

GG863-SR Getting Started User Guide

1vv0300884 Rev.0 – 07/09/2010



This document is related to the following product :

Short Range to GSM | GPRS Gateways

Terminal

GG863-SR

Gateway



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CHAPTER I.

INTRODUCTION

I.1. Aim of the Document

The goal of this document is to show the customers how to start-up the Demo on the GG863-SR describing all the necessary hardware, installation procedures and configuration of both GG863-SR and PC.

I.2. Reference documents

[1] GG863-SR Software User Guide	1vv0300836
[2] GG863-SR Product Description	80322ST10058
[3] GG863-SR Hardware User Guide	1vv0300835
[4] GE863-PRO ³ Linux SW User Guide	1vv0300781

I.3. Document change log

Revision	Date	Changes
ISSUE # 0	07/09/10	First Release



CHAPTER II. LOCAL CONNECTION GG863-SR<->IP HOST

II.1. Introduction

In this chapter is described how to start the demo application in case of the local connection between PC and GG863-SR. PC hosting Demo Application should be connect to the GG863-SR through the USB connection.

II.2. Gateway Configuration for Local Connection

Before starting make sure that Linux USB Ethernet/RNDIS Gadget (necessary to recognize the GG863-SR) is installed (more details can be found in [1] paragraph 2.4.5).

Follow the Configuration Gateway phase to set the parameters needed to connect the IP Host to the **GG863-SR**.

- Turn on the **GG863-SR** and wait 20 seconds for the system to boot
- Connect the **GG863-SR** to a local PC (see [1] paragraph 2.4.5)
- In the local PC connected to the **GG863-SR** type the address:

<http://192.168.121.3/cgi-bin/index.cgi>

where 192.168.121.3 is one of the IP addresses of the **GG863-SR**.

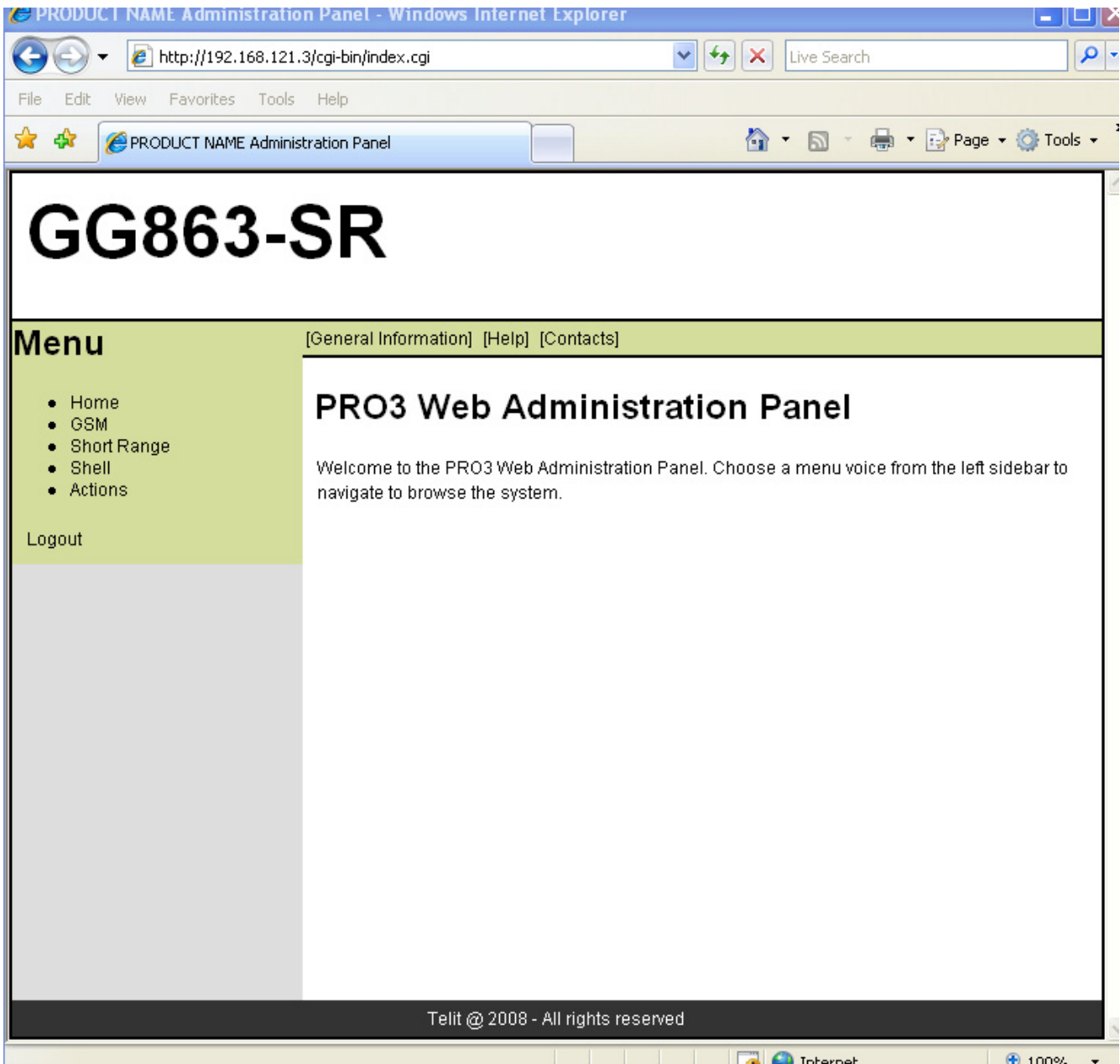
Note1: IP address 192.168.121.3 (defined in [1]) can also be changed (see [4])

Note2: Although the connection will be established only local it is necessary to insert the SIM card in the GG863 to make it work correctly. Before inserting the SIM card in GG863 make sure that PIN is deactivated.



You can see the Home Page of the Web Administration Panel (allows to configure parameters of the server-IP host that will be used by Auto Application to establish the connection such as IP address of the PC host, port, connection type; in the Web panel we can also decide if Auto Application should start automatically or not at the next reboot of GG863):





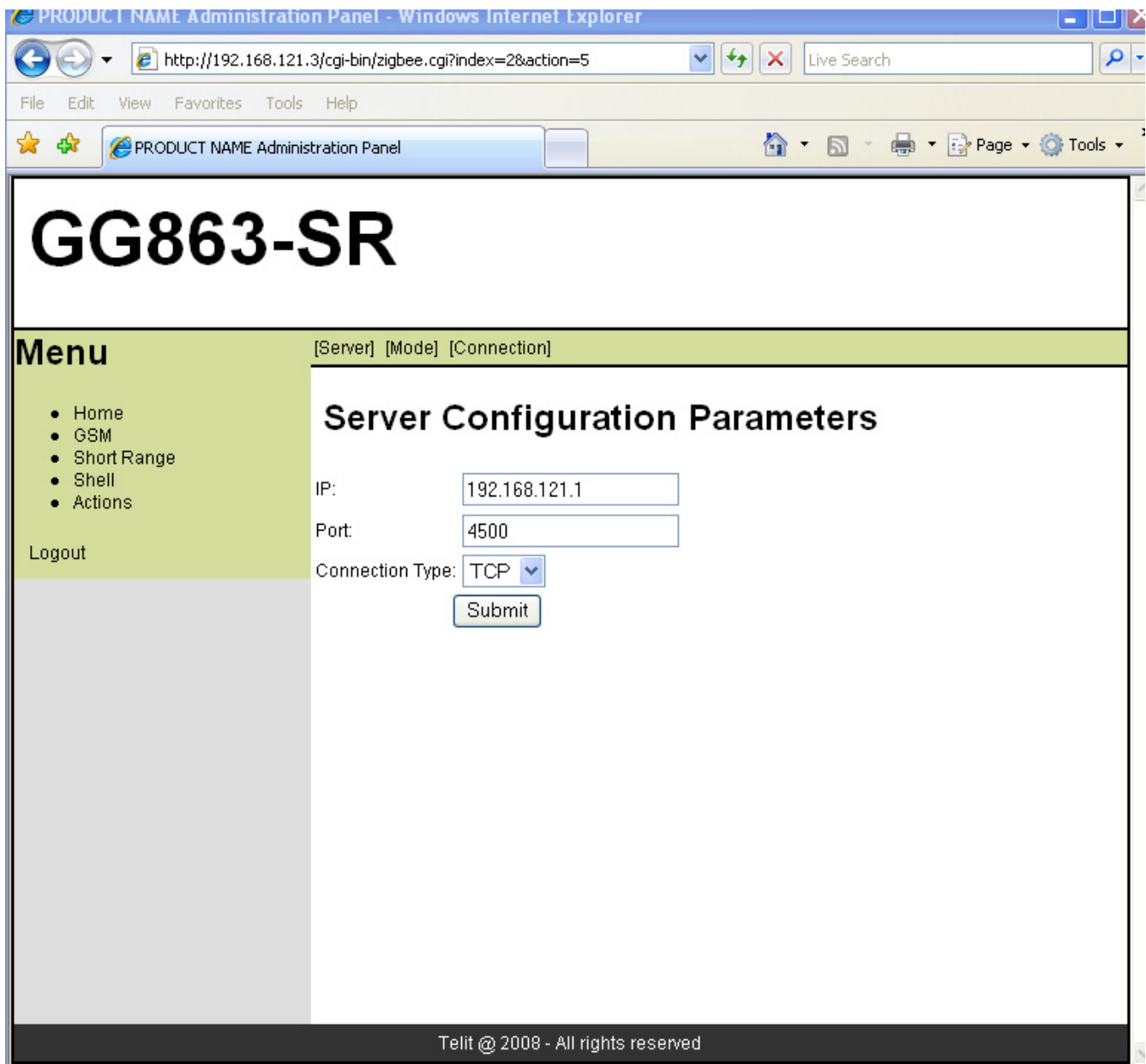
1. Set the IP Host parameters:

