

To: Eclipse BD Support Agreement & Warranty Customers

Date: June 14, 2011

Subject: EclipseSuite BD 4.0 Beta N

Summary:

This TechFlash is to notify all BD support agreement & warranty customers of the availability of EclipseSuite BD 4.0 Beta N. This BETA software has undergone limited testing and is being made available as-is.

Who should upgrade to this version?

- Customers who process Fox/MGM images.
- Customers who process 3D BD images authored using Sonic Scenarist BD

Key Updates:

1. This version implements the latest (04092011) Fox Title Structure analysis checks.

Customers who process images for Fox Studios should upgrade to this version.

2. This version fixes a problem that incorrectly triggered the rule '**First SPN for 3D clip extent differs**' on certain 3D images.

It is possible that this may also trigger the errors: '**Extent size too small for 3D Output Mode**' and '**Maximum Stereoscopic average bitrate exceeded**'.

EclipseSuite BD 4.0 Fixes & Enhancements:

3. Changed the rule 'ISAN error' to 'Invalid ISAN Number' since the rule no longer identifies an error condition.

Due to a change in the specifications, the ISAN number is no longer required. Although the EclipseSuite tools still trigger this rule when the ISAN number is invalid, it is no longer treated as an error; only a warning.

4. Added the ability to notify the user when an Enhanced Title exists but there is no BD-J Application included in the image.

The BD specifications require that if an Enhanced Title is included in a Blu-ray image, then it must also include a BD-J application. Two new rules were added to support this enhancement. The first, 'Enhanced Title' simply specifies that an enhanced title is included in the image. The second, 'Enhanced Title requires a BD-J Application' is an error that is triggered if an Enhanced Title is included but no BD-J Application.

5. The rule 'Process Goal' will be triggered when making a clone copy of a Type A or AX BD image without any encryption.

The additional info column of this rule will indicate that the user selected the 'Do not encrypt' option so the output image Type will be the same as the source. This will also occur if the option 'AACs Encryption' is not enabled on the user's dongle.

6. Change how the EclipseSuite tools compare the BCA settings between the PIC.DAT and BDCMF.

For BDCMF versions above 0.945, the BCA setting in the PIC.DAT will be compared to the BCA attribute in the BDCMF.CMF file. For older versions of BDCMF, the BCA setting in the PIC.DAT will be compared to the PMSN attribute in the BDCMF.CMF file.

7. Corrected a problem where permission request file allocated in JAR subdirectories were not being analyzed.
8. Added a character encoding attribute to all XML logs generated by the EclipseSuite tools.

The character encoding attribute 'ISO-8859-1' supports multiple languages. In previous versions, if any non-English characters were present it would cause the XML logs to fail parsing in web browsers or parser utilities.
9. The information displayed in Info|Video Attr has been expanded to show video, audio, language and graphic content for every Playlist and Clip files. Some Stereoscopic related information (3D) is also included.
10. Corrected a problem that was causing the rule 'Maximum Stereoscopic average bitrate exceeded' to be triggered incorrectly.
11. Java Class name case sensitivity will be now considered during the authentication of JAR files.

It is possible that authors include duplicate copies of class files inside a JAR file. During authentication, the specifications indicate that only the last entry of a duplicate file be authenticated. Unfortunately, the specifications are not clear regarding case sensitivity (i.e. when the file entries differ only in character casing). Previous versions of EclipseSuite were case insensitive and only authenticated the first entry of every file. A fix was put in place so that the EclipseSuite tools would authenticate the last entry as per specifications. In some cases, this caused the error "Can't trust JAR Manifest file entry". This version fixes this by changing the EclipseSuite tools to be case sensitive when authenticating JAR files.
12. Corrected a problem where the code verifying the authenticity of JAR files was incorrectly excluding the app root certificate from the validation chain when the name of the signer or the cert serial number was unexpected.
13. When comparing files under "\\BDMV\PLAYLIST\" to their backup files under "\\BDMV\BACKUP\PLAYLIST\", all backup playlist files must exist, otherwise the EclipseSuite applications will show an error.

Similarly, the EclipseSuite tools will compare files under the "\\BDMV\BDJO\" directory to files with equivalent names under the "\\BDMV\BACKUP\BDJO\" directory.
14. ICheck will create partial checksum information for dual layer BD images to allow ImageEncoder to check UCD.DAT and UD.DAT integrity when processing only part of the files. This was always the case with checksum files created by ImageCopy and the CMU.

In previous versions, ICheck created a single full signature for the entire file. However, when processing a specific layer of a BD image, a partial checksum is required for only the data that exists in that layer. If an image that does not include a partial checksum is encountered, the new warning rule 'Checksum not verified' will be triggered.
15. Further refinements to Fox/MGM title structure checks to allow directory names under the '\\BDMV\JAR' for facilities with valid JAR or directory name entries in any of the AppCacheInfo(), ref_to_name fields for the applications.
16. TitleStructure checks for Fox/MGM Properties-file will translate characters from ISO 8859-1 and show a separate error when invalid characters are detected. Invalid characters won't get saved to the log files in such a case.
17. EclipseSuite tools won't abort with the "Failed drive authentication" error while trying to read the Volume ID from a Blu-ray recordable or rewritable disc.

Bus Encryption Enhancements:

18. Check the UCD Bus Encryption Flag on discs with PC data. Previously, only discs with video content were checked.
19. The new rule 'Bus Encryption not checked' will be triggered when analyzing a Bus Encryption enabled disc with a drive that does not support bus encryption.
20. The following new rules 'Bus Encryption enabled' and 'Bus Encryption disabled' were added for support of Bus Encryption.
These rules will be triggered when checking the UCD.DAT, BDCMF.CMF and Content Certificate files.
21. The new rule 'CC Bus Encryption Enabled flag not set' will be triggered when the BEE flag in the primary and backup Content Certificate files do not match.
22. The new rule 'Bus encrypted sector not in Clip AV stream file space' will be triggered when the UCD.DAT Bus Encryption Flag is set for a sector not belonging to a Clip AV Stream file.

The UCD.DAT file includes 18 bytes for each sector in the UD.DAT. One of these bytes includes the Bus Encryption Flag. This flag can only be set if the 18 bytes are for a sector that belongs to a Clip AV file (*.m2ts).

23. Do not trigger the rule 'CC/UCD Bus Encryption Flag Mismatch' when reading from a disc where the UCD BEF flag cannot be recovered.

New Supported Peripherals:

- MATSHITA BD-MLT LF-PB371
- HL-DT-STBD-RE BH10LS30
- PX-LB950SA
- Buffalo Bus Encryption-enabled drive 'Optiarc BD-RW BD-5740'
- Hitachi Bus Encryption-enabled drive 'HL-DT-ST, BDDVDRW CT30P'

Download Instructions:

The EclipseSuite BD 4.0 Beta N software is available from the following link.

<ftp://ftp.eclipsedata.com/esbd40/esbd40n.zip>

Password: pR113Db\$te