

Forcing a Cable Modem to get a new IP

[sanddrag](#) 1 November 1, 2005, 12:08am

I want my cable modem to get a new (global) IP. How do I do it? Charter Broadband cable service. It is not static, but it almost never changes. Even a long period of having it powered off will not change it. Surfboard cable modem and a router. Thanks.

[sciguy125](#) 2 November 1, 2005, 12:20am

It might not be possible. It's assigned on your ISP's end. I've noticed the same thing with my SBC DSL modem though. I only get a new IP every month or so. My guess is that the IPs are assigned to the modem for long periods.

[BrianBSL](#) 3 November 1, 2005, 9:06am

Try changing the MAC address of your router (most have a spoofing feature), and then changing it back. It will almost definitely change when you change it the first time, but I'm not sure if you will get the same one when you change it back.

[Jeff Rodriguez](#) 4 November 1, 2005, 10:44am

You can try leaving it off for a day or two. That usually works with most ISPs, but you have to survive without the internet for that time.

[Tom Bottiglieri](#) 5 November 1, 2005, 11:27am

The cable providers allocate IP address using DHCP. It looks at the MAC address of the computer (or router) it is communicating with and goes from there.

So,

1. Unplug your cable modem for about a minute
 2. Direct connect your PC or laptop to the modem
 3. Power On Cable Modem (on surfboard, wait for the "Online" light to come on constantly)
 4. Wait another minute.
 5. Repeat steps 1-3 for Router.
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[sanddrag](#) 6 November 1, 2005, 11:51am

Here's what I did:

Unplugged cable modem power and unplugged it from router.

Powered on PC and plugged it directly into cable modem.

Plugged in cable modem power and waited for it to come fully online.

Unplugged PC and plugged router back into the cable modem.

Is this right or did I do something wrong? It didn't work. Perhaps there is an IP assigned to the modem for a very long period of time?

[Al Skierkiewicz](#) 7 November 1, 2005, 2:21pm

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Why?

My Earthlink modem will get a new IP everytime I reconnect or my lease runs out. It really doesn't matter what it is if you are connected. The IP that the cable or DSL sees (from the modem) is not the same IP that your computer or network see from the other side (the network output).

[Ryan M](#) 8 November 1, 2005, 2:34pm

Al Skierkiewicz:

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Sometimes it's useful if you've been playing an online game and some guy with a thing against you decides that a ping flood would be fun. If you change your IP, he doesn't know where you've gone. Well, that's never happened to me, but it's definitely possible. 😊

Try going into your router's config/admin page (typically 192.168.1.1 or .254. Check in your manual.) and finding the release and/or renew option. On my Hawking wireless router, it's on the "status" page, but on an older one it was under "advanced configuration." Look around.

[Marc P](#) 9 November 1, 2005, 2:34pm

Cable modems have their own built in MAC address, besides passing on the MAC of the associated computer or router. That's how cable companies keep track of who is using their network (unlike DSL which relies on authentication via PPPoE.)

Sanddrag, DHCP servers assign IP addresses with a set lease time, sometimes 3 days, sometimes 7 days, depending on how the network is set up. Most of the time, the release and renewal when an IP expires is transparent, it happens in milliseconds and there's rarely a disruption of service. The problem you're having is most DHCP servers cache MAC addresses in a client table, and tend to assign the same IP associated with a given MAC address each renewal. Network operators and their servers appreciate consistency, and on a network with potentially thousands of clients, the more consistent addresses are, the less stress there is on the server to straighten out the client table and make sure everyone gets an address. Rather than try finding the next available address for your system, it remembers you had that address last renewal, and gives it back to you.

Only way around that (short of calling your ISP directly and asking if they can clear your MAC out of the client table) is to find out how long your IP lease is, and unplug your cable modem an hour before the lease expires, and plug it back in an hour after the lease expires. If your modem isn't online to negotiate the renewal, the DHCP server should chop it out of the client table and assign the IP to another client. Next time your modem communicates with the DHCP server, it should assign the next available IP in it's block. Generally, the longer you wait after the expiration, the better chance you'll have to get a new IP (the assumption is another client will come online to take your old IP before you do).

[BrianBSL](#) 10 November 1, 2005, 2:57pm

When you plugged it directly into your laptop, did you get the same IP as your router did?

If you got a different IP on the laptop, but the same one back on the router, spoof the router to a MAC address of a network card you own. (As this is more legit than making one up that is assigned to someone else, and as long as that network card is always on the LAN side of your router, it shouldn't cause any issues).

Usually the modem's MAC address is used to assign it a non-internet (private) IP in the 10.x range, and the MAC address of the client PC is used to assign the internet IP. I'm not familiar with the CMTS system that Charter uses, however, so it may be different.

[sanddrag](#) 11 November 1, 2005, 4:02pm

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[Tom Bottiglieri](#) 12 November 1, 2005, 4:04pm

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Use a proxy.

[Mike_AA](#) 13 November 2, 2005, 1:01am

Using a proxy server works fairly well to get onto a website that you're blocked from, I had someone on another team whom blocked the team's website from my IP address (which is static being its sDSL). I logged onto one of my proxy servers and logged on and emailed him and suddenly I was unblocked the next day. So maybe log on and email the site admin and see what's up.

-Mike

[Bharat](#) 14 November 2, 2005, 6:10am

Marc said it all right. I needed to get my IP changed so I called up my ISP and told them. It took them 10 minutes to reset it.