OLT is unable to Authenticate ONU

1. Please ensure that the OLT has enabled the PON port.

OLT Configuration>PON>Configuration>PON>Admin Status

	Optical Inf	ormation T	raffic Statistics	Config	guration 3	Range P	rotection Swite	h Group	Remote Pro
OLT Information	PON Cor	nfiguration							
OLT Configuration 🚹	Cubasit	Defreeb							
VLAN	Submit	Refresh				Charm		0.06)	Dete (OIC)
Uplink Port	Port ID	Description	Admin Status	Isolate	ONU P2P	Stori	1(0 64-10000		Rate(0)64
PON 2						Broadcast	Multicast	Unicast	Ingress
MAC	PON1					512	0	512	0
LACP	PON2					512	0	512	0
QoS	PON3					512		512	
ACL	10103					512		512	
IPv6 ACL	PON4					512	0	512	0
IGMP	PON5					512	0	512	0
IPv6 MLD	PONG					512		512	
STP	FONO		<u> </u>			512		512	
Loopback	PON7					512	0	512	0
DHCP	PON8					512	0	512	0
DHCPv6			1						
IPV6 SLAAC									

2.Please ensure that the OLT has enabled Auto Authentication for the ONU.

GPON/XG(S)PON: ONU Configuration>ONU AutoLearn>Enable PON AutoLearn (OLT WEB)

••••••	ONU Autol	earr ON	U AutoBind	ONU AutoDele	ete ONU Scl	neduled Reboot	ONU Pre	Configure
OLT Information	Automat	tic Learn						
OLT Configuration				1				
ONU Configuration	Default	ONU Profile	default	~				
ONU AuthList	Plug and	l Play	disable	~				
ONU AutoFind	Default	vlan	1	~				
ONU AutoLearn 2			·				-	
ONU Upgrade	Variable	Vlan disa	ble	✓ 1		(1-3070)		
Rogue ONU								
ONU Common Service	PON ID	Enable		Line Profile		Srv Profile		Alarm Pro
Profile Configuration	PON1	Enable		✓ N/A	~	srv_1	~	N/A
System Configuration	PON2	Enable		✓ N/A	~	N/A	~	N/A
	PON3	Enable		✓ N/A	~	N/A	~	N/A
	PON4	Enable		✓ N/A	~	N/A	~	N/A
	PON5	Enable		✓ N/A	~	N/A	~	N/A
	PON6	Enable		✓ N/A	~	N/A	~	N/A
	PON7	Enable		✓ N/A	~	N/A	~	N/A
	PON8	Enable		✓ N/A	~	N/A	~	N/A
	Apply	Refresh						



3.Please verify the OLT blacklist table, to ensure that the ONU is not listed. GPON/XG(S)PON: ONU Configuration>ONU Allowlist (OLT WEB)

	ONU list	ONU Status	ONU Optical Information	ONU Version Info	rmation	ONU Manual Add	ONU Allowlist
OLT Information							3
OLT Configuration	Add ON	U Allowlist					
ONU Configuration	When th	ne allowlist ta	ble is empty, it means tha	at all onu can be o	online.		
ONU AuthList	sn			1			
ONU AutoFind	Endsn			1			
ONU AutoLearn			Add	_			
ONU Upgrade							
Rogue ONU		owList Table	1:_*	Dalata			
ONU Common Service	Clopr	Refrech	list	Delete			
Profile Configuration	Cicai	Kellesh					
System Configuration							

Typically, the table should be empty.

4.Please check and replace the PON module and verify it's working. For GPON, use a GPON PON module, and for XG(S) PON use an XG or XGS PON module (combo).

5.Please verify the ONU RX power in the ONU Web interface. Typically, the ONU RX power should be within the range of -3dBm to -28dBm.

O		
airli▼e	Connect information	
i Status 👻		
HGU STATUS	PON MODE	XGS-PON
Device Info	Connect state	Operation State (O5)
WAN Info	FEC Upstream Status	Disable
	FEC Downstream Status	Disable
PON Info		
User Info		
	Laser Device Info	
Network		
ADVANCE SETTINGS	Tx Power	6.059727 dBm
Security >	Rx Power	-26.777806 dBm
	Temperature	51.488281 °C
Application >	Voltage	3.367200 V
🖨 Management 🔹 🔸	Bias Current	36.686000 mA
	PON Alarm Info	
🔆 Diagnostics 🔹 🔹		

The image below shows the AirLive ONU-10XGS-1004-10G as an example.

If ONU RX power shows '-inf' after fiber plug-in, please replace PON module and/or replace a with another ONU to check.



6.Please verify the ONU PON Mode.

If you are using an AirLive XG(S) OLT, the OLT should be in the correct PON mode for the ONU which will be connected to it. Note that the correct PON module is also used.

