

Acanac Inc. Smart RG 505 Modem Setup Instructions

Please note that after the first time you log into your modem as an administrator, you might not be prompted to log in again (step 3 in many of the instructions in this manual).

PPPoE Setup (Log into the Acanac service and use the modem both as a modem and wireless router)

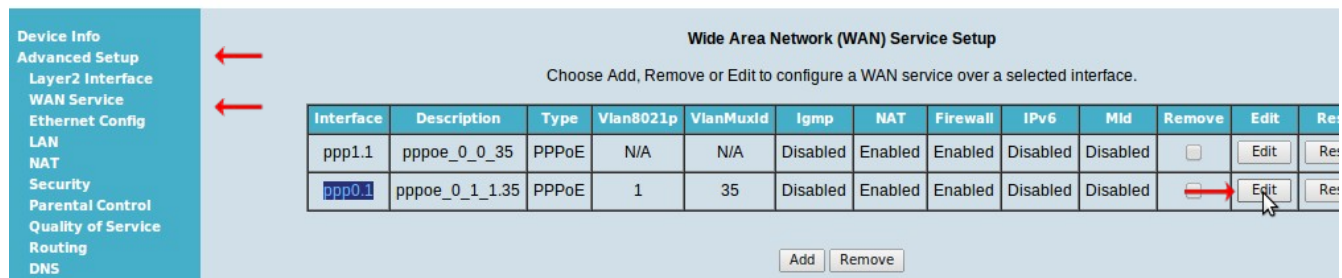
- 1) Open your web browser and go to **192.168.1.1**
- 2) Click on "**Manage gateway (advanced)**"



3) A login window will pop up and you will enter username "**admin**" and password "**admin**" (yes they are the same, all lower-case letters and no quotation marks) and press ENTER

4) Click on "**Advanced Setup**"

5) Select "**WAN Service**" and click on the "**Edit**" button next to ppp0.1



6) Enter your Acanac username (don't forget the "@acnac.net" part) and password **[Please note that the username and password are CASE-SENSITIVE, so lower-case and capital letters matter]**, scroll all the way down and click on "Next", "Next", "Next" and "Apply/Save"



WAN Setup - Summary

Make sure that the settings below match the settings provided by your ISP.

Connection Type:	PPPoE
Service Name:	pppoe_0_1_1.35
Service Category:	UBR
IP Address:	Automatically Assigned
Service State:	Enabled
NAT:	Enabled
Full Cone NAT:	Disabled
Firewall:	Enabled
IGMP Multicast:	Disabled

Click "Apply/Save" to have this interface to be effective. Click "Back" to make any modifications.

7) Enable PING (optional but helps with troubleshooting): Click on "Management", "Access Control,

Access Control -- Services

A Service Control List ("SCL") is used to enable or disable network services on the gateway.
Note: LAN side firewall must be enabled to modify LAN SCLs.

Services	LAN	WAN	WAN Port Number
FTP	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable	(default)
HTTP	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable	80
ICMP	Enable	<input checked="" type="checkbox"/> Enable	(default)
SNMP	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable	(default)
SSH	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable	22
TELNET	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable	(default)
TFTP	<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable	(default)

