

To: Eclipse Support Agreement & Warranty Customers

Date: June 2012

Subject: EclipseSuite 9.0 Release

Summary:

This TechFlash is to notify all support agreement & warranty customers of the availability of the final release of EclipseSuite 9.0. This version is available to all support agreement and warranty customers.

Key Features:

- Support for Verance Cinavia Watermark
- Support for Signed CSS
- Improved CD-Text Handling
- Improved UDF Analysis
- Added new rules and upgraded severity of some existing rules
- New drive support

Fixes & Enhancements

1. Enhanced the "Limit analysis messages to 1000 per rule" behavior so that the message limit applies separately for each analysis section.

The analysis tab in ImageCopy and ImageVerify include multiple analysis sections. In the case of ImageVerify there is one section for the source and one for the target. In the case of ImageCopy, if Verify After Copy is enabled, there are two sections for the source (**Copy** = analysis during the copy process and **Source** = analysis during the verify pass) and one for the **Target** (output image).

Previously, the limit behavior would add the same rule message from all analysis sections and stop reporting it once the combined total reached 1000. In this version, the limit behavior will apply to each section independently.

2. Enhance ImageAnalysis signature calculation and signature output so that it also works with disc sources.
3. Enhanced the Info|Preferences section to display the options "Encrypt with Replicator Plant ID", "Clear APS" and "Movie Studio common keys directory".
4. Enhanced the EclipseSuite tools to detect uncompressed DDP on Disc RipGuard Images.

All RipGuard images that are copied onto recordable media must be compressed. Otherwise, the RipGuard copy protection may be negatively affected. ImageCopy and the ImageArchive option can be used to copy, compress and encrypt RipGuard images onto recordable media.

5. Enhanced the EclipseSuite tools to check that the proper Video Title Set file order during DVD Layer 1 analysis if a layer info file gets loaded.

Since layer 1 does not include the ISO9660 or UDF file system there is no way to know where the files are on layer 1. Therefore, the EclipseSuite tools cannot validate whether the DVD-Video files on layer 1 are in the correct order. The only way to do it is if the EclipseSuite tools find a layer info file from the matching layer 0 or if the Partner Location is specified.

6. Added new COM interface method to ImageCopy, providing a way for the calling client to specify the output partner layer during the transfer of a dual layer DVD image.

7. Enhanced ICheck to accept optical drive letters as input.

Similar to the EclipseSuite tools, ICheck will allow users to search for an image in optical drives. Previously, only hard disk locations were allowed.

8. Enhanced the Media Selection tab to include the drive letter and interface type of optical drives for easy identification.

9. Added support of IMG files to be used as ISO (similar to NRG files).

The file length must be less than or equal to that of a DVD-9 and the Primary Volume Descriptor identifier is "CD001".

10. Enhanced ICheck when running from the command line.

ICheck supports several command line arguments. However, in previous versions, users could only specify two. In this version, users can specify all supported arguments.

Also, when running from the command line, ICheck will not use the configuration settings from the registry for creating a log file and saving results in a CSV file. ICheck will do this only if it is specified via a command line argument.

11. Enhanced the EclipseSuite tools to identify whether a source or target image was a DDP on Disc in the Info|Runtime.

Although the analysis identifies whether an image is DDP on Disc, previous versions only displayed a drive letter in the Runtime information. Now it will also indicate whether the image was DDP on Disc.

12. Enhanced the EclipseSuite tools to compare the DVD-Video IFO files to their backups.

If a difference is found, the rule 'File comparison error' will be triggered.

13. Added support SafeDisc masters recorded using the CD-XA format.

Previous versions only supported SafeDisc on Mode 1. This has been enhanced to include CD-XA.

14. Enhanced the EclipseSuite tools to detect a short track in the PQ packets.

The specifications require that a track be a minimum of 4 seconds long (2 seconds of pause when applicable and 2 seconds of audio). In a DDP image, the EclipseSuite tools were only checking the lengths in the DDPMS file. They have now been enhanced to also check the DDPPQ file since it also specifies the track lengths.

15. Enhanced the EclipseSuite tools to catch conditions where a DDP on Disc is not -detected due to errors when reading the disc.

16. Enhanced the 'Convert to CSS' Plug-In so that it also allows setting the Macrovision Analog Copy Protection System.

The Plug-In allows users to add CSS to any DVD-Video that does not have CSS. The enhancement allows users to also set the Macrovision Analog Copy Protection System via the Plug-In Properties.

