



FREEMINDTRONIC SL

SECURE ENCRYPTION WITH DATASHIELDER HSM PGP EXTENSION



You need:

- An NFC device bank card or Tag format
- The Freemindtronic Android Application
- The EviDNS software
- The DataShielder HSM PGP extension for web browsers



ESSENTIAL TOOLS BEFORE STARTING

The instructions for downloading can be found in the following slides

1

Download and install the **Freemindtronic Application** on your Android NFC phone.



2

Download and install the **DataShielder HSM PGP extension** on your computer, as well as the **DataShielder Engine software**. (slides 6 to 8)



3

Finally, download and install the **EviDNS software** on your computer to enable the detection of your phone on the local network.

<https://freemindtronic.com/support/download/#evidns-download>

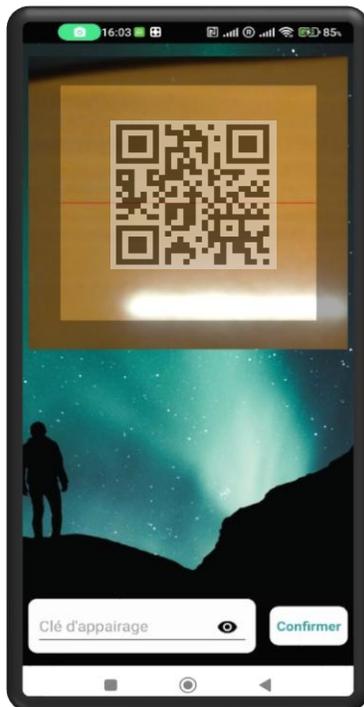
 EviDNS Microsoft	 EviDNS Apple	 EviDNS Linux
Network discovery	Network discovery	Network discovery
Software: EviDNS	Software: EviDNS	Software: EviDNS
Developer: Freemindtronic	Developer: Freemindtronic	Developer: Freemindtronic
Technology: zeroconf	Technology: zeroconf	Technology: zeroconf
Version: 1.3.7	Version: 1.3.7	Version: 1.3.4
Date : 2024/05/29	Date : 2024/05/29	Date : 2023/07/03
Security: Code Signing	Security: Application signed by Apple	Requires operating system: Linux
Certificates by Commodo	Requires operating system: macOS 11 or later	MD5 & SHA256 signature keys is present More
Requires operating system: Windows 10 64 bits,		

ESSENTIAL STEPS BEFORE STARTING

The instructions for pairing can be found in the following slides.

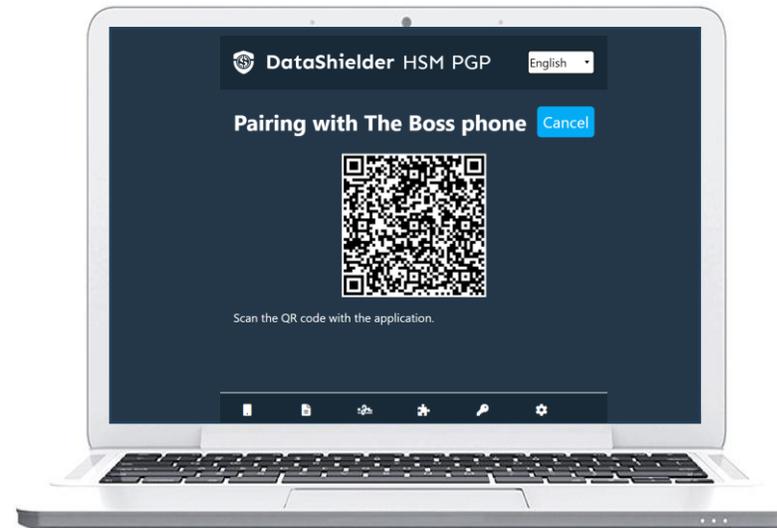
1

Pair your NFC device with your Android phone. (slide 12)



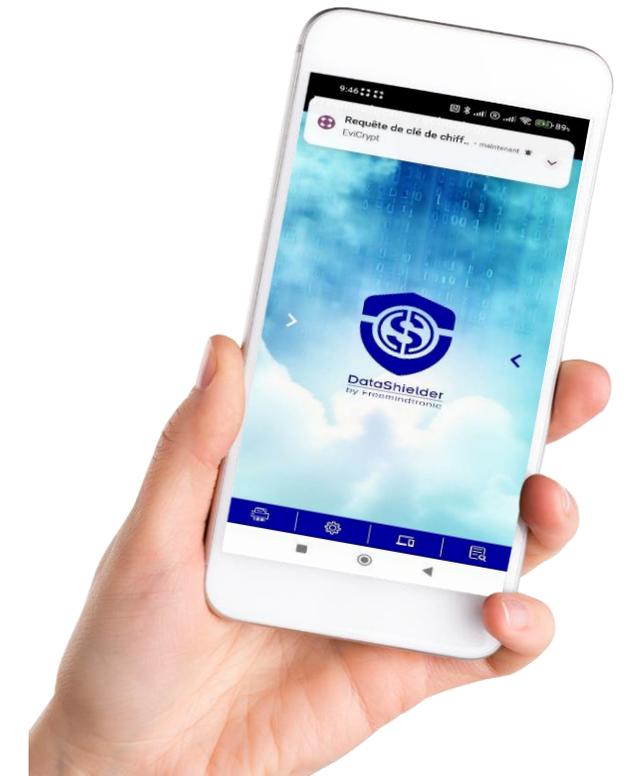
2

Pair your phone with the DataShielder HSM PGP extension. (slides 14 & 15)



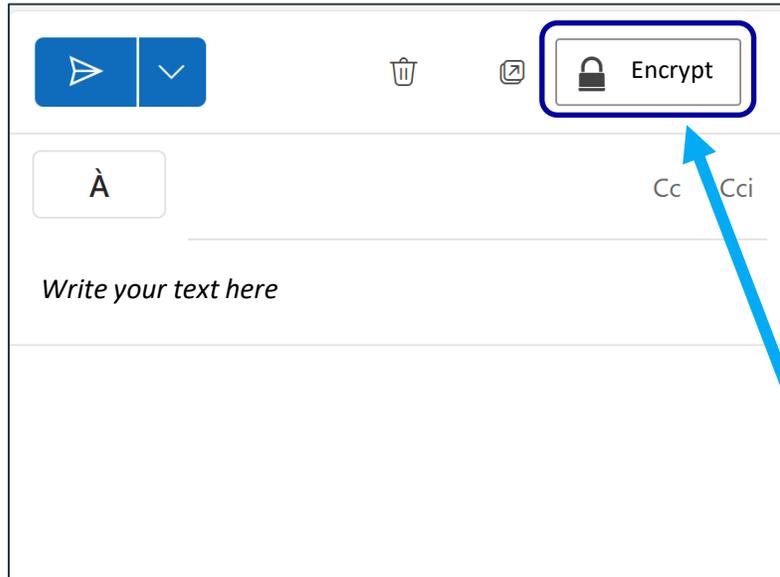
3

Requests will be sent to your phone to enable the encryption of data using the keys stored in your NFC device.

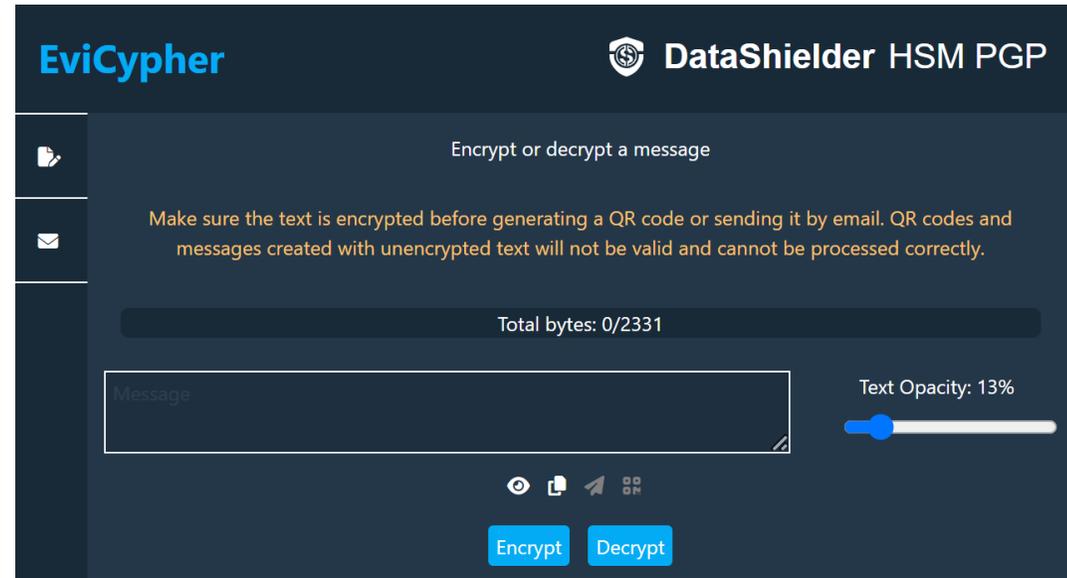


PRINCIPLE OF OPERATION

Encryption from a compatible webmail (Gmail, Outlook, Yahoo, Yandex, iCloud, Roundcube ...)



Encryption using the DataShieder HSM PGP extension



- **A simple click on the "Encrypt" button.**
- *A request is sent to the phone via the Wi-Fi network.*
- *Select the key to be used for encryption.*
- *The data is encrypted automatically.*

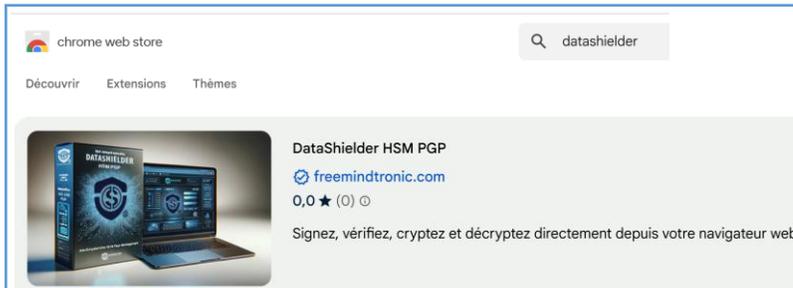
CONTENTS

- Download and install the DataShielder HSM PGP extension
- Download DataShielder Engine to activate the license
- Download EviDNS
- Encryption principles
- Pair your NFC device with your phone
- Pair your phone with the extension
- Activate the NFC function
- Text encryption: 2 possibilities
- Encrypt and decrypt a text using the extension
- Encrypt and decrypt a file using the extension
- Encrypt and decrypt a text from a compatible webmail
- Backup a SEED phrase (BIP39)
- Paired phones management
- Settings

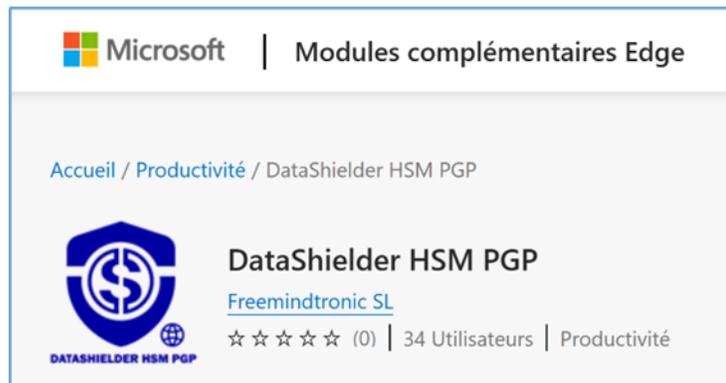
INSTALL THE EXTENSION

Download & install the DataShielder extension

CHROME : [chrome web store](#)



MICROSOFT EDGE : [Edge Addons](#)