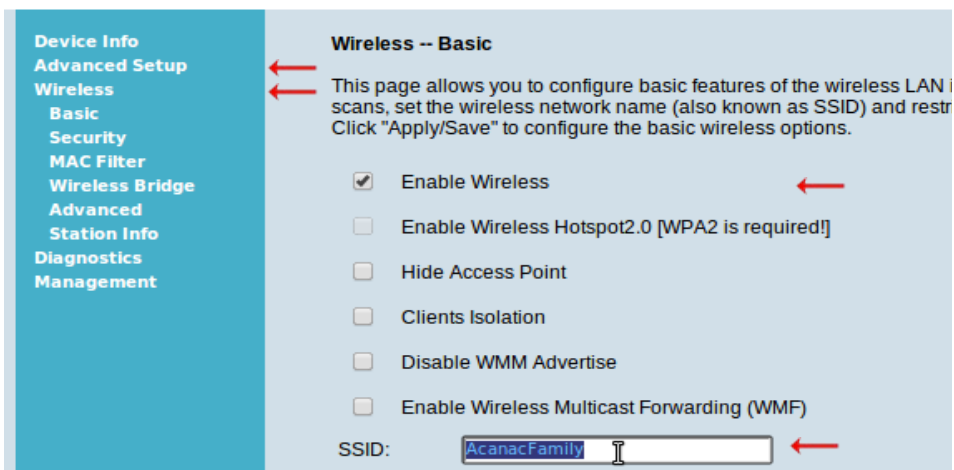
This should give your modem basic connectivity, but you may wish to review next section of this manual as it contains information on setting up wireless connectivity.

WiFi - Wireless connectivity

[Please note that our technical support does not officially assist with wireless setup but following these instructions will get you up and running. For assistance with connecting to a wireless network, please contact your software vendor's support, like Microsoft for Windows users, Apple for Mac users and your distribution's official forum or IRC chat for Linux users]

Steps 1-3 are not necessary if you just completed the PPPoE setup and are still in the modem's web interface. Look at PPPoE setup for screenshots if needed

- 1) Open your web browser and go to **192.168.1.1**
- 2) Click on "**Manage gateway (advanced)**"
- 3) A login window will pop up and you will enter username "admin" and password "admin" (yes they are the same, all lower-case letters and no quotation marks) and press ENTER
- 4) Click on "**Advanced Setup**" and then "**Wireless**". Make sure there is a check-mark next to "**Enable Wireless**". If you wish to change your wireless network name (**SSID**), you can change it on this screen before scrolling to the bottom and clicking on **Apply/Save**



- 5) Click on "**Security**" and make sure "**Network Authentication**" is either "**Mixed WPA2/WPA-PSK**" or "**WPA2-PSK**". Please refer to the screenshot on the next page.

6) **Uncheck** the box "Use base MAC address as WPA/WAPI passphrase" and enter a password that will be easy for you to remember but has at least 8 characters into the "WPA/WAPI passphrase" field before clicking on **Apply/Save**

The image shows a web interface for configuring wireless security. On the left is a navigation menu with the following items: Wireless, Basic, Security, MAC Filter, Wireless Bridge, Advanced, Station Info, Diagnostics, and Management. The 'Security' item is highlighted with an orange bar and a red arrow points to it from the left. The main content area is titled 'WPS Setup' and contains the following elements: a note about WPS, a dropdown menu for 'Enable WPS' set to 'Disabled', a section for 'Manual Setup AP' with a descriptive paragraph, a 'Select SSID' dropdown set to 'AcanacFamily', a 'Network Authentication' dropdown set to 'Mixed WPA2/WPA -PSK' with a red arrow pointing to it from the right, a 'WPA/WAPI passphrase' field containing eight dots with a 'Click here!' link to its right and a red arrow pointing to it from the right, an unchecked checkbox labeled 'Use base MAC address as WPA/WAPI passphrase' with a red arrow pointing to it from the left, a 'WPA Group Rekey Interval' field set to '0', a 'WPA/WAPI Encryption' dropdown set to 'TKIP+AES', a 'WEP Encryption' dropdown set to 'Disabled', and an 'Apply/Save' button at the bottom right with a red arrow pointing to it from the right.

DSL Line Statistics

If you are able to e-mail support for no connectivity, slow speeds or intermittent connectivity, this page will contain information useful to us that we might not be able to access through our diagnostics. Ideally, you should e-mail us a screenshot of the top of this page or at least note down the important values. Screenshots of the first 3 steps are available under the "PPPoE Setup" part of this manual.

