

GGM WAPEXTD

Creating a WIFI Bridge in Manual Mode



What you need to know before you start :

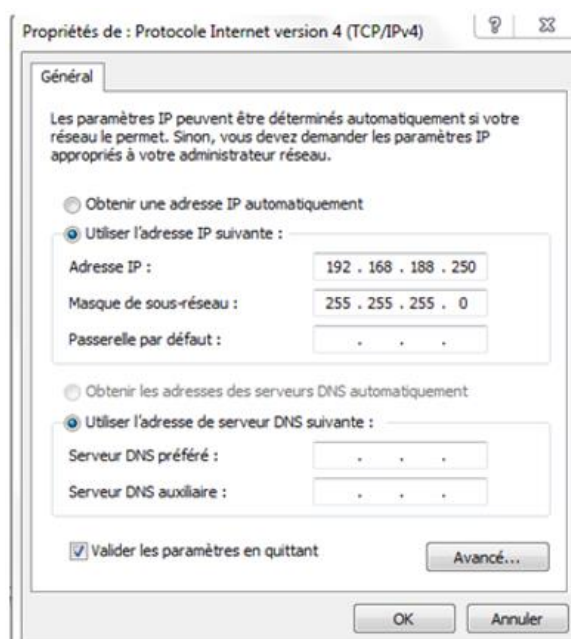
Each terminal has unique Mac LAN address and a factory IP address noted on the label on the back of the terminal

Once you have noted this information, we will be able to configure your network in order to be able to access the configuration of your terminals via the web interface.

Go in the « view network status and tasks » in your computer -> « Change adapter setting »

Right click on the LAN network card (connecting on local network) -> properties -> Double click on the internet protocol version 4 (IPV4)

Next enter an different IP from the default IP of the terminal in order to in this « sub-network » :



Here is a concrete example, the subnet mask will show itself, don't forget to check the box « Validate setting upon exit » in order to save the changes.

Once your computer's LAN port is configured we will no longer need to touch the computer's setting

You can now power your 2 WI-FI terminals (POE power supply only)

Then all you have to do is connect 1 by 1 wifi terminal to the network to which your computer is connected

After a few moments, open an web page and enter in the URL bar the factory ip of your terminal that you have just connected to your network



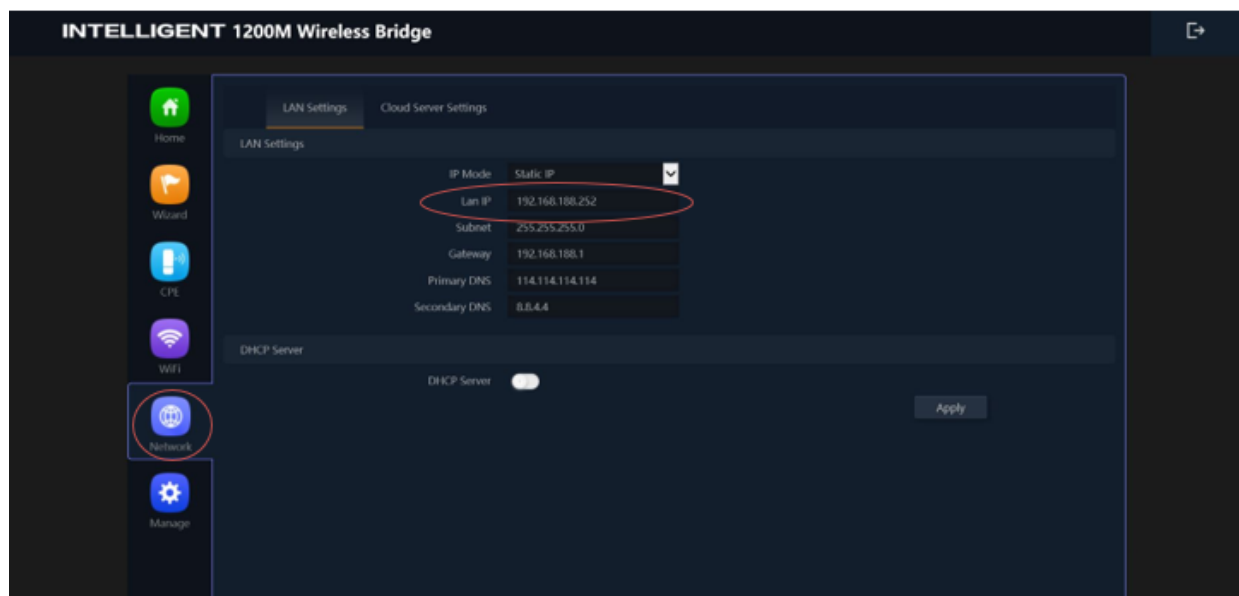
You are now accessing of the connection menu, the default password is « admin » :



