

OLT LTP-8X, LTP-4X. EasyMode

LTP-8X, LTP-4X

(EasyMode)
3.48.0 (30.09.2023)

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LTP-X (EasyMode)

(EasyMode) — LTP, GPON . EasyMode , GPON, Triple Play.

EasyMode :

- GPON ELTEX;
- ;
- .

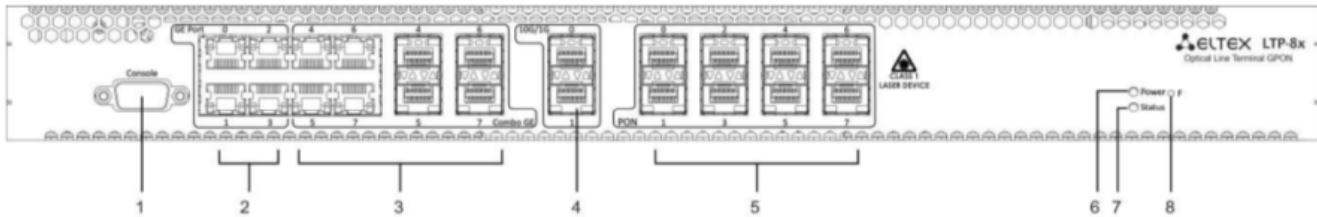
B, C NTU. :

LTP-8X(4X)	3.26.1
NTU-1	3.24.0
NTU-2W	3.25.1
NTU-2V(C), NTU-RG-1402G-W	3.25.2
NTU-RG-1421(31)G-Wac	3.28.1

, LTP .

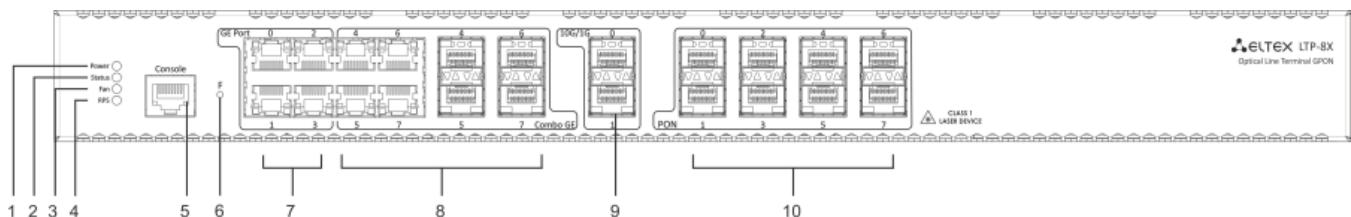
LTP , Ethernet- GE-.

LTP rev.B RS-232 DB9(F) – DB9(F), . , 1.



1 — LTP rev.B

LTP C D RS-232 RJ-45 – DB9(F), . , 2.



2 — LTP rev./rev.D

1 — , LTP rev.B

1	Console	RS-232
2	GE Port 0..3	4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-8X)
3	Combo GE	4 SFP- 1000BASE-X uplink- IP- (LTP-4X)
		4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-4X)
4	10G/1G 0..1	4 SFP- 10GBASE/1000BASE-X uplink- IP-
		4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-8X)
5	PON	4 SFP- xPON 2,5 G (LTP-4X) 8 SFP- xPON 2,5 G (LTP-8X)
6	Power	
7	Status	
8	F	: • 10 ; • 10 CLI .

2 , , LTP rev.C/rev.D.

