



## USING RED MEDIA TODAY

This document provides an overview of today's RED workflow. It describes 2 RED workflow scenarios and compares those two to Optix' workflow.

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**Current RED workflow issues if R3D files can't be processed in post natively. Generally speaking the post production workflow of RED footage can be quite cumbersome if RED files (R3D) can't be processed natively.**

- Conversions are necessary utilizing 3<sup>rd</sup> party applications such as **RED cine**, **RED Alert** etc. These conversions from **RED R3D** files to other file formats are very render intensive and time consuming.
- The **RED** file consists of a 12 bit raw structure. Converted files translate a some form of compression/ algorithm for Avid and FCP or for a higher end finish, in **10 bit DPX** file sequences or HD clips. The **12 bit raw R3D** file however will give more control during color grading and ultimately a higher end result, especially for a theatrical release.
- Some systems are capable of handling **R3D** files natively but those systems focus only on dailies and color grading. This means conversion of the **R3D** files is still necessary after the grading process for online and finishing. Handles and layers will no longer be available anymore during online.
- Once **R3D** files are converted the file size becomes much larger compared to the original size of the **R3D** files. This also means a much higher demand on band-width and storage.
- Multiple software applications need to be used to process **RED** files from beginning to final mastering.



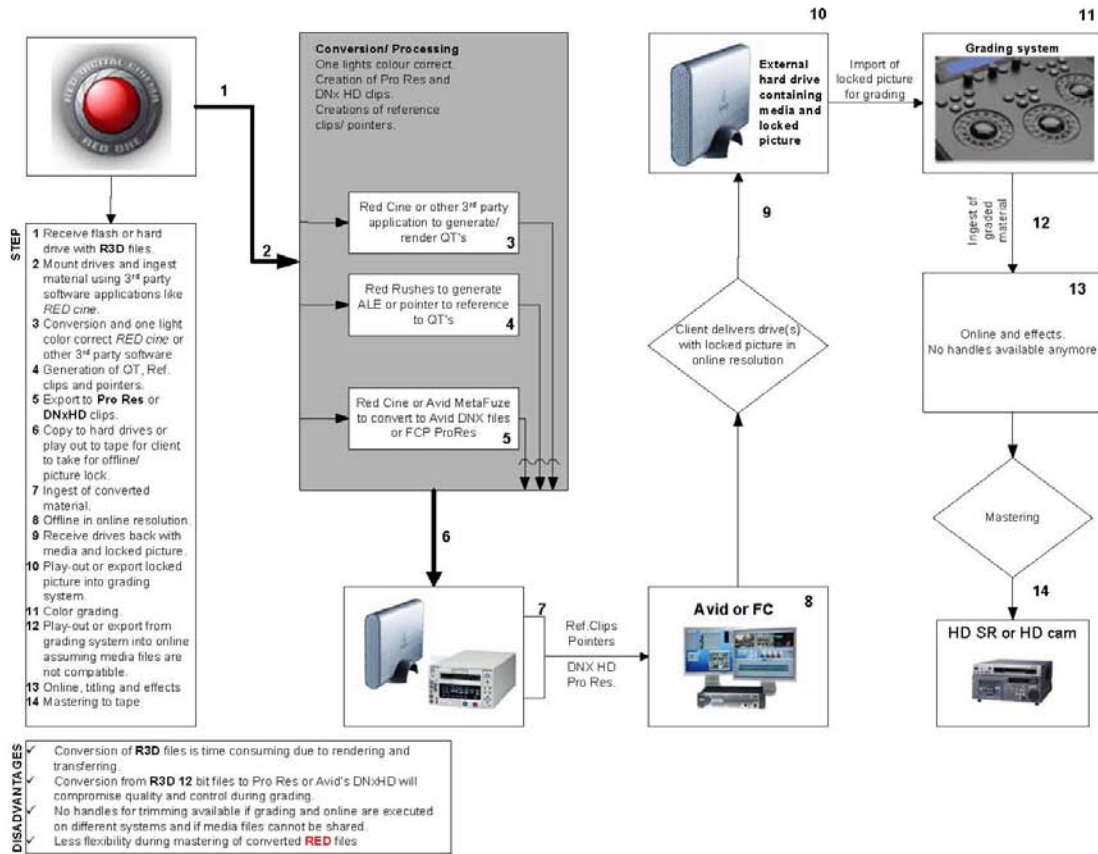
**Why Optix RED workflow is better in a nutshell?**

