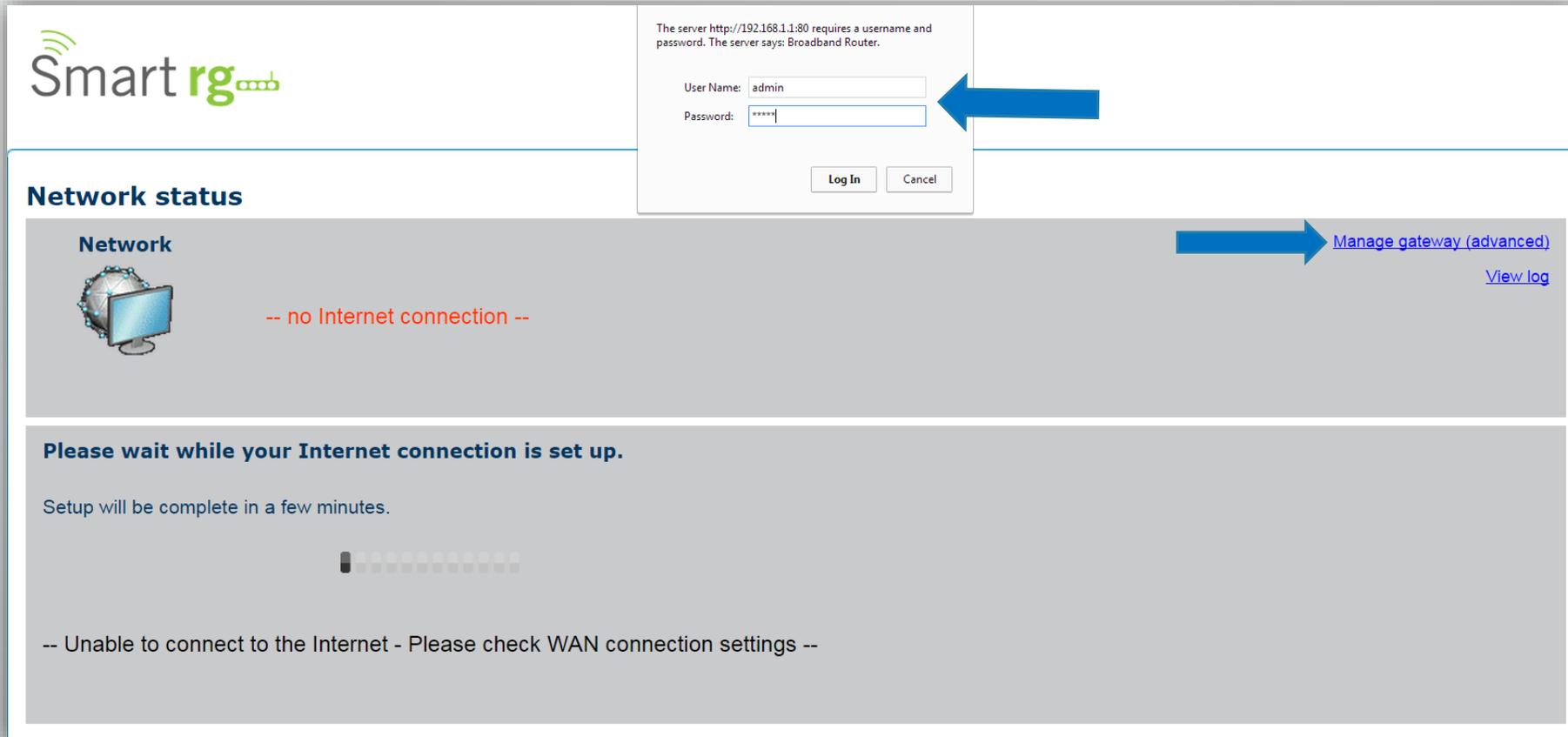




# ADSL configuration for SmartRG 505N

September, 2014

# Step 1: Log in to SmartRG 505N



The screenshot displays the SmartRG 505N web interface. At the top left is the SmartRG logo. A modal dialog box is open, displaying the message: "The server http://192.168.1.1:80 requires a username and password. The server says: Broadband Router." Below this message are two input fields: "User Name:" with the text "admin" and "Password:" with masked characters "\*\*\*\*\*". A blue arrow points to the "User Name" field. Below the input fields are "Log In" and "Cancel" buttons. In the background, the "Network status" section is visible, showing a "Network" icon and the text "-- no Internet connection --". A blue arrow points to the link "Manage gateway (advanced)" in the top right of the network status area. Below the network status is a message: "Please wait while your Internet connection is set up." followed by a progress bar and the text "Setup will be complete in a few minutes." At the bottom of the network status area, it says "-- Unable to connect to the Internet - Please check WAN connection settings --".

- Open a web browser and type in `http://192.168.1.1/` in the address bar
- Click on *Manage gateway (advanced)*
- If it prompts you for a username and password, enter *admin* (all lowercase) for both

# Step 2: Remove Existing WAN Service Configuration



- Device Info
- Advanced Setup
- Layer2 Interface
- WAN Service**
- Ethernet Config
- LAN
- NAT
- Security
- Parental Control
- Quality of Service
- Routing
- DNS

## 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	Mld	Remove	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



- By default, your SmartRG is configured for VDSL connection. We will have to remove these settings first before configuring the modem for ADSL connection.
- Click on Advanced Setup (top right corner of the opened page) >> WAN Service