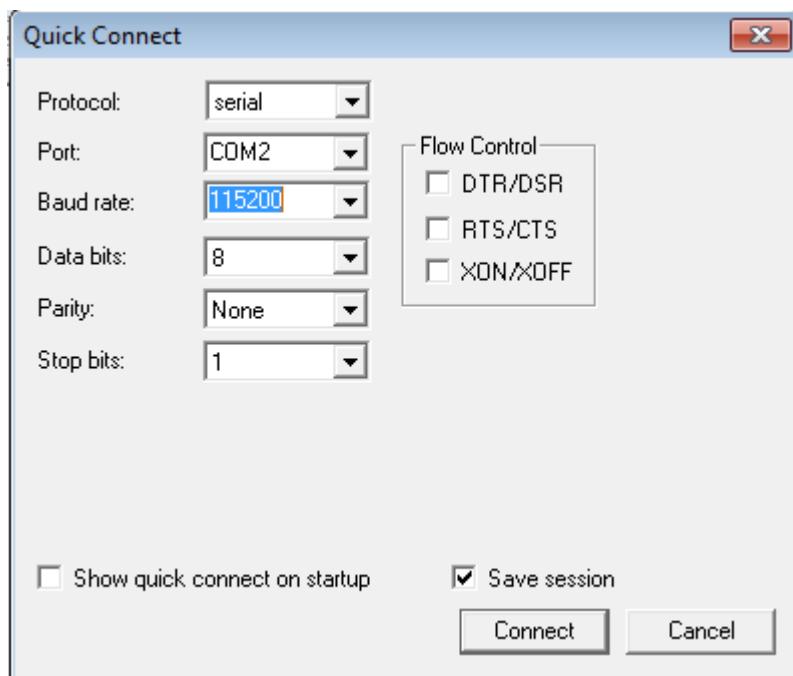
2 — , LTP rev./rev.D

1	Power	
2	Status	
3	Fan	
4	RPS	

5	<i>Console</i>	<ul style="list-style-type: none"> • ; • ; • RX, • GND, • GND, • TX, • ; • ; 								
6	<i>F</i>	<ul style="list-style-type: none"> • ; • 10 ; • 10 ; <p>CLI .</p>								
7	<i>GE Port 0..3</i>	4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-8X)								
8	<i>Combo GE</i>	<table border="1" style="margin-left: 20px;"> <tr> <td>0..3</td> <td>4 SFP- 1000BASE-X uplink- IP- (LTP-4X)</td> </tr> <tr> <td></td> <td>4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-4X)</td> </tr> <tr> <td>4..7</td> <td> <table border="1" style="margin-left: 20px;"> <tr> <td>4 SFP- 1000BASE-X uplink- IP- (LTP-8X)</td> </tr> <tr> <td>4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-8X)</td> </tr> </table> </td> </tr> </table>	0..3	4 SFP- 1000BASE-X uplink- IP- (LTP-4X)		4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-4X)	4..7	<table border="1" style="margin-left: 20px;"> <tr> <td>4 SFP- 1000BASE-X uplink- IP- (LTP-8X)</td> </tr> <tr> <td>4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-8X)</td> </tr> </table>	4 SFP- 1000BASE-X uplink- IP- (LTP-8X)	4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-8X)
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4..7	<table border="1" style="margin-left: 20px;"> <tr> <td>4 SFP- 1000BASE-X uplink- IP- (LTP-8X)</td> </tr> <tr> <td>4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-8X)</td> </tr> </table>	4 SFP- 1000BASE-X uplink- IP- (LTP-8X)	4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-8X)							
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4 RJ-45 10/100/1000BASE-T Gigabit uplink- IP- (LTP-8X)										
9	<i>10G/1G 0..1</i>	2 SFP- 10GBASE/1000BASE-X uplink- IP-								
10	<i>PON</i>	<table border="1" style="margin-left: 20px;"> <tr> <td>4 SFP- xPON 2,5 G (LTP-4X)</td> </tr> <tr> <td>8 SFP- xPON 2,5 G (LTP-8X)</td> </tr> </table>	4 SFP- xPON 2,5 G (LTP-4X)	8 SFP- xPON 2,5 G (LTP-8X)						
4 SFP- xPON 2,5 G (LTP-4X)										
8 SFP- xPON 2,5 G (LTP-8X)										

	Baud Rate	115200
	Data Bits	8
	Parity	
	Stop Bits	1
	Flow Control	

SecureCRT 3.

