

FILE FORMATS OVERVIEW

These are the most common file formats used in digital film production.

1. **.dpx or .cin (Cineon)**

These are the file formats used in DI . They are in logarithmic colourspace and are geared towards 35mm film output. They are an image sequence, 1 file per frame. File size is about 12Mb per frame.

2. **16 bit Tiffs (.tiff)**

To create these, the .dpx or .cin files need to go through a colourspace conversion into CAP X'Y'Z and ratio change into digital cinema formats. They are still an image sequence, 1 file per frame and about 10Mb per frame. They are used purely as an intermediate stage in creating a DCP.

3. **Jpeg2000 (.j2c)**

To create these, we need to compress the 16 Bit Tiffs. This is purely a compression process and has no effect on colourspace. They are still an image sequence, 1 file per frame but are now about 1Mb per frame. They are used purely as an intermediate stage in creating a DCP.

4. **MXF (.mxf)**

To create these, we wrap the Jpeg2000 file sequence. It is the file format used within a DCP and is 1 file per reel and the same size as the total number of Jpeg2000's within it. It allows encryption to be added for security. It is decoded by the Digital Cinema playback server.

Summary;

.dpx or .cin (Cineon)

Convert colourspace and format into;

16 bit Tiffs (.tiff)

Compress into;

Jpeg2000 (.j2c)

Wrap into;

MXF (.mxf)

Make DCP