



BSNL ONT REQUIREMENTS



MTCTE Certification

- All the ONT models inducted to the BSNL Network should be MTCTE approved.



ONT N/W Locking Requirements

PPPOE:

1. PPPOE username should be hardcoded with domain name “@ftth.bsnl.in” in WAN Page.
2. Hardcoded domain “@ftth.bsnl.in” should be displayed after the PPPOE username box .
3. There should not be any truncation in PPPOE username. It should be displayed with actual data, as entered. The authentication request should be forwarded to the respective authentication server ,with the actual entered user id appended with the hardcoded domain name.

VoIP:-

4. SIP Register address should be hardcoded with “.bsnl.in” as voip domain name suffix.
5. Hardcoded phrase “.bsnl.in” should be displayed after the VOIP domain name boxes.
6. There should not be any truncation at VOIP domain fields and it should be displayed with actual data, as entered. The SIP registration request should be forwarded to respective voip core with the actual entered data appended with the hardcoded phrase “.bsnl.in”
7. No hardcoding required at Out bound proxy. The hard coding is required for Primary & Secondary domain names.



General Requirements:

8. Bridge mode should be disabled . All the required SERVICES should be present like, INTERNET,VOICE,TR069 and its required combinations.
9. Add the following notes in the respective hardcoded pages:
 - 9.a. *@ftth.bsnl.in* will be added to the username by default.
 - 9.b. *.bsnl.in* will be added to the VoIP domain name by default
10. In firmware version, BSNL should be displayed. Preferably prefixed with '*BSNL.*'
11. After factory reset ONT should not go to default factory version, it should remain in BSNL hardcoded version. The firmware upgradations within the NW locked version should be allowed.

ONT NW Locking Samples

- PPPoE WAN Configuration

WAN Configuration

| | |
|-----------------|---|
| Connectin Name: | 1_INTERNET_R_VID_ ▾ |
| Mode: | Route ▾ |
| IP Version: | IPv4 ▾ |
| DHCP | <input type="radio"/> Get address via ISP |
| Static | <input type="radio"/> Get static address via ISP |
| PPPoE | <input checked="" type="radio"/> Use PPPoE |
| Enable NAT: | <input checked="" type="checkbox"/> |
| Enable Vlan: | <input checked="" type="checkbox"/> |
| Vlan ID: | 900 |
| 802.1p: | 0 ▾ |
| MTU: | 1492 |
| Username: | bb ⁰⁰ 20700002 @ftth.bsnl.in @ftth.bsnl.in will be added to Username |
| Password: | |

ONT NW Locking Samples

VOIP Configuration

| Primary SIP Register | |
|---------------------------------|---|
| Primary SIP Register Address: | <input type="text" value="ktk.ftth.ims"/> .bsnl.in .bsnl.in will be added to the VoIP domain name |
| Port: | <input type="text" value="5060"/> |
| Secondary SIP Register | |
| Secondary SIP Register Address: | <input type="text" value="ktk.ftth.ims"/> .bsnl.in .bsnl.in will be added to the VoIP domain name |
| Port: | <input type="text" value="5060"/> |
| Primary SIP Proxy | |
| Proxy Address: | <input type="text" value="ktk.ftth.ims"/> .bsnl.in .bsnl.in will be added to the VoIP domain name |
| Enable Subscribe | <input checked="" type="checkbox"/> |
| Port: | <input type="text" value="5060"/> |
| Enable Outbound Proxy | <input checked="" type="checkbox"/> |
| Outbound Proxy Address: | <input type="text" value="ktk.ftth.ims.bsnl.in"/> |
| Outbound Proxy Port: | <input type="text" value="5060"/> |
| SIP Domain: | <input type="text" value="ktk.ftth.ims"/> .bsnl.in .bsnl.in will be added to the VoIP domain name |
| Register Expire(sec): | <input type="text" value="3600"/> |

ONT NW Locking Samples

Bridge Mode Disabled

WAN Configuration

| | |
|-----------------|--|
| Connectin Name: | 1_INTERNET_R_VID_ |
| Mode: | Route |
| IP Version: | Route |
| DHCP | <input type="radio"/> Get address via ISP |
| Static | <input type="radio"/> Get static address via ISP |
| PPPoE | <input checked="" type="radio"/> Use PPPoE |
| Enable NAT: | <input checked="" type="checkbox"/> |
| Enable Vlan: | <input checked="" type="checkbox"/> |
| Vlan ID: | 900 |
| 802.1p: | 0 |
| MTU: | 1492 |
| Username: | bb002010000... @ftth.bsnl.in @ftth.bsnl.in will be added to Username |
| Password: | |
| Service-Name: | |
| PPP type | Continuous |
| Service Mode: | INTERNET |

ONT NW Locking Samples

Firmware Version with BSNL

Device Info

| | |
|------------------|---|
| Device model | BS-3R3321A3 |
| Device SN | 123451CE70001A1B2 |
| Hardware Version | V4.1 |
| Firmware Version | V2.1.08-230103_BSNL  |
| PON S/N | 3R3N3321A1B2 |

ONT NW Locking Samples

General Firmware Upgradation Error in locked version

| | |
|---------------|--|
| Commit/Reboot | Error:Incorrect model image file.Reboot 45 |
| Timely Reboot | |
| Upgrade Image | |
| Load Default | |
| Config File | |

BSNL ACS(TR069) CONFIGURATION REQUIREMENT

- **ACS / CWMP Menu Configuration settings:**
- Enable Periodic Informing: **YES**
- ACS URL: **http://acs.bsnl.in:7547**
- *(ONT should support HTTPS also for our future upgrade in ACS Server)*
-
- ACS User Name: **<blank>**
- ACS Password: **<blank>**
-
- Inform Interval Timer: **900 seconds**
- Enable Certificate Authentication: **NO**

- **Note:-**
 1. **ONT CWMP TR-069 Stack should support Bulk Parameter Values reading request from BSNL ACS Server.**
 2. **ACS menu WAN Interface selection should allow TR069_INTERNET or TR_069 service type enabled WAN connection.**
 3. **ONT should support HTTPS also for future upgrade in ACS Server with SSL encryption mode.**

Security Requirements

- By default, all the ports should be blocked from WAN side . It should have the option to unblock the same on customer requirement.
- After entering the default password, the ONT should automatically prompt to change default password.
- Captcha should be enabled for ONT Login.
- By default, the firewall should be enabled and high.
- WPA2-AES for data confidentiality instead of WEP. WEP can be removed.
- WPS feature can be disabled by default.
- User logging can be enabled.



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