

# CRYPTSTRING

A web application for the visualisation of cryptographic transformations of strings.

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## User's Guide

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# 1 Introduction

## 1.1 General purpose

CRYPTSTRING is a web application (available [here](#)) allowing you to apply transformations to a string of characters. It offers you the possibility to combine those operations in a flexible sequence. Cryptstring helps you to visualise and to analyse the effects of cryptographic primitives on your given string.



## 1.2 System requirements

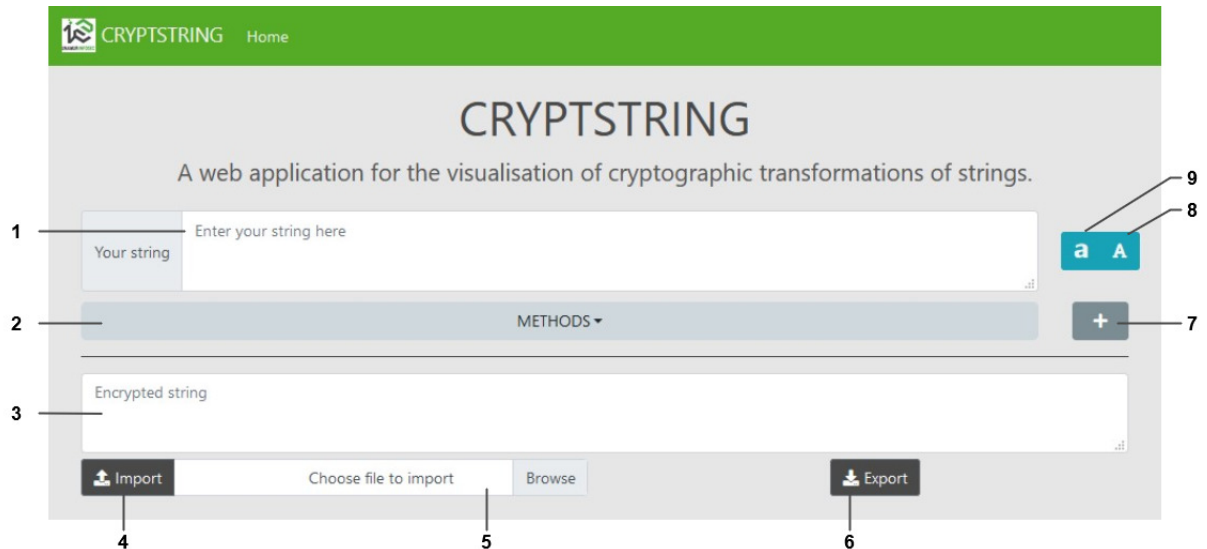
The website should run correctly on the latest version of any widespread web browser except Opera Mini and Internet Explorer. If you encounter any problem, refer to the [troubleshooting](#) section.

IE	Edge *	Firefox	Chrome	Safari	Opera	Safari on iOS *	Opera Mini *	Android Browser *	Opera Mobile *	Chrome for Android	Firefox for Android	UC Browser for Android	Samsung Internet	QQ Browser	Baidu Browser	KaiOS Browser
	12-13 14	2-51	4-54	3.1-10 10.1	10-41	3.2-10.2 10.3							4-5.4			
6-10	15-88	52-85	55-88	11-13.1	42-72	11-13.7		2.1-4.4.4	12-12.1				6.2-12.0			
11	89	86	89	14	73	14.5	all	89	62	89	86	12.12	13.0	10.4	7.12	2.5
		87-88	90-92	TP												

