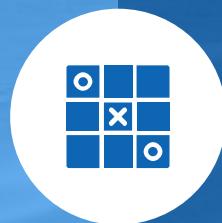




High Availability Local Networks



HALNy NETWORKS

ONT HALNy HGU WEB Configuration

List of items

I. Interoperability (IOP)

II. WAN concept

III. Supported Service Scenario

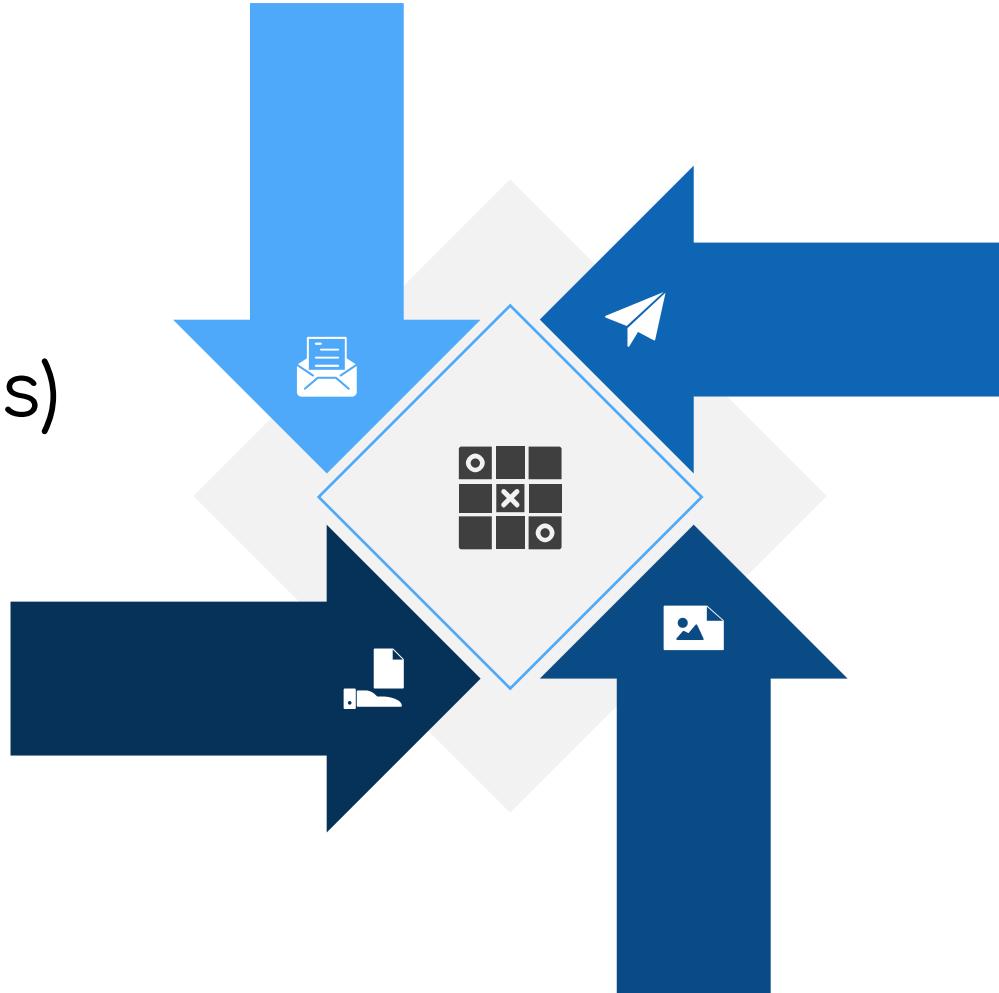
1. ONT Configuration (Bridge Mode – only INTERNET: 1-4/WIFI)
 2. ONT Configuration (Bridge Mode - INTERNET: 1-4/WIFI, VOIP interface)
 3. ONT Configuration (Bridge Mode – INTERNET: 1-2/WIFI, IPTV: 3-4, VOIP interface)
 4. ONT Configuration (Router Mode – only INTERNET: 1-4/WIFI)
 5. ONT Configuration (Router Mode – INTERNET: 1-4/WIFI, VOIP interface)
 6. ONT Configuration (Router Mode – INTERNET: 1-2/WIFI, IPTV: 3-4, VOIP interface)
 7. ONT Configuration (Router Mode – Rate-Limit)
 8. ONT Configuration (Remote management)
-



I. Interoperability (IOP)

IOP with different OLT vendors:

- HUAWEI
- DASAN
- ZTE
- CISCO (ALTICE Labs)
- ZHONE
- ALU / NOKIA
- RAISECOM
- ZYXEL



High Availability Local Networks

II. WAN Concept



ONT should support minimum up to 6 WAN interfaces:



WAN 0

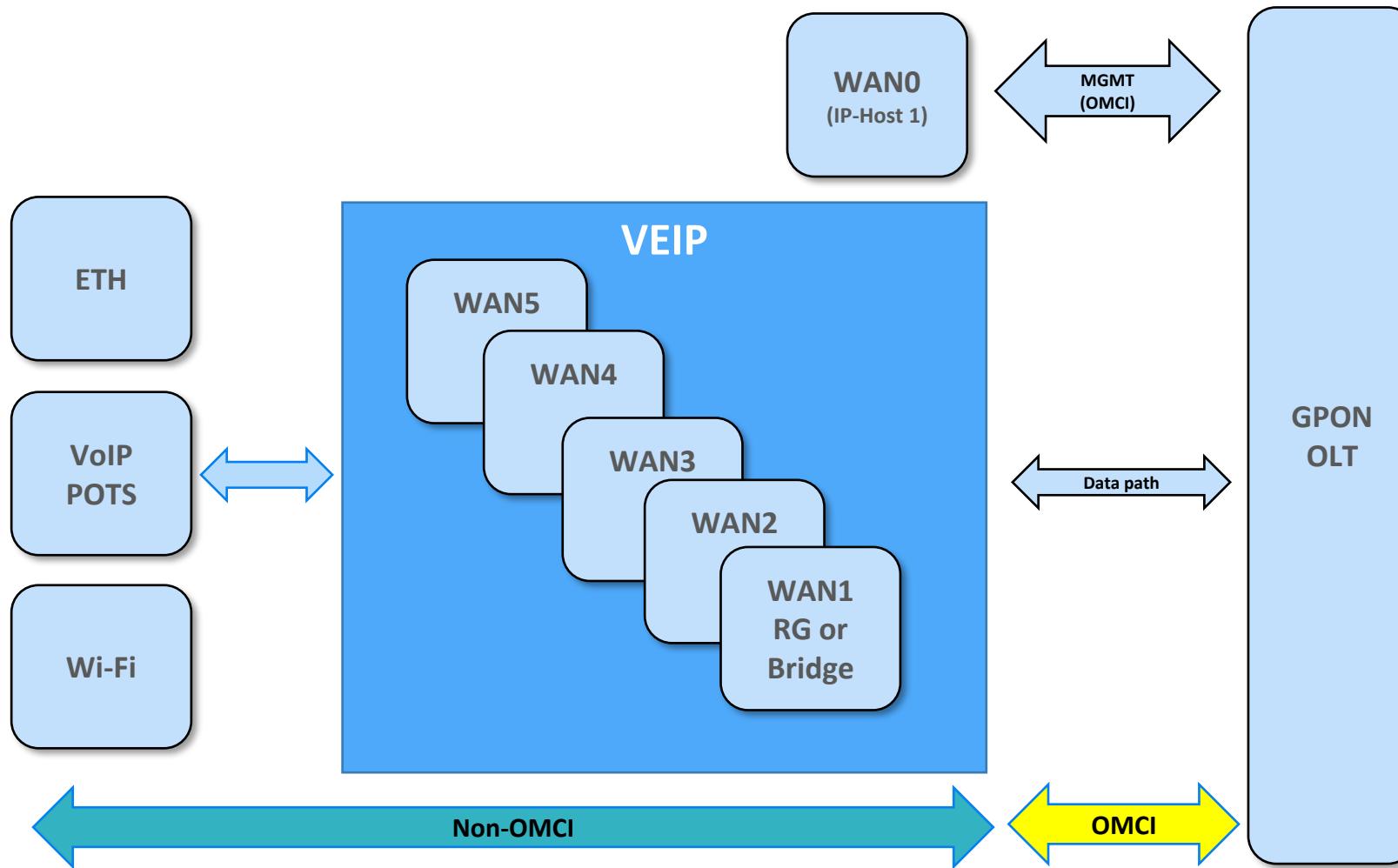
- o Used for remote management/monitoring (WEB, SSH, SNMP) and provisioning (DHCP, TR-069),
- o DHCP Client or Static IP,
- o Always available – no matter of ONT VEIP configuration.



WAN 1 – WAN 5

- o Part of VEIP interface (Virtual Ethernet Interface Point),
- o Used for services (Internet, IPTV, VOIP),
- o Controlled by WEB, provisioning or backup file,
- o All UNI and SSID interfaces are belonged to one VEIP and it cannot be controlled by OMCI,
- o Each WAN can be set as bridge or router.

