

Wireless Meshing GWN7664 to GWN7062 Router (not using GWN Cloud)

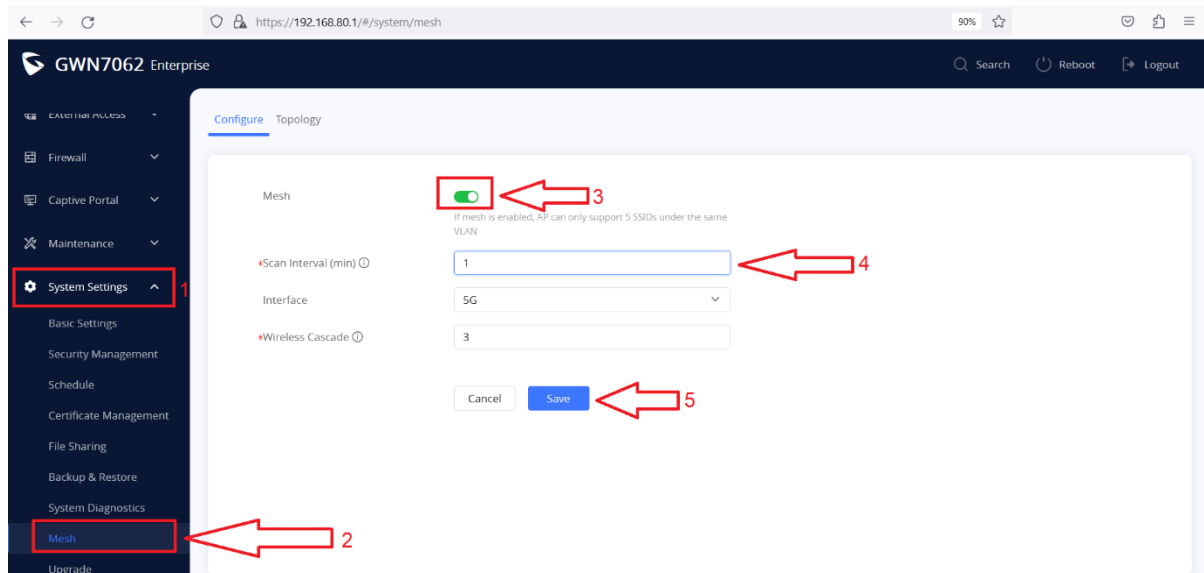
Ensure all devices are running the latest firmware - <https://www.grandstream.com/support/firmware>

Connect GWN7664 to POE switch to power device. After approx. 2 minutes LED on top of GWN7664 will be **Purple** (Solid **Purple** LED = Unit not provisioned)

Connect ethernet cable from POE switch to LAN port of the GWN7062 router.

Login to GWN7062 router using IP address (default IP is 192.168.80.1)

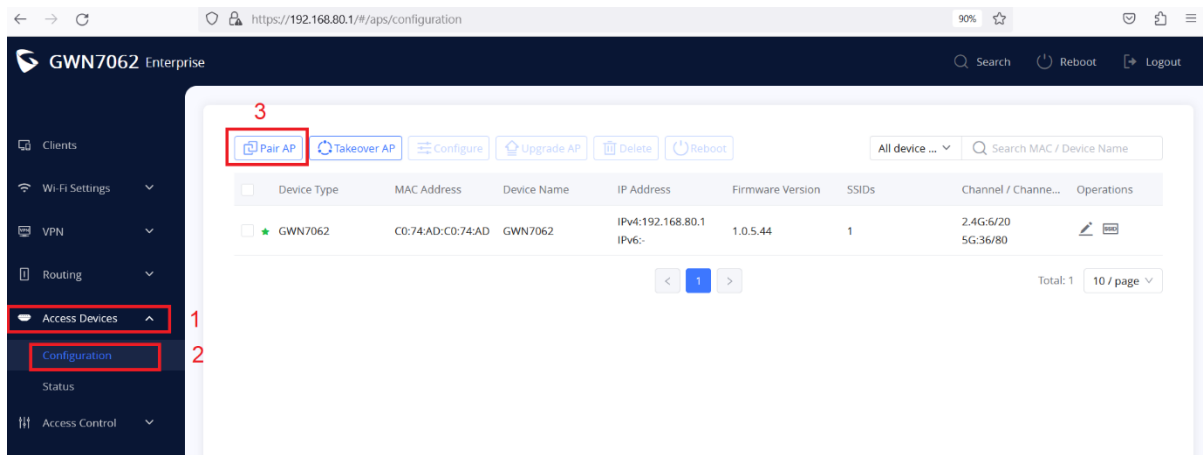
1. **System Settings**
2. **Mesh**
3. **Enable Mesh**
4. **Click Save**



