

AOB headers for MLP input

This is an experimental fork of ffmpeg aimed at importing MLP file layout into dvda-author when input is MLP. This is required to compute PTS and DTS stamps in 64/43 B sector headers of MLP AOBs. Algorithm is as follows:

At each sector of rank (1-based) N of 2048 B, compute :

- sum S of header size in bytes before N in B ($64 + 43 + 43 + \dots + 43$, N-1 terms)
- total byte size = $2048 * (N-1) - S$
- run parallel layout using libffmpeg.a, gives rank of packet and position of packet
- this is given by get_mlp_layout() which returns an MLP_LAYOUT table of at most MAX_AOB_SECTORS i.e $1024 * 512$ lines. Each line has fields pkt_pos, nb_samples and rank.
- pkt_pos is position in MLP file (raw), nb_samples is number of PCM samples in output (raw), rank is sector rank in AOB (all fields 0-based).
- take rank such that pkt_pos of MLP packet just after start of sector (total byte size)
- $nb_samples * c * br = Nbyteswritten$
- $Nbyteswritten / (c * sr * br) = duration$
Or : $duration = nb_samples / sr$
 $PTS = \text{ceiling}(duration * 90000)$
 $DTS = \text{floor}(duration * 90000)$
Add :
 $PTS = PTS + PTS0$
 $DTS = DTS + DTS0$
 $PTS0=105$
 $DTS0=24$

Write PTS at offset 23 (0-based) on 5 bytes Write DTS at offset 28 (0-based) on 5 bytes First sectors with have PTS starting with 0x31 and DTS with 0x11.

REST OF AOBs is just MLP bytes except for last sector padding (PCM style, TODO)