

NVG34x Installation guide

1. Introduction of ARRIS NVG34x series

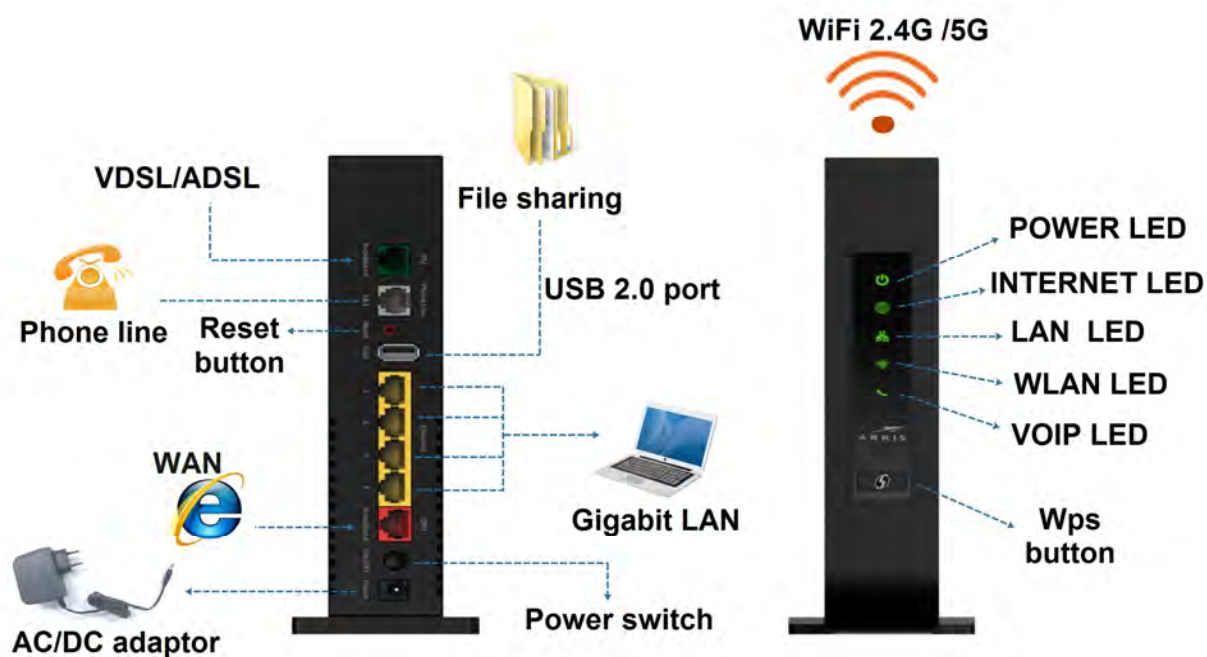
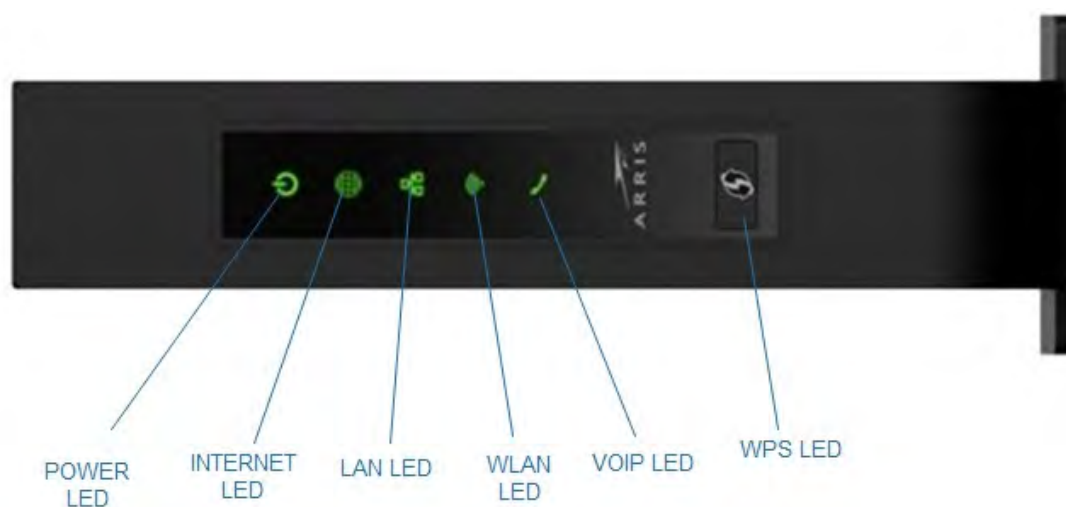