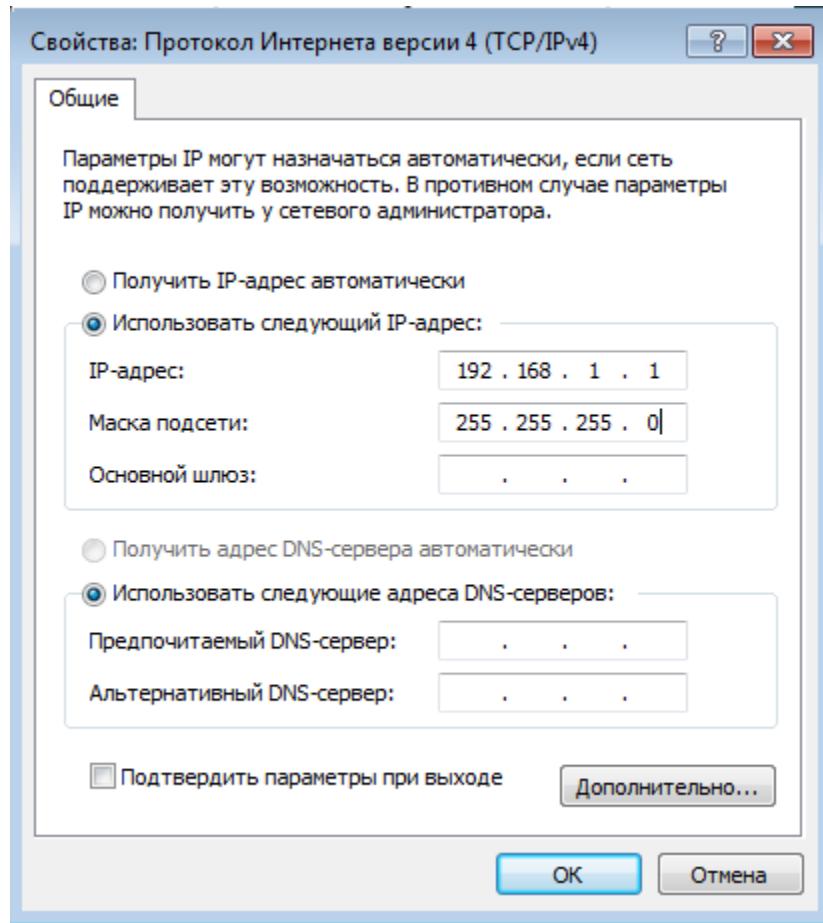


```
*****
*      Optical line terminal LTP-4X rev.B      *
*****
LTP-4X login:
```

: admin/password.

Telnet/SSH

Ethernet- GE/ComboGE-. IP- LTP — 192.168.1.2/24. 192.168.1.1 255.255.255.0, 4.



