

Grandstream Networks, Inc.

Client Isolation Configuration Guide





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INTRODUCTION

GWN76xx Access Points support client isolation feature with different types allowing users to better manage access to their WiFi networks.

In environments where WiFi access needs to be provided to clients but with some restrictions/control, such as allowing them to access Internet without accessing other network devices, providing Internet access but restricting access to management devices (GWN76xx access points and GWN7000 routers), the GWN76xx Client Isolation is the best solution to meet such requirements.

Without client isolation, anyone on a wireless internet connection in a Wi-Fi hotspot will have full access to the network's resources and access to the various wireless devices connected to Wi-Fi network at that time.

GWN76xx Client Isolation feature can be used for each WiFi network SSID created allowing to define for instance a WiFi network for production without restriction and another WiFi network for guests restricting access to network resources but allowing Internet access only.

This guide covers supported mode for GWN76xx Client Isolation and needed steps to configure them.





CLIENT ISOLATION MODES

GWN76xx Client Isolation feature supports 3 modes:

- "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 GWN7000 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.
- **"Radio" Mode:** Wireless clients can access to the internet services, GWN7xxx router and the access points GWN76xx but they cannot communicate with each other.





CLIENT ISOLATION CONFIGURATION

In this chapter, we assume the following:

- WiFi network with SSID GWN_Guest is already created using default network group "group0".
- Client Isolation will be applied on GWN_Guest network.

Notes:

- Users can create additional SSIDs under same or different network groups and apply Client Isolation configuration on each one of them.
- Client Isolation configuration can be done from GWN76xx acting as Master or from GWN7000 router acting as controller.

Client Isolation - Internet Mode

Using **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 GWN7000 nor the access points GWN76xx.



Figure 1: Client Isolation - Internet Mode

To configure your WiFi network with the isolation mode set to "Internet mode", refer to following steps:

- 1. Access the Master GWN76xx using the administrator username and password. (Default username/password are: admin/admin).
- 2. Access to Network Group-> Network Group.





3. Click for edit a network group or click \bigcirc Add to create a new network group. (In our example, we are using the default network group).

Overview	🕂 Add								
Pouter 💌	Network Group	Enabled	SSID	Enable Wi-F	i WAN Membership	LAN Membership	VLAN ID	IP Address	Actions
Access Points	group0	~	GWN_Guest	~	WAN Port 1			192.168.3.1	r ù
Clients									
VPN 🔻									
Firewall 🔻									
Network Group 🔻									
Network Group									
Additional SSID									

Figure 2: Network Group -> Internet Mode

4. Navigate to **Wi-Fi** tab and configure your SSID with its security mode and set client isolation to "**Internet**" as displayed on the following screenshot.

		Edit	×
Basi	ic Wi-Fi	Device Membership Schedule	
	Enable Wi-Fi	8	
	SSID (?)	GWN_Guest	
	SSID Hidden		
	Security Mode	Open •	
	Use MAC Filtering	Disabled •	
	Client Isolation 🕐	2	
	Client Isolation Mode	Internet •	
	Enable RSSI 🕐		
	Minimum RSSI (dBm) 🕐		
		Save	

Figure 3: Client Isolation Mode set to Internet

5. Press **Save** button to save and apply the new settings.





Client Isolation - Radio Mode

Using **Radio Mode**, Wireless clients will be able to access to the internet services, GWN7xxx router and the access points GWN76xx but they cannot communicate with each other.



Figure 4: Client Isolation - Radio Mode

To configure your WiFi network with the isolation mode set to "Radio Mode", please refer to following steps:

- 1. Access the Master GWN76xx using the administrator username and password. (Default username/password are: admin/admin).
- 2. Access to Network Group-> Network Group.
- 3. Click for edit a network group or click Add to create a new network group. (In our example, we are using the default network group).





Overview	+ Add						
Pouter 💌	Network Group Enabled	SSID	Enable Wi-	Fi WAN Membership LAN Membership	VLAN ID	IP Address	Actions
Access Points	group0 🗸	GWN_Guest	~	WAN Port 1		192.168.3.1	e 1
Clients							
VPN 🔻							
Network Group							
Additional SSID							

Figure 5: Network Group -> Radio Mode

 Navigate to Wi-Fi tab and configure your SSID with its security mode and set client isolation to "Radio Mode" as displayed on the following screenshot.

		Edit	×
Basic	Wi-Fi	Device Membership Schedule	
	Enable Wi-Fi	₹	
	SSID 🔅	GWN_Guest	
	SSID Hidden	0	
	Security Mode	Open •	
	Use MAC Filtering	Disabled	
	Client Isolation 🕐		
	Client Isolation Mode	Radio	
	Enable RSSI ?		
	Minimum RSSI (dBm) 🕐		
	_		
		Save	

Figure 6: Client Isolation Mode set to Radio

5. Press **Save** button to save and apply the new settings.





Client Isolation - Gateway MAC Mode

Using **Gateway Mode**, Wireless clients can only communicate with the gateway and access to network services, the communication between clients is blocked and they cannot access any of the management services on the GWN76xx access points.



Figure 7: Client Isolation - Gateway MAC Mode

To configure your WiFi network with the isolation mode set to "**Gateway MAC mode**", please refer to following steps:

- 1. Access the Master GWN76xx using the administrator username and password. (Default username/password are: admin/admin).
- 2. Access to Network Group-> Network Group.
- 3. Click for edit a network group or click Add to create a new network group. (In our example, we are using the default network group).





Overview		🕂 Add								
Pouter	Ţ	Network Group	Enabled	SSID	Enable Wi-F	i WAN Membership	LAN Membership	VLAN ID	IP Address	Actions
Access Points		group0	~	GWN_Guest	~	WAN Port 1			192.168.3.1	1
Clients										
VPN	•									
	•									
	•									
Network Group										
Additional SSID										

Figure 8: Network Group -> Gateway MAC Mode

- 4. Navigate to **Wi-Fi** tab and configure your SSID with its security mode and set client isolation to "**Gateway MAC**" as displayed on the following screenshot.
- 5. Specify the default LAN Gateway Mac address. In this scenario, GWN7000 router MAC address to allow access to the router and Internet.

		Edit	×	<
Bas	sic Wi-Fi	Device Membership	Schedule	
	Enable Wi-Fi			
	SSID (?)	GWN_Guest		
	SSID Hidden	0		
	Security Mode	WPA2	¥	
	WPA Key Mode	PSK	Ŧ	
	WPA Encryption Type	AES	¥	
	WPA Pre-Shared Key 🔅	•••••	0	
	Use MAC Filtering	Disabled	•	
	Client Isolation ?	2		
	Client Isolation Mode	Gateway MAC	•	
	Gateway MAC Address ?	00:0B:82:8B:4F:88		
	Enable RSSI 🕐	0		
	Minimum RSSI (dBm) 🕐			
		Save Cancel		

Figure 9: Client Isolation Mode set to Gateway MAC Mode

6. Press **Save** button to save and apply the new settings.

