

Grandstream Networks, Inc.

GDMS Networking - User Guide



GDMS Networking - User Guide

Overview

GDMS Management is an enterprise-grade platform designed to provide a unified, centralized management system for a wide range of network and communication devices. It integrates GDMS Networking and GDMS Unified Communications to offer comprehensive oversight and control over network and communication infrastructure.

GDMS Networking is a core component of the GDMS Management platform, focused specifically on managing network devices. It provides a streamlined and centralized approach to handle access points (APs), routers, switches, and GCC devices. It simplifies and enhances network management, ensuring efficient, secure, and high-performance operations across multiple locations through an intuitive interface. GDMS Networking is a cloud-based solution while GWN Manager serves as the on-premise solution for robust network management within a local environment. Both solutions support the GDMS App on iOS(R) and Android(R) for mobile network management and monitoring.

PRODUCT OVERVIEW

Features Highlights

GDMS Networking	Software-as-a-Service (SaaS) Solution to manage all your Grandstream products (Access points, Routers, switches and All-in-one convergence devices), without any additional on-premise infrastructure. High level security, since all the traffic between devices and cloud is secured. Easy way to add new devices, either using device MAC address or Mobile App (Android(R) or iOS(R)). No limits on number of sites or devices.
GWN Manager	Linux(R) (CentOS7, AlmaLinux9 and Ubuntu) based solution to secure and manage all your Grandstream devices. Automatically discover and Adopt devices in your network. Adopt device manually using SSH or through Web GUI by setting the Manager address and port. Up to 50 000 devices, with high performance hardware.
Shared	Highly available with no single point of failure across the whole system. Easy and intuitive dashboard for monitoring. Network Group creation. Devices and clients Centralized monitoring and management. Captive portal configuration. Bandwidth control per SSID, IP, or MAC address. Unified GWN/GCC device management (GWN Routers, GWN Switches, GWN APs and GCC devices) Inventory management Map to locate devices and Heatmap. Network topology

Features Highlights

Specifications

Function	Network-based GWN/GCC devices management Network/devices/client monitoring
Security and Authentication	Supports access policies configuration (blacklist, whitelist, time policy etc) Multiple security modes including WPA, WPA2, WPA3,WEP, open, etc. Bandwidth rules for client access User and privilege management

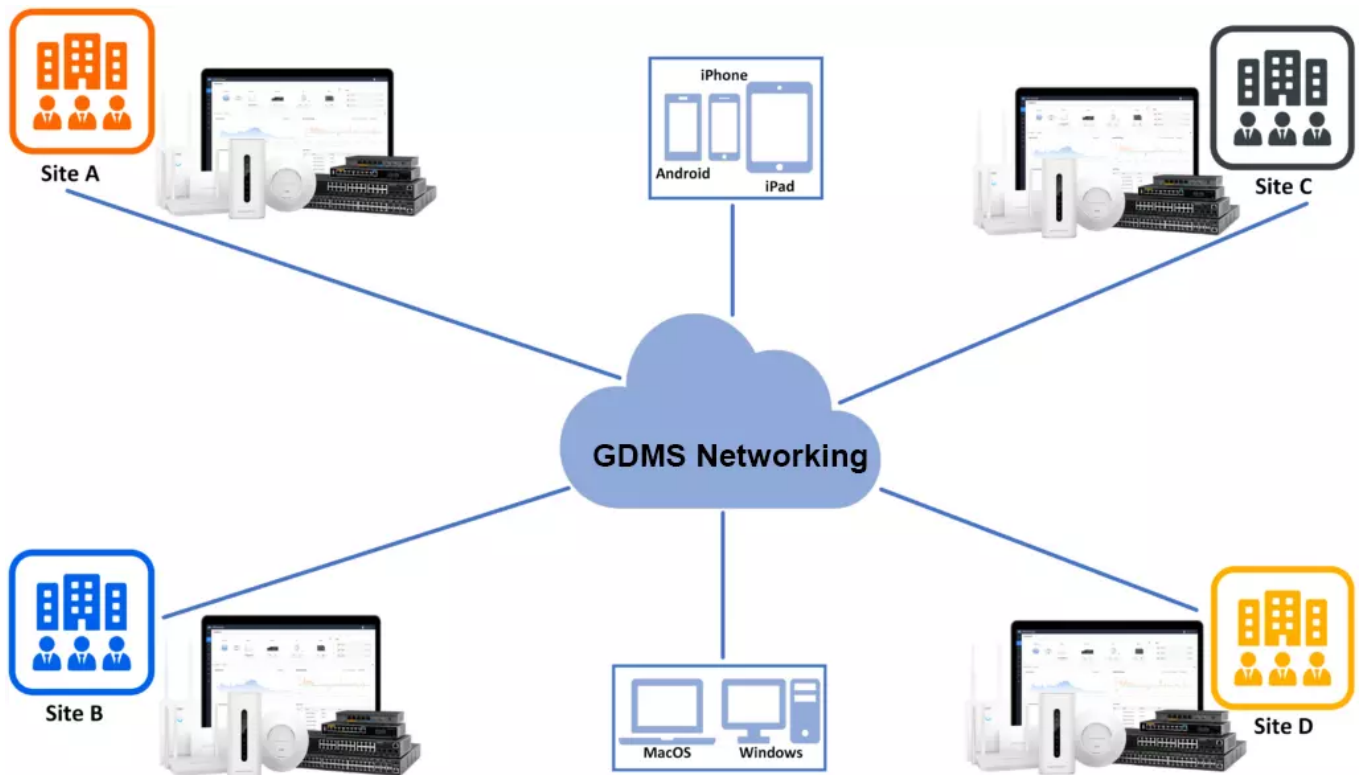
Enterprise Features	No limits on number of sites or devices for GDMS Networking and up to 50 000 devices for GWN Manager with high performance hardware. Hosted by AWS with 99.99% uptime (GDMS Networking only) Bank-grade TLS encryption from end-to-end X.509 certificate-based authentication Supports Wi-Fi Alliance Voice-Enterprise Mobile app for iOS(R) and Android(R) Real-time Wi-Fi Scan for deployment URL access log collection Multiple Wi-Fi performance optimization methods including band steering, Minimum RSSI, ARP Proxy, IP multicast to unicast, etc
Supported Devices	Access points: GWN76xx(LR) Routers: GWN7052/F, GWN7062 and GWN700x Switches: GWN780x(P), GWN781x(P), GWN7806(P), GWN783x All-in-one convergence devices: GCC601x(W)
Captive Portals	Splash page with built-in WYSIWYG editor Social media integration Multiple captive portal authentications including simple password, radius, voucher, custom field etc. External captive portal integration Real-time guest statistics and monitoring Advertisement integration with flexible strategies Export guest info into file and automatically send to email
Centralized Management	Local data forwarding, no user traffic sent to the controller Network-based device management Network/device/client monitoring Layer2 and Layer3 based device discovery
Reporting and Monitoring	Real-time Network and client monitoring Detailed reports by network, devices, client etc. Retrieval of historical data for statistical observations Real-time alerts and event logs
Maintenance	Ping/traceroute/capture Both configuration and data backup Scheduled devices firmware update and LED control Change log for audit trail
Languages	English, Chinese, Spanish, German, Portuguese, French and more.

GDMS Networking specifications

GETTING TO KNOW GDMS Networking PLATFORM

GDMS Networking

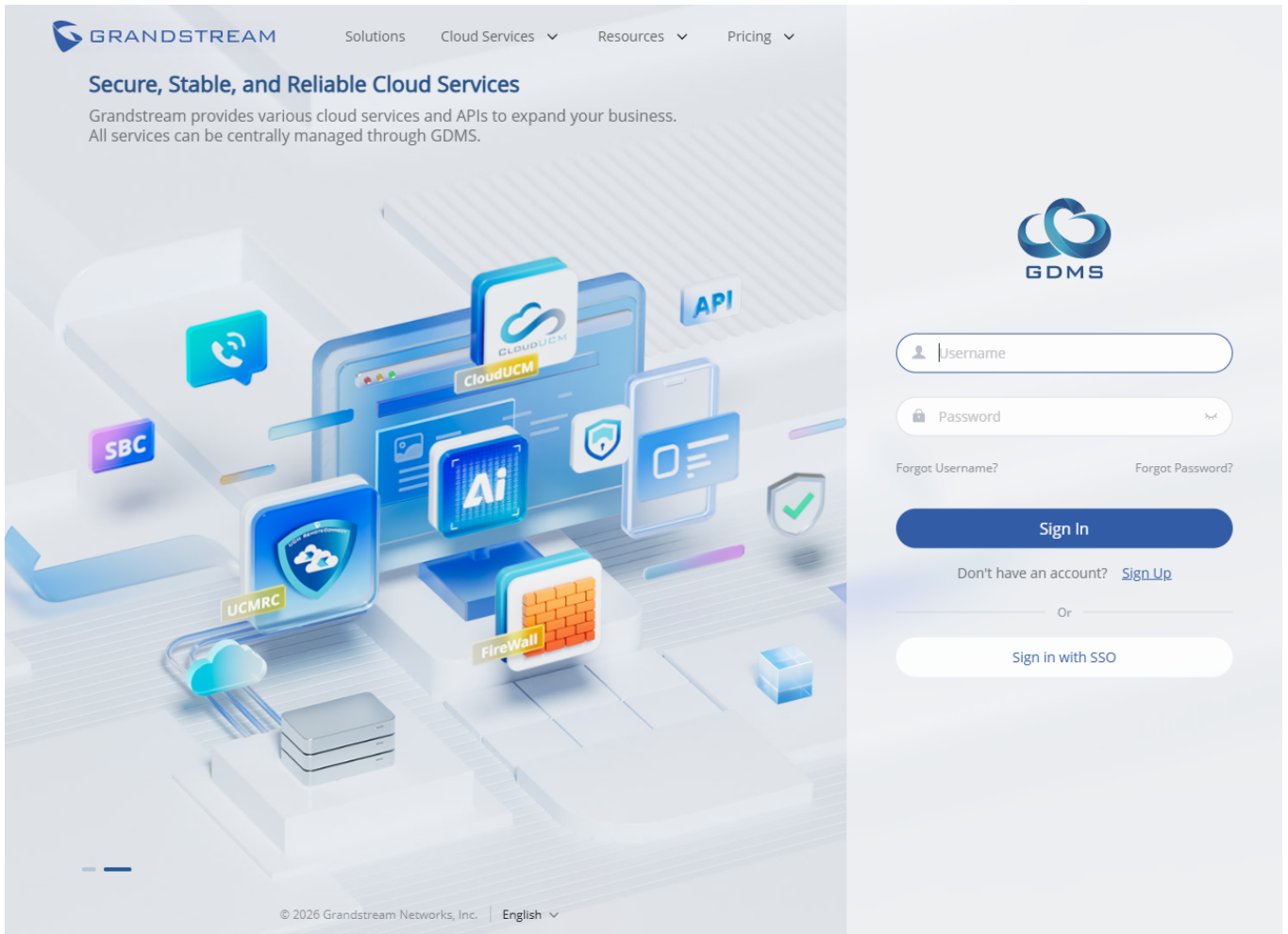
GDMS Networking is a cloud-based platform used to manage and monitor Grandstream devices (GWN Access Points, GWN Routers, GWN Switches and GCC devices) wherever they are as long as they are connected to the internet. The platform can be accessed using the following link: <https://www.gdms.cloud>. It provides an easy and intuitive web-based configuration interface as well as an Android(R) and iOS(R) App.



GDMS Networking Architecture

Sign up to GDMS Networking

When accessing GDMS Networking for the first time, users are required to sign up. The following screen will be displayed:



GDMS Login Page

1. Click "Sign up" to go to the sign-up screen, then enter the required information.

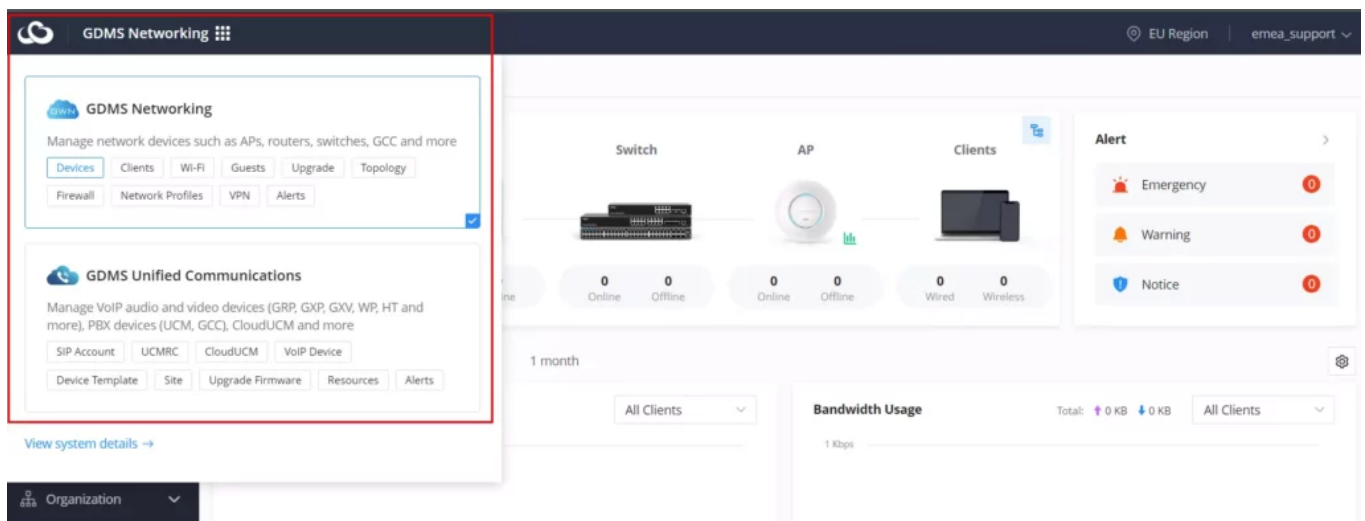
GDMS Sign up page

Nickname	Specify a nickname of this account.
Username	Specify a username for this account.
Email	Enter the email address.
Password	Specify a password for the accountNote: 8-16 characters, must be a combination of numbers, letters, and special characters.
Confirm password	Re-enter the password again.
User type	Select from the drop-down list the type of user: Enterprise Server provider Channel Reseller System Integrator Personal User
Company Name	Enter the company name if the type of user is set to Enterprise, Server provider, Channel reseller, System integrator.
Verification code	Copy the verification from the Captcha.

GDMS Sign-up Settings

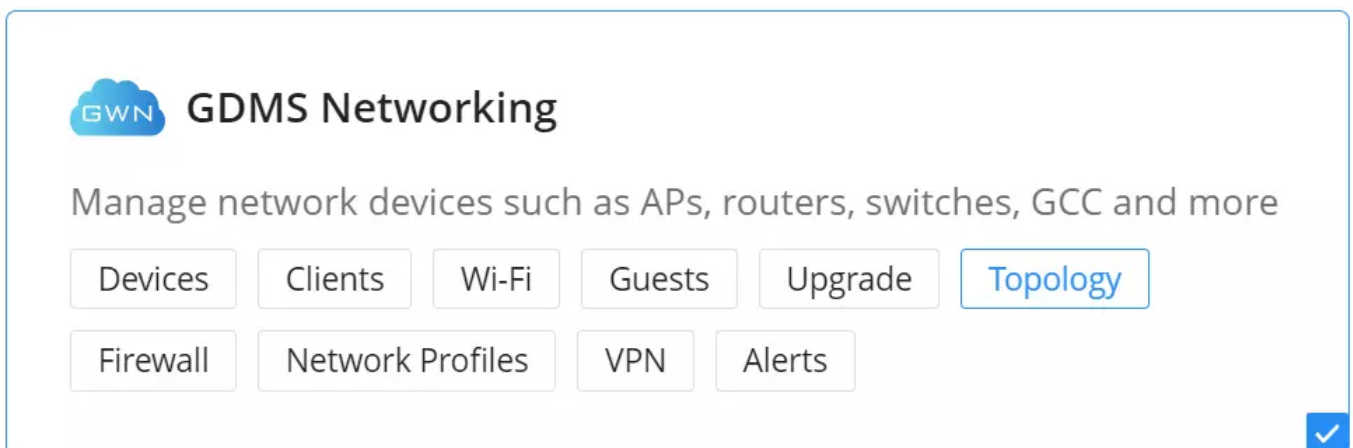
2. Once you create an account, you can access your GDMS Networking page for the first time, and the following page will be displayed:

When the first page opens on GDMS Unified Communications, users can access GDMS Networking by clicking on the **"GDMS Networking"** option located in the top right corner, as shown below.



Select a System

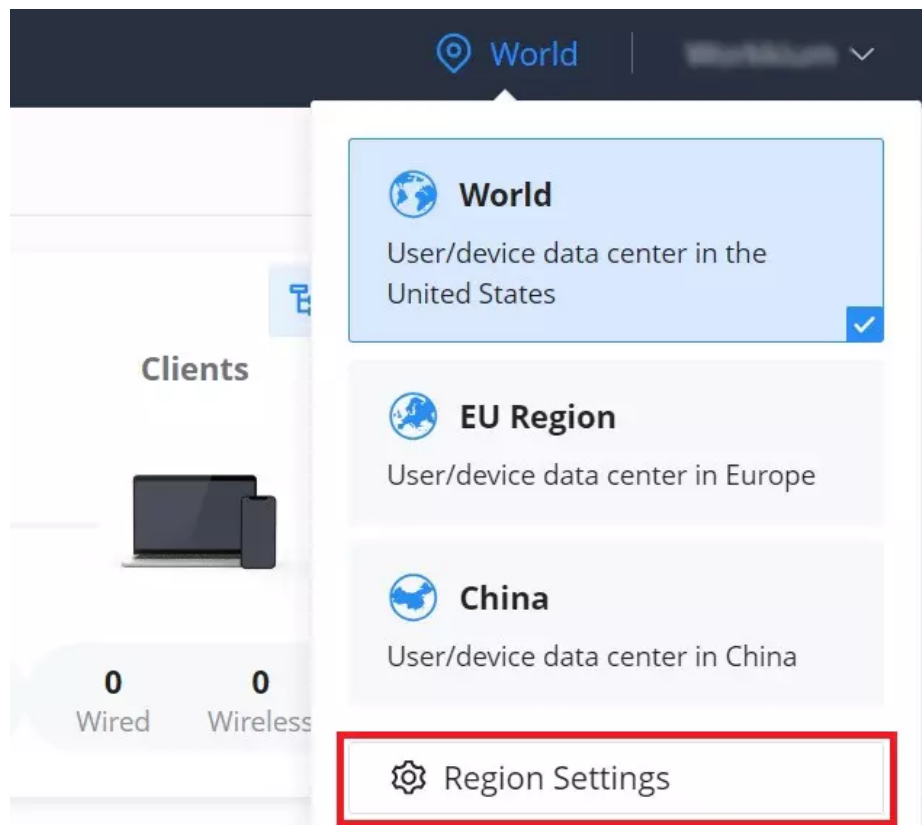
The user can access the modules listed in each category to jump quickly to the intended destination. See the example below for the GDMS Networking system.



GDMS Networking Module

Region settings

Region settings allow users to enable different regions (data centers). To enable or delete a region, on the top right of the page, click on **the location icon -> region settings** as shown below:



Region settings

The users' and devices' data is stored in the enabled regions. To delete a region, click on "**Delete**", and to enable a region, click on "**Enabled**".

Region Settings



Opened Regions



World

User/device data center in the United States

Delete

Closed Regions



EU Region

User/device data center in Europe

Enabled



China

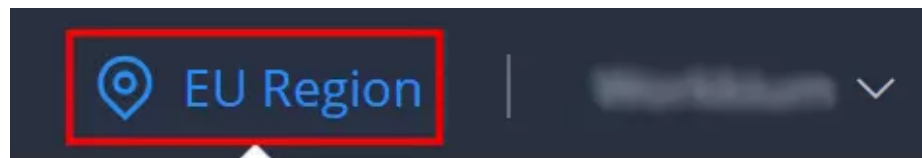
User/device data center in China

Enabled

Region settings delete enable

Please note that deleting a region will delete all data within that region.

To start using the enabled region to store users/devices data, make sure it's selected on the main page, as shown below:



World

User/device data center in the United States



EU Region

User/device data center in Europe



China

User/device data center in China

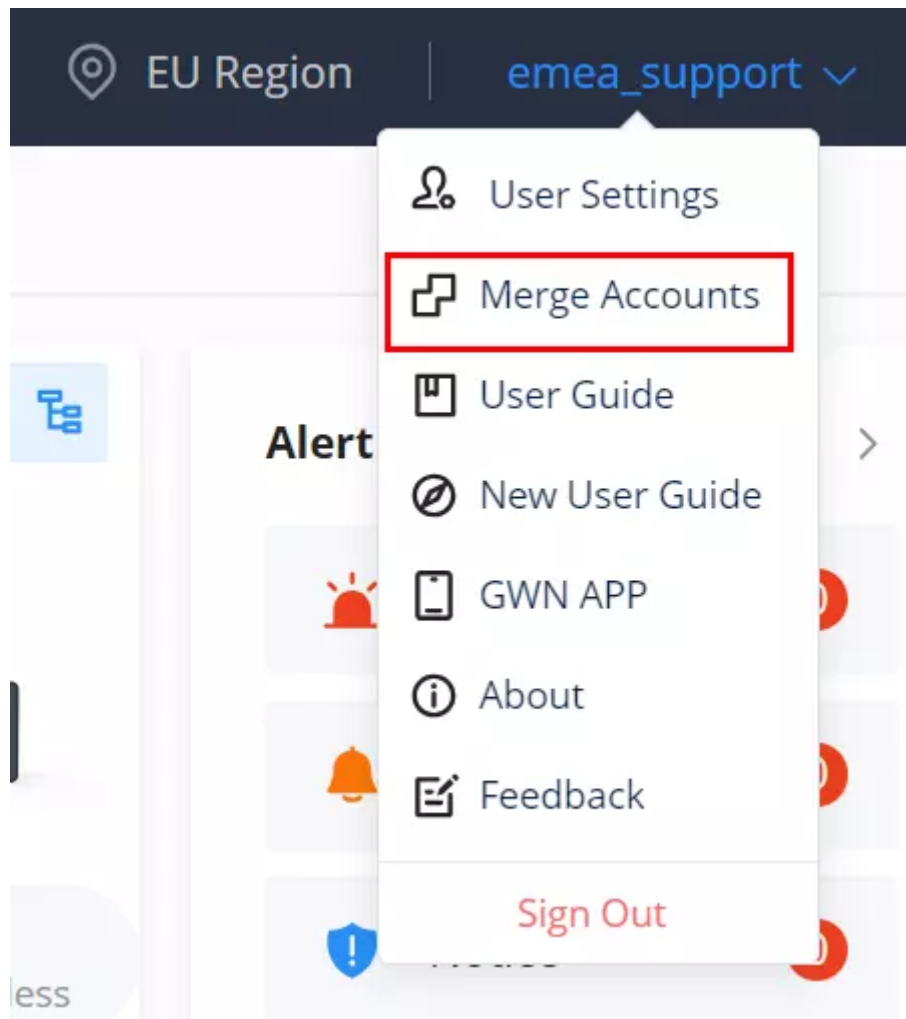


Region Settings

The selected region EU Region

Merge Accounts

The merge accounts feature allows users to merge different accounts with different services and regions into one single base account. On the main page of GDMS Networking, in the top right corner of the page, click on the account name, then select Merge Accounts as shown below:



Merge Accounts

Click on the "+Accounts to Be Merged" button to add more accounts, then select the base account that will be used for centralized management.

Merge Accounts



Merge multiple accounts into one for centralized management.

[How to merge accounts?](#)

Select the account that will be used as the base account for centralized management.

All information from the other accounts such as sub-accounts, role permissions, devices and settings will be transferred to the current account upon merging. Note: The system settings and API developer configurations of the current account will be used.

Current Login Account

Account after Merge ☒

Username	Email	Enterprise	Enabled Platforms
Wenbin	wenbin@gmail.com	None	UC Services (World、 EU Region、 China) GWN.Cloud (World、 EU Region、 China)

Account To Be Merged 1



Username	Email	Enterprise	Enabled Platforms
Wenbin	wenbin@gmail.com	—	UC Services (World) GWN.Cloud (World)

[+ Accounts to Be Merged](#)

Cancel

Merge

Merge Accounts

Merged accounts successfully



The selected account (**AccountName**) can be used to log into GDMS and GWN.Cloud in the future.

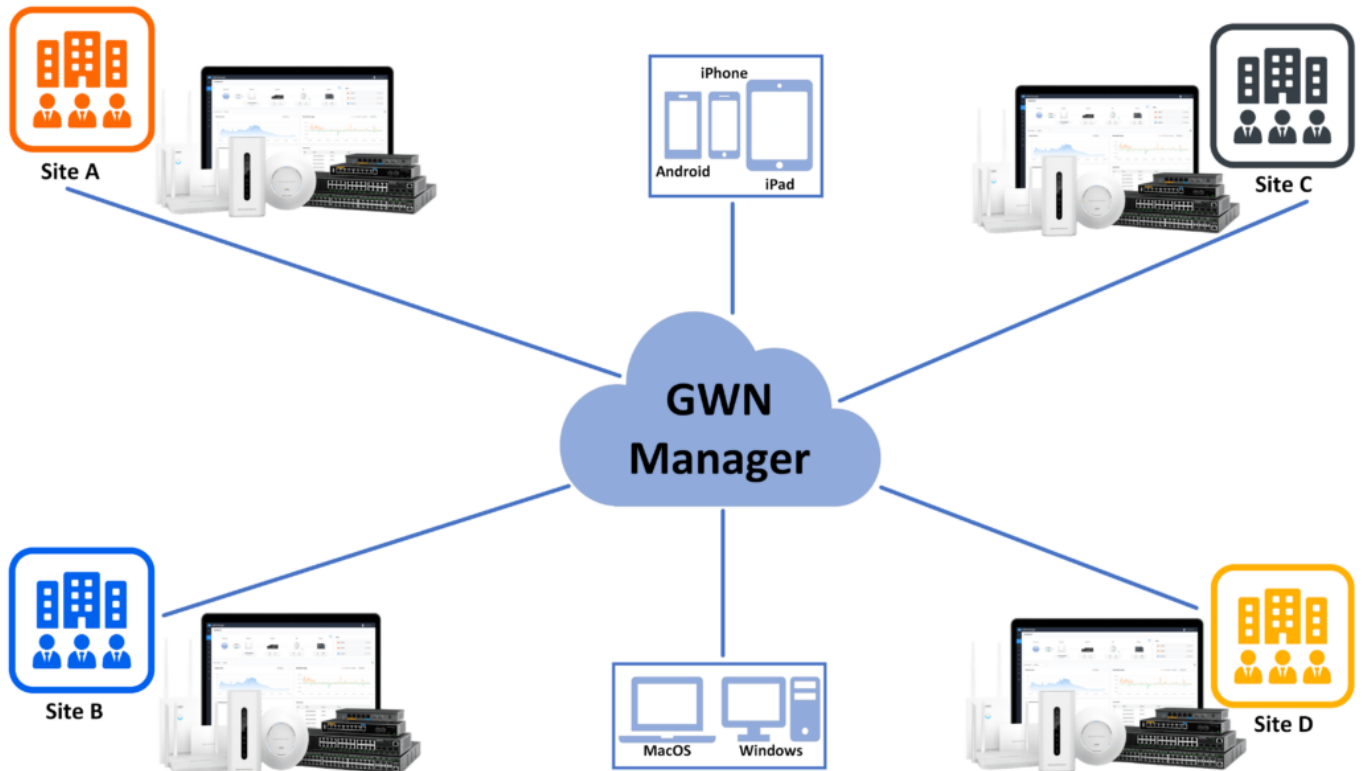
[Start Use](#)

Merged accounts successfully

The base account will be used for centralized management, and all information from the other accounts, such as sub-accounts, role permissions, devices, and settings, will be transferred to the base account upon merging. The system settings and API developer configurations of the current account will be used.

GWN Manager

GWN Manager is an On-premise Grandstream device controller used to manage and monitor network devices, including GWN Access points, GWN Routers, GWN Switches, and GCC devices on your network.



GWN Manager Architecture

GWN Manager Hardware Requirements

Software Requirements	Hardware requirements
Operation System: CentOS 7 AlmaLinux OS 9 Ubuntu	For up to 200 devices and 2 000 clients: CPU: Intel(R) Core(TM) i3-3240 or above RAM: 4GB or above Storage: 250GB (Dependent on the retained data)
	For up to 3 000 devices and 30 000 clients: CPU: Intel(R) Xeon(R) Silver 4210 RAM: 16GB or above Storage: 250GB (SSD preferred, depend on retained data size)
	For up to 10 000 devices and 200 000 clients: Intel(R) Xeon(R) Platinum 8175M or better 144GB or above 2x 1TB HDD
	For up to 30 000 devices and 600 000 clients: Intel(R) Xeon(R) Platinum 8175M or better 320GB or above 2x 2TB HDD
	For up to 50 000 devices and 1 000 000 clients: Intel(R) Xeon(R) Platinum 8358 or better 416GB or above 2x 3TB HDD

GWN Manager hardware requirements

Installation

To install GWN Manager, please visit the links below:

[GWN Manager - Quick Installation Guide](#)

[GWN Manager - Deploying a Virtual Machine from an OVA file](#)

First Use

The GWN Manager provides an easy and intuitive Web UI to manage and monitor GWN network devices. It provides users access to all GWN settings, without any additional on-premise infrastructure.

On first use, users need to fill in additional information following the GWN Manager Wizard:

General	Specify the country/region and time zone for the default network.Note: these parameters can be automatically detected by the system.
User Account	Set up a username, password and email for local login.
Adopt Device	Select the GWN devices to be adopted by the default network.Note: Access points, Routers available on the same LAN will be detected automatically.
SSID Configuration	Create an SSID to be used by the default network for the first time.Note: this SSID can be modified later.
Summary	Review all the previous settings

GWN Manager setup wizard

GWN Manager

1

2

3

4

5

General

Sets the country/region and time zone of the default network



Country/Region
Morocco(المغرب)

Timezone
(GMT+01:00) Casablanca, Monrovia

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GWN Manager Wizard Part 1

GWN Manager

✓

2

3

4

5

User Account

Set up a Username and Password for local login.



* User name
1-64 characters

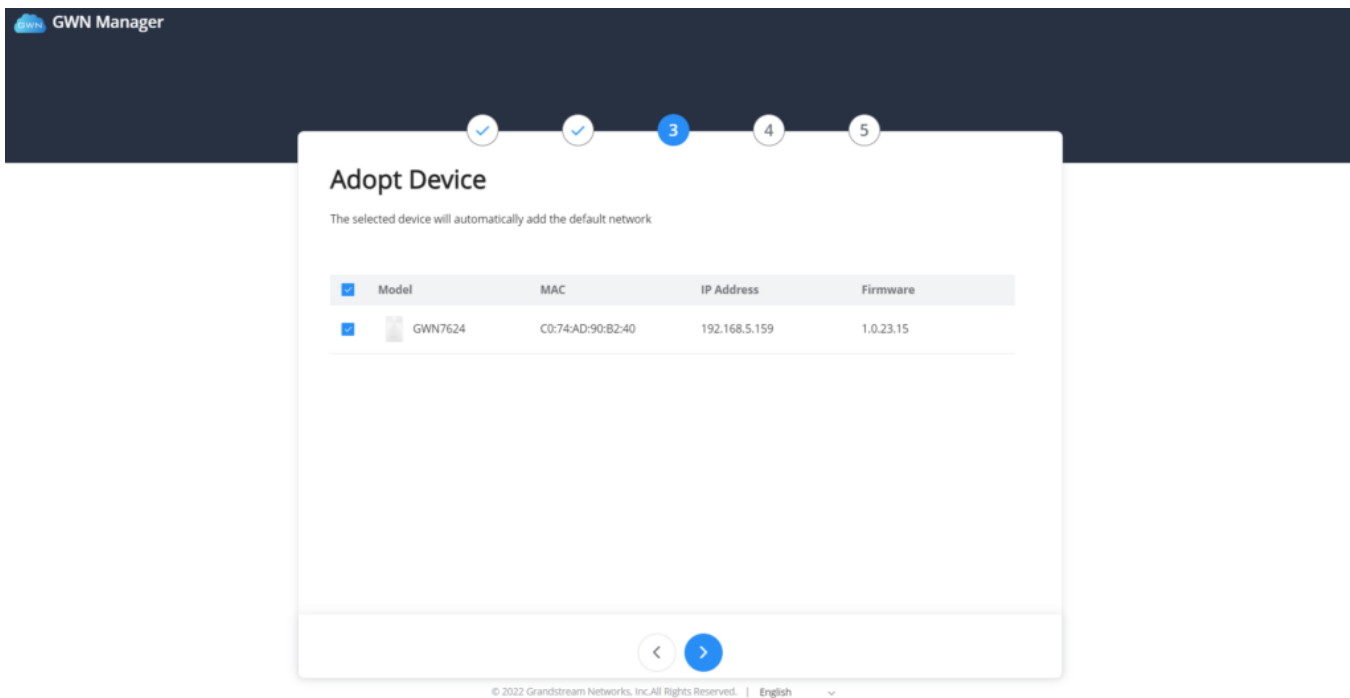
* Password
8-16 characters, only the numbers, letters or special characters

* Confirm Password

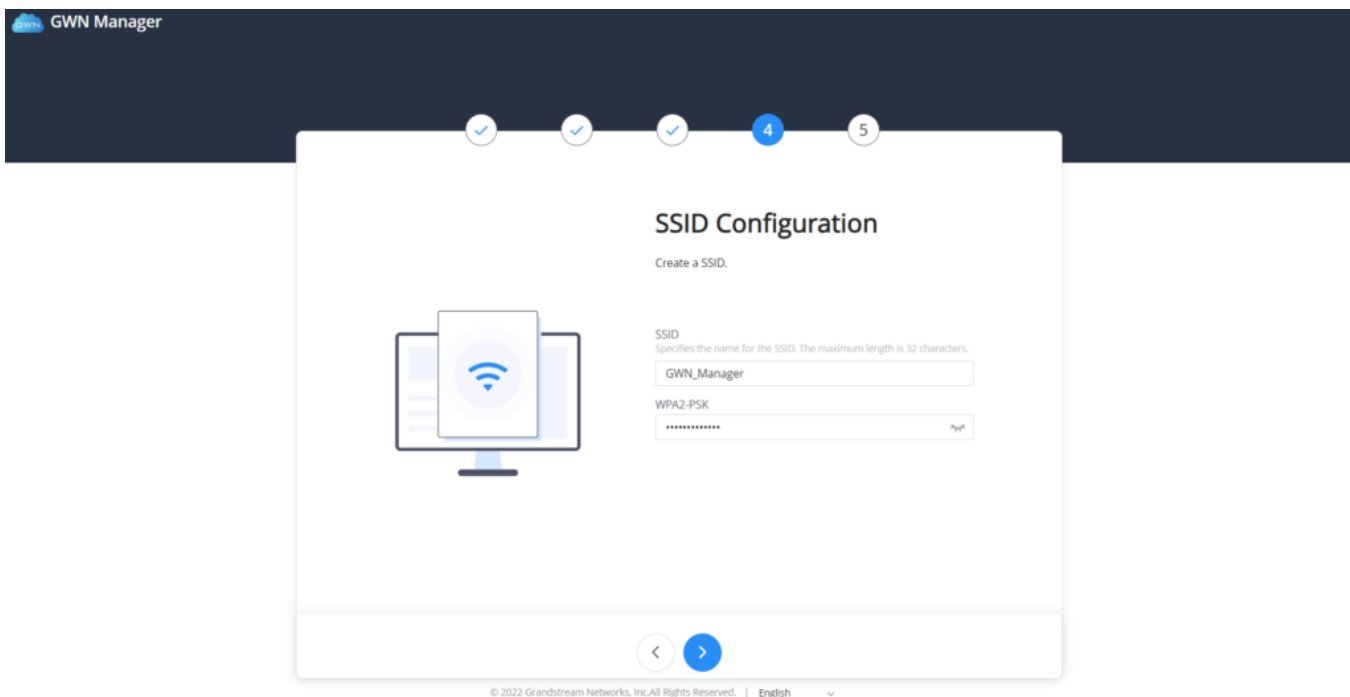
* Email

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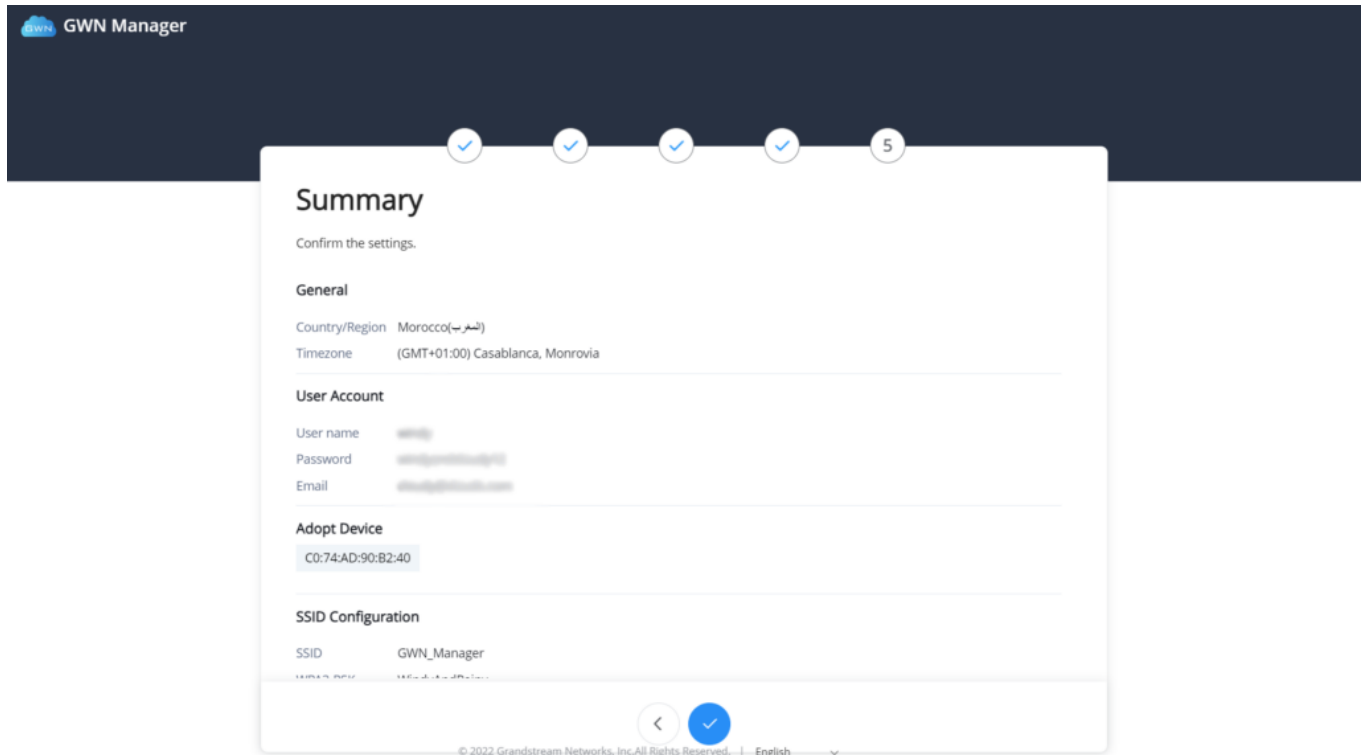
GWN Manager Wizard Part 2



GWN Manager Wizard Part 3



GWN Manager Wizard Part 4



GWN Manager

Summary

Confirm the settings.

General

Country/Region Morocco(المغرب)

Timezone (GMT+01:00) Casablanca, Monrovia

User Account

User name admin

Password admin@grandstream.com

Email admin@grandstream.com

Adopt Device

C0:74:AD:90:B2:40

SSID Configuration

SSID GWN_Manager

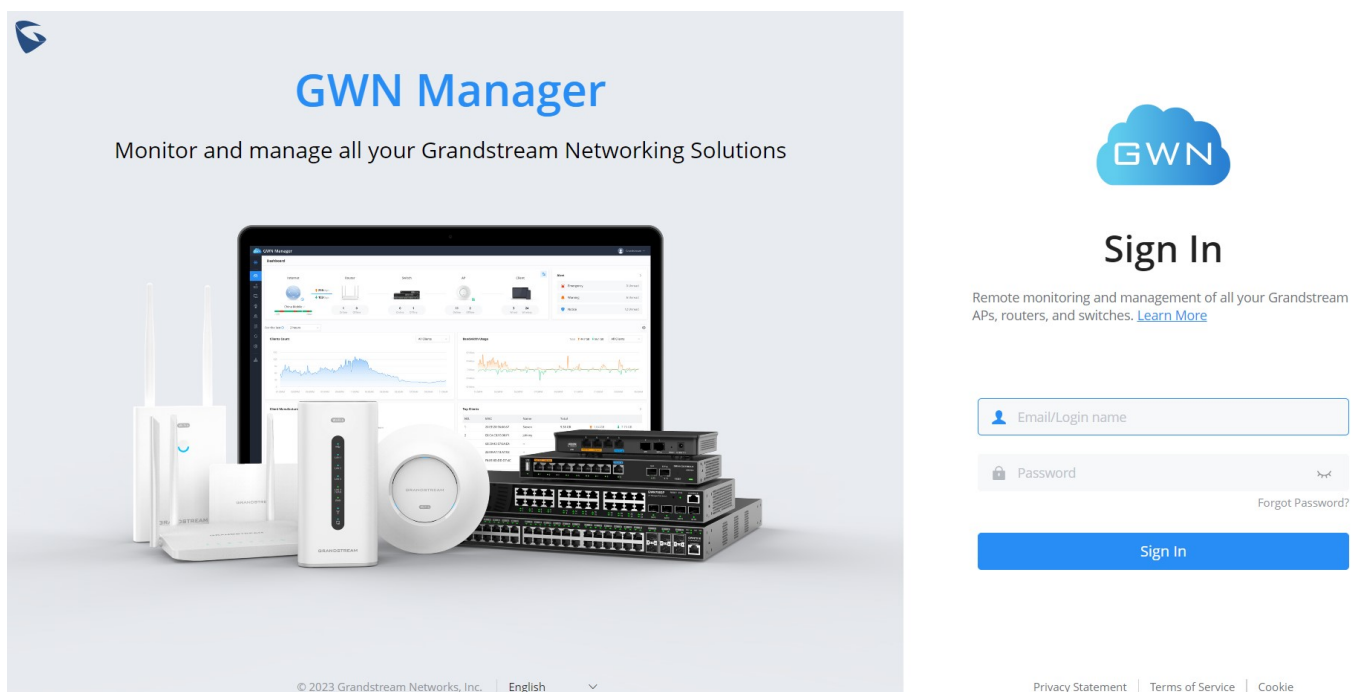
WPA2 PSK 12345678901234567890

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GWN Manager Wizard Part 5

Sign up for GWN Manager

Enter the previously configured user credentials to access the GWN Manager GUI:



GWN Manager

Monitor and manage all your Grandstream Networking Solutions

Sign In

Remote monitoring and management of all your Grandstream APs, routers, and switches. [Learn More](#)

Email/Login name

Password

[Forgot Password?](#)

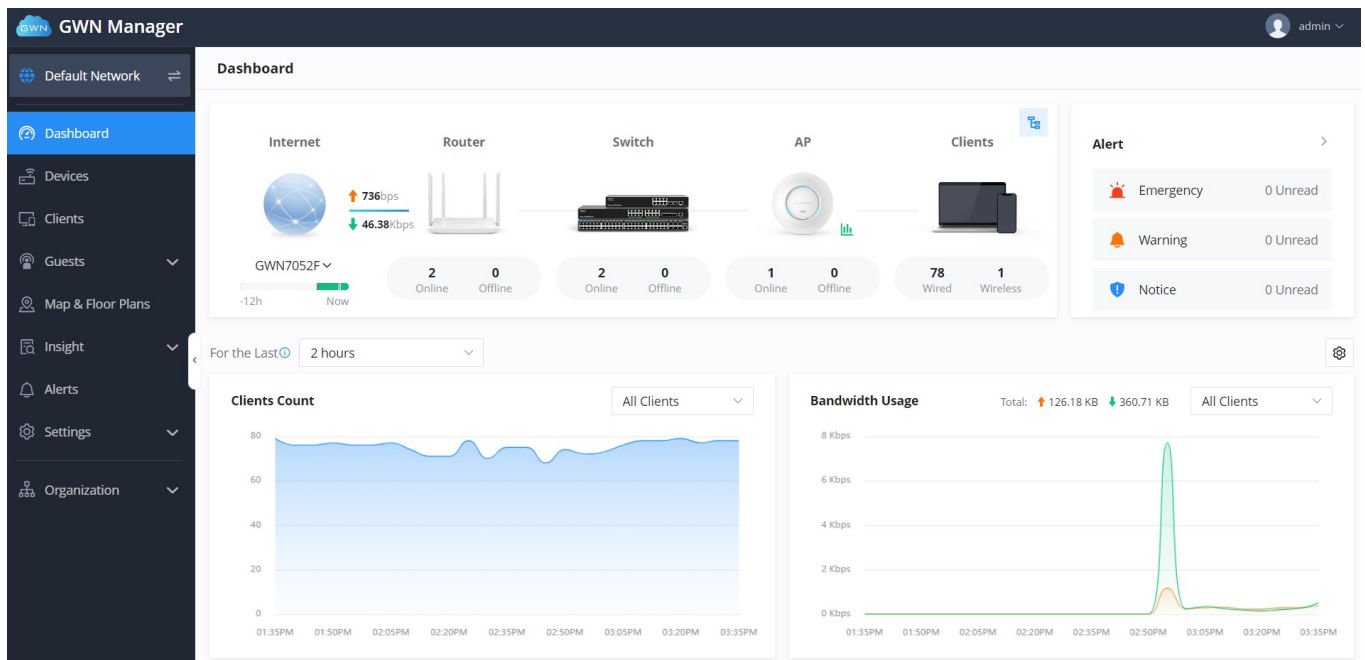
Sign In

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[Privacy Statement](#) | [Terms of Service](#) | [Cookie](#)

GWN Manager Login Page

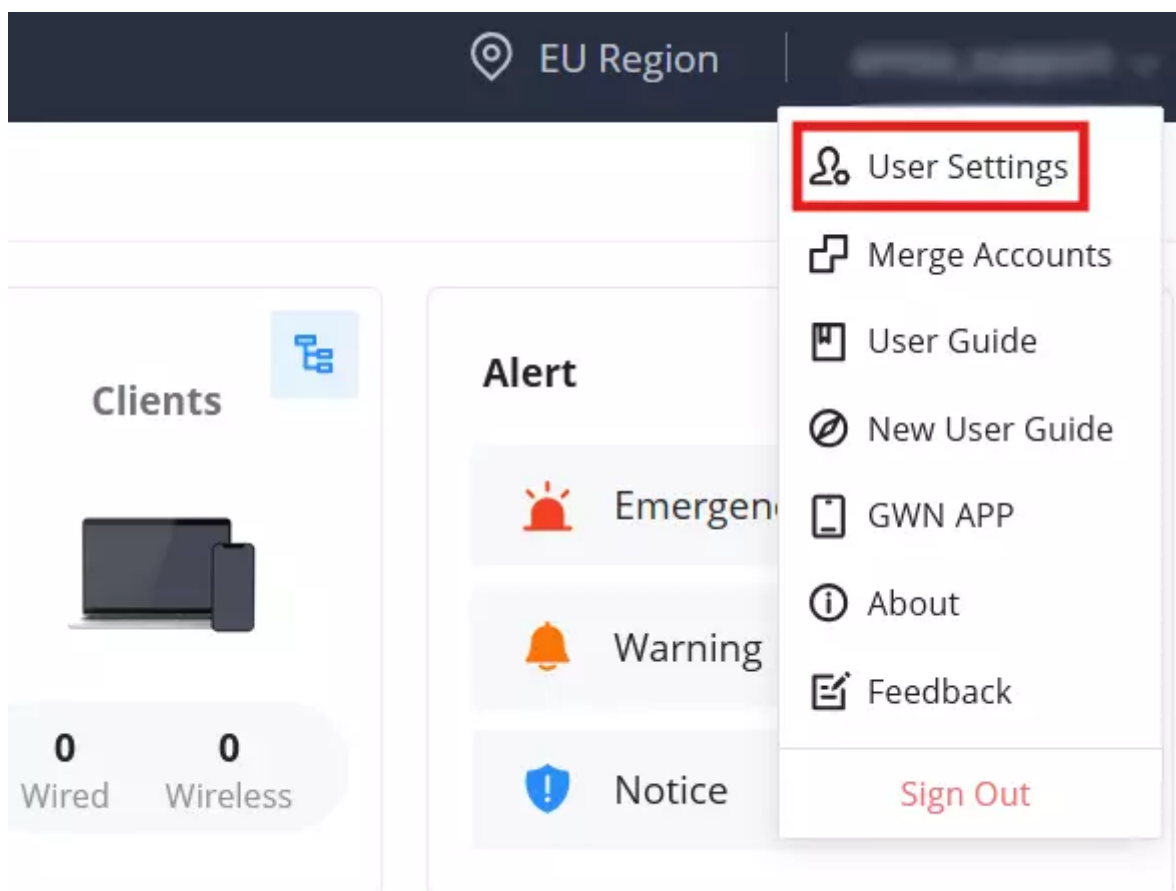
The following page will be displayed:



GWN Manager Dashboard

Users Settings

To edit the user settings of the currently logged-in account, click on the name of the account from the top right corner -> Click on **User Settings**, and a new page displaying the account details will be displayed, refer to the figure below:



User Settings

To modify a field, click on "**Modify**" text, refer to the figures and table below:

User Settings

Nickname	*****	Modify
Username	*****	Modify
Email	*****@*****.*****	Modify
Password	*****	Modify
Language	English	Modify
Timezone	*****	Modify
Time	12 hours	Modify
Date Format	YYYY/MM/DD	Modify
Appearance	Light	Modify
User Type	Enterprise	Modify
Company Name	*****	Modify
Country	Morocco(المغرب)	Modify
Multi-Factor Safety Authentication	☐	Multi-Factor Authentication Instructions

User Settings

Select Authentication Method



Authentication App

Authenticate via a code generated by an app installed on your mobile device or PC.



TOTP Hardware Token

Authenticate via a code displayed on a "time-based one-time password" (TOTP) hardware token.



FIDO Security Key

Authenticate via a code generated by YubiKey or other devices that support FIDO security keys.

[Multi-Factor Authentication Instructions](#)

User Settings Multi Factor Authentication

Nickname	Modifies the user nickname
Username	Modifies the username
Email	Modifies the Email address
Password	Changes the password
Language	Select the web UI language from the drop-down list
Timezone	Select the timezone from the drop-down list
Time	Select the time format: 12 hours or 24 hours
Date Format	Select the date format from the drop-down list
Appearance	Select the interface theme from the drop-down list:* Follow System* Light* Dark.This setting customizes the platform's appearance for your account only.
User Type	Select the user type from the drop-down list
Company Name	Specifies the company name
Country	Select the country from the drop-down list
Multi-Factor Safety Authentication	Toggle ON/OFF the Multi-Factor authenticationNote: for more details, visit Multi-Factor Authentication

User Settings

Theme Appearance

GDMS Networking includes a customizable **Appearance** setting, allowing each user to personalize the platform interface using **Light**, **Dark**, or **System Default** themes.

This setting enhances visual comfort-especially in low-light environments-and is applied on a **per-user basis**, without affecting other users in the same organization.

To access the appearance settings:

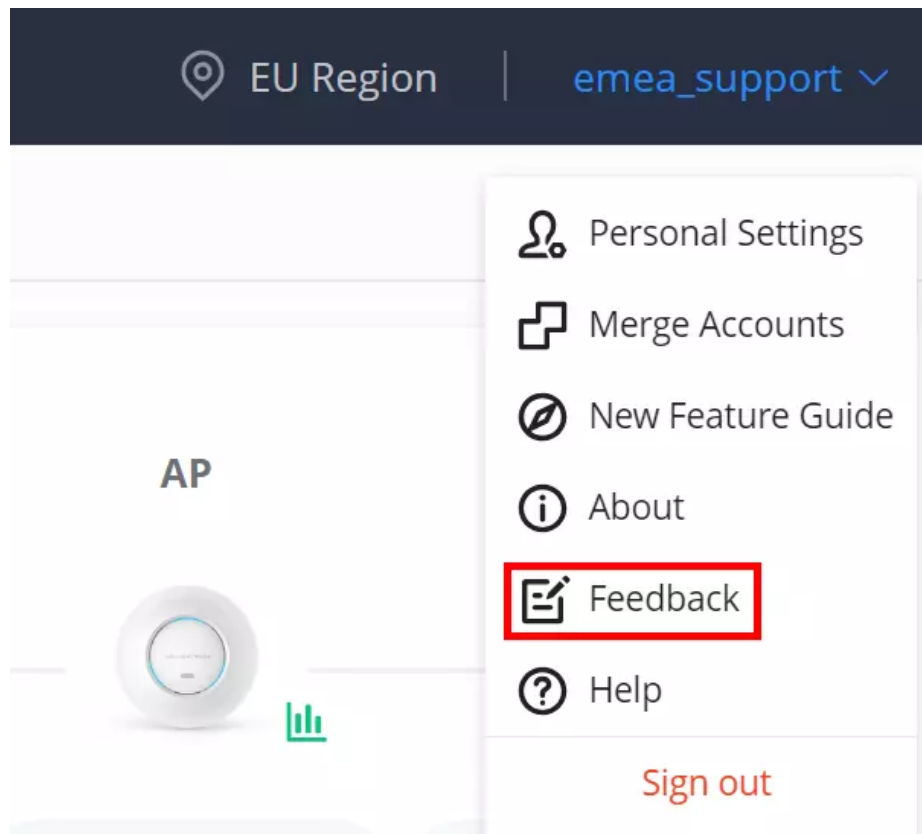
1. Click your **account icon** in the upper-right corner of the page.
2. Select **User Settings** from the dropdown menu.
3. On the **User Settings** page, locate the **Appearance** field.
4. Click **Modify** to open the theme selection dropdown.
5. Choose one of the available options:
 - **Follow System (Light)**: Automatically uses your operating system's current display theme.
 - **Light**: Standard white background with light color scheme.
 - **Dark**: Dark interface theme designed for low-light or night-time environments.
6. Click **Save** to apply the selected theme.

The screenshot shows the 'User Settings' page with a dark theme. The 'Appearance' field is highlighted, and its dropdown menu is open, showing three options: 'Follow System(Light)', 'Light', and 'Dark'. The 'Dark' option is currently selected and highlighted in blue. To the right of the dropdown are 'Save' and 'Cancel' buttons. Other settings visible include Nickname, Username, Email, Password, Language (English), Timezone, Time (12 hours), Date Format (YYYY/MM/DD), User Type, Company Name, Country (Morocco), and Multi-Factor Safety Authentication (disabled).

Theme Appearance

Feedback

If the users have an issue/bug to report or need help with configurations or general feedback, on the top right corner of the page, click on the account username, then click on "Feedback" to send feedback.



Feedback

Then, select what type of feedback:

- I have an issue/bug to report and need a solution (forwards the users to Grandstream helpdesk)
- I need help on my configurations (forwarding the users to Grandstream helpdesk)
- Feedback.
- Other.

Feedback


I have an issue/bug to report and need a solution


I need help on my configurations


Feedback


Other

Feedback types

If Feedback or Other is selected, this page will be shown for users to specify the issue/bug/feedback with attachments (e.g., syslog) and emails for contact.

Report an Issue

* Please enter your feedback

You can directly paste screenshots and web pictures here as attachments



(File type: zip, tar, rar, xls, xlsx, txt, docx, doc, jpeg, jpg, png, pdf, mp4, avi, wav, csv, gz)

* Please enter your email address so that we can contact you in time.

emea_support@grandstream.com



 Add Email

Cancel

Submit

GETTING STARTED WITH GDMS PLATFORM

The GDMS Platform provides an easy and intuitive Web UI or mobile app (both Android(R) & iOS(R) versions) to manage and monitor Grandstream devices (Access points, Routers, Switches, and GCC devices). It provides users access to all device settings, without any additional on-premise infrastructure.

Add a Device to GDMS Networking

To add a device to GDMS Networking, the administrator needs two pieces of information:

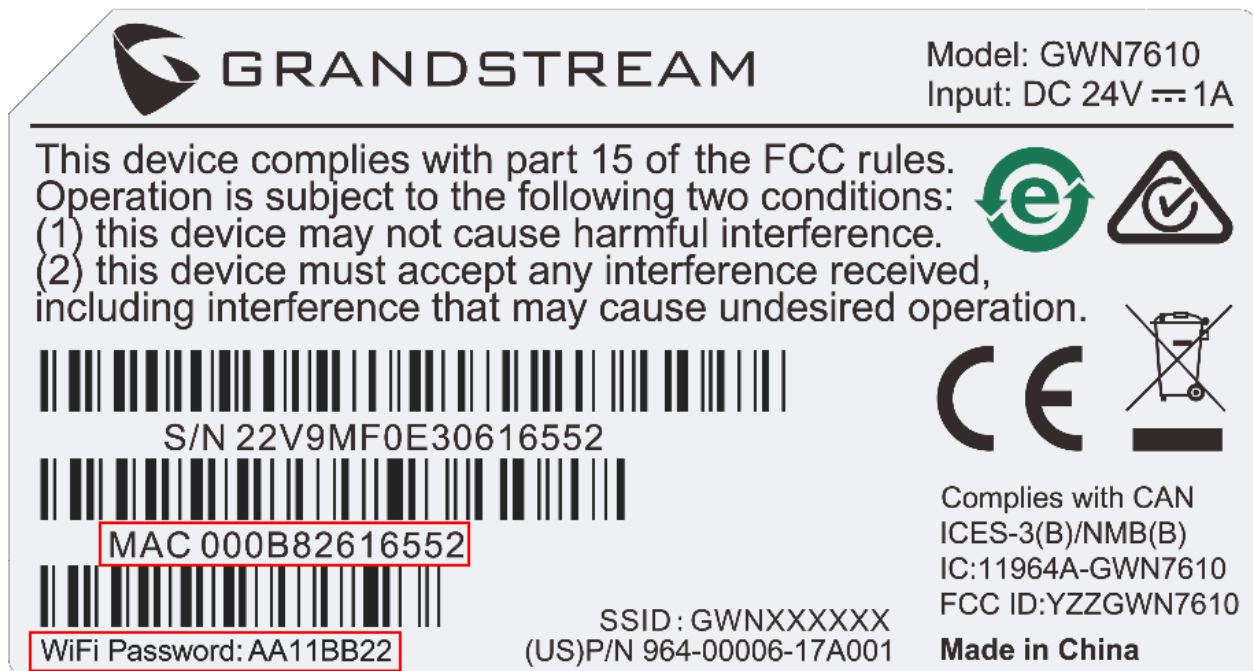
- MAC address of the device.
- Password is in the back of the unit.

There are 3 methods to add devices to the cloud:

1. **Method 1: Adding a New Device Manually**
2. **Method 2: Adding a New Device Using the GWN Application**
3. **Method 3: Transfer APs' control from Local Master** (only for GWN Access points)

Method 1: Add a new device manually

1. Locate the MAC address on the MAC tag of the unit, which is on the device or the package.
2. Locate the Password.



Device MAC and Password

3. Navigate to **Devices** and click on the **"Add"** button.

Devices

Add

Export

Group Management

More

All Status

All Models

Q MAC/Name/IP/Device Group

☐	Device Model	MAC	IP Address	Public IP Address	Device Group	Firmware	Operation
☐	GWN7813P	C0:74:AD: GWN7813P	192.168.80.211		Default	1.0.1.8	

Total 1

10/page

1

Adding a new device to GDMS Networking

4. Select a name for the device, then enter the MAC address and password. The user also has the option to add equipment remarks to easily identify the devices when added to the GDMS Networking or GWN Manager. Also, there is the option to select a device from the [Inventory](#) (previously claimed). Please, check the figures below:

Add Device

[Manual](#)

[Inventory](#)

[Import](#)

Name

1-64 characters

GWN7624

* MAC

c0 : ad : 74 : 00 : 00 : 00

* Password

.....



Equipment Remarks

0-64 characters

Hall AP

Cancel

Add

Adding a device AP Manually

If the device is a router, the users will have to option to automatically synchronize router local WAN configurations to GDMS Networking and also assign the SSIDs that are already in the network to the newly added router.

Add Device

ManualInventoryImport

Device added successfully

☒ Automatically synchronize router local WAN configurations to GWN.Cloud
The synchronization will begin after the device is online.

☐ Assign the SSID in this network to the newly added router.
If selected, the SSID created in the local web interface will be overwritten. Device management can be carried out within Wi-Fi -> Wireless LAN.

Cancel

OK

Router

Cancel

Add

Adding a GWN Router Manually

Add Device

ManualInventoryImport

Device GroupDefault

All Models

MAC/SN

	Device Model	MAC	Serial Number	Device Name
☒	 GWN7661	C0:74:AD:	C	0-64 characters
☐	 GWN7624	C0:74:AD:	0	0-64 characters

Cancel

Add

Adding a device Inventory

5. Click on the **"Add"** button, and the device will be added automatically to your GDMS account, and you will be able to monitor/manage it.

Bulk-add devices using CSV file import

Another option for bulk-add devices is to use a CSV file upload.

After clicking on **"Add"** under the menu **Devices**, click on the **Import** Tab and click on the **"Add"** button to select a CSV file.

Add Device

ManualInventoryImport



Click to upload CSV file

click to download the [reference template](#).

CancelAdd

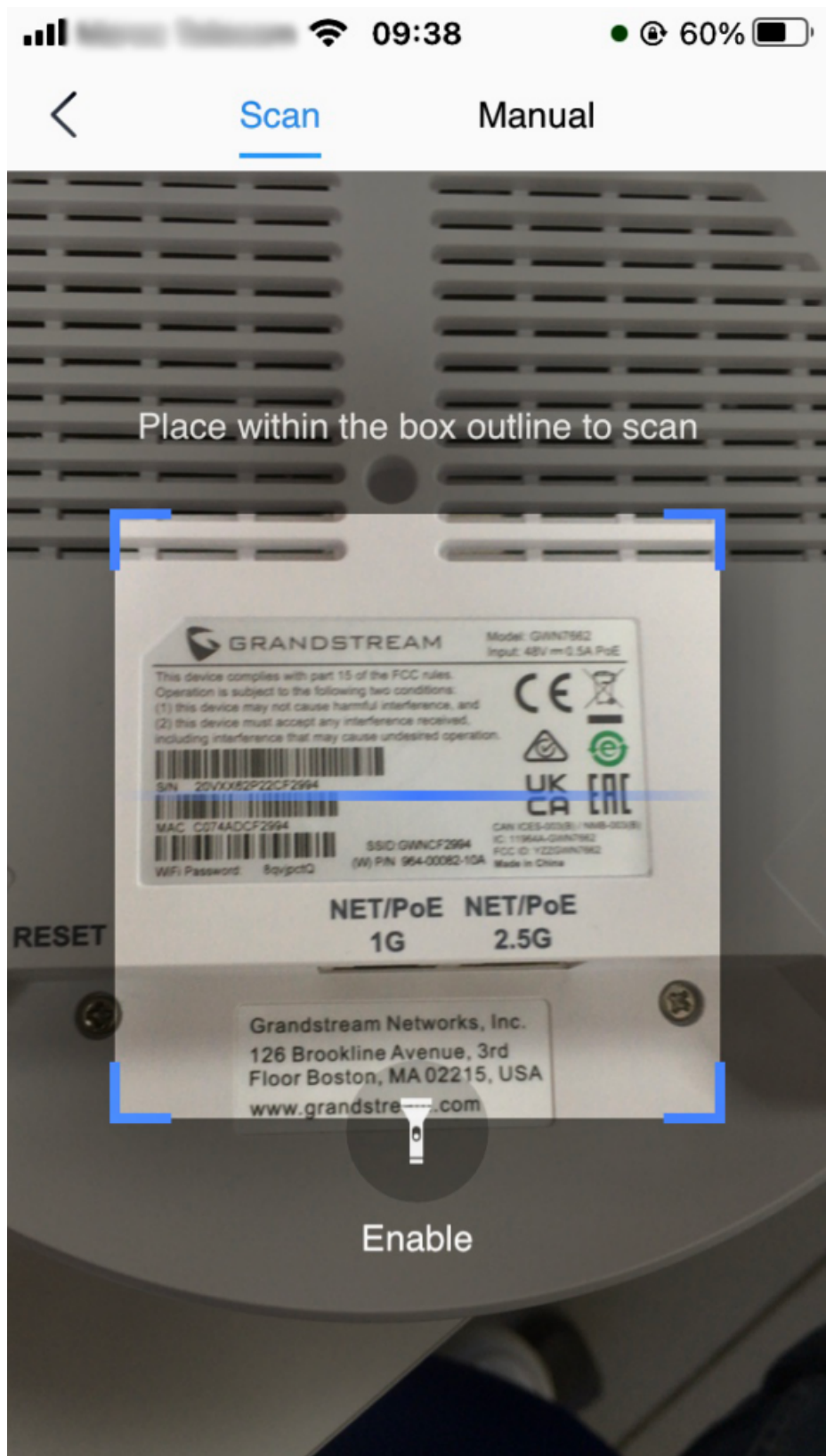
Import the CSV file for devices

Method 2: Add a new device using the GDMS Networking Application

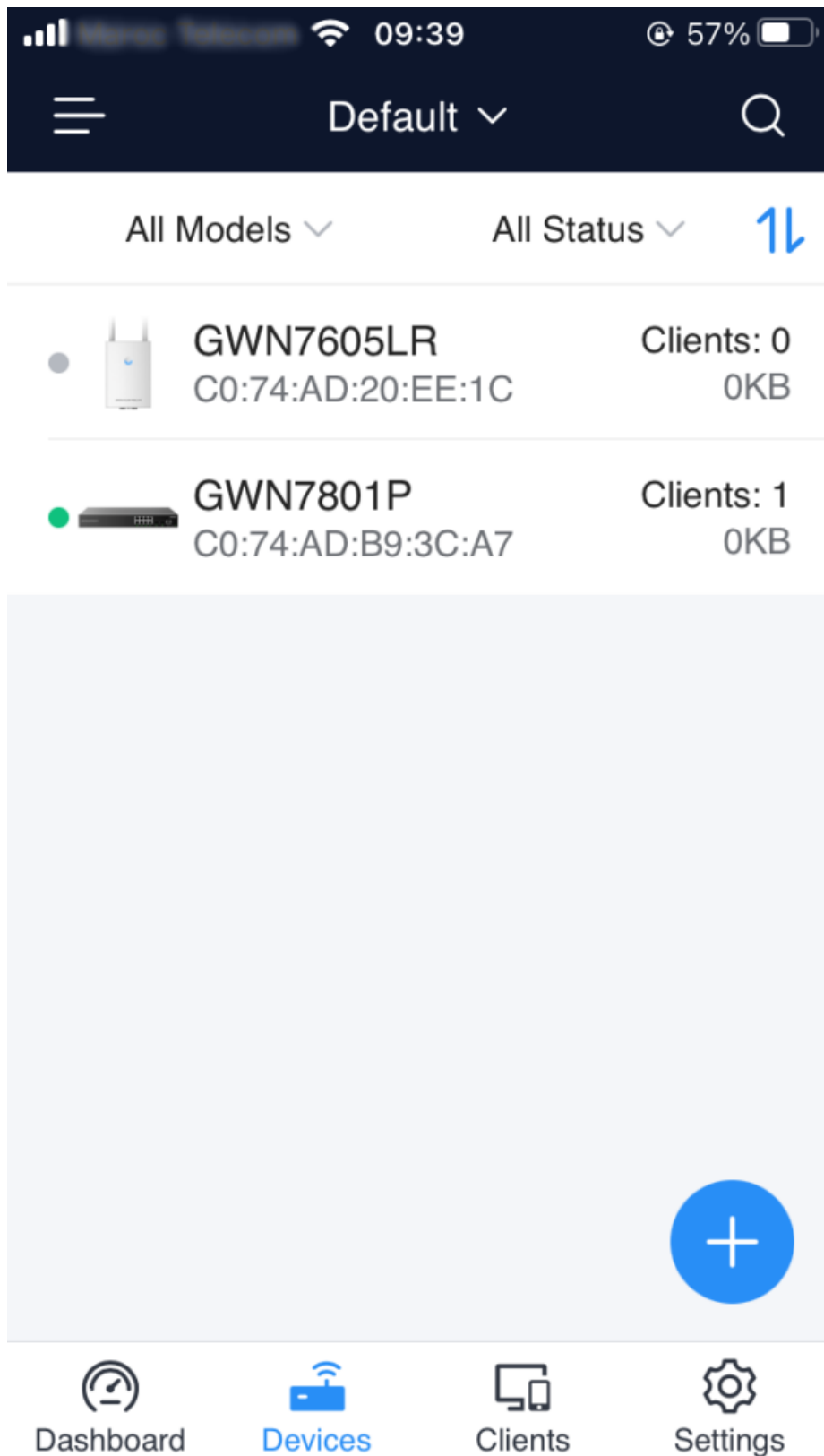
An easy way to add a new device to your GDMS Networking is to use the GDMS Application.

GDMS App is available on Google Play for Android(R) and App Store for iOS(R).

The operation is done by scanning the barcode from the device's sticker.



Adding a device to GDMS Networking using GDMS App part 1



Adding a device to GDMS Networking using GDMS App part 2

Once added, the list of devices will be displayed on the GDMS Networking interface.

Devices

Adopt

Export

Group Management

More

All Status

All Models

MAC/Name/IP/Device Group

☒ Device Model	IP Address	Device Group	Num of Clients	Operation
☒  GWN7624	192.168.5.110	New Device Group	1	
☒  GWN7002	192.168.80.1	WAN	0	
☒  GWN7052F	192.168.80.1	New Device Group	1	
☒  GWN7803P	192.168.5.107	Default	154	
☒  GWN7813P	192.168.5.109	New Device Group	152	

Configure

Reboot

Move

Push Configuration

Reset

Delete

Total 5

10/page

<

1

>

GWN devices list

Method 3: Transfer from Local Master

In the case where a local master is managing the Access points. Another method to add devices (Access points slaves) to the GDMS is by transferring them to the cloud from the local Master. Follow these steps to achieve this:

Transfer from the local master method is only available for GWN Access points.

The following example is based on Access points where one of them is acting as a Local Master and the rest are Slaves.

1. Access the web UI of the local master and go to **Access Points**.

Overview

Access Points

Clients

Captive Portal

Bandwidth Rules

SSID

System Settings

Access Points

Device Type

Search

Transfer AP

Discover AP

Failover

Upgrade

Reboot

Add to SSIDs

Configure

	Device Type	Name/MAC	IP Address	Status	Uptime	Firmware	Actions
	GWN7600	00:0B:82:8B:58:30	192.168.6.246	Master	20m 24s	1.0.6.23	

Showing 1-1 of 1 record(s).

Per Page: 10

Master AP Access Points

2. Press  button. A new window will display the "Transferable devices" list as shown below.

Transfer AP to cloud

Transferable devices (online and supported by cloud):

00:0B:82:8B:58:30

untransferable devices:

There are no untransferable devices.

Transfer

Cancel

Transfer AP to Cloud

- Press button. The web browser will redirect to GDMS Networking login page.
- Once logged in to the cloud, the configuration page "Select Network" will be displayed:

Select Network

* Network

Select network

Access Point ? 00:0B:82:8B:58:30

Failed ?