1. Click on *Short Range*
2. Click on [Server]

Fill the form in the following way:



- IP Host address: **192.168.121.1**
- Port: **4500**
- Connection Type: **TCP**

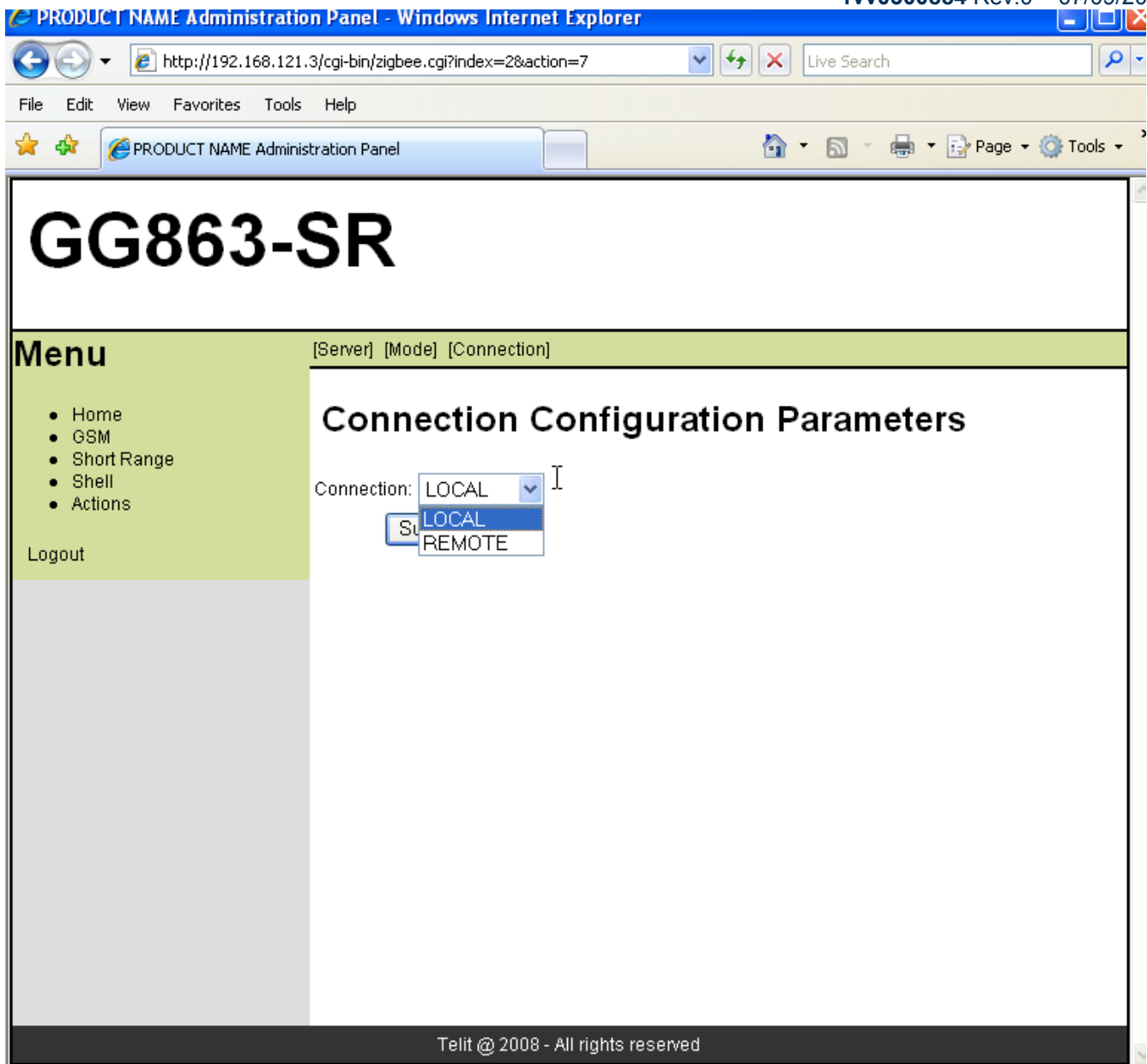


Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

2. Click on [Connection]
- Connection: **LOCAL**