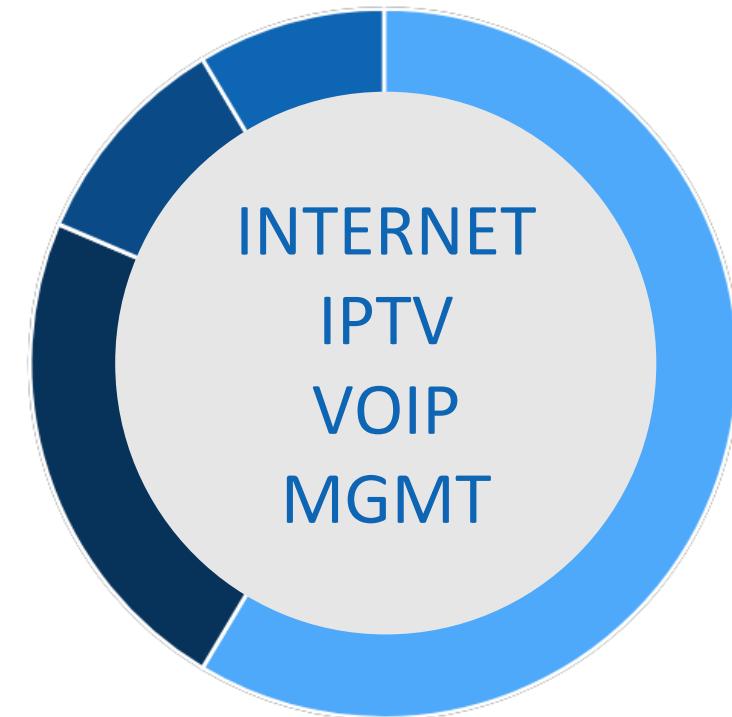
II. WAN Concept



III. SUPPORTED SERVICE SCENARIO

ONT Web Access

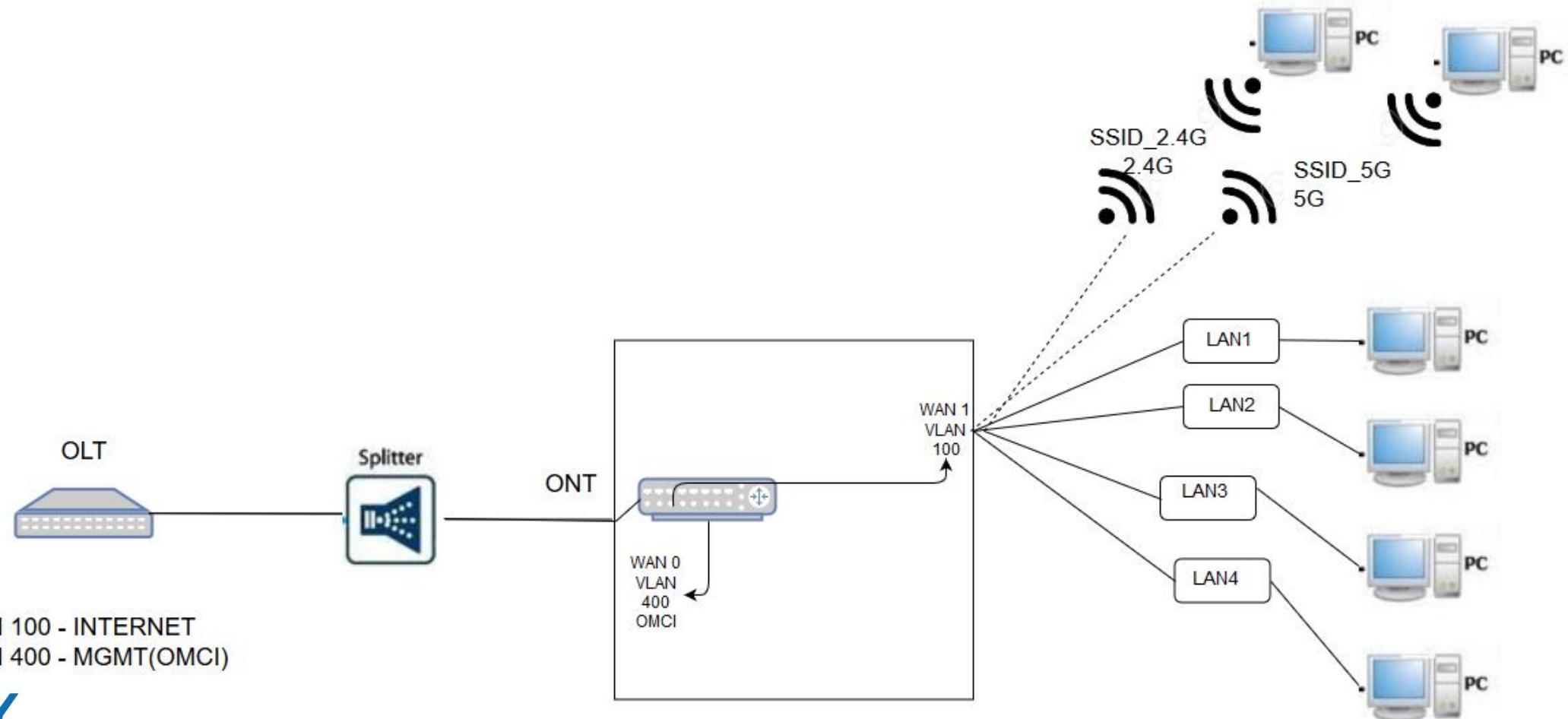
1. ONT Configuration (Bridge Mode – only INTERNET: 1-4/WIFI)
2. ONT Configuration (Bridge Mode - INTERNET: 1-4/WIFI, VOIP interface)
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4. ONT Configuration (Router Mode – only INTERNET: 1-4/WIFI)
5. ONT Configuration (Router Mode – INTERNET: 1-4/WIFI, VOIP interface)
6. ONT Configuration (Router Mode – INTERNET: 1-2/WIFI, IPTV: 3-4, VOIP interface)
7. ONT Configuration (Router Mode – Rate-Limit)
8. ONT Configuration (Remote management)





1. Bridge Mode – only INTERNET: 1-4/WIFI

- WAN1 – Bridge mode
- VLAN configuration on WAN0
- LAN1-LAN4, SSID1_2.4G, SSID1_5G assigned to WAN1 (access ports)





1. Bridge Mode – only INTERNET: 1-4/WIFI

1. Create WAN Interface for INTERNET:

1. Go Interface Setup -> Internet
2. Choose Wan
3. Enable WAN interface
4. Select IP Version: IPv4
5. Choose ISP : Bridge Mode
6. Choose 802.1q: Tag and Set VLAN-ID
7. Save settings

HALNY
High Availability Local Networks

Language xPON ONU

Interface 1 **Interface Setup Internet** Advanced Setup Access Management Maintenance VoIP Status

LAN Wireless Wireless 5G Advanced Wireless

WAN Transfer Mode Transfer Modes : Fiber

xPON

2 WAN : 1 WANs Summary

3 Status : Activated Deactivated

IPv4/IPv6

4 IP Version : IPv4 IPv4/IPv6 IPv6

Encapsulation

5 ISP : Dynamic IP Address
 Static IP Address
 PPPoE
 Bridge Mode

802.1q

6 802.1q : Tag Untag Passthrough
VLAN ID : 100 (range: 0~4095)
802.1p : Remark 0 (range: 0~7)

7 SAVE DELETE



1. Bridge Mode – only INTERNET: 1-4/WIFI

1. Go Advanced Setup
2. Go Port Binding
3. Enable Port Binding
4. Select index 0 for Internet
5. Set mapping for Internet ports:
6. Save settings

HALNY
High Availability Local Networks

Language xPON ONU

Advanced Interface Setup 1 Advanced Setup Access Management Maintenance VoIP Status

Routing NAT PortBinding 2

Portbinding Group Setting

3 Active : Activated Deactivated

4 Group Index : 0

5

WANs : Port #	1	2	3	4	5	6	7
	<input checked="" type="checkbox"/>	<input type="checkbox"/>					

