ISDCF Main Meeting Notes – January 11, 2024 In person at Harman & Zoom

Upcoming Meetings

Tuesday February 27, 2024 - Zoom Only Thursday April 18, 2024 - in person (Harman)

Thank you to companies that sponsored ISDCF for 2023 and those that have paid dues for 2024 - including AEGISOLVE, AMC, Dolby, Eikon, GDC, Paramount, Qube, Samsung/Harman, Warner Bros.



Part 1: General Reporting

Housekeeping:

- Zoom meeting (provided by ISDCF)
- Set next meeting dates (above).
- Thank you ISDCF for support of the Chairman.
- Thank you to Harman for the meeting space and logistics (GREAT Zoom support)
- Thank you to Dean Bullock for providing general expenses and admin support.
- Meeting notes from November '2023 approved and to post to open website

Legal reminder / press reminder / Antitrust Disclaimer. The official antitrust
guidelines are posted on our website and are linked from the main ISDCF page. A short
verbal overview of guidelines was given. Please no-social-media for discussions held at
ISDCF.

Organizational Issues:

- * InterSociety Bylaws approved, new board members added.
- * ICTA Presentation can be posted to ICTA website approved (Thank you to Loren and Dan who gave the report at the conference.)

InterSociety Board: Susie Beiersdorf, Dean Bullock, Mark Collins, *Reiner Doetzkies* Steve LLamb, *Sean Romano*, Don Tannenbaum, *Mark Waterston* and Jerry Pierce (Executive Director) (*New Members in italic*)

Attendance is at end of these notes.

Action Items from January 11, 2024

- 1. Jerry to send ICTA presentation to Steve for EDCF update. Let ICTA post the slides to their website
- 2. Again consider making a statement about end-of-life equipment may be at risk of not playing new content
- 3. Consider creating a few "blog" pages to post information that needs correction. FilmTech can point to these professional documents posted on ISDCF
- 4. Schedule a Security Subcommittee meeting
- 5. Create a rough draft of a "what's possible with metadata" document for discussion (Kirk?)

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Future of ISDCF - Financial Report

2023 Review

- New membership model
- 22 Sustaining Invoices Sent
- 16-1/3 Paid Sustaining Members \$65,333 income
- \$37,934 expense
- New things in place to support receiving corporate payments New physical address

- New W-9
 - New proof of 501c from IRS

2024 Finances

- 23 Sustaining Invoices Sent
- Some are same members that did not respond last year
- Expecting 20 returns 6 already paid
- \$80,000 revenue
- Expecting expenses of \$50,000 \$37,650 cash on hand
- 2023 Taxes underway this month
- We will send individual invoices for 2024

Real Work

The CERT adventure

Overview: A number of archival / vintage /classic / repertory and NEW movies have a CPL that was signed with a certificate (CERT) that expired on December 30, 2023 (they were valid when they were created) and they faced a dark screen condition by the equipment. This was not the first time this has happened, but there were many more classic titles that used this particular CERT.

The issues is: One or more certs in the signing chain has a "not after" date that is in the past.

It was generally agreed that the behavior of equipment should allow playback of a feature if the CERT was valid at the time of authoring. (In fact DCI issued a notice that this is the case.) But some equipment had implemented a dark screen condition software rule. Many of these companies provided updated software, but not all the updates had been distributed to the field. One major company does not have a software fix and noted during the meeting that they are aware of the issue.

There was a scramble for a number of exhibitors to update software on some equipment and in some cases the authoring facility created a new CPL with an updated CERT. Given that there are hundreds of thousands of movies in the archive that used expiring CERTS, remastering is not a viable option.

At the end of December about 600 CPLs were remastered for the weekend. There are some stop-gap work arounds that involve KDM formulation, but this does not work on all systems. (If you **do not** use content authentication within the KDM some systems will play the content. This is how the ISDCF KDM formulation document is written. Studios must be aware of not using content authentication and the potential risks. The DCI spec seems to require content authentication.)

There is a lot of misinformation floating around. There are multiple problems that are being blamed to this one issue. This problem has to do with SMPTE standard 430-2 step 9 of the validation rules.

field within the CommonName.) If the validation context includes a desired role, check that this role appears (see Section 6.1 and informative note there-in). D-Cinema security devices should ignore unrecognized roles appearing in the CommonName.

- 9. If the validation context includes a desired time, check that the desired time is within the validity dates. Informative Note: In most cases the desired time is the current time, but a different time might be used to examine historical or future information. Implementations that do not need to know the current time in order to otherwise comply with their requirements typically will not include a desired time in the validation context and therefore will skip this step.
- Check that the signature algorithms specified inside and outside of the certificate body match and that both equal sha256withRSAEncryption. Reject certificates that violate this rule.