FIREFOX : in progress

OPERA : in progress

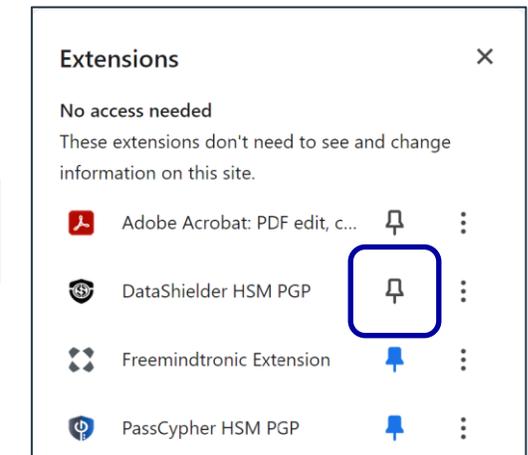
1

At the top right of your computer screen, click this icon to access extensions



2

Click the icon to pin DataShielder to your toolbar

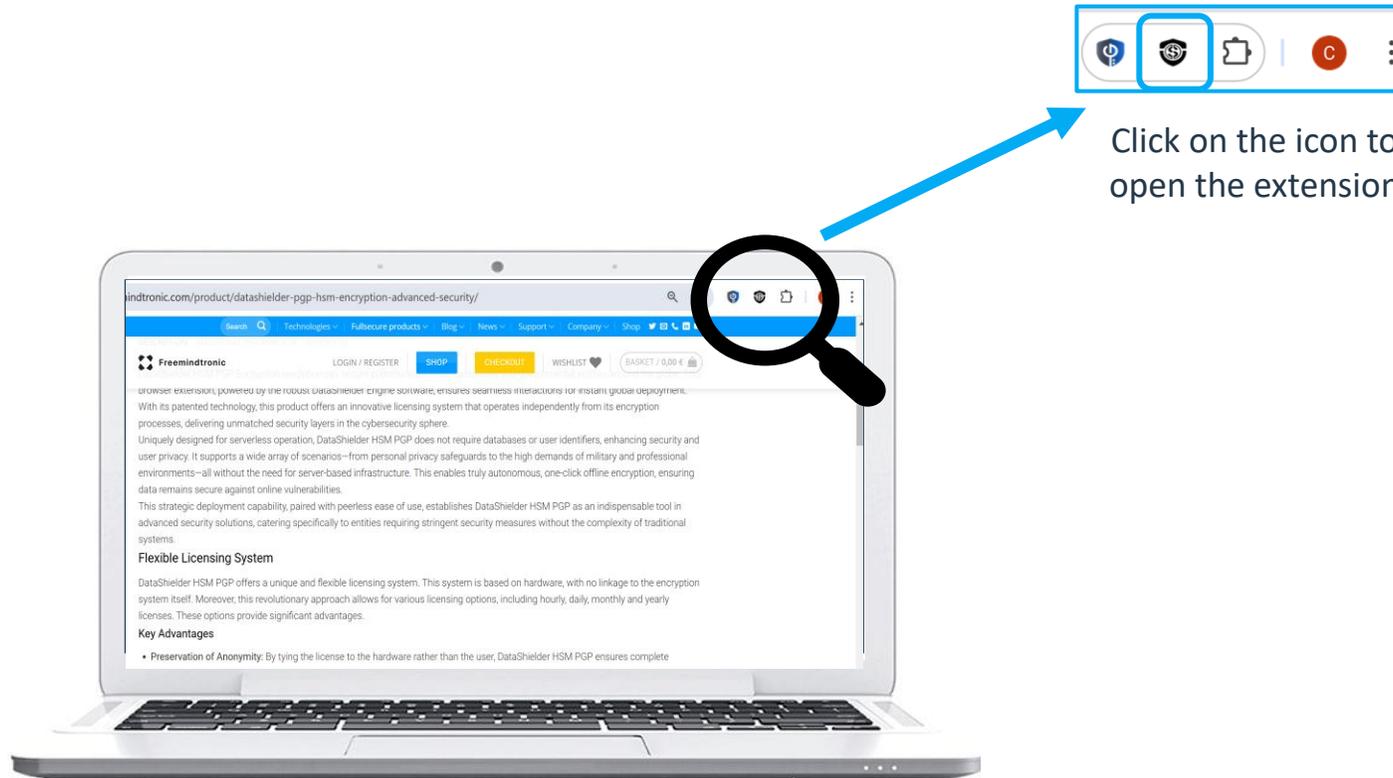


3

The DataShielder icon appears at the top right of your computer screen. Click to open the extension.

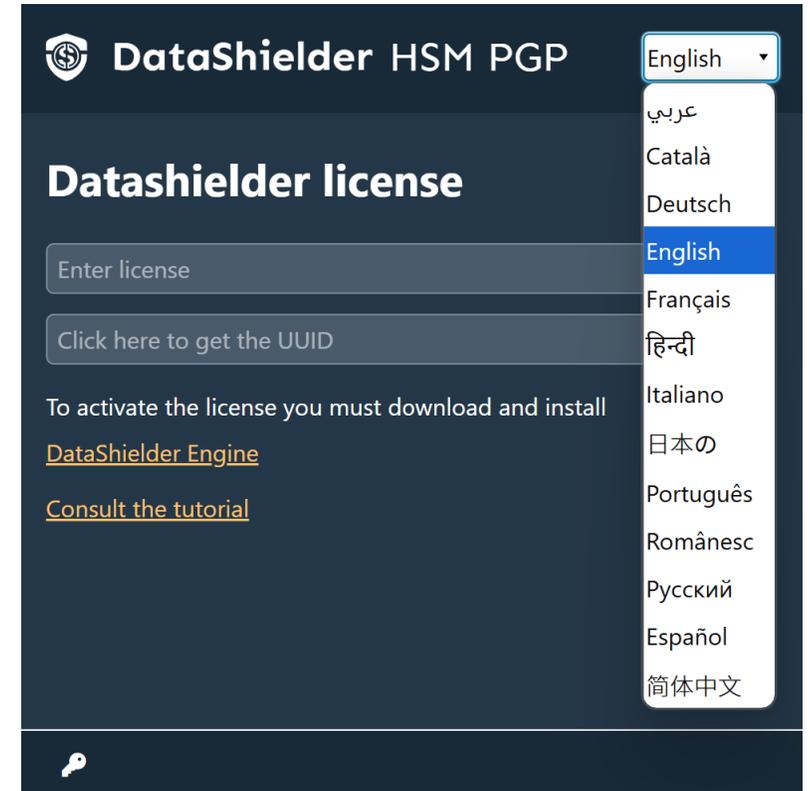


THE EXTENSION IS INSTALLED



To complete the process, click [here](#)* to **download DataShielder Engine** and install the software (Windows or MacOS). Then **go to the next slide**.

(*) <https://freemindtronic.com/support/download/#datashielder-engine-microsoft>

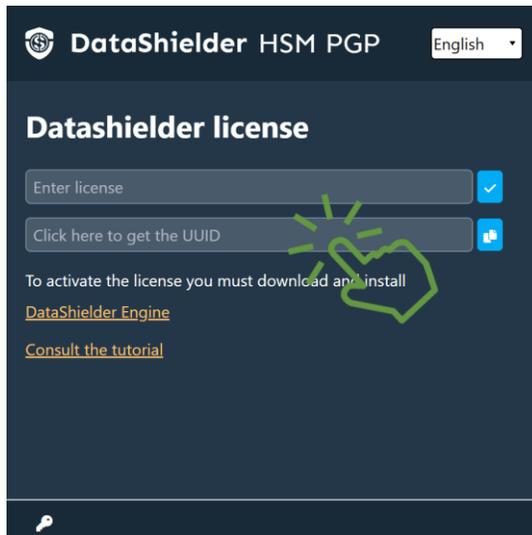


The **DataShielder HSM PGP extension** is translated in **13 languages** : Arabic, German, English, Catalan, Chinese, Spanish, French, Hindi, Italian, Japanese, Portuguese, Romanian and Russian. You can choose in which language to display the extension.

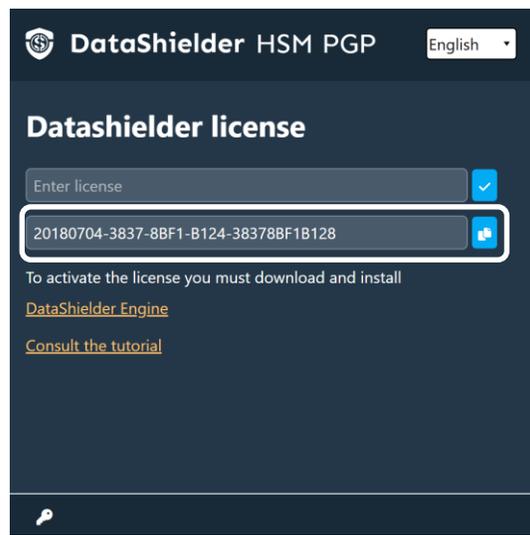
ACTIVATE THE LICENSE



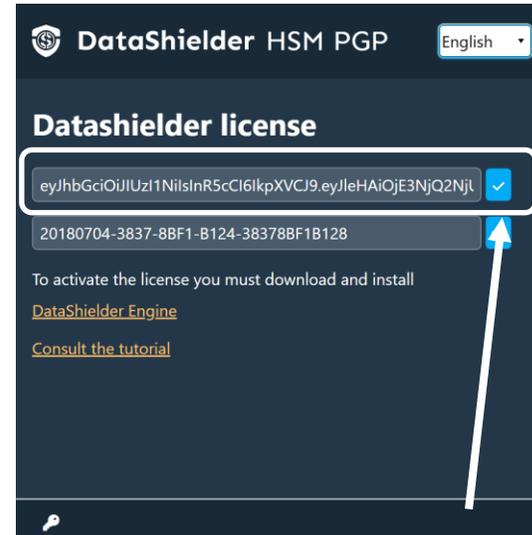
Tutoriel : Activate the DataShielder License
https://www.youtube.com/watch?v=3I_ZYnAFwik



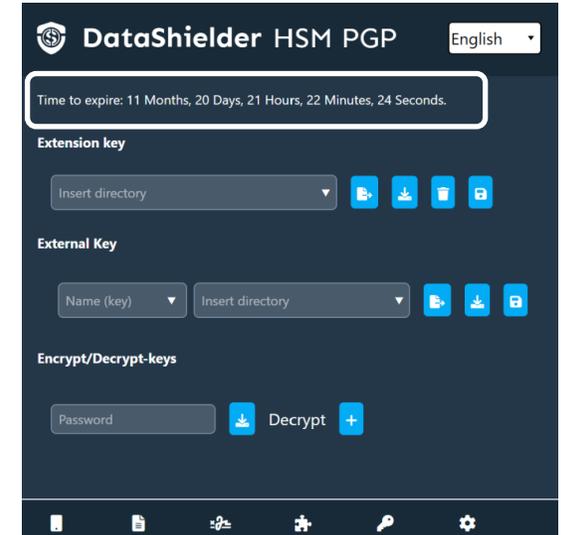
When DataShielder is installed, click to get the **UUID of your computer's motherboard**



Copy this number and send it by email to the address indicated on the Freemindtronic website.



Then, copy/paste the license number received in return and click on the indicated icon to activate the license.



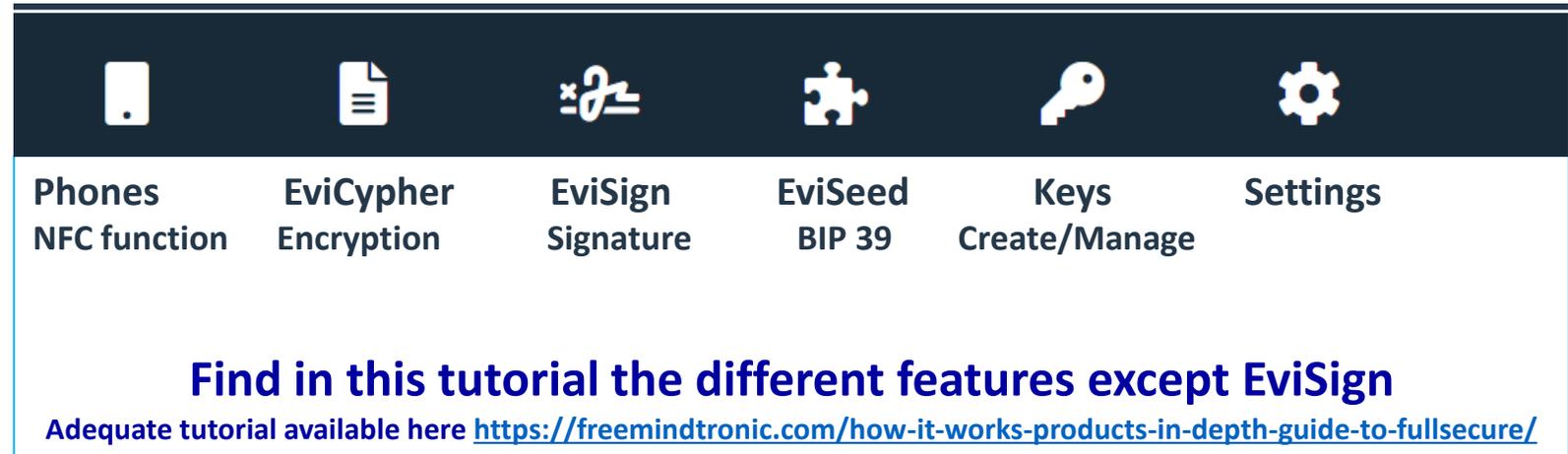
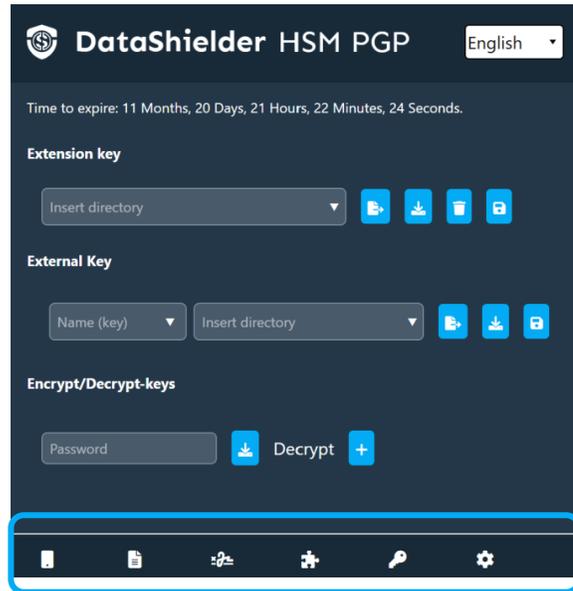
The license is activated. The validity is indicated in real time at the top of the page.*

(*) Several subscriptions are available: hourly, daily, weekly, monthly or annually.