Ethernet : Port #	0	1	2	3
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

WLan : Port #	0
	<input checked="" type="checkbox"/>

WLan11ac : Port #	1
	<input checked="" type="checkbox"/>

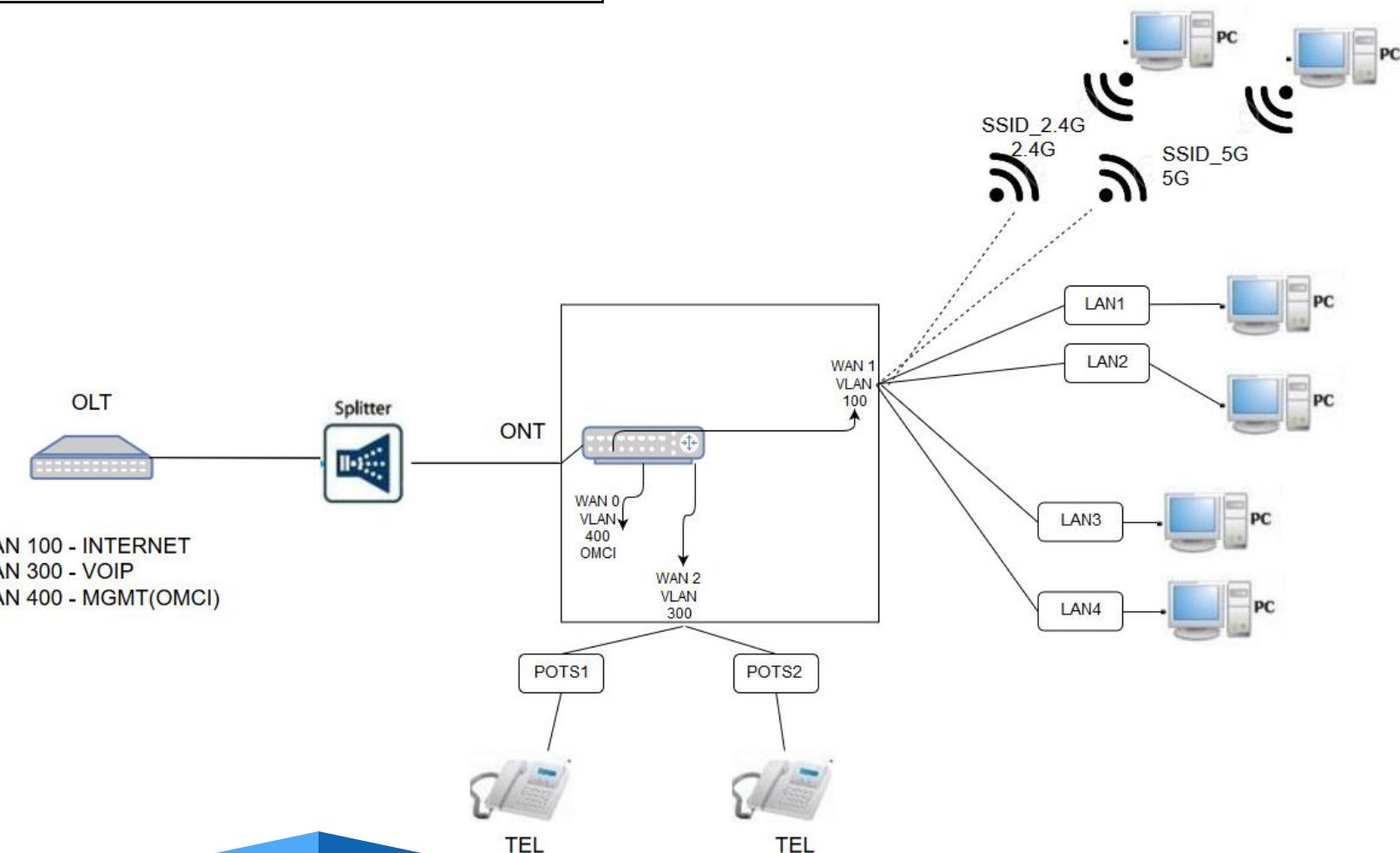
Group Summary PortBinding Summary

6 SAVE DELETE CANCEL



2. Bridge Mode – INTERNET: 1-4/WIFI, VOIP interface

- **WAN1 – VLAN 100 – INTERNET Bridge mode**
 - LAN1 - LAN4, SSID1_2.4G, SSID1_5G assigned to WAN1 (access ports)
- **WAN2 – VLAN 300 – IP Interface (Static IP / DHCP Client / PPPoE Client)**
 - POTS1, POTS2 assigned to WAN2



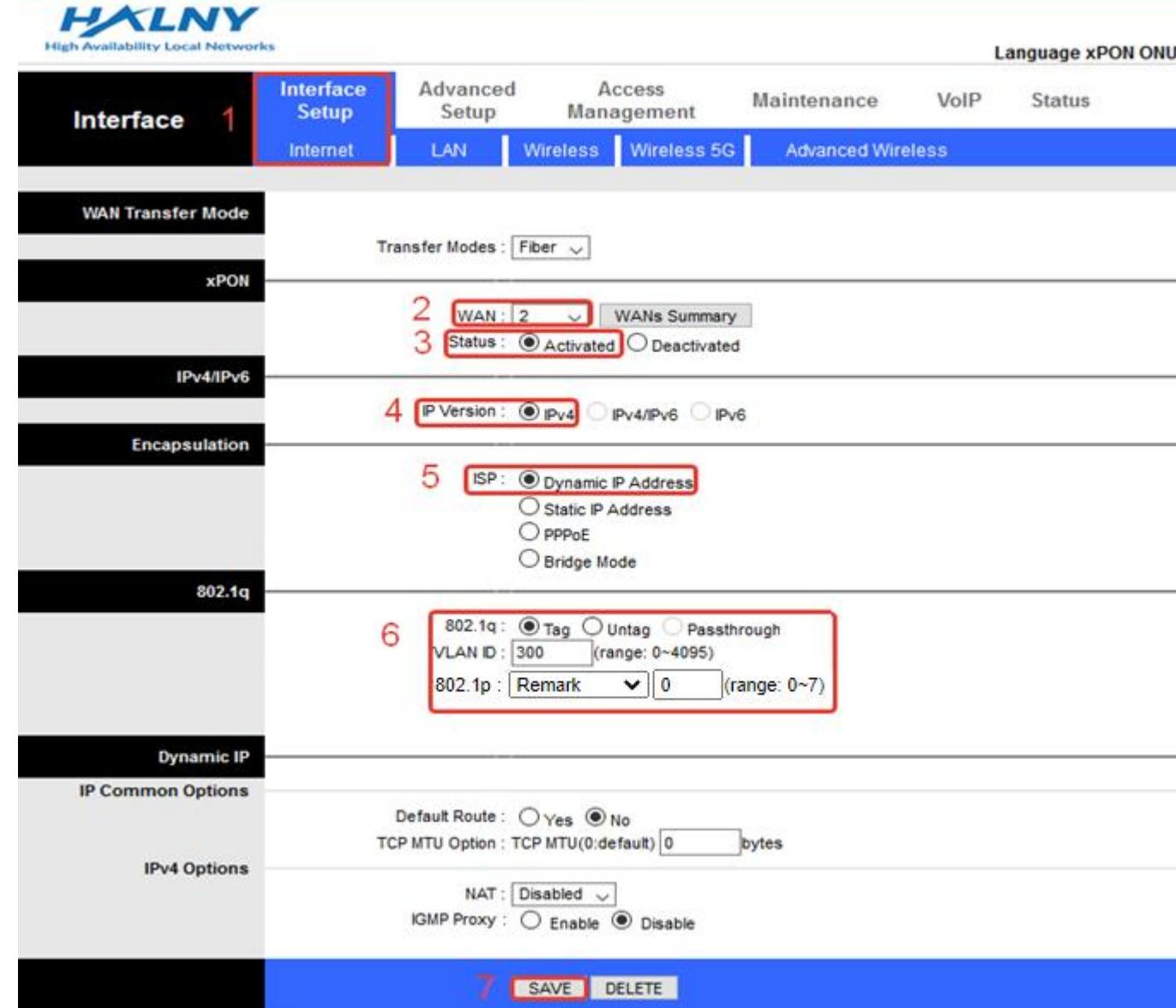
2. Bridge Mode – INTERNET: 1-4/WIFI, VOIP interface

1. Create WAN Interface for INTERNET – the same as in topic:

Bridge Mode – only INTERNET: 1-4/WIFI

2. Create second WAN interface for VOIP:

1. Go Interface Setup -> Internet
2. Choose Wan
3. Enable WAN interface
4. Select IP Version: [IPv4](#)
5. Choose ISP: [Dynamic IP Address](#)
6. Choose 802.1q: [Tag](#) and Set [VLAN-ID](#)
7. Save settings



The screenshot shows the HALNY web interface for managing network interfaces. The top navigation bar includes tabs for Interface Setup, Advanced Setup, Access Management, Maintenance, VoIP, and Status. The Language is set to xPON ONU.

The main content area displays the configuration for 'Interface 1' (highlighted in red). The 'Interface Setup' tab is active, and the 'Internet' mode is selected. The 'WAN Transfer Mode' section shows 'Transfer Modes: Fiber' and 'xPON' selected. The 'WAN' dropdown is set to '2' (highlighted in red), and the 'Status' radio button is set to 'Activated' (highlighted in red).

