**Basic Configuration Guide using Web Interface for router TG585iv7** 

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#### Introduction

Users with a Windows Operating System on their PCs can use the configuration wizard that is installed by the ADSL Agent in order to configure both Internet access and their PCs. Advanced users or users who have other Operating Systems and don't have a similar tool for configuration can use all the features offered by the router in an very easy way.

WARNING: before using the tools that the manufacturer of this product offers directly to you and that are informed by Telefonica de España merely with informative purposes, we advise you that Telefonica de España doesn't offer any type of technical support on it.

The ST585iV7 gateway has its own web server from which the router can be completely configured and this will be the way showed in the following guidelines to describe the different configurations, but before, some concepts necessary to follow this document, will be introduced.

First of all, it is necessary to access to the initial web page of the router. The user must access to the <a href="http://192.168.1.1">http://192.168.1.1</a> page using any web explorer.

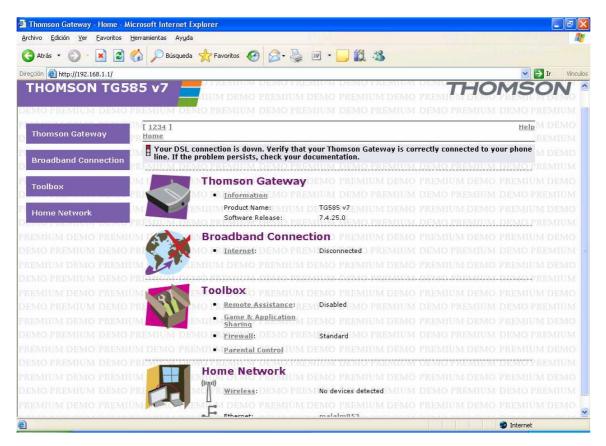
The user name and password will be needed. Fill in "1234" in the user field and "1234" for the password.



Once accepted, the Router welcome page will be shown.

In case the access to this web page is denied, please make sure your computer IP address belongs to the same sub network of the router (192.168.1.1 by default). Finally, you will be sure to know the router configuration, restoring default configuration.

Once the access to the router via web is established, following the steps described previously, you will see this page:



The links on the left allow the access to all the different configuration or information menus.

The ADSL access services of Telefónica have two options referring to the way your router or computer receives the IP address needed to access to the Internet:

The dynamic IP address (PPPoE) is the most common. By this way, the IP address will be assigned to your equipment at the connection moment, this means your device will be connected to the Internet with this assigned IP, but only when the connection is enabled. To make this connection, you will receive a user name and a password which will be used automatically by your device once set up.

The static IP address means that your equipment will be connected to the Internet through an IP address permanently assigned since the service hiring. This address would identify your equipment in the Internet. Moreover, to complete the configuration another value called subnet mask is needed and its format is identical to the IP address, this means, four numbers separated by one point. In this case you should receive a letter with the configuration parameters (user and management IP address and subnet mask)

On the other hand, regarding the way your local equipments (computer) connect or/and share the Internet connection, two configurations ways are possible:

The "multipuesto" mode allows you to create a local network with different equipment and allows you also an Internet access from every equipment. This implies the NAT use (Network Address Translation) which changes the private IP address of your network equipments, by a unique public IP address valid in the Internet. An additional advantage is that this configuration increase the security on you local network since the local addresses cannot be seen in the Internet.

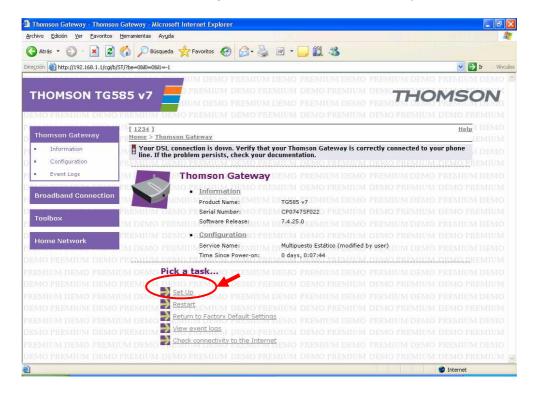
The "monopuesto" mode allows you to connect simultaneously one computer to the Internet. The advantage of this configuration is that your computer is another node in the Internet network, and has access to the Internet without any restriction. That allows the correct operation of any application. The disadvantage is that your computer is vulnerable to the external attacks and for this reason it's recommendable the use of protection programs like firewall.

We can talk about four combinations. The detailed configuration through the router web interface for these four options, is explained on the following sections:

# Configuration "multipuesto dinámica".

The initial configuration of router TG585iv7 is "multipuesto dinámica", so you don't need to modify anything for starting to use the router. However, you can configure it manually following next steps:

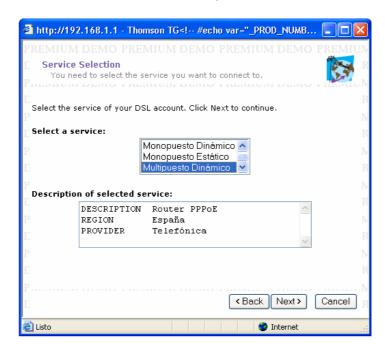
· Click on "Thomson Gateway" and after it click on "Set up"



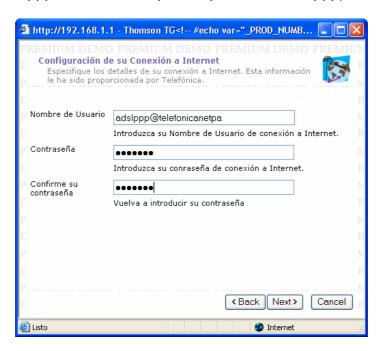
 Now the "Thomson Gateway Easy Setup" wizard starts. Then click on "Next".



