ACES Working Group Proposal

Proposal submitter
Tucker Downs

Proposal submission date
10/25/2023

Description of the problem or question(s) the Working Group will be investigating

The current ACEScc and ACEScct encodings cannot encode the full dynamic range of modern digital cinema cameras in the 0 to 1 range. While ACEScc and ACEScct are capable of encoding values below 0 and above 1, those ranges are clipped when passed over digital interfaces such as HD-SDI.

This working group will establish a new "ACESlog" encoding, intended to supersede ACEScc and ACEScct. The working group will consider encoding dynamic range, quantization, round-trip color errors when quantizing to various bit depths, and grading behavior when using as a color corrector working space.

Proposed Working Group deliverable(s)

- A new ACESlog specification
- Performance details
- Best practices for recommended usage

List of Proponents
ROE Visual, Netflix, RED, Universal Pictures

Anticipated core Working Group contributors
ROE Visual, Netflix, Arri, RED

Anticipated Working Group lifecycle

ACES Leadership Use

Approved

Not approved

Proposal modifications required

Review date
10/27/2023

Assigned Working Group Name
ACESlog Working Group

Assigned Working Group Lead
Tucker Downs

Supervising Technical Advisory Committee
 Architecture   Implementation

Anticipated Academy resources required
Imaging Lab, Baselight, Sony X300 and Projector for testing.

Notes