How to configure your static External IP's with the Huawei HG633 Router provided with your TalkTalk Business Broadband.

Having just recently switched to TalkTalk Business Fibre I was left a little lost when searching for information regarding the configuration of the 4 Static External IP's you are provided with as part of TalkTalk Business Fiber.

Luckily the solution is actually very simple and following the steps below you will be up and running with your External Static IP's in no time.

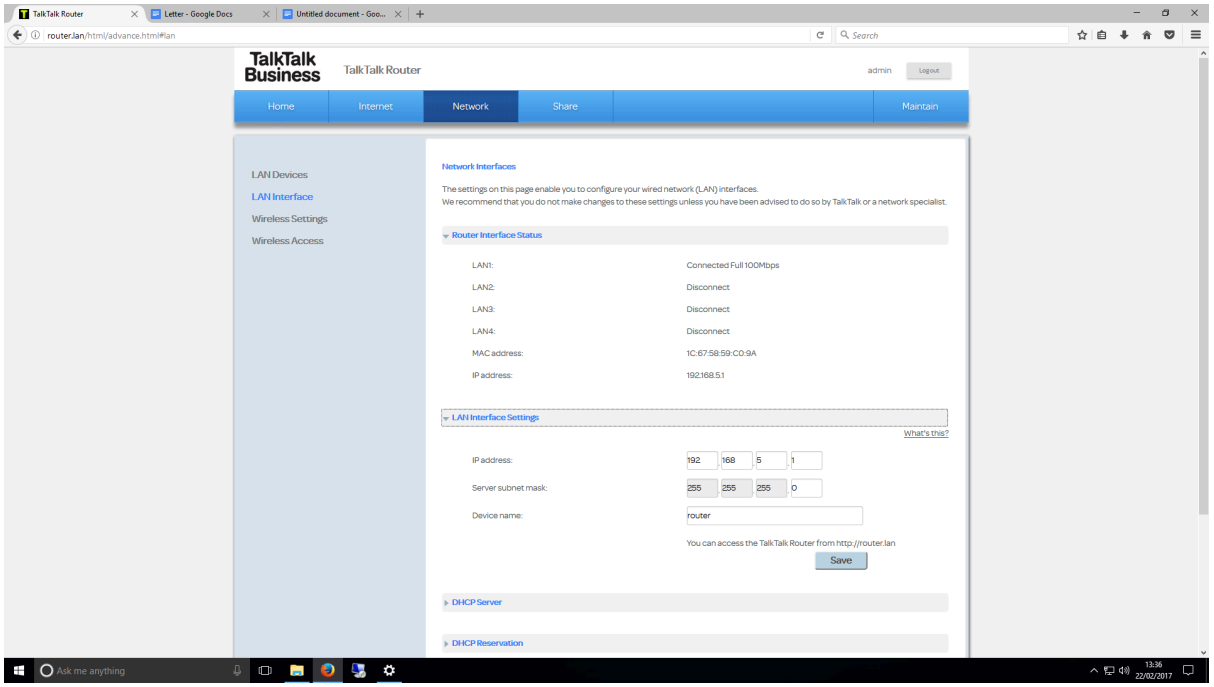
- Once your service is fully activated, log into your HG633 router at the default 192.168.1.1 address. You should see the login page for your router, sign in with the details on the back of your router.

- Click on the "Check the status of my internet connection" box. On this screen take a note of your WAN IP address. For the purposes of this guide I will use the 92.27.90.71 address. This IP is the Router's IP address and is always the second IP in your external range.

- Based on the IP address above, the range of IP's provided to you will be:
  - 92.27.90.70
  - 92.27.90.71 (GateWay)
  - 92.27.90.72
  - 92.27.90.73

- With the information above in hand we can now setup our network so you can assign your External IP's to Computers/Devices Internal IP's on your Local Area Network. The default LAN for your Router is 192.168.1.0/24. Again by default the Router is set to give these IP's via DHCP automatically. (192.168.1.2 to 192.168.1.254)

- Click on the "Network" tab on your Routers web console the click on "Lan Interfaces" on the left hand menu.



- Click on the “DHCP Server” drop down on the screen and reduce the DHCP range to something like 192.168.1.200 to 192.168.1.254. This allows me to set one of my External Static IP’s to be assigned to any device that connects to my router via DHCP and is given an Internal IP in this range automatically.

- Now set the DNS for the DHCP Server to be your Routers Internal IP 192.168.1.1 in our example. You can set both DNS records to this IP. Make sure to save your settings!

- From here click on the “Internet” tab on the top menu of the Router's web console. Once there click on “Port Forwarding” on the left menu. Then click on the “Multi-NAT” dropdown on the center screen.

- It is here in the “Multi-NAT” section that you can point your External IP’s to your Internal IP’s. If you want to point say 90.27.92.73 to the DHCP range we created above, click on the “New Multi-NAT” link. Then set the “Type” dropdown to “Many to One” meaning many Internal IP’s to One External IP. Local Start IP would be 192.168.1.200 in our example and local End IP would be 192.168.1.254. The public Start IP being 90.27.92.73, now save this rule.

- If you want to assign an External IP to a specific device on your network, let's say your Home PC as an example. Go into your Network Settings on your PC then click “change adapter options” from there highlight “Internet Protocol Version 4” and click the properties button. Now give your PC a static IP from your Internal IP range (192.168.1.2 to 192.168.1.199) we can’t go past 199 as our dhcp range starts at 200. I will give my computer the IP Address of 192.168.1.5 and the netmask of 255.255.255.0. The default Gateway is your Router’s Internal IP 192.168.1.1 by default. You want to use this as your first DNS server also, then set the second to google’s DNS 8.8.4.4

- Now go back to the “New Multi-NAT” link in the Router’s web console and this time select the “Type” as “One to One” from the drop down. Set the Local start IP to 192.168.1.5 and the Public start IP to 90.27.92.72 and save.

- That's all there is to it! My home PC now has a Static External IP of 92.27.92.72 and an Internal Static IP of 192.168.1.5. Any device such as mobile phones that connect to my router are assigned an Internal IP via DHCP in the range “192.168.1.200 to 192.168.1.254” and will all be assigned the 90.27.92.73 External IP

I hope this guide helps anyone who felt as lost as I did trying to find information online regarding setting up these IP Addresses.

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