

SMPTE REGISTERED DISCLOSURE DOCUMENT

Interoperable Master Format – Isochronous Stream of XML Documents (ISXD) Plugin



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Introduction

This document defines a method for wrapping an Isochronous Stream of XML Documents (ISXD) in an Interoperable Master Format (IMF) Essence Component file. An ISXD Track File is appropriate for reference by an IMF Composition Playlist or Packing List, and in any other context where reference to an abstract IMF Essence Component is appropriate.

An isochronous stream of XML documents is a contiguous, ordered collection of discrete data items, where each item is a well-formed and valid XML document, and where all of the documents in the collection conform to a defined data model. The items are also related temporally, with the first item occurring earliest, and with the temporal distance between each item being inversely proportional to Edit Rate. The ISXD items are frame-wrapped as a single MXF Source Clip having only Data Elements.

An ISXD Track File can also contain one or more static XML documents, which may be used, e.g., to provide global context for the ISXD data.

This document also defines a Virtual Track structure compatible with the IMF Composition Playlist. This structure provides a method of reference to an ISXD Track File from within an IMF Composition Playlist instance.

1 Scope

This SMPTE Registered Disclosure Document (RDD) specifies a method for wrapping isochronous streams of XML documents in a manner consistent with the Interoperable Master Format (IMF) Essence Component. Only a Frame Wrapping method is defined. Clip Wrapping is not considered.

This document defines:

- an ISXD Track File to carry ISXD data as specified in an application;
- an ISXD Virtual Track for use in an IMF Composition Playlist.

2 References

SMPTE ST 377-1:2011, Material Exchange Format (MXF) – File Format Specification

SMPTE ST 377-1:2011 Am1:2012, Material Exchange Format (MXF) – File Format Specification – Amendment 1

SMPTE ST 377-1:2011 Am2:2012, Material Exchange Format (MXF) – File Format Specification – Amendment 2

SMPTE ST 379-2:2010, For Television – Material Exchange Format (MXF) – MXF Constrained Generic Container

SMPTE ST 429-17:2017, XML Constraints

SMPTE ST RP 2057:2011, Text-Based Metadata Carriage in MXF

SMPTE ST RP 2057:2011 Am1:2013, Text Based Metadata Carriage in MXF – Amendment 1