Green: compatible, purple: incompatible

## 2 Getting Started

### 2.1 Getting to Know the Interface

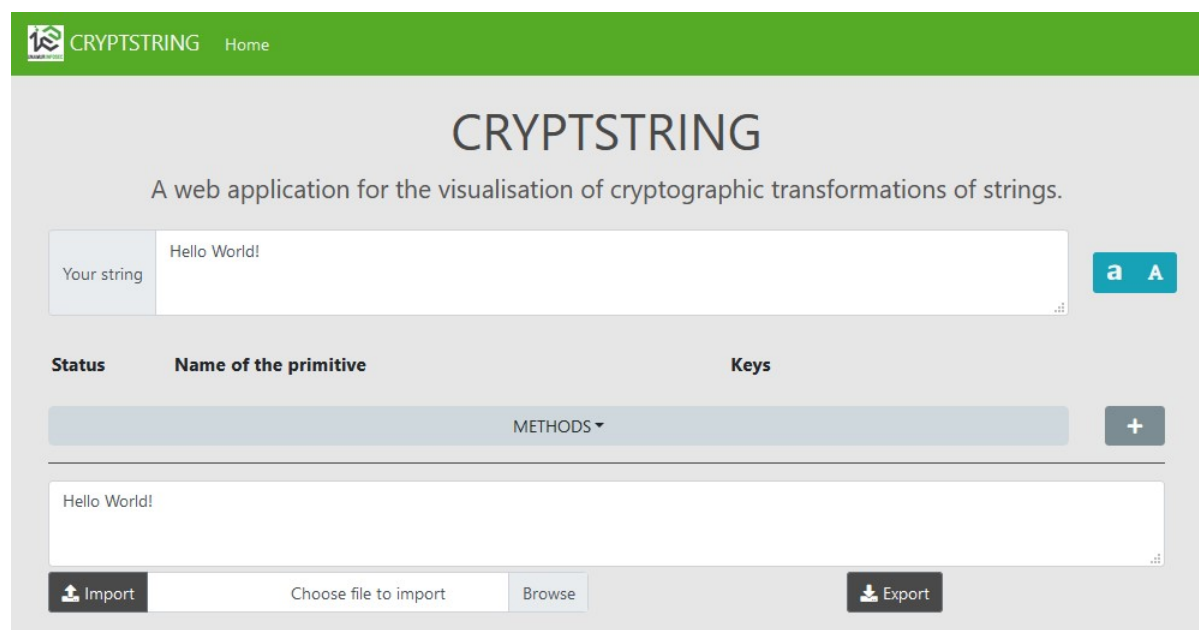


- |                                                           |                          |
|-----------------------------------------------------------|--------------------------|
| 1. Input field for your string                            | 5. File selection button |
| 2. Method selection menu // Drop-down <i>METHODS</i> menu | 6. Export button         |
| 3. Result display field                                   | 7. Add method button     |
| 4. Import button                                          | 8. Uppercase button      |
|                                                           | 9. Lowercase button      |

## 2.2 First steps

- Navigate to the site hosting [Cryptstring](https://cryptstring.io) with your favourite web browser.  
The current URL is <https://antoinemouchet.github.io/base>
- Insert your string in the corresponding field (see the [previous figure](#) on page [3](#) if you have any problem finding it.)

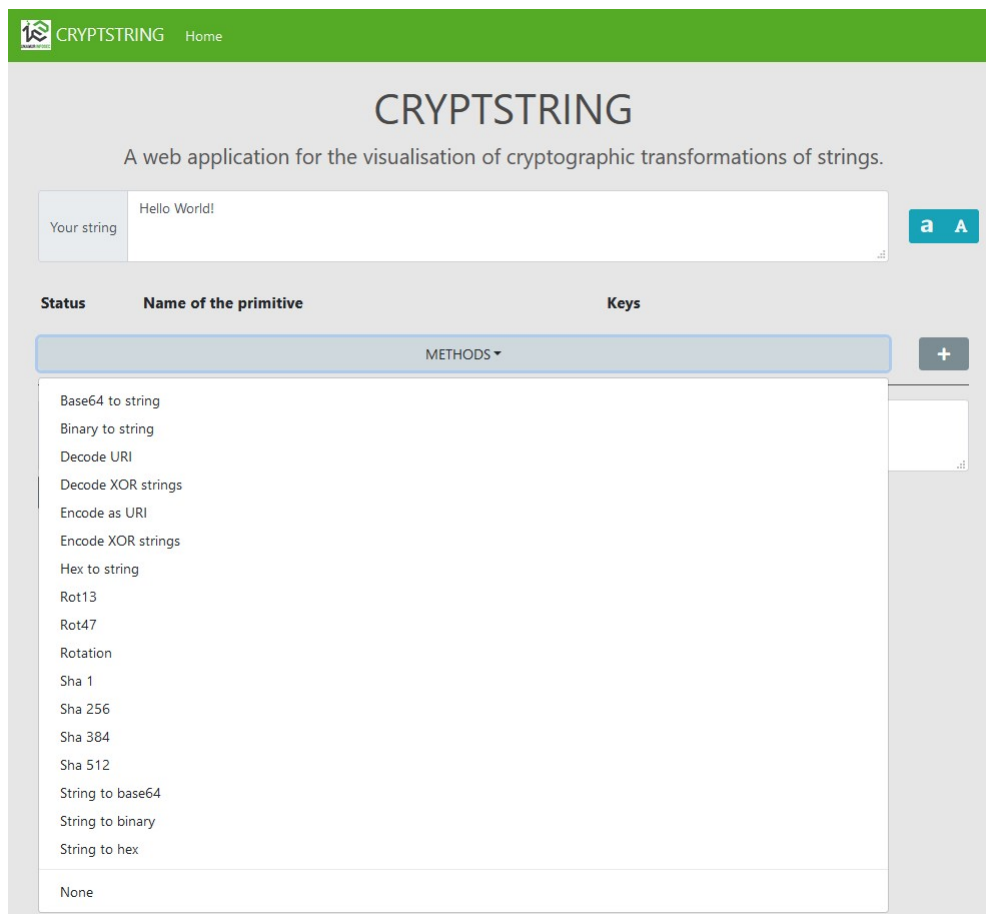
At this point, you should see something like this. If it is not the case, please refer to the [troubleshooting](#) section.



