

'Piranha 3D' Screams for SCRATCH at inner-D

The summer-horror flick 'Piranha 3D', starring Jessica Szohr, Richard Dreyfuss, and Elizabeth Shue, literally screams for thrills and chills as teens combat man-eating fish during Spring Break. inner-D, a post-production house that specializes in 3D conversions and DI, recently wrapped up the finishing touches for the film's August 20 premiere with the help of ASSIMILATE's SCRATCH Digital Finishing Solution.

Grant Boucher, award-winning VFX pioneer and founder of inner-D, and his team of post artists managed the 35mm 2D-to-3D conversion process, as well as the first pass color grading and finishing for director Alexandre Aja's *Piranha 3D* (2010), a Weinstein Company production.

Boucher explains, "We formed inner-D specifically for the 3D conversion and post production of *Piranha 3D* and the investment has paid off for us. The film was our anchor project, and since then we have perfected a proprietary and innovative 2D-to-3D conversion process - reali-D™ Stereoscopic Conversion - that results in realistic 3D characters and worlds, while eliminating the eye strain and headaches for viewers. We designed and developed reali-D™ from the ground up to represent a realistic 3D universe that is comfortable to watch for long periods of time, and thus becomes thoroughly immersive to audiences."

Boucher adds, "3D is our focus. We are battle-tested and set up with a high-performance, SCRATCH 3D real-time data

workflow. We're ready to meet the demands of these complex imagery projects."

The Game Plan for 'Piranha 3D'

"The director and DP John Leonetti planned ahead for the shoot, knowing they would do a 2D-to-3D conversion. For example, the underwater scenes were shot full frame, which

gave more latitude in repositioning for 3D," says Boucher. "We also talked with the director before we started regarding the issues associated with a 3D conversion, as well as the data workflow."

Grant explains, "As is standard for all stereoscopic conversions, we first took apart the film in 2D piece by piece (in our case, with precise rotoscoping); separated them into layers by depth;

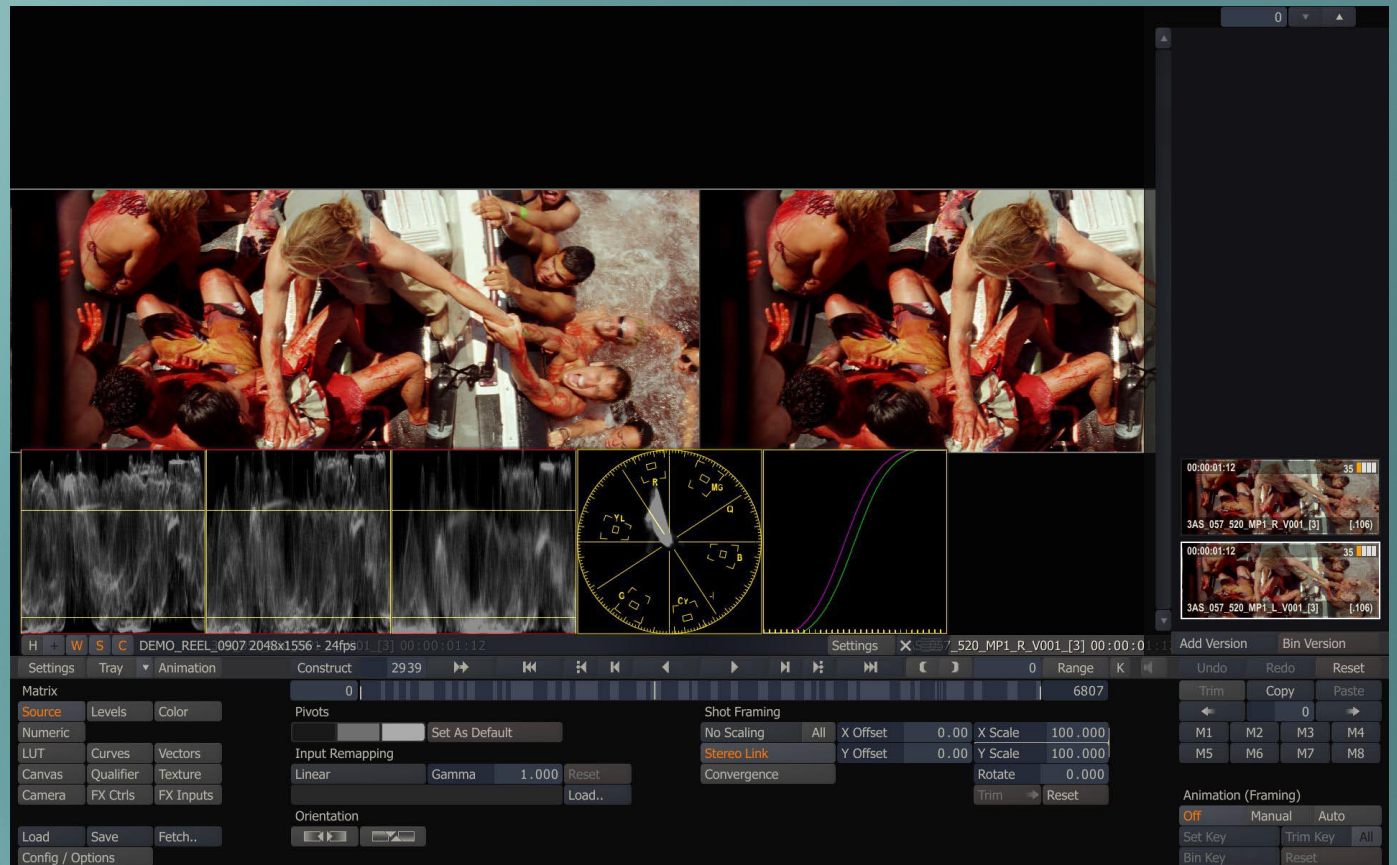
Scene from *Piranha 3D*; image courtesy of inner-D