- 1) Open your web browser and go to **192.168.1.1**
- 2) Click on "**Manage gateway (advanced)**"
- 3) A login window will pop up and you will enter username "admin" and password "admin" (yes they are the same, all lower-case letters and no quotation marks) and press ENTER
- 4) Click on "**Device Info**", then on "**Statistics**" and finally on "**xDSL**"
- 5) Either take a screenshot of this page or write down (for **BOTH downstream AND upstream**) the following values:
 - Mode
 - Status
 - Rate (Kbps):
 - Attainable Rate (Kbps):
 - SNR Margin (dB):
 - Attenuation (dB):



Statistics -- xDSL			
Mode:			VDSL2
Traffic Type:			PTM
Status:			Up
Link Power State:			L0
	Downstream	Upstream	
Line Coding(Trellis):	On	On	
SNR Margin (dB):	32.4	24.6	
Attenuation (dB):	18.3	0.0	
Output Power (dBm):	13.7	1.9	
Attainable Rate (Kbps):	83182	33238	
	Path 0		Pa
	Downstream	Upstream	De
Rate (Kbps):	26943	8128	0

Note for technicians: You can calculate the Relative Capacity Occupation by dividing the Rate by the Attainable Rate. For example, if the donwstream Attainable Rate is 83118 and the Rate is 26943, the RCO is calculated by dividing 26943 by 83118 and getting 32.4%.

Bridge Mode

This is what you need to set up on your modem if you wish to use a separate wireless router. Screenshots for the first 3 steps are in the PPPoE section of this manual.

- 1) Open your web browser and go to **192.168.1.1**
- 2) Click on "**Manage gateway (advanced)**"
- 3) A login window will pop up and you will enter username "admin" and password "admin" (yes they are the same, all lower-case letters and no quotation marks) and press ENTER
- 4) Click on "**Advanced Setup**"
- 5) Select **WAN Service**
- 6) Check the "**Remove**" boxes for both connections and click on the **Remove** button



SR505

Wide Area Network (WAN) Service Setup

Choose Add, Remove or Edit to configure a WAN service over a selected interface.

Interface	Description	Type	Vlan8021p	VlanMuxId	Igmp	NAT	Firewall	IPv6	Mid	Remove	Edit	Reset
ppp1.1	pppoe_0_0_35	PPPoE	N/A	N/A	Disabled	Enabled	Enabled	Disabled	Disabled	<input checked="" type="checkbox"/>	Edit	Reset
ppp0.1	pppoe_0_1_1.35	PPPoE	1	35	Disabled	Enabled	Enabled	Disabled	Disabled	<input checked="" type="checkbox"/>	Edit	Reset

Add Remove

- 7) Once the screen reloads, click on the "**Add**" button

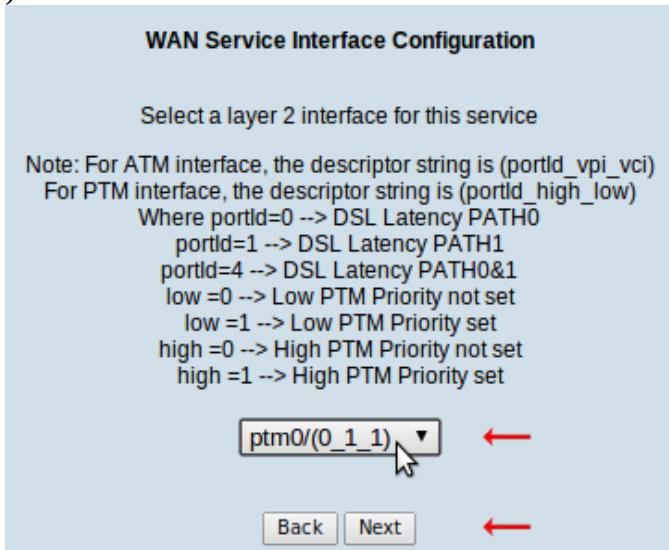
Wide Area Network (WAN) Service Setup

Choose Add, Remove or Edit to configure a WAN service over a selected interface.