The 'IPv4/IPv6' section shows 'IP Version: IPv4' selected (highlighted in red). The 'Encapsulation' section shows 'ISP: Dynamic IP Address' selected (highlighted in red). The '802.1q' section shows '802.1q: Tag' selected (highlighted in red) and 'VLAN ID: 300' entered. The '802.1p' section shows 'Remark' selected (highlighted in red) and '0' entered.

The 'Dynamic IP' section includes 'IP Common Options' and 'IPv4 Options' sections. Under 'IPv4 Options', 'Default Route' is set to 'No' (radio button highlighted in red), 'TCP MTU Option' is set to 'TCP MTU(0:default)' (range 0~4095) (highlighted in red), and 'NAT' is set to 'Disabled' (radio button highlighted in red). 'IGMP Proxy' is set to 'Disable' (radio button highlighted in red).

At the bottom right, there are 'SAVE' and 'DELETE' buttons (both highlighted in red).



2. Bridge Mode – INTERNET: 1-4/WIFI, VOIP interface

3. Basic VOIP configuration:

1. Go VoIP -> Basic
2. Choose Protocol: SIP
3. Bind WAN interface name
4. Set SIP server addresses and destination port
5. Enable POTS port
6. Refresh page to check Register Status
7. Set authentication name, password for VOIP account
8. Save settings

HALNY
High Availability Local Networks

1 Language xPON ONU

VoIP Interface Setup Advanced Setup Access Management Maintenance VoIP Status

VolP Basic

2 Protocol : SIP if change the VoIP Protocol, please restart

3 Binding Interface Name : WAN2

Region : ETS-ETSI

4 SIP Proxy Address : 195.162.16.201

SIP Proxy Port : 5060

5 Status	Activated	Deactivated
6 Register Status	Initializing	Disabled
7 Authentication Name	814	
Password	*****	

8 SAVE

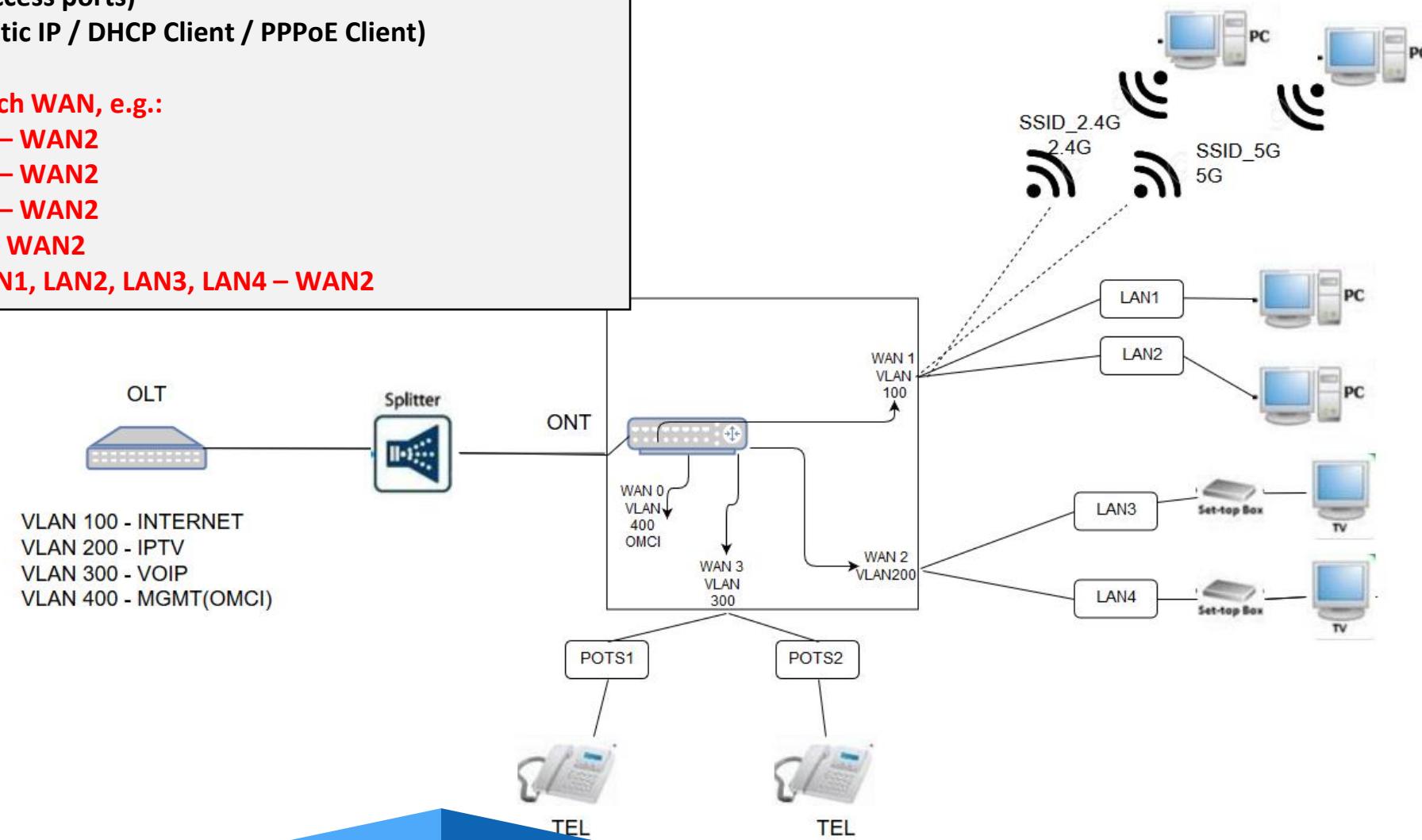


3. Bridge Mode – INTERNET: 1-2/WIFI, IPTV: 3-4, VOIP interface

- WAN1 – VLAN 100 – INTERNET Bridge mode
 - LAN1, LAN2, SSID1_2.4G, SSID1_5G assigned to WAN1 (access ports)*
- WAN2 – VLAN 200 – IPTV Bridge mode (IGMP snooping enabled)
 - LAN3, LAN4 assigned to WAN2 (access ports) *
- WAN3 – VLAN 300 – IP Interface (Static IP / DHCP Client / PPPoE Client)
 - POTS1, POTS2 assigned to WAN3

* Different LAN ports number assigned to each WAN, e.g.:

- LAN1 – WAN1 | LAN2, LAN3, LAN4 – WAN2
- LAN1, LAN2 – WAN1 | LAN3, LAN4 – WAN2
- LAN1, LAN2, LAN3 – WAN1 | LAN4 – WAN2
- LAN1 – WAN1 | LAN2, LAN3, LAN4 – WAN2
- SSID1_2.4G, SSID1_5G – WAN1 | LAN1, LAN2, LAN3, LAN4 – WAN2





3. Bridge Mode – INTERNET: 1-2/WIFI, IPTV: 3-4, VOIP interface

1. Create WAN Interface for INTERNET – the same as in topic:

Bridge Mode – only INTERNET: 1-4/WIFI

2. Create WAN Interface for VoIP – the same as in topic:

*Bridge Mode - INTERNET: 1-4/WIFI,
VOIP interface*

3. Create WAN Interface for IPTV:

1. Go Interface Setup -> Internet
2. Choose Wan
3. Enable WAN interface
4. Select IP Version: [IPv4](#)
5. Choose ISP: [Bridge Mode](#)
6. Choose 802.1q: [Tag](#) and Set [VLAN-ID](#)
7. Save settings

The screenshot shows the HALNY xPON ONU web interface. The top navigation bar includes the HALNY logo, a search bar, and tabs for Interface Setup, Advanced Setup, Access Management, Maintenance, VoIP, and Status. The Interface Setup tab is selected, and the sub-tab Internet is also selected. The main content area is titled "WAN Transfer Mode".

