

EclipseSuite 8.0 Release Notes

Below are the fixes and enhancements since the release of EclipseSuite 7.1.

Key Features:

1. Added support for Microsoft® Windows 7.

There has been limited testing in the Windows 7 operating system without any problems. Only the Professional and Ultimate 32-bit versions of Windows 7 are supported.

2. Enhanced the EclipseSuite tools with an option to specify a onetime usage of rule and/or behaviors file.

It is sometimes necessary to modify a rule or behavior for a specific job. In previous versions, users had to modify the existing configured rules or behavior files or save the changes under a new file. While this process worked, users sometimes forgot to return the rules or behaviors back to their original setting.

Instead of permanently saving the rule setting, the users can now specify a onetime use of a rule or behavior file. If users do not have a rules or behaviors file configured, then they can choose to modify the default rules or behaviors for the current job only. Once the job finishes, the rules and behaviors will automatically return to their original settings.

To use this new feature, hold down the Shift key while clicking the Start button or click File|Run Once. A window will popup asking you to select the rules and/or behaviors file to use for the job. Optionally, instead of selecting a file, you can select to modify individual rules and behaviors.

3. Added 7 additional supported drives.

4. Added 16 new analysis rules.

Fixes & Enhancements:

1. Corrected an ImageVerify problem where the severity of certain rules was set incorrectly.

In ImageVerify, it is possible to set different rule settings for the source and target images. A problem was discovered where, on a source image, the severity of two rules was taken from the rules settings of the target. The affected rules were "CMF/DDP on Disc Detected – Using CMF on Disc for operation" (with additional info "1000 msg limit reached – treating as ignored") and "Abnormal program termination". This problem has been corrected in this release.

2. Corrected a problem where certain Plextor PX-8xx drives and DVD+R media would cause the EclipseSuite tools to fail to detect any file system on the media.

3. Corrected a problem that was triggering the rule "Signature file not found" on CD-DA images.

4. Enhanced the UPC/ISRC Editor's import function to prompt the user for an action when the number of imported track ISRCs does not match the actual number of tracks.

5. Updated the EclipseSuite tools with the latest Gear libraries.

The Gear libraries are used with ImageArchive. The new libraries correct a speed problem during a Verify After Copy after creating a DVD archive.

6. Corrected a problem where carriage return and line feed characters in the DDPID user-defined text field were causing log files to fail to open.

The carriage return and line feed characters (CR/LF) are invalid characters in DDP and should never be used in

any field.

7. Added a new rule to detect when a CD-Audio DDP image includes a CDTEXT.BIN file but the DDP is not version 2.00.

This rule is used to alert users when a CDTEXT.BIN file is present in an image folder but it is not referenced in DDP. If not properly referenced in DDP, some encoder systems may not include the CDTEXT during mastering. The result will be a replica that does not include the CD-TEXT data. To identify such images, the EclipseSuite software includes the new rule "Non DDP 2.00 compliant CD-Text detected".

8. Enhanced the EclipseSuite tools with the option to specify a onetime usage of rules or behaviors file.

It is sometimes necessary to modify a rule or behavior for a specific job. In previous versions, users had to modify the existing configured rules or behavior files or save the changes under a new file. While this process worked, users sometimes forgot to return the rules or behaviors back to their original setting.

Instead of permanently saving the rule setting, the users can now specify a onetime use of a rule or behavior file. If users do not have a rules or behaviors file configured, then they can choose to modify the default rules or behaviors for the current job only. Once the job finishes, the rules and behaviors will automatically return to their original settings.

To use this new feature, hold down the Shift key while clicking the Start button or click File|Run Once. A window will popup asking you to select the rules and/or behaviors file to use for the job. Optionally, instead of selecting a file, you can select to modify individual rules and behaviors.

9. Fixed problem that was causing the EclipseSuite tools to crash during saving of the file checksums when copying an audio CD with RW data.

The crash occurred when the following conditions were met:

- a. The behavior '**Quick RW scan when copying from CD to tape**' was enabled.
- b. No RW data was detected during the Quick RW scan.
Note: the Quick RW scan only scans the first 20 sectors of each track.
- c. RW data is detected during the copy operation.

10. Added logging of ImageCopy options "Do not encrypt", "DDP on disc" and "Disable Laser".

The ImageCopy log files will now include an entry that indicates the setting of these options when the job was run. The settings for these options can be found in Info|Runtime.

