JCTVC-T0064: Comments on palette sharing

Marta Karczewicz, Wei Pu, Vadim Seregin, Rajan Joshi

Palette sharing

| reused entries | new entries |

previous CU palette size
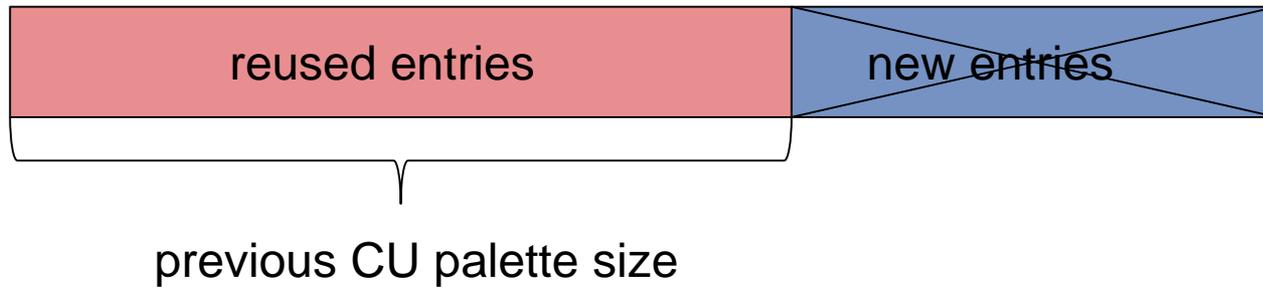
- In SCM-3.0, additional RD is done at encoder side for palette sharing
- Palette sharing flag is coded with context coded bin

Proposal: Remove palette sharing mode

- Two tests are performed to replace palette sharing:
  1. Replace palette sharing RD by another RD in which only reused entries are allowed in the palette, and no new entries are signalled
  2. Replace palette sharing RD by another RD in which new palette entries are derived for pixels that are not within a certain threshold of the reused entries

- When signalling the number of new entries, the first bin is context coded
  - Replaces context coded palette sharing flag

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Results

Test1

	All Intra		
	G/Y	B/U	R/V
RGB, text & graphics with motion, 1080p & 720p	0.0%	0.1%	0.1%
RGB, mixed content, 1440p & 1080p	0.0%	0.0%	0.0%
RGB, Animation, 720p	0.0%	0.0%	0.0%
RGB, camera captured, 1080p	0.0%	0.0%	0.0%
YUV, text & graphics with motion, 1080p & 720p	0.1%	0.2%	0.1%
YUV, mixed content, 1440p & 1080p	-0.1%	-0.1%	0.0%
YUV, Animation, 720p	0.0%	0.0%	0.1%
YUV, camera captured, 1080p	0.0%	0.0%	0.0%
Enc Time[%]	110%		
Dec Time[%]	107%		

Test2

	All Intra		
	G/Y	B/U	R/V
RGB, text & graphics with motion, 1080p & 720p	-0.5%	-0.2%	-0.3%
RGB, mixed content, 1440p & 1080p	-0.3%	-0.4%	-0.4%
RGB, Animation, 720p	0.0%	0.0%	0.0%
RGB, camera captured, 1080p	0.0%	0.0%	0.0%
YUV, text & graphics with motion, 1080p & 720p	-0.1%	-0.3%	-0.4%
YUV, mixed content, 1440p & 1080p	-0.1%	-0.4%	-0.3%
YUV, Animation, 720p	0.0%	0.0%	0.0%
YUV, camera captured, 1080p	0.0%	0.0%	0.0%
Enc Time[%]	105%		
Dec Time[%]	104%		

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Thank you!

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