Cancel

Save

Select Network

- Access Point:** Shows the MAC address of the passed check device.
 - Failed:** Shows the MAC address of the authentication that failed or was added.
- Select **Network** from the drop-down list to which the AP will be assigned.
 - Press the **Save** button to confirm.
 - Once added to the cloud, the Master AP web UI will display the following successful notice.

Notice

Data is successfully transferred to the cloud!

Click OK to delete paired device(s).

OK

Transfer AP to Cloud Success

Adopt a Device to GWN Manager

To add devices (router, switch, access point, GCC) to the GWN manager:

1. Navigate to **GWN Manager Web UI -> Devices**
2. Click on the "**Adopt**" button.

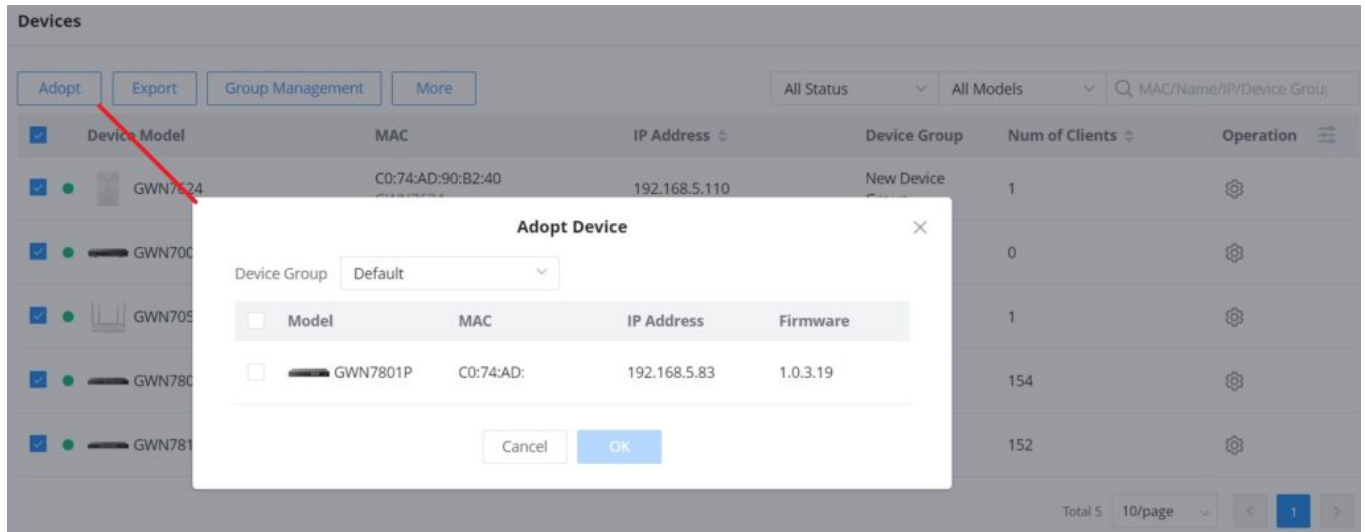
Devices

Adopt Export Group Management More				All Status	All Models	Q MAC/Name/IP/Device Group
☒	Device Model	MAC	IP Address	Device Group	Num of Clients	Operation
☒	 GWN7624	C0:74:AD:GWN7624	192.168.5.110	New Device Group	1	
☒	 GWN7002	C0:74:AD:	192.168.80.1	WAN	0	
☒	 GWN7052F	C0:74:AD:	192.168.80.1	New Device Group	1	
☒	 GWN7803P	C0:74:AD:	192.168.5.107	Default	154	
☒	 GWN7813P	C0:74:AD:	192.168.5.109	New Device Group	152	

Adding a new device to GWN Manager

3. If the GWN Manager connects to the same local subnet as Grandstream devices, it can discover the devices automatically via layer 2 broadcast. GWN devices accept DHCP option 224 encapsulated in option 43 to direct the controller. An example of a DHCP option 43 configuration would be:

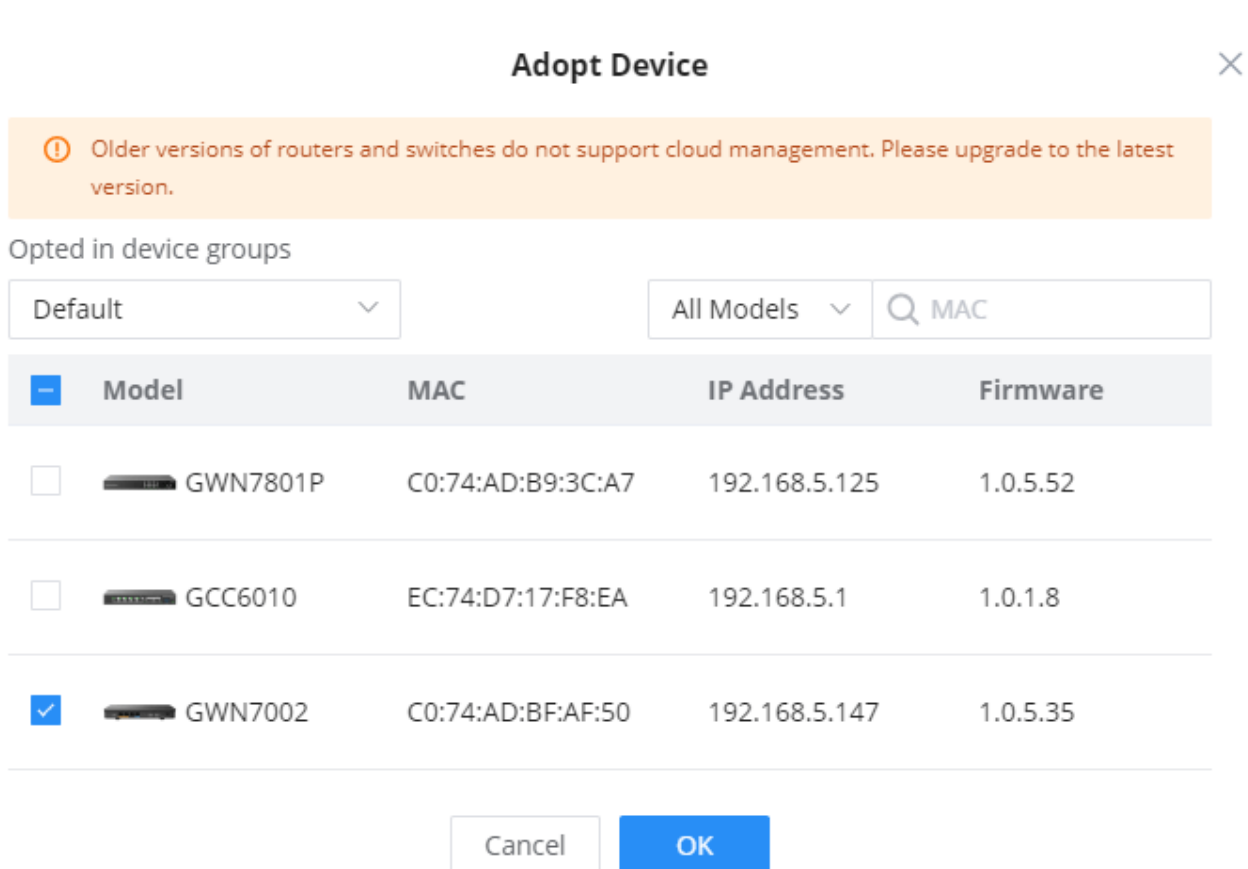
```
224(type)18(length)172.16.1.124:10014(value) translated into Hex as  
e0123137322e31362e312e3132343a3130303134
```



Auto detect devices

4. Select a device by checking the box on its left. Or select all by checking the top box. Then click the **"OK"** button.

When adopting a GWN router or a switch, the user will be prompted to enter the router/switch's current administrator password. Please refer to the screenshots below.



Adopt Device

When clicking "OK", the user will be prompted to enter the current password of the administrator account of the device to finish adopting the device.

Adopt Device



* Password

Cancel

OK

Enter The Password

Adopting devices manually

To manually configure the manager address and port on a GWN device, enable Manager Settings, fill in the Manager Address and Port, and finally click on the **"Save"** button. For each GWN device (AP, Router, or Switch), please check the steps below:

We are going to use the example of a Slave Access point.

You can log into the WebUI of a slave AP or an unpaired AP to set the Manager address and port.

For GWN APs, please log in to the GWN AP in slave mode, then navigate to **GWN AP Web UI -> System -> Manager Settings**.

GWN7624

System / Manager Settings

Manager Address 192.168.5.142

Manager Port 8443

Allow DHCP Option 43 Override Manager Addr... ? ☒

Save Reset

Manager Settings Slave WebGUI

For GWN routers, please navigate to **GWN Router Web UI -> System Settings -> Basic Settings page -> Manager Server Settings tab**.

For GWN switches, please navigate to **GWN Switch Web UI -> System -> Access Control page -> Manager Settings tab**.

It's also possible to SSH a slave AP and use the GWN menu to set the Manager address and port (8443).

```
Main Menu

[1] Status
[4] Clients
[9] Maintenance
[11] Software Manager
[0] Debug

[x] Exit
Select by pressing the [number] or [letter] and then ENTER
11
Software Manager

[1] Manager Address: :10014
[x] Back

Select by pressing the [number] or [letter] and then ENTER
1
[x] Back

Enter Manager Address Please input ip/domain:port (e.g. x.x.x.x:10014)!

Select by pressing the [number] or [letter] and then ENTER
192.168.5.142:8443
```

Manager Settings SSH

NETWORKS

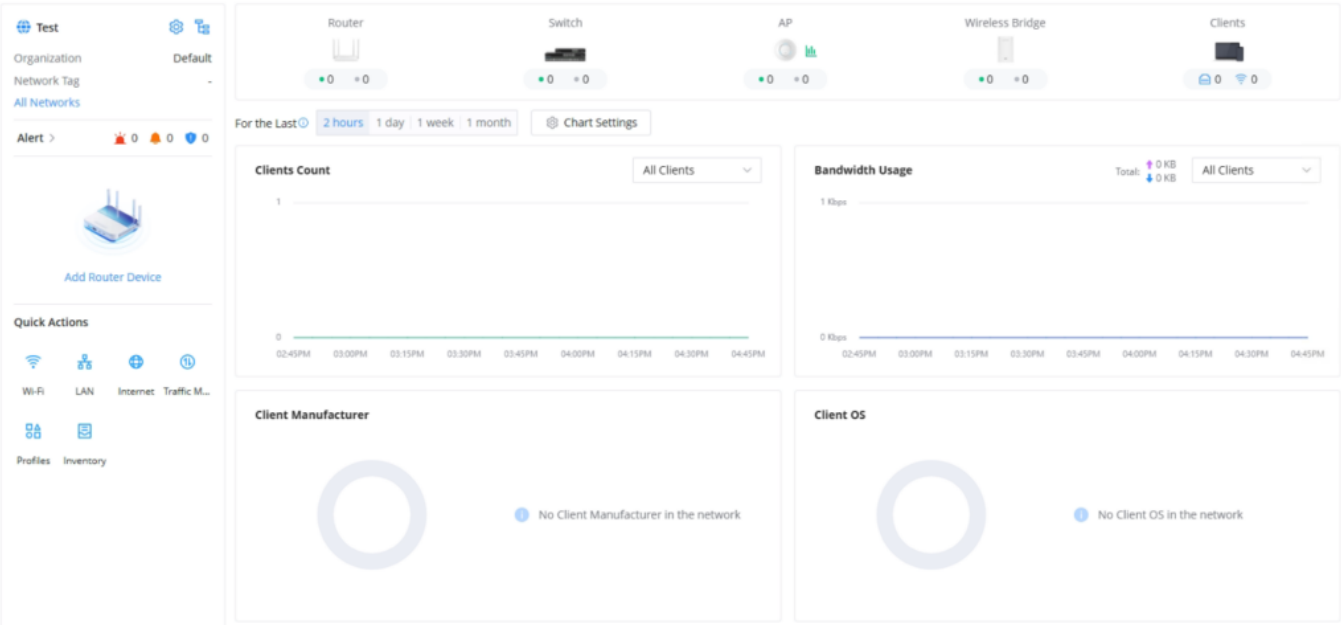
The network page provides information regarding all the network groups created under your account. Once the administrator selects one network, all the other configuration pages will change to reflect the information related to the selected network.

Create a new Network

To create a new Network:

1. Navigate to **GWN Manager Web UI -> Organization -> Overview -> Network Overview Tab**, and all the previously created networks will be displayed here.
2. Click on **the** "Create Network" button and enter the network name, country/region, time zone, and Network Administrator, and select a network in case you want to clone a previously created network.

Dashboard



Network list

Overview > Network Management > Add Network

* Organization

Default

* Network Name

1-64 characters

* Country/Region

Morocco(المغرب)

* Time Zone

(GMT+01:00) Casablanca, Monrovia

Administrator

Clone Network

Select a network to clone

Default Network

Default Network

Tag(s)

SELECT NETWORK TAG

Position

Bottom of List

Cancel

Save

Create Network

Organization	Select the organization under which the network will be created. This is used to group and manage networks within a specific organization account.
Network Name	Enter the name of the network. The name must contain between 1 and 64 characters and should help identify the network easily.
Country/Region	Select the country or region where the network is deployed. This setting may affect regional services, formats, and compliance requirements.
Time Zone	Select the time zone for the network. The system uses this setting for logs, schedules, reports, and time-based configurations.
Administrator	Displays the administrator account assigned to manage the network. This account will have management permissions for the created network.

Clone Network	Allows the user to copy the configuration settings from an existing network. Select a network from the drop-down list to duplicate its settings.
Default Network	Enable this option to set the newly created network as the default network within the organization.
Tag(s)	Assign tags to the network for easier categorization, filtering, and management. Multiple tags can be added if available.
Position	Specify the physical location, branch, or deployment position of the network if required for organizational purposes.

Add Network Parameters

Move a device to a Network

To move a GWN device to another Network, please navigate to the Devices page, select the desired devices, click on the **"More"** button, then select **"Move"**. A pop-up window will appear to choose the destination network to which the selected devices will be moved.

Devices

Adopt Export Group Management **More** All Status All Models Q MAC/Name/IP/Device Group

Device Model	IP Address	Device Group	Num of Clients	Operation
☒ GWN7624	192.168.5.110	New Device Group	1	
☐ GWN7002	192.168.80.1	WAN	0	
☐ GWN7052F	192.168.80.1	New Device Group	1	
☐ GWN7803P	192.168.5.107	Default	166	
☐ GWN7813P	192.168.5.109	New Device Group	146	

Configure
Reboot
Move
Push Configuration
Reset
Delete

Move a Device to a different network

Share a Network

GWN Platforms allow the sharing of a network among the administrators of the organization. To share a network, please navigate to **Organization -> Overview**, then click the configuration icon of the network you wish to share.

Network List

Create Network Sort Network Search Name

Network Name	Devices (Total)	Devices (%Down)	Num of Clients	Created Time	Operation
Network A	0	—	0	2023-05-19 10:19PM	
Organization A	0	—	0	2023-05-19 04:40PM	
Default Network	2	100%	0	2022-12-23 10:02AM	

Total 3 10/page 1

Network List

* Network Name ⓘ

Network A

1-64 characters

* Country/Region

Morocco(المغرب) ▾

* Time Zone

(GMT+01:00) Casablanca, Monrovia ▾

Network Administrator

Cancel

Save

[Edit Network](#)

Share Network



Sharing Permission

☐ Co-management

Manage the current network with another user

☒ Transfer Management

The current network management authority will be issued to the shared account (history client statistic will not be shared), and you will no longer manage it.

☐ Read-only Privilege

The co-management will have read-only access to the current network.

* Shared Account

The region's super administrator's email address must be used.

Cancel

Save

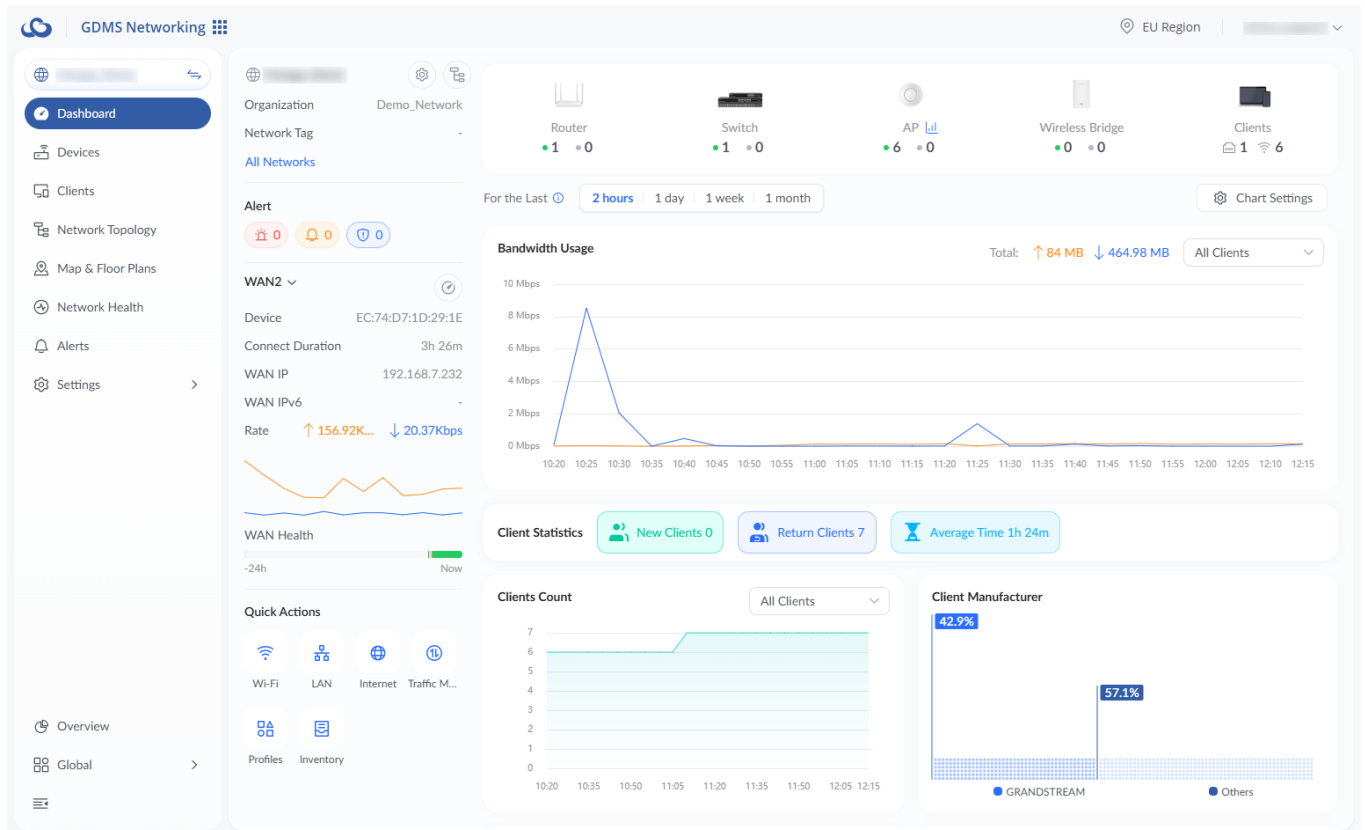
[Share Network](#)

DASHBOARD

The Dashboard page provides general information that can be used to monitor GWN devices (The Router with its WAN IP, Switches, and Access Points) and Clients. It also displays the number of Devices online and offline, and as for Clients it displays the number of wired and wireless clients. It also displays an Alerts preview, and the user can click on icon to open the Alerts page with more details.

Clicking on one of the devices will redirect the user to the Devices page, and clicking on Clients will redirect the user to the Clients page.

Click on this icon to get redirected to the Network Topology page.

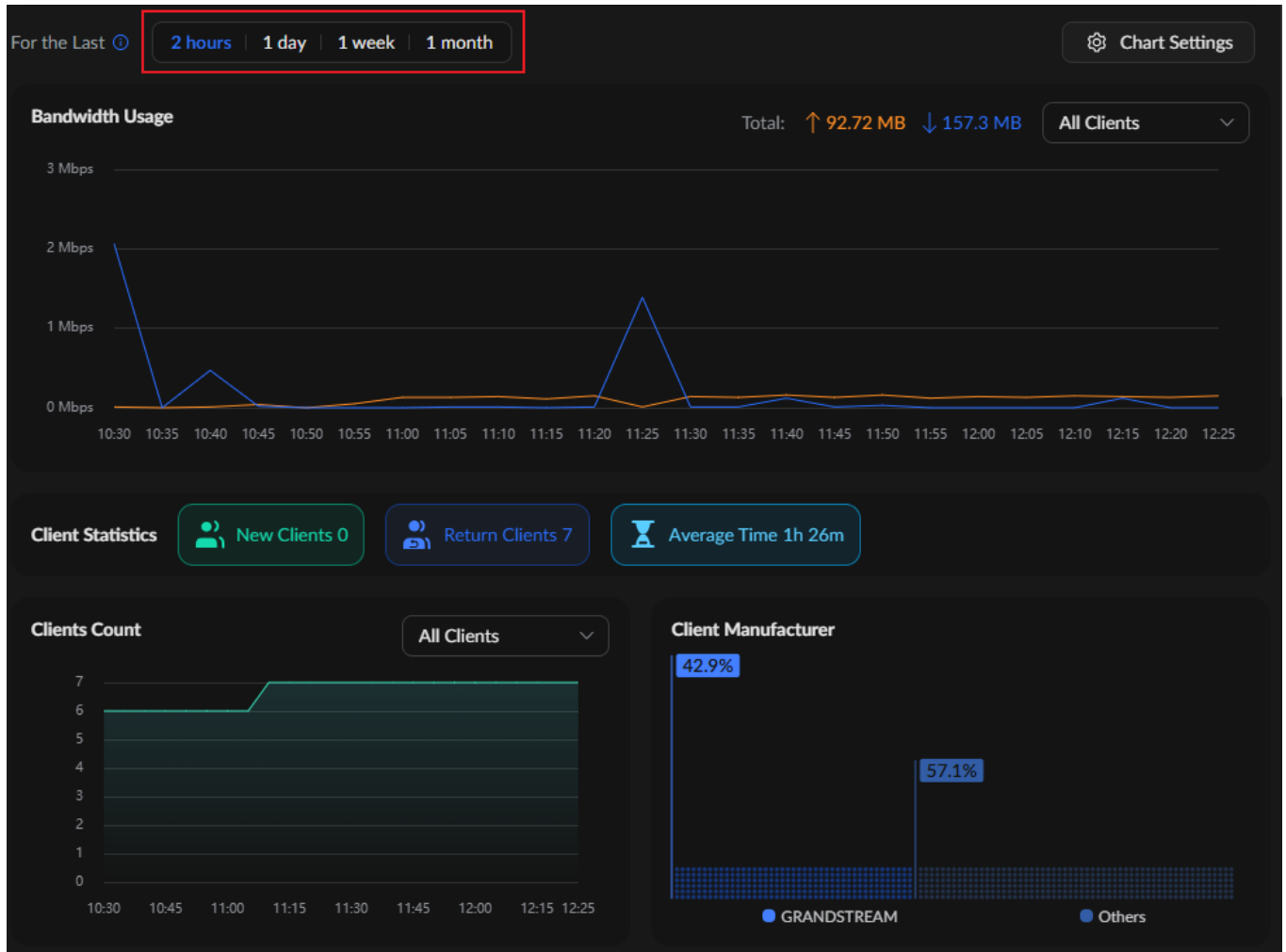


Dashboard

The user can choose the statistical duration of the data to review for the last 2 hours, 1 day, 1 week, 1 month, 3 months, or 6 months.

- **2 hours and one day:** Refresh and record data every 5 minutes.
- **1 week:** Refresh and record data every 30 minutes.
- **1, 3, and 6 months:** Refresh and record data every 3 hours.

3 months and 6 months duration are available on GWN Manager.



Charts Time

To customize the Dashboard page by adding or removing charts, please click on this icon, and refer to the figure below:

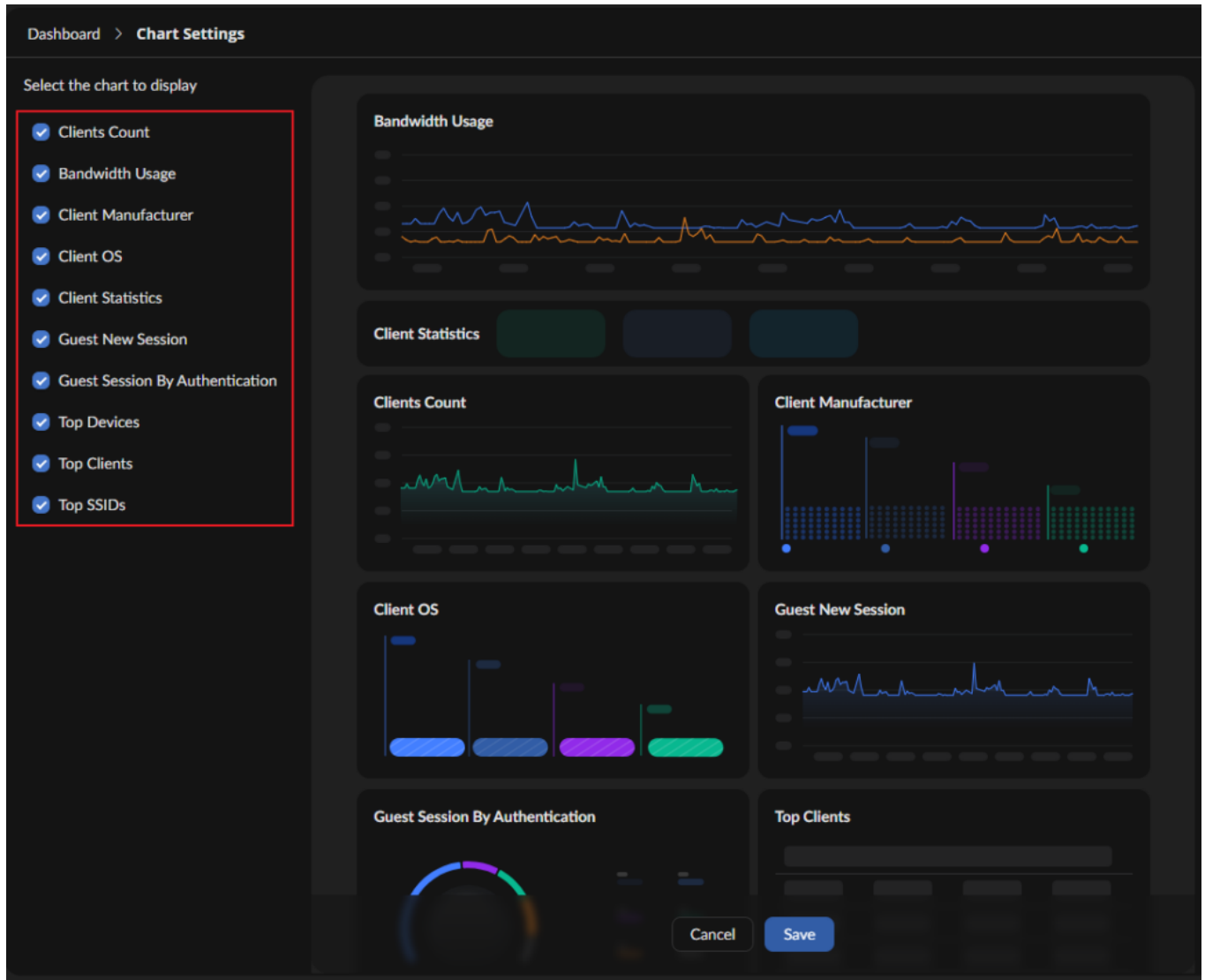
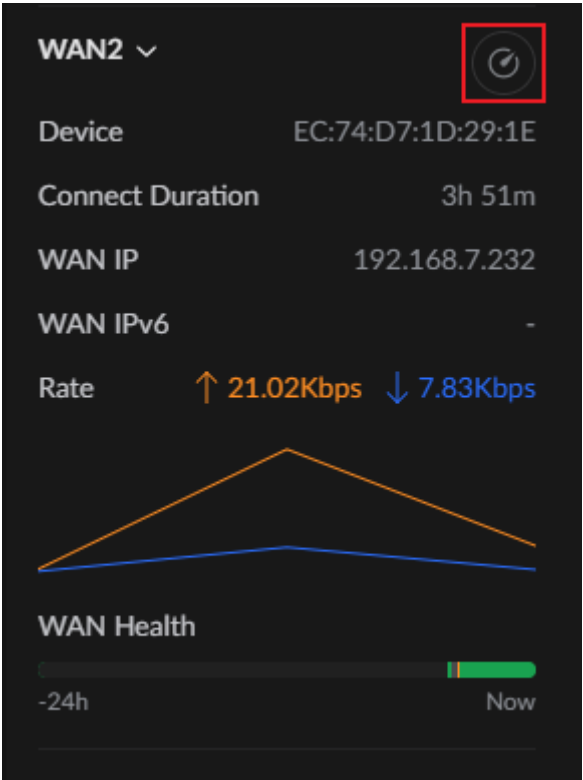


Chart Settings

Clients Count	It shows the number of clients connected at a specific period of time.
Bandwidth Usage	It shows the bandwidth usage over time across all the WAN ports.
Client Manufacturer	It shows the names of the manufacturers of the network hosts with the percentage of the number of the hosts from each manufacturer.
Client OS	It shows the operation system that the network hosts are running.
Client Statistics	Displays the new clients, the returning clients, and the average client time.
Guest New Session	Displays the number of clients who used Captive Portal authentication.
Guest Session by Authentication	Displays the number of clients per type of Captive Portal authentication.
Top Devices	This shows the total bandwidth used by network switches and access points. This includes the bandwidth used by the clients connected to network equipment as well as the bandwidth used by the equipment itself.
Top Clients	Lists the clients by their total amount of upload and download bandwidth used.
Top SSIDs	Lists the SSIDs with the most upload and download bandwidth used.

WAN Speed Test

When a GWN router is added to the GWN Management and the WAN is added under [Settings -> Internet](#) -> [WAN](#), the user can click on the speed test icon as shown below to run the speed test of the selected WAN.



WAN Speed test

First, select the WAN under Internet, then click on the speed test icon, and then the download test will start.

WAN Speed Test

This feature is mainly used for connectivity testing. However, speed test results may be lower than the actual bandwidth due to the clients and servers used.

Test Server

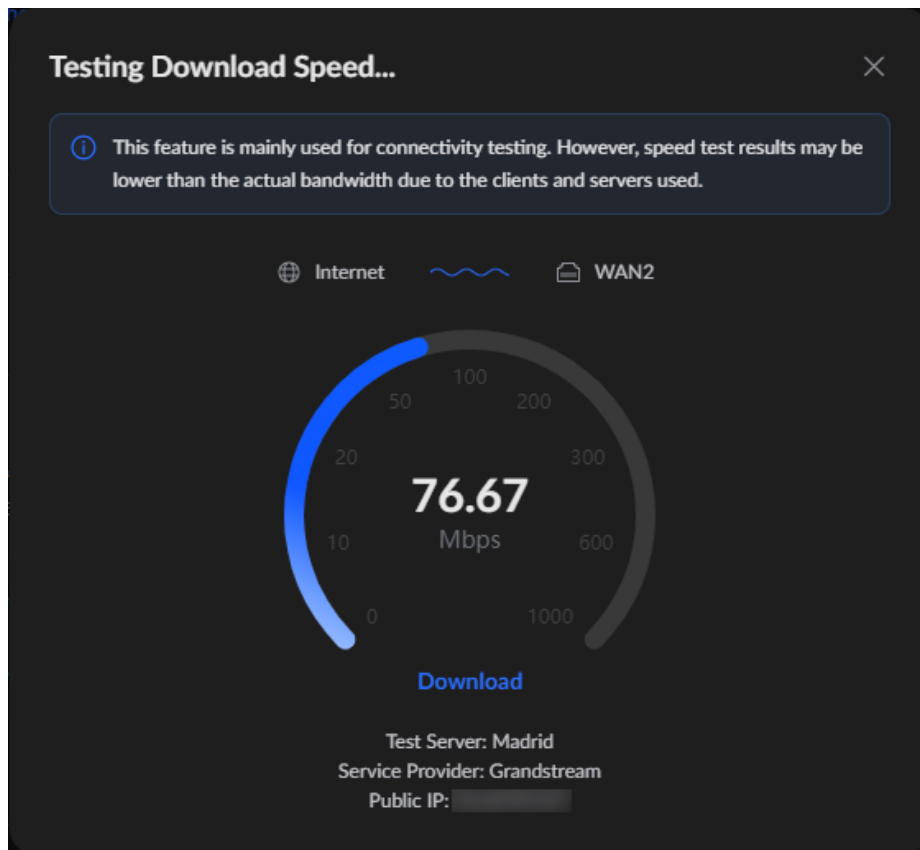
Madrid

Service Provider

Grandstream

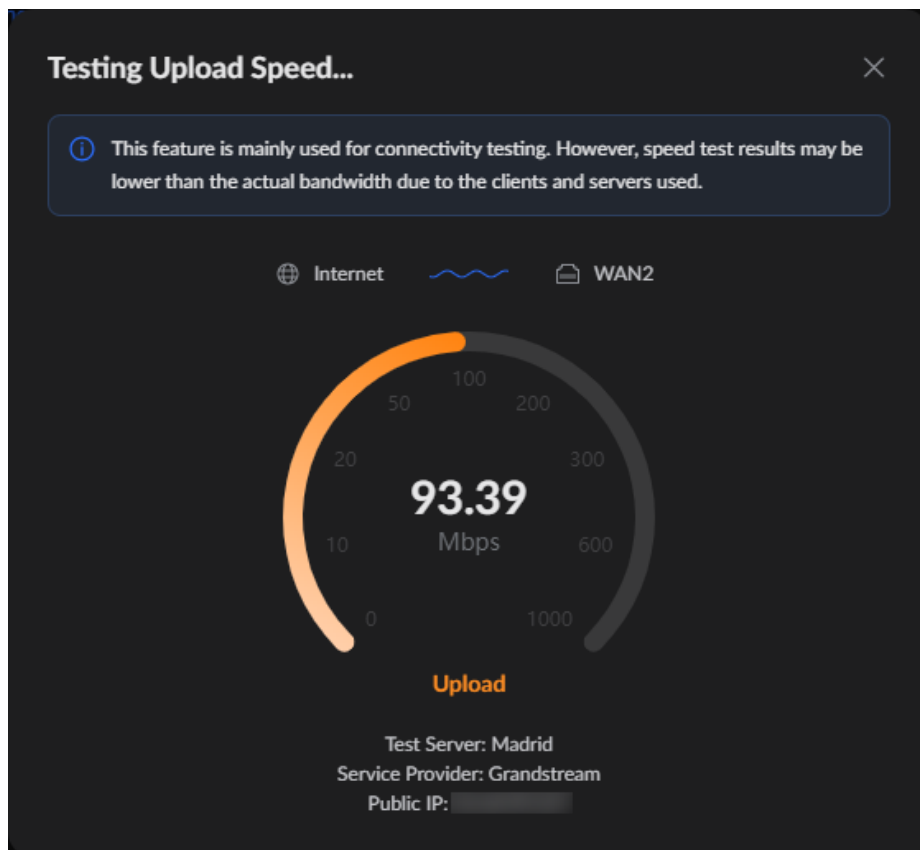
Public IP

Start Speed Test



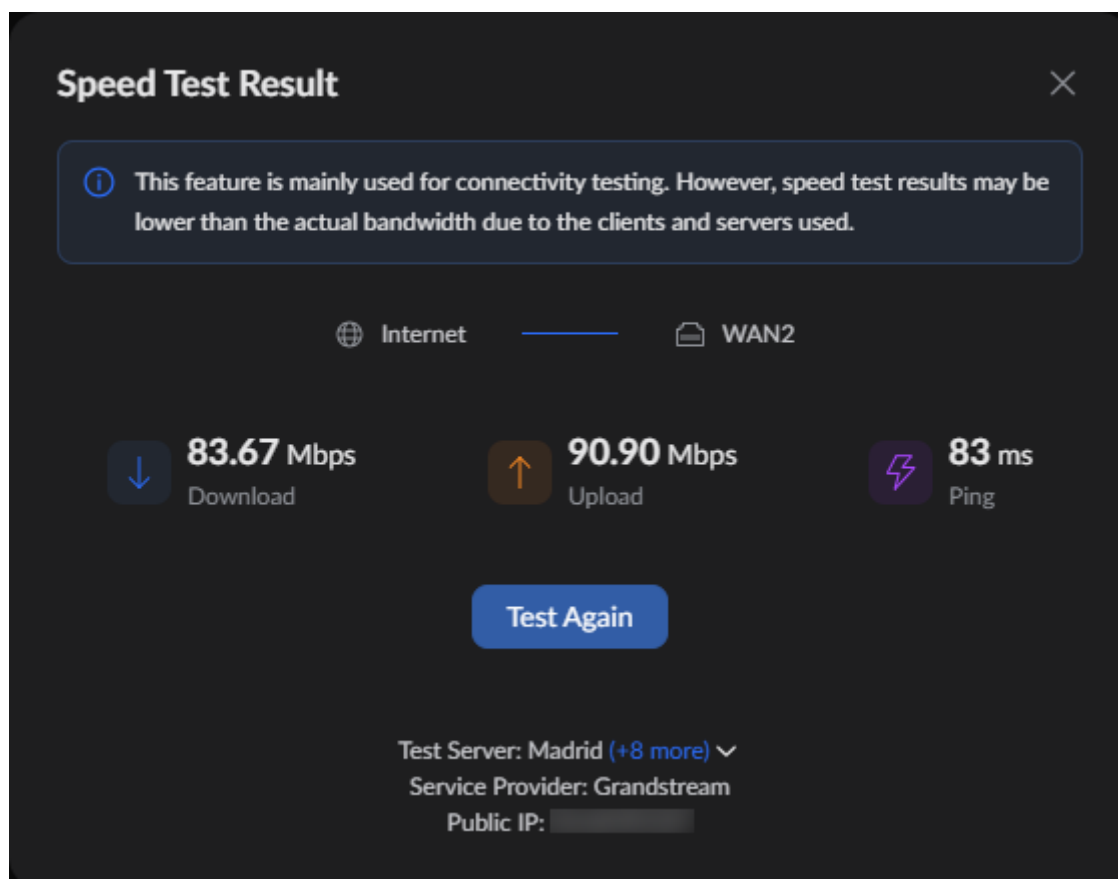
WAN Speed test Download test

Once the download test is over, the upload test will start next.



WAN Speed test Upload test

Finally, the speed test result will be shown with download and upload rates.



WAN Speed test result

The speed test result could be affected by the hardware limitation. For more details about the maximum speed rate for each GWN device, click on the link as shown in the figure above or visit the Device Comparison page.

GDMS Networking

Device Comparison

You may find out the differences on GDMS Networking functions among devices (based on recommended version)

All Models

Device Model

☒ AP

Wired Router

Wireless Router

Switch

GWN7600

GWN7600LR

GWN7602

GWN7605

GWN7605LR

Function	Model	GWN7600	GWN7600LR	GWN7602	GWN7605	GWN7605LR	GWN7610	GWN7615	GWN7624
DFS(CE)									
SpeedTest									
Maximum Speedtest Value		550Mbps	550Mbps	130Mbps	450Mbps	450Mbps	130Mbps	450Mbps	450Mbps
MLD Snooping									

Device Comparison Maximum Speedtest Value

DEVICES

On this page, users can Add (GDMS Networking) or Adopt (GWN manager), export a list of devices, move to a different network/Device group, reset, delete, configure, reboot, or push configuration.

Also displays all the related information for the GWN devices on the current network. To add/remove columns, click on the **"Parameters icon"** as shown below:

Tx Power		Link Speed	Last Seen	Operation
2.4G	10dBm	100Mbps	2024/07/31 12:1	☒ Device Model
5G	—			☐ Name
2.4G	—	1000M...	2024/07/31 12:1	☒ MAC
5G	—			☒ IP Address
2.4G	—	—	2024/07/31 12:1	☐ Public IP Address
5G	—			☐ IPv6 Address
—	—	—	2024/07/31 12:1	☐ Device Group
—	—	—	2024/07/31 12:1	☒ Firmware
—	—	—	2024/07/31 12:1	☒ Uptime
—	—	—	2024/07/31 12:1	☒ Num of Clients
			Total 6	☒ Usage
			10/page	☒ Channel
				☒ Tx Power
				☒ Link Speed
				☒ Last Seen

Devices list part 1

More information can be viewed from this page:

- **Device Model**
- **Name**
- **MAC address**
- **IP address**
- **Public IP address**
- **IPv6 address**
- [Device group](#)
- **Firmware**
- **Uptime**
- **Number of Clients**
- **Usage**
- **Channel**: displays GWN APs' used channels on all bands.
- **TX Power**: displays transmission power on wireless devices, e.g., GWN APs, in dBm.
- **Uplink Speed**: Displays the current uplink speed for routers and switches (e.g., 1Gbps, 2.5Gbps), improving real-time link monitoring.
- **First Seen**: Shows the date and time the device was first connected to GDMS Networking, useful for tracking onboarding history.
- **Last Seen**: displays the date and time of the device's most recent connection to GDMS.

For reference, please check the examples below:

Devices

Add		Export		Group Management		More		All Status		All Models		Q MAC/Name/IP/Device Group	
	Device Model	Name	MAC	IP Address	Public IP Address	IPv6 Address	Device Group	Firmware	Operation				
☐	 GWN7664	GWN7664	C0:74:AD:88:88:88	192.168.80.108	192.168.80.108	—	Default	1.0.25.15					
☐	 GWN7605LR	GWN7605LR	C0:74:AD:88:88:88	192.168.80.226	192.168.80.226	—	Default	1.0.25.10					
☐	 GWN7660LR	GWN7660LR	C0:74:AD:88:88:88	192.168.80.25	192.168.80.25	—	Default	1.0.25.15					
☐	 GWN7813P	—	C0:74:AD:88:88:88	192.168.80.133	192.168.80.133	—	Default	1.0.1.7	  				

Devices list part 2

☐	Device Model	MAC	Uptime	Num of Clients	Usage	Channel	Tx Power	Link Speed	Operation
☐	 GWN7664	C0:74:AD:GWN7664	16m	1	5.28 MB	2.4G 1 5G 44	2.4G 20dBm 5G 23dBm	1000Mbps	
☐	 GWN7605LR	C0:74:AD:GWN7605LR	42m	0	15.45 KB	2.4G — 5G 36	2.4G — 5G 19dBm	10Mbps	
☐	 GWN7660LR	C0:74:AD:GWN7660LR	42m	0	1.93 KB	2.4G 6 5G —	2.4G 20dBm 5G —	100Mbps	
☐	 GWN7813P	C0:74:AD:...	1h 2m	3	—	—	—	—	  

Devices list part 3

Group Management

Group management is a logical group that contains devices either for the same model or different models. This helps make GWN device management even easier. For example, there are pre-set features for switches when added to a group, or when the user wants to apply certain configurations on many devices at the same time, configurations can be applied directly to the device group containing those devices.

GDMS Networking also supports cloning network settings for WAN, VPN, and Device Groups, allowing administrators to quickly duplicate and apply existing configurations across multiple deployments. This helps simplify large-scale network deployments, reduce repetitive configuration tasks, and maintain consistent network settings across different sites and device groups.

To create or edit a Device Group, please navigate to the **Web UI -> Devices** page, then click on the **"Group Management"** button.

Devices

Adopt

Export

Group Management

More

All Status

All Models

MAC/Name/IP/Device G

☐	Device Model	MAC	IP Address	Device Group	Num of Clients	Operation
☐	GWN7624	C0:74:AD:90:B2:40 GWN7624	192.168.5.110	device x	0	
☐	GWN7813P	C0:74:AD:DF:CC:94	192.168.5.109	device x	142	

Group Management

+

Default

GWN_Device

Routers

WAN

Move Devices

All Models

MAC/Name

	Device Model	MAC	Name
☐	GWN7813P	C0:74:AD:DF:CC:94	—
☐	GWN7624	C0:74:AD:90:B2:40	GWN7624

Group Management list

To add a new Device group or add devices to a previously created Device group, click on "+" icon, to delete or modify a Device group, click on the "Edit" or "Delete" icons, respectively.

The services of the device group will be applied to the subsequent new devices.

* Name

Device Group

1-64 characters

* Parent Group

Default

Device

GWN7003(C0:74:AD:DF:CC:94) × GWN7662(C0:74:AD:90:B2:40) ×

Remark

New Device Group

0-64 characters

Switch Pre-Provisioning

Only applies to the switches added the first time.

Port Settings

Port

1 +3

5 +1

Port Profile

All VLANs

Default LAN

Trust DHCP Snooping

On

Off

Add New Item

CLI Command

```
# this is an example
configure
vlan 2
exit
interface Ethernet 1/0/1
switchport mode access
```

Cancel

Save

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Add a Device Group

Please note that the device group depends on the configuration, for example:

- For Wireless LAN (Wi-Fi or SSID), the device group must only contain wireless devices e.g., GWN APs.
- For the Router parameter under Settings -> Internet -> Add WAN, the device group must contain only routers of the same mode.

Switch Pre-Provisioning

The switch Pre-Provisioning feature allows the user to pre-configure port settings and CLI commands for the switches that belong to the same device group. Once the GWN switches are added to the device group, the pre-configurations will take effect.

Only applies to the switches added the first time.

- Port Settings

In this section, the user can pre-configure the switch ports with a port profile and Trust DHCP Snooping (On or Off).

Click on "+" or "-" icons to add or delete port settings. Please refer to the figure below:

If the port is not selected on the device, it will not take effect.

- CLI Command

The user can enter the CLI commands here, separated by "Enter". Please use English and characters only, and use the "#" key for the comment line.

Switch Pre-Provisioning

Only applies to the switches added the first time.

Port Settings

Port

1 +3

5 +1

Port Profile

All VLANs

Default LAN

Trust DHCP Snooping

On

Off

Add New Item

CLI Command

```
# this is an example
configure
vlan 2
exit
interface Ethernet 1/0/1
switchport mode access
```

Cancel

Save

Switch Pre Provisioning

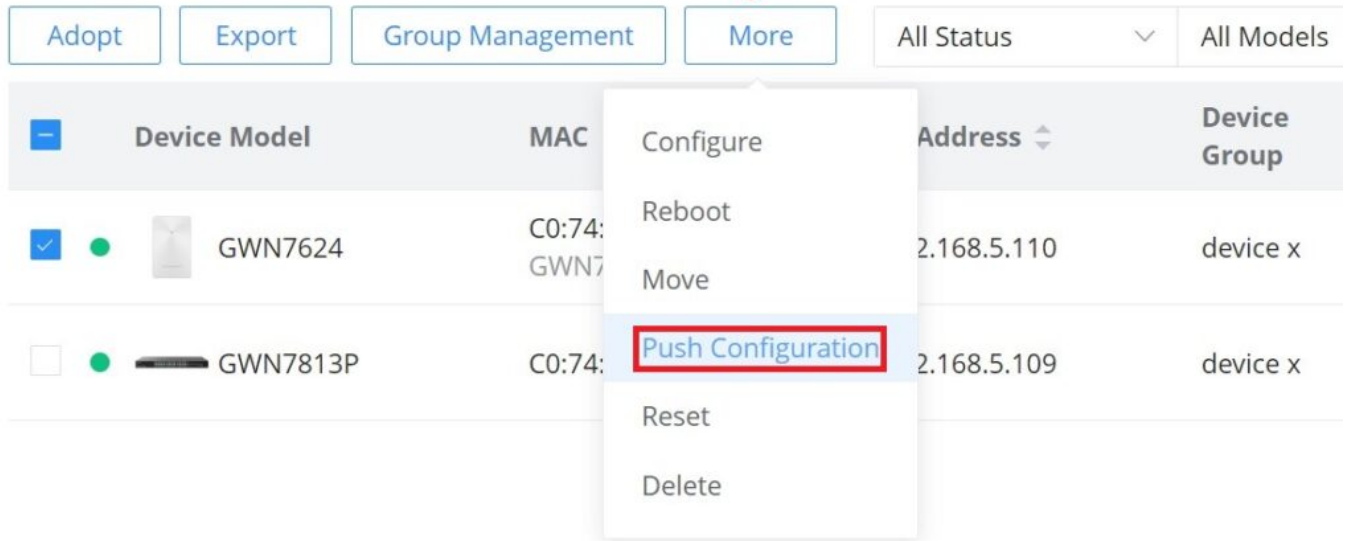
Push Configuration

The push configuration feature helps to push GDMS Networking or GWN Manager configuration to the local side of added GWN devices, either manually or automatically.

Manual Method

To manually push the GDMS Networking/GWN Manager configuration to the local side of a GWN device, please navigate to **Web UI -> Devices** page, then select a device and click on the **"More"** button, next click on **"Push Configuration"**.

Devices



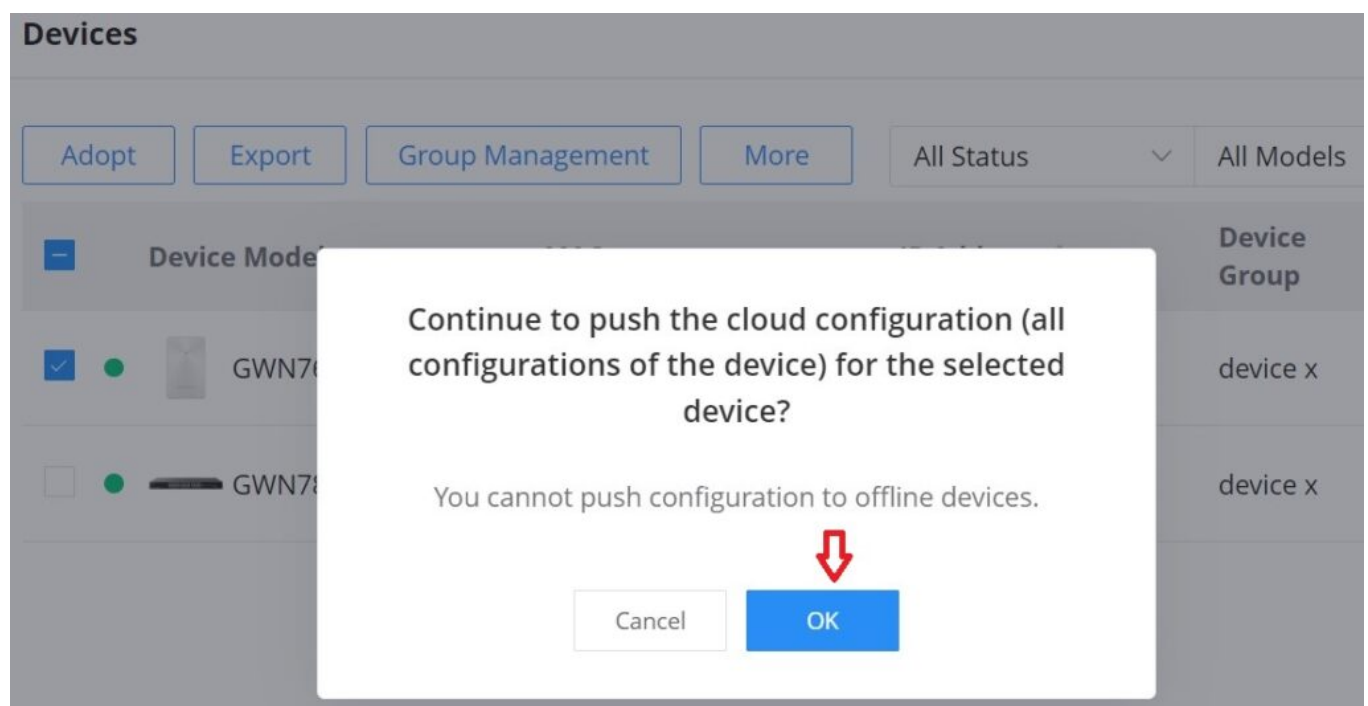
The screenshot shows the 'Devices' page with a table of devices. A red arrow points to the 'More' button in the top navigation bar. A context menu is open over the table, showing options: Configure, Reboot, Move, Push Configuration (highlighted with a red box), Reset, and Delete.

	Device Model	MAC	Address	Device Group
☒	GWN7624	C0:74:GWN7	2.168.5.110	device x
☐	GWN7813P	C0:74:	2.168.5.109	device x

Devices page Push configuration part 1

A confirmation dialog will pop up to confirm the push configuration, to proceed click on the "OK" button.

Push configuration does not work with offline GWN devices.



The screenshot shows the 'Devices' page with a confirmation dialog box. The dialog text reads: 'Continue to push the cloud configuration (all configurations of the device) for the selected device?'. Below this, it says 'You cannot push configuration to offline devices.' There are 'Cancel' and 'OK' buttons. A red arrow points to the 'OK' button.

Devices page Push configuration Part 2

Automatic Method

If the user wants to push the GDMS Networking/GWN Manager configuration automatically for the selected GWN device, navigate to **Web UI -> Devices** page, then click on a GWN device or configuration icon, and on the top of the page, toggle ON "**Auto Configuration Delivery**", please refer to the figure below:

Devices > C0:74:AD:DF:CC:94

UsageInfoPortDebugConfiguration

Auto Configuration Delivery

Device Information

Device Name

Model

Uptime

Device System Time

—

GWN7813P

4h 18m

2023-09-18 05:16PM

Show more Information

Auto Configuration Delivery

Export

The user can click on the "Export" button to download a file (Excel file) that contains all the devices on this network with details. Please refer to the figures below:

Recent Downloads

Device_list_20231027.xls
5.0 KB • Done

Show all downloads

Devices

Add

Export

Group Management

More

All Status

Device Model	MAC	IP Address	Public IP Address	Device Group	Firmware	Operat
GWN7661	C0:74:AD:GWN7661	—	—	Default	—	
GWN7813P	C0:74:AD:GWN7813P	—	—	Default	—	

Devices Export

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Device Model	Mac	Name	IP Address	Connection IP Address	IPv6 Address	Device Group	Firmware	Running Time	Clients Count	Usage	Channel	Tx Power	Device Remarks	Serial Number
GWN7660	C0:74:AD:GWN7660	—	192.168.5.94	192.168.5.94	—	Default	1.0.25.10	—	0	—	2.4G	2.4G	—dBm	—
GWN7003	C0:74:AD:GWN7003	—	192.168.80.1	192.168.5.98	fe80:c274:adff:fec9:72e9	Default	1.0.5.6	3h 9m	0	—	2.4G 0	2.4G 0dBm	—	—
GWN7803P	C0:74:AD:GWN7803P	—	192.168.5.60	192.168.5.60	—	Default	1.0.3.37	3h 10m	77	—	5G 0	5G 0dBm	—	—

Devices Export Excel file

The exported file contains the following information about all the devices:

- Device Model
- MAC Address
- Name
- IP Address
- Connection IP Address
- IPv6 Address
- Device Group
- Firmware Version
- Running Time
- Clients Count
- Usage

- Channel (For GWN APs & GWN Wireless Routers)
- Tx Power
- Device Remarks
- Serial Number

More

To view more options, please click on the "More" button as shown below:

Devices

Add	Export	Group Management	More	All Status	All Models	Q MAC/Name/IP/Device Group
Device Model	MAC	IP Address	Public IP Address	Device Group	Firmware	Operation
☒ GWN7661	C0:7:GWN			Default		
☐ GWN7003	C0:7:GWN	192.168.80.1	197.230.72.219	Default	1.0.5.3	

Configure

Reboot

Return

Move

Push Configuration

Reset

Delete

Total 210/page<1>

Devices More

- Reboot:** to reboot the GWN device.
- Return:** Returning a device will transfer it from its current network to the [inventory](#), where it can be reassigned.
- Move:** [to move a device from the current network to another network.](#)
- Reset:** to reset a device.
- Delete:** to delete a device.

Operation

Under Operation, the user can find more tools that can help with managing GWN devices.

Devices

Add	Export	Group Management	More	All Status	All Models	Q MAC/Name/IP/Device Group
Device Model	MAC	IP Address	Public IP Address	Device Group	Firmware	Operation
☐ GWN7813P	C0:74:AD:CC:DF:18 GWN7813P	192.168.80.132	197.230.72.219	Default	1.0.1.20	

Total 110/page<1>

Devices Operation

- : Click to configure the GWN device.
- : Remove access to the GWN device Web UI.
- : Web CLI.

```
Username: admin
Password: ****
GWN7813P#
```

Web CLI

Configure a Device

The configuration page allows the administrator to name, reboot, configure, etc. GWN devices.

This page is dependent on the device; each GWN device may require different configurations.

Navigate to the **Web UI -> Devices** page, then click on a GWN device entry or click on the configuration icon.

Configure a GWN Access Point

On the Devices page, when the user clicks on a GWN Access point, there are many options on the top of the page dedicated only to GWN Access points:

Devices > C0:74:AD:F8:95:E8

Auto Configuration Delivery ☒

Edit Configuration File

Bridge

Speed Test

Locate the device

Clear usage

Usage

Info

Debug

Configuration

General ^

Device name

0-64 characters

Device Remarks

0-64 characters

Additional Remarks

0-64 characters

Fixed IPv4

☐

Fixed IPv6

☐

Management VLAN

☐

LED

Use System Settings

Reboot Plan

Use System Settings

Disable Ports

None

NET/PoE(1G) Port Type

Trunk

Longitude

0±180 characters

Latitude

0±90 characters

Radio Settings ^

Back

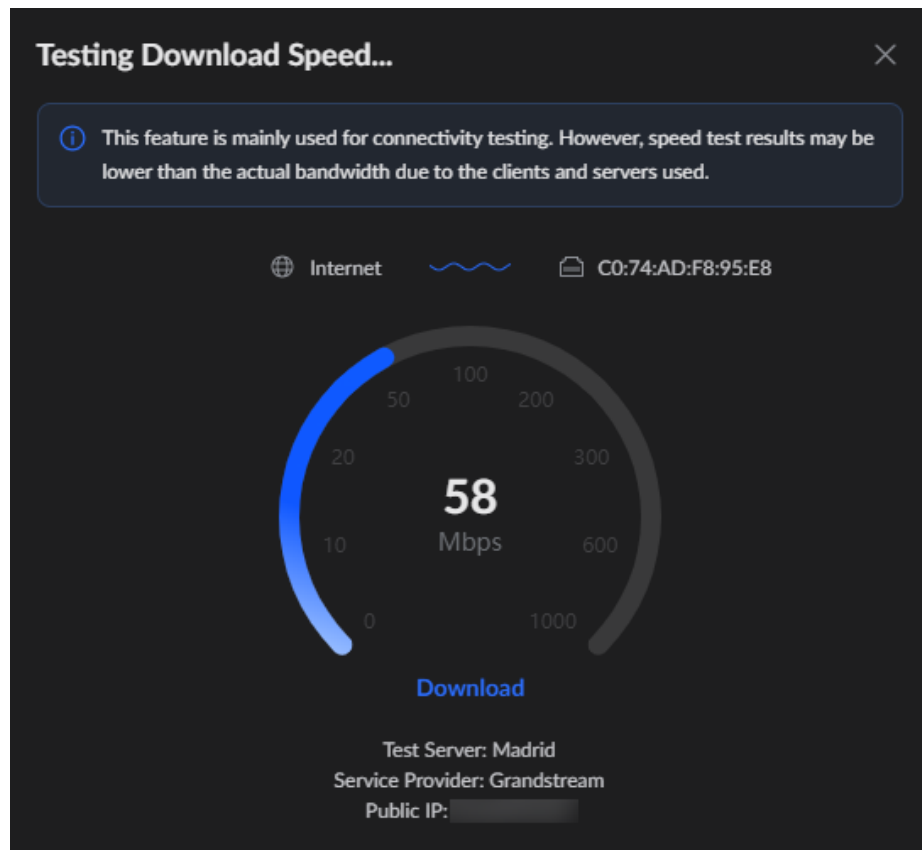
Save

Devices GWN AP

- **Speed Test:** is a feature on GWN APs to run a speed test directly from GDMS Networking or GWN manager, making it easier for administrators to check many GWN APs from one single interface. For more details, please refer to the figures below:

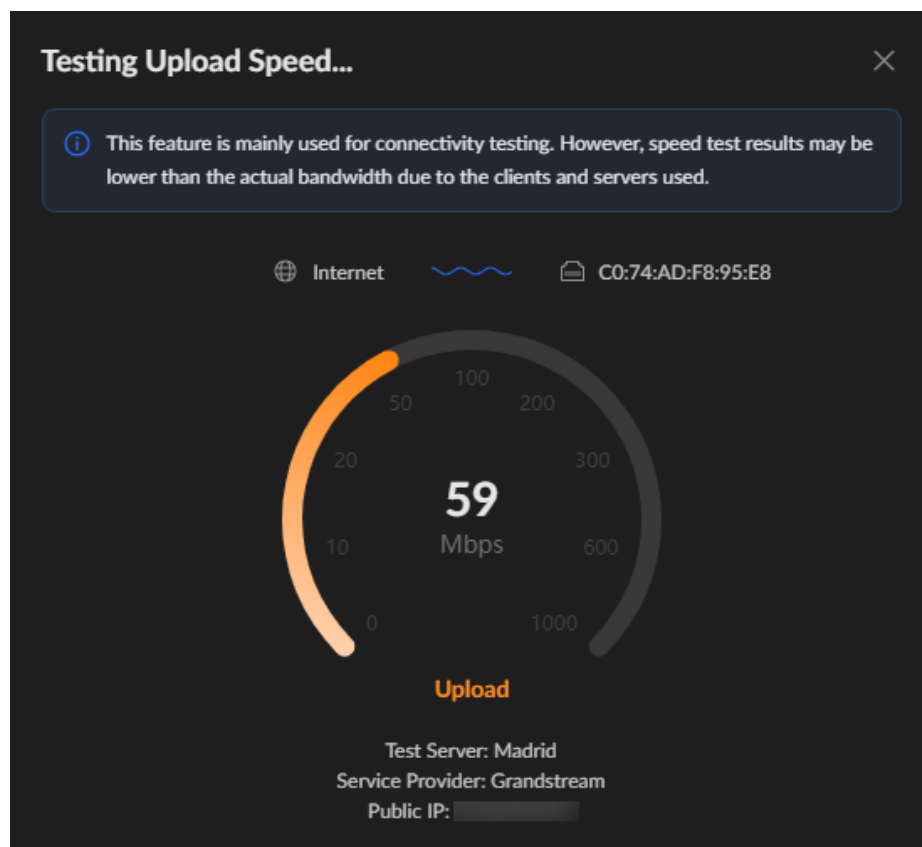
To start running the speed test, click on the "**Speed Test**" button, refer to the figure above.

The first speed test tests download speed.



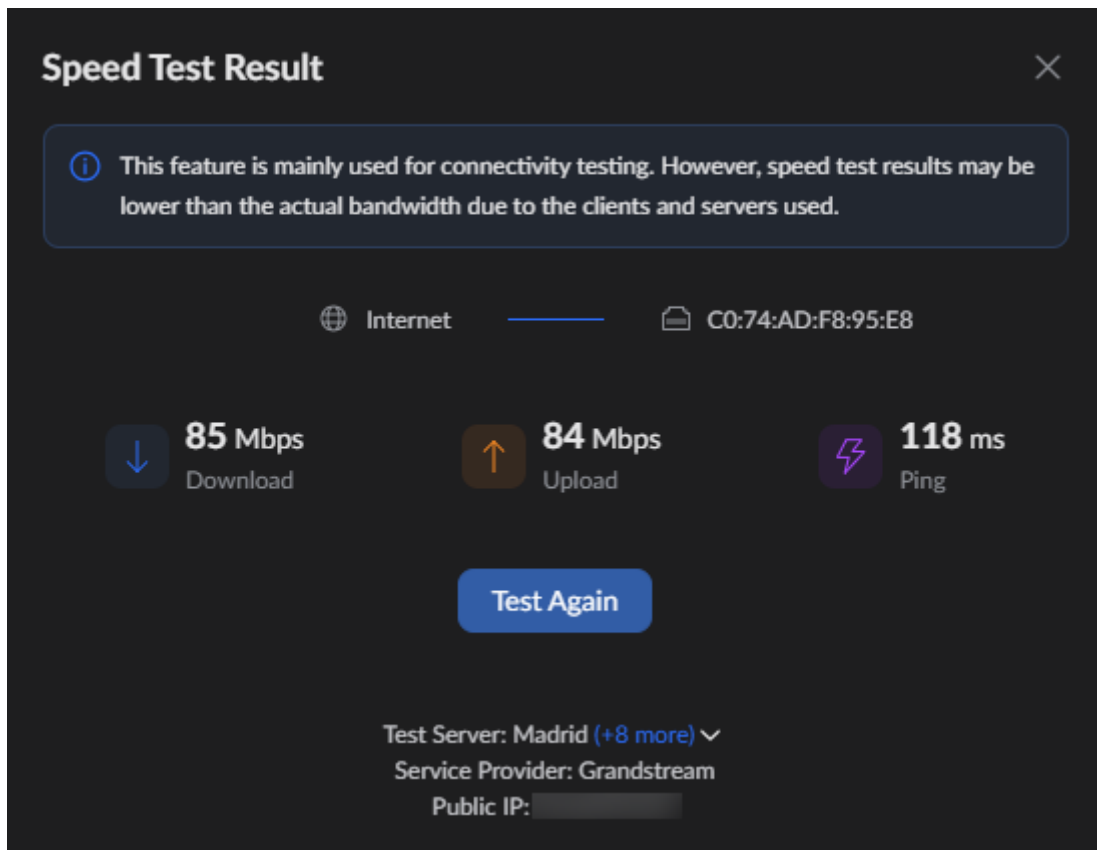
GWN APs Speed Test Download

Once the download speed test is over, the second test is testing upload speed.



GWN APs Speed Test Upload

Finally, the user will be able to see the final result, including Download/Upload speed and also the Ping response time in ms (Milliseconds). To run the speed test again, click on the "Test Again" button.



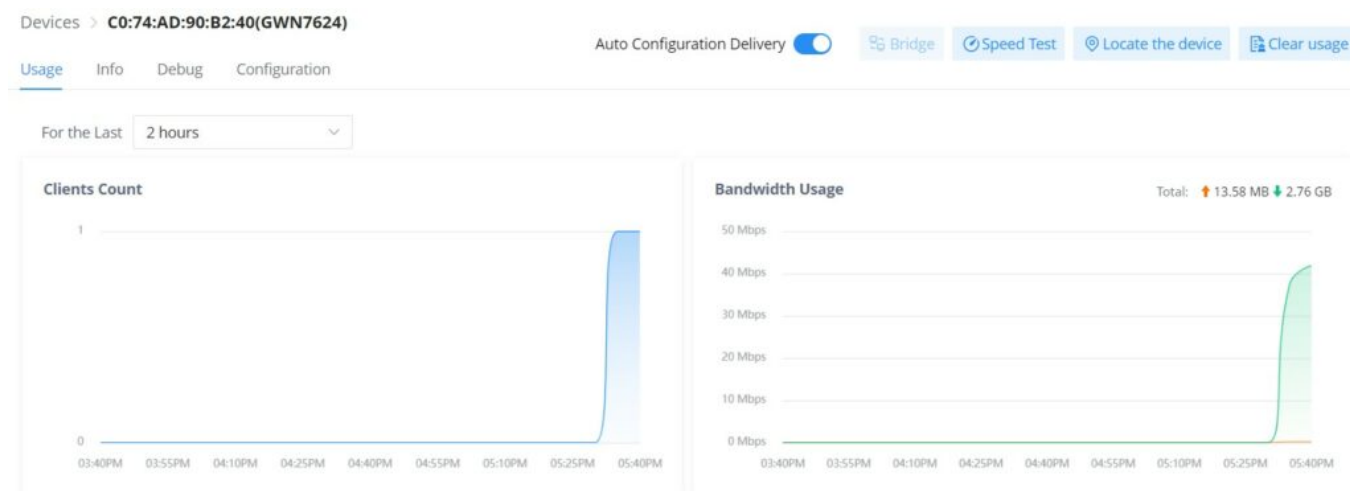
GWN APs Speed Test Result

Speed Test feature is not supported on GWN7610 and GWN7602 APs.

- **Locate the device:** easily locate the device by clicking on the "Locate the device" button, a white light will flash for 2 minutes, or click on the "Close" button.
- **GWN Access Point - Usage**

This page shows the usage of the GWN AP (Bandwidth usage and Client Count). The data shown can be filtered from 2 hours up to 1 month.

Clear usage: to clear collected data from the AP (Bandwidth usage and Client Count).



GWN AP Usage

- **GWN Access point - Info**

On this page, info related to the GWN AP information (firmware, Uptime, etc), RF (Radio Frequency), and

Current Client can be found here.

Devices > C0:74:AD:90:B2:40(GWN7624)

Auto Configuration Delivery ☒ Bridge Speed Test Locate the device Clear usage

UsageInfoDebugConfiguration

Device Information

Device NameGWN7624

ModelGWN7624

Link SpeedPOE 1000 M/FDLAN1 DisconnectedLAN2 DisconnectedLAN3 Disconnected

Current rate—

Show more information

RF Information

Radio	Channel	Wireless Power	Num of Clients	SSID	BSSID
2.4G	—	—	0	—	—
5G	—	—	0	—	—

Current Client

Hostname	IP Address	Total	Channel	RSSI
Ain E8:F4:08:3B:62:FD	192.168.5.154	1.31 GB 6.73 MB 1.3 GB	5G:44	-54

GWN AP Info

RF Information (BSSID)

The Basic Service Set Identifier (BSSID) is the MAC address of the wireless interface, or precisely the radio antenna (2.4GHz or 5GHz). For example, on the GWN7624 access point, we will have two BSSIDs, one for the 2.4GHz antenna and another for the 5GHz antenna. The two MAC addresses for both antennas will be based on the original device MAC address. In our example, the GWN7624 MAC address is C0:74:AD:XX:XX:40, then the 2.4GHz antenna BSSID is C0:74:AD:XX:XX:41, and for the 5GHz antenna is C0:74:AD:XX:XX:42. Access points include the BSSID in their beacons and probe responses.

Navigate to **web UI -> Devices -> Info**, then scroll down to RF Information (BSSID). Refer to the image below.

RF Information is only available for devices with a wireless signal (Wi-Fi), like GWN access points or GWN wireless routers.

Devices > C0:74:AD:90:B2:40(GWN7624)

Bridge
 Locate the device
 Clear usage

Usage
 Info
 Debug
 Configuration

Equipment Remarks
 Access Point

Hide more Information ^

RF Information

Radio	Channel	Wireless Power	Num of Clients	SSID	BSSID
2.4G	1	6dbm	0	Guests	c0:74:ad:90:b2:41
5G	36	8dbm	1	Guests	c0:74:ad:90:b2:42

BSSID

GWN Access point - Debug

GWN APs have many debug tools to help diagnose the issues:

- **Ping/Traceroute:** Ping and traceroute to check the reachability or the trace of an IP/Domain.
- **Capture:** to capture the traffic of GWN AP or GDMS Networking/Manager (a file will be downloaded to your local machine).
- **Core Files:** Core Files will be listed here when generated.
- **SSH Remote Access:** to allow SSH remote access
- **Event log:** a list of events related to the GWN AP.

