



What Is DPX?

Digital Picture Exchange (DPX) is a common file format for digital intermediate and visual effects work and is an ANSI/SMPTE standard (268M-2003).

The file format is most commonly used to represent the density of each color channel of a scanned negative film in an uncompressed "logarithmic" image where the gamma of the original camera negative is preserved as taken by a film scanner. For this reason, DPX is the worldwide-chosen format for still frames storage in most Digital Intermediate post-production facilities and film labs. DPX provides a great deal of flexibility in storing color information, color spaces and color planes for exchange between production facilities. Multiple forms of packing and alignment are possible. The DPX Specification allows for a wide variety of metadata to further clarify information stored (and storable) within each file. The DPX file format was originally derived from the Kodak Cineon open file format (.cin file extension) used for digital images generated by Kodak's original film scanner. The original DPX (version 1.0) specifications are part of SMPTE 268M-1994. The specification was later improved and its latest version (2.0) is published by SMPTE as ANSI/SMPTE 268M-2003.

Which Fields Do We Want to Build a Tool to Edit?

- Image Filename
- Creation date/time
- Creator (Name of Institution)
- Project Name (Institutional UUID)
- Rights Use (Public Domain, Copyright, Other Restrictions)
- Source Image date/ time (Of the Source Object, not the file)
- Input Device Name (Scanner)
- Input Device Serial Number
- Film Manufacturing Code (Source Object)
- Film Type (Source Object)
- Digitization Process History - Data in this field defined as a collection of strings, each presented on a separate line, containing a history of the coding processes applied to the file. The first line documents the source film reel, the second line contains data on the capture process, the third line of data records information on the storage of the file. A new line is added when the coding history related to the file is changed (See Handout).