KDM always use the current time to validate it's cert. A validation for the CPL needs to look at time of issue date of the CPL to validate the cert.

DCI Releases DCI Specification, DCSS Version 1.4.4 Approved for Distribution on January 3, 2024 Digital Cinema Initiatives, LLC, Member Representative Committee

DCSS Changelog since 1.4.3

- Permit playback of CPLs after the signing certificate has expired
- Relax ingest and storage capacity requirements

The DCI Redline of the document:

- 4. Validate Composition Playlists (CPL), and log results as a prerequisite to the associated composition playback. For encrypted content, validation shall confirm that:
 - a. The associated KDM's ContentAuthenticator element matches a certificate thumbprint of one of the certificates in the CPL's signer chain (see item 1 above), and that such certificate indicate only a "Content Signer" (CS) role per Section 5.3.4. "Naming and Roles" of the certificate specification [SMPTE 430-2 D-Cinema Operation - Digital Certificate].
 - b. [This item left blank intentionally. The KDM-CPL content essence keys match test has been reassigned to the SMS.]
 - c. The CPL meets the two validation requirements defined in Section 5.2.1. of SMPTE 430-5 D-Cinema-"D-Cinema Operations Security Log Event Class and Constraints for D-Cinema. D-Cinema with the following caveat: When performing Step 9 of Section 6.2 in SMPTE ST 430-2, the desired time of the validation context shall be equal to the IssueDate field of the target CPL (and not the current time). This behavior permits the continued playback of a CPL after the expiration of its signing certificate, but ensures that the signing took place during the certificate's validity period.
- 5. Process essence (i.e., Track File frame) integrity pack metadata for image and sound during show runtime.

A question was raised why does this not include the packing list? One provider said that packing lists are generated on-demand. It was suggested that DCI expand the change to include packing lists. The packing list does not seem to be the problem for the near-term issue, but should be included in next revision.

A comprehensive statement would be for DCI to make a statement to permit of ingest of a packing list after the signing certificate has expired. If content is to be "repaired" it should feature an updated assetID and date on the document so it doesn't cause other problems with content management systems.

The elephant in the room is the existence of playback equipment that may not be updated. Companies have many 10K's deployed equipment that is end of life / end of support and is at risk of not getting an update. We again face the issue that equipment at end of life / end of support may not be able to play some content. ISDCF needs to inform the industry that this end of life / end of support is real and will eventually need to be replaced.

The ISDCF test content fails for playback due to this issue on some systems. It is perfect test content to verify that your system plays content that should play.

SMPTE_TST-1-Bv21_51-71_20170110_SMPTE_Folders (linked to on ISDCF's https://www.isdcf.com/smpte-dcp-tests/) has, as of Jan 1 2024, expired CS and CS issuer certs:

Error: PKL 1f4db139-fcde-498c-a028-cb0c54792c99: Signature X: Certificate "CS.tdc-bur-user01" expired 4 days ago (Aug 15 2011-Dec 31 2023)

Error: PKL 1f4db139-fcde-498c-a028-cb0c54792c99: Signature X: Certificate ".tdc-admin-c" expired 3 days ago (Mar 27 2007-Jan 1 2024)

We may suggest that someone post information on FilmTech with the corrected information. We need to fix the wrong information that is being propagated. Should ISDCF have an account on FilmTech and have an internal group monitoring? No, you can't represent yourself as an organization. One member is going to join FilmTech and try to re-direct to ISDCF discussions. Maybe create a Blog-ish landing spot to correct misinformation that those active on FilmTech to go. We should include EDCF in our discussions.

Image Artifact Adventures (AKA JPEG2000 issues)

Last month we posted the "DC-J2C-ISSUES_DECKSPLANATION" and continue to seek input from the field. We identified three issues:

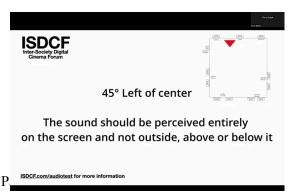
- 1. '0xffff'Issue
- 2. 'UnbalancedImage'Issue-UnderInvestigation
- 3. 'GreenFlash'Issue-UnderInvestigation

These issues are being studied by a group of industry participants (not an ISDCF group). We are not ready to widely share these since we still don't really have a good understanding of two of the three issues. They think they are ready to share more details of the '0xffff" AKA Green/Purple tearing. We still are asking exhibitors to "see something/say something" to identify these problems and including the UUID and a time of playback and server/projector system. There are too many unknowns.

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Audio Test Material

We demonstrated the current state of the test content for 7.1 playback. It is about 15 minutes of content for testing any kind of theaters.