and then every layer was converted to a 3D representation. Once the material was in 3D, we generated new left and right eyes. In SCRATCH, we brought in the EDL from our Avid suite, and then reviewed all the 3D material in context to make sure the depth was accurate, shot by shot, and then across scenes and reels.

SCRATCH was a new color grading paradigm for us, but we quickly adapted, working with the left eye and then the right eye, and verifying the consistency of the foregrounds and backgrounds, as well as the overall look and feel. We reviewed the dailies in real-time with the DP, director, and client executives in our screening room, which was a huge benefit to all involved. They were able to immediately see the quality of the work, make changes on-the-fly, experiment, and see the results instantaneously before making final approvals.”

“A real-time data workflow like SCRATCH enables a significant time savings for a 3D pipeline, which has double the shots, all the complex imagery, and the convergence of left and right eyes. Even during the finishing process we were able to make convergence changes or color adjustments, and again working in real time was invaluable,” says Boucher.

Boucher notes, “On a production like ‘Piranha 3D’ there were a lot of ‘gotcha’ moments, right up until the final days. Edits were being made by the clients while we were in color grading, but fortunately SCRATCH could conform a new 5-reel Avid edit, uncompressed, in a day. As the lead delivery vendor for the entire film, we also were working with hundreds of VFX shots from several sources for visual effects above and below the water. No one had ever done this before, and since impossible is not in our vocabulary, we jumped to the challenge of figuring out what would give the best solution. We made it happen...and on a very lean budget.”



SCRATCH post of *Piranha 3D*; image courtesy of inner-D

3D Data Workflow

“Though 3D is on the rise, filmmakers are still working under tight budget constraints,” says Boucher. “To be competitive, we need to offer cost-effective, yet high-quality, streamlined 3D workflows. For the major visual effects companies I’ve built in the past, I’ve had very positive experiences with PC-based, GPU-accelerated solutions. So we build our own high-performance RAID storage systems. Fortunately, when we agreed to take on the role of conforming the final delivery before everything went to Technicolor, a member of the client’s post-production team had previously used SCRATCH and

recommended it for its smooth workflow and DI tool suite. We put SCRATCH through a few 3D tests and it just nailed it.”

“SCRATCH is now the center point of everything we do,” says Boucher. “We’re impressed, but so is the production company, from senior management on down.”

“We also use Avid for editorial, and off-the shelf programs like After Effects and Nuke because of their broader pools of highly skilled talent,” says Boucher. “Since all of us are experienced visual effects artists, our biggest strength is in our experience and talent. And the tools we use are chosen because they maximize these assets.”

Final mastering and film out for *Piranha 3D* was done at Technicolor. inner-D masters their own Digital Cinema Packages (DCP) for client dailies and delivery to theaters when needed.

