

BSNL FTTH Problems & Solutions

KOTTAYAM/PATHANAMTHITTA BA

FTTH Common Issues

IN THIS, WE HAVE INCLUDED THE COMMON FTTH ISSUES WE HAD GONE THROUGH.

SPEED ISSUES, DATA USAGE CHECK, PLAN CHANGE, PON RED INDICATION, OPTICAL RECEIVE POWER, MTU ISSUES, DNS ISSUES, DISCONNECTION AND RECONNECTION ISSUES, VPN ISSUES ETC. ARE INCLUDED WITH THE BEST OF OUR KNOWLEDGE.

HOPE THIS WILL BE HELPFUL FOR YOU.

PON Light Indications:

IF PON LIGHT IS **RED**/ NO LIGHT :

REASON: FIBER BREAK OR LOW / HIGH POWER.

IF PON LIGHT IS BLINKING :

REASON: OLT/ONT CONFIGURATION ISSUE.

*** FOR THE PROPER WORKING, PON LIGHT SHOULD BE STABLE IN GREEN LIGHT.

SPEED Issues

Speed issues are related with following parameters;

- **Fiber power** : It should be between **-14db and -25db** to get optimal speed.
- MTU Size : Mostly MTU size are related with network elements of different server/nodes. We can check by different MTU sizes between 1400-1500. The most common MTU value in BSNL is 1460.
- **DNS :** (if the Ethernet Adaptor symbol shows **Yellow Triangle Exclamation** mark on it and Internet not getting, can also be solved by the below DNS setting on ONT or Ethernet IPv4 setting of system).
- Set DNS as 61.1.1.1 & 61.0.3.3 of BSNL (Primary & Secondary) . or Set DNS as 8.8.8.8 & 8.8.4.4 of Google (Primary & Secondary).
- 802.1p Select as "Null" in ONT configuration for better speed.

MTU Setting

met Binding LAN IP Address WLAN Remote LOID Configuration. Gols Time Router	St	tatus	Netwo	нƙ	S	ecurity	Appi	ication		Management
	met	Binding	AN IP Address	WLAN	Remote	LOID Configuration	Q05	Time	Router	

WAN Configuration

Normally ONT IP will be 192.168.1.1 or 192.168.0.1

Type it in any browser-

Username: admin Password: admin / password / stdONU101/system (any of these)

Go to network - WAN - and as shown in figure

Connection Name:	2_INTERNET	R_VIC V
Mode:	Route	•
IP Protocol Mode:	lpv4	
O DHCP	Get an address f	rom ISP
Static	Get a static IP ac ISP	dress fron
PPPoE	Select this when	using PPP
0	Enable PPPOE	Proxy
Enable NAT:		
Enable Vlan:		
Vlan ID:	100	
802.1p:	(null)	,
MTU:	1460	91.29 K
UserName:	test_sid@ftth.b	snl.in
PassWord:		
Service Name	int	
РРР Туре	Auto Connect	۲
Service Mode	INTERNET	۲
Turn off LAN DHCP:	101	

DNS Setting

Generally **DNS** is the only system in the entire world that can help you browse the internet without its IP address. You can use Either BSNL Exclusive DNS or Google DNS.

Proper DNS Setting will:

- Increase the speed of Network.

- Website resolving (In case of any particular website) capability will be improved.

- 61.1.1.1 & 61.0.3.3 for BSNL.
- **8.8.8.8 & 8.8.4.4** for Google.

DNS setting at ONT

				~				Ga
Network	s	tatus	Network	1	Security	Appl	ication	
	Internet	Sinding LAN IP Ad	dress WLA	Remote	LOID Configuration	Gos	Time	Rep
Pv4 Configuration		LAN Settings Configure the IP ad configuration	dress and s	ibnet mask	of the LAN access	s ports o	of the CF	PE CI
Pv6 Configuration		IP Address		2.168.1.1				
Pv6 DHCP Server Configuration		Subnet Mask: Disable DHCP Enable DHCP	Server Server	5.255.255	0			
A Configuration		Start IP Addres						
		End IP Address Lease Time Lan Dns Mode	One Day	0.55452530				
		Primary Dns Secondary Dns	61.1.1.1					
		O Enable DHCP						

DNS Setting

-

We can set DNS value individually at PC / Laptop / Mobile etc. as per requirement.

