
Netcomm NL1901ACV

A Guide for Commander Partners

November 2020



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Logging into Modem - Locally

(if you have changed the IP range you will need to use the new range)

Modem IP: 192.168.1.1

You will then be presented with to Login popup

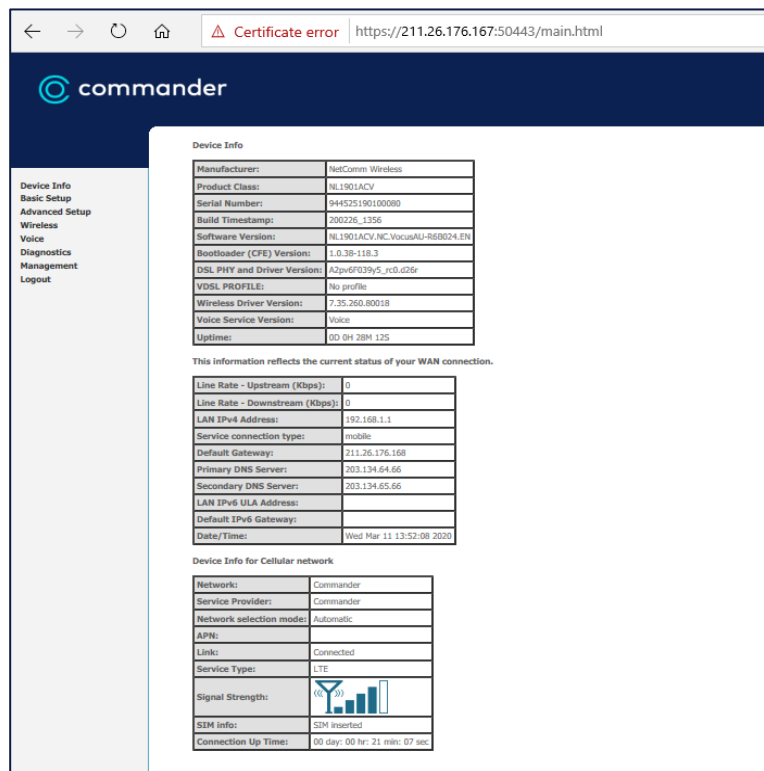
Please enter the login credential for the device

Default username: admin

Default password: serial number of the device

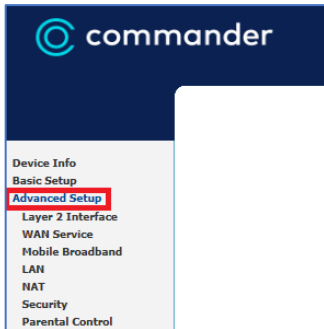


You will be presented with the "Device Information" page

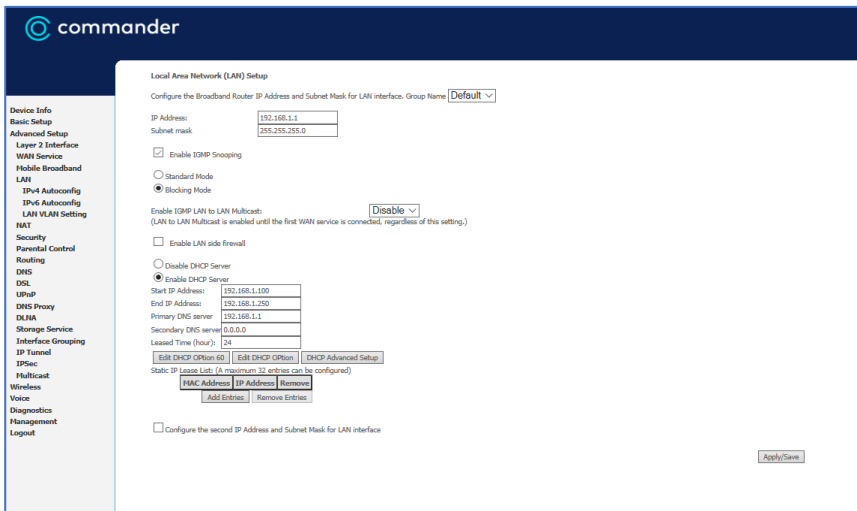
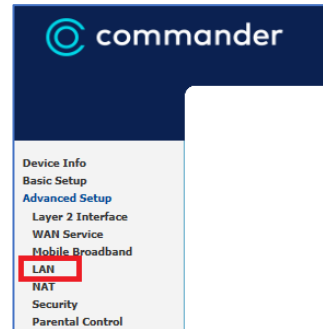