HOME PAGE IN DETAIL

When you open the DataShielder extension, the window below appears.

By default, the extension opens on the "keys" window.



ENCRYPTION VIA AN NFC DEVICE

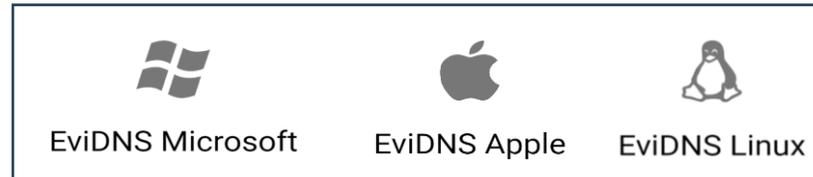
Using an Android NFC phone and the Freemindtronic Application

1. **ACTIVATE** the NFC feature in the extension Parameters



2. **Download and install the EviDNS software available for Windows, Apple and Linux**

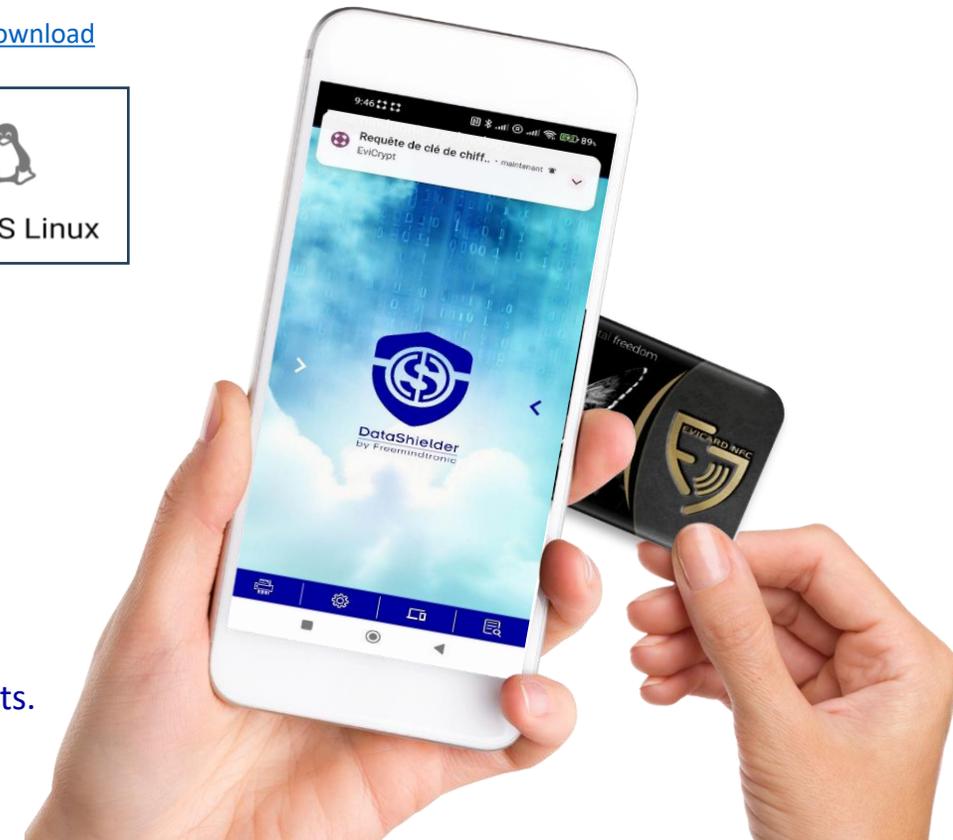
<https://freemindtronic.com/support/download/#evidns-download>



Requests will be sent to your phone to enable data encryption.

Check that your computer and phone are on the same Wi-Fi network.

Do not forget to open the Freemindtronic Application on your phone to receive encryption requests.



YOUR DATASHIELDER CARD



Each card (or Tag) comes with a unique pairing key (QR code).

This QR code is found on the white PVC card. You need to pair your card with your phone in order to use it.

Store it in a safe place, as you will need the pairing key if you change phones. If you lose the QR code, we will not be able to provide it to you.



ABOUT THE NFC CONNECTION



Find the location of your smartphone's NFC antenna

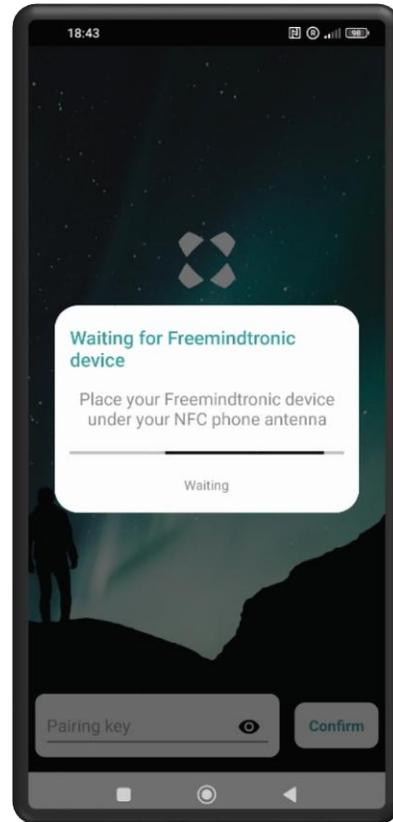
The NFC antennas of smartphones are generally located on the upper back part, below the cameras. However, they can be found in other places on some phones.

If you have difficulty managing the NFC connection with your phone, try placing the card in different positions or refer to your phone's technical specifications to locate the NFC antenna.

FIRST STEP: PAIR THE CARD WITH YOUR PHONE



Open the Freemindtronic App.
Place the card under your
phone's NFC antenna. Scan the
QR code of your pairing key.



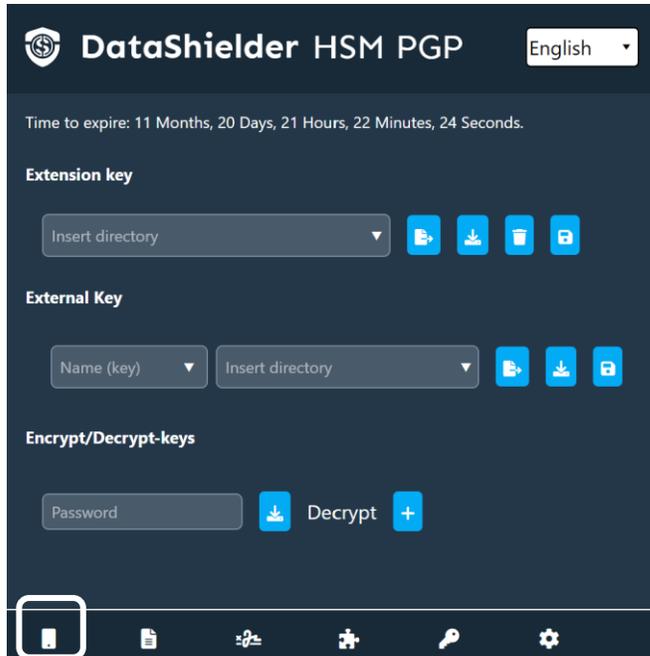
Place again the card under
your phone



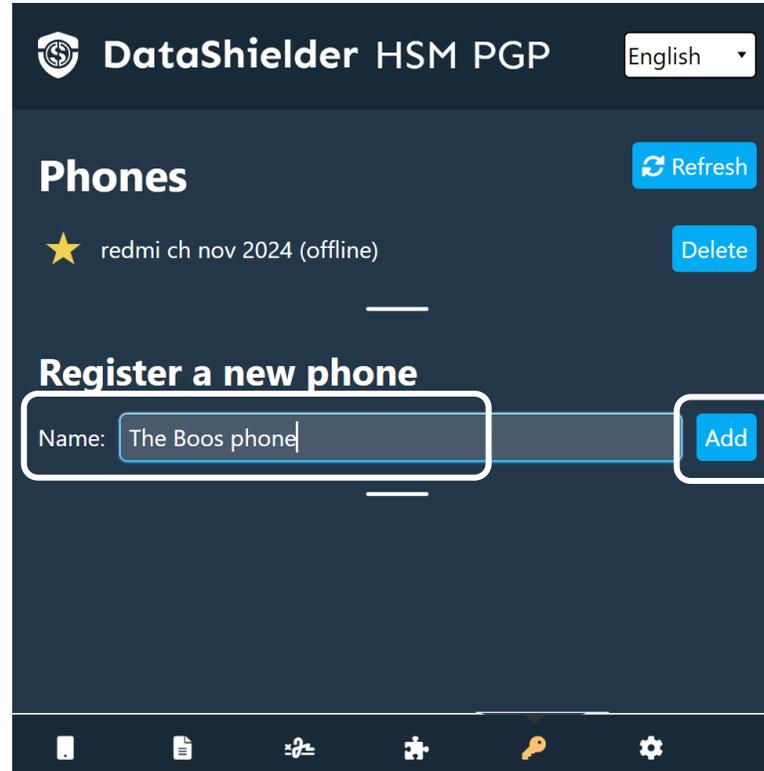
Click to accept the "Terms and
Conditions" and "Privacy Policy"
and click on **"Confirm"**.



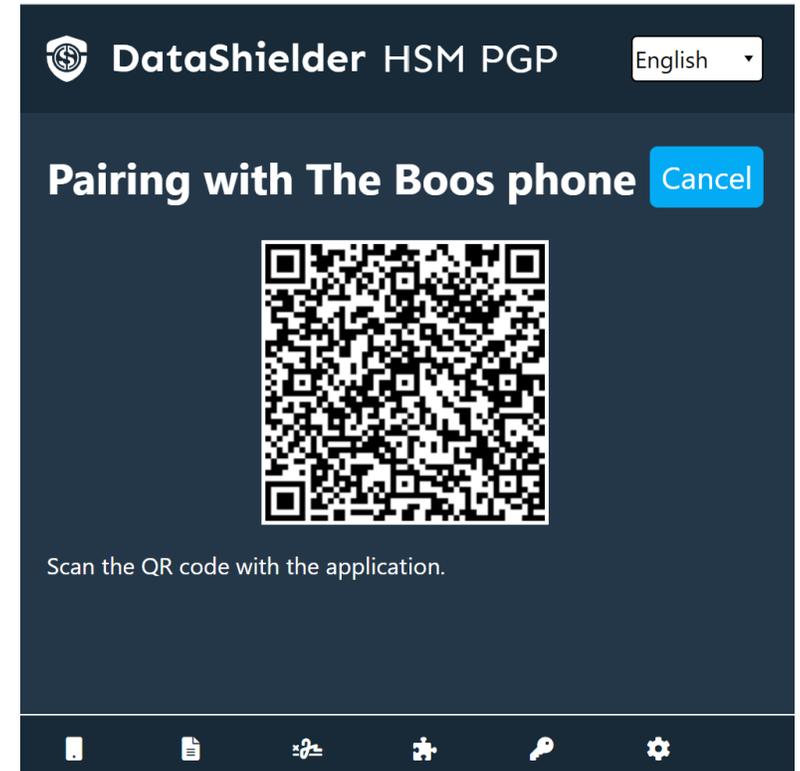
PAIR YOUR PHONE WITH THE EXTENSION 1/2



Open the DataShielder extension and click on the **"Phones"** icon.



A new window appears. **Write the name** you want to give to this phone, then click on **"Add"**.