Organize Disable this network device Diag	nose this connection »	
FTTH BSNL Network 5 Realtek PCIe GBE Family Controller		
NIB-BB Properties	Internet Protocol Version 4 (TCP/IPv4) Properties
Networking Sharing	General	
Configu This connection uses the following items: Client for Microsoft Networks Client for Microsoft Networks Client for Microsoft Networks File and Printer Sharing for Microsoft Networks Internet Protocol Version 6 (TCP/IPv6)	e Obtain an IP address OUse the following IP a IP address: Subnet mask: Default gateway:	energen der state der
 Internet Protocol Version 4 (TCP/IPv4) Internet Protocol Version 4 (TCP/IPv4) Link-Layer Topology Discovery Mapper I/O Driver Link-Layer Topology Discovery Responder 	Obtain DNS server ad	
Install Uninstall Properti	A STATE AND A STAT	61 . 1 . 1 . 1
Description Transmission Control Protocol/Internet Protocol. The defa wide area network protocol that provides communication across diverse interconnected networks.	Alternate DNS server:	61 . 0 . 3 . 3

SPEED Issues

In case of FTTH plans above **100 Mbps**;

- EPON/GEPON OLTs/ONTs have limitation for providing speed above 100mbps. GPON OLTs/ONTs will perform better.
- Customer PC/Laptop Ethernet port should be Gigabit Ethernet.
- Use cat 6 Ethernet cables. (**Cat 6** is cable that's more reliable at higher speeds than **Cat 5** or **Cat** 5e.)
- PCs/Laptops should have enough processing capacity. Processors should be I3 or above.
- Most of the Mobile devices are limited with around 60mbps or below speed.

SPEED Issues

- WIFI need Dual Band Antennas for ONTs/Routers (2.4 GHz (802.11g/N) and 5.1 GHz (802.11a/N))



Range of Dual Band Antennas in WIFI



If any website/application is not getting ...

- 1. In Windows, go to Start and select Run.
- Type in cmd (Windows 2000/XP) or command (Windows 98/ME) into the Open: field. Hit the enter key or click OK.
 The DOS prompt should open.
- 3. At the DOS prompt, type in **ping www.yahoo.com -f -l 1492** and hit the Enter key:

🗪 Command Prompt

```
C:\>color f0
C:\>ping www.yahoo.com -f -l 1492
Pinging ds-any-fp3-real.wa1.b.yahoo.com [46.228.47.115] with 1492 bytes of data:
Packet needs to be fragmented but DF set.
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>
```

The results above indicate that the packet needs to be fragmented. Repeat this test, lowering the size the packet in increments of +/-10 (e.g. 1472, 1462, 1440, 1400) until you have a packet size that does not fragment:

🐼 Command Prompt

```
C:\>ping www.yahoo.com -f -l 1400

Pinging ds-any-fp3-real.wa1.b.yahoo.com [46.228.47.115] with 1400 bytes of data:

Reply from 46.228.47.115: bytes=1400 time=127ms TTL=51

Reply from 46.228.47.115: bytes=1400 time=120ms TTL=51

Reply from 46.228.47.115: bytes=1400 time=120ms TTL=51

Reply from 46.228.47.115: bytes=1400 time=120ms TTL=51

Ping statistics for 46.228.47.115:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 117ms, Maximum = 127ms, Average = 121ms

C:\>m
```

Begin increasing the packet size from this number in small increments until you find the largest size that does not fragment. Add 28 to that number (IP/ICMP headers) to get the optimal MTU setting. For example, if the largest packet size from ping tests is 1462, add 28 to 1462 to get a total of 1490 which is the optimal MTU setting. Change the MTU on the routers WAN Setup.

VPN Issues with ONT

If a particular customer complaints about his VPN is not getting via his ONT....

Please check the MTU Size needed for his VPN and apply it.

For Eg: **Global Protect** VPN need 1460 in ONT & 1300 in Global Protect VPN Adapter setting.

Most of the ONTs support VPNs. In case of not supporting, please ask the ONT Vendor for firmware upgrade.

