GPON-SFP-ONT-MAC-I Configuration Guide

Basic Product Introduction

The transceiver is designed for Passive Optical. Network application, 2.488Gbps downstream and 1.244Gbps upstream. It is fully compliant with ITU-T G.984.2. The product is an MSA compliant SFP that incorporate not just the optics for an ONU, but all of the electronics need as well. It is a 'PON on a Stick' that an entire FTTH ONU is a sightly oversized SFP. It can be plugged into networking equipment. Allowing the data interfaces in a switch, router, etc., to be customized for different fiber environment and distance requirements.

- Single fiber bi-directional data links GPON ONU and application with GPON MAC function
- Transmitter 1310nm 1.244Gbps with DFB-LD
- Receiver 1490nm 2.488Gbps with APD-TIA
- SFP package with SC/APC receptacle
- Single 3.3V power supply
- Digital diagnostic monitor interface compatible with SFF-8472
- Compliant with MSA SFP-8074
- Compliant with ITU-T G.984.2 Operating temperature range commercial -40°C to 85°C
- Power dissipation < 2.5W，Distance up to 20km
- 0.5dBm ~ 5dBm launch power，-28dBm ~ -8dBm for receiving

Applications:

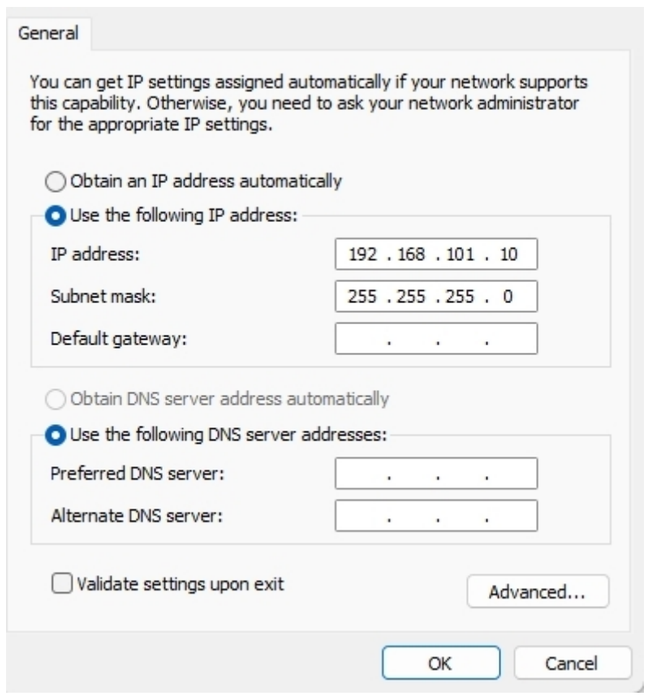
- GPON
- FTTx
- Wireless Backhaul

Physical Connection

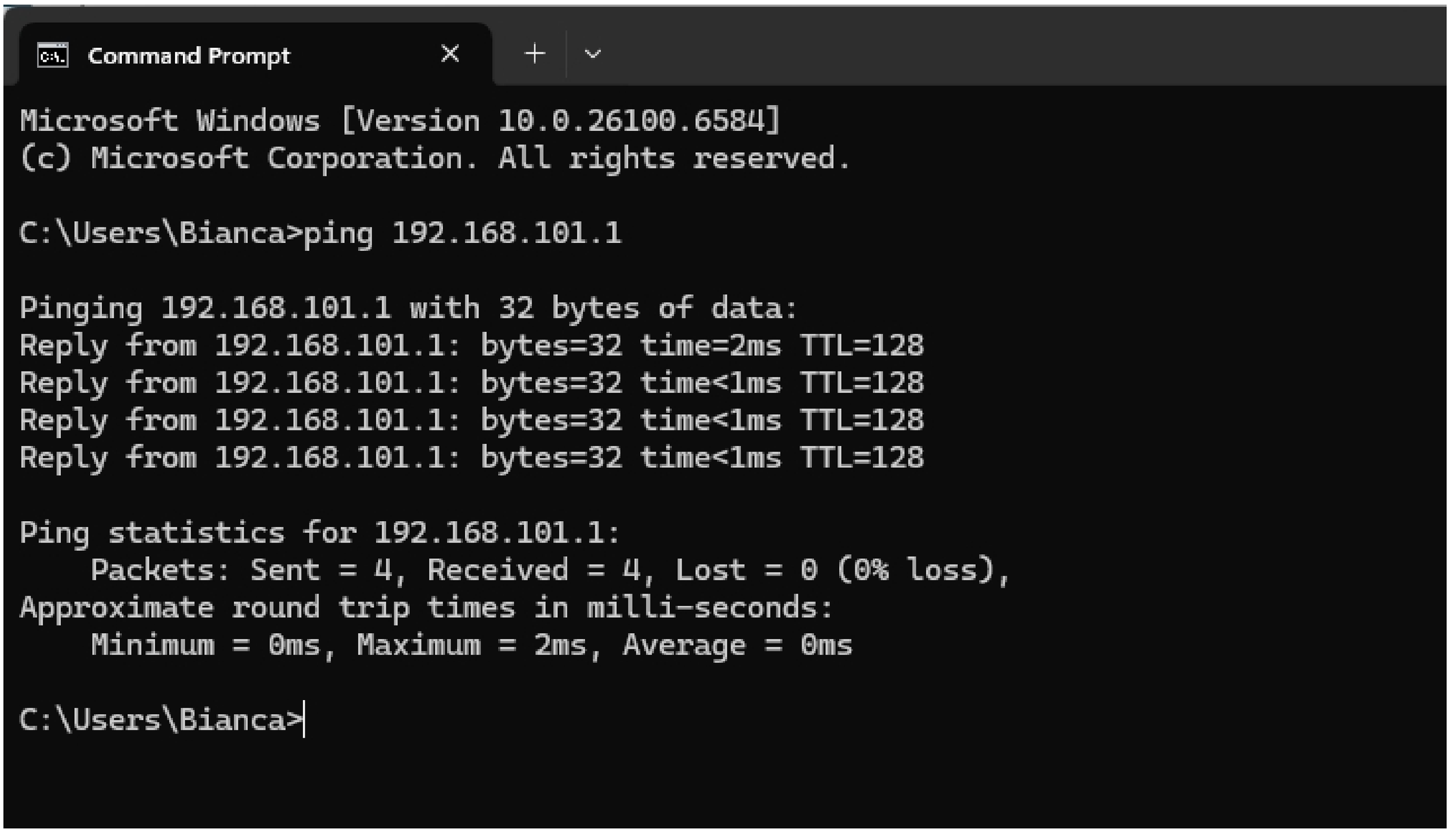
- **Step 1:** Insert the GPON ONU Stick into an SFP+ port on your router or switch.
- **Step 2:** Connect the Stick ONU module to the OLT module using an SC/APC fiber optic cable.
- **Step 3:** Check the LED indicators on the router or switch; a solid green light indicates a successful connection.
- **Step 4:** Connect your computer to a LAN port on the router or switch using an Ethernet cable.