Devices > C0:74:AD:90:B2:40(GWN7624)

Auto Configuration Delivery
 Bridge
 Speed Test
 Locate the device
 Clear usage

Usage
 Info
 Debug
 Configuration

Ping/Traceroute
 Capture
 Core Files
 SSH Remote Access
 Event log

Tool
 IPv4 Ping

* Destination IP Address/Domain
 192.168.5.10

Run

PING 192.168.5.10 (192.168.5.10): 56 data bytes
 64 bytes from 192.168.5.10: seq=0 ttl=64 time=2.255 ms
 64 bytes from 192.168.5.10: seq=1 ttl=64 time=0.565 ms
 64 bytes from 192.168.5.10: seq=2 ttl=64 time=0.553 ms
 64 bytes from 192.168.5.10: seq=3 ttl=64 time=0.567 ms
 64 bytes from 192.168.5.10: seq=4 ttl=64 time=0.567 ms

 --- 192.168.5.10 ping statistics ---
 5 packets transmitted, 5 packets received, 0% packet loss
 round-trip min/avg/max = 0.553/0.901/2.255 ms

GWN AP Debug

GWN Access Point - Configuration

On this page, the administrator can configure GWN AP-related settings like (name, band steering, VLAN, RF, etc). This configuration is limited to this GWN AP.

Devices > C0:74:AD:90:B2:40(GWN7624)

Auto Configuration Delivery
Bridge
Speed Test
Locate the device
Clear usage

Usage
Info
Debug
Configuration

General

Device name

GWN7624

0-64 characters

Device Remarks

Hall Access Point

0-64 characters

Fixed IP

Management VLAN

LED

Use System Settings

Reboot

Use System Settings

Band Steering

Use Radio Settings

Disable Ports

None

VLAN (LAN1)

Please enter VLAN ID

VLAN (LAN2)

Please enter VLAN ID

VLAN (LAN3)

Please enter VLAN ID

2.4GHz

2.4GHz

Back

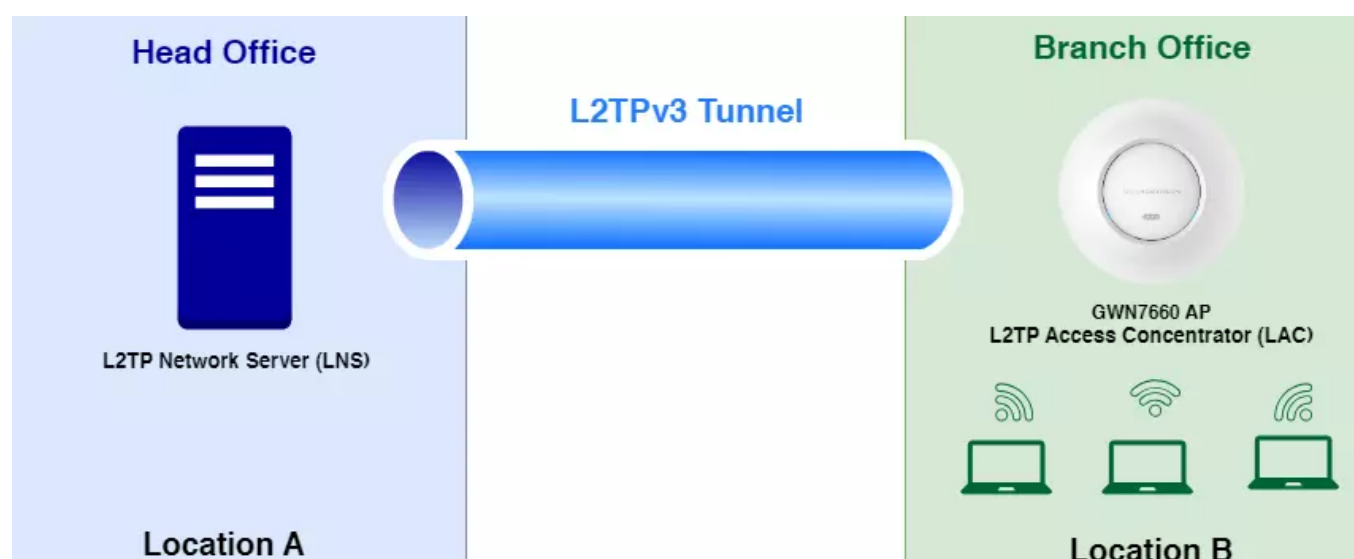
Save

GWN AP Configuration

To configure the Global Radio Settings, navigate to **Web UI -> Settings -> Wi-Fi page -> Global Radio Settings page**.

- GWN AP L2TPv3

L2TPv3 (Layer 2 Tunneling Protocol version 3) is a versatile protocol widely utilized for tunneling Layer 2 traffic over IP networks. When implemented on GWN Access Points acting as L2TP Access Concentrators (LACs) connecting to a central L2TP Network Server (LNS), it enables seamless and secure communication for wireless clients.



L2TPv3 Diagram

GWN Access Points, known for their reliability and performance, acting as LACs, establish tunnels to the LNS, facilitating the encapsulation and transmission of all wireless clients' Layer 2 traffic. This architecture

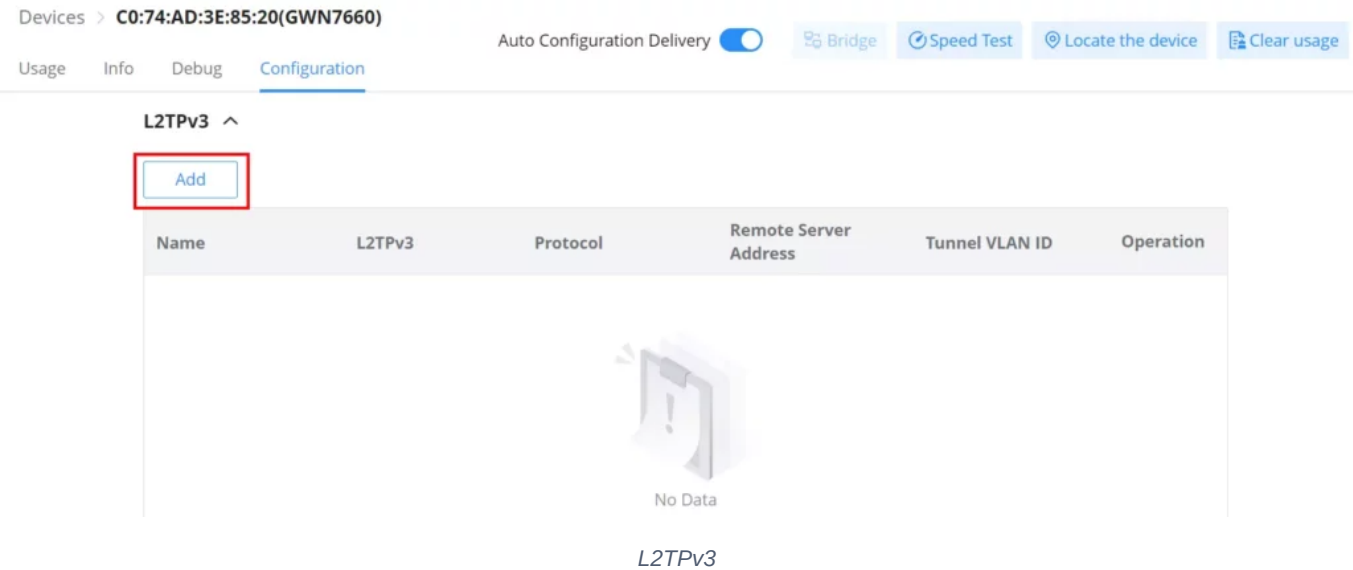
proves particularly beneficial in centralized network models where VLANs extend from corporate environments to remote branch sites.

By leveraging L2TPv3, wireless clients associated with GWN Access Points are seamlessly integrated into the corporate network infrastructure. They receive IP addresses dynamically from the DHCP server hosted on the LNS, ensuring efficient network resource allocation and management.

This integration empowers organizations with scalable and secure wireless connectivity solutions, optimized for various deployment scenarios. Whether for small businesses or enterprise environments, the utilization of L2TPv3 on GWN Access Points offers a robust framework for extending network capabilities while maintaining high levels of performance and security.

This feature is only supported on GWN7660 and GWN7660LR.

To add an L2TPv3 tunnel, click on the "Add" button as shown below:



It is best to set the MTU to match the server to avoid network connectivity issues.

Please refer to the figure and table below:

Add L2TPv3



*** Name**

1-32 characters

L2TPv3 Tunnel

L2TPv3



Protocol

☒ IP ☐ UDP

*** Remote Server Address**

197.99.53.22

*** Local Tunnel ID ⓘ**

1-4294967295 numbers

1111

*** Remote Tunnel ID ⓘ**

1-4294967295 numbers

7

Add L2TPv3 part 1

*** Local Session ID** ⓘ

1-4294967295 numbers

*** Remote Session ID** ⓘ

1-4294967295 numbers

Local Cookie

Supports 8-bit or 16-bit hexadecimal strings

Remote Cookie

Supports 8-bit or 16-bit hexadecimal strings

MTU

576-1500 numbers

*** Tunnel VLAN ID** ⓘ

Valid range is 2-4093, excluding 666

Cancel

Save

Add L2TPv3 part 2

Name	Set the name of the tunnel.
L2TPv3	Enable/Disable the tunnel.
Protocol	Set the encapsulation type of the tunnel. Valid values for encapsulation are: UDP, IP.
Remote Server Address	Set the IP address of the remote peer.
Local Tunnel ID	Set the tunnel id, which is a 32-bit integer value. This uniquely identifies the tunnel.
Remote Tunnel ID	Set the peer tunnel id, which is a 32-bit integer value assigned to the tunnel by the peer.
Local Session ID	Set the session id, which is a 32-bit integer value. This uniquely identifies the session being created. The value used must match the peer_session_id value being used at the peer.
Remote Session ID	Set the peer session id, which is a 32-bit integer value assigned to the session by the peer. The value used must match the session_id value being used at the peer.

Local Cookie	Set an optional cookie value to be assigned to the session. This is a 4 or 8 byte value, specified as 8 or 16 hex digits, e.g. 014d3636deadbeef. The value must match the peer_cookie value set at the peer. The cookie value is carried in L2TP data packets and is checked for expected value at the peer. Default setting is no cookie used.
Remote Cookie	Set an optional peer cookie value to be assigned to the session. This is a 4 or 8 byte value, specified as 8 or 16 hex digits, e.g. 014d3636deadbeef. The value must match the cookie value set at the peer. It tells the local system what cookie value to expect to find in received L2TP packets. Default is no cookie used.
MTU	Set the MTU.Note: Please make sure the MTU values are consistent with the INS values.
Tunnel VLAN ID	Specify the VLAN IDNote: The tunnel ID must be set in SSID, and make sure that SSID only has the AP(s) who enabled L2TPv3.

Add L2TPv3

Configure GWN Access Points in Batches

GWN Management platforms allow configuring GWN access points in batches. To do that, please select the access points, click on "More", then click "Configure" as shown in the figure below.

Devices

Add

Export

More

	Device model	MAC	IP Address	IPv6 Address
	GWN763	74:AD:01:93:D8 N7630	—	—
	GWN780	74:AD:BA:24:FC N7803P	192.168.5.134	—

Configure

Reboot

Return

Move

Reset

Delete

Batch Configuration of GWN Access Points

Batch configuration of GWN Access Points is for the same model only.

Edit Configuration File (Access Points)

GDMS Networking allows administrators to directly view and edit an access point's configuration file in text format. This feature is **available for GWN Access Points only** and is mainly intended for advanced troubleshooting, support-guided changes, or applying a configuration that is not easily handled through the standard UI.

Devices

Add Export Group Management More									
All Device Groups ▾		All Status ▾		All Models ▾		Q MAC/Name/IP/Device Group			
☐	Device Model	Name ▾	MAC ▾	IP Address ▾	IPv6 Address	Device Group	Firmware	Operation	
☐	 GWN7670	—	EC:74:D7:...	192.168.80.83	—	Default	1.0.25	 	
☐	 GWN7002	—	C0:74:AD:...	192.168.80.1	...	Default	1.0.11	 	
☐	 GWN7662	—	C0:74:AD:...	192.168.6.198	—	Default	1.0.25	 	
☐	 GWN7660LR	—	C0:74:AD:...	192.168.10.101	—	Default	1.0.25	 	
☐	 GWN7003	—	EC:74:D7:...	192.168.80.1	...	Default	1.0.11	 	

Edit Configuration File Access Points

To access and use the configuration file editor:

1. Go to **Devices**, locate the target access point, then click the **Edit Configuration File** icon under the **Operation** column.
2. In the **Edit Configuration File** window, you can edit the configuration directly in the text area. You can also use **Export** to download the current configuration as a text file, then edit it locally and use **Import** to upload the updated file back into the editor.
3. Click **Save** to apply the configuration to the access point.

Edit Configuration File

Export

Import

```
config debug 'debug'
  option log_level '7'
  option syslog_proto 'tls'
  option url_log_proto 'udp'

config general 'general'
  option password_change_required '1'
  option time_sync_method '1'
  list ntp_server '0.pool.ntp.org'
```

7800/999999

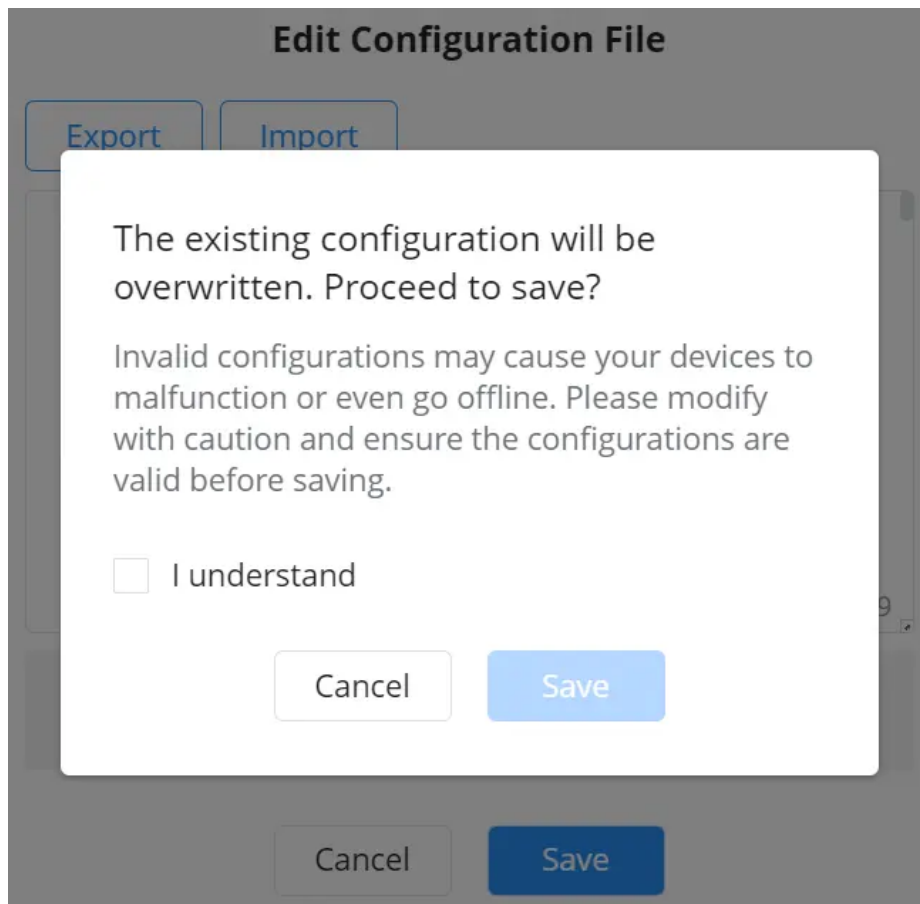
 Any modules updated through a configuration file cannot be overridden by manual changes made on this page.

Cancel

Save

Edit Configuration File Access Points

When saving a modified or imported configuration, GDMS Networking displays a confirmation warning that the existing configuration will be overwritten. Check **I understand**, then click **Save** to proceed.



Edit Configuration File Access Points

After any edit (including importing a file), the editor may show **"The initial configuration file has been modified."** This simply indicates the current text differs from what was originally loaded when the window opened.

Edit Configuration File

Export

Import

```
config debug 'debug'
  option log_level '7'
  option syslog_prot 'tls'
  option url_log_proto 'udp'

config general 'general'
  option password_change_required '1'
  option time_sync_method '1'
  list ntp_server '0.pool.ntp.org' 7799/999999
```

The initial configuration file has been modified.

⚠ Any modules updated through a configuration file cannot be overridden by manual changes made on this page.

Cancel

Save

Edit Configuration File Access Points

Notes:

- Configuration files may include sensitive values (such as keys or credentials). Treat exported files as confidential.
- Invalid configuration entries may cause the device to malfunction or go offline, so it is recommended to **export a backup** before making changes.
- Settings applied through a configuration file may not be overridden later through standard UI configuration pages.

Configure a GWN Router/GCC device

- NAT Traversal

Network Address Translation (NAT) translates private IP addresses to a public IP address, allowing multiple devices to share one public IP address. This poses a challenge for inbound connections from the internet. NAT Traversal facilitates these connections, making devices behind a NAT router accessible from the Internet. This is essential for applications like VoIP, online gaming, and remote management.

NAT Traversal is only supported on GWN routers and GCC devices.

When a Grandstream GWN router/GCC device is added to the GDMS Cloud, the NAT Traversal option becomes available. This section will guide you through the configuration process with step-by-step instructions and screenshots.

To configure NAT Traversal, under the Devices page, select a GWN router or GCC device, then click on "**NAT Traversal**" as shown below:



GWN RouterGCC device NAT Traversal

Click on the **"Add"** button to create a new NAT Traversal rule.

Add							
Name	Status	External Network Host/Port	Internal Network Host/Port	Service Type	Valid for	Operation	
Grandstream device	☒	13.38.221.13/16133	192.168.80.37/443	HTTPS	07/31 02:46P...	  	

Total 1 10/page < 1 >

Add NAT Traversal rule

Specify the Name, Service type, Internal IP address, and the port, then click on the **"Save"** button to save the rule.

Configure Service



* Name

1-64 characters

Grandstream device

Service Type

HTTPS

* IP Address

192.168.80.37

* Port

1-65535 numbers

443

Cancel

Save

Add/Edit NAT Traversal rule

Finally, for the rule to take effect, enable it under status and click on "Sign in" to get redirected.

Devices > C0:74:AD:BF:AF:50(GWN7002) > NAT Traversal

Add

Name	Status	External Network Host/Port	Internal Network Host/Port	Service Type	Valid for	Operation
Grandstream device		13.38.221.13/16133	192.168.80.37/443	HTTPS	07/31 02:46P...	Sign in

Total 1

10/page

<1>

Enable NAT Traversal

- GWN Router/GCC device - Usage

Same as the GWN AP usage tab, on this page, the user can find usage related to the GWN Router and GCC devices, like bandwidth usage, Real-time Rate, and even a Link Trace Table for detailed traffic data. Please refer to the figure below:

Devices > C0:74:AD:BF:AF:50

Auto Configuration Delivery

Clear usage

UsageInfoDebugConfiguration

GWN7002

Bandwidth Usage

Total:

6.59 MB

47.29 MB

2 hours

Real-time Rate

Link Trace Table

Refresh

→ Source

← Back

All IP Protocol Fan

Source/Destination IP

TCP

Source/Destination Port

IP Family	Protocol Type	Life Cycle	Mark	State	Flow	packets/b...
ipv4	tcp	295	255	ESTABLISHED	127.0.0.1[55372] ↔ 127.0.0.1[5303]	→ 7/609 ← 14/945
ipv4	tcp	295	2	ESTABLISHED	192.168.5.127[62134] ↔ 192.168.5.130[443]	→ 7/525 ← 14/777
ipv4	tcp	299	255	ESTABLISHED	192.168.5.130[56888] ↔ 192.168.5.93[8443]	→ 26/2646 ← 20/2428

GWN RouterGCC device Usage

- GWN Router/GCC Device - Info

All the information related to the GWN router can be found here, including Device information (name, firmware, etc), GWN router ports' status (active ports), and information about IPv4 and IPv6 (IP address, DNS, etc).

Devices > C0:74:AD:BF:AF:50

Usage Info Debug Configuration

Auto Configuration Delivery ☒ Clear usage

Device Information

Device Name	—
Model	GWN7002
Uptime	2h 35m
Device System Time	2023-09-18 05:43PM

[Show more Information](#) ▾

Port

WAN Name	WAN1
WAN Port MAC Address	C0:74:AD:BF:AF:50
Port Type	SFP
Port Rate	1Gbps Full duplex
Usage	↑ Pkts / Bytes: 0 / — ↓ Pkts / Bytes: 0 / —
Connection Time	0m

GWN RouterGCC device Info

- GWN Router/GCC Device - Debug

The same debug tools found on GWN APs can be found here; please check [GWN Access Points](#).

Devices > C0:74:AD:BF:AF:50

Usage Info **Debug** Configuration

Auto Configuration Delivery ☒ Clear usage

Ping/Traceroute Capture Core Files SSH Remote Access

Tool: IPv4 Ping

* Destination IP Address/Domain: 192.168.5.130

Interface: Auto

Run

```

PING 192.168.5.130 (192.168.5.130): 56 data bytes
64 bytes from 192.168.5.130: seq=0 ttl=64 time=0.443 ms
64 bytes from 192.168.5.130: seq=1 ttl=64 time=0.266 ms
64 bytes from 192.168.5.130: seq=2 ttl=64 time=0.290 ms
64 bytes from 192.168.5.130: seq=3 ttl=64 time=0.435 ms
64 bytes from 192.168.5.130: seq=4 ttl=64 time=0.441 ms

--- 192.168.5.130 ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max = 0.266/0.375/0.443 ms
  
```

GWN RouterGCC device Debug

- GWN Router/GCC Device - Configuration

On the GWN router/GCC device configuration tab, the user can configure device name, and Network Acceleration, enable/disable physical ports (WAN/LAN), and add/edit VLAN interfaces. Please refer to the figure below:

General
^

Device name

GWN7002

0-64 characters

Device Remarks

0-64 characters

Device Password ⓘ

8-32 characters, must include two of the following: numbers, letters and special characters

LED

Use System Settings

▼

Reboot

Use System Settings

▼

Network Acceleration
^

Acceleration Mode

Hardware Acceleration

▼

Port
^

Physical Port	Port Name	Port Mode	Status	Port Configuration
1	ISP	WAN		▼
2	0-64 characters	LAN		None ▼
3	Default WAN port	WAN		▼
4	0-64 characters	LAN		None ▼
5	LAN by Default	LAN		None ▼
6	0-64 characters	LAN		None ▼

VLAN Interface
^

Add

VLAN ⓘ	IPv4 Address/Prefix Length	IPv6	IPv6 Address Prefix/Prefix Length	Operation
--------	----------------------------	------	-----------------------------------	-----------

Back

Save

GWN Router Configuration

To configure the Global Radio Settings for wireless routers, navigate to **Web UI -> Settings -> Wi-Fi page -> Global Radio Settings page**.

VLAN Interface (interface for GWN routers/GCC device)

VLAN Interface, as the name suggests, turns a VLAN into a virtual interface that can be routed using layer 3 routing by giving this interface an IP address. To add a VLAN interface for GWN routers/GCC devices, please click on the **"Add"** button or configure a previously created one by clicking on the **"Configure icon"** under operation, refer to the figure below:

5	LAN	☒	All VLANs
6	LAN	☒	All VLANs
Device Password ⓘ			8-32 characters, must include two of the following: numbers, letters and special characters

VLAN Interface ^

[Add](#)

VLAN	IPv4 Address/Prefix Length	IPv6	IPv6 Address Prefix/Prefix Length	Operation
20(Guests)	192.168.20.1/24	Disabled	—	
30(Office)	192.168.30.1/24	Disabled	—	

[Back](#) [Save](#)

GWN Router configuration VLAN Interface

Then, select the VLAN from the list or visit the [LAN](#) page to create a VLAN (with or without a DHCP Server) first, in case there are no VLANs listed, then specify an IPv4 or IPv6 Address/Prefix for this VLAN interface.

Configure VLAN Interface



- Before configuring the IP address, configure the default route for the device in the static route to prevent the VSwitch from losing the default route and unable to connect to the cloud.

* VLAN ⓘ

30(Office)

* IPv4 Address/Prefix Length

Prefix length range 8-30

192.168.30.1

/

24

IPv6

[Cancel](#)[Save](#)

GWN routerGCC device AddEdit VLAN Interface

Before configuring the IP address, configure the default route for the device in the static route to prevent the VSwitch from losing the default route and being unable to connect to the cloud.

- **GWN Router/GCC Device - FXS Configuration (GWN7062ET Only)**

The **FXS Configuration** section allows administrators to configure and manage the FXS ports of supported GWN devices for analog telephony services. Through this section, users can configure SIP account registration settings, SIP server and network communication parameters, voice codec behavior, ring tone settings, and advanced call handling features. These configurations help ensure proper interoperability with SIP platforms, analog phones, PBX systems, and VoIP service providers.

All configuration settings can be applied individually for each available **FXS port**, allowing administrators to customize telephony behavior and SIP account settings independently per connected analog device or telephone line.

Account Settings: The **Account Settings** section is used to configure the basic SIP account information associated with the selected FXS port. Administrators can enable or disable the port and configure parameters such as the SIP User ID, authentication ID, authentication password, and display name. These settings are required for registering the FXS port with a SIP server or IP PBX system.

Devices > EC:74:D7:63:41:F4(GWN7062ET)

Usage Info Debug Configuration FXS Configuration

FXS1

Account Settings

SIP Settings

Voice Codec Settings

Ring Tones

Call Features

☒ Enable Port

☒ Port SIP User ID ⓘ

☒ SIP Authenticate ID ⓘ

☒ SIP Authenticate Password ⓘ

☒ Name ⓘ

10.1.1.1

1001

This is a test

Line1

Back

Save and Apply

SIP Settings: The **SIP Settings** section is used to configure SIP server communication and network-related SIP parameters. Administrators can define the primary and failover SIP servers, outbound proxy settings, NAT traversal methods, SIP transport protocols (UDP/TCP/TLS), local SIP ports, and SIP keep-alive mechanisms. These settings help ensure stable SIP registration and reliable communication between the FXS device and the VoIP infrastructure.

FXS1

Account Settings

SIP Settings

Voice Codec Settings

Ring Tones

Call Features

Registration & Proxy

* ☒ Primary SIP Server ⓘ

☒ Failover SIP Server ⓘ

☐ Prefer Primary SIP Server ⓘ

☐ Outbound Proxy ⓘ

☐ Backup Outbound Proxy ⓘ

NAT Traversal

☐ NAT Traversal

☒ No ☐ STUN ☐ UPnP

Advanced Settings

☐ Outgoing Call without Registration ⓘ

☒ SIP Transport ⓘ

☐ UDP ☐ TCP ☒ TLS

☐ Use Random SIP Port ⓘ

☐ Local SIP Port ⓘ

10.1.1.1

10.1.1.2

No

STUN

UPnP

UDP

TCP

TLS

5060

Back

Save and Apply

Voice Codec Settings: The **Voice Codec Settings** section allows administrators to configure RTP and audio processing behavior for voice calls. Settings include jitter buffer type and length, RTP port configuration, SRTP encryption mode, preferred DTMF method, and regional SLIC impedance settings. These parameters help optimize audio quality, call stability, compatibility, and voice security depending on the deployment environment and SIP provider requirements.

FXS1

Account Settings

SIP Settings

Voice Codec Settings

Ring Tones

Call Features

Codec Settings

☐ Jitter Buffer Type

☐ Fixed ☐ Adaptive ☒ NetEQ

☐ Jitter Buffer Length

☐ Low ☒ Medium ☐ High

RTP Settings

☐ Use Random RTP Port ⓘ

☐

☐ Local RTP Port ⓘ

5004

☐ SRTP Mode ⓘ

☐

Advanced Settings

☐ Preferred DTMF method ⓘ

RFC2833

☐ SLIC Setting ⓘ

USA 1 (BELLCORE 600 ohms)

Back

Save and Apply

Voice Codec Settings

Ring Tones: The **Ring Tones** section is used to customize telephony tone behavior for the selected FXS port. Administrators can configure dial tone, ringback tone, busy tone, reorder tone, and prompt tone language settings. These configurations help adapt the telephony experience to different regional standards and user preferences.

FXS1

Account Settings

SIP Settings

Voice Codec Settings

Ring Tones

Call Features

☐ Dial Tone ⓘ

f1=350@-17,f2=440@-17,c=0/0;

☐ Ringback Tone ⓘ

f1=440@-17,f2=480@-17,c=2000/4000;

☐ Busy Tone ⓘ

f1=480@-21,f2=620@-21,c=500/500;

☐ Reorder Tone ⓘ

f1=440@-13,c=300/10000;

☐ Prompt Tone Language

English

Back

Save and Apply

Call Features: The **Call Features** section provides advanced telephony and call handling configurations for the selected FXS port. Features include anonymous calling, anonymous call rejection, call waiting, hook flash support, DND reminder ring, visual message waiting indication (MWI), call forwarding options, emergency call handling, and audio gain adjustments for transmit and receive paths. These settings allow administrators to customize user calling behavior and enhance telephony functionality for analog devices connected to the FXS port.

FXS1

Account Settings

SIP Settings

Voice Codec Settings

Ring Tones

Call Features

Dial Settings

☐ Send Anonymous ⓘ

☐ Anonymous Call Rejection ⓘ

☐ Enable Call-Waiting ⓘ

☐ Enable Hook Flash

☐ Enable Reminder Ring for DND

☐ Enable Visual MWI ⓘ

☐ Visual MWI Type

FSK

NEON

☐ SUBSCRIBE for MWI

Advanced Settings

☐ Unconditional Forward Feature ⓘ

☐ Busy Forward Feature ⓘ

☐ Delayed Forward Feature ⓘ

Back

Save and Apply

Call Features

Configure a GWN Switch (Layer 2+ / Layer 3)

- GWN Switch - Usage

As for the GWN Switches usage tab, traffic statistics or PoE Ports power usage can be found here. The user can click on the "**Clear Traffic**" button to clear all the traffic or click on the "**Clear**" icon under operation to clear traffic only for a specific port.

Devices > C0:74:AD:DF:CC:94

Auto Configuration Delivery ☒

Usage

Info

Port

Debug

Configuration

Traffic Statistics

PoE Ports

Clear Traffic

Statistical Interval ⓘ

10 second(s)

▼

All Ports

▼

Port	Receive Rate	InOctets	InPackets	InErrPackets	Transmit Rate	OutOctets	OutPackets	OutErrPackets	Operation	
1/0/1	0.0 bps	0 B	0	0	0.0 bps	0 B	0	0		
1/0/2	0.0 bps	0 B	0	0	0.0 bps	0 B	0	0		
1/0/3	0.0 bps	0 B	0	0	0.0 bps	0 B	0	0		
1/0/4	0.0 bps	0 B	0	0	0.0 bps	0 B	0	0		
1/0/5	0.0 bps	0 B	0	0	0.0 bps	0 B	0	0		
1/0/6	0.0 bps	0 B	0	0	0.0 bps	0 B	0	0		
1/0/7	0.0 bps	0 B	0	0	0.0 bps	0 B	0	0		
1/0/8	0.0 bps	0 B	0	0	0.0 bps	0 B	0	0		

GWN Switch Usage

- GWN Switch - Info

Relevant GWN switch information or PoE power supply information can be found here.

Devices > C0:74:AD:DF:CC:94

Auto Configuration Delivery ☒

Usage

Info

Port

Debug

Configuration

Device Information

Device Name

—

Model

GWN7813P

Uptime

11m

Device System Time

2023-09-19 12:13PM

Show more Information ▼

PoE power supply information

Number of PoE ports

24

Total PoE power supply

360W

PoE reserved power

20W

PoE power consumption

0.0mW

Show more Information ▼

GWN Switch Info

- GWN Switch - Port

The Port tab under each GWN switch device in GDMS Networking provides a centralized interface to monitor and configure individual Ethernet ports. This includes port status, traffic rates, VLAN tagging, link aggregation, speed controls, authentication methods, and security settings.

This page allows administrators to fine-tune port behavior to meet both performance and security needs in enterprise networks.

Port List and Status View:

At the top of the Port tab, users can see a graphical representation of all switch ports. Each port block displays real-time link status, port number, and traffic activity.

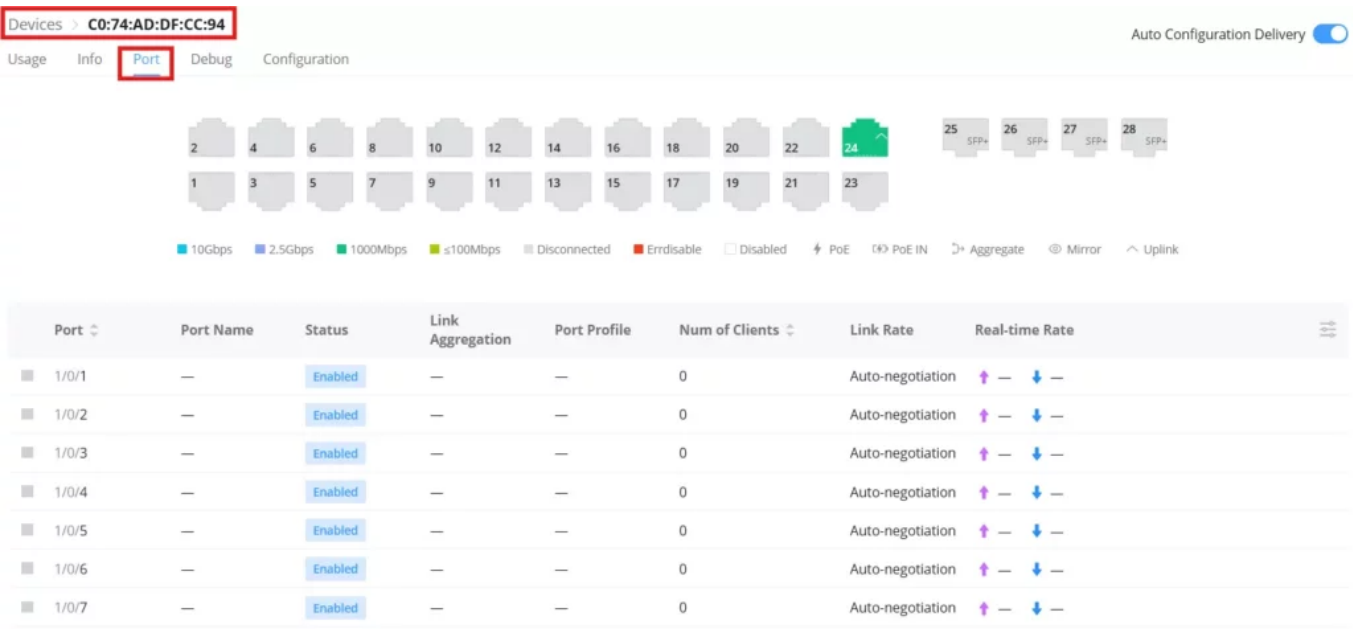
- Visual Layout (Top Panel)

The port layout gives a graphical overview of each port's current connection and status. Ports are color-coded by link speed:

- **10Gbps** - Cyan
- **2.5Gbps** - Blue
- **1000Mbps** - Green
- **<=100Mbps** - Yellow
- **Disconnected** - Gray
- **Errdisable** - Red
- **Disabled** - Light Gray

Icons can appear over ports to indicate special configuration:

- ? PoE (Power over Ethernet)
- <-> Aggregation (LAG)
- ?? Mirror (monitoring enabled)
- ? Uplink (indicates uplink port)



GWN Switch Port page

This layout helps network admins visualize the topology and quickly locate key connections or issues.

Port capabilities such as PoE, link speed (e.g., 2.5Gbps, 10Gbps), vary by switch model. Refer to your specific GWN switch model specifications to confirm supported features.

Clicking on a port opens a detailed configuration panel for that individual port.

Devices > C0:74:AD Auto Configuration Delivery ☒

Usage Info **Port** Debug Configuration

10Gbps 2.5Gbps 1000Mbps <100Mbps Disconnected Errdisable Disabled PoE PoE IN Aggregate Mirror Uplink

Port	Port Name	Status	Link Aggregation	Port Profile	Num of Clients	Link Rate	Real-time Rate
1/0/2	—	Enabled	—	—	—	Auto-negotiation	↑ — ↓ —
1/0/4	—	Enabled	—	—	—	Auto-negotiation	↑ — ↓ —
1/0/6	—	Enabled	—	—	—	Auto-negotiation	↑ — ↓ —
1/0/8	—	Enabled	—	—	—	Auto-negotiation	↑ — ↓ —
1/0/1	—	Enabled	—	—	—	Auto-negotiation	↑ — ↓ —
1/0/3	—	Enabled	—	—	—	Auto-negotiation	↑ — ↓ —
1/0/5	—	Enabled	—	—	—	Auto-negotiation	↑ — ↓ —
1/0/7	—	Enabled	—	—	—	Auto-negotiation	↑ — ↓ —
1/0/9	—	Enabled	—	—	—	Auto-negotiation	↑ — ↓ —

GWN Switch Port page

After selecting a port, the panel expands to include key settings grouped into the following areas:

- **Basic Info:** Port name, enable status, link profile
- **General Settings:** VLANs, duplex mode, flow control
- **Security Settings:** MAC or 802.1X authentication, isolation, guest VLAN

The top section of the port settings includes:

- **Port Number & Name:** Displays the port number. You can assign a custom name for easier identification (up to 64 characters).
- **Port Enable:** Toggle to enable or disable the port.
- **Link Aggregation:** Assign this port to a Link Aggregation Group (LAG).
- **Link Aggregation Type:** Choose between Static or LACP (Link Aggregation Control Protocol).
- **LACP Protocol Priority:** Set the priority for this port in the LAG group. Lower values indicate higher priority (range: 1-65535).
- **LACP Packet Timeout Period:** Choose between Slow (30s timeout) or Fast (1s timeout) modes.
- **Port Profile / LAG Port Profile:**
 - When **LAG is not enabled**, this setting appears as **Port Profile**.
 - When the port is assigned to a **LAG group**, it becomes a **LAG Port Profile**.
 - In both cases, this setting applies a predefined profile to the port or virtual LAG interface.
Note: The profile is only effective if the Port Profile Override is disabled.
- **Trust DHCP Snooping:** Enable to allow DHCP responses from trusted sources on this port.

To configure or manage port profiles, go to:

[Settings](#) -> [Profile](#) -> [Port Profile](#)

Devices > C0:74:AD Auto Configuration Delivery ☒

Usage Info **Port** Debug Configuration

■ 10Gbps
 ■ 2.5Gbps
 ■ 1000Mbps
 ■ ≤100Mbps
 ■ Disconnected
 ■ Errdisable
 ■ Disabled
 ⚡ PoE
 ⚡ PoE IN
 ➤ Aggregate
 ⌂ Mirror
 ⬅ Uplink

Port 2

Name 0-64 characters

Port Enable ☒

Link Aggregation ▼

Link Aggregation Type ☐ Static ☒ LACP

*LACP Protocol Priority 1-65535 numbers

LACP Packet Timeout Period ☒ Slow ☐ Fast

LAG port profile ▼

Trust DHCP Snooping ☒

GWN Switch Port page part 1

Port Configuration - Port Profile Override:

If **Port Profile Override** is enabled, the predefined port profile (or LAG port profile) will be ignored, and custom settings can be applied directly to the selected port. This is useful when specific port behavior is required outside of the standard profile applied to other ports.

The override settings are grouped into two sections: **General** and **Security**.

General Settings:

- **Native VLAN:** Selects the untagged VLAN for the port.
- **Allowed VLAN:** Lists the tagged VLANs allowed on the port.
- **Voice VLAN:** Enables a dedicated VLAN for voice traffic (requires Voice VLAN to be enabled globally).
- **Rate:** Sets the interface speed (Auto or manual selection).
- **Duplex Mode:** Choose between Auto-negotiation, Full-duplex, or Half-duplex.
- **Flow Control:** Enables or disables Ethernet flow control.
- **Enable Port STP:** Enables Spanning Tree Protocol for the port.
- **Incoming/Outbound Speed Limit:** Allows rate limiting in both directions.
- **LLDP-MED:** Enables LLDP-MED protocol for enhanced device discovery and voice services.
- **Network Policy TLV:** Allows setting network policy TLVs (Voice VLAN must be enabled first).

Port Profile Override

Port Profile Override



Once enabled, "Port Profile" will be invalid and the following custom configuration will be applied.

General ^

* Native VLAN

1 (Default LAN) ▾

Allowed VLAN

1 (Default LAN) × ▾

Voice VLAN



Please enable the Voice VLAN in the Global LAN Settings first

Rate

Auto ▾

Duplex Mode ⓘ



Auto-negotiation



Full-duplex



Half-duplex

Flow Control ⓘ



Auto-negotiation



Disabled



Enable

When the duplex mode is "Half-Duplex", the flow control function does not take effect.

Enable Port STP



Incoming Speed Limit



Outbound Speed Limit



LLDP-MED



Network Policy TLV



Please enable the Voice VLAN first.

GWN Switch Port page part 2

Security Settings:

- **Storm Control:** Enables protection against broadcast, multicast, or unknown unicast storms.
- **Port Isolation:** Isolates traffic from this port to others.
- **Port Security:** Allows MAC address-based security.
- **User Authentication Mode:** Selects between None, MAC-based, or 802.1X-based authentication.
- **Authentication Type:** Configure MAC Authentication and/or 802.1X with method (e.g., RADIUS).
- **Guest VLAN:** Assigns a fallback VLAN for unauthenticated clients (requires global Voice VLAN).
- **Port Control:** Defines behavior (e.g., Auto, Force-Authorized, Force-Unauthorized).
- **Re-authentication:** Enables periodic re-authentication for connected clients.

Security ^

Storm Control ☐

Port Isolation ☐

Port Security ⓘ ☐

User Authentication Mode ⓘ

MAC-based

Authentication Type ⓘ

Authentication Type

Method

☒ MAC Authentication

Preferred

Alternative

☐ 802.1X Authentication

RADIUS

Guest VLAN ⓘ



Enable the Guest VLAN in the Global LAN Settings first

Port Control ⓘ

Disabled

Re-authentication ⓘ



Cancel

Save

GWN Switch Port page part 3

You can either apply a shared configuration using a Port Profile (set under: [Settings -> Profile -> Port Profile](#)) or override that profile for a specific port using this section. The override is ideal for one-off configurations, while profiles offer reusability and consistency across devices.

- GWN Switch - Debug

Debugging tools like ping/traceroute are also available for GWN switches, as well as SSH Remote Access.

Devices > C0:74:AD:DF:CC:94

Auto Configuration Delivery ☒

Usage Info Port **Debug** Configuration

Ping/Traceroute

SSH Remote Access

Tool

IPv4 Traceroute

* Destination IP Address/Domain

192.168.80.1

Run

```
traceroute to 192.168.80.1 (192.168.80.1), 30 hops max, 38 byte packets
1 192.168.5.1 (192.168.5.1) 0.000 ms 0.000 ms 0.000 ms
2 * * *
3
```

- GWN Switch - Configuration

On this tab, under devices (only for GWN switches), the user can configure GWN switch-related configurations like switch name, RADIUS Authentication, and VLAN interfaces.

Device Password: Set the device's SSH remote login password other than APs, which is also the device's web login password.

Devices > EC:74:D7:3D:92:30 Auto Configuration Delivery ☒

Usage Info Port Debug Configuration

Device name 0-64 characters

Device Remarks 0-64 characters

Additional Remarks 0-64 characters

Device Password 8-32 characters, must include two of the following: numbers, letters and special characters

Longitude 0±180 characters

Latitude 0±90 characters

Management VLAN ☒

RADIUS Authentication

VLAN Interface

All Types

VLAN	Status	Type	IP Address	IPv6	IPv6 Local Link Address	IPv6 Global Unicast Address	Operation
------	--------	------	------------	------	-------------------------	-----------------------------	-----------

GWN Switch Configuration

VLAN Interface (interface for GWN switches)

Hosts in different VLANs cannot communicate directly and need to be forwarded through routers or layer 3 switching protocols.

A VLAN interface is a virtual interface in Layer 3 mode and is mainly used to implement Layer 3 communication between VLANs; it does not exist on the device as a physical entity. Each VLAN corresponds to an interface by configuring an IP address for it; it can be used as the gateway address of each port in the VLAN so that packets between different VLANs can be forwarded to each other on Layer 3 routing through the VLAN interfaces. GWN switches support IPv4 interfaces as well as IPv6.

To add a VLAN Interface for GWN switches, click on the **"Add"** button or click on the **"Configure icon"** to edit previously added one. Refer to the figure below:

Devices > EC:74:D7:3D:92:30
Auto Configuration Delivery ☒

Usage Info Port Debug Configuration

Device name
0-64 characters

Device Remarks
0-64 characters

Additional Remarks
0-64 characters

Device Password ⓘ
8-32 characters, must include two of the following: numbers, letters and special characters

Longitude
0±180 characters

Latitude
0±90 characters

Management VLAN ⓘ
☐

+ RADIUS Authentication

VLAN Interface

VLAN	Status	Type	IP Address	IPv6	IPv6 Local Link Address	IPv6 Global Unicast Address	Operation
------	--------	------	------------	------	-------------------------	-----------------------------	-----------

GWN Switch configuration VLAN Interface

- **If DHCP is selected:** hosts will obtain IP addresses automatically from whatever DHCP pool is configured for example a router.
- **If Static IP is selected:** for hosts to obtain IP addresses, the user must configure a VLAN with DHCP Server, and create or edit VLAN first [LAN](#).

Add VLAN Interface

Before configuring the IP address, configure the default route for the device in the static route to prevent the Switch from losing the default route and unable to connect to the cloud.

* VLAN

Select VLAN ID

IPv4 Address Type

☒ Static IP
☐ DHCP

* IPv4 Address/Prefix Length

Prefix length range 8-30

/

IPv6

☐

Cancel

Save

GWN Switch AddEdit VLAN Interface

Configure a GWN Switch (Layer 2 lite)

This section explains how to configure GWN Layer 2 Lite switches, such as the GWN7711P, using the GDMS Networking platform. Layer 2 Lite switches have a simpler interface compared to Layer 2+/Layer 3 switches, and not all features are available depending on the specific model. The following pages reflect the actual layout and tabs of the Web UI for easier orientation.

- Layer 2 Lite Switch - Usage - Traffic Statistics

The "Traffic Statistics" view under the Usage tab allows users to monitor packet flow in real-time for each port on the switch. It displays key metrics such as:

- InPackets / OutPackets
- InErrPackets / OutErrPackets

A statistical interval drop-down is available to refresh data every few seconds, and you can filter to show specific ports. Use the "Clear Traffic" button to reset statistics either for all ports or individually using the eraser icon in the Operation column.

Devices > EC:74:D7:0D:52:B9(GWN7711P) Auto Configuration Delivery ☒

Usage Info Port Debug Configuration

Traffic Statistics PoE Ports

[Clear Traffic](#) Statistical Interval 10 second(s) All Ports

Port	InPackets	InErrPackets	OutPackets	OutErrPackets	Operation
GE1	7640	0	37740	0	
GE2	0	0	0	0	
GE3	0	0	0	0	
GE4	0	0	0	0	
GE5	0	0	0	0	
GE6	0	0	0	0	
GE7	38695	0	8396	0	
GE8	0	0	0	0	

Layer 2 Lite Switch Usage Traffic Statistics

- Layer 2 Lite Switch - Usage - PoE Ports

This page appears only if the switch model supports PoE. It displays detailed power usage for each PoE-enabled port, including:

- Current (mA)
- Current Power (mW)
- Power-Off Schedule
- Temperature (degC)
- Power Supply Mode (Auto, Force, Close)

At the top, a banner appears prompting users to match the total configured input power to the actual power supply. Failing to do so may result in unstable power delivery to connected devices. The "Set up now" link will lead users directly to the **Configuration tab** to adjust power input values.

Devices > EC:74:D7:0D:52:B9(GWN7711P) Auto Configuration Delivery ☒

Usage Info Port Debug Configuration

Traffic Statistics **PoE Ports**

Please ensure that the total input power supply is equal to the actual input power supply. If the power does not match, the PoE port may be powered abnormally. [Set up now](#) X

All Ports

Port	Power Status	Current (mA)	Current power (mW)	PD Level	Temperature(°C)	Power-Off Schedule	Power Supply Mode	Operation
GE1	No power supplied	—	—	—	—	None	☒	
GE2	No power supplied	—	—	—	—	None	☒	
GE3	No power supplied	—	—	—	—	None	☒	
GE4	No power supplied	—	—	—	—	None	☒	

Layer 2 Lite Switch Usage PoE Ports

To configure PoE behavior per port, click the gear icon on the right. This opens advanced settings, allowing users to define the following:

- Port-specific Power Supply Standard (802.3af/at, 24V DC, 48V DC)
- Custom Power Limit (in Watts)
- Power Supply Mode (Auto / Force / Close)
- Power Priority (Highest, Second Highest, Lowest)

This lets the user fine-tune how power is allocated to each port, especially in cases where power is limited and needs to be prioritized.

Devices > EC:74:D7:0D:52:B9(GWN7711P) > **GE1**

Port	GE1
Power Supply Standard	802.3af/at
Power Supply Mode	☐ Auto ☐ Close ☒ Force
* Custom Limit(W)	10 1-30 numbers
Power Priority	☐ Highest ☒ Second Highest ☐ Lowest

Layer 2 Lite Switch PoE Ports configure port

Some standards like 24V and 48V DC are available only on models like the GWN7710R that support them.

Devices > EC:74:D7:0D:52:B9(GWN7711P) > **GE1**

Port	GE1
Power Supply Standard	802.3af/at
Power Supply Mode	☐ Auto ☐ Close ☒ Force
* Custom Limit(W)	10 1-30 numbers
Power Priority	☐ Highest ☒ Second Highest ☐ Lowest

Layer 2 Lite Switch PoE Ports power supply standard

- Layer 2 Lite Switch - Info

The Info tab provides a quick summary of system data, including:

- Device Name
- Model
- System Uptime
- PoE Power Supply Information (Total capacity, reserved, consumption)

This tab is read-only and reflects current operating conditions. It also includes chip-level power status, such as working condition and voltage delivery.

This is especially useful when troubleshooting PoE issues or confirming if the system is receiving and supplying adequate power.

Devices > **EC:74:D7:0D:52:B9(GWN7711P)**

Usage **Info** Port Debug Configuration

Device Information

Device Name	GWN7711P
Model	GWN7711P
Uptime	25m
Device System Time	—

[Show more Information](#) ▾

PoE power supply information

Number of PoE ports	4
Total PoE power supply	65W
PoE reserved power	5W
PoE power consumption	0mW
Configured power	—
PoE power supply support type	802.3af/802.3at/24V DC 2Pair/24V DC 4Pair/48V DC 4Pair
Chip1	Working Status ON Power Supply Voltage 52V

[Hide more Information](#) ▲

Layer 2 Lite Switch Info

If the switch is configured in a stack, the user can switch the view between the switches in the same stack.

GDMS Networking

World admin ▾

Auto Configuration Delivery ☐

Devices > **C0:74:AD:DF:D6:C8(7813P-D6C8)**

Usage **Info** Port Debug Configuration

Device Information

Device Name	7813P-D6C8
Model	GWN7813P
Uptime	8d 3h 7m
Device System Time	2026/07/29 20:34

[Show more Information](#) ▾

PoE power supply information

Number of PoE ports	24
Total PoE power supply	370 W
PoE reserved power	20 W
PoE power consumption	38.19 W

[Show more Information](#) ▾

7813P-D6C8(D: 1) ▲
7813P-D6C8(D: 1)
7813P ---DEFB(D: 2)

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Stacked Switch Info

- Layer 2 Lite Switch - Port

The Port tab shows a visual representation of the switch's physical ports. Each port's color indicates its current link speed or state:

- **Green:** Connected (speed color-coded)

- **Grey:** Disconnected or Disabled
- **Orange/Red:** Error-disabled

It also displays PoE and LAG status icons per port. These indicators vary by model and capabilities - some support 10Gbps or 2.5Gbps, depending on the hardware.

Devices > EC:74:D7:0D:52:B9(GWN7711P) Auto Configuration Delivery ☒

Usage Info **Port** Debug Configuration



10Gbps
2.5Gbps
1000Mbps
≤100Mbps
Disconnected
Error-disabled
Disabled
PoE
PoE IN
Aggregate
Mirror
Uplink

Port	Port Name	Status	Link Aggregation	Port Profile	Link Rate
GE1	—	Enabled	—	—	Auto-negotiation
GE2	—	Enabled	—	—	Auto-negotiation
GE3	—	Enabled	—	—	Auto-negotiation
GE4	—	Enabled	—	—	Auto-negotiation
GE5	—	Enabled	—	—	Auto-negotiation
GE6	—	Enabled	—	—	Auto-negotiation
GE7	—	Enabled	—	—	Auto-negotiation
GE8	—	Enabled	—	—	Auto-negotiation

Layer 2 Lite Switch Port page

Clicking on a port opens the configuration window. Here, users can:

- Enable or disable the port
- Assign it to a Link Aggregation Group (LAG)
- Choose Aggregation Type (Static or LACP)
- Set LACP priority and timeout behavior
- Apply a Port Profile

If LAG is enabled, the user configures a LAG Profile. If LAG is disabled, the user can assign a standard Port Profile. These profiles are preconfigured templates stored in the system to simplify port configuration across multiple devices or ports. Check [Port Profile](#) for more info.

If "Port Profile Override" is toggled on, the system ignores the assigned Port Profile and allows direct manual configuration of port behavior.

Devices > EC:74:D7:0D:52:B9(GWN7711P) Auto Configuration Delivery ☒

Usage Info **Port** Debug Configuration

10Gbps 5Gbps 1000Mbps 100Mbps Disconnected Errdisable Disabled PoE PoE IN Aggregate Mirror Uplink

Port 1

Name: GWN7711P - Port 1 0-64 characters

Port Enable: ☒

Link Aggregation: LAG1 (0/8)

Link Aggregation Type: ☐ Static ☒ LACP

* LACP Protocol Priority: 32768 1-65535 numbers

LACP Packet Timeout Period: ☒ Slow ☐ Fast

LAG port profile: Port Profile for Layer 2 lite switches

Trust DHCP Snooping: ☒

Port Profile Override

Port Profile Override: ☐ Once enabled, "Port Profile" will be invalid and the following custom configuration will be applied.

Layer 2 Lite Switch Edit port

Port Profile configuration allows users to set advanced parameters such as LLDP-MED, Voice VLAN, rate control, and more. These profiles can be created once and applied across supported switch models, including Layer 2, Layer 2 lite, and Layer 3 switches.

If the switch is stacked, the user can toggle the view between all the stacked switches in the same page.

GDMS Networking World admin

Devices > C0:74:AD:DF:D6:C8(7813P-D6C8) Auto Configuration Delivery ☒

Usage Info **Port** Debug Configuration

ID1 (7813P-D6C8) ID2 (7813P-DEF8)

10Gbps 5Gbps 1000Mbps 100Mbps Disconnected Errdisable Disabled PoE PoE IN Aggregate Mirror Uplink Stack

Stack port configuration is not supported

Port	Port Name	Status	Link Aggregation	Port Profile	Num of Clients	Link Rate	Real-time Rate
1/0/1	—	Enabled	None	All VLANs	1	Auto-negotiation	5.58 Kbps 11.36 Kbps
1/0/2	API-Port-EY6Y...	Enabled	None	All VLANs	0	Auto-negotiation	0bps 0bps
1/0/3	API-Test-Port01...	Enabled	None	All VLANs	0	Auto-negotiation	0bps 0bps
1/0/4	7665--95b0-Re	Enabled	None	All VLANs	1	Auto-negotiation	7.81 Kbps 14.95 Kbps
1/0/5	7625	Enabled	None	All VLANs	1	Auto-negotiation	2.36 Kbps 4.63 Kbps
1/0/6	7604-bridge	Enabled	None	All VLANs	0	Auto-negotiation	0bps 0bps
1/0/7	7664	Enabled	None	All VLANs	0	Auto-negotiation	0bps 0bps
1/0/8	7670E--879D	Enabled	None	All VLANs	1	Auto-negotiation	2.46 Kbps 3.66 Kbps
1/0/9	—	Enabled	None	All VLANs	0	Auto-negotiation	0bps 0bps
1/0/10	—	Enabled	None	All VLANs	1	Auto-negotiation	15.34 Kbps 5.38 Kbps
1/0/11	—	Enabled	None	All VLANs	0	Auto-negotiation	0bps 0bps
1/0/12	—	Enabled	None	All VLANs	1	Auto-negotiation	3.13 Kbps 1.13 Kbps
1/0/13	7302	Enabled	None	All VLANs	0	Auto-negotiation	0bps 0bps

Stacked Switch Port Information

- Layer 2 Lite Switch - Debug

The Debug tab gives access to diagnostic tools, currently limited to Ping functionality. The tool allows the user to test network reachability for IPv4 addresses or domain names.

Enter the destination IP or domain, select the protocol type, and click "Run." The results will show round-trip

time, packet loss, and other network diagnostic info.

This is useful for confirming whether a device has connectivity to upstream devices or the internet.

Devices > EC:74:D7:0D:52:B9(GWN7711P)

Usage Info Port **Debug** Configuration

Ping

Tool IPv4 Ping

* Destination IP Address/Domain 1.1.1.1

Run

Host Address: 1.1.1.1
Number of Packets sent: 4
Number of Packets Received: 4
Packet Lost: 0
Minimum Round Trip Time: 23 ms
Maximum Round Trip Time: 27 ms
Average Round Trip Time: 24 ms
Status: Ping succeed

Layer 2 Lite Switch Debug

- Layer 2 Lite Switch - Configuration

The Configuration tab allows users to customize device identity, location, and network behavior. Available fields include:

- Device Name
- Remarks
- Device Password (cloud-set password overrides local device password)
- Latitude and Longitude (can be manually entered or auto-filled if device is mapped)
- Total Power Input (W)

The Total Power Input value is critical for PoE stability. It should match the physical power supply connected to the switch. An incorrect setting may lead to ports not supplying power properly.

The lower section also includes IP Settings, where users can:

- Set static or dynamic IP addressing
- Enable Static DNS
- Specify Preferred and Alternate DNS Servers

This section ensures the device can reliably connect to the network and resolve domain names.

Devices > EC:74:D7:0D:52:B9(GWN7711P)

Usage
Info
Port
Debug
Configuration

Auto Configuration Delivery ☒

Device name
GWN7711P
0-64 characters

Device Remarks
layer 2 lite Switch with 4 PoE+ ports
0-64 characters

Device Password ⓘ
8-32 characters, must include two of the following: numbers, letters and special characters

Longitude
0±180 characters

Latitude
0±90 characters

Total Power Input (W) ⓘ
65
15-115 numbers

ⓘ Please ensure that the total input power supply is equal to the actual input power supply. If the power does not match, the PoE port may be powered abnormally.

IP Settings

IPv4 Address Type
Obtain IP Automatically (DHCP)

Static DNS
☒

* Preferred DNS Server
8.8.4.4

Alternative DNS Server
1.1.1.1

Layer 2 Lite Switch Configuration

CLIENTS

From the clients page, the administrator can monitor and manage all the clients connected to the network/GWN devices. A list of all connected clients with their related information, such as connection type, IP Address, total bandwidth usage, associated devices (GWN AP, router, or switch), and more, will be displayed.

GDMS Networking allows administrators to customize the client information displayed for detected clients, including details such as Hostname, Connection status, SSID, BSSID, VLAN ID, IP Address, IPv6 Address, 802.1X Identity, Wi-Fi Band, total traffic usage, upload and download statistics, RSSI, link rate, associated devices, station mode, guest status, connection time, operating system, manufacturer, first seen timestamp, and last seen timestamp.

GDMS Networking also supports client batch configuration, allowing administrators to select and manage multiple clients simultaneously for more efficient client management and configuration operations across the network.

In addition, GDMS Networking supports client offline alarms and bandwidth usage alerts, allowing administrators to receive notifications when a client disconnects unexpectedly or when a client exceeds a specified bandwidth usage threshold. This helps administrators quickly detect abnormal behavior, monitor network usage, and improve overall network management and troubleshooting efficiency.

For more information about a client or related configuration settings, please click on the client entry or click on the configuration icon. Please refer to the figure below:

Clients

Export

Now Online

All Clients

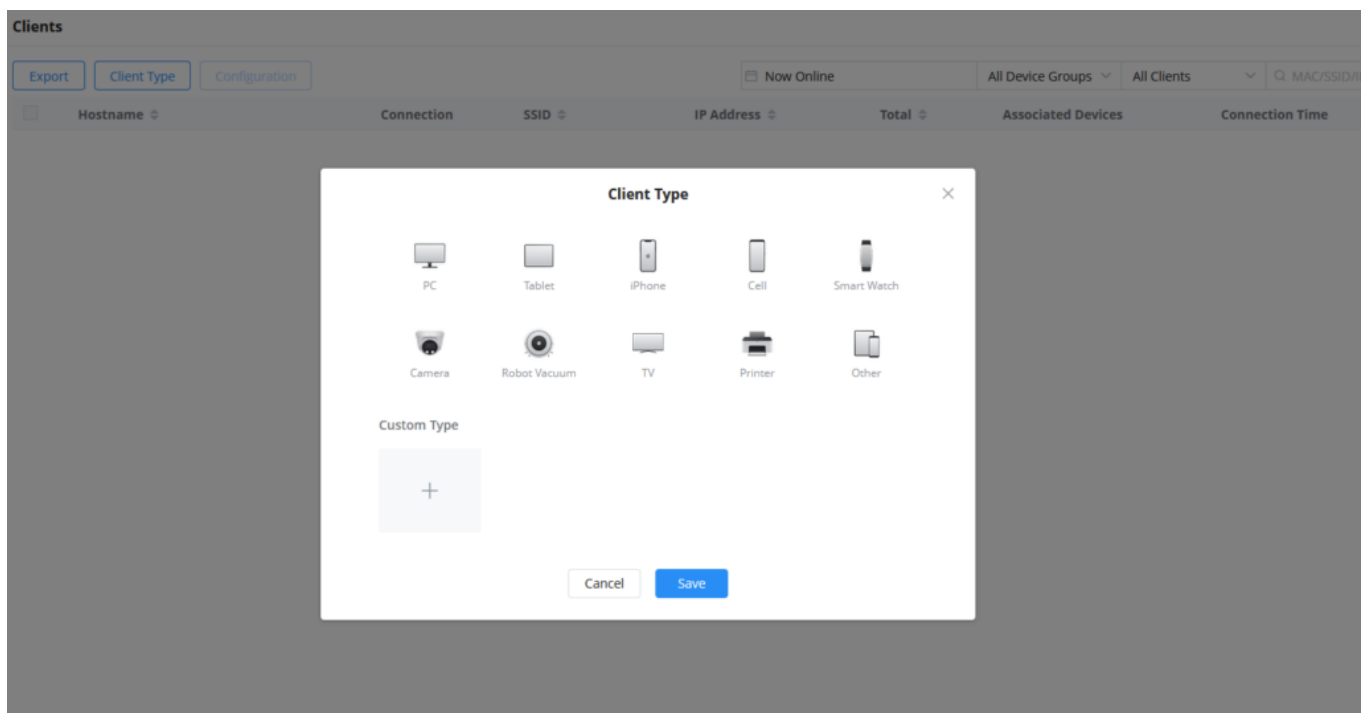
Q MAC/SSID

Hostname	Connection	SSID	VLAN ID	IP Address	Total	RSSI	Associated Devices	Station Mode	Connection Time
Ain	Wireless	GWN76...	1	192.168.5.154	690.59 KB	-55	GWN7624 C0:74:AD:...	11AC_VH...	1h28m
	Wired	—	1	192.168.0.1	—	—	C0:74:AD:...	—	0m
	Wired	—	1	—	—	—	C0:74:AD:...	—	0m
	Wired	—	1	—	—	—	C0:74:AD:...	—	0m
	Wired	—	1	—	—	—	C0:74:AD:...	—	0m
	Wired	—	1	—	—	—	C0:74:AD:...	—	0m
	Wired	—	1	—	—	—	C0:74:AD:...	—	0m
	Wired	—	1	192.168.5.113	—	—	C0:74:AD:...	—	0m
	Wired	—	1	192.168.5.85	—	—	C0:74:AD:...	—	0m

☒ Hostname
☒ Connection
☒ SSID
☒ VLAN ID
☒ IP Address
☐ IPv6 Address
☐ Wi-Fi Band
☒ Total
☐ Upload
☐ Download
☒ RSSI
☐ Link Rate
☒ Associated Devices
☒ Station Mode
☐ Guest
☒ Connection Time
☐ OS
☐ Manufacturer
☐ First Seen
☐ Last Seen

Clients Page

GDMS Networking also supports Client Type Identification and Classification, allowing administrators to distinguish connected clients based on their device category, such as PCs, tablets, smartphones, cameras, printers, TVs, and other device types.



The users also have the option to set an icon for the client from the predefined icons or add a new custom one, as shown below:

Clients

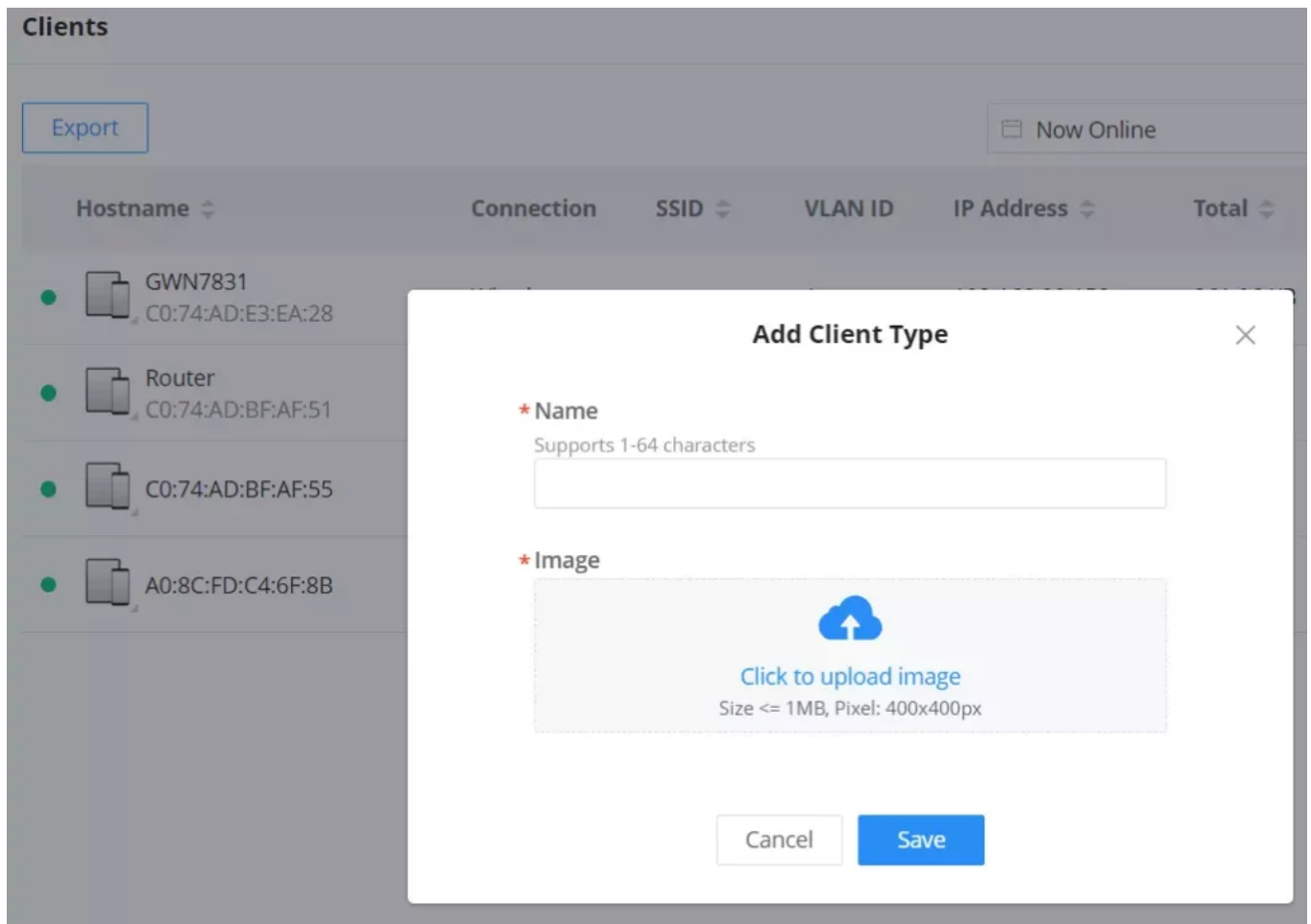
Export

Hostname		Connection
	 C0:74:AD:25:2A:08	Wired
	 C:99:57:BC:B9:F7	Wired

 Cell
 Smart Watch
 Camera
 Robot Vacuum
 TV
 Printer
 Other ✓
 Add New Type

Clients page set an icon

To add a custom icon, click on "**Add New Type**" as shown above, then upload the icon image and specify a name for it.



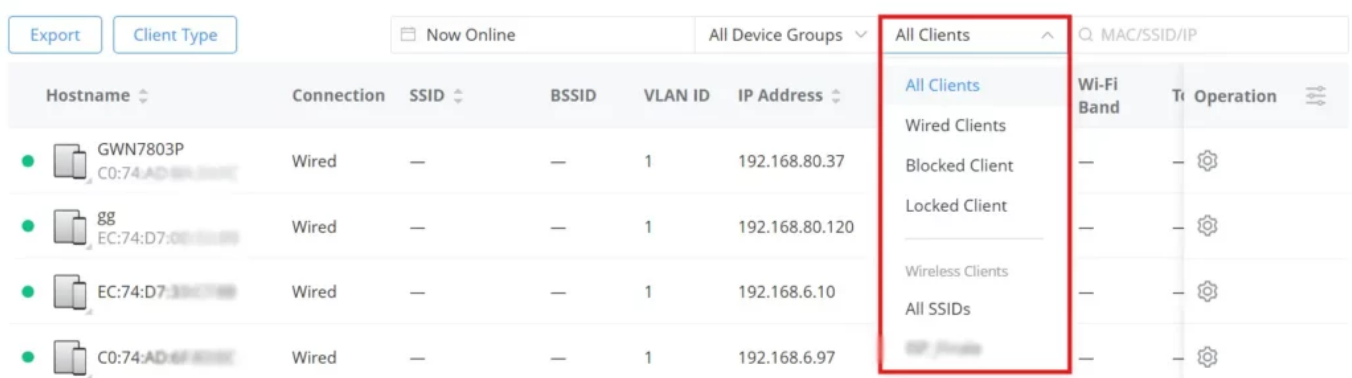
Clients page set a custom icon

To make it easier to find specific clients, you can use the **Client Type** filter at the top of the Clients page to narrow down the list.

This filter allows you to display:

- **Wired Clients** to show only clients connected by Ethernet.
- **Wireless Clients** to show only clients connected through Wi-Fi.
- **All SSIDs** or a specific SSID to list wireless clients connected to that SSID.
- **Blocked Client** to show clients that are currently blocked.
- **Locked Client** to show clients that are locked to a specific access point.