A QR code appears. You need to **scan it** with the application on **your phone**.

PAIR YOUR PHONE WITH THE EXTENSION 2/2



Open the app and click on the icon indicated above.



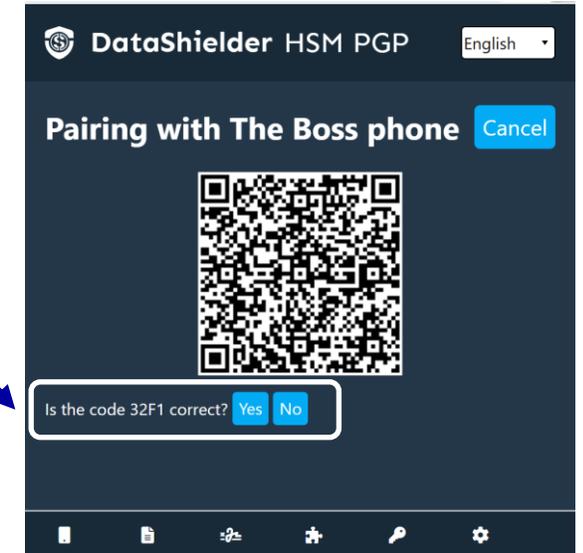
Click on the « + » icon and ...



... scan the QR code displayed on the computer.



A **security code** appears on your phone.

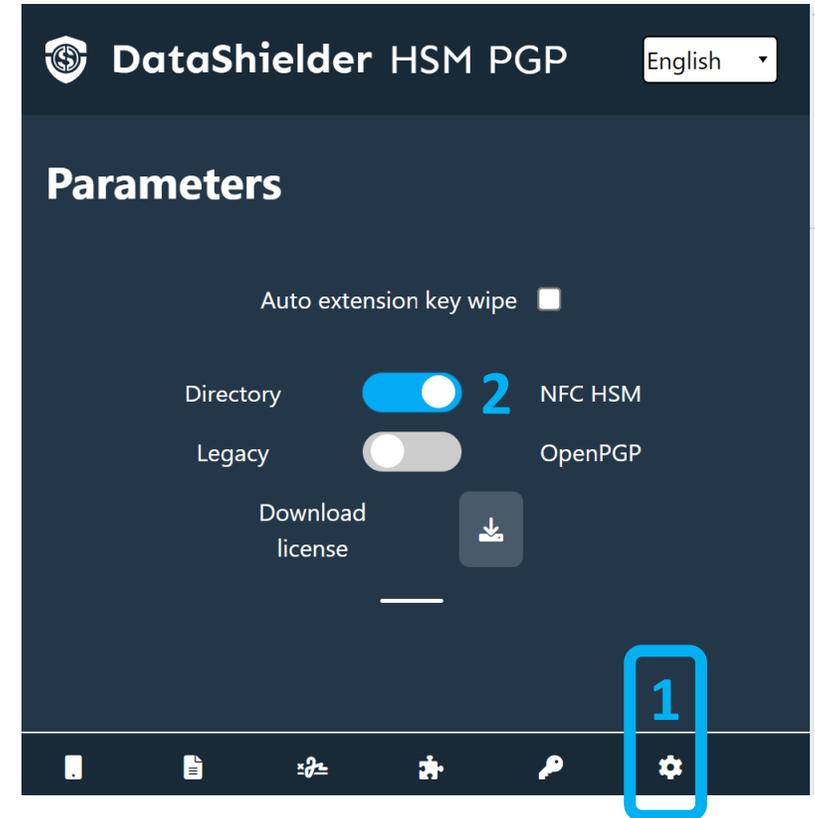


Verify that the security code displayed is the same as the one on your computer. If they match, click "**YES.**"

Your phone is now paired with the DATASHIELDER extension. The chosen name appears in the list of phones.

ACTIVATE THE “NFC HSM” FUNCTION

- Open the DataShielder HSM PGP extension.
- Click on the "Settings" icon [1].
- Slide the toggle to "NFC HSM" [2].
- Encryption and decryption operations will be carried out using the keys stored in your DataShielder NFC card.
- A request will be sent to your paired phone.

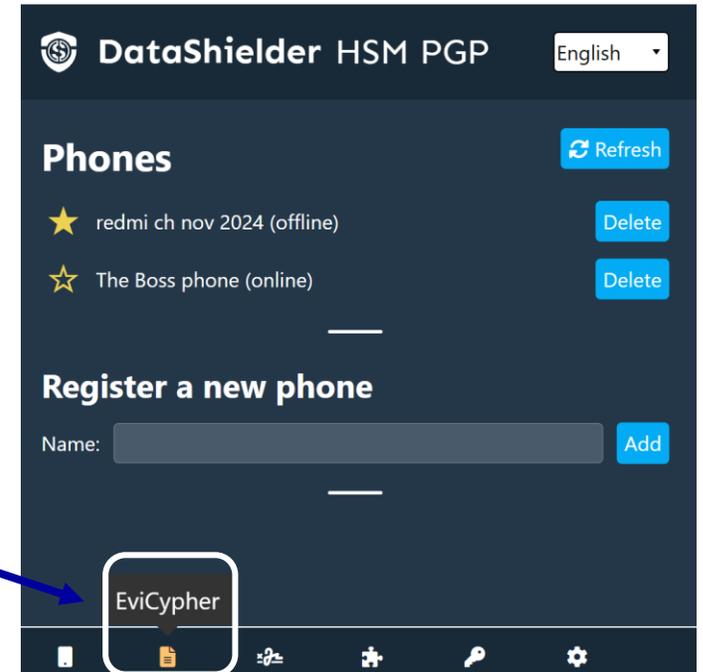


(*) A specific tutorial is available to guide you on how to create and save encryption keys in the NFC card.

PRINCIPLES OF ENCRYPTION

- Encryption with an AES encryption key created and stored in the DataShielder NFC card.
- Both the sender and recipient must possess the same encryption key.
- Encryption and decryption of texts or files* from your computer.
- Steps:
 - Write your text and click on the "**Encrypt**" button OR insert the file(s) to encrypt in the indicated area.
 - A request is sent to your **favorite phone**.
 - Click on the request and place your NFC card under the antenna of your phone.
 - **Choose the encryption key** you want to use and place the card under the phone.
 - The text is encrypted, ready to be sent to your recipient.
 - The file is encrypted and available in the **.Evi format**.

To encrypt with the DataShielder extension,
click on the« **EviCypher** » icon.



(*) All file types are compatible: jpeg, pdf, Word, Excel, PowerPoint, videos, etc.

Encryption request in detail

When you click on "Encrypt" or "Decrypt" from your computer, a request is sent to your phone (via the Wi-Fi network).

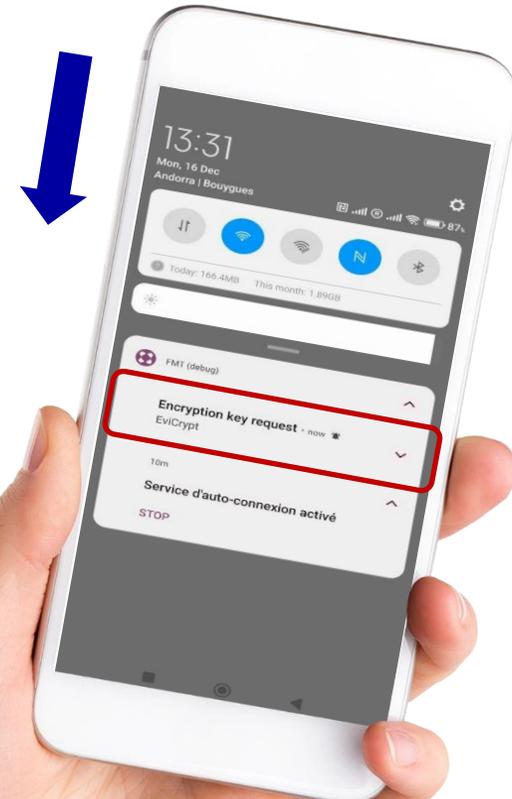
Click on the request and follow the instructions displayed on the phone.



What to do if the request is no longer displayed?

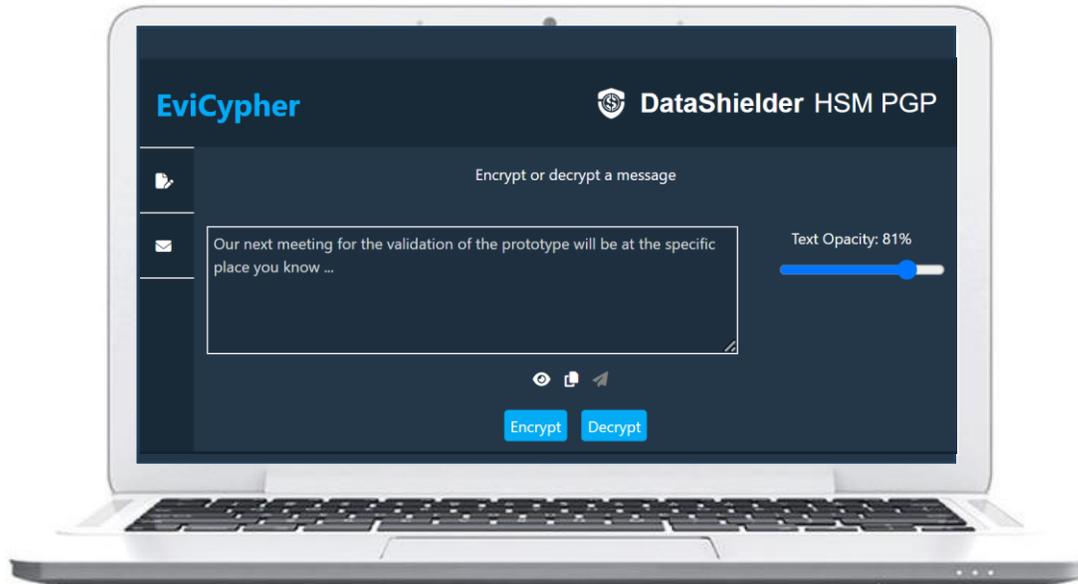
The request remains displayed for 6 seconds.

If you did not click and it disappears, swipe down on the screen, and the request will become visible again.



TEXT ENCRYPTION: TWO OPTIONS

UNIVERSAL USAGE



The extension is compatible with all messaging services, chats, etc. In this case, encryption and decryption are done **directly from the extension**.

