

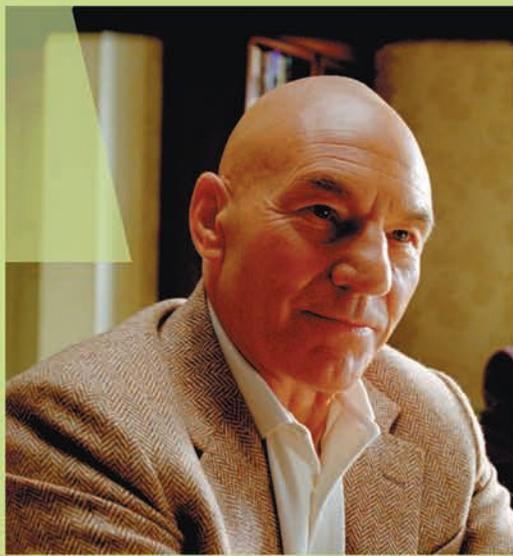
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# Entertainment Engineering

## MEN

### The Last Stand Stars Get Age Reduction



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# X-Men: The Last Stand Stars Get Age Reduction

Six months, a plastic surgeon, the right software, and the right Visual Effects Producer can do almost anything. Here's an interview with Lola Visual Effects Producer Thomas Nittmann on how he was able to reduce the age of X-Men characters by decades.



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**Q:** How long did the 20-25 shots take to complete?

**Thomas Nittmann:** The initial development work completing the age reduction started back in October, 2005 and final delivery was mid April.

**Q:** What was the process to make the characters younger (eg) old photos to go by? And what techniques did you use (eg) wrinkle removal?

**Thomas Nittmann:** It's a fairly involved process that originates with pulling any reference footage (from older films, magazines, and internet resources), consultation from plastic surgeons, and special techniques developed using Discreet Inferno software. The Director, VFX Supervisor/Producer, and Studio review all the reference material and pick a desired look for each of the actors. This level of age reduction has never really been done in film before and we had to prove to the director that it was possible. Production provided film scans of two close-up shots, one with Sir Ian McKellen and another of Patrick Stewart. In 2-4 weeks, we developed three versions of age reduction for both actors with the lightest version going back approximately 5 years and the heavy version going back approximately