- Check the Remove box >> Click Remove

# Step 3: Remove PTM Configuration



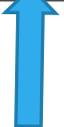
- Device Info
- Advanced Setup
  - Layer2 Interface
  - ATM Interface
  - PTM Interface**
  - ETH Interface
- WAN Service
- Ethernet Config
- LAN
- NAT
- Security

## DSL PTM Interface Configuration

Choose Add, or Remove to configure DSL PTM interfaces.

Interface	DSL Latency	PTM Priority	Conn Mode	IP QoS	Remove
ptm0	Path0	Normal&High	VlanMuxMode	Support	<input checked="" type="checkbox"/>

Add Remove



- Click Advanced Setup >> Layer2 Interface >> PTM Interface
- Check the Remove box >> Click Remove

# Step 4: Configure ATM Settings

## DSL ATM Interface Configuration

Choose Add, or Remove to configure DSL ATM interfaces.

Interface	Vpi	Vci	DSL Latency	Category	Peak Cell Rate(cells/s)	Sustainable Cell Rate(cells/s)	Max Burst Size(bytes)	Min Cell Rate(cells/s)	Link Type	Conn Mode	IP QoS	MPAAL Prec/Alg/Wght	Remove
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Add Remove



- Click Advanced Setup >> Layer2 Interface >> ATM Interface
- Select Add

# Step 4: Configure ATM Settings (continued)

**Device Info**  
**Advanced Setup**  
Layer2 Interface  
  ATM Interface  
  PTM Interface  
  ETH 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

### ATM PVC Configuration

This screen allows you to configure a ATM PVC.

VPI:  [0-255]  
VCI:  [32-65535]

Select DSL Latency  
 Path0 (Fast)  
 Path1 (Interleaved) 

Select DSL Link Type (EoA is for PPPoE, IPoE, and Bridge.)  
 EoA  
 PPPoA  
 IPoA

Encapsulation Mode:  ▾

Service Category:  ▾

Minimum Cell Rate:  [cells/s] (-1 indicates no shaping)

Select Scheduler for Queues of Equal Precedence as the Default Queue  
 Weighted Round Robin  
 Weighted Fair Queuing

Default Queue Weight:  [1-63]  
Default Queue Precedence:  [1-8] (lower value, higher priority)

VC WRR Weight:  [1-63]  
VC Precedence:  [1-8] (lower value, higher priority)