Computer initial configuration

- **Step 1:** Set your computer's IP address to be in the same IP address range as the Stick module.



- **Step 2:** Open the Command Line Interface (CLI) on your PC and ping 192.168.101.1. A successful reply confirms connectivity.



How to log in to the module

The default IP address of the GPON-SFP-ONT-MAC-I module is 192.168.101.1.

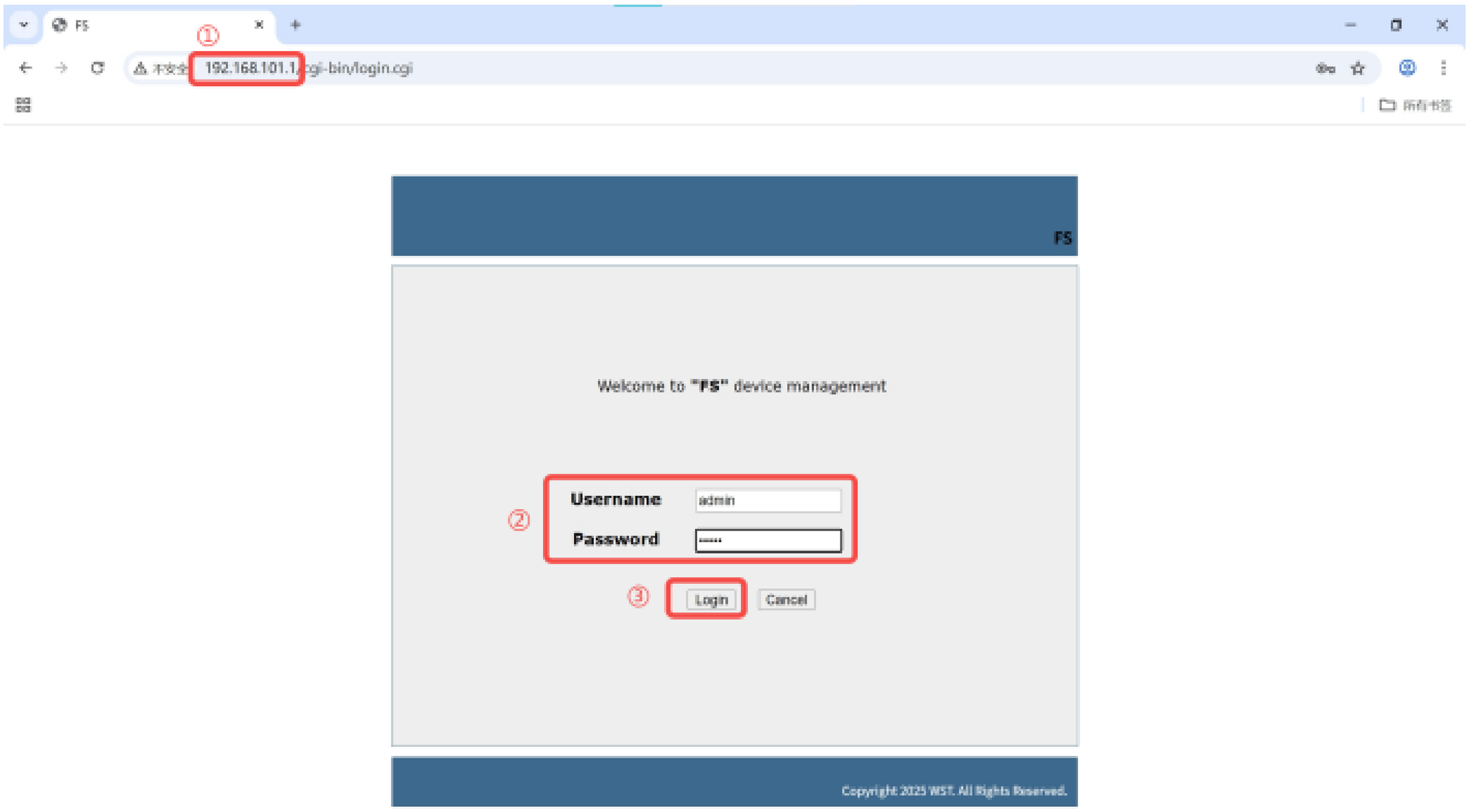
Access Methods: **Web**, **SSH**, **Telnet**.

- **Web Login**

  Open a web browser and navigate to http://192.168.101.1.

  Enter the username and password: **admin** / **admin**.

  Click **Login** to access the module's Web GUI graphical management interface.