NL1901ACV LAN Setup

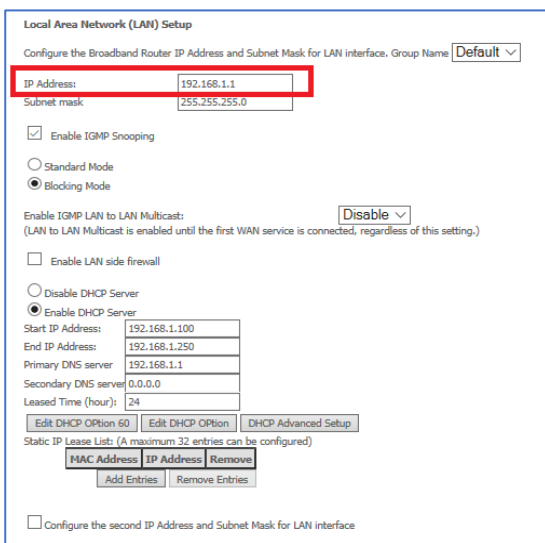
On the left-hand menu select Advanced Setup



Once selected it will default to Layer 2 Interface please change this to LAN >>>>

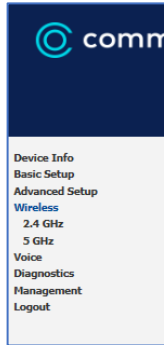
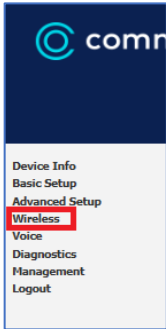


In this window please enter the Desired IP Range then click ok *please note this will change the IP used to login to the modem*

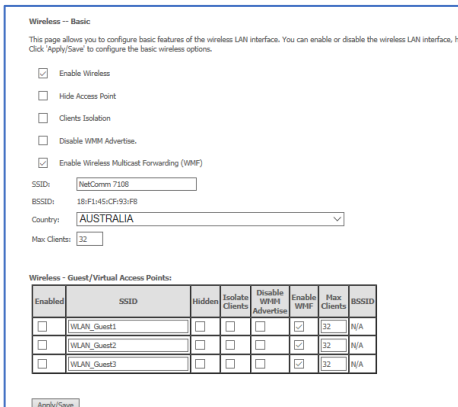


NL1901ACV WIFI Setup

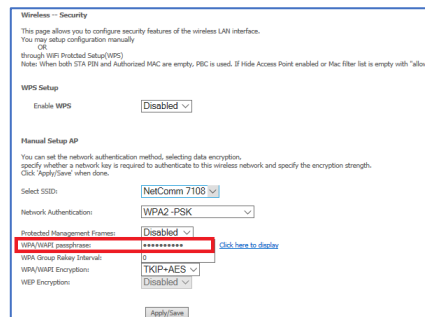
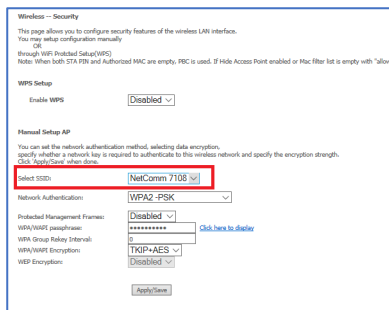
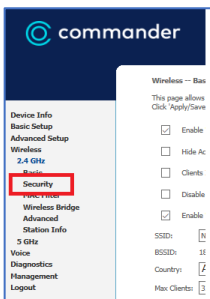
1. On the left-hand menu select Advanced Setup
2. Once selected it will default to 2.4ghz Interface please change this to 5ghz if you want to change 5ghz
3. Using the left-hand menu select either "2.4GHz or 5GHz" both menu screens are the same design so steps below can be replicated on either 2.4GHz or 5GHz



On the right-hand side of the page you will see the "Wireless -- Basic" screen here we configure the WIFI SSID
To change the SSID please replace the "Netcomm ****" with desired SSID



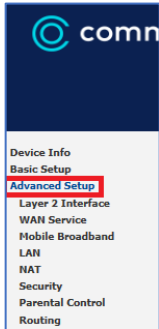
1. On the left-hand menu select Security
2. Please select the "SSID" to change
3. Once you have selected the interface change "WPA/WAPI Passphrase" icon as per the image below