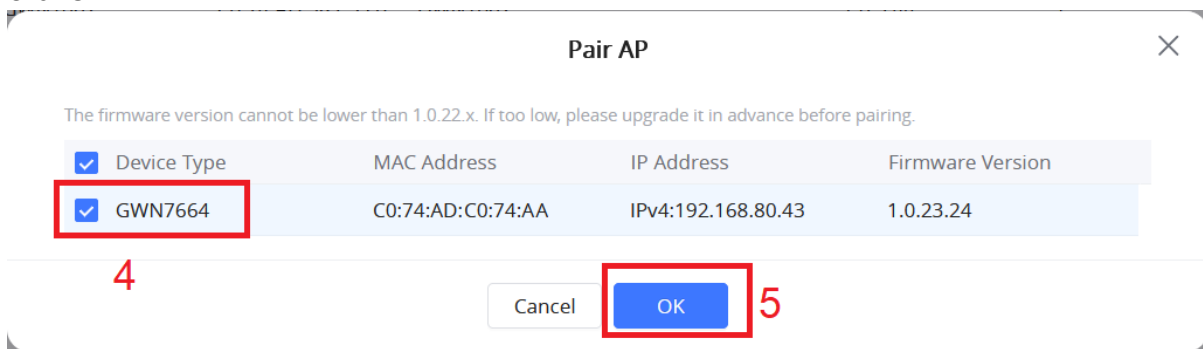
Click "Access Devices"

Click "Configuration"

Click "Pair AP"



THE GWN7664 should appear in Pair AP menu. Take note of the IP address of the GWN7664
Tick the box under the device type column
Click OK



Check that the LEDs on top of GWN7664 start to blink Blue (Blinking **Blue** = Unit provisioning in progress)

Wait approx. 1 minute. LEDs should change to solid **Blue** (Solid **Blue** = Unit is provisioned successfully)

Disconnect GWN7664, move it to desired location and connect it to a POE injector.

Wait approx. 15 minutes.

During this time visually check the LEDs on the GWN7664 and see if they turn yellow (Yellow = Mesh disconnection)

Open command prompt on Windows laptop and perform a continual ping test.

Ping 192.168.80.43 -t

Replace IP address with the address you noted during Pair AP step

```

C:\Users\craig>ping 192.168.80.43 -t

Microsoft Windows [Version 10.0.19044.2728]
(c) Microsoft Corporation. All rights reserved.

C:\Users\craig>ping 192.168.80.43 -t

Pinging 192.168.80.43 with 32 bytes of data:
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64
Reply from 192.168.80.43: bytes=32 time=7ms TTL=64
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64
  
```

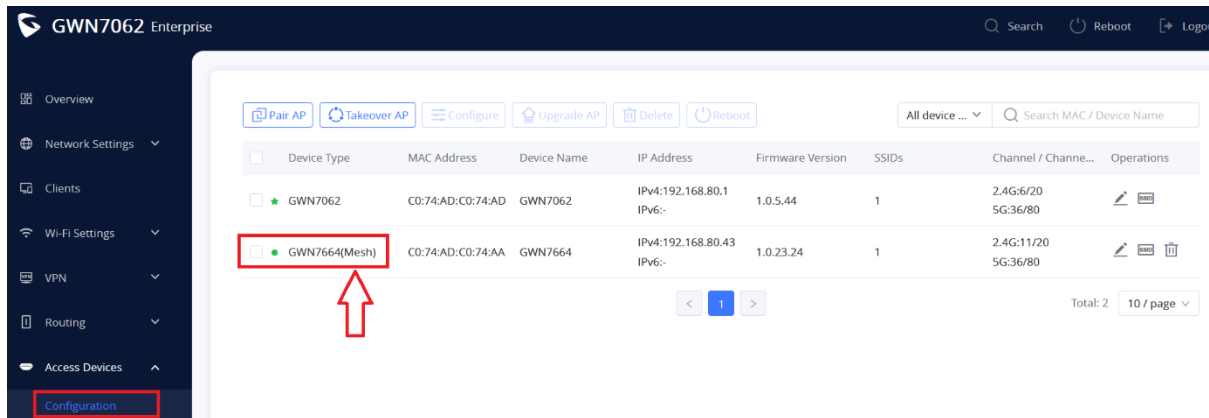
When the ping test begins to respond check that the LEDs on GWN7664 are solid **BLUE**