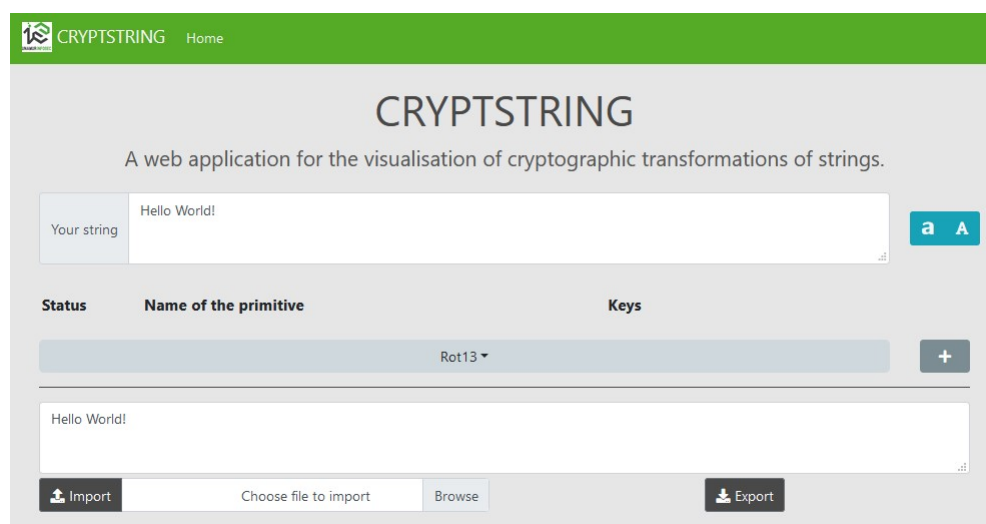
The screenshot shows the Cryptstring web application interface. At the top, there is a green header with the Cryptstring logo and the text "CRYPTSTRING Home". Below the header, the main title "CRYPTSTRING" is displayed, followed by the subtitle "A web application for the visualisation of cryptographic transformations of strings.".


The interface features a text input field labeled "Your string" containing the text "Hello World!". To the right of the input field are two buttons labeled "a" and "A". Below the input field, there is a table with the following headers: "Status", "Name of the primitive", and "Keys". The table is currently empty. Below the table, there is a button labeled "METHODS" with a dropdown arrow and a "+" button. Below the table, there is a text input field containing the text "Hello World!". At the bottom of the interface, there are two buttons: "Import" and "Export". The "Import" button is accompanied by a text input field labeled "Choose file to import" and a "Browse" button.