Important Security Aspects

1. All are requested to change MODEM/FTTH ONT login password with a difficult one. (With Alphabets/ Numerics/ Special Characters).

2. Old ONTs have firmware updates available. Please update soon.

3. Use carefully and only in urgent situations :Remote access like Anydesk, Ultraviewer, Team viewer etc. After use make sure that it is log off and closed.

4. Install a good antivirus in PCs/Laptops/Mobiles. Also use firewall in OS for Internet access.

5. Shut down systems and Internet access devices after use.

6. Deny location sharing and device access for apps when it is not used(Deny full access, if it not necessary).

7. Use WiFi passwords for Access points.

8. Don't share your IP details, Internet usernames to anyone.

9. Don't save your bank/atm/email passwords and credit card no.s in mobiles or in online platforms and also in browsers .

10. Stay safe with your Private Data.

Data Usage check via selfcare.bsnl.in

acilities for Unregistered Users	Welcome To BSNL	Facilities for Registered Users
Wireline Wireless Image: New Services(Self Onboarding) Mare Image: New Services(By Agent) Mare Image: New Service Booking Mare Image: Track New Service Request Mare Image: Go Green(opt for E-Bill Only) Mare Image: Pay your bill(s) Image: Register Comptaint Image: Track Comptaint Track Comptaint Image: Track Comptaint Track Comptaint	Username: * Username Password: * Password HFJWJY & Captcha: * Captcha Captcha: * Captcha Cogin with Password CLogin with OTP CReset Password Login Sign Up f Sign in with Facebook Sign in with Google	Wreine Wreiss ViewiPay Bills/Sign up for E-bill Check Landline/Broadband Usage ViewiRedeem Loyalty Points Track Order/Complaints Change Broadband Password Update Customer Profile Schedule Conference

Options	Ē				
Manage Account	My Accounts				
Password Managment	SWITEINE UWITE	ess			
Opt for New Service					
Schedule Conference	Note: • Wireline services in	clude Landline, Broadbar	id, Bharat Fiber, ISDN, Fi	MT, MMVC and Leased	Circuit.
Directory Enquiry	 Please click on billi 	ng account number to see	e usage, view bills and o	ther details.	
Directory Enquiry	Please click on billi Show 10 • entries	ng account number to see	-	Search:	
Directory Enquiry	Show 10 v entries	ing account number to see	3	Search:	Detach #
Directory Enquiry	Show 10 v entries		3	Search:	Detach #
Directory Enquiry	Show 10 v entries	ienvice Id : Customer Id;	Billing Account Number a	Search: Service Type :	Detach #

Options Bills & Payments My Usage Manage Account Billing Account No: 9038547071 My Services Landline No: 0481-2970888 Modify Services Outstanding Unbilled Amount Amount **Register Complaints** due on 2020-07-21 till 2020-07-20 Update Billing Profile Wondering how you most use your services? ₹0 ₹0.00 You can view your usage details and export it Bills & Payments as PDF or .xis > Go to Bills & Payments > Go to my usage My Usage Manage Loyalty Points My Complaints Loyalty Management Account Profile New Services Schedule Conference As we constantly strive to improve our We appreciate your trust in us and provide our ilaan wa da ant taka ariayanaan liabthu sustamors with a Lovalty Cahama Vau aan

भारत संचार निगम लिमिटेड BHARAT SANCHAR NIGAM LIMITED

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BSNL

Options Manage Account < My Services Modify Services Register Complaints Update Billing Profile Bills & Payments My Usage Usage Broadband Usage Manage Loyalty Points ۲ Account Profile New Services Schedule Conference

BSNL भारत संचार ानग	मालाम
Options	
Manage Account	<
My Services	<
Modify Services	*
Register Complaints	<
Update Billing Profile	<
Bills & Payments	<
My Usage	<
Manage Loyalty Points	<
Account Profile	<
New Services	<
Schedule Conference	

Jounna	ative Billed Usage	
Telepho	ne no/Service ID: *0481-2970888(B	SHARAT
	* 07/01/2020	
From:	* 07/01/2020	

