AHG Report on Font Format

m56303 - WG3 "MPEG Systems" (April 26-30, 2021)

April 26, 2021

Mandates

1. Review and discuss the text of Working Draft amendment of ISO/IEC 14496-22:2019_AMD2 to review and update COLR v1 data structure descriptions.
2. Discuss clarifications and updates to other parts of the OFF specification, and submit AHG recommendations for proposed changes to address identified technical issues.

Highlights

- The increased role of GitHub for AHG work!
  Most of the activities are happening with public input in two GitHub forums: MPEGGroup/OpenFontFormat and ColorGradientSpec
- New version 1 of COLR (Composition Of LayeRs) table makes color fonts much more attractive option:
  - matching many capabilities of SVG without additional rendering complexity;
  - Significant increase in encoding efficiency

Working Draft issues (see m56219 - BoG Report)

ISSUES TO RESOLVE:

- Color interpolation space
- Interactions between COLR and CPAL tables
- Clarify gradients behavior and interaction with transforms
- Addressing previously identified technical issues

Working Draft issues (see m56219 - BoG Report)

ISSUES TO RESOLVE:

- Color interpolation space
- Interactions between COLR and CPAL tables
- Clarify gradients behavior and interaction with transforms
- Addressing previously identified technical issues

INPUT CONTRIBUTIONS:

- **m56340** - Clarifying color interpolation and CPAL amendments
- **m56339** - Introducing sweep gradients
  m56341 - Clarifying gradients behavior
- **m56342** - New [non-variable] paint formats for encoding efficiency
- **m56343** - Misc corrections and updates for identified technical issues

16%

"NOTO Emoji" size reduction after introducing a new set of *non-variable* paint formats!

———

Outreach activities

- COLR version 1 will be featured in the upcoming [ATypI Tech Forum](#)
  (happening May 3-5 where many AHG members are active participants!)
- Active collaboration with font designers and tool developers:
  - New formats introduced by the AMD2 have already been prototyped in real products

AHG Recommendations

- AHG recommends to accept the changes proposed by input contributions.
- AHG recommends the updated Working Draft to be promoted to CD stage, and to publish it under three-month ballot to allow sufficient time for ballot comments.

Thank you!

Vladimir Levantovsky

Type Standards, LLC
www.typestandards.com

April 26, 2021