Login to GWN7062






Click **"Access Devices"**

Click **"Configuration"**

If device type has (Mesh) in the device type column name and the status is showing a green dot then you have successfully wirelessly meshed the GWN7664 to GWN7062



The screenshot shows the GWN7062 Enterprise web interface. The left sidebar has a 'Configuration' tab highlighted. The main area displays a table of access devices. The table has columns: Device Type, MAC Address, Device Name, IP Address, Firmware Version, SSIDs, Channel / Channel Width, and Operations. Two devices are listed: GWN7062 and GWN7664(Mesh). The GWN7664(Mesh) device is highlighted with a red box, and a red arrow points to it. The status of GWN7664(Mesh) is indicated by a green dot.

Device Type	MAC Address	Device Name	IP Address	Firmware Version	SSIDs	Channel / Channel Width	Operations
GWN7062	C0:74:AD:C0:74:AD	GWN7062	IPv4:192.168.80.1 IPv6:-	1.0.5.44	1	2.4G:6/20 5G:36/80	 
GWN7664(Mesh)	C0:74:AD:C0:74:AA	GWN7664	IPv4:192.168.80.43 IPv6:-	1.0.23.24	1	2.4G:11/20 5G:36/80	  

Using GWN Cloud to wirelessly mesh GWN7664 to GWN7062 Router

Ensure all devices are running the latest firmware - <https://www.grandstream.com/support/firmware>

Create a free GWN Cloud account - <https://www.gwn.cloud/>

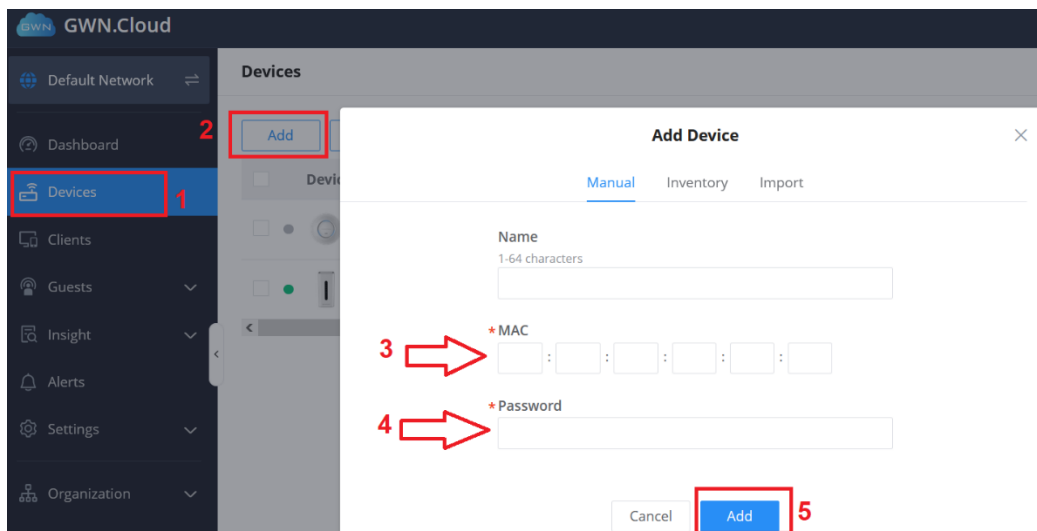
Login to GWN cloud account (either via Laptop or using GWN app on Smartphone)

Connect GWN7062 to network.