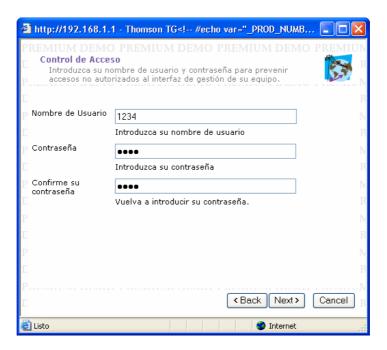
On this screen, select the service "Multipuesto Dinámico" and click "Next":



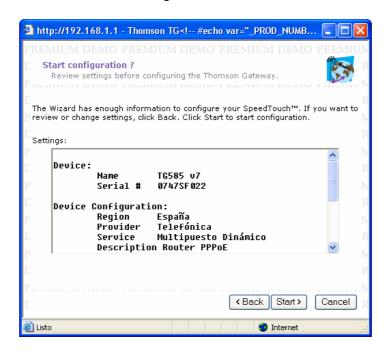
• After it, introduce the internet account settings provided by Telefónica (user name: adslppp@telefonicanetpa and password: adslppp) and click "Next".



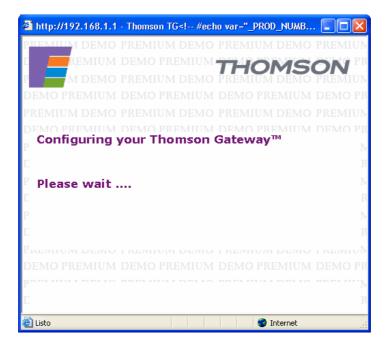
 On next screen you need to introduce user name (1234) and password (1234) for accessing to the router. Then, click "Next".

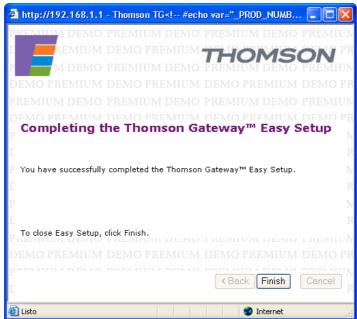


Now click "Start" and the configuration of the router will start.



 After several seconds the router configuration process ends. Then, click "Finish".

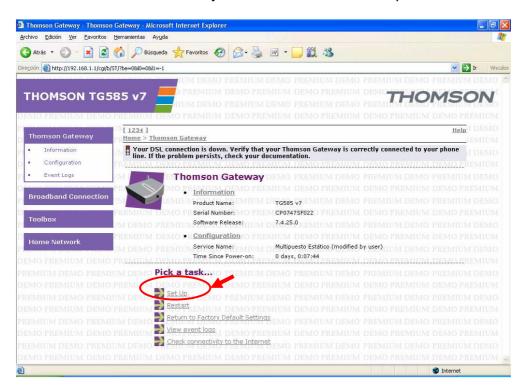




# Configuration "multipuesto estática"

In order to setup the "multipuesto estática" configuration, you need to follow the next steps:

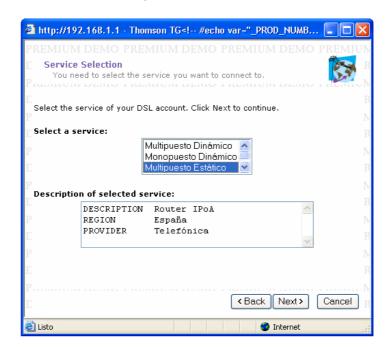
• Click on "Thomson Gateway" and then click on "Set up"



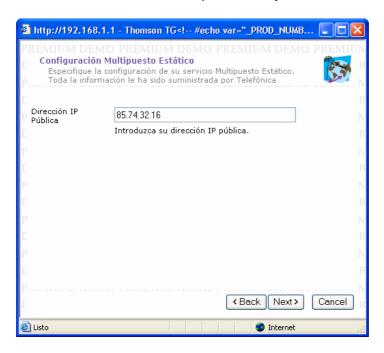
 Now the "Thomson Gateway Easy Setup" wizard starts. Then click on "Next".



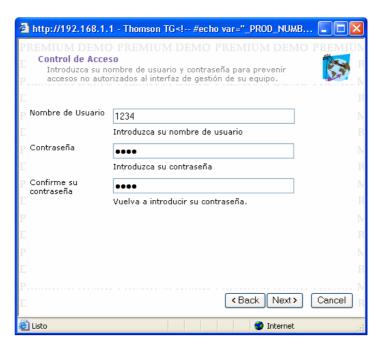
Now select the service "Multipuesto Estático":



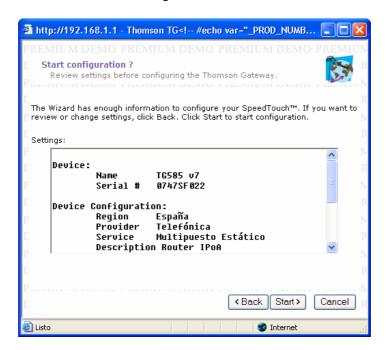
• Now introduce the static IP address provided by Telefónica:



 On next screen you need to introduce user name (1234) and password (1234) for accessing to the router. Then, click "Next".



• Now click "Start" and the configuration of the router will start:



 After several seconds the router configuration process ends. Then, click "Finish:

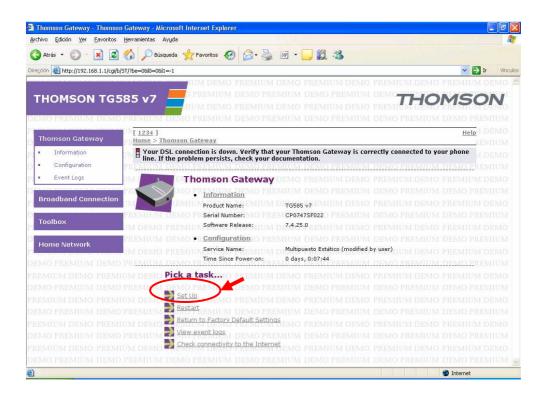




# Configuration "monopuesto estática"

In order to setup the "monopuesto estática" configuration, you need to follow the next steps:

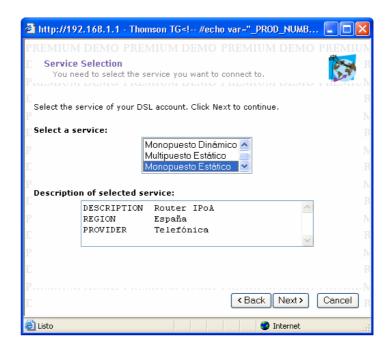
• Click on "Thomson Gateway" and then click on "Set up"



 Now the "Thomson Gateway Easy Setup" wizard starts. Then click on "Next".