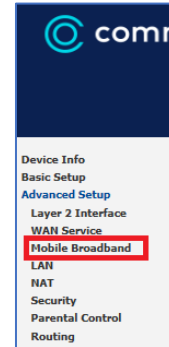
To view the password, you can click "Click here to display" link this will open a popup window displaying the current password

NL1901ACV Mobile Broadband/4G Setup

On the left-hand menu select Advanced Setup

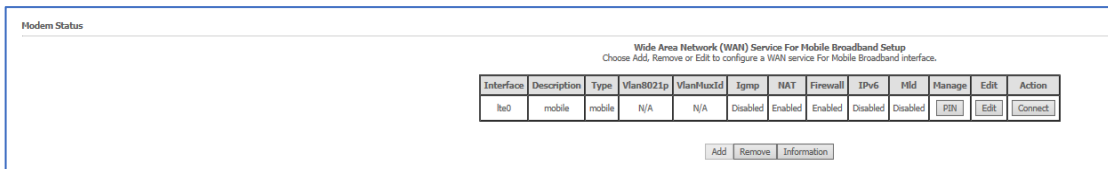


Once selected it will default to Layer 2 Interface please change this to Mobile Broadband >>>



On the right-hand side of the page you will see the "Modem status" screen here we configure the cellular service

Please follow the steps below to configure 3G/LTE



Cellular configuration

Please Click the "Edit" (if LTE is connected you will need to disconnect first)
only modify then APN or you will disable the LTE service

Support NDIS

DHCP

Enable NAT

User Name:

Password:

Authentication Method:

APN:

Dial Number:

Net Select:

Dial Delay(in sec.):

Default WAN Connection Select:

WAN backup mechanism: DSL/WAN port IP connectivity

Checking IP address:

Period time (in sec.):

Timeout (in sec.):

Fail Tolerance:

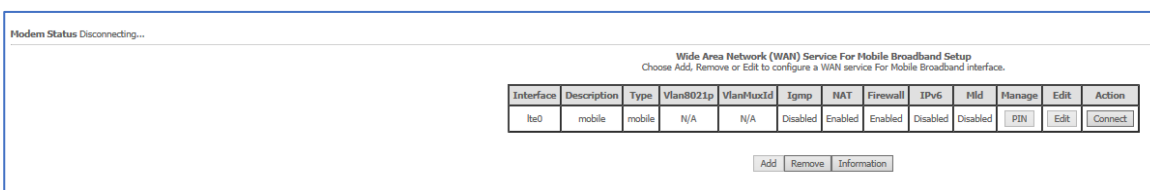
Keep-alive: (leave this blank to disable Keep-alive)

Destination address:

Period Ping Timer(in sec.):

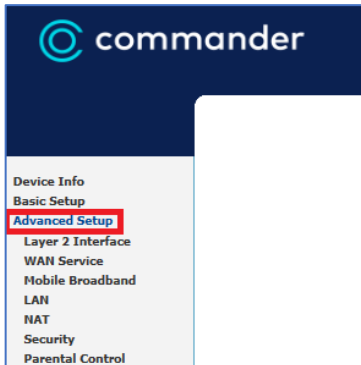
Fail count: (1-65535)

In this window please enter the APN *PRIMUSLNS1* Then click Apply/Save
(the service should auto connect if not hit connect)