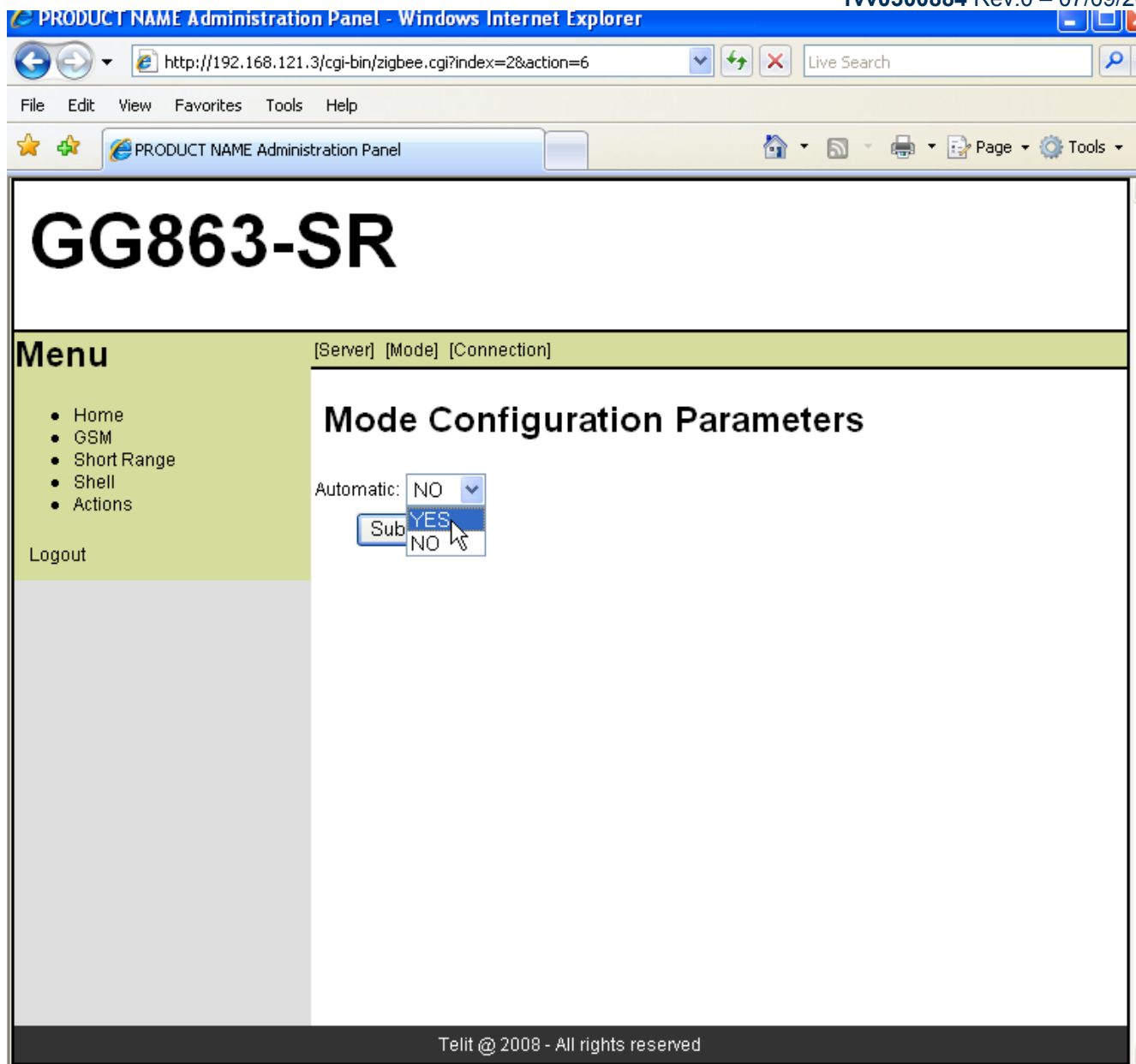


Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

3. Click on [Mode]
 - Automatic: **YES**





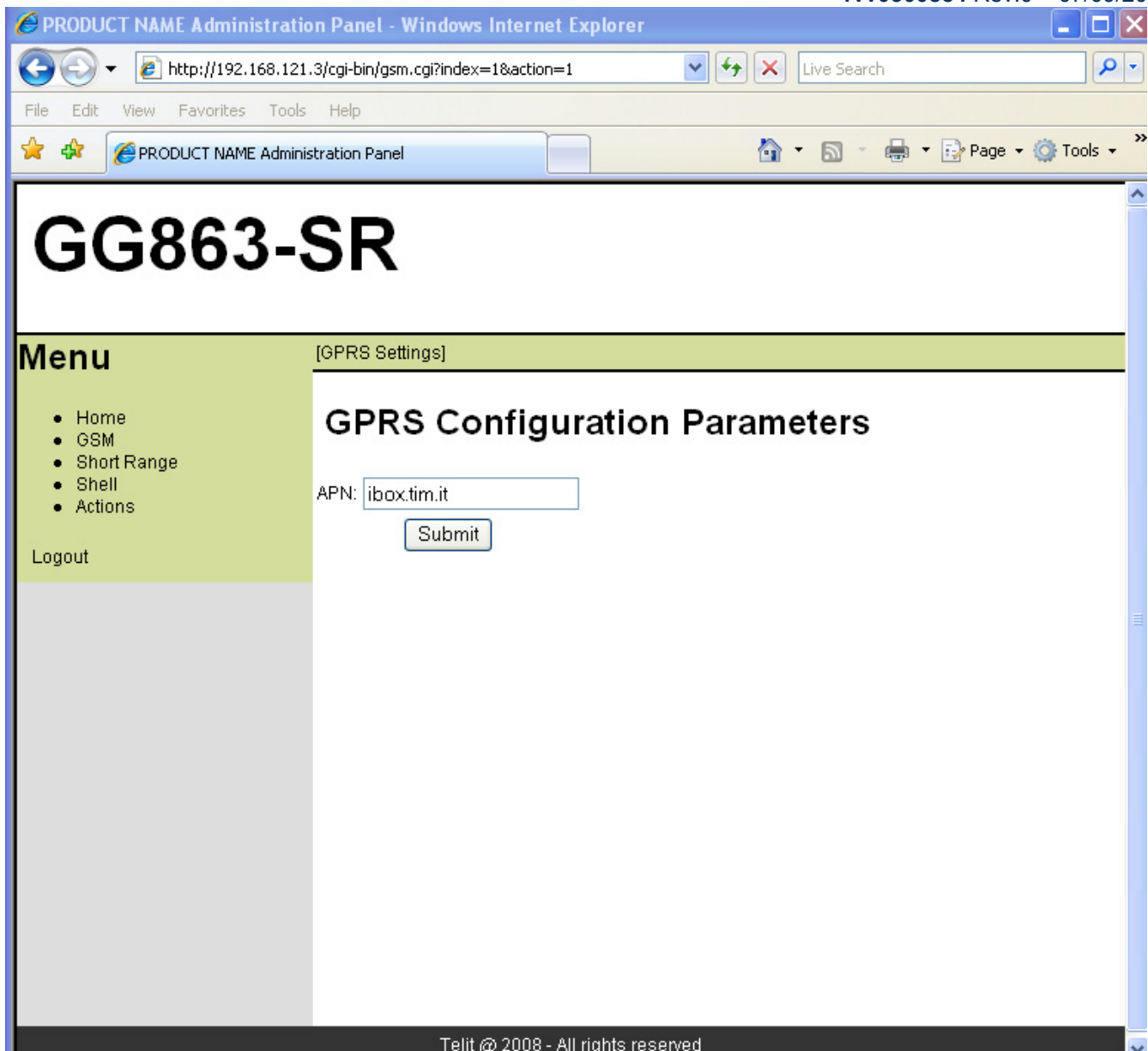
Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

4. Click on GSM:
 - Click on [GPRS Settings]

Fill the form with APN:



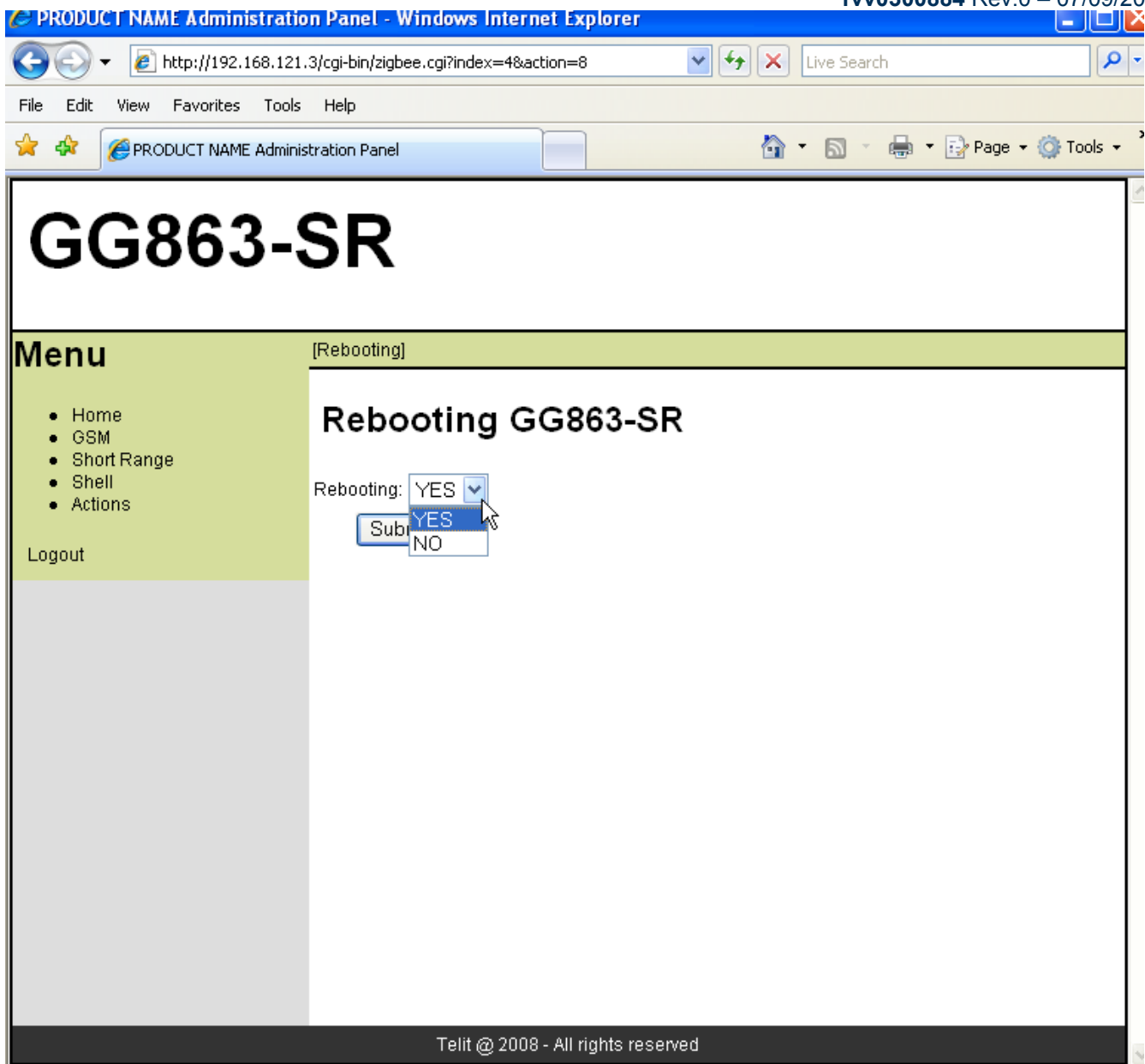


Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

5. Click on Actions:
 - Click on [Rebooting]
 - Rebooting: **YES**





Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

- Unplug the USB cable from the PC
- Wait 30 seconds
- plug the USB cable into the local PC

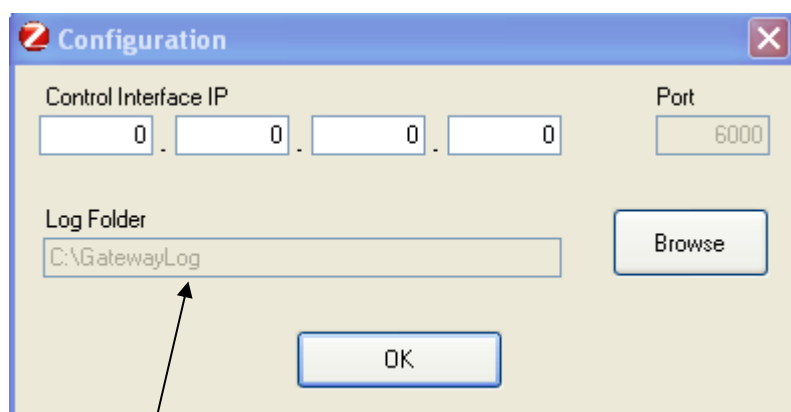


II.3. IP Host Demo

IP host will connect to GG863-SR through IP gateway application. In order to establish the local connection (PC+GG863 over USB) the following info are necessary:

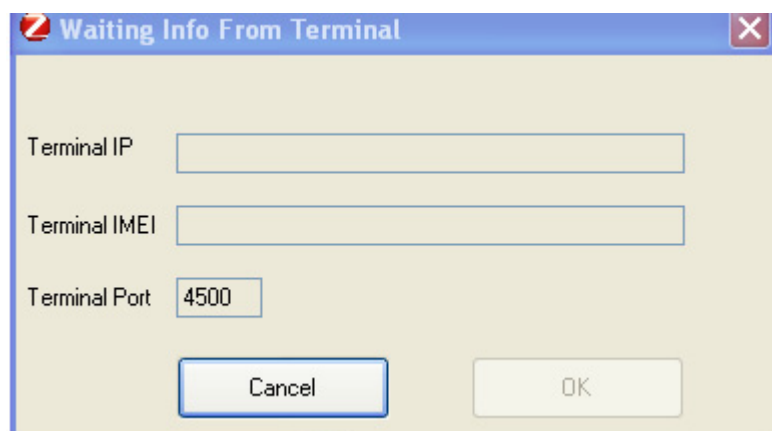
- Install SRGatewayDemo.exe: used to communicate with IP Gateway application on GG863 (detailed explanation how to use it can be found in [1] paragraphs 2.5.2 and 7.3). Some of the commands that can be executed on the demo are: start/stop network, node discovery, switch to command/data mode or send any command. It is only example/demo of what client can do from IP host PC.

After the previous USB plugging run the SRGatewayDemo.exe on the PC:

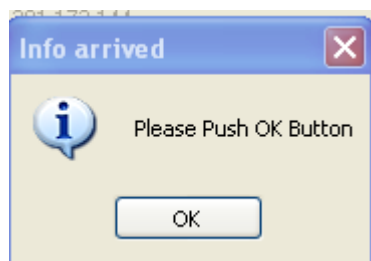


Choose the folder where to store the logs
Click **OK**

- Clicking **Ok**, the IP Host waits for **GG863-SR** IP address and IMEI



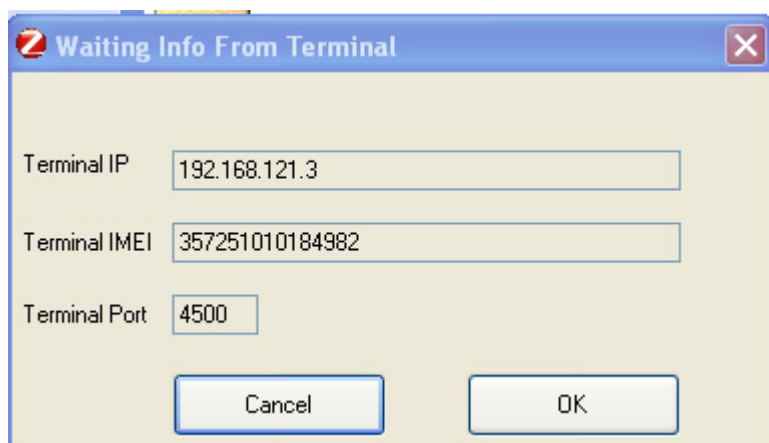
- When appears the following pop-up it means the connection between **GG863-SR** and SRGatewayDemo is established.



Click **Ok**

- Now you can see the information received from **GG863-SR**:

For example:



At this point the PC Demo is communicating with the IP Gateway Application running inside the **GG863-SR**. Click **OK**.