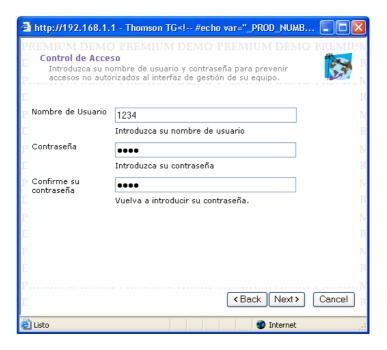
Now select the service "Monopuesto Estático":



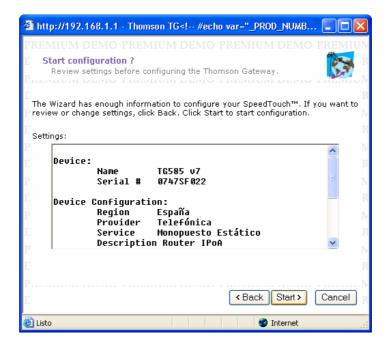
• Now introduce the static IP address provided by Telefónica:



 On next screen you need to introduce user name (1234) and password (1234) for accessing to the router. Then, click "Next".

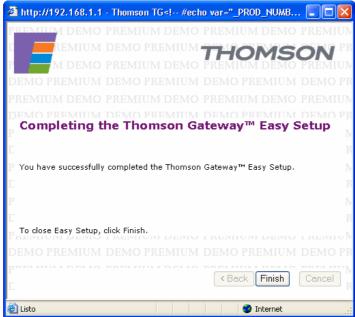


• Now click "Start" and the configuration of the router will start:



 After several seconds the router configuration process ends. Then, click "Finish:

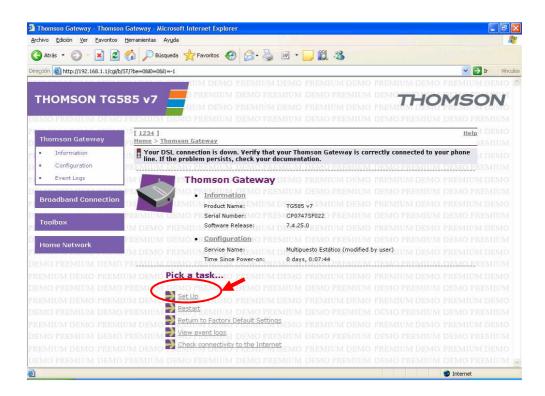




# Configuration "monopuesto dinámica"

In order to setup the "monopuesto dinámico" configuration, you need to follow the next steps:

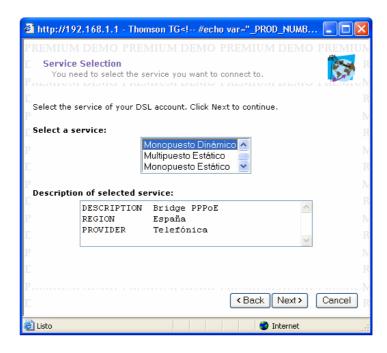
• Click on "Thomson Gateway" and then click on "Set up"



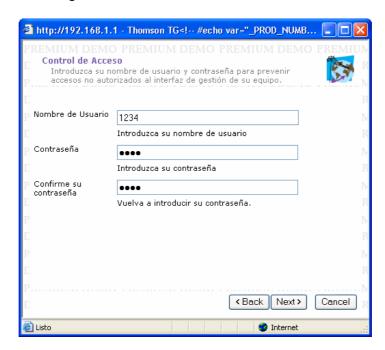
 Now the "Thomson Gateway Easy Setup" wizard starts. Then click on "Next".



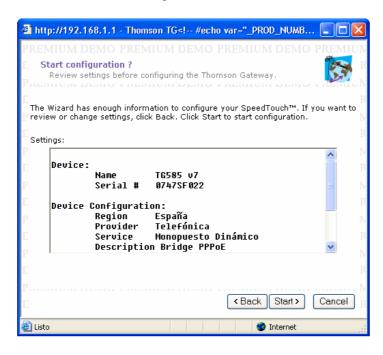
Now select the service "Monopuesto Dinámico":



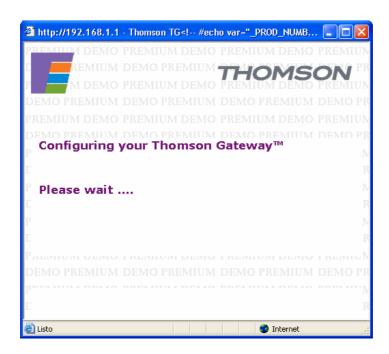
• On next screen you need to introduce user name (1234) and password (1234) for accessing to the router. Then, click "Next".