11. Added logging of preference settings "Archive log files in BDCMF" and "Overwrite logs under automation".

The log files will now include an entry that indicates the setting of these options when the job is run. You can view these settings in the Info|PREF display.

12. Corrected a problem where the "Limit analysis messages to 1000 per rule" and "Output DVD checksum version 0.99" behaviors were not being set to their default setting when running an application for the first time.

When no behaviors file is being used and an EclipseSuite program was started, the above behaviors were not initialized to their default setting.

13. Corrected a problem in ImageCopy that was causing an unnecessary overwrite prompt when automatically saving log files with the timestamp naming convention.

When the automatic saving of log file was selected and the log naming convention was set to timestamp, there was always a user prompt to replace the existing log file. This prompt was occurring by error since the timestamp should have made the log filename unique.

14. Corrected a problem where empty lines in the log file were causing errors when opening the log.

15. Added several UDF analysis enhancements.

- Don't log any debug statements and don't check for allocation errors during the quick UDF scan that gets used to determine the media content type.
- Don't display the "FE/EFE ICB File Type" info for each file when the UDF behavior "Basic Advanced UDF info" is checked to decrease memory requirements.
- UDF data allocation analysis tuned again for better performance.
- New "Searching for allocation conflicts" item added to the Progress tab.
- An uninitialized variable was randomly creating the false conditions to trigger the error "Invalid Partition Descriptor" with the additional info "... Partition overflows". This should have happened analyzing DVD discs or Blu-ray images only.
- ES tools will show more detailed information in the Additional Info column to help to explain why the rule "Invalid Partition Descriptor" is getting triggered during an overflow condition.
- Improved algorithm that keeps UDF prevailing Volume Descriptors and show the new rule "Different Volume Descriptors in same sequence" when descriptors with the same Volume Descriptor Sequence Number have different content.
- Provide location information in the analysis tab when showing the rule "Invalid Logical Block Number" for allocation descriptors.
- Show location information for file extents with error conditions under the UDF tab with the appended string "(Extent error)" to help during research.
- Added more UDF checks to comply with BDA FSV detailed requirements.
- Many UDF errors will provide more additional info.
- New UDF behavior "Support multiple partitions" to optionally expect this possibility during address translations from LBN to LSN. The code was expecting multiple possible physical partitions but all known ROM formats use only one. By default this behavior will be turned off so that invalid LBN addresses can get translated to a meaningful LSN.
- UDF rule "ECMA 167 Volume" rephrased as "ECMA-167 Volume".
- New UDF rules to show more specific errors for BDA FSV qualification:
 - a. "Invalid character set type".
 - b. "Bits 9-31 in list of character sets not set to zero".
 - c. "All zero bytes dstring value".
 - d. "Unused dstring characters not set to zero".
 - e. "Reserved regid flags not set to zero".
 - f. "Unrecognized Volume Structure Descriptor".
 - g. "Extent Location specified but Extent Length is 0".
 - h. "Bad Tag Descriptor Version".
- UDF file allocation analysis was running a single process thread by default.
- Allow an Extended Attribute space to contain only the Extended Attribute Header Descriptor and no Extended Attributes. The rule "Bad Extended Attribute" won't get triggered for this condition any more.
- When the UDF FS analysis of one of the original or backup FS copies detects video content, the code will retain the information even if the other copy disagrees due to other errors or corruption. This was the original behavior but got modified on 12-21-06 when Blu-ray support began to get included.
- The rule "More than one Allocation Descriptor" was renamed "AV directory or file with multiple Allocation Descriptors". This rule will now trigger only if multiple ADs are detected for files included in the "\VIDEO_TS", "\AUDIO_TS" or "\JACKET_P" directories and for those same directories or the root directory of a DVD disc containing such AV content. The new rule "DVD data directory or file with multiple Allocation Descriptors" will be used for other DVD data files and directories for informational purpose.
- Fixed a problem that was causing jobs to abort with the error 'End of input encountered' during the UDF analysis.
- The EclipseSuite tools were trying to read an invalid UDF address (an address outside the UDF Volume Space). The invalid address resulted in several UDF-related errors and warnings. This included unreadable sectors and finally 'End of input encountered' which aborted the job.

16. Added support for MD5 checksums.

ImageCopy is now able to generate MD5 checksums. The other EclipseSuite programs are able to validate the MD5 checksums when present.

