

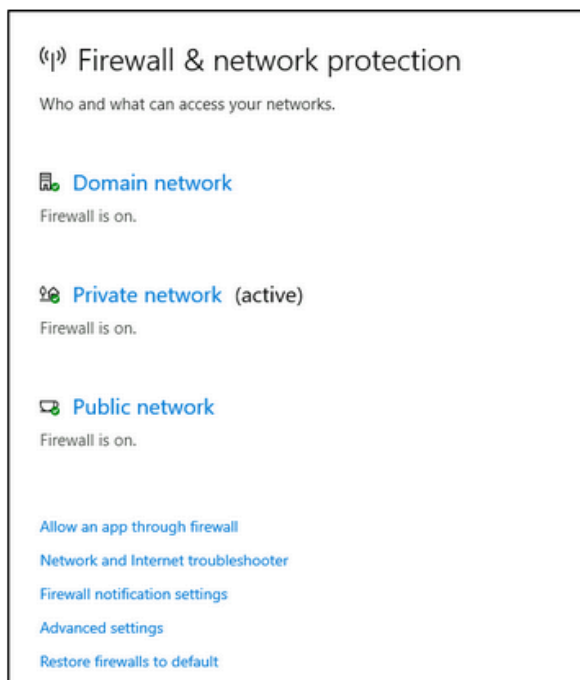
# 3 - Firewall & Network Protection

## Task 5 Firewall & network protection

What is a **firewall**?

Per Microsoft, "Traffic flows into and out of devices via what we call ports. A firewall is what controls what is - and more importantly isn't - allowed to pass through those ports. You can think of it like a security guard standing at the door, checking the ID of everything that tries to enter or exit".

The below image will reflect what you will see when you navigate to **Firewall & network protection**.



**Note:** Each network may have different status icons for you.

What is the difference between the 3 (**Domain**, **Private**, and **Public**)?

Per Microsoft, "Windows Firewall offers three firewall profiles: domain, private and public".

- **Domain** - The domain profile applies to networks where the host system can authenticate to a domain controller.
- **Private** - The private profile is a user-assigned profile and is used to designate private or home networks.
- **Public** - The default profile is the public profile, used to designate public networks such as Wi-Fi hotspots at coffee shops, airports, and other locations.

If you click on any firewall profile, another screen will appear with two options: **turn the firewall on/off** and **block all incoming connections**.



Active private networks

Network 3

Windows Defender Firewall

Helps protect your device while on a private network.

On

Incoming connections

Prevents incoming connections when on a private network.

Blocks all incoming connections, including those in the list of allowed apps.

**Warning:** Unless you are **100%** confident in what you are doing, it is recommended that you leave your Windows Defender Firewall enabled.

Allow an app through firewall

Allowed apps

Windows Defender Firewall > Allowed apps

Search Control Panel

Allow apps to communicate through Windows Defender Firewall

To add, change, or remove allowed apps and ports, click Change settings.

What are the risks of allowing an app to communicate?

Change settings

Allowed apps and features:

Name	Private	Public
<input checked="" type="checkbox"/> AllJoyn Router	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> BranchCache - Content Retrieval (Uses HTTP)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> BranchCache - Hosted Cache Client (Uses HTTPS)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> BranchCache - Hosted Cache Server (Uses HTTPS)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> BranchCache - Peer Discovery (Uses WSD)	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Captive Portal Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Cast to Device functionality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> COM+ Network Access	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> COM+ Remote Administration	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Core Networking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Cortana	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Delivery Optimization	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Details...

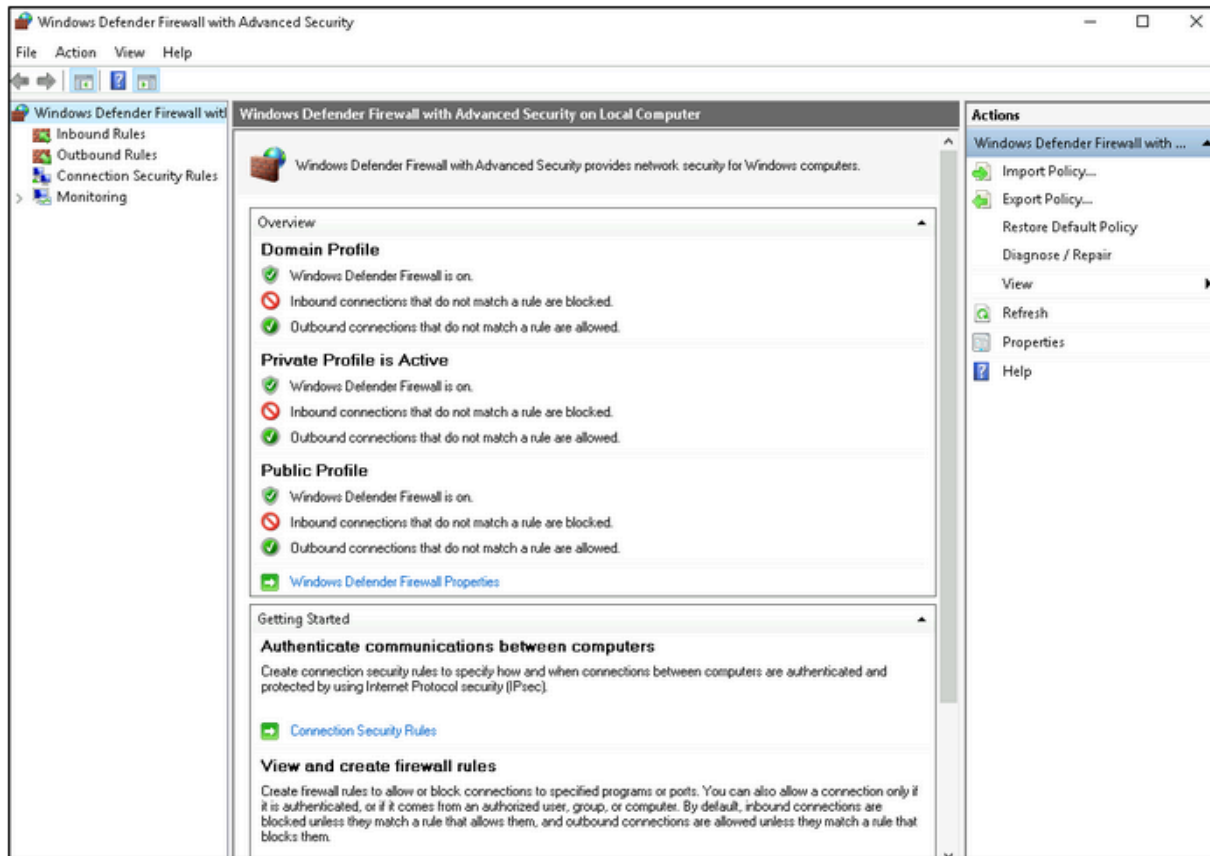
Remove

Allow another app...

You can view what the current settings for any firewall profile are. In the above image, several apps have access in the Private and/or Public firewall profile. Some of the apps will provide additional information if it's available via the **Details** button.

**Advanced Settings**

## Advanced Settings



Configuring the **Windows Defender Firewall** is for advanced Windows users. Refer to the following Microsoft documentation on best practices [here](#).

**Tip:** Command to open the Windows Defender Firewall is `WF.msc`.