BSNL भारत संचार निगम लिमिटेड BHARAT SANCHAR NIGAM LIMITED

भारत संचार निगम लिमिटेड BHARAT SANCHAR NIGAM LIMITED

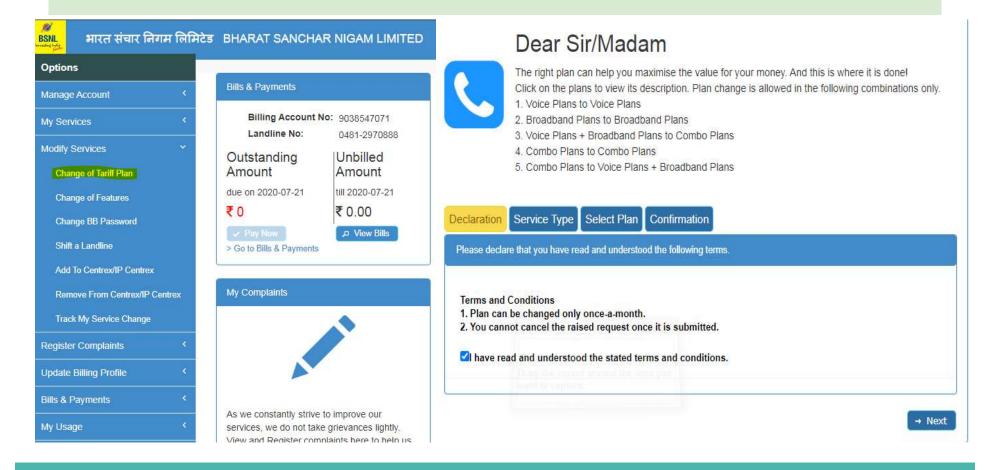
opuons		() ()	
Manage Account.		88 Cumulative Un	billed Usage
My Services	C	Telephone no/Se	rvice ID: *0481-2
Modily Services	- C.	-	1/2020 0/2020
Register Complaints	- C	+ G0	0/2020
Update Billing Profile	• ¢	*Please click on th	e icons to Down
Bills & Payments	 • 		
My Usage		Total Upload Vol(MB)	Total Downlo Vol(MB)
Manage Loyally Points		7715.19	118720.48
Account Profile	- • • ·		
New Services	-	<u></u>	
Schedule Conference			

N/ BSNL

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Cumulative Un	billed Usage				
Telephone no/Se	rvice ID: * 0481-29708	ISS(BHARAT -			
From: *07/0	1/2020	1			
To: * 07/2	0/2020	1			
+ Go					
	e icons to Download	the data in excel or	pdf respectively		
		Cumulative Unit	iBed Usage details		
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		Cumulative Unit	iBed Usage details	Total Duration	B8 Plan

Plan change via selfcare.bsnl.in



eclaration Please provi	 Voice Plans to Voice Plans Broadband Plans to Broadband Voice Plans + Broadband Plans Combo Plans to Combo Plans Combo Plans to Voice Plans + 	s to Combo Plans
Telephone	Number / Service ID *:	0481-2970888 (BHARAT FIBER BB)
	Existing Plan ID	Existing Plan Name
•	704449	500GB CUL CS353-Bharat Fibre

× .	Declaration	rvice Type Select Plan Confirmation				
. <	Select a New Plan	to replace the Old Plan				Bill Me
*		scription will be in the Monthly component.To chan istomer Service Center. To continue with Monthly c		A STATE OF A		Type
an Description fo	r 750 GB PLAN					
		Name		Rental	Free Units	Cha
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Add this pla		Server see onmarries		1.0000 0000		
	704088	750 GB PLAN		Combo Plans		
	704310	40GB CUL-Bharat Fiber		Combo Plans		
	104010					
	704313	Bharat Fiber BB-FIBRO COMBO ULD 777 ANI PLAN FOR KSITM	NUAL	Combo Plans		

Call NIB, If the plan change is not done within 48 Hours.

Disconnection and Reconnection

Normal Disconnection Dates : 6th-10th of next month after last date of payment.

If the Connection gets disconnected, All the light will be same on ONT. But the internet won't get. Check the IP in ONT corresponding to FTTH Data/WAN Connection, if the **WAN IP** starts with **10.x.x.x.x** series, we can confirm that it is in disconnection due to non-payment. Pay the bill to any BSNL customer service centre for the speedy reconnection.

