

Introduction: Advanced

Paranoid Crypto™ is a robust tool for secure QR code encryption and decryption.

Installation Guide

Depending on your operating system (OS), you will need to enable installation from unknown sources or right-click, open, or perform similar actions to allow the software to run. Please consult online resources for details specific to your OS and version.

Security Model

Offline Security

Paranoid Crypto™ uses a zero-trust security model. By operating completely offline, it eliminates the attack vectors associated with internet-connected devices and services. Your sensitive data is never exposed to online threats.

Encryption Strength

Paranoid Crypto™ uses industry-standard encryption algorithms with multiple layers of protection:

- Password protection (minimum 16 characters)
- Pepper system (minimum 32 characters)
- Two-factor authentication (Advanced and Ultimate versions)
- Adjustable encryption speeds for enhanced security

Basic Workflow

The typical workflow for using Paranoid Crypto™ consists of two main processes:

Encryption Process

1. Enter the text you want to encrypt
2. Create a strong password (16+ characters)
3. Create a strong pepper (32+ characters)
4. Add 2FA if using Advanced or Ultimate version
5. Generate the encrypted QR code
6. Save, print, or engrave the QR code

Decryption Process

1. Scan or upload the encrypted QR code
2. Enter your password
3. Enter your pepper
4. Enter 2FA code if applicable
5. View your decrypted data

Getting Started

To begin using Paranoid Crypto™, follow these steps:

1. **Select your version** - Choose Essential, Advanced, or Ultimate based on your security needs
2. **Set up 2FA** (Advanced/Ulimate only) - Configure your authenticator app following the 2FA Setup guide
3. **Create your first encrypted QR code** - Follow the Encrypt QR guide to secure your first password or key
4. **Test decryption** - Verify you can decrypt your QR code using the Decrypt QR guide
5. **Create backups** - Print or engrave multiple copies of your QR codes and store them securely

Physical Backup Options

The system allows for various physical backup methods, which users can implement through local or online services. These options are not provided by the system itself but are recommended approaches for creating durable backups:

1. **Acquiring a personal laser engraver (most recommended option)**
WARNING: Only use the laser engraver with proper safety gear. Ensure you are in a well-ventilated room, preferably with an exhaust system.
 - Small desktop cube-shaped engravers are available
 - Approximate dimensions: 20cm x 20cm x 20cm (7.9in x 7.9in x 7.9in)
 - Starting price: around \$100 - \$200 USD (small format desktop devices, such as cube-shaped ones with Bluetooth and/or Wi-Fi, exist in variations on Amazon, for example.)
2. Metal card engraving (estimated cost: \$10 USD per card, often found much cheaper like 20 packs of cards for \$10)
3. Standard paper printing (most economical option, though less durable)
4. Utilizing online engraving services (least recommended due to potential exposure)
These methods offer a range of durability and cost options, allowing users to choose the most suitable backup strategy for their needs. Users are responsible for selecting and implementing their preferred backup method.

It's crucial to note that any unnecessary exposure of the QR code increases security risks. Therefore, the personal laser engraver option is highly recommended as it maintains the air-gapped integrity of the system.

For online engraving services or any method involving digital transfer, users should exercise extreme caution. If such methods are absolutely necessary, users should transfer the encrypted QR code to a USB stick and use a different computer or device to access the service. However, this approach introduces additional security risks and should be avoided if possible.

Remember, the security of the system relies heavily on minimizing exposure of sensitive data. The safest approach is to keep all processes entirely offline and under your direct control.

Always handle your passwords, peppers, and 2FA secrets with extreme care.

Encrypt QR Code

This section describes how to create an encrypted QR code. Features and layout vary by Paranoid Crypto™ version (Essential, Advanced, Ultimate). Screenshots are version-specific.

You are offline. Features are enabled.

Pq

Paranoid Crypto™

Version: SR Advanced v1.0.0

Encrypt QR

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Encrypt QR Code

Enter text to encrypt

0 / 2153 characters (2153 remaining)

Encryption Speed Settings: The slower the setting, the more secure your data becomes (keep in mind duration depends on hardware and it is advised to test what one suits your needs)

Very Fast

Password

Warning: Important Usage Info.

