EclipseSuite V1.42

Release Notes

The following are the new fixes and enhancements since version 1.40 of EclipseSuite.

1.0 Ensure the correct Book Type is written when transferring from DVD Recordable or ReWritable media

The Book Type is a field in the Control data information that identifies a DVD disc as Read-Only or some form of recordable media. The table below lists the valid Book Types.

Book Type	Media Type
0	Read-Only Disc (i.e. DVD Replicate)
1	Rewritable Disc (i.e. DVD-RAM)
2	Recordable Disc (i.e. DVD-R)
3	Re-recordable Disc (i.e. DVD-RW)
9	Rewritable Disc (i.e. DVD+RW)
Others	Reserved

The Book Type is also used in copy protections. It was for this reason that previous versions of ImageCopy did not correct the Book Type when transferring from Recordable media to hard disk. However, the only valid Book Type for Read-Only media (i.e. replicate) is 0. In addition, some DVD players do not support playback from media which is not Read-Only. Therefore, in version 1.40 of ImageCopy, if Book Types 1, 2, 3 and 9 are detected, they will be reset it to 0 when the image is transferred to the hard disk to reflect a Read-Only disc. If the Book Type contains a reserved value, then it will be assumed that is used for a copy protection and will be copied "as is." In 1.42, any Book Type which is not reserved for a copy protection will be reset to 0.

2.0 Miscellaneous DDP Enhancements

Do not insert a Postgap to intermediate sessions

If the PST field of the last track in an intermediate session was blank, previous versions of the EclipseSuite software would assume that 150 sectors of Postgap would be inserted before the Lead-out of that session. This caused any subsequent sessions to be shifted by 150 sectors. The software has been changed so that no Postgap is inserted in intermediate sessions. If necessary, a Postgap will be appended but only in the last session.

If a blank PST field is specified on the last session, adjust the PQ start for the lead-out track

When copying an image to tape or hard disk, some authoring systems leave the PST field blank on the last track of a Multisession image. When the PST field is blank on the last track of a session, it indicates that a Postgap of 150 sectors should be appended to the end of the track. However, the PQ Descriptor file (e.g. DDPPQ or PQ_Descr) is created not taking into account that a Postgap will be inserted. This causes a discrepancy between the DDPMS and PQ Descriptor files as to where the Lead-out should start. If the image is transferred with EclipseSuite 1.42, the PQ Descriptor file will be adjusted to match the DDPMS file.

3.0 Corrected condition in which CRCs at audio track transitions caused a link block to be processed internally but was not displayed in the ETOC

Previous versions of EclipseSuite identified an audio CD-R as being Track At Once by the presence of link blocks at track transitions. Unlike CD-ROM sectors, audio sectors do not have headers that can be used to easily identify a Link Block. Since a link block typically

contains corruption, the software checks for CRCs in the subchannel at each track transition. If it finds that at least 50% of the transitions contain a CRC, then it is assumed that the CD-R is recorded in Track At Once mode. Since link blocks contain corrupt data, ImageCopy would normally zero-out the link block sectors during a transfer.

Recently, we have discovered some CD-Rs that are recorded in a mode where a group of tracks are recorded in one write operation, while other tracks are recorded individually. The tracks that are recorded as a group contained crossfades at the transition point, while the others contained a pause. When the EclipseSuite software checked the recording mode, it found that at least 50% of the tracks contained a CRC at the transition points and therefore identified the CD-R as Track At Once. This also meant that each track transition point was assumed to contain a link block. This caused ImageCopy to zero-out (mute) audio data in the tracks that had been recorded as a group.

To minimize the chances of this problem occurring, EclipseSuite 1.42 has been enhanced so that when it finds a CRC at a track transition, it also checks to see whether the Main Channel data (audio data) is corrupt, which is typical when a link block is present. If no corruption is present in the Main Channel, then the CRC is ignored. The difference between this new method and the previous, is that if at least 50% of the transitions contain a CRC, only the transitions with the CRC and CU will be treated as a link block. The data in all other transitions will be preserved.

4.0 Parse through CD-TEXT records to determine the actual CD-TEXT length versus the length reported by the Plextor CD-ROM drive

On occasions, the Plextor CD-ROM drives report an invalid length for CD-TEXT information. In previous versions of EclipseSuite, this length was not verified by the EclipseSuite tools. This caused problems when the Plextor drives reported a length greater than the amount of CD-TEXT data that was recorded. This problem often triggered the error "SCSI: No Sense data is available". In EclipseSuite 1.42, the EclipseSuite tools parse through the CD-TEXT data and determine the correct CD-TEXT length. If necessary, ImageCopy writes the correct length to the output CD-TEXT file when copying an image to the hard disk.

5.0 Better handling of DVD-R Media

Proper handling of DVD-R for Authoring media that is tagged for encryption

If DVD-R Authoring media contains an image tagged for encryption, this causes previous versions of EclipseSuite to incorrectly trigger the error "**Cannot copy CSS encrypted disc**". This only occurs when the media is read on a Pioneer DVD-R 201 recordable drive. This has now been corrected.

Better detection of user data length of DVD-R General media

EclipseSuite v1.40 relied on DDPID, Control data and ISO9660 information, as well as the presence of unreadable sectors, to determine the last sector recorded on DVD-R General media. While this is a reliable method for determining the length of most DVD-R General media, there are still some media where this method does not produce the correct length. EclipseSuite 1.42 uses a new read command, which gives the last sector recorded on the media. However, this command is only available when using Pioneer DVD-ROM drives models 303 or later .

6.0 Support for SuperDLT Drive

EclipseSuite v1.42 adds support for the Quantum SuperDLT drive.

7.0 Help System Enhancements

Picture Text

The size of the text in many pictures in the EclipseSuite Rules Help File v1.40 was too small, making the text difficult to read. This has been corrected in version 1.42.

New Rules

With the enhancements of link block detection, two new rules were introduced.

CU at track index transition

Audio session contains link blocks

Enhanced Annotations

One of the problems with using Help Annotations is that they are lost when the help file is updated. This is a big inconvenience if you have added many annotations and have to re-enter them every time you upgrade the EclipseSuite software. This is a limitation of the Windows NT help system.

While you can still add annotations the traditional way, we've added a better way to include your own custom annotations. You can now create your own annotation documents using programs such as Microsoft Word and Microsoft WordPad*.

Each rule includes a 'Rule ID' at the end of the rule's description. If you wish to add an annotation to any rule, simply create a document using the Rule ID as the document name. For example: "405.DOC".

When you access the help system, the help system checks the annotations directory for a document file with a matching Rule ID in the filename. If one is found, the button '**More Info**' in the help window will be enabled for the operator to click and view the document. If no document is found, then the button is disabled, as shown in the picture below.
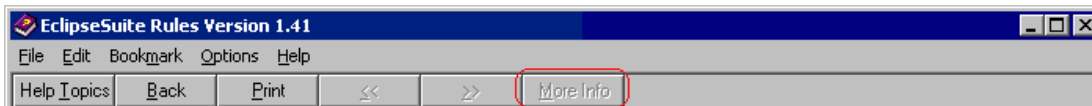
All annotations must be located in a folder **\Annotations**.

For example: C:\Eclipse\Annotations\   <--- Annotation documents

                      C:\Eclipse\ImageTools\   <--- EclipseSuite Programs and help files