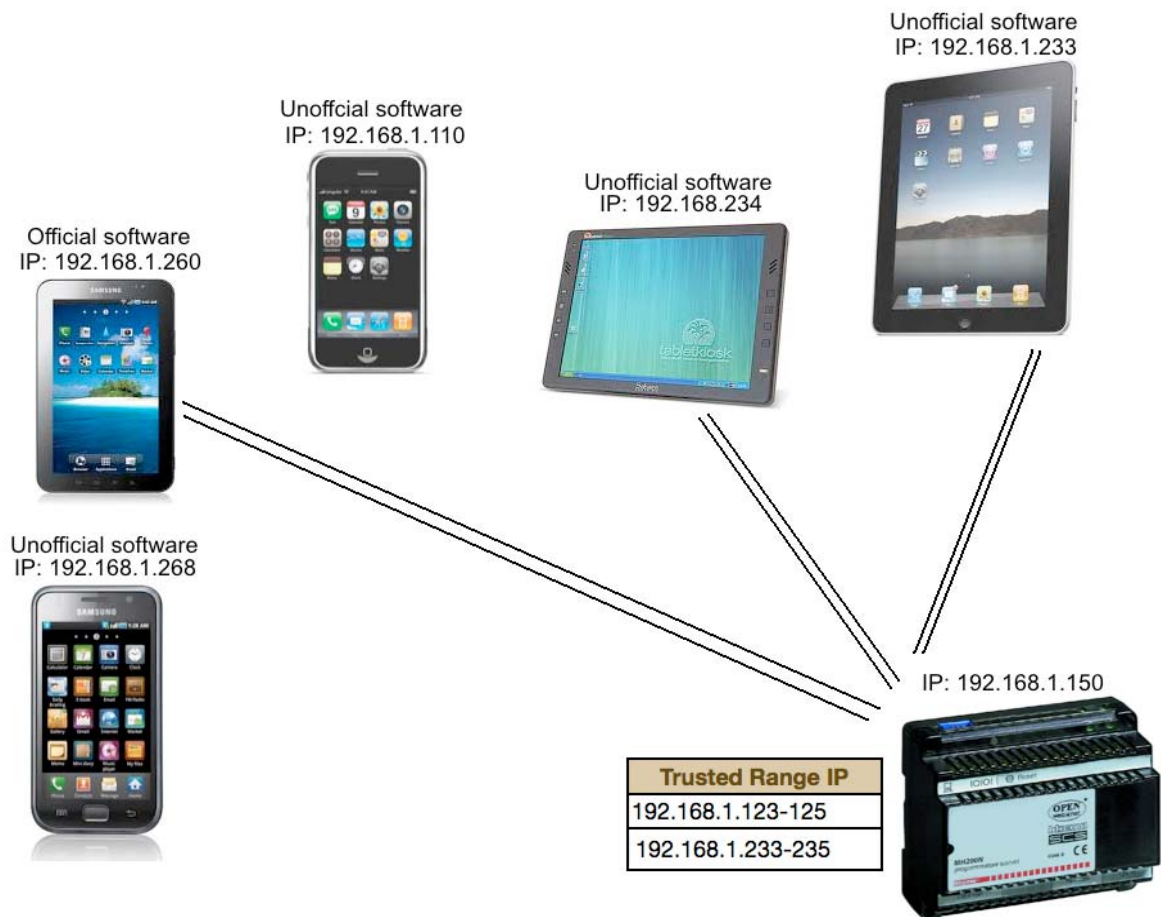


DESCRIPTION:

- The computer marked by IP: 192.168.1.233 can communicate with the gateway because it is in the Trusted Range IP while it is running an unofficial software.
- The computer marked by IP: 192.168.1.234 can communicate with the gateway because it is in the Trusted Range IP while it is running an unofficial software.
- The computer marked by IP: 192.168.1.127 can communicate with the gateway because it isn't in the Trusted Range IP but it is running an official software.
- The computer marked by IP: 192.168.1.229 can't communicate with the gateway because it isn't in the Trusted Range IP while it is running an unofficial software.

TABLET AND SMARTPHONE

This picture displays how tablets and smartphones can connect with a My Home gateway inside a LAN network.