The configuration steps are numbered:

- 2 WAN : 2 (highlighted with a red box)
- 3 Status : Activated Deactivated (highlighted with a red box)
- 4 IP Version : IPv4 IPv4/IPv6 IPv6 (highlighted with a red box)
- 5 ISP : Dynamic IP Address Static IP Address PPPoE Bridge Mode (highlighted with a red box)
- 6 802.1q : Tag Untag Passthrough
VLAN ID : 200 (range: 0~4095)
802.1p : Remark ▾ | 0 (range: 0~7) (highlighted with a red box)
- 7 SAVE (highlighted with a red box)



3. Bridge Mode – INTERNET: 1-2/WIFI, IPTV: 3-4, VOIP interface

1. Go Advanced Setup -> Port Binding
2. Enable Port Binding
3. Select **index 0** for Internet
4. Set mapping for Internet ports:
 - Mark 1-2 ethernet, Wlan and Wlan11ac to WAN 1

HALNY
High Availability Local Networks

Language xPON ONU

Advanced **1 Advanced Setup** Access Management Maintenance VoIP Status

Interface Setup Routing NAT **PortBinding**

Portbinding Group Setting

2 Active : Activated Deactivated

3 Group Index : 0

4

WANs :	Port #	1	2	3	4	5	6	7
Ethernet :	Port #	1	2	3	4			
WLAN :	Port #	1						
WLAN11AC :	Port #	1						

Language xPON ONU

5. Select **index 1** for IPTV
6. Set mapping for Internet ports:
 - Mark 3-4 ethernet to WAN 2
7. Save settings

HALNY
High Availability Local Networks

Language xPON ONU

Advanced Interface Setup **Advanced Setup** Access Management Maintenance VoIP Status

Routing NAT PortBinding

Portbinding Group Setting

Active : Activated Deactivated

5 Group Index : 1

6

WANs :	Port #	1	2	3	4	5	6	7
Ethernet :	Port #	1	2	3	4			
WLAN :	Port #	1						
WLAN11AC :	Port #	1						

Group Summary PortBinding Summary

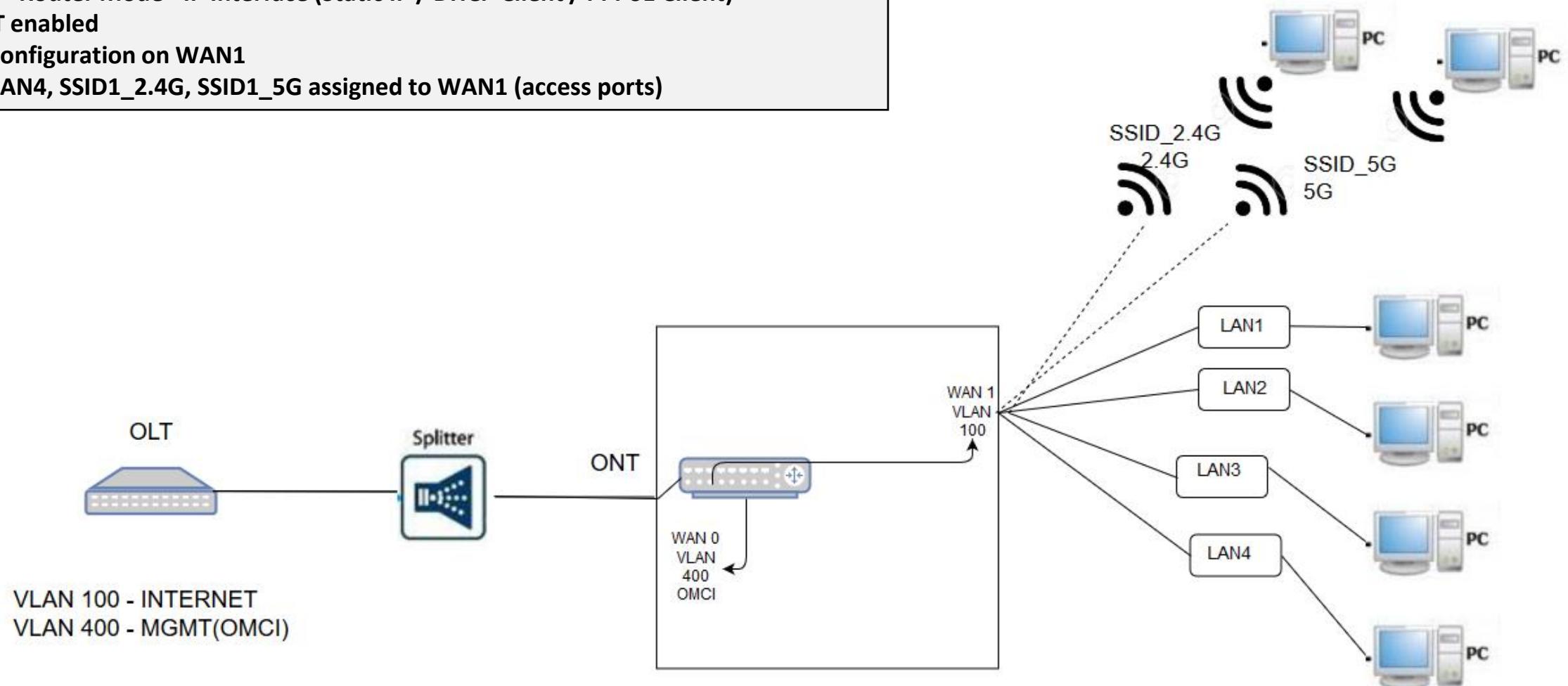
7 **SAVE** DELETE CANCEL

Language xPON ONU



4. Router Mode – only INTERNET: 1-4/WIFI

- WAN1 – Router Mode - IP Interface (Static IP / DHCP Client / PPPoE Client)
 - NAT enabled
- VLAN configuration on WAN1
- LAN1-LAN4, SSID1_2.4G, SSID1_5G assigned to WAN1 (access ports)





4. Router Mode – only INTERNET: 1-4/WIFI

1. Create WAN Interface for INTERNET:

1. Go Interface Setup -> Internet
2. Choose Wan
3. Enable WAN interface
4. Select IP Version: IPv4
5. Choose ISP: **Dynamic IP Address**
6. Choose 802.1q: **Tag** and Set **VLAN-ID**
7. Enable **Default Route** on interface
8. Enable **NAT**
9. Save settings

HALNY
High Availability Local Networks

Language xPON ONU

Interface 1 **Interface Setup Internet** Advanced Setup Access Management Maintenance VoIP Status

WAN Transfer Mode Transfer Modes : Fiber

xPON

2 WAN : 1 3 Status : Activated Deactivated

IPv4/IPv6

4 IP Version : IPv4 IPv4/IPv6 IPv6

Encapsulation

5 ISP : Dynamic IP Address Static IP Address PPPoE Bridge Mode

802.1q

6 802.1q : Tag Untag Passthrough
VLAN ID : 100 (range: 0~4095)

MVLan Options

Dynamic IP

IP Common Options

IPv4 Options

7 Default Route : Yes No
TCP MTU Option : TCP MTU(0:default) 0 bytes

8 NAT : Enable Disable
IGMP Proxy : Enable Disable

9 **SAVE** **DELETE**



4. Router Mode – only INTERNET: 1-4/WIFI

1. Create WAN Interface for INTERNET - *PPPoE*:

1. Go Interface Setup -> Internet
2. Choose Wan
3. Enable WAN interface
4. Select IP Version: [IPv4](#)
5. Choose ISP: [PPPoE](#)
6. Choose 802.1q: [Tag](#) and Set [VLAN-ID](#)
7. Set PPPoE [Username](#) and [Password](#)
8. Enable [Default Route](#) on interface
9. Set Dynamic IP Address
10. Enable [NAT](#)
11. Save settings

The screenshot shows the Winbox interface for a Router Mode device. The top navigation bar has tabs for Interface, Internet, Advanced Setup, Access Management, Maintenance, VoIP, and Status. The Internet tab is selected and highlighted in red. The sub-menu for the Internet tab includes LAN, Wireless, Wireless 5G, and Advanced Wireless. A 'Transfer Modes' dropdown is set to Fiber.

The main configuration area is titled 'Interface 1'. It contains several sections:

- xPON**: Shows 'WAN : 1' and 'Status : Activated' (radio button selected).
- IPv4/IPv6**: Shows 'IP Version : IPv4' (radio button selected).
- Encapsulation**: Shows 'ISP' options: Dynamic IP Address, Static IP Address, PPPoE (selected), and Bridge Mode.
- 802.1q**: Shows '802.1q : Tag' (radio button selected) and 'VLAN ID : 100' (range: 0~4095).
- MVLan Options**: Shows 'Multi VLAN : -1' (range: -1~4095, -1 means no multi vlan).
- PPPoE**: Shows 'Connection Setting' with fields for 'Username : user4' and 'Password : *****'.
- Connection**: Shows 'Connection : Always On (Recommended)' (radio button selected).
- TCP MSS Option**: Shows 'TCP MSS(0 means use default)' with a value of 0 bytes.
- IP Options**: Shows 'Default Route : Yes' (radio button selected).
- IP Common Options**: Shows 'Get IP Address : Dynamic' (radio button selected) and 'Static IP Address : 0.0.0.0'.
- IPv4 Options**: Shows 'IP Subnet Mask : 0.0.0.0' and 'Gateway : 0.0.0.0'.
- NAT**: Shows 'NAT : Enable' (dropdown menu selected).
- TCP MTU Option**: Shows 'TCP MTU(0 means use default:1492)' with a value of 0 bytes.
- IGMP Proxy**: Shows 'IGMP Proxy : Disabled' (radio button selected).

At the bottom right, there are 'SAVE' and 'DELETE' buttons.