4 — IP-

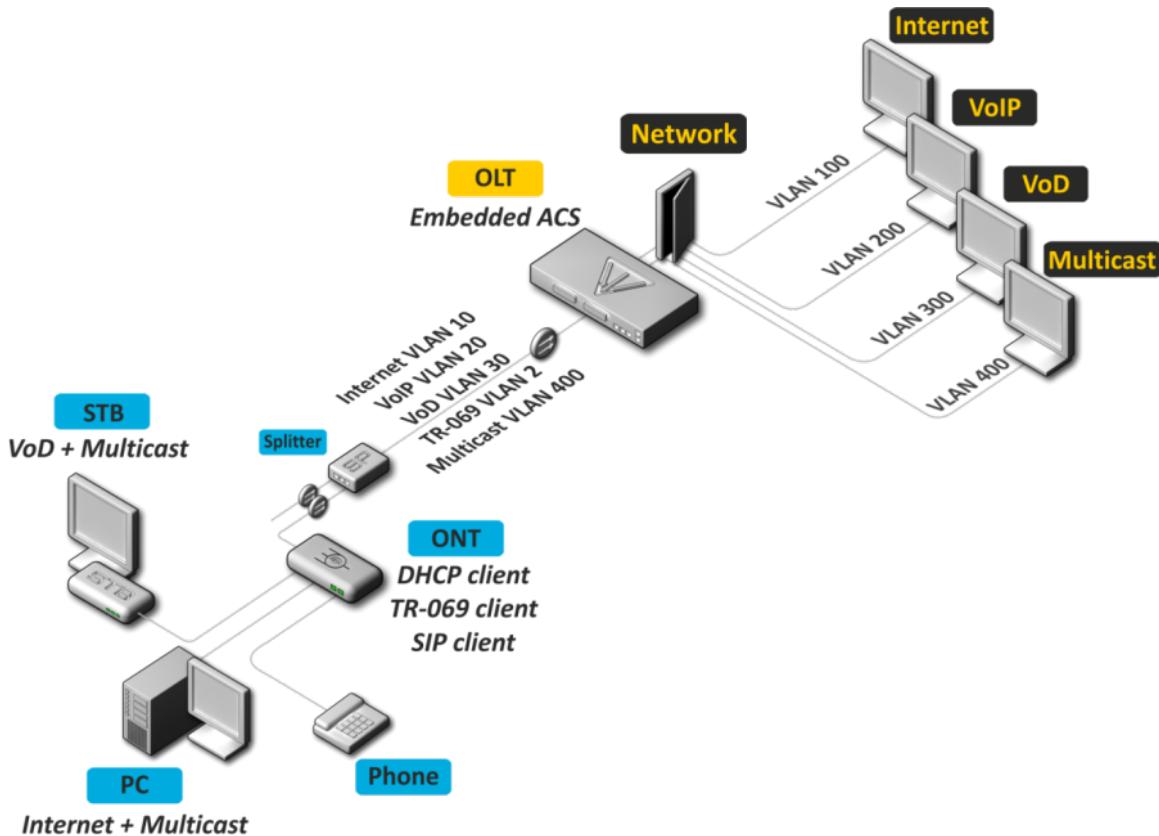
telnet ssh 192.168.1.2.

```
*****
*      Optical line terminal LTP-4X rev.B      *
*****
LTP-4X login:
```

: admin/password.

EasyMode

, 5.



5 — EasyMode

- IPoE, DHCP- 82.
- «VLAN ». VLAN.
- .
- multicast vlan. Unicast- IPTV (Video-On-Demand, VoD) multicast-.
- Multicast-

EasyMode



EasyMode

EasyMode

IP- LTP	192.168.1.2
	255.255.255.0
VLAN	1
Gateway	
ACS VLAN (TR-069)	2
Internet VLAN	100
VoIP VLAN	200
VoD VLAN	300

Multicast VLAN	400
Option82 Circuit-Id	
Option82 Remote-Id	

EasyMode **easy-mode**.



```
LTP-4X# easy-mode
Enabling easy-mode will delete current configuration. Are you sure? (y/n) y
Configured easy-mode...
Easy mode enable successfully
LTP-4X#
```

[6.3 7](#)



ONT, , rollback.

LTP, VLAN DHCP 82 *Wizard*, .
Wizard **easy-mode wizard**.

```
LTP-4X# easy-mode wizard
Enabling easy-mode will delete current configuration. Are you sure? (y/n) y
Customize easy-mode configuration:
< ... >
```

VLAN

VLAN, . VLAN Ethernet-, VLAN ACS-,
, N . , , <Enter>.
VLAN :

ACS VLAN	2()
Internet VLAN	1001
VoIP VLAN	1002
VoD VLAN	1003
Multicast VLAN	3

```
Current VLAN configuration:
ACS VLAN ID: 2
Internet VLAN ID: 100
VoIP VLAN ID: 200
VoD VLAN ID: 300
Multicast VLAN ID: 400
Do you want to change VLAN configuration? (y/N): y
Enter ACS service VLAN ID (leave blank for default) [2]:
Enter Internet service VLAN ID (leave blank for default) [100]: 1001
Enter VoIP service VLAN ID (leave blank for default) [200]: 1002
Enter VoD service VLAN ID (leave blank for default) [300]: 1003
Enter Multicast VLAN ID (leave blank for default) [400]: 3
```

management LTP

LTP. , N . . , , <Enter>. management :

Management IP	10.189.55.19
Management mask	255.255.255.0
Management gateway	10.189.55.254
Management vid	189

```
Current management settings:  
IP: 192.168.1.2  
Mask: 255.255.255.0  
Gateway: 0.0.0.0  
Management VLAN ID: 1  
Do you want to change management configuration?  
Attention, it may cause disconnection from remote sessions! (y/N): y  
Enter management IP (leave blank for default) [192.168.1.2]: 10.189.55.19  
Enter management mask (leave blank for default) [255.255.255.0]:  
Enter management gateway (leave blank for default) [0.0.0.0]: 10.189.55.254  
Enter management VLAN ID (leave blank for default) [1]: 189
```



VLAN ACS-.