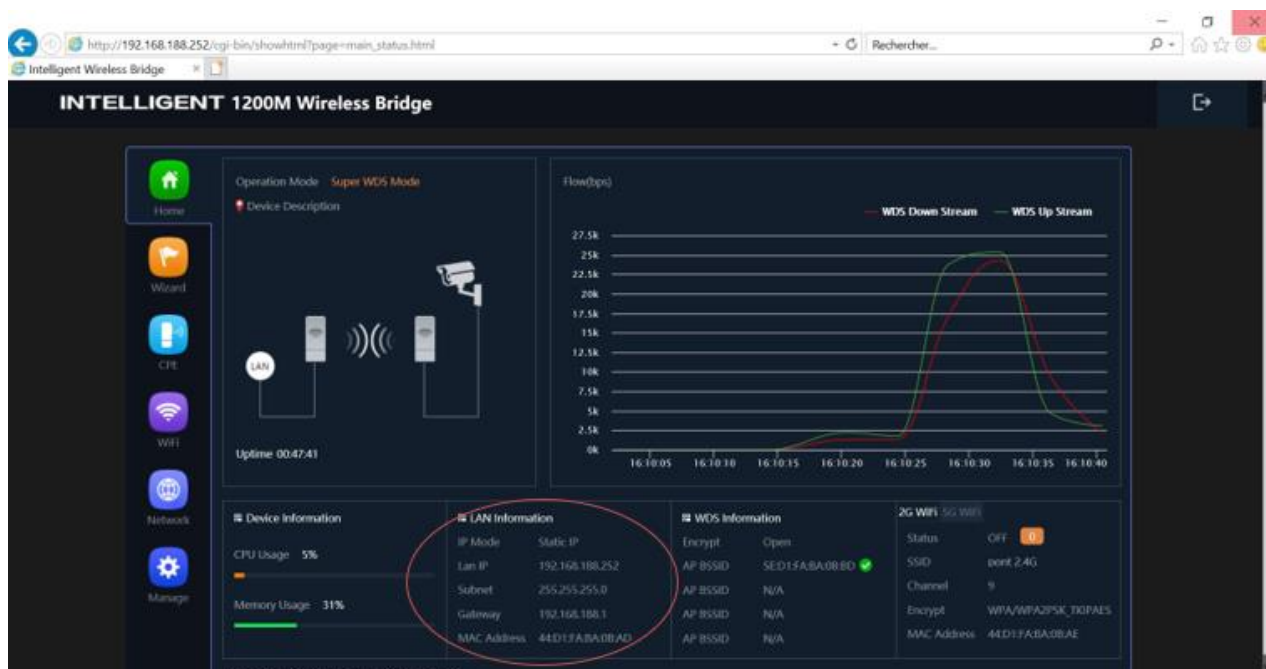
Check that the mac address indicated corresponds to the mac of your terminal before making any changes

Once connected you will arrive on the dashboard, we will start by giving a fixed IP to our terminal that does not belong to any other equipment on the network :

