EclipseSuite v1.23 Release Notes

January 2000

The following are the new fixes/enhancements since version 1.22 of EclipseSuite.

New DVD Rules

The following are new rules that have been added to EclipseSuite since the release of version 1.22.

Encrypted file on unencrypted media

This rule is invoked when the EclipseSuite tools detect that one of the files in an unencrypted DVD image is tagged for CSS encryption.

Protection state of VOB files from the same VTS disagree

This rule is invoked when files within the same Video Title Set (VTS) do not agree as to whether the Video Title Set contains CSS encryption. Normally, all the files belonging to the same VTS should have the same protection status whether they contain encryption or not.

Protection state not valid for this file

This rule is invoked when a file that is not a Video Object file is tagged as containing CSS encryption. The CSS specifications do not allow files that are not Video Object files to be encrypted.

An encryption key was provided for an unencrypted VTS

This rule is invoked when a Title Key is found for a Video Title Set that does not contain any CSS encryption.

Non-zero VTS id in sector header of unencrypted file

In a file that contains CSS encryption, there is a byte in every sector header that indicates the Video Title Set number that the sector belongs to (VTS ID). If the file does not contain encryption, the bytes in the sector header should all be zeros. This rule occurs when VTS ID on a file without CSS encryption is non-zero. This occurs only on a Tape or File DVD image.

Non-zero VOB flag in sector header of unencrypted file

In a file that contains CSS encryption, there is a byte in every sector header called "VOB Flag." There are two different interpretations as to how this flag is used:

1 - In a Tape or File DVD image that contains CSS, this flag is used to indicate which sectors will be encrypted (1) and which will not be encrypted (0).

2 - In a Tape or File DVD image, this flag indicates whether a sector belongs to a Video Object file (VOB). Sectors belonging to a *.VOB file will have this flag set to 1; otherwise it is set to 0.

Illegal use of reserved bytes in CPR_MAI of unencrypted VTS

In a DVD image that does not contain CSS encryption, the CPR_MAI bytes of every sector in every VTS file should be zeros. This rule is invoked if the EclipseSuite tools find non-zero data in the CPR_MAI bytes.

Layer 1 length greater than layer 0

This rule occurs on a Dual-Layer Opposite Track Path DVD Tape or File image. Due to the way that the sectors in Layer 1 are addressed, the length of Layer 1 must be less than or equal to the length of layer 0.

Opposite track path not valid for single layer

This rule occurs when a Single-Layer DVD image is labeled as Opposite Track Path. In a Single-Layer DVD, only Parallel-Track Path is valid.

Fixes/Enhancements

All Products: During the prescanning of certain CDs, the Plextor 40Max drive would hang-up or take very long when scanning the Lead-out. We have added a new behavior "**Do not scan Lead-out**" as a workaround to alleviate this problem.

All Products: During the prescanning of certain CDs, the Plextor 40Max drive would hang-up or take very long when scanning. The EclipseSuite products will now limit the prescanning speed to 4x when using the 40Max drive.

Copy Protection: The SafeDisc plug-in will differentiate between a Master and a Replica. The version of the plug-in is now 1.01.

Copy Protection: The SafeDisc plug-in now uses an improved method for SafeDisc identification.

DVD: The EclipseSuite tools will not report any warnings or errors when the VTS ID and VOB Flag are zero (i.e. no CSS).

DVD: The EclipseSuite tools will now save the complete Layer 0 Control data to a temp file when analyzing DVD-9 Opposite Track Path images where SSCRST=2. The Control data for these images contains the encryption key files that are needed for properly scanning Layer 1 images.

DVD: The EclipseSuite tools will now support Source Storage Mode 7 (i.e. '**Incomplete 2064**') for the Control data file. Normally, the Control data file is stored as **User Data 2048** or **Complete 2054**. However, some systems output **Incomplete 2064**.

DVD: In the DVD info tab, the field previously displayed as "Book Version" in the Control data is now referred to as "Part Version" to more accurately match the DVD specifications.

DVD: When copying a DVD-R to Tape or File, ImageCopy would not change the fields that indicated that the image was a DVD-R. In this new version, ImageCopy will change the following fields in the Control data file:

Book Type: Changed from Recordable (1) to Read-Only (0)

Layer Type: Changed from Recordable User Data (2) to Embossed User Data (0)

Track Density: Changed from 0.8um (1) to 0.74um (0)

Linear Density: Changed from 0.293um (1) to 0.267um (0)

Part Version: Output value will be set to Version 1.0 (1)

All Products: The EclipseSuite products will differentiate between RID and valid ISRC codes. The tools will no longer display invalid ISRC codes in the ETOC when a RID code is present. The RID code is displayed in the Analysis screen and in the Subchannel Viewer.

ImageCopy: ImageCopy now supports the new Yamaha writer model CRW6416. ImageCopy does not support any of the drives rewritable features.

ImageCopy: When analyzing Layer 0, ImageCopy will now save Layer 0 information to a temporary file on the hard disk. This information may include layer and image lengths that are not available in Layer 1. Without this information, ImageCopy could not perform a complete analysis on Layer 1 of a DVD-9.

ImageCopy: The output DDP for DVD images will now have a blank DSP field. The inclusion of values in the DSP was a known issue with ODC LBR systems.

DVD: When the rule **"Macrovision APS bits changed"** is triggered, the additional info column now displays the APS bits in the same manner as the DVD specification and the help system.

DVD: The EclipseSuite tools will ignore padded sectors on Layer 0 of a Parallel Track Path DVD tape/file image when determining the start and end address of user data. The previous version checked the padded sectors as if they were part of the user data. This caused the following rules to be invoked:

- Main & ISO9660 CPM or CGMS disagree
- VOB Flag in sector header is invalid