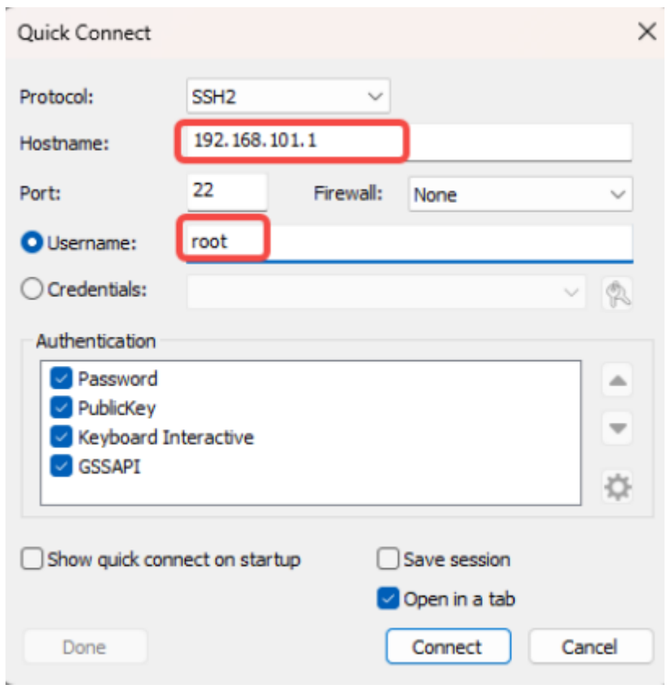


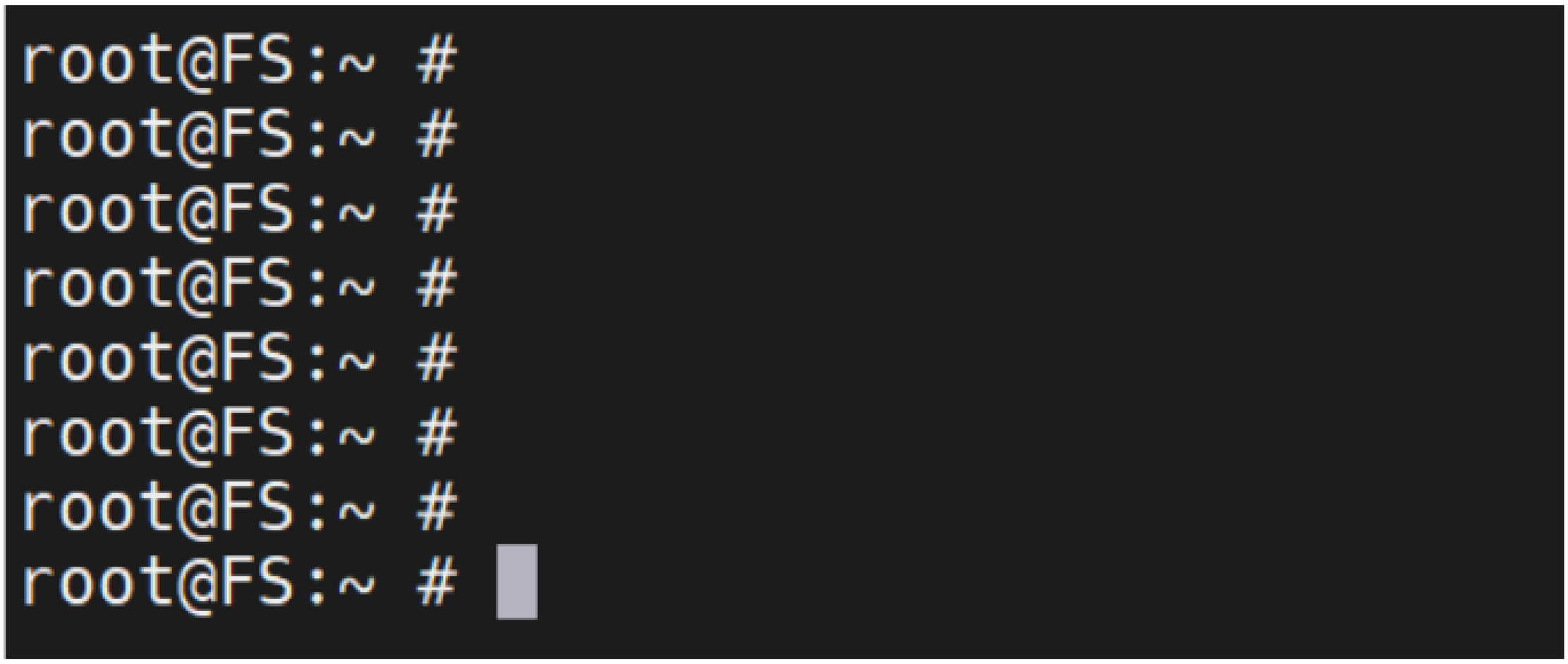
- **SSH Login**

Open an SSH client (e.g., SecureCRT, MobaXterm) and create a new SSH session.

Enter the IP address 192.168.101.1, and the username/password: **root** / **root**.

Click **Connect** to access the module's command-line interface via SSH.



