**Useful tools**

Often in Cicada 3301 you may encounter a puzzle or situation that needs a special technique or requires some repetitive task; below are a list compiled of different types of utilities that may be useful in these situations and during your solving.

**Forewarning**: Exercise caution while using any of these utilities. Anybody can freely add their own links here, so be careful when you download or run anything.

Uncovering-Cicada wiki takes no liability for any harm done by these utilities.

## Data translators

These utilities translate information between different formats and number systems.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Description** | **Links** | **Images** | **Status** |
| Paulschou's Xlate | Translates binary, ascii, hex, decimal, octal | [here](https://paulschou.com/tools/xlate/) | none | UP |
| Traductor | (Spanish Xlate) Translates binary, ascii, hex, decimal, octal | [here](http://redir.dasumo.com/hex/) | none | DEAD LINK |
| JXlate | (Clientside Xlate) Website that translates multiple number and data systems | [here](http://cyber.meme.tips/xlate/) | none | UP |
| CyberChef | Website that allows multiple different steps to be used on data | [here](https://gchq.github.io/CyberChef/) | none | UP |

## XOR utilities

[XOR](https://uncovering-cicada.fandom.com/wiki/XOR) is a reversible bitwise operation used in Cicada 3301 and other ARGs. These utilities make performing XOR between files easier in different ways.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Description** | **Links** | **Images** | **Status** |
| Skuater's XOR script | Unknown | [here](https://infotomb.com/6ijx5) | none | DEAD LINK |
| Cclark's XOR Script | XORs hex strings obtained from Cicada 3301 onion sites (Requires Python) | [xor script](http://pastebin.com/nxXyrxin) [permutation generator](http://pastebin.com/WM8RsWc0) [permutations](http://pastebin.com/T7KCsQcC) | none | UP |
| OTPXor | CLI utility for XORing two large files with with one offset, also provides text scanning modes. | [here](https://github.com/otp22/decoders/tree/master/OtpXor) | none | UP |
| Nirsoft Xorfiles | Utility for xoring files in multiple combinations (WINE compatible) | [here](http://www.nirsoft.net/utils/xorfiles.html) | none | UP |
| XorJ | GUI Program for XORing multiple files each at specified offsets and lengths. (Requires Java) | [here](https://github.com/crashdemons/XorJ) | none | UP |
| XorJS | Webapp for XORing multiple files each at specified offsets and lengths. (In-browser replacement for XorJ) | [here](http://cyber.meme.tips/xorjs/) | none | UP |

## Rune manipulation

As much of the documents provided by Cicada 3301 are in [Runes](https://uncovering-cicada.fandom.com/wiki/Runes_Transcriptions) or are encoded with the [Gematria Primus](https://uncovering-cicada.fandom.com/wiki/Gematria_Primus), these utilities make translating this associated information simpler.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Description** | **Links** | **Images** | **Status** |
| Huw's Rune Analyzer | Made in 2015 for the unsolved rune pages (explain) (Requires Python) | [here](http://git.io/xQrlUg) | none | UP |
| Rune conversion script | Converts runes between primes values and letters (Requires Python) | [here](http://pastebin.com/6v1XC1kV) | none | UP |
| Writing In Runes | Website that translates text into runes | [here](http://the-oracle-answers.com/write-in-runes/) | none | UP |
| Mlehmk's Rune Tool | Unfinished rune utility (explain) (Windows executable, Requires FreeMono font) | [RuneShift.exe](https://www.dropbox.com/s/8qybj9rlcd36x13/RuneShift.exe) [Rune.exe](https://www.dropbox.com/s/5ix7rxn9kmb55dh/Rune.exe) |  | DEAD LINK |
| 3301chef | Like cyberchef, allows multiple different steps to be used on data - but adds rune and gematria functions | [here](https://opensource.cicada.gq/) [dead link](http://opensource.exposed/) [source](https://gitlab.com/onecool/3301chef) | none | UP |

## Text manipulation

Basic text manipulation is still in use in some ciphers and puzzles, occasionally these utilities may be useful.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Description** | **Links** | **Images** | **Status** |
| Anagram Solver | Website for finding hidden words in a phrase through anagrams | [here](http://www.a2zwordfinder.com/anagram_solver.html) | none | UP |
| Reverse Text | Website for generating reversed text | [here](http://textmechanic.com/Reverse-Text-Generator.html) | none | UP |
| Rumkin Ciphers | Website featuring various useful classical text ciphers | [here](http://rumkin.com/tools/cipher/index.php) | none | UP |

## Steganography

More often than not in Cicada 3301, there are images or files that store hidden information - these tools help to reveal it.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Description** | **Links** | **Images** | **Status** |
| JJTC Stegonography tools | Various tools for steganography | [here](http://www.jjtc.com/Steganography/tools.html) | none | UP |
| Outguess | Program for embedding and retrieving encrypted messages in JPEG images | [here](https://github.com/crorvick/outguess) | none | UP |
| JOutguess | Website that runs outguess for you. | [site](https://cyber.meme.tips/joutguess/) [source](https://github.com/ae27ff/joutguess) | none | UP |
| OpenPuff | Another Steg utility supporting multiple file formats | [here](http://embeddedsw.net/OpenPuff_Steganography_Home.html) | none | UP |

## File analysis

These utilities provide information about file formats, statistical analysis or reveal metadata about them.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Description** | **Links** | **Images** | **Status** |
| EXIF Tool | Website for revealing various forms of metadata in images and other file formats | [here](http://exif.regex.info/exif.cgi) | none | UP |
| JPDump | Website that outputs and allows downloading header information from JPEG image files. | [here](http://cyber.meme.tips/jpdump/) | none | UP |

## Other

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Description** | **Links** | **Images** | **Status** |
| Is It Cicada? | Website for that automatically verifies PGP messages against Cicada's key. | [site](http://isitcicada.challenge.pt/) [source](https://github.com/crashdemons/isitcicada) | [1](https://i.imgur.com/mePD0RH.png) | UP |
| cluosh's 4chan tracker | Website for that scans and automatically uploads PGP-signed content | [1](http://r7ynbvzmfi4q467h.onion/) [2](http://jm7d2oei2ddzmqu5.onion/) [script](https://pastebin.com/17m7pyZ7) | none | DOWN |

## Reference sheets

<SepheusIX> I made the Vigenere table