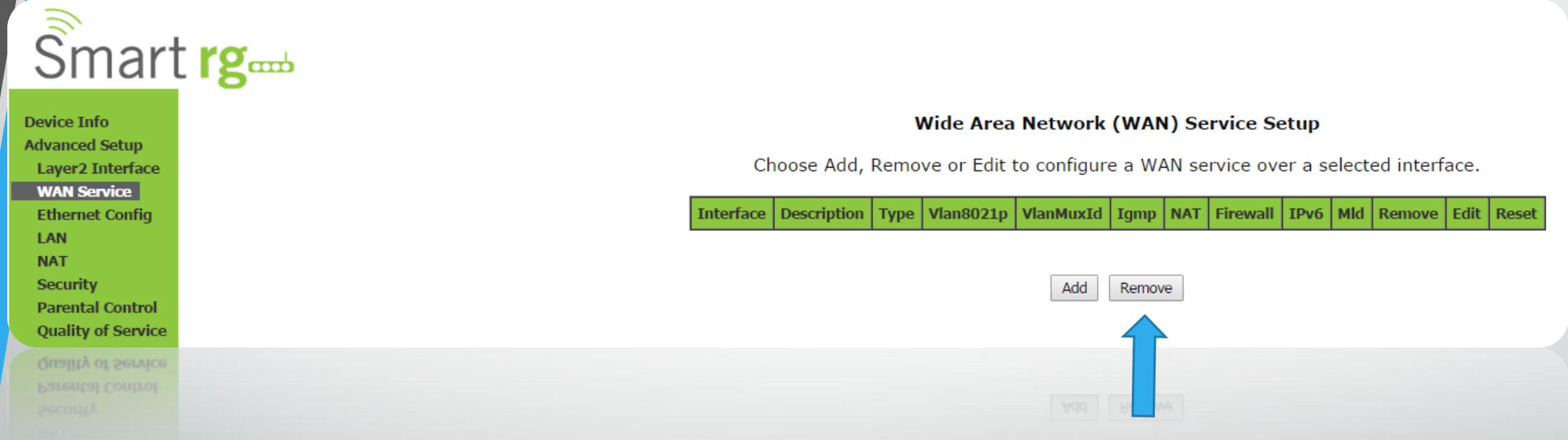
Note: VC scheduling will be SP among unequal precedence VC's and WRR among equal precedence VC's.  
For single queue VC, the default queue precedence and weight will be used for arbitration.  
For multi-queue VC, its VC precedence and weight will be used for arbitration.



- Make sure you have all the settings as show in this slide
- By default, Path1 (Interleaved) is unchecked. Please make sure that you check this box to avoid connections errors.
- Click Apply/Save

Now we have to configure WAN Settings

# Step 5: Configure WAN settings



SmartRG

- Device Info
- Advanced Setup
- Layer2 Interface
- WAN Service**
- Ethernet Config
- LAN
- NAT
- Security
- Parental Control
- Quality of Service

### 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	Mld	Remove	Edit	Reset
-----------	-------------	------	-----------	-----------	------	-----	----------	------	-----	--------	------	-------

Add Remove

↑

- Select Advanced Setup >> WAN Service
- Click Add

# Step 5: Configure WAN settings (continued)



**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

atm0/(4\_0\_35) ▾  
atm0/(4\_0\_35)

Back Next

**WAN Service Configuration**

Select WAN service type:

PPP over Ethernet (PPPoE)  
 IP over Ethernet  
 Bridging

Enter Service Description:

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]:

Enter 802.1Q VLAN ID [0-4094]:

Network Protocol Selection:

Back Next

- You will be taken to WAN Service Interface Configuration page
- In the drop down menu, you will only have one option (atm0(4 0 35)), select that and click Next
- On the next page, select PPP over Ethernet (PPPoE) and make sure that rest of the values in your modem are set to be same as shown above.
- Then click Next

# Step 5: Configure WAN settings (continued)

## PPP Username and Password

PPP usually requires that you have a user name and password to establish your connection. In the boxes below, enter the user name and password that your ISP has provided to you.

PPP Username:  ←

PPP Password:

PPPoE Service Name:

Authentication Method:

## Link Control Protocol

LCP Keepalive Period (s):

LCP Retry Threshold:

Dial on demand (with idle timeout timer)

Dial on demand (with idle timeout timer)

- Enter your username and password that you received when signing up with VMedia
- Example: [username@dev.vianetdsl.com](mailto:username@dev.vianetdsl.com)

# Step 5: Configure WAN settings (continued)

Retry PPP password on authentication error 

Max PPP authentication retries (1-65536):  (use 65536 to retry forever)

Enable PPP Debug Mode

Bridge PPPoE Frames Between WAN and Local Ports

Enable Firewall 

## Network Address Translation Settings

Network Address Translation (NAT) allows you to share one Wide Area Network (WAN) IP address for multiple computers on your Local Area Network (LAN).

