

# Huawei MA5800-X7

Configuration manual for Leox LXT-010G-D

## ONT with single service(Internet – in my case on vlan 3000)

### 1. Create DBA profile

```
dba-profile add profile-id 10 profile-name "dba-profile_10" type4 max 1024000
```

### 2. Create srv profile

```
ont-srvprofile gpon profile-id 156 profile-name "LXT010GD_NET"  
ont-port eth 1  
port vlan eth 1 translation 3000 user-vlan 3000  
commit
```

### 3. Create line profile

```
ont-lineprofile gpon profile-id 156 profile-name "LXT010GD_NET"  
fec-upstream enable  
tcont 1 dba-profile-id 10  
gem add 0 eth tcont 1  
gem mapping 0 0 vlan 3000  
commit  
quit
```

### 4. Register ONT on OLT, serial number in HEX format (in my case LEOXA2105024 is transformed to 4C454F58A2105024)

```
interface gpon 0/1  
ont add 0 10 sn-auth "4C454F58A2105024" omci ont-lineprofile-id 156 ont-srvprofile-id 156 desc  
"lxt_net"
```

### 5. Create service-port

```
service-port 9 vlan 3000 gpon 0/1/0 ont 10 gemport 0 multi-service user-vlan 3000 tag-transform  
translate
```

### 6. Set Native Vlan on ONT port(untagged)

```
interface gpon 0/1  
ont port native-vlan 0 10 eth 1 vlan 3000 priority 0
```

VLAN translation with working multicast, rBSA(Orange) as an example

OLT Internet VLAN 1331 <-> 35 Client Internet VLAN

OLT IPTV VLAN 2031 <-> 839 Client IPTV Vlan

OLT VOD VLAN 2131 <-> 838 Client VOD Vlan

### 1. Create DBA profile

```
dba-profile add profile-id 10 profile-name "dba-profile_10" type4 max 1024000
```

### 2. Create ONT srvprofile

```
ont-srvprofile gpon profile-id 155 profile-name "LXT010GD_RBSA"  
ont-port eth 1  
multicast-forward tag translation 839  
port vlan eth 1 translation 1331 user-vlan 35  
port vlan eth 1 translation 2131 user-vlan 838  
port vlan eth 1 translation 2031 user-vlan 839  
commit
```

### 3. Create ONT lineprofile

```
ont-lineprofile gpon profile-id 158 profile-name "LXT010GD_RBSA"  
fec-upstream enable  
tcont 1 dba-profile-id 11  
tcont 2 dba-profile-id 11  
tcont 3 dba-profile-id 11  
gem add 0 eth tcont 1  
gem add 1 eth tcont 2  
gem add 2 eth tcont 3  
gem mapping 0 0 vlan 1331  
gem mapping 1 1 vlan 2031  
gem mapping 2 2 vlan 2131  
commit
```

### 4. Register ONT

```
Interface gpon 0/1  
ont add 0 9 sn-auth <ONT SN in HEX> omci ont-lineprofile-id 158 ont-srvprofile-id 155 desc  
"NEOxxxxxxxxxxxxx"
```

### 5. Create service ports

```
service-port 6 vlan 1331 gpon 0/1/0 ont 9 gemport 0 multi-service user-vlan 1331 tag-transform  
translate  
service-port 7 vlan 2031 gpon 0/1/0 ont 9 gemport 1 multi-service user-vlan 2031 tag-transform  
translate  
service-port 8 vlan 2131 gpon 0/1/0 ont 9 gemport 2 multi-service user-vlan 2131 tag-transform  
translate
```

## 6. Create IGMP configuration

```
btv
igmp user add 0 service-port 7 no-auth
multicast-vlan 2031
igmp default uplink-port 0/9/0
igmp query-proxy disable
igmp version v2
igmp match mode disable
igmp multicast-vlan member service-port-list 7
igmp mode snooping
igmp uplink-port 0/9/1
igmp uplink-port 0/9/0
default-policy service-port multicast-unknown transparent
```

## 7. Create abs config

```
raio-format pitp-pmode cid xpon "anid#ontlabel"
raio-format dhcp-option82 cid xpon "anid#ontlabel"
raio-format dhcpv6-option cid xpon "anid#ontlabel"
raio-mode user-defined pitp-pmode
raio-mode user-defined pitp-vmode
raio-mode user-defined dhcp-option82
raio-mode user-defined dhcpv6-option
raio-anid <OPERATOR_CODE>
pitp enable pmode
```

## 8. Enable DHCP Option82

```
dhcp option82 enable
dhcpv6 option enable
```