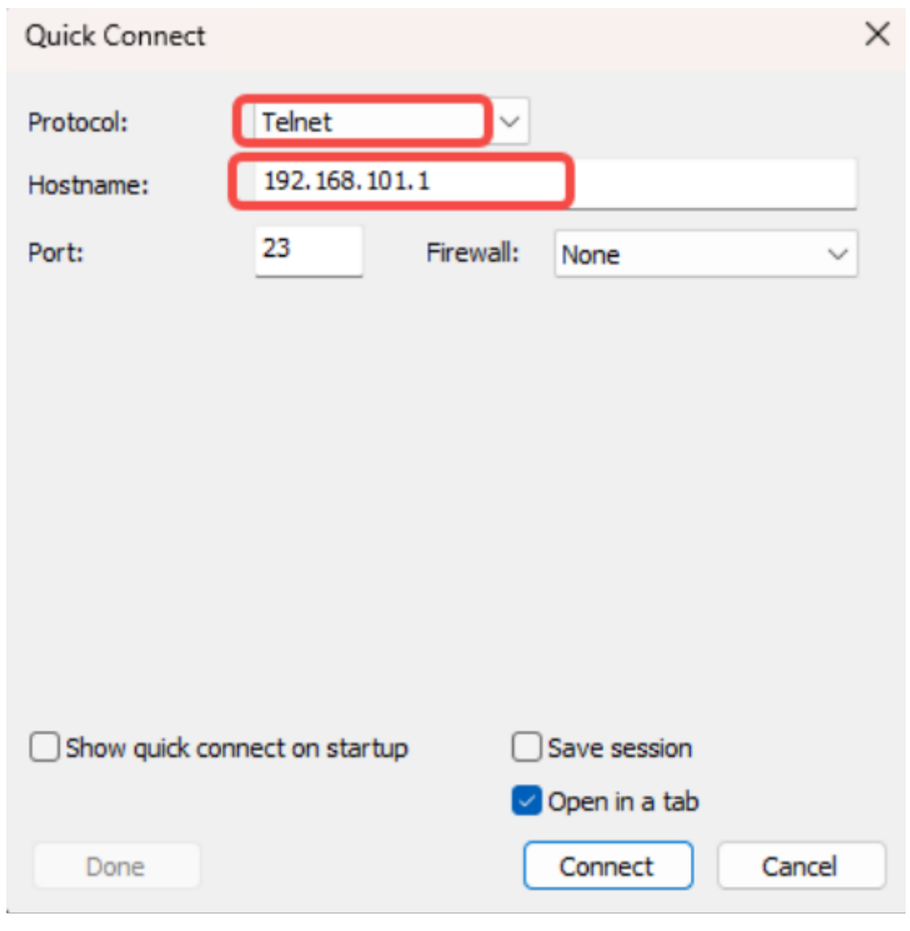


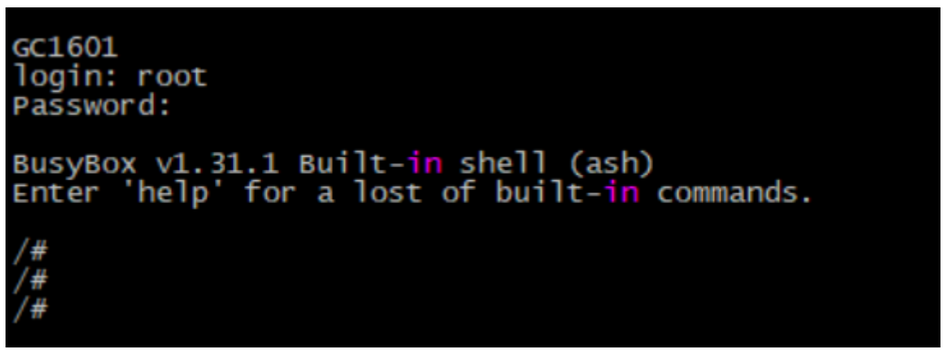
- **Telnet Login**

Open a terminal client (e.g., SecureCRT, MobaXterm) and create a new Telnet session.

Enter the IP address 192.168.101.1, and the username/password: **root** / **root**.

Click **Connect** to access the module's command-line interface via Telnet.

