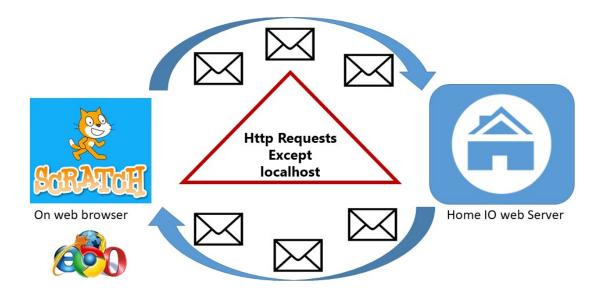
# Communication between Https Scratch 3 and Http Server Home IO



# 1. Introduction

Home IO includes an integrated web server. Installed on your computer at the same time as Home IO. The server communicates with the http protocol. However, in order to secure websites, the https protocol has arrived with the notion of encryption and certificates. The management of certificates on all machines with Home IO is not possible, so we cannot switch to the https protocol. Local requests are not a problem. However when you want to request from an IP address other than localhost (even if the IP address requested is your computer), http requests will be blocked as they are considered as not secure. So you have to manually indicate in the web browser that you trust the Home IO server on your computer.

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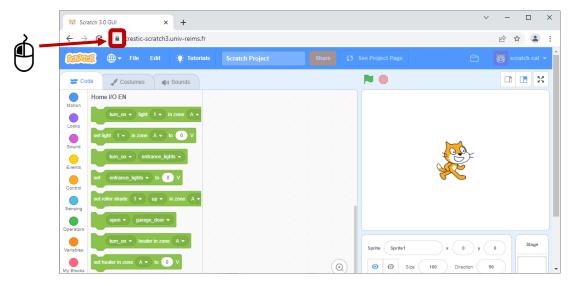
# 2. Procedures

Depending on the browser and the hardware used, the procedure is different. However, the goal is the same: to allow the https site to send http requests to the Home IO server.

# Important note: your hardware must be on the same network as your Home IO server.

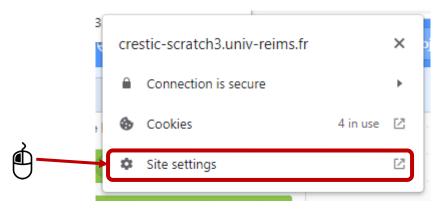
## > Chrome on computer

1. Go to the Scratch3 site for Home IO of URCA: <u>https://crestic-scratch3.univ-reims.fr/</u>



2. Click on the padlock

### 3. Click on Site settings



#### 4. Allow the Insecure content (just for this website)

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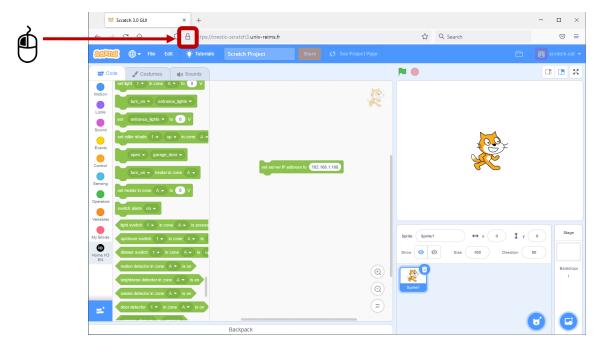
- 5. Close the tab, refresh the Scratch 3 page, and import the Home IO library
- 6. You are ready to use the Home IO server from your hardware

# > Firefox on computer

- 1. Go to the Scratch3 site for Home IO of URCA: <u>https://crestic-scratch3.univ-reims.fr/</u>
- 2. Import the Home IO library
- 3. Define the block « set serveur IP address to » with your IP address
- 4. Click on the block

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#### 5. Click on the padlock

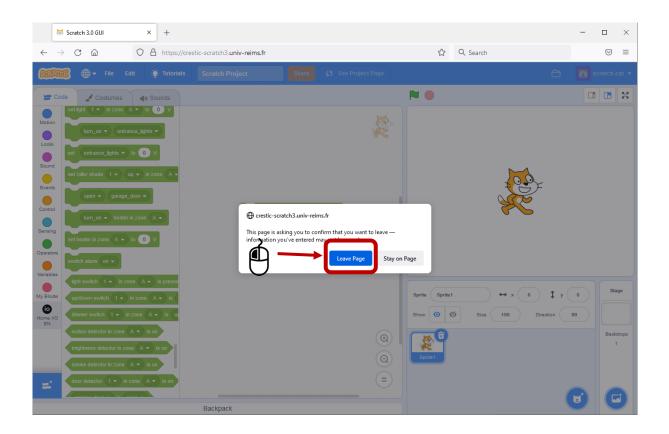


#### 6. Click on Connection secure

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Clear cookies and site	lata					
set entrance_lights v to 0 V						
Sound set roller shade 1 • up • in zone A •						
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Control turn_on • heater in zone A •	set server IP address to 192.168.1	.168		×C		
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Operators						
Switch alarm on -						
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smoke detector in zone A • is on			Sprite1			
door detector 1 v in zone (A v) is on						
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## 7. Click on Disable protection for now