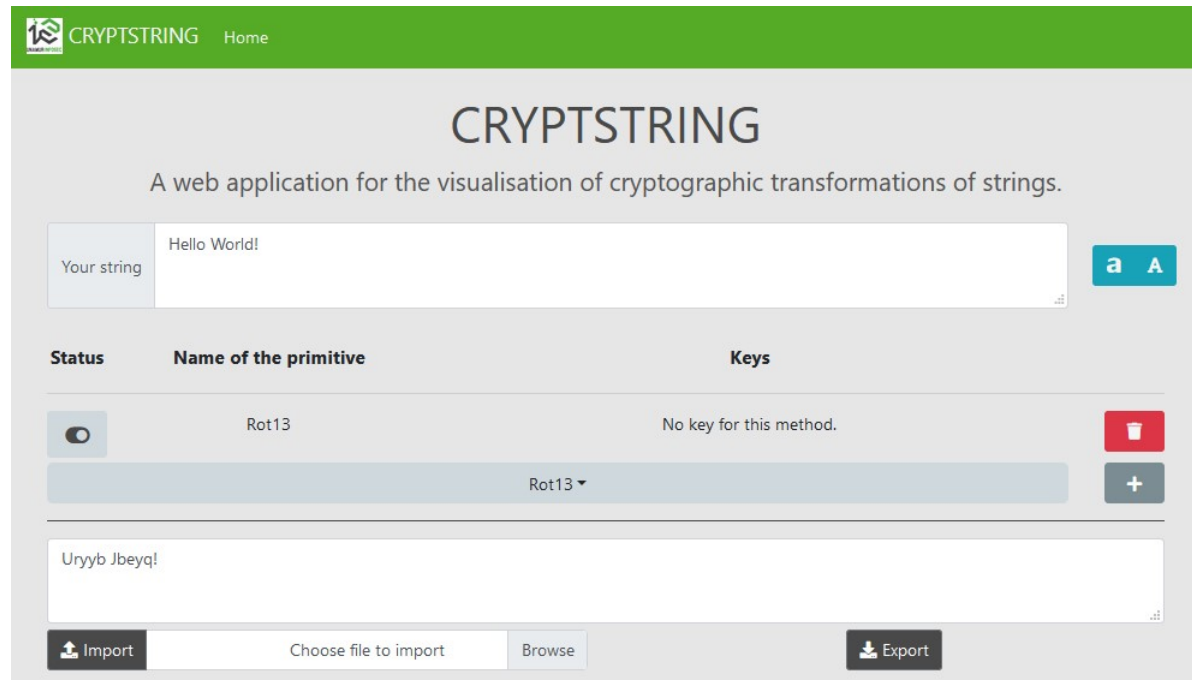
- Select a method in the drop-down *METHODS* menu by clicking on it.



- The name of the selected method will be displayed in place of *METHODS*.



- Press the *plus* button  next to the method selection menu. This action will add the method to the list of transformations applied to your string.
- You can now analyse the modified string in the output field.



## 3 Going Further

### 3.1 Method with a key

Some methods need a key. If you select one, insert your key in the text box in the *keys* column. The transformation will use your key to modify your string (See the figure below for an illustration).

The screenshot shows the CRYPTSTRING web application. At the top is a green header with the logo and 'CRYPTSTRING Home'. Below this is a large title 'CRYPTSTRING' and a subtitle 'A web application for the visualisation of cryptographic transformations of strings.'.

On the left, there's a section labeled 'Your string' with a text input containing 'Hello World!' and a blue button with 'a A'.

Below this is a table with three columns: 'Status', 'Name of the primitive', and 'Keys'.

Status	Name of the primitive	Keys
<input type="radio"/>	Rot13	No key for this method.
<input type="radio"/>	String to binary	No key for this method.
<input type="radio"/>	Encode XOR strings	Key 1 <input type="text" value="mouse"/>

Below the table, there's a button 'Encode XOR strings' with a dropdown arrow and a '+' button.

At the bottom, there's a large text area containing the result: '38 1d c a 7 4d 25 17 16 1c 1c 4e'.

At the very bottom, there's an 'Import' button, a text input 'Choose file to import', a 'Browse' button, and an 'Export' button.

### 3.2 Adding more methods

To add more methods to the list of transformations, repeat the steps starting from [method selection](#).

Cryptstring has no limit to the number of modifications you can apply, so feel free to let your creativity express itself.


If you have multiple methods needing a key, enter one for each method.