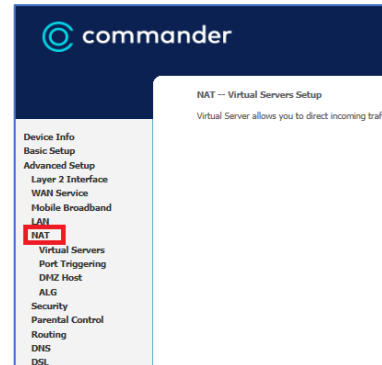


NL1901ACV Port Forward Setup

On the left-hand menu select Advanced Setup

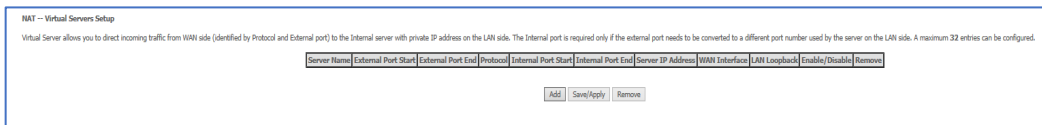


Once selected it will
Default to Layer 2 Interface
lease change this to NAT >>>>

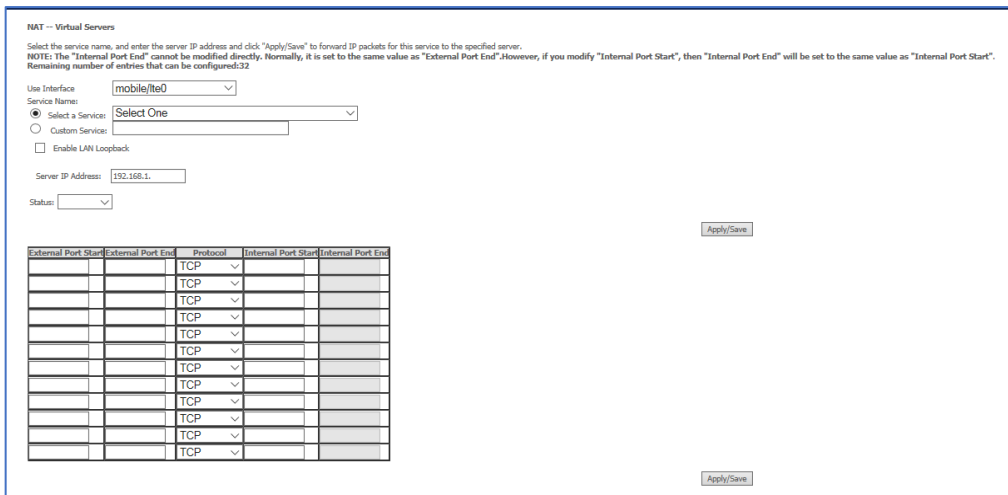


On the right-hand side of the page you will see the "NAT -- virtual Servers Setup" screen please change to "Static NAT" TAB

Please follow the steps below to configure Port Forward



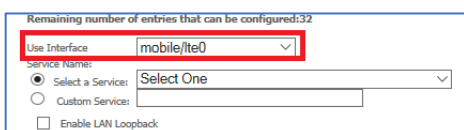
Please click the "Add" button



On the new window you create the rule wanted

please make sure you follow directions below without mistake or the rule will not work

Select interface



Now select a service or enter a customer service type (this is the best option if you want to use nonstandard ports)

Use Interface: mobile/te0

Service Name:

- Select a Service: Select One
- Custom Service:

Enable LAN Loopback

Now enter the LAN IP you wish to have the port forward enabled on and select enable or disable

Server IP Address: 192.168.1.101

Status: Enable

Now Enter the "External port" settings as shown below

- External port is the port that will be accessed from the "outside world"
- Internal port is the port wanted on the computer (these can be different)

External Port Start	External Port End	Protocol	Internal Port Start	Internal Port End
80	80	TCP/UDP	80	80
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		

Once done click "Apply/Save"

NAT - Virtual Servers

Select the service name, and enter the server IP address and click "Apply/Save" to forward IP packets for this service to the specified server.
 NOTE: The "Internal Port End" cannot be modified directly. Normally, it is set to the same value as "External Port End". However, if you modify "Internal Port Start", then "Internal Port End" will be set to the same value as "Internal Port Start".
 Remaining number of entries that can be configured:32

Use Interface: ETH WAN/ppp4.2

Service Name:

- Select a Service: Select One
- Custom Service: webservier

Enable LAN Loopback

Server IP Address: 192.168.1.101

Status: Enable

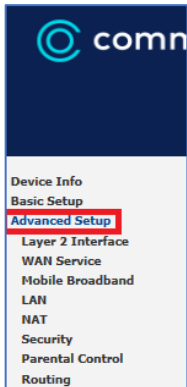
Apply/Save

External Port Start	External Port End	Protocol	Internal Port Start	Internal Port End
80	80	TCP/UDP	80	80
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		
		TCP		