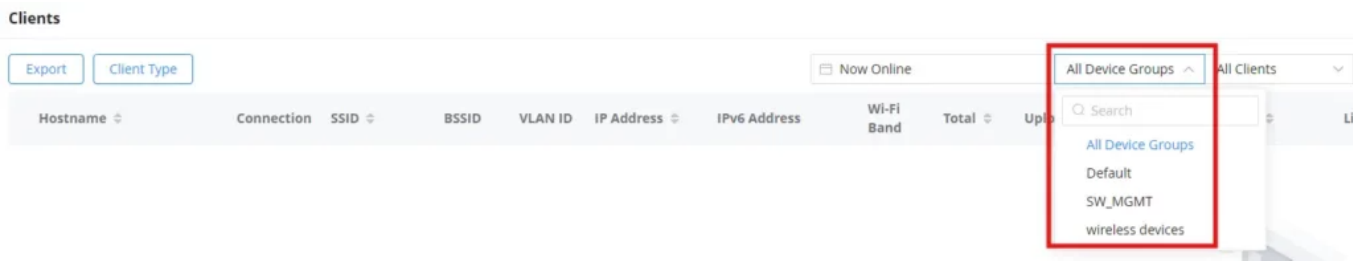
Clients



Clients Page sorting

The **Clients** page also supports filtering by **Device Group**. Use the **All Device Groups** drop-down list to

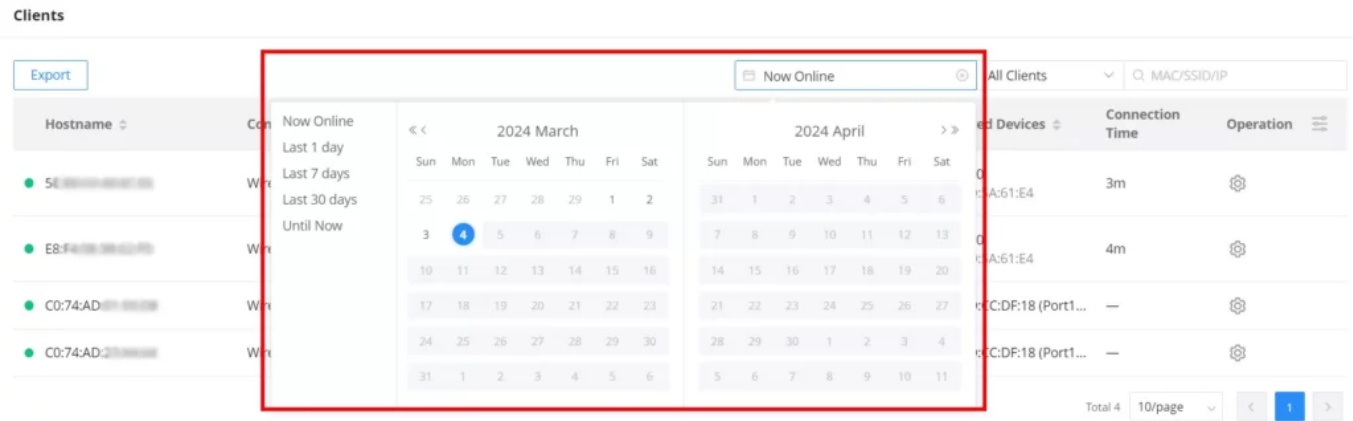
show clients associated with devices in a specific device group, or keep **All Device Groups** selected to display clients from all groups. Click here to know more about [Device Groups](#).



Clients Page filter by Device Groups

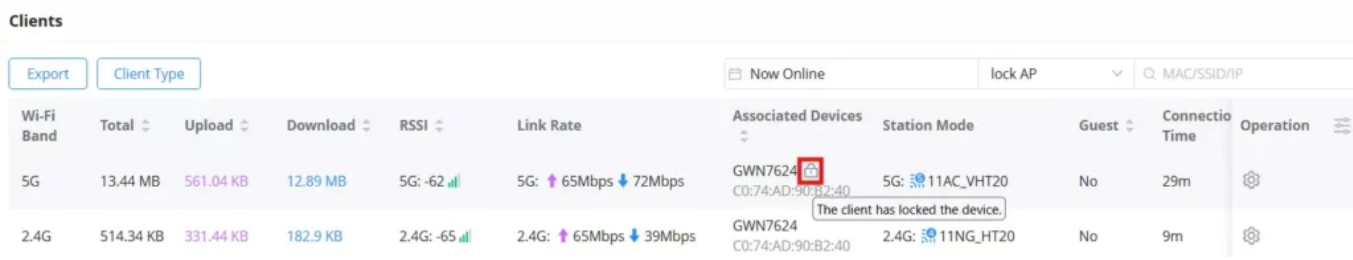
In the same way, users can filter clients by wired and wireless connections; they can also filter by time (calendar). Many options are available:

- **Now Online:** displays currently connected clients.
- **By day:** displays connected clients from a past day selected from the calendar.
- **Last 1 day:** displays connected clients of the last day.
- **Last 7 Days:** displays connected clients of the last 7 days.
- **Last 30 days:** displays connected clients of the last 30 days.
- **Until Now:** displays all connected clients until the current moment.



Clients Page calendar

A **lock icon** is displayed next to the Access Point under the **Associated Devices** column to indicate that the connected client is locked to that specific AP. For more details, check [Configure a Client](#).



The client has locked the device

Configure a Client

The **Client Configuration** tab allows users to customize settings for individual clients connected to the network. This includes blocking specific wireless clients, applying bandwidth restrictions, setting DHCP static IP assignments, and binding clients to specific Access Points (APs) with optional failover.

When a wireless client is selected, additional options are available:

- **Client Blocking** allows the administrator to block a wireless client from the network. This is applied via the Global Blocklist, which supports up to 1000 MAC entries. You can also specify whether the block is permanent (Always) or temporary.
- **Lock to the Access Point** allows binding the client to a specific AP. If enabled, the client will always connect to the assigned AP. An optional **Failover Access Point** can be set to provide redundancy in case the primary AP becomes unavailable.
- The **View All APs with Lock Devices** option provides a centralized list of all APs with locked clients, simplifying the process of tracking and managing client bindings.

Clients > **E8:F4:08:3B:62:FD(Ain)**

Usage

Info

Configuration

Hostname

Ain

0-64 characters

Client Blocking



[View Global Blocklist](#)

Block duration ⓘ



Always



Temporarily

Bandwidth Rules ⓘ

Client_Block



DHCP Static IP address binding



This client can be bound only to the current network

Lock to the Access Point



[View All APs with Lock Devices](#)

Back

Save

Client Configuration part 1

Clients > **E8:F4:08:3B:62:FD(Ain)**

Usage

Info

Configuration

Hostname

Ain

0-64 characters

Client Blocking



[View Global Blocklist](#)

Bandwidth Rules ⓘ

Client_Block



DHCP Static IP address binding



This client can be bound only to the current network

Lock to the Access Point



[View All APs with Lock Devices](#)

* Access Points

GWN7624(C0:74:AD:90:B2:40)

Failover for Lock to Access Point ⓘ

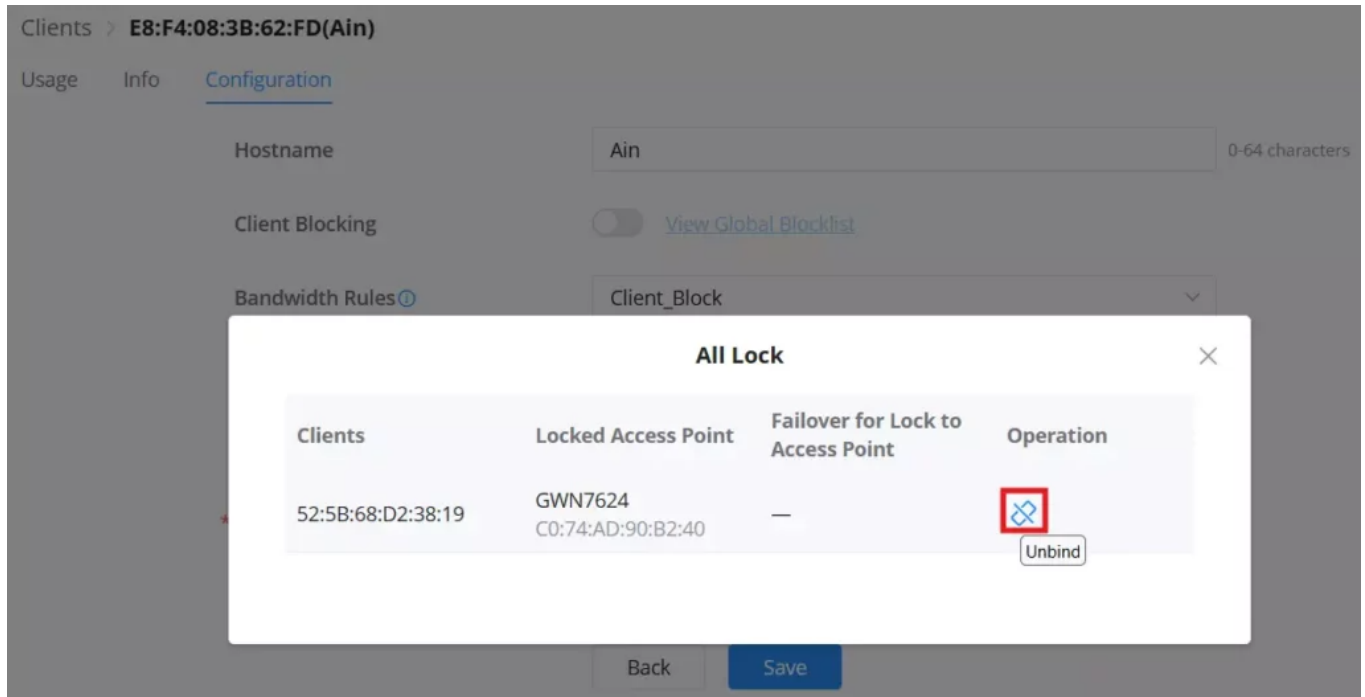
None

None

GWN7624(C0:74:AD:90:B2:40)

Client Configuration part 2

When viewing locked client devices under **View All APs with Lock Devices**, users can quickly **unbind** a client from its associated Access Point by clicking the **Unbind** icon in the Operation column.



Client Configuration part 3

Field	Description
Hostname	The name assigned to the client device.
Client Blocking	Option to block the client device from accessing the network. Notes: Client Blocking and Lock to the Access Point can't be enabled at the same time. Only applicable to wireless clients. Click on View Global Blocklist to view the Global Blocklist or add new one.
Block Duration	Determines if the block is always or temporary. * Always: Will always block the client; * Temporarily: Blocks the client for a set period of time. Once the set duration is reached, the block automatically cancels.
Duration	Specifies the duration for the temporary block (in days, hours, and minutes).
Bandwidth Rules	Defines bandwidth rules applied to the client, select from the list or click on "Add New Bandwidth rule" to add a new one. Note: The bandwidth rule does not take effect on wired clients.
DHCP Static IP address binding	Enables binding the client to a specific IP address within the network.
VLAN	Specifies the VLAN to which the client is assigned.
IP Address	The static IP address assigned to the client.
Lock to the Access Point	Option to lock the client to a specific access point. Note: Client Blocking and Lock to the Access Point can't be enabled at the same time. View All APs with Lock Devices: opens a list view of all access points with locked clients and their assigned failover APs.
Access Point	Choose the primary AP the client will stay connected to.
Failover for Lock to Access Point	Optional backup AP. If the primary AP fails, the client will connect to this failover AP.

Client Configuration

Client usage

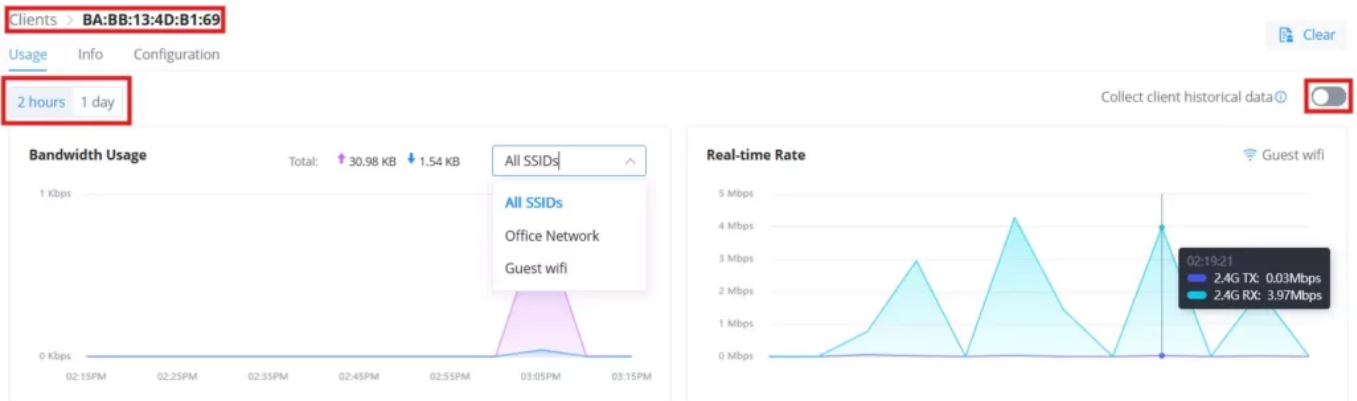
The **Usage** tab provides per-client bandwidth statistics and real-time rate monitoring. This is useful for reviewing network activity or diagnosing traffic-related issues per device.

Navigation: Clients -> [Select a Client] -> Usage Tab

- Real-Time View & Short-Term Usage

When **Collect client historical data** is **disabled**, the chart provides usage history over **short timeframes only**:

- **Selectable ranges**: 2 hours or 1 day
- **Real-time Rate Graph**: Continuously updates to reflect current bandwidth activity in Mbps
- **Bandwidth Usage Graph**: Displays total upload/download during the selected timeframe
- **SSID Filter**: View usage for a specific SSID or across all SSIDs
- **Graph Tooltips**: Hover over any point on the graph to view the upload/download at that time

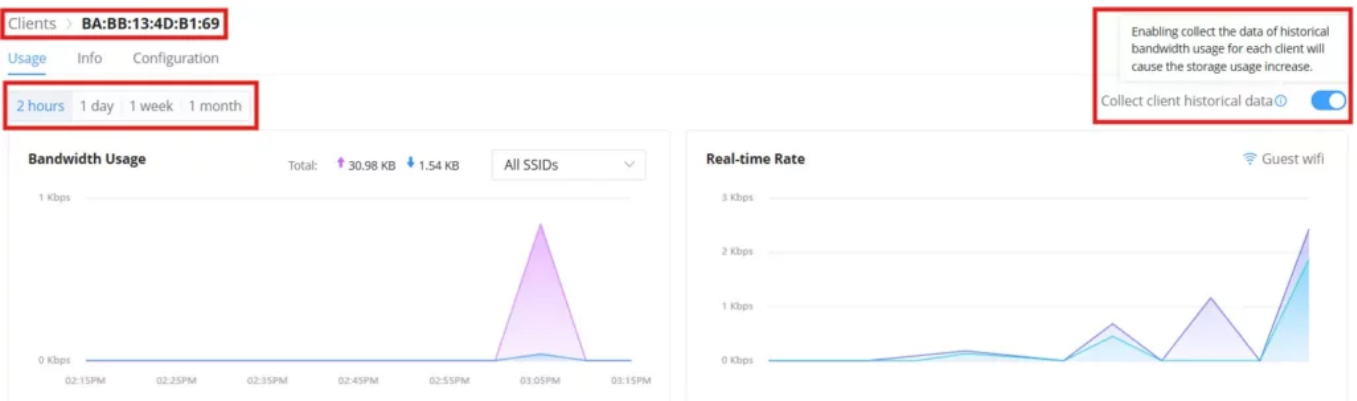


Client Usage Collect client historical data off

- Enabling Historical Usage Tracking

If **Collect client historical data** is **enabled**, longer timeframes become available:

- **Additional ranges**: 1 week and 1 month
- Enables deeper usage analysis and bandwidth trend comparison over time
- A warning is displayed that enabling this will increase data storage usage



Client Usage Collect client historical data on

Client info

On this page, info about the current client will be displayed, showing the client's Hostname, Client Status, IP Address, Current rate, etc.

Click on **"Show more information"** to get more info about the client.

Clients >

Usage Info Configuration

Basic

Hostname —

Client Status Online

IP Address 192.168.5.59

Current Rate —

[Show more Information](#) ▼

History

Device	MAC	Connection Time ↕
GWN7624	C0:74:AD: 	04:50PM

Client Info

GUESTS

Online Status

This page displays information about the clients connected via the Captive portal, including the MAC address, Hostname, Authentication Type, the device they are connected to, Certification state, SSID, as well as the RSSI and Data usage.

The administrator can also export a .csv file containing all the guest information (Client MAC address, Authentication Form when choosing Custom Field, Last Visit...etc) by clicking on the "Export" button, and selecting the export time period for all users who connected to the captive portal during that period.

Online Status

Export

Search MAC

Hostname	Associated Devices	SSID	RSSI	Authentication Type	Start Time	Expire Time	State	Operation
BA:18:96:11:03:E1	C0:74:AD:90:B2:40	Clients	-43	Voucher	2022-12-15 03:55PM	2022-12-15 04:02PM	Authenticated	

Total 1

10/page

< 1 >

Guests Online Status

Voucher

The **Voucher** system in GDMS Networking allows admins to generate one-time or multi-use access codes for guests to join Wi-Fi securely-ideal for hotels, events, cafes, campuses, or any scenario where temporary access is needed.

Voucher Groups can be generated manually or based on a **Voucher Group Template**, allowing you to quickly reuse common settings like device quota, duration, or bandwidth limits.

- Accessing the Voucher Page:

To begin voucher configuration:

- Navigate to Guests -> Voucher
- This will bring up the voucher management screen

- Adding a New Voucher Group:

To add vouchers manually:

1. Click **Add Voucher Group**
2. Fill in the configuration form with the required parameters

Voucher



Add and print vouchers for guest login. Supports custom voucher validity time, rate limit, and traffic limit.

Add Voucher Group

Add Voucher Group button

Voucher > **Add Voucher Group**

* Name	Voucher	1-64 characters
Voucher Group Template	☐ Once enabled, the following configuration references the data in the template. Configuration template	
* Quantity	10	1-1000 numbers
* Device Quota ⓘ	1	Range from 0-10000, 0 will be excluded
* Duration ⓘ	7 d 12 h 30 min	
Maximum upload rate (Kbps) ⓘ	1000	1-999999 numbers
Maximum download rate (Kbps) ⓘ	5000	1-999999 numbers
Byte Limit (MB) ⓘ	3000 Per Voucher	
* Validity Time	90 d	
Notes	Welcome	0-64 characters

Add Voucher Group

Add Voucher Group Template

Once the template is created , it is shown as below:

Voucher > **Voucher Group Template**

ⓘ If you want to add a voucher group, you can refer to the configuration within the template

[Add Template](#)

Template Name	Duration	Byte Limit (MB)	Created Time	Notes	Operation
Voucher20052026174748	45d	—	20/05/2026 17:47	—	  

Total 1   

By clicking the highlighted icon, the system will generate a new voucher list from the created voucher and use it as a template.

Voucher > **Voucher Group Template**

ⓘ If you want to add a voucher group, you can refer to the configuration within the template

[Add Template](#)

Template Name	Duration	Byte Limit (MB)	Created Time	Notes	Operation
Voucher20052026174748	45d	—	20/05/2026 17:47	—	  

Total 1   

Important:

When the toggle is enabled, all relevant fields will auto-fill from the selected template. If disabled, you may edit all fields manually.

- Voucher Branding Options

To customize the printed/exported vouchers, click **Voucher Settings** on the voucher page.

You can upload a **logo** and define a **slogan** that will appear on the printed voucher layout.

Voucher

[Add Voucher Group](#) [Voucher Settings](#) [Voucher Group Template](#)

Name	Voucher Quota	Duration	Creator	Byte Limit (MB)	Created Time	Validity Time	Notes	Operation
Add Voucher	0/10					5PM 2025/07/10 12:05PM	welcome	  

Total 1   

Voucher Settings

Logo ⓘ 

Slogan ⓘ

Grandstream

[Cancel](#) [Save](#)

Voucher Branding Options

- Managing Vouchers

After creating a voucher group, you'll see it listed in the table. From the **Operations** column, you can:

- Download the voucher set as CSV

- Print vouchers for distribution
- Delete the batch if needed

Voucher

Add Voucher Group

Voucher Settings

Voucher Group Template

Q

Group Name

Name	Voucher Quota	Duration	Creator	Byte Limit (MB)	Created Time	Validity Time	Notes	Operation
Add Voucher	0/10	7d	emea_support	10000 / Per Voucher	2025/04/11 12:05PM	2025/07/10 12:05PM	welcome	

Total 1

10/page

<

1

>

Managing Vouchers

Using the Voucher (Guest Access)

Once generated, vouchers are applied by assigning them to SSIDs configured with a **Splash Page**.

The Splash Page must be set to use **Voucher login mode**. When a guest connects, they'll be prompted to enter a valid voucher code.

?? For full setup of the Splash Page and guest portal options, see: [Splash Page Configuration Guide](#)

NETWORK TOPOLOGY

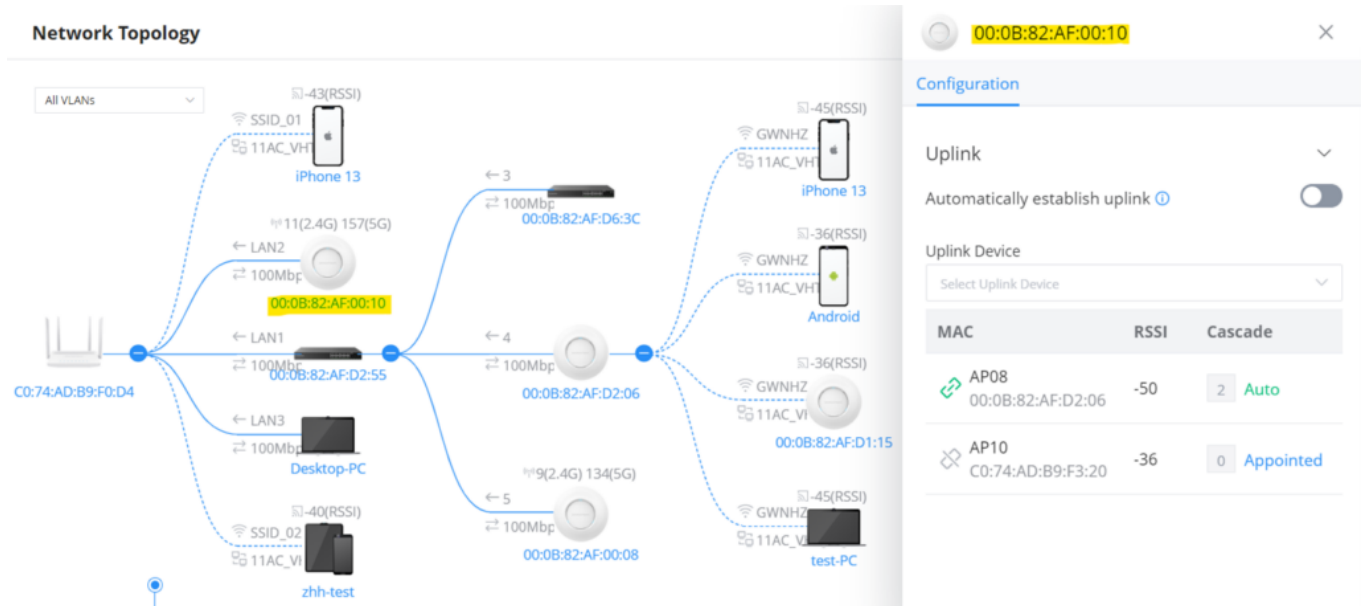
Network Topology shows an overview of the whole network, starting from the GWN Router or GCC Convergence device (Internet access), including GWN Switches and Access Points, as well as Clients. The administrator/monitor can have an overview of the network at a glance. By clicking on a GWN device or a Client, more information can be displayed.

Features overview:

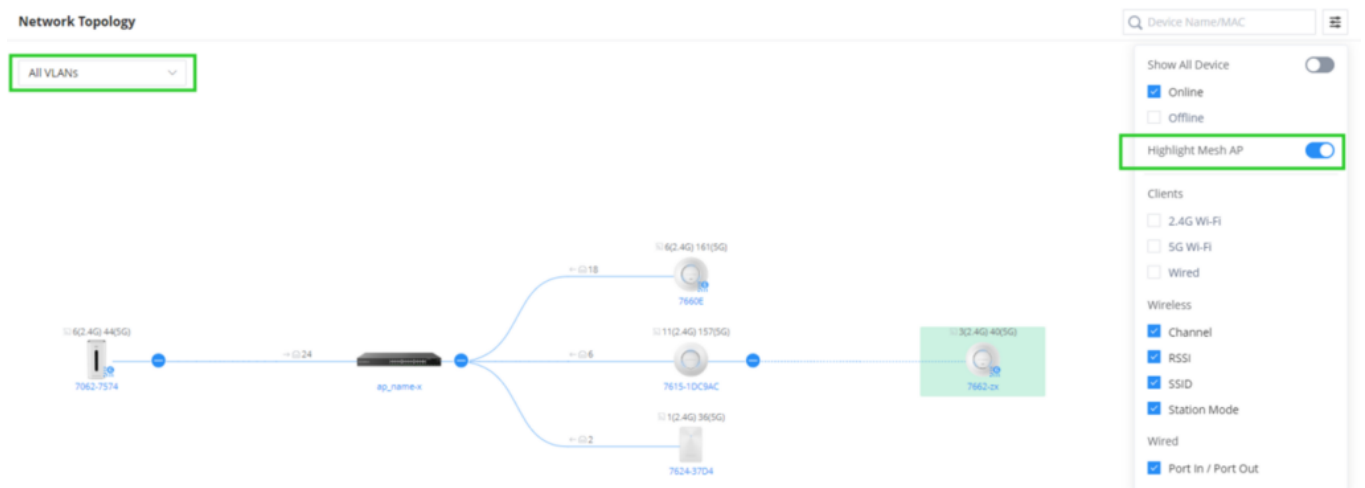
- Display network layout.
- Visualize gateway, switch, access point, and connected client device information.
- The topology map can be zoomed in and out, and nodes are retractable; topology supports vertical/horizontal orientation.
- Support Mesh AP and also the option to highlight Mesh AP.
- VLAN information filtering.

Notes:

- Click on to collapse that part of the network.
- Dashed lines mean wireless connection, while solid lines mean wired connection.



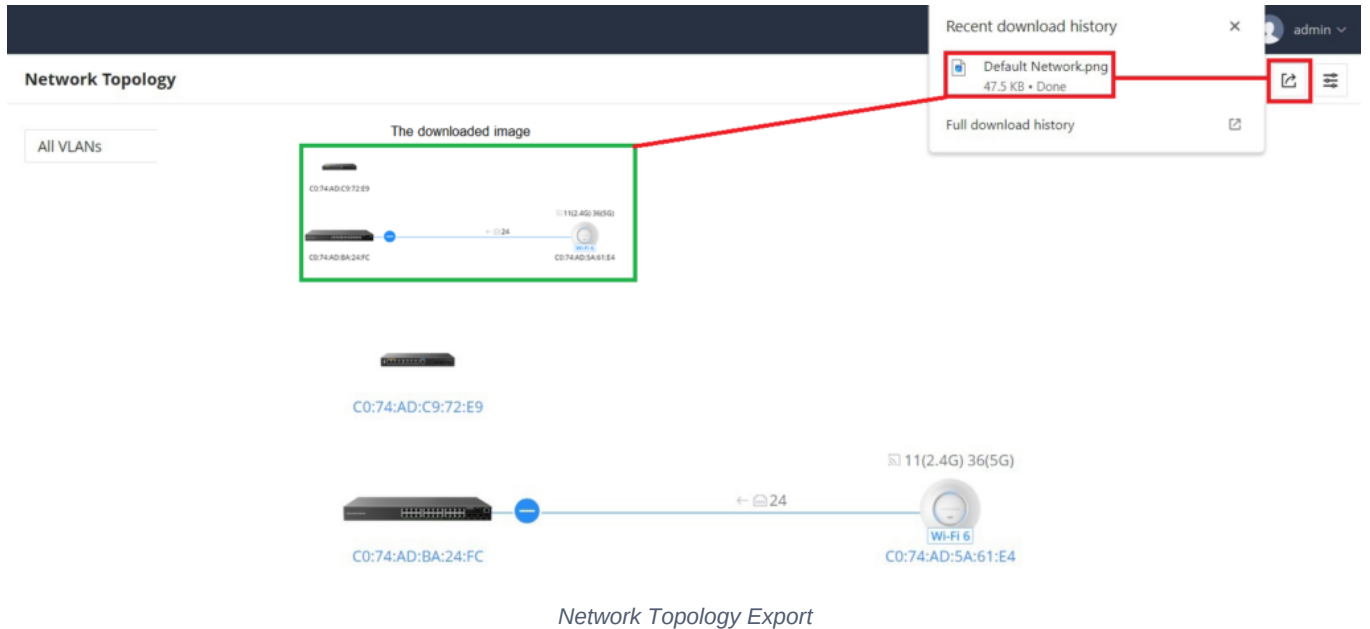
Network Topology



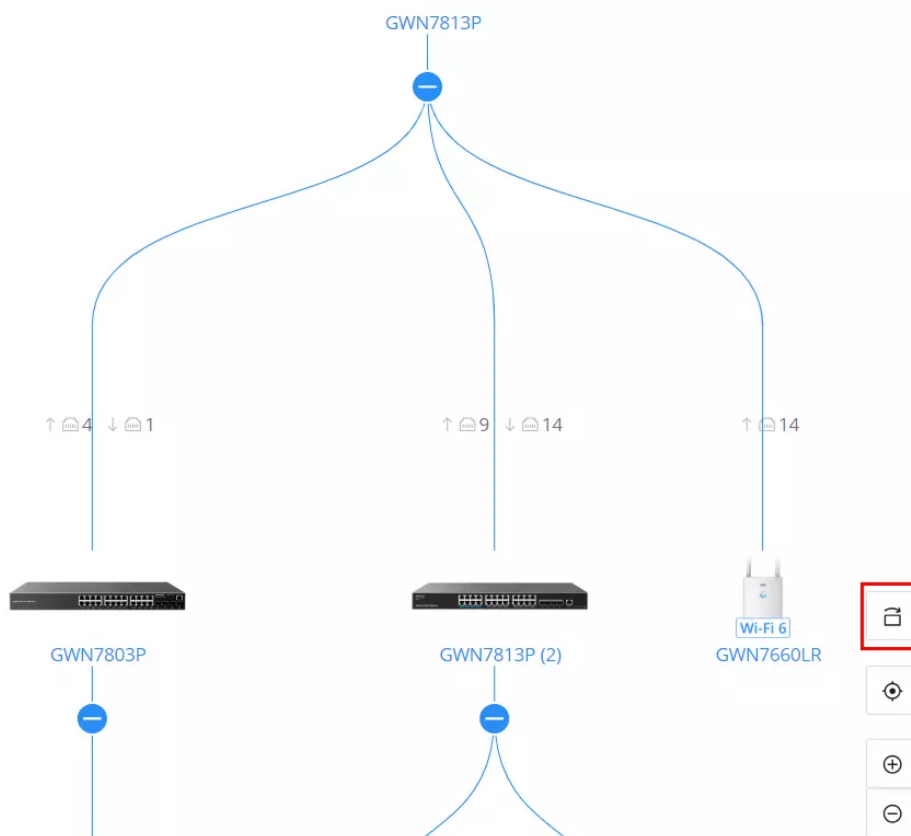
Network Topology Highlight mesh

To backup the current topology or share it, on the top right corner of the page, click on the **"Export"** button, and a PNG image will be downloaded.

For the best result, adjust the network topology to the best viewable size before exporting.



It's also possible to change the topology orientation (vertically or horizontally), click on the orientation icon as shown below,

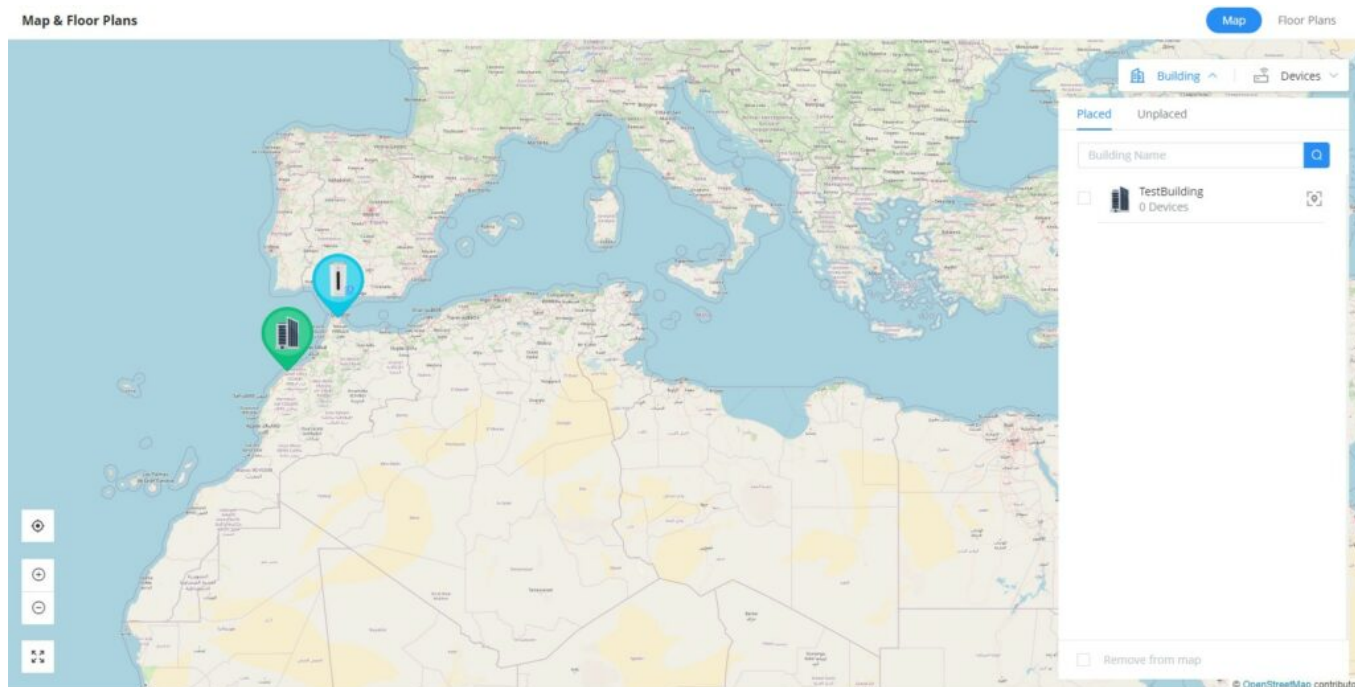


MAP & FLOOR PLANS

Map

With the Map feature, the administrators can link GWN devices or buildings to certain places on the Map, either manually on the Map or automatically using the device IP address, which will help to geolocate GWN devices or to link them to a different location (ex, company branch).

To place GWN Devices/Building on the Map, please navigate to **Web UI -> Map & Floor Plans** (under Map tab). Please refer to the figure below:



Map

Map feature on GDMS Networking/GWN Manager supports both OpenStreetMap and Google Maps.

Select "**Building**" or "**Devices**" and under "**Unplaced**" select the device/building, then click on the "**Map**" icon to manually place the GWN device on the map, or click on "**Place on map**" to be placed based on the IP address.

Placed

Unplaced

Search MAC/Name

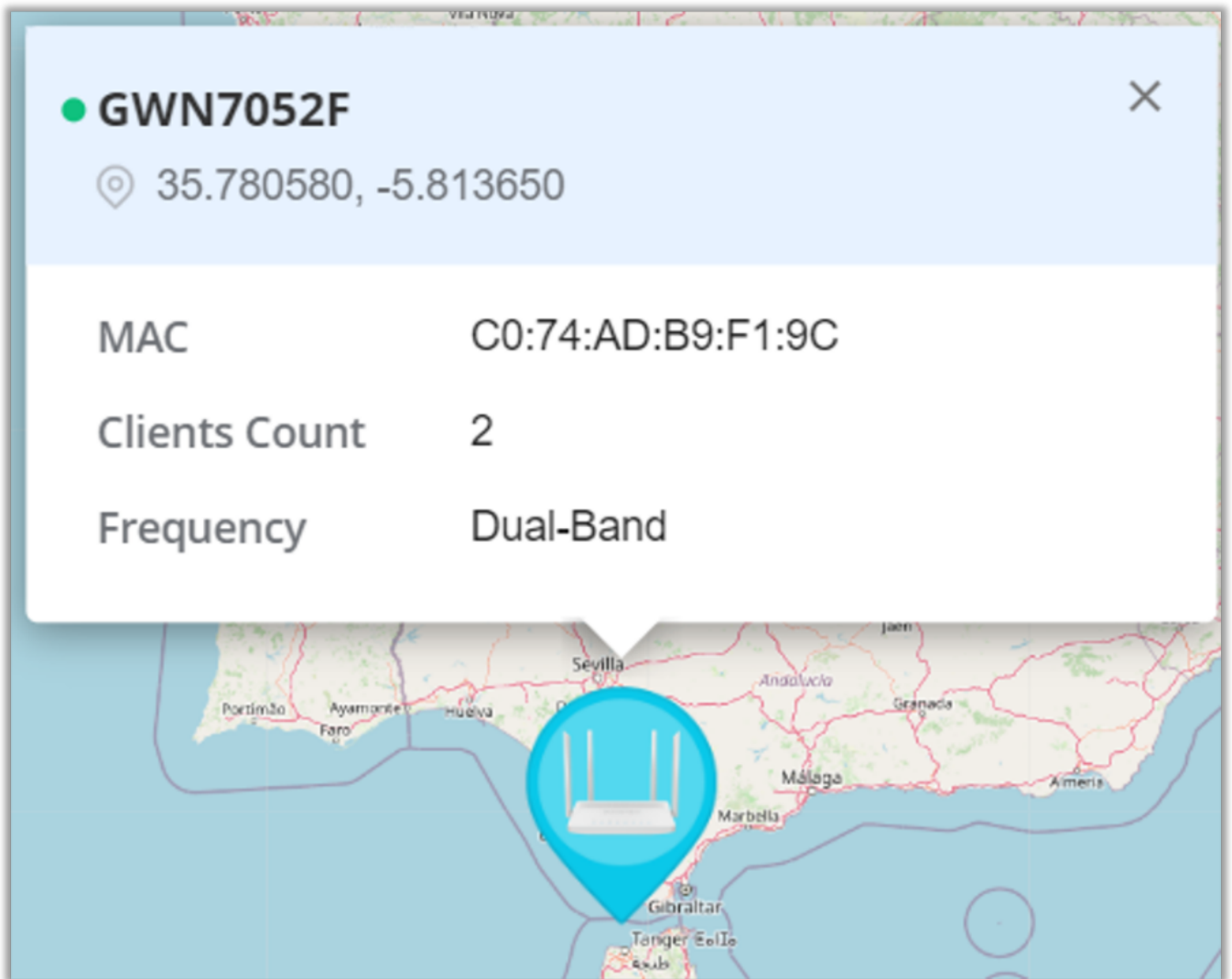


GWN7052
C0:74:AD:95:12:90



Place on map

Unplaced devices



Placed GWN devices

To remove the GWN device/building from the Map, please select the device/building and then click on "**Remove from map**".

Placed

Unplaced

Search MAC/Name

Q

✓

GWN7801P

C0:74:AD:B9:3C:A7

✓

Remove from map

Placed devices

GWN management supports Open Street and Google Maps.

Floor Plans

The **Floor Plans** feature provides a convenient way to plan and deploy devices within a building to achieve optimal wireless coverage. Using the RF heat map preview, users can easily predict the best locations to deploy GWN devices, including both physical and virtual GWN access points, wireless routers, and wireless bridge devices.

For large deployments with multiple walls, glass partitions, and wide coverage areas, this feature helps deployment teams accurately determine the ideal placement of GWN devices to ensure reliable Wi-Fi coverage and an improved wireless experience for users.

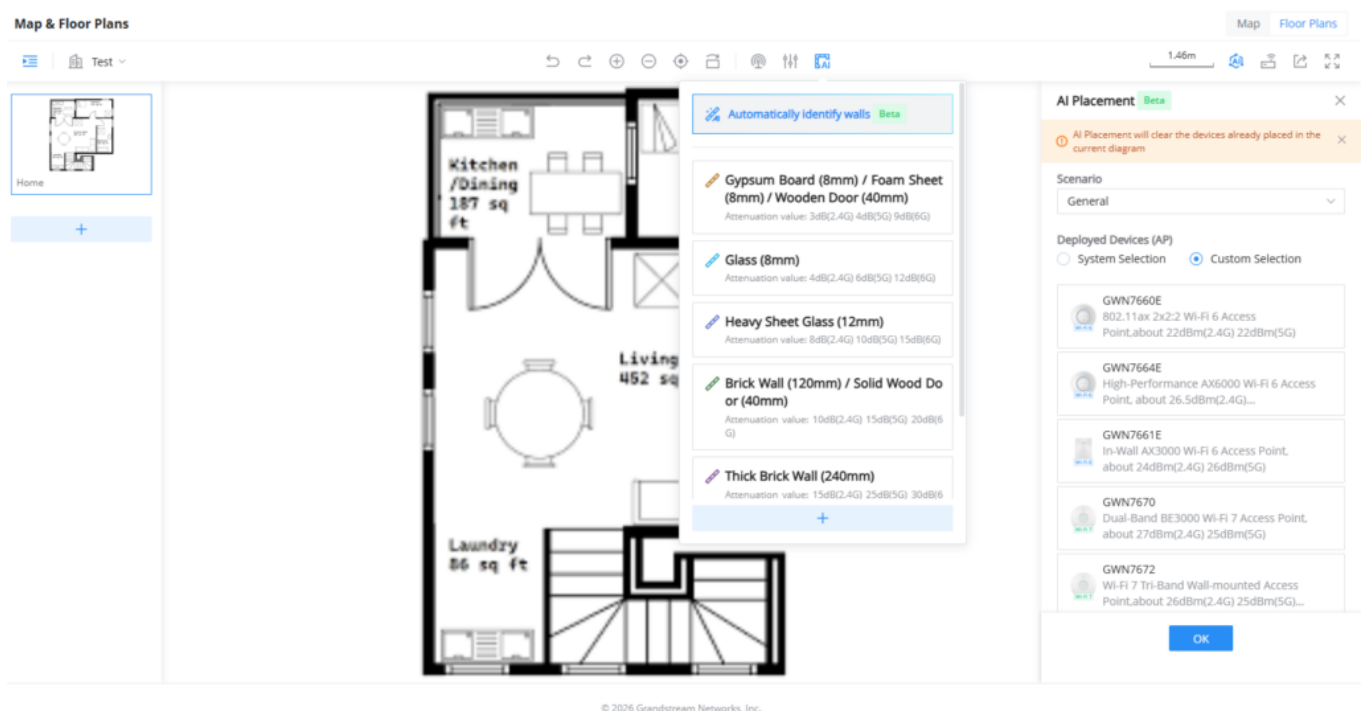
Please navigate to **Web UI -> Map & Floor Plans -> Floor Plans**. Refer to the figure below.



Floor Plans

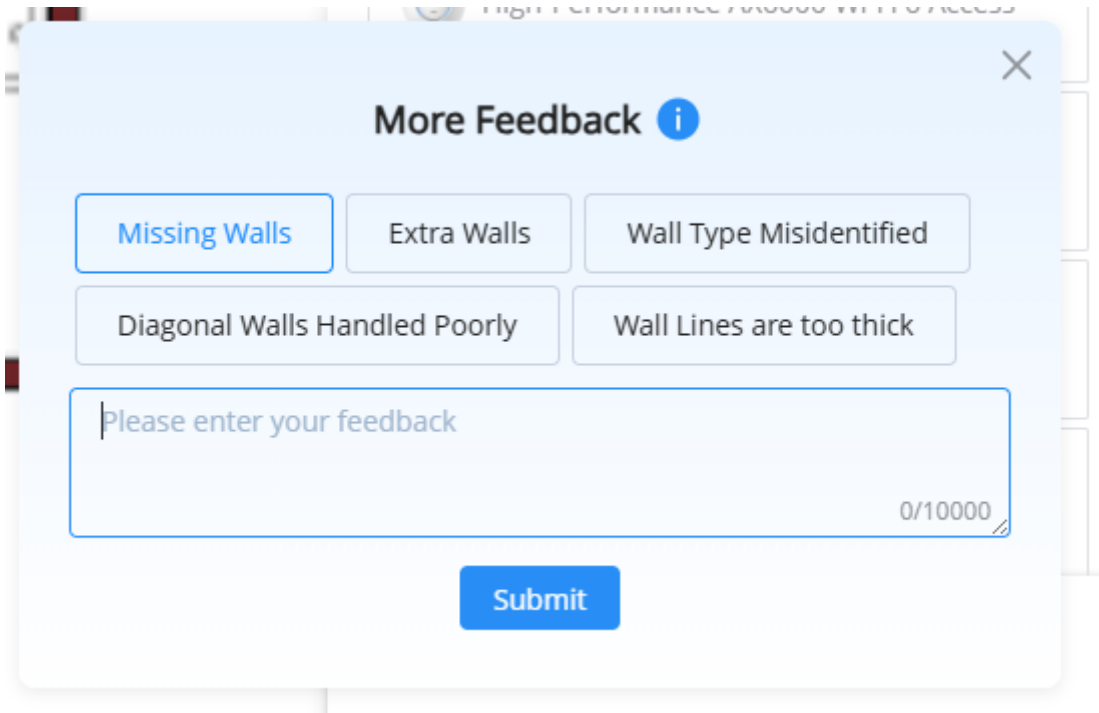
Uploading a Floor Plan

- Click the "+" icon on the left side of the page to upload a floor plan image.
- After uploading the image, optionally add walls and dividers to simulate the building structure more accurately.
- Click the "+" button to create a custom wall or divider and configure custom attenuation values for both 2.4 GHz and 5 GHz signals.
- The system also supports **AI Wall Detection**, which can automatically identify walls and estimate wall types directly from the uploaded floor plan image to simplify and accelerate deployment planning.



Uploading a Floor Plan

After the AI placement process is completed, GDMS Networking will prompt the user to provide feedback regarding the generated deployment layout and device placement recommendations. This feedback mechanism helps improve future AI placement accuracy and overall deployment recommendations.

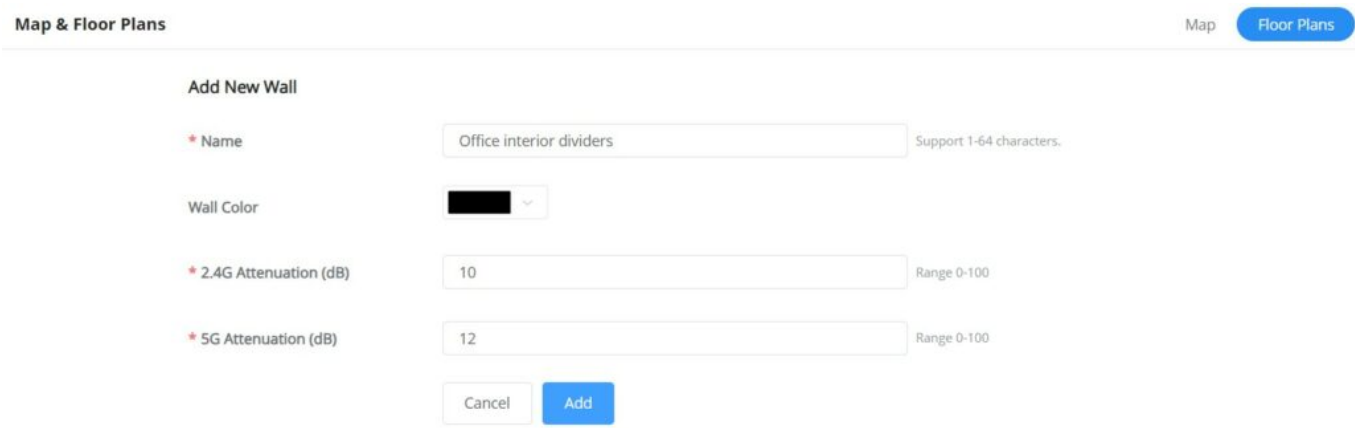


Feedback about the wall detection

The walls and dividers available are:

Wall / Divider Type	2.4 GHz Attenuation	5 GHz Attenuation
Gypsum Board (8 mm) / Foam Sheet (8 mm) / Wooden Door (40 mm)	3 dB	4 dB
Glass (8 mm)	4 dB	6 dB
Heavy Sheet Glass (12 mm)	8 dB	10 dB
Brick Wall (120 mm) / Solid Wood Door (40 mm)	10 dB	15 dB
Thick Brick Wall (240 mm)	15 dB	25 dB
Concrete (240 mm)	25 dB	30 dB

Click on the "+" button as shown above to add a custom wall or a divider.



Floor Plans Custom wall or divider

1. Under devices, please select the GWN device either from adopted ones or virtual ones, then place it on

the floor building accordingly, and it will display the label of the device. You can click on a device parameter icon, then configure the device name and wireless power accordingly. Many other tools and options can help the user to visualize the signal accurately, like rotating the floor plan, zooming in or out, centering the floor plan, etc. Please refer to the figure below:



Floor Plans Heat map

Adding Devices to the Floor Plan

1. Under **Devices**, select a GWN device from either the adopted devices list or the virtual devices list.
2. Supported device types include:
 - Access Points (AP)
 - Wireless Routers
 - Wireless Bridges
3. Drag and place the device on the floor plan according to the intended deployment location.
4. Click the device parameter icon to configure settings such as:
 - Device name
 - Wireless transmit power
5. The system also supports **AI Device Placement**, which can intelligently recommend optimal device placement locations based on the floor layout and wireless coverage requirements.
6. Additional tools are available to improve visualization accuracy, including:
 - Rotate floor plan
 - Zoom in / Zoom out
 - Center floor plan
 - Device positioning adjustments



Adding Devices to the Floor Plan

Virtual Device Simulation

The Floor Plans feature also supports adding **virtual GWN devices** to help users simulate wireless coverage before performing the actual deployment. This allows administrators and deployment teams to preview device coverage ranges directly on the uploaded floor plan in real time.

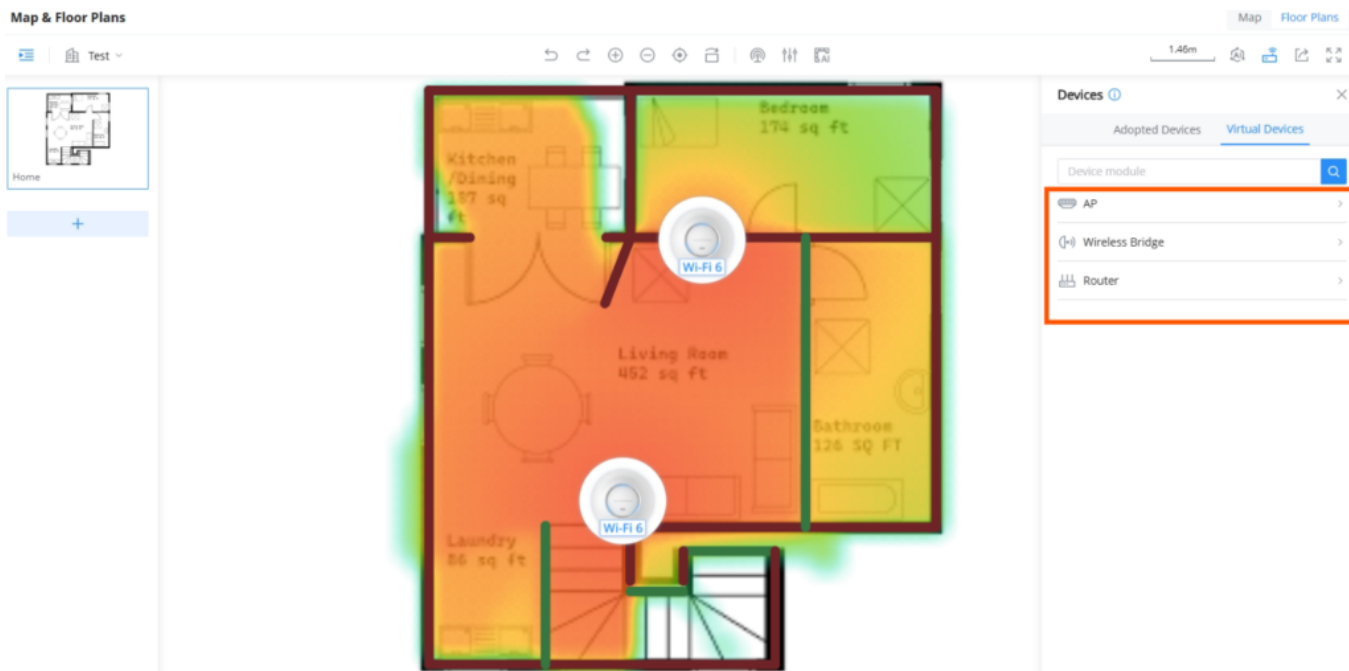
Under the **Devices** section, users can select different categories of virtual GWN devices, including:

- **Access Points (APs)**
Multiple GWN AP models are supported and can be selected based on the deployment requirements and expected wireless coverage.
- **Wireless Routers**
Different GWN router models can also be added as virtual devices to simulate router-based wireless coverage and placement.
- **Wireless Bridge**
GWN wireless bridge model is supported as virtual devices and can be used to simulate point-to-point or point-to-multipoint wireless bridge deployments within the floor plan.

After selecting the desired device model, users can place the virtual device directly onto the uploaded floor plan. The system will then automatically display the estimated wireless coverage range and signal propagation in real time based on:

- Device type and model
- Wireless transmit power
- Floor plan dimensions
- Walls and divider attenuation
- 2.4 GHz and 5 GHz wireless bands

This feature allows users to better visualize deployment scenarios, optimize device placement, reduce coverage blind spots, and improve the overall wireless network planning process before installing physical devices.



AI Device Placement

The system also supports **AI Device Placement**, which intelligently recommends optimal device placement locations based on the uploaded floor plan, wireless coverage requirements, and detected environmental conditions.

Two deployment modes are available:

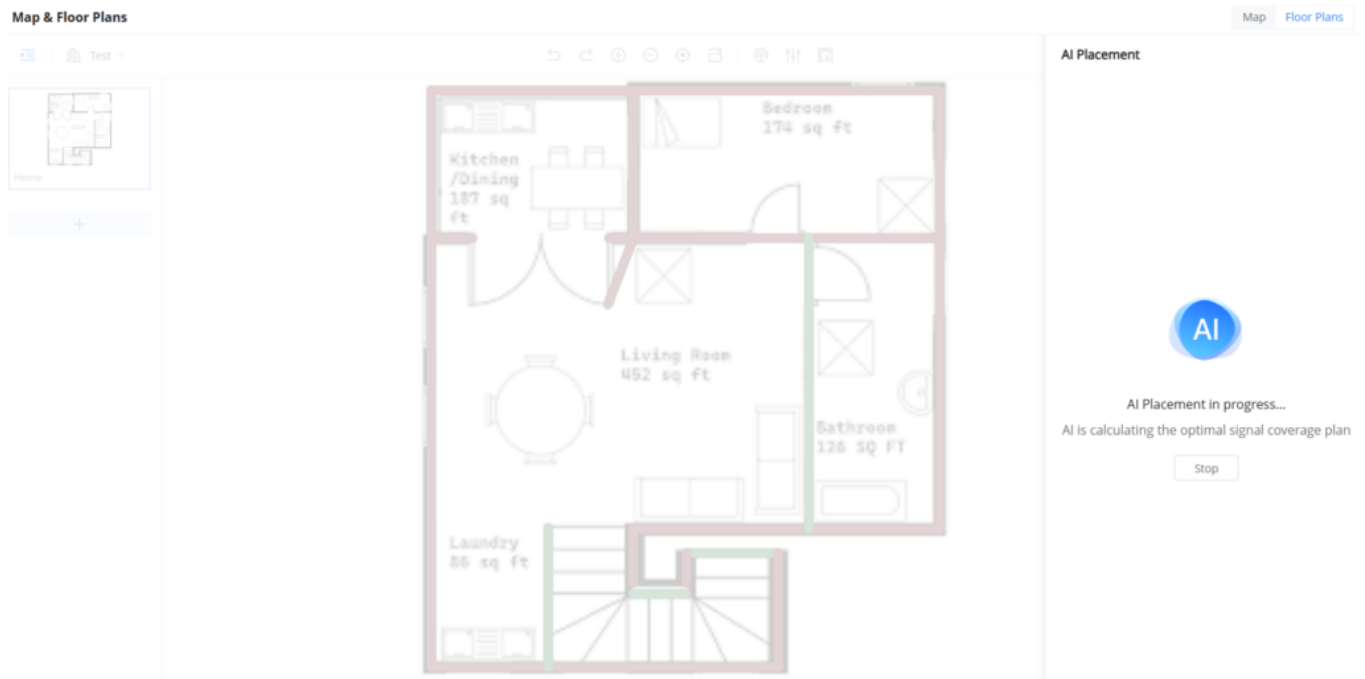
- **System Selection**

In this mode, the AI automatically selects the most suitable GWN device models for the deployment scenario. Based on the floor plan layout, coverage requirements, wall attenuation, and deployment area, the system will automatically determine the appropriate device types, placement locations, and the recommended number of devices required for optimal wireless coverage.

- **Custom Selection**

In this mode, users can manually select their preferred GWN device models. The AI will then analyze the uploaded floor plan and automatically optimize the placement locations and calculate the recommended number of devices needed to achieve the best possible wireless coverage using the selected device model.

This feature greatly simplifies wireless planning and helps deployment teams achieve efficient and accurate network coverage while minimizing manual adjustments and deployment guesswork.



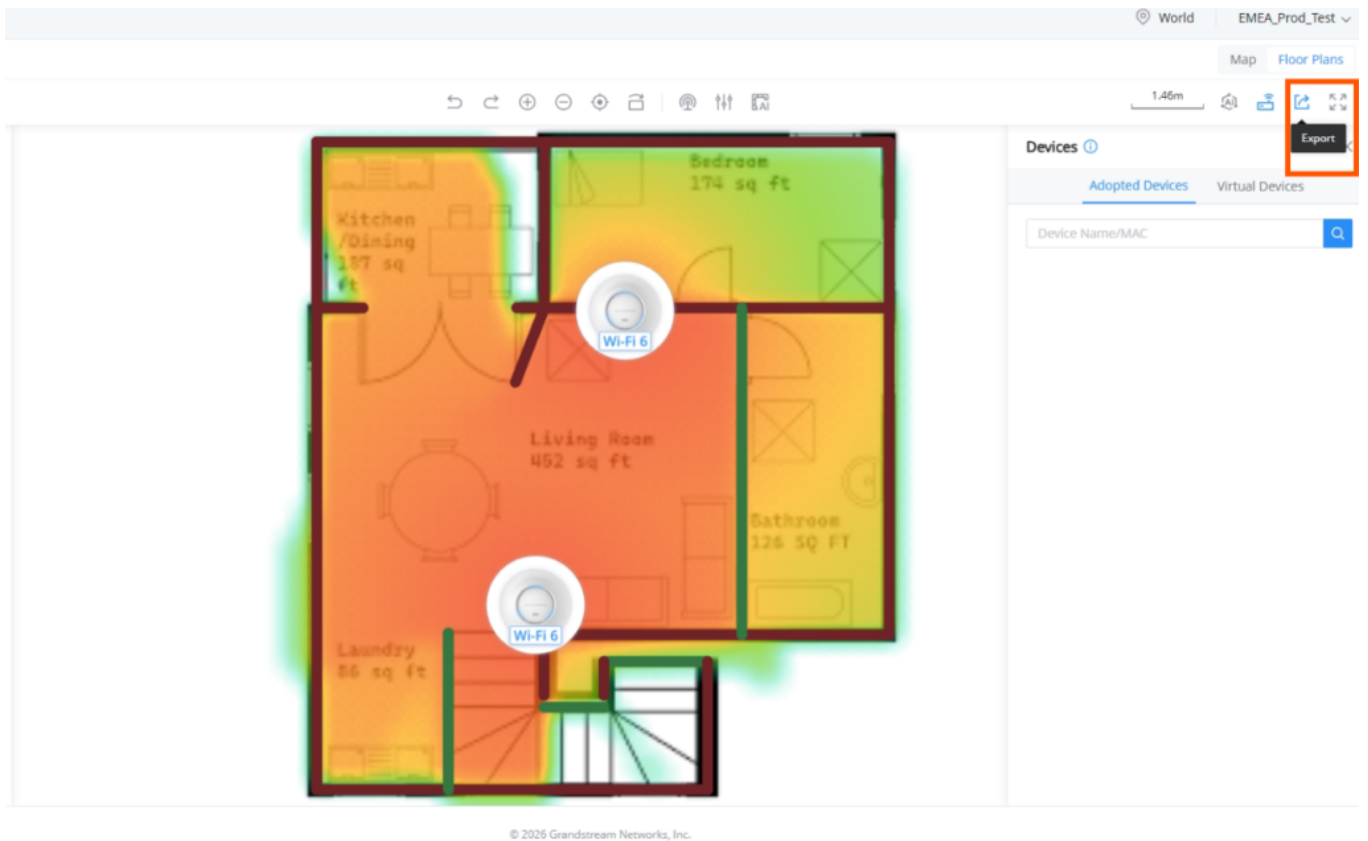
AI Placement In Progress



AI Placement Done

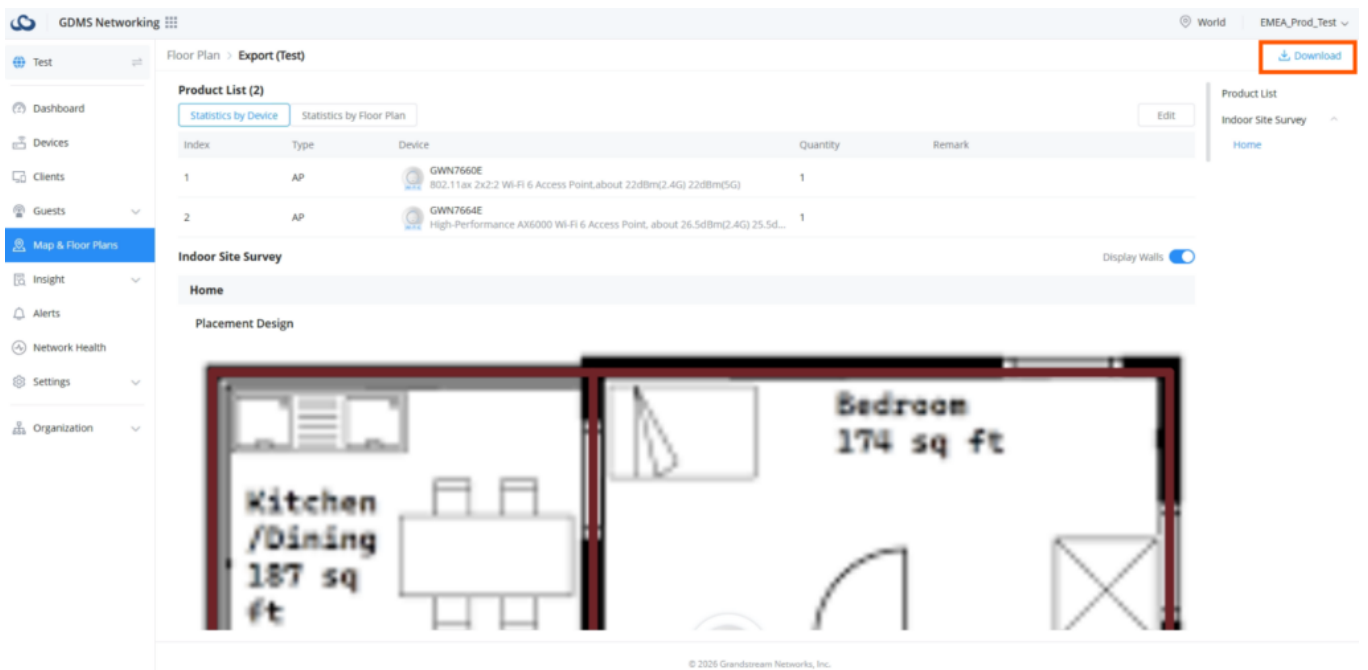
Export RF Planning Reports

The GDMS networking supports exporting detailed **RF Planning Reports** based on the configured floor plans and deployment simulations. Users can achieve this by clicking the highlighted **Export RF Planning Report** icon within the Floor Plans interface.



This feature allows users to generate professional reports containing important deployment information such as floor plan layouts, device placements, heat map coverage results, wall attenuation configurations, and wireless signal analysis.

Exported RF planning reports can be downloaded and used for deployment documentation, customer presentations, project validation, troubleshooting reference, and installation planning. This helps deployment teams and administrators easily review, share, and archive wireless planning results for future reference and optimization.



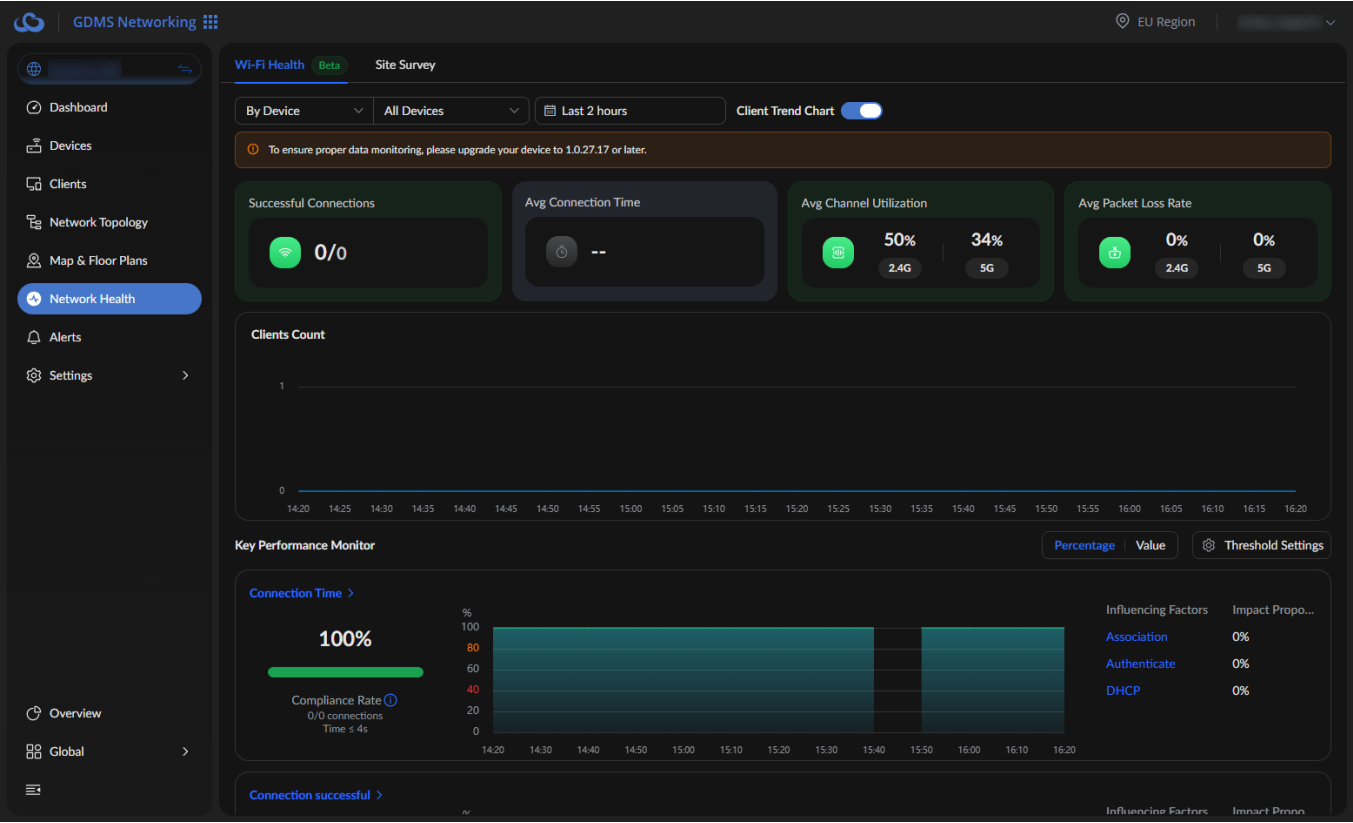
Export RF Planning Reports

NETWORK HEALTH

Wi-Fi Health

Network Health Monitor is a feature that monitors the Wi-Fi general performance and coverage.

On the main page of the GDMS Networking, click on "Network Health" on the sidebar.

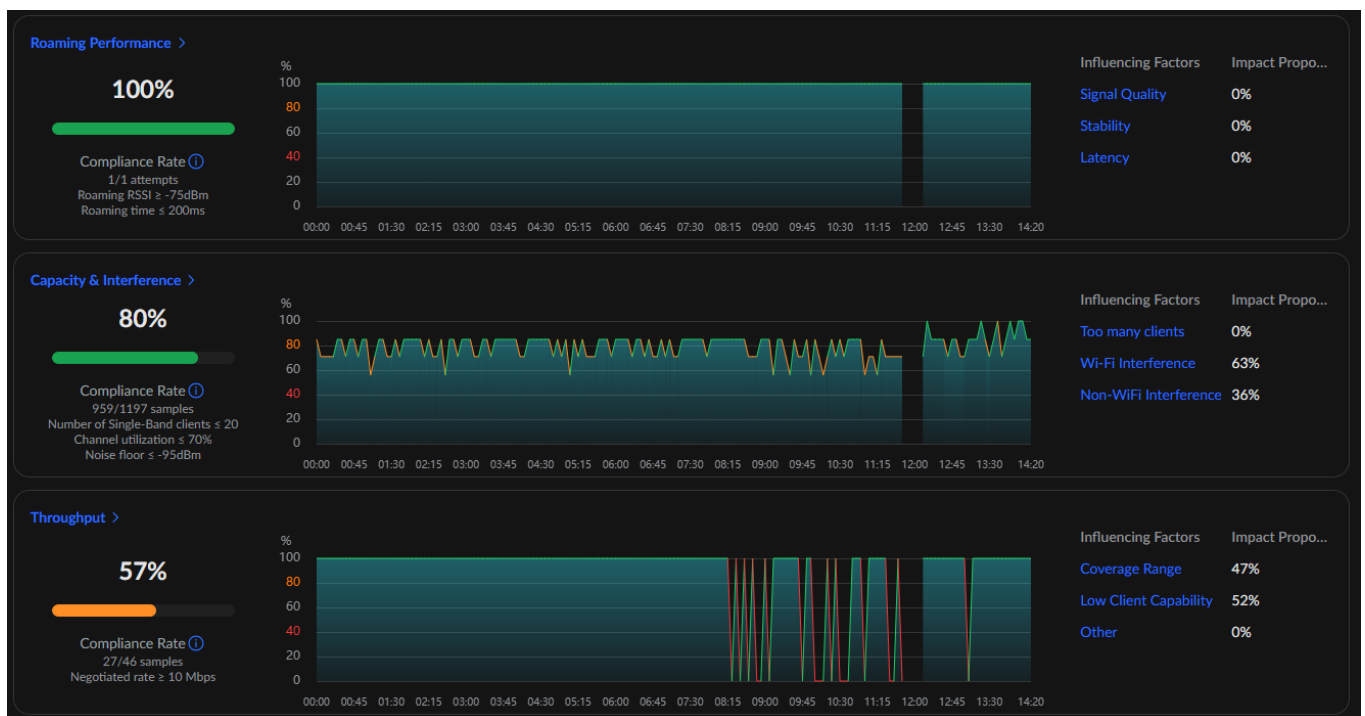


Network Health Monitor

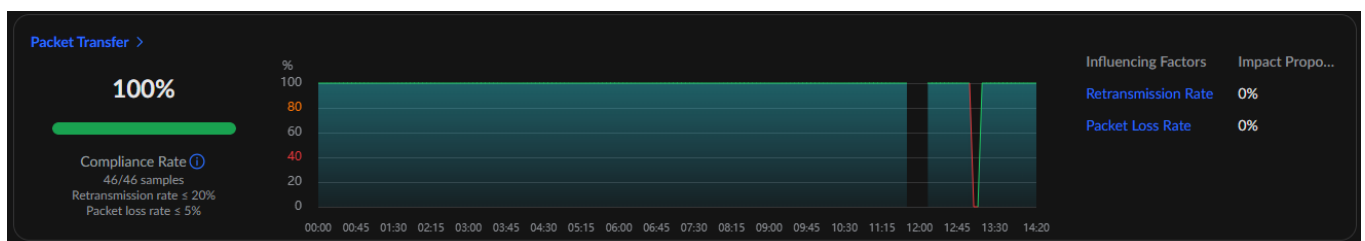
In the same page, the user can find the Key Performance Monitor, it shows the history of the network performance. The key monitors that are shown are Connection Time, Connection Success, Coverage, Roaming Performance, Capacity & Interference, Throughput, and Packet Transfer.