17. Added ImageCopy only behavior "Do not create layer info files in source location" which defaults to disabled.

When enabled, 'layer0.layer_info' and 'layer0.layer_info_ctrl' files will not be generated in the source input file directory.

18. Partner layer shell links will no longer prompt the user if the link location fails to be resolved.

When copying layer 1 and the Partner Location is set, ImageCopy creates a shortcut in the output image directories for layer 0 and layer 1. This shortcut links both layers. However, in many cases, the image may be moved/copied to a different location where the link is no longer valid. Since this is expected when the image is moved or copied, the user will not be prompted.

19. Added XML character encoding tag to all EclipseSuite-generated XML log files. Different language characters were causing the XML logs to fail to open without the encoding tag.

All EclipseSuite XML log files will include the XML declaration `<?xml version="1.0" encoding="ISO-8859-1"?>`. This defines the XML version and character encoding. Previous versions of EclipseSuite did not include this declaration. Therefore, the encoding defaulted to UTF-8. However, not all character-sets can be described with UTF-8. When an XML log included a character that was not supported by UTF-8, the XML log would fail to be parsed by web browsers or XML parser utilities.

20. Enhance the EclipseSuite tools and ImageEncoder to use SPTI (SCSI Pass-Through) when accessing devices.

Previously, the EclipseSuite tools used ASPI but certain devices. However, this presented problems with certain devices.

21. Enhanced ES so that it is able to validate differences between DDPMS and DDPPQ entries.

Some authoring tools create bad DDP file sets where the number of tracks, index locations or lead-out start differs between the DDPMS & DDPPQ files.

22. Enhanced ImageCopy to automatically copy and add the CONTROL.DAT file to the output image from the partner layer location if the CONTROL.DAT file is missing from a layer 1 CMF 1.* and DDP 2.10 image.

Previous versions did not report any error or warning if the control data file was missing from layer 1. This is now fixed as well.

23. Enhanced ImageCopy to display output DVD data in the "Out DVD" section of the Info tab. Previously, only the source DVD information was displayed.

24. Report an error when the DDPPQ file contains more sessions and/or tracks than the DDPMS file.

25. Enhanced the EclipseSuite tools to safeguard against problems that might cause a log file to fail loading.

The data in EclipseSuite logs are stored sections. In previous, versions of EclipseSuite, if an error occurred in any section, the complete log file would fail to load. In this version, only the affected section will not be loaded and the rest of the sections will be displayed normally.

26. Enhanced the EclipseSuite tools to detect when the CONTROL.DAT file is not the correct size.

The size of the CONTROL.DAT file must be a multiple of 2048, 2054 or 2064 bytes. If it isn't, the new rule "Invalid sector size in Control data" is triggered.

27. Enhanced the DVD-Video analysis so that ImageVerify knows which rule to trigger when there are differences between source and target.

ImageVerify includes a specific rule to compare the PES_Scrambling_control bits of a DVD-Video sector. There is also a generic rule 'Comparison error' that is triggered when sectors do not match. The first rule applies only for differences in the PES_Scrambling_control bits and only on DVD-Video files.

A condition was detected on a DVD-ROM image containing an MPEG file caused an encoder to think it was dealing with a DVD-Video file and modified the PES_Scrambling_control bits to match the encryption status of the image. This, in turn, caused the verification analysis to trigger the warning "PES_Scrambling_control comparison error". Since the image was DVD-ROM, ImageVerify should have triggered the generic "Comparison error" instead.

28. Enhanced the display of the behaviors in the Info tab to be sorted alphabetically.
29. When copying a dual-layer image and a Partner Location is specified delete any existing layer0_layer_info and layer0.layer_info_ctrl files from the destination directory.

If the output directory already exists and the partner location specified, ImageCopy will ensure that the correct files are generated in the output directory.

30. VTS/ATS ID number in CSS section of Info tab now left blank if the VOB object has no ID.

This typically applies when authors copy non-DVD-Video files into the VIDEO_TS directory. The EclipseSuite tools display the file in the Info|CSS tab. Internally the VTS ID is initialized to some pre-determined value but non-DVD-Video files will not have any valid VTS ID. Therefore, this version will leave the VTS ID blank if the file is not a DVD-Video file.

31. Corrected a problem where optical media drive locations could not be selected as partner locations for ImageAnalysis and ImageVerify.