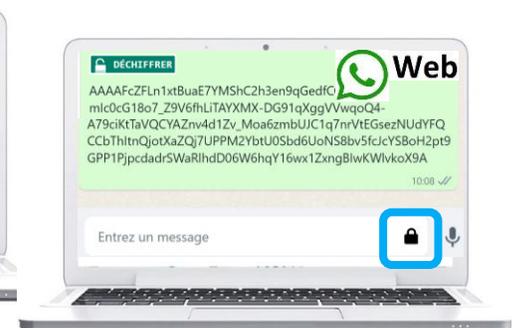
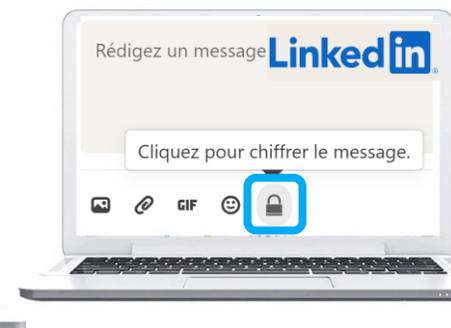
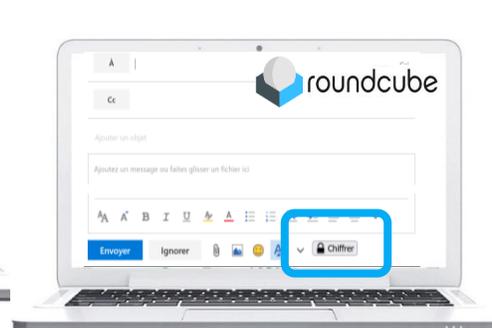
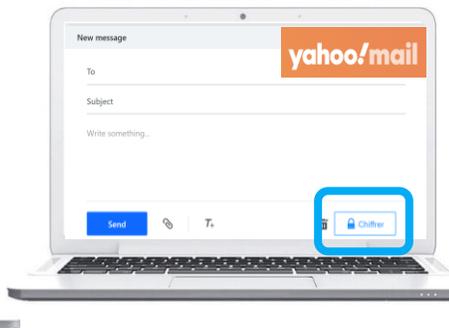
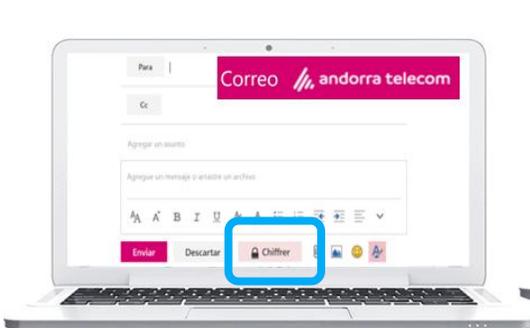
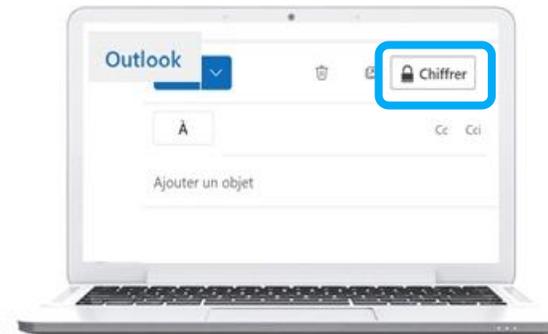
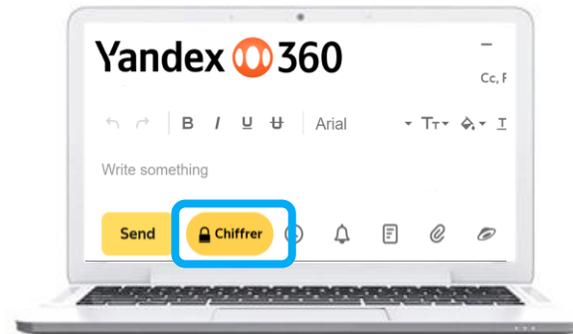
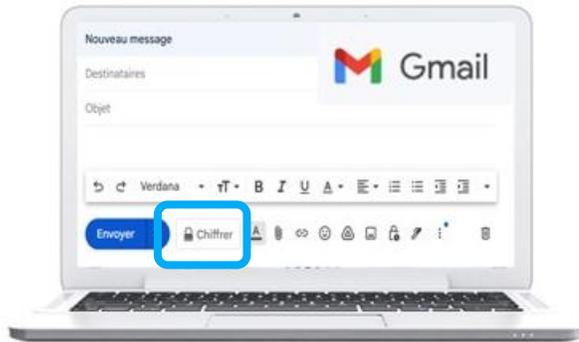
WEBMAILS USAGE



The extension is compatible with certain email clients that use a web browser to access your emails (webmail). In this case, encryption and decryption are done automatically **directly within the webmail**.

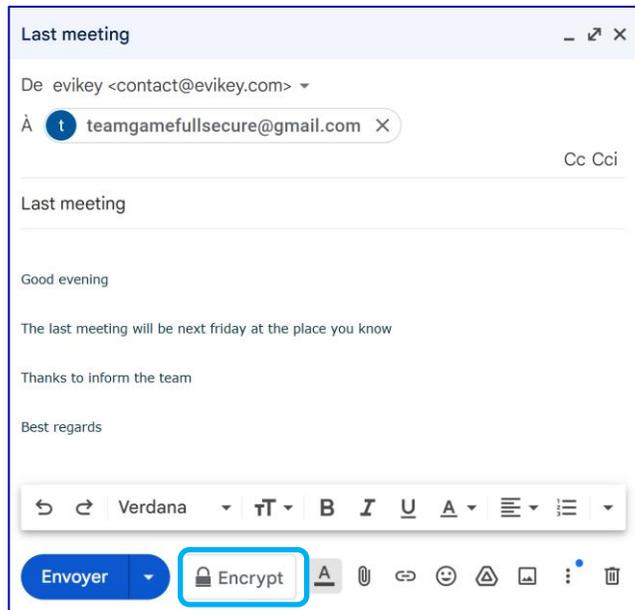
SOLUTION #1: WEBMAILS USAGE

- If you are using a webmail compatible with our extension, **you do not need to change your habits.**
- Write your email and click the "Encrypt" button and use your NFC card before sending it to your recipient.
- The recipient, if he uses a compatible webmail, simply needs to click the "**Decrypt**" button and use his NFC card to read your message.



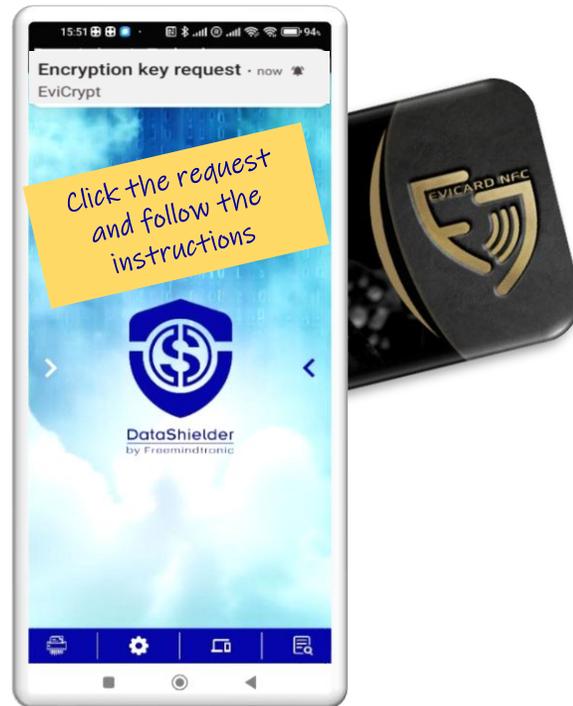
ENCRYPT A MESSAGE WITH GMAIL

1



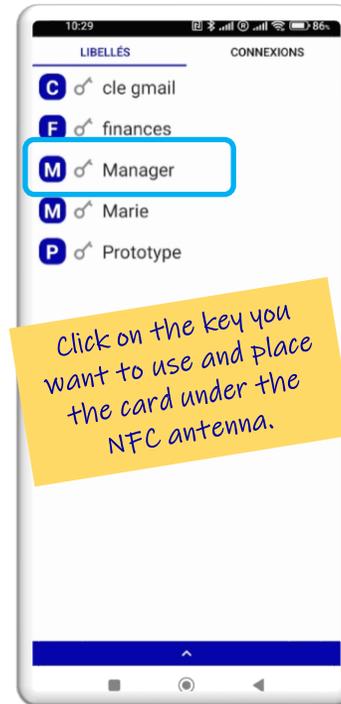
Open Gmail and compose a message.
Click on the "Encrypt" button.

2

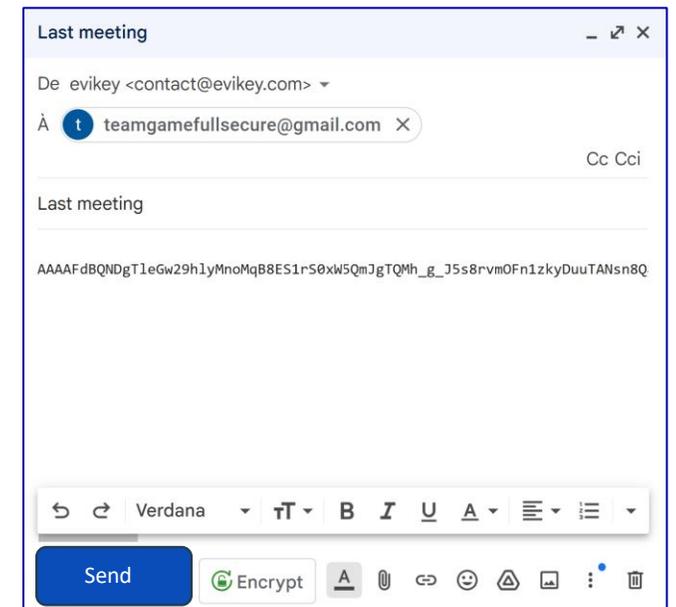


and place the card under the phone's antenna.

3



4

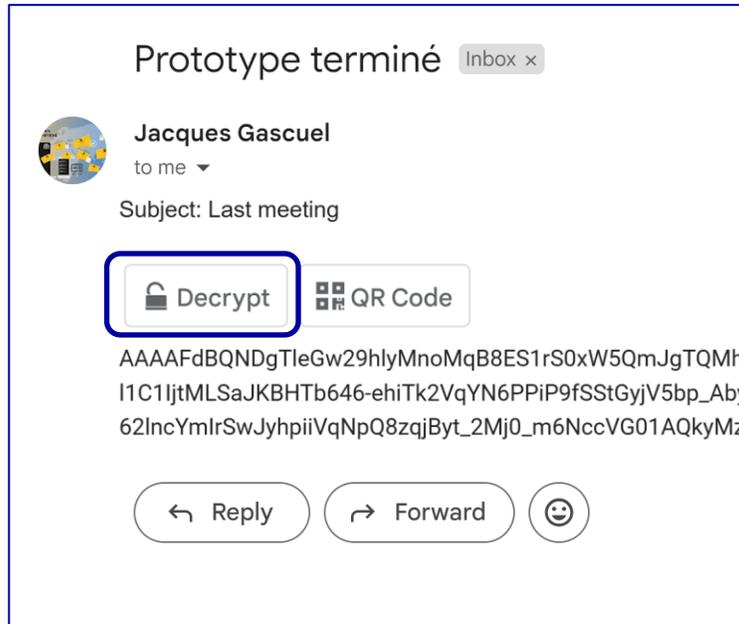


The message is encrypted. Click on "Send".

DECRYPT AN ENCRYPTED MESSAGE RECEIVED IN GMAIL

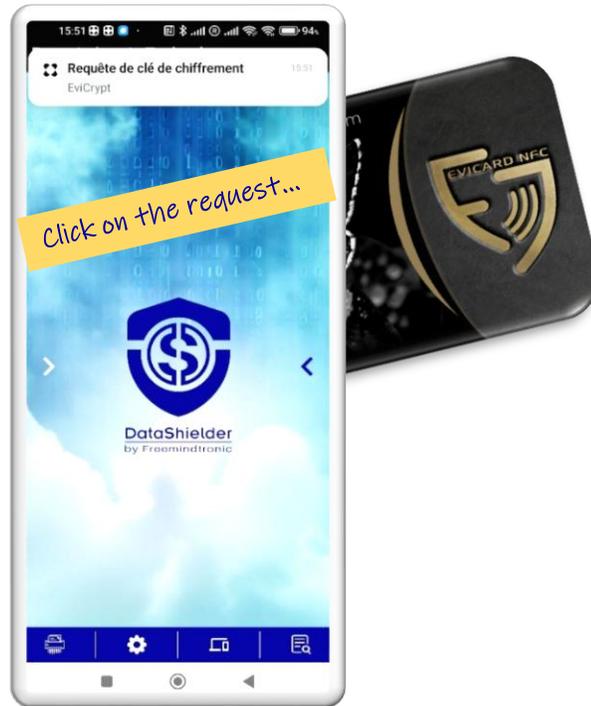
First method from your computer

1



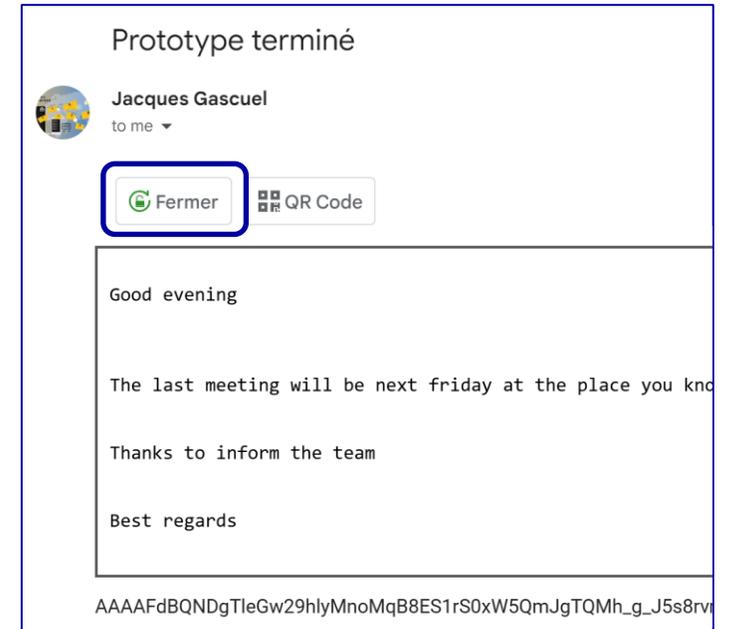
Open the email received in Gmail and click on the "Decrypt" button.

2



And place the card under the phone's antenna.

