

DCA Viper Pre-Mastering



Next generation pre-mastering

with enhanced analysis,

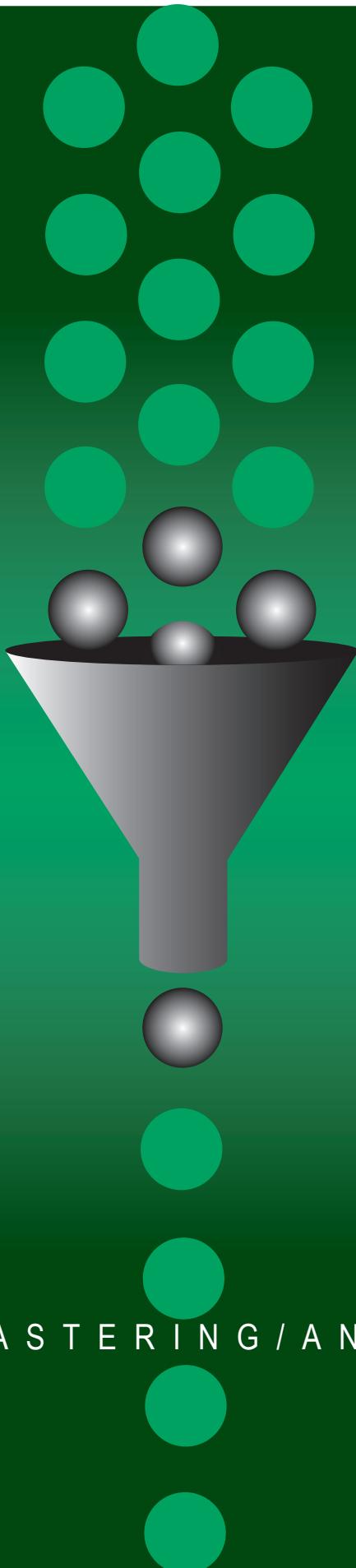
HCRC verification, simpler

interface, full DiscTag integration,

and more



P R E - M A S T E R I N G / A N A L Y S I S



DCA's Viper is the result of a complete overhaul of our pre-mastering architecture, developed from the ground up with the goal of providing transfer, analysis, copy protection and data verification all in one simple to use interface.

Today, Viper is available with support for CD, DVD & Blu-ray, with all formats and all operations contained in a single application.

DiscTag Makes It Simple

At the heart of the Viper application is the DiscTag Enabled Workflow. The Viper Load job inserts a DiscTag in the lead-in area of the DDP/CMF (allowing it to be read from your replica discs), which is stored with job report and title information metadata on your plant's metadata server partition. The metadata is used for later retrieval of verification & testing parameters. Viper additionally creates a hierarchical CRC (HCRC) of the disc image, allowing for sector-by-sector verification of an image without the need to store the entire disc image on a server, so you need less than 0.005% of the bandwidth & storage space necessary to test an image previously.

All Viper jobs populate their user interface and retrieve all job parameters, when possible, using the incoming DiscTag metadata, so there are fewer chances for operator errors.

Transfer

Viper provides a new, user interface where a user can build a job on the fly just by selecting source, target, and operations to be performed. DDP/CMF is transferred from a device to your network, and can be created from non-copy protected sources, including discs, images or files/folders. Title-based loading for dual layer DVD and Blu-ray discs provides an easy way to ensure that the exact same version of both layers are the ones that actually end up on the replicas.

Viper supports DDP 1.x, DVDCMF 1.x, DDP 2.x and BD-CMF 1.x. Sony CMF is supported for input only (BD-CMF will be created on output).

Viper's MMC5 compliant device model ensures that operators can use transfer or create DDP/CMF from any device Windows can see, even if the device is not yet tested on DCA's approved device list. (Use of non-tested devices is not guaranteed by DCA. Device handling is literally plug-and-play ready, so if you want to use a USB, Firewire, SATA, SCSI or IDE drive, just plug it in and it should work with Viper, first time.

Copy Protection

Viper can perform either AACS or CSS encryption during the transfer/load job. Encryption is done in a streaming process, costing your operators little or no additional time from a standard transfer. Ripguard, ProtectDisc, Patronus and SafeDisc copy protections are also supported by Viper. In addition, Viper can automatically decrypt AACS or CSS from replicas to compare your discs against the original pre-encrypted HCRC values.

Analysis

Viper's all new analysis engine provides DDP, Image, File System, Video System, BD-J and Copy Protection checks to ensure that your incoming media is good-to-go prior to mastering. Analysis is done in real-time, using a streaming process. This means that you can do a transfer, encryption & analysis, all in one single pass. All analysis is based upon proven Class A verification products and matches or exceeds the level of analysis provided by competing products.

