

# ***EclipseSuite Release Notes Version 1.10E***

**Jan 6, 1998**

## **Overview**

This new version of ***EclipseSuite*** contains many new features, bug fixes, and enhancements since the last general release, Version 1.07. There are also some changes to program functionality. These changes are highlighted in the sections following. ***EclipseSuite*** Version 1.10 is the result of Eclipse development and input from our customers. Please read this document completely before installing the software.

If you have any questions about this release, please contact Eclipse at (925) 224-8880.

## **Significant User Interface Changes**

- ◆ The ETOC and Analysis screens have been changed in terms of how the application responds to mouse clicks.
- ◆ Right click on the column headers for Location and Length toggle between ATIME or sector number format (previously the left click controlled this).
- ◆ Right click in the column header for CD Mode to switch the column's display format.
- ◆ Right clicking in the Analysis, ETOC or Book screen will present a drop down menu that offers choices for explaining an error message, viewing the Notes page, or launching the Main Channel and Sub Channel viewers (which are part of ImageUtilities).
- ◆ In the Analysis tab, the left click is used for sorting the analysis information by column (a standard windows convention)
  - ◆ Left click on the Description column to sort by description
  - ◆ Left click on the Location column to sort messages by location
  - ◆ Left click on the Session column to sort by severity (the severity icons are shown on the left side of the Session column)

Please see the notes in the **Enhancement** section for the new behaviors for the right and left mouse clicks in these screens.

## **Known Problems**

- ◆ When writing a multi-session disc on the Yamaha writer, the writer will put link blocks in at the beginning and end of each session, even if the session is written Disk at Once. However, the link blocks are "clean" and do not create an unreadable link transition area.
- ◆ Support for Packet (incrementally written) CD's is not yet available in ImageCopy and ImageVerify.

## **Installation Instructions**

1. Logon as an Administrative level user. Make sure that none of the **EclipseSuite** products are currently active and that all the windows have been closed.
2. If you don't have a set of disks containing the earlier software, backup up the current directory (usually **EclipseImageTools**) to another directory or to floppies. Leave copies of any custom rules files in the directory.
3. Insert the first disk of the distribution set into the **a:** floppy drive and open the **Start** Menu and select **Run**. Type **a:setup** into the **Open** box and then press the **OK** button.
4. Follow the instructions on the setup screens. It is recommended that all of the default values for installation directory (**EclipseImageTools**) and program folder (**Eclipse**) be selected.
5. As long as the new software is installed into the same directory as the old software, any custom defined rules files and setting will be preserved.
6. If you have purchased an **ImageUtilities** upgrade or have received an **ImageUtilities** demonstration upgrade, follow the instructions included with the upgrade.

**Note:** The system must be shut down and rebooted after installing the upgrade.

## ***Enhancements***

### **All Products:**

- ◆ Track at Once (TAO) and Disc at Once (DAO) is now determined on a session by session basis. Discs have been identified that contain one session DAO, another session TAO. This means you may now see a disc reported as being both TAO and DAO in the Analysis tab.
- ◆ Link block detection on audio and ROM discs is greatly enhanced by using a new algorithm. Previously, link blocks on audio discs were sometimes not detected.
- ◆ DVD: If DDP is from a file, CONTROL.DAT must be from file. If the DDP used for a DVD image is specified as being in a file (as opposed to on the front of the DLT tape), then it also implies that the CONTROL.DAT file must exist in the same location as the DDP files.
- ◆ Added an ISRC column in the Info tab for DDPPQ. This is useful because ISRC's can be specified in the DDPMS and/or DDPPQ file. The information in the DDPPQ file will always take precedence over any settings in the DDPMS.
- ◆ The result of clicking on various columns in the Analysis and ETOC screens has changed. Right click in the column headers for Location and Length to toggle between ATIME or sector number format. Right click in the column header for CD Mode to switch its format.
- ◆ In the analysis screen, left click in column header for Session, Location, or Description to change the sort order.
- ◆ Right clicking in the Analysis, ETOC or Book screen will present a drop down menu that allows selecting Explain, Notes, or the Main Channel and Sub Channel viewers.
- ◆ Performance problem due to large DDPPQ (lots of indexes) was slowing analysis. This situation has been fixed. The CPU became progressively more busy and the data structures grew.
- ◆ The main channel mode, and the subchannel control/address of Leadout are read from the CD and displayed in the ETOC screen.
- ◆ Improved RTIME error detection. The analysis engine can now detect incorrect incrementing

RTIME, incorrect decrementing RTIME, and duplicate RTIME.

