

# [LTP-N, LTX]

OLT LTP-N, LTX – LTP-X, MA4000. LTP-N, LTX , OLT, ONT / PON-port ONT.  
 , model1, model2, model3, LTP-X, MA4000.

,  
 , ONT, cross-connect.  
cross-connect.  
cross-connect :  
 , , cross-connect. - ( show running-config profile cross-connect RG1 all)

```
profile cross-connect RG1
  description "ONT Profile Cross-Connect 8"
  ont-mode router
  bridge group 75
  tag-mode single-tagged
  outer vid 1
  vlan-replace ont-side
  no inner vid
  user vid untagged
  no mac-table-limit
  no outer upstream cos
  no inner upstream cos
  no multicast enable
  no iphost enable
  iphost id 1
  iphost mode dynamic
  traffic-model n-to-1
exit
```

 -, , , cross-connect, show running-config profile cross-connect <name> - . show running-config profile cross-connect <name> all .

, cross-connect: traffic-model vlan-replace.

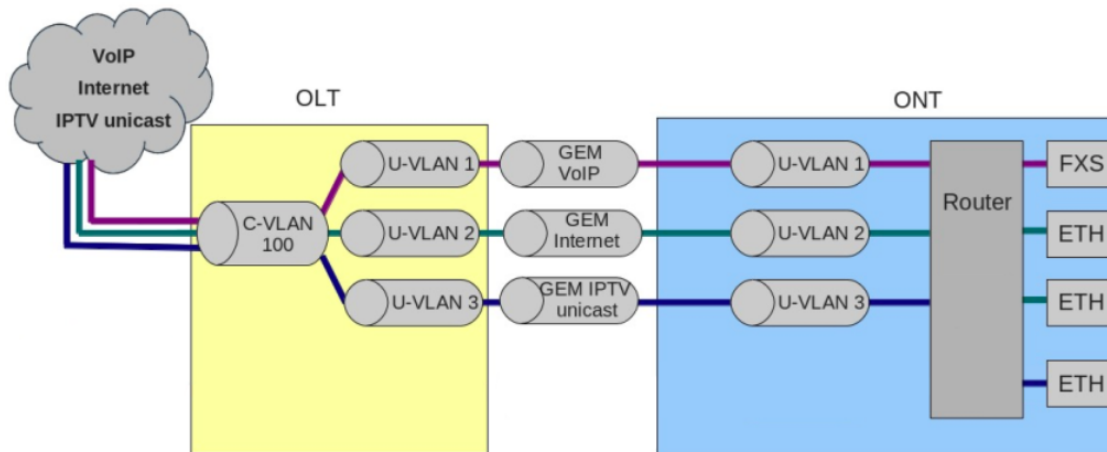
traffic-model :  
- 1-to-1 - «VLAN » svlan(c-vlan)  
- n-to-1 - «VLAN » VLAN .

vlan-replace vlan id vlan id:  
- ont-side - ONT  
- olt-side - OLT

## Model1

LTP-N/LTX LTP-X/MA4000 1-to-1, VLAN, . VLAN OLT. broadcast GEM-, .. unicast-GEM.

 (broadcast unknown unicast), GEM- , GEM- , VLAN.



outer vid inner vid, user vid, VLAN 1000(100):

```
profile cross-connect VoIP
tag-mode double-tagged
outer vid 1000
inner vid 100
user vid 1
traffic-model 1-to-1
vlan-replace olt-side
exit
profile cross-connect Internet
tag-mode double-tagged
outer vid 1000
inner vid 100
user vid 2
traffic-model 1-to-1
vlan-replace olt-side
exit
profile cross-connect IPTV_UC
tag-mode double-tagged
outer vid 1000
inner vid 100
user vid 3
traffic-model 1-to-1
vlan-replace olt-side
exit
```

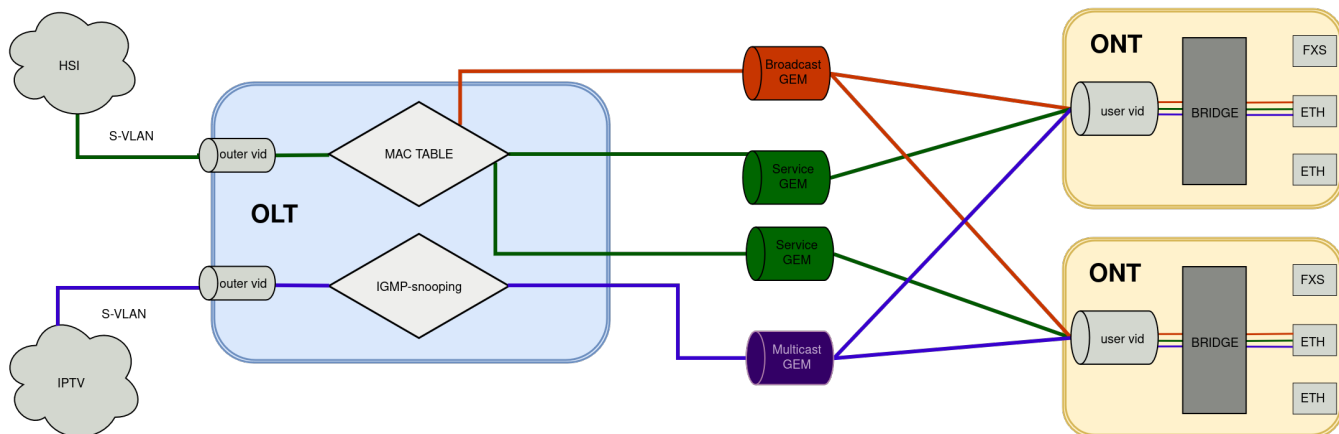
**1-to-1** VLAN user vid OLT (vlan-replace olt-side)  
vlan-replace ont-side,

Can't commit candidate configuration, because:  
Profile cross-connect 'RG1': 1-to-1 traffic model cannot be used with ont-side vlan replacement

## Model2, Model3

**1-to-1** ( QinQ) VLAN ID. broadcast GEM. S-VLAN, S-VLAN:C-VLAN N- ONT, PON, PON. OLT S-VLAN. MAC-, MAC- GEM-.

**1-to-1** MAC- L2, PON, N:1. PON broadcast GEM-port, ONT.



, , S-VLAN U-VLAN. **vlan-replace.**

Model2 : traffic-model **n-to-1** + vlan-replace **olt-side**

Model3 : traffic-model **n-to-1** + vlan-replace **ont-side**

, cross-connect Model2

```
profile cross-connect VoIP
  outer vid 1000
  user vid 11
  vlan-replace olt-side
exit
profile cross-connect Internet
  outer vid 1001
  user vid 12
  vlan-replace olt-side
exit
profile cross-connect IPTV_UC
  outer vid 1002
  user vid 13
  multicast enable
  vlan-replace olt-side
exit
```

cross-connect Model3 :

```
profile cross-connect VoIP
  outer vid 1000
  user vid 11
exit
profile cross-connect Internet
  outer vid 1001
  user vid 12
exit
profile cross-connect IPTV_UC
  outer vid 1002
  user vid 13
  multicast enable
exit
```



. traffic-model **n-to-1** vlan-replace **ont-side** show running-config cross-connect. , cross-connect , model3.



, (traffic-model; vlan-replace) cross-connect, ONT. , , ONT .



. cross-connect : vlan-replace **olt-side** + user vid **untagged**. OMCI-bridge vlan-replace **ont-side**, ( LTP-X).