

Шифр Сурок

Шифр Сурок (Cipher Marmot) is a Steganography tool developed by Alek.

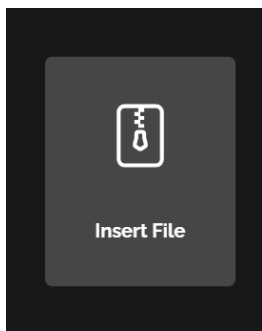
It leverages a feature in the PDF standard to embed encrypted binary data; bypassing the need to encode the cipher text, allowing the PDF file to remain compact while handling large files.

Despite not being open source, it's a simple task to figure out its logic.

Considerations

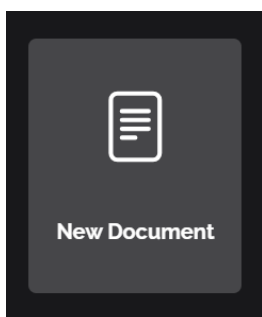
- The embedded cipher is invisible to virtually, every PDF engine.
 - When you choose a password, a cryptographically secure key will be derived. However, it's strongly advised to use a password that is difficult to guess.
 - Most PDF files are compatible with Шифр Сурок (Cipher Marmot), but it is advised to test the integrity of the PDF file after embedding the data.
 - It's been succesfully tested with files up to 700mb. The whole midsommar movie was encrypted, embedded, and extracted in less than 4 minutes using a consumer-grade laptop. ~~(This speed was reached only after compiling using the -O3 flag)~~
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Encrypting and Embedding a file within a PDF



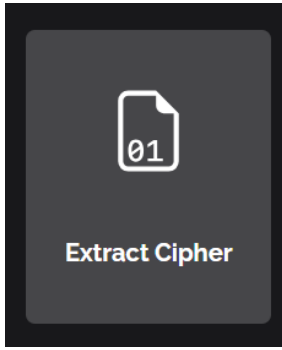
1. Select the file to encrypt and embed.
 2. Select the PDF file to use. Choose you own file or select a template.
 3. Choose a password
 4. Select the location to save the resulting PDF.
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Creating a new document, and embedding it



1. Fill in the document title, and add your own content
 2. Select "Encrypt & Embed"
 3. Select the PDF file to use. Choose you own file or select a template.
 4. Choose a password
 5. Select the location to save the resulting PDF.
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Extracting a file/document



1. Select whether you want to extract a file or a document.
2. Enter the password
3. “f you’re extracting a document, it will be displayed automatically. If you’re extracting a file, you’ll be prompted to select a save location, and for security reasons, the recipient needs to add the file extension.

This file itself, contains an encrypted PNG file.

*You can test it by using the password **1234***