## How to Work Out What's Preventing You From Using the Web and Email

This article shows you how to:

- ✓ Determine what the problem is with your Internet connection
- ✓ Check whether your broadband really is slow
- ✓ Find out whether a website problem is at their end or yours

As modern life has progressed, we've come to take certain things for granted, like electricity and running water. And now we can include Internet access in that category: losing your Internet connection can leave you feeling very lost and cut off.
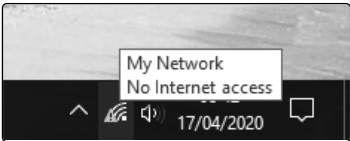
Many Internet problems are caused by something outside your home, and they put themselves right after a short time, but how can you tell if your problem is one of those? And if it isn't, what can you do to put it right? Read on to find the answers.

Lost All Internet Access: What's Gone Wrong?

Check the network icon on the taskbar

When you look towards the right-hand side of your taskbar, near the clock, you hope and expect to see one of these icons:

A wireless connection…

- The two icons on the left indicate that you're successfully connected to your wireless network (your 'WLAN') and that your WLAN has Internet access. The upper icon is the one you'll see in Windows 10; the lower is what you'll see in Windows 8.1 or 7.

…or a cabled connection

- The two icons on the right indicate that you're connected to your network's router with a cable. Again, your network has Internet access.

A tooltip gives you brief details

Whichever of these icons you see, if you hold your mouse pointer over it you'll see a little tooltip message telling you the current status of your network connection. It varies slightly between the different versions of Windows, but it will tell you what you're connected to and confirm that you have Internet access.

If something goes haywire with your connection, the icon changes. There are three possibilities:

Exclamation mark: no Internet access

**1. No Internet access:** one possibility is that it gains a yellow triangular exclamation mark. This means that although you're connected to your network, the network (and thus your PC) doesn't currently have Internet access. If you hold the mouse pointer over this icon, the tooltip message will tell you so (similar to the screenshot on the first page of this article). I'll explain how to deal with this on page 4.

Cross: not connected

2. No network: the second possibility is that it gains a red cross. This indicates that your PC isn't currently connected

to your network. It might be just temporary – in a second or two, you might see a little revolving circle over the icon indicating that your PC has started to connect. However, you might find that it's stuck like this: it's not connected and it can't connect. I'll explain what to do about this on page 4.
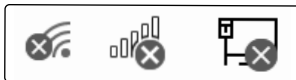
3. Connections available (wireless only): if you connect to your network wirelessly, you may see a little star added to the icon. This means that you're not currently connected to a WLAN, but there are wireless networks available within range of your PC (one of which is hopefully your own network). In many cases, this will be temporary too: you've probably told Windows to connect to your home WLAN automatically, and within a few seconds it will probably begin doing that. If it doesn't, jump to page 5 for the solution.

Star: wireless connections are available

Before you spend too much time on the following fixes, there are two points worth considering which may save you some trouble:

- The icon is wrong! Perhaps you actually are connected to your network, you do have Internet access and Windows is just being silly. If you haven't tried yet, start your favourite web browser and visit a popular, reliable website like **www.microsoft.com** to see what happens. If it works, just ignore that wrong icon.

- Restarting your PC might fix it. It may be that Windows has got itself into a slightly-confused state, or that something has just been updated on your PC which has briefly upset the networking features.

Fix problem 1: No Internet access

Connected, but no Internet access

In this situation, you know you're connected to your network (either wirelessly or via a cable), but your network seems not to have Internet access, so your PC doesn't either. Therefore, the fault must lie at your router: it's obviously switched on and working, but it has presumably dropped its connection to the Internet.

Check or restart the router

You could check the lights on your router, if you know what they all mean (or can be bothered to find its user manual!), but a better option is to just restart it. To do that, unplug it from the mains, wait about 30 seconds and then plug it back in again. (Remember to give it a good couple of minutes from this point to start itself up and – with luck – recreate its broadband connection.)

If Windows still insists there's no Internet access after being reconnected to the network (and a test visit to a website proves this to be the case), it's time to have a look at the lights on the router. On most routers there's one light to tell you a broadband connection is available and another light to tell you whether the router is con-nected to it. You'll quite likely find that one or both of these lights is either off or flashing, indicating a problem.

It's usually a temporary outage

That problem might be a faulty cable between router and telephone socket, but it's much more likely to be that your broadband connection is temporarily unavailable due to routine maintenance or something similar. Give it an hour or so, and if there's still no change, try giving your broadband provider a call to see if there's a known issue.

Fix problem 2: Can't connect

No connection?

