

# EclipseSuite v1.31

## Release Notes

The following are the new fixes/enhancements since version 1.30 of EclipseSuite.

### Enhancements

#### **New DLT Drive Support**

EclipseSuite now supports the Tandberg DLT 8000, HP BNCHMARKDLT1 DLT1, COMPAQ DLT 8000 and QUANTUM DLT1 tape drives.

#### **U-matic enhancement**

Better PQ burst detection and handling.

U-matic tapes that started with SMPTE timecode prior to 00:00:00:00, such as 23:59:59:29, were not handled properly. In addition, slight variations in the PQ burst frequency caused by tape playback speed variation would cause the PQ burst to be missed. This is now handled properly.

#### **Detection of missing 24-byte data frame**

Added the rule "Input stream missing 24 bytes of data." This rule is used to detect when a 24-byte data shift occurs in the main channel due to a missing subcode byte.

In an EFM frame, there is a subcode byte for every 24-bytes of main channel data. When a subcode byte is missing, it will cause the whole EFM frame to be discarded along with the 24 bytes of main channel data. This causes a CRC error in the subchannel. CRCs are not uncommon in the subchannel and therefore, not critical. However, in the main channel, this is critical since it causes a 24-byte shift due to the missing 24 bytes of data. ImageAnalysis will typically not see this problem. ImageCopy will detect this problem only if Verify After Copy is enabled. Verify After Copy and ImageVerify will show this as comparison errors.

#### **Removed DDP 1.01 ISRC output behavior**

This feature was originally added for compatibility with certain encoders.

In DDP 1.00, ISRCs must be recorded in the pause entries for every track (index 0 entries). This presented a problem for tracks that did not have a pause area. Nevertheless, most copying utilities insert the ISRCs into the Index 1 entries of each track. This presented no problems with most encoders. However, some encoders did not like this. To work around this problem, the ImageCopy added a zero-length Index 0 entry to the DDPPQ file in order to add the ISRC. However, the same encoders that did not like zero-length entries in the DDPPQ file. In EclipseSuite 1.30, this feature was added so that DDP 1.01 would be used instead. DDP 1.01 allows ISRCs in either the Index 0 or Index 1 entries of the tracks. Unfortunately, the same encoders had another problem: they did not support DDP 1.01. Since then, the encoder manufacturer has added support for ISRCs in the Index 1 entry of the tracks. Therefore, this feature is no longer needed.

## **Detect CD-XA Subheader comparison error**

Detect sub-header comparison error between source and target for CD-XA images.

Previously, the EclipseSuite tools were not comparing the Subheader area in CD-XA disc. There is now a new rule, "Subheader comparison error", that will be triggered when the Subheader in the source and target do not match.

## **New CpmGeneric.dll**

There is a new CpmGeneric.dll for supporting scripting copy protection signatures. This has been expanded to include updated commands for user-defined encryptions. For more information on this feature, contact Eclipse.

## **DDP 1.00 output for U-matic**

ImageCopy will output DDP 1.00 for U-matic source images.

In previous versions, ImageCopy would output DDP 1.01 for U-matic source images. This presented a problem on encoders that did not support DDP 1.01. In this version, ImageCopy will output DDP 1.00 instead.

## **Pioneer DVD-ROM 305/U05 support for non-CSS discs**

Reading non-CSS DVD-Video discs will not result in the SCSI "Command Sequence" error.

Previous models of the Pioneer DVD-ROM drives used similar command protocol. When the Pioneer 305/U05 were introduced, Pioneer changed the protocol, which caused the EclipseSuite tools to abort when checking whether a DVD-Video was protected with CSS. The EclipseSuite tools have been changed to support the new protocol.

## **Strip zero length index zero entries from U-matic PQ output**

Zero length index zero entries from the U-matic PQ output will be stripped if the DAG 320 data actually contains them.

Zero-length PQ entries are now removed from the DDPPQ file when the source is from U-matic. This was causing problems with some encoders that do not support zero-length entries.

# **Fixes**

## **Fixed various audio comparison issues**

Fixed various false audio comparison errors and added a new rule "Unable to sync audio for comparison" when failed to synchronize between source and target. This problem is shown as false comparison errors of 17-19 sectors long starting at the beginning of the track.

This problem had two causes. First, there was a bug in the software that, depending on the data pattern, caused the software to not be able to sync

properly. Second, the rule "Unable to sync audio for comparison" was supposed to be triggered with this condition was encountered but it was not triggered. Both of these problems have been fixed.

### **Save ImageVerify print settings**

ImageVerify print settings are now remembered.

In version 1.30, ImageVerify included print options so you could select what part of a log you wanted to print. ImageVerify was supposed to save the options you selected so that the next time you printed it would default to the same options. This has been corrected in this version

### **Plextor 12/10/32 not writing out ISRC on index 1**

ImageCopy will now properly write out ISRC on index 1 using the Plextor 12/10/32 CD-R writer.

## **New Rules**

The following rules have been added since the previous release of EclipseSuite.

**Input stream missing 24 bytes of data**

**ROM Subheader comparison error**