Figure 1 Quick Installation Guide of ARRIS NVG34x Series

1.1 ARRIS Gateway Status Indicator Lights

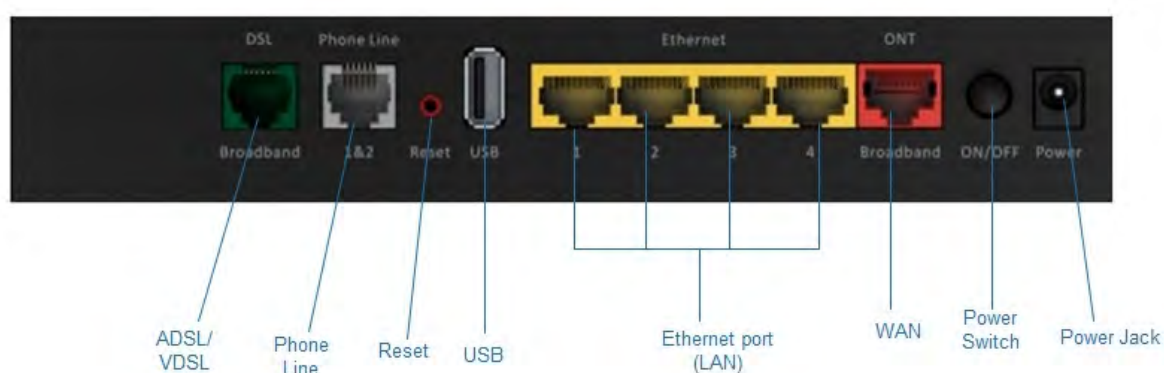
Colored LEDs on your ARRIS Gateway indicate the status of various port activity.(Figure 2)



LED	Action
POWER	Solid Green = The device is powered. Yellow=The device is bootting up. Off = The device is not powered.
INTERNET	Solid Green = Good broadband connection. Red = No broadband connection. Off = The device is not powered.
LAN	Solid Green = This led will flash follow the LAN data. Yellow=The led will turn on when the LAN ports exist connect ,and this led will turn off when the LAN ports disconnect . Off = The device is not powered, no cable or no powered devices connected to the Ethernet.
WLAN	Solid Green = 5G WIFI is connected. yellow =2.4G WIFI is connected. Red=WLAN function was turned off. Off = The device is not powered.
VOIP	Solid Green = This led will turn on when VOIP is calling. Yellow=The LED will turn on when the VOIP ports exist connect ,and this led will turn off when the VOIP ports disconnect . Off = VOIP not in use, line not registered or Gateway power off.

Figure 2

1.2.Rear Panel Introduction. (Figure3)



Item	I/O interface	Description
b	ADSL/VDSL Port	Connect to a modem.
c	VOIP port	Voice ports, please use RJ14 Y cable to connect a phone

d	USB port	USB 2.0 connector
e	LAN port	Ethernet RJ-45 LAN connect to PC
f	WAN port	Ethernet RJ-45 WAN connect to PC
h	POWER 12V/2A DC	Connect to the 12V/2A DC power adapter

Figure 3

2. Set up the ARRIS Gateway

Refer to your Quick start Guide for instructions on how to connect your ARRIS gateway to your power source, PC or local area network, and your Internet access point, whether it is a Fiber connection or a Gigabit Ethernet connection. Different ARRIS Gateway models are supplied for any of these connections. If Dynamic Addressing is not enabled on your PC, perform the following. (Figure 4)