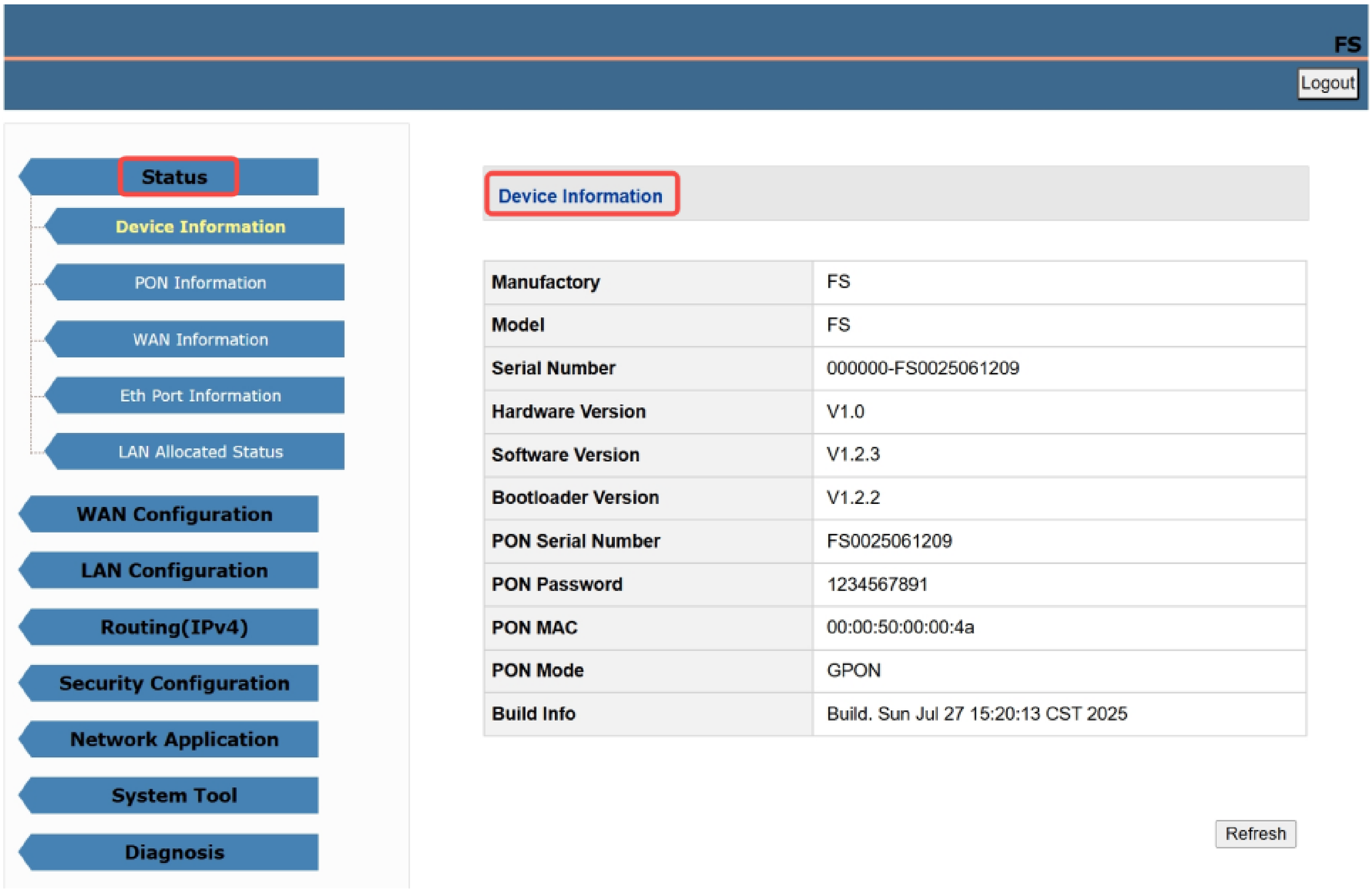




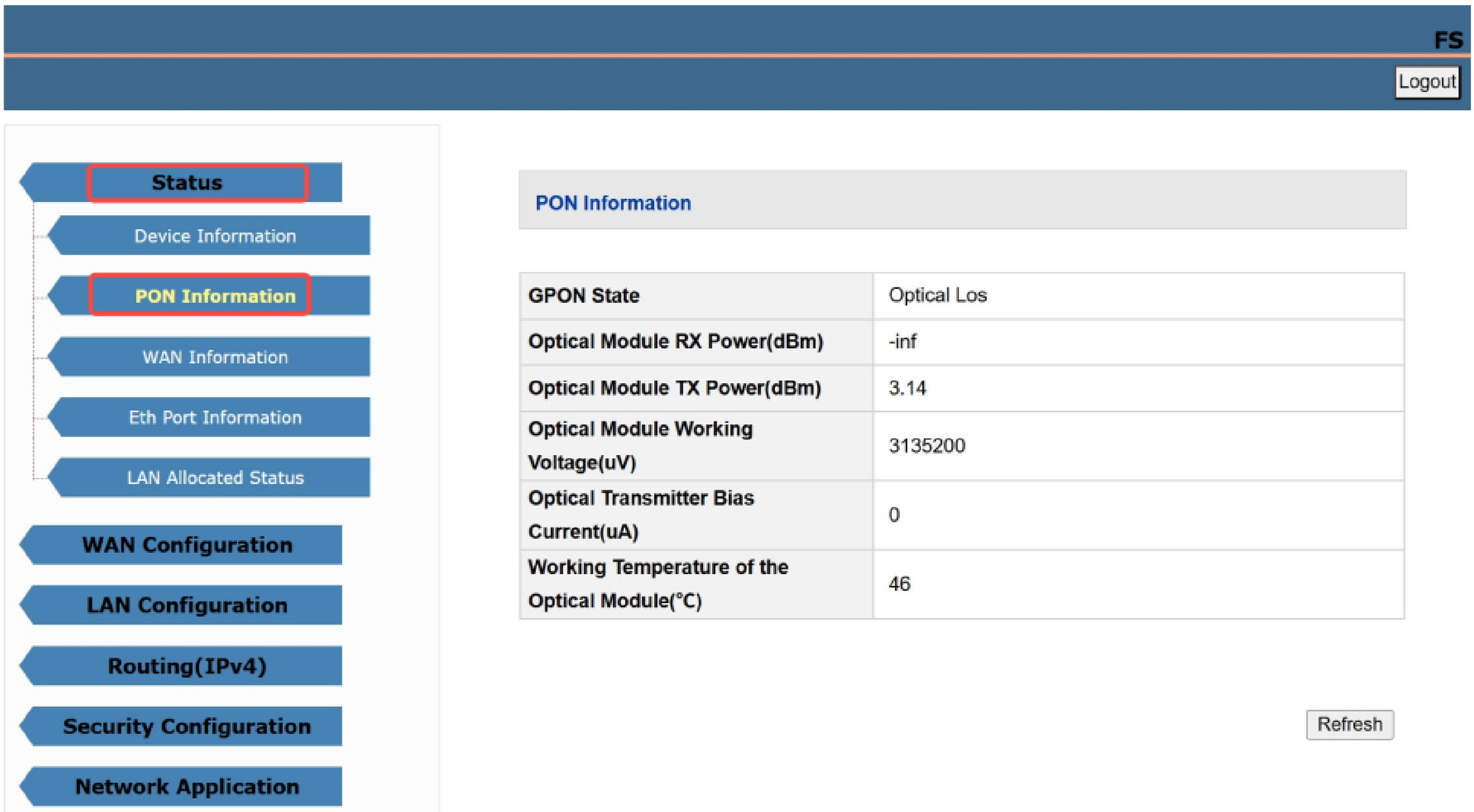
Basic Web Interface Configuration

Checking device and module status