Error: ACS VLAN intersects with management VLAN. Try again.

VLAN.



IP- ACS-.

ACS 192.168.200.1/21. .

Error: ACS network intersects with management network. Try again.

IP-.

DHCP Relay Agent (option 82)

— DHCP 82 . . 82, , N .
Circuit-Id Remote-Id.

Circuit-Id	%HOSTNAME%%PONSERIAL%%VLAN0%
Remote-Id	-

, . .

%HOSTNAME%	LTP
%MNGIP%	IP-
%GPON-PORT%	GPON- ONT
%ONTID%	ONT GPON-
%PONSERIAL%	ONT
%GEMID%	GEM-
%VLAN0%	() VLAN
%VLAN1%	() VLAN

%MAC%	MAC-
%OLTMAC%	MAC- OLT
%OPT60%	60
%OPT82_CID%	Circuit-Id 82
%OPT82_RID%	Remote-Id 82
%DESCR%	ONT

Circuit-Id Remote-Id , , N .

, IP- LTP 10.189.55.19, ONT 1 GPON- ID 15. , :

Circuit-Id	1-15
Remote-Id	10.189.55.19

```
Do you want to use option 82? (y/N): y
Current configuration dhcp-ra overwrite-option 82:
Circuit id: %HOSTNAME%-%PONSERIAL%-%VLAN0%
Remote id: -
Do you want to setup Option 82 format?
(answer No for default option) (y/N): y
Enter Circuit ID (leave blank for empty option): %GPON-PORT%-%ONTID%
Enter Remote ID (leave blank for empty option): %MNGIP%
```

```
Configured easy-mode...
Easy mode enable successfully
```

, save.

```
LTP-4X# save
.....
Configuration successfully saved to file
```

ONT

ONT

ONT, ONT . . EasyMode. NTU-1, OMCI, easy-ONT. ONT easy-RG.

```
LTP-8X# show running-config gpon olt
configure terminal
gpon olt auto-activation ont enable
gpon olt auto-activation ont default template "easy-RG"
gpon olt auto-activation ont type NTU-1 template "easy-ONT"
exit
commit
LTP-8X#
```



ONT, , rollback.

ONT

EasyMode ONT :

1. ONT.

```
LTP-8X(config)# no gpon olt auto-activation ont enable
```

2. ONT, GPON-, . , GPON-, . ONT **show interface ont 0-7 unactivated** (LTP-4X **show interface ont 0-3 unactivated**).

```
LTP-4X# show interface ont 0-3 unactivated
```

```
GPON-port 0 has no unactivated ONTs  
GPON-port 1 has no unactivated ONTs
```

```
-----  
GPON-port 2 ONT unactivated list
```

##	Serial	ONT ID	GPON-port	Status	...
1	454C545862000100	n/a	2	UNACTIVATED	...
2	454C545866000101	n/a	2	UNACTIVATED	...

```
GPON-port 3 has no unactivated ONTs
```

3. ONT ID GPON-. **show interface ont 2 unconfigured**.

```
LTP-4X# show interface ont 2 unconfigured
```

```
GPON-port 2 ONT unconfigured list: 2-127  
Total ONT count: 126  
LTP-4X#
```

4. . **configure terminal**.

```
LTP-4X# configure terminal  
LTP-4X(config)#
```

5. ONT ID ONT. **interface ont 2/2**.

```
LTP-4X(config)# interface ont 2/2  
LTP-4X(config)(if-ont-2/2)#
```

6. ONT :easy-ONT NTU-1 easy-RG . ONT.

```
LTP-4X(config)(if-ont-2/2)# serial 454C545862000100  
LTP-4X(config)(if-ont-2/2)# template easy-ONT  
LTP-4X(config)(if-ont-2/2)# exit  
LTP-4X(config)#
```