DESCRIPTION:

- The tablet marked by IP: 192.168.1.233 can communicate with the gateway because it is in the Trusted Range IP while it is running an unofficial software.
- The tablet marked by IP: 192.168.1.234 can communicate with the gateway because it is in the Trusted Range IP while it is running an unofficial software.
- The smartphone marked by IP: 192.168.1.110 can't communicate with the gateway because it isn't in the Trusted Range IP while it is running an unofficial software.
- The tablet marked by IP: 192.168.1.260 can communicate with the gateway because it isn't in the Trusted Range IP but it is running an official software.
- The smartphone marked by IP: 192.168.1.268 can't communicate with the gateway because it isn't in the Trusted Range IP while it is running an unofficial software.

COMMUNICATION AMONG DEVICES CONNECTED BY LAN AND BY WAN

Thanks to this picture you can understand the communication stream through a Lan and a Wan network. Particularly the tablet and the smartphone are connected to a My Home gateway through a WAN network; on the other hand the other device through a LAN one. As you may notice in the trusted IP range there is a large number of IP addresses because when you are connected in a WAN network your phone carrier might give you, every time, a different IP address so to be sure that your device could communicate with a My Home gateway you have two choices:

- Open a large IP range
- Use a VPN connection.

OPEN A LARGE TRUSTED IP RANGE



DESCRIPTION:

- The PC marked by IP: 192.168.1.134 can communicate with the gateway because it is in the Trusted IP range while it is running an unofficial software.
- The smartphone marked 2.112.16.28 can communicate with the gateway, even if it is connected to a WAN network because its IP is inside the trusted IP range.

- The tablet marked 2.112.10.18 can't communicate with the gateway because its IP isn't inside the trusted IP range.

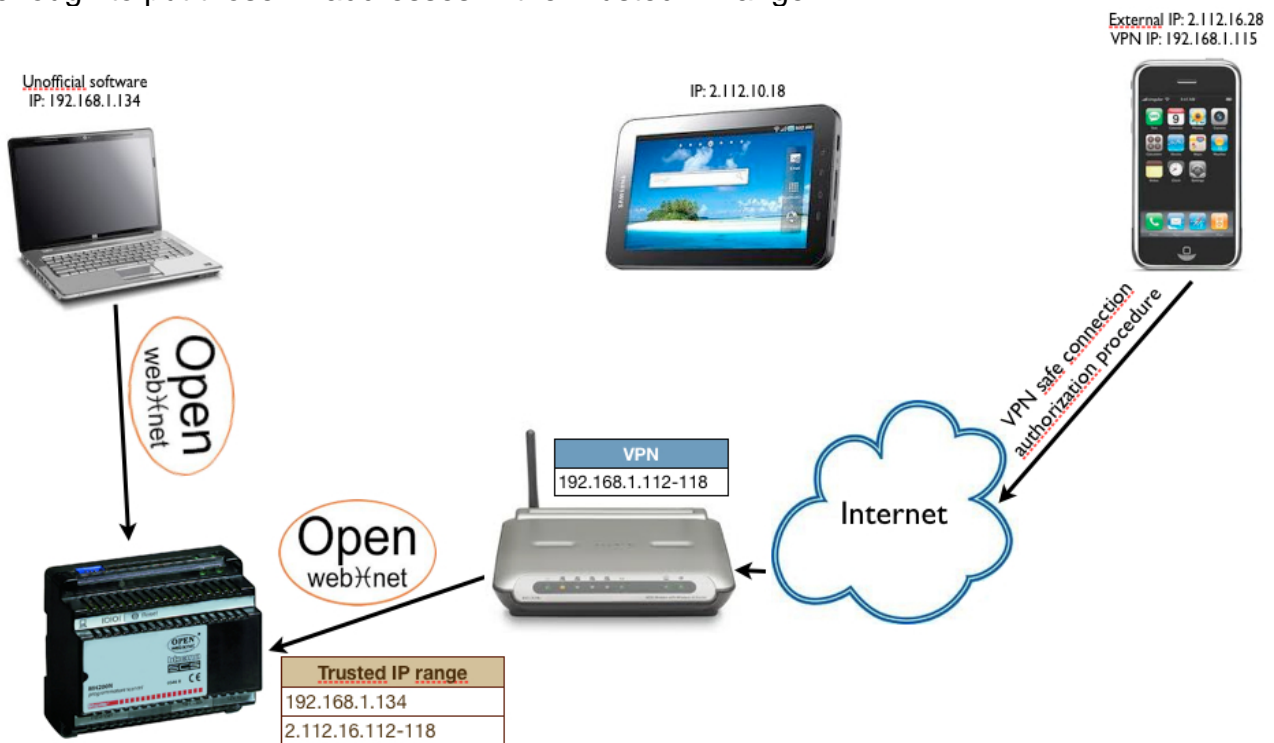
VPN CONNECTION

VPN networks allow users to exchange information and files in a safe way due to the authentication process.

