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Coding of moving pictures and audio

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INTERNATIONAL ORGANISATION FOR STANDARDISATION
ORGANISATION INTERNATIONALE DE NORMALISATION
ISO/IEC JTC 1/SC 29/WG 11
CODING OF MOVING PICTURES AND AUDIO

ISO/IEC JTC 1/SC 29/WG 11 **N19592**
July 2020, Online

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Title: EE4FE 13.44 on fine granularity slices (including scalability)

Abstract

Exploratory experiment 13.44 intends to evaluate the proposed introduction of fine granularity slices into the G-PCC design.

Mandate

The mandate of the experiment is to evaluate —

- the effects of node group based slicing using the current breadth-first octree scan order,
- the costs and benefits of a flexible node group scan order,
- means to slice attribute data that follows or combines geometry slices,
- the applicability of slicing to scalable content distribution.

Participants

Company	Contact	E-mail	Status
Apple	David Flynn	davidflynn@apple.com	Proponent
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Timeline

2020-07-31	Expected release of TMC13v11
2020-08-31	Distribution of CE software and results for verification
2020-10-07	MPEG 132 document upload deadline
2020-10-12	MPEG 132

Evaluation

All CTC [1] test conditions for TMC13 will be evaluated using category one and three content.

Description of proposals

m54677 – Fine granularity slices

Fine granularity slices is a method of slicing the geometry octree. It introduces the concept of a node group, which is identical to the existing availability boundary. A flexible traversal order permits minimising the number of slices while permitting trivial parallel encoding and decoding of the tree structure. With the addition of a layer identification, the slice structure furthers the utility of the scalable attribute coding modes.

References

[1] 3DG, "Common Test Conditions for G-PCC," ISO/IEC JTC1/SC29/WG11, 131st meeting, OnLine, Tech. Rep. w19584, Jun. 2020.