Or go to Windows -> Run > CMD > type command- > **ipconfig /all** (it will show the WAN IP).

Reconnection

After the bill payment, wait for 2 to12 hours to get it reconnected.

After the reconnection, Reboot the ONT to get the Internet.

FTTH VOIP - DHCP Configuration for LCOs

VLAN: 1831

IP PROTOCOL MODE: IPV4

SERVICE MODE: VOICE - VOIP

SERVICE TYPE: SOFTSWITCH SIP

SIP REGISTER ADDR.: 10.187.6.12

PRIMARY SIP PROXY ADDRESS: 10.187.6.12

SUBSCRIBE: ENABLED

OUTBOUND PROXY: ENABLED

OUTBOUND PROXY ADDRESS: 10.187.6.12

SIP DOMAIN: 10.187.6.12

SESSION TIMER ENABLED

LINE 1 ENABLED

ACCOUNT NUMBER: 9148******

ACCOUNT NAME: 9148*******

PASSWORD: 0000

NETLINK MODEM IP : 192.168.1.1

USERNAME: admin PASSWORD: stdONU101

Network	s	Status		Network		Security	
	Thinnes	Bedig	LATIFIAMINES	WEAN	Renote	100 Configuration	0:0
		Connecti	on Name.	2_V	OICE_R	_VID_18 •	
Internet Connection	Mode:			Rou	Contract of the second second second	•	
		IP Protocol Mode.			1		
	* DHCP			Get an address from ISP			
	O Static		Get a	static IP	address from		
	© PPPoE			Selec	d this whi DE	en using	
	Enable Vlan: Vlan ID:			10			
				183	1		
	802 tp:		(nul	1)	•		
	MTU: Request DNS:			150	0		
				Enable			
		Primary I	DNS.		nolating.		
		Secondary DNS:		-			
		Service Mode			CE		
		Turn off I	LAN DHCP:				

SERVICE TYPE: SOFTSWITCH SIP

SIP REGISTER ADDR.: 10.187.6.12

PRIMARY SIP PROXY ADDRESS: 10.187.6.12

SUBSCRIBE: ENABLED

OUTBOUND PROXY: ENABLED

OUTBOUND PROXY ADDRESS: 10.187.6.12

SIP DOMAIN: 10.187.6.12

SESSION TIMER ENABLED

LINE 1 ENABLED

ACCOUNT NUMBER: 9148*******

ACCOUNT NAME: 9148*******

PASSWORD: 0000

Application	Status		Network			Security		Applicat
	Advances NAT	UPTH	VOP	1500 M	MLD	Dally Appleaten	DONS	
	2.42	er Type ary SIP	Register	Addr		Soft Switch Sil	P •	
OIP Configuration	SIP Register Addr.					10.187.6.12		
	Port					5060		
dvanced VOIP Configuration		10122-01-12		Sec. 1		here and the second sec		
		ondery 5 Register	2	ster Add	r	10 187 6.12		
	Port	The same person and	AUG.			5060		-
	Poit					5000		
		ary SIP	Proxy			-		
	Address: Subscribe					10.187.6.12		
						2		
	POR	12/				5060		
	Enable Outbound Proxy					40 407 6 40		
	Outbound Proxy Addr:					10.187.6.12		_
	Outbound Proxy Port					5060		
	SIPI	Domain:				10 187 6.12		_
		Expire (s				3600		
	1000	le Sessi				2		
	Sess	sion Expir	re (sec):			1800		
		ondary S						
	Subs	editos				10		
	Addr							

Huawei ONU IP: 192.168.18.1

USERNAME: Epadmin PASSWORD: adminEp

Enable WAN: Encapsulation Mode: Protocol Type: WAN Mode: Service Type:	IPoE PPPoE IPv4 Route WAN VOIP	•
Protocol Type: WAN Mode: Service Type:	IPv4 Route WAN	*
WAN Mode: Service Type:	Route WAN	*
Service Type:		
	VOIP	*
127-1101 PR ANN 5200-1		
Enable VLAN:	8	
VLAN ID:	1831	*(1-4094)
802.1p Policy:	Use the specified val	eneret T
802.1p:	0	•
MTU:	1500	(1-1540)
IPv4 Information		
IP Acquisition Mode:	Static ® DHCP	PPPOE
Enable NAT:	2	
Vendor ID:		(consists of 0-64 characters.)
User ID:		(option 61; consists of 0-64 characters.)
	Apply	Cancel
	VLAN ID: 802.1 p Policy: 802.1 p: MTU: IPv4 Information IP Acquisition Mode: Enable NAT: Vendor ID;	VLAN ID: 1831 802.1p Policy: Use the specified val 802.1p: 0 MTU: 1500 IPv4 Information ISTREE IP Acquisition Mode: Static ● DHCP ID Enable NAT: Image: Comparison of the specified val Vendor ID: Image: Comparison of the specified val