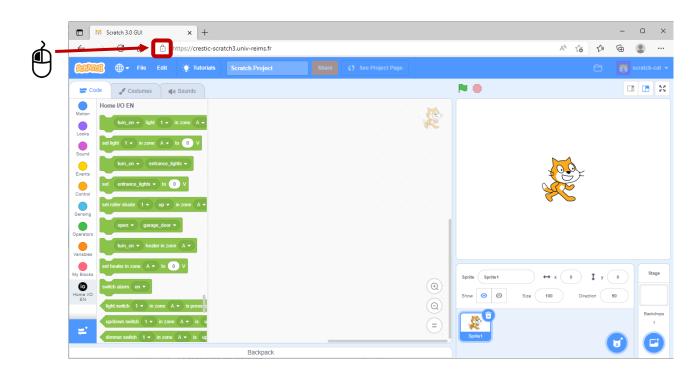
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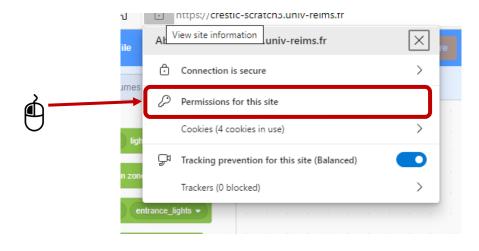
- 8. Import the Home IO library again
- 9. You are ready to use the Home IO server from your hardware

## Edge on computer

- 1. Go to the Scratch3 site for Home IO of URCA: <u>https://crestic-scratch3.univ-reims.fr/</u>
- 2. Click on the padlock



1. Click on Permissions for this site



### 2. Allow the Insecure content (just for this website)

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About Microsoft Edge							

- 3. Close the tab, refresh the Scratch 3 page, and import the Home IO library
- 4. You are ready to use the Home IO server from your hardware

# > Chrome on Androïd/Computer (does not work on IOS)

#### 1. Launch Chrome

2. Enter in the search bar : chrome://flags/

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	Available Unavailable				
	Temporarily unexpire M97 flags.         Temporarily unexpire flags that expired as of M97. These flags will be removed soon. – Mac,         Windows, Linux, Chrome 0S, Android, Fuchsia         #temporary-unexpire-flags-m97				
	Temporarily unexpire M98 flags.         Temporarily unexpire flags that expired as of M98. These flags will be removed soon. – Mac,         Windows, Linux, Chrome OS, Android, Fuchsia         #temporary-unexpire-flags-m98				•

### 3. Enter in the search bar : Insecure origins

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	Available       Unavailable         Insecure origins treated as secure       Insecure origins treated as secure         Treat given (insecure) origins as secure origins. Multiple origins can be supplied as a comma-separated list. Origins must have their protocol specified e.g. "http://example.com".       Insecure origins (Insecure) origins as secure origins. Multiple origins can be supplied as a comma-separated list. Origins must have their protocol specified e.g. "http://example.com".         For the definition of secure contexts, see https://w3c.github.io/webappsec-secure-contexts/       Disabled         - Mac, Windows, Linux, Chrome OS, Android, Fuchsia       Disabled         #unsafely-treat-insecure-origin-as-secure					

4. Enter <u>http://IPaddress:9797</u> with IPaddress: the IP address of the computer where is launching Home IO (so its server)

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	Insecure origins treated as secure Treat given (insecure) origins as secure origins. Multiple origins can be supplied as a comma-separated list. Origins must have their protocol specified e.g. "http://example.com". For the definition of secure contexts, see https://w3c.github.io/webappsec-secure-contexts/ - Mac. Windows. Linux. Chrome OS. Android. Fuchsia http://192.168.1.1:9797 #unsafely-treat-insecure-origin-as-secure																
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#### 5. Change Disabled with Enabled

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	<ul> <li>Insecure origins treated as secure</li> <li>Treat given (insecure) origins as secure origins. Multiple origins can be supplied as a comma-separated list. Origins must have their protocol specified e.g. "http://example.com".</li> <li>For the definition of secure contexts, see https://w3c.github.io/webappsec-secure-contexts/</li> <li>Mac, Windows, Linux, Chrome OS, Android, Fuchsia</li> <li>http://192.168.1.1:9797</li> </ul>						
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#### 6. Click on Relaunch

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Your changes will take	effect the next time you relaunch Chrome.		₫ <b>→</b>	R	Relaunch	-

7. Go to the Scratch3 site for Home IO of URCA: <u>https://crestic-scratch3.univ-reims.fr/</u> and import the Home IO library

## ➢ Safari on IOS

- 1. Go to the Scratch3 site for Home IO of URCA: <u>http://crestic-scratch3.univ-reims.fr/</u> and import the Home IO library
- ➢ Firefox on IOS
- 1. Go to the Scratch3 site for Home IO of URCA: <u>http://crestic-scratch3.univ-reims.fr/</u> and import the Home IO library

### > Other cases

- 1. Make a first test by going on the scratch3 website for Home IO of URCA: http://cresticscratch3.univ-reims.fr/ and import the Home IO library
- 2. If this does not work, look in the browser settings to allow, "mixed active content".