Connect GWN7664 to POE switch to power device. After approx. 2 minutes LED on top of GWN7664 will be purple (Solid **Purple** LED = Unit not provisioned)

In GWN Cloud, click:

1. Devices
2. Add
3. Enter MAC address of GWN7062 (Details available on the sticker on the bottom of device)
4. Enter password of GWN7062 (Details available on the sticker on the bottom of device)



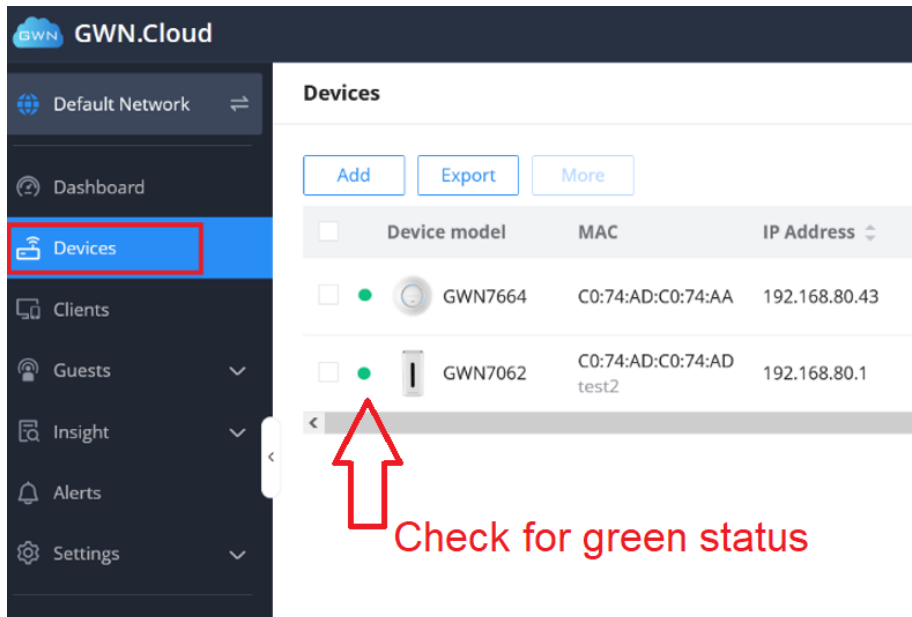
Repeat the above process to add the GWN7664.



Wait approx. 3 minutes for the devices to show as online in GWN Cloud

Check LEDs on GWN7664 (they should change to solid **BLUE**)

Check GWN Cloud devices menu and see if both devices have a green status.



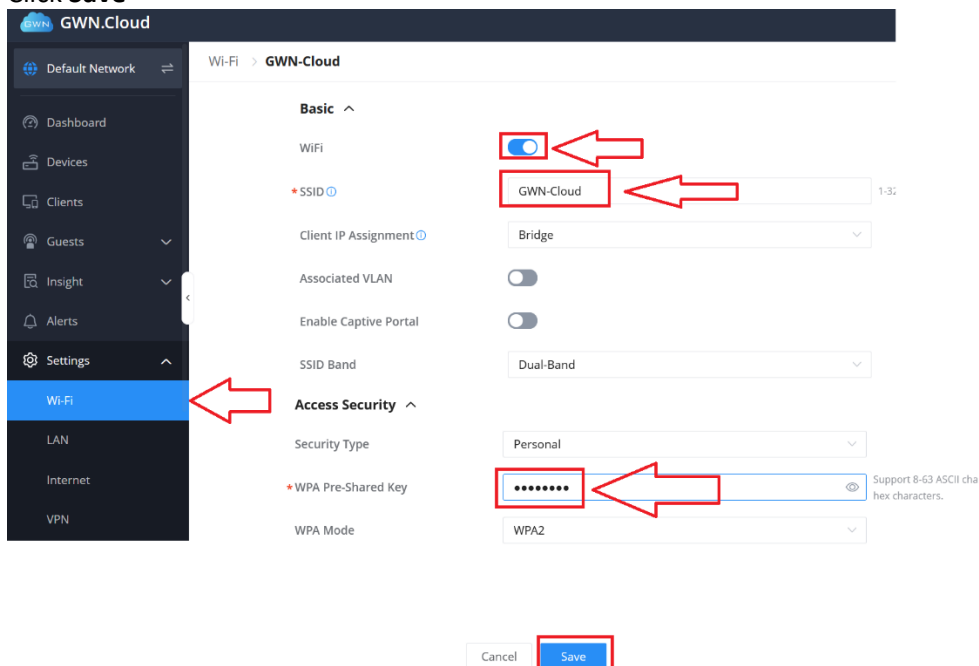
Under Settings click “**Wi-Fi**”