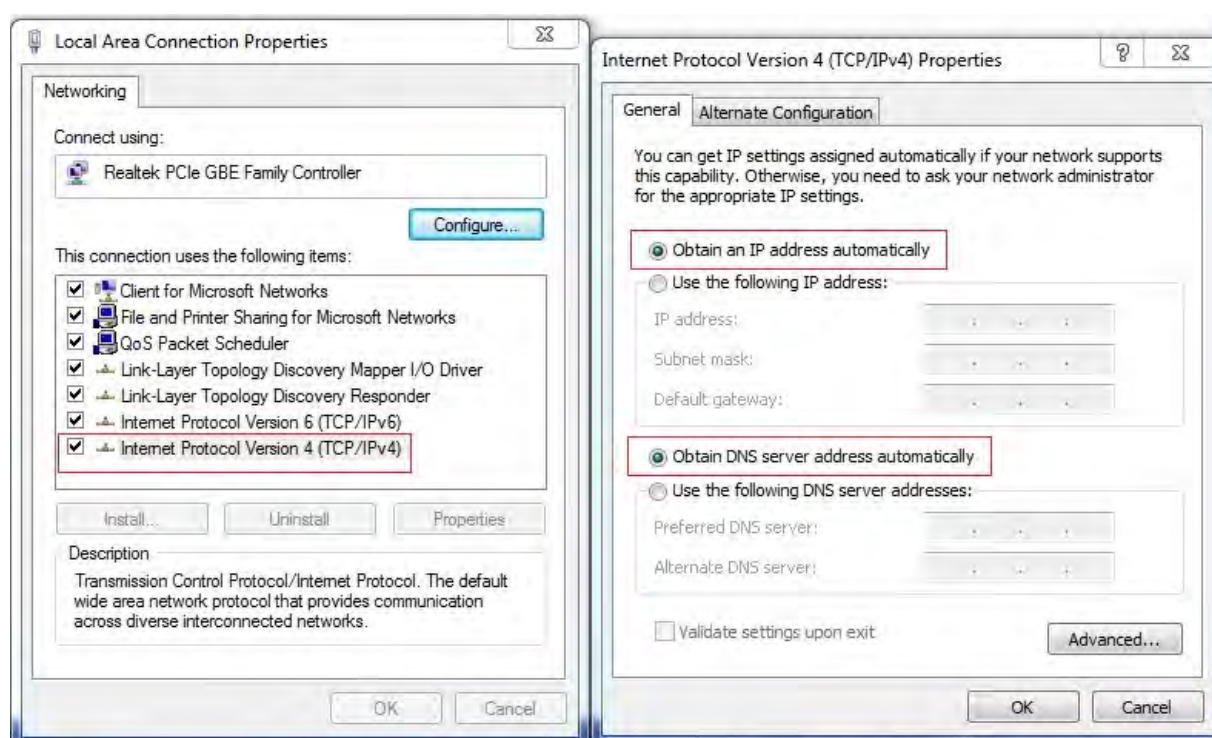


Figure 4

3. Accessing the Web Management Interface

Run your Web browser application, such as Firefox or Microsoft Internet Explorer, from the computer connected to the ARRIS Gateway.

Enter http://192.168.1.254 in the Location text box. Once the network type is determined, The device Status Page opens. Enter your user name and password and click "OK" button. username and password are both "admin".(Figure 5)



Figure 5

The Device Status Page opens.

The Device Status displays the following information in the center section. (Figure 6)