4. Router Mode – only INTERNET: 1-4/WIFI

1. Create WAN Interface for INTERNET - *Static IP:*

1. Go Interface Setup -> Internet
2. Choose Wan
3. Enable WAN interface
4. Select IP Version: **IPv4**
5. Choose ISP: **Static IP Address**
6. Choose 802.1q: **Tag**, Set **VLAN-ID**
7. Enable **Default Route** on interface
8. Set **IP address, mask, gateway**
9. Enable **NAT**
10. Save settings

The screenshot shows the 'Interface Setup Internet' configuration page. The interface is labeled '1'. The configuration steps are as follows:

1. WAN Transfer Mode: Transfer Modes : Fiber
2. WAN : 1 (selected) / WANs Summary
3. Status : Activated (radio button selected)
4. IP Version : IPv4 (radio button selected) / IPv4/IPv6 / IPv6
5. ISP : Static IP Address (radio button selected) / Dynamic IP Address / PPPoE / Bridge Mode
6. 802.1q : Tag (radio button selected) / Untag / Passthrough / VLAN ID : 100 (range: 0~4095)
7. Default Route : Yes (radio button selected) / No / TCP MTU Option : TCP MTU(0:default) 0 bytes
8. Static IP Address : 192.168.1.1 / IP Subnet Mask : 255.255.255.0 / Gateway : 192.168.1.254
9. NAT : Enable (radio button selected) / Disable
10. SAVE / DELETE



4. Router Mode – only INTERNET: 1-4/WIFI

1. Go Advanced Setup
2. Go Port Binding
3. Enable Port Binding
4. Select index 0 for Internet
5. Set mapping for Internet ports:
6. Save settings

HALNY
High Availability Local Networks

Language xPON ONU

Advanced Interface Setup 1 Advanced Setup Access Management Maintenance VoIP Status

Routing NAT PortBinding 2

Portbinding Group Setting

3 Active : Activated Deactivated

4 Group Index : 0

5

WANs : Port #	1	2	3	4	5	6	7
Ethernet : Port #	1	2	3	4			
WLan : Port #	1						
WLan11ac : Port #	1						

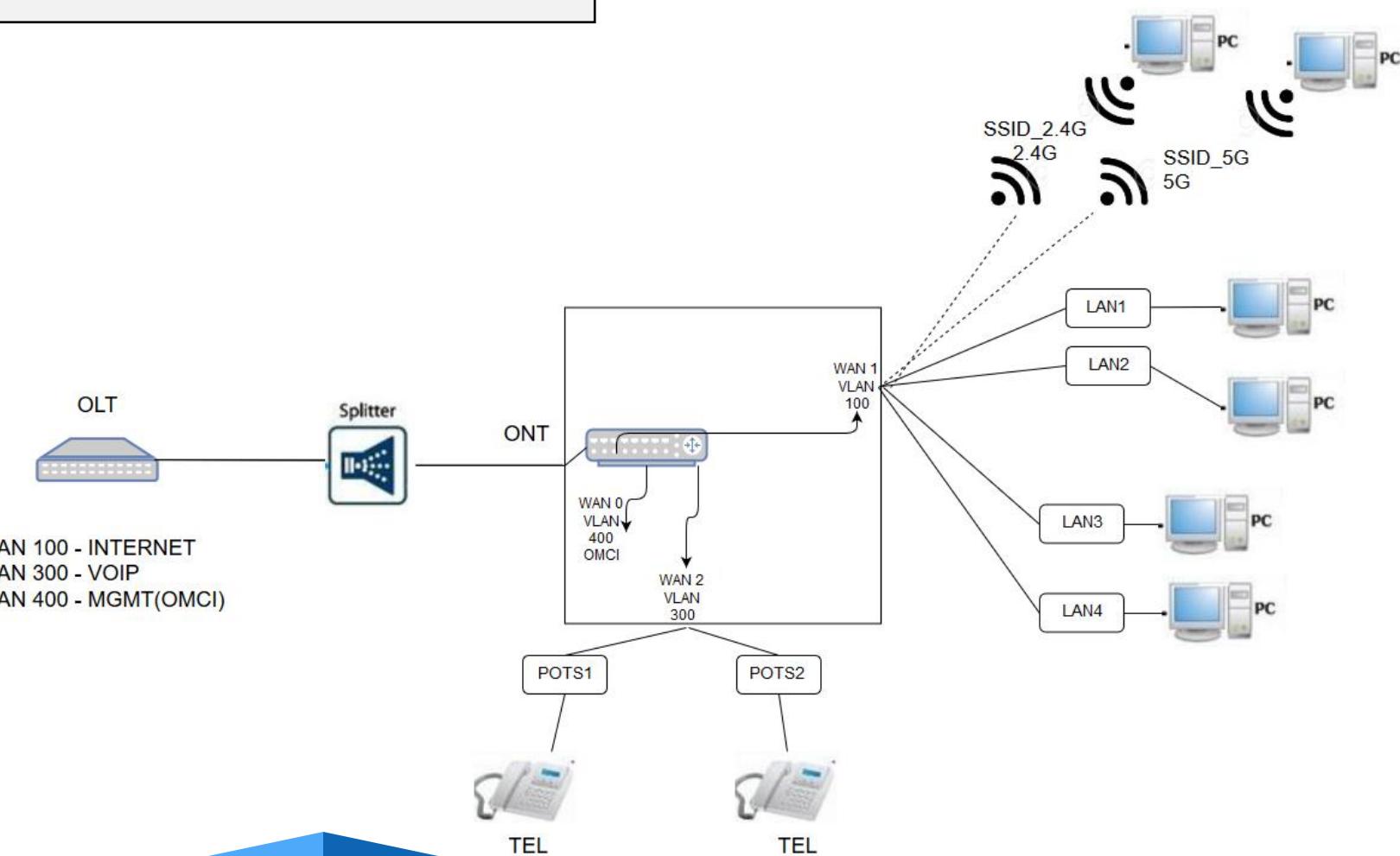
Group Summary PortBinding Summary

6



5. Router Mode – INTERNET: 1-4/WIFI, VOIP interface

- **WAN1 – VLAN 100 – Router Mode - IP Interface (Static IP / DHCP Client / PPPoE Client)**
 - LAN1, LAN2, SSID1_2.4G, SSID1_5G assigned to WAN1 (access ports)
 - NAT enabled
- **WAN2 – VLAN 300 – IP Interface (Static IP / DHCP Client / PPPoE Client)**
 - POTS1, POTS2 assigned to WAN2



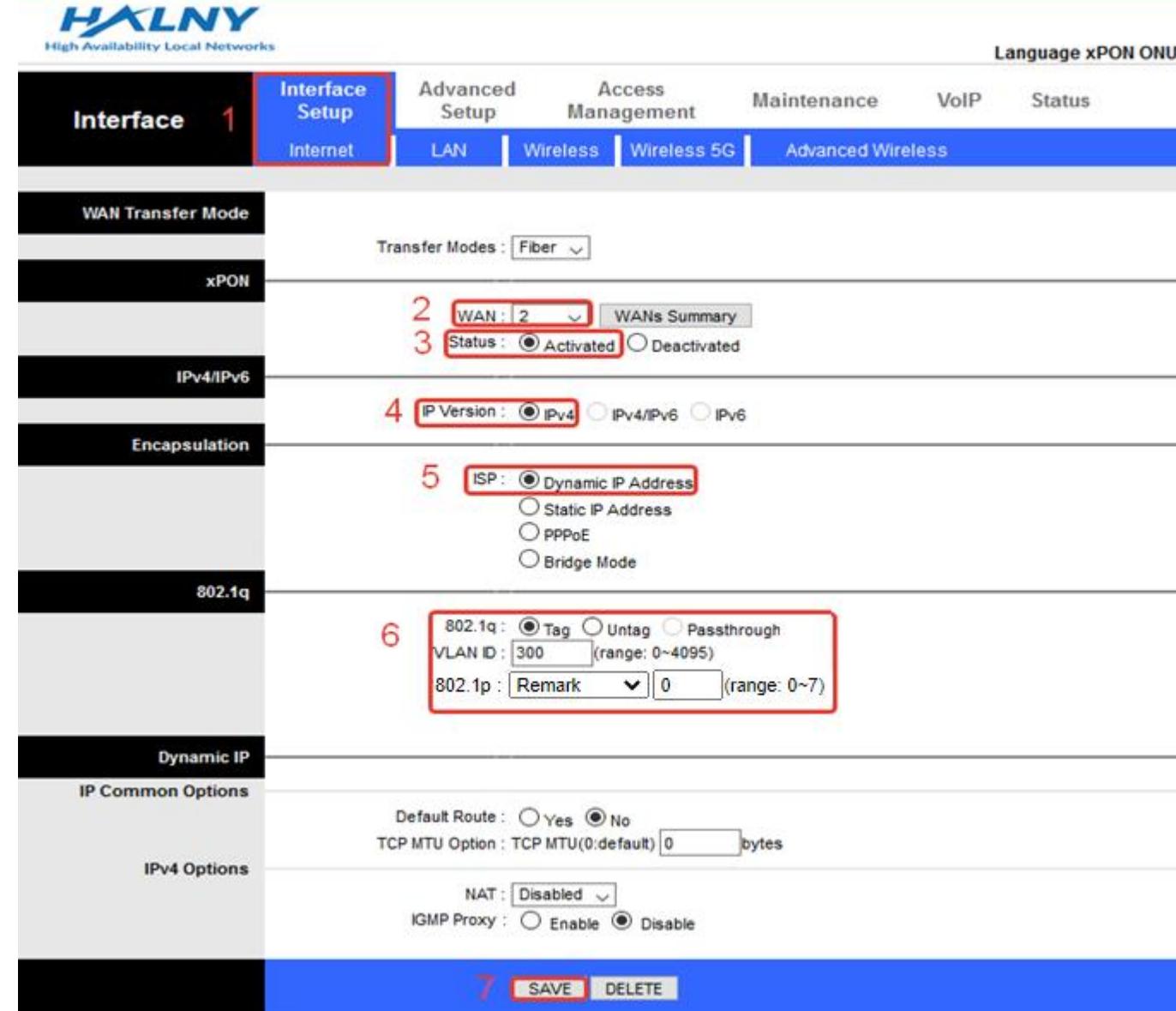
5. Router Mode – INTERNET: 1-4/WIFI, VOIP interface