- ◆ Sony vs. Philips subcode format is now detected and reported.
- ◆ Index 1 location consistency - Table of Contents (TOC) vs. Subchannel. The TOC contains the location for the index 1 points of each track. This information is redundantly available in the subchannel as well. The analysis engine checks that these two values are identical.
- ◆ Analyzing/Copying/Verification of CD's now starts at Absolute Sector 75 (00:01:00). It used to be at 150. (00:02:00). The ETOC screen now shows the initial pause area broken into two pieces to reflect this change. This allows detection of certain errors that were previously unnoticed, such as data in the pause area and incorrect or corrupt sectors.
- ◆ Whitebook/Video CD detection, - while this has always been supported, you now specifically get a message identifying the detection this type of disc.
- ◆ Added support for UDF detection and display of the data in the Info tab.
- ◆ Current dongle status can be seen and passwords can be entered via File | Dongle Password menu item
- ◆ New menu item File | Print Screen will print out the currently displayed screen.
- ◆ Help implemented in Behaviors, Preferences, and Rules screens
- ◆ Support added in for the DEC TZ88 Digital Linear Tape Drive.
- ◆ Check for legal Subcode control bits in the DDPPQ file

### ImageAnalysis:

No Specific Enhancements

### ImageVerify:

- ◆ Enhance some audio compare situations that were not allowing audio to not sync up, which resulted in comparison errors in some cases when none actually existed.
- ◆ Improved audio silence search algorithm allows for better audio sync up in verification
- ◆ Add in new print feature called Compare Summary that will just print out a quick summary of the compare operation without any analysis data.
- ◆ Compare Subcode time formats (Sony vs. Philips)

### ImageCopy:

- ◆ DVD tape output is now a factor of 16. It was 8. This caused block size to be 16384 instead of 32768.
- ◆ Yamaha CD recorder now supports multi-session

- ◆ Add behavior to allow a written CD-R to remain appendable (Yamaha writer only)
- ◆ DVD: When outputting the CONTROL.DAT to a file, it was being called CRTLn.DAT. Now it is correctly named CONTROL.DAT.
- ◆ RW Quick Scan added as a behavior. This is useful when copying CD-Audio to tape. A quick scan is performed to see if each audio track contains R-W subcode data (data typically used for graphics (i.e. Karaoke)). If not, the track is assumed to not have an RW data and thus the RW data is not copied to the tape. This process allows for much faster copies to tape if the input is thought to not have RW data.
- ◆ To prevent data underruns when outputting to CD-R, ImageCopy now requires that all other SCSI devices are idle. This precludes concurrently running other EclipseSuite programs, the NT Tape Backup program, or anything else that refers to a directory or file on a CD.

### ImageUtilities\*\*:

- ◆ Main Channel Viewer implemented for all *EclipseSuite* products
- ◆ Subchannel Viewer implemented for all *EclipseSuite* products
- ◆ *QuickEditor* added to allow for editing of UPC, ISRCs, and MID in the DDP
- ◆ *TapeCopy* program to support the copying of tape to tape or tape to file for non DDP tapes
- ◆ *TapeDir* program to do a directory list of a tape
- ◆ Verify the contents of the fields entered in the *QuickEditor* to insure proper lengths

\*\* Note: *ImageUtilities* is an add-in module sold separately from *EclipseSuite*.

### New Rules/Exclusions

- ◆ CD Subcode Format Mismatch
  - ◆ The RTIME format for the Source and the Target is not the same.
- ◆ Compressed Tape
  - ◆ The input tape in an Exabyte drive was written in compressed mode.
- ◆ Contains UDF data
  - ◆ The input contains data in the Universal Disk Format.
- ◆ DA Pause contains data
  - ◆ A pause area on a digital audio track contains non-zero data.
- ◆ Duplicate RTIME in Subchannel
  - ◆ The RTIME in the subchannel has been repeated from one frame to the next. The RTIME should increment, or, in the case of a pause area, decrement.
- ◆ Illegal Control Bits in DDPPQ entry