Detailed explanation how to use it can be found in [1] paragraph 2.5.2



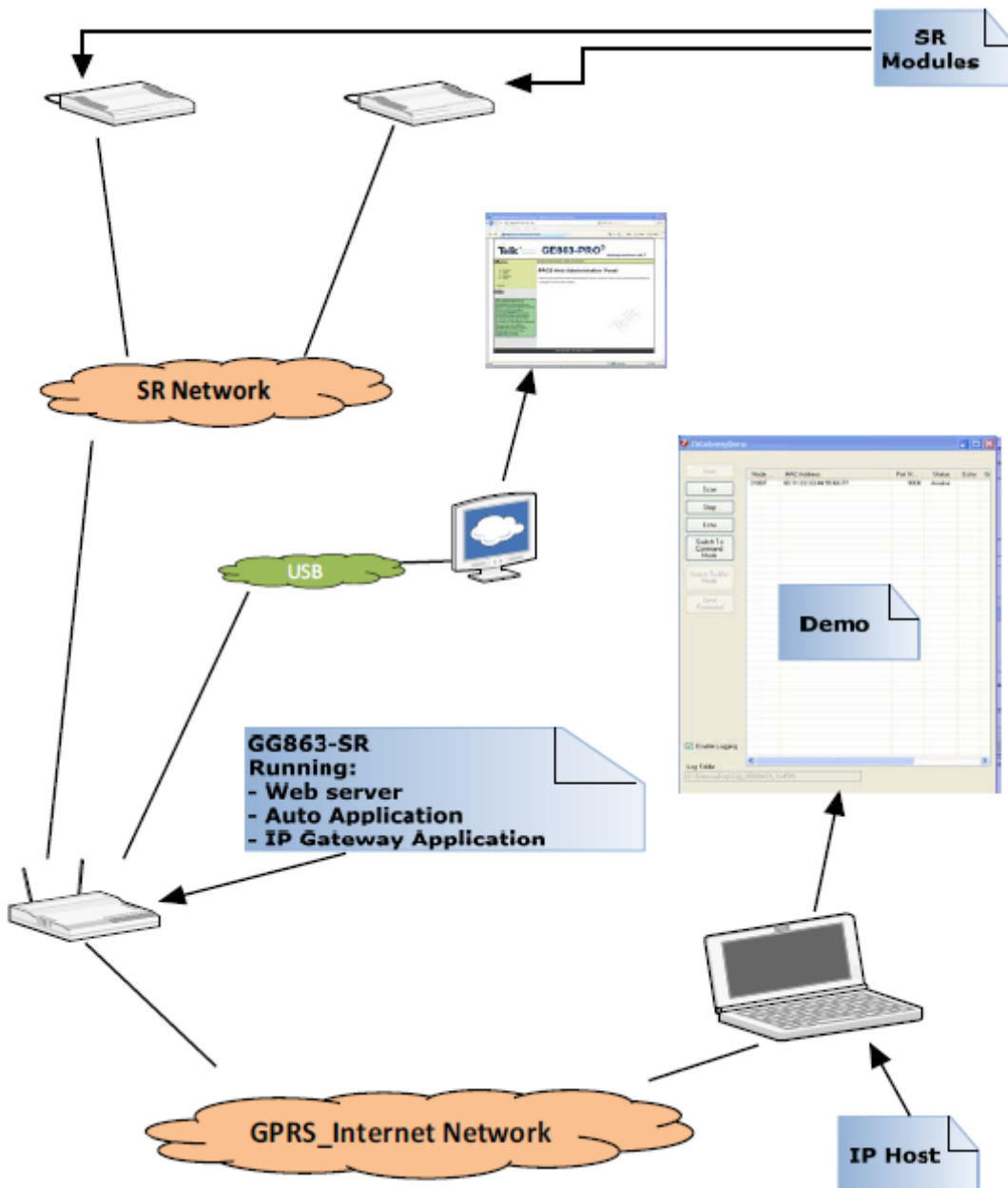
CHAPTER III. REMOTE CONNECTION GG863-SR <-> IP HOST

III.1. Introduction

In this chapter is described how to start the demo application in case of the remote connection between PC and GG863-SR. PC hosting Demo Application will be connect to the GG863-SR through the GPRS connection.



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III.2. Gateway Configuration for Remote Connection

Before starting make sure that Linux USB Ethernet/RNDIS Gadget (necessary to recognize the GG863-SR) is installed (more details can be found in [1] paragraph 2.4.5). It is not require installing it on the IP host PC that will connect remotely with GG863, only on the PC connected locally to the GG863-SR.

Follow the Configuration Gateway phase to set the parameters needed to connect the IP Host to the **GG863-SR**.

- Turn on the **GG863-SR** and wait 20 seconds for the system to boot
- Connect the **GG863-SR** to a local PC (see 2.4.5 paragraph)
- In the local PC connected to the **GG863-SR** type the address:

<http://192.168.121.3/cgi-bin/index.cgi>

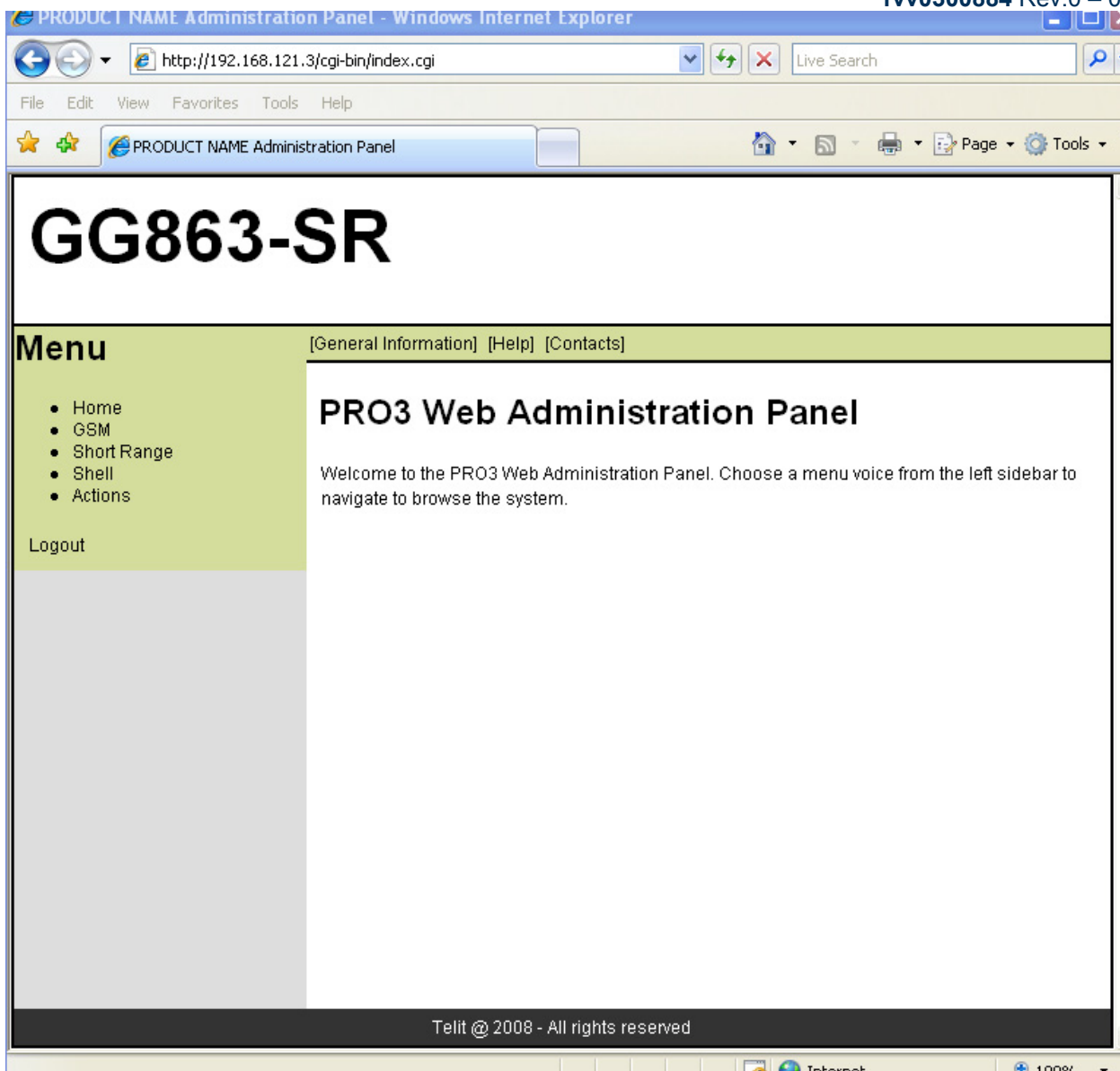
where 192.168.121.3 is one of the IP addresses of the **GG863-SR**.