Key Performance Monitor 1



Key Performance Monitor 2



Key Performance Monitor 3

Site Survey

An integrated Wi-Fi Scanner is supported on GWN Management Platforms to help the administrator scan the wireless networks in the area and to display extensive information, including SSID's name, AP's MAC address, Channel used, Wi-Fi Standard, Bandwidth, security standard used, Manufacturer, RSSI, ... and more.

Site Survey

Detect Refresh		All Time		2.4G&5G		SSID/BSSID/Scanned by											
SSID	BSSID	Channel	Protocol	Bandwidth	Encryption	Manufacturer	Num of APs	Scanned by	RSSI	Last Seen							
WiFi	9C:C9:EB:88:88	5G	802.11ac	80	WPA2	Netgear	1	C0:74:AD:90:B...	-92	2022-12-15 11...							
WiFi	40:33:06:88:88	5G	802.11ac	80	WPA2	TP-Link E...	1	C0:74:AD:90:B...	-88	2022-12-15 11...							
WiFi	B8:50:01:88:88	5G	802.11ac	40+	WPA2	TP-Link	1	C0:74:AD:90:B...	-95	2022-12-15 11...							
WiFi	C0:74:AD:90:B...	5G	802.11ac	80	WPA2	TP-Link	1	C0:74:AD:90:B...	-91	2022-12-15 11...							
WiFi	84:3D:C8:88:88	5G	802.11n/a	20	WPA2	TP-Link	1	C0:74:AD:90:B...	-88	2022-12-15 11...							
WiFi	FC:40:08:88:88	5G	802.11ac	80	WPA2	TP-Link	1	C0:74:AD:90:B...	-90	2022-12-15 11...							
WiFi	B8:50:01:88:88	5G	802.11ac	40+	WPA2	TP-Link	1	C0:74:AD:90:B...	-95	2022-12-15 11...							
WiFi	B8:50:01:88:88	5G	802.11ac	40+	Open	TP-Link	1	C0:74:AD:90:B...	-92	2022-12-15 11...							
WiFi	C6:74:AD:90:B...	5G	802.11ac	80	Open	TP-Link	1	C0:74:AD:90:B...	-91	2022-12-15 11...							
WiFi	84:3D:C8:88:88	5G	802.11n/a	20	Open	TP-Link	1	C0:74:AD:90:B...	-88	2022-12-15 11...							
Total 117							10/page	<	1	2	3	4	5	6	...	12	>

Site Survey

Users can press the **"Detect"** button to run the Wi-Fi scanner or press the **"Refresh"** button to refresh the results page.

ALERTS

The Alerts page displays alerts about the network. The user can specify to display only certain types, like (System, Performance, Security, or Network), or the levels. To check the alerts that have been generated, please navigate to **the Web UI -> Alerts** page.

The alerts can be displayed either by type or level. However, that is not the only way to display them. The user can filter through the alert log using a date interval or search by MAC address or device name.

- Alert Types

The available types are **System, Performance, Security, and Network**, or the user can choose to display all the types.

Alerts

Alert SettingsAlert Notification

DeleteDelete AllMark All as Read

Start Date - End Date

All TypesAll LevelsMAC/Name

Alert Detail		Level	Alert Time
☐	Device (C0:74:AD:B9:F1:9C) configuration has been modified by the local user	Notice	2023-09-20 12:57PM
☐	Device (C0:74:AD:B9:F1:9C) configuration has been modified by the local user	Notice	2023-09-20 12:56PM
☐	Device (C0:74:AD:B9:F1:9C) configuration has been modified by the local user	Notice	2023-09-18 03:11PM
☐	Device (C0:74:AD:B9:F1:9C) configuration has been modified by the local user	Notice	2023-09-18 03:08PM

Alerts Types

- **Alert Levels**

The user can filter the alert level by the following levels: **All Levels, Emergency, Warning, or Notice.**

Alerts

Alert SettingsAlert Notification

DeleteDelete AllMark All as Read

Start Date - End DateAll TypesAll LevelsMAC/Name

Alert Detail	Alert Type	Alert Time
☐ Device (C0:74:AD:B9:F1:9C) configuration has been modified by the local user	System	2023-09-20 12:57PM
☐ Device (C0:74:AD:B9:F1:9C) configuration has been modified by the local user	System	2023-09-20 12:56PM
☐ Device (C0:74:AD:B9:F1:9C) configuration has been modified by the local user	System	2023-09-18 03:11PM
☐ Device (C0:74:AD:B9:F1:9C) configuration has been modified by the local user	System	2023-09-18 03:08PM

Alerts Levels

- **Read/Unread Alerts**

The user can filter the alerts by: **All or Unread.**

Alerts

Alert SettingsAlert Notification

DeleteDelete AllMark All as Read

Start Date - End DateAll TypesUnreadAll LevelsMAC/Name

Alert Detail	Alert Type	Level	Alert Time
☐ Switch (C0:74:AD:B9:F1:9C) offline more than 2 m	System	Warning	2025/03/26 03:11...
☐ Switch (C0:74:AD:B9:F1:9C) port 1/0/7 status is down	Network	Notice	2025/03/26 03:09...
☐ Switch (C0:74:AD:B9:F1:9C) port 1/0/8 status is up	Network	Notice	2025/03/26 01:28...
☐ Switch (C0:74:AD:B9:F1:9C) port 1/0/8 status is down	Network	Notice	2025/03/26 01:28...
☐ Switch (C0:74:AD:B9:F1:9C) port 1/0/8 status is up	Network	Notice	2025/03/26 01:27...
☐ Switch (C0:74:AD:B9:F1:9C) port 1/0/8 status is down	Network	Notice	2025/03/26 01:26...
☐ Switch (C0:74:AD:B9:F1:9C) port 1/0/8 status is up	Network	Notice	2025/03/26 12:42...
☐ Switch (C0:74:AD:B9:F1:9C) port 1/0/8 status is down	Network	Notice	2025/03/26 12:42...
☐ Switch (C0:74:AD:B9:F1:9C) port 1/0/7 status is up	Network	Notice	2025/03/26 12:41...
☐ Switch (C0:74:AD:B9:F1:9C) port 1/0/7 status is down	Network	Notice	2025/03/26 12:41...

Total 40610/page123456...41

Alerts Unread Filter

Alert Settings

The **Alert Settings** page allows administrators to configure which system events will trigger notifications. Alerts are grouped into four categories:

- **System Alert**
- **Performance Alert**
- **Security Alert**
- **Network Alert**

Each alert type can be enabled or disabled independently. When selected, the system will notify users based on the defined conditions or thresholds.

System Alert

System Alerts notify administrators about general service or operational issues across routers, switches, and access points. These include device offline/online status, upgrade results, temperature issues, and alert exceptions.

Common examples include:

- Device offline/online for a specific duration
- Upgrade succeeded or failed
- Configuration sync failed
- Temperature or optical module warnings
- Device time deviation detection

Administrators can also exclude specific Access Points from offline alerts using the exception dropdown.

The screenshot shows the 'Alert Settings' page for 'System Alert'. The page has a dark theme. At the top, there's a breadcrumb 'Alerts > Alert Settings' and four tabs: 'System Alert' (selected), 'Performance Alert', 'Security Alert', and 'Network Alert'. Below the tabs, there's a section titled 'Select alerts to be notified of' with a sub-header 'Cloud'. A list of alert options follows, each with a checkbox and a bell icon. The options are: 'AP offline for more than 30 mins, but the selected AP does not generate any alert' (dropdown), 'AP online (After offline for 30 mins)', 'Router offline for more than 30 mins', 'Router online (After offline for 30 mins)', 'Switch offline for more than 30 mins', 'Switch online (After offline for 30 mins)', 'Wireless Bridge offline for more than 30 minutes', 'Wireless Bridge online (After being offline for 30 mins)', 'Device configuration sync failed', 'Cancel/Return/Reject shared network', 'The current device has a time deviation of 30 minutes' (checked), and 'The specified client [Select MAC Group] was offline for more than [] minutes during the [Start Time - End Time] period.' Below this is another option: 'The specified client [Select MAC Group] has exceeded the traffic usage limit of 30 GB.' A note at the bottom states: 'Traffic statistics will be automatically reset to zero at midnight on the 1st of each month. An alert will be sent only once per month when traffic...'. At the bottom right are 'Cancel' and 'Save' buttons.

Alert Settings part 1

Performance Alerts

Performance Alerts focus on resource usage and traffic thresholds. These alerts are useful for proactively monitoring bandwidth, CPU, memory, and client count across your network devices.

Examples of performance thresholds include:

- Network or SSID throughput exceeded (Cloud-level)
- CPU or memory usage exceeded (Router/Switch/AP)
- Channel usage or client count thresholds
- WAN or port-level throughput exceeded
- Packet loss on switch ports

Each threshold can be customized using percentage or Mbps values.

Alerts > **Alert Settings**

System Alert Performance Alert Security Alert Network Alert

① Select alerts to be notified of

Cloud

☐ ☒ Network Throughput exceeded 50 Mbps ▾

☐ ☒ SSID Throughput exceeded 50 Mbps ▾

Router

☐ ☒ CPU Usage exceeded 90 %

☐ ☒ Memory Usage exceeded 90 %

☐ ☒ 2.4GHz Channel Usage exceeded 60 %

☐ ☒ 5GHz Channel Usage exceeded 60 %

☐ ☒ 2.4GHz Clients exceeded 20

☐ ☒ 5GHz Clients exceeded 20

☐ ☒ WAN port throughput exceeded 50 Mbps ▾

☐ ☒ WAN port uplink Bandwidth exceeded 50 Mbps ▾

☐ ☒ WAN port downlink Bandwidth exceeded 50 Mbps ▾

Switch

☐ ☒ CPU Usage exceeded 90 %

☐ ☒ Memory Usage exceeded 90 %

☐ ☒ Switch Port Packet Loss Rate exceeded 10 %

Cancel Save

Alert Settings part 2

Security Alerts

Security Alerts provide early warnings for potential attacks or rogue device detection. These events rely on enabling security features in advance.

Supported alerts include:

- Basic attack detected (e.g., DoS)
- Spoofing attack detected
- Rogue AP detected on the network

These alerts only activate when Basic Attack Defense or Spoofing Defense features are enabled.

Alerts > Alert Settings

System AlertPerformance AlertSecurity AlertNetwork Alert

ⓘ Select alerts to be notified of

Router

☐ 🔔 Basic attack detected

ⓘ The alarm can be generated only after [\[Basic Attack Defense\]](#) is set

☐ 🛡️ Spoofing attack detected

ⓘ The alarm can be generated only after [\[Spoofing Defense\]](#) is set

AP

☐ 🚨 Device detected a rogue AP of

Cancel

Save

Alert Settings part 3

Network Alerts

Network Alerts report changes in port, RF, or client behavior across the network. This helps identify connectivity issues or disruptions at the physical and wireless levels.

Monitored conditions include:

- WAN/PPPoE failures or disconnections
- VPN tunnel and client status changes
- Port up/down status and PoE events
- Channel radar detection and RF activity
- Client authentication failures or wireless connection issues

These alerts provide deeper visibility into how devices and users interact with the network.

Alerts > Alert Settings

System AlertPerformance AlertSecurity AlertNetwork Alert

Select alerts to be notified of

Router

☐

 Network failed

☐

 VPN client connected (The device itself is the client)

☐

 The VPN client is disconnected (device as client)

☐

 The VPN user has established connection (device as server)

☐

 The VPN user is disconnected (device as server)

☐

 The certificate expired

☐

 PPPoE connection failed

☐

 RF not started

☐

 Channel radar avoidance

☐

 WAN is down

☐

 RADIUS server failed

☐

 Router USB/LAN/WAN port connection

Switch

☐

 Port Up

☐

 Port Down

☐

 PoE power off

Cancel

Save

Alert Settings part 4

Alert Notification

The Alert Notification page is used to configure how alerts are delivered for the current account. You can add email recipients, configure a 3rd-party platform destination, and then enable the notification methods you want for each alert.

Alert notification settings are configured per account. Each account can choose which alerts to receive and which destinations to use (**Web, Email, App, or a 3rd-party platform**).

Alerts > Alert Notification

Each account can independently set alerts they want to receive and the email address to receive them.

Email Address

Add New Item

3rd-Party Platforms

None

System Alert

Performance Alert

Security Alert

Network Alert

Alert Detail

Notification Type

Cloud

AP offline for more than 30 mins

Web

Email

App

AP online (After offline for 30 mins)

Web

Email

App

Router offline for more than 30 mins

Web

Email

App

Router online (After offline for 30 mins)

Web

Email

App

Switch offline for more than 30 mins

Web

Email

App

Switch online (After offline for 30 mins)

Web

Email

App

Wireless Bridge offline for more than 30 minutes

Web

Email

App

Wireless Bridge online (After being offline for 30 mins)

Web

Email

App

Device configuration sync failed

Web

Email

App

Cancel/Return/Reject shared network

Web

Email

App

The current device has a time deviation of 30 minutes

Web

Email

App

Cancel

Save

For platform-specific setup details (Wave, WhatsApp, Telegram, and Webhook), refer to the guide below:
GDMS Networking Alert Notifications to Third-Party Platforms

Under 3rd-Party Platforms, select the destination type (Wave, WhatsApp, Telegram, or Webhook) and enter the required information for that platform (for example, Token). Once a 3rd-party destination is configured, you can enable alert forwarding by using the 3rd-Party Platform toggle in the alert list.

SETTINGS

All Wi-Fi-related settings are available on this page. The page is organized into **three sections: Wireless LAN, Global Radio Settings, and Mesh.**

Wireless LAN							
Select device		Q Name/Remark/Device Group		+ Add			
Name	Wi-Fi Status	VLAN ID	Wi-Fi Band	Online Devices	Security Type	Portal	Operation
SSID_1	Enabled	—	2.4GHz,5GHz	0	Open	Disabled	  
SSID_2	Enabled	—	2.4GHz,5GHz	0	Personal	Disabled	  
SSID_3	Enabled	—	2.4GHz,5GHz	0	Open	Disabled	  
SSID_4	Enabled	—	2.4GHz,5GHz	0	Open	Disabled	  

Global Radio Settings

Mesh

Wi Fi page

Wireless LAN

The **Wireless LAN** section lists the SSIDs configured under the current network and shows their main status at a glance (for example: whether the SSID is enabled, its VLAN ID, which band it uses, how many devices are online, the security type, and captive portal status).

To help you find the right SSID quickly, you can use the controls at the top of the list:

- **Select device:** filters the list to SSIDs related to a specific device (useful when you have many APs and only want to check what applies to one device).
- **Search (Name/Remark/Device Group):** lets you locate an SSID by its name, its remark/description, or the assigned device group.
- **+ Add:** creates a new SSID.

Each SSID row also provides operation icons. Typically, you can:

- Click the **gear icon** to edit the SSID settings.
- Click the **QR code icon** to generate a QR code for the SSID.
- Click the **trash icon** to delete the SSID.

The **QR code** option is mainly used for faster sharing and onboarding. For example, you can display the QR code and let users scan it to join the Wi-Fi network (depending on device/OS support), or download the QR code image to share it through email or chat.

Wi-Fi

^ Wireless LAN

Select device ▼ Q Name/Remark/Device Group + Add

Name	Wi-Fi Status	VLAN ID	Wi-Fi Band	Online Devices	Security Type	Portal	Operation
GDMS Clients	Enabled	—	2.4GHz,5GHz	0	Open	Disabled	  
GDMS Clients	Enabled	—	2.4GHz,5GHz	0	Personal	Disabled	GDMS Clients  Download
ISP_Finale	Enabled	—	2.4GHz,5GHz	0	Open	Disabled	
ISP_Finale	Enabled	—	2.4GHz,5GHz	0	Open	Disabled	

▼ Global Radio Settings

▼ Mesh

Wi Fi QR code

Below the Wireless LAN section, you will also find:

Global Radio Settings: manages radio parameters that apply across SSIDs and access points (for example global band behavior and transmit power).

Mesh: enables wireless mesh networking between supported access points, with options that help extend coverage when wired uplinks are not available.

Add SSID

To add a new SSID, navigate to Web UI -> Settings -> Wi-Fi page -> Wireless LAN section then click the "Add" button. A new page will pop up, enter different settings to add a new SSID.

Basic ^

Wi-Fi ☒

* Name ⓘ

Remark

Schedule ⓘ

None ▾

Client IP Assignment ⓘ

Bridge ▾

Associated VLAN ☐

Enable Captive Portal ☐

* SSID Band

2.4GHz × 5GHz × ▾

Enable MLO ⓘ ☐

Access Security ▾

Access Control ▾

Device Assignment ▾

Advanced ▾

AddEdit wireless LAN

Basic	
WiFi	Check to enable Wi-Fi for the SSID
Name	Set or modify the SSID name.
Remark	Optional label to help distinguish SSIDs, especially when multiple SSIDs use the same name. This label may be shown next to the SSID name in other pages (for example, SSID lists and SSID selection menus).
Schedule	Select a schedule to control when the SSID is broadcast. Choose None to keep the SSID available at all times, or click Add New Schedule to create a new schedule.
Client IP Assignment	Select between Bridge or NAT
Associated VLAN	Check to Enable VLAN and enter VLAN ID, otherwise, this SSID will be using the default network group.
Enable Captive Portal	Click on the checkbox to enable the captive portal feature.
SSID Band	Select the Wi-Fi band the GWN will use, three options are available: Dual-Band, 2.4GHz or 5GHz
Enable MLO	Allows the device to connect to multiple Wi-Fi bands (e.g., 2.4GHz + 5GHz and 6GHz) at the same time. Helps boost speed, reduce lag, and make the connection more stable. Requires compatible client devices.

Access Security	
Security Type	Set the security type, 5 options are available:Open: no security is requiredOWE: Allows secure open authentication process with encryption using Diffie-Hellman exchange, which traditionally is not performed in traditional open authentication method. No password is required upon authentication when this option is selected.Personal: Select the WPA Pre-Shared Key and the WPA ModeEnterprise: Select Radius Authentication and WPA Mode.PPSK without RADIUS: Private Pre-shared key supplied by the AP.PPSK with RADIUS: Private Pre-shared key supplied by RADIUS server.PPSK with RADIUS (Easy PSK): Combines local PSK and RADIUS to provide a unique password.Note: When providing a WPA passphrase, you can enable the "Set Passphrase Reset Cycle" option. This feature allows the system to automatically rotate the Wi-Fi password at scheduled intervals, helping improve wireless network security and reduce long-term unauthorized access risks.
802.11w	Disabled:disable 802.11w;Optional: either 802.11w supported or unsupported clients can access the network;Required: only the clients that support 802.11w can access the network.
Access Control	
MAC Filter	Controls access based on device MAC addresses. Choose Allowlist to only let approved devices connect, or Blocklist to keep specific ones out. If no list is selected while Allowlist is enabled, no clients will be able to connect.Note: The total number of MAC addresses across all blocklists is limited to 1000 entries.
Client Isolation	Client isolation feature blocks any TCP/IP connection between connected clients to GWN76xx's Wi-Fi access point. Client isolation can be helpful to increase security for Guest networks/Public Wi-Fi. Available modes are:Radio Mode: Wireless clients can access to the internet services, GWN7xxx router and the access points GWN76xx but they cannot communicate with each other.Internet Mode: Wireless clients will be allowed to access only the internet services and they cannot access any of the management services, either on the router nor the access points GWN76xx.Gateway MAC Mode: Wireless clients can only communicate with the gateway, the communication between clients is blocked and they cannot access any of the management services on the GWN76xx access points.Custom MAC Address: All clients except for the added MAC addresses will be isolated from each other. Note: The gateway MAC address must be included when configuring this.
Client Time Policy	Configures the client time policy. Default is None.
Bandwidth Control	Select Bandwidth Control (Per-SSID or Per-Client), then select from the Bandwidth rules previously created.
Schedule	Select a schedule that will be applied to this SSID, schedules can be managed from the menu "Settings -> Profiles -> Schedule".
OS Filter	Whitelist or blacklist clients based on what OS they are using.Disabled: the feature is disabledWhitelist: the user will select the OS that will be whitelistedBlacklist: the user will select the OS that will be blacklistedWarning: This feature requires certain client functionality to work, and some clients' OS may not be supported.
OS Whitelist/Blacklist	Note: this option is only available if OS Filter is enabled.Select one or more or All from the list below:AllWindows(R)macOS(R)iOS(R)Linux(R)Android(R)
IP Source Guard	When enabled, clients using static IP addresses will be blocked from accessing the Internet.
Device Assignment	
Select from the Devices list the ones to be part of this SSID.Note: If an AP or router that uses the Wi-Fi network is selected, new APs will be automatically added to the network.	
Advanced	
SSID Hidden	Select to hide SSID. SSID will not be visible when scanning for Wi-Fi, to connect a device to hidden SSID, users need to specify SSID name and authentication password manually.

Multi-VLAN	Multi-VLAN is useful for assigning different VLANs to different users, devices, or network segments on the same SSID to improve network segmentation, security, and traffic management. Once enabled, please configure the AP's Layer 3 roaming management VLAN in Device Management. Multi-VLAN priority will take precedence over the SSID VLAN, meaning that when Multi-VLAN is configured, its VLAN assignment rules will override the VLAN configured directly under the SSID settings. Disabled by default.
DTIM Period	Configures the frequency of DTIM (Delivery Traffic Indication Message) transmission per each beacon broadcast. Clients will check the AP for buffered data at every configured DTIM Period. You may set a high value for power saving consideration. Default value is 1, meaning that AP will have DTIM broadcast every beacon. If set to 10, AP will have DTIM broadcast every 10 beacons. Valid range: 1 - 10.
Wireless Client Limit	Configure the limit for wireless client. If there's an SSID per-radio on a network group, each SSID will have the same limit. So, setting a limit of 50 will limit each SSID to 50 users independently. 0 means limit is disabled.
Client Inactivity Timeout	AP will remove the client's entry if the client generates no traffic at all for the specified time period. The client inactivity timeout is set to 300 seconds by default.
Multicast/Broadcast Suppression	Disable: all of the broadcast and multicast packages will be forwarded to the wireless interface.Enable: all of the broadcast and multicast packages will be discarded except DHCP/ARP/IGMP/ND;Enable with Proxy ARP enabled: enable the optimization with Proxy ARP enabled in the meantime.
Convert IP multicast to unicast	Once selected, AP will convert multicast streams into unicast streams over the wireless link. Which helps to enhance the quality and reliability of video/audio stream and preserve the bandwidth available to the non-video/audio clients.
Enable Voice Enterprise	Enable this feature to help clients connected to the GWN76xx to perform better roaming decision.The 802.11k standard helps clients to speed up the search for nearby APs that are available as roaming targets by creating an optimized list of channels. When the signal strength of the current AP weakens, your device will scan for target APs from this list.When your client device roams from one AP to another on the same network, 802.11r uses a feature called Fast Basic Service Set Transition (FT) to authenticate more quickly. FT works with both pre-shared key (PSK) and 802.1X authentication methods.802.11v allows client devices to exchange information about the network topology, including information about the RF environment, making each client network aware, facilitating overall improvement of the wireless network.Note: 11R is required for enterprise audio feature, 11V and 11K are optional.Enable Voice Enterprise is only available under "WPA/WPA2" and "WPA2" Security Mode.
Enable 802.11r	Check to enable 802.11r
Enable 802.11k	Check to enable 802.11k
Enable 802.11v	Check to enable 802.11v
ARP Proxy	Once enabled, AP will avoid transferring the ARP messages to Stations, while initiatively answer the ARP requests in the LAN.
Enable Bonjour Gateway	Click to enable Bonjour GatewayNote: If enabled, client Bonjour requests on SSID can be forwarded to the VLAN of Bonjour services (such as Samba).
Enable U-APSD	Configures whether to enable U-APSD (Unscheduled Automatic Power Save Delivery)
Target Wake Time	Enables TWT (Target Wake Time), a Wi-Fi 6/7 power-saving feature that lets the AP and clients agree on specific times to communicate. This reduces constant checking and helps compatible devices stay in low-power mode longer, extending battery life.Note: Only available on Wi-Fi 6/7 models. Not effective if Wi-Fi 5 compatibility mode is enabled.

Add Wireless LAN

Global Radio Settings

On this page the Administrator can configure the global radio settings which will affect all the GWN devices with the wireless signal, it's a convenient way to configure all the device's wireless signal at once.

Wi-Fi

Global Radio Settings

General

Band Steering

Balance

Client Steering

Airtime Fairness

Beacon Interval

100

Country/Region

Morocco

2.4G

Channel Width

20MHz

Channel

Dynamically Assigned by RRM

Radio Power

Dynamically Assigned by RRM

Enable Short Guard Interval

Allow Legacy Devices

Enable Minimum RSSI

Enable Minimum Rate

Wi-Fi5 Compatible Mode

5G

Global Radio Settings

To configure a specific device (GWN AP or Wireless GWN router), navigate to **Web UI -> Devices**, then click on the device or the configuration icon then select the Configuration Tab. Refer to the figure below:

General ▾

2.4GHz ^

2.4GHz



Channel Width ⓘ

Use Radio Settings ^

Channel ⓘ

Radio Power ⓘ

Enable Minimum RSSI ⓘ

Enable Minimum Rate ⓘ

Use Radio Settings ▾

Device Configuration

Selecting the option **"Use Radio Settings"** from the drop-down list will use the settings configured on the **Global Radio Settings** section.

Please refer to the table below:

General	
Band Steering	Select from the drop-down list, four options are available: Disable Band Steering: Band steering is disabled 2.4G in priority: steer clients to 2.4G 5G in priority: steer clients to 5G Balance: balance between 2.4G and 5G.
Client Steering	This feature will help Wi-Fi client to roam to other APs within same Network. Steering happens when clients is inactive or active clients with the standards 802.11K&V support.
RSSI Threshold	It will start monitoring the RSSI for the clients in order to redirect them to another GWN AP in the same network. This prevents clients from remaining associated with AP with less than ideal RSSI, which can cause poor connectivity and reduce performance for other clients. Default is -75.
Client Access Threshold	It will start monitoring the number of clients' connections with the AP, once reaching configured threshold, it will roam to the other. Default is 30.
Airtime Fairness	Allows faster clients to have more airtime than slower clients.

Beacon Interval	Configures interval between beacon transmissions/broadcasts. The Beacon signals help to keep the network synchronized and provide main information about the network such as SSID, Timestamp... Using High Beacon Interval: AP will be sending beacon broadcast less frequently. This will help to get better throughput, thus better speed/performance. It also helps to save WiFi clients energy consumption. Using Low Beacon Interval: AP will be sending beacon broadcast more frequently. This can help in environments with weak signal areas; sending more frequently beacons will increase chances to be received by WiFi clients with weak signal. Notes: When AP enables several SSIDs with different interval values, the max value will take effect. When AP enables less than 3 SSIDs, the interval value which will be effective are the values from 40 to 500. When AP enables more than 2 but less than 9 SSIDs, the interval value which will be effective are the values from 100 to 500. When AP enables more than 8 SSIDs, the interval value which will be effective are the values from 200 to 500. Mesh feature will take up a share when it is enabled. Default value is 100ms. Valid range: 40 - 500 ms.
Country/Region	Displays the country/region of the AP.
2.4G/5G	
Channel Width	Choose the Channel Width, note that wide channel will give better speed/throughput, and narrow channel will have less interference. 20MHz is suggested in very high-density environment.
Channel	Select "Auto" or a Dynamically Assigned by RRM. Default is "Auto".
Custom Channel	Select a custom channels.Note: that the proposed channels depend on Country Settings under Settings -> System.
Radio Power	Set the Radio Power, it can be Low, Medium, or High or Custom or Dynamically assigned by RRM or Auto. Note : Dynamically assigned by RRM activates TPC and CHD: Transmit Power Control: TPC algorithm runs every 10 minutes. AP acquires the RSSI information of the neighbor by wireless scanning and establishes the neighbor table. The algorithm requires that there must be at least 3 neighbor APs with RSSI larger than -70dbm. Otherwise, power will not be adjusted. Coverage Hole Detection: CHD enables AP to decide whether to increase the AP power by the current SNR and SNR threshold of the connected clients. Custom: allows users to set a custom wireless power for both 5GHz/2.4GHz band, the value of this field must be between 1 and 31.
Enable Short Guard Interval	Check to activate this option to increase throughput.
Allow Legacy Devices (802.11b)	Check to support 802.11b devices to connect the AP in 802.11n/g mode. (2.4GHz setting)
Enable Minimum RSSI	Check to enable RSSI function, this will lead the AP to disconnect users below the configured threshold in Minimum RSSI (dBm).
Minimum RSSI (dBm)	Enter the minimum RSSI value in dBm. If the signal value is lower than the configured minimum value, the client will be disconnected. The input range is from "-94" or "-1".
Enable Minimum Rate	Specify whether to limit the minimum access rate for clients. This function may guarantee the connection quality between clients and AP.
Minimum Rate (Mbps)	Specify the minimum access rate. Once the client access rate is less than the specified value, AP will kick it off. Available values are: 1Mbps, 2Mbps, 5Mbps, 6Mbps, 9Mbps, 11Mbps or 12Mbps.
Wi-Fi5 Compatible Mode	Some old devices do not support Wi-Fi6 well and may not be able to scan the signal or connect poorly. After turning on this switch, it will switch to Wi-Fi5 mode to solve the compatibility problem. At the same time, it will turn off Wi-Fi6 related functions.

Global Radio Settings

Mesh

Wireless Mesh Network is a wireless extension of the traditional wired network using multiple access points connected through wireless links to areas where wired access is not an option while also expanding the

coverage of the WLAN network.

In the traditional WLAN network, the uplink of the AP is a wired network (usually an Ethernet Link):

- The advantages of a wired network are security, anti-interference, and stable bandwidth.
- The disadvantages are high construction cost, long periods of planning and deployment, and difficulty of change in case a modification is needed.

However, these are precisely the advantages of wireless networks. As a result, a Wireless Mesh Network is an effective complement to wired network.

In addition, Mesh networking provides a mechanism for network redundancy. When an abnormality occurs in a wired network, an AP suffering the uplink failure can keep the data service continuity through its Mesh network.

For more details about the GWN Mesh Network feature, please don't hesitate to read the following technical paper:

GWN76xx Mesh Network Guide

Users can set some Mesh Network parameters under the menu "**Settings -> Wi-Fi -> Mesh**", as shown in the figure below:

Mesh

Enable Mesh

☐ The AP only support 5 SSIDs under the same VLAN if enabled.

Scan Interval (s)

300

10-300 numbers

Interface

☐ 2.4G

☒ 5G

☐ 5G&6G

Wireless Cascade

3

1-3 numbers

Cancel

Save

Mesh

Enable Mesh	Enables Mesh networking functionality, allowing APs to communicate wirelessly with each other to extend wireless coverage without requiring a wired uplink connection. When enabled, the AP supports up to 5 SSIDs under the same VLAN.
Scan Interval (s)	Specifies how often the AP scans for neighboring Mesh devices and evaluates wireless backhaul connections. The configurable range is from 10 to 300 seconds.
Interface	Selects the wireless band used for Mesh communication. Available options include 2.4G, 5G, and 5G & 6G. The 6G option is only supported on certain models. For details, please refer to Device Comparison. The 2.4G option is only supported on APs; however, 2.4G channels are generally more susceptible to interference and instability, therefore their use is not recommended for Mesh backhaul deployments.
Wireless Cascade	Specifies the maximum allowed Mesh cascade level (hop count) between APs. Higher cascade levels allow Mesh connections to extend further across multiple APs. The supported range is from 1 to 3.

LAN

This page shows all the created VLANs as well as the Default VLAN (Default LAN), as well as the global switch settings that affect all the added GWN switches.

LAN

LAN

Name	VLAN ID	Gateway	Gateway IPv4	Gateway IPv6	Operation
Default LAN	1	C0:74:AD:DF:CC:94	—	—	

Global Switch Settings

LAN page

The user can click on "+Add" button to add a LAN/VLAN, then specify the name, VLAN ID, Gateway, and IPv4/IPv6. For more details please refer to the figure and table below:

LAN > Add LAN

* LAN Name

1-64 characters

* VLAN ID

2-4094 numbers

VLAN-Only Network

☐

* Gateway

IPv4

☒

* Gateway IPv4 Address/Prefix Length

/
Prefix length range 8-30

DHCP Service

IPv6

☒

Interface ID

☒
If disabled, the LAN interface ID will be automatically generated based on the selected MAC.

* Custom Interface ID

: : :

Add VLAN

Field	Description
LAN Name	Name of the LAN/VLAN interface (1-64 characters). Used for internal reference.
VLAN ID	Numeric VLAN ID used for tagging (2-4094).
VLAN-Only Network	Enables VLAN-only (Layer 2) mode with no IP interface/routing on this VLAN.
Gateway	Select the gateway device (Router, Switch, or Device Group) managed by GDMS Networking.

Enable Captive Portal	Enables Captive Portal for this LAN so clients can be redirected to a portal for authentication/onboarding.
Captive Portal Policy	Select the Captive Portal policy to apply when Captive Portal is enabled.
IPv4	Enables IPv4 addressing for this LAN interface.
Gateway IPv4 Address/Prefix Length	Defines the gateway IPv4 address and subnet (CIDR format, e.g., 192.168.1.1/24).
DHCP Service	Select DHCP Server, DHCP Relay, or Close (disable DHCP) for this LAN.
IPv6	Enables IPv6 addressing for this LAN interface.
Interface ID	Auto-generates the IPv6 interface ID based on the selected MAC address (when enabled).
Custom Interface ID	Manually set a specific IPv6 interface ID (when required).
IPv6 Preferred DNS Server	Optional preferred DNS server for IPv6 clients.
IPv6 Alternative DNS Server	Optional secondary DNS server for IPv6 clients.
IPv6 Relay from WAN	Enables DHCPv6 relay from the WAN interface to this LAN (when applicable).
IPv6 Address Assignment	Select how IPv6 addresses are assigned on this LAN (method depends on platform/device support).

[Add VLAN](#)

Static IP Binding

GDMS Networking supports the **Static IP Binding** function, that allows administrators to centrally manage and assign fixed IP addresses to connected clients in a unified manner. This feature helps ensure that specific client devices always receive the same IP address from the network, which is especially useful for devices such as printers, cameras, servers, or other devices requiring stable and consistent network addressing for management and communication purposes.

Static IP Binding				Select	+ Add
Hostname	VLAN	IP Address	Operation		
No Data					

[Static IP Binding](#)

The below options can be configured for each Static IP Binding

LAN > Add Static IP Binding

* VLAN

Select

* Hostname

1-64 characters

* Client MAC Address

* IP Address

Cancel

Save

[Static IP Binding](#)

VLAN	Selects the VLAN associated with the static IP binding entry. The client device will receive the assigned IP address within the selected VLAN network.
Hostname	Specifies a name or label for the client device. This helps administrators easily identify the device within the network.
Client MAC Address	Defines the MAC address of the client device that will be associated with the static IP assignment. The system uses this MAC address to identify the device and reserve the configured IP address for it.
IP Address	Specifies the static IP address that will always be assigned to the client device matching the configured MAC address.

Switch Settings

Global Switch Settings allow the user to configure the general settings for all the GWN78XX switches which have been added to the account, instead of configuring the settings individually for each switch.

Global Switch Settings

RADIUS Authentication

RADIUS Authentication

None

Voice VLAN

Voice VLAN

☒

Multicast

IGMP Snooping VLAN

Select LAN

MLD Snooping VLAN

Select LAN

Unknown Multicast Message

Flooding

DHCP Snooping Settings

DHCP Snooping

☒

802.1X

Guest VLAN

☒

Other

* Jumbo Frame

9216

Black Hole MAC Address

None

Cancel

Save

Global Switch Settings

Radius Authentication	
Radius Authentication	Select a Radius server or click Add New RADIUS
Voice VLAN	
Voice VLAN	Toggle voice VLAN on/off.

Multicast	
IGMP Snooping VLAN	Select the IGMP Snooping VLAN.
MLD Snooping VLAN	Select the MLD Snooping VLAN.
Unknown Multicast Message	Configures how the switch (IGMP Snooping/MLD Snooping) handles packets from unknown groups.
DHCP Snooping Settings	
DHCP Snooping	Toggle DHCP Snooping on/off
802.1X	
Guest VLAN	Configures whether to enable the guest VLAN function for the global port.
Other	
Jumbo Frame	Enter the size of the jumbo frame. Range: 1518-10000
Black Hole MAC Address	Select a Black Hole MAC Address from the list or click Add New MAC group

Internet

Internet configurations like adding/configuring WAN ports or configuring Load-balancing/backup (Failover) between the WANs port are found here, please navigate to **Web UI -> Settings -> Internet** page.

WAN

In this section, the user can add WAN (router WAN port or a device group) or edit previously created WAN ports, and the number of WAN ports is determined by how many GWN routers are added/adopted to GDMS Networking/GWN Manager accordingly. Once, the WAN/Device group is added, then the user can monitor the network health for the last 12 hours.

Please navigate to **Web UI -> Settings -> Internet page -> WAN** section.

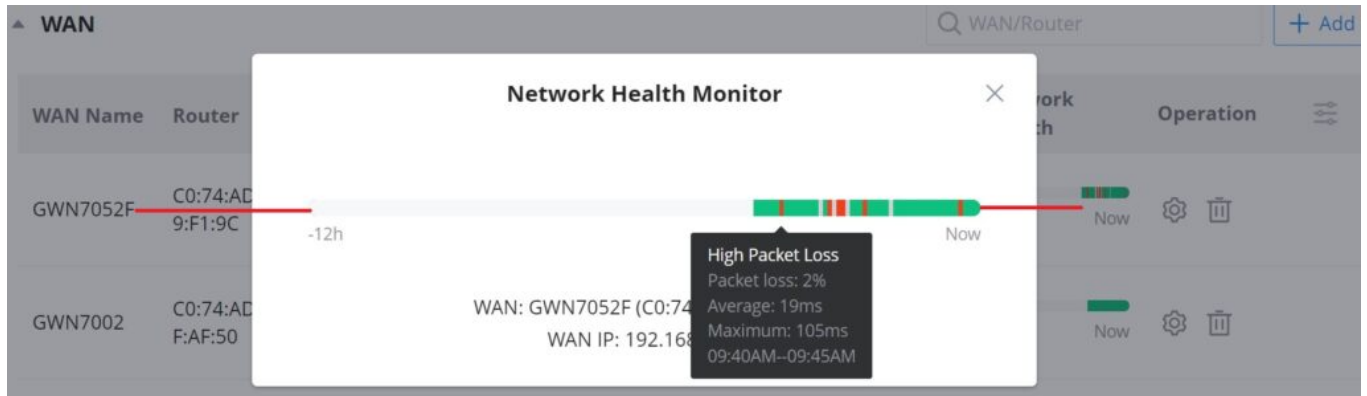
Internet

WAN								
Q WAN/Router + Add								
WAN Name	Router	Physical Port	MAC	Connection Type	IP Address	Connect Duration	Network Health	Operation
GWN7052F	C0:74:AD:B9:F1:9C	4	C0:74:AD:B9:F1:A0	Obtain IP Automatically (DHCP)	192.168.5.82	2h 44m	-12h Now	 
GWN7002	C0:74:AD:BF:AF:50	3	C0:74:AD:BF:AF:52	Obtain IP Automatically (DHCP)	192.168.5.130	2h 44m	-12h Now	 

WAN

- Network Health

Network Health is a feature that monitors the WAN (WAN ports or Device group) and displays the status for the last 12 hours for each WAN/device group with color code.



Network Health

Hover with the cursor over the color to see more details like Packet loss percentage, duration etc.

Green: Online

Grey: Offline

Red: High Packets Loss

- Add or Edit a WAN/Device group

To edit a WAN click on the entry or click on the **"Configure icon"** under operation, and to add a WAN click on the **"Add"** button on the top of the page. on the next page, the user can configure the WAN name, router (WAN port or logical device group), physical port, connection type (DHCP, Static or PPPoE), MTU, DDNS, DMZ, UPnP, etc. Please check the figures and table below:

Internet > **GWN7052F** Sync

* WAN Name	GWN7052F	1-64 characters
* Router	C0:74:AD:B9:F1:9C	
* Physical Port	4	
Connection Type	Obtain IP Automatically (DHCP)	
Static DNS	☒	
* Preferred DNS Server	8.8.4.4	
Alternative DNS Server		
* Maximum Transmission Unit (MTU)	1500	576-1500 numbers
WAN Port MAC Address	Use Default MAC Address	
* Tracking IP Address 1	8.8.8.8	
Tracking IP Address 2		
VLAN Tag	☒	
* VLAN Tag ID		3-4094 numbers

Addedit a WAN part 1

* Priority	0	Range 0-7 and 7 is the highest priority
Multiple Public IP Addresses	☒	
* Public IP Address		-
	Add New Item +	
IPv6		
IPv6	☒	
Connection Type	Obtain IP Automatically (DHCPv6)	
Static DNS	☒	
* Preferred DNS Server		
Alternative DNS Server		
IPv6 Relay to VLAN	☒	If enabled, IPv6 addresses will be relayed to LAN-side clients.
Tracking IPv6 Address 1		
Tracking IPv6 Address 2		

Addedit a WAN part 2

DDNS

DDNS	☒
Service Provider	Oray
* Username	
* Password	
* Domain	
<input http:="" type="button" value="If no account is available, please go to www.oray.com to register for a username, password and domain.	
* IP Source	☒ WAN IP ☐ Public IP
* Update Interval (min)	10 1-1440 numbers
Cloud DDNS	☒
* Domain	pe1gfpde.gwn.ai
	Update Copy
* IP Source	☒ WAN IP ☐ Public IP
* Update Interval (min)	10 1-1440 numbers

DMZ

Destination Group	None
-------------------	-----------------------------------

UPnP

UPnP	☐
------	--------------------------

Addedit a WAN part 3

WAN Name

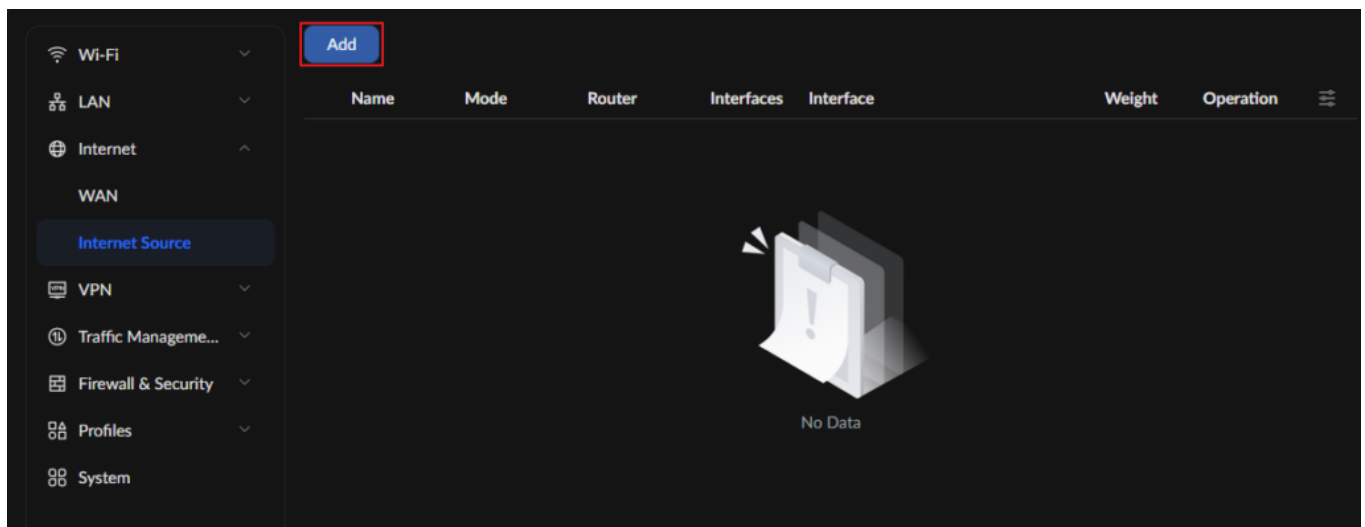
Router	Select a router or a Device group from the drop-down list
Physical Port	Select the physical port (WAN port) from the drop-down list
Connection Type	Obtain IP automatically (DHCP): When selected, it will act as a DHCP client and acquire an IPv4 address automatically from the DHCP server. Enter IP Manually (Static IP): When selected, the user should set a static IPv4 address, IPv4 Subnet Mask, IPv4 Gateway and adding Additional IPv4 Addresses as well to communicate with the web interface, SSH, or other services running on the device. Internet Access with PPPoE account (PPPoE): When selected, the user should set the PPPoE account and password, PPPoE Keep alive interval, and Inter-Key Timeout (in seconds). The default setting is "Obtain IP automatically (DHCP)"
Static DNS	Check Static DNS then enter the Preferred DNS Server and the Alternative DNS Server
Preferred DNS Server	Enter the preferred DNS Server
Alternative DNS Server	Enter the Alternative DNS Server
Maximum Transmission Unit (MTU)	Configures the maximum transmission unit allowed on the WAN. When using Ethernet, the valid range that can be set by the user is 576-1500 bytes. The default value is 1500. Please do not change the default value unless you have to. When using PPPoE, the valid range that can be set by the user is 576-1492 bytes. The default value is 1492. Please do not change the default value unless you have to.
WAN Port MAC Address	Select from the drop-down list either to: Use Default MAC Address Use Custom MAC Address Default is "Use Default MAC Address"
Custom MAC Address	Enter the custom MAC Address to be used with this WAN.
Tracking IP Address 1	Configures tracking IP address of WAN port to determine whether the WAN port network is normal.
Tracking IP Address 2	Add another alternative address for Tracking IP Address
VLAN Tag	Select if either to enable or disable VLAN Tag.
VLAN Tag ID	Enter the VLAN tag ID.
Priority	Enter the priorityNote: Range 0-7 and 7 is the highest priority
Multiple Public IP Addresses	Please use with Port Forward function, so that you can access to router via public IP address.
Public IP Address	Enter one or more public IP addressesClick on "+" icon or "-" icon to add or delete public IP addresses
IPv6	
IPv6	Enable this option to use IPv6 on this specific WAN.
Connection Type	Select the connection type from the drop-list, three options are available: Obtain IP automatically (DHCPv6) Enter the IP manually (static IPv6) Internet Access with PPPoE Account (PPPoE) The default setting is "Obtain IP automatically (DHCPv6)".
Static DNS	Enable this option to enter statically assigned DNS
Preferred DNS Server	Enter the preferred DNS Server
Alternative DNS Server	Enter the Alternative DNS Server
IPv6 Relay to VLAN	Once enabled, relay IPv6 addresses to clients on the LAN side. Note: This function will take effect only "IPv6 Relay from WAN" is enabled on VLAN.
Tracking IPv6 Address 1	Configures tracking IP address of WAN port to determine whether the WAN port network is normal
Tracking IPv6 Address 2	Add another alternative address for Tracking IP Address
DDNS	
DDNS	Toggle ON or OFF the DDNS function, default is OFFNote: On the router, DDNS function can only be enabled on one WAN port.

Service Provider	Select the DDNS provider from the listNote: Includes providers like no-ip.com, freedns.afraid.org, Oray, etc.
Username	Enter the username for your DDNS account.Note: Required for third-party DDNS providers.
Password	Enter the password for your DDNS account.Note: Required for third-party DDNS providers.
Domain	Enter the domain registered with your DDNS provider.Note: Must match the domain you've set up with the DDNS provider.
IP Source	Choose whether to use the WAN IP or Public IP for DDNS updates.Note: Select WAN IP to use in the same network segment. Public IP reflects external visibility.
Update Interval (min)	Set how often the router updates the DDNS IP address.Note: Valid range is 1 to 1440 minutes.
Cloud DDNS	Enable to use GDMS Networking's built-in DDNS without an external provider.Note: No login required. Automatically generates a *.gwn.ai domain.
Domain (Cloud DDNS)	Displays the generated gwn.ai domain name.Note: Read-only. Click 'Update' to regenerate the subdomain.
IP Source (Cloud DDNS)	Choose WAN or Public IP for the cloud DDNS.Note: Same logic as standard DDNS affects domain resolution visibility.
Update Interval (min, Cloud DDNS)	Set how frequently the router reports the IP to GDMS cloud.Note: Valid range is 1 to 1440 minutes.
DMZ	
Destination Group	Select the destination group from the drop-down list.
UPnP	
UPnP	Toggle ON or OFF the UPnP function, default is OFFNote: If UPnP (Universal Plug and Play) is enabled, devices on LAN can request the router to port forward automatically
Destination Group	Select the destination group from the drop-down list.

Add/edit a WAN

Internet Source

In this section of internet configuration, under internet source, the user can configure load balancing or backup (Failover) between the previously added WANs. Either click on the entry or **"Configure icon"** to edit previously added internet sources or click on the **"Add"** button to add a new one, refer to the figure below:



Internet Source

Here, the user can specify the name for the Load Balance or Backup, select the router/device group and specify the weight for each uplink.

- **Default:** If enabled, the subsequent WAN added by the router will be associated with the Internet Source
- **Interface:** In an Internet source, each interface can only be selected once, and only interfaces of the same router or the same device group are supported in an Internet source.
- **Weight:** Weight value determines the ratio at which connections are sent through each member. The default is 1. Enter a value from 1~10 with 10 being the highest weight.

Internet Source

> Add Internet Source

* Name

1-64 characters

* Router

EC:74:D7:1D:29:1E

▼

Mode

☒ Load Balance

☐ Backup

☐ Standby ⓘ

Default ⓘ

☐

* Interface

Interface ⓘ

Select

▼

Weight ⓘ

1

▼

+

Add New Item

+

Cancel

Save

Add an Internet Source

Name	Enter the name of the Internet Source configuration.
Router	Select the router to use.
Mode	Select the mode of operation of the router. Load Balance Backup Standby
Default	If enabled, the subsequent WAN added by the router will be associated with the Internet Source.
Interface (Preferred Interface)	Select the preferred interface(s) InterfaceWeight
Alternative Interface	This option appears only when the mode is set to "Backup". InterfaceWeight
Standby Interface	This option appears only when the mode is set to "Standby". Select the interface to use when the other interfaces fail. The standby interface only takes effect when all primary interfaces fail. Note: Interfaces configured as standby will lose connectivity.

VPN

GDMS Networking and GWN Manager support many VPNs including PPTP, IPsec (Site-to-Site), OpenVPN(R), and WireGuard(R).

GDMS Networking and GWN Manager support more than one GWN router with single or multi-WAN on the same network, thus when configuring a VPN it's important to specify which router (WAN/Device group) and interface will be used.

- **PPTP**: supports client and server.
- **IPSec (Site-to-Site)**: supports manual and auto mode.
- **OpenVPN(R)**: supports client and server.
- **WireGuard(R)**: server side.

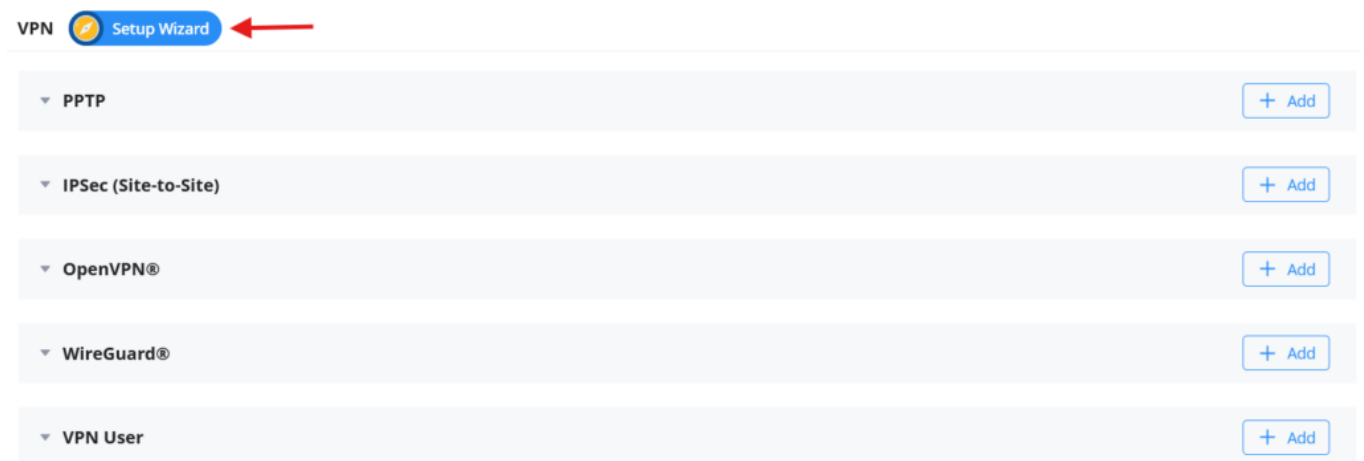
Setup Wizard

The **VPN Setup Wizard** is a step-by-step assistant designed to help users configure VPN tunnels more easily and quickly. It supports four common protocols:

- **OpenVPN(R)**
- **WireGuard(R)**
- **IPSec (Site-to-Site)**
- **PPTP**

The wizard helps users choose the correct scenario (e.g., client-to-site or site-to-site), fill in the minimum required settings, and deploy the VPN configuration in fewer steps. This is useful for both first-time setups and fast testing environments.

To access the wizard: Navigate to Settings -> VPN -> Setup Wizard



VPN Setup Wizard

Select a VPN Protocol

The wizard starts by letting you select a VPN type. Each has specific use cases and benefits.

Protocol Overviews:

- **OpenVPN(R)**:
Secure, open-source VPN protocol suitable for cross-platform connections (Windows, Mac, Android, iOS). Supports certificate-based authentication and is ideal for remote workforce access or site-to-site encryption over public networks.
- **WireGuard(R)**:
Lightweight and modern protocol with fast setup and minimal overhead. Ideal for mobile users or low-resource devices. Supports quick configuration export for peers.
- **IPSec (Site-to-Site)**:
Enterprise-grade encryption standard. Suitable for building permanent tunnels between two fixed locations (e.g., HQ <-> Branch). Supports dynamic IP updates and hardware acceleration.
- **PPTP**:
Legacy protocol with broad compatibility. Easy to configure but not recommended for high-security needs. Best for internal or low-risk use cases.

Please select the appropriate protocol type

**OpenVPN®**

A popular and widely used VPN protocol that uses encryption and authentication to create a secure tunnel between users and servers.

- Compatible with Windows, Macs, Androids, iOS and other platforms
- Certificate management, which can effectively manage the connected time of the access users
- User, SSL (certificate) and other authentication methods, suitable for a variety of networking scenarios

**WireGuard®**

Secure, modern VPN tunneling with state-of-the-art encryption. We recommend using this solution with mobile phones, computers and other terminal devices.

- Lightweight, small memory footprint
- Easy to deploy, support multiple networking scenarios
- Faster and lower latency than OpenVPN®
- Configuration Generate and Export Quickly

**IPSec (Site-to-Site)**

Standardized network security protocols that provide a kind of point-to-point security which can be implemented in a variety of operating systems and network devices.

- High security and flexibility
- One-stop automatic networking, the network will automatically rebuild after changing the WAN IP.
- Improve the performance and efficiency of data transmission through hardware acceleration and optimal configuration

**PPTP**

It is a VPN protocol with wide compatibility, supporting multiple operating platforms such as Windows, macOS, Linux, and mobile platforms.

! To ensure the security of your data, we recommend using OpenVPN®, IPSec or WireGuard®

Next

Select a VPN Protocol

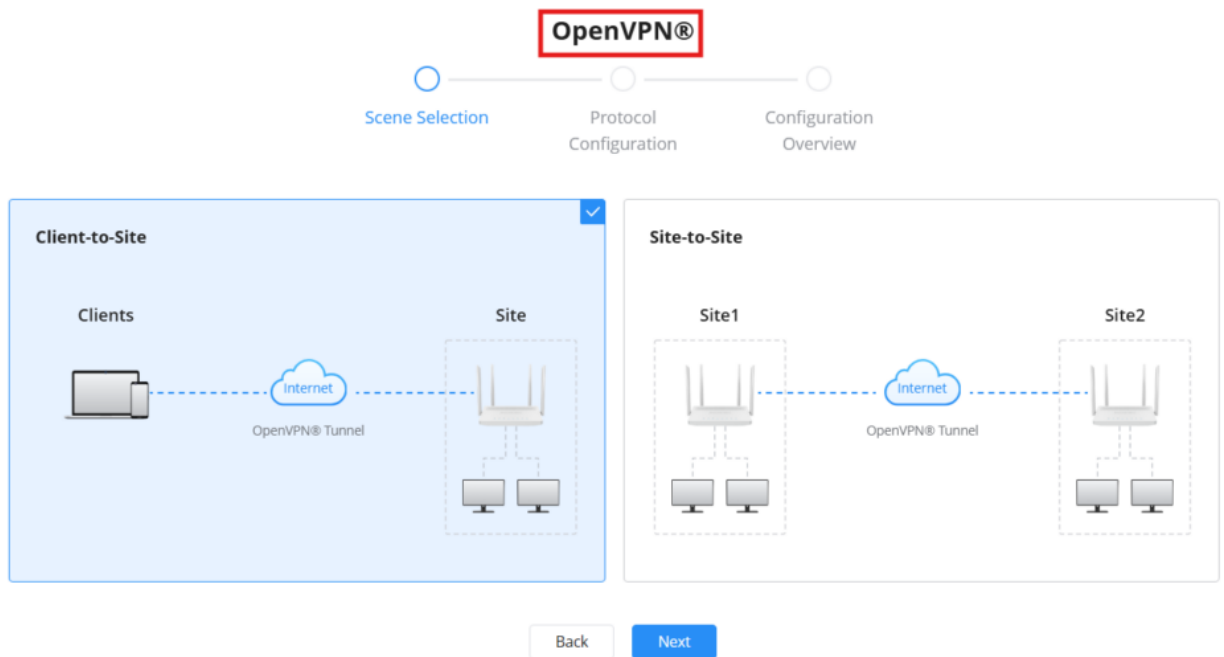
OpenVPN(R) Configuration Wizard

Choose between:

- **Client-to-Site** - For remote users to connect securely to a central office.
- **Site-to-Site** - To connect two office networks over the internet.

Once selected, the wizard will guide through server selection, certificate management, and encryption options.

For advanced configuration, refer to [OpenVPN\(R\) Manual Setup](#).

*OpenVPN(R) Configuration Wizard*

WireGuard(R) Configuration Wizard

WireGuard uses fewer parameters for faster setup. You'll be prompted to:

- Name the connection
- Choose the router and WAN interface
- Assign the local IP and subnet

For advanced features like Peers and Remote Clients, refer to [WireGuard\(R\) Manual Configuration](#).

WireGuard®

○ ——— ○ ——— ○ ——— ○

Interface Settings Scene Selection Protocol Configuration Configuration Overview

Select WireGuard®

Add New WireGuar... ✓

* Name

WireGuard Server

1-64 characters

* Router

Select Router

▼

* Interface

Select WAN

▼

* Local IP Address/Mask Length

192.168.77.138

/

24

Mask Length 24-32

Back Next

WireGuard(R) Configuration Wizard

IPSec (Site-to-Site) Wizard

Designed for secure office-to-office tunnels. Simply select the Site-to-Site mode, and the wizard handles tunnel basics like endpoint roles and tunnel IPs.

Why use this:

- Ideal for permanent, encrypted connections between two static sites
- Supports automatic rebuild after WAN IP changes

For detailed control and manual tuning, see [IPSec Site-to-Site Setup](#).

VPN > Setup Wizard



IPSec Site to Site Wizard

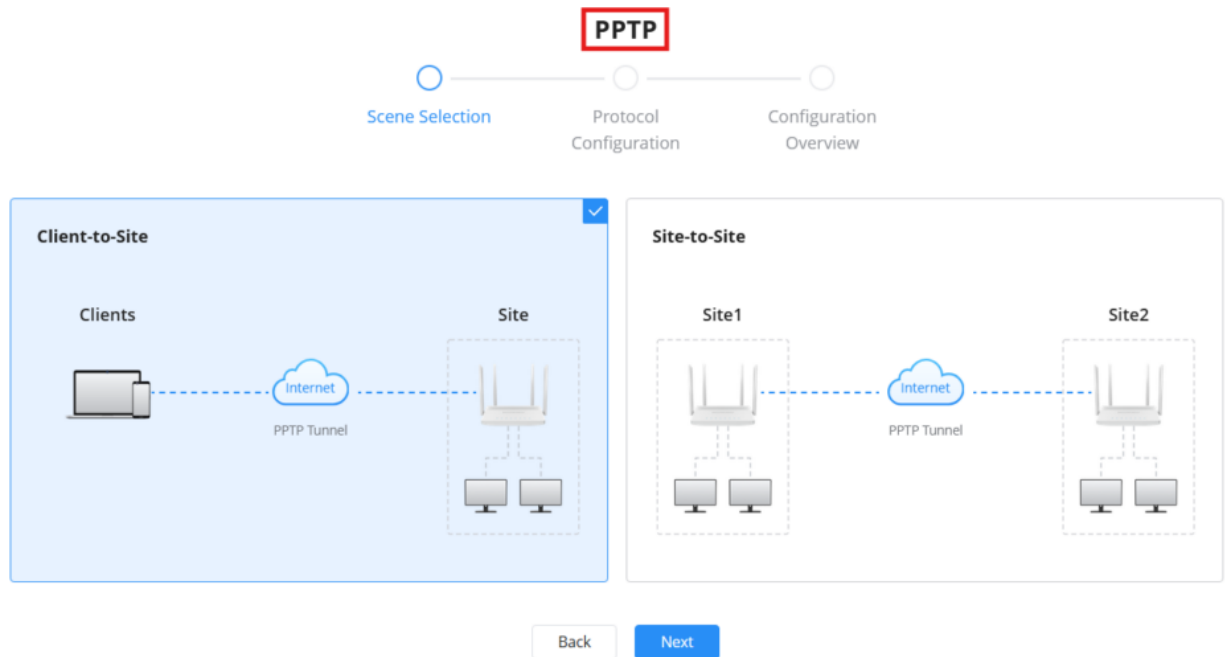
PPTP Wizard

Choose:

- **Client-to-Site** - For basic remote user access
- **Site-to-Site** - For simple office-to-office bridging

PPTP is the easiest to set up, but less secure. Only use it in trusted environments or for quick internal access.

For more configuration options, refer to [PPTP Setup](#).



PPTP Wizard

To add a new VPN or a VPN user, please navigate to **Web UI -> Settings -> VPN** and then click on the "Add" button as shown in the figure below:

VPN



VPN

PPTP

PPTP is a data-link layer protocol for wide area networks (WANs) based on the Point-to-Point Protocol (PPP) and developed by Microsoft that enables network traffic to be encapsulated and routed over an unsecured public network such as the Internet. Point-to-Point Tunneling Protocol (PPTP) allows the creation of virtual private networks (VPNs), which tunnel TCP/IP traffic through the Internet.

The below figure shows the configuration for adding a PPTP Client, it's also possible the say way to add a PPTP Server. When adding a PPTP Client make sure to specify the username and password as well.

Type

PPTP Client

PPTP Server

* Name

PPTP VPN

1-64 characters

Status

Once disabled, the associated VPN services will also be disabled.

* Server Address

192.168.5.7

* Username

GSuser3

1-64 characters

* Password

.....

1-32 characters

* Router

C0:74:AD:BF:AF:50

* Interface

GWN7002

MPPE Encryption

IP Masquerading

* MTU

1450

576-1450 numbers

Remote Network

192.168.122.0

/

24

Add New Item

Cancel

Save

VPN Add PPTP Client

Type	Select either PPTP Client or PPTP Server to configure.
Name	Enter a name for the PPTP client.
Status	Toggle ON or OFF to enable or disable the PPTP Client VPN.Note: PPTP Server: Once disabled, the PPTP service will also be disabled.
Server Address	Enter the IP/Domain of the remote PPTP Server.
Username	Enter the Username for authentication with the VPN Server.
Password	Enter the Password for authentication with the VPN Server.
Router	Select from the drop-down list the router/device group that this VPN will be using.
Interface	Select from the drop-down list the exact interface of the router/device group.
MPPE Encryption	Enable / disable the MPPE for data encryption.By default, it's disabled.
IP Masquerading	This feature is a form of network address translation (NAT) which allows internal computers with no known address outside their network, to communicate to the outside. It allows one machine to act on behalf of other machines.
Maximum Transmission Unit (MTU)	This indicates the size of the packets sent by the router. Please do not change this value unless necessary.
Remote Subnet	Configures the remote subnet for the VPN.The format should be "IP/Mask" where IP could be either IPv4 or IPv6 and mask is a number between 1 and 32.example: 192.168.5.0/24

VPN - Add PPTP Client

VPN > Add PPTP

Type

☐ PPTP Client

☒ PPTP Server

* Name

PPTP Server

Status

☐

Once disabled, the PPTP service will also be disabled.

* Server Local Address/Prefix Length

192.168.5.10

/

24

* Client Start Address

192.168.5.2

* Client End Address

192.168.5.10

* Router

C0:74:AD:BF:AF:50

* Interface

GWN7002

MPPE Encryption

☒

LCP Echo Interval (sec)

20

LCP Echo Failure Threshold

3

LCP Echo Adaptive

☐

* MTU

1450

Cancel

Save

VPN Add PPTP Server

Type	Select either PPTP Client or PPTP Server to configure.
Name	Enter a name for the PPTP Server.
Status	Toggle ON or OFF to enable or disable the PPTP Client/Server VPN.Notes: Once disabled, the PPTP service will also be disabled.
Server Local Address/Prefix Length	Specify the server local address with the prefix length
Client Start Address	specify client start IP address
Client End Address	specify client end IP address
Router	Select from the drop-down list the router/device group that this VPN will be using.
Interface	Select from the drop-down list the exact interface of the router/device group.
MPPE Encryption	Enable / disable the MPPE for data encryption.By default, it's disabled.
LCP Echo Interval (sec)	Configures the LCP echo send interval.
LCP Echo Failure Threshold	Set the maximum number of Echo transfers. If it is not answered within the set request frames, the PPTP server will consider that the peer is disconnected and the connection will be terminated.
LCP Echo Adaptive	Once enabled: LCP Echo request frames will only be sent if no traffic has been received since the last LCP Echo request. Once disabled: the traffic will not be checked, and LCP Echoes are sent based on the value of the LCP echo interval
Maximum Transmission Unit (MTU)	This indicates the size of the packets sent by the router. Please do not change this value unless necessary. By default is 1450.
Maximum Receive Unit (MRU)	MRU indicates the size of the received packets. By default is 1450.
Preferred DNS Server	specify the preferred DNS server. Ex: 8.8.8.8
Alternative DNS Server	specify the alternative DNS server. Ex: 1.1.1.1

IPSec (Site-to-Site)

Internet Security protocol- IPSec is mainly used to authenticate and encrypt packets of data sent over the network layer. To accomplish this, they use two security protocols - ESP (Encapsulation Security Payload) and AH (Authentication Header), the former provides both authentications as well as encryption whereas the latter provides only authentication for the data packets. Since both authentication and encryption are equally desirable, most of the implementations use ESP.

IPsec supports two different encryption modes, they are Tunnel (default) and Transport mode. Tunnel mode is used to encrypt both payloads as well as the header of an IP packet, which is considered to be more secure. Transport mode is used to encrypt only the payload of an IP packet, which is generally used in gateway or host implementations.

GDMS Networking and GWN Manager support IPsec (Site-to-Site) that can help encrypt and secure traffic between two sites using two GWN routers. It supports manual configuration and auto mode.

VPN > Add IPSec

General ^

Mode

☐ Manual
 ☒ Auto

ⓘ If Auto is selected, the LAN subnet and WAN IP will be automatically set to the peer router, and will synchronize automatically after the change, and the IPSec link will not be disconnected due to the change of WAN IP

* Name

IPSec VPN

1-64 characters

Status

☐ Once disabled, the associated VPN services will also be disabled.

* Router

C0:74:AD:B9:F1:9C

* Interface

GWN7052F

* Peer ⓘ

Network

Router

WAN

Default Networ

C0:74:AD:BF:AF

GWN7002

Cancel

Save

VPN Add IPSec Auto

Mode	Select the mode: Manual or Auto.Note: If Auto is selected, the LAN subnet and WAN IP will be automatically set to the peer router, and will synchronize automatically after the change, and the IPSec link will not be disconnected due to the change of WAN IP.
Name	Specify a name for IPSec VPN.
Status	Toggle ON or OFF to enable or disable the IPSec VPN.Note: Once disabled, the associated VPN services will also be disabled.
Router	Select from the drop-down list the router/device group that this VPN will be using.
Interface	Select from the drop-down list the exact interface of the router/device group.
Peer	Set the IP address of the WAN port so the peer network automatically connects with the current network.

For the manual mode, please refer to the figure and table below:

VPN > Add IPSec

General ^

Mode

Manual

Auto

① If Auto is selected, the LAN subnet and WAN IP will be automatically set to the peer router, and will synchronize automatically after the change, and the IPSec link will not be disconnected due to the change of WAN IP

* Name

IPSec Manual

1-64 characters

Status

Once disabled, the associated VPN services will also be disabled.

* Remote Address

192.168.5.10

* Router

C0:74:AD:BF:AF:50

* Interface

GWN7002

* Pre-shared Key

1-32 characters

* Local Network

192.168.122.0

/

24

+

Add New Item

* Remote Network

192.168.80.0

/

24

+

Add New Item

Advanced Settings v

Cancel

Save

VPN Add IPSec Manual mode

General	
Mode	Select the mode: Manual or Auto.Note: If Auto is selected, the LAN subnet and WAN IP will be automatically set to the peer router, and will synchronize automatically after the change, and the IPSec link will not be disconnected due to the change of WAN IP.
Name	Specify a name for IPSec VPN.
Status	Toggle ON or OFF to enable or disable the IPSec VPN.Note: once disabled, the associated VPN services will also be disabled.
Remote address	Specify the remote IP address
Router	Select from the drop-down list the router/device group that this VPN will be using.
Interface	Select from the drop-down list the exact interface of the router/device group.
Pre-shared key	Specify a pre-shared key
Local Network	Set the local IP address and mask length of the protected traffic. Please enter an IP address or subnet (e.g., 192.168.122.0/24)
Remote Network	Set the peer IP address and mask length of the protected data flow. Please enter an IP address or subnet (e.g., 192.168.122.0/24)
Advanced Settings	
IKE Version	Select from the drop-down list the IKE version: IKEv1 or IKEv2.
IKE SA Lifetime (sec)	Specify the IKE SA Lifetime (sec), default is 28800.

