

**To:** Eclipse Support Agreement & Warranty Customers  
**Date:** October 13, 2010  
**Subject:** Availability of EclipseSuite BD 3.0 Beta Z & ImageEncoder 4.0 Beta Z15

**Summary:**

This TechFlash is to notify all support agreement & warranty customers of the availability of EclipseSuite BD 3.0 Beta Z & IEScheduler\ImageEncoder 4.0 Beta Z15. This BETA software has undergone limited testing and is being made available as-is.

**ATTENTION!**

Users of the **Certificate Management Utility (CMU)** may require a dongle activation after installing EclipseSuite 3.0 Beta Z. Contact Eclipse Support with your system code for an activation.

**EclipseSuite Fixes & Enhancements:**

- Updated Managed Copy compliance according to the **AACS Update Notice AACS NA 2010-5** (*UPDATE - Managed Copy Update to AACS Specification Books*).
  - Added the new rule "Incorrect size for AACS Managed Copy Manifest file" to be triggered when the Managed Copy Manifest file size is less than 768 Kbytes as required by the AACS Specifications.
  - Added the new rule "No Content ID in Managed Copy Manifest file" to detect when no Content ID is specified in the Managed Copy Manifest file.
  - Reduced the severity of the rule "No AACS Managed Copy Manifest file" to INFO since the file is no longer required, only recommended.
- Added the new rule "BDCMF/PIC BCA Flag mismatch" to be triggered when the BCA flag differs between the BDCMF.CMF and PIC.DAT files of an image.
- When the 'Density' attribute is missing or has an incorrect value, always default to '25G' since it is currently the only supported density.
- When a Blu-ray image uses Secure CMF, get encryption keys from KEY.DAT or KEY.DAT.EPKI.  
When a Secure CMF image created, the encryption keys are put into the KEY.DAT file instead of copying them to the Unit Key RO file in the image. Once the image is identified as Secure CMF, the EclipseSuite tools will now retrieve the encryption keys from the KEY.DAT or KEY.DAT.EPKI files in order to process the image.
- Added various enhancements to the Title Structure Analysis.
- Added the new rule "Disc PAC content read error" to be triggered when reading the PAC information from disc.  
When no PAC information is available or readable, ImageCopy is able to re-generate this information when copying from disc to hard disk. Therefore, this rule will be a WARNING only and can be ignored.
- Added support for the 'MVC' codec attribute when using BDCMF 1.21.  
Previously, only 'MVC Base' and 'MVC Dependent' were supported.
- Add a log entry when the following ImageCopy options are used.  
**Media Selection:** 'Do not encrypt', 'DDP on Disc' and 'Disable Laser'  
**Preferences:** 'Archive log files in BDCMF' and 'Overwrite logs under automation' are used.

Previously, there was no way of knowing from a log whether a job was run using these options.

- Fixed a problem where the behaviors 'Limit analysis messages to 1000 per rule' and 'Output DVD checksum version 0.99' were not being set to their defaults when an EclipseSuite application was run for the first time.
- Enhanced the analysis engine for better performance.

The UDF analysis engine, BD-Java security analysis, and the libraries that process the BDCMF XML files have gone through various enhancements in order to enhance performance on certain Blu-ray 3D images that require more system resources.

- Added support for the Plextor BDDVDR PX-320 drive.

This drive can be used as a CD, DVD and Blu-ray reader.

- Fixed a problem with the UDF analysis where an invalid address was causing the job to abort.

Previously, if an anchor point had an invalid address that was outside the volume space it would cause an abort condition with the error 'End of input encountered'.

- Fixed a problem that was causing an unnecessary overwrite prompt when automatically saving log files with the timestamp naming convention.
- Fixed a problem where empty lines in the log files were causing the EclipseSuite applications to not be able to open the log file.

When the EclipseSuite applications were used to open a log file that included empty lines, a message popped up indicating that it was an invalid log file.

- Fixed a problem where ImageCopy was not properly setting the PMSN flag when copying a Sony CMF image.

Previously when copying a Sony CMF image that had the PMSN flag set, ImageCopy would not set the PMSN flag on the output image.

- Corrected a problem in which the warning rule "Bad Tag CRC" was been displayed incorrectly for the UDF File Identifier (FID) of some files in directories with an allocation size bigger than 65536 bytes.
- Corrected a problem that would sometimes incorrectly trigger the rule "Invalid Partition Descriptor".
- Enhanced the detection and output of the 'Bus Encryption Enable' flag on Sony CMF images.

### **New Rules:**

Common CPS Unit Key was not used for encryption

BDCMF/PIC BCA Flag mismatch

Incorrect size for AACMS Managed Copy Manifest file

No Content ID in Managed Copy Manifest file

Disc PAC content read error

Directory not in Authoring Studio namespace

### **IEScheduler/ImageEncoder Fixes & Enhancements:**

- Enhancements for better performance during pre-scanning of images.