Enable **Wi-Fi**

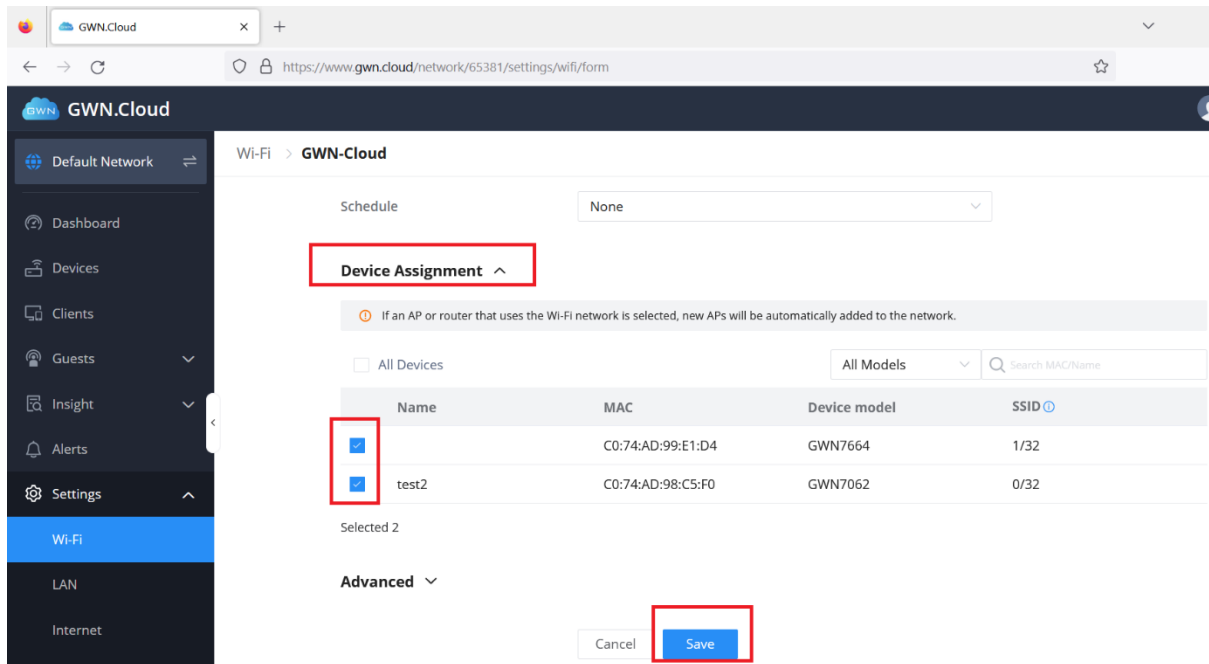
Adjust / rename the SSID as required.

Adjust / change the WPA pre shared key as required. This will be the password to access Wi-Fi connection.