Local Source IP	Enter the local Source IP address.
Local ID	Set the local ID to identify the identity of the local device for the remote device to verify its legitimacy.
Remote ID	Set the remote ID to authenticate the identity of the remote device. This parameter must be consistent with the local ID set on the remote device.
Negotiation Mode	Select the negotiation mode from the drop-list, two options are list: Main or Aggressive.
Encryption Algorithm	Select from the drop-down list the encryption algorithm to use, the available ones are: 3DES AES-128 AES-192 AES-256 Default is AES-256
Hash Algorithm	Select from the drop-down list the Hash algorithm to use, the available ones are: MD5 SHA-1 SHA2-256 Default is SHA2-256
DH Group	DH (Diffie-Hellman) group, select from the drop-down list the DH group, available groups are Group 2,5,14,19,20,21.
Reconnect	Set whether to renegotiate the connection when it is about to expire.
Number of Reconnections	Specify the number of reconnections.Note: The range is 0-10. 0 means continuous attempts to negotiate a connection.
DPD (Dead Peer Detection)	Toggle ON or OFF DPD.Note: DPD is a method that is used by devices to check for the current existence and availability of IPsec peers.
DPD Delay Time (sec)	Set the delay time for connecting DPD keepalive packets.
DPD Idle Time (sec)	Set the amount of time to remain idle if no response is received from the peer.
DPD Action	Hold: Hold IPsec routes and delete IPsec SA. Clear: Delete IPsec routes, IPsec and IKE SA. Restart: Delete IPsec routes, IPsec SA, and IKE SA, then re-initiate the negotiation.
IPsec SA Lifetime (sec)	Specify the IPsec SA lifetime, default is 3600.
ESP Encryption Algorithm	Select from the drop-down list the ESP Encryption Algorithm, the available ones are: 3DES AES-128 AES-192 AES-256 Default is AES-256.
ESP Hash Algorithm	Select from the drop-down list the ESP Hash Algorithm, the available ones are: MD5 SHA-1 SHA2-256 Default is SHA2-256
PFS Group	Select from the drop-down list the PFS group, the available ones are: Group 2,5,14.Default is disabled.

VPN - Add IPsec Manual mode

OpenVPN(R)

OpenVPN(R) is a virtual private network system that secures site-to-site or point-to-point traffic in routed or bridged configurations and remote access facilities. It supports both the client and server side.

GDMS Networking and GWN Manager support both OpenVPN(R) Client and Server side also certificates management for ease of use.

Type	☐ OpenVPN® Client ☒ OpenVPN® Server
* Name	OpenVPN Server
Status	☐ Once disabled, the OpenVPN® service will also be disabled.
Protocol	UDP
* Router	C0:74:AD:BF:AF:50
* Interface	GWN7002
* Local Port ⓘ	1194
Authentication Mode	SSL
Encryption Algorithm	AES-256-CBC
Digest Algorithm	SHA256
TLS Identity Authentication	☐
Duplicate client certificates are allowed ⓘ	☐
Redirect Gateway	☒
	Cancel Save

VPN Add OpenVPN(R) Server

Type	Select the OpenVPN(R): Client or Server
Name	Enter a name for the OpenVPN(R) server.
Status	Toggle ON or OFF to enable or disable the OpenVPN(R) Server. Note: Once disabled, the OpenVPN(R) service will also be disabled.
Protocol	Choose the Transport protocol from the dropdown list, either TCP or UDP. The default protocol is UDP.
Router	Select from the drop-down list the router/device group that this VPN will be using.
Interface	Select from the drop-down list the exact interface of the router/device group.
Local Port	Configure the listening port for OpenVPN(R) server. The default value is 1194.
Authentication Mode	Choose the server mode the OpenVPN(R) server will operate with. 4 modes are available: SSL: Authentication is made using certificates only (no user/pass authentication). Each user has a unique client configuration that includes their personal certificate and key. This is useful if clients should not be prompted to enter a username and password, but it is less secure as it relies only on something the user has (TLS key and certificate). User Authentication: Authentication is made using only CA, user and password, no certificates. Useful if the clients should not have individual certificates. Less secure as it relies on a shared TLS key plus only something the user knows (Username/password). SSL + User Authentication: Requires both certificate and username / password. Each user has a unique client configuration that includes their personal certificate and key. PSK: Used to establish a point-to-point OpenVPN(R) configuration. A VPN tunnel will be created with a server endpoint of a specified IP and a client endpoint of specified IP. Encrypted communication between client and server will occur over UDP port 1194, the default OpenVPN(R) port. Most secure as there are multiple factors of authentication (TLS Key and Certificate that the user has, and the username/password they know).
Encryption Algorithm	Choose the encryption algorithm from the dropdown list to encrypt data so that the receiver can decrypt it using same algorithm.

Digest Algorithm	Choose digest algorithm from the dropdown list, which will uniquely identify the data to provide data integrity and ensure that the receiver has an unmodified data from the one sent by the original host.
TLS Identity Authentication	This option uses a static Pre-Shared Key (PSK) that must be generated in advance and shared among all peers. This feature adds extra protection to the TLS channel by requiring that incoming packets have a valid signature generated using the PSK key.
TLS Identity Authentication Direction	Select from the drop-down list the direction of TLS Identity Authentication, three options are available (Server, Client or Both).
TLS Pre-Shared Key	If TLS Identity Authentication is enabled, enter the TLS Pre-Shared Key.
Duplicate client certificates are allowed	Click on "ON" to allow duplicate Client Certificates
Redirect Gateway	When redirect-gateway is used, OpenVPN(R) clients will route DNS queries through the VPN, and the VPN server will need to handle them.
Push Routes	Specify route(s) to be pushed to all clients. Example: 10.0.0.1/8
LZO Compression Algorithm	Select whether to activate LZO compression or no, if set to "Adaptive", the server will make the decision whether this option will be enabled or no.
Allow Peer to Change IP	Allow remote change the IP and/or Port, often applicable to the situation when the remote IP address changes frequently.
CA Certificate	Select a generated CA from the dropdown list or add one.
Server Certificate	Select a generated Server Certificate from the dropdown list or add one.
IPv4 Tunnel Network/Mask Length	Enter the network range that the GWN70xx will be serving from to the OpenVPN(R) client. Note: The network format should be the following 10.0.10.0/16. The mask should be at least 16 bits.

VPN - Add OpenVPN(R) Server

Type	☒ OpenVPN® Client ☐ OpenVPN® Server
* Name	1-64 characters
Status	☐ Once disabled, the associated VPN services will also be disabled.
Protocol	UDP
* Router	C0:74:AD:BF:AF:50
* Interface	Select WAN
* Local Port ⓘ	1194 1-65535 numbers
* Remote OpenVPN® Server	
* OpenVPN® Port	1194 1-65535 numbers
Authentication Mode	SSL
Encryption Algorithm	AES-256-CBC
Digest Algorithm	SHA256
TLS Identity Authentication	☐
Cancel Save	

VPN Add OpenVPN(R) Client

Type	Select the OpenVPN(R): Client or Server
Name	Enter a name for the OpenVPN(R) Client.
Status	Toggle ON or OFF to enable or disable the OpenVPN(R) Client.Note: Once disabled, the associated VPN services will also be disabled.
Protocol	Specify the transport protocol used. UDP TCP Note: The default protocol is UDP.
Router	Select from the drop-down list the router/device group that this VPN will be using.
Interface	Select from the drop-down list the exact interface of the router/device group.
Local Port	Configures the client port for OpenVPN(R).The port between the OpenVPN(R) client and the client or between the client and the server should not be the same.
Remote OpenVPN(R) Server	Configures the remote OpenVPN(R) server. Both IP address and domain name are supported.
OpenVPN(R) Port	Configures the remote OpenVPN(R) server port

Authentication Mode	Choose the server mode the OpenVPN(R) server will operate with. 4 modes are available: SSL: Authentication is made using certificates only (no user/pass authentication). Each user has a unique client configuration that includes their personal certificate and key. This is useful if clients should not be prompted to enter a username and password, but it is less secure as it relies only on something the user has (TLS key and certificate). User Authentication: Authentication is made using only CA, user and password, no certificates. Useful if the clients should not have individual certificates. Less secure as it relies on a shared TLS key plus only something the user knows (Username/password). SSL + User Authentication: Requires both certificate and username / password. Each user has a unique client configuration that includes their personal certificate and key. PSK: Used to establish a point-to-point OpenVPN(R) configuration. A VPN tunnel will be created with a server endpoint of a specified IP and a client endpoint of specified IP. Encrypted communication between client and server will occur over UDP port 1194, the default OpenVPN(R) port. Most secure as there are multiple factors of authentication (TLS Key and Certificate that the user has, and the username/password they know).
Encryption Algorithm	Choose the encryption algorithm. The encryption algorithms supported are: DES-CBC RC2-CBC DES-EDE-CBC DES-EDE3-CBC DESX-CBC BF-CBC RC2-40-CBC CAST5-CBC RC2-64-CBC AES-128-CBC AES-192-CBC AES-256-CBC SEED-CBC
Digest Algorithm	Select the digest algorithm. The digest algorithms supported are: MD5 RSA-MD5 SHA1 RSA-SHA1 DSA-SHA1-old DSA-SHA1 RSA-SHA1-2 DSA RIPEMD160 RSA-RIPEMD160 MD4 RSA-MD4 ecdsa-with-SHA1 RSA-SHA256 RSA-SHA384 RSA-SHA512 RSA-SHA224 SHA256 SHA384 SHA512 SHA224 whirlpool
TLS Identity Authentication	Enable TLS identity authentication direction.
TLS Identity Authentication Direction	Select the identity authentication direction. Server: Identity authentication is performed on the server side. Client: Identity authentication is performed on the client side. Both: Identity authentication is performed on both sides.
TLS Pre-Shared Key	Enter the TLS pre-shared key.
Routes	Configures IP address and subnet mask of routes, e.g., 10.10.1.0/24.
Deny Server Push Routes	If enabled, client will ignore routes pushed by the server.
IP Masquerading	This feature is a form of network address translation (NAT) which allows internal computers with no known address outside their network, to communicate to the outside. It allows one machine to act on behalf of other machines.
LZO Compression	Select whether to activate LZO compression or no, if set to "Adaptive", the server will make the decision whether this option will be enabled or no. LZO encoding provides a very high compression ratio with good performance. LZO encoding works especially well for CHAR and VARCHAR columns that store very long character strings.
Allow Peer to Change IP	Allow remote change the IP and/or Port, often applicable to the situation when the remote IP address changes frequently.
CA Certificates	Click on "Upload" and select the CA certificate Note: This can be generated in System Settings -> Certificates -> CA Certificate
Client Certificate	Click on "Upload" and select the Client Certificate. Note: This can be generated in System Settings -> Certificates -> Certificate

VPN - Add OpenVPN(R) Client

VPN User

In this section, the user can add a VPN user for either PPTP VPN or OpenVPN(R). Please refer to the figure and table below:

* Name	VPN User	1-64 characters
Status	☒	
Server Type	☐ PPTP ☒ OpenVPN®	
* Server	OpenVPN Server	
Username ⓘ	OpenVPN_User1	1-64 characters
Password ⓘ	P@ssW0rd	1-32 characters
Client Subnet ⓘ	192.168.2.0 / 24	
		Add New Item
Client Certificate	Client Cert	
	Cancel Save	

VPN Add VPN User

Name	Enter a name for the user. This name will not be used to log in.
Status	Enable or disable this account.
Server Type	Choose the type of the server. PPTP OpenVPN(R)
Server Name	Select the VPN server from the drop-list
Username	Enter the username. This username will be used to log in. Note: only alphanumeric characters and @ ! \$ % - _ are supported.
Password	Enter the password. Note: only alphanumeric characters and @ ! \$ % - _ are supported.
Client Subnet	Set the IP address and mask length of the subnet for the client to access. Please enter an IP address or subnet (e.g., 192.168.2.0/24)
Only if OpenVPN(R) is selected	
Client Certificate	Select from the drop-down list the client certificate.

VPN - Add VPN User

WireGuard(R)

WireGuard(R) is a free and open-source VPN solution that encrypts virtual private networks, easy to use, high performance and secure.

GDMS Networking and GWN Manager support WireGuard(R) as well, a Server local address can be specified while a private key can be generated with one click then after that the public key can be copied and shared with the client.

* Name

WireGuard VPN

Status

☐

Once disabled, the associated WireGuard® service will also be disabled.

* Router

C0:74:AD:BF:AF:50

* Interface ⓘ

GWN7002

* Listening Port ⓘ

51820

* Server Local Address/Prefix Length

192.168.7.0 / 24

* Private Key

yEXeLmFGEFgMj3VELbenSM92Gshq8+jvYX5h6mw98Ho=
[One-Click Generation](#)

Public Key

Lp+f9uAcf9Nhpsd/TGqE9kGFIsxyYOBaobICOZIWO30=
[Copy](#)

* MTU

1420

Cancel

Save

VPN Add WireGuard(R)

Name	Specify a name for Wireguard(R) VPN.
Status	Toggle ON or OFF to enable or disable the Wireguard(R) VPN.
Router	Select from the drop-down list the router/device group that this VPN will be using.
Interface	Select from the drop-down list the exact interface of the router/device group.Note: one WAN only supports creating one WireGuard(R).
Listening Port	Set the local listening port when establishing a WireGaurd(R) tunnel.Default: 51820
Server Local Address/Prefix Length	Specify the server local address with the prefix length
Private Key	Click on "One-Click Generation" text to generate a private key.
Public Key	The public key will be generated according to the private key.Click on "Copy" text to copy the public key.
MTU	This indicates the size of the packets sent by the router. Please do not change this value unless necessary. By default is 1450.

VPN - Add WireGuard(R)

Once the Wireguad tunnel is created , the peers can be added as shown below:

Add Type

☒ Auto

☐ Manual

①

Automatically generates WireGuard Peer configurations for devices like smartphones and computers, which can be downloaded or scanned via QR code from the Peer list, provided the associated WireGuard interface is connected.

* Name

User1

Supports 1-64 bits of numbers, letters, and special characters, does not support \$'|^~!-<>; ()

* Allowed IP

0.0.0.0 / 0

Add New Item

Preferred DNS Server

8.8.8.8

Alternative DNS Server

Cancel

Save

Add Type	Specifies how the WireGuard peer configuration will be created. Auto automatically generates WireGuard peer configurations for devices such as smartphones and computers, allowing the configuration to be downloaded or scanned via QR code from the Peer list. Manual allows administrators to manually configure the peer settings.
Name	Defines the name or label of the WireGuard peer. This helps administrators identify and manage the VPN peer connection.
Allowed IP	Specifies the IP address or subnet that is allowed to communicate through the VPN tunnel for this peer. A total of 8 Allowed IP entries can be added if needed.
Preferred DNS Server	Specifies the primary DNS server that will be assigned to the VPN peer when connected through the WireGuard tunnel.
Alternative DNS Server	Specifies a secondary or backup DNS server for the VPN peer connection.

Traffic Management

On this page, the user can manage traffic by either adding static routes (IPv4 or IPv6) or adding Policy Routes.

Static Routes

Static routing is a form of routing by manually configuring the routing entries, rather than using a dynamic routing traffic for any service that requires a static address that never changes.

GDMS Networking and GWN Manager support setting manually **IPv4 or IPv6 Static Routes** which can be accessed from **Web UI -> Settings -> Traffic Management page -> Static Routes section**.

All the Static routes either IPv4 or IPv6 will be listed here.

Static Routes

IPv4 Static Route

IPv6 Static Route

Name	State	Gateway Device	IP Address	Subnet Mask	Outgoing Interface	Next Hop	Metric	Operation
main exit	Disabled	C0:74:AD:BF:AF...	192.168.5.1	255.255.255.0	GWN7002	—	60	 

Policy Route

Name	Status	Router	Protocol Type	Source Group	Source IP Address	Destination IP Address	Internet Source	Operation
main route	On	C0:74:AD:BF:AF:50	TCP/UDP	All	192.168.80.0/24	—	1	 

Static Routes

Click on  button to add a static route, the user has the option between IPv4 or IPv6.

Traffic Management > Add Static Route

Type

☒ IPv4 Static Route

☐ IPv6 Static Route

* Name

IPv4 Static Route

Supports 1-64 characters

Status

☒

* Gateway Device

C0:74:AD:95:12:90

* Destination IP Address

192.168.5.85

* Subnet Mask

255.255.255.0

* Outgoing Interface

WAN1

Next Hop

* Metric

60

Cancel

Add

Add Static Route

Policy Route

GDMS Networking and GWN Manager support managing more than one GWN router on the same network, with multiple GWN routers added, the user will have many [internet sources](#), which will enable the user to specify which traffic can be forwarded to an internet source (Load Balance/Backup). Also, a schedule can be applied to this policy route to only be active based on the [schedule](#) selected.

Static Routes

IPv4 Static Route

IPv6 Static Route

Name	State	Gateway Device	IP Address	Subnet Mask	Outgoing Interface	Next Hop	Metric	Operation
main exit	Disabled	C0:74:AD:BF:AF...	192.168.5.1	255.255.255.0	GWN7002	—	60	 

Policy Route

+ Add

Name	Status	Router	Protocol Type	Source Group	Source IP Address	Destination IP Address	Internet Source	Operation
main route	On	C0:74:AD:BF:AF:50	TCP/UDP	All	192.168.80.0/24	—	1	  

Policy Route

Navigate **Web UI -> Settings -> Traffic Management page -> Policy route section** and then click on the "**Add**" button to add a policy route, please refer to the figure below:

Traffic Management > main route

* Name

main route

1-64 characters

Status

IP Family

IPv4

Protocol Type

TCP/UDP

* Router

C0:74:AD:

* Source Group

All

Source IP Address/Mask Length

192.168.80.0

/

24

Source Port

1-65535 numbers

Destination IP address/mask length

/

Destination Port

1-65535 numbers

* Internet Source

Internet Source 1

Schedule

None

Cancel

Save

Add Policy Route

Name	Specify a name for the policy route
Status	Toggle ON or OFF to enable or disable the policy route
IP Family	IP Family, default is IPv4

Protocol Type	Select from the drop-down list the protocol type: All TCP UDP TCP/UDP ICMP
Router	Select from the drop-down list the router or the device groupNote: for device groups, only router group is supported
Source Group	Select the source group from the drop-down list
Source IP Address/Mask Length	Set the source IP address and mask length of the packet to be matched. Please enter an IP address or subnet (e.g., 192.168.122.0/24)
Destination IP address/mask length	Set the destination IP address and mask length to match the packet. For example, 192.168.122.0/24
Internet Source	Select the internet source (WAN/Load Balance/Backup) from the drop-down list
Schedule	Select a schedule from the drop-down list or click on "Add New Schedule" to add one.

Add Policy Route

QoS

The QoS (Quality of Service) feature allows administrators to manage and prioritize network traffic to ensure better bandwidth allocation and application performance across the network. Administrators can create Bandwidth Policies to control and filter traffic based on parameters such as IP addresses, ports, protocols, interfaces, and applications, while also defining traffic actions and DSCP priorities.

Traffic Management > Add QoS

Type

Bandwidth Policy

Bandwidth Channel

*

Name

Test_Policy

1-64 characters

Status

Address Family

AnyIPv4IPv6

Protocol Type

TCP/UDPTCPUDP

Source & Destination

*

Router/Group

GWN7062ET(EC:74:D7:63:41:F4)

*

Source Interface

Select Interface

Source IP Address/Prefix Length

/

Source Port

1-65535 numbers

*

Destination Interface

Select Interface

Destination IP Address/Mask Length

/

Destination Port

1-65535 numbers

Advanced Configuration

QoS

Below is a description for each configurable option:

Type	Selects the QoS configuration type. Bandwidth Policy is used to create traffic matching and bandwidth control rules, while Bandwidth Channel is used to allocate guaranteed and maximum bandwidth for different priority levels.
------	--

Name	Specifies the name or label of the QoS policy for easier identification and management.
Status	Enables or disables the QoS policy.
Address Family	Defines the IP version used by the policy. Available options are Any, IPv4, or IPv6.
Protocol Type	Specifies the traffic protocol type the policy applies to. Available options include TCP/UDP, TCP, or UDP.
Router/Group	Selects the target router or device group where the QoS policy will be applied.
Source Interface	Specifies the source network interface from which the traffic originates.
Source IP Address/Prefix Length	Defines the source IP address or subnet range to match traffic for the QoS rule.
Source Port	Specifies the source port number or port range used for traffic matching.
Destination Interface	Specifies the destination network interface where the traffic is forwarded.
Destination IP Address/Mask Length	Defines the destination IP address or subnet range used for traffic matching.
Destination Port	Specifies the destination port number or port range for the QoS rule.
Application	Allows the administrator to match traffic based on specific applications or services.
DSCP Priority	Defines the DSCP priority level used for traffic classification and prioritization.
Action	Specifies the action applied to matched traffic. Permit allows the traffic normally, while Channel Rate Limit applies bandwidth limitation rules.
Rewrite DSCP	Allows administrators to rewrite or modify the DSCP value of matched packets for traffic prioritization purposes.
LAN IP Rate Limit	Enables LAN-side IP-based bandwidth rate limiting for matched traffic.
Schedule	Specifies a schedule during which the QoS policy will be active and enforced.

In addition, the Bandwidth Channel feature allows administrators to allocate guaranteed and maximum uplink/downlink bandwidth values for different priority levels, helping ensure that critical services and applications receive sufficient network resources during periods of heavy traffic usage.

Type ☐ Bandwidth Policy ☒ Bandwidth Channel

* Name 1-64 characters

* Router/Group ▾

Uplink Bandwidth

Guaranteed Bandwidth (Kbps) Range: 1-10000000. Leave empty for no limit.

Max Bandwidth (Kbps) Range: 1-10000000. Leave empty for no limit.

Downlink Bandwidth

Guaranteed Bandwidth (Kbps) Range: 1-10000000. Leave empty for no limit.

Max Bandwidth (Kbps) Range: 1-10000000. Leave empty for no limit.

Channel Priority

Priority	Guaranteed Bandwidth Ratio (%)	Max Bandwidth Ratio (%)	Rewrite DSCP
0 (Highest)	Integer 1-100	100	None
1	Integer 1-100	100	None
2	Integer 1-100	100	None

Bandwidth Channel

This feature is particularly useful for optimizing network performance, prioritizing important business applications, limiting non-critical traffic, and improving overall traffic management across supported GWN routers and device groups. Please refer to the options below for more information:

Type	Selects the QoS configuration mode. Bandwidth Channel is used to allocate and manage bandwidth resources across different traffic priority levels.
Name	Specifies the name or label of the bandwidth channel configuration for easier identification and management.
Router/Group	Selects the target router or device group where the bandwidth channel configuration will be applied.
Uplink Guaranteed Bandwidth (Kbps)	Defines the minimum guaranteed upload bandwidth reserved for traffic managed by this bandwidth channel.
Uplink Max Bandwidth (Kbps)	Specifies the maximum allowed upload bandwidth for this bandwidth channel. Leaving the field empty means no bandwidth limit is applied.
Downlink Guaranteed Bandwidth (Kbps)	Defines the minimum guaranteed download bandwidth reserved for this bandwidth channel.
Downlink Max Bandwidth (Kbps)	Specifies the maximum allowed download bandwidth for this bandwidth channel. Leaving the field empty means no bandwidth limit is applied.
Channel Priority	Defines the bandwidth allocation and traffic priority levels used by the bandwidth channel configuration. Lower priority numbers represent higher traffic priority.
Priority	Specifies the traffic priority level, where 0 represents the highest priority and 7 represents the lowest priority.
Guaranteed Bandwidth Ratio (%)	Defines the percentage of guaranteed bandwidth reserved for the corresponding priority level.
Max Bandwidth Ratio (%)	Specifies the maximum percentage of bandwidth allowed for the corresponding priority level.

Rewrite DSCP	Allows administrators to rewrite the DSCP value for traffic matching the corresponding priority level to support traffic classification and prioritization across the network.
--------------	--

Firewall and Security

The **Firewall & Security** page combines all configurations related to security and traffic control. It is divided into six main sections:

- Port Forwarding
- Wired Firewall Rules
- Wireless Firewall Rules
- Rogue AP
- Security Defense
- Advanced Security Settings

Click on any section to expand the list of rules or click the **Add** button to create a new configuration.

Firewall & Security



Firewall and Security

Port Forwarding

Port forwarding is redirecting the communication request from one address and port to another address and port. A source IP Address and port will be mapped to a Destination IP Address, port, and Group.

To add port forwarding, navigate to **Web UI -> Settings -> Firewall & Security page -> Port Forwarding tab**.

Firewall & Security > Add Port Forwarding

* Name	Port Forwarding	1-64 characters
Status	☒	
Protocol Type	☒ TCP/UDP ☐ TCP ☐ UDP	
* Interface	WAN1	
Source IP Address ⓘ		
* Source Port ⓘ	24	1-65535 numbers
* Destination Group	Default LAN	
* Destination IP Address	192.168.5.85	
* Destination Port ⓘ	24	1-65535 numbers
	Cancel Save	

Port Forwarding

Refer to the following table for the port-forwarding option when editing or creating a port-forwarding rule:

Name	Enter a name for the port forwarding rule.
Status	Toggle on/off the rule status.
Protocol Type	Select the transport protocol used.TCP/UDPTCPUDP
Interface	Select the WAN port
WAN IP Address	Enter the WAN IP address for Internet clients to access this server; if an interface is selected, leave this field blank and all IP addresses on that interface can be used for port forwarding.
Source Address Type	Select the address type that will be enteredIP AddressIP SubnetSelect IPv4 AddressSelect IPv4 Address Group
Source Address	Sets the IP address that external users access to this device. If not set, any IP address on the corresponding WAN port can be used
Source Port	Set a single or a range of Ports.
External Port	The service port that the router provides to the WAN. External users obtain services by sending requests to this port. You can enter a port number or a range of ports (e.g. 5-23).
Internal IP Address	Set the The IP address of the network host acting as the server in the LAN IP address.
Internal Port	The service port provided by the router to the local network, i.e. the LAN service port. If the source port is entered in a range, the destination port must also be entered in a range, and the port range difference must be consistent (for example, the source port can be entered as 10-20, and the destination port can be entered as 11-21, and the port range difference is 10).

Port Forwarding

Wired Firewall Rules

Wired Firewall Rules allow administrators to control traffic through the GWN devices using various rule types. Administrators can define rules to allow, deny, drop, or manipulate traffic based on source/destination, protocol, port, and more. These rules are essential for managing inbound and outbound network security and routing behavior.

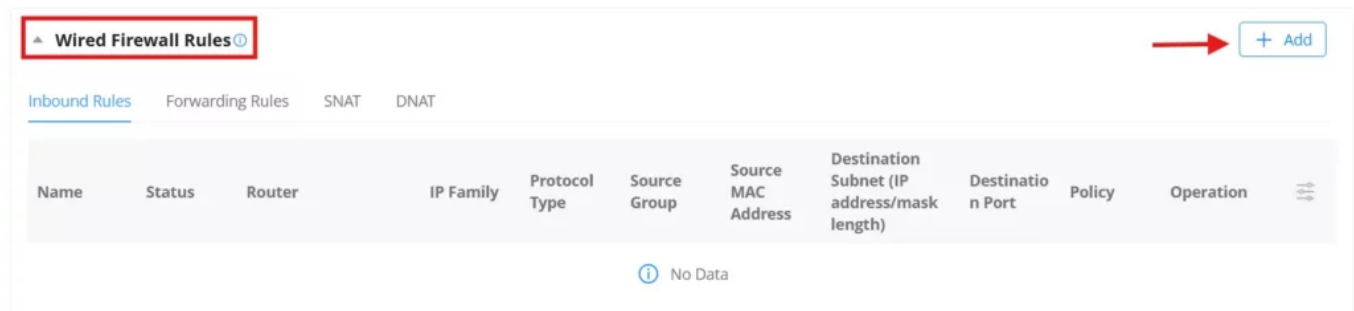
To configure Wired Firewall Rules, navigate to:

Web UI -> Settings -> Firewall & Security -> Wired Firewall Rules tab

Four rule types are supported:

- **Inbound Rules** - Control incoming traffic to the network
- **Forwarding Rules** - Define how traffic is passed across network interfaces
- **SNAT Rules** - Rewrite the source address for outgoing packets
- **DNAT Rules** - Rewrite the destination address for incoming packets

Click the **+ Add** button to configure a new rule.



Wired Firewall Rules

Wired firewall rules apply only to Routers.

Inbound Rules

Inbound Rules control traffic entering the router from external networks. These rules are typically used to allow or restrict access to services hosted within the internal network.

You can define rules based on:

- Source group, MAC, IP, port
- Destination IP and port
- Protocol type
- Router and IP family (IPv4/IPv6)
- Action to take: Accept, Reject, or Drop

Type

☒ Inbound Rules

☐ Forwarding Rules

☐ SNAT

☐ DNAT

* Name

Inbound Rule

1-64 characters

Status

IP Family

☐ Any

☒ IPv4

☐ IPv6

* Protocol Type

UDP

* Router

Select Router/Group

* Source Group ⓘ

Select

Source MAC Address

Source IP Address/Mask Length ⓘ

/

Source Port ⓘ

1-65535 numbers

Destination IP Address/Mask length ⓘ

/

Destination Port ⓘ

1-65535 numbers

Action ⓘ

☒ Accept

☐ Reject

☐ Drop

Add Inbound Rule

Field	Description
Type	Select the type of firewall rule. For this setup, choose 'Inbound Rules'.
Name	Enter a descriptive name for the rule (1-64 characters). Example: Inbound Rule.
Status	Toggle this switch to enable or disable the rule.
IP Family	Choose the IP version to match traffic: Any, IPv4, or IPv6.
Protocol Type	Select the protocol to filter traffic. Options: TCP, UDP, UDP/TCP, ICMP, IGMP, ALL.
Router	Select a router group. Only router groups are supported for rule application.
Source Group	Choose the WAN or VLAN group where traffic originates from.
Source MAC Address	Optionally define a MAC address to narrow the rule scope. Leave blank for all MACs.
Source IP Address/Mask Length	Specify the originating IP or subnet. Example: 192.168.122.0/24.
Source Port	Optional. Use commas for multiple ports or ranges. Example: 4, 5-10.
Destination IP Address/Mask Length	Define where traffic is headed. Example: 192.168.1.0/24.
Destination Port	Optional. Use commas for multiple ports or ranges. Example: 80, 1000-2000.
Action	Choose how to treat matching traffic: - Accept: Allow - Reject: Deny with response - Drop: Deny silently

Forwarding Rules

Forwarding Rules define how traffic is relayed across internal interfaces. These are typically used to manage routing decisions between LAN segments or VLANs within the network.

Firewall & Security > Add Wired Firewall Rules

Type

☐ Inbound Rules

☒ Forwarding Rules

☐ SNAT

☐ DNAT

* Name

1-64 characters

Status

IP Family

☒ Any

☐ IPv4

☐ IPv6

* Protocol Type

UDP

* Router

Select Router/Group

* Source Group ⓘ

Select

Source MAC Address

Source IP Address/Mask Length ⓘ

/

Source Port ⓘ

1-65535 numbers

* Destination Group

Destination IP Address/Mask length ⓘ

/

Destination Port ⓘ

1-65535 numbers

Action ⓘ

☒ Accept

☐ Reject

☐ Drop

Add Forwarding Rule

Field	Description
Type	Select the type of the firewall rule. In this case, 'Forwarding Rules'.
Name	Enter a name to identify the forwarding rule (1-64 characters).
Status	Toggle the rule on or off.
IP Family	Select the IP version: IPv4, IPv6, or Any.
Protocol Type	Choose the type of traffic to control: TCP, UDP, UDP/TCP, ICMP, IGMP, or ALL.
Router	Select the router or router group this rule applies to (only router groups are supported).
Source Group	Select a source group such as a WAN or VLAN. If set to 'All', more specific rules take priority.
Source MAC Address	Optionally specify a source MAC address to match.
Source IP Address/Mask Length	Define the source IP or subnet (e.g., 192.168.122.0/24).
Source Port	Specify individual ports or ranges using commas (e.g., '4, 5-10').

Destination Group	Required: Select the destination group, such as WAN or VLAN.
Destination IP Address/Mask Length	Set the IP/subnet range targeted by the rule (e.g., 192.168.122.0/24).
Destination Port	Specify destination ports or ranges (e.g., '80, 1000-2000?').
Action	Choose how to handle matching traffic: Accept (allow), Reject (deny with response), or Drop (silently discard).

Add Forwarding Rule

SNAT (Source NAT) Rules

SNAT Rules allow the router to rewrite the **source IP address** of outbound packets. This is typically used for hiding internal IP addresses behind a public IP when accessing external services.

Key configuration points include:

- Source IP and rewrite source IP
- Source and destination port mapping
- Destination group

SNAT ensures that return traffic can be routed correctly back to the originating device by modifying the source IP.

Firewall & Security > Add Wired Firewall Rules

Type

☐ Inbound Rules

☐ Forwarding Rules

☒ SNAT

☐ DNAT

* Name

1-64 characters

Status

IP Family

☒ IPv4

* Protocol Type

UDP/TCP

* Router

Select Router/Group

* Source IP Address/Mask Length ⓘ

/

* Rewrite Source IP Address ⓘ

Source Port ⓘ

1-65535 numbers

Rewrite Source Port ⓘ

1-65535 numbers

* Destination Group

Select

Destination IP Address/Mask length ⓘ

/

Destination Port ⓘ

1-65535 numbers

Add SNAT

Field	Description
Name	Enter a name for the SNAT rule (1-64 characters).
Status	Toggle to enable or disable the SNAT rule.

IP Family	Select IPv4 (currently the only supported type).
Protocol Type	Choose the applicable protocol: TCP, UDP, UDP/TCP, ICMP, IGMP, or ALL.
Router	Select the router or router group the rule applies to. Only router groups are supported.
Source IP Address/Mask Length	Specify the original source IP or subnet of the outgoing traffic (e.g., 192.168.1.0/24).
Rewrite Source IP Address	Enter the new IP address that will replace the original source IP.
Source Port	Optionally define the original source port(s) or port range(s), comma-separated (e.g., 80, 1000-2000).
Rewrite Source Port	Optionally enter the new source port(s) that should replace the original ones.
Destination Group	Select the destination group (WAN/VLAN).
Destination IP Address/Mask length	Optionally define the destination IP or subnet for filtering purposes (e.g., 10.1.1.0/24).
Destination Port	Optionally enter destination ports or port ranges to apply SNAT only to certain services.

Add SNAT

DNAT (Destination NAT) Rules

DNAT Rules allow the router to rewrite the **destination IP address** of incoming traffic. This is commonly used for port forwarding to internal hosts.

You can configure:

- Source conditions (group, IP, port)
- Destination group and IP
- Rewrite destination IP

DNAT is essential for exposing internal services to the outside world while preserving internal addressing.

Type

☐ Inbound Rules☐ Forwarding Rules☐ SNAT☒ **DNAT**

* Name

1-64 characters

Status

IP Family

☒ IPv4

* Protocol Type

UDP/TCP

* Router

Select Router/Group

* Source Group

Select

Source IP Address/Mask Length ⓘ

/

Source Port ⓘ

1-65535 numbers

* Destination Group

Select

Destination IP Address/Mask length ⓘ

/

* Rewrite Destination IP Address ⓘ

Destination Port ⓘ

1-65535 numbers

Rewrite Destination Port ⓘ

1-65535 numbers

NAT Reflection

NAT Reflection Source

☒ Internal☐ External

Add DNAT

Field	Description
Type	Select DNAT to configure destination network address translation.
Name	Enter a name for the DNAT rule (1-64 characters).
Status	Toggle to enable or disable this rule.
IP Family	Select IPv4 for DNAT rules (IPv6 is not supported for this rule type).
Protocol Type	Choose the protocol to match traffic (e.g., TCP, UDP, UDP/TCP, ICMP, IGMP, ALL).
Router	Select the router or router group where this rule will apply.
Source Group	Select the source group (WAN or VLAN) for matching incoming traffic.
Source IP Address/Mask Length	Enter source IP or subnet to match (e.g., 192.168.1.0/24).
Source Port	Define the original port or port range for the match (e.g., 80, 8000-8080).
Destination Group	Choose the destination group (WAN or VLAN).
Destination IP Address/Mask length	Specify the original destination IP address or subnet to match.
Rewrite Destination IP Address	Enter the internal IP to which the traffic will be redirected.
Destination Port	Original port(s) for matching the destination (e.g., 443, 1000-2000).
Rewrite Destination Port	Enter the new port(s) for redirecting the matched traffic.

NAT Reflection	Toggle to enable NAT reflection (loopback) for internal access via external IP.
NAT Reflection Source	Choose whether the NAT reflection source is 'Internal' or 'External'.

Add DNAT

Wireless Firewall Rules

This section is located under **Web UI -> Settings -> Firewall & Security page -> Wireless Firewall rules tab**, it does allow users to control the outgoing and incoming traffic from clients connected to the adopted/paired GWN devices by manually setting up policies to either deny or permit the traffic for wireless traffic based on protocol type and by specifying SSIDs and destinations.

Wireless firewall rules apply only to AP.

Firewall & Security > Add Wireless Firewall Rules

Type

Service Protocol

Policy

Source

* IP Address

* Subnet

Destination

☒ Inbound Rules

☐ Outbound Rules

Any

☐ Permit

☒ Deny

Particular Network

192.168.80.0

255.255.255.0

All

☐ Inbound Rules

☒ Outbound Rules

Any

☒ Permit

☐ Deny

All

EMEASSID

CancelSave

Add Wireless Firewall Rules

Type	Select the type of the firewall rule: Inbound rules or Outbound rules
Name	Enter a name for the wireless firewall rule.
Service Protocol	Select the Service protocol type from the drop-down list.
Policy	Permit: Traffic from clients will be allowed. Deny: Traffic from clients will be denied.
Source	Select the source, it can be from a Particular IP or Networkthen enter the IP and/or the subnet.Note: this option is only available when the type selected is Inbound rules.
Destination	Select the destination, it can be from a Particular IP, Network or Domain.then enter the IP/Domain and/or the subnet.
SSID	If All is selected, this rule will also be applied to new SSIDs (Wireless LAN).Note: this option is only available when the type selected is Outbound rules!

Rogue AP

GDMS Networking and GWN Manager offer the ability to prevent malicious intrusion into the network and increase the wireless security access of clients when introducing the Rogue AP detection feature to the adopted/paired GWN devices. The detected devices will be listed with all the details under the **"Alerts"** page for further intervention.

Navigate to **Settings -> Firewall & Security page -> Rogue AP section**, The below figure shows the configuration page to enable Rogue AP detection.

Firewall & Security

▲

Rogue AP

Enable Rogue AP Detection

☒

Detect Range ⓘ

☐ Same Channel
 ☒ All Channels

Countermeasure Level ⓘ

Medium

▼

Containment Range ⓘ

☒ Same Channel
 ☐ All Channels

Sub-string for Spoofing SSID ⓘ

Grand

Stream

EMEA

Add New Item +

Trusted AP ⓘ

c0

:

ad

:

74

:

0c

:

47

:

da

Add New Item +

Untrusted AP ⓘ

:

:

:

:

Add New Item +

Cancel

Save

Rogue AP

Enable Rogue AP Detection	Select to either to enable or disable Rogue AP scan.
Detect Range	Specify the rogue AP detect range. Same Channel: AP will execute simple detection on the APs around, this mode almost has no effects on the wireless network communication. All channels: AP will execute a deep detection every 5 minutes. And the clients connecting to the AP will have few seconds of communication interrupt. Default is Same Channel.
Countermeasure Level	Countermeasures level specifies the type of attacks which will be suspected by the AP. Select different levels: High: Untrusted BSSID, Illegal access without authentication, Illegal access, Spoofing SSID. Medium: Untrusted BSSID, Illegal access without authentication, Illegal access. Low: Untrusted BSSID, Illegal access without authentication. Default is Disabled.

Containment Range	Specify the containment range: Same channel: detect AP will countermeasure the APs in the same channel. ALL channels: detect AP will countermeasure the APs in all channels at the cost of consuming of much AP performance. Default is Same Channel.
Sub-string for Spoofing SSID	The AP broadcasting SSID with the specified string will be classified as a Spoofing SSID.
Trusted AP	You can specify MAC address of the trusted AP, which should be formatted as XX:XX:XX:XX:XX:XX. If an AP is defined as trusted AP, no countermeasures will be executed on it.
Untrusted AP	You can specify MAC address of the untrusted AP, which should be formatted as XX:XX:XX:XX:XX:XX. If an AP is defined as untrusted AP, countermeasures will be executed on it when countermeasure is enabled.

Rogue AP

Security Defense

The Defense Configuration features under Firewall & Security enhance the security posture of GDMS Networking-managed devices by providing protection against common network attacks such as DoS (Denial of Service), Flooding, Port Scanning, and Spoofing.

These settings allow administrators to fine-tune real-time defense behavior with flexible thresholds and control mechanisms to mitigate malicious traffic and spoofing attempts before they affect network performance or availability.

Navigate to: **Settings -> Firewall & Security -> Security Defense**

Basic Attack Defense

The **Basic Attack Defense** tab allows enabling protection against several types of network flood and scan attacks, with options to configure exception rules by IP address and set custom blocking thresholds and durations.

Basic Attack Defense

Spoofing Defense

Basic Attack Defense

IP Exception

IP Address

Add New Item

Flood Attack Defense

	Status	Blocking Threshold (pps)	Blocking Duration (s)
SYN Flood Attack Defense	☒	2000	300
UDP Flood Attack Defense	☒	5000	300
ICMP Flood Attack Defense	☒	250	300
ACK Flood Attack Defense	☒	2000	300

Scan Attack Defense

	Status	Blocking Threshold (packets/m)	Blocking Duration (s)
Port Scan Defense	☒	50	100

Abnormal Packet Attack Defense

Select what you want to defend

☒ IP Option
 ☒ TCP Flag
 ☒ Land
 ☐ Smurf
 ☐ Fraggle
 ☐ Ping of Death
 ☐ Trace Route
 ☐ IP Fragment
 ☐ Unassigned Protocol Numbers
 ☐ SMAC=DMAC
 ☐ Large ICMP Packet Control

Basic Attack Defense

Main Controls

- **Basic Attack Defense:** Enables or disables all attack defense features globally.
- **IP Exception:** Allows specific IP addresses to bypass defense rules.

Flood Attack Defense Types

- **SYN Flood Attack Defense:** Blocks excessive TCP SYN requests, commonly used in DoS attacks.
- **UDP Flood Attack Defense:** Blocks high volumes of UDP traffic.
- **ICMP Flood Attack Defense:** Protects against excessive ICMP ping requests.
- **ACK Flood Attack Defense:** Detects and blocks suspicious TCP ACK packet floods.

Each rule includes:

- **Status Toggle:** Enable or disable defense.
- **Blocking Threshold (pps):** Packets per second allowed before triggering the block.
- **Blocking Duration (s):** Duration in seconds that traffic is blocked after threshold is exceeded.

Scan Attack Defense

- **Port Scan Defense:** Detects and blocks traffic patterns that indicate port scanning activity.
- **Blocking Threshold (packets/m):** Limit of packets per minute.

- **Blocking Duration (s):** Block time after detection.

Abnormal Packet Attack Defense

Enables blocking for specific unusual or malformed packet types. Checkboxes allow you to selectively enable protection for:

- IP Option
- TCP Flag
- Land Attack
- Smurf
- Fraggle
- Ping of Death
- Trace Route
- IP Fragment
- Unassigned Protocol Numbers
- SMAC=DMAC
- Large ICMP Packet Control

Spoofing Defense

The **Spoofing Defense** tab provides advanced protection against address spoofing threats, such as forged IP or MAC addresses used to disguise malicious actors on the network.

Features:

- **Spoofing Defense:** General toggle to enable spoofing countermeasures.
- **ARP Spoofing Defense:** Prevents manipulation of ARP responses to poison network address resolution.

▲ Security Defense

Basic Attack Defense

Spoofing Defense

Spoofing Defense



ARP Spoofing Defense ⓘ



Cancel

Save

Spoofing Defense

How it works:

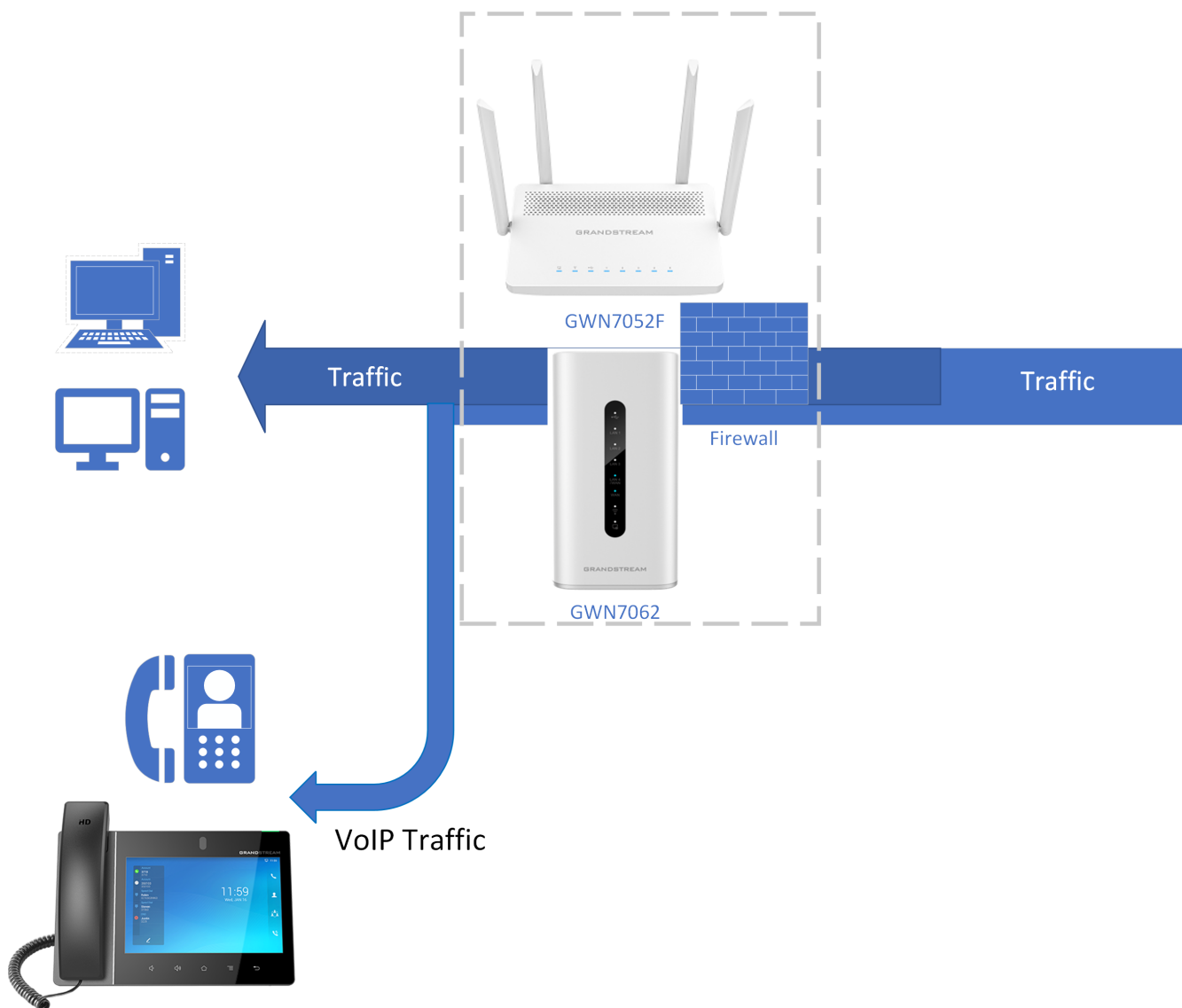
When enabled, GDMS verifies the consistency of the source and destination MAC addresses in the Ethernet frame and ARP header. If mismatches are detected, the ARP packets are discarded to protect against spoofing and ARP poisoning. Additionally, VRRP MAC addresses will not be added to the ARP table when this feature is active.

Notes:

- All defense rules are device-level settings managed through GDMS Networking and must be configured per network needs.
- Thresholds should be carefully set to balance security and network stability.
- These defense mechanisms are especially valuable for public-facing networks or deployments with heightened security requirements.

Advanced Security Settings

ALG stands for **Application Layer Gateway**. Its purpose is to prevent some of the problems caused by router firewalls by inspecting VoIP traffic (packets) and if necessary modifying it.



Application Layer Gateway

To configure ALG, navigate to **Web GUI -> Settings -> Firewall & Security page -> Advanced Security Settings tab**.

Firewall & Security

Wireless Firewall Rules

Rogue AP

Advanced Security Settings

ALG

SIP Protocol ☒ Supports both UDP and TCP SIP packets

* Listening Port 1-65535 numbers

PTSP Protocol ☒ Supports only TCP RSTP packets

* Listening Port 1-65535 numbers

Cancel

Save

ALG

PROFILES

Portal policy

The policy configuration page allows adding multiple captive portal policies which will be applied to SSIDs and contains options for different authentication types a splash page that can be easily configured as shown in the next section.

Each SSID can be assigned a different captive portal policy, for example, company ABC could have a specified Wi-Fi for staff people who can access via a portal policy requiring a user username and password for authentication and another SSID for guest people who can sign in via their Facebook account; also, they could assign either an internal or external Splash page.

* Name		1-64 characters
Splash page	Internal	
* Client Expiration ⓘ	0 day(s) 0 hour(s) 0 minute(s)	
Client Idle Timeout ⓘ		5-1440 numbers
Timeout Duration of Unauthenticated Clients (minutes) ⓘ	1	1-1440 numbers
Failsafe Mode ⓘ	☐	
Daily Limit ⓘ	Limit by Authentication Type	
* Splash Page Customization ⓘ	Select	
Landing Page ⓘ	Redirect to the original URL	
Enable HTTPS Redirection ⓘ	☐	
Cancel Save		

Add Portal Policy

Internal Splash Page

Please refer to the table below when configuring the Internal Splash Page.

Name	Enter the name of the Captive Portal policy
Splash Page	Select Splash Page type, Internal or External. Note: this table is only about internal splash page.
Client Expiration	Configures the period of validity, after the valid period, the client will be re-authenticated again.
Client Idle Timeout	Specify the idle timeout value for guest network connection. Once timed out, guest should re-authenticate for further network use. Note: this option is not applicable to voucher guests and payment guests.
Timeout Duration of Unauthenticated Clients (minutes)	Set the timeout time for unauthenticated clients. After the timeout, unauthenticated client devices are disabled from using Wi-Fi.
Failsafe Mode	Once enabled, guest can access internet when the authentication server or external portal is unreachable. Note: only the Radius, custom field and Voucher authentications support this feature.
Daily Limit	Disabled: Daily access is not limited. Limit by Client: Guest can access only once a day. Limit by Authentication Type: Users can access each authentication mode only once a day.
Splash Page Customization	Select a splash page from the drop-down list or click "Add New Splash Page".
Landing Page	Choose the landing page, 2 options are available: Redirect to the Original URL. Redirect to External Page.
Enable HTTPS Redirection	Check to enable/disable HTTPS service. If enabled, both HTTP and HTTPS requests sent from stations will be redirected by using HTTPS protocol. And station may receive an invalid certification error while doing HTTPS browsing before authentication. If disabled, only the HTTP request will be redirected.

Enable Secure Portal	If enabled, HTTPS protocol will be used in the communication between STA and AP. Otherwise, the HTTP protocol will be used.
Pre Authentication Rule(s)	
Destination	Defines which destinations can be reached before authentication.All: No destination restrictionHostname: Enter a valid hostnameSubnet/Prefix: Enter a valid IPv4 subnet and maskIP Address: Enter a valid destination IPv4 address (e.g., 11.1.1.1)
Service	Defines which services can be reached before authentication.All: No service restriction.Web: web related services.TCP Port: input integer between 1~65535.UDP Port: input integer between 1~65535.Protocol Id: Enter a valid IP protocol number.Email Service: Select IMAP or POP3
Post Authentication Rule Type	If set to "Blocklist", access to all except the rules added.if set to "Allowlist",only access the rules added.
Post Authentication Rule(s)	
Destination	Destination can be either IP Address, Hostname or Subnet/Prefix
Service	All: no limitation.Web: web related services.TCP Port: input integer between 1~65535.UDP Port: input integer between 1~65535.Protocol Id: input related services agreement No.

Portal Policy - Internal Splash Page

External Splash page

Please refer to the table below when configuring the External Splash Page.

Name	Enter the name of the Captive Portal policy
Splash Page	Select Splash Page type, Internal or External.Note: this table is only about external splash page.
Platform	Select the Radius Authentication Method provided by external portal platform.
If Linkyfi, Purple or Universal Platform is selected	
External Splash Server Address	Enter the External Splash Page URL, and make sure to enter the pre-authentication rules request by the external portal platform in the pre-authentication configuration option.
RADIUS Authentication	Select a RADIUS from the drop-down list or click on "Add New Radius".
If Aiwifi platform is selected	
URL Pre-shared Key	The configuration will be used to generate the signature. Please enter 20-32 characters, support entering numbers, English, characters (excluding spaces)
Timeout Duration of Unauthenticated Clients (minutes)	Set the timeout time for unauthenticated clients. After the timeout, unauthenticated client devices are disabled from using Wi-Fi.
External page	Please enter the Redirect URL provided by external portal platform.
Enable HTTPS Redirection	Check to enable/disable HTTPS service. If enabled, both HTTP and HTTPS requests sent from stations will be redirected by using HTTPS protocol. And station may receive an invalid certification error while doing HTTPS browsing before authentication. If disabled, only the HTTP request will be redirected.
Pre Authentication Rule(s)	
Destination	Defines which destinations can be reached before authentication.All: No destination restrictionHostname: Enter a valid hostnameSubnet/Prefix: Enter a valid IPv4 subnet and maskIP Address: Enter a valid destination IPv4 address (e.g., 11.1.1.1)

Service	Defines which services can be reached before authentication.All: No service restrictionWeb: web related services.TCP Port: input integer between 1~65535.UDP Port: input integer between 1~65535.Protocol Id: Enter a valid IP protocol number.Email Service: Select IMAP or POP3
Post Authentication Rule Type	If set to "Blocklist", access to all except the rules added.if set to "Allowlist",only access the rules added.
Post Authentication Rule(s)	
Destination	Destination can be either IP Address, Hostname or Subnet/Prefix
Service	All: no limitation.Web: web related services.TCP Port: input integer between 1~65535.UDP Port: input integer between 1~65535.Protocol Id: input related services agreement No.

Portal Policy - External Splash Page

Splash page

Splash page allows users with an easy-to-configure menu to generate a customized splash page that will be displayed to the users when trying to connect to the Wi-Fi.

On this menu, users can create multiple splash pages and assign each one of them to a separate captive portal policy to enforce the selected authentication type.

The generation tool provides an intuitive "WYSIWYG" method to customize a captive portal with a very rich manipulation tool.

Add Splash Page

Users can set the following:

- **Authentication type:** Add one or more ways from the supported authentication methods:

For Free	Clients can log in without authentication.
Simple Password	The user can specify a password that clients must enter to authenticate.Note: Simple passwords support all characters except spaces.

Radius Server	Authentication using a RADIUS server.
Voucher	Authentication using a Voucher code.
Custom Field	Collects guest information using a customizable form before granting network access (not credential-based authentication). Build the form via Create custom field (Common Field / Custom Field). Mark fields as Required (*). Optional Filling: allow login after filling one or more required fields. Custom Login Page: use a hosted URL instead of the default system page. Skip Login Page: bypass the default splash page and open the custom page directly. Collected guest info can be emailed from Settings -> System -> Guest Information.
Email	Authentication using Email.
SMS	Authentication using SMS, with Twilio or Amazon SMS Service Provider.
Active Directory	Authentication using Active Directory.
SAML SSO	Authentication using SAML Single Sign-On (SSO) through an external identity provider (IdP).
Facebook	Authentication using Facebook account.
X	Authentication using X account.
Google	Authentication using Google account.

Splash page - Authentication types

- Set up a picture (Company Logo) to be displayed on the splash page.
- Customize the layout of the page and background colors.
- Customize the Terms of Use text.
- Visualize a preview for both mobile devices and laptops.

On each splash page, the maximum number of authentication methods is 5 methods.

Advertisement

On this page, advertisements can be enabled and forced on each access point, where users will be forced to view media content (images or videos) before being granted access to the network.

Click on the **"Add"** button to add media content (images or videos) then specify the **"Force to watch duration"** (in seconds).

Rotation: when there are many media contents, the user can specify the rotation (Random, Regular interval, or Regular time), then the preset time can be specified.

Profiles > **Add Splash Page**

Page Advertisement WiFi4EU

Splash page example

Enable advertisement ☒ Force user to view media content on each access

* Force to watch duration(seconds) 1-300 numbers

Rotation

* Preset Time

* Media Content

* Random



Advertisement1

* Random



Advertisement2

Splash Page Advertisement

WiFi4EU

Once enabled, the top area of the splash page will display the information about WiFi4EU. The language can be set as well as the Network UUID.

Self-test modus: A WiFi4EU supplier can test if the snippet is correctly installed and if its portal is compliant by enabling the snippet self-test modus.

Profiles > **Add Splash Page**

Page Advertisement **WiFi4EU**

Splash page example

WiFi4EU ☒ Once enabled, the top area of the splash page will display the information about WiFi4EU.

Language

* Network UUID

Self-test modus ☒

Splash Page WiFi4EU

Port Profile

Port profiles are a convenient way to provision a GWN device (ex: GWN switches) interfaces easily. Name a profile then select the relevant configurations, like VLAN, Rate, Speed limit, LLDP, etc. Also for security, we can enable Storm control, Port Isolation, Port Security, and 801.1X Authentication.

A VLAN is also considered as a port profile.

To create a new Port Profile or edit an existing one, please navigate to **Web UI -> Settings -> Profiles page -> Port Profile section**.

General ^

* Profile Name

Voice

* Native VLAN

7 (VLAN7) ▾

Allowed VLAN

7 (VLAN7) ▾

Voice VLAN

Please enable the Voice VLAN in the Global LAN Settings first

Rate

Auto ▾

Duplex Mode ⓘ

☒ Self-negotiation

☐ Full-duplex

☐ Half-duplex

Flow Control ⓘ

☐ Self-negotiation

☒ Disabled

☐ Enable

When duplex mode is "Half-duplex", the traffic control does not take effect.

Enable Port STP

Incoming Speed Limit

Outbound Speed Limit

LLDP-MED

Network Policy TLV

Please enable the Voice VLAN first.

Add port profile General

Security ^

Storm Control

Port Isolation

Port Security ⓘ

802.1X Authentication

Cancel

Save

Add port profile Security

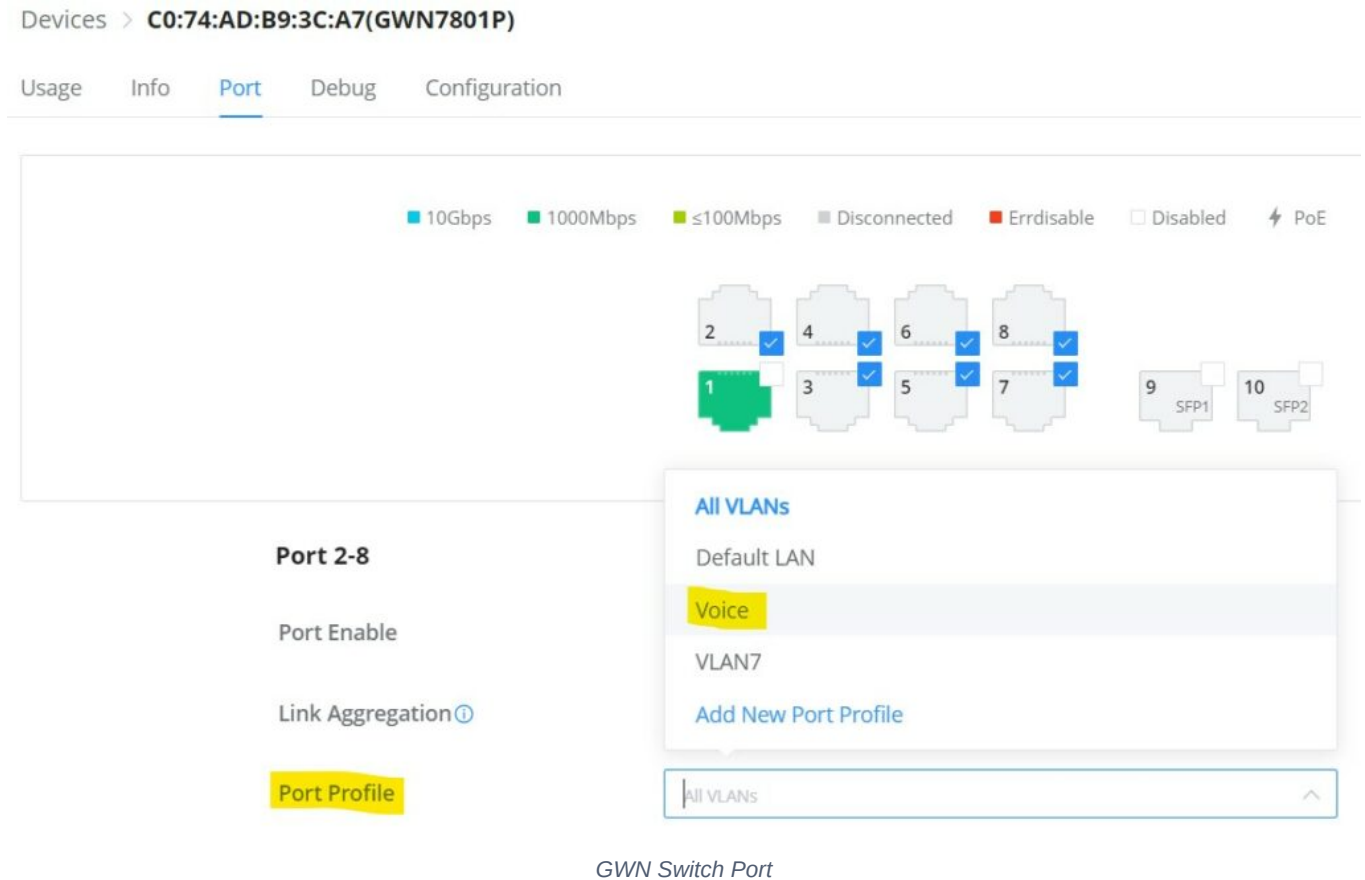
General	
Profile Name	Specify a name for the profile.
Native VLAN	Select from the drop-down list the native VLAN (Default LAN).
Allowed VLAN	Check the allowed VLANs from the drop-down list (one VLAN or more).
Voice VLAN	Toggle ON or OFF Voice VLAN.Note: Please first enable the Voice VLAN in the Global LAN Settings.
Rate	Specify the rate (port speed) from the drop-down list.

Duplex Mode	Select the duplex mode: Auto-negotiation: The duplex status of an interface is determined by auto-negotiation between the local port and the peer port. Full-duplex: Force full-duplex, and the interface allows sending and receiving data packets at the same time. Half duplex: Force half duplex, and the interface only send or receive packets at a time.
Flow Control	When enabled, if congestion occurs on the local device, the device sends a message to the peer device to notify it to stop sending packets temporarily. After receiving the message, the peer device stops sending packets to the local device.Note: When duplex mode is "Half-duplex", the traffic control does not take effect.
Enable Port STP	Toggle ON or OFF the Port STP.
Incoming Speed Limit	Toggle ON or OFF the incoming speed limit.
CIR (Kbps)	Configures the Committed Information Rate, which is the average rate of the traffic to pass through.
Outbound Speed Limit	Toggle ON or OFF the outbound speed limit.
CIR (Kbps)	Configures the Committed Information Rate, which is the average rate of the traffic to pass through.
LLDP-MED	Toggle ON or OFF the LLDP-MED.
Network Policy TLV	Toggle ON or OFF the network policy TLV.
Security	
Storm Control	Toggle ON or OFF storm control.
Broadcast	Toggle ON or OFF Broadcast and then specify the control threshold (pps = packet per second).
Unknown Multicast	Toggle ON or OFF Broadcast and then specify the control threshold (pps = packet per second).
Unknown Unicast	Toggle ON or OFF Unknown Unicast and then specify the control threshold (pps = packet per second).
Port Isolation	Toggle ON or OFF port isolation.
Port Security	Toggle ON or OFF port security.Note: after enabled, start MAC address learning including the dynamic and static MAC addresses.
Maximum number of MACs	Specify the maximum number of MAC addresses allowed.Note: after the maximum number is reached, if a packet with a non-existing source MAC address is received, regardless of whether the destination MAC address exists or not, the switch will consider that there is an attack from an illegal user, and will protect the interface according to the port protection configuration.
Sticky MAC	Toggle ON or OFF Sticky MAC.Note: after enabled, the interface will convert the learned secure dynamic MAC address into Sticky MAC. If the maximum number of MAC addresses has been reached, the MAC addresses in the non-sticky MAC entries learned by the interface will be discarded, and whether to report a Trap alert is determined according to the port protection configuration.
802.1X Authentication	Toggle ON or OFF 802.1x authentication.
User Authentication Mode	Select the user authentication mode from the drop-down list Mac-based: allows multiple users to authenticate without affecting each other; Port-based: allows multiple users to be authenticated. As long as one user passes the authentication, other users are exempt from authentication.
Method	Select the method from the drop-down list.
Guest VLAN	Toggle Guest VLAN ON or OFF.Note: Enable the Guest VLAN in the Global LAN Settings first.
Port Control	Select the port control from the drop-down list: Disabled Mandatory authentication Mandatory non-authentication Automatic
Re-authentication	Configures whether to enable re-authentication for the device connected to the port.

Add port profile

Once the Port profile is added the user can apply it on a GWN device/device group ports (ex: GWN switches).

Under the [Devices](#) page, select the relevant device, and under the **Port** tab, select the ports then apply the Port Profile on these ports. please refer to the figure below:



Mac Groups

The MAC Group feature in GDMS Networking allows administrators to define and manage groups of MAC addresses for use in authentication and access control policies across APs, routers, and switches. This centralized approach helps streamline the configuration of MAC-based authentication and improves consistency across the network.

You can assign a MAC Group to SSID settings, switch port policies, and access lists for granular client control. Each MAC Group can include multiple MAC address entries, each representing an individual device.

Navigation: Go to Settings -> Profiles -> MAC Groups

Create a MAC Group

To create a new MAC Group:

1. Click Add on the MAC Group page.
2. Enter a Group Name.
3. Add MAC addresses to the list using the Add MAC button.
4. Optionally, use the CSV import function for bulk entry.
5. Click Save.

Add MAC Groups



Manual

Import

* Name

Supports 1-64 characters

MAC

 : : : : : 

Add New Item 

Cancel

Add

Add MAC Groups

MAC Groups can be applied in various contexts depending on the device type, here are some examples:

For Access Points (GWN APs), MAC Groups can be selected under SSID settings using the MAC Authentication field ([Blocklist](#)). This allows or denies client access based on the MAC address.

For Switches (GWN78XX), MAC Groups can now be applied directly to port policies through MAC Authentication.

For Routers, MAC Groups may be referenced in various policy rules (depending on model and use-case), allowing consistent centralized access control across device types.

Bandwidth Rules

The bandwidth rule is a platform feature that allows users to limit bandwidth utilization per SSID or client (MAC address or IP address).

Add Bandwidth Rules



*** Name**

Supports 1-64 characters

Schedule Policy

None

▼

*** Please fill in at least one of the following items**

Upload Limit(Kbps)

A number range of 1-1000000

Download Limit(Kbps)

A number range of 1-1000000

Cancel

Add

Add Bandwidth rules

Schedule

A schedule can be created here to be applied in many places like rebooting or LED for example.

ⓘ If both weekly and absolute schedules are configured on the same day, only the absolute schedule will take effect.

* Name ⓘ

Weekly

Time Zone

(GMT+01:00) Casablanca, Monrovia

Weekly

Unselect All	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
05:00AM - 05:30AM							
05:30AM - 06:00AM							
06:00AM - 06:30AM							
06:30AM - 07:00AM							
07:00AM - 07:30AM							
07:30AM - 08:00AM							
08:00AM - 08:30AM							
08:30AM - 09:00AM							
09:00AM - 09:30AM							
09:30AM - 10:00AM							

Absolute Date/Time (If no time period is selected on the scheduled date, no service on the corresponding date will be excuted.)

📅 Select date

🕒 Select time

Cancel

Save

Create Schedule

RADIUS

This page allows the user to add a RADIUS to be used in Portal policy or Wi-Fi security for example.

* Name				1-64 characters
* Authentication Servers ⓘ	Server Address	Port	Secret	
	 Host name/IP address	1812		
				Add New Item
RADIUS Accounting Servers ⓘ	Server Address	Port	Secret	
	 Host name/IP address	1813		
				Add New Item
RADIUS NAS ID ⓘ				0-48 characters
* Attempt Limit ⓘ	1			1-5 numbers
* Radius Retry Timeout (s) ⓘ	10			1-120 numbers
* Accounting Update Interval (s) ⓘ				30-604800 numbers
Dynamic VLAN	☐ If enabled, VLAN of the accessing client can be dynamically changed			
Cancel Save				

Add RADIUS

Private Pre-Shared Key (PPSK)

PPSK (Private Pre-Shared Key) is a way of creating Wi-Fi passwords per group of clients instead of using one single password for all clients.

To configure PPSK, **please navigate to Web UI -> Settings -> Profiles -> PPSK**, then click on the "Add" button to add a new PPSK Group.

* Name	PPSK_Group	1-64 characters
PPSK	Add	
Cancel Save		

Add PPSK Group

Give the PPSK Group a name, and after that click on the "Add" button to add a new PPSK.

When generating PPSKs automatically, set **Number of PPSKs** to define how many PPSK entries will be created in the selected PPSK group. You can also set **Max Num of Access Clients** to limit how many client devices are allowed to be online using the same PPSK.

Add PPSK

Manual

Auto

Import

* Number of PPSKs

1-300 numbers

300

* PPSK Name Prefix ⓘ

Support 1-60 bits, "," is not supported

Grandstream

* Passphrase Length ⓘ

8-64 numbers

16

* Max Num of Access Clients ⓘ

1-512 numbers

512

Bandwidth Control



VLAN

Valid range is 2-4093, excluding 666

Please enter VLAN ID

Cancel

Save

PPSK Autoconfiguration

- The maximum number of PPSKs per group is **2500** for the following model: **GWN7672** and **GWN7674**.
- The maximum number of PPSKs per group is **1000** for the following model: **GWN7664E/ELR** and **GWN7670/7670E/ELR**.
- The maximum number of PPSKs per group is **300** for the rest of the models which were not mentioned above.
- The maximum **Max Num of Access Clients** per PPSK is **512**.
- The supported PPSK capacity is optimized based on the device model. The maximum number of PPSKs supported per group and the maximum number of access clients allowed per PPSK vary depending on the deployed GWN device model and its performance capabilities.

This is the result of the above configuration: **300** PPSKs have been created, each allowing up to **512** access clients. If the email was added then click on the Email icon to send the credentials in the email, if it was not pre-configured before you will be prompted to enter the email first.