The performance enhancements should help when processing certain images, such as Blu-ray 3D, that take longer to prescan. In some cases, the longer pre-scan was causing the Sony PTM LBR to abort because the encoder was not ready.

- Support BI-specified Philips RMI PCF files.

Users can now specify the PCF filename in the BI file's general section:

```
[GENERAL]
PCFFile=[filename]
```

- Changed BCA flag display to be based on the BCA flag value in the PIC data instead of the BDCMF.
 

The BCA flag of a Blu-ray image is specified in the BDCMF.CMF and the PIC.DAT files. However, when mastering, only the flag in the PIC.DAT will matter. Therefore, this flag will be displayed instead of the one from the BDCMF.CMF file.
- Fix problem where mastering any layer other than zero on a recordable band using the Sony PTM LBR caused the ESPFormatter to always cut layer 0.
- Added support for the China Blue High-Definition format.
  - Rename the "HD DVD" Lbr Params page to be "CBHD / HD DVD". This page is displayed only if either HD DVD or CBHD options are enabled.
  - Support AACS and DKAA protection with China Blue masters.
- Corrected a problem that caused ImageEncoder to abort when mastering a Blu-ray image using BDCMF 1.10.
 

Previously, when mastering a BDCMF image version 1.10 or later, the encoder assumed the image was Secure CMF and automatically looked for the file KEY.DAT or KEY.DAT.EPKI. If the image was not Secure CMF, then the encoder aborted.
- Corrected a problem where queue image directories for recordable jobs could not be deleted.
- Corrected a problem that was causing the CTO band to be skipped when mastering layer 1 using the PCI encoder.
- Empty debug output lines will no longer be saved into log files as they were causing errors when loading log files.
- Support a new option to extend the cutting of the last area on main band (outer area on SL and L0, inner area on L1 OTP). To use the option, add the following entries to the registry hive:
 

```
HKCU\Software\Eclipse\ImageEncoder\EncoderSettings\
ExtraMicronsLO = <additional length in microns>
ExtraMicronsL1 = <additional length in microns>
```

The additional data sectors will be calculated and added onto the area generation (lead-out/middle/lead-in etc.). The actual radius reported to the LBR will not be affected by this setting – that is, IE will silently output the extra blocks while the LBR ends where the original radius point is specified.
- When IE is handling a BDCMF 1.10 CS image but the KEY.DAT is not encrypted, do not abort if there is no private key configured.
 

Previously, the encoder assumed that the KEY.DAT file was encrypted and aborted when it couldn't find a private key to un-encrypt it.
- Enhance the display of the Info|LBR tab in ImageEncoder to include radius locations where each zone begins/ends on a Blu-ray cut.
- Added a new flag rule to handle the condition where the Philips Rom Mark unit does not transition back to the idle state.
 

Previously, the encoder expected the Philips RMI to return to an idle state at the end of the job and the encoder aborted with an RMI error. Since it has been determined that this condition does not affect the

mastering results, the encoder no longer aborts but will trigger a flag rule to show that this condition occurred.

- Updated several LBR Interface DLLs: ODC\_Nimbus.DLL Version 1.1.46, PanaLBR.DLL Version 1.19, TTLGeneric.DLL Version 1.34, DMS8000.DLL and Version 1.0.29.7.

All of these interface DLLs were enhanced with the new ESP recordable parameters **ESPTTLStart** in their configuration file (INI). Previously, users would have to specify the parameters, ESPTTLStart\_L0 and ESPTTLStart\_L1 to indicate the TTL start trigger for each layer. Now, only this new parameter (**ESPTTLStart**) is needed to start either layer.

If the ESPTTLStart parameter is specified in the configuration file of the DLL, the original parameters (ESPTTLStart\_L0 and ESPTTLStart\_L1) are ignored. Users who wish to specify separate TTL start triggers for each layer can still use the original parameters.

Example 1: specifying a start trigger for each layer

```
[ESPR]
...
ESPTTLStart_L0=OR
ESPTTLStart_L1=OR
```

Example 2: specifying a single trigger for both layers

```
[ESPR]
...
ESPTTLStart=OR
```

### **Download Instructions:**

The EclipseSuite BD 3.0 software is available from the following link.

<ftp://support-ecl@ftp.eclipsedata.com/es30bd/esbd30z.zip>

Password: zeB03DdTE6

The IEScheduler/ImageEncoder software is available from the following link.

<ftp://support-ecl@ftp.eclipsedata.com/IEScheduler/ies-ie40z15.zip>

Password: ieS4iE0z1E5

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