

Percy Jackson & the Olympians: The Lightning Thief – VFX in SCRATCH

Remote Functionality Used for Simultaneous 2K Viewing in Two Locations



Percy Jackson in SCRATCH CONstruct; image courtesy of 20th Century Fox

Like all adventure and fantasy films, the visual effects were a critical component for Chris Columbus' 'Percy Jackson & the Olympians: The Lightning Thief' (2010). VFX Producer Denise Davis and Post Production Supervisor Jeffrey Harlacker brought Nashia Wachsman on board as the data coordinator of VFX for this film. Wachsman also used his creative and IT talents to manage the daily flow of data files to and from San Francisco and Los Angeles; run the 2K dailies; and work as the on-site guru of ASSIMILATE's SCRATCH® digital workflow that was used as a multi-purpose tool throughout the post-production process.

"Filmmakers and post teams are taking advantage of IT and other advanced technologies to streamline their workflows, which makes more time available for creativity," says Wachsman. "We knew that SCRATCH could handle viewing the dailies in real-time 2K, but this was our first go with using its remote functionality for simultaneous viewing in two locations - on site in San Francisco and the FOX studio in Los Angeles. This was essential to the post production process and it worked extremely well."



Off-the-Lot Review Sessions in Real Time

Wil Fluckey at 20th Century Fox had used SCRATCH for the VFX data pipeline on *Wolverine* (2009). He made the SCRATCH systems available for Harlacker, who installed SCRATCH at Chris Columbus' building in San Francisco. "Jeffrey essentially renovated the space to create a small studio complete with a screening room, 2K projector, and SCRATCH. Chris was able to view the dailies and VFX in progress, and then make color changes in real time," says Wachsman. "Jeffrey also installed a robust IT infrastructure with enterprise-level speed that could push and pull hundreds of gigabytes of data at a speed of 100 megabits/second. All the VFX and the DI files went through this pipeline daily, back and forth between San Francisco and the FOX studio in LA. The SCRATCH systems at both sites were perfectly synchronized for color so that both facilities were seeing the exact same material in all the review sessions. The immediacy and efficiency of this process saved us vast amounts of time."

Wachsman adds, "The film was shot in 35mm, digitized, and the plates were delivered to the VFX vendors, with a set of digital reference plates to the San Francisco studio for backup. The vendors uploaded 850+ shots to the encrypted Aspera server at the FOX Studio and I would pull from that. Kevin Mack, the VFX Supervisor and I loaded the shots daily into the timeline for review. I used the color tools in SCRATCH to neutralize the shots and prep them for Chris' review. We then created constructs for the pending approved files and sent them off to LA. Both the executives at FOX LA and our team up in San Francisco were simultaneously reviewing the shots at full 2K resolution with color timing. Once we had sign-off, I would set up the next shots for review, and so forth."

"We all wanted to view the shots just as they would play in the



Color grading in SCRATCH for *Percy Jackson*; image courtesy of 20th Century Fox

big theater, and we saved time and money by not going to film out for the reviews," says Nashia. "Viewing the shots in full 2K in SCRATCH was like reviewing film, but easier – we could make color adjustments in real time."

Data Management

"With numerous shots and several iterations going back and forth between the two sites, a lot of data management was



Yellow guides over the image in *Percy Jackson* show what was used in the final cut with other versions to the right; image courtesy 20th Century Fox

required,” says Nashia. “My role was much like a traffic cop and SCRATCH has an excellent data management tool that helped me keep everything on track.”

Nashia explains, “I kept all the VFX shots for the entire film in SCRATCH. I saved all the color grades, and could pull up any version of the shot for review. I was able to access the versions quickly, jumping back and forth within the construct, and color grading on the fly. It was exciting to give Chris what he wanted to see in real time. Chris and the studio were very pleased because with the fluid workflow the process was transparent and the focus was all on the content reviews.”

“All in all this was an exciting project for me. I learned so much about how robust digital tools can simplify the post workflow. It’s very cool to be working with software like SCRATCH that’s so intuitive and truly enables you to be more efficient, productive, and creative. All the tedious aspects of a traditional film workflow are removed,” says Nashia.

Nashia adds, “The genius of the SCRATCH design is enabling me to take on more functions in the filmmaking process. It’s like a guitar to a musician – you can’t play without it, and SCRATCH will play a vital role in how films are made in the future and I’m able to be part of it.”

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