Viper's all-new help system provides detailed information on errors & warnings, going in-depth both on what the error means, and displaying your plant's policy on specific errors (administrator-customizable entries in the error log).

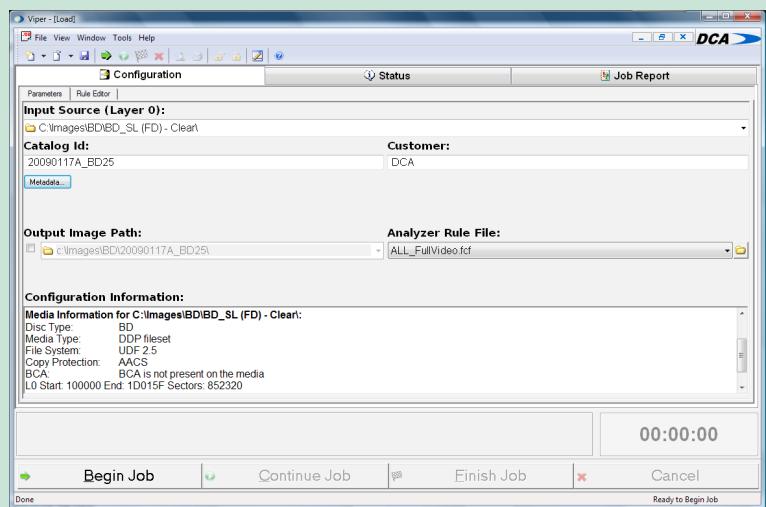
Data Verification

Viper's Verify job, upon disc insertion, locates the DiscTag, looks up the metadata from the DiscTag Server, which includes HCRC values, and automatically matches the layers (against mis-bonding) and automatically verifies image integrity (against any formatting/modulation/stamping errors). All HCRC errors are reported by sector number (your choice: PSN or LBA), file name and radius location, giving you the fastest way to locate and correct errors within the process. Sector numbers and radius locations can easily be correlated to physical tester reports for even faster pinpointing of errors.

Verification jobs can start automatically, using information entered at the time the image came into the plant to populate the user interface and reports (no more data entry issues at runtime).

Other Viper Features

- Integration with Commander Archiver for simple archives that don't slow your Load or Verify jobs down, since archiving takes place in a completely separate process.
- Error handling is user-configurable, allowing the administrator to set which failed rules will be fatal, warnings, or ignores, as well as set how many errors you want before a job is aborted
- Viper is always in Commander-Ready mode, waiting for a network scheduled job. Users can also add a new Commander Scheduler or Singulus MSH job directly from the Viper interface.
- Users can scan/verify any disc or image from address "A" to address "B"



DCA Viper provides next generation pre-mastering with enhanced analysis, HCRC verification, a simpler user interface and full DiscTag integration, providing the easiest way to reduce errors and ensure integrity prior to mastering.

Viper Configurations

Load Only – includes full DDP analysis, DLT Creator and DDP/CD-Text Editor.

Verify Only – HCRC verification for replicas and/or DDP/CMF images. Includes Sector Viewer.

Pro – both Load & Verify, plus complete DDP, Image, Filesystem, Video & Copy Protection analysis.

All Viper configurations include full DiscTag integration. Copy protection support available for AACS, CSS, Ripguard, ProtectDisc, Patronus and SafeDisc.

Viper Tools - Utilities that provide additional functionality to Viper.

- DLT Creator – Allows the user to create DLT copies of DVD DDP 2.x or CMF 1.x file sets, placing each layer on a separate DLT tape.
- DDP/CD-Text Editor – A simple editor for DDP or CMF files for CD/DVD images, including the DDPID/MS and PQ_DESCR files. Includes the ability to create or edit the CDTEXT.bin file for the file set. All changes are checked using Viper's analysis engine prior to saving, to ensure that the files are correct for mastering.
- Sector Viewer – A side-by-side hex view of two images, synchronized at a specific sector address.
- DDP Audio Converter – Allows CD DDP audio images to be converted to MP3, FLAC, BIN/CUE or WAV. Additionally, the tool converts the CD-Text and ISRC values (from PQ_DESCR) to ID3 tags (in MP3 outputs). Users can also edit the ID3 tags directly.
- DDP Preview/Playback – Allows CD or DVD DDP images to be mounted within Windows, as if the disc was in an optical disc drive. Playback can be performed using any available media player on the system.
- DDP Playable Disc Creator – Creates a playable copy of non-copy protected CD or DVD images onto CD-R or DVD+/-R media. Can output to a local drive or a Rimage robot on your network. This tool will be available in Q2 2009.

Contact Us

For more information on Viper or the Viper Tools, contact your DCA Account Manager

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