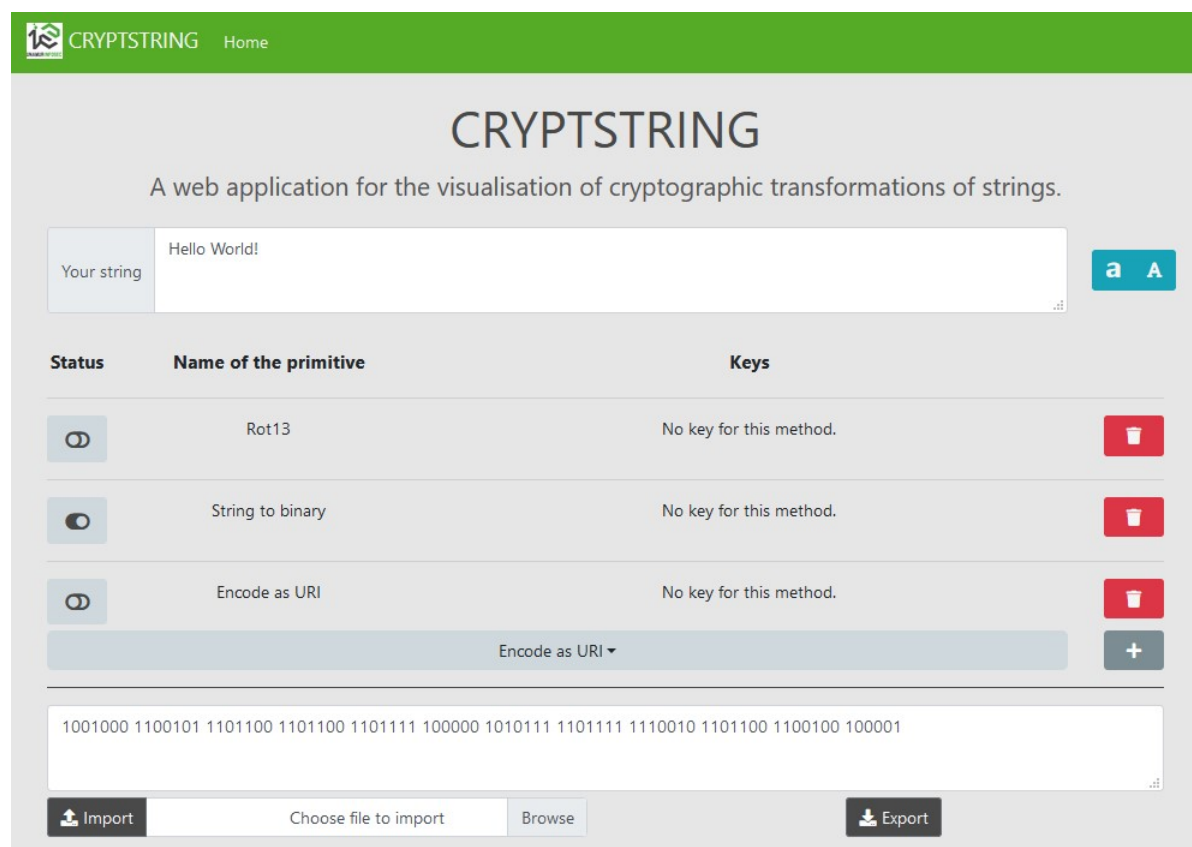


### 3.3 Removing an operation


To remove an operation from your list of active modifications, you have 2 possibilities:

#### 3.3.1 First Method: Temporarily deactivating the method


To temporarily deactivate the method, press the status button  next to it. Your string will not be affected anymore by this transformation, but it will stay in the displayed list, and you can turn the modification back in anytime you want.




#### 3.3.2 Second method: Definitively removing the method

To definitively remove a method, press the delete button  next to it. Your string will not be affected anymore by this transformation, and it will disappear from the displayed list.

### 3.3.3 Reactivate a temporarily deactivated method

To reactivate a method previously deactivated, press the status button  another time.


## 3.4 Change string to uppercase or lowercase

To convert your string to uppercase or lowercase, press the corresponding button  to transform your string of characters in the desired format.

If you have any trouble remembering the meaning of each button, please refer to the [“Getting to Know the Interface”](#) section.

## 3.5 Export the sequence of operations

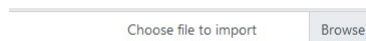
Cryptstring offers the possibility to download the current sequence of operations. It is especially useful if you need to save a particular sequence or if you want to send it to someone else.

To export the sequence, press the export button  and save the file on your computer.