1. Create WAN Interface for INTERNET – the same as in topic:

Router Mode – only INTERNET: 1-4/WIFI

2. Create second WAN interface for VOIP:

1. Go Interface Setup -> Internet
2. Choose Wan
3. Enable WAN interface
4. Select IP Version: [IPv4](#)
5. Choose ISP: [Dynamic IP Address](#)
6. Choose 802.1q: [Tag](#) and Set [VLAN-ID](#)
7. Save settings



The screenshot shows the HALNY web interface for configuring a second WAN interface. The top navigation bar includes 'Language xPON ONU', 'Interface Setup' (which is highlighted), 'Advanced Setup', 'Access Management', 'Maintenance', 'VoIP', and 'Status'. The main menu on the left lists 'Interface 1', 'Internet', 'Advanced Wireless', 'LAN', 'Wireless', and 'Wireless 5G'. The configuration page is divided into several sections: 'WAN Transfer Mode' (Transfer Modes: Fiber), 'xPON' (WAN: 2, Status: Activated), 'IPv4/IPv6' (IP Version: IPv4), 'Encapsulation' (ISP: Dynamic IP Address), '802.1q' (802.1q: Tag, VLAN ID: 300, 802.1p: Remark), 'Dynamic IP' (Default Route: No, TCP MTU Option: 0 bytes), and 'IP Common Options' (NAT: Disabled, IGMP Proxy: Disable). Numbered red boxes (1-7) point to specific fields: 1 points to 'Interface 1' and 'Internet'; 2 points to 'WAN: 2'; 3 points to 'Status: Activated'; 4 points to 'IP Version: IPv4'; 5 points to 'ISP: Dynamic IP Address'; 6 points to '802.1q: Tag' and 'VLAN ID: 300'; 7 points to the 'SAVE' button.



5. Router Mode – INTERNET: 1-4/WIFI, VOIP interface

3. Basic VOIP configuration:

1. Go VoIP -> Basic
2. Choose Protocol: SIP
3. Bind WAN interface name
4. Set SIP server addresses and destination port
5. Enable port
6. Refresh page to check Register Status
7. Set authentication name, password for VOIP account
8. Save settings

HALNY
High Availability Local Networks

1 Language xPON ONU

VoIP Interface Setup Advanced Access Maintenance VoIP Status

Basic Advanced

VolP Basic

2 Protocol : SIP if change the VolP Protocol, please restart

3 Binding Interface Name : WAN2

Region : ETS-ETSI

4 SIP Proxy Address : 195.162.16.201

SIP Proxy Port : 5060

5 Status	Activated	Deactivated
6 Register Status	Initializing	Disabled
7 Authentication Name	814	
Password	*****	

8 SAVE

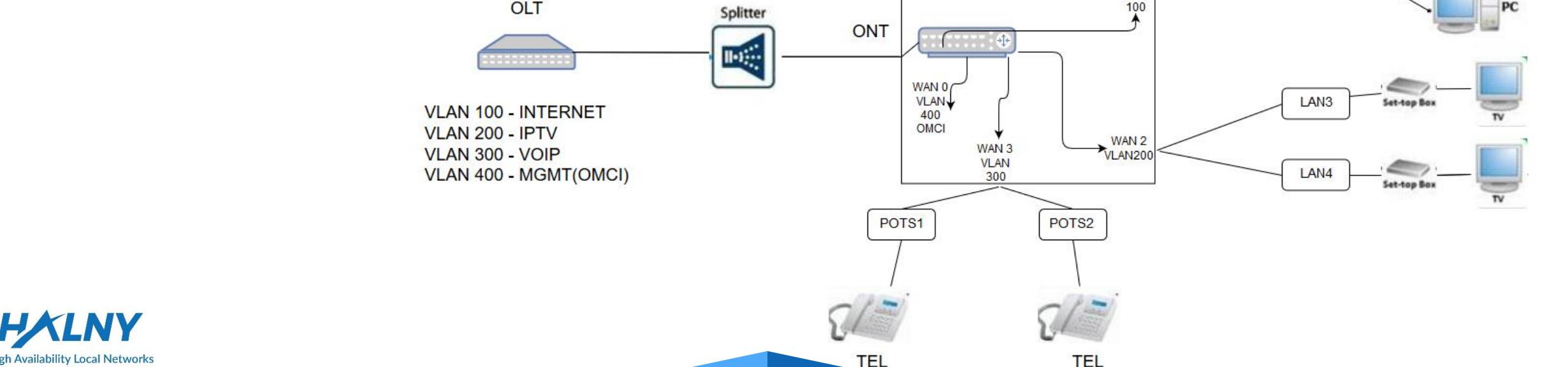


6. Router Mode – INTERNET: 1-2/WIFI, IPTV: 3-4, VOIP interface

- WAN1 – VLAN 100 – Router Mode - IP Interface (Static IP / DHCP Client / PPPoE Client)
 - LAN1, LAN2, SSID1_2.4G, SSID1_5G assigned to WAN1 (access ports)*
 - NAT enabled
- WAN2 – VLAN 200 – IPTV Bridge mode (IGMP snooping enabled)
 - LAN3, LAN4 assigned to WAN2 (access ports) *
- WAN3 – VLAN 300 – IP Interface (Static IP / DHCP Client / PPPoE Client)
 - POTS1, POTS2 assigned to WAN3

* Different LAN ports number assigned to each WAN, e.g.:

- LAN1 – WAN1 | LAN2, LAN3, LAN4 – WAN2
- LAN1, LAN2 – WAN1 | LAN3, LAN4 – WAN2
- LAN1, LAN2, LAN3 – WAN1 | LAN4 – WAN2
- LAN1 – WAN1 | LAN2, LAN3, LAN4 – WAN2
- SSID1_2.4G, SSID1_5G – WAN1 | LAN1, LAN2, LAN3, LAN4 – WAN2





6. Router Mode – INTERNET: 1-2/WIFI, IPTV: 3-4, VOIP interface

1. Create WAN Interface for INTERNET – the same as in topic:

Router Mode - only INTERNET: 1-4/WIFI

2. Create WAN Interface for VoIP – the same as in topic:

*Router Mode - INTERNET: 1-4/WIFI,
VOIP interface*

3. Create WAN Interface for IPTV:

1. Go Interface Setup -> Internet
2. Choose Wan
3. Enable WAN interface
4. Select IP Version: **IPv4**
5. Choose ISP: **Bridge Mode**
6. Choose 802.1q: **Tag** and Set **VLAN-ID**
7. Save settings

The screenshot shows the HALNY xPON ONU interface with the following configuration steps highlighted:

1. Interface 1 (selected)
2. WAN : 2 (highlighted)
3. Status : Activated (highlighted)
4. IP Version : IPv4 (highlighted)
5. ISP : Bridge Mode (highlighted)
6. 802.1q : Tag (highlighted), VLAN ID : 200 (highlighted), 802.1p : Remark (highlighted)
7. SAVE (highlighted)

Other visible interface elements include: Advanced Setup, Access Management, Maintenance, VoIP, Status, LAN, Wireless, Wireless 5G, and Advanced Wireless tabs.