🐙 EG8141A5

	WAN	
命	LAN	
Ŧ	Security	,
Ð	Route	1
ø	Forward Rules	1
	Application	1
	WLAN	
	Voice	,
	VolP Basic	
	VolP Advanced	
	SIP/H.248 Conversi	
	System Management	~

SIP)	
10.187.6.12	(IP or domain
5060	(0-65535)
10.187.6.12	(IP or domain
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	5060 10.187.6.12 5060 10.187.6.12 5060 10.187.6.12 5060 10.187.6.12

ignaling Port:	2_VOIP_	R_VID_1831 • (Select the nam	ne of the W	AN that will carry				
ignaling Porc	the voice	the voice signaling messages.)						
		R_VID_1831 • (Select the nam						
ledia Port:		e media. The name is the sam	e as the sig	naling port name				
		s empty.)						
egion:	India		•					
sic User Parameters (S	IP)							
New Delete								
Delete								
No. URI Registration U	ser Name	Authentication User Name	Password	Associated POTS Port				
1 9148125	1999	914812 369999	******	1				
nable User:								
RI:		(URI)						
egistration User Name:	91481	(phone	number)					
ssociated POTS Port:	1 •							
	91481	(The le	ngth must r	ange 0 to 64.)				
uthentication User Name:								
uthentication User Name:		(The le	ngth must r	ange 0 to 64,				

VOIP Configuration by Static IP

VLAN: 1830	PRIMARY SIP PROXY:
IP PROTOCOL MODE: IPV4	ADDRESS: 10.187.6.12
SERVICE MODE: VOICE	SUBSCRIBE: DISABLED
IP ADDRESS/SUBNET MASK/GATEWAY : BY NIB	OUTBOUND PROXY: ENABLED
PRIMARY DNS: 172.30.249.3	OUTBOUND PROXY ADDRESS: 10.187.6.12
SECONDARY DNS: 172.30.249.19	SIP DOMAIN: 10.187.6.12
	SESSION TIMER ENABLED
VOIP :	LINE 1 ENABLED
SERVICE TYPE: SOFTSWITCH SIP	ACCOUNT NUMBER: 9148******
PRIMARY SIP REGISTER ADDR. : "VOICE IP"	ACCOUNT NAME: 9148******
SECONDARY SIP REGISTER ADDR. : 10.187.6.12	PASSWORD: 0000

BSNL Teevra Application

This Mobile app meant for fetching the FTTH/ Broadband LIVE details via your Mobile and make your customer service more easier ;

Link for downloading - www.tinyurl.com/teevra-final

Who can avail this application;

- BSNL Employees upto TM level
- BBCs/ LCOs

Features;

- BROADBAND/FTTH DETAILS.

username, status- active/suspended outstanding amount

connected status - connected / not connected

olt inner & outer vlan and OLT owner.