Note: IP address 192.168.121.3 (defined in GG863 SW UG) can also be changed (see PRO3 User Guides)



You can see the Home Page of the Web Administration Panel (allows to configure parameters of the server-IP host that will be used by Auto Application to establish the connection such as IP address of the PC host, port, connection type; in the Web panel we can also decide if Auto Application should start automatically or not at the next reboot of GG863):





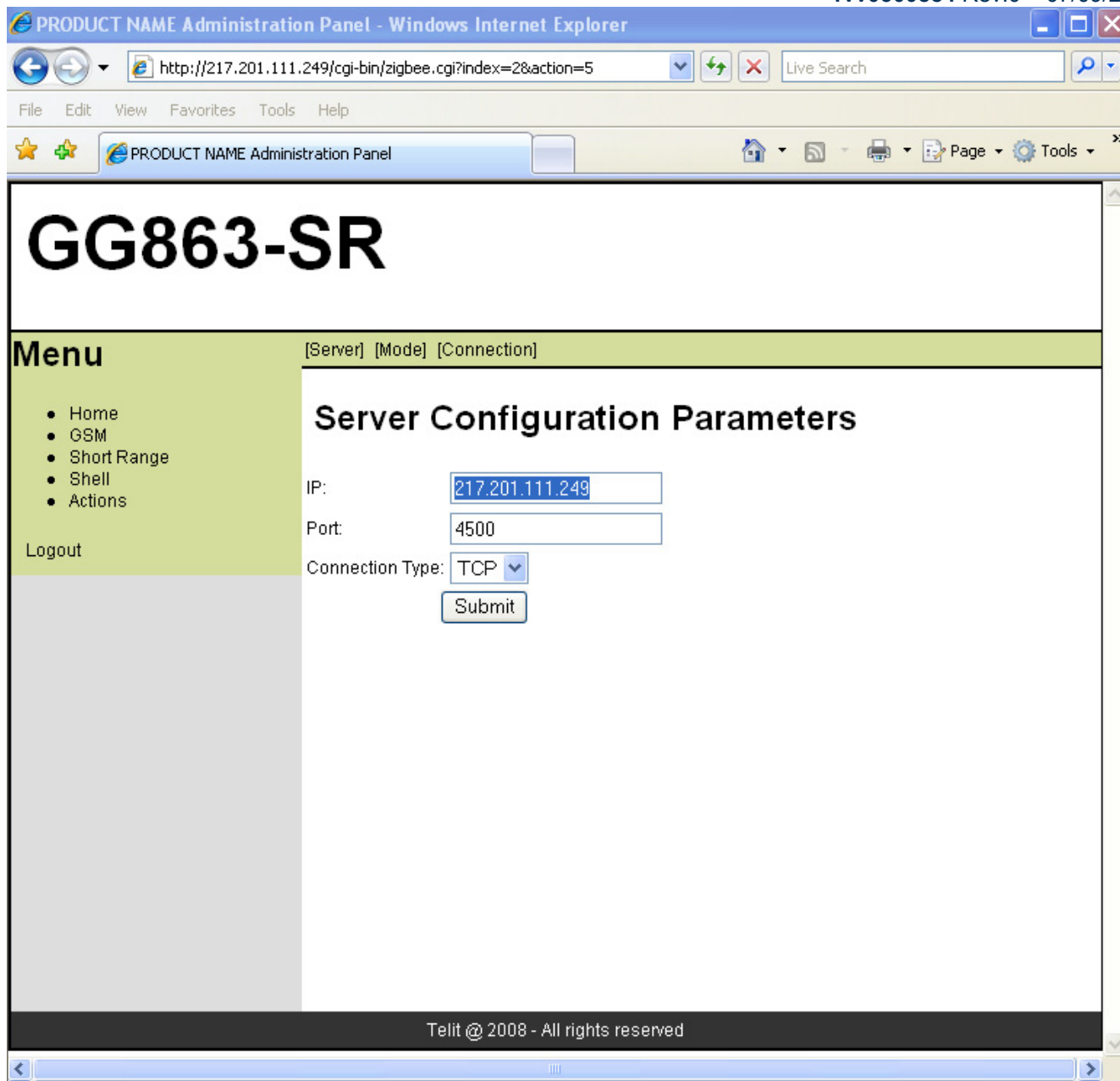
1. Set the IP Host parameters:

- Click on *Short Range*
- Click on [Server]

Fill the form in the following way:

- IP Host address: Remote Host IP Address (IP address must be public :fixed or dynamic)
- Port: **4500**
- Connection Type: **TCP**

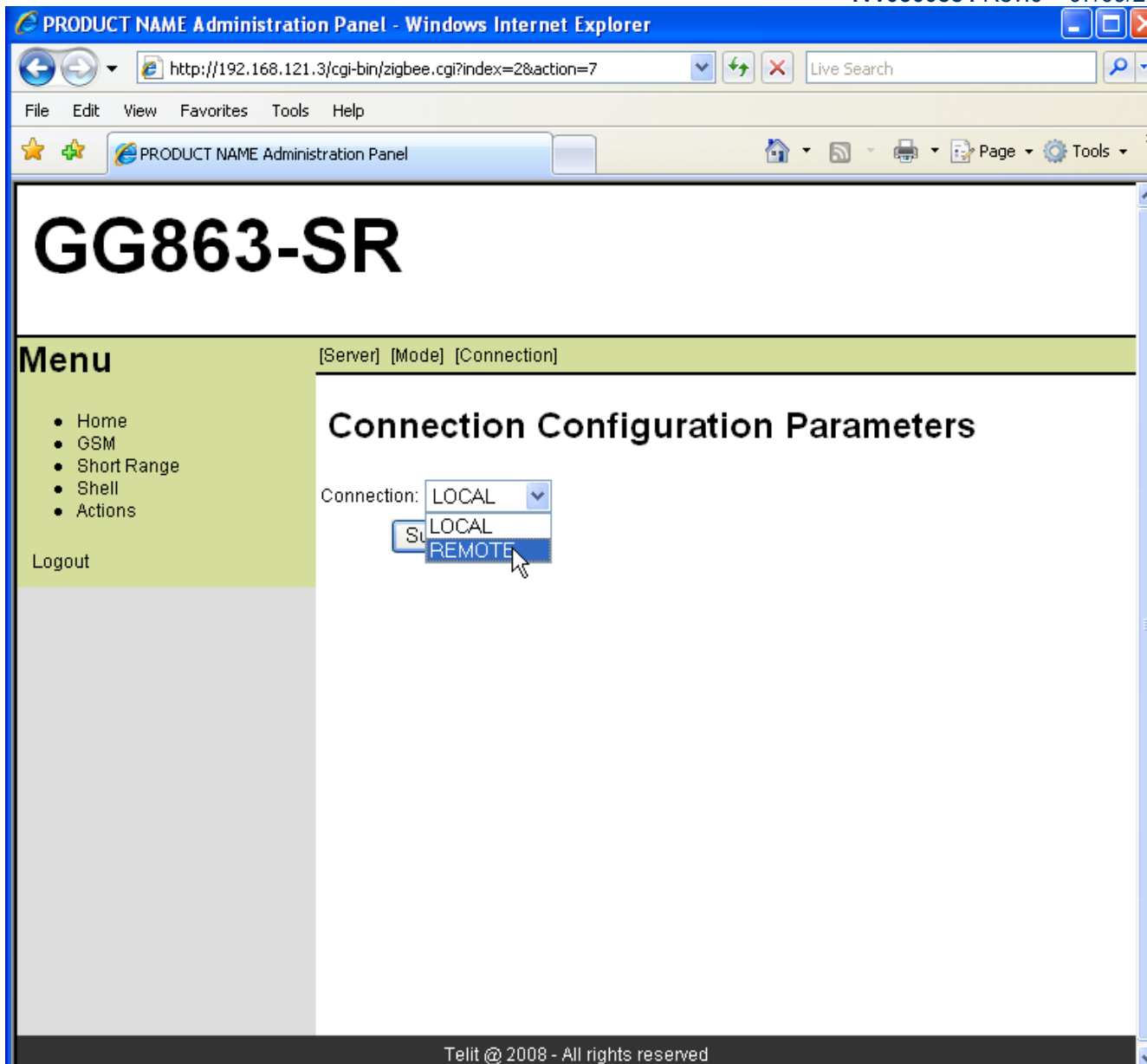




Click **Submit**, wait until the Web Panel shows the message:

- Parameter configuration was successful*
- 2. Click on [Connection]
Connection: **REMOTE**



