

Tom Yan 27-09-2025

Proxy，即代理伺服器（Proxy Server），是指位於用戶端與網際網路服務之間的中介，負責轉發用戶的請求，並將伺服器的回應傳回給用戶。使用代理伺服器可以保護用戶的隱私、增加安全性、管理網路流量，或突破地理限制以存取特定內容。它如同一個中轉站，**使用者的網路流量透過它進行傳輸，從而隱藏用戶真實的 IP 位址。**

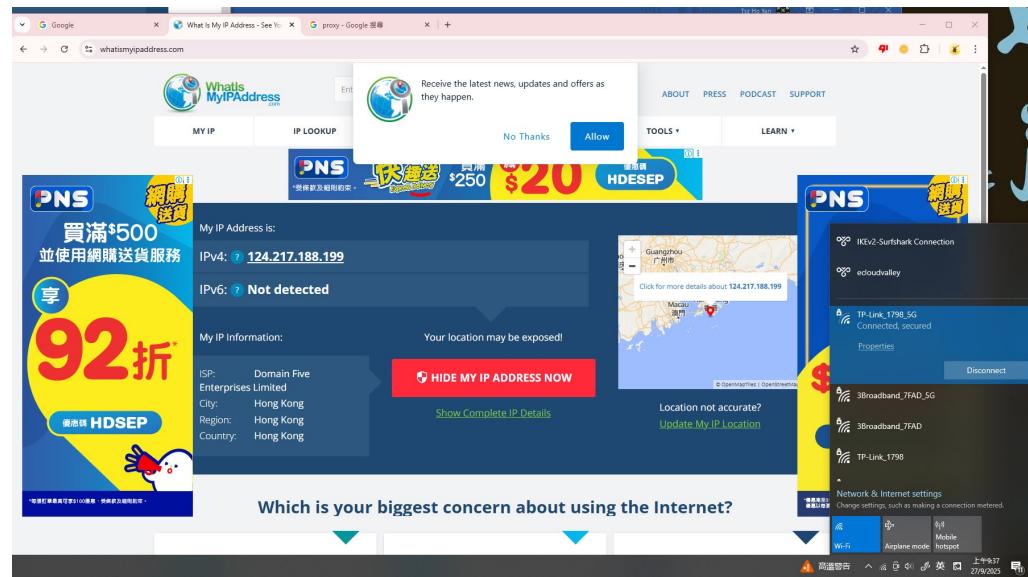
Proxy 的主要用途

- **保護隱私：**

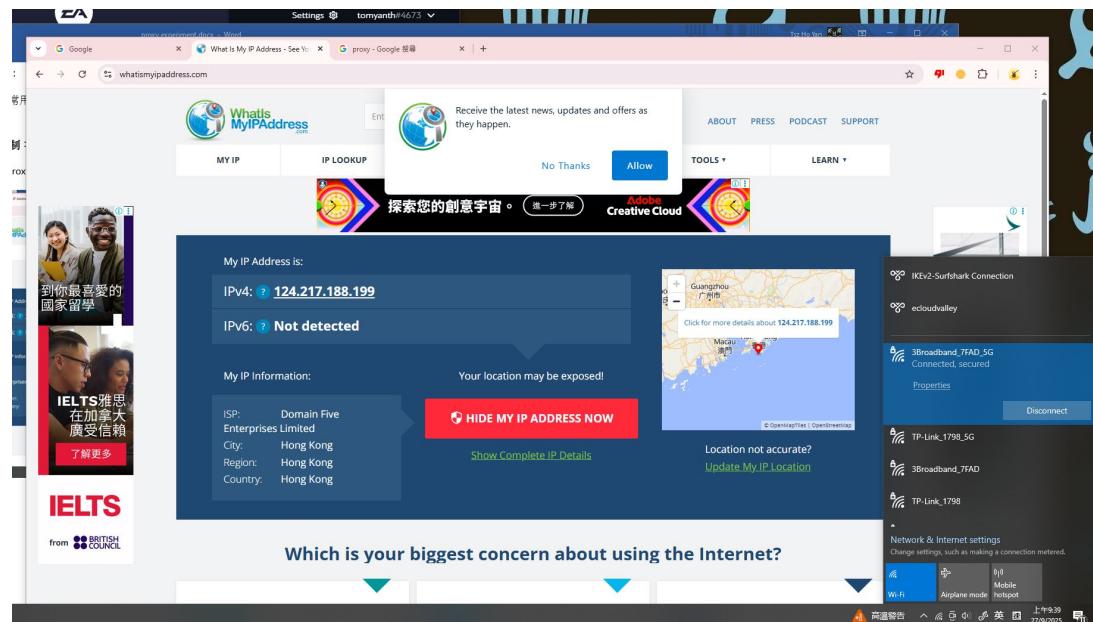
Proxy 可以隱藏用戶真實的 IP 位址，使網站只會記錄 Proxy 伺服器的 IP 位址，從而保護用戶的個人隱私。