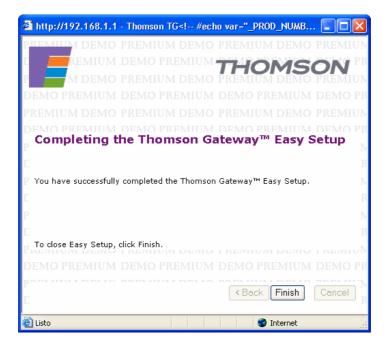


Now click "Start" and the configuration of the router will start:



 After several seconds the router configuration process ends. Then, click "Finish:



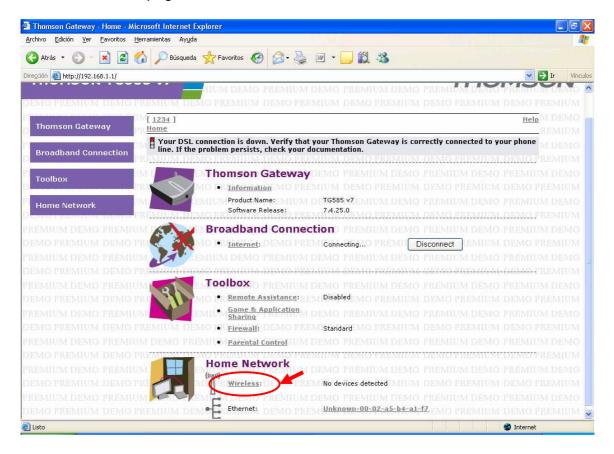


# Wireless configuration

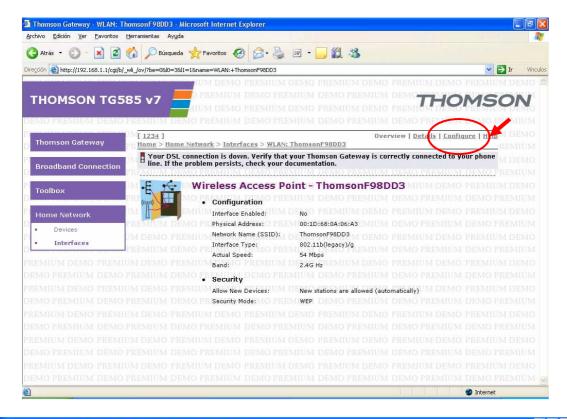
#### Enabling the wireless interface

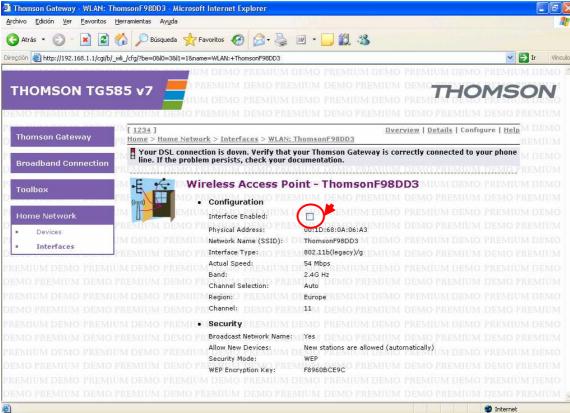
For enabling the wireless interface you need to follow the next steps:

• At the start page, at "Home Network" section, click on "Wireless":



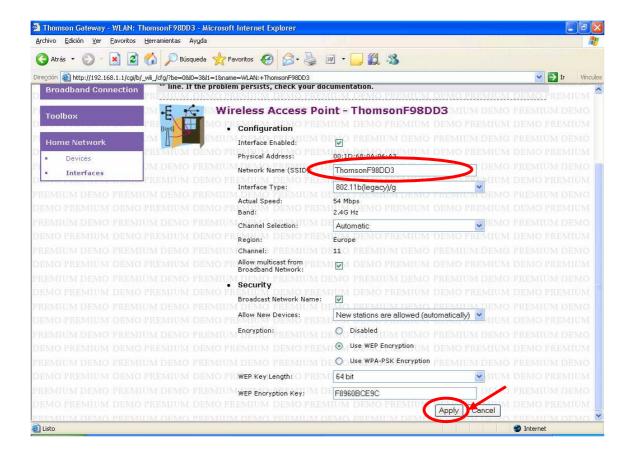
 Now click on "Configure". Then, on next screen please select the "Interface Enabled" checkbox (perhaps it is already enabled):





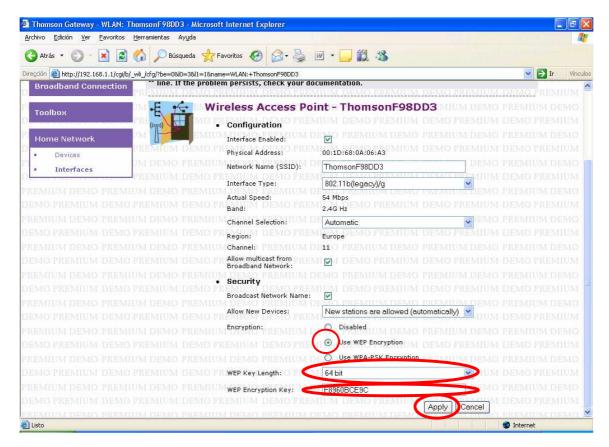
#### SSID Modification

 Before doing this, please check that the wireless interface is already enabled by following the previous chapter (*Wireless interface activation*).
 Once you have done it, the following window will appear. Now introduce the new SSID in the "Network Name (SSID)" field and click "Apply".



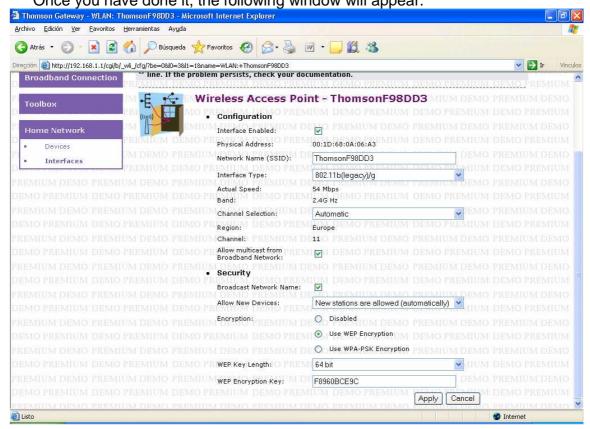
#### WEP encryption key modification

• Before doing this, please check that the wireless interface is already enabled by following the previous chapter (*Wireless interface activation*). Once you have done it, the following window will appear. Now select "Use WEP Encryption" and choose the "WEP Key Length" (64 ó 128 bits) in this field. Then, introduce the new WEP key in "WEP Encryption Key" field and click "Apply" for saving the changes.