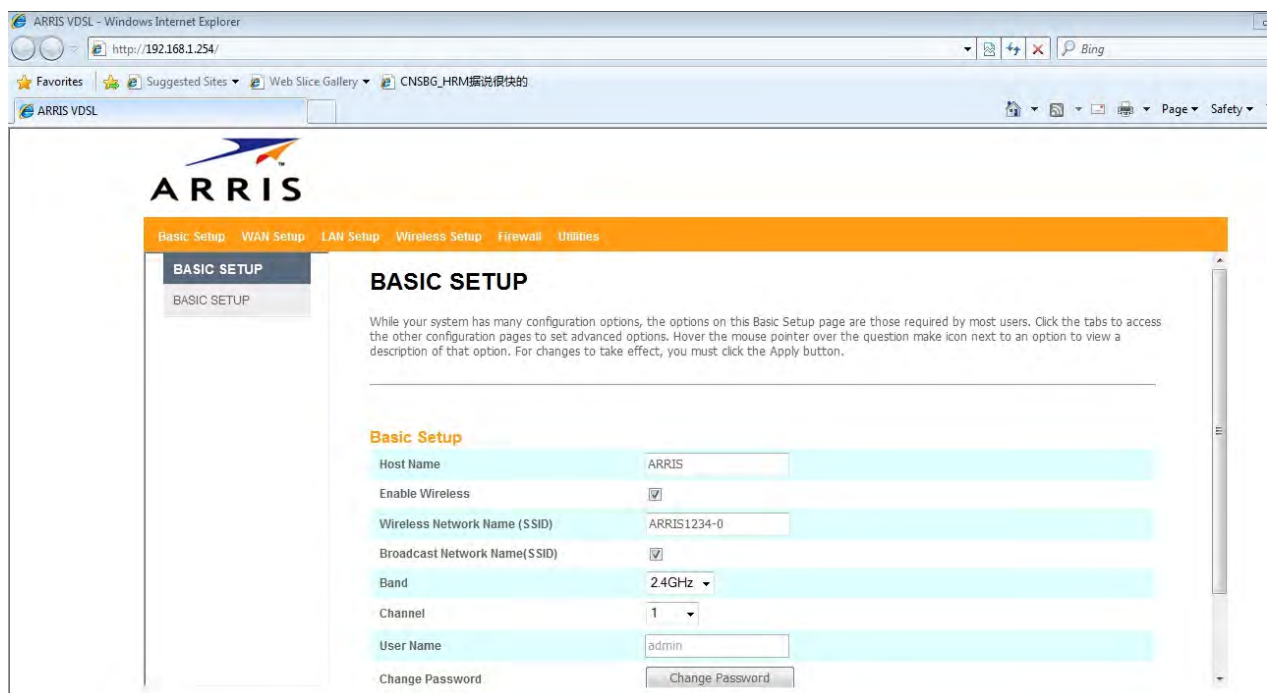


Figure 6

3.1 Links Bar

The links bar at the top of each page allows you to configure different aspects of the features displayed on the page. (Figure 7)



Figure 7

3.2 Basic Setup

Click "Basic Setup", you can change user name and password, and other settings as the figure shows. About WIFI settings, select "2.4G" or "5G" on "Band", then click "Apply/Save". (Figure 8)