3



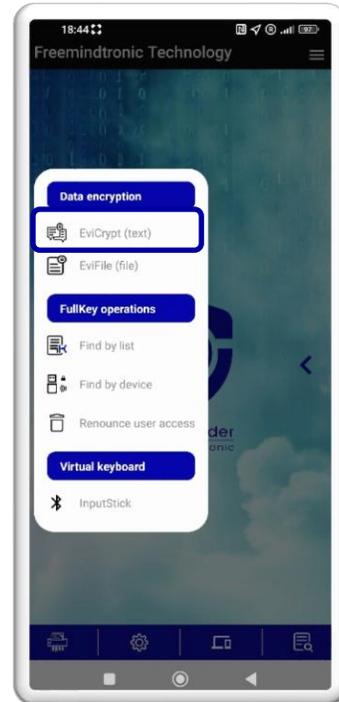
The message is **instantly decrypted on your computer**. If you close the message, it will reappear encrypted.

DECRYPT AN ENCRYPTED MESSAGE RECEIVED IN GMAIL

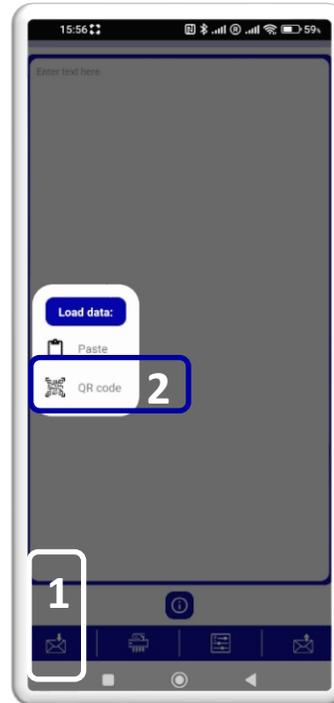
Second method*



Open the email received in Gmail and click on the "QR Code" button.



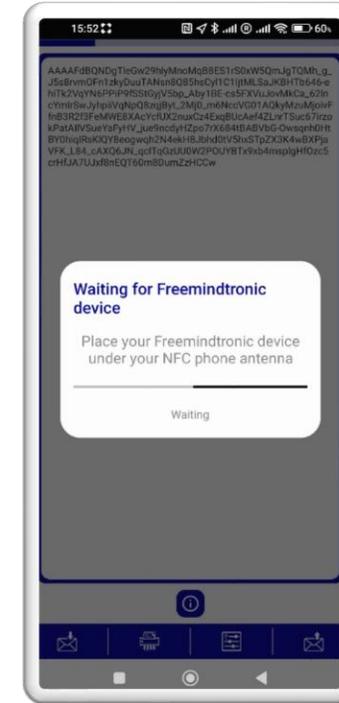
Open the side menu and click on **EviCrypt**.



Click on the **envelope** icon, then on **QR code**.



Scan the QR code displayed on the computer screen.



Place the card under the phone's NFC antenna.

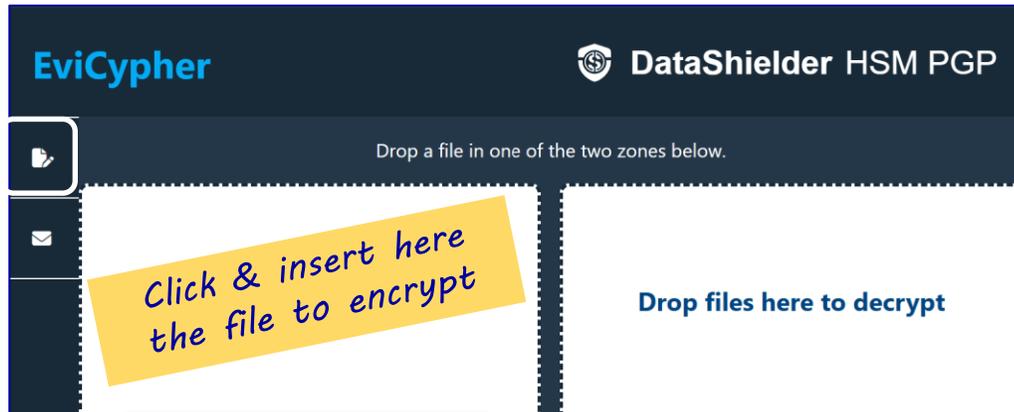


The message appears **decrypted**.

(*) Using this method allows the decrypted message to be displayed on the phone

ENCRYPT A FILE WITH DATASHIELDER EXTENSION

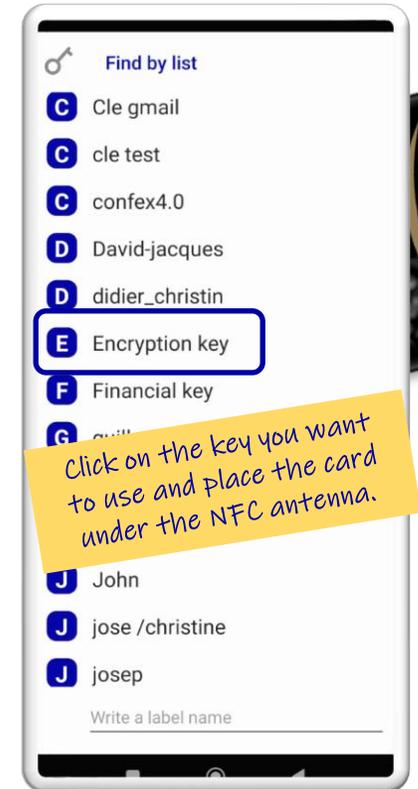
1



2



3

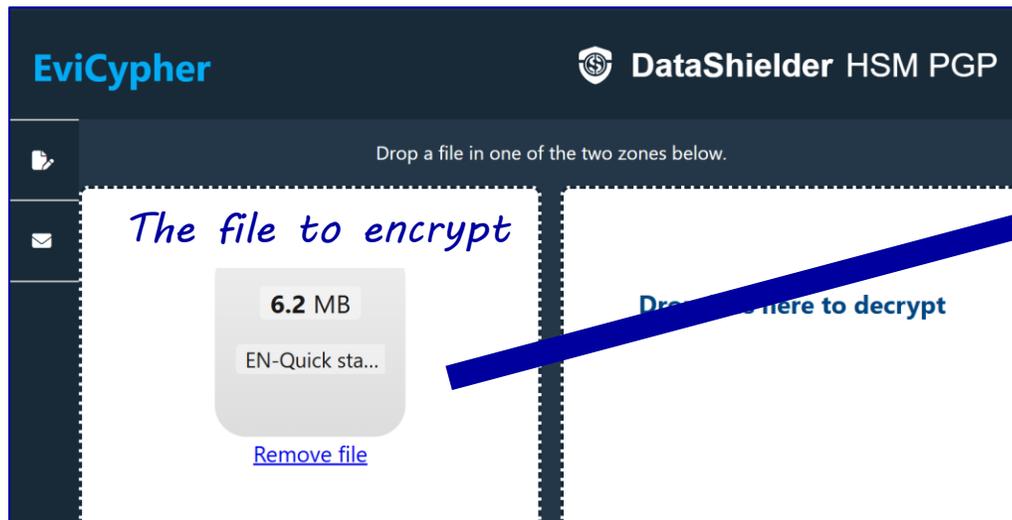


5



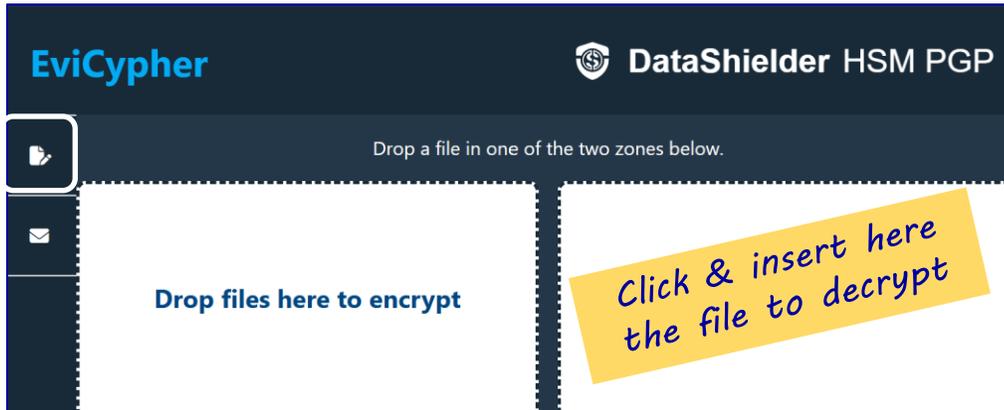
The encrypted file is available in the "Downloads" folder with a .Evi extension.

4

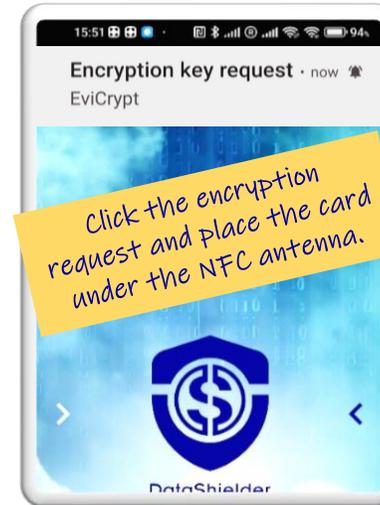


DECRYPT A FILE WITH DATASHIELDER EXTENSION

1



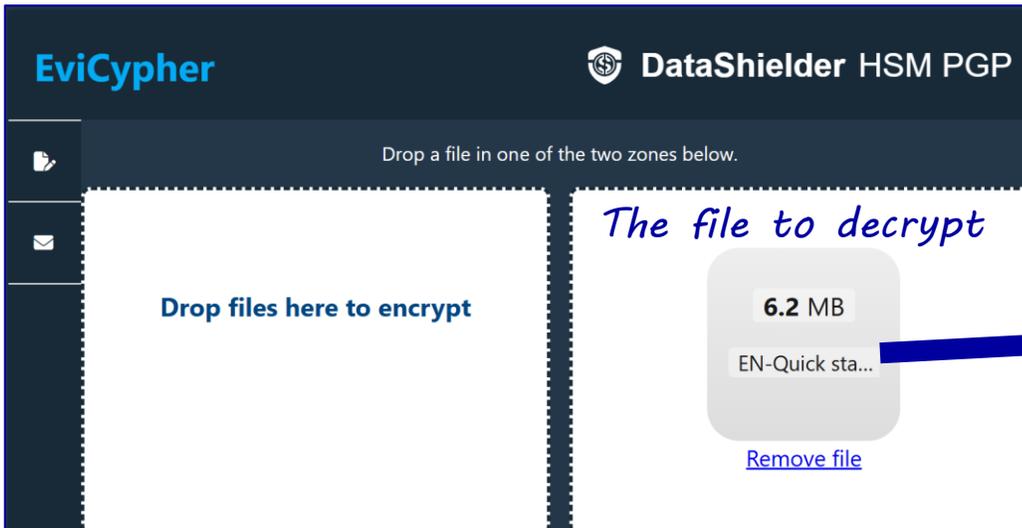
2



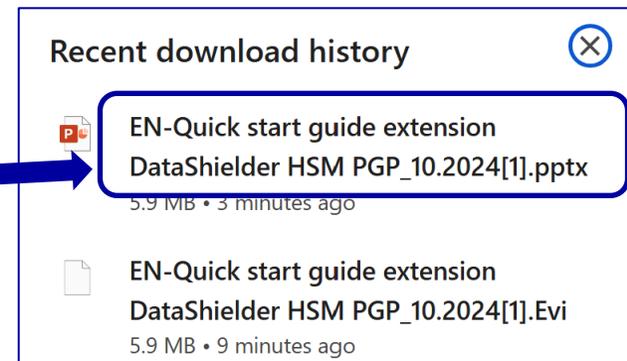
If the **key** used to encrypt the file is stored in the **NFC card**, decryption is **automatic**.

If your browser is not compatible with the automation service, you will need to use the manual method, i.e., click on the key used for decryption.