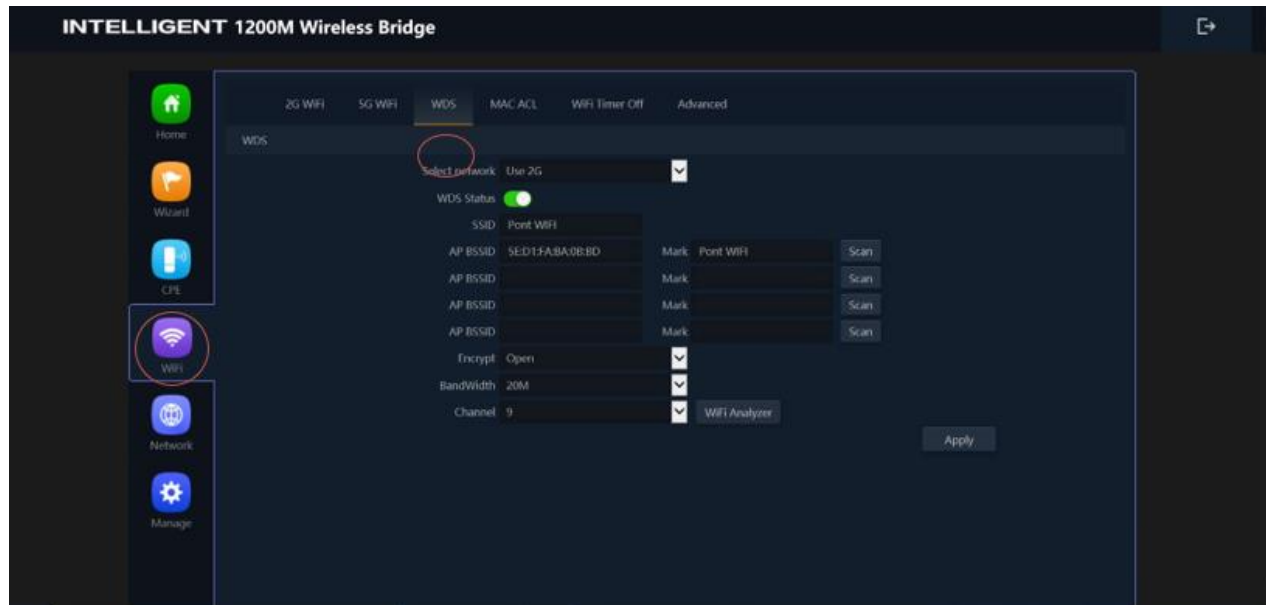
Note : that it will be important to retain this information



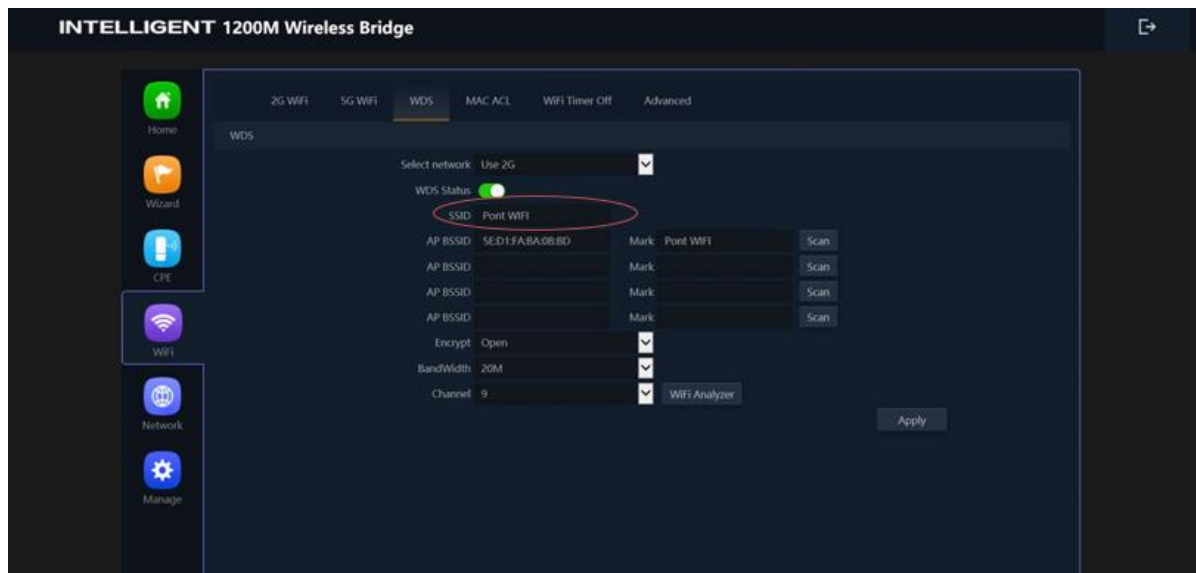
Once you have validated the setting you will automatically be taken back to the connection page, in fact you have been reconnected to the new link, since you have changed the IP, The URL of the wifi terminal also changes.



