

## **ISDCF Immersive Audio Plugfest**

20190225 setup and 20190226 plugfest

SPECIAL THANKS TO:

### **Deluxe (especially Justin and Steve)**

Mike Radford / Fox

Fraunhofer

Barco

Dolby

### **OVERALL:**

**FANTASTIC!** Accomplished what we were hoping for!

Great discussions. Good feedback. Helping the industry move forward.

### **Summary:**

- Two playback systems - All “Basic” playback of current Atmos spec worked well (Great News!)
- Development underway for other parts of the SMPTE Spec
- Great Test Content and better understanding of the SMPTE IAB Spec
- D-Box Compatible
- DTS Content played on Dolby renderer!
- Ingestion worked well, almost everywhere.
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- Many SMPTE Advanced features not yet implemented - not sure if all can be implemented - will know more at April ISDCF meeting
- Request to prioritize list of TBD features

### **Content:**

Fox Killer Reel (in 24/48/60fps):

FoxIAATest-v5\_TST-24fps\_S\_EN-XX\_OBAE\_2K\_TCF\_20190221\_TCF\_SMPTE

Fox Alita Trailer (with D-Box Track):

AlitaBattleAngel\_TLR-D\_S\_EN-EN-CCAP\_US-GB\_ATMOS-DBOX-HI\_2K\_TCF\_20190223\_TCF\_SMPTE

Fraunhofer:

FraunhoferlabTestContentV1\_TST\_S\_EN-XX\_INT\_71-ATMOS\_2K\_20190125\_SMPTE\_OV

Fraunhofer Meridian:  
 Meridian3Beds\_TST\_S-178\_EN-XX\_71-ATMOS\_2K\_20190125\_SMPTE\_OV

DTS:  
 DTSCutOfTheBox\_SHR\_F\_EN-XX\_US\_Atmos\_4K\_DTS\_20190222\_DTB\_SMPTE\_OV

Dolby:  
 DolbyShattered45s\_POL-2D\_F\_EN-XX\_71-ATMOS\_2K\_20150421\_DLB\_SMPTE

**Hardware:**

Barco	Dolby	Dolby	DigiCine	Comscore TCC TMS	Comscore TCC TMS
Equipment Information	Equipment Information	Equipment Information	Equipment Information	Equipment Information	Equipment Information
ICMP Alchemy	ShowVault/ IMB	ShowVault/ IMB	IMB	On Barco Setup	On Dolby Setup
1.3.5.2.20787	2.8.22-0	2.8.22-0			
APX Sound Processor	CP850 Sound Processor	CP850 Sound Processor	CP850 Sound Processor		
2.1.8.464	2.3.1.5-4935 429 (Beta)	2.3.0.3-4595 940 (Current)	2.3.0.3-4595 940 (Current)		
	TMS	TMS		TMS	TMS

Test and Overall Results:

<b>This will work...</b>
Ingest Content
Validate Content
Playback of Content
Show that IA is playing
Sync Test
Simple Bed Channel Routing (5.1)
Simple Bed Channel Routing (7.1DS)
Simple Bed Channel Routing (9.1OH)
Object Snap Test - Off
Object Snap Test - On
Object Snap Test - On, Tolerance 0.8
Object Spread Test, Overhead, One-D

Object Spread Test, Screen, One-D
Multiple Objects (3) combined with Snap/Spread Test, Spread On
Multiple Objects (3) combined with Snap/Spread Test, Snap Off, Spread Off
Multiple Objects (3) combined with Snap/Spread Test, Snap On
Multiple Objects (3) combined with Snap/Spread Test, Snap Tolerance
10 Simultaneous Objects, No Bed
15 Simultaneous Objects, No Bed
18 Simultaneous Objects, No Bed
30 Simultaneous Objects, No Bed
50 Simultaneous Objects, No Bed
10 Simultaneous Objects, Quiet 9.1OH Bed
15 Simultaneous Objects, Quiet 9.1OH Bed
18 Simultaneous Objects, Quiet 9.1OH Bed
30 Simultaneous Objects, Quiet 9.1OH Bed
50 Simultaneous Objects, Quiet 9.1OH Bed
118 Simultaneous Objects, Quiet 9.1OH Bed
Authoring Tool Info Test, at begin of IAFrame ChildElements
Authoring Tool Info Test, at end of IAFrame ChildElements
Unknown Element Test, beginning of the IAFrame
Unknown Element Test, end of the IAFrame
User Data Test, at begin of IAFrame ChildElements
User Data Test, at end of IAFrame ChildElements

<b>TBD if these features will work</b>	
128 Simultaneous Objects, No Bed — 118 OK	118 limit?
<b>Mixing of Two Simultaneous Beds</b>	
9.1OH' Bed - Gain Test	
9.1OH' Bed - Decorrelation Test	
Pink Noise 13.1HT Bed with 3 Spoken Conditional Beds.	
Bed Remap Test (Source: 13.1HT, Dest: 5.1, 7.1DS, 11.1HT, 9.1OH)	
Object Gain Test	

Object Zone Gain Test (using ZERO/ONE gain flags)	
Object Zone Gain Test (using decimal gain)	
Object Spread Test, Overhead, Low-Rez	
Object Spread Test, Overhead, Three-D	
Object Spread Test, Screen, Low-Res	
Object Spread Test, Screen, Three-D	
Pan Sub-block Test	
Conditional Sub-BedDefinition elements	
Conditional Sub-ObjectDefinition elements	
Three simultaneous 9.1OH BedDefinition elements	