

# Errata Notice on Schema Locations

March 17, 2022

This standard makes use of namespace locations with a form of <http://www.scte.org/schemas/xyz/>\*, where “xyz” is the location of the specific schema being referenced. Due to limitations on the current SCTE website, those specific locations are not available.

To find such schemas:

1. Go to the standards download page at <https://www.scte.org/standards/library/catalog/>
2. Search for the standard number (xyz in the above example)
3. Select the document from the table
4. Scroll to the “Supporting Documentation” section of the document webpage.

The schema will be listed within the Supporting Documentation section.

This notice will be removed once the exact namespace values are functional.

# SCTE<sup>®</sup> | STANDARDS

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**Digital Video Subcommittee**

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**AMERICAN NATIONAL STANDARD**

**ANSI/SCTE 236 2021**

**Content Metadata**

## NOTICE

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# 1. Introduction

## 1.1. Executive Summary

This standard (SCTE 236) defines the metadata typically required when a provider delivers on demand content to a distributor. This standard supersedes the CableLabs specification known as MD-SP-CONTENTv3.0-C01-151104. Special attention is paid to conversion to and from earlier versions of the CableLabs specifications.

## 1.2. Scope

This standard describes the grammar needed to represent information pertinent to the distribution, presentation and consumption of multimedia content. In a normal use case, the metadata originates from a provider and is distributed to operators.

This standard uses Extensible Markup Language (XML) extensively. A markup language defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. The reader is referred to the normative [XML] references for additional background and definitions.

A set of files referenced in this document contains the normative XML Schema definition that *may* be used to validate XML documents purported to conform to this specification. .

## 1.3. Intended Audience

This standard is written for providers and consumers of content and metadata. It can be used to acquire Live to On Demand content or file based On Demand content. It can also be used for guide data information.

## 1.4. Areas for Further Investigation or to be Added in Future Versions

It may be useful in the future to look at other metadata standards and attempt to unify key names and definitions. Some examples include EIDR, Schema.org and Movielabs metadata standards and specifications.

# 2. Normative References

The following documents contain provisions, which, through reference in this text, constitute provisions of this document. At the time of Subcommittee approval, the editions indicated were valid. All documents are subject to revision; and while parties to any agreement based on this document are encouraged to investigate the possibility of applying the most recent editions of the documents listed below, they are reminded that newer editions of those documents might not be compatible with the referenced version.

## 2.1. SCTE References

[SCTE 35] SCTE 35 2019a, Digital Program Insertion Cueing Message for Cable, Society of Cable Telecommunications Engineers (SCTE), 2019a.

## 2.2. Standards from Other Organizations

[Ad-ID] Ad-ID Structure, <https://www.ad-id.org>

[EIDR] EIDR ID Format can be found at: <https://www.eidr.org>

|                  |                                                                                                                                                                                                                         |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [IETF BCP 47]    | IETF BCP 47, Tags for Identifying Languages, 2009, Internet Engineering Task Force.                                                                                                                                     |
| [ISAN]           | ISAN (International Standard Audiovisual Number) website – <a href="http://www.isan.org">http://www.isan.org</a>                                                                                                        |
| [ISCI]           | Industry Standard Commercial Identification                                                                                                                                                                             |
| [ISO 3166]       | International Organization for Standardization, ISO 3166-1:2006. Code for the representation of names of countries and their subdivisions – Part 1: Country codes.                                                      |
| [ISO 4217]       | International Organization for Standardization, ISO 4217:2008. Codes for the representation of currencies and funds.                                                                                                    |
| [ISRC]           | International Standard Recording Code (ISRC) FAQ: <a href="http://www.riaa.com/issues/audio/isrc_faq.asp">http://www.riaa.com/issues/audio/isrc_faq.asp</a>                                                             |
| [RFC 1034]       | IETF RFC 1034, Domain names - concepts and facilities. P.V. Mockapetris. November 1987.                                                                                                                                 |
| [RFC 3986]       | IETF RFC 3986, Uniform Resource Identifier (URI): Generic Syntax. T. Berners-Lee, R. Fielding, L. Masinter. January 2005.                                                                                               |
| [XML InfoSet]    | W3C Recommendation, "XML InfoSet (Second Edition)", John Cowan, Richard Tobin, 4 February 2004, <a href="http://www.w3.org/TR/2004/REC-xml-infoset-20040204/">http://www.w3.org/TR/2004/REC-xml-infoset-20040204/</a> . |
| [XML Namespaces] | W3C Recommendation, "Namespaces In XML (Third Edition)", Tim Bray, et al, 08 December 2009, <a href="http://www.w3.org/TR/2006/REC-xml-names-20091208/">http://www.w3.org/TR/2006/REC-xml-names-20091208/</a> .         |
| [XML SchemaP1]   | W3C Recommendation, "XML Schema Part 1: Structures (Second Edition)", H. Thompson, et al, 28 October 2004, <a href="http://www.w3.org/TR/xmlschema-1/">http://www.w3.org/TR/xmlschema-1/</a> .                          |
| [XML SchemaP2]   | W3C Recommendation, "XML Schema Part 2: Datatypes (Second Edition)", P. Biron, et al, 28 October 2004, <a href="http://www.w3c.org/TR/xmlschema-2/">http://www.w3c.org/TR/xmlschema-2/</a> .                            |
| [XML]            | W3C REC: eXtensible Markup Language (XML) 1.1, 29 September 2006.                                                                                                                                                       |

### 2.3. Published Materials

- No normative references are applicable.

## 3. Informative References

The following documents might provide valuable information to the reader but are not required when complying with this document.