3



4

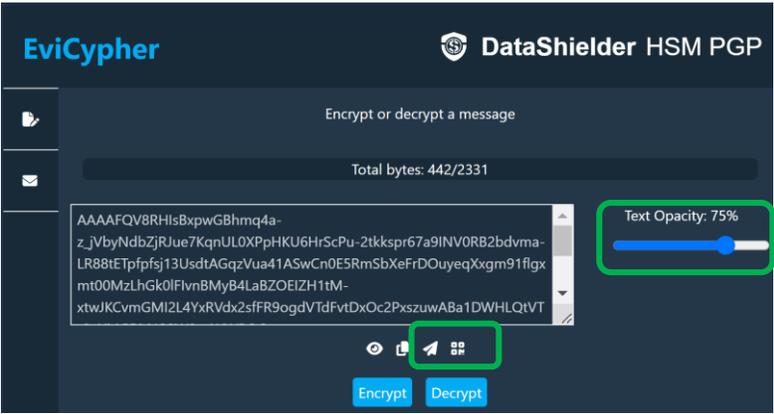
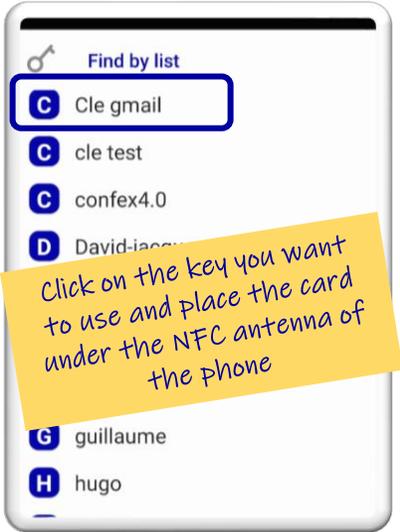
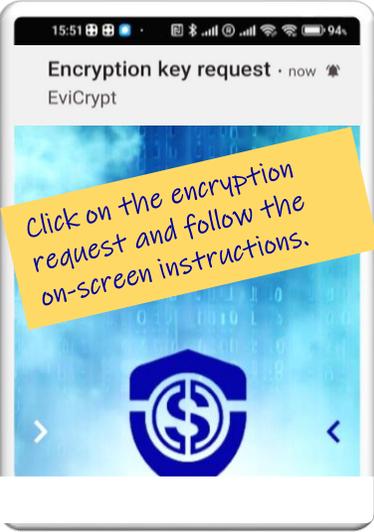


The decrypted file is available in the « **Downloads** » folder.

ENCRYPT A TEXT WITH THE DATASHIELDER EXTENSION



Click the specified icon and write your message in the designated field. Click on "Encrypt". A request is sent to your favorite phone.

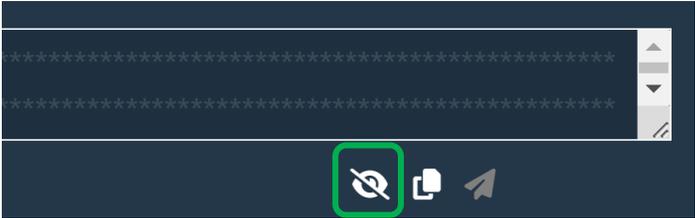


The text is encrypted. The icons "Send" and "QR Code" become accessible. Click on your preferred icon to send your message.

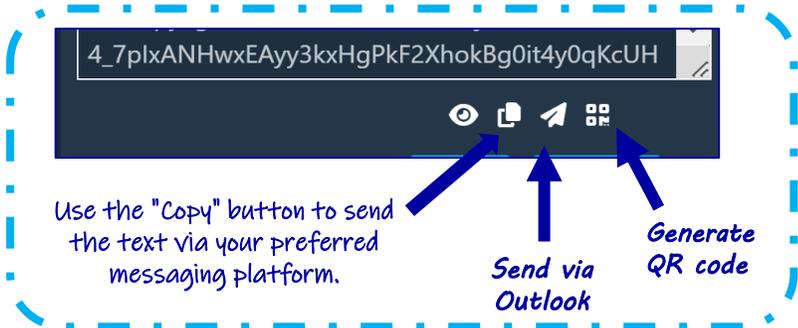
Some useful notes directly related to cybersecurity



Text Opacity: By default, and for security purposes, opacity is set to 13%. You can adjust it as desired.



You can also make the text completely unreadable by clicking on the eye icon.



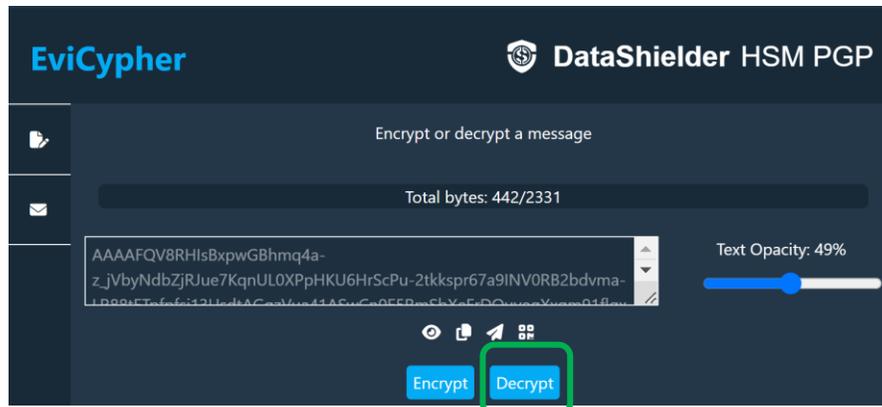
Use the "Copy" button to send the text via your preferred messaging platform.

Send via Outlook

Generate QR code

DECRYPT A TEXT WITH THE DATASHIELDER EXTENSION

1



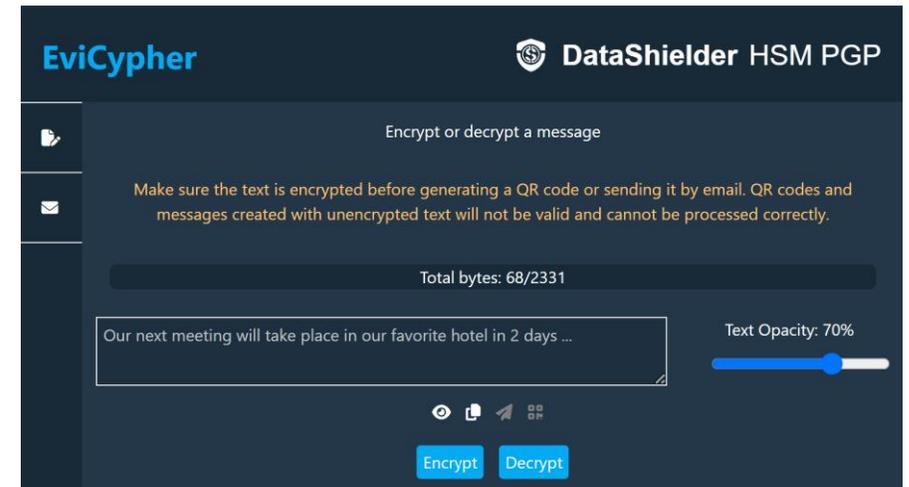
Copy the encrypted text received via email (or another source) into the designated area. Click on "Decrypt". A request is sent to your favorite phone.

2



If the appropriate encryption key is saved on the card, decryption is automatic.

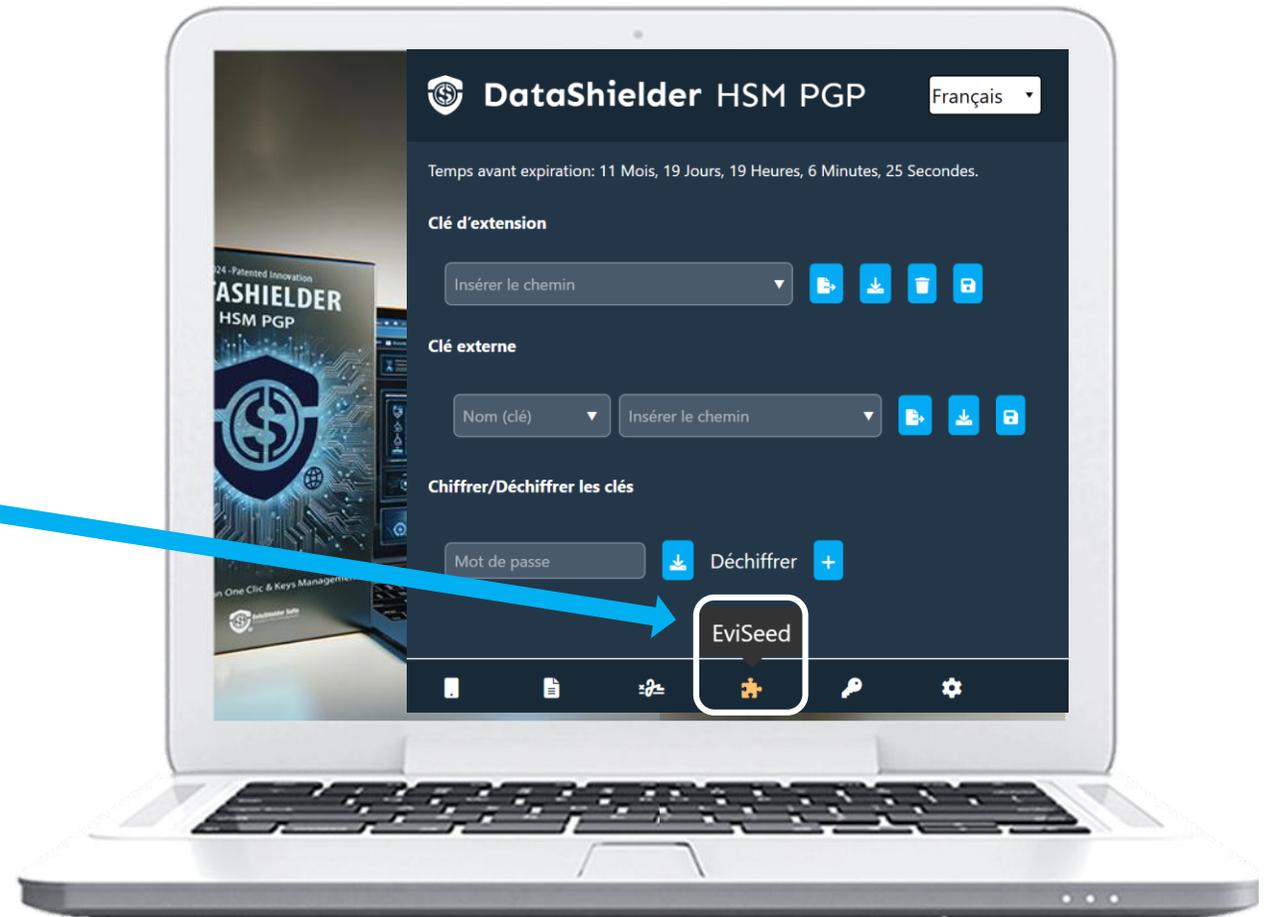
3



The message is automatically decrypted and displayed in the designated area.

BACKUP OF SEED PHRASES (BIP 39)

- Seed phrases must be saved offline.
- They are composed of a variable number of words.
- They can be written in multiple languages.
- The backup is performed in an encrypted manner.
- Click on the "**EviSeed**" icon to get started.



For this operation, you need a **SEED NFC device** (card or tag format), available in the [Freemindtronic online store](#).

HOW TO PROCEED?

EviSeed DataShielder HSM PGP

Store seed phrase

Label name: SEED Test

Select Size: 12 Select Language: English

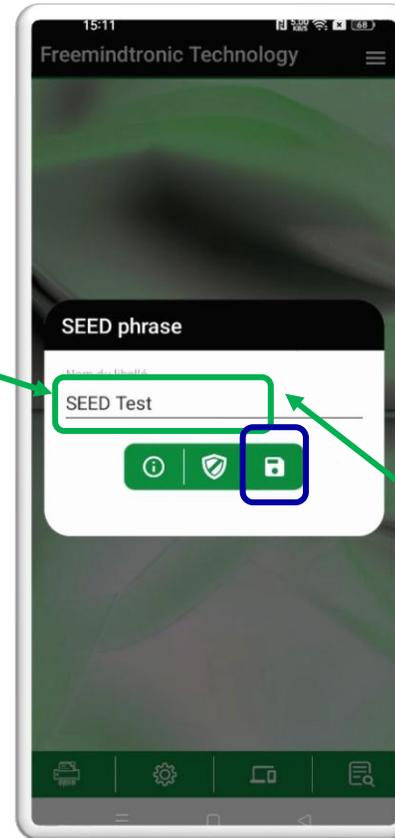
1	5	9
tribe	federal	useless
2	6	10
snap	donkey	trophy
3	7	11
first	social	insane

QR Code

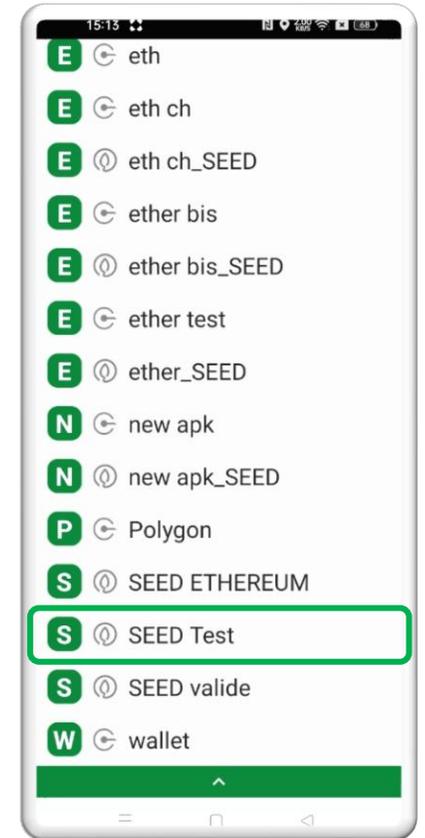
Fill in all fields. Pay attention to the order of the different words. Then click on "QR Code."