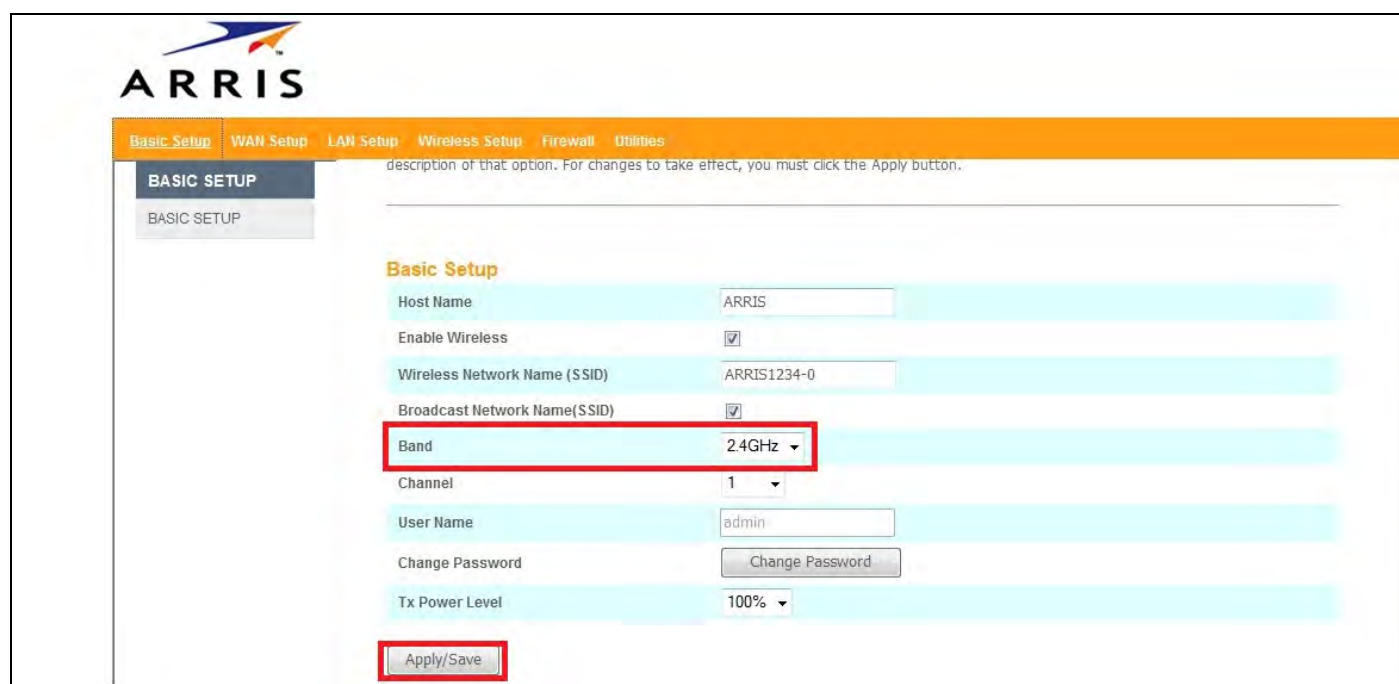
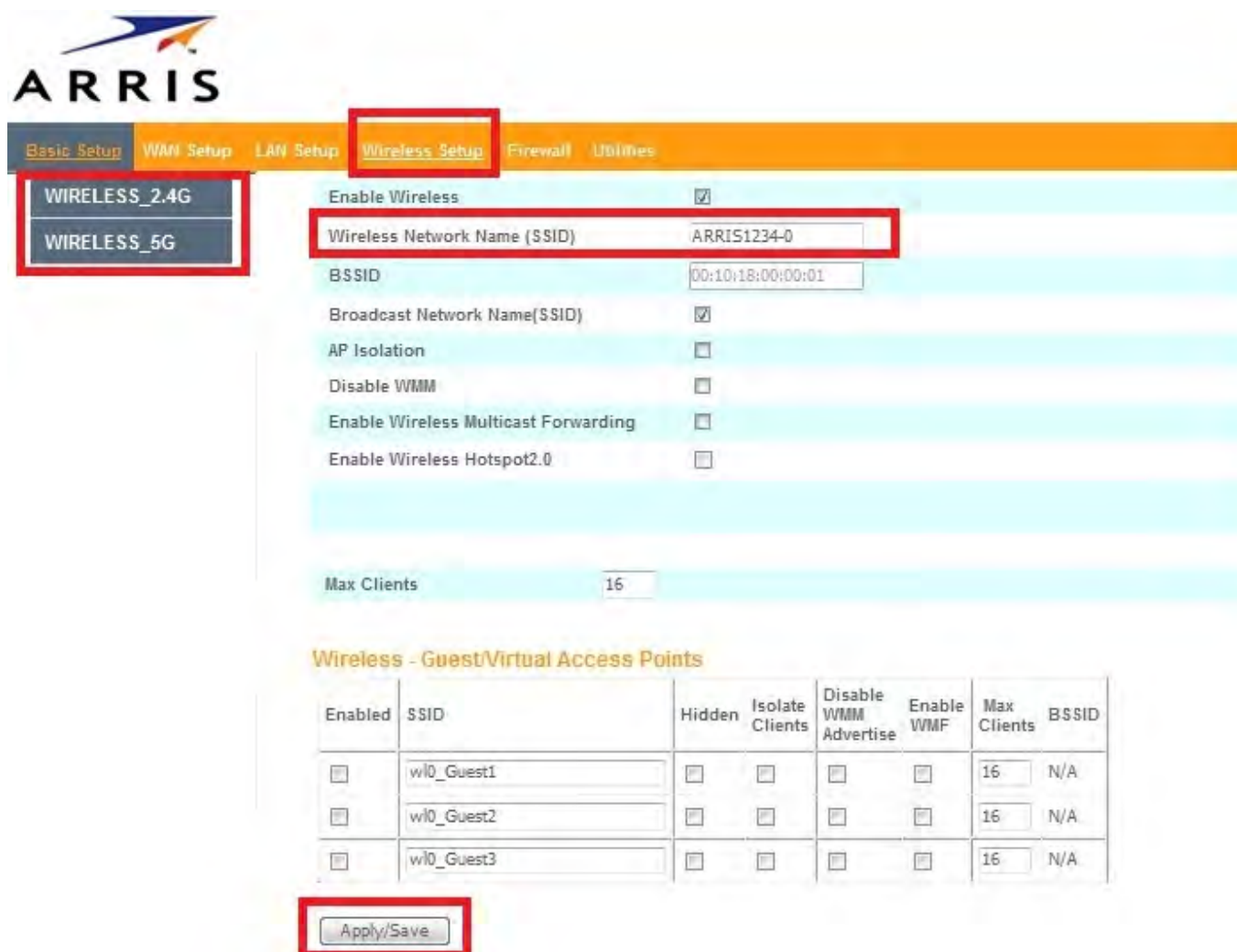


Figure 8

3.3 WIFI setting

Click "Wireless Setup" sub menu "Wireless 2.4G" or "Wireless 5G". Change WIFI SSID in "Wireless Network Name", then click "Apply/Save". (Figure 9)