When setting a Partner Location, users can manually type a path or select it via the DDP Picker. In previous versions, when clicking **Set Partner Location**, the DDP Picker did not display any optical drives for the user to choose from. In this version, optical drives are listed and users can navigate to any path in the media that is inserted into the drive.

32. Verify that the user has not set the same path for both the source image location and Partner Location at the start of a job.

When analyzing a dual-layer image, users can set the Partner Location to a path where the partner layer is located. This enhancement validates that the user does not specify the same path for the Partner Location and the source image. In previous versions, specifying the same path for source and partner locations would result in analysis errors.

33. Corrected an ImageCopy problem where a signature is computed and displayed in Verify-After-Copy for pre-encrypted DVD-Video images.

Signatures are not supported for pre-encrypted DVD-Video images (SSCRST 2). ImageCopy was incorrectly generating a signature and displaying it in the analysis.

34. Corrected a problem where extra zero-length ETOC entries are displayed when analyzing a consolidated DDP image where no track number is specified.

CD-Audio DDP images can include one data file per track or can also consolidate the data from all the tracks into a single file. When the tracks are consolidated, the DDPMS file includes a single entry to describe the file.

In this case, the track and index points in the DDPMS entry have no meaning. However, if the track and index is not specified, previous versions of the EclipseSuite tools would display extra zero-length entries in the ETOC.

35. Corrected an ImageCopy problem where under certain conditions the disc analysis was not being performed during Verify After Copy.
36. Corrected a problem with ImageCopy where it was not generating a checksum for the CONTROL.DAT file if the file was created with the behavior "Generate Control data for OTP Layer 1".

The behavior can be used to create the CONTROL.DAT file when layer 1 images do not include one. While ImageCopy did create the file, it failed to create a checksum for it.

Fixed ImageCopy bug with the "Generate Control Data for OTP Layer 1" behavior where the generated control data for layer 1 does not match the control data for layer 0. This bug also causes the "Bad file checksum" rule to be triggered if the source image does not have a checksum value for the control data file.

ImageCopy has also been updated to support for CSS images when using this behavior. Originally this behavior only worked for non-CSS images.

37. Corrected a Plug-In problem that caused the EclipseSuite tools to become very slow in the initial pre-scanning phase.

An internal Plug-In error was causing the EclipseSuite tools to become slow during detection of copy protection by the Plug-Ins.

38. Corrected a problem that was causing duplicate device entries in the device dropdown lists of the media selection tab.

This caused a lockup or crash when users attempted to use one of the duplicate entries.

39. Corrected a problem with the Postgap scan in non-optimized mode where it was taking a long time to complete.

An internal problem was causing the EclipseSuite tools to scan the whole disc for a Postgap, therefore, taking a long time to complete. This problem only occurred when the 'Use Optimized Scan' Postgap behavior was disabled. This behavior should always be enabled unless a stamper player drive is being used.

40. Corrected a problem that caused certain copy protection Plug-Ins to hang the analysis.

41. Corrected a problem where internal SATA and eSATA drives were being identified as USB instead.

This problem was seen on Windows 7. As part of this enhancement, the EclipseSuite tools will identify a device's interface type and drive letter in the Media Selection tab.

42. Corrected a problem in ImageAnalysis that was causing it to generate a different signature from the other EclipseSuite tools.

This problem occurred on images that included a copy protection such as RipGuard. ImageAnalysis was not saving the copy protection skip list in the layer info file which resulted in a different signature during the analysis of the image.

43. Corrected a problem in ImageCopy that caused an incorrect abort message when attempting to convert a dual layer DVD-Video ISO image to DDP.

ImageCopy does not allow conversion of a dual-layer DVD-Video ISO image due to layer break requirements. When users attempt a conversion, ImageCopy aborts with the appropriate message. In previous versions, however, the abort message was misleading since it indicated a DDP error.

44. Corrected a problem in ImageCopy where the control data region code was not being corrected for layer 1 images.

There are conditions in which the region code in the Control Data is automatically corrected by ImageCopy. However, the correction was only happening when copying layer 0. When copying layer 1, the original uncorrected region code was being transferred and caused errors in the verification analysis.

45. Corrected a problem in the Analysis tab that caused problems while sorting errors by description or severity.

This only occurred when Plug-n rules were included in the error list.

46. Don't allow ISO DVD DL A/V files to be converted to DDP.

Due to layer break requirements for dual-layer DVD-Video images, ImageCopy will no longer allow conversion of dual-layer DVD-Video ISO images to DDP. Also, previous versions did not detect ISO images when read via a Blu-ray optical drive. Optical drives will now be searched when detecting ISO images.