PPSK List

Add PPSK

Account Name	Wi-Fi Password	Max Num of Access Clients	MAC	VLAN	Bandwidth Usage	Operation	
Grandstream_1	Uv8MH7wyUJ6...	512	—	—	—	  	
Grandstream_2	WH4paAVczedT...	512	—	—	—	  	
Grandstream_3	6f9uVwaWtKQ...	512	—	—	—	  	
Grandstream_4	vqDufyP4nkW4...	512	—	—	—	  	
Grandstream_5	bjPpSFmzRB9G...	512	—	—	—	  	
Grandstream_6	PeZYGvRvdfbkA...	512	—	—	—	  	
Grandstream_7	CrLFhcHMM9e...	512	—	—	—	  	
Grandstream_8	UdeSk4cf7bxN...	512	—	—	—	  	
Grandstream_9	aKvLkR8pSJLgH...	512	—	—	—	  	
Grandstream_10	49ukGVajxyyZZj...	512	—	—	—	  	

Total 30010/page<123456...30>

Add PPSK Auto

It's also possible to manually assign a Wi-Fi password for a number of clients.

Add PPSK

Manual

Auto

Import

* Account Name

Support 1-64 bits, ", " is not supported

Guests

* Wi-Fi Password

8-64 characters

2QXphbpn

 One-Click Generation

* Max Num of Access Clients ⓘ

1-512 numbers

3

MAC ⓘ

Bandwidth Control



* Upload Limit (Kbps)

1-1000000 numbers

1000

* Download Limit (Kbps)

1-1000000 numbers

2000

VLAN

Valid range is 2-4093, excluding 666

3

Email Address

guest1@grandstream.com

PPSK Manual

Refer to the table below for a description of each field:

Field	Description
Account Name	Name/identifier for this PPSK entry (used to distinguish PPSKs within the PPSK group).
Wi-Fi Password	The pre-shared key that clients will use to connect. You can enter it manually or use One-Click Generation to create one automatically.
One-Click Generation	Generates a random Wi-Fi Password for this PPSK entry.
Max Num of Access Clients	Maximum number of client devices allowed to be online using this same PPSK at the same time (range: 1-512).

MAC	Optional MAC binding. When Max Num of Access Clients is set to 1, you can bind a MAC address so only that device can use this PPSK. If the PPSK is used from a different MAC address, that device cannot access the SSID.
Bandwidth Control	Enable/disable per PPSK bandwidth limits. When enabled, Upload Limit and Download Limit become available.
Upload Limit (Kbps)	Maximum upload throughput allowed for clients using this PPSK (shown in Kbps).
Download Limit (Kbps)	Maximum download throughput allowed for clients using this PPSK (shown in Kbps).
VLAN	Optional VLAN ID applied to traffic from clients using this PPSK (valid range: 2-4093, excluding 666).
Email Address	Optional recipient email. If provided, GDMS will email the PPSK credentials (e.g., Account Name, Wi-Fi Password, Max Num of Access Clients) to the end user after saving.

PPSK - Manual

Another way is to upload a CSV file, please download the reference template.

Add PPSK

Manual
Auto
Import

ⓘ Please download and use the template to import data [reference template](#)



Click to upload CSV file

Cancel
Save

PPSK Import CSV file

Now, the user can apply this PPSK group to any SSID, refer to the figure below:

Basic ^

WiFi ☒

* SSID ⓘ Guests

Client IP Assignment ⓘ Bridge

Associated VLAN ☐Enable Captive Portal ☐

SSID Band Dual-Band

Access Security ^

Security Type PPSK

* PPSK Group Select

802.11w ⓘ

Guests

Add New PPSK Group

PPSK group Access Security

- Exporting PPSK Entries

Administrators can now easily export all PPSK entries within a PPSK group for backup, audit, or sharing purposes.

To export PPSKs:

1. Navigate to Settings -> Profiles -> PPSK
2. Locate the PPSK group you want to export
3. Click the **Download** icon in the **Operation** column

This will download a CSV file containing all configured PPSKs, including key assignments and user labels (if defined).

PPSK				Q Name	+ Add
Name	Associated SSID	PPSKs Number	Operation		
vb	—	2			
Test	—	1			

Exporting PPSK Entries

Certificates

In this section, the user can create CA, Client, and Server certificates that can be used with OpenVPN either for the client or server side.

The user can either click on the "Add" button to add a new certificate or click on the "Import" button to import them from his local machine to the GDMS Networking or GWN Manager.

Profiles

▼ SCHEDULE

+ Add

▼ RADIUS

+ Add

▼ PPSK

+ Add

▲ Certificates

Q Name

Import

+ Add

CA Certificate

Certificate

Revoked Certificate

Name	Certificate Type	Issuer	Valid for	Operation
Server Cert	Server	GS,CA Cert	2297-07-04 12:24PM	Download Cert or Key Revoke Cert

▼ Client Time Policy

+ Add

▼ Hotspot 2.0

+ Add

Profiles Certificates

This page will be shown after clicking on the "Add" button, then the user can select between a CA Certificate or a Certificate which can be either for a Server or a Client based on the option "Certificate Type". Please refer to the figures and tables below:

Type	☒ CA Certificate ☐ Certificate
* Name	
Key Length	2048 v
Digest Algorithm	SHA256 v
* Expiration (D)	
SAN	☒ None ☐ IP Address ☐ Domain
Country/Region	United States v
* State/Province	
* City	
* Organization	
* Organizational Unit	
* Email	

Cancel

Save

Profiles Add CA Certificate

Type	Select the type of certificate either CA Certificate or Certificate.
Name	Enter the certificate's name.
Key Length	Choose the key length for generating the CA certificate. The following values are available: 2048: 2048-bit keys are a good minimum. (Recommended). 4096: 4096-bit keys are accepted by nearly all RSA systems. Using 4096-bit keys will dramatically increase generation time, TLS handshake delays, and CPU usage for TLS operations.
Digest Algorithm	Select the digest algorithm. SHA256: This digest algorithm generates an almost unique, fixed-size 256 bit hash. Note: Hash is a one-way function, it cannot be decrypted back.
Expiration (D)	Select the duration of validity of the certificate. The number entered represents the days that have to elapse before the certificate is considered as expired. The valid range is 1 - 999999.
SAN	Enter the address IP or the domain name of the SAN (Subject Alternate Name).
Country/Region	Select a country from the dropdown list of countries. Example: "United States of America".
State/Province	Enter a state name or a province. Example: California
City	Enter a city name. Example: "San Diego"
Organization	Enter the organization's name. Example: "GS".

Organization Unit	This field is the name of the department or organization unit making the request. Example: "GS Sales".
Email	Enter an email address. Example: "EMEAregion@grandstream.com"

Profiles - Add CA Certificate

Profiles > Add Certificate

Type

☐ CA Certificate ☒ Certificate

* Name

Server Cert

* CA Certificate

CA Cert

Certificate Type

☒ Server ☐ Client

Key Length

2048

Digest Algorithm

SHA256

* Expiration (D)

999

SAN

☒ None ☐ IP Address ☐ Domain

Country/Region

United States

* State/Province

Massachusetts

* City

Boston

* Organization

Grandstream

* Organizational Unit

Grandstream

* Email

GS@grandstream.com

Cancel

Save

Profiles Add Certificate Client or Server

Type	Select the type of certificate either CA Certificate or Certificate.
Name	Enter the certificate's name.
CA Certificate	Select from the drop-down list the CA Certificate previously created.
Certificate Type	Select the certificate type either a server or a client certificate.
Key Length	Choose the key length for generating the CA certificate. The following values are available: 2048: 2048-bit keys are a good minimum. (Recommended). 4096: 4096-bit keys are accepted by nearly all RSA systems. Using 4096-bit keys will dramatically increase generation time, TLS handshake delays, and CPU usage for TLS operations.
Digest Algorithm	Select the digest algorithm. SHA256: This digest algorithm generates an almost unique, fixed-size 256 bit hash. Note: Hash is a one-way function, it cannot be decrypted back.

Expiration (D)	Select the duration of validity of the certificate. The number entered represents the days that have to elapse before the certificate is considered as expired. The valid range is 1 - 999999.
SAN	Enter the address IP or the domain name of the SAN (Subject Alternate Name).
Country/Region	Select a country from the dropdown list of countries. Example: "United States of America".
State/Province	Enter a state name or a province. Example: California
City	Enter a city name. Example: "San Diego"
Organization	Enter the organization's name. Example: "GS".
Organization Unit	This field is the name of the department or organization unit making the request. Example: "GS Sales".
Email	Enter an email address. Example: "EMEAregion@grandstream.com"

Profiles - Add Certificate (Client or Server)

Client Time Policy

The administrator can configure a Time policy that will dictate how much a client connects to the Wi-Fi if this policy is applied for the SSID.

Add Time Policy

Enable Time Policy

*

Name

Supports 1-64 characters

Time Policy

*

Validity Time

0

d

1

h

0

m

*

Reset Cycle

Reset Daily

*

Reset Time

12

:00

AM

Time Zone

(GMT+01:00) Casablanca, Monrovia

Cancel

Add

Add Time Policy

Enable Time Policy	Check/Uncheck to Enable/Disable Policy
--------------------	--

Name	Enter a name to identify the Policy. Supports 1 to 64 characters, including numbers, letters, and special characters.
Validity Time	Configure the policy duration from 1 minute to 365 days.
Reset Cycle	Set up a Reset mode: Daily, Weekly, or Periodically
Reset Time	When the Reset Cycle is Daily: configure the time of the day. When the Reset Cycle is Weekly: configure the time and the day of the week When the Reset Cycle is Periodic: configure the period (d//h/m)
Time Zone	Detected Automatically. This parameter can be changed under System Settings

Add Time Policy

Hotspot 2.0

Hotspot 2.0, also known as HS2.0 or Passpoint, is a set of industry specifications developed by the Wi-Fi Alliance to improve the connectivity and user experience of Wi-Fi networks, particularly in public places. The goal of Hotspot 2.0 is to make Wi-Fi connectivity as seamless and secure as cellular networks.

Key features of Hotspot 2.0 include

1. **Automatic Authentication:** Hotspot 2.0 enables automatic and secure connection to Wi-Fi networks without user intervention. Devices can automatically connect to Wi-Fi hotspots, similar to how cellular networks work.
2. **Seamless Roaming:** With Hotspot 2.0, users can roam between different Wi-Fi networks without having to re-authenticate. This is especially useful in environments with multiple Wi-Fi access points, such as airports, shopping malls, and other public spaces.
3. **Passpoint:** Passpoint is a specific implementation of Hotspot 2.0 that allows mobile devices to automatically discover and connect to Wi-Fi networks that are part of the Passpoint ecosystem. Passpoint provides a streamlined and secure connection process, making it easier for users to connect to Wi-Fi hotspots.

Hotspot 2.0 is particularly relevant in environments where reliable and secure Wi-Fi connectivity is essential, such as airports, hotels, and other public spaces. It improves the overall user experience by making Wi-Fi connectivity more like cellular connectivity, with automatic authentication and seamless roaming.

General ^

* Name

Domain ID

* HESSID ⓘ

Network Access

☒ Internet Access

Network Type

 ▾

IPv4 Type

 ▾

IPv6 Type

 ▾

Network Auth Type ⓘ

 ▾**Venue** ▾**Operator Name** ▾*Add Hotspot 20*

SYSTEM

General

Navigate to **Web UI -> Settings -> System -> under General** to configure General settings like Country/Region, Time zone, Time, LED, Reboot Schedule, etc.

System

General ^

Country/Region ⓘ	Morocco(المغرب) ▾
Timezone	(GMT) Casablanca, Monrovia ▾
Auto Sync Time ⓘ	☒
* AP Login Password ⓘ	 🔒
Device Password ⓘ	 🔒
LED	Always on ▾
Reboot Schedule	None ▾
Enable Client Connection Event	☒
Subscribe to Client Historical Data ⓘ	☒
Presence API ⓘ	☒ Once enabled, if no API requests have been received for more than 1 week, it will be automatically disabled
Bluetooth API ⓘ	☒
Automatically add to SSIDs ⓘ	☒

System page General

Country/Region	Select the country or region from the drop-down list. This can affect the number of channels depending on the country standards.
Timezone	Configure time zone for GWN APs. Please reboot the device to take effect.
Auto Sync Time	If enabled, all managed devices' system times will be synced with GWN Cloud
AP Login Password	Sets the APs login password with up to 8 characters. Alphanumeric characters and special characters - _ are supported
Device Password	Set the devices SSH remote login password other than APs (Routers and Switches), which is also the device web login password.
LED	Select whether to always turn ON or OFF the LEDs on the APs or apply a schedule for this function.
Reboot Schedule	Once scheduled, the current network will not work for a while during the scheduled period.
Enable Client Connection Event	When enabled, then Client connects/disconnects events are listed under Devices -> GWN device -> Info page.
Subscribe to Client Historical Data	Enabling collect the data of historical bandwidth usage for all clients in the network.Note: this will cause the storage usage increase.
Presence API	Once enabled, will detect and collect wireless device info. near the AP, which can be used for device positioning, pedestrian flow monitoring and so on.

Bluetooth API	When enabled, Bluetooth client information detected near select Wi-Fi-enabled APs will be automatically collected. See API details for more information.
Automatically add to SSIDs	If enabled, newly added GWN APs and wireless routers will be automatically provisioned for all SSIDs.

System page - General

URL Access Log

The URL Access Log section allows administrators to configure how client browsing activity logs are stored, grouped, and exported. This feature helps with traffic analysis, domain grouping, and scheduled email reporting of access logs. Logs can be stored on the GDMS server and emailed periodically to designated recipients.

The platform System will send these logs via Email to the configured Log Receiver in the form of a downloadable link providing a CSV file format containing all the website logs visited for each client during the defined period (daily, weekly, or monthly basis).

To enable this feature, follow the below steps: navigate to **"Settings -> System page -> URL Access Log section"** and enable the URL Access Log field.

Refer to the figure and table below for more details:

URL Access Log ^

Log Storage ⓘ

GDMS Server

Export URL Access Log ⓘ ☒ [Export Immediately](#)

Group Metric by Main Domain ☒

Customized Top-level Domain ⓘ

.us.com

+ + Add New Item

Email Frequency

Monthly

* URL Log Receiver

admin@gs.com

+ + Add New Item

URL Access Log

Field	Description
Log Storage	Select where to store the URL access logs. Options include 'Do not Store' and 'GDMS Server'. When GDMS Server is selected, logs are stored centrally.
If Log Storage is set to GDMS Server	
Export URL Access Log	Toggle to enable or disable exporting of URL access logs. When enabled, a download link is sent based on the configuration.
Export Immediately	Manual trigger to export URL logs immediately when the toggle is enabled.

Group Metric by Main Domain	Toggle to group statistics by the main domain instead of subdomains.
Customized Top-level Domain	Specify custom TLDs to be merged for traffic stats (e.g., .us.com). Default TLDs like .com are merged automatically.
Email Frequency	Set how often the log export link will be sent to the specified recipient(s). Options may include Daily, Weekly, Monthly.
URL Log Receiver	Specify one or more recipient email addresses to receive the exported log reports. Required field.
If Log Storage is set to Remote Syslog Server	
Remote Syslog Server Address	The Remote URL Log Server feature allows administrators to automatically forward and store URL access logs on an external remote server instead of relying only on local device storage. This enables long-term log retention, centralized log management, and easier monitoring or auditing of network activity beyond the default local storage period. Support for this feature depends on the device model. For supported models, please refer to About -> Device Comparison.
Protocol	Selects the protocol used for remote syslog communication, two options are available, UDP and TCP.

URL Access Log

In this example, the administrator will start receiving, every week, an Email containing a downloadable link providing a CSV file containing the websites visited by the clients during the last day.

Users can click on "**Export Immediately**", and then specify the time range of the URL Access Log during the last (1 - 30) days to be exported immediately.

Export



 Specify the time range of the URL Access Log to be exported.

★ For the Last

1-30 integers

day(s)

Cancel

Export

Export Immediately

5. Click on the "**Export**" button and notice the success confirmation message:

Export succeed!



[Click to download URL Access Log](#)

Export Succeed

1. Click the highlighted link to Download the log file and save it locally.

Once downloaded, administrators will have a CSV file tracking the Internet activity for all the clients connected to the paired GWN devices.

The CSV file will contain columns displaying the AP MAC address, the client's hostname as well as the device MAC address, the Source and Destination IP, the URL logs, the HTTP Method (GET/POST), and the time of request.

	A	B	C	D	E	F	G	H
1	AP MAC	MAC	Hostname	User	Source IP	Destination IP	URL	HTTP Method
2			Iphone XS		192.168.5.133	17.253.113.204	http://captive.apple.com/	GET
3			Huawei Mate 20		192.168.5.133	17.167.192.94	https://gsp85-ssl.ls.apple.c	
4			Samsung Galaxy S10		192.168.5.133	81.192.28.179	http://netcts.cdn-apple.co	GET
5			OnePlus 7 Pro		192.168.5.133	17.134.127.250	https://gs-loc.apple.com	
6			Moto G7 Power		192.168.5.133	17.57.12.11	https://gsp64-ssl.ls.apple.c	
7			iPhone 11 Pro Max		192.168.5.133	173.194.76.101	https://s.youtube.com	
8			Google Pixel 4 XL		192.168.5.133	74.125.193.119	https://i.ytimg.com	
9			BlackBerry Key2 LE		192.168.5.133	172.217.18.42	https://youtubei.googleapp	
10					192.168.5.133	17.125.249.8	https://p71-buy.itunes.app	

URL Access Log CSV file example

The Platform Database will keep storage of reports for 30 days, after that, they will be automatically erased from the system.

Guest Information

If enabled, the cloud server will periodically send out the log download link based on the configured email settings. To enable this feature, follow the below steps:

1. Go under "**Settings -> System page -> Guest Information section**" and enable the Guest Information field.
2. Choose to set the Email Frequency to be generated either on a daily, weekly, or monthly basis.
3. Configure the Email Receiver.

URL Access Log ▾

Guest Information ^

Email Guest Information ⓘ

☒

Email Frequency

Weekly ▾

* Email Receiver ⓘ

Admin@grandstream.com

−

Add New Item +

NAT Pool ▾

SNMP ▾

Syslog ▾

Cancel

Save

Guest Information

NAT pool

Users can use this feature to set an address Pool from which the clients that are connected to the adopted/paired devices will acquire their IP address in that way GWN devices will act as a lightweight router.

This option cannot be enabled when Client Assignment IP is set to Bridge mode.

Guest Information

NAT Pool

* Default Gateway	10.1.0.1
* DHCP Server Subnet Mask	255.255.255.0
* DHCP Release Time (mins)	720 2-525600 numbers
DHCP Preferred DNS	
DHCP Alternate DNS	

SNMP

Syslog

Cancel

Save

NAT Pool

Navigate to **Web UI -> Settings -> System page (NAT Pool section)**, to configure the Gateway, DHCP Server Subnet Mask, DHCP Lease Time, and DHCP Preferred/Alternate DNS.

SNMP

This section lists the SNMPv1, SNMPv2c, and SNMPv3 options available to integrate the adopted/paired GWN devices with enterprise monitoring systems.

Users can enable the SNMP feature under **Web UI -> Settings -> System page (SNMP section)**.

NAT Pool ▾

SNMP ^

SNMPv1, SNMPv2c	☒	
* Community String	public	1-32 characters
SNMPv3 ⓘ	☒	
* Username		1-64 characters
Authentication Mode	MD5	
* Authentication Password		8-32 characters
Privacy Mode ⓘ	DES	
* Privacy Password		8-32 characters

Syslog ▾

Cancel

Save

SNMP

SNMPv1, SNMPv2c	Enable Enable SNMPv1/SNMPv2c.
Community String	Enter the SNMP Community string.
SNMPv3	Enable SNMPv3.Note: If the SNMPv3 function of the switch is required to work, SNMPv1 and SNMPv2c should be enabled at the same time.
Username	Enter the SNMPv3 username.
Authentication Mode	Set the Authentication mode to: either MD5 or SHA.
Authentication password	Enter the SNMPv3 authentication password.
Privacy Mode	Set the Privacy mode to: either AES128 or DES.Note: AES128 mode is only for routers and APs. Switches use DES mode.
Privacy password	Enter the privacy password.

SNMP

Syslog

The **Syslog Capture** section provides flexible options for collecting system logs from selected devices (Access points, Routers, Switches...). Admins can choose between using a **Cloud Syslog Server** managed by GDMS, or a **Local Syslog Server** within their private network. Logs can be filtered by severity, and captures can be scheduled for specific durations and devices.

To enable this feature, follow the below steps: navigate to "**Settings -> System page -> Syslog section**".

Refer to the figures and table below for more details:

Syslog ^

Syslog Server

Cloud Syslog Server

Syslog Level

Warning

Syslog Capture Expiration ⓘ

0

d

0

h

10

min

Devices ⓘ

C0:74:AD:21:BB:FC ×

Client ⓘ

DESKTOP-AV09UEH(6C... ×

Syslog Capture

Capturing... Will stop at 2025/04/04 05:02PM

Stop

Delete

Q MAC

☐ C0:74:AD:21:BB:FC >

Syslog Cloud Syslog Server

Syslog ^

Syslog Server

Local Syslog Server

Local Syslog Server Address ⓘ

192.168.5.10

Syslog Level

Warning

Protocol ⓘ

UDP

Devices ⓘ

C0:74:AD:21:BB:FC ×

Client ⓘ

DESKTOP-AV09UEH(6C... ×

Syslog Local Syslog Server

Field	Description
If Syslog Server is set to Cloud Syslog Server	
Syslog Server	Select the syslog server mode. Options: 'Cloud Syslog Server' or 'Local Syslog Server'.
Syslog Level	Select the severity of logs to capture. Levels include None, Emergency, Alert, Critical, Error, Warning, Notice, Information.

Syslog Capture Expiration	Set duration (in days, hours, minutes) for capturing logs. Capture will stop automatically upon expiration.
Devices	Select one or more devices (e.g., AP, Router) to capture system logs from. TCP protocol is not supported for switches.
Client	Select a specific client device (by MAC or name) to capture its logs.
Syslog Capture	Click this button to start the syslog capture for the selected duration and devices.
If Syslog Server is set to Local Syslog Server (extra fields)	
Local Syslog Server Address	Enter the IP address of the local syslog server (e.g., 192.168.5.10).
Protocol	Select the protocol (UDP or TCP) used for forwarding logs to the local syslog server.

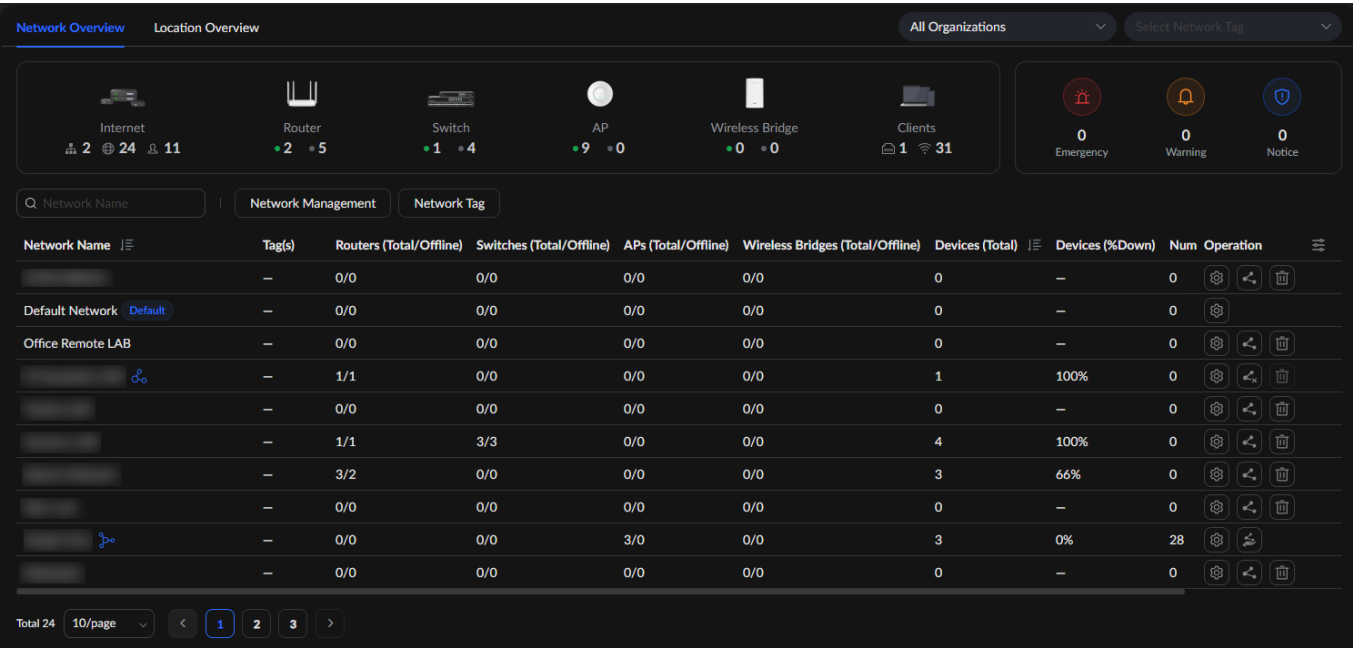
Syslog

ORGANIZATION

Overview

Network Overview

The **Network Overview** page (under **Organization -> Overview**) provides a centralized view of your networks, device status, client counts, and alerts. It also includes tools to organize networks using tags and to access advanced functions such as Network Management.



Network Overview page

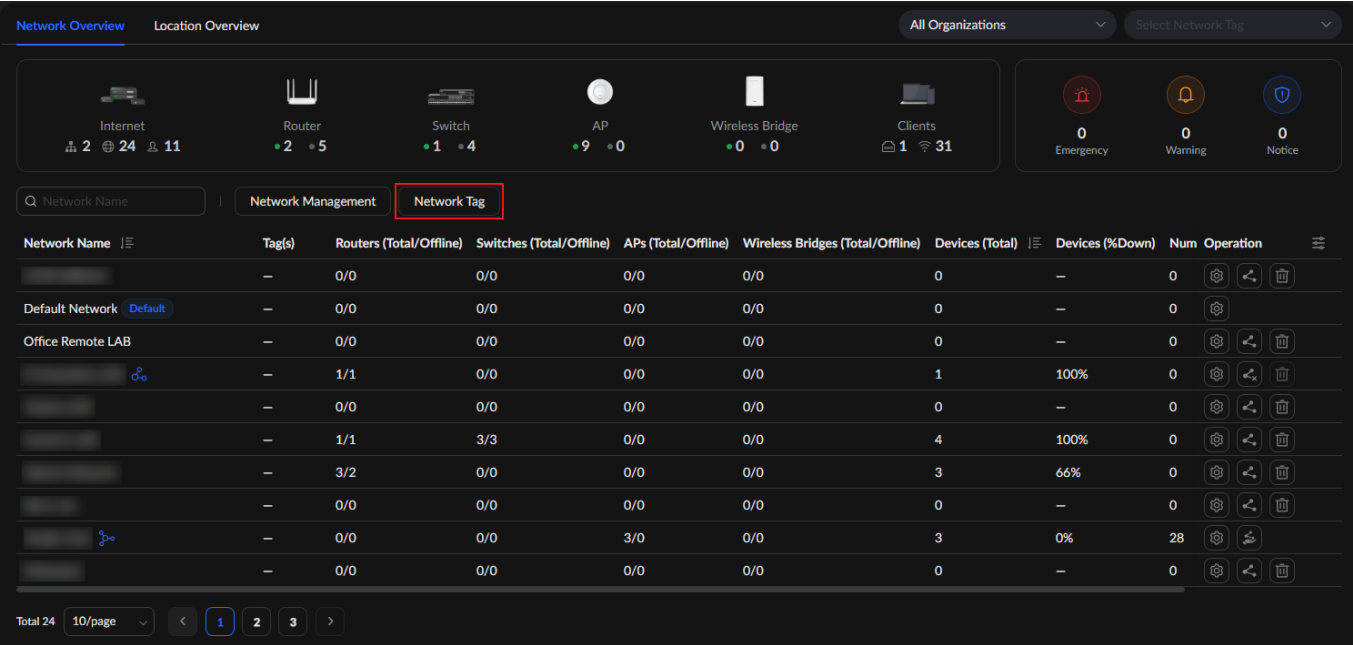
Top Summary Panel

At the top of the page, GDMS Networking displays high-level totals for the deployment, including the number of **Networks** and **Administrators**, online/offline status for **Routers**, **Switches**, and **APs**, total **Clients** (wired and wireless), and an **Alert** overview (Emergency/Warning/Notice). This provides a quick snapshot of system status before drilling into a specific network.

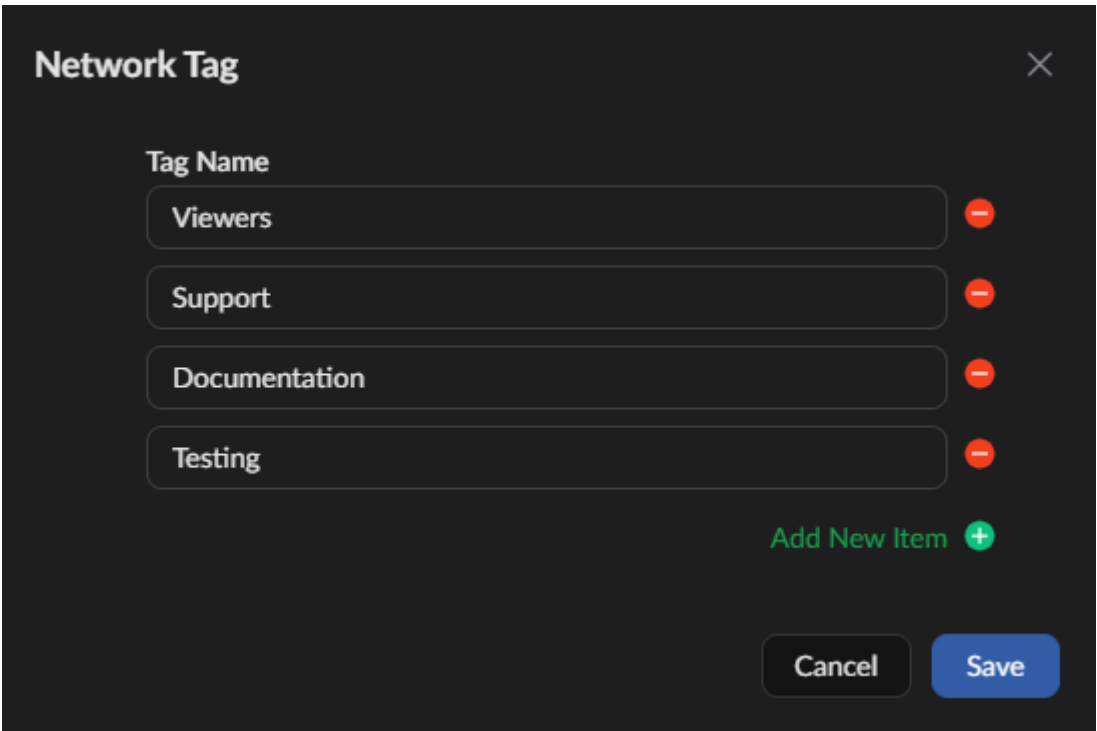
Network Tags

Network tags help categorize networks for easier organization and filtering (for example, separating support, documentation, or testing environments). Tags are managed from the Network Overview page.

Click **Network Tag** to open the tag management window. From here, you can add new tags, remove existing ones, and save changes. After tags are created, they can be applied when creating or editing a network and later used for filtering.



Network Overview

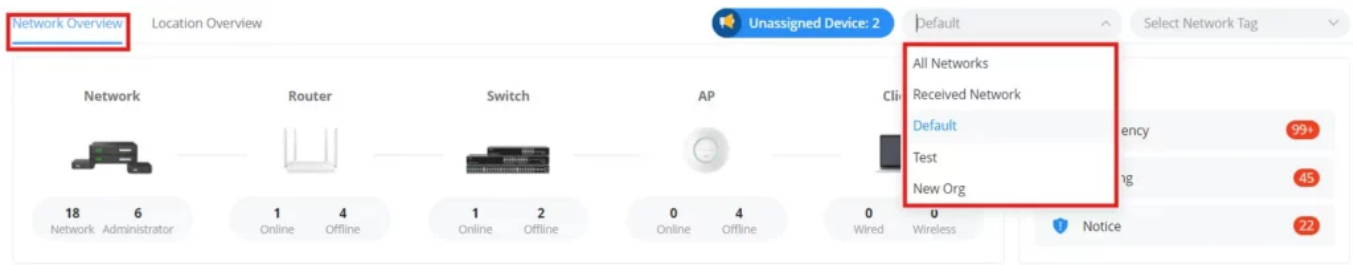


Network Tags

Unassigned Devices and Filtering

The **Unassigned Device** indicator shows how many devices have been added to GDMS Networking but are not assigned to any network. Click this indicator to open the assignment workflow.

You can also filter the network list from the same area. Use the **organization selector** to switch between organizations (the network list updates based on your selection), and use **Select Network Tag** to filter networks by tag.



Unassigned Devices and Filtering

Network List Indicators and Actions

The Network List displays summarized information for each network. The **default network** is labeled accordingly, and networks with active notifications/alerts may display an icon for quick identification. Use the **Operation** actions on each network row to manage networks directly. These shortcuts provide access to tasks such as editing network configuration, sharing a network, or deleting it (based on your account permissions).

Network List

Network Management

Network Tag

Q Network Name

Network Name	Tag(s)	Routers (Total/Offline)	Switches (Total/Offline)	APs (Total/Offline)	Devices (Total)	Devices (%Down)	Num of Clients	Created Time	Operation
Default Network		0/0	0/0	0/0	0	—	0	2024/02/13 11:37	
Default		0/0	0/0	0/0	0	—	0	2024/02/13 11:37	
Test Network		1/1	0/0	0/0	1	100%	0	2025/11/07 09:58	
Test Network		1/1	1/1	1/1	3	100%	0	2025/04/10 15:26	
Test Network		2/2	0/0	2/2	4	100%	0	2024/03/18 14:18	
Test Network		0/0	0/0	0/0	0	—	0	2024/11/27 09:51	
Test Network		0/0	0/0	0/0	0	—	0	2024/07/12 10:02	
Test Network		0/0	1/1	0/0	1	100%	0	2024/09/11 16:31	
Test Network		0/0	0/0	0/0	0	—	0	2024/09/12 11:14	
Test Network		0/0	0/0	0/0	0	—	0	2025/03/21 09:42	
Test Network		0/0	0/0	0/0	0	—	0	2025/03/28 15:39	

Total 18

10/page

<12>

Network List Indicators and Actions

Network Management

Click **Network Management** to open the management view, where networks are grouped under their corresponding **organizations**. This view supports multi-organization deployments and helps separate networks by tenant/customer. From this page, you can create networks using the + icon and manage organization structure (such as adjusting organization order, depending on permissions).

Overview > **Network Management**

+

Default (18)

Test (2)

New Org (1)

+ ≡

New Network

Default

* Organization Name 1-64 characters

Administrator

Network Management

Add Network

From Network Management, click the + icon to create a new network. When creating a network, you must assign it to an **Organization**, which helps keep networks properly separated and supports later operations such as moving networks between organizations.

On the Add Network page, select an existing organization or choose **Add New Organization**. Then enter the network details such as **Network Name**, **Country/Region**, and **Time Zone**, and assign **Administrator(s)** if needed. Optional settings include **Clone Network**, enabling **Default Network**, and assigning **Tag(s)**. Click **Save** to create the network.

Overview > Network Management > **Add Network**

* Organization

* Network Name ⓘ

* Country/Region

* Time Zone

Administrator

Clone Network

Default Network

Tag(s)

^

Default

Test

New Org

+ Add New Organization

Set Administrator ▾

▾

☐ Once enabled, the current network will be set as the default

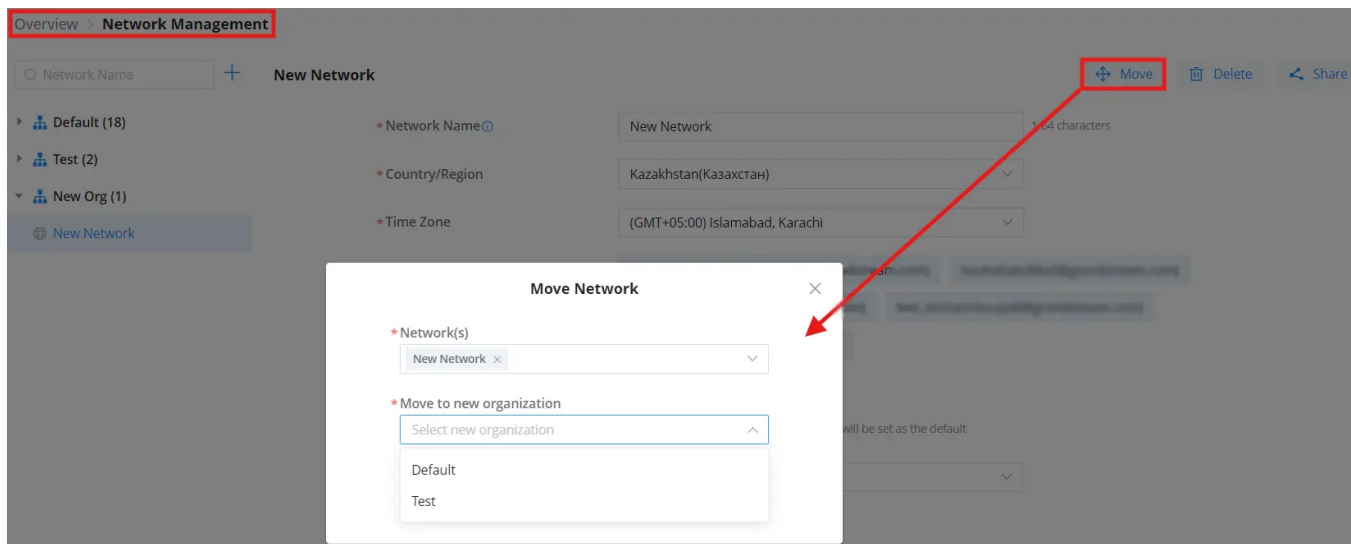
▾

Add Network

Move Network to Another Organization

GDMS Networking allows moving a network from one organization to another. This is useful when reorganizing tenants/customers or correcting where a network was initially created.

Select the network and click **Move**, then choose the destination organization and confirm.



Move Network to Another Organization

Share Network

Networks can be shared from Network Overview. When sharing a network, select the appropriate permission level such as **Co-management**, **Transfer Management**, or **Read-only Privilege**, then choose who to share with and save the configuration.

To remove a network, click **Delete** and confirm. Use this option carefully, especially in multi-organization environments.

Network Overview

Location Overview

All Organizations

Select Network Tag

Internet

2 24 11

Router

2 5

Switch

1 4

AP

9 0

Wireless Bridge

0 0

Clients

1 31

0

Emergency

0

Warning

0

Notice

Q Network Name

Network Management

Network Tag

Network Name	Tag(s)	Routers (Total/Offline)	Switches (Total/Offline)	APs (Total/Offline)	Wireless Bridges (Total/Offline)	Devices (Total)	Devices (%Down)	Num	Operation
	—	0/0	0/0	0/0	0/0	0	—	0	
Default Network	Default	0/0	0/0	0/0	0/0	0	—	0	
Office Remote LAB	—	0/0	0/0	0/0	0/0	0	—	0	
	—	1/1	0/0	0/0	0/0	1	100%	0	
	—	0/0	0/0	0/0	0/0	0	—	0	
	—	1/1	3/3	0/0	0/0	4	100%	0	
	—	3/2	0/0	0/0	0/0	3	66%	0	
	—	0/0	0/0	0/0	0/0	0	—	0	
	—	0/0	0/0	3/0	0/0	3	0%	28	
	—	0/0	0/0	0/0	0/0	0	—	0	

Total 24

10/page

<

1

2

3

>

Share Network

Sharing Permission

☒ Co-management

Manage the current network with another user

☐ Transfer Management

The current network management authority will be issued to the shared account (history client statistic will not be shared), and you will no longer manage it.

☐ Read-only Privilege

The co-management will have read-only access to the current network.

Share with ⓘ

☒ Super Administrator

Enter Username

☐ Associated Company

Select

☐ Grandstream Support

Sharing duration

Permanent

Cancel

Save

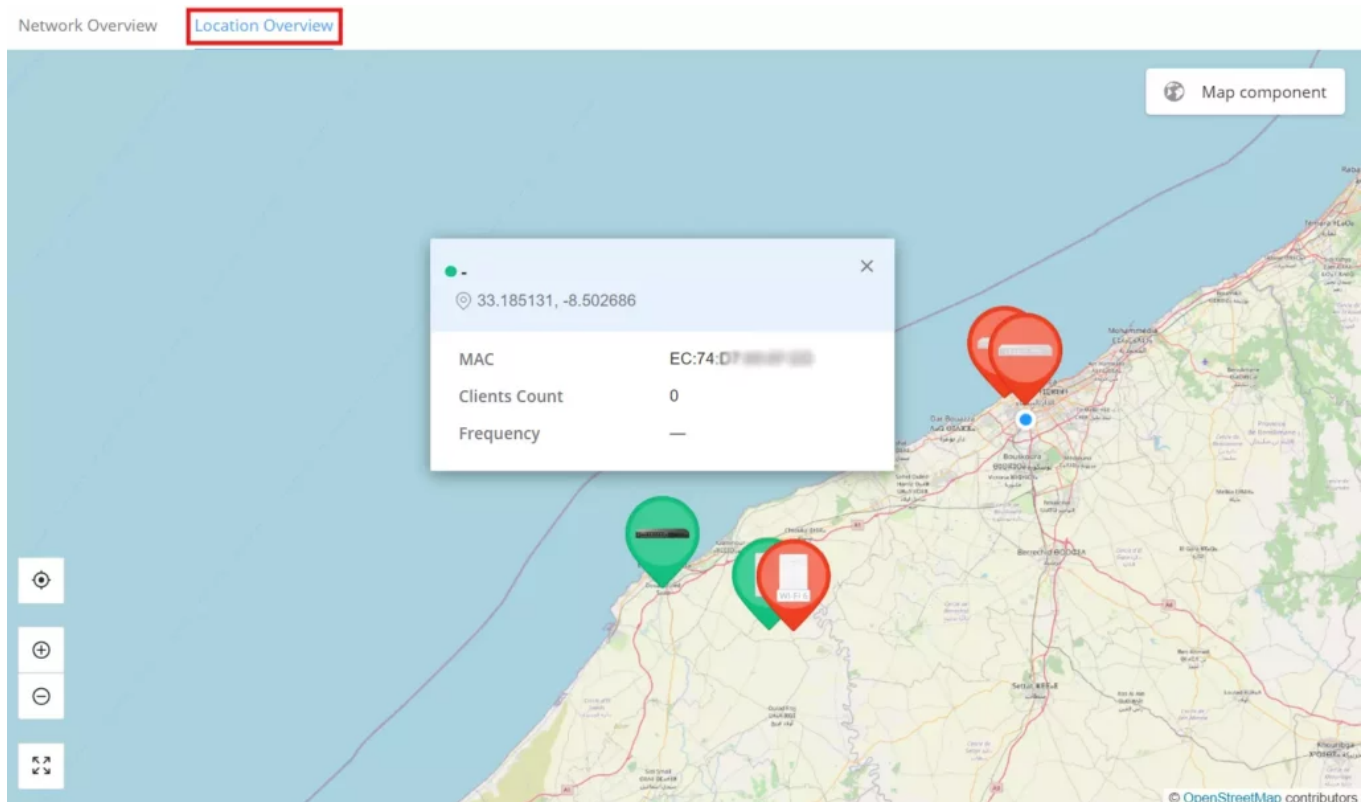
Share Network

Location Overview

The **Location Overview** page provides a real-time geographic visualization of all network devices associated with your GDMS Networking organization. It consolidates device locations across **all networks** into a single interactive map view, offering a high-level operational snapshot.

This view supports device-level status indication, allowing administrators to quickly identify online/offline devices.

To access the Location Overview: Navigate to **Organization -> Overview -> Location Overview** tab.



Network Overview Location Overview

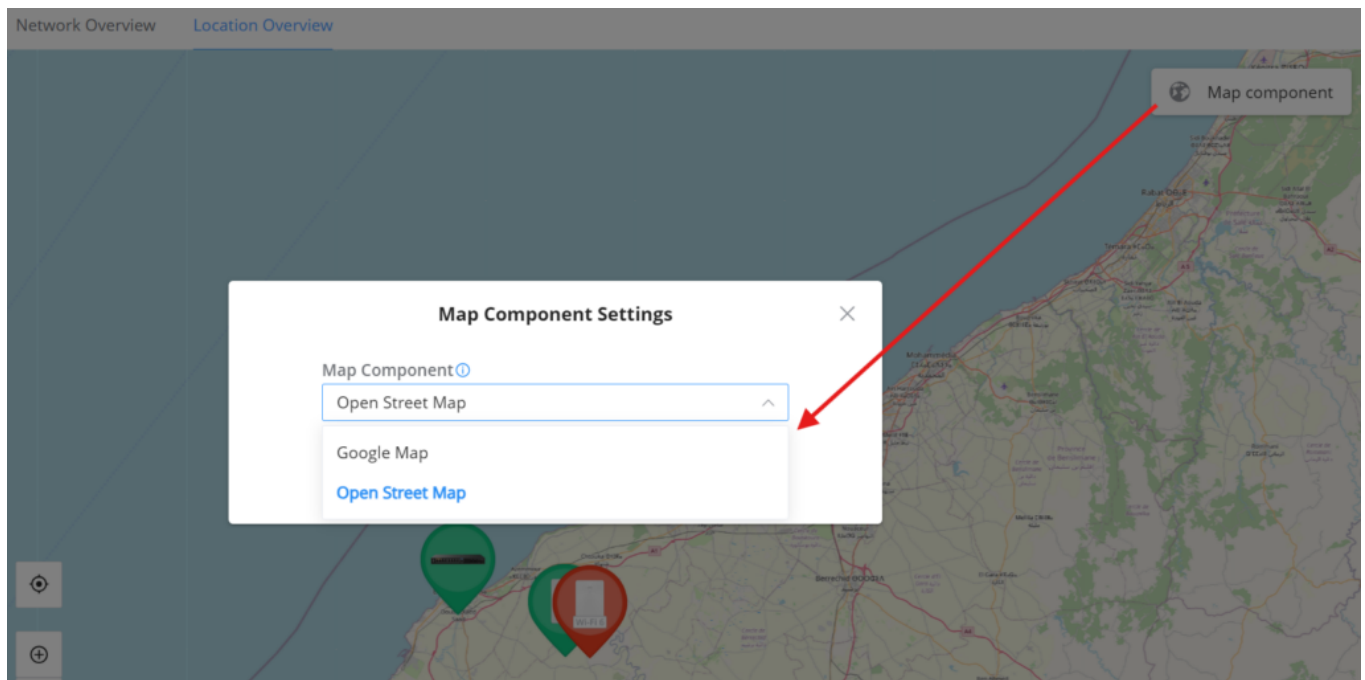
Key Feature: Global Device Visibility

- The Location Overview shows **all devices** from all networks under the organization.
- Devices are represented as map pins:
 - **Green Pins:** Device is online and accessible via GDMS Networking.
 - **Red Pins:** Device is offline or currently unreachable.
- Devices include: Access Points, Routers, Switches, and GCC (Grandstream Cloud Controller) devices.

While Location Overview displays all devices, new device placement or configuration must be done at the individual network level [map](#).

Map Component Settings:

Users can choose between **Open Street Map** and **Google Maps** as the underlying map component.



Location Overview Map Component Settings

To change the map view:

1. Click on the **"Map Component"** button on the top-right of the map.
2. In the **Map Component Settings** popup, select the desired map type.
 - **Google Map** (requires a valid Google Maps API key)
 - **Open Street Map** (default)

Inventory

The **Inventory** section under **Organization -> Inventory** allows users to manage all Grandstream devices registered to their GDMS Networking account.

Devices in the Inventory are claimed meaning they are associated with your organization and **cannot be claimed by another GDMS account**. This protects ownership and prevents duplicate configuration.

Devices can be:

- Claimed directly into the Inventory (without assigning to a network)
- Added directly to a network (which also claims them automatically)
- Removed from networks, but still remain in Inventory
- Deleted only if unassigned from all networks

Think of Inventory as your virtual device shelf a staging area for devices you own, regardless of whether they're currently deployed.

Inventory

Claim Device

Assign to Network

More

All Status

All Devices

All Models

Q MAC/Name/Network/Serial

Device Model	Network	Serial Number	Claim Time	Assigned Time	Last Seen
GWN7062	ISP Locking	T78923AA64	2025/04/11 02:50PM	2025/04/11 02:50PM	2025/04/11 04:47PM
GWN7630	Export	259L9UXK52019294	2025/04/11 11:02AM	2025/04/11 11:02AM	2025/04/11 04:47PM
GWN7003	Delete	33B07R5648	2025/04/10 05:29PM	2025/04/10 05:29PM	2025/04/11 04:47PM
GWN7813P		20VXV6KP42DFCC94	2025/04/10 05:29PM	2025/04/10 05:29PM	2025/04/11 04:47PM
GWN7624		23252ZUN3290B240	2025/04/07 05:42PM	2025/04/07 05:42PM	2025/04/11 04:47PM
GWN7711P		33C07B6530	2025/04/07 11:46AM	Unassigned Returns from the Jawad...	2025/04/11 04:47PM
GWN7660E		20VXZLGP72F03F94	2025/03/21 11:41AM	2025/03/21 11:41AM	2025/03/26 03:11PM

Total 7

10/page

1

Total 7 10/page < 1 >

Inventory page

The user can click on the **"Export"** button to export a CSV file containing all the GWN devices.

- Filtering Options

To simplify device management, the Inventory view includes multiple filtering tools. These filters help administrators locate devices quickly and perform actions at scale.

Available Filters:

- Connection Status

- All devices
- Online only
- Offline only

- Assignment Status

- Devices currently assigned to a network
- Devices unassigned and available for deployment

- Device Model

- Filter by specific hardware model (e.g., GWN7660, GWN7813P)

- Search Field

- Search by MAC address
- Device name
- Serial number
- Assigned network

These filters can be combined to refine results even further.

Claim Devices or Import

- **Claim Device:** to claim a device (GWN device MAC address and Password is required) even if the GWN

device is offline, it will not be assigned to any network.

Users

Inventory

Reseller Channel

ITSP

Upgrade

Report

Change Log

Global Settings

MAC/Name/Serial Num

Claim Device

Assign to Network

More

	Device Model	MAC	Network	Serial Number	Claim Time	Assigned Time	Last Seen
	 GWN7831		Default		2026/08/06 12:30	2026/08/06 12:30	2026/08/06 18:09
	 GWN7830		Default		2026/08/06 12:30	2026/08/06 12:30	2026/08/06 18:09
	  GWN7661		Demo_Network		2026/08/06 09:00	2026/08/06 09:00	2026/08/07 16:45
	  GWN7665		Demo_Network		2026/08/06 08:54	2026/08/06 08:54	2026/08/07 16:45
	  GWN7670WM		Demo_Network		2026/08/06 08:14	2026/08/06 08:14	2026/08/07 16:45
	  GWN7672		Demo_Network		2026/08/06 08:14	2026/08/06 08:14	2026/08/07 16:45
	  GWN7660E		Demo_Network		2026/08/05 11:17	2026/08/05 11:17	2026/08/07 16:45
	  GWN7670		Demo_Network		2026/08/03 16:47	2026/08/03 16:47	2026/08/07 16:45
	  GWN7062E		Default		2026/07/31 16:08	2026/07/31 16:08	2026/08/05 17:41
	  GCC6010		Demo_Network		2026/07/27 09:57	2026/07/27 09:57	2026/08/07 16:45

Total 21

10/page

1

2

3

Inventory

- **Assign Device:** to assign the device to the network (it will added to the selected network).

Claim Device

Manual

Import

* Device MAC Address

Device Name

0-64 characters

* Initial Password

To view the Device Label

Cancel

Claim

Claim Device

- **Export:** to export a CSV file containing all the GWN devices.

	A	B	C	D	E	F	G
1	Model	Mac	Network	Serial Number	Claimed Time	Assigned Time	Last Seen
2	GWN7661	C0:74:AD: [REDACTED]	—	[REDACTED]	2023-10-27 04:11PM	Unassigned	—
3	GWN7624	C0:74:AD: [REDACTED]	—	[REDACTED]	2023-10-27 02:38PM	Unassigned	2023-10-27 04:09PM
4	GWN7813P	C0:74:AD: [REDACTED]	Default	[REDACTED]	2023-10-27 02:16PM	2023-10-27 02:16PM	2023-10-27 03:59PM

Inventory Export

- **Delete:** to delete a device from the GWN management platform.

Reseller Channel

Reseller Channel will be able to support the establishment of the hierarchy agent partnership, retrieve device from ERP, and assign device to network groups or channels/agents:

1. Support first-level channel or agent to bind the ERP ID and sync the device.
2. Support assigning/returning/reclaiming device to network or associated company.

Reseller Channel



Please share your link [Associated Binding Address](#) with your parent channel so that it can assign devices to you. Alternatively, please contact Grandstream Support to add an ERP account to sync devices in your ERP order.

Sync from ERP

Reseller channel

Please share your link Associated Binding Address with your parent channel so that it can assign devices to you. Alternatively, please contact Grandstream Support to add an ERP account to sync devices in your ERP order.

Reseller Channel

[Sync from ERP](#)
[Assign to Network](#)
[Assign to Associated Company](#)
[Export](#)
[Reclaim Device](#)
[Return Device](#)

All Models From All All Status All associated com Q MAC

Device Model	MAC	Serial Number	Origin	Storage Time	State	Assign to	Operation
GWN7600	C0:74:AD:00:00:03	—	chldaim2@gs.com	22/12/2023 01:29	Returned	chldaim2@gs.com	
UCM6104	00:0B:82:8D:E7:76	21AWLS8G308DE776	yxou company1234	28/11/2023 01:40	Unassigned	—	
UCM6104	00:0B:82:8D:E7:74	21AWLS8G308DE774	yxou company1234	28/11/2023 01:40	Unassigned	—	
GXP2130	00:0B:82:8E:6C:C0	24UMHXVG308E6CC0	yxou company1234	28/11/2023 01:40	Unassigned	—	
GXP2130	00:0B:82:8F:97:F9	24UMHXVG308F97F9	yxou company1234	28/11/2023 01:40	Unassigned	—	
UCM6102	00:0B:82:8D:D4:7A	21AWL8LG308DD47A	yxou company1234	28/11/2023 01:40	Unassigned	—	
GXP2130	00:0B:82:8F:97:F8	24UMHXVG308F97F8	yxou company1234	28/11/2023 01:40	Unassigned	—	
UCM6102	00:0B:82:8D:D4:7B	21AWL8LG308DD47B	yxou company1234	28/11/2023 01:40	Unassigned	—	
GXP2130	00:0B:82:8F:97:FE	24UMHXVG308F97FE	yxou company1234	28/11/2023 01:40	Unassigned	—	
GXP2130	00:0B:82:8E:6C:BB	24UMHXVG308E6CBB	yxou company1234	28/11/2023 01:40	Unassigned	—	

Total 59 10/page 1 2 3 4 5 6 >

Reseller channel example

The user can designate the associated network directly on the CVS file.

GDMS Networking

[Default Network01](#)
[Users](#)
[Inventory](#)
[Reseller Channel](#)
[ITSP](#)
[Upgrade](#)
[Report](#)
[Change Log](#)
[Global Settings](#)

Sync from ERP
 Assign to Network
 Assign to Associated Company
 More

Device Model MAC Serial Number **Import File Assignment** Storage Time Status

GWN7665	EC:74:D7:A7:41...	EC74D7A741...	Manual Assignment	2026/07/30 09:18AM	Configured
GWN7061E(WORLD)	EC:74:D7:5D:A6...	348C009FF7	ERP Order	2026/07/28 11:55AM	Unassigned Return from Network
GWN7711P	C0:74:AD:FD:DE...	33B0167165	ERP Order	2026/07/28 11:55AM	Unassigned Return from Network
GWN7062(US)	C0:74:AD:7C:74...	23252ABMC37C74DC	ERP Order	2026/07/23 09:34AM	Unassigned Return from Network
GWN7661E(WORLD)	EC:74:D7:28:F9...	34407C9137	ERP Order	2026/07/02 02:26PM	Configured
GWN7672(WORLD)	EC:74:D7:7C:22...	352030E779	ERP Order	2026/06/19 11:40AM	Configured
GWN7665	C0:74:AD:F8:95...	C074ADF895B4	ERP Order	2026/06/03 04:28PM	Unassigned Return from Network
GCC6010	C0:74:AD:25:26...	MYX6DB8pM8Sk9OK	ERP Order	2026/05/29 10:30AM	Configured
GWN7053F(WORLD)	C0:74:AD:B9:F8...	20V3W7QN9389F08C	ERP Order	2026/05/22 03:37PM	Unassigned Return from Network
GWN7660E(WORLD)	EC:74:D7:2E:4C...	34504NB2CE	Associated Network		

Total 51 10/page 1 2 3 4 5 6 >

Import File Assignment

Please download and use the template to import data. [Reference template](#)

Click to upload CSV file

B	C	D
Associated Network	Device Group(Optional)	MAC
		Device Name(Optional)

© 2026 Grandstream Networks, Inc.

Cancel Import

ISP Locking

The ISP Locking feature in Grandstream GDMS Cloud allows administrators and Internet Service Providers (ISPs) to lock specific router configurations to ensure deployment consistency and prevent unauthorized modifications. Administrators can lock settings such as default passwords, SSIDs, WAN configurations, and other critical network parameters across managed routers.

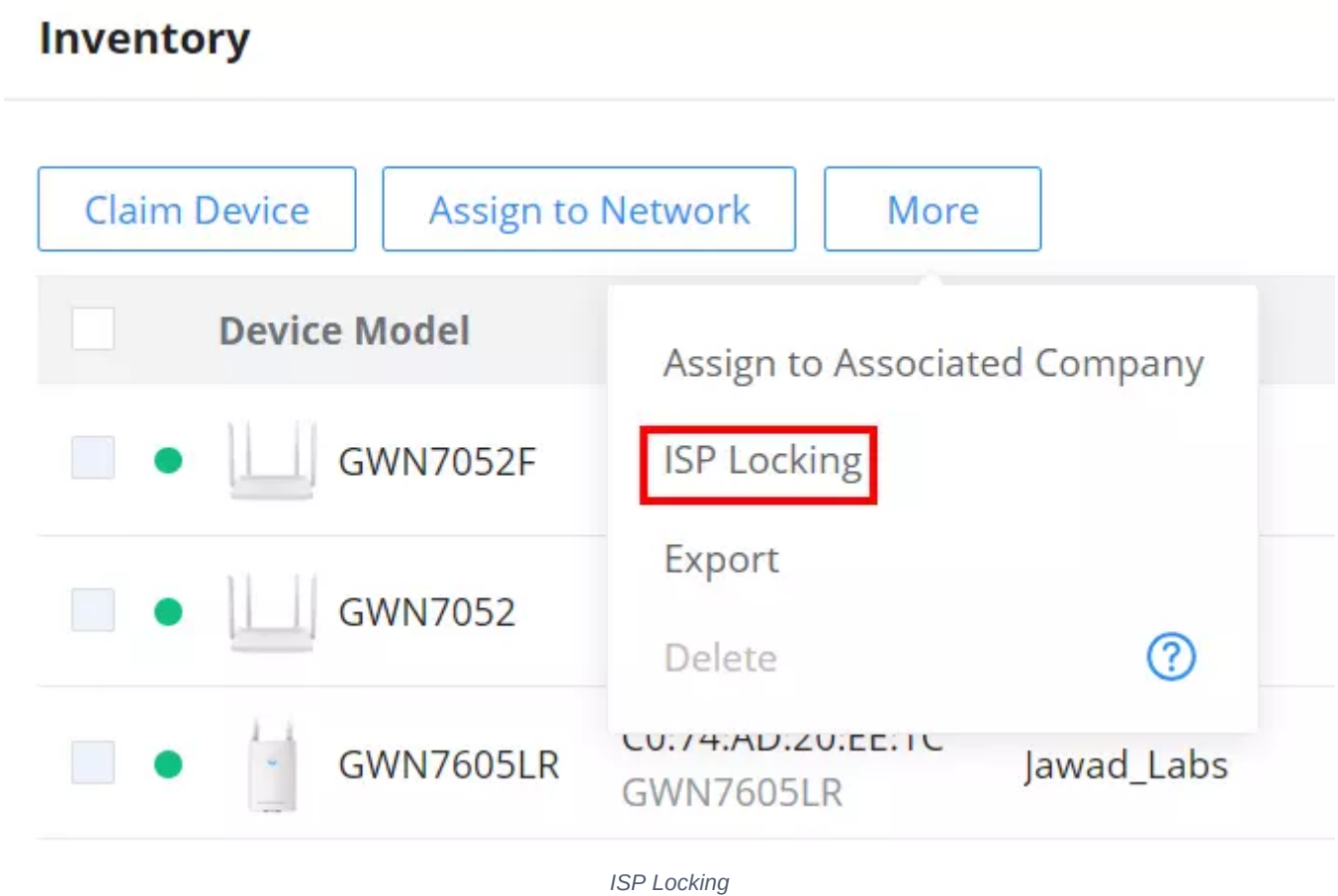
GDMS Networking also supports Universal Configuration, allowing administrators to create and apply standardized configuration templates across multiple supported devices and deployments, helping simplify large-scale provisioning and maintain configuration consistency.

This feature is supported only on Grandstream GWN series routers.

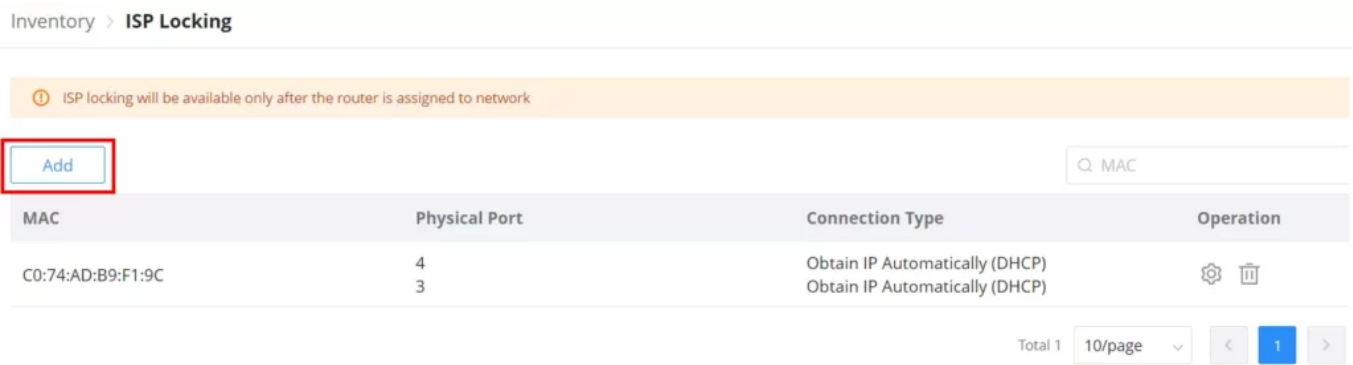
Prerequisites

- The router must be assigned to a network within GDMS Cloud.
- Additional privileges are required to enable this feature on your GDMS account.

To configure ISP Locking, navigate to Organization -> Inventory, then click on "More" after that click on "ISP Locking". Refer to the figure below for a visual guide:



To add a new router, click the "Add" button. To configure an existing router, click the "Configure" icon.



Fill in the required details in the "Configure ISP Locking" form, which includes the default password, WAN configuration (including VLAN Tag), and SSID information (such as SSID name and password).

These new configurations will become the default settings even after the router is reset.

To activate ISP Locking, the router must be reset.

Configure ISP Locking

Connection Type

Obtain IP Automatically (DHCP) 

Preferred DNS Server

1.1.1.1

Alternative DNS Server

8.8.8.8

VLAN Tag

3-4094 numbers

7

WAN2

SSID

Name

1-32 characters

ISP_Name

Cancel

Save

Configure ISP Locking

Users

User Management allows the administrators to create multiple accounts for different users to log in to the platform. There are 6 base different access levels to monitor and manage GWN devices, it's also possible to create a [custom role](#) with custom privileges.

- Super Administrator (the initial administrator)
- Platform Administrator
- Platform Administrator (Read Only)
- Network Administrator
- Network Administrator (Read Only)
- Guest Editor

Super Administrator	Under this account, all network and sub-accounts have read/write permissions and can create networks and admins with various roles (except for super administrators).
Platform Administrator	This account can create networks and create platform administrators, network administrators, and guest administrators.
Platform Administrator (Read-only)	This account has read-only access to networks and sub-accounts.
Network Administrator	Under this account, all network and sub-accounts have read/write permissions and can create guest administrators for their managed networks.
Network Administrator (Read-only)	This account has read-only permissions for its networks.
Guest Editor	This account has read/write permissions for limited management features within a specified network.

User Management base roles

The Super administrator is an admin with top authority, using this privilege users can create/delete accounts with any privilege level. Each account has a unique Super Administrator which is created automatically when signing in.

Add New User

To add a new user, navigate to **Organization -> Users -> User** page, then click on the **"Add"** button to create a new user. Administrators can specify the nickname, email address, assigned role, and the networks that the user is allowed to access across all regions. There is also an option to enable multi-factor authentication (MFA) and automatically add the user to newly created networks.

GDMS Networking supports multiple administrator roles with different permission levels to provide flexible access control and management capabilities:

- **Platform Administrator:** Grants read/write permissions for all organizations, networks, and sub-accounts within the enterprise, along with the ability to create organizations, networks, and administrators with various roles, including other platform administrators.
- **User Administrator:** Grants read permissions for all organizations and networks under the account, with the ability to create, edit, and delete networks, view administrators and users, and create sub-accounts.
- **Organization Administrator:** Grants read/write permissions for all organizations, networks, and sub-accounts under the account, along with the ability to create networks and sub-accounts.
- **Network Administrator:** Grants read/write permissions for all networks under the account and allows the creation of guest administrators for managed networks.
- **Guest Administrator:** Grants read/write permissions for guest-related management along with the ability to create and manage vouchers.

Add User

Nickname

0-64 characters

* Email Address

Supports 1-64 characters

* Role ⓘ

Multi-Factor Authentication



* Network

World

EU Region

China

☒ Auto Add New Network

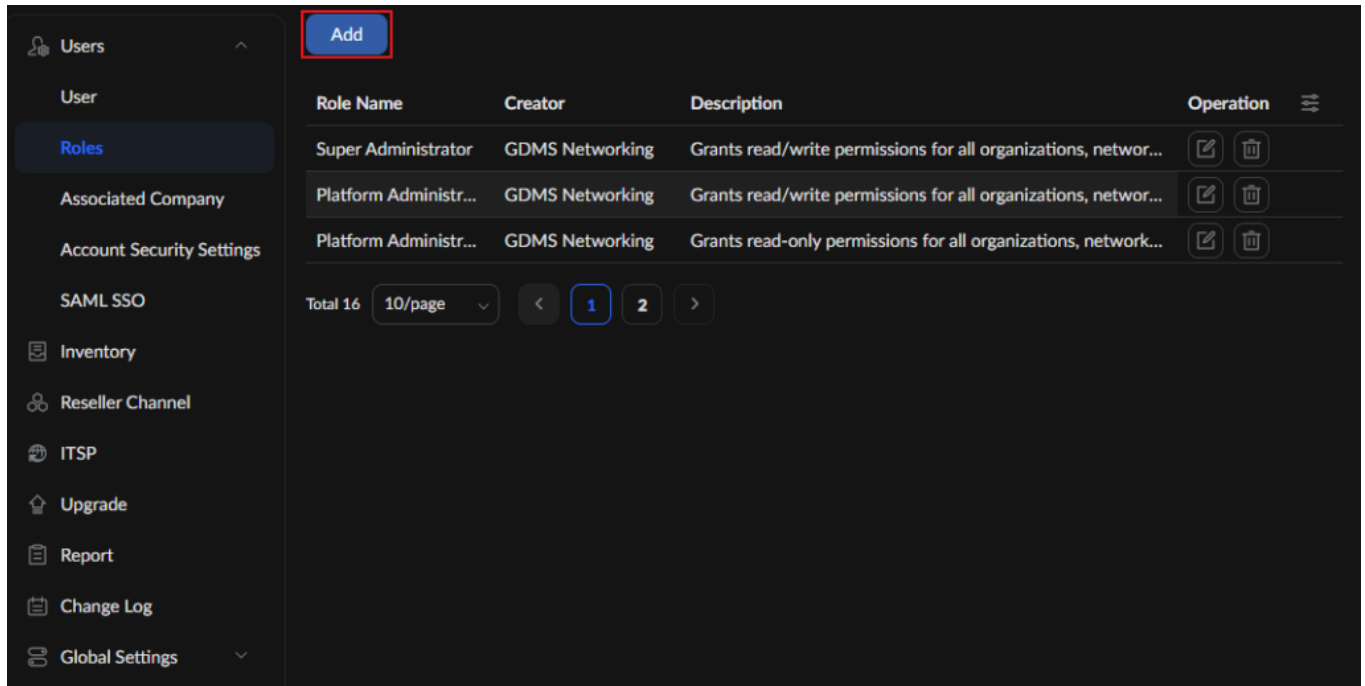
Cancel

Add

Add user

Roles

In addition to the roles predefined, the user can add a custom role and choose which privileges to assign to the role. To add a new role, please navigate to **Organization -> Users -> Roles**, then click on "Add" as shown below:



Roles page

Under "**Organization**" tab, select the organization privileges for this user.

Roles > Add Role (For GDMS Networking)

* Role Name 1-64 characters

Description 0-256 characters

* Privilege Content

Global **Network**

☐ All Privilege

☐ Overview

☐ Network Overview (Read-only) ☐ Location Overview (Read-only) ☐ Network Management

☐ Configure Map Component

☐ Users

☐ User List (Read-only) ☐ Role List (Read-only) ☐ Associated Company (Read-only)

☐ Configure User ☐ Configure Role ☐ Configure Associated Company

☐ Inventory

☐ Device Information (Read-only) ☐ Export Device Information

☐ Reseller Channel

☐ Reseller Channel List (Read-only) ☐ Configure Reseller Channel Info

☐ Upgrade

Add Role Organization Privileges

Under "**Network**" tab, select the network privileges for this user.

Roles > Add Role (For GDMS Networking)

• Role Name

1-64 characters

Description

0-256 characters

• Privilege Content

Global

Network

☐ All Privilege

☐ Dashboard

☐ Devices

☐ Device Information (Read-only)

☐ Add Device

☐ Export Device Information

☐ Group Management

☐ NAT Traversal

☐ Batch Configuration

☐ Speed Test

☐ FXS Configuration

☐ Reboot Devices

☐ Return Devices

☐ Move Devices

☐ Push Configuration

☐ Factory Reset

☐ Delete Devices

☐ Device Configuration

☐ Auto Configuration Delivery

☐ Remote Access

☐ Web CLI

☐ Clear Traffic

☐ Bridge device

☐ Locate device

☐ PBX Configuration

☐ Debug device

☐ PoE Port Configuration

☐ Port Configuration

☐ Installer Configuration

☐ Clients

☐ Client Information (Read-only)

☐ Guest Information (Read-only)

☐ Export Client Information

☐ Client Configuration

☐ Subscribe to Client Historical Data

☐ Clear Traffic

Cancel

Save

Add Role Network Privileges

Then create a new user account and assign the new role to it.