- No conversion of **RED** files (**R3D**) is necessary. Therefore huge time savings because no rendering is needed.
- Dailies in real-time.
- Complete tapeless work-flow. Export of various QT with embedded meta data for file conform
- File conform (**Optix high-speed-conform**) is almost instantaneous. No tedious conform process from tape is required
- Grading is executed in **4K, 2K or HD in 12 bit native raw** format which means higher quality and more control over color with no processing/ rendering whatsoever.
- Specific filters are available in **Mistika** to address inherent **RED** problems such as noise in blacks
- No export or conversion needed for online after grading.
- Graded program on **Mistika** timeline is completely uncommitted, meaning handles for trimming of edits are available. Furthermore grading can happen in layers if composites were executed within **Mistika**. For example a background plate and foreground blue-screen can be graded individually if the keying is executed within **Mistika**.
- **Mistika** has superior keying tools than most competitive systems.
- Online, titling and effects can be all finalized within **Mistika** in **RED** native.
- Optix has 2 **Mistika** systems tied into a **SAN**. (Shared storage) This allows us to work in both suites simultaneously on the same project. Online, titling and effects can be worked on in one suite while the grading process is happening in our grading suite.
- True **universal mastering**. **4K RED** native can be mastered to any format straight from the **Mistika** timeline. **Pan & Scan, framing, resolution and format decisions** can be made in real-time.



**Scenario 1**

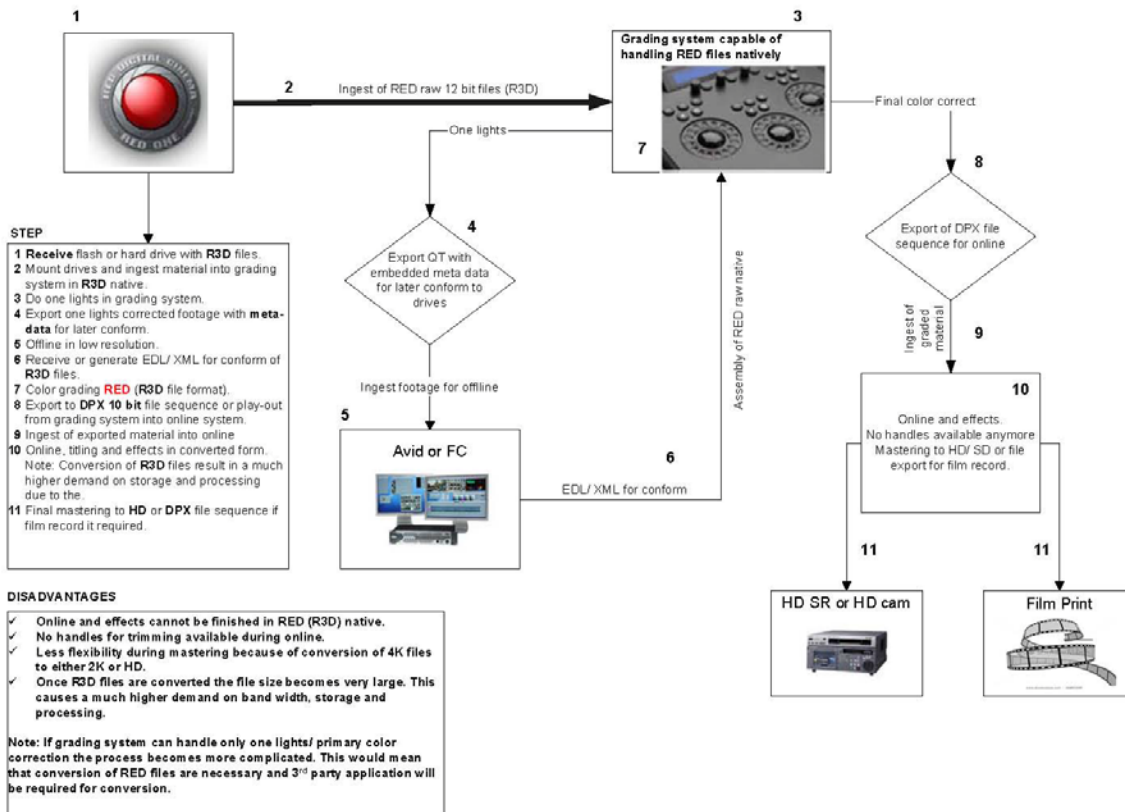
Export/ conversion of **R3D** files to Pro Res for FCP or DNxHD for Avid to avoid conform.  
 Basically offline will be executed in high resolution.