This feature was added primarily to support the MD5 checksums used by the Singulus Ace encoder. Customers using ImageCopy to load images for mastering on the Ace encoder can take advantage of this feature and ensure that the image is protected throughout the whole mastering process.

17. A new Fortium Patronus Plug-In DLL file (CpmDVDx.dll) version 1.04 is included with this release.

This version will recognize compressed EDZ DDP/CMF created by ImageArchive. ImageCopy 8.0 will also compress the DDP files when creating an archive of a Patronus-protected image.

18. Corrected a problem in ICheck that was causing checksum errors on the DDPID, DDPMS and DDPPQ files when the image did not include any checksums.

19. Corrected a problem in ICheck which was causing the checksum calculation process to fail when recursively calculating a DVD image.

20. Add a new Postgap Behavior 'Use Optimized scan' to allow the user to disable the optimized Postgap scan.

This behavior is selected by default but allows users to disable it in order to enhance readability when using a stamper reader. Users not using a stamper reader should have this behavior selected at all times.

21. Added new rule "Full signature" to displays an image's full signature value.

This rule defaults to IGNORE but users who wish to see the full signature instead of the short 6-byte signature can change this rule to INFO.

22. Corrected a problem which was causing the ETOC to display the wrong PSEC of the second session of a Multisession CD image.

23. Reduced number of layer choice prompts in ImageVerify.

The layer prompt will only appear once when comparing a multi-layer image and the selected layer will be tested for both source and target.

24. Added rule "Excluded Implementation ID detected"." which is triggered if the UDF implementation ID contains the text "Microsoft Windows", and only a UDF file system is found.

This rule was added to identify recordable media that was recorded using the drag-n-drop method (i.e. Windows Live File System) in Microsoft Windows®. This recording method is not recommended for masters intended for replication.

25. Corrected a problem which caused the EclipseSuite tools to crash when opening a log file that contained certain UNICODE characters.

When attempting to open a log file containing certain unsupported characters, it caused the EclipseSuite tools to crash.

26. Corrected a problem where the rules "Compressed file found on input media" and "DDP/CMF file found on input media" were not getting triggered.

These rules were not being triggered if the UDF analysis detected these types of files but the "Advanced UDF analysis for computer data" behavior was turned off.

27. Corrected a problem that caused the EclipseSuite tools to crash on an image with CD-Text and the CD-Text Genre Code was undefined.

28. Corrected a problem where the SafeDisc copy protection was not being detected on a replica.

There were some conditions in which it was possible that the detection would fail. This only affected a replicated disc.

29. When saving XML logs, do not save unprintable characters.

30. Corrected a problem that caused errors during a conversion of an ISO image to DDP.

The problem occurred in ImageCopy when converting a CD ISO image to DDP. ImageCopy incorrectly added a Postgap twice to the generated DDP file-set. This generated errors during the analysis and verify after copy process.

31. Changed the severity of the rule 'Unknown file system' to an ERROR.

Since most images target the Windows operating system, it is expected that they have ISO9660 or UDF file systems. If neither is detected and the image is mastered, the replicas will fail playability. If this error is triggered, users should confirm the target operating system before mastering.

32. Corrected a problem in ImageCopy where certain log files could not be opened.

This problem occurred when the ImageCopy that created the log had the ImageArchive option but the ImageCopy that was opening the log file did not.

33. Corrected a problem in the EclipseSuite tools where they were not validating the Linear Density of DVD images.

There are two possible values for the linear density depending on whether the image is single layer or dual layer. The EclipseSuite tools were not validating whether this value was correct since ImageCopy would have corrected it during loading.

New Device Support

- Plextor PX-B310U
- Plextor PX-B320SA
- Plextor PX-890SA
- Plextor BD PX-B910, PX-B920, PX-B930, PX-B940
- LiteOn BD iHES106

New Rules

DVD data directory or file with multiple Allocation Descriptors
Dongle needs option upgrade
Full signature
Calculated MD5 value does not match expected MD5 value
Excluded Implementation ID detected
Calculated SHA-1 value does not match expected SHA-1 value
Invalid character set type
Bits 9-31 in list of character sets not set to zero
All zero bytes dstring value
Unused dstring characters not set to zero
Reserved regid flags not set to zero
Unrecognized Volume Structure Descriptor
Bad Tag Descriptor Version
Different Volume Descriptors in same sequence
Calculated MD5 value matches expected MD5 value
Non-DDP 2.00 compliant CD-Text detected