47. Corrected a problem that was causing the EclipseSuite tools to display the wrong signature value when opening a log.

When opening a log file, the signature displayed in the main window of the EclipseSuite tools should be taken from the analysis section of the log. Instead, the EclipseSuite tools were trying to read the signature from the input location.

48. Corrected a crash that was occurring in ImageAnalysis when running with the decoder when checking for digital silence.

49. Corrected a problem that caused the EclipseSuite tools to crash when a Plug-In triggered a rule that was set to Abort severity.

50. Enhanced ImageCopy's ISRC Editor import function to prompt the user for action when the number of tracks on the imported ISRC does not match with the actual number of tracks.

51. Corrected a problem that caused ImageCopy to fail loading of a log file that was generated from a dual-output ImageArchive operation.

If the computer where the log file was being loaded did not have the ImageArchive option enabled, then loading of the log file could result in errors and display problems.

52. Corrected a problem where the EclipseSuite tools were crashing while loading log files that contain invalid characters in the "Additional Info".

53. In ICheck, do not automatically create the log file and CSV file when running in automation.

54. Corrected a problem where the version 2.00 DDPID for CD was being parsed and generated as though the image was DVD.

There are two flavors of the DDP 2.00 specifications: one for DVD and one for CD. This problem caused user text in the DDPID of version 2.00 for CD images to be cut off.

55. Corrected a problem in ImageCopy which was causing log files to be encrypted incorrectly, causing job failures when used with ImageSend.

In ImageSend, ImageCopy automatically encrypts the logs and sends them along with the image to the ftp destination. An internal problem was causing the logs to be encrypted incorrectly and thus failed when users attempted to open the logs.

56. Check to make sure that the Linear Density in the DVD control data is set to 0 for single layer and 1 for dual layer.
57. Corrected a problem when converting an ISO image to DDP causing too many Postgap sectors to be added.
58. Corrected a problem where the rule "Invalid control data linear density" was triggered when processing a DVD9 ISO image.
59. Corrected a problem where the EclipseSuite tools were incorrectly triggering "Invalid dstring" errors on the File Identifier field of a File Identifier Descriptor (FID).

The dstring errors apply only to d-character fields. The File Identifier field of a FID does not contain d-characters so it should not trigger these errors.

60. Enhanced the EclipseSuite tools to use ASPI instead of SPTI for tape devices. However, in Windows 7 64bit, SPTI will be used instead.
61. Corrected a problem where rule descriptions in the analysis were being truncated when loading a log file.

New Devices:

CD/DVD Drives:

- Plextor PX-LB950SA (internal) & PX-LB950UE (external USB)
- Plextor PX-L890, PX-B310, PX-B320 and PX-B940
- Pioneer BD-RW BDR-206

Blu-ray Drives:

- Plextor PX-LB950SA
- LG 'HL-DT-STBD-RE WH12LS30 1.00' (Product Id = 'BD-RE WH12LS30)
- MATSHITA BD-MLT SW-5583
- MATSHITA BD-MLT LF-PB271
- LG BD HL-DT-STBD-RE BH10LS30
- MATSHITA BD-MLT LF-PB371
- Pioneer BD-RW BDR-206

Blu-ray Bus Encryption Drives:

- LG HL-DT-ST BDDVDRW UH12LS28
- Lite-On ATAPI BD E DH12E3SH
- Sony Optiarc BD RW BD-5300
- Toshiba Samsung TSSTcorp BDDVDW SN-506AB
- Optiarc BD RW BD-5740L
- Pioneer BD-RW BDR-206 (Mfg. on or after July 2011)

Download Instructions:

The EclipseSuite 9.0 software is available from the following links. Note that you will need a dongle activation in order to run this version unless you are already running a previous Beta version of 9.0. Contact Eclipse Customer Support with your system code if you need an activation code.

EclipseSuite 9.0 (no ImageArchive):

<ftp://ftp.eclipsedata.com/es90/es90.zip>

Password: V1u9D0a6S3

EclipseSuite 9.0 w/ ImageArchive:

<ftp://ftp.eclipsedata.com/es90/es90a.zip>

Password: V1u9D0a6S3

You may be required to login to Eclipse's FTP site. Contact Eclipse Customer Support if you don't already have the username and password.

NOTE: The software download links and passwords in this email are provided to you as a benefit to your Eclipse software support contact. Please do not forward or share this information outside of your company.