

**NAME**

MovIm specification

**VERSION**

0.1.17

**DESCRIPTION**

**MovIm** is a video codec specifically designed for both conservation and restoration of moving images.

**libmovim** is a C library implementing **MovIm**.

The **openMovIm** package includes the **libmovim** library and its associated **movimenc**, **movimdec** and **movimplay** utilities, as well as the **openmovim** Bash command-line interface.

**BIT-STREAM CONVENTIONS**

Coming soon...

A variable expressed in natural binary is designed by  $b(n)$ . A value expressed in natural binary is prefixed  $0b$ .

A variable expressed in Grey code is designed by  $g(n)$ . A value expressed in Gray code is prefixed by  $0g$ .

$u(n)$  is an unsigned integer stored on  $n$  bits expressed in natural binary.

**FILE FORMAT**

Coming soon...

**SYNTAX**

```
movim_file() {
    file_magic           u(32)
    movim_vers
    nb_channels

    for (i=0; i < nb_channels; i++) {
        pixel_format
        bit_depth
    }
}
```

**SEMANTICS**

file\_magic = "0x4d6f7649" ("MovI")

**DESIGN CHOICES**

Coming soon...

The technical specification is given at the beginning of each frame. This allows to change the parameters from one frame to the other.

The "raw" data are encoded in Gray code rather than in natural binary, in order to speed up significantly the processing time.

**NOTES**

The uncompressed or lossless compressed MovIm data can be used directly as a file (.movim).

The **MovIm** video codec is an enhancement of **YCoCg** and **MSMI**, and actually it supersedes these two video codecs.

**SEE ALSO**

**libmovim(1)**; **movimdec(1)**, **movimenc(1)** and **movimplay(1)**; **openmovim(1)**.

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