When you use a Virtual Private Network your device seems to have two different IP addresses. One is the external address given by the phone carrier and the other is the address that the device acquires when it tries to connect to the router.

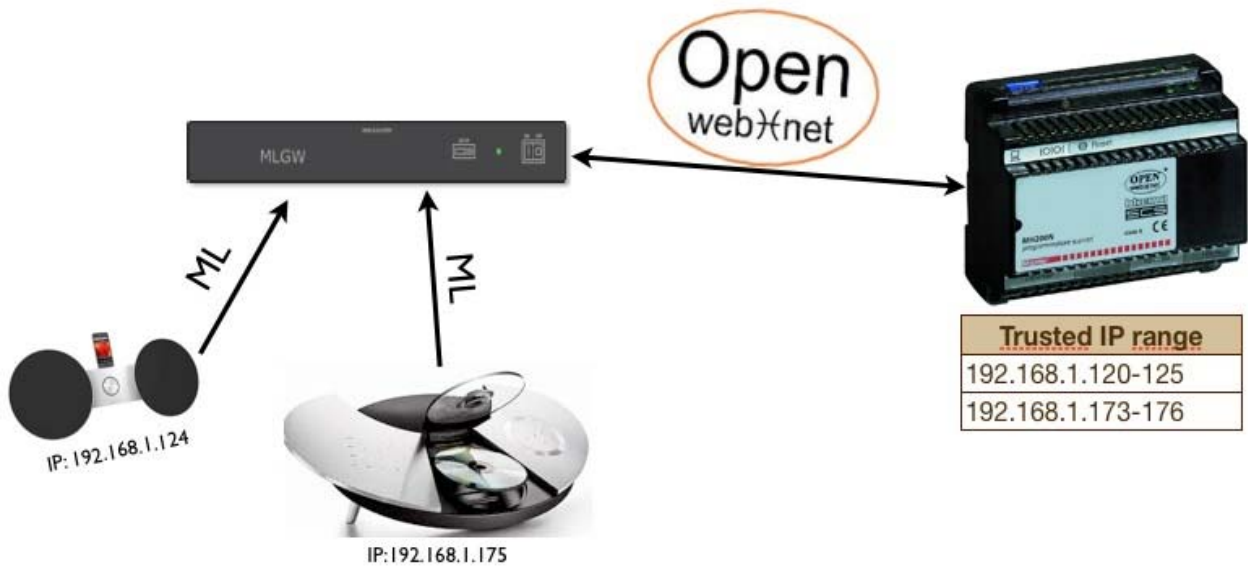
Inside the router you have to associate to each device a small IP range, in order to maintain security.

At this point My Home Gateway sees only the IP address given by the router so it is enough to put those IP addresses in the Trusted IP range.



COMMUNICATION WITH THIRD PART INTEGRATED SYSTEM

In this picture is presented a kind of communication between a My Home gateway and a third part gateway in order to let the two system live together. In particular is presented system integrating “Bang & Olufsen” functions and My Home.



DESCRIPTION:

- All the devices are connected to their gateway, speaking their language. The B&O gateway is able to communicate with a My Home one thanks to the Open Web Net Language and to its IP address which is held in My Home Web server Trusted IP range.

GATWAY INFORMATION

GATEWAYS THAT ALLOW THE FUNCTION

BTicino	Legrand	Version
MH200		2.1.2
MH200N	03565	All
F453AV	573992	All
F453		All
F452V		3.1.16
F452		3.1.16

GATEWAYS THAT ALLOW WEB PAGE SET UP

BTicino	Legrand	Version
MH200		No
MH200N	03565	All
F453AV	573992	2.1.7
F453		All
F452V		No
F452		No

IMPORTANT NOTE

- F452 – F452V – MH200N don't admit the web page configuration.
 - In case of wrong range configuration it is impossible to use the software through Ethernet.
 - You have to use the USB programming cable (3559) or the Serial one (335919).
- F453AV admits the web page configuration
 - In case of wrong range configuration you can use the USB cable (3559) or the Serial one (335919).
- It isn't possible to run Virtual Configurator on a PC while it is inside the trusted IP range.
- To be sure that your device in WAN can communicate with a My Home gateway, verify if the IP address that your phone carrier has given is configured in the trusted IP range.
- To always know your Modem Router IP address when you are outside from your LAN, it's suggested to use the service offered by Dynamic DNS: www.dyndns.org.