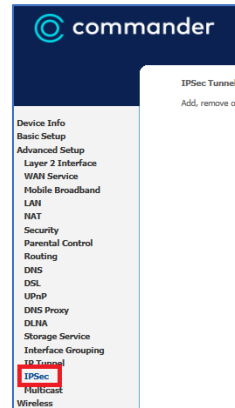
Apply/Save

NL1901ACV IPSec VPN

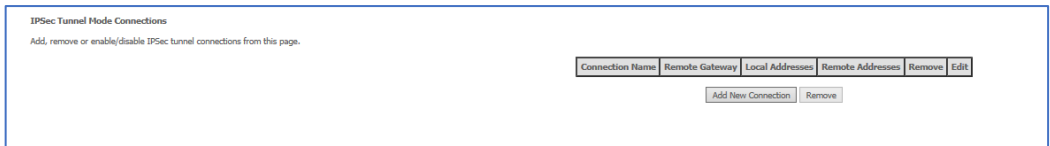
On the left-hand menu select Advanced Setup



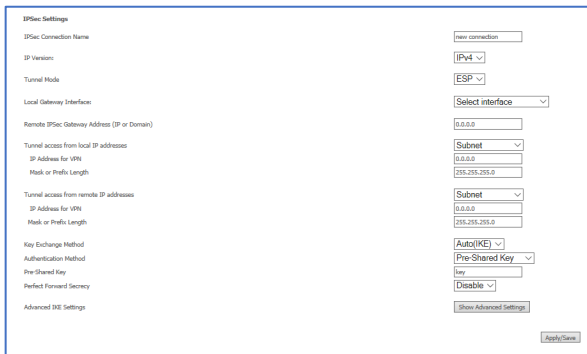
Once selected it will default to Layer 2 Interface please change this to IPSEC >>>>



On the right-hand side, you will see the current setup IPsec tunnels and have the ability to add or remove them

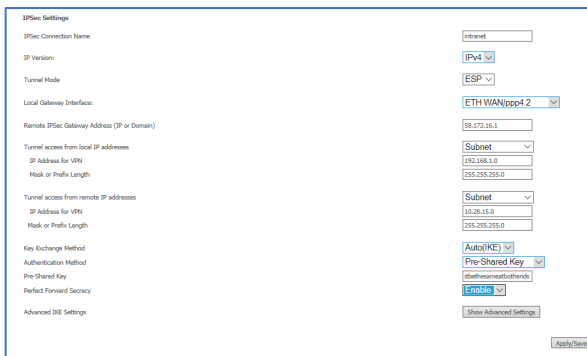


Follow the guide below to setup an IPsec tunnel
Click "Add New Connection" the page will change to look like below



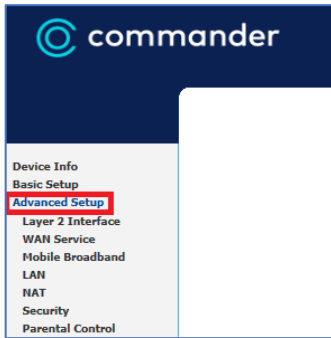
Enter the desired details and click apply and save (I have put an example below)

Local = the device you are configuring
Remote = the site you wish to access

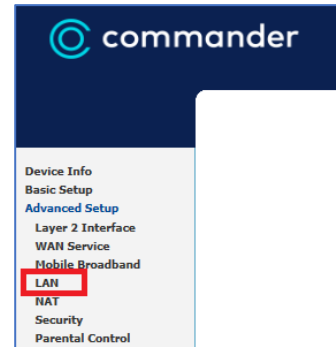


NL1901ACV Framed Route Setup

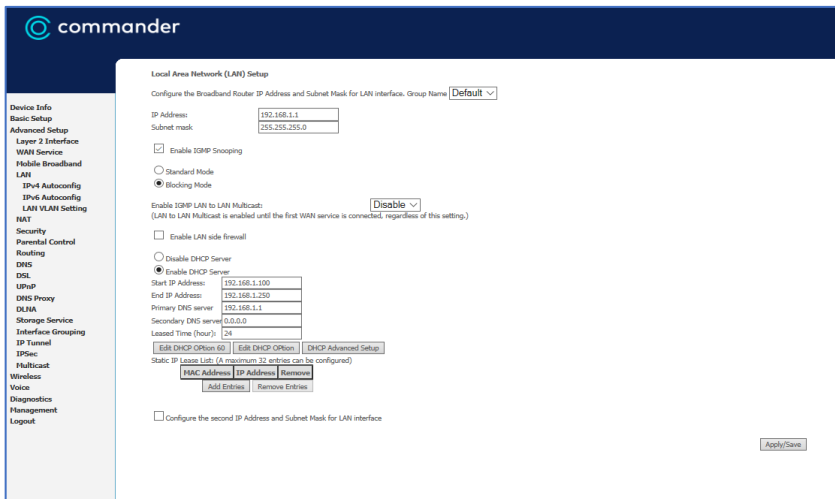
On the left-hand menu select Advanced Setup