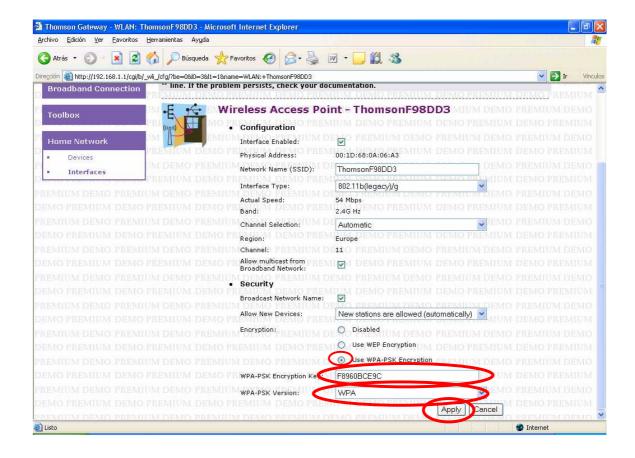


#### WPA-PSK encryption key modification

 Before doing this, please check that the wireless interface is already enabled by following the previous chapter (*Wireless interface activation*).
 Once you have done it, the following window will appear.



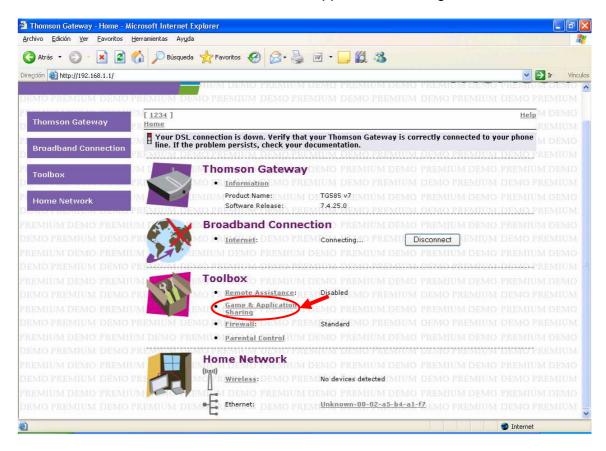
- Now select "Use WPA-PSK Encryption". Then, choose the WPA-PSK version (WPA, WPA2 or WPA+WPA2).
- Finally, introduce the new WPA-PSK key in "WPA-PSK Encryption Key" field and click "Apply" for saving the changes done.



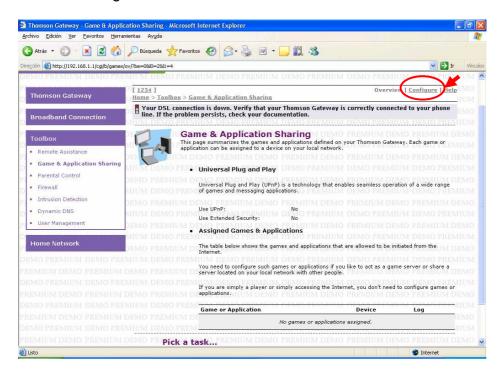
# **Ports configuration**

For modifying ports configuration, you need follow the next steps:

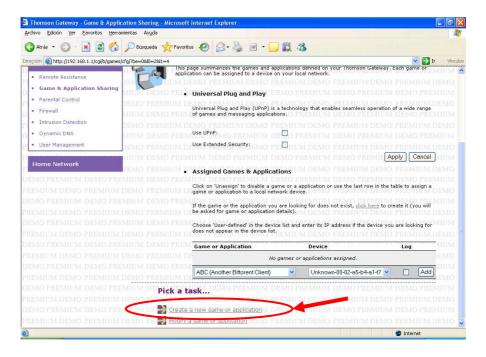
At "Toolbox" section, click on "Game & Application Sharing"



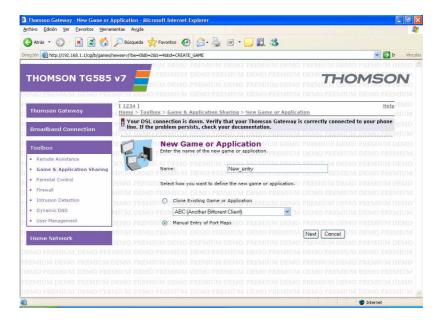
Now click "Configure":



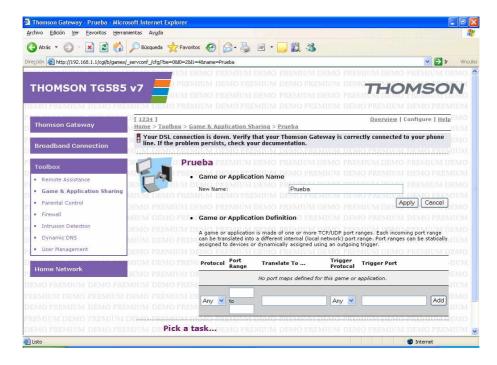
- If the application you want to map doesn't appear on the menu, you will need to proceed as follows:
  - Click "Create a new game or application"



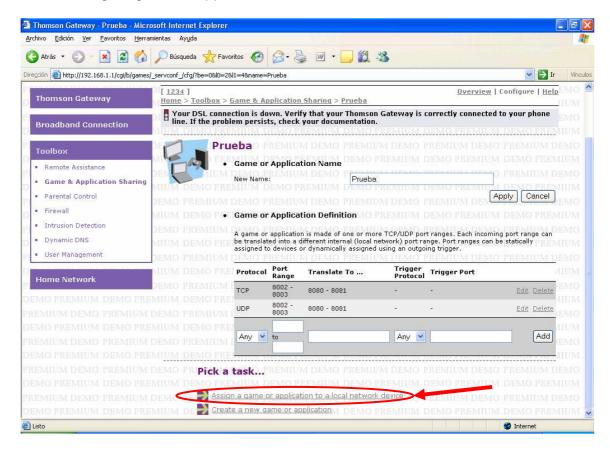
 Introduce the name of the application you want to map into the "Name" field. Then, select "Manual Entry of Port Maps" and click "Next":



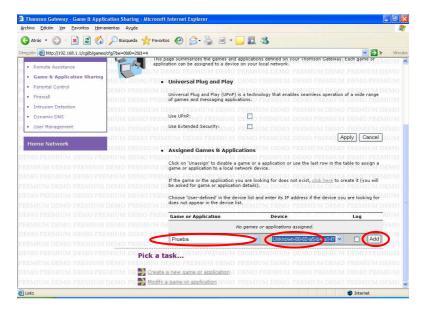
 Select the "Protocol", then indicate port/port range you want to open ("Port Range") and click "Add" (leave the rest of fields empty).