Then you can go to the WDS menu :



Indicate a name for the terminal in order to find it more easily later, we cannot yet completely configure it, we will activate its distribution by giving it a name :

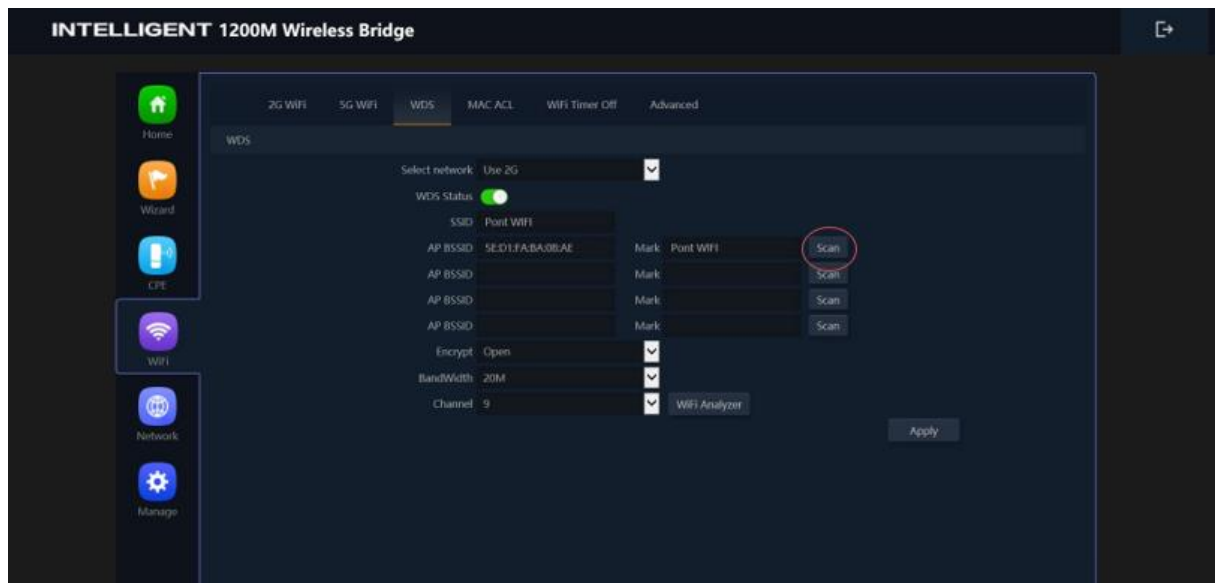


Then you can use the « Apply » button

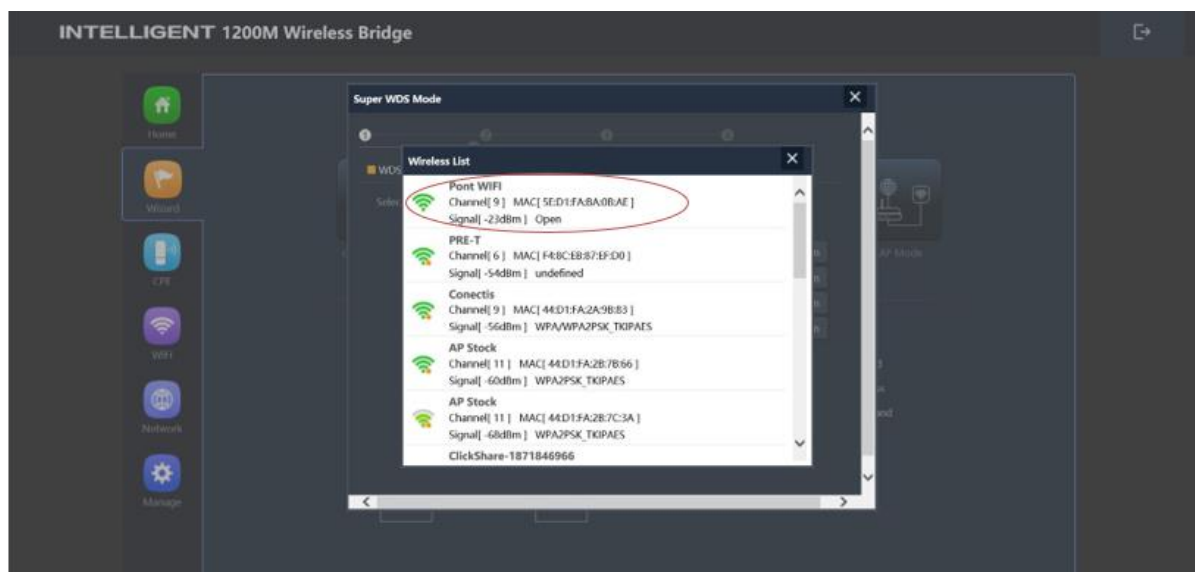
Once this is done we will do the same for the other wifi terminal, disconnect the first wifi terminal from the network (no need to remove the power supply) and connect the other terminal and access it on the web interface