## Scenario 2

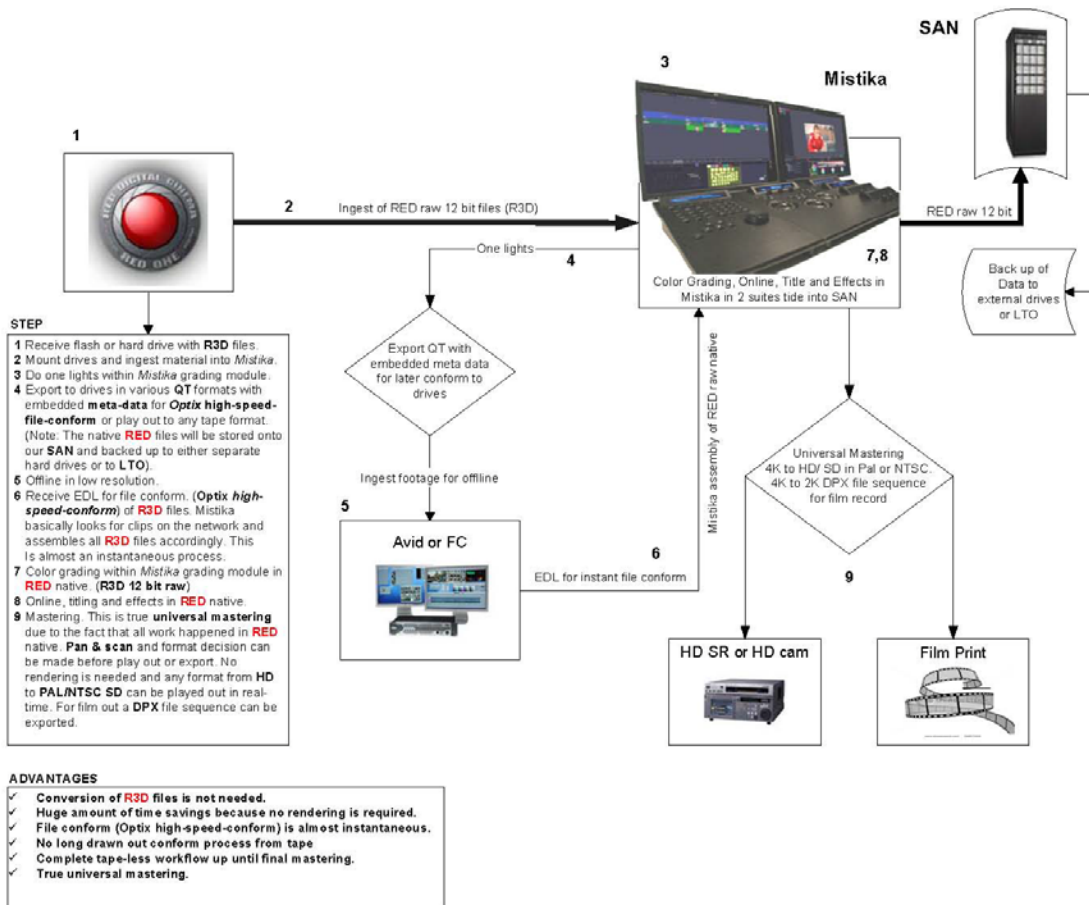
Offline of project will be executed in lower resolution which means conform in high resolution is required. Systems which can handle **RED** natively are part of the work-flow. Currently the only systems dealing with **RED** natively are focusing one lights, primary and secondary color correction. (With the exception of *Mistika*)





## Optix Workflow

*Optix workflow really set itself apart from all other facilities due to the fact that **RED** footage (R3D files) are handled natively in all aspects (One lights, final grading, online, titling and effects) to final mastering.*





## What is Mistika and its capabilities?

### Mistika SD/HD/2K/4K/Stereo:

Mistika is the total solution for high-end timeline based editing, conforming, compositing, image restoration, multimastering and colour grading. All tasks can be accomplished interactively, and also evaluated in their global context in real time.