- Status＞Device Information

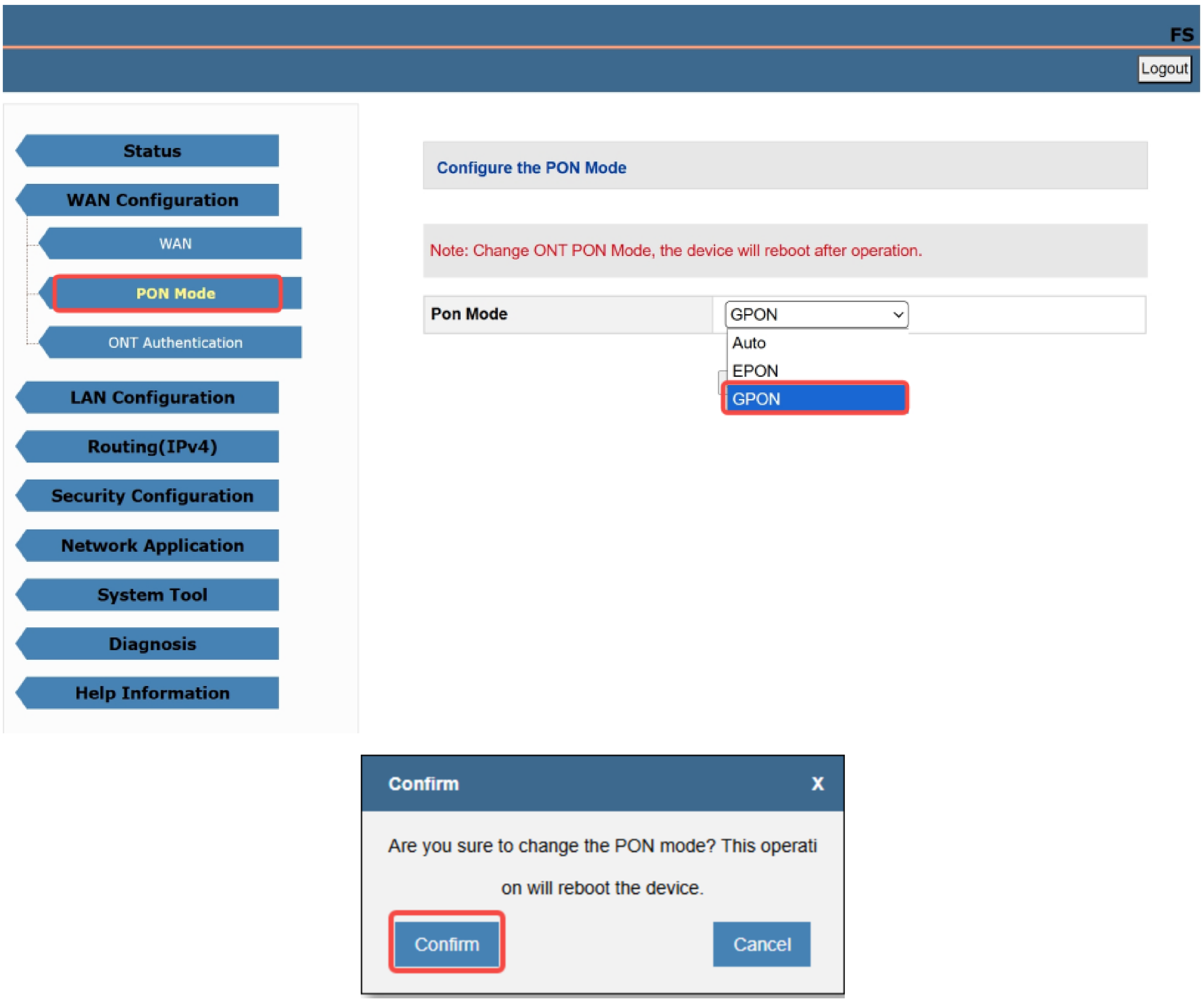


- Status＞PON Information



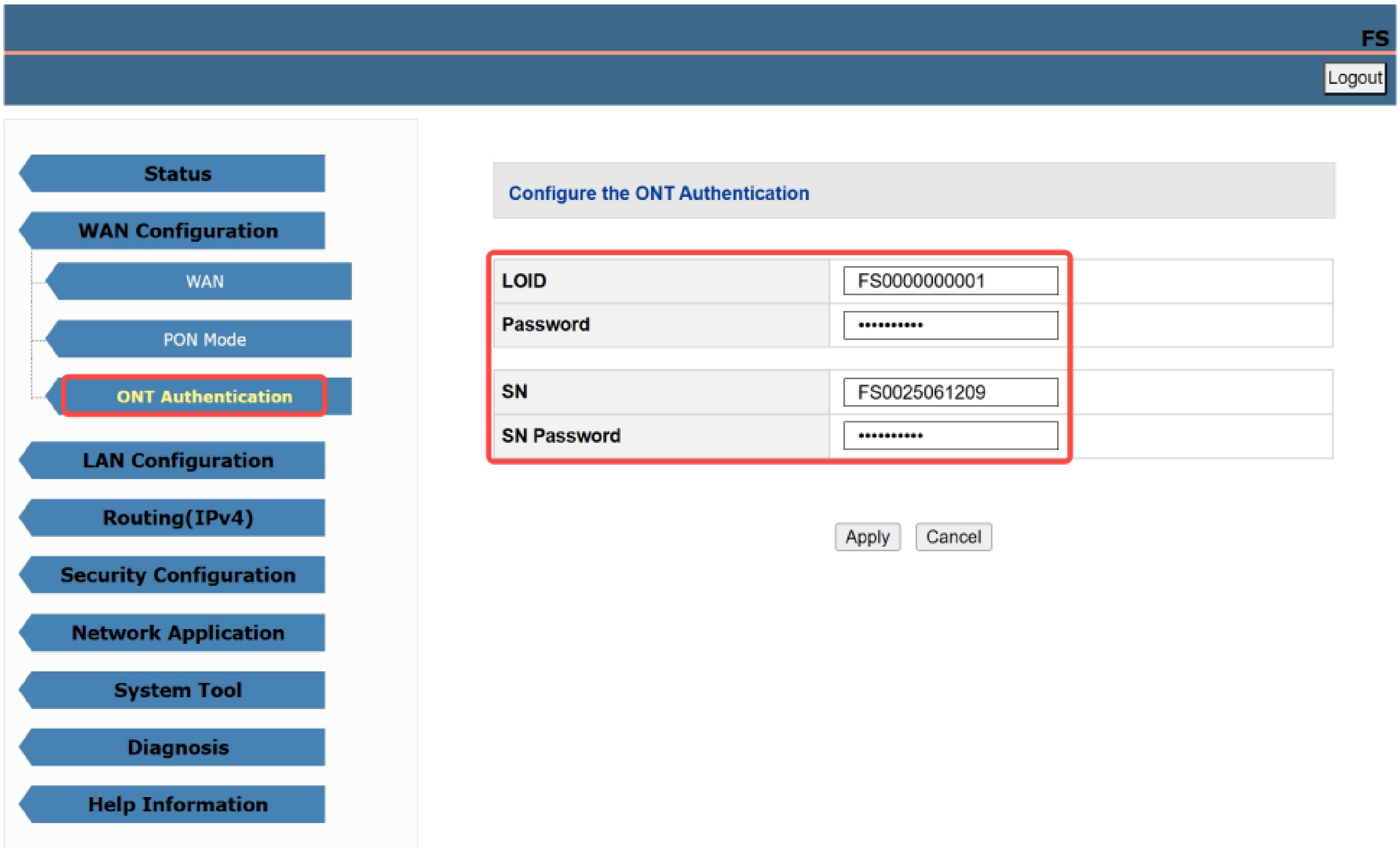