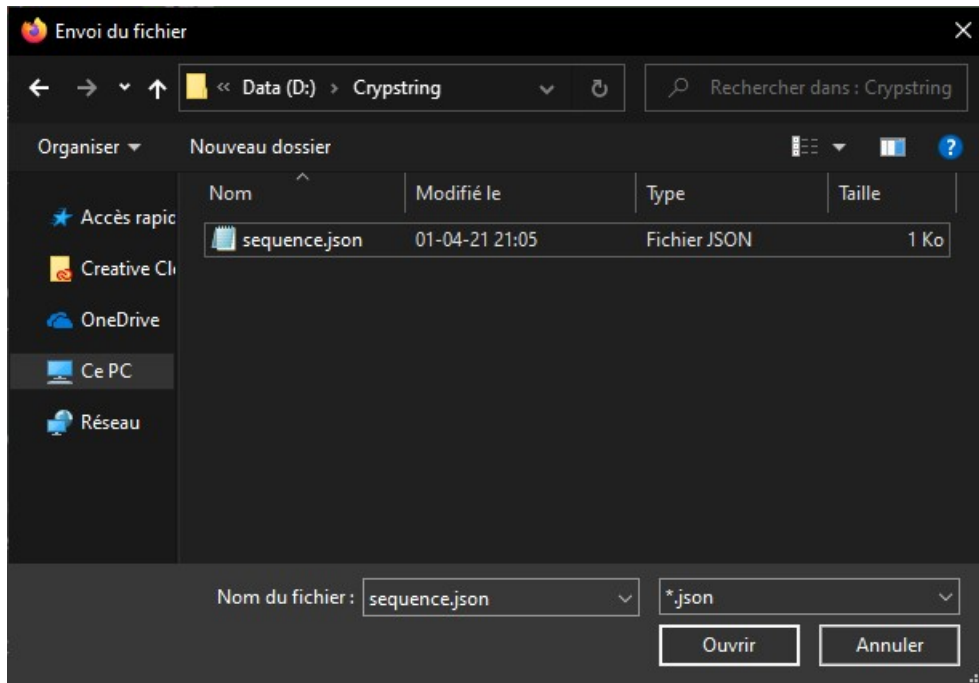
## 3.6 Import a sequence of operations


Since you can export a sequence, you need to be able to import it back to Cryptstring.

- Press the file selection button



- Select a valid file exported from Cryptstring in your file explorer and press open.




- The name of the selected file replaces the placeholder on the page. It allows you to verify that you chose the correct file.
- Press import  Import

## 4 Troubleshooting

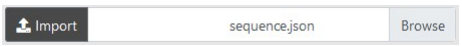
### 4.1 The page does not load.

1. Check your internet connection.
2. Check that you entered the correct URL.
3. Try [clearing your cache](#) and your cookies and see if it solves the problem.
4. Disable any plugins, extensions or custom themes installed in the browser and see if that solves the problem.

### 4.2 The result does not change despite adding some methods.

1. Check that you inputted something.
2. Check that all the methods needing a key have one.
3. Check that you have at least one method activated. Its status button should look like this .
4. You might be using unsupported text characters.

### 4.3 The import button does not seem to work.

1. Check that you selected a file. Its name should be in the box next to the import button.  Here the user selected the *sequence.json* file.
2. Make sure the file you try to import is a sequence of operations exported from Cryptstring.

## 5 Frequently Asked Questions

### 5.1 Can I contribute to the evolution of Cryptstring?

The project is distributed under the [Apache License, Version 2.0](#) and is currently unavailable to the public.

### 5.2 If I close the tab with Cryptstring, will I recover my sequence of operations when I open it again?

Cryptstring does not store any information neither collect any data. Therefore, you will lose all ongoing work when closing the page. If you want to save a set of methods, use the [export](#) feature.

### 5.3 What can I do if I encounter a problem not described in the troubleshooting section?

You can contact the support at this address: [amouchet.projects@gmail.com](mailto:amouchet.projects@gmail.com).

## 6 Contact

For any question or suggestion, feel free to send us an email to: [amouchet.projects@gmail.com](mailto:amouchet.projects@gmail.com).

## 7 End Notice

This project is sponsored by Jean-Noel Colin, a member of the [InfoSec](#) research team.

