

Cybersecurity: Home network security

Browse the internet with confidence and security.

What is it?

Network security helps you browse the internet securely by making sure no one can access your internet connection without your consent. Keeping your network secure is an important element of cybersecurity.

What can I do?

Change your network name

The name of your home network is called a Service Standard Identifier (SSID). You can see a list of nearby SSIDs when you connect to WiFi.



Most default SSIDs are the name of the router manufacturer or service provider, followed by random letters or numbers. Changing the name of your network offers two advantages:

- It hides information about your router. Whether the name includes your service provider or the manufacturer, an attacker may be familiar with the vulnerabilities and how they can be exploited.
- It also signals that you have taken steps to secure your connection, which may deter would-be attackers.

Change your password

When you set up your WiFi router, take the time to change the default password. It may not be unique to you, leaving your devices and connection vulnerable.

Since every router is different, check your service provider's website for instructions or contact them directly.

Update your password annually, just like any other account.

Set up encryption

Most routers have an encryption feature that you may need to enable. Check the manufacturer or service provider website for information specific to your router.

Of the four types of router encryption available, the most secure are WiFi Protected Access 2 (WPA2) and WiFi Protected Access 3 (WPA3).

Set up a guest network

If the option is available, you may wish to create a guest network for people visiting your home or business.

This will keep your internet-connected devices separate from your guests' activity, adding an extra layer of protection to both parties in the event a device is compromised.

Get a Virtual Private Network

If you are using public WiFi or a shared network when travelling, considering using a virtual private network (VPN) to encrypt your activity and disguise your online identity. This makes it harder for attackers to track your activity and steal your information.

Remember that not all VPNs are created equally. Some free VPNs will capture and sell your information.

Like any product, do your research and always read the user acceptance policies before purchasing and installing a product.

Check for software patches

Like any other device, internet routers may need security patches to address vulnerabilities in the firmware—which is software built into a device that does not require an operating system like the one on your computer.

Unlike most software, firmware updates may not be pushed automatically to your device. Check your internet service provider's website and the router manufacturer website regularly to see if updates are available.

Not only will you have a more secure connection but the latest firmware may lead to faster services due to speed-enhancing adjustments.

Why should I use it?

Most people do not think about securing their internet router, but it can be a great backdoor for attackers looking to access your system.

CYBERSECURITY TIPS

Visit [Alberta.ca/cybersecurity-in-alberta](https://alberta.ca/cybersecurity-in-alberta) for more information.

©2022 Government of Alberta | August 30, 2022 | Service Alberta