The thing that we are going to do on this terminal and that we have not done before is the following step

We are going to assign terminal 2 to terminal 1 to create the Wifi



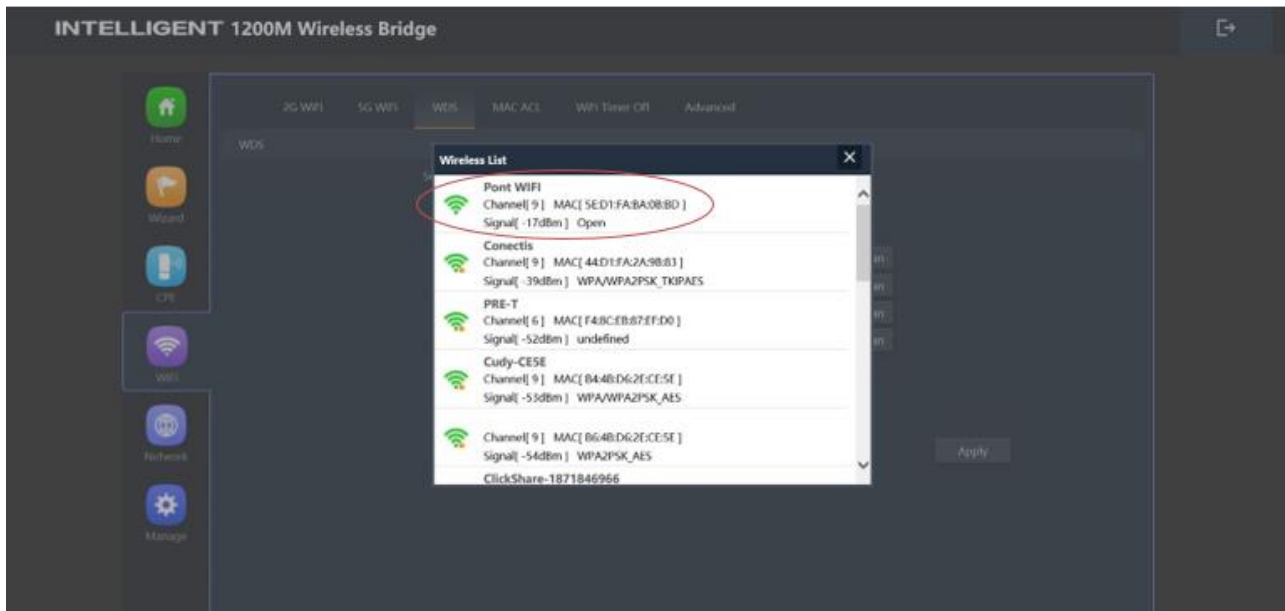
You are going to select the terminal 1 that we configured just before, **make sure that the BROADCAST name and MAC address are the same as the one configured previously !**



Click on the desired network.