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Immersive Audio

Beyonce was released using the IAB naming and it included a projectionist letter with information. Also released was Anyone But You with the IAB name.

Some studios are saying they do not intend to move naming to IAB and maintain releases using ATMOS label. Others are shifting to IAB. Expect both will be in the field.

Security subcommittee report

ISDCF has a security (FIPS) subcommittee to discuss issues with changing security requirements of digital cinema equipment.

No new meetings.

If you want to join this discussion, please email <u>jerry@jerrypierce.org</u> and ask to join the security discussion.

Metadata subcommittee report

The wish list needs to come from exhibition. The group thought that our subcommittee would be useful to help exhibitors/pre-show programmers to understand what is possible from the metadata in order to talk with their vendors.

The start would come from a document describing what's possible. The suggestion is to have someone do a rough draft of a document and the subcommittee could contribute.

BREAK

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Naming Convention / IT issues for ISDCF

We had one service provider enter about 15 studio names to the registry. We discussed if this was appropriate. We decided that if the service provider indicated what they had permission to enter them in the GitHub entry, we should register them. We want to be careful, especially for European entities, that we have permission. We don't expect any mis-use of the system since we have manual oversight on all entries.

We considered that we should have consistent studio/facility codes for the same organization. Bottom line, it didn't work. There were a number of conflicts.

FYI a "new" language - "unknown" or "made up" language. We are using the code "und" for these languages. (Undetermined language). Another option might be "x-" for private use subtag.

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Terminology Registry

Initial terminology registry was started https://registry-page.isdcf.com/terms/
This joint ICTA/ISDCF project is stalled. ICTA will take the lead in reviewing it.

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Mastering Best Practices

https://docs.google.com/document/d/17VWIB3sA1HQy7yRzJoDYtnOZJ2hi5feedOPiKEkiZ_k/edit and should include a pointer to the RDD52 GitHub registry. https://github.com/SMPTE/rdd52

At the last ISDCF meeting we suggested creating a document to describe possible new suggestions to be part of additions to RDD52 - guidelines for making valid DCP products.

These should be issues entered into the RDD52 GitHub issue tracker and we should not create a new external document.

DCI

DCI published new version 1.4b of the CTP:

DCI has published on its website a new Version 1.4b of the Compliance Test Plan (CTP) approved for Distribution July 18, 2023.

CTP Version 1.4b Summary of changes since CTP Version 1.4a This release is intended to be substantially identical to release 1.4

- Rename track file and change duration of A.2.293. HDR Dark Gray Scale
- Rename track file and change duration of A.2.292. SDR Dark Gray Scale Fix incorrect "SPEAKING" OBAE expectations
- Rename track file at A.2.251. SDR Stereoscopic Contrast Test Patterns
- Rename track file at A.2.254. 4K SDR Scaling Test Pattern Table 11.1: add Test Start Date and fix row numbering
- Bump to DCI common HTML tooling

Pursuant to DCI's Compliance Test Plan Change Policy Statement, CTP 1.4 went into effect, on Saturday December 02, 2023 - 120 days after CTP 1.4 was approved for distribution. CTP VERSION 1.4b is a "stage 1" revision to CTP Version 1.4 and replaces it immediately.

Open for comments: No comments.

Other topics for DCI covered earlier in the meeting.

Should the DCI CTP include a test for expired CPL CERTS? Left as a question.

Test material for 1.4 is available in DCI's GitHub repository. If you need access, contact DCI email address.

SMPTE update

SMPTE will offer open access to all standards for members. The SMPTE standards will be available in an easy to find on-line way. We showed a demo of the access. https://pub.smpte.org/doc/ The links are intended to be permanent.

There are a number (12?) documents that have been updated and will soon publish.

The Cinema Foundation / CIT

No update.

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EDCF

February convention in Amsterdam. Again invitations are going out for the pre-CinemaCon tours.

Other

Pixar is re-releasing three movies and HDR versions will be showing at the Culver City theater.

Action Items from November 8, 2023

- 1. Jerry to Doodle to find a time for Intersociety meeting (zoom only) early January Done
- 2. Please send candidates for Board Members to Jerry. Done-thank you!
- 3. Expect invoices to be issued starting in December for 2024 (due first part of 2024) Done
- 4. A note should be given to exhibition to help them understand the playback issues and how to report to studios/mastering/equipment manufacturers when playback problems are found. Not done.
- 5. Begin a document for "Mastering Best Practices" Done
- 6. Create a "power point" for the screens to be created for the audio test content Done
- 7. Call another meeting of the security subcommittee oops, not done
- 8. Chair to call a meeting of the metadata subcommittee to discuss the goals of the group.

 Discussed during meeting
- Chair to contact ICTA to discuss future of terminology registry Discussed during meeting

Attendance on last page.