Once selected it will default to Layer 2 interface – please change this to LAN >>>



Now We can proceed to setup the framed route



In this window please enter the framed Route Details

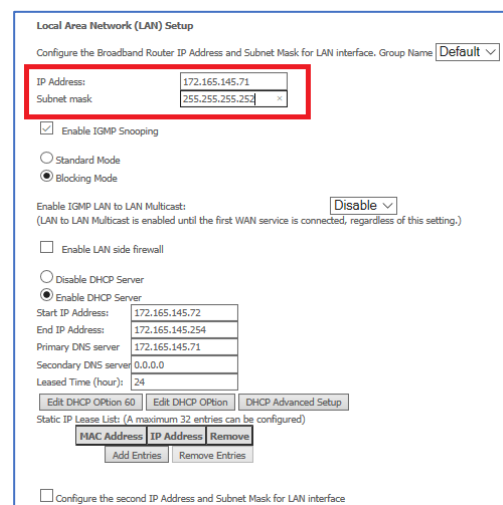
IP address: (this will be the Framed route IP provided by ISP)

Subnet Mask: (this will be the subnet provided by ISP)

The start address and end address with change automatically

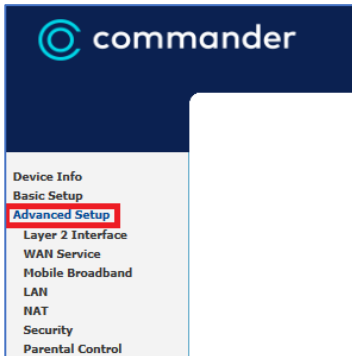
DNS Service please use the DNS provided by ISP

Click on **Apply/Save** - done

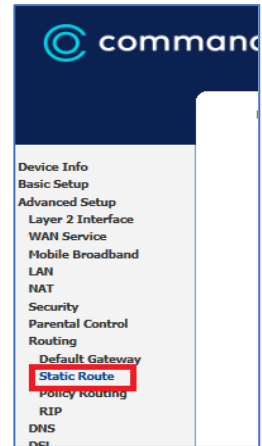


NL1901ACV Static Route Setup

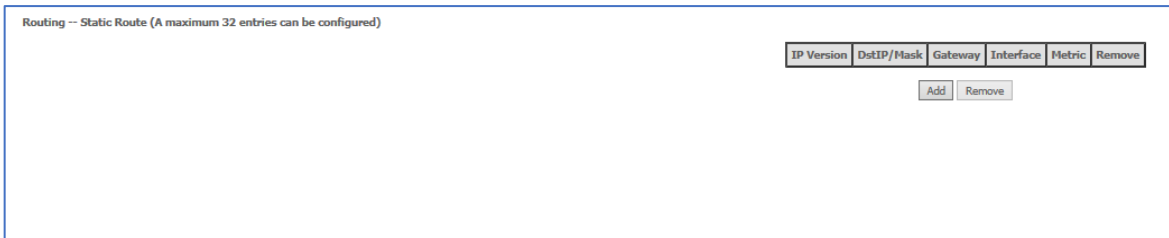
On the left-hand menu select Advanced Setup



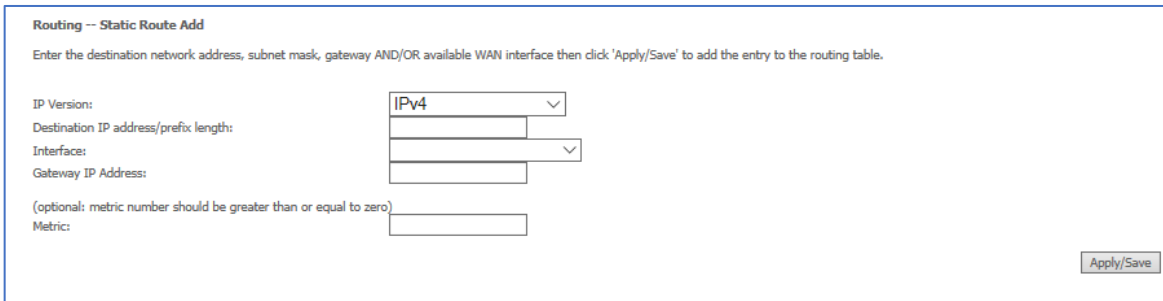
Once selected it will default to Layer 2 Interface please change this to Static Route >>>>