Click **Save**



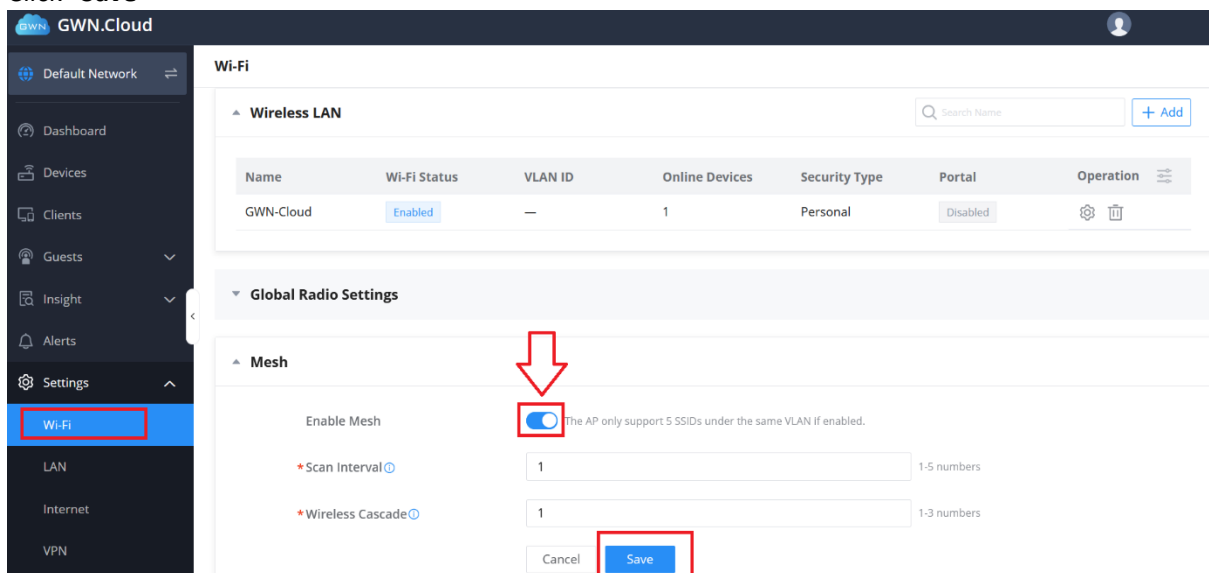
Click on **“Device Assignment”**
 Select all devices, click **“Save”**.



The screenshot shows the GWN.Cloud interface. In the left sidebar, 'Wi-Fi' is selected. The main content area is titled 'Wi-Fi > GWN-Cloud'. Under the 'Device Assignment' section, there is a table of devices. Two devices are selected, indicated by blue checkboxes in the first column. The 'Save' button at the bottom right is highlighted with a red box.

Name	MAC	Device model	SSID
<input checked="" type="checkbox"/>	C0:74:AD:99:E1:D4	GWN7664	1/32
<input checked="" type="checkbox"/>	C0:74:AD:98:C5:F0	GWN7062	0/32

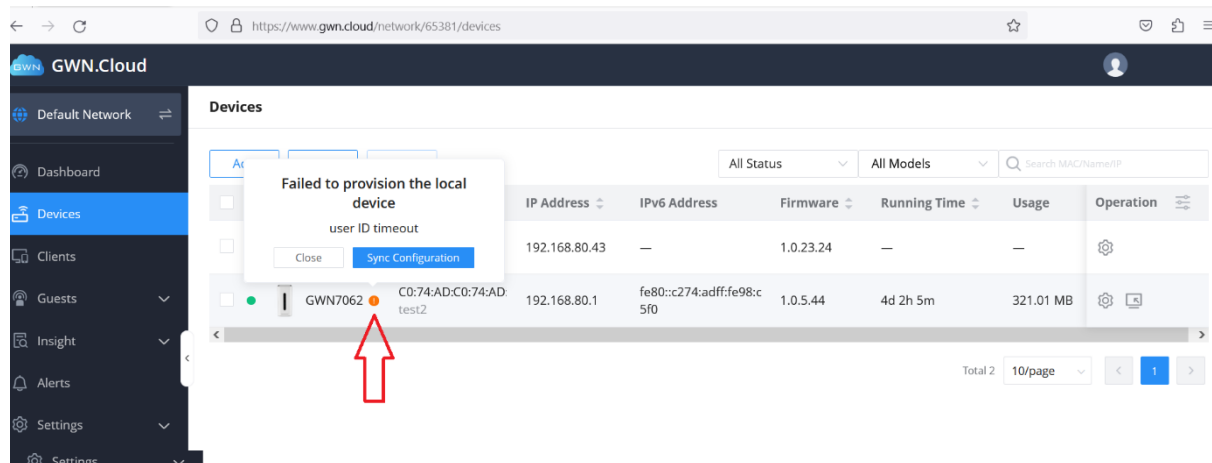
Click **“Wi-Fi”**
 Click **“Mesh”**
 Enable **“Mesh”**
 Click **“Save”**