If you're seeing the red cross on the connection icon, which indicates that Windows can't connect to your network, there are various possible reasons and several things to check:

- Is your router definitely powered on? If it isn't, that would obviously explain it! (And, if it isn't, that may be because the mains adapter has been pulled out, which is easily done on these types of devices.)

Check the router

- Try restarting your router, as explained on the previous page, on the basis that it's worth ruling out the quick-and-simple fixes first.

- If you use a cable connection to your router, check that the cable is securely plugged in at both ends (try unplugging each and plugging it back in again), and examine the cable for damage. If you have another network cable, try using that.

- If you connect wirelessly, does your PC have a wireless adapter that plugs into a USB socket? If so, try unplugging it and plugging it in again – perhaps into a different socket.

Check the wireless adapter

- If you connect wirelessly and you're using a notebook or tablet PC, see if there's an on/off switch for Wi-Fi somewhere on the PC's casing. It's possible that you've accidentally turned off the PC's ability to connect to a WLAN.

- If you connect wirelessly and you use Windows 10, make sure Wi-Fi hasn't been disabled. Press ⊞+Ⅰ to open the Settings app, click on **Network & Internet** and then, at the left of the window, on **WiFi**. At the top of the page you'll see an On/Off switch below the 'Wi-Fi' heading: if this is set to 'Off', click it to turn it to **On** and within seconds you should see signs that Windows is now connecting to your wireless network.

**Has Wi-Fi been disabled?**

Fix problem 3: Connections available

If the connection icon shows a little star, indicating that you're not currently connected to a wireless network but there

See if you can connect

are networks within reach, the first thing to check is whether your own network is among them.

Click the name of your wireless network

Click the connection icon and a panel will pop open listing the names of the wireless networks within range of your PC. Assuming you do see yours in this list, click it. You'll then see a checkbox labelled **Connect automatically** ① (which it's a good idea to tick, as I'll explain below) and a **Connect** button ② : click the button and Windows should then connect to your network.
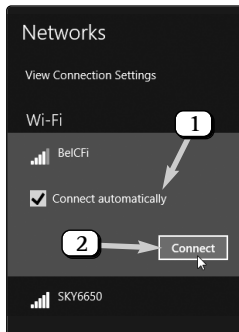
> Assuming you were able to connect, the question is why Windows hadn't done that for you itself. Presumably – for reasons unknown – the connection was dropped, and you hadn't ticked that **Connect automatically** box when you last connected, so Windows wouldn't reconnect. This is why I recommend ticking that box. Then, whenever the connection is dropped, Windows will keep trying to reconnect of its own accord without having to involve you (or potentially worry you!) at all.

Name not listed?

The problem may come if you don't see your own network in this list. That gives two possibilities:

Check your router

- Your router isn't currently running or it has some kind of problem. You could check its lights to see whether it claims to be offering Wi-Fi or, if all seems well, restart it as explained on page 4.

Are you out of wireless range?

- Your PC isn't within range of the wireless network created by your router. Perhaps you've just moved your PC to a different room and you're now too far away, or

perhaps you've always been just on the edge of your network's range and some tiny change in conditions has been the final straw.

> If it's the second of those, another tiny change in conditions will quite likely make your network 'reappear', allowing Windows to connect to it. However, this obviously isn't a recipe for reliability, and I'll give you some tips to help improve matters on page 8.

What to Check if Your Connection is Slow or Unreliable

You have Internet access, but it's not as good as you think it should be. Perhaps it keeps 'dropping out', leaving you briefly without a connection, or perhaps it just seems unreasonably slow. Let's find out what the cause could be and what you can do about it.

Disconnecting or running slowly

I keep losing the Internet connection

When this happens, you need to find out exactly what it is you're losing. Is your router dropping the broadband connection, or is your PC losing its connection to the router?

Which connection is being lost?

The first of those is rare. Your router should be able to maintain a steady broadband connection day after day, week after week, not least because the gadgetry in your local telephone exchange is monitoring and adjusting the connection to keep it running smoothly.

Router losing connection? Nevertheless, next time it happens, check the lights on your router. As I mentioned earlier, there'll be a light that confirms the broadband connection, and if this shows there currently isn't one, you're a step closer to the answer.

The router drops the Internet connection

The question is whether the problem is with the router itself or with something outside your home. It's almost certainly the latter, so give your broadband provider a call to report the problem. (Your provider probably supplied the router, too, so if that's where the problem turns out to be, they should be able to sort that out as well.)