Modify module information

- WAN Configuration＞PON Mode



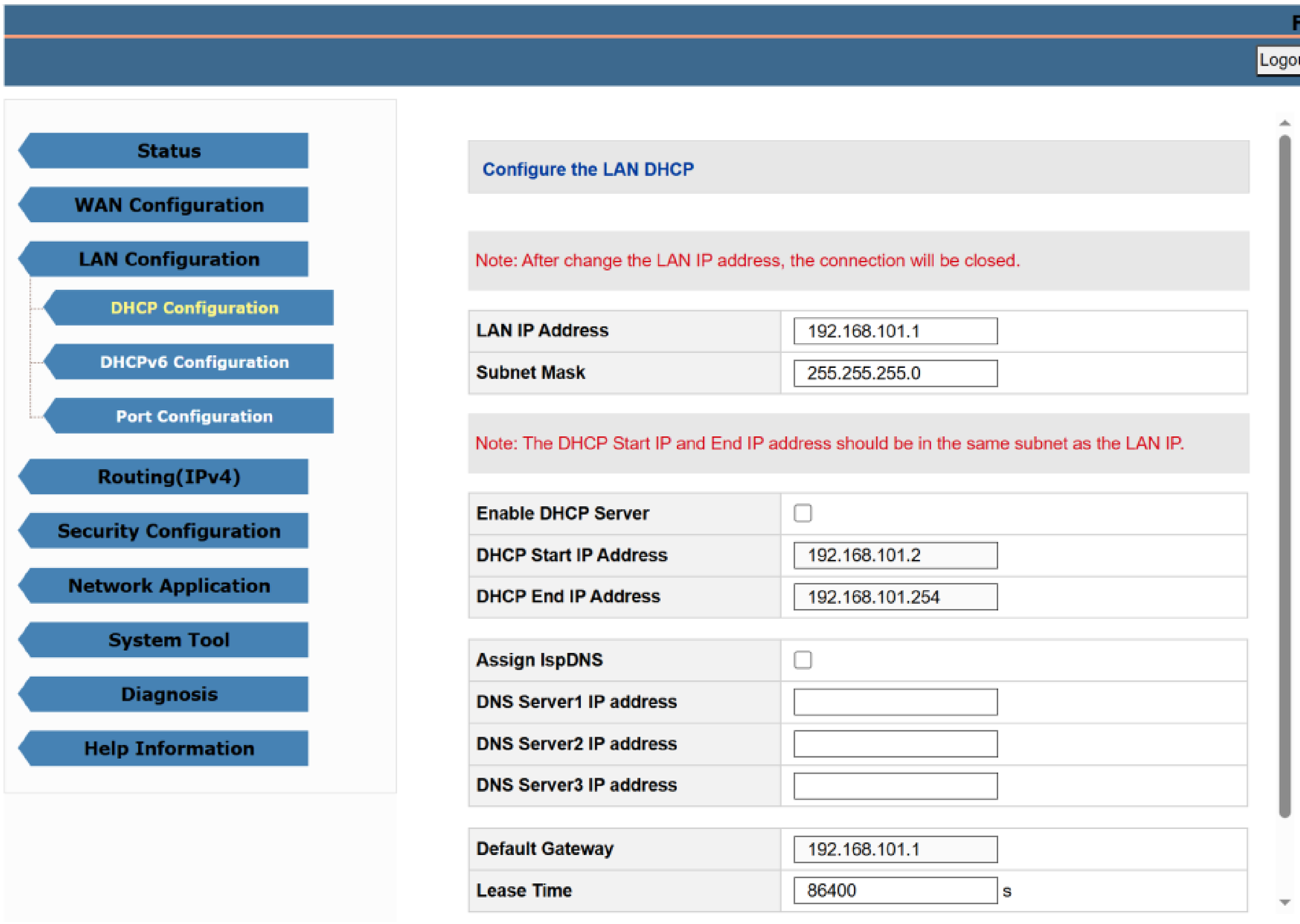
View or modify module LOID, LOID Password, SN, SN Password, etc.

