HPA Tech Retreat 2012 Annie Chang VP, Post-Production Technology — The Walt Disney Studios

Interoperable Master Format Update

What a difference a year makes...

- 2011 Tech Retreat all about USC ETC IMF effort
- February 2011 ETC published IMF 1.0
- March 2011 SMPTE IMF work begins
 - WG Chair Annie Chang
 - No "rubber stamping" of input documents
 - Use cases
 - Document roadmap and framework
 - Worked on a lot of documents
- SMPTE version of IMF



IMF Key Concepts

- Components Wrapped into Track Files
 - Essence (Image & Audio)
 - Data Essence (Subtitles & Captioning)
 - Dynamic Metadata (Pan and Scan)
- Compositions and Composition Play Lists (CPL)
 - Creates versioning
 - Flexible hierarchy for combining and using Track Files
- Output Profile Lists (global output parameters)
- Packages
- Security

Image Codecs...

Modular Approach

- Core Framework
 - Playlists
 - Wrapping
 - General Image, Audio and Subtitling Parameters
- Modular Applications
 - "Plug-in" to framework
 - Allow for specific functionality
 - Higher compressed CODECs
 - Specific resolutions or frame rates
 - Allows for different problems to be solved
 - Interoperable within an Application (but not necessarily between Applications)

Core Framework

Application #1 Uncompressed

≤ HD

#2 J2K

≤ HD Lossy & Lossless

Application

Application #3

MPEG-4 SStP ≤ 2K Application #n

Your App __Here

SMPTE Document Status

- Documents in "finalizing" state
 - Composition Play List
 - Wrapping
- WIP Documents
 - Audio
 - Data Essence (Subtitling and Captioning)
 - Application #2 JPEG2000
 - Application #3 MPEG-4 SStP
- Still Need to work on
 - Output Profile Lists
 - Packaging and Security
 - Other Applications
- Implementers Interchange
 - Before documents get to Draft Publication

Moving Fast!

How to Get Involved

- Visit www.imfforum.com
- Join the SMPTE Standards Community
 - https://www.smpte.org/standards/engineering-committees
 - Join 35PM Technology Committee
 - Join 35PM50 Working Group for IMF
- Thanks!