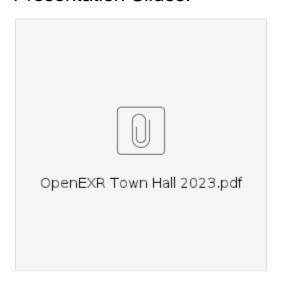
2023 ASWF OpenEXR Virtual Town Hall

August 1, 2023

Presentation Slides:



New Optional Standard Attributes:

Support automated editorial workflow

reelName, imageCounter, ascFramingDecisionList

Support forensics ("which other shots used that camera and lens before the camera firmware was updated?")

cameraMake, cameraModel, cameraSerialNumber, cameraFirmware, cameraUuid, cameraLabel
lensMake, lensModel, lensSerialNumber, lensFirmware
cameraColorBalance

Support pickup shots (reproduce critical camera settings)

shutterAngle, cameraCCTSetting, cameraTintSetting

Support metadata-driven match move

sensorCenterOffset, sensorOverallDimensions, sensorPhotositePitch, sensorAcquisitionRectangle
nominalFocalLength, effectiveFocalLength, pinholeFocalLength, entrancePupilOffset
tStop (complementing existing aperture)

Tracking current work in SMPTE

SMPTE is trying to be more agile, and virtual production makes a good test case for their efforts; there's an overview blog post on their site:

Update on SMPTE's Rapid Industry Solutions (RIS) On-Set Virtual Production (OSVP) Initiative



SMPTE's Rapid Industry Solutions (RIS) program was designed to give the Society an agile, responsive framework through which to address emerging industry needs. Working with partners across the industry, SMPTE identified on-set virtual production (OSVP) as a suitable subject for its first RIS initiative, the SMPTE RIS OSVP initiative, which launched one year ago.

https://www.smpte.org/blog/update-on-smptes-rapid-industry-solutions-ris-on-set-virtual-production-osvp-initiative

Real-world camera and lens metadata is messy

Camera vendors provide metadata with their own names, their choice of data type, their choice of unit, and perhaps most importantly their own semantics

SMPTE offers metadata normalization definitions

Anyone with a GitHub account can comment on them: https://github.com/SMPTE/ris-osvp-metadata/

SMPTE works with camera vendors to show how their metadata is mapped to SMPTE RIS OSVP metadata

Anyone with a GitHub account can file an Issue or submit a PR: https://github.com/SMPTE/ris-osvp-metadata-camdkit

ARRI, Blackmagic Design, Canon, RED, Sony contributions so far

The new metadata leverage a very good white paper from Cooke Optics establishing lens terminology for VFX

The definitions in this paper are used in the SMPTE RIS for OSVP camdkit project just mentioned



amera and lens definitions for VFX	21/07/23

Contents

Introduction	3
2.0 There are three different definitions of focal length	4
2.1 Pinhole focal length	5
2.2 Optical models of lenses	6
2.3 Talking to optical designers about pinhole focal length	9
2.4 Practical implications	. 10
3.0 The mount is the best physical reference point	. 11
4.0 Definitions	. 12
5.0 References.	. 13

... that you can find at

https://cookeoptics.com/wp-content/uploads/2023/07/Cooke-Camera-Lens-Definitions-for-VFX-210723.pdf