Add User

Nickname

0-64 characters

* Email Address

Supports 1-64 characters

* Role ⓘ

all

* Platform Administrator (Read-only)

User Administrator

Organization Administrator

Organization Administrator (Read-only)

Network Administrator

Network Administrator (Read-only)

Guest Editor

Assign The New Role

Custom role users can also log into the GWN APP.

Associated Company

Users can add other accounts, such as sub-channels and customers, as Associated Companies. They can then share their network with them under the user name or assign devices to them.

Navigate to **Organization -> Users -> Associated Company**, then click on **"Add"** button to add an associated company.

Users

User Roles Associated Company Account Security Settings

① Add other accounts such as sub-channels and customers as associated companies to share the network under your account or assign devices to them. [View my associated company binding address](#)

Add

Disassociate

Q Enter Company Name/Rem

Company Name	Remark	Add Time	Operation
--------------	--------	----------	-----------



No Data

Associated company binding address

To add an associated company, the associating address is required. It can be found under **Organization -> Users -> Associated Company**, then click on "**View my associated company binding address**" as shown above.

Associating Address



The associating address can be shared with other companies to allow them to manage this current company.

<https://www.gwn.cloud/bind?token=9386796>

Reset Address

Copy

Associated company binding address

Add Associated Company



* Associating Address

Contact the company administrator to obtain the \"Associated Company Binding Address\"

https://www.gwn.cloud/bind?token=...

Remark

sharing the network or assigning devices to company x.

Cancel

Save

Add associated company

Once the associated company is added, devices under **Organization -> Inventory** can be assigned to the newly added associated company, as shown in the example below:

Inventory

Claim Device

Assign to Network

Assign to Associated Company

Export

Delete

?

All Devices

All Models

MAC/Name/Network/Serial

☒	Device Model	MAC	Network	Serial Number	Claim Time	Assigned Time	Last Seen
☒	GWN7813P	C0:74:AD:CC:DF:18	—	20VXV6KP22CCDF18	2024/02/28 11:33AM	Unassigned Returns from the Jawad_Labs network	2024/02/28 05:55PM

Assign to associated company

ⓘ Devices assigned to associated companies will automatically be removed from your inventory.

* Associated Company

Workkium

* Target Device(s)

☒ Specify Device☐ Enter MAC address

All Models

Q MAC

Selected Devices(1)

☒	MAC	Device Model
☒	C0:74:AD:CC:DF:18	GWN7813P

Total 1

10/page

<

1

>

MAC	Device Model	Operation
C0:74:AD:CC:DF:18	GWN7813P	⊖

Total 1

10/page

<

1

>

Cancel

Assign

Assign devices to the associated company

It's also possible to share an entire network with an associated company under **Organization -> Overview** (the default network can't be shared with an associated company). Please check the example below:

[Share Network](#)

* Network Name ⓘ

Jawad_Labs

1-64 characters

* Country/Region

Morocco(المغرب)

* Time Zone

(GMT+01:00) Casablanca, Monrovia

Network Administrator

emsa.support@emsa_support@grandstream.com)

Cancel

Save

Share a network with the Associated Company

Share Network



☐ Transfer Management

The current network management authority will be issued to the shared account (history client statistic will not be shared), and you will no longer manage it.

☐ Read-only Privilege

The co-management will have read-only access to the current network.

Share with

☐ account name

Can only be shared with admin accounts in the same region.

☒ Associated Company

Can only be shared with associated companies in the same region.

Cancel

Save

Share a network with Associated Company

Account Security Settings

To enhance GDMS Networking security, users can enable **Password Security**. With this option, users can set a password expiration period (in days) during which the password must be changed and cannot be the same as the previous one(s). Also account idle timeout and login duration can be configured here (minutes). Multi-Factor authentication can be enabled on all accounts.

Account Security Settings affects all accounts (including this account), and only this account can view these settings.

Users

Account Security Settings affects all accounts (including this account), and only this account can view these settings.

Password Security

Password Security

☒

* Password Expiration (days)

90

30-180 numbers

* No Repeating Passwords

1

1-20 numbers

Account Security

* Idle Timeout (min)

180

5-1440 numbers

Login Duration (min)

720

5-1440 numbers

Multi-Factor Safety Authentication

☐

Once enabled, all accounts will be enabled.

Cancel Save

Account Security Settings

Password Security	
Password Security	Toggle on/off the password security.
Password Expiration (days)	Specify the number of days of validity of a password. Once the number of days configured has elapsed, the user will be prompted to change his/her password upon login.
No Repeating Passwords	Settings this option will prevent the user from using a password which he/she had previously used. You can set the number of previous passwords which have been used to prevent them from being used again as a new password.
Account Security	
Idle Timeout (min)	This configures the number of minutes of a user being idle on the web GUI before he/she can be automatically logged out by the system. The user can enter a value from 5 to 1440 minutes. Configuring this value is required. Note: The default value is 180.
Login Duration (min)	This configures the number of minutes a login session can last before the user is logged out automatically by the system. The user has to log in again to start after being logged out. Note: The user can enter a value between 5 and 1440
Multi-factor Authentication	If MFA is enabled, all accounts (including this account) will be required to use multi-factor authentication. This cannot be disabled by other users. If disabled, users will be able to toggle MFA for their own accounts.

Account Security Settings

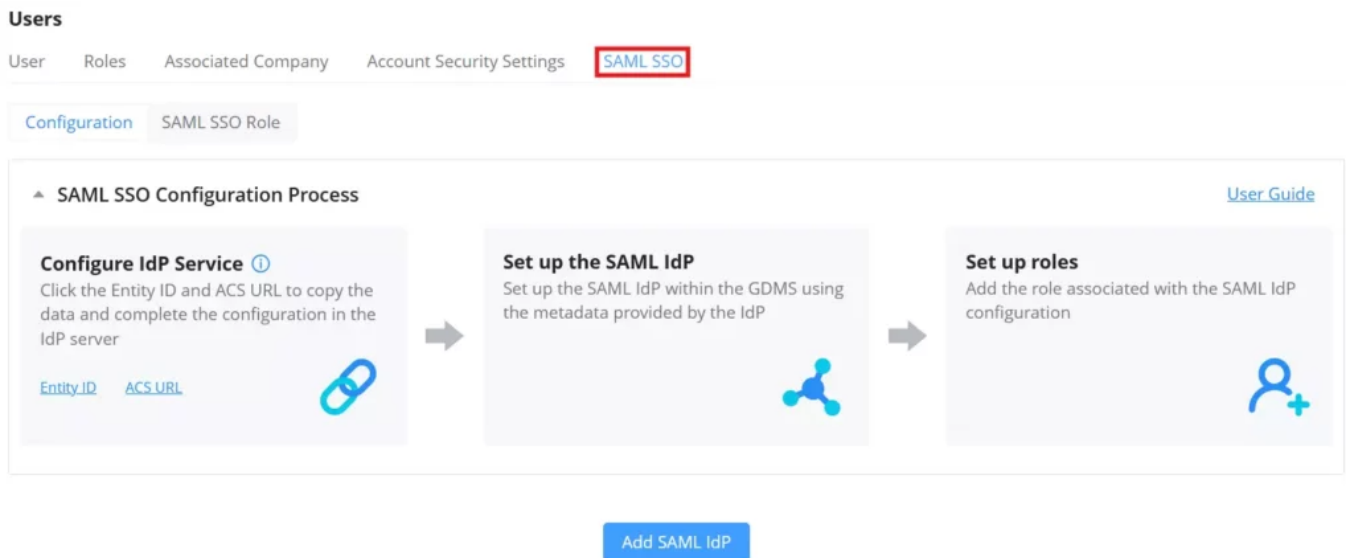
SAML SSO

SAML (Security Assertion Markup Language) Single Sign-On (SSO) allows users to authenticate into GDMS Networking using their organization's centralized identity provider (IdP). This enables streamlined and secure

access across systems while reducing password fatigue and administrative overhead.

With SAML SSO, administrators can configure and manage external login services (e.g., Azure AD, Okta, etc.) for users in their GDMS Networking account. Once configured, users can log in through their IdP, and roles will be assigned based on mapped permissions in the system.

To access this feature, navigate to: **Organization -> Users -> SAML SSO tab**

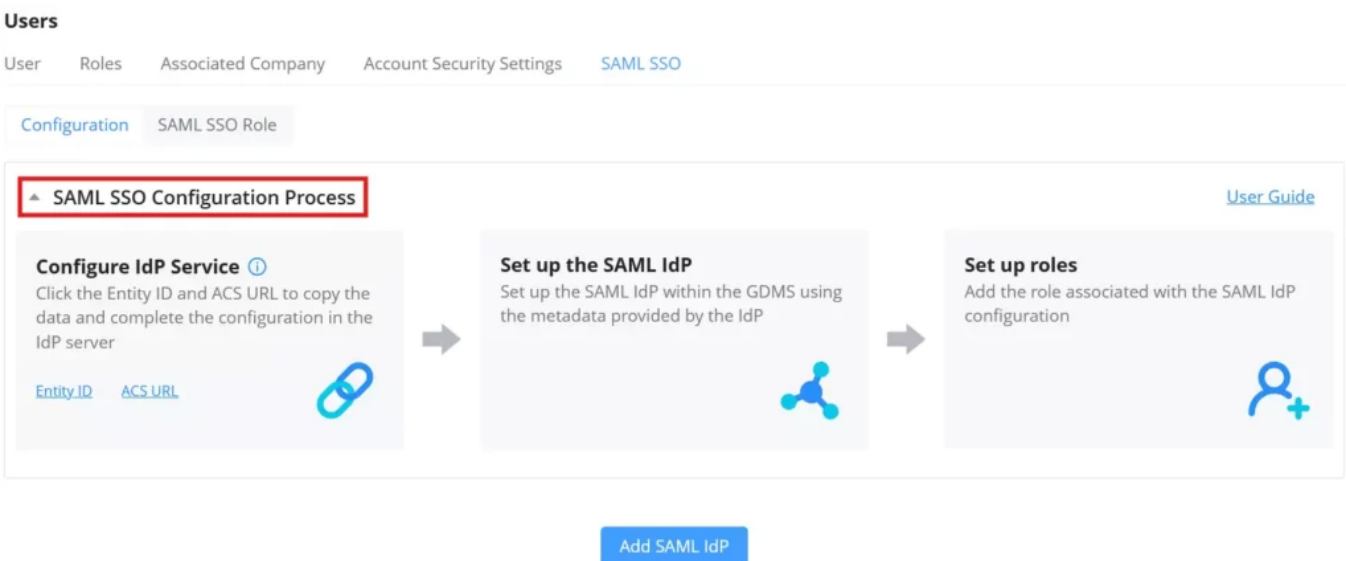


SAML SSO page

SAML SSO Configuration

The **Configuration** tab displays a step-by-step process to set up SAML SSO for your organization. The setup includes:

- 1. Configure IdP Service**
Copy the required metadata-**Entity ID** and **ACS URL**-to input into your IdP dashboard.
- 2. Set Up the SAML IdP**
Input metadata from your identity provider into GDMS Networking to connect both ends.
- 3. Set Up Roles**
Define which users can access the system and what they are allowed to do by mapping roles.



SAML SSO Configuration Process

Clicking on **Entity ID** or **ACS URL** automatically copies the values to your clipboard for quick use in the IdP

configuration panel.

Click the **Add SAML IdP** button to create a new configuration.

Users

UserRolesAssociated CompanyAccount Security SettingsSAML SSO

ConfigurationSAML SSO Role

SAML SSO Configuration Process

Configure IdP Service ⓘ

Click the Entity ID and ACS URL to copy the data and complete the configuration in the IdP server

Entity IDACS URL

➔

Set up the SAML IdP

Set up the SAML IdP within the GDMS using the metadata provided by the IdP

➔

Set up roles

Add the role associated with the SAML IdP configuration

User Guide

Add SAML IdP

Add SAML Idp

When adding a new IdP, a detailed form appears. The key fields are:

Add SAML IdP

SAML IdP

SAML SSO

*SSO Access Code ⓘ

Remark

Metadata ⓘ

*IdP Entity ID

*X.509 cert SHA1 fingerprint ⓘ

*SSO Login URL ⓘ

SSO Logout URL ⓘ

Support 1-64 digits of letters, numbers, and _ - .

0-64 characters

1-128 characters

1-128 characters

1-256 characters

0-256 characters

Cancel

Save

Add SAML Idp

- **SSO Access Code**
A unique identifier used during login. This code is what users enter on the GDMS login page to trigger SSO.
- **IdP Entity ID**
The unique identifier of your identity provider.
- **X.509 cert SHA1 fingerprint**
This fingerprint from your IdP certificate is used for encryption and validation.

- **SSO Login URL**

Where users will be redirected when their session expires or upon login.

- **SSO Logout URL**

Optional. When users log out from GDMS, they'll also be logged out of the IdP if this URL is configured.

Once all required fields are completed, click **Save**.

SAML SSO Role

After configuring your SAML IdP, switch to the **SAML SSO Role** tab to create role mappings between the IdP and GDMS Networking.

Click the **Add** button to create a new role mapping.

Users

User Roles Associated Company Account Security Settings **SAML SSO**

Configuration **SAML SSO Role**

Add

Role Name Organization Network Operation

Q Role Name

Add SAML SSO Role

Step 1: General Settings

Set a **Role Name** that exactly matches the role configured in your IdP.

Users > **Add Role**

General Settings UC Permissions Networking Permissions

*Role Name SAML SSO Role 1-64 characters

UC Organization World EU Region

Networking World EU Region

Network-based Default Network

☒ Auto Add New Network

Next

Add role General Settings

Step 2: UC Permissions

Define permissions related to UC (Unified Communications) features.

General Settings **UC Permissions** Networking Permissions

< Basic UCMRC CloudUCM Resources Alerts Reseller Channel RPS Management Users System >

☐ All

☐ Dashboard

☐ Overview

☒ Extension - SIP Account

☒ Account List ☐ Add Account ☐ Import Account ☐ Export Account ☒ Edit Account

☐ Delete Account ☐ Modify SIP Server ☐ Go to PBX/CloudUCM Web UI to edit extension

☒ Extension - SIP Server

☒ SIP Server List ☐ Add Server ☐ Delete Server ☐ Edit Server

☒ VoIP Device

☒ Device List ☐ Transfer Device ☒ Add Device ☐ Authorization Management ☐ Import Device

☐ Export Device ☐ Edit Device ☐ Delete Device ☐ Open Subscription ☐ Upgrade Firmware

Back Next

Add role UC Permissions

Step 3: Networking Permissions

Choose networking-specific permissions or assign a custom role.

General Settings UC Permissions **Networking Permissions**

Permissions

None

None

Platform Administrator

Platform Administrator (Read-only)

Network Administrator

Network Administrator (Read-only)

Guest Editor

Custom

Add role Networking Permissions

Additional Help

A detailed **User Guide** is available directly from the platform by clicking the **User Guide** link in the top-right of

the Configuration tab.

Users

UserRolesAssociated CompanyAccount Security SettingsSAML SSO

ConfigurationSAML SSO Role

SAML SSO Configuration Process

Configure IdP Service ⓘ

Click the Entity ID and ACS URL to copy the data and complete the configuration in the IdP server

Entity IDACS URL

➔

Set up the SAML IdP

Set up the SAML IdP within the GDMS using the metadata provided by the IdP

➔

Set up roles

Add the role associated with the SAML IdP configuration

User Guide

Add SAML IdP

SAML SSO User Guide

Alternatively, you can access the documentation here: **GDMS SAML SSO User Guide**

Upgrade

Devices Upgrade

This feature allows upgrading GWN devices. Under **"Upgrade"** menu allows the administrator to manage GWN devices' firmware, and trigger immediate upgrades or Upgrade reminders. There is also the option for Upgrade History on the second tab.

Upgrade

Devices UpgradeUpgrade History

FirmwareUpgrade

Upgrade Reminder ⓘ

All NetworksAll ModelsAll Devices

Model/MAC/Firmware Versi

	Device Model	MAC	Network Name	Firmware	Recommended Version	Scheduling
☐	GWN7624	C0:74:AD:90:B2:40 GWN7624	Default Network	1.0.25.10	1.0.25.7	No
☐	GWN7002	C0:74:AD:BF:AF:50	Default Network	1.0.4.6	1.0.3.5	No
☐	GWN7052F	C0:74:AD:B9:F1:9C	GS Network	1.0.9.2	1.0.7.2	No
☐	GWN7813P	C0:74:AD:DF:CC:94	Default Network	1.0.1.8	1.0.1.8	No

Total 410/page<1>

Upgrade

Select the devices you wish to upgrade then click **"Upgrade"**. Under **"Firmware Version"** the users can select which version to upgrade to (Beta Firmware is also supported but not recommended).

Firmware Server	☒ Cloud ☐ Local (HTTP/HTTPS)
Firmware Version	Latest Recommended Version
Upgrade Time	☒ Upgrade Now ☐ Upgrade Later ☐ Upgrade Regularly
Remark	Upgrade Add a comment about the upgrade
	Cancel OK

Upgrade in Batches

Manager Upgrade

The users can upgrade the GWN Manager directly from the Web UI, by navigating to **Organization -> Upgrade page -> Manager Upgrade** tab.

On this page, the users can see the current version and the latest firmware available, to upgrade to the latest firmware, please click on "**Upgrade**" button as shown below:

GWN Manager

Upgrade

Devices Upgrade Manager Upgrade Upgrade History

Upgrade

Upgrade Reminder ⓘ ☒

Service	Version	Latest Firmware	Scheduling
GWN Manager	1.1.28.10	1.1.28.10	No

Manager Upgrade

The users have the option to upgrade now, upgrade later or upgrade regularly, a remark or comment about the upgrade can be also added. The overall features related to the upgrade will be listed under.

Upgrade	Latest Firmware	
Upgrade Time	☒ Upgrade Now ☐ Upgrade Later ☐ Upgrade Regularly	
Remark	Manager Upgrade	Add a comment about the upgrade
Release Note	GWN_Manager 1.1.28.10 1. Supports link speed display for Aps on the device list 2. Supports cloning the LAN and wired firewall configuration 3. Added Beta firmware display and supports upgrading to Beta 4. Optimize client list Sorting 5. Supports Local WAN Configuration Synchronization 6. Added Phone Number length Settings for the authentication of Splash Page 7. Optimized Feedback entry 8. Added PPSK configuration, inventory information acquiring, and switch port information acquiring for API 9. Internal bug fixes	
Cancel OK		

Upgrade the GWN Manager

Upgrade History

On the upgrade history tab, the user can see the upgrade history of all GWN devices with details information like (device model, firmware version, upgrade status, etc), it's also possible to search for a device using its MAC address.

Upgrade

Devices Upgrade [Upgrade History](#)

➡

Schedule ID	Device Type	Device Model	Device Number	Target Version	Upgrade Status	Administrator	Scheduled Time	Remark	Operation
1	AP	GWN7660	1	1.0.25.10	Successful	admin@grands tream.com	2023-11-16 04:32PM	Upgrade	☒ Schedule ID ☒ Device Type ☒ Device Model ☒ Device Number ☒ Target Version ☒ Upgrade Status ☒ Administrator ☒ Scheduled Time ☒ Remark

Total 1 10/page

Upgrade History

Report

Administrators can generate and configure the platform to send reports periodically to the configured email addresses. Each report can be related to one or more different Network groups, providing Wi-Fi statistics (client count, bandwidth usage, client and guest statistics...etc.)

Report

Report Management

Generated Report

Create Report

Title	Scheduled Time	Creator	Report Frequency	Operation
custom range	2025/12/30 12:17	www.support@grandstream.com	2025/12/16—2025/12/16	
Daily report	2025/12/30 12:16	www.support@grandstream.com	Daily	

Total 2

10/page

1

Report

To generate the report, click on the **"Create a Report"** button, and a new page displaying the report details will be displayed.

Report > Create Report

*Title

Daily

The v \$&#:

Type

☒ Statistical Report

☐ Speed Test Report

*Organization

Default

*Network

All

*Report Contents

☒ Clients Count

☒ Bandwidth Usage

☒ Client Statistics

(Client Manufacturer、Client OS 、 New Clients、 Return Clients、 Average Duration)

☒ Guest Statistics

(Guest sessions and guest authentication sessions)

☒ Top Devices

Top 5

☒ Top Clients

Top 5

☒ Top SSIDs

Top 5

☒ WAN Bandwidth Usage Statistics

Selected Devices(1)

Report Frequency

Daily

Report Generate Time

Now

Email Address

admin@grandstream.com

Add New Item

Create a report

The following table explains different options for report settings:

Field	Description
-------	-------------

Title	Enter a name for the report.
Type	Select the report type (e.g., Statistical Report or Speed Test Report).
Organization	Select the organization that the report belongs to.
Network	Select the Network Group(s) to include in the report.
Report Contents	Choose what to include in the report (e.g., Clients Count, Bandwidth Usage, Client Statistics, Guest Statistics, Top Devices/Clients/SSIDs, and WAN Bandwidth Usage Statistics).
WAN Bandwidth Usage Statistics	Include WAN traffic/bandwidth statistics in the report. After enabling it, click Selected Devices to choose the WAN device(s) to report on.
Report Frequency	Choose how often the report is generated (Daily, Weekly, Monthly, or Custom Range).
Report Generate Time	Choose whether to generate the report Now or at a Later time.
Email Address	Add one or more email recipients to receive the generated report.

Report

Organization Change Log

The **Change Log** page provides a history of actions and events in your GDMS Networking account. It includes two tabs:

- **System Log** (system and configuration actions)
- **Account Center** (account activity records)

System Log

The **System Log** records system and configuration actions performed in the platform, including who performed the action and where it was applied.

Change Log

System Log

Account Center

Start Date

End Date

Operator/IP/Network

Time	Operator	IP	Operation
2025/12/30 16:11	admin	192.168.1.1	Enabled API that restrict specific networks
2025/12/30 16:11	admin	192.168.1.1	Remoted Access Device (EC:74:48:11:11:11:11)
2025/12/30 16:11	admin	192.168.1.1	Remoted Access Device (C0:74:48:11:11:11:11)
2025/12/30 15:23	admin	192.168.1.1	Deleted Devices (EC:74:48:11:11:11:11)
2025/12/30 15:00	admin	192.168.1.1	Added Devices (C0:74:48:11:11:11:11)
2025/12/30 14:42	admin	192.168.1.1	Default
2025/12/30 13:10	admin	192.168.1.1	Default
2025/12/30 12:44	admin	192.168.1.1	Default
2025/12/30 12:08	admin	192.168.1.1	Default
2025/12/30 12:07	admin	192.168.1.1	Default

Total 767

10/page

1

2

3

4

5

6

...

77

Change Log -> System Log

You can filter and locate entries using:

- **Date range** (Start Date / End Date), including quick ranges such as **Last 1 day**, **Last 7 days**, and ****Last 30 days**.
- **Search** field to filter by **Operator** or **IP Address**

Each entry includes the following information:

- **Time:** When the action occurred.
- **Operator:** The user who performed the action.
- **IP Address:** The source IP used.
- **Network:** The related network (if applicable).
- **Details:** A short description of the action.
- **Operation:** Additional options for the log entry.

To view expanded details for a specific entry, click the **three dots** under the **Operation** column.

The screenshot shows the 'Change Log' interface with the 'System Log' tab selected. A table lists log entries with columns: Time, Operator, IP Address, Network, Details, and Operation. A 'More Details' modal window is open, showing fields for 'Name', 'MAC', and 'Password'. A red arrow points from the three dots icon in the 'Operation' column of the table to the modal window.

Change Log -> System Log -> More Details

The **More Details** window displays additional information for the selected entry (for example, updated parameters and values).

Account Center

The **Account Center** tab records account-related activity (for example, login events). You can filter results using:

- **Date range** (Start Date / End Date)
- **Search** field to filter by **Operator** or **IP Address**

The screenshot shows the 'Change Log' interface with the 'Account Center' tab selected. A table lists login events with columns: Time, Operator, IP Address, and Details. The details column shows 'Login success' for multiple entries. The bottom of the page shows pagination information: Total 418, 10/page, and a list of page numbers.

Change Log -> Account Center

Each entry includes:

- **Time**
- **Operator**
- **IP Address**
- **Details** (for example, Login success)

Global

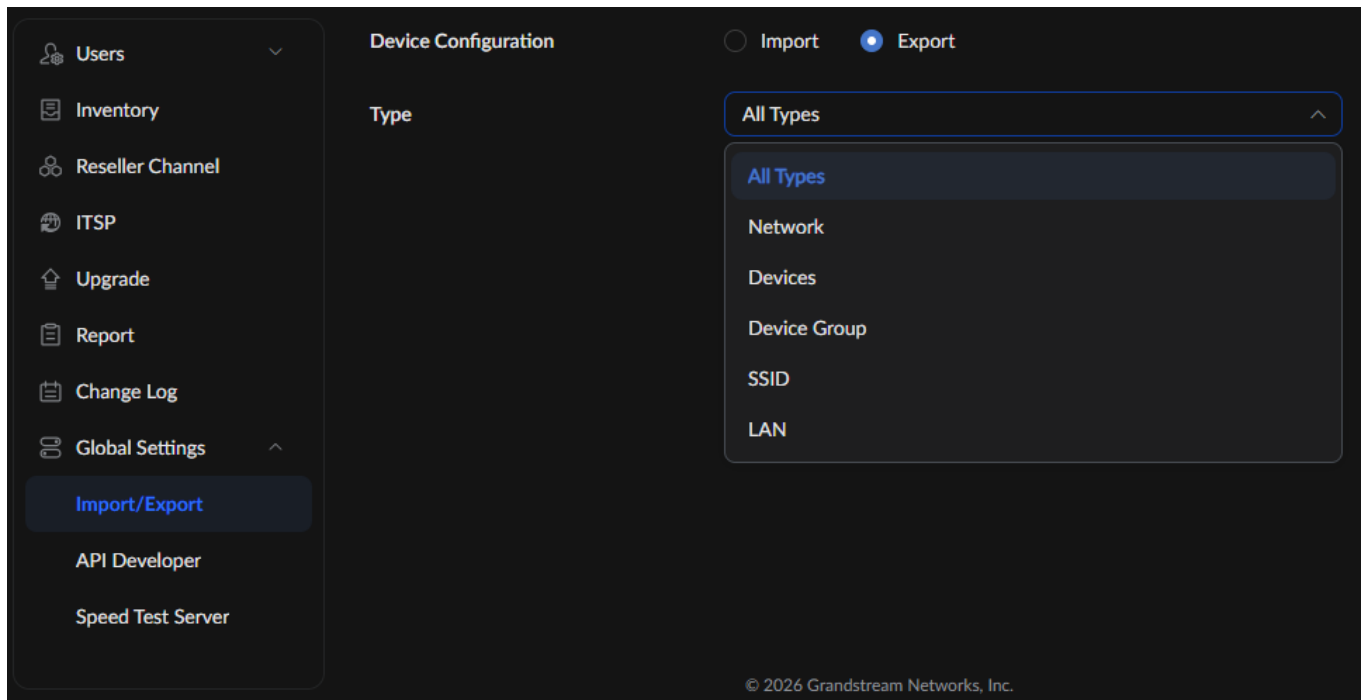
Import/Export

The Import/Export section provides a way to export device configuration data to files, or import configuration data in bulk using a template.

Navigation: **Organization -> Global -> Import/Export**

Export

Use Export to download configuration data as CSV files.

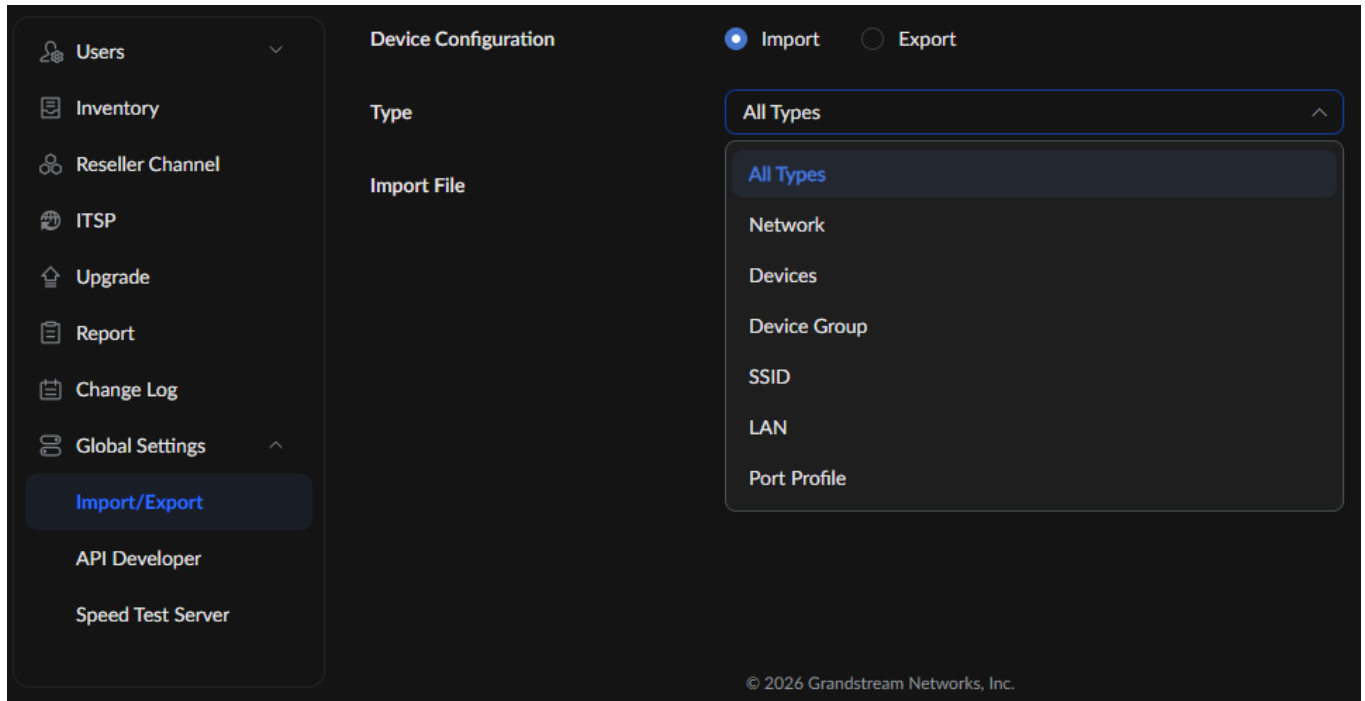


Export

1. Select **Export**.
2. In **Type**, choose what you want to export:
 - **All Types**: Exports multiple CSV files (for example, Network, Device Group, Device Configuration, etc.).
 - **Network / Devices / Device Group / SSID / LAN**: Exports only the selected type.
1. The browser downloads the exported CSV file(s).

Import

Use Import to upload configuration data in bulk using the provided template.



Import

1. Select **Import**.
2. In **Type**, choose the data type you are importing (for example, Network, Devices, Device Group, SSID, LAN, or Port Profile).
3. Click **Reference template** to download the import template, then fill it with your configuration data.
4. Under **Import File**, click the upload area and select your completed template file.
5. (Optional) Enable **Assign the SSID in this network to the newly added router** if you want GDMS to assign imported SSIDs to newly added routers. Depending on your environment, this may overwrite SSIDs created in the device's local web interface.
6. Click **Import** to upload and apply the configuration.

API Developer

The **API Developer Mode** in GDMS Networking allows organizations to securely integrate their network operations with external platforms, in-house tools, or automation workflows using a RESTful API.

This feature is designed for environments that require centralized monitoring, real-time alerts, automated provisioning, or system-to-system integration beyond the standard web interface.

Navigation: Go to **API Developer** from the main menu.

API Developer

Enterprises can enable API Developer Mode to invoke various GWN features via API in third-party applications. [View More Details →](#)

API Developer Info

APP ID

12345678

Secret Key

abcdefghijklmnopqrstuvwxyz1234567890

Reset

Restrict APIs to specific networks ⓘ



Disable API Developer Mode

API Developer

Enabling Developer Mode

To activate API Developer Mode:

1. Toggle the **Enable Developer Mode** option.
2. The system will generate:
 - **APP ID** - A unique identifier used for authenticating API requests.
 - **Secret Key** - A secure key used to obtain an access token.
3. Optionally, toggle **Restrict APIs to specific networks** to limit access only to networks associated with the logged-in user.

Authentication Requirements

To access GDMS Networking APIs, a valid **access token** must be generated. The authentication process depends on your settings:

- If **"Restrict APIs to specific networks" is disabled (default):**
You only need your **APP ID** and **Secret Key**.
 - **If restriction is enabled:**
In addition to the APP ID and Secret Key, you must also provide your **GDMS account username and password**.
This adds a layer of security by ensuring the token only grants access to networks assigned to that user.
- This flexible model allows both general integrations and tightly scoped access when required.

API Capabilities and Integration Highlights

GDMS Networking's **API Developer Mode** provides secure, programmable access to the platform's core features, allowing seamless integration with external systems and custom workflows.

The API supports a wide range of functions, including (but not limited to):

- Accessing real-time device and client data
- Automating configuration of networks, SSIDs, VLANs, and device groups
- Managing provisioning and deployment across distributed environments

- Receiving alerts through **Webhook integration**
- Retrieving **Bluetooth Low Energy (BLE) client data** from supported access points. Note: Bluetooth API must be enabled first under [Settings -> System -> General](#).
- Configuring security features such as MAC-based authentication and RADIUS profiles
- Handling bulk import/export of network and device configurations

These capabilities enable IT teams and system integrators to build scalable, automated, and responsive network operations.

Developer Documentation

The full list of API endpoints, usage examples, authentication steps, and integration methods can be found in the official developer guide: [GWN API Developer Guide](#)

This includes:

- Access token generation
- Webhook payload format
- Endpoint descriptions and parameters
- Sample request/response structures
- Error code definitions

Speed Test Server

The Speed Test Server page is where you add and manage custom speed test servers that GDMS Networking can use when running speed tests and generating Speed Test Reports.

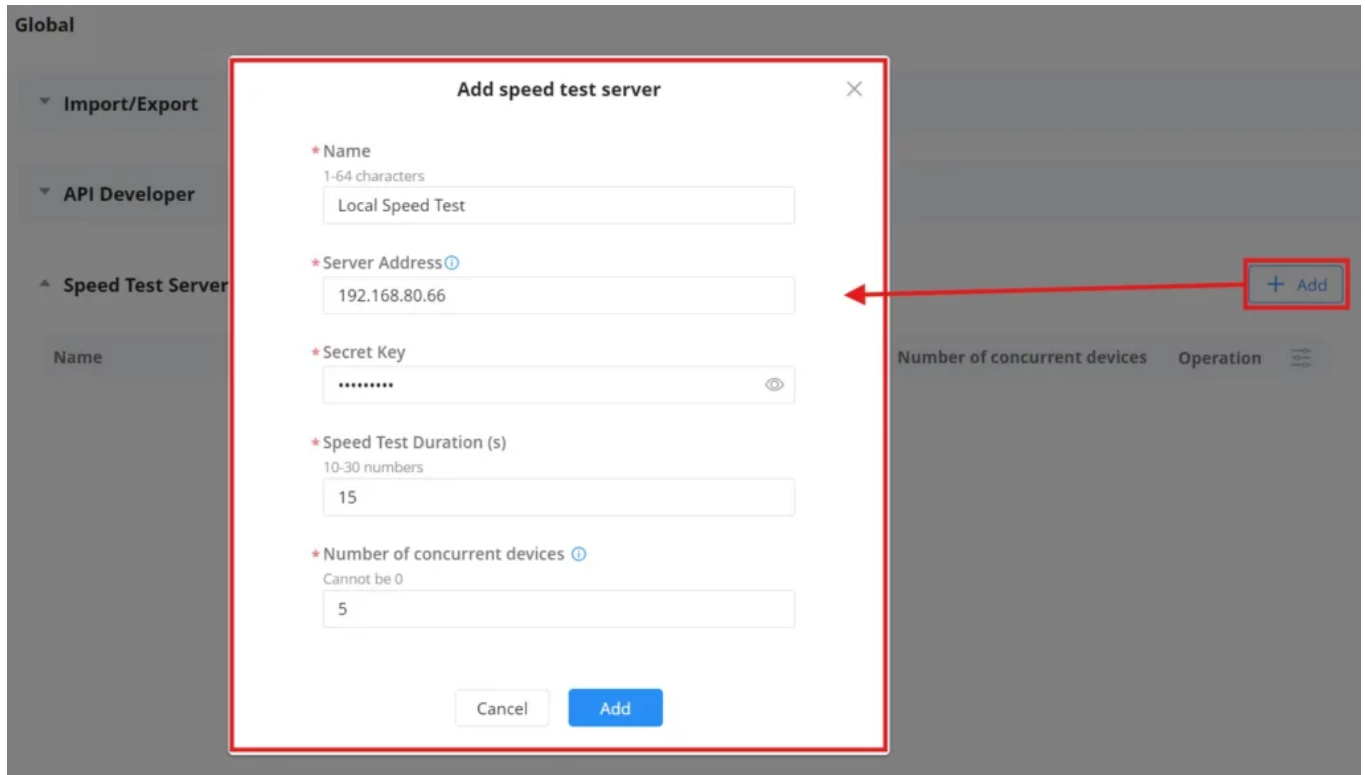
To open this page, go to **Organization**, select **Global**, then open **Speed Test Server**.

⬆️ Speed Test Server
+ Add

Name	Server Address	Speed Test Duration (s)	Number of concurrent devices	Operation
ⓘ No Data				

Speed Test Server

Click **Add** to create a new speed test server.



Speed Test Server

In the **Add speed test server** window, fill in the following fields:

Field	Description
Name	Enter a name for the server (1-64 characters).
Server Address	Enter the server address. If the server address uses a port, include the port number.
Secret Key	Enter the secret key used to authenticate with the speed test server.
Speed Test Duration (s)	Set the test duration in seconds (10-30).
Number of concurrent devices	Set how many devices can run the speed test at the same time. This value cannot be 0.

For instructions on deploying and configuring a local speed test server, refer to the **Deploy a Local GWN Speed Test Server (GDMS Networking/GWN Manager) Guide**.

MANAGER SETTINGS

Manager Settings is only available for GWN Manager.

Manager Settings

▼ Basic

▼ SMTP Server

▼ Backup & Restore

Manager Settings page

Basic

In this section, the user can download the Manager log files by clicking on the "**Export**" button as shown below, as well as enabling "**Remote Assistance**" in case the users need professional help from experts or support.



Manager Settings Basic

SMTP Server

To enable email notifications from GWN Manager, the user needs first to set up the SMTP Server here, once the SMTP Server configuration is set, please click on the "**Send test email**" button to test if it's working or not.

▲ SMTP Server

From Email Address ⓘ

From Name ⓘ

1 to 64 characters

SMTP Username ⓘ

SMTP Password ⓘ

* SMTP Host ⓘ

* SMTP Port ⓘ

Send test email

Cancel

Save

Manager Settings SMTP Server

Backup & Restore

Users can Backup GWN Manager configuration as shown below:

Manager Settings

▼ Basic

▼ SMTP Server

▲ Backup & Restore

Upload Backup ⓘ

Upload

Manual Backup ⓘ

Backup

Backup Settings ^

* File Storage Path ⓘ

/gwn_backup

Retained Data Backup



Cancel

Save

Backup and Restore

Users can click the "**Upload**" button to import a backup from the local directory. Or, click the "**Backup**" button to back up immediately.

REQUIREMENTS

The following tables show the requirements of Grandstream networking products including GWN Access Points, GWN Routers, GWN Switches, GCC Devices, and GWN App versions (Android(R) and iOS(R)) for GWN Management Platforms (GDMS Networking & GWN Manager):

- GWN Access Points: minimum and recommended version

Model	Minimum	Recommended
GCC6010	1.0.1.8	1.0.1.8
GCC6010W	1.0.1.8	1.0.1.8
GWN7001	1.0.1.6 (1.0.5.35 for GWN Manager)	1.0.5.35
GWN7002	1.0.1.6 (1.0.5.35 for GWN Manager)	1.0.5.35
GWN7003	1.0.1.6 (1.0.5.35 for GWN Manager)	1.0.5.35
GWN7052	1.0.5.34 (1.0.9.42 for GWN Manager)	1.0.9.42
GWN7052F	1.0.5.4 (1.0.9.42 for GWN Manager)	1.0.9.42
GWN7062	1.0.5.34 (1.0.9.42 for GWN Manager)	1.0.9.42

AP minimum and recommended version

- GWN Routers/GCC Devices: minimum and recommended version

Model	Minimum	Recommended
GCC6010	1.0.1.8	1.0.1.8
GCC6010W	1.0.1.8	1.0.1.8
GWN7001	1.0.1.6 (1.0.5.35 for GWN Manager)	1.0.5.35
GWN7002	1.0.1.6 (1.0.5.35 for GWN Manager)	1.0.5.35
GWN7003	1.0.1.6 (1.0.5.35 for GWN Manager)	1.0.5.35
GWN7052	1.0.5.34 (1.0.9.42 for GWN Manager)	1.0.9.42
GWN7052F	1.0.5.4 (1.0.9.42 for GWN Manager)	1.0.9.42
GWN7062	1.0.5.34 (1.0.9.42 for GWN Manager)	1.0.9.42

GWN routers/GCC devices minimum and recommended version

- GWN Switches: minimum and recommended version

Model	Minimum	Recommended
GWN7711	1.0.1.8	1.0.1.8
GWN7711P	1.0.1.8	1.0.1.8
GWN7801	1.0.3.19 (1.0.5.52 for GWN Manager)	1.0.5.52
GWN7801P	1.0.3.19 (1.0.5.52 for GWN Manager)	1.0.5.52
GWN7802	1.0.3.19 (1.0.5.52 for GWN Manager)	1.0.5.52
GWN7802P	1.0.3.19 (1.0.5.52 for GWN Manager)	1.0.5.52
GWN7803	1.0.3.19 (1.0.5.52 for GWN Manager)	1.0.5.52
GWN7803P	1.0.3.19 (1.0.5.52 for GWN Manager)	1.0.5.52
GWN7806	1.0.1.14 (1.0.5.52 for GWN Manager)	1.0.5.52
GWN7806P	1.0.1.14 (1.0.5.52 for GWN Manager)	1.0.5.52
GWN7811	1.0.1.8 (1.0.7.64 for GWN Manager)	1.0.7.64
GWN7811P	1.0.1.8 (1.0.7.64 for GWN Manager)	1.0.7.64
GWN7812P	1.0.1.8 (1.0.7.64 for GWN Manager)	1.0.7.64
GWN7813	1.0.1.8 (1.0.7.64 for GWN Manager)	1.0.7.64
GWN7813P	1.0.1.8 (1.0.7.64 for GWN Manager)	1.0.7.64
GWN7816	1.0.3.8 (1.0.7.64 for GWN Manager)	1.0.7.64
GWN7816P	1.0.3.8 (1.0.7.64 for GWN Manager)	1.0.7.64
GWN7830	1.0.3.3 (1.0.7.64 for GWN Manager)	1.0.7.64
GWN7831	1.0.3.3 (1.0.7.64 for GWN Manager)	1.0.7.64
GWN7832	1.0.3.3 (1.0.7.64 for GWN Manager)	1.0.7.64

Switch minimum and recommended version

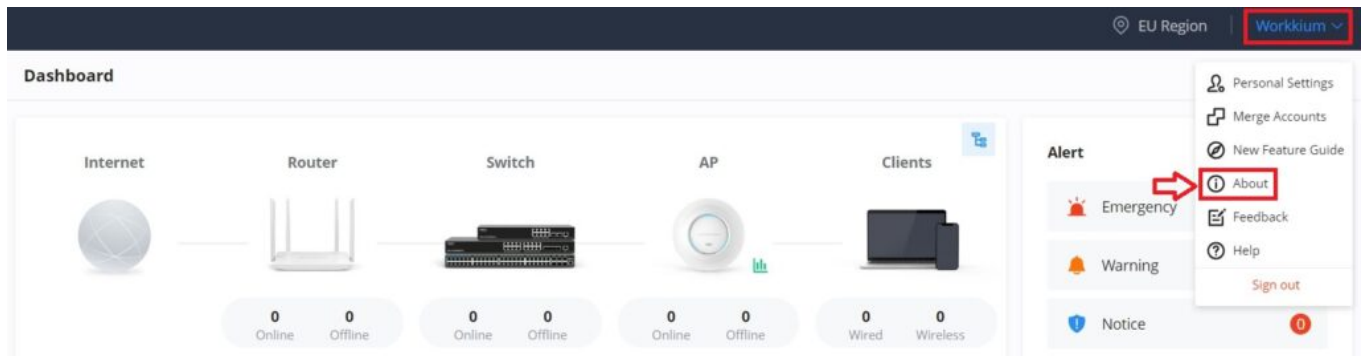
- GWN App: minimum and recommended version

Platform	Minimum	Recommended
iOS(R)	1.0.5	1.6.7
Android?(R)	1.0.0.14	1.0.6.7

App minimum and recommended version

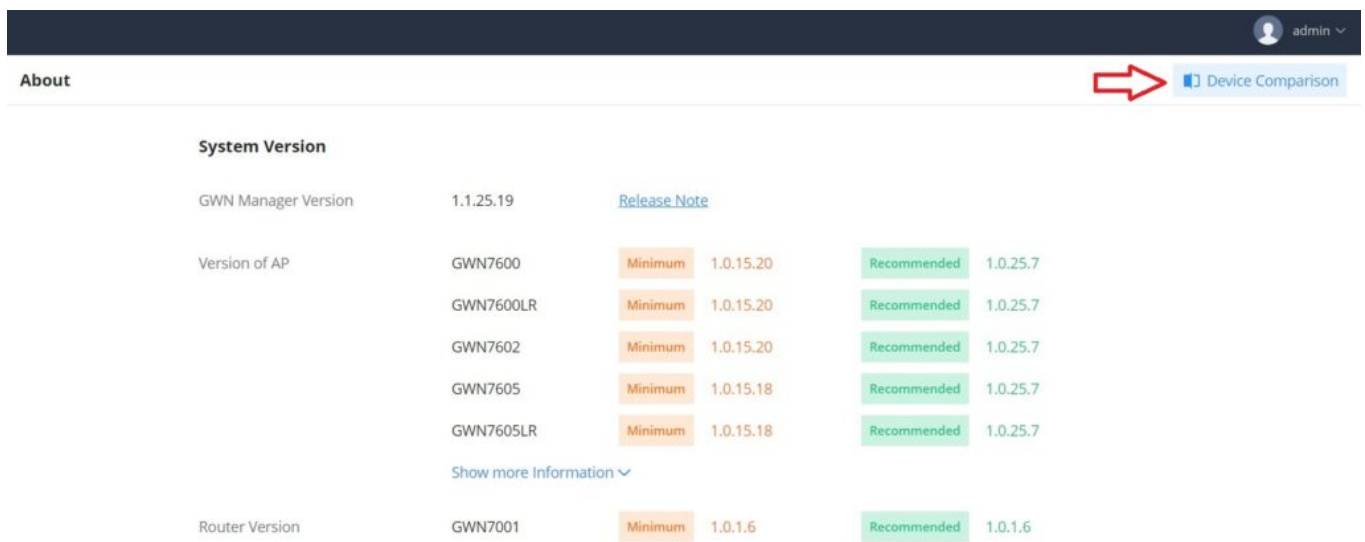
Requirements

To know more about the differences between Grandstream devices in terms of functions based on the recommended versions, please navigate to **GDMS Networking Web UI -> About -> Device Comparison**. refer to the figures below:



Device Comparison Step 1

On this page, the users can find the minimum and recommended firmware version for each Grandstream device and APP (iOS(R) and Android(R)). If a Beta firmware is available for a device it will be also shown here.



Device Comparison Step 2



Device Comparison Step 2 Beta firmware

GWN Cloud										
Device Comparison You may find out the differences on GWN Cloud functions among devices (based on recommended version)										
Function	Model	GWN7600	GWN7600LR	GWN7602	GWN7605	GWN7605LR	GWN7610	GWN7615	GWN7624	All Models
DFS(CE)			✓	✓	✓	✓		✓		☒ Device Model ☒ AP > ☒ GWN7811 ☒ Wired Router > ☒ GWN7811P ☒ Wireless Router > ☒ GWN7812P ☒ Switch > ☒ GWN7813 ☒ GWN7813P
DFS(FCC)				✓	✓	✓		✓	✓	
Wired Firewall Rules										
Wireless Firewall Rules		✓	✓	✓	✓	✓	✓	✓	✓	
DFS(RCM)				✓	✓	✓		✓	✓	✓
DFS(IC)				✓	✓	✓		✓		✓
DFS(ANATEL)		✓		✓						✓
Band4(EU)			✓							
SSID - Client IP Assignment: NAT		✓	✓	✓	✓	✓		✓	✓	✓
SSID - Security Mode: WPA3					✓	✓		✓	✓	✓

Device Comparison Step 3

EXPERIENCING GWN MANAGEMENT PLATFORMS

Please visit our Website: <http://www.grandstream.com> to receive the most up-to-date updates on firmware releases, additional features, FAQs, documentation, and news on new products.

We encourage you to browse our product-related documentation, FAQs, and User and Developer Forum for answers to your general questions. If you have purchased our products through a Grandstream Certified Partner or Reseller, please contact them directly for immediate support.

Our technical support staff is trained and ready to answer all your questions. Contact a technical support member or submit a trouble ticket online to receive in-depth support.

Thank you again for using Grandstream GWN Management Platforms, it will be sure to bring convenience to both your business and personal life.

CHANGE LOG

This section documents significant changes from previous versions of the GWN Management Platform User Manuals. Only major new features or major document updates are listed here. Minor updates for corrections or editing are not documented here.

Version 1.1.39.5

- Added support for Wi-Fi health management, including key performance metrics, customizable health thresholds, compliance tracking, and unhealthy device detection (Beta). [[Network Health](#)]
- Added support for quick viewing of stacked switches [[Configure a GWN Switch \(Layer 2 lite\)](#)]
- Added support for VLAN configuration in switch management page [[Configure a GWN Switch \(Layer 2+ / Layer 3\)](#)]
- Added support for Standby mode for router WAN policies [[Internet Source](#)]
- Added IPSG (IP Source Guard) [[Wireless LAN](#)]
- Added OWE options for SSID access security [[Add SSID](#)]
- Added support for Wireless Bridge-related alerts [[System Alert](#)]
- Added "Additional Remarks" field for supported devices [[Configure a GWN Access Point](#)]
- Added support for importing Port Profiles [[Import](#)]

- Added support for network sharing with Grandstream support team [[Share Network](#)]
- Added support for device allocation to networks on the CSV file [[Reseller Channel](#)]
- Added support for device names when claiming devices in Inventory [[Inventory](#)]
- Added custom Installer permissions [[Roles](#)]

Version 1.1.37.6

- Added Support for Wireless Bridge configuration and status management. [[Wireless Bridge](#)]
- Added support for Floor plans AI Recognition of Walls and AI Placement. [[AI Device Placement](#)] [[AI Wall Detection](#)]
- Added ability to export RF planning reports based on Floor plans. [[Export RF Planning Reports](#)]
- Added support for Multi-VLAN on SSIDs created. [[Multi-VLAN](#)]
- Added the ability to change the SSID password regularly and set the default SSID based on your organization. [[Set Passphrase Reset Cycle](#)]
- Added ability to display 802.1x Identity in client list. [[802.1X Identity](#)]
- Added support for client batch configuration. [[Client batch configuration](#)]
- Added Client Type Filter. [[Client Type](#)]
- Added client offline alarms and bandwidth usage alerts. [[Client Offline Alarms and Bandwidth Usage Alerts](#)]
- Added support for voucher template configuration and QR codes. [[Using Voucher Group Templates](#)]
- Added the Static IP Binding function menu to manage client IP bindings in a unified manner. [[Static IP Binding](#)]
- The PPSK quantity limit is optimized to be based on the device model. [[PPSK Capacity](#)]
- Added support for sending URL Access logs to external servers. [[Remote Syslog Server](#)]
- Added support to clone network settings for WAN & VPN as well as Device Group. [[Group Management](#)]
- Added the User Administrator role to manage ITSP users. [[User Administrator](#)]
- Added support for interface selection on wireless router mesh management. [[Mesh](#)]
- Added ability of WireGuard Auto Peer to support Allowed IP and DNS Server settings. [[Allowed IP](#)] [[Preferred DNS Server](#)] [[Alternative DNS Server](#)]
- Added support for router QoS configuration. [[QoS](#)]
- Added support for FXS port configuration. [[FXS Configuration \(GWN7062ET Only\)](#)]
- Added support for ISP Locking and adding universal configuration. [[ISP Locking](#)]

Version 1.1.35.5

- Added support for additional GWN device models. [[Devices](#)]
- Added Multi-organization management support, including enhanced organization hierarchy view, improved permission assignment, and organization transfer. [[Network Overview](#)]
- Added support for directly editing Access Point configuration files. [[Configuration File](#)]
- Added Blocked Client and Locked Client options. [[Client](#)]
- Added support for displaying devices on shared networks in Inventory. [[Inventory](#)]
- Added support for duplicate SSID names. [[Wi-Fi](#)]
- Added support for adding SSID via QR code. [[Wi-Fi](#)]
- Added support of SAML SSO authentication for the Splash Page. [[Splash page](#)]
- Added Custom Login Page and Skip Login Page options for Custom Field on the Splash Page. [[Splash page](#)]
- Added support for All Destination option and Email Service pre-authentication rules for Portal policies. [[Portal policy](#)]
- Added support for WAN traffic statistics report. [[Report](#)]

- Added support for Captive Portal on Router LAN. The Enable Captive Portal option and Captive Portal Policy selection are available when adding/editing a LAN/VLAN. [[LAN](#)]
- Added support for custom 3rd party Speed Test Servers and Speed Test Reports. [[Report](#)] [[Speed Test Server](#)]
- Added support for Alert Notifications to 3rd-party platforms, including WhatsApp, Telegram, Wave, and custom webhooks. [[Alert Notification](#)]
- Added support for retrieving Network Overview information, alert information, WAN configuration, and URL Access Logs via the API. [[API Developer](#)]

Version 1.1.33.42

- Added **Email Address** field for PPSK to email credentials to the end user. [[PPSK](#)]
- Added **LAN importing** (import LAN/VLAN configuration via CSV for bulk setup and management). [[Network Overview](#)]
- Added **Device Group** filter on the **Clients** page to filter client lists by device group. [[Clients](#)]

Version 1.1.33.5

- Updated **Max Num of Access Clients** limit to **512** per PPSK. [[PPSK](#)]

Version 1.1.33.2

- Added support for Webhook API alerts. [[API Developer](#)]
- Added support for BLE client API. [[API Developer](#)]
- Added rotating Floor Plans option and added more label information. [[Floor Plans](#)]
- Added support for MAC-based authentication, LACP on switch ports (for GWN78XX versions equal to or higher than 1.0.15.X). [[Configure a GWN Switch](#)]
- Added support for capturing switch syslogs. [[Syslog](#)]
- Added support for Voice VLAN, LLDP, and total input power configuration on GWN77XX. [[Configure a GWN Switch \(Layer 2 lite\)](#)]
- Added global blocklist limit to 1000. [[Wireless LAN](#)]
- Added "Power Supply Mode" in the switch POE status list. [[Configure a Switch](#)]
- Optimized the device list to display the uplink speed of routers and switches. [[Devices](#)]
- The Splash Portal password authentication now supports all characters (except spaces) for simple passwords. [[Splash page](#)]
- Optimized the client list to display Locked APs. [[Clients](#)]

Version 1.1.31.22

- Added Alert Icons to the network list. [[Network Overview](#)]
- Added filter for read/unread alerts on the alerts page. [[Alerts](#)]
- Support exception AP for offline alerts. [[System Alert](#)]
- Added the configuration of target wake-up time for SSID. [[Wi-Fi](#)]
- Added MAC authentication for SSID. [[Wi-Fi](#)]
- Added frequency band display of the SSID in the SSID list. [[Wireless LAN](#)]
- Added the SAML SSO Configuration to support SSO Login. [[SAML SSO](#)]
- Added defense configuration for DoS/Spoofing Attack. [[Security Defense](#)]
- Added Defense Alert for DoS/Spoofing attack. [[Security Alerts](#)]
- Added SNAT & DNAT configuration for GWN router. [[SNAT](#)] [[DNAT](#)]
- Added VPN Configure Wizard for fast and convenient setup for different VPN protocols. [[VPN Setup Wizard](#)]
- Display the locked access point for all set devices and added the configuration for the Failover Access Point. [[Configure a Client](#)]

- Added Network Tags for the network list in the overview page. [[Network Tags](#)]
- Added the function to Import Network/Device/Device Group/SSID configuration. [[Network Import](#)]
- Added Dark Web Theme support [[Theme Appearance](#)]
- Added Voucher Group Template configuration support. [[Voucher Group Template](#)]
- Added PPSK support for GWN routers and support PPSK download and export. [[PPSK](#)]
- Added VLAN2 configuration in LAN. [[LAN](#)]
- Added a method to sort RSSI by numerical order. [[Clients](#)]
- Added quick link to view Blocklist. [[Clients](#)]
- Added Real Time Chart for wireless client usage. [[Client usage](#)]
- Added filter for online/offline devices on inventory page. [[Inventory](#)]
- Added longitude and latitude configuration for devices. [[Devices](#)]
- Added display for Uplink Port of the switch. [[GWN Switch - Port](#)]
- Support the use of public IP for DDNS source IP. [[DDNS](#)]
- Support configuring the refresh interval for DDNS. [[DDNS](#)]
- Support RADIUS Profile configuration on API. [[API Developer](#)]

Version 1.1.29.15

Product Name: GDMS Networking

- Optimized the performance and stability for some business process. GWN.Cloud was renamed "GDMS Networking". Unified GDMS entry and email notifications.
- Supports vertical and horizontal display for network topology. [[Network Topology](#)]
- Added timestamp of the last contact with GDMS Networking to the list of devices. [[Devices](#)]
- Supports router NAT Traversal to remote access devices. [[NAT Traversal](#)]
- Added selections of Icon Types for Clients. [[Clients](#)]
- Added client blocking duration setting. [[Clients](#)]
- Added a central control "Collect client historical data" for all available clients. [[System](#)]
- Support binding a client to a specific AP. [[Clients](#)]
- Supports ISP Locking for wireless routers. [[ISP Locking](#)]
- Supports setting the ports names of routers. [[Configure a device](#)]
- Added the API for basic router configuration (including port). [[API developer](#)]

Version 1.1.28.27

Product Name: GWN Manager

- Added security enhancement by verifying device password when adding a switch or a router. [[Adopt a Device to GWN Manager](#)]

Version 1.1.28.25

Product Name: GWN.Cloud and GWN Manager

- Added support of GCC601X SMB UC/Networking Convergence Solutions [[Requirements](#)]
- Added the ability to update AP info in real time when enter AP detailed page [[GWN AP Info](#)]
- Added the ability to customize MAC for client isolation in wireless LAN [[Add SSID](#)]
- Added a new feature of OS Filter in wireless LAN [[Add SSID](#)]

Version 1.1.28.9 - 1.1.28.10

Product Name: GWN.Cloud(1.1.28.9) and GWN Manager(1.1.28.10)

- Supports link speed display for APs on the device list. [[Devices](#)]
- Supports L2TPv3 configuration on GWN7660 series APs (supported only GWN.Cloud) [[GWN AP L2TPv3](#)]

- Supports cloning the LAN and wired firewall configuration [[Create a new network](#)]
- Added Beta firmware display and supports upgrading to Beta. [[Requirements](#)]
- Optimized client list sorting. [[Clients](#)]
- Supports local WAN configuration synchronization. [[Add device to GWN.Cloud](#)]
- Optimized Feedback entry. [[Feedback](#)]
- Added PPSK configuration, inventory information acquiring, and switch port information acquiring for API. [[API Developer](#)]
- Added GWN Manager Upgrade support [[Manager Upgrade](#)]

Version 1.1.27.13

Product Name: GWN.Cloud and GWN Manager

- Added Regions/Systems Switch to allow multiple regions/systems to be opened. [[Region settings](#)]
- Upgraded Account Permission, allowing comprehensive management of all Grandstream services and enable all systems in the selected region. [[Merge Accounts](#)]
- Added Associated Company to support cross-region/cross-system management on channels and customers for network sharing and device allocation. [[Associated Company](#)]
- Added Reseller Channel to support the establishment of hierarchy in agent partnership, obtain device from ERP, and assign device to network groups or channels/agents. [[Reseller Channel](#)]
- Optimized User Management, unified management of account and password security. [[account security settings](#)]
- Optimized Personal Settings page and added user type settings. [[Personal Settings](#)]
- Added API support for exporting the switch information, mainly the information and port modules in the switch details, and the information of the global switch settings. [[API](#)]
- Added API support for PPSK configuration. [[API](#)]

Version 1.1.26.11

Product Name: GWN.Cloud and GWN Manager

- Added Pre-Provisioning for Switch in device management for port Setting, port profile, and DHCP Snooping. [[Switch Pre-Provisioning](#)]
- Added remarks and serial number fields for device export. [[Devices](#)]
- Added more default Wall Types and optimized attenuation values for Floor Plans. [[Floor Plans](#)]
- Added support for topology export. [[Network Topology](#)]
- Added MAC search field in Upgrade History. [[Upgrade History](#)]
- Added a column to display the network that the device was returned from. [[Inventory](#)]
- Added support for custom role users to log in to GWN APP. [[User Management](#)]
- Increased Password Security, added password expiration and conflict limits configuration. [[Personal Settings](#)]
- Added support hiding Weak Heat Map signal. [[Floor Plans](#)]
- Removed SMTP Username/Password requirement. [[SMTP Server](#)]

Version 1.1.25.23

Product Name: GWN.Cloud and GWN Manager

- Added features of multiple VPN tunneling methods such as PPTP, IPSec, OpenVPN(R), and WireGuard(R), and IPSec supports automatic networking mode. [[VPN](#)]
- Added the feature of managing multiple routers at the same time on the same network. [[Devices](#)]
- Added device group management, and pre-set features for switches in the group. And a new way to select device groups in multiple businesses. [[Group management](#)]

- Added the feature of pushing cloud configuration to the local side of the device, and the push method includes manual and automatic. [[Devices](#)]
- Added a new feature for network speed test of APs. [[configure a GWN Access Point](#)]
- Added a new feature for 12-hour network health monitoring of WAN ports. [[WAN](#)]
- Added a new feature of policy routes. [[Policy routes](#)]
- Added a new feature of certificate management. [[Certificate](#)]
- Added floor plan management features, support device RF heat map preview, and convenient device placement planning. [[Floor plans](#)]
- Added the feature of Cloud DDNS service. [[WAN](#)]
- Added a new feature of VLAN interface configuration for routers. [[Configure a GWN Router](#)]
- Added alerts such as abnormal device time, abnormal temperature of the optical module, and VPN-related alerts [[Alerts](#)]
- Supports automatic time synchronization between routers and switches with cloud [[System](#)]
- Supports IPv6 PD/prefix length configuration in WAN [[WAN](#)]
- Added the ability to set the Primary Network for cloud [[Network Overview](#)]
- Added the ability to retrieve Guest information with API commands.
- Added the ability to display the Wi-Fi version used in the client's information [[Clients](#)]
- Added the ability to Customize the Channel in the 2.4G band [[Wi-Fi](#)]
- Added the ability to disable the Router LAN ports [[Configure a GWN router](#)]
- Added the ability to configure the router/switch device password from GWN Cloud [Configure a device]
- Added the ability to support batch or single configuration for the Device Password [[System](#)]
- Added the ability to highlight mesh devices in Network Topology [[Topology](#)]
- Added the ability to configure Port Profile for Device Group [[Port profile](#)]
- Added the ability to display the router's LAN IP address [[Devices](#)]
- Added a new feature of VLAN Interface configuration for routers [[Configure a GWN router](#)]
- Added API support for Device Name and Equipment Remarks.

Version 1.1.24.28

Product Name: GWN.Cloud and GWN Manager

- Adjust the upper limit to 300 on the number of PPSK in a group [[PPSK](#)]
- Support to display the switch port info on the client list when the client connects to the switch [[Clients](#)]
- Support the option "Timeout Duration of Unauthenticated Clients" on the external splash page [[Portal Policy](#)]
- Support the option "URL Pre-shared Key" when selecting Aiwifi as the platform of the external splash page [[Portal Policy](#)]

Version 1.1.24.23

Product Name: GWN.Cloud and GWN Manager

- Added the unified management for model of GWN7801(P),GWN7802(P),GWN7803(P)
- Added the support for Device Information, Configuration, and Debug under the Device menu for GWN switch models [Configure a GWN Switch]
- Added the support for GWN switches & port configurations through Global Switch Settings and Port Profiles [[DEVICES](#)]
- Added the support for GWN switches in Topology (including wired devices hierarchy relationship) [[Network Topology](#)]
- Added the support of GWN switches' Alert events [[ALERTS](#)]
- Added a new feature of user role management and customizable role privilege [[USER MANAGEMENT](#)]

- Added a new feature of Organization Overview [[ORGANIZATION](#)]
- Added a new feature of Map for device location management [[Map](#)]
- Added a new feature of AP batch configuration [Configuration]
- Added a new feature of displaying Change logs' content details [[Organization Change Log](#)]
- Added a new feature of transferring management permission for shared Network [[Share a Network](#)]
- Added a new feature of restricting APIs to specific networks [[API Developer](#)]
- Added a new feature of batch firmware upgrade for different GWN models to the recommended version [[Upgrade](#)]
- Added a new feature of disabling AP's Ports [Configuration]
- Added a new feature of Limit by Authentication Type for Daily Limit of Captive Portal [[Profiles](#)]
- Added a new feature of Active Directory into Splash Page Logging Components [[Splash Page](#)]
- Added a new feature of grouping top website statistics by Main Domain rather than URL
- Added a new feature of PPSK With Radius into SSID Security Type [[Wireless LAN](#)]

Version 1.1.23.27

Product Name: GWN.Cloud and GWN Manager

- New Cloud Web Portal, SDN concept & UI design
- Unified GWN device management (Access points, Routers, Switches) [[Devices](#)]
- Inventory management [[Inventory](#)]
- New Network topology (replacing the old mesh topology) [Network Topology]
- New Alert design and support more alert events [[Alerts](#)]

Version 1.0.22.23

Product Name: GWN Manager

- Added feature of U-APSD for AP [SSID]
- Added feature of Email authentication for Captive Portal [[Splash page](#)]
- Added feature of post-authentication rules for Captive Portal [[Portal Policy](#)]
- Added feature of service auto start after machine reboot for GWN Manager

Version 1.0.21.17

Product Name: GWN Manager

- Added feature of reporting Probe request RSSI information
- Added feature to export APs, clients, and alerts [[Devices](#)] [[Clients](#)]
- Added feature of Google Authentication [[Splash page](#)]
- Added feature of WiFi4EU [[Splash page](#)]
- Added feature of SMS authentication for Captive Portal [[Splash page](#)]
- Added feature of Hotspot 2.0 R3 [[Hotspot 2.0](#)]
- Added support to transfer APs to GWN Manager

Version 1.0.19.8

Product Name: GWN Manager

- No major changes.

Version 1.0.19.7

Product Name: GWN Manager

- Added support for deleting the voucher in use. [Voucher]
- Added support of client name in CSV file when importing access list. [Access List]

- Added configuration of secondary radius server for WLAN 802.1x authentication. [[Wi-Fi Settings](#)]
- Added WPA3 support in the SSID setting. [[Wi-Fi Settings](#)]
- Added NET Port Type option for AP setting

Version 1.0.19.2

Product Name: GWN Manager

- Added support of Top Website statistic graph [[Overview](#)]
- Added support of Guest Count statistic graph [Captive Portal Summary]
- Added manager role: Network Administrator [USER MANAGEMENT]
- Added support of API Developer [[API Developer](#)]
- Added support of Access List Import in CSV [Access List]
- Added support of Rogue AP Detection [[Rogue AP](#)]
- Added support of SNMP [[SNMP](#)]
- Added support of Allow DHCP Option 43 to override GWN Manager Address [Discover GWN76xx]
- Added support of NAT [[NAT Pool](#)]
- Added support of Firewall [[Firewall](#)]
- Added support of Hotspot 2.0 Beta [Hotspot 2.0]

Version 1.0.10.7

Product Name: GWN.Cloud

- Added Site Survey feature [[Site Survey](#)]
- Added feature of Minimum Rate Control. [[Enable Minimum Rate](#)]
- Added feature of SSH Remote Access. [[SSH Remote Access](#)]
- Added feature of External Portal support Socifi Platform.
- Added feature of Client inactivity timeout. [[Client Inactivity Timeout](#)]
- Added feature of Upgrade Regularly [[Upgrade](#)]
- Added feature of Client Steering [[Client Steering](#)]
- Enhanced feature of Voucher: the display of remaining bytes. [[Voucher](#)]
- Enhanced feature of Dynamic VLAN
- Changed LED patterns [GWN76xx LED Patterns]

Version 1.0.9.8

Product Name: GWN.Cloud

- Added support for collecting user feedback from the GWN Cloud page. [[Feedback](#)]
- Added support for Voucher Style Customization. [[Voucher](#)]
- Added support for video URL. [[Advertisement](#)]
- Added support to export Guest Information via Email. [[Email Guest Information](#)]
- Added support for client RX/TX Rate display. [[Dashboard](#)]
- Expanded Max Devices to use the same Voucher. [[Voucher](#)]
- Added support to enable/disable client connection/disconnection events.

Version 1.0.8.17

Product Name: GWN.Cloud

- Added support for Advertisement for Captive Portal [[Advertisement](#)]
- Added support for Custom Field for Captive Portal Splash Page [[Splash Page](#)]
- Added feature of ARP Proxy. [[ARP Proxy](#)]

- Added support of Clear client data. [[Clients](#)]
- Enhanced Event log by Wi-Fi authentication event. [[Event Log per AP](#)]
- Added EU Server support. [Zone]
- Enhanced Bandwidth Rules by adding an option to limit bandwidth per client. [[Range Constraint](#)]
- Added Total Bandwidth Usage Display [[Dashboard](#)]
- Added Export Immediately feature for URL Access Logs. [[URL Access Log](#)]

Version 1.0.8.7

Product Name: GWN.Cloud

- Added support for URL logging (Except for GWN7610). [[URL Access Log](#)]

Version 1.0.7.18

Product Name: GWN.Cloud

- Enhanced Client Information. [[Dashboard](#)]
- Enhanced Access Point status. [[Info](#)]
- Added Reset access point button. [[Reset Device](#)]
- Added External Captive Portal Support. [[External Splash Page](#)]
- Added AP Scheduling Reboot. [[Reboot Schedule](#)]
- Added Change Log section. [[Change Log](#)]
- Added Account idle timeout. [Account Idle timeout]
- Added feature of Wi-Fi Statistic Report. [[Report](#)]
- Added feature of Captive Portal Guest Summary. [[Guests](#)]
- Changed SSID limit. [SSID]
- Enhanced Wi-Fi Service by adding configurable options. [[Wi-Fi](#)]
- Enhanced Captive Portal features. [Failsafe Mode] [Daily Limit] [Byte Quota] [Force To Follow] [[Portal Policy](#)]

Version 1.0.0.37

Product Name: GWN.Cloud

- This is the initial version for GWN.Cloud.

Version 1.0.0.33

Product Name: GWN Manager

- This is the initial version for GWN Manager.

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