



Colorfront Transkoder Engine: the secret sauce inside Joust VFX management package

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Colorfront user: *The Creative-Cartel, Culver City, Los Angeles*

The Creative-Cartel is making a quite a name for itself in as a full-service digital pipeline management company for filmmaking in the 21st century. The burgeoning business specializes in digital camera-to-post workflows for major Hollywood motion pictures, supporting blockbusters such as *Chappie* (Columbia Pictures/Sony Pictures), *After Earth* (Sony Pictures) and *Ted* (Universal Pictures) and high-end episodic TV shows including the hit TV mini series *Cosmos: A SpaceTime Odyssey* (Fox Network).

The company’s services are tailored to meet the different demands of each production. These encompass VFX production management and infrastructure, plus on-set mobile digital lab services – dailies and transcoding, plus a web-based viewer for editorial and VFX dailies – all integrated into The Creative-Cartel’s increasingly-popular Joust software package.

Deployed as a digital repository enabling multiple VFX vendors – to push and pull RAW assets, cyberscans, VFX composites and other work-in-progress, plus camera reports, color information, as well as the final VFX deliverables destined for the DI grading house – Joust has helped to slash turnaround times for editorial and VFX teams. It has significantly reduced costs too, with the consequence that the business has skyrocketed. Joust been successfully utilized on the 2015 releases of *Tomorrowland* (Walt Disney Studios Motion Pictures), *Ted 2* (Universal Pictures), *Night At The Museum: Secret Of The Tomb* (Fox) and *Chappie* (Columbia Pictures/Sony Pictures), with more on the front burner.



One of the primary components powering Joust's performance is Colorfront Transkoder Engine, enabling seamless, automated and easy-to-use digital workflows from camera to the DI grade.

"We designed and built Joust to take the hassle out of digital workflow, so that productions can focus on what matters most – getting the job on time and on budget," says Jenny Fulle, CEO of The Creative Cartel. "We were really only able bring Joust's editorial toolset successfully to market because of Transkoder Engine. The Colorfront team are really smart and build awesome products. Transkoder Engine gives our package the validity we were seeking, and that's why we incorporated it into Joust."

The challenge: *developing a new, efficient business model for global VFX production*

The Creative-Cartel was established in 2009 by Fulle, a long-time VFX producer who has over fifty feature films to her credit. Fulle began her highly-successful career in the film industry at George Lucas's Industrial Light & Magic, before stints at Boss Films, Digital Domain, Warner Digital Studios, DreamWorks SKG. During eleven years as evp/executive producer at Sony Imageworks in LA, Fulle's exploration of the Indian VFX and animation market illuminated a new understanding of the VFX business as a global industry, and this in turn led to her starting The Creative-Cartel as a dedicated VFX management company. The Creative-Cartel's first major project was *Priest* (Sony Pictures), uniting over a dozen VFX vendors from around the world. Since then, the company has honed its processes and successfully managed VFX delivery for many other features including *Ted 2* and *Ghost Rider: Spirit Of Vengeance* (Columbia Pictures).

"The Creative-Cartel was conceived as a new way of doing business, to get beyond the traditional bricks-and-mortar, overhead-heavy studio production facility to a leaner, more nimble entity," says Fulle. "The concept was to have a core team of asset managers, production coordinators, project managers and digital pipeline wizards who could break down the script into its various disciplines, and bring together the best-suited VFX houses from around the world to efficiently deliver the final VFX shots. However, no two shows are the same, with different cameras, formats and VFX requirements, and so the technical requirements of vary from show to show.

"We pioneered the first Sony F65 workflow on *After Earth*, controlling the data from camera through to post using Joust. While that worked fine, we recognized the need for a wider set of tools to further streamline the management of editorial, VFX dailies and



metadata from sensor to screen. Colorfront approached us with Transkoder Engine and the game changed. It has enabled us to develop Joust into an incredibly efficient, easy-to-use, self-drive management package for multiple VFX vendors, and directly address the need to speed-up turnaround times and reduce costs.”

The solution: *Colorfront Transkoder Engine*

The Creative-Cartel team has steadily grown to a crew of 15 full time staff, and offers in-depth digital workflow knowledge from on-set to post production.

Along with running Colorfront On-Set Dailies systems for near-set operations, the company also uses Transkoder Engine to power six Joust VFX management systems. These flight-cased packages are designed to follow productions, with SFTP or Aspera connections providing fast broadband connectivity for the chosen VFX vendors, editorial and DI partners.

The Creative-Cartel collaborates with each production in advance to establish a blueprint of the workflow, the file formats and file-naming conventions required, and assign Transkoder Engine pre-sets accordingly. Pressed into immediate service, Transkoder Engine typically undertakes the “heavy lifting” procedures of RAW transcoding to a variety of DPX, EXR, QT and MXF files formats for the VFX and editorial teams and the DI finishing house, although it is also capable of delivering the vast majority of codecs and mezzanine delivery formats in use today.

In practice, EDLs are continuously read and auto-conformed by Transkoder Engine. Users can make selections of the RAW pulls and deliverables they need using the pre-sets in Joust, which then pushes these assets to the vendor in the required format. Joust also has a dailies viewer, enabling users to review shots-in-progress, and a live interactive review capability for multiple users around the world.

“The digital revolution has enabled us to introduce Joust as a self-service model into the VFX pipeline, to take the complication and voodoo out of the process, and to make things as simple as possible,” says Fulle. “Being able to harness Transkoder as part of an automated system, meant we could develop Joust into an easy-to use standalone package that users can interact with directly themselves. With Joust there’s hardly any learning curve, and as soon as production is set in motion it’s all automated via a simple web user-interface. Depending on the file sizes this means that turnaround times have diminished to the point that it’s pretty much immediate.”



Fulle notes, "Editors and editorial teams are loving that they don't have to wait for their VFX pulls anymore. Previously, the turnover time in getting plates from the lab might have been several days, which could total literally thousands of man-days over the course of a production. Thanks to Transkoder Engine it's now all-but instant, which means those previously lost man-days can be reallocated to the creative artists so they can focus on keeping the quality bar high.

"Furthermore, on a typical VFX movie it might have cost in the region of \$250,000 for just the plate pulls, but that expense has been eliminated completely now. Additionally, Joust powered by Transkoder Engine can pre-conform RAW files, and transcode to whatever format DI house needs for the final DI grade. The ability to download frame accurate pulls for opticals, reverse-outs and skip frames, is saving a huge amount of conform time at the DI house."

Obviously, with new cameras and formats being developed the whole time, specifications can and do change. And Fulle is quick to acknowledge Colorfront's leading-edge development in this respect. "When a new technology comes along Colorfront are already ready there with support. We can rely to them to be ahead of the curve. We can always tell clients, 'Yes, we can we can support those new cameras you want to utilize'."

Asked what she would say to anyone else considering their transcoding and asset management options with Colorfront, Fulle says, "It's a good bet. Being in business with Colorfront you can rely on consistency and advanced technology. While we have tested and used other transcoding systems in the past, what has separated Transkoder Engine from them is the superior technical support we get from Colorfront, and the ability for us to write directly into the Transkoder API. Other systems we evaluated had a translator step in between, making for a less streamlined workflow."

Looking towards the future Fulle remarks, "There's absolutely no reason why we can't move into automated cloud-based operations and are really looking forward to the next developments from Colorfront."