- Port verify

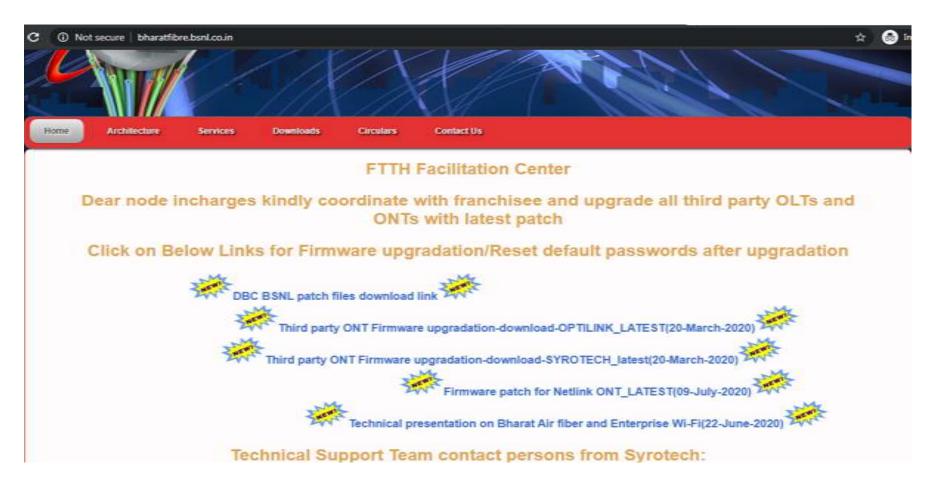
- to check whether connected to the desired port/vlan

TEEVRA Application

ail ail 🖘 👫 👁	* 💷 1:32
BROADBAND DETAIL	FMS
(Complete Broadband Details)	(Franchisee Management System)
NMS	PORT VERIFY
(Ping Your N/W elements)	(BBTEST And MULTIPLAY Test)
NETWORK GLANCE	EARCH LOG
(N/W Element At A Glance)	(Browse Your Search History)
REPORTS	ADMIN
(Fetch Reports Here)	(Restricted To Nodal-Officer)
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all all 🖘 🔐 🗣		* 💷 1:32				
BROADBAND	DETAIL	n				
BROADBAND	FTTH	TIP				
PLEASE ENTER 0481-2970	BHARAT FIBER TELE	PHONE NUMBER				
	SUBMIT					
MOBILE	0.147070027					
FTTH TELE NO	0481-2970888					
FTTH USER-ID	:iul.i_uiJ@ftth.bsn	l.in				
A/C STATUS	Active.					
OUTSTANDING	₹0/-					
STATIC-IP	No Static Ip					
PLANNAME						
BANDWIDTH						
CUS	TOMER OLT PARAME	TERS				
OLT PORT	3051/427(ALPHION	1)				
LINK STATUS	Up					
ONT TX-POWER	3.0 In dBm					
ONT RX-POWER	-17 In dBm					
CUSTOMER INTERNET INFORMATION						
STATUS	Connected Since 2020-07-22 12:28:16					
SPEED	51200(Kbps)					
\triangleleft	0					

To get Third Party ONT firmware updates - Visit: http://bharatfibre.bsnl.co.in/



General OLT Configuration

We can manage Third party OLT via NMS. Different vendors have different NMS and IP for accessing the NMS via browser. Eg: 192.168.1.251

General configuration in OLTS;

- OLT should be configured with Mgmt VLAN 119 & IP provided by NIB.
- Should Add required VLANS. Normally we need to pass VLAN 128 1499 for DATA.
- For VoIP : Static VoIP- 1830, DHCP VoIP- 1831.
- GPON OLTs : DBA / Tcont / Flow / ONT / Line Profile Creation.

EPON/GEPON OLT:

- We need to tag the VLANS in Uplink and Downlink ports.

GPON OLT:

- VLANs should be tagged in Uplink port .
- For VLANs and each ONT, Line profiles should be created.
- Each ONT should link to corresponding VLAN profile.
- Should add Serial number of ONT for each customer.

Switch : Incase the OLTs connected via L2 Switch, both uplink and downlink ports should be tagged with all VLANs of BSNL for 802.1Q connectivity.