Interface	Description	Type	Vlan8021p	VlanMuxId	Igmp	NAT	Firewall	IPv6	Mid	Remove	Edit	Reset
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Add Remove

9) Select **PTM** and click on "**Next**"



WAN Service Interface Configuration

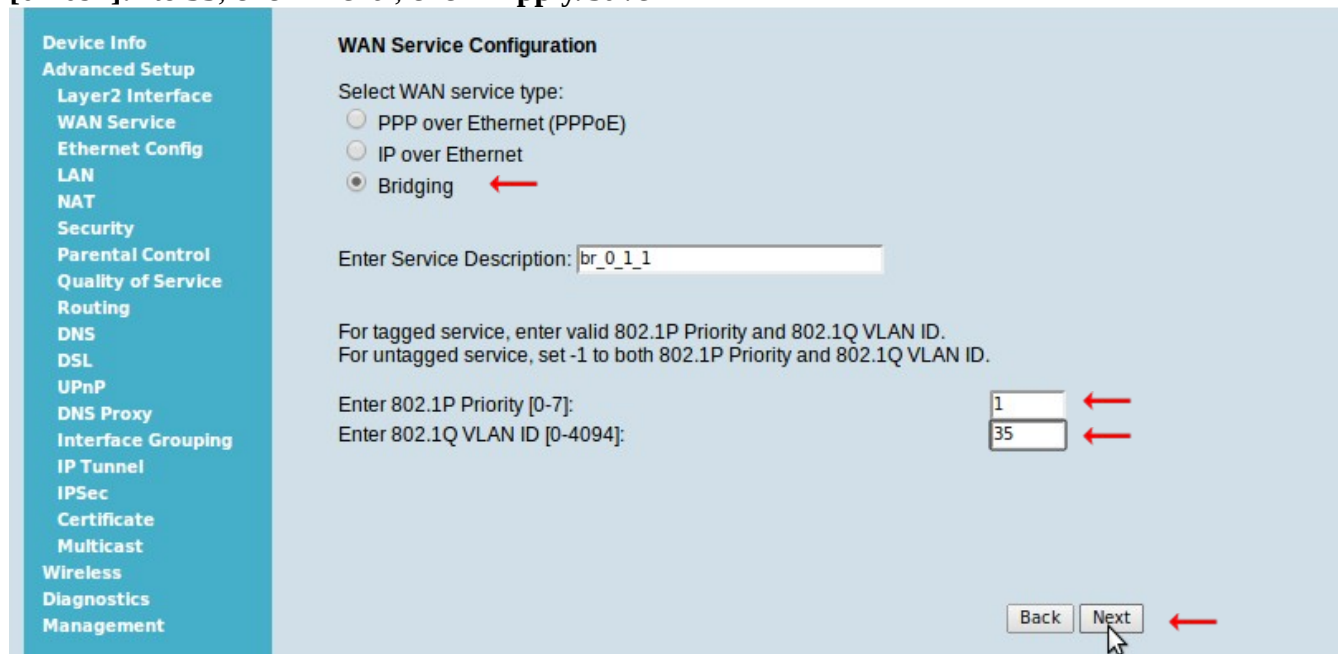
Select a layer 2 interface for this service

Note: For ATM interface, the descriptor string is (portId_vpi_vci)
For PTM interface, the descriptor string is (portId_high_low)
Where portId=0 --> DSL Latency PATH0
portId=1 --> DSL Latency PATH1
portId=4 --> DSL Latency PATH0&1
low =0 --> Low PTM Priority not set
low =1 --> Low PTM Priority set
high =0 --> High PTM Priority not set
high =1 --> High PTM Priority set

ptm0/(0_1_1) ←

Back Next ←

10) Select "**Bridging**", set "**Enter 802.1P Priority [0-7]:**" to **1** and "**Enter 802.1Q VLAN ID [0-4094]:**" to **35**, click "**Next**", click "**Apply/Save**"



Device Info
Advanced Setup
Layer2 Interface
WAN Service
Ethernet Config
LAN
NAT
Security
Parental Control
Quality of Service
Routing
DNS
DSL
UPnP
DNS Proxy
Interface Grouping
IP Tunnel
IPSec
Certificate
Multicast
Wireless
Diagnostics
Management

WAN Service Configuration

Select WAN service type:

PPP over Ethernet (PPPoE)
 IP over Ethernet
 Bridging ←

Enter Service Description: br_0_1_1

For tagged service, enter valid 802.1P Priority and 802.1Q VLAN ID.
For untagged service, set -1 to both 802.1P Priority and 802.1Q VLAN ID.