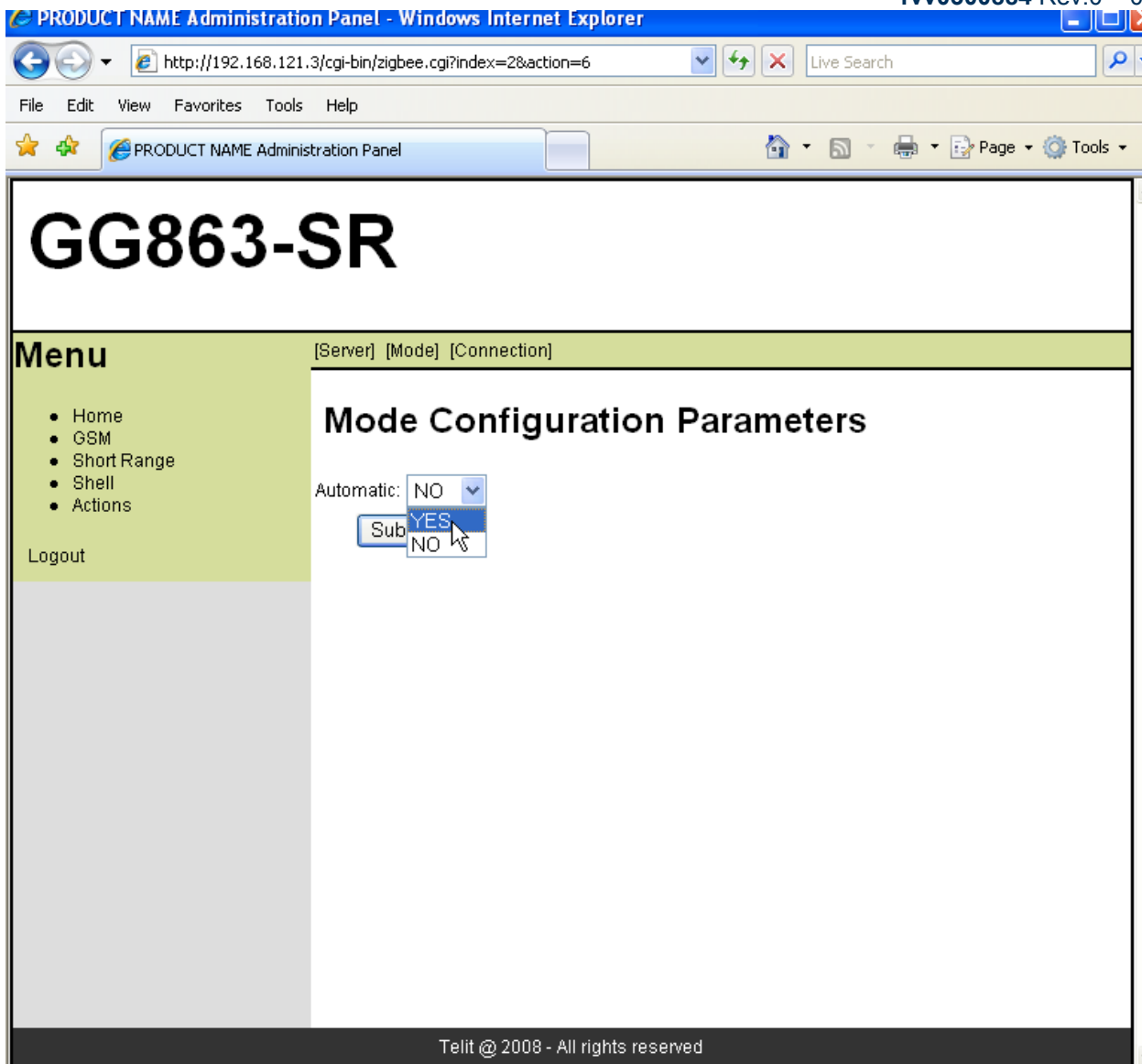


Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

3. Click on [Mode]
 - **AUTOMATIC: YES** (allows to set if Auto Application will be started automatically at next reboot of GG863-SR)





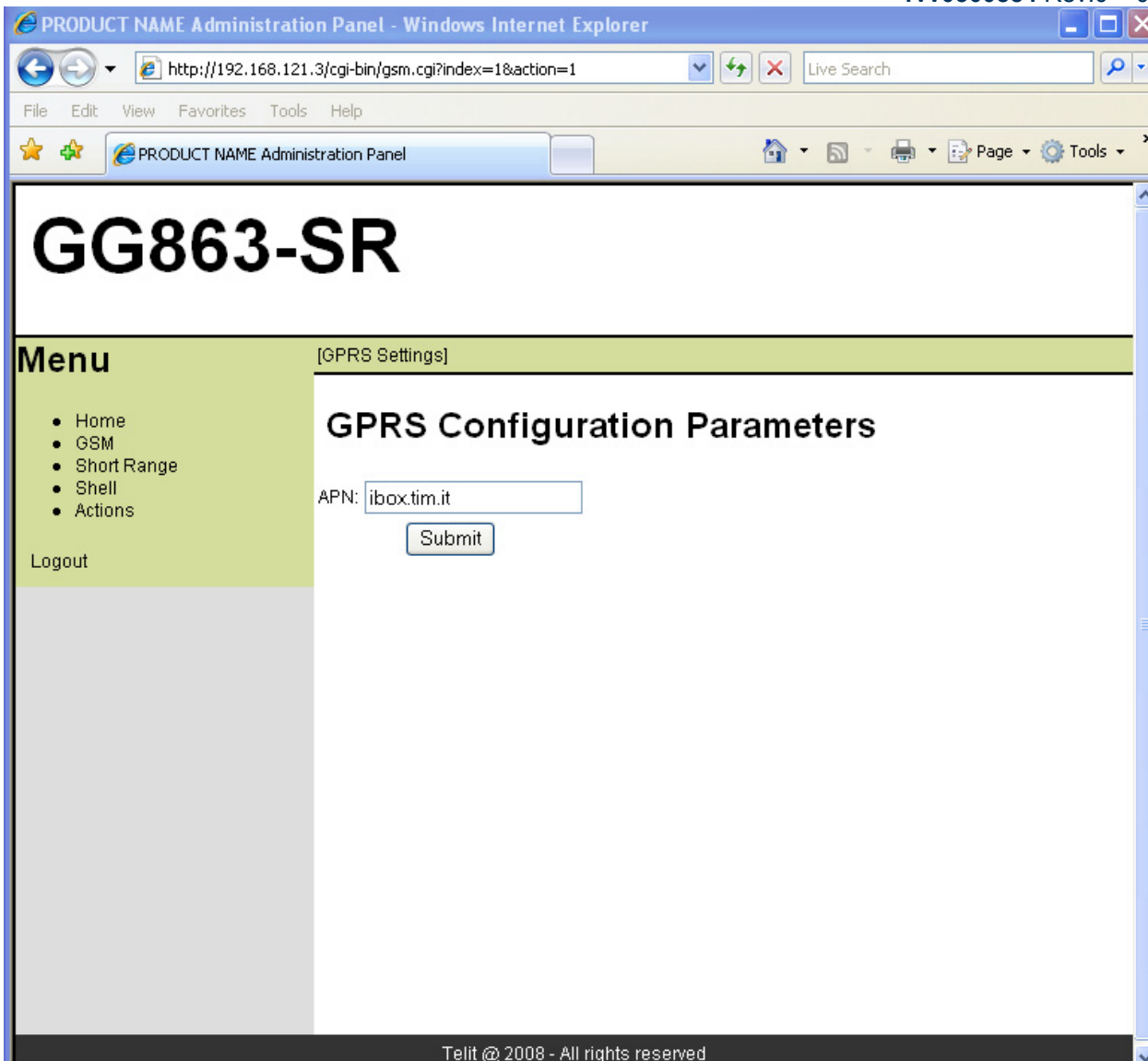
Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

4. Click on GSM:
 - Click on [GPRS Settings]

In order to connect the **GG863-SR** to the GPRS Network, you have to specify the APN, the Access Point Name provided by the Mobile Network Operator





Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

5. Click on Actions:
 - Click on [Rebooting]
Rebooting: **YES** (allows to reboot the GG863-SR)





Click **Submit**, wait until the Web Panel shows the message:

Parameter configuration was successful

- Unplug the USB cable from the local PC
- Wait 30 seconds



III.3. IP Host Demo

IP host will connect to GG863-SR through IP gateway application. In order to establish the remote connection (PC+GG863 over GPRS) the following steps are necessary:

