

ACES Working Group Proposal

Proposal submitter

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

The work completed by the Gamut Mapping Architecture group, which resulted in a scene-referred RGB Gamut Compression Algorithm, requires implementation of the algorithm in major software applications. The scope of work for the working group is as follows:

- Outline baseline implementation standards and documentation
- Work with software developers to ensure implementation across specialties such that productions can use the tool at scale

Our initial target software for implementation will be:

On Set: Pomfort LiveGrade

VFX: OpenColorIO

Grading/Finishing: Baselight, Resolve, Colorfront

Additional Information

There are a few notes from the Architecture working group that will need to be addressed by the implementation:

1. The algorithm is not fully implementable as a 3D LUT. Should the group create LUT based approximations for backwards compatibility in older software versions?
2. There is an inverse flag in the CTL deliverable. How should that be implemented / exposed to end users, knowing the limitations?
3. There are several "default values" set in the CTL - how, if at all should these parameters be exposed to the end users? Should it be different per discipline?
4. Based on the answers to the above, how much is tracking of the algorithm a requirement? Ideal would be to track via AMF, but how much? Simple on/off? Parameters? Version?

Proposed Working Group deliverable(s)

- Documentation detailing the implementation best practices and test materials (if applicable).
- Reference implementations in at least one application for major production uses (on set, VFX, grading/finishing)

Anticipated Academy resources required

Staff administration, Staff technical support, Imaging Lab resources, Stella Stage resources, etc.

List of Potential Contributors:

ACES Rep - Joachim Zell

Joseph Goldstone - LA

Jed Smith - Montreal

Doug Walker - Montreal

Michael Dolan - North Carolina

Daniele Siragusano - Germany

Rohit Gupta - Singapore

Patrick Renner - Germany (Munich)

Chris Clark - LA

Francesco Luigi Giardiello - London

Thomas Mansencal - New Zealand

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