Once done, remember again the BROADCAST MAC address of the 2nd wifi terminal.
Disconnect this 2nd terminal from the network and reconnect with the first,

Again we are going to assign it the terminal2 that we have just configured :

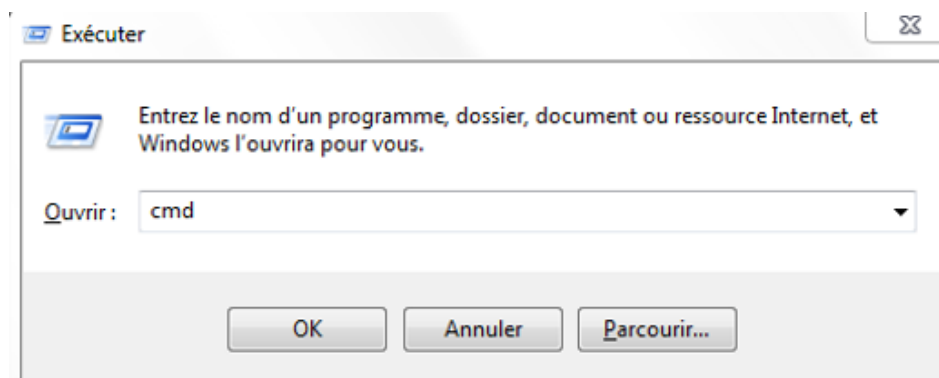


Once this is done, your terminal are powered, one is connected to the network on which your computer is located, and another terminal is just powered.

We are now going to test the proper functioning of the bridge.

Do not be connected to the Wi-Fi on your computer

If you are on Windows press the WINDOWS keys then r once, then write « cmd » and enter :



You will have a command prompt, we will send a « ping » to our terminals to know if we are well connected to it.

```
Microsoft Windows [version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. Tous droits réservés.

>ping 192.168.188.252 -t

Envoi d'une requête 'Ping' 192.168.188.252 avec 32 octets de données :
Réponse de 192.168.188.252 : octets=32 temps<1ms TTL=64
Réponse de 192.168.188.252 : octets=32 temps<1ms TTL=64
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Statistiques Ping pour 192.168.188.252:
    Paquets : envoyés = 7, reçus = 7, perdus = 0 (perte 0%),
Durée approximative des boucles en millisecondes :
    Minimum = 0ms, Maximum = 0ms, Moyenne = 0ms
Ctrl+C
^C
C:\Users\n.triquet>
```

Logically, the terminal connected directly to your network responds because you are on the same network :

Here we have sent a signal to the terminal connected to our network, the -t allows to send it to infinity, if you want to interrupt the sending do CTRL+C.

So we have a signal, now do the same with the 2nd terminal which is not powered by 12v and has no port connected:

```
C
ping 192.168.188.251 -t

Envoi d'une requête 'Ping' 192.168.188.251 avec 32 octets de données :
Réponse de 192.168.188.251 : octets=32 temps=4 ms TTL=64
Réponse de 192.168.188.251 : octets=32 temps=2 ms TTL=64
Réponse de 192.168.188.251 : octets=32 temps=5 ms TTL=64
Réponse de 192.168.188.251 : octets=32 temps=7 ms TTL=64
Réponse de 192.168.188.251 : octets=32 temps=7 ms TTL=64
Réponse de 192.168.188.251 : octets=32 temps=3 ms TTL=64
Réponse de 192.168.188.251 : octets=32 temps=3 ms TTL=64
Réponse de 192.168.188.251 : octets=32 temps=4 ms TTL=64
Réponse de 192.168.188.251 : octets=32 temps=2 ms TTL=64
Réponse de 192.168.188.251 : octets=32 temps=4 ms TTL=64

Statistiques Ping pour 192.168.188.251:
    Paquets : envoyés = 10, reçus = 10, perdus = 0 (perte 0%),
Durée approximative des boucles en millisecondes :
    Minimum = 2ms, Maximum = 7ms, Moyenne = 4ms
Ctrl+C
^C
C:\Users\n.triquet>
```

It works, the Wi-Fi bridge is in place!