- ◆ The DDPPQ file has illegal settings for the subcode control bits.
- ◆ Invalid Decrementing RTIME in Subchannel
  - ◆ The RTIME in the subchannel for a pause area is not decrementing correctly. The RTIME in the pause should decrement from the index 0 point to the index 1 point.
- ◆ ISRC exists in DDPMS but not DDPPQ
  - ◆ The value for the ISRC in the DDPPQ file overrides the value in the DDPMS file. If there is no entry for the ISRC in the DDPPQ file the resultant track in the image will NOT have an ISRC.
- ◆ Leadout Start Time
  - ◆ Reports the start time for the leadout in the analysis tab.
- ◆ Negative Skew Exists
  - ◆ The subchannel to main channel skew is negative. This can cause discs to be unreadable in some readers.
- ◆ Philips Subcode Format
  - ◆ The subcode RTIME is using the Philips format. This means that the RTIME in a pause area counts down to 00:00:01 and then an index change occurs and the RTIME becomes 00:00:00 and starts incrementing with each successive frame. (See Sony Subcode format for alternative method)
- ◆ Program Area length is not a multiple of 16
  - ◆ The program area length for a DVD image is NOT a multiple of 16
- ◆ Sony Subcode Format
  - ◆ The subcode RTIME is using the Sony format. This means that the RTIME in a pause area counts down to 00:00:00 and then an index change occurs and the RTIME of 00:00:00 is repeated and then starts incrementing with each successive frame. (See Philips Subcode format for alternative method).
- ◆ UPC exists in DDPID but not DDPPQ
  - ◆ The value for the UPC in the DDPPQ file overrides the value in the DDPMS file. If there is no entry for the UPC in the DDPPQ file the resultant image will NOT have an UPC.
- ◆ Video CD
  - ◆ The input is a Video (White Book) CD.

### **Bug Fixes**

#### **All Products:**

- ◆ Tape input and Tape output threads were not logging all errors to analysis engine.
- ◆ Chart was cutting off right most data (labels)
- ◆ ETOC shows the ISRC in index 0. There were some problems with the ETOC showing multiple ISRCs in one track.
- ◆ When the "ISRC Changed" error occurred, the Actual(Expected) and Expected(Actual) were backwards. It is now Actual(Actual) and Expected(Expected)

- ◆ Some subcode errors were getting logged into the "Main Channel" region of the performance graph
- ◆ Fixed bug with improper length detection for ROM in Track 1, Index 0 for RomReady/CDIRReady
- ◆ Negative lengths due to improper link detection are no longer displayed in the output.
- ◆ Properly detect and report Audio Track At Once as Orange Book discs
- ◆ Properly identify different sessions of Audio as orange or red book. Don't assume both sessions are the same
- ◆ Fix printout problems where print would extend on top of page number area
- ◆ Only print the logo on the first page of printout
- ◆ Fix ETOC display to properly display data from an DCA ATS generated tape.
- ◆ On a ROM to Audio track transition, missing pauses were not reported.
- ◆ The initial pause on a disc must be at least two seconds. This test has been added.

### ImageAnalysis:

No Specific fixes.

### ImageVerify:

No Specific fixes.

### ImageCopy:

- ◆ Yamaha - output proper PSEC. When outputting to the Yamaha CD recorder, the PSEC was always being set to 00
- ◆ Fixed bug with ISRC and UPC not being stored in DDPPQ. The ISRC was always being stored in the DDPMS file, the UPC was always being stored in the DDPID. They are now stored in the DDPPQ file. This is important because if there is a DDPPQ file, the values for IPC and UPC always override other values, even if the values are null.
- ◆ When copying a CD-R that contains the Serial Copy Management System (SCMS), **ImageCopy** was improperly putting a DDP Version 2.0 value into a DDP Version 1.0 field. This apparently is not detected by some mastering equipment and was causing ROM tracks to be converted to AUDIO tracks, even though the DDP still specified ROM.
- ◆ If an input contained Serial Copy Management System (SCMS), when ImageCopy converted this image to DDP format (i.e. tape of file) it incorrectly used a DDP 2.0 convention in the DDP 1.0 representation of this image. This in turn caused in various LBR encoders to convert ROM tracks to Audio. During mastering.

## ImageUtilities:

◆ Insure that the Subchannel viewer is not off the screen at initial start.

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