Next Up

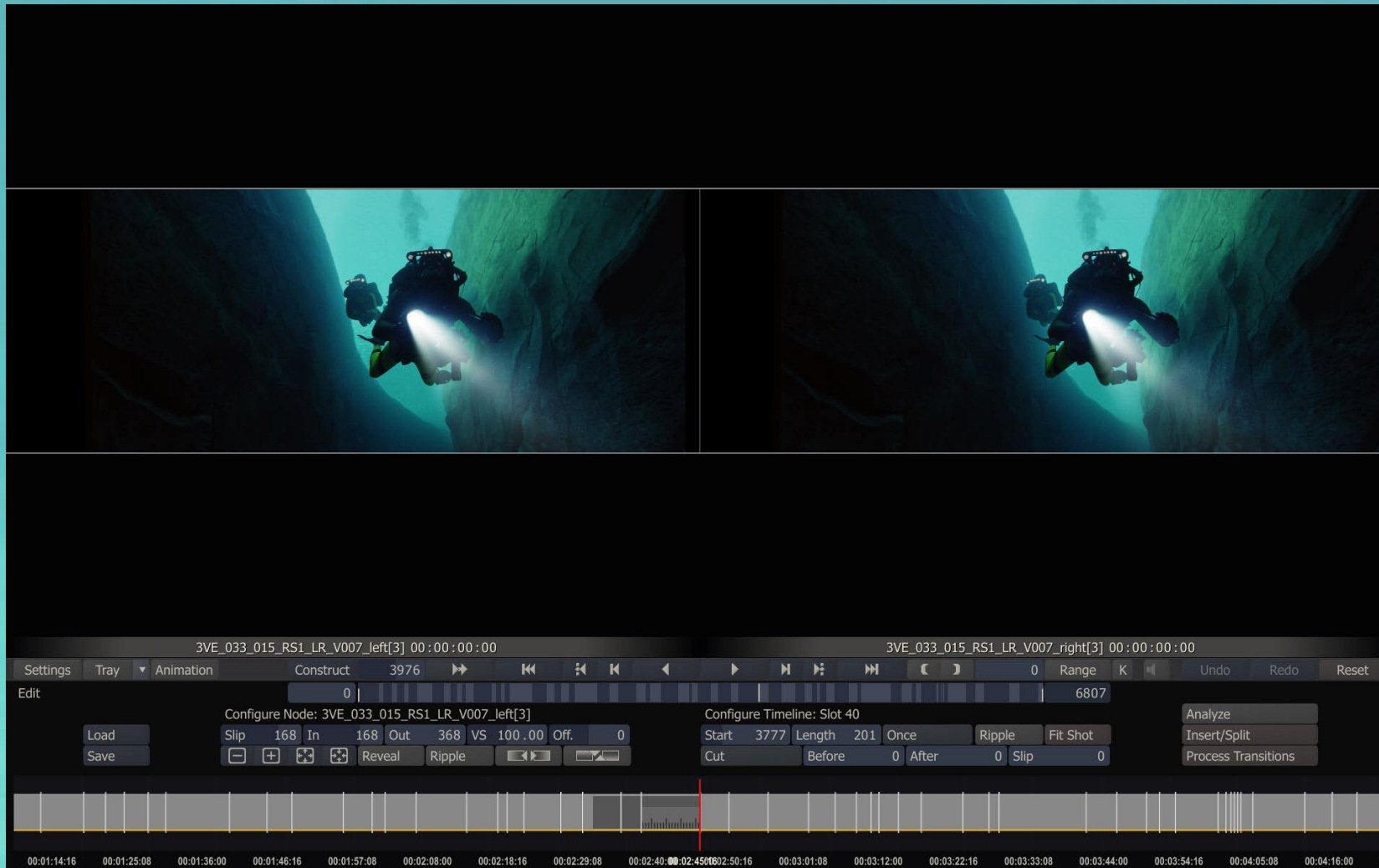
“We’ve done a number of tests for other big 3D films, and actively pursuing future projects,” says Boucher. “The 3D

market is heating up for high-quality stereoscopic conversions, and why not? If an audience can have a natural, highly immersive experience, 3D is a truly compelling value-add to any film.”

“We are now set up to take on multiple 3D projects, large or small,” says Boucher. “We can work with any format from film to native RED and ARRIRAW. Using SCRATCH at the heart of

our 3D pipeline means no changes to whatever workflow the client has chosen - another cost savings to our clients.”

Boucher adds, “Over the long term, 3D done correctly and respectfully provides the opportunity to revive some of our great films of the past and give them renewed life. Films like *Gone with the Wind*, *Alien*, *Star Wars*, and *Lawrence of Arabia* would be amazing in 3D.”



SCRATCH post of *Piranha 3D*; image courtesy of inner-D