Enable NAT 

Enable Fullcone NAT

Enable SIP

## Multicast Proxy

Enable IGMP Multicast Proxy

No Multicast VLAN Filter

MTU size [1370-1492]:

Use Base MAC Address on this WAN interface:

Back

Next

- Scroll down and make sure you check

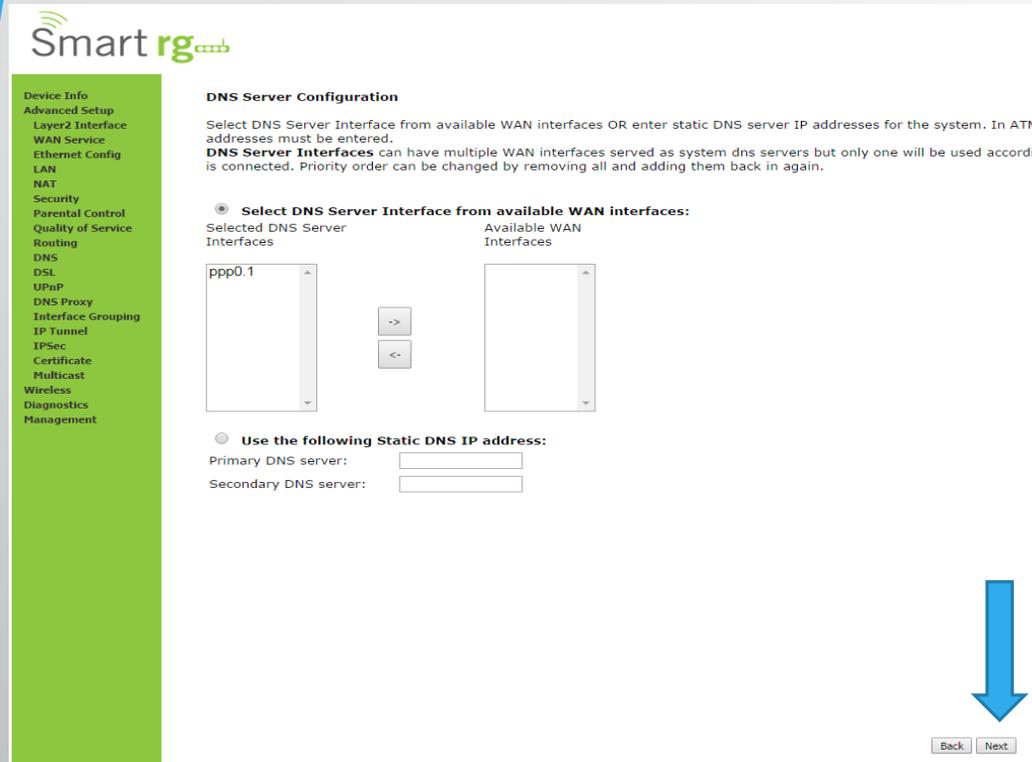
1. Retry PPP password on authentication error

