

Referencing special image, video, audio, and audiovisual Encoding Best Practice

This practice defines a controlled vocabulary for ImageID values that refer to video objects such as black, color bars, and slate.



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REVISION HISTORY

Version	Date	Description
1.0	TBD	Initial publication

1 INTRODUCTION

1.1 Scope and ‘Compliance’

This practice defines controlled vocabulary for ImageID and AudioID that refer to objects such as black, color bars, and slate, 2-pop, and tone.

Note that this is a best practice, so we use the phrase ‘controlled vocabulary’ loosely. Parties not familiar with this practice will be unable to process these ImageID and AudioID values. In that case, it is probably a good idea to provide media tracks that represent the picture in question.

1.2 Background

The PlayableSequence mechanism allows the addition of video as part of a sequence. There are currently two mechanisms: 1) Clip, which references video, and 2) ImageClip which references an image and says how long that image should be repeated to create a video. ImageClip supports reference to audio.

There are two ways to add black video (e.g., commercial black, or leader), color bars, slate and other static video is to create a video with that content (i.e., black, etc.) and reference it from a Playable Sequence.

This requires the delivery of additional assets, either images or video, for the picture in question. For example, you want 10 seconds of black, provide a video with 10 seconds of black.

1.3 Using an ImageClip with ImageID to create video

The process defined here can be thought of as an abstract reference to video. That is, there is no need to deliver the actual video. This is done with PlayableSequence/ImageClip element.

2 CONSTRUCT FOR CONTROLLED VALUES FOR IMAGE ID

Image IDs referencing images referenced by controlled vocabulary are constructed as following

“md:imageid:md:” + <image value>

where <image value> is a string representing the special image.

Note that in Common Metadata, Section 2.2.1, the ‘md’ scheme is defined as referencing controlled vocabulary.

If you are defining your own special image IDs use <image value> of the form

“private:” + <private value>

where <private value> a user-defined term.

3 IMAGEID CONTROLLED VALUES

3.1.1 General Guidance

When using an ImageID to refer to bars, countdown or other elements with expected minimum times, ImageClip/Duration must comply with the requirements of the bars, countdown, or other elements.

3.1.2 Black

Black applies to both commercial black, and other black sequences (e.g., black leader)

<image value> is “black”

For example, md:imageid:md:black

3.1.3 Leader

3.1.3.1 Color Bars

<image value> is “barsandtone:” + <color bar>, where <color bar> is

- ‘native’ – generate bars compatible with video source
- “rs198a”
- “smpteecr1-1978”
- “smpterp219-2002”
- ‘ebu100-75’ – EBU/IBA 100/0/75/0
- ‘ebu75’ – EBU 75/0/75/0
- ‘ebu100SD’ – EBU 100/0/100/0 Standard Definition
- ‘ebu100HD’ – EBU 100/0/100/0 High Definition

If bars are required without tone, <image value> is “bars:” <color bar> with the same values as above.

3.1.3.2 Countdown

<image value> is ‘countdown:’ + <leader>, where <leader> is

- ‘academy’ – academy countdown
- ‘SMPTE’ – SMPTE universal leader

3.1.3.3 2-pop

2-pop specifies a 1kHz tone, 1 frame long, 2 seconds before the start of program.

For 2-pop, ImageID should be md:imageid:md:2pop

Back picture is assumed when 2-pop is specified.

ImageClip/Duration specifies the length of the sequence before program, and must be at least 2 seconds. Any time > 2 prior to the pop. That is, a 10-second duration would result in 8 seconds of black silence, followed two seconds of black, with the pop at the first frame.

3.1.3.4 Ratings Cards

<image value> is derived from Common Ratings (www.movielabs.com/md/ratings), and expressed in the form:

“common-rating:” + <system> + “:” + <rating>

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