The screenshot shows the GWN.Cloud interface with 'Wi-Fi' selected in the sidebar. The main content area is titled 'Wi-Fi'. Under the 'Global Radio Settings' section, the 'Mesh' subsection is expanded. The 'Enable Mesh' toggle switch is turned on and highlighted with a red box and a red arrow. The 'Save' button at the bottom right is also highlighted with a red box.

Wait approx. 3 minutes.

If an orange status appears on GWN7062 click **"Sync Configuration"**. This will push the GWN Cloud Mesh settings to GWN7062.



Disconnect GWN7664, move it to desired location and connect it to a POE injector

Wait approx. 15 minutes.

During this time visually check the LEDs on the GWN7664 and see if they turn yellow (**Yellow** LED = Mesh disconnection)

Open command prompt on Windows laptop and perform a continual ping test

Ping 192.168.80.43 -t

Replace IP address with the address that is listed in GWN Cloud for the GWN7644

```

C:\> Command Prompt - ping 192.168.80.43 -t

Microsoft Windows [Version 10.0.19044.2728]
(c) Microsoft Corporation. All rights reserved.

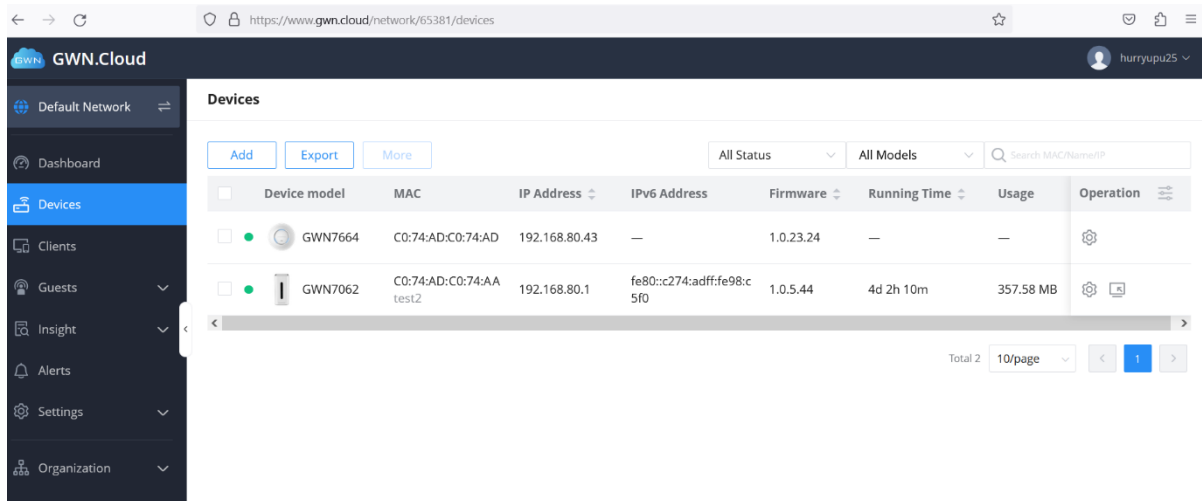
C:\Users\craig>ping 192.168.80.43 -t

Pinging 192.168.80.43 with 32 bytes of data:
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64
Reply from 192.168.80.43: bytes=32 time=7ms TTL=64
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64
Reply from 192.168.80.43: bytes=32 time=6ms TTL=64

```

When the ping test begins to respond check that the LEDs on GWN7664 are solid **BLUE**

Check that the GWN7664 is showing as online via GWN Cloud (check for green status)



