



KALTURA

Streaming Media West

Per-Title encoding



Assaf.Berkovitz@Kaltura.com

***Kaltura Content Aware
Encoding Engine***



Old CAE-ish Implementation

- Capped by source bitrate
- **Attempt** to provide max bitrate

Moving to CAE - Assumptions

- Sources bitrate values are not optimized
- 10k-60k/day
- ALL titles are important

Implementation

- Calculate source average complexity.(CRF=23)
- Encode relevant flavors only. (not lower than 50% of the flavor bitrate)
- Capped CRF*

Results



SaaS Ecosystem First Month Results

- AVG sum(BT) per title -
 - NON-CAE: 3479
 - CAE: 3082 (~11%)
- 58,000/332,000 high bitrate HD flavors were NOT generated (~17.5%)

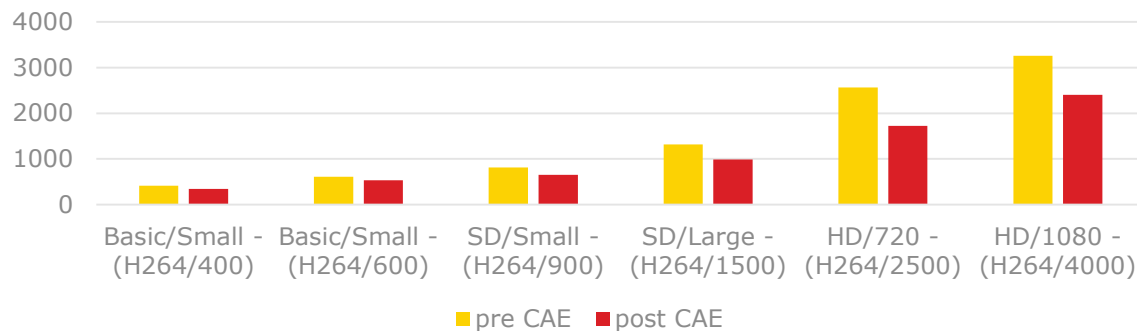
Content Intensive Customer

3 weeks comparison

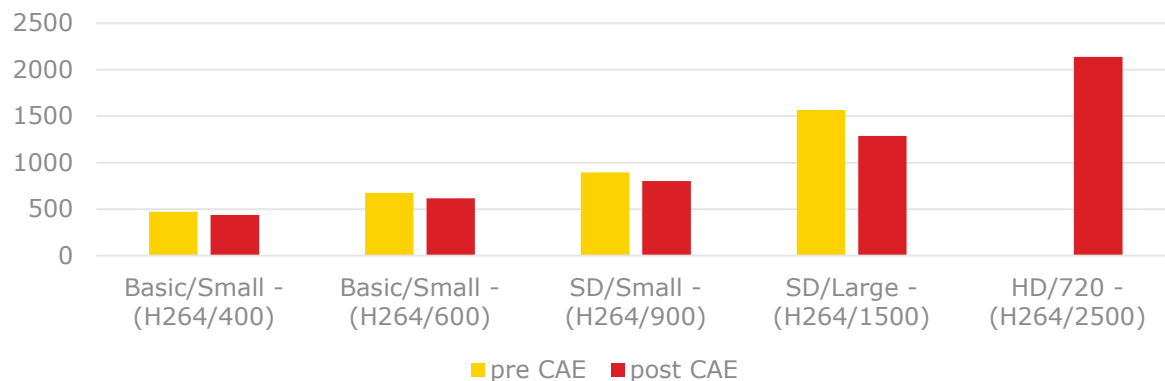
	#Samples	AVG Source BR	AVG sum(BT) per title
Non CAE	6041	7258	9663
CAE	3921	7602	7952

Case Studies

NYU AVG Bitrate



LAKANA AVG Bitrate





KALURA

Thank You