Your PC loses the network connection

PC losing connection? It's much more likely that your PC is temporarily dropping its connection to your network, especially if you connect via Wi-Fi. In this case, you'd expect Windows to show the 'No network' or 'Connections available' icon (explained on page 3) on the taskbar.

Too far from the Wi-Fi signal?

Assuming you are connected wirelessly, the probable cause of the dropouts is that your PC and router are too far apart (or that your router isn't powerful enough to stretch its Wi-Fi signal as far as your PC, which amounts to the same thing). Here are some solutions to consider:

Angle the antenna

- Does your router have an antenna that can be turned and angled? If so, try pointing it in different directions to see if that helps. (If your router has two wireless antennas, it's generally reckoned that pointing one vertically and the other horizontally creates the best coverage.)

Boost the signal with a wireless extender

- Try a 'wireless extender'. You place this closer to where your PC is, connect it to your wireless network and it boosts your Wi-Fi signal, effectively giving you a network with a much wider range. A simple wireless extender like the D-Link DAP-1520 (pictured) costs under £20 and plugs into a mains wall socket.

- Try using Powerline adapters, which extend your network using your home's electrical wiring. One adapter plugs into the mains near your router, with a network cable connecting it to your router; the other plugs into the mains near your PC, and connects to your PC with a network cable. As a result, you're now effectively using a cabled network rather than a wireless one, so the distance between those two Powerline adapters is immaterial. You can buy Powerline 'starter kits' containing two adapters from a variety of companies including TP-Link, Solwise and D-Link.

Use Powerline adapters

My Internet connection seems very slow

There's no doubt about it, Internet speeds can vary dramatically, and for all sorts of reasons. It's worth remembering that a web page you visit is being sent to you from the one computer on which it's stored, somewhere on the Internet. That computer might well store dozens of other websites and serve up their pages too. It might be dealing with thousands of other requests besides yours, and it might not have as fast an Internet connection as it really needs to cope with all the demands its getting.

Internet speeds vary for many reasons

More generally, the Internet has 'rush hours'. Here in the UK, broadband speeds drop by 35% or more between 7pm and 11pm, so if that's when you do the majority of your surfing, you'll be doing it comparatively slowly. Conversely, you'll get better speeds first thing in the morning (between about 7.30am and 9am) or in the early afternoon.

Avoid peak surfing times!

Closer to home, there are three other common reasons for a slower Internet connection:

- You use Wi-Fi and you're not close enough to your router. If you think that might be the case, Powerline adapters or a wireless extender, mentioned above, would be worth trying.

A poor Wi-Fi signal

Other devices also using the Internet

- You have several devices all using the Internet at once – computers, tablets, mobile phones, smart TVs, set-top boxes and so on. And in these days of catch-up TV, streaming films and online gaming, those devices might all be downloading far more data than they would have been a few years ago, putting a lot more strain on your home's broadband connection.

You don't leave your router switched on

- You turn off (or unplug) your router when you're not using the Internet. I mentioned earlier that the gadgetry in your local telephone exchange monitors your router and broadband connection, aiming to keep it working at the fastest reliable speed it can. If your router is switched off (and thus disconnected), this gadgetry assumes your line was unable to main-tain a broadband connection at the current speed and slows it down. The more this happens, the more your speed will be reduced as the gadgetry tries to find a speed at which the connection doesn't keep getting 'dropped'. The solution, of course, is to keep your router switched on permanently: start doing this now, and over the course of a couple of weeks the speed should increase to its maximum again.

Check your broadband speed

Despite all that, you may feel that your broadband connection is unreasonably slow. When you signed up with your broadband provider, you should have been told roughly what maximum speed you could expect, so the next step is to run some speed checks to find out whether or not you're achieving anything near that speed. Here's what to do:

1. First, close any programs on your PC that might be using your broadband connection – email programs, web browsers, and so on. Likewise, if any other devices in your home are using the Internet, do the same with those.

2. Now start your favourite web browser and visit this address: **www.speedtest.net**

3. When you arrive, you'll see the word **Go** inside a large circle. Click anywhere in that circle to start testing your speed.

Start the speed test

4. Now wait for a minute or so while the speed test takes place. This website downloads some dummy data to your PC to test your download speed, then sends the data back to test the upload speed. Once the test is finished, you'll see a panel like this:
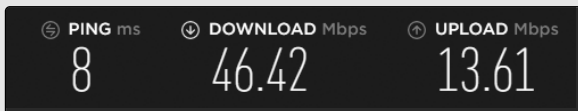
5. What you're chiefly interested in is your download speed (measured in Mbps, megabits per second). You can compare this with the expected download figure you were given by your broadband provider.