The image shows the ARRIS Wireless Setup interface. The top navigation bar includes tabs for Basic Setup, WAN Setup, LAN Setup, **Wireless Setup**, Firewall, and Utilities. Under the Wireless Setup tab, there are two sub-menus: **WIRELESS_2.4G** and **WIRELESS_5G**. The main configuration area includes the following settings:

- Enable Wireless:** ☒
- Wireless Network Name (SSID):** ARRIS1234-0
- BSSID:** 00:10:18:00:00:01
- Broadcast Network Name (SSID):** ☒
- AP Isolation:** ☐
- Disable WMM:** ☐
- Enable Wireless Multicast Forwarding:** ☐
- Enable Wireless Hotspot2.0:** ☐
- Max Clients:** 16

Below these settings is a section titled "Wireless - Guest/Virtual Access Points" containing a table:

Enabled	SSID	Hidden	Isolate Clients	Disable WMM Advertise	Enable WMMF	Max Clients	BSSID
☐	wl0_Guest1	☐	☐	☐	☐	16	N/A
☐	wl0_Guest2	☐	☐	☐	☐	16	N/A
☐	wl0_Guest3	☐	☐	☐	☐	16	N/A

At the bottom of the interface is an **Apply/Save** button.

Figure 9

Click sub menu "SECURITY" to change WIFI password. select "WPA2-PSK" in "Network Authentication", then change password in "WPA/WAPI pass phrase" (Figure 10)

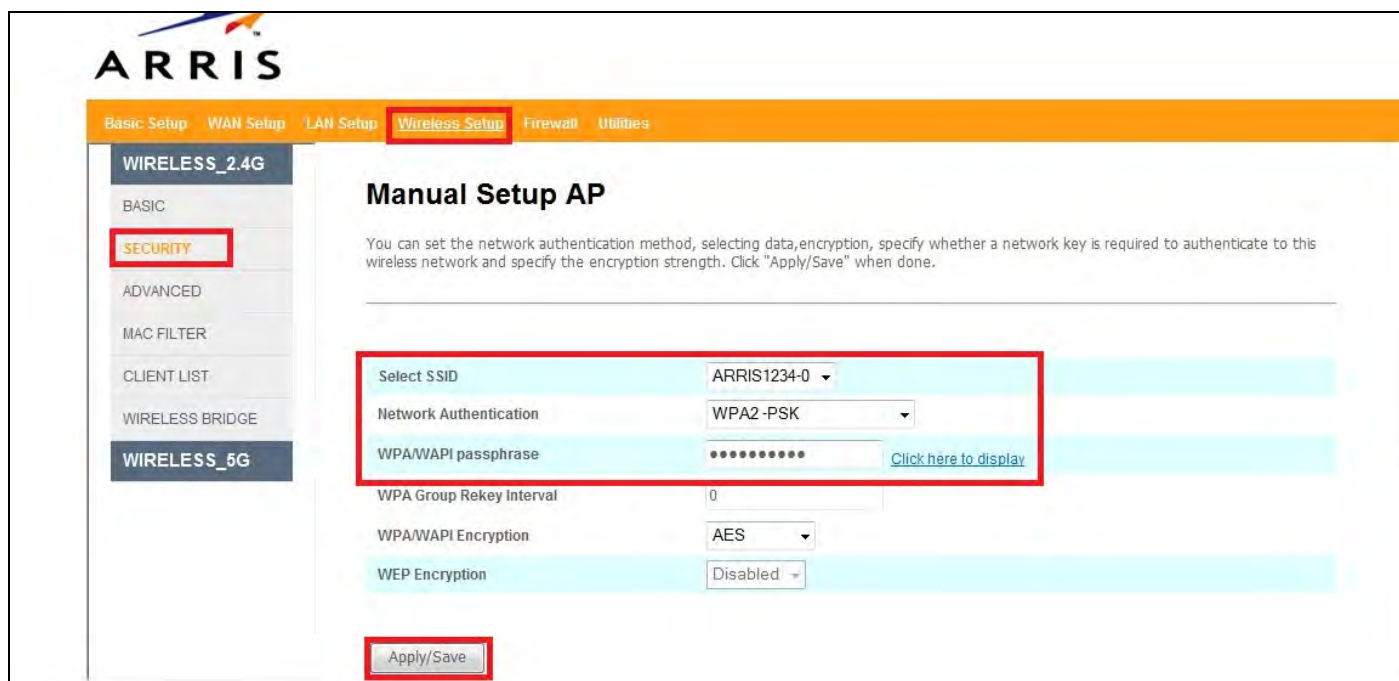
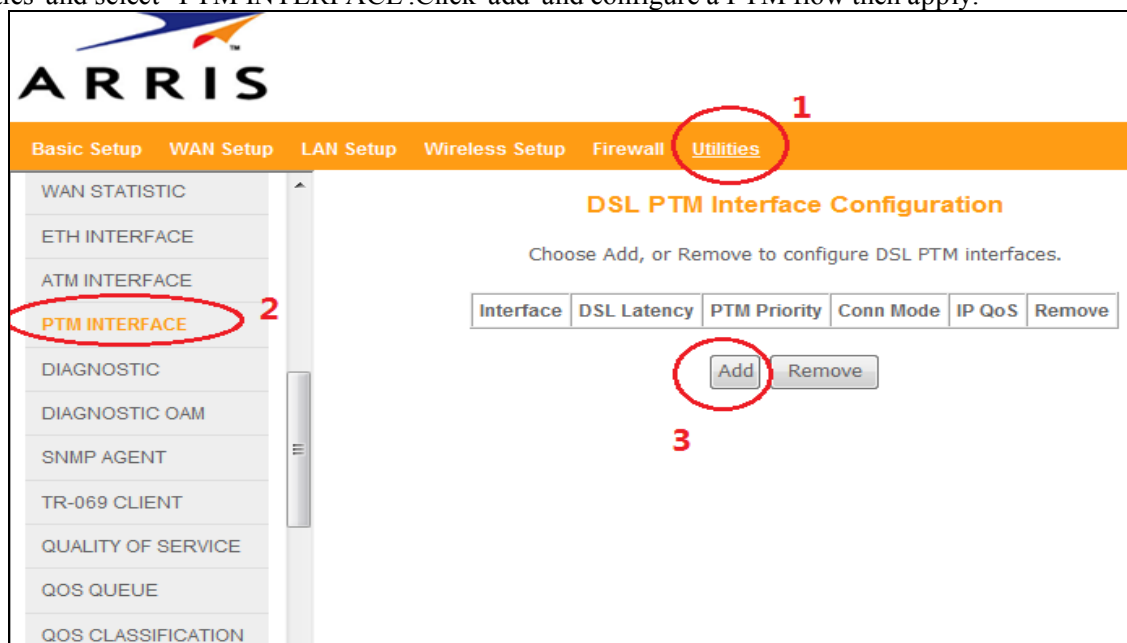