其實家居上網已經是一個 proxy 的設計，如圖

連 router

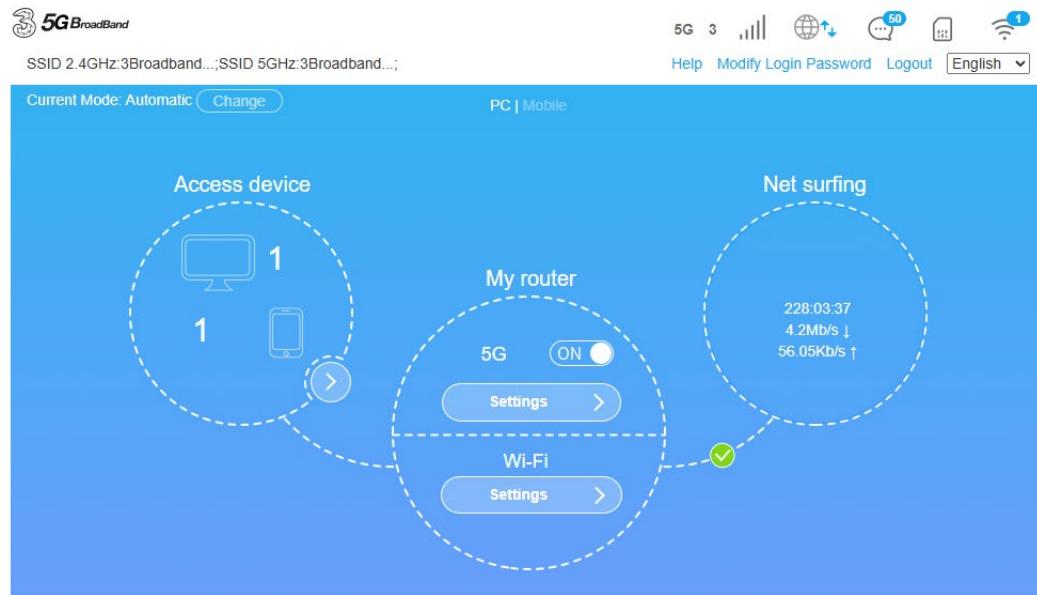


連 modem



顯示 IP 一樣, 所以真實的 ip 其實外網看不到 (masking)

Log in to your modem. As my modem can served as a router as well, so the icon my router is the modem itself



Status Information

SIM Card Number	—
IMEI	866949067480567
IMSI	454030012994895
Signal Strength	-91 dBm
CA Status	CA Inactive
Max Access Number	64
Network Name (2.4GHz Main SSID)	3Broadband_7FAD
Network Name (5GHz Main SSID)	3Broadband_7FAD_5G
Wi-Fi Coverage	Long Wi-Fi Coverage
IP Address	192.168.0.1
WAN IP Address	10.85.216.199
WAN IPv6 Address	—
Software Version	BD_HTCNHKMC888V1.0.2B03

Detail Information

2.4GHz Wi-Fi 5GHz Wi-Fi

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Your WAN (Wide Area Network) IP address, also known as your public IP address, is the unique internet-facing address assigned to your router by your Internet Service Provider (ISP).

Your router's WAN IP is not the same as your public IP because you are likely behind your Internet Service Provider's (ISP) Network Address Translation (NAT), a system that uses a private IP on your router to represent your device's connection to the internet. This situation, often called Carrier-Grade NAT (CGNAT), is common and can sometimes be resolved by contacting your ISP to request a public IP address.

所以其實你的 modem 不是直接出外網, 而還要經過網絡供應商的 proxy server 才行

Your real IP is here. Archer_AX73 is the my home router. DESTOP-SPCH62 is my PC.

但其實這個 IP 是 private IP, 簡單來說我家的 192.168.0.234 跟你家的不是同一部機器

About

Installed RAM	Processor	Graphics Card	Storage
32.0 GB	Intel(R) Core(TM) i5-9600K CPU @ 3.70GHz	6 GB	2.05 TB
Speed: 3200 MHz	3.70 GHz	NVIDIA GeForce RTX 2060	1.44 TB of 2.05 TB used

DESKTOP-SPCHU62 System Product Name	Rename this PC
(1) Device Specifications	<button>Copy</button>

Device Name	DESKTOP-SPCHU62												
Processor	Intel(R) Core(TM) i5-9600K CPU @ 3.70GHz 3.70 GHz												
Connected Devices All of wireless devices connected to this router will show on the page, including device name and MAC address													
Wi-Fi MAC Filter Switch <input checked="" type="radio"/> Block List <input type="radio"/> Allow List <button>Apply</button>													
<table><thead><tr><th colspan="4">Wireless Access Devices</th></tr><tr><th>Host Name</th><th>MAC Address</th><th>IP Address</th><th>Operation</th></tr></thead><tbody><tr><td>DESKTOP-SPCHU62</td><td>D0:C6:37:9F:8D:23</td><td>192.168.0.234</td><td><button>Manage</button> <button>Block</button></td></tr></tbody></table>		Wireless Access Devices				Host Name	MAC Address	IP Address	Operation	DESKTOP-SPCHU62	D0:C6:37:9F:8D:23	192.168.0.234	<button>Manage</button> <button>Block</button>
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For more access devices, please check Offline Access Device(s).													

Archer_AX73	X	Microphone	Search
全部 購物 影片 圖片 地圖 新聞 短片 更多 工具			



Usually default SNAT is /24

To change a subnet from /24 to /23, you must update the network device's interface, the router's default gateway, all static IP addresses on end devices, and reconfigure DHCP scopes and DNS accordingly

$32-24 = 8$ so you theoretically has $2^8 = 256$ (private) ip at your disposal. However, some of the ips are reserved for particular purpose such as XXX.XXX.0.1 is usually reserved for the modem itself.