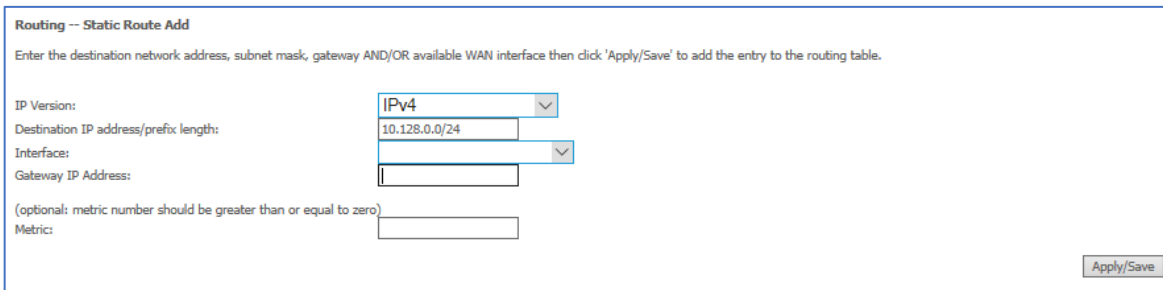
Please follow the steps below to configure a new Static Route



Please click "Add" the page will change as per below



Entered desired details and click "Apply/Save"



Pv4 static route configuration information

Item	Description
Destination IP address	Set the destination IP address of a IPv4 static route.
Interface	Specifies the name of a LAN/WAN interface. If the interface name is specified, a static route searches the routing table of the WAN instance for an outbound interface according to Next hop .
Next hop	Set the next-hop IP address of a IPv4 static route.
Metric	Set the priority of a IPv4 static route. A smaller value indicates a higher priority.

NL1901ACV Voice Settings

Follow modem log in process

VOICE SETTINGS ARE READ ONLY - To change Voice settings, call Commander Technical support for further support.

Select from menu on the left: **Voice -> VOIP Status**

Voice -- Voice Status

Account denial will display "Disabled", registered successfully will display "Up", and unregistered will display "Down".

SIP Account	Call Time	User Accounts	Registration Status	Hook Status	Call Status
1	0:00:00		Up	On Hook	Idle
2	0:00:00		Down	On Hook	Idle

Active call monitoring

Calling number	Called number	Source IP	Destination IP	Port used	Duration	Direction	Packets sent	Packets received	Packets lost

Call history:

Index	Calling number	Called number	Source IP	Destination IP	Port used	Duration	Direction	Packets sent	Packets received	Packets lost	Timestamp

The example below shows no services registered 'Registration Status' = Down

Voice -- Voice Status

Account denial will display "Disabled", registered successfully will display "Up", and unregistered will display "Down".

SIP Account	Call Time	User Accounts	Registration Status	Hook Status	Call Status
1	0:00:00		Down	On Hook	Idle
2	0:00:00		Down	On Hook	Idle

Active call monitoring

Calling number	Called number	Source IP	Destination IP	Port used	Duration	Direction	Packets sent	Packets received	Packets lost

Call history:

Index	Calling number	Called number	Source IP	Destination IP	Port used	Duration	Direction	Packets sent	Packets received	Packets lost	Timestamp

The sample below shows SIP 1 Account as registered and SIP 2 not registered

Voice -- Voice Status

Account denial will display "Disabled", registered successfully will display "Up", and unregistered will display "Down".

SIP Account	Call Time	User Accounts	Registration Status	Hook Status	Call Status
1	0:00:00		Up	On Hook	Idle
2	0:00:00		Down	On Hook	Idle

Active call monitoring

Calling number	Called number	Source IP	Destination IP	Port used	Duration	Direction	Packets sent	Packets received	Packets lost

Call history:

Index	Calling number	Called number	Source IP	Destination IP	Port used	Duration	Direction	Packets sent	Packets received	Packets lost	Timestamp