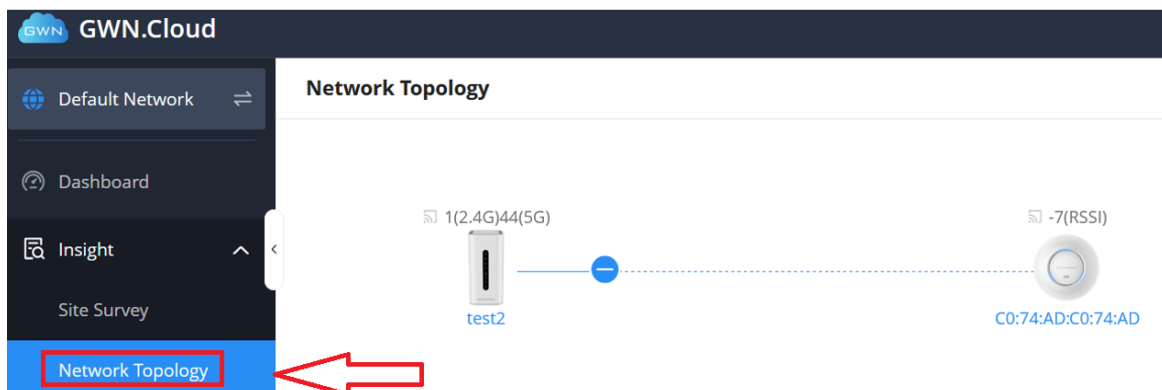
	Device model	MAC	IP Address	IPv6 Address	Firmware	Running Time	Usage	Operation
<input type="checkbox"/>	GWN7664	C0:74:AD:C0:74:AD	192.168.80.43	—	1.0.23.24	—	—	
<input type="checkbox"/>	GWN7062	C0:74:AD:C0:74:AA test2	192.168.80.1	fe80::c274:adff:fe98:c5f0	1.0.5.44	4d 2h 10m	357.58 MB	

If the GWN Cloud status of the GWN7664 is showing a green dot then you have successfully wirelessly meshed the GWN7664 to GWN7062

Click **“Insight”**

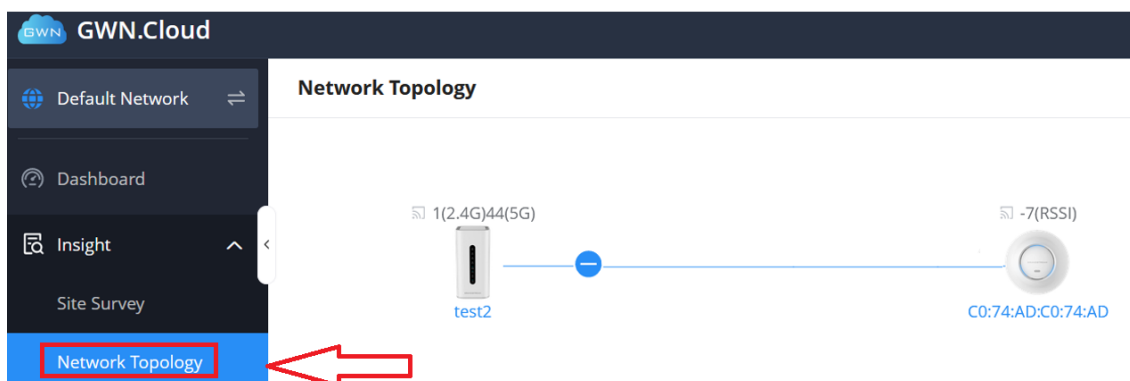
Click **“Network Topology”**

A dashed blue line appears between the GWN7062 and GWN7664 represents a wireless / meshed connect between the 2 devices



If you have a GWN7664 connected to a POE Injector and then physically plugged into one of the LAN ports of the GWN7062 it will show a solid blue line in Network Topology

Solid blue line = cabled connection between GWN7062 and GWN7664



For further information please see below:

<https://documentation.grandstream.com/knowledge-base/gwn70xx-user-manual/>

On GWN, the mesh can be set up in three ways:

1. GWN Access Points only (CAP + REs)
2. GWN Routers as CAP and GWN Access points as REs
3. GWN.Cloud/GWN Manager as a Master, GWN Router/AP as a CAP and GWN Access points as REs