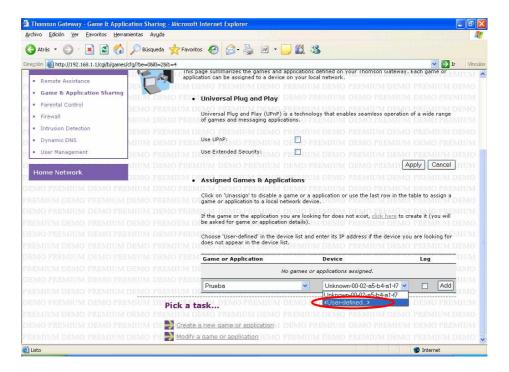
 Once all the previous steps have been done, the new application is created and available in the applications list. Then you will be able to continue with the normal process about ports configuration clicking on "Assign a game or application to a local network device":



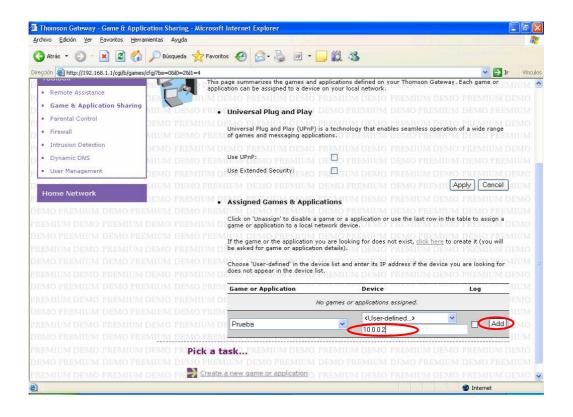
 After it, select the desired application in the first menu, and in the second menú select the PC you want to open the ports for. Finally, click "Add":



 In case the desired PC doesn't appear in the menu or you want to introduce the PC's IP address directly, select the "<User-defined>" option as showed below:



• Introduce the PC's IP address and click "Add", as follows:



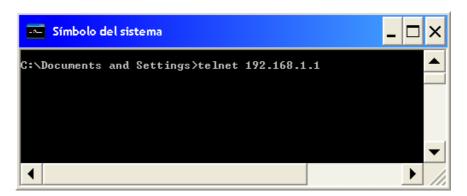
# **Firmware Upgrade**

**Warning:** The firmware upgrade shouldn't be done unless it is strictly necessary. Please do not disconnect or switch off the gateway during the upgrading process because this could generate problems and make your gateway unusable.

**Warning:** To proceed with the firmware upgrade it is necessary to have installed and running a HTTP Server on your PC. The file containing the new firmware must be added to the root folder of the server.

Please follow the instructions below to proceed with the firmware upgrade:

1. Do a telnet from MS-DOS to the gateway IP address (default IP address is 192.168.1.1)



2. Introduce username and password (user configured by default is "1234" and password by default is "1234")

Username : 1234 Password : \*\*\*\*

- 3. Enter the command "software download url <URL\_SERV-HTTP> filetype firmware filesize < FIRM-SIZE>", where:
  - <URL\_SERV-HTTP> is the HTTP URL where the file is to be found including remote filename.
  - < FIRM-SIZE> is the exact size (shown in the web server) of the file to be downloaded

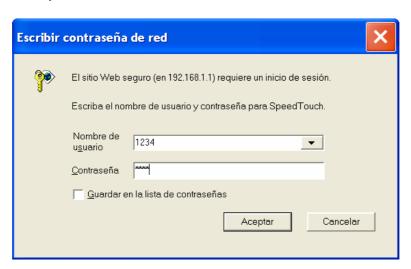
#### Example:

{1234}=> software download url http://192.168.1.33:8080/CANTP07.432 filetype firmware filesize 2839295

- 4. The transmission progress would be shown in the HTTP Server in your PC. Moreover, when the file would be completely downloaded, the following message will be shown in the command line interface of your gateway:
  - [CLI] Reboot to load new software
- 5. Once the previous message is shown ("[CLI] Reboot to load new software"), it is necessary to switch off and then on the gateway so it will load the new downloaded firmware.
- 6. Finally, it is possible to check that the firmware upgrade has been done correctly accessing to the graphical user interface of the gateway following the steps below:

First of all, it is necessary to access to the initial web page of the router. The user must access to the <a href="http://192.168.1.1">http://192.168.1.1</a> page using any web explorer.

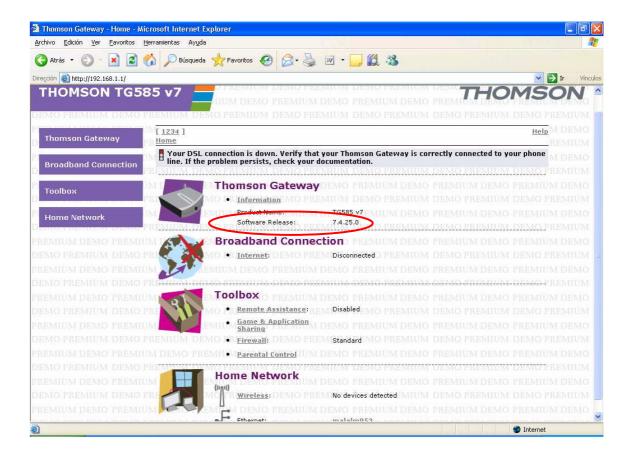
The user name and password will be needed. Fill in "1234" in the user field and "1234" for the password.



