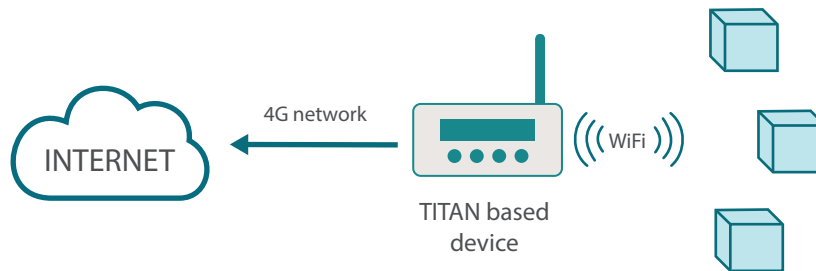# TITAN

Application Note 25

Using the Router as a Wi-Fi Access Point with a 4G Internet Output

Using the Router as a Wi-Fi Access Point with a 4G Internet Output

1. Introduction

One of the many features of a TITAN-based router is its ability to behave as a Wi-Fi Access Point to provide Internet connectivity (via 4G/3G/2G) to Wi-Fi devices. A typical configuration for this scenario is provided in this application note.

2. Configuration

To configure the TITAN-based device as a Wi-Fi Access Point, go to the "Wi-Fi > Basic Settings" section of the configuration menu. Here we will choose the "Wi-Fi Access Point" operating mode, we will enter an SSID (the name that will be seen by other Wi-Fi devices) and we will indicate the type of security (WPA2-Personal is recommended), the channel and an appropriate KEY.

It is important to specify a Wi-Fi IP address on a different subnet than the Ethernet IP address. For example, if the Ethernet IP address of the TITAN-based device is in subnet (192.168.1.X), the Wi-Fi IP address would have to be in another range, for example (192.168.2.X).

The IP Gateway box should not be filled in, since we are going to use the 4G/3G/2G WAN interface as the Internet connection. Lastly, as the goal is to provide Internet access to Wi-Fi-connected devices, we must activate the "Internet Access" box to enable this.

The next step is to activate the DHCP server for the Wi-Fi interface. Go to the "Wi-Fi > DHCP Server" configuration menu.

In this section, as pictured above, we should activate the "Enabled" box and specify a range for the Wi-Fi IP addresses to be assigned to the devices connected via DHCP. The range of IP addresses should match the configured subnetwork from the last section. That is, if we have established that the Wi-Fi IP address of the Titan router is 192.168.2.1 (subnetwork 192.168.2.X), the start and end DHCP addresses should be from the same subnetwork. E.g. from 192.168.2.100 to 192.168.2.110.

In this section, as is shown in the previous figure, the "Enabled" box must be checked and a range indicated for the Wi-Fi IP addresses to be assigned to the devices that connect via DHCP. Obviously, the range of IP addresses must correspond to the subnet configured in the previous section. As such, if we have established that the Wi-Fi IP address of the TITAN-based device is 192.168.2.1 (subnet 192.168.2.X), the start and end DHCP addresses must also be from the same subnet. For example, from 192.168.2.100 to 192.168.2.110.

Of course, the 4G/3G/2G section must also be configured, as indicated in "Wan > Basic Settings". The following figure shows a basic configuration:

Once this has been configured, go to the "Other > Reboot" menu and restart the TITAN-based device.

After restarting, wait a few seconds for it to connect to the 4G/3G/2G network and to establish the Wi-Fi network, you can then connect to the Internet via the TITAN-based device and access its configuration interface over Wi-Fi.