Typically, you can find the OLT PON mode on the OLT Web interface.

System Configuration>Device Management>PON Mode

The image below is an example of the AirLive OLT-2XGS.

Firmware Upgrade Device Reboot Config File Advance Config File PON Mode OLT Information OLT Configuration After switching the PON mode, you need to reboot the system to take effect. ONU Configuration Profile Configuration Mode Image: Configuration image: Configuratimage: Configuration image: Configuration image: Configu	oirlive					
OLT InformationPON Mode ConfigurationOLT ConfigurationAtter switching the PON mode, you need to reboot the system to take effect.Profile ConfigurationModeXGS-PONONU Rapid DeploymentSystem ConfigurationSystem TomeSystem TimeSystem TimeFANMirrorSystem TimeFANSignamentSystem TimeSignamentSystem TimeSignamentFANSignamentMirrorConfigurationTacacs+RadiusDot1xNetwork Diagnose		Firmware Upgrade	Device Reboot	Config File	Advance Config File	PON Mode
OLT Configuration ONU Configuration Profile Configuration ONU Rapid Deployment System Configuration System Configuration System Log Device Management User Management SNMP AUX IP DNS System Time FAN Mirror Login Management SSH Tacas+ Radius Dot1x Network Diagnose	OLT Information	PON Mode Config	uration			
ONU ConfigurationModeXGS-PONProfile ConfigurationGPON XG-PONSystem ConfigurationXGS-PONSystem LogXGS-PONDevice ManagementKGS-PONSNMKGS-PONAux IPKGS-PONDNSKGS-PONSystem TimeKGS-PONFANKGS-PONIntrorKGS-PONLogin ManagementKGS-PONSSHKGS-PONTacacs+KGS-PONRadiusKGS-PONDot1xKGS-PONNetwork DiagnoseKGS-PON	OLT Configuration	After switching the	PON mode, you n	eed to reboot	the system to take effe	ect.
Profile ConfigurationONU Rapid DeploymentSystem ConfigurationSystem ConfigurationSystem LogDevice ManagementUser ManagementSNMPAUX IPDNSSystem TimeFANMirrorLogin ManagementSSHTacacs+RadiusDot1xNetwork Diagnose	ONU Configuration	Mode	XGS-PON	~		
ONU Rapid DeploymentXG-PONSystem LogXG-PONDevice ManagementXG-PONUser ManagementNMPAUX IPDNSDNSSystem TimeFANFANMirrorLogin ManagementSSHSSHTacacs+RadiusDot1xNetwork Diagnose	Profile Configuration	110de	GPON			
XGS-PONSystem LogDevice ManagementUser ManagementAUX IPDNSSystem TimeFANMirrorLogin ManagementSSHTacacs+RadiusDot1xNetwork Diagnose	ONU Rapid Deployment		XG-PON			
System Log Device Management User Management SNMP AUX IP DNS System Time FAN Mirror Login Management SSH Tacacs+ Radius Dot1x Network Diagnose	System Configuration		XGS-PON			
Device ManagementUser ManagementSNMPAUX IPDNSSystem TimeFANMirrorLogin ManagementSSHTacacs+RadiusDot1xNetwork Diagnose	System Log					
 User Management SNMP AUX IP DNS System Time FAN Mirror Login Management SSH Tacacs+ Radius Dot1x Network Diagnose 	Device Management					
SNMP AUX IP DNS System Time FAN Mirror Login Management SSH Tacacs+ Radius Dot1x Network Diagnose	User Management					
AUX IPDNSSystem TimeFANMirrorLogin ManagementSSHTacacs+RadiusDot1xNetwork Diagnose	SNMP					
DNS System Time FAN Mirror Login Management SSH Tacacs+ Radius Dot1x Network Diagnose	AUX IP					
System Time FAN Mirror Login Management SSH Tacacs+ Radius Dot1x Network Diagnose	DNS					
FAN Mirror Login Management SSH Tacacs+ Radius Dot1x Network Diagnose	System Time					
Mirror Login Management SSH Tacacs+ Radius Dot1x Network Diagnose	FAN					
Login Management SSH Tacacs+ Radius Dot1x Network Diagnose	Mirror					
SSH Tacacs+ Radius Dot1x Network Diagnose	Login Management					
Tacacs+ Radius Dot1x Network Diagnose	SSH					
Radius Dot1x Network Diagnose	Tacacs+					
Dot1x Network Diagnose	Radius					
Network Diagnose	Dot1x					
	Network Diagnose					

7.Kindly update the OLT to the latest version by visiting the AirLive website www.airlive.com

8. Please attempt to reboot OLT to see whether the problem has been solved.