Check the download speed

One note of caution: don't read too much into a single test! Make a note of the date, time and result of this test, and run further tests over the next few days, at different

times of day, noting their results as well in order to get a clearer view of how your connection is performing. If it's significantly slower than you were led to expect, it's time to have a word with your provider, and you have the figures ready to quote.

Having Trouble Opening a Particular Web Page?

Error message when opening a web page?

As Internet problems go, there's nothing worse than having no Internet connection at all. Anything else that goes wrong is likely to be a minor frustration by comparison – and in many cases just a temporary one. But close to the top of that list is when you try to visit a particular web page and you can't: all you see is some sort of error message such as 'Server not found' or 'This page can't be displayed'. What can you do?

Can you load any web pages at all?

See if other websites will load

If you haven't done so already, it's worth checking whether you can load other web pages. Try well-travelled sites like **amazon.co.uk**, **google.co.uk** and **microsoft.com** on the basis that if anything will load, those should.

If no websites will load, but you do seem to have a working Internet connection, try visiting this address: **http://173.194.220.94**

A temporary problem with the DNS?

Without getting carried away with the technical details, this is the 'real' address of Google's site at google.com. If you arrive at Google it indicates that your broadband provider has a technical problem – specifically, a problem with its DNS (Domain Name System) server, the system that looks up friendly names like '**google.com**' and finds their 'real' numeric names.

That would certainly explain why you can't reach any websites by typing their names, but it's a problem that they'll expect to fix very quickly.

Is that particular website out of action?

If you've just typed the address of the web page you're trying to load, are you sure you've typed it correctly? If you are, another thing you can try is finding out whether that website is currently unavailable.

See if a website really is unavailable

There are several websites that aim to tell you whether a particular site is 'up' (working) or 'down' (out of action):

www.DownForEveryoneOrJustMe.com

www.IsItDownRightNow.com

www.CurrentlyDown.com

In each case, when you arrive you'll see an obvious box into which you can type the domain name of the site you want to check (such as 'twitter.com' or 'bbc.co.uk') and then press (Enter). Within seconds you'll be told whether the site whose address you've typed is down for everyone or just for you.

Type the domain name you want to check

It's just you. **http://google.co.uk** is up.

Check another site?

If it's down for everyone, it's clearly not your problem and all you can do is try again later. If it's apparently just down for you, there are several possible reasons why. One is that you typed the address wrongly when trying to visit it, but correctly when checking whether it's up or down. Another is that it was indeed down when you tried to visit it, but had come back up again by the time you ran the 'up or down' check.

Is it just down for you?

Yet another possibility is that some oddity of your web browser or your PC is keeping the site from loading. You could try using a different browser (and/or a different computer). Perhaps a firewall or Internet Security software on your PC has blocked this particular website. If that's a possibility, you might think about disabling that software temporarily to try again, but consider very carefully whether it might have been blocked for a good reason and whether you might do best to leave well alone!

Has the web page been moved or renamed?

Missing web page?

Perhaps you're trying to reach one particular page on a website, which you've found using a search engine or by picking it from your Favourites/Bookmarks or History list. But all you reach is a note that the page doesn't exist or can't be found. Where's it gone?

Try starting at the website's home page

Just as you can rename, move or delete files on your PC, a website owner can do the same to pages on the site, and that may be what's happened in this case. One option is to make your way to the front page (the 'home page') of the website and see if you can find links from there to the page you wanted: in your browser's address box, delete everything after the domain name in the address (in other words, everything after the .com or .co.uk or .net or .org) and then press (Enter) and that will take you to the front page of the website.

Did you follow a link from Google and find that the page no longer exists? If so, Google may still be able to show you a recent copy of that page. Go back to the item you clicked at Google and look at the green address below that link: is there an arrowhead beside it (1)? If so, click the arrowhead, then click the **Cached** link (2) and you'll be taken to a copy of the page that Google grabbed last time it indexed this website.
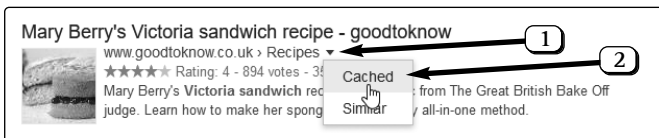
Has the page or site gone for good?

If a web page (or an entire website) seems to have disappeared and you really need to find it, there's one other excellent option: the Internet Archive's Wayback Machine. For years this free service has been keeping copies of websites, and it may have a copy of the site you want. Indeed, it may even have several copies taken at different points in time. Here's how to use it:

Find an archived copy at the Wayback Machine

1. Start your favourite web browser and visit **archive. org/web**.

2. In the text box at the top of the page, type the address of the site (or, if you know it, the address of the specific web page you're hoping to find on that site) and press (Enter).