- Install SRGatewayDemo.exe: used to communicate with IP Gateway application on GG863 (detailed explanation how to use it can be found in [1] paragraph 7.3). Some of the commands that can be executed on the demo are: start/stop network, node discovery, switch to command/data mode or send any command. It is only example/demo of what client can do from IP host PC.
- Connect IP host through a modem (es. GT863) that permits to establish the GPRS connection (with command ipconfig we can discover the IP address that needs to be insert in Web panel during configuration)
- Get IP address of the PC host
- IP address of GG863 (during remote connection (between IP gateway application and SRgateway demo) GG863 will communicate its IP address to PC IP Host)

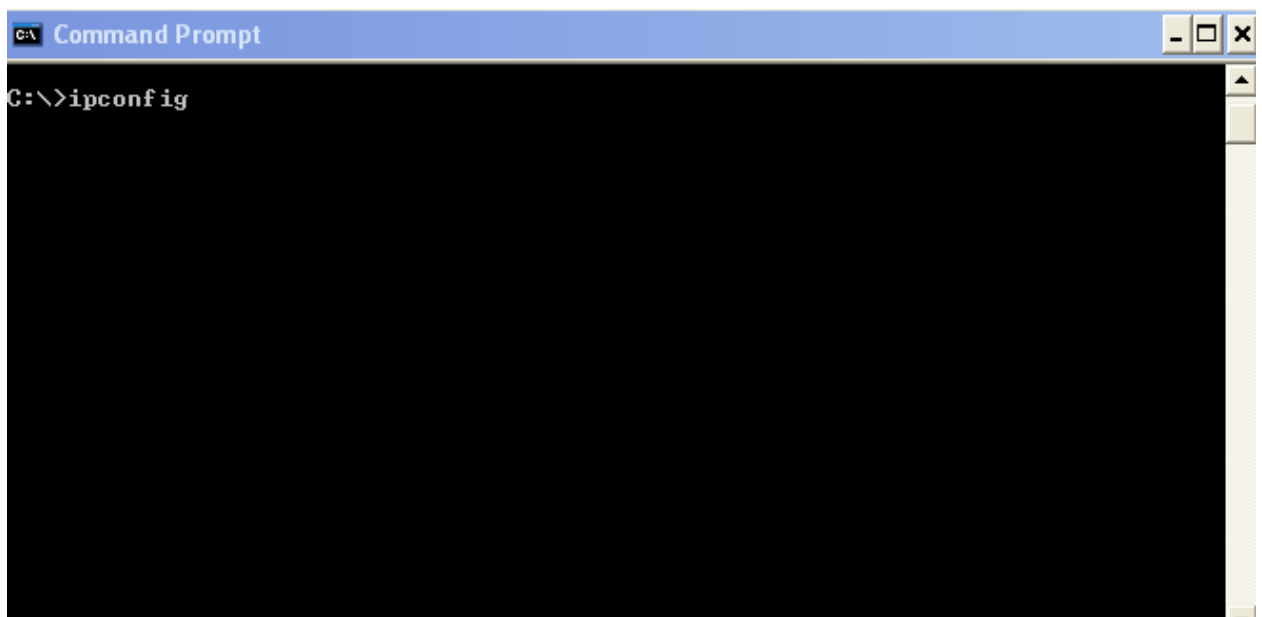
Note: IP address, for both IP host and GG863, must me **public** (fixed or dynamic). In case of dynamic IP address once the connection is established the IP address will not change; only after reboot or shut down it usually changes.

To set up and use the Telit Demo Gateway on the remote IP Host follow these steps:

1) Setup of the IP Host and get public IP address:

- ❖ Connect the modem (e.g. Telit GT863-PY) to the IP Host and start the GPRS connection
- ❖ Get the public IP address, using for example the ipconfig command:

IP address..... nnn.nnn.nnn.nnn



2) Follow the set up phase described in the previous chapter and be sure that:



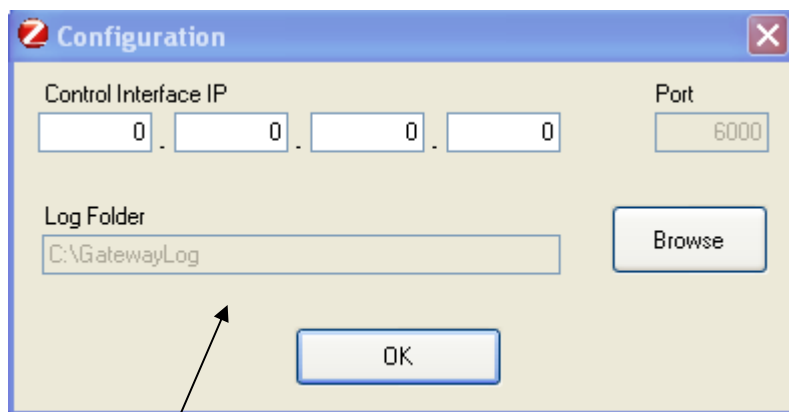
ShortRange → [Server]:

- ❖ IP → IP Host address got in step 1
- ❖ Port → 4500
- ❖ Connection Type → TCP

Connection:

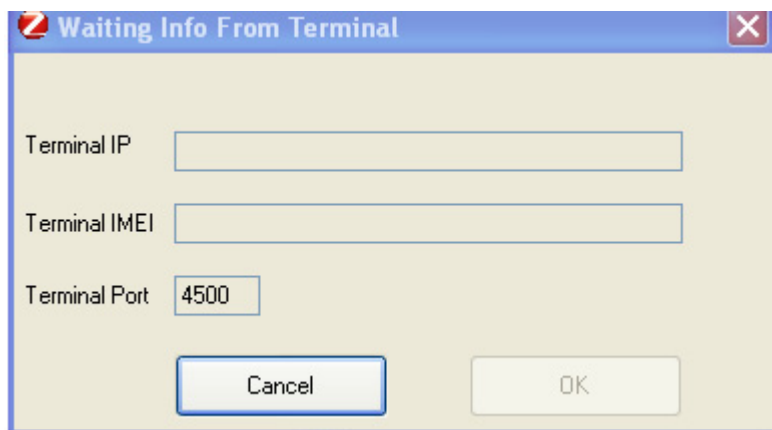
- ❖ Connection → REMOTE

3) Starting SRGatewayDemo.exe appears the following window:



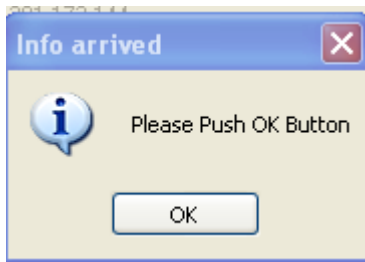
Choose the folder where to store the logs

- Clicking **Ok**, the IP Host waits for **GG863-SR** IP address and IMEI



- When appears the following pop-up it means the GPRS connection between **GG863-SR** and IP Host is established.

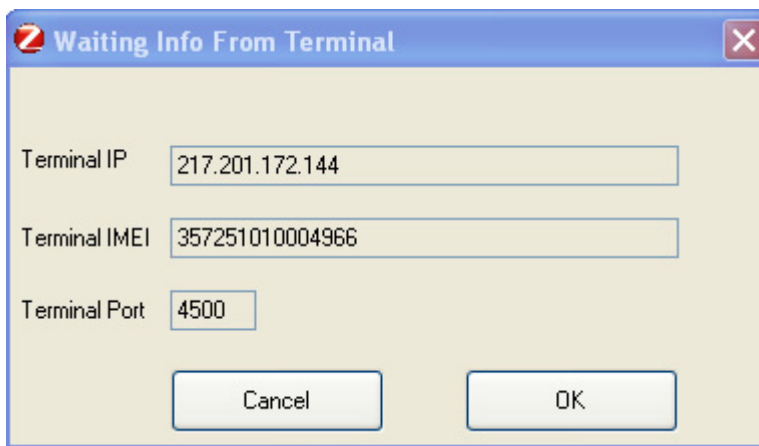




Click **OK**

- Now you can see the information received from **GG863-SR**:

For example:



- Click **OK**
- At this point the SRGatewayDemo.exe allows to use Gateway functionalities running inside the **GG863-SR**:
Detailed explanation how to use it can be found in 7.3 paragraph.

