

GPON device authentication code



Overview

Configuring Authentication Parameters The three authentication modes can be used separately or jointly. All the authentication parameters are pre-configure.

Key Takeaways

A GPON device authentication code is typically a password or PLOAM key used by an ONU/ONT to authenticate with the OLT, often combined with the device's serial number for secure registration. Authentication Modes

GPON systems support several ONU/ONT authentication modes:

- **Serial Number (SN) Authentication:** The OLT verifies the ONU using its unique serial number, which is a globally unique identifier. For example, Huawei ONUs start with "hwhw" for manufacturer identification. This mode is reliable and requires pre-registration of the SN on the OLT .
- **Password Authentication:** The ONU sends a password (authentication code) to the OLT. The OLT checks it against a locally configured password. This allows flexible access and does not require SN pre-registration .
- **Combined SN and Password:** Both the serial number and password are verified for enhanced security .

GPON Authentication Code Details

- **PLOAM Password:** A 10-byte credential used during ONU registration. It can be in ASCII or hexadecimal format depending on the device .

- Configuration Location: Authentication parameters are configured on the OLT and cannot be modified on the ONU. If not pre-configured, the ONU cannot register .

- Vendor and Device Metadata: OMCI Management Entities (ME 256 and ME 257) store vendor and equipment identification data used by the OLT for device recognition .

Configuration Steps (Example)

- Access the OLT system view and PON interface view.

- Configure the authentication password using commands such as gpon-password for Huawei devices .

- For H.248-based devices, configure the MG interface with the authentication MG ID and initial key, then reset the interface to apply changes .

- Verify the authentication parameters using display commands to ensure the ONU can register successfully .

Best Practices

- Use unique passwords for each ONU to prevent unauthorized access.

- Pre-register SNs for devices in networks requiring strict access control.

- Regularly update authentication credentials to maintain network security.

- For automated registration, configure line templates and service profiles to match the authentication mode . By correctly setting the authentication code and related parameters, a GPON ONU/ONT can securely register with the OLT, ensuring proper network access and preventing unauthorized devices from connecting.

Article Content

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ONU Vendor ID

Needs to be set for the OLT to authenticate your ONT; please read your original ONT's Serial Number, it can be either in HEX or

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The document discusses troubleshooting for ONU registration failures and broadband service issues in a GPON network. It

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In this article, the basic operation and configuration of VSOL GPON OLT will be introduced. Feel free to contact VSOL

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Configuring Attributes of a GPON Interface To enable the router to communicate with an upstream optical line terminal

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Procedure Check for the possible causes on the ONU and troubleshoot the faults accordingly.

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The device supports the SN authentication mode by default. A GPON system supports the following ONU authentication modes: only

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GitHub

Many routers today use GPON internet, and a way to bypass all authentication on the devices (CVE-2018-10561) was found by

ONT Registrations

ONT Manual Registration Configuration You can manually register an ONT by defining an authentication registration rule and

Huawei GPON configuration (commands) | Splynx Documentation

Learn how to configure Huawei GPON, set user and default routes, check status with commands, and remove ONT from configured

OAuth 2.0 device authorization grant

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OLT Fault

This page provides troubleshooting steps for resolving OLT faults that prevent GPON ONUs from going online.

GPON

GPON uses passive optical network (PON), which is a fiber-optic access architecture where a single optical fiber from a central

Configuring Remote Authentication

If authentication and authorization are performed on an authentication server such as a RADIUS server, it is called remote

Huawei ONT WiFi Configure

Indicates the authentication mode for the STA to request access to the wireless network. The Authentication mode

GPON ONU Configuration Guide | PDF | Internet Architecture ...

The document provides instructions for configuring and monitoring ONU devices connected to a GPON OLT. It shows how to register

User Guide

Features available for GPON OLT products may vary due to your region, hardware version, and device model. All

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