3. Now – assuming the Wayback Machine has indeed made at least one copy of this site or web page in the past – you'll arrive at a page with a graph at the top and a calendar below:

- The black bars on the graph give a rough indication of the years in which the Wayback Machine took copies of the website and how many copies it took that year. At the moment, the most recent year is selected (which is likely to be what you want), but you can click an earlier year if you'd like to see how the site looked longer ago.

Click a year in which copies were taken

- The calendar relates to the year you've selected, and blue circles around a date indicate that the Wayback Machine took a copy of the website on that date.

Click a circled date on the calendar

> Pick one of those circled dates and click it, and you'll arrive at the copy that was taken.

Unable to Send or Receive Email Messages?

Error when sending or receiving email?

You started your email program and you're trying to send messages you've written and/or check for new messages coming in. But all you see is an error message like 'The host could not be found' or 'Send/Receive error'. Or, perhaps, a little dialog pops up asking you to enter your email password, but when you do that, the same dialog reappears straight away. What's the problem?

It's rarely your problem!

The most important thing to remember about email problems is that they're nearly always at your email service provider's end, not yours! In fact, if you haven't altered your email account settings in your email program since the last time you sent or received messages successfully, there's no reason to think the problem is at your end.

Therefore, don't be tempted to fiddle around with your email account settings in an attempt to get things working again. If you do, you might turn a temporary glitch into a permanent one!

> Another point worth understanding about email is that you may find you can send messages but can't check for new ones coming in, or vice versa. That's because the sending process and the checking/receiving process are two separate systems: it's quite possible for one to have problems while the other doesn't.
>
> On a similar topic, the checking/receiving process needs your email password (to prevent someone else from collecting your messages), whereas the sending process usually doesn't. So, if you find yourself suddenly prompted

> to enter your email password, it's safe to assume the checking/receiving process currently has a problem and no-one (including you) can sign in to collect their email.

With email problems, the best course of action is usually to wait half-an-hour and then try again. If the problem continues for much longer than that, you may want to contact your email service provider (which, of course, may be your broadband provider) to check that the problem really is at their end. Rather than picking up the phone, though, a quicker way is often to visit their website: they probably have a 'Service Status' page (perhaps in the 'Support' area) which notes any problems they're having.

Try later or check the 'Service Status' page

Problems Using the Internet While Travelling?

Most of the Internet problems I've covered above are going to affect you at home, but perhaps you take a tablet or notebook PC with you when you go on holiday, reckoning to use the hotel's Wi-Fi connection? If so, there are two common snags you might come up against.

Using a portable PC on your travels?

I can't get the Wi-Fi working!

In most cases, you'll be given two pieces of information: the name of the hotel's wireless network and a password. You might well approach this in the same way you connect to your own network or that of a friend: you click the network icon near the clock on the taskbar, then click the name of the network and get ready to type the password. But no password prompt appears; instead you seem to be connected immediately. However, depending what you try to do next, you may find that you don't actually seem to have a working Internet connection.

No prompt to type the password?

Just try visiting any website

The trick is to start your web browser and try to visit any web page – it doesn't matter which, because it probably won't load. Instead, you should arrive at a page which prompts you to type the password you were given, and after doing that you should find that you can use the Internet normally.

I can receive email but I can't send messages

Error message when sending email?

If you try using an email program on your portable PC, you may find it can collect incoming messages but gives an error message if you try to send. What's the problem?

This can happen if you're using the email account provided by your broadband supplier. When you're at home, you're connected to your home's broadband, so the email server knows you're a customer and allows you to connect to it and send messages. But, quite reasonably, it won't allow non-customers to use it.

The server doesn't know you're a customer

When you're away, you're connected to the hotel's broadband, so as far as that email server is concerned, you don't appear to be a customer. You can still collect messages, because (as I mentioned on page 16) your email program is sending your email password to identify you, but you can't send any.

There are two possible solutions to this:

Set up 'SMTP Authentication'...

- Set up your email program to use 'SMTP Authen-tication'. In simple terms, that means editing your email account settings to make your email program send your password when you try to send, as it does when you try to receive. However, you'll have to check with your broadband provider exactly what those settings should be as their precise details vary from one provider to another.

...or use webmail instead

- A simpler option is to use webmail. Your provider almost certainly offers a webmail option, whereby you log into an email page on their website, and there you'll be able to send and receive messages without any such problems.