Enter 802.1P Priority [0-7]: 1 ←
Enter 802.1Q VLAN ID [0-4094]: 35 ←

Back Next ←

Your modem should now be ready to connect to a separate wireless router. Please note that if you require assistance with the router, please **contact the manufacturer's technical support**. Router manufacturers have people trained to work with their equipment. Chances are that the Acanac technician you are talking to has never seen your router in his or her life. The manufacturer will be able to help you quickly and efficiently. All they need to know are your DSL **username, password**, that your modem is in **bridge mode** and that the **connection type** is **PPPoE**.

Factory Reset

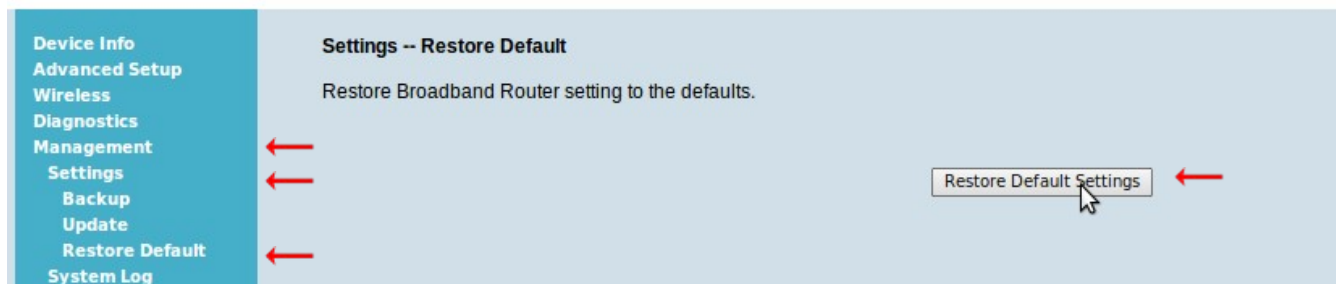
You will need to perform this if you want to put your modem back to router (PPPoE) mode or if you changed your settings so much it would take too much time to fix them. There are 2 ways to go about it:

The easy way:

- 1) Make sure the modem is plugged in and turned on
- 2) **Push** a straightened **paperclip**, piece of wire or *dull* syringe tip into the **small red hole** in the **back** of the modem until you **feel** a button **click** and **hold for 30 seconds**
- 3) Let go, wait for 10 seconds
- 4) Powercycle the modem by **unplugging** it from power **for 30 seconds** and plugging it back in.
- 5) Once the DSL light comes back on solid, your modem will be ready to configure for a PPPoE connection.

The hard way:

- 1) Set up a **static** local area **connection** with the **IP address** set to *192.168.1.2*, **default gateway** *192.168.1.1* and **netmask** *255.255.255.0*
- 2) **Disable** the **wireless** connection and **use** the **static** LAN connection to connect to the modem
- 3) Open your web browser and go to **192.168.1.1**
- 4) Click on "**Manage gateway (advanced)**"
- 5) A login window will pop up and you will enter **username "admin"** and **password "admin"** (yes they are the same, all lower-case and no quotation marks)
- 6) Click on "**Management**", "**Settings**", "**Restore Default**" and finally on the "**Restore Default Settings**" button.



- 7) **Reconnect** to your modem with a **DHCP connection** (obtain IP address and DNS automatically) and configure it as needed.