2. Enable Firewall

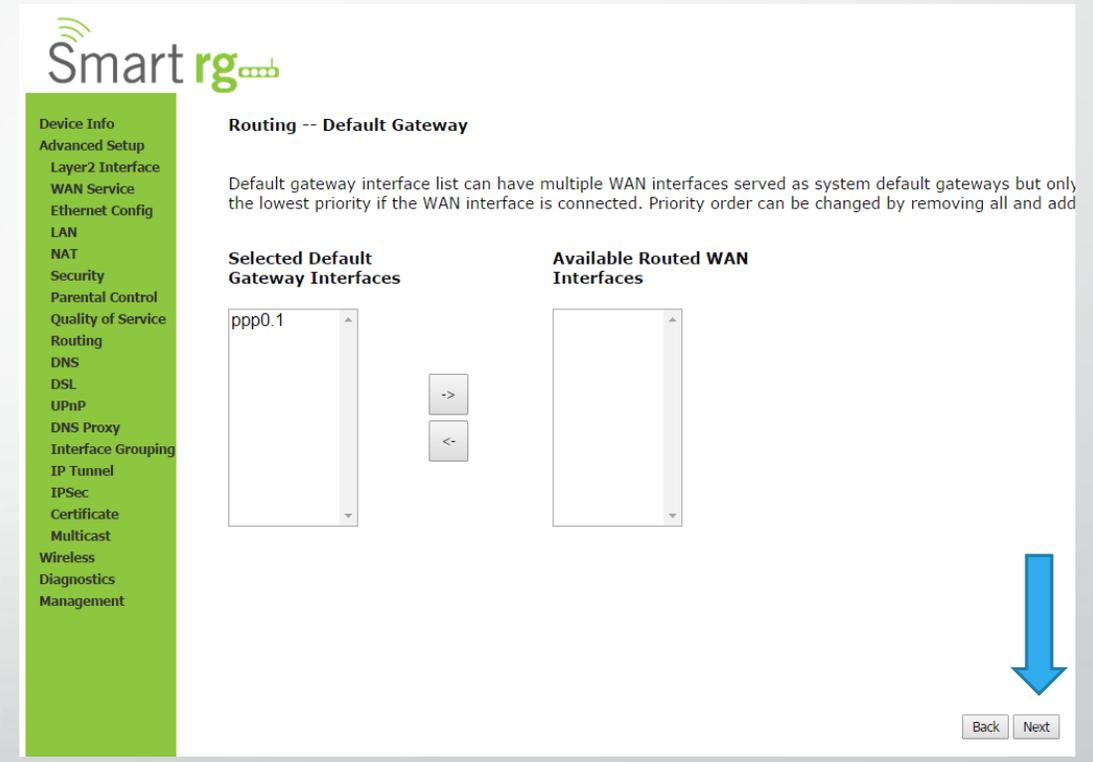
3. Enable NAT

- Click Next

# Step 5: Configure WAN settings (continued)



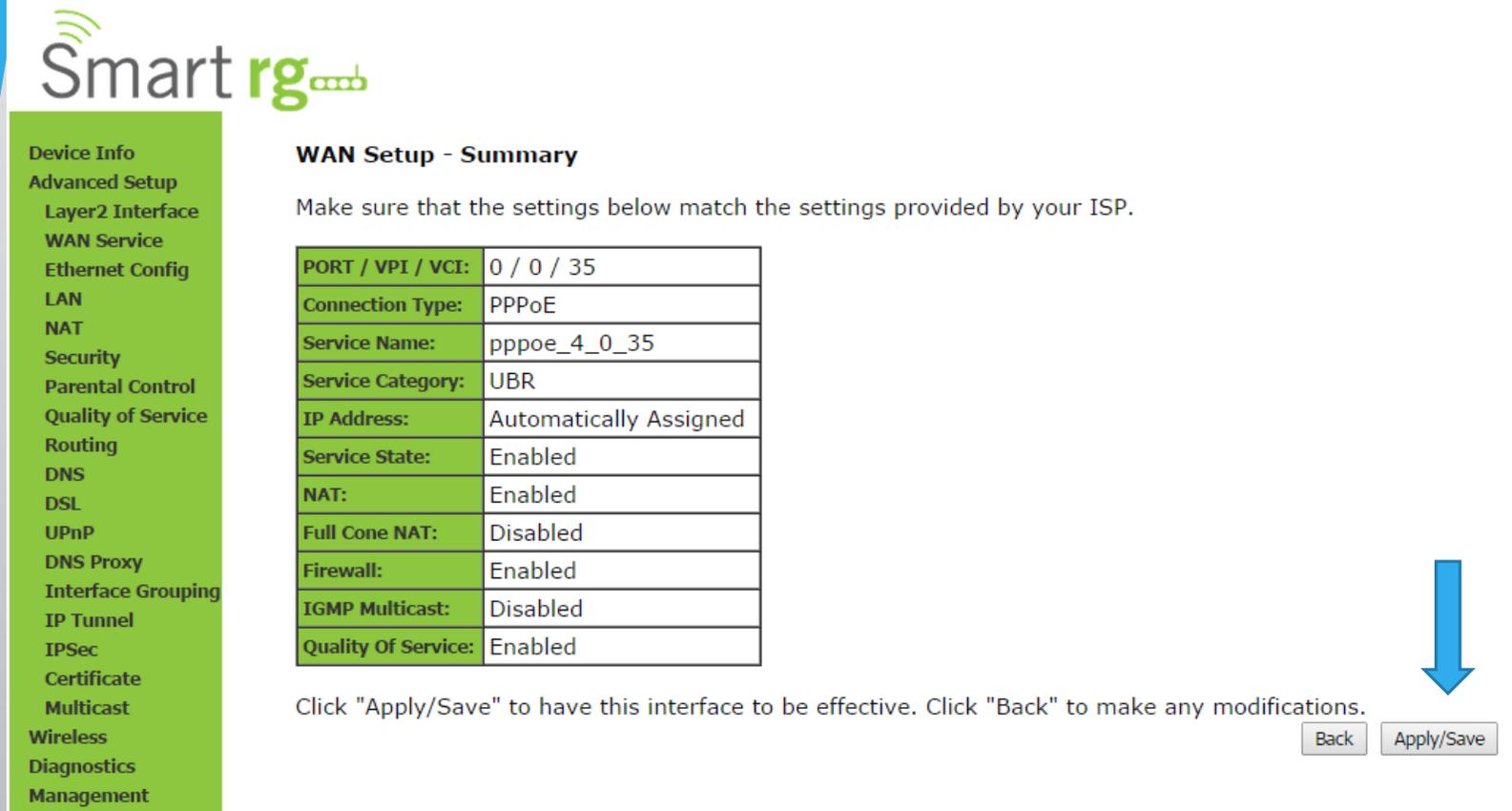
The screenshot shows the 'DNS Server Configuration' page in the Smart RG400 web interface. The left sidebar contains a menu with 'DNS' highlighted. The main content area has a heading 'DNS Server Configuration' and a sub-heading 'Select DNS Server Interface from available WAN interfaces:'. Below this, there are two columns: 'Selected DNS Server Interfaces' containing 'ppp0.1' and 'Available WAN Interfaces' which is empty. There are right and left arrow buttons between the columns. Below the columns, there is a radio button for 'Use the following Static DNS IP address:' followed by input fields for 'Primary DNS server:' and 'Secondary DNS server:'. At the bottom right, there are 'Back' and 'Next' buttons, with a large blue arrow pointing down towards the 'Next' button.



The screenshot shows the 'Routing -- Default Gateway' page in the Smart RG400 web interface. The left sidebar contains a menu with 'Routing' highlighted. The main content area has a heading 'Routing -- Default Gateway' and a sub-heading 'Default gateway interface list can have multiple WAN interfaces served as system default gateways but only the lowest priority if the WAN interface is connected. Priority order can be changed by removing all and add'. Below this, there are two columns: 'Selected Default Gateway Interfaces' containing 'ppp0.1' and 'Available Routed WAN Interfaces' which is empty. There are right and left arrow buttons between the columns. At the bottom right, there are 'Back' and 'Next' buttons, with a large blue arrow pointing down towards the 'Next' button.

- Leave everything as it is in **DNS Server Configuration** and **Routing -- Default Gateway**
- Click **Next** for both

# Final Step



**Smart rg**

- 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 Setup - Summary

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

PORT / VPI / VCI:	0 / 0 / 35
Connection Type:	PPPoE
Service Name:	pppoe_4_0_35
Service Category:	UBR
IP Address:	Automatically Assigned
Service State:	Enabled
NAT:	Enabled
Full Cone NAT:	Disabled
Firewall:	Enabled
IGMP Multicast:	Disabled
Quality Of Service:	Enabled

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

- Finally, click **Apply/Save**

You have successfully completed configuring you SmartRG 505N Modem for ADSL connection!

Should you need any assistance, feel free to contact us at 1-855-333-8269 or email us at [support@vmedia.ca](mailto:support@vmedia.ca)