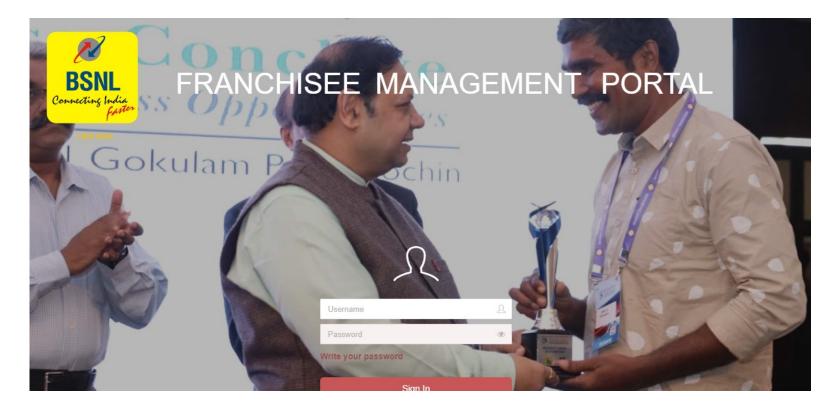
LCO OLT – Reachability from EMS

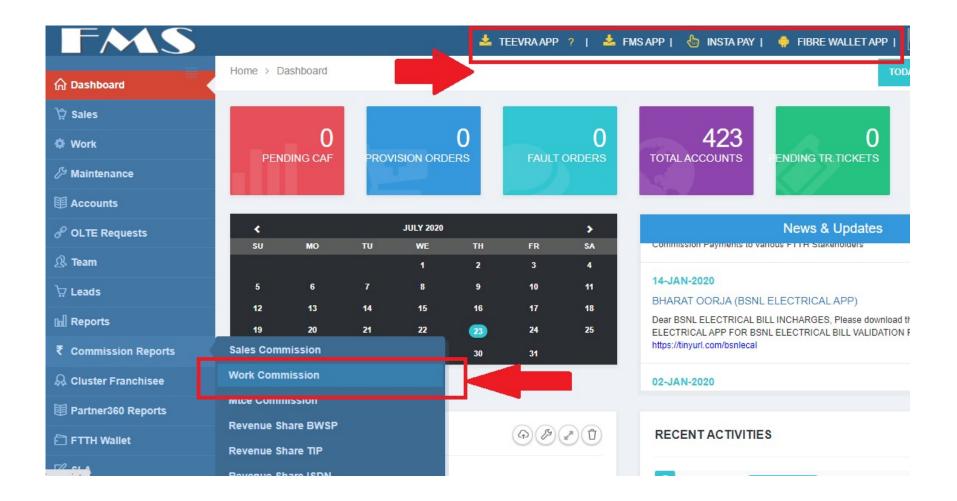
To ensure connectivity to EMS software, a default route is to be created in the LCO OLTs to the BNG TIP Management Gateway Interface.

	VLAN IP ARP	Proxy Stati	ic Route	
OLT Information	Add Static Ros	ute	127510275	
OLT Configuration				
VLAN	Destination IP		医学者 的复数子子 医外子	
Uplink Port	Destination Mas Gateway	sk		
PON	Galeway			the same
MAC	Static Route T	able		
LACP				
QoS	Destination IP	Destination I	Mask Gateway	Delete
ACL	0.0.0.0	0.0.0.0	10.215.193.	1
IPv6 ACL		and the second second		
IGMP				
IPv6 MLD				
STP				
Loopback				
DHCP				
DHCPV6			A REPORT OF LAND	
IPV6 SLAAC				

FMS - Portal

Website Address - https://fms.bsnl.in





BSNL E-Pay

E-PAY FACILITATES HASSLE FREE RELEASE OF COMMISSION TO LCOS THROUGH FTTH WALLET INSTANTANEOUSLY AND THE RELEASE OF AMOUNT TO THEIR BANK ACCOUNT ON THE NEXT BUSINESS DAY OF TRANSACTION AGAINST EACH ONLINE PAYMENT BY CUSTOMERS.

IN ORDER TO ACCOMPLISH THIS, THE FOLLOWING ACTIVITIES HAVE TO BE COMPLETED BY THE FRANCHISEES.

>WALLET CREATION – ANY BSNL MOBILE NUMBER

WALLET CHARGE / RECHARGE - THROUGH INSTAPAY / BSNL CSC
 REGISTRATION IN THE BSNL EPAY SYSTEM

- 1. LETTER TO INDIAIDEAS.COM LIMITED ('BILLDESK')
- 2. ANNEXURE 1 (COMPANY INFORMATION DETAILS OF LCO)
- 3. ANNEXURE 2 (TRANSACTION / PAYMENT GATEWAY CHARGES)
- 4. ANNEXURE 3 (CERTIFICATE FROM BANK)
- **5.** CANCELLED CHEQUE.
- 6. GST CERTIFICATE/NO GST DECLARATION



Thank You...& Stay Safe. NIB & FTTH – KTM/PTA