- WAN Configuration＞ONT Authentication



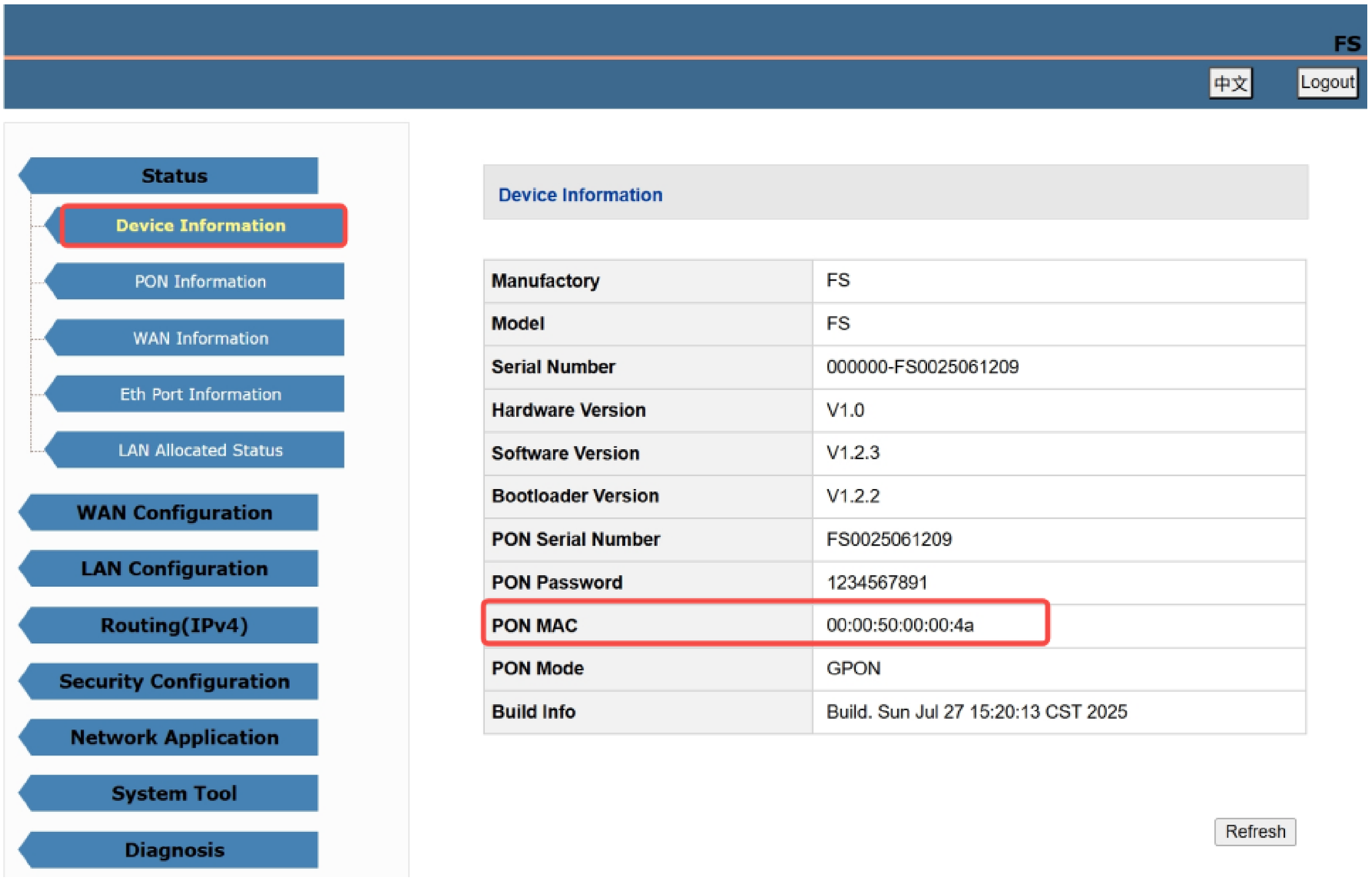
View or modify module IP address

- LAN Configuration＞DHCP Configuration



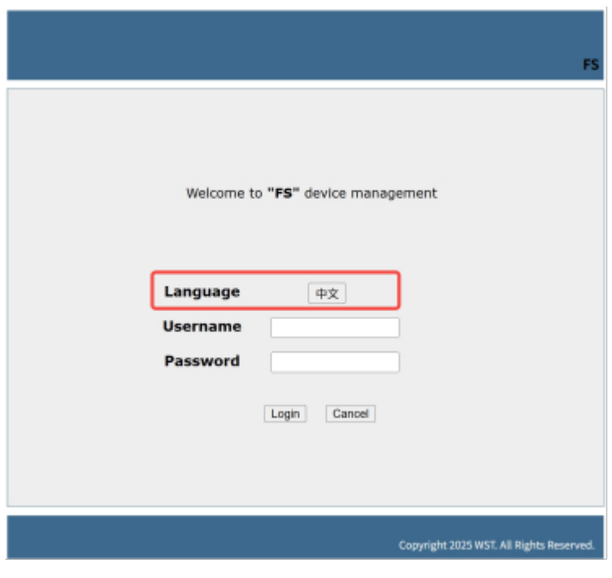
Viewing the module MAC address

- Status＞Device Information



Modify the WEB interface language

- For the first time, you need to use SSH to change the language and save it;
- Click on the language switch on the WEB interface for the second time.



SSH/Telnet main operation instructions

Configuring SN and MAC

- **Query GPON SN**

root@FS:~ # gccli sys sn

SN: FS0025061209

- **Modify GPON SN**

Note: The first 4 bytes are in ASCII, and the last 8 bytes are in Hex.

root@FS:~ # gccli sys sn

SN: FS0025061209

root@FS:~ # gccli sys sn FS0025061208

sys sn success

root@FS:~ # gccli sys save

sys save success

root@FS:~ #

- **Query MAC address**

root@FS:~ # gccli sys mac

Mac Address: 00:00:50:00:00:4A

- **Modify MAC address**

root@FS:~ # gccli sys mac

Mac Address: 00:00:50:00:00:4A

root@FS:~ # gccli sys mac 00:00:50:00:00:4B

sys mac success

root@FS:~ # gccli sys save

sys save success

root@FS:~ #

Configuring the Vendor and Vendor ID

- **Query Vendor & Vendor ID**

root@FS:~ # gccli sys vendor

Vendor: FS

- **Query Vendor ID**

root@FS:~ # gccli sys vendorid

Vendor Id: FS

root@FS:~ #

Configuring Hardware and Software Version Numbers

- **Query hardware and software version numbers**

root@FS:~ # gccli sys hwversion

Hardware Version: V1.0

root@FS:~ # gccli sys version

Software Version: V1.2.3

root@FS:~ #

- **Modify hardware and software version numbers**

rroot@FS:~ # gccli sys hwversion V1.0

sys hwversion success

root@FS:~ # gccli sys save

sys save success

root@FS:~ # gccli sys version

Software Version: V1.2.3

sys version success

root@FS:~ # gccli sys save

sys save success

root@FS:~ #

Configuring LOID and LOID Password

- **Query LOID**

root@FS:~ # gccli sys loid

LOID Name: FS0000000001

- **Revise LOID**

root@FS:~ # gccli sys loid

LOID Name: FS0000000001

root@FS:~ # gccli sys loid FS0000000002

sys loid success

root@FS:~ # gccli sys save

sys save success

root@FS:~ #

- **Query LOID PASSWORD**

root@FS:~ # gccli sys loidpw

LOID Password: 1234567891

- **Revise LOID PASSWORD**

root@FS:~ # gccli sys loidpw 1234567890

sys loidpw success

root@FS:~ # gccli sys save

sys save success

root@FS:~ #

Configuring Language Switching

root@FS:~ # gccli sys language

Language: English

root@FS:~ # gccli sys language Chinese

sys language success

root@FS:~ # gccli sys save

sys save success

```
root@FS:~ # gccli sys language

Language: Chinese

root@FS:~ #
```

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