7. 5-6 ONT.

```
LTP-4X(config)# interface ont 2/3  
LTP-4X(config)(if-ont-2/3)# serial 454C545866000101  
LTP-4X(config)(if-ont-2/3)# template easy-RG  
LTP-4X(config)(if-ont-2/3)# exit
```

8. , **commit** **save**.

```

LTP-4X(config)# exit
LTP-4X# commit
Changes successfully committed (2 chunks)
LTP-4X# save
.....
Configuration successfully saved to file
LTP-4X#

```



ONT

RG ONT ACS . ACS Eltex ACS, .
 ONT 454C545866000101 101 ***secret SIP- sip.test.pon*** :

1. ACS- **acs**.

```

LTP-4X# acs
LTP-4X(acs)#

```

2. ONT ONT **ont ont 454C545866000101**.

```

LTP-4X(acs)#ont
LTP-4X(acs-ont)#ont 454C545866000101
LTP-4X(acs-ont-sn='454C545866000101')#

```

3. , SIP-, .

```

LTP-4X(acs-ont-sn='454C545866000101')#set private sip_proxy sip.test.pon
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.SIP.
UserAgentDomain' = 'sip.test.pon'
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.SIP.
RegistrarServer' = 'sip.test.pon'
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.SIP.
ProxyServer' = 'sip.test.pon'
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.SIP.
OutboundProxy' = 'sip.test.pon'
Ok
LTP-4X(acs-ont-sn='454C545866000101')#set private voicel_enable TRUE
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.Line.1.
Enable' = 'TRUE'
Ok
LTP-4X(acs-ont-sn='454C545866000101')#set private voicel_number 101
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.Line.1.SIP.
AuthUserName' = '101'
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.Line.1.
DirectoryNumber' = '101'
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.Line.1.
CallingFeatures.CallerIDName' = '101'
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.Line.1.SIP.
URI' = '101'
Ok
LTP-4X(acs-ont-sn='454C545866000101')#set private voicel_password secret
Host property has been updated: 'InternetGatewayDevice.Services.VoiceService.1.VoiceProfile.1.Line.1.SIP.
AuthPassword' = 'secret'
Ok

```

4. **commit** ONT **reconfigure**.

```

LTP-4X(acs-ont-sn='454C545866000101')#commit
LTP-4X(acs-ont-sn='454C545866000101')#reconfigure
Ok
LTP-4X(acs-ont-sn='454C545866000101')#

```

5. ACS **exit**.

```

LTP-4X(acs-ont-sn='454C545866000101')#exit
LTP-4X(acs-ont)#exit
LTP-4X#exit
LTP-4X#

```

ONT EasyMode

EasyMode, ONT, LTP, . . .

:

- Internet

IPoE- u-VLAN 10 DHCP- IGMP proxy. LAN- 1 2 ONT c 4 (NTU-RG), 1 ONT 2 (NTU-2V(C), NTU-2W). LAN- . Upstream IGMP report-VLAN. multicast VLAN **ip igmp proxy** LTP.

- VoIP

IPoE u-VLAN 20. SIP-.

- VoD

Bridge u-VLAN 30 LAN- 3, 4 ONT c 4 (NTU-RG), 2 ONT 2 (NTU-2V(C), NTU-2W).

ONT **easy-mode**.

```

LTP-4X# configure terminal
LTP-4X(config)# interface ont 2/2
LTP-4X(config)(if-ont-2/2)# easy-mode
LTP-4X(config)(if-ont-2/2)# exit
LTP-4X(config)# exit
LTP-4X# commit
Changes successfully committed (1 chunk)

```

no easy-mode send omci restore interface ont.

```

LTP-4X# configure terminal
LTP-4X(config)# interface ont 2/2
LTP-4X(config)(if-ont-2/2)# no easy-mode
LTP-4X(config)(if-ont-2/2)# exit
LTP-4X(config)# exit
LTP-4X# commit
Changes successfully committed (1 chunk)
LTP-4X# send omci restore interface ont 2/2
[ONT2/2] was successfully restored to default config and rebooted

```