Mistika provides the flexibility to produce and deliver any job.

Optix' Mistika systems run on Linux 64bit operating systems. Linux is the most stable and fastest operating system in high end postproduction environments.

### Accept any job and deliver in any format

Mistika is completely configurable in terms of resolution, frame rates, aspect ratio, interlacing, and colour spaces.

On the same timeline you can edit, compose and colour grade in any format and resolution while retaining the ability to non-destructively modify effects parameters.

Mistika also is able to provide high quality real time conversions between 4K, 2K, HD, SD. All the standard output formats like PAL/NTSC SDI, HD-SDI RGB 4:4:4, 2K DVI output, 4K HDSL and even 3D stereo dual HD-SDI can be supported thanks to the hardware configuration Optix is running.





## What is Mistika and its capabilities? (Continued)

### Native support for RED Camera R3D format, and the complete R3D workflow.

Mistika Support for RED Camera R3D 4K format, includes R3D real-time playback with all the Mistika colour grading tools applied, plus cross fades & effects. 4K R3D files can be graded and output to 2K or HD displays using their full resolution, without the need of proxies nor any format conversion or ingest process.

It also provides R3D metadata control and modification on a per-clip basis, and EDL conform directly with the R3D files.

You can finish all these jobs without the need of any conversion to other formats. In addition you can create 4K DPX to collaborate with systems that can not work well with R3D, and finally, when these DPX come back to a Mistika 4K system it will still work in realtime. As a result, the complete workflow is supported in real time.

### Optix high-speed-conform

Optix in conjunction with SGO the developers of Mistika have developed a process allowing for a file conform of data acquired footage. If dailies and exports to QT formats were executed at Optix, a conform of the original files will take virtually only minutes even for long-format projects. Because of proper meta-data our Mistika suites will perform the **Optix high-speed-file-conform** by gathering all original footage generated in a file format residing on drives which are mounted to either our network or our SAN.

# SEEING RED?

Astonishing **TRANSFERS!**  
Fantastical **ONLINING!**  
Groovy **GRADING!**  
Sweet **MASTERING!**

Scared of **RED's** Workflow?  
Announcing the latest software and hardware  
upgrades at **Optix**, introducing the most streamlined  
workflow in **RED** (and all other  
formats) today.

**Real-time Work Flow for Dailies**  
Load in R3D files natively, complete One Lights in real time  
& export to any file or tape format for your Offline.

**No 3rd Party Software Needed**  
Time consuming conversions through 3rd Party  
applications are now obsolete.

**Protection of Content**  
We store your files for your security and peace of mind. File-based camera  
originals will reside on our SAN until your final Master has been output.

**Colour Grading, Online & Effects in real-time**  
Work with original RED R3D files in the finishing stage.  
Experience total flexibility for needs like Pan and Scan, Scaling, etc.

**Instantaneous Native R3D File Conform**  
Bring us your project for an online file conform that takes  
place faster than the real-time length of your program.  
Spend your budget on the creative process!

**Mastering of Content**  
New Universal Mastering capabilities: for example have a RED 4K  
natively finished project and output in real-time to 2K, HD, SD  
in any standard and/or format.

**Talent and Support**  
Take advantage of Optix' technical and creative staff.  
Work with our CD and his team on Openings and Title Designs;  
consult with our Effects Supervisor and Animation Director for  
any CGI needs and take advantage of our Technical Support  
staff before you shoot.

Before commencement of your next project  
call Paul, Stephenie or Rob at 416-214-9911.  
At Optix we're **RED-Ready!** [www.optix.ca](http://www.optix.ca)