Password must be at least 16 characters long and include uppercase, lowercase, numbers, and special characters.

Enter encryption password

Toggle

Generate

0 characters

Confirm encryption password

Toggle

0 characters

Pepper

Pepper must be at least 32 characters long and include uppercase, lowercase, numbers, and special characters.

Enter encryption pepper (secret value)

Toggle

Generate

0 characters

Confirm encryption pepper

Toggle

0 characters

Enter 2FA code

Generate Encrypted QR

Download Encrypted QR Code

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- 1 Enter text to encrypt: Input text for QR code encryption.
- 2 Character Count: Shows entered and remaining characters (max 2153).
- 3 Encryption Speed: please check color code for available options.

Essential: Very Fast, Fast, Medium (Slower = more secure).

Advanced: Super Fast, Very Fast, Fast, Medium, Slow, (Slower = more secure).

Ultimate: Ultra Fast, Super Fast, Very Fast, Fast, Medium, Slow, Ultra Slow, (Slower = more secure).

Test different speeds to balance security and time.
- 4 **WARNING:** Before proceeding, ensure you understand the following: This tool encrypts sensitive data into a QR code. Misuse or improper handling may result in data loss or exposure. Always securely store your password and pepper. Losing them will make decryption impossible. Verify all inputs before generating the QR code. Incorrect data cannot be recovered.

Please read and understand this warning before continuing.
- 5 Encryption Input filed: Input password here and repeat in the confirm field.
- 6 Toggle: Show/hide passwords or peppers for verification.
- 7 Generate: Create random passwords or peppers automatically.
- 8 Character counter/meter: Counts and shows characters for password, similar filed for pepper available.
- 9 Pepper Input filed: Input pepper here and repeat in the confirm field.
- 10 Enter 2FA code: Input 2FA code for enhanced security (if enabled).

Essential: Not available.

Advanced: Available.


Ultimate: Available.
- 11 Generate Encrypted QR: Generate encrypted QR code.
- 12 Download Encrypted QR Code: Download encrypted QR code image.

Always handle your passwords, peppers, and 2FA secrets with extreme care.

Decrypt QR Code

This section explains how to decrypt a previously encrypted QR code created with Paranoid Qrypto™.

You are offline. Features are enabled.



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Decrypt QR Code

1 Upload Encrypted QR Code

2 Decrypted Text

3 Password

Password must be at least 16 characters long and include uppercase, lowercase, numbers, and special characters.

3 Enter decryption password

4 Toggle

8 characters

5 Confirm decryption password

Toggle

8 characters

6 Pepper

Pepper must be at least 32 characters long and include uppercase, lowercase, numbers, and special characters.

6 Enter decryption pepper (secret value)

Toggle

8 characters

Confirm decryption pepper

Toggle

8 characters

7 Enter 2FA code

8 Decrypt QR Code

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- 1 **Upload QR:** Select and upload the encrypted QR code image.
- 2 **Decrypted Text:** Decrypted text will appear here .
- 3 **Password:** Enter password used to encrypt the QR.
- 4 **Password Toggle:** Show/hide.
- 5 **Confirm Password:** Re-enter password, same field exists below for pepper.
- 6 **Pepper :** pepper used during encryption.
- 7 **2FA Code** Provide a valid working 2FA.
 - Essential: Not available.
 - Advanced: Available.
 - Ultimate: Available.
- 8 **Decrypt QR Code:** Show

2FA Setup

2FA Setup Main

This section describes Two-Factor Authentication (2FA) setup.

You are offline. Features are enabled.