Figure 10

3.4 Setup VDSL

click 'Utilities' and select 'PTM INTERFACE'. Click 'add' and configure a PTM flow then apply.



ARRIS

Basic Setup WAN Setup LAN Setup Wireless Setup Firewall Utilities

ACCOUNT/PASSWORD
SYSTEM SETTINGS
SYSTEM LOGS
DYNAMIC DNS
LAN STATISTIC
WAN STATISTIC
ETH INTERFACE
ATM INTERFACE
PTM INTERFACE
DIAGNOSTIC
DIAGNOSTIC OAM
SNMP AGENT
TR-069 CLIENT
QUALITY OF SERVICE
QOS QUEUE

PTM Configuration

This screen allows you to configure a PTM flow.

Select DSL Latency
Path0 (Fast) ☒
Path1 (Interleaved) ☐

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)
Default Queue Minimum Rate [1-0 Kbps] (-1 indicates no shaping)
Default Queue Shaping Rate: [1-0 Kbps] (-1 indicates no shaping)
Default Queue Shaping Burst Size [bytes] (shall be >=1600)

Back **Apply/Save** 4

Click 'WAN SETUP' select 'wan service', then click 'add'. If you only want to set xDSL interface with default configure. Click next, next....and apply in the end.

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Basic Setup **WAN Setup** LAN Setup Wireless Setup Firewall Utilities

WAN SETUP
WAN INFO
WAN SERVICE 6
DEFAULT GATEWAY
STATIC ROUTE
POLICY ROUTING

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	VlanTpid	Igmp Proxy	Igmp Source
7 Add Remove							

Select the interface you have set in step '1', then next.



ARRIS

Basic Setup WAN Setup LAN Setup Wireless Setup Firewall Utilities

WAN SETUP

WAN INFO

WAN SERVICE

DEFAULT GATEWAY

STATIC ROUTE

POLICY ROUTING

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) was the interface that we sated before in step 1-4

ptm0/(0_1_1) ▼

Back Next **8**

Select WAN service type under your environment. Here I select IPOE, then next.

