

Custom Compressed Tag Store (CCTS) files are meant to be an extremely efficient means of storing tag data from Graffiti on disk. These file sacrifice the external compatibility that something like a Property List or JSON file provides but allows for far less disk space used than a more general data format such as those. The specification is purposefully extremely simple as it is purpose built for this program to maximize compactness.

Byte layout of a CCTS file

0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07	0x08	0x09	0x0a	0x0b	0x0c	0x0d	0x0f
2 Low bytes from version.major		2 Low bytes from version.minor		2 Low bytes from version.patch		4 bytes: number of files contained in the tag store				2 Low bytes length of first file path		Variable: utf-8 encoded bytes representing the path. The length of this data is encoded by the bytes at 0x0a and 0x0b		2 low bytes: number of tags the precedingly named file has
2 low bytes length of tag name for first tag of file		Variable: tag name encoded as utf-8												

Notes about implementation:

- All integers are encoded using Big-Endian format
- Strings are all encoded using UTF-8
- The Blue boxed data represents tags of a file. It can repeat many times for a single file. The number of these blue box repeats is given by the 2 bytes immediately following the end of the filename
- The Green boxed data represents a file and it includes all the blue box tag data of the file. These green boxes (with their contained blue boxes) can repeat many times. The number of repeats is given by the 4 bytes from offset 0x06 into the start of the file.
- The entire file, taken as a stream of UInt8 bytes, is compressed using LZMA compression before being written to disk