A QR code will be displayed



Click to open the menu on the right, click on "QR code" and scan the QR code. This screen will automatically appear, click on the "save" icon.



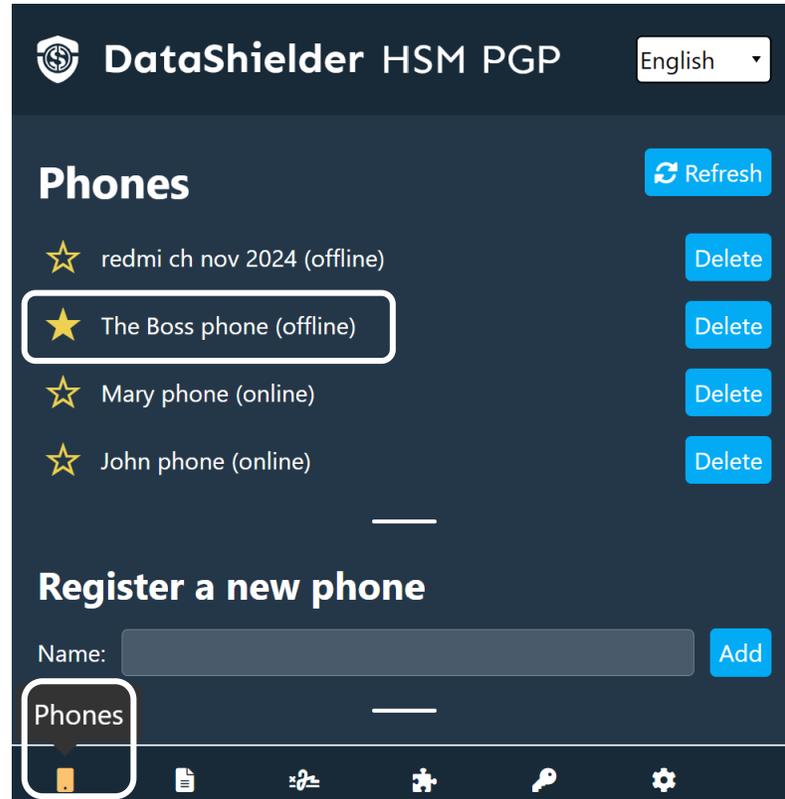
Your SEED phrase is successfully saved in your SeedNFC card.



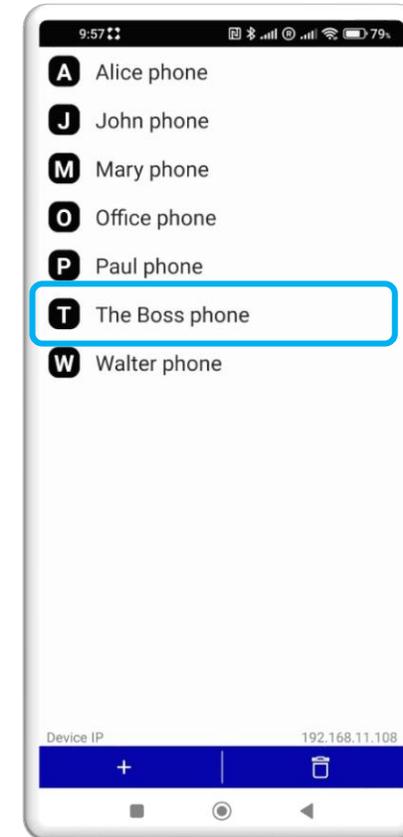
A validation check of the SEED phrase is performed (CHECKSUM). If the words are incorrect or entered in the wrong order, an error message will appear, preventing data from being saved.

MANAGE PAIRED PHONES

You can pair a large number of different phones.
To do so, repeat the pairing procedure and assign a different name to each phone.

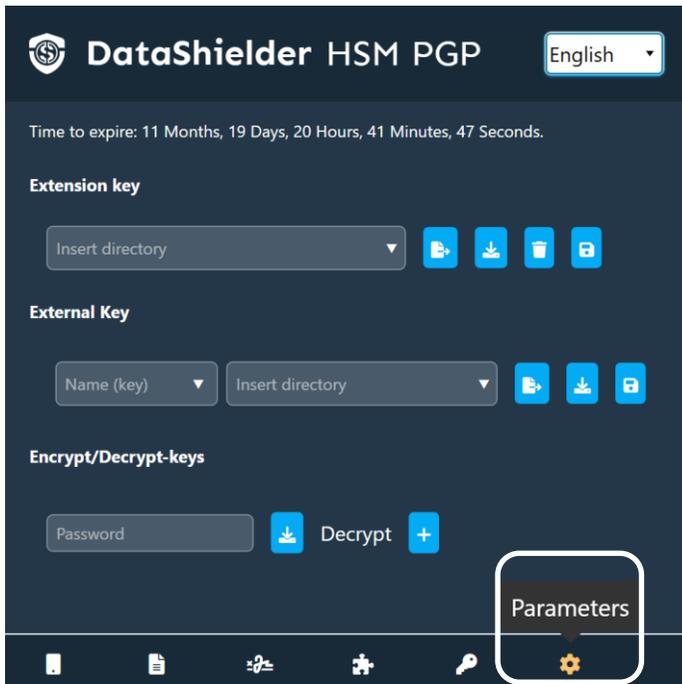


In the extension, click on the "**Phones**" icon. To set a **favorite phone** for receiving requests, click on the **star**.

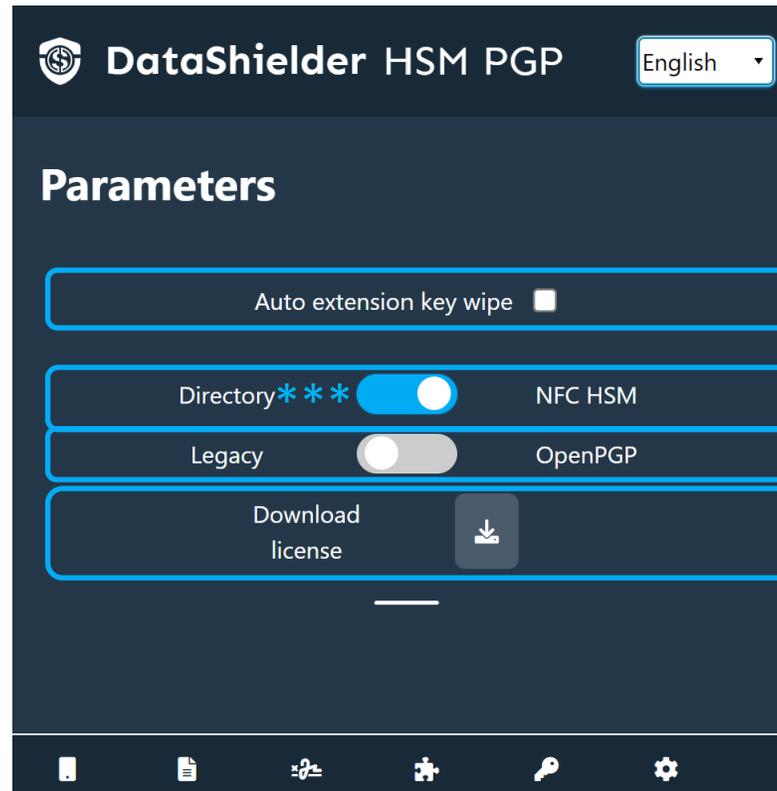


Paired phones list

PARAMETERS & FUNCTIONALITIES



Click on the « Parameters » icon



A window will open with various options you can enable.

The key will be erased if this option is checked **

Use of an activated NFC device *

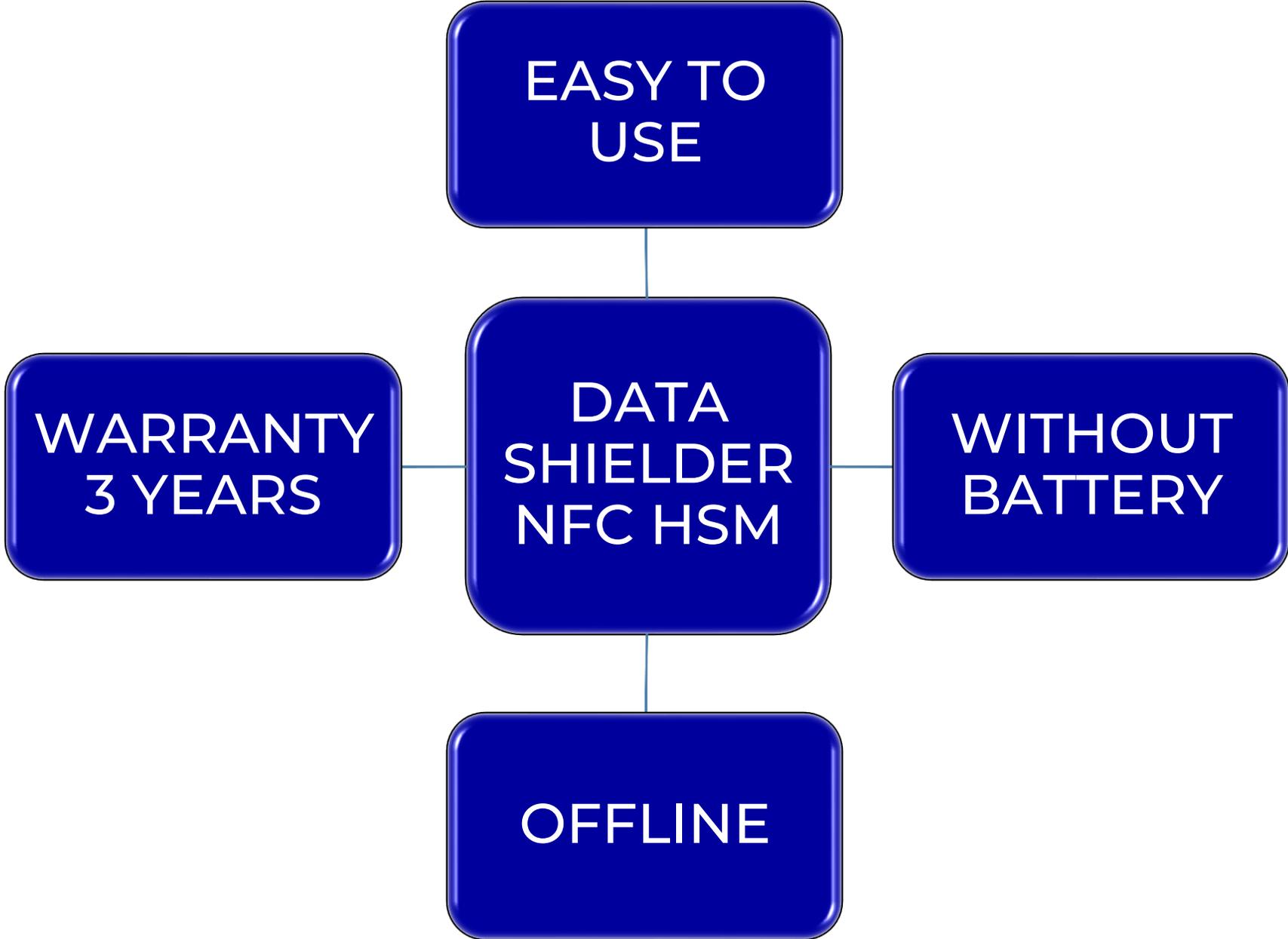
Choose the encryption algorithm for texts

Save the license key preferably on an external support

(*) Functionality explained in this tutorial: use of an NFC device.

(**) When the license expires, the key is automatically erased for cybersecurity purposes, especially if it is used temporarily on a computer that does not belong to the user.

(***) Refer to the DataShielder Extension Tutorial explaining its functionality with specific paths.



EASY TO USE

WARRANTY 3 YEARS

DATA SHIELDER NFC HSM

WITHOUT BATTERY

OFFLINE

Take back control, Take back power

EviCypher Technology

By Freemindtronic Andorra



To know more: <https://www.freemindtronic.com>