Basic Setup **WAN Setup** LAN Setup Wireless Setup Firewall Utilities

WAN SETUP

WAN INFO

WAN SERVICE

DEFAULT GATEWAY

STATIC ROUTE

POLICY ROUTING

Select WAN service type:

☐ PPP over Ethernet (PPPoE)

☒ **IP over Ethernet** **9**

☐ 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]:

Select VLAN TPID: **Select a TPID** ▼

Internet Protocol Selection:

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Wan IP set ... next and next.

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Basic Setup **WAN Setup** LAN Setup Wireless Setup Firewall Utilities

WAN SETUP

WAN INFO

WAN SERVICE

DEFAULT GATEWAY

STATIC ROUTE

POLICY ROUTING

WAN IP Settings

Enter information provided to you by your ISP to configure the WAN IP settings.
Notice: If "Obtain an IP address automatically" is chosen, DHCP will be enabled for PVC in IPoE mode.
If "Use the following Static IP address" is chosen, enter the WAN IP address, subnet mask and gateway.

☐ Obtain an IP address automatically

Option 60 Vendor ID

Option 61 IAID (8 hexadecimal digits)

Option 61 DUID (hexadecimal digit)

Option 125 ☒ Disable ☐ Enable

11 ☒ Use the following Static IP address:

WAN IP Address

WAN Subnet Mask

WAN gateway IP Address **12**

Default gateway...next.

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Basic SetupWAN SetupLAN SetupWireless SetupFirewallUtilities

WAN SETUP

WAN INFO

WAN SERVICE

DEFAULT GATEWAY

STATIC ROUTE

POLICY ROUTING

Network (LAN).

Enable NAT

☒

Enable Fullcone NAT

☒

ONLY IF REQUIRED -- DISABLES NETWORK ACCELERATION AND SOME SECURITY FEATURES

☐

Enable Firewall

☐

IGMP Multicast

Enable IGMP Multicast Proxy

☐

Enable IGMP Multicast Source

☐

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Next

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ARRIS

Basic SetupWAN SetupLAN SetupWireless SetupFirewallUtilities

WAN SETUP

WAN INFO

WAN SERVICE

DEFAULT GATEWAY

STATIC ROUTE

POLICY ROUTING

Routing Default Gateway

Default gateway interface list can have multiple WAN interfaces served as system priority with the first being the highest and the last one the lowest priority if the removing all and adding them back in again.

Selected Default Gateway Interfaces

ptm0.1

Available Routed WAN Interfaces

->

<--

Back

Next

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Basic Setup **WAN Setup** LAN Setup Wireless Setup Firewall Utilities

WAN SETUP

WAN INFO

WAN SERVICE

DEFAULT GATEWAY

STATIC ROUTE

POLICY ROUTING

Select DNS Server Interface from available WAN interfaces:

Selected DNS Server Interfaces: ptm0.1

Available WAN Interfaces:

Use the following Static DNS IP address:

Primary DNS server:

Secondary DNS server:

Back Next

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In the end, click "Apply". You can see this

ARRIS

Basic Setup **WAN Setup** LAN Setup Wireless Setup Firewall Utilities

WAN SETUP

WAN INFO

WAN SERVICE

DEFAULT GATEWAY

STATIC ROUTE

POLICY ROUTING

WAN Setup - Summary

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

Connection Type	IPoE
NAT	Enabled
Full Cone NAT	Enabled
Firewall	Disabled
IGMP Multicast Proxy	Disabled
IGMP Multicast Source Enabled:	Disabled
MLD Multicast Proxy	Disabled
MLD Multicast Source Enabled:	Disabled
Quality Of Service	Enabled

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

Back Apply/Save

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[Basic Setup](#) [WAN Setup](#) [LAN Setup](#) [Wireless Setup](#) [Firewall](#) [Utilities](#)

WAN SETUP

WAN INFO

WAN SERVICE

DEFAULT GATEWAY

STATIC ROUTE

POLICY ROUTING

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	VlanTpid	Igmp Proxy	Igmp Source	NAT	Firewall	IPv6	Mld Proxy	Mld Source	Remove	Edit
ptm0.1	ipoe_0_1_1	IPoE	N/A	N/A	N/A	Disabled	Disabled	Enabled	Disabled	Disabled	Disabled	Disabled		Edit

Add

Remove