### 3.1. SCTE References

|          |                                                            |
|----------|------------------------------------------------------------|
| [CEP3.0] | SCTE 254 2019, Content Encoding Profiles 3.0 Specification |
|----------|------------------------------------------------------------|

### 3.2. Standards from Other Organizations

|          |                                                                                                                                                |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------|
| [ADI1.1] | CableLabs Asset Distribution Interface Specification Version 1.1, MD-SP-ADI1.1-C01-120803, August 3, 2012, Cable Television Laboratories, Inc. |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------|

|              |                                                                                                                                                   |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| [Content1.1] | CableLabs Video-on-Demand Content Specification Version 1.1, MD-SP-VOD-CONTENT1.1-C01-120803, August 3, 2012, Cable Television Laboratories, Inc. |
| [GENRES]     | Genres list can be found at: <a href="https://www.ctam.com">https://www.ctam.com</a>                                                              |
| [Content3.0] | <a href="#">CableLabs Content 3.0 Specification</a> , MD-SP-CONTENTv3.0-C01-151104, November 4, 2015, Cable Television Laboratories, Inc.         |
| [MPAA]       | Motion Picture Association of America Ratings, <a href="https://filmratings.com">https://filmratings.com</a>                                      |
| [TV]         | TV Parental Guidelines, <a href="https://www.tvguidelines.org">https://www.tvguidelines.org</a>                                                   |

### 3.3. Published Materials

- No informative references are applicable.

## 4. Compliance Notation

|                   |                                                                                                                                                                                                                                                                                   |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>shall</i>      | This word or the adjective “ <i>required</i> ” means that the item is an absolute requirement of this document.                                                                                                                                                                   |
| <i>shall not</i>  | This phrase means that the item is an absolute prohibition of this document.                                                                                                                                                                                                      |
| <i>forbidden</i>  | This word means the value specified shall never be used.                                                                                                                                                                                                                          |
| <i>vital</i>      | This word indicates a course of action to be followed strictly (no deviation is permitted).                                                                                                                                                                                       |
| <i>should</i>     | This word or the adjective “ <i>recommended</i> ” means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighted before choosing a different course.                    |
| <i>should not</i> | This phrase means that there may exist valid reasons in particular circumstances when the listed behavior is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behavior described with this label. |
| <i>may</i>        | This word or the adjective “ <i>optional</i> ” means that this item is truly optional. One implementor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another implementor may omit the same item.   |
| <i>deprecated</i> | Use is permissible for legacy purposes only. Deprecated features may be removed from future versions of this document. Implementations should avoid use of deprecated features.                                                                                                   |

## 5. Abbreviations and Definitions

### 5.1. Abbreviations

|        |                                                        |
|--------|--------------------------------------------------------|
| Ad-ID  | Advertising Digital Identification                     |
| ADI1.1 | Asset Distribution Interface Specification Version 1.1 |
| AMS    | asset management system                                |
| EIDR   | Entertainment Identifier Registry                      |
| EPG    | electronic program guide                               |
| HD     | high definition                                        |
| ID     | identifier                                             |
| ISAN   | International Standard Audiovisual Number              |
| ISCI   | Industry Standard Commercial Identifier                |
| ISRC   | International Standard Recording Code                  |
| MPAA   | Motion Picture Association of America                  |
| MSO    | multiple system operator                               |
| SCTE   | Society of Cable Telecommunications Engineers          |
| SVOD   | subscription video-on-demand                           |
| TV     | television                                             |
| URI    | uniform resource identifier                            |
| VOD    | video-on-demand                                        |
| XSL    | (eXtensible Stylesheet Language                        |
| XML    | eXtensible Markup Language                             |

### 5.2. Definitions

|                              |                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Asset                        | A combination of content and associated metadata, except for a Content Asset, which includes only metadata, and that directly or indirectly refers to content. An Asset <i>may</i> be an abstract container of references to other Assets with metadata that applies to all of the referenced Assets.                                                                                              |
| Asset Distribution Interface | The means by which assets (content as well as metadata describing that content) are transported from a provider to an Asset Management System. In addition, it provides a mechanism by which ‘block’ updates <i>may</i> be made to previously distributed assets. These block updates include metadata replacement, adding a new child asset to a previously received asset and deleting an asset. |
| Asset Distribution System    | Provides transportation of Assets from the premises of the Assets’ provider to the premises of the MSO. It interfaces to the Asset Management System using the Asset Distribution Interface (ADI).                                                                                                                                                                                                 |
| Asset Management System      | An entity that stores and manages the lifecycle of Assets.                                                                                                                                                                                                                                                                                                                                         |
| Content                      | Audio, video, or still picture creative materials used to form a movie, preview, poster art, etc. file (e.g., MPEG-encoded movie).                                                                                                                                                                                                                                                                 |
| Content Asset                | A specific type of Asset which is only metadata and which includes a reference to content.                                                                                                                                                                                                                                                                                                         |

|                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Metadata                         | Descriptive data included in an Asset or Content Asset.. It <i>may</i> vary in depth from merely identifying the asset or information to populate an EPG to providing a complex index of different scenes in a movie or providing business rules detailing how the content <i>may</i> be displayed, copied or sold. Separate uses for metadata have originated from the studios, distribution networks (Cable, Satellite), down to the CPE (STBs, PVRs). |
| Provider                         | A Party responsible for allocating asset identifiers.                                                                                                                                                                                                                                                                                                                                                                                                    |
| eXtensible Markup Language (XML) | A markup language defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. The reader is referred to the normative XML references for additional background and definitions.                                                                                                                                                                                                                          |

## 6. Overview

This specification defines the metadata content assets that are used to distribute a content metadata from a Provider to a number of cable operators.

### 6.1. Data Model

The essential conceptual object in the SCTE 236 data model is an Asset. An asset represents the basic amount of information that all other metadata types *should* contain.