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Two-Factor Authentication Setup

☐ Use custom name

Generate 2FA Secret

Or enter your own 2FA secret

Set Manual Secret

Upload 2FA QR Code

Auto-Setup Authenticator

Enter 2FA code to verify

Verify 2FA

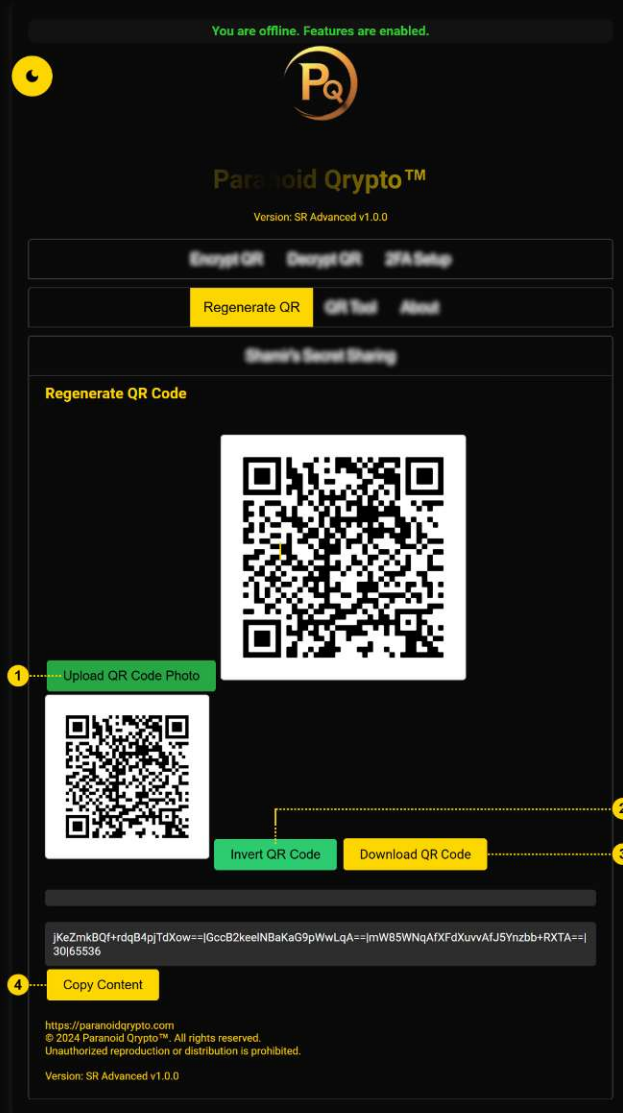
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- 1** **Checkbox Custom Name:** Enables to set custom name for 2FA Secret.
- 2** **Generate 2FA Secret:** Click to generate a custom 2FA secret
- 3** **Upload 2FA QR Code:** you can use an unencrypted 2FA QR Code, only if really needed.
- 4** **Auto-Setup Authenticator:** Automatically setup the set Authenticator secret in the default installed Authenticator app (Mobile only).
- 5** **Code Verification input field:** You can verify if setup is correct and if 2FA works correct.
- 6** **Verify:** Click to verify the above entered 2FA TOTP.
- 7** **Encrypt 2FA:** Quickencrypt the 2FA secret
- 8** **Decrypt:** Quickdecrypt the 2FA secret

Regenerate QR Code

This tab allows you to regenerate a QR code. When you upload a code to be regenerated, the processing time can vary depending on the size and quality of the uploaded QR code and the performance of your device. During this process, the app will not respond to any user actions, and you must wait until the regeneration is complete. There is no progress indicator available during this time, so patience is required. For a visual guide on this process, you can refer to the tutorial video section.




- 1 Upload QR Code Photo: Select image to Regen.
- 2 Invert QR Code: Invert the color of the QR Code if needed.
- 3 Download QR Code: Download the regenerated .
- 4 Copy Content: Copy qr to clipboard .


Always handle your passwords, peppers, and 2FA secrets with extreme care.

QR Tool

This tab provides a QR code tool.

You are offline. Features are enabled.





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Shannon's Secret Sharing

QR Tool Not Available in this Tier

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Shamir's Secret Sharing


This tab provides functionality for Shamir's Secret Sharing (SSS).


- Split Secret
- Recover Secret

Recover Secret

Use this section to recover a secret from shares.

You are offline. Features are enabled.





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