6. Router Mode - INTERNET: 1-2/WIFI, IPTV: 3-4, VOIP interface

1. Go Advanced Setup -> Port Binding
2. Enable Port Binding
3. Select **index 0** for Internet
4. Set mapping for Internet ports:
 - Mark 1-2 ethernet, Wlan and Wlan11ac to WAN 1

HALNY
High Availability Local Networks

Language xPON ONU

Advanced **1 Advanced Setup** Access Management Maintenance VoIP Status

Interface Setup Routing NAT **PortBinding**

Portbinding Group Setting

2 Active : Activated Deactivated

3 Group Index : 0

4

WANs :	Port #	1	2	3	4	5	6	7
Ethernet :	Port #	1	2	3	4			
WLAN :	Port #	1						
WLAN11AC :	Port #	1						

Language xPON ONU

5. Select **index 1** for IPTV
6. Set mapping for Internet ports:
 - Mark 3-4 ethernet to WAN 2
7. Save settings

HALNY
High Availability Local Networks

Language xPON ONU

Advanced Interface Setup **Advanced Setup** Access Management Maintenance VoIP Status

Routing NAT PortBinding

Portbinding Group Setting

Active : Activated Deactivated

5 Group Index : 1

6

WANs :	Port #	1	2	3	4	5	6	7
Ethernet :	Port #	1	2	3	4			
WLAN :	Port #	1						
WLAN11AC :	Port #	1						

Group Summary PortBinding Summary

7 **SAVE** DELETE CANCEL



7. Rate-limit configuration

Rate-limit is set per CoS value. Before setting rate-limit value, 802.1p bit has to be set correctly, from range 0-7. For example:

WAN1 – Internet CoS ->0

WAN2 – IPTV CoS ->4

WAN3 – VoIP CoS ->6

xPON	WAN : <input type="button" value="1"/> WANs Summary Status : <input checked="" type="radio"/> Activated <input type="radio"/> Deactivated
IPv4/IPv6	IP Version : <input checked="" type="radio"/> IPv4 <input type="radio"/> IPv4/IPv6 <input type="radio"/> IPv6
Encapsulation	ISP : <input checked="" type="radio"/> Dynamic IP Address <input type="radio"/> Static IP Address <input type="radio"/> PPPoE <input type="radio"/> Bridge Mode
802.1q	802.1q : <input checked="" type="radio"/> Tag <input type="radio"/> Untag <input type="radio"/> Passthrough VLAN ID : <input type="text" value="400"/> (range: 0~4095) 802.1p : Remark <input type="button" value="0"/> (range: 0~7)
Dynamic IP	

xPON	WAN : <input type="button" value="2"/> WANs Summary Status : <input checked="" type="radio"/> Activated <input type="radio"/> Deactivated
IPv4/IPv6	IP Version : <input checked="" type="radio"/> IPv4 <input type="radio"/> IPv4/IPv6 <input type="radio"/> IPv6
Encapsulation	ISP : <input checked="" type="radio"/> Dynamic IP Address <input type="radio"/> Static IP Address <input type="radio"/> PPPoE <input checked="" type="radio"/> Bridge Mode
802.1q	802.1q : <input checked="" type="radio"/> Tag <input type="radio"/> Untag <input type="radio"/> Passthrough VLAN ID : <input type="text" value="200"/> (range: 0~4095) 802.1p : Remark <input type="button" value="4"/> (range: 0~7)
xPON	WAN : <input type="button" value="3"/> WANs Summary Status : <input checked="" type="radio"/> Activated <input type="radio"/> Deactivated
IPv4/IPv6	IP Version : <input checked="" type="radio"/> IPv4 <input type="radio"/> IPv4/IPv6 <input type="radio"/> IPv6
Encapsulation	ISP : <input checked="" type="radio"/> Dynamic IP Address <input type="radio"/> Static IP Address <input type="radio"/> PPPoE <input type="radio"/> Bridge Mode
802.1q	802.1q : <input checked="" type="radio"/> Tag <input type="radio"/> Untag <input type="radio"/> Passthrough VLAN ID : <input type="text" value="100"/> (range: 0~4095) 802.1p : Remark <input type="button" value="6"/> (range: 0~7)
Dynamic IP	



7. Rate-limit configuration

Rate-limit 500/500 Mbit/s settings for Internet WAN0 with CoS=0
corresponding configuration from previous slide

```
traffic-profile HL-4GMV_RL create
tcont 1
gemport 1/1-1/8
dba-profile DBA
tcont 2
gemport 2/1
dba-profile DBA
mapper 1
gemport count 8
mapper 2
gemport count 1
bridge 1
ani mapper 1
uni virtual-eth 1
multicast-profile HL-4GMV-200
bridge 2
ani mapper 2
link ip-host-config 1
ip-host-config 1
ip address dhcp
extended-vlan-tagging-operation MGMT
apply
```

RATE LIMIT

Rate Limit : Enable Disable

Type : 0 1 2

RECOMENDATION:

- Type 0 - PON Mode - (Down > 500Mb/s | Up > 500Mb/s) - DASAN/FIBERHOME OLT
- Type 1 - PON Mode - (Down < 500Mb/s | Up < 500Mb/s) - All OLTs and Ethernet Mode
- Type 2 - PON Mode - (Down > 500Mb/s | Up < 500Mb/s) - DASAN/FIBERHOME OLT

Please restart ONT after Type change!

Set by : ONT

- if ONT -> then below settings are set
- if OLT -> ONT received gemport rate-limit from OLT (disable ONT rate-limit settings)

Set by OLT supported by DASAN

PER COS

Each Cos entry is related to the COS value set on WAN Interface settings.
Set value in Mb/s (0 - default unlimited)

#	DOWNSTREAM	UPSTREAM
COS0	500	500
COS1	0	0
COS2	0	0
COS3	0	0
COS4	0	0
COS5	0	0
COS6	0	0
COS7	0	0



8. Remote management – access to the ONT via WAN IP

Configuration of remote management via WAN ip address

Create WAN Interface for INTERNET:

1. Go Interface Setup -> Internet
2. Choose Wan
3. Enable WAN interface
4. Select IP Version: **IPv4**
5. Choose ISP: **Dynamic IP Address** || **Static IP** || **PPPoE**
6. Choose 802.1q: **Tag** and Set **VLAN-ID**
7. Enable **Default Route** on interface
8. Enable **NAT**
9. Save settings
10. Then go to the Access Management tab, next ACL tab:
10. Enable remote web management
11. Set port

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Interface : **WAN1** Connection Type : Dynamic IP MAC Address :

Status : Connected IP Address : **10.192.168.133** renewIP releaseIP

Subnet Mask : 255.255.255.128 Gateway : 10.192.168.129 Primary DNS : 10.192.168.129 Secondary DNS :

HALNY
High Availability Local Networks Language xPON ONU

Interface 1 **Interface Setup Internet** Advanced Setup LAN Access Management Maintenance VoIP Status

WAN Transfer Mode Transfer Modes : Fiber

xPON 2 WAN : **1** WANS Summary

3 Status : Activated Deactivated

IPv4/IPv6 4 IP Version : IPv4 IPv4/IPv6 IPv6

Encapsulation 5 ISP : Dynamic IP Address Static IP Address PPPoE Bridge Mode

802.1q 6 802.1q : Tag Untag Passthrough VLAN ID : **100** (range: 0~4095)

MVLan Options Multi VLan : -1 (range: -1~4095, -1 means no multi vlan)

Dynamic IP 7 Default Route : Yes No TCP MTU Option : TCP MTU(0:default) 0 bytes

IP Common Options 8 NAT : Enable Disable IGMP Proxy : Enable Disable

IPv4 Options 9 SAVE DELETE

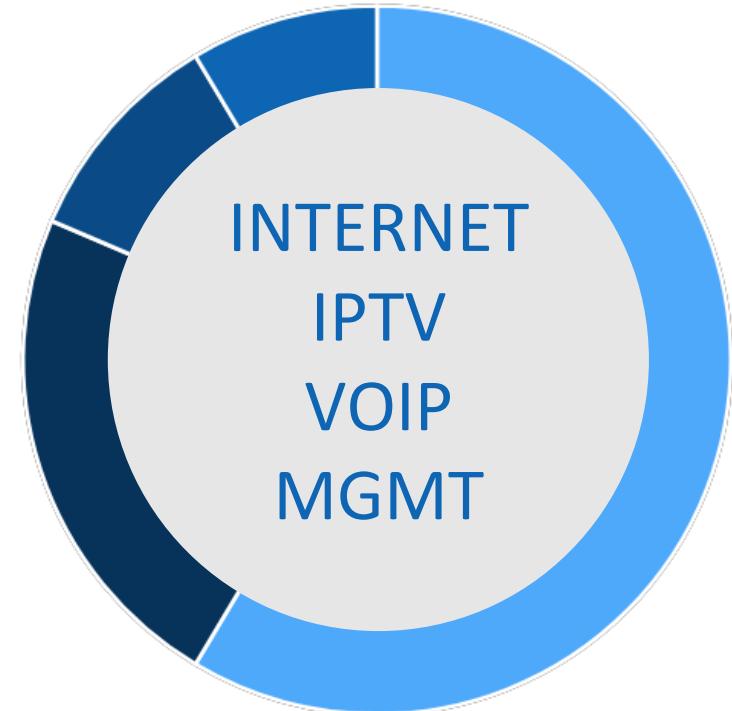
Remote Web Management

Remote Management : Activated Deactivated

WAN Interface : **WAN1** Port Number : **88888**

SET DELETE CANCEL

In separated files You can
find how to configure OLTs
from different vendors.



High Availability Local Networks

THANK YOU



High Availability Local Networks