Once accepted, the Router welcome page will be shown.

In case the access to this web page is denied, please make sure your computer IP address belongs to the same sub network of the router (192.168.1.1 by default). Finally, you will be sure to know the router configuration, restoring default configuration.

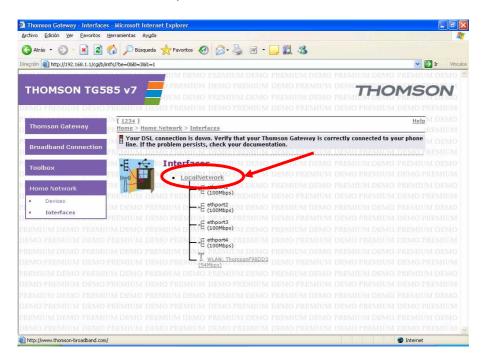
Once the access to the router via web is established, following the steps described previously, you will be able to check the firmware version (Software release) as show on the following picture:



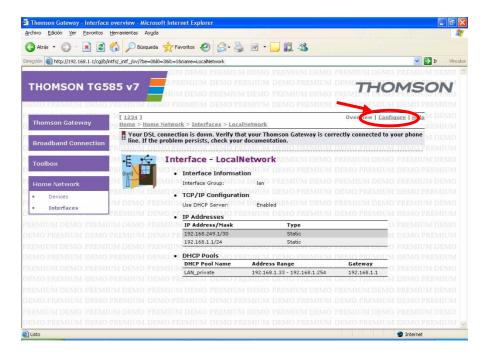
#### **APENDIX**

### DHCP server configuration.

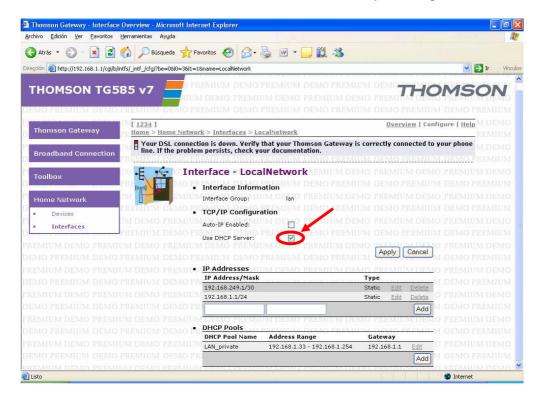
In "Home Network" section, click "Interfaces" and then click "LocalNetwork":



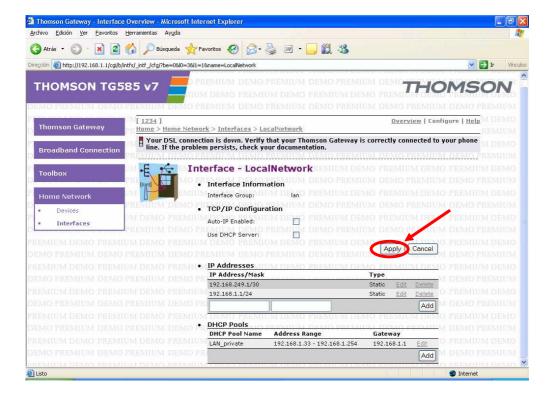
• Then, click "Configure" as follows:

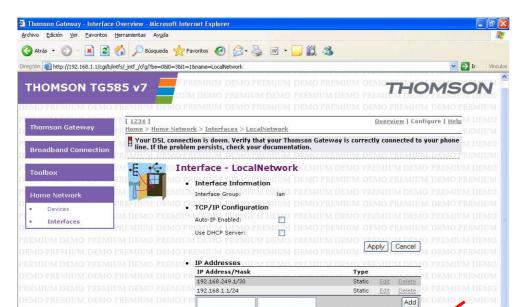


After it, disable the "Use DHCP Server" checkbox by clicking on it:



• Then, click on "Apply":





Now, at the bottom of the page, click "Edit" from the "DHCP Pools" section:

Now you need to introduce the following data:

DHCP Pools

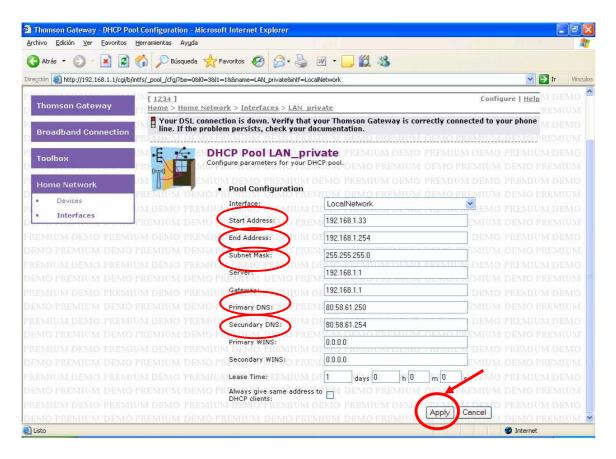
DHCP Pool Name

 The first IP address of the subnet for the DHCP pool range in "Start Address".

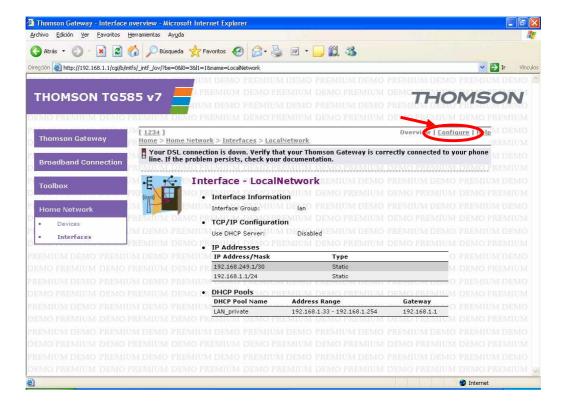
Address Range

Gateway

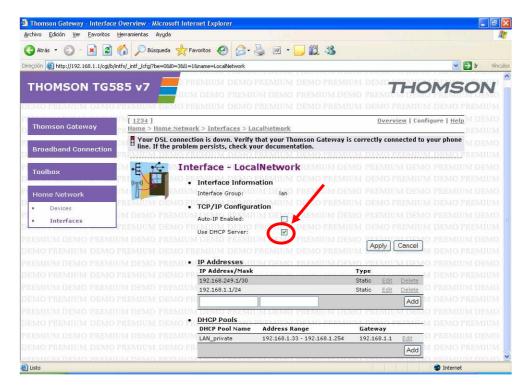
- The last IP address of the subnet for the DHCP pool range in "End Address".
- The subnet mask.
   The primary DNS server and secondary DNS Server IP addresses.
   These IP addresses are provided by Telefónica
- Once you have introduced all the required information, click "Apply" for saving the changes:



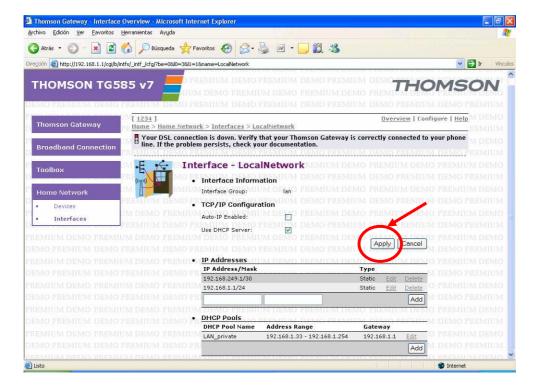
• Now come back to the DHCP configuration menu by clicking "Configure":



 And then, in order to activate the DHCP Server, select the "Use DHCP Server" checkbox by clicking on it:

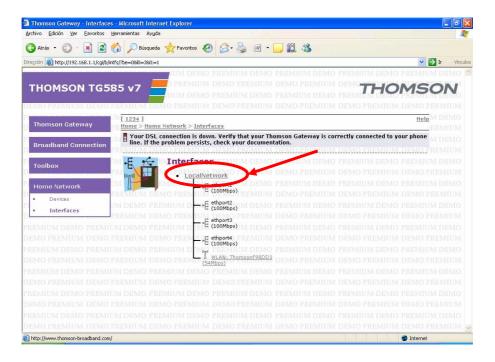


· Finally, save the new DHCP server configuration by clicking "Apply":

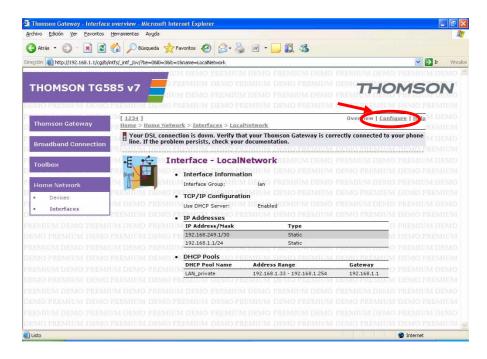


#### **DHCP Server disabling**

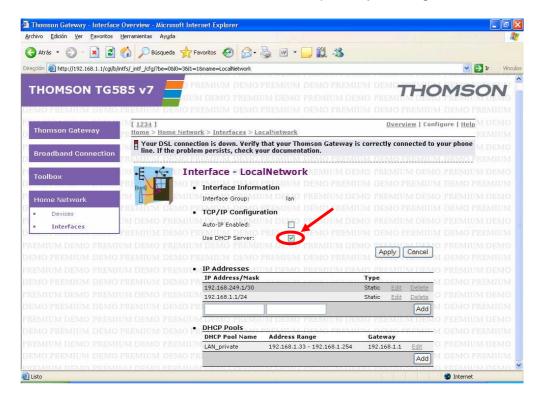
 For disabling the DHCP server, in "Home Network" section, click "Interfaces" and then click "LocalNetwork":



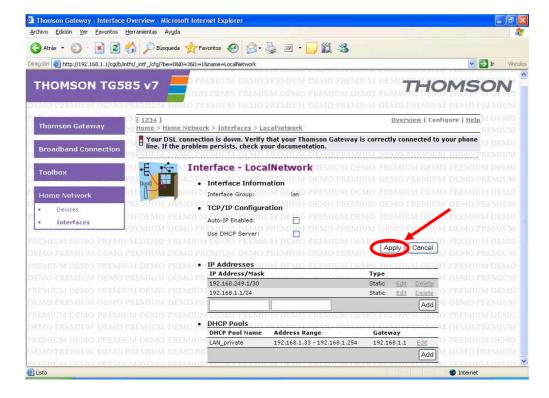
• Then, click "Configure" as follows



After this, disable the "Use DHCP Server" option by clicking on it:



Now save the configuration by clicking on "Apply":



# Calculating the Gateway IP from the public IP address and mask provided by Telefónica:

First convert both the public IP address and mask into binary. Then do the "AND" logical operation between both values, and add "1" to the result ("OR" logical operation). After it, convert the final result into decimal:

(IP AND MASK) OR 1

AND / OR table:

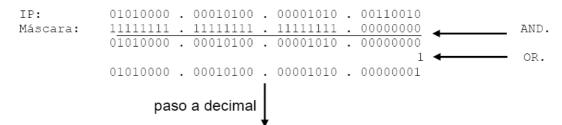
AND	0	1	OR	0	1
0	0	0	0	0	1
1	0	1	1	1	1

#### Example:

IP: 80.20.10.50

Netmask: 255.255.255.0

We convert these values into binary and do the "AND" logical operation. Then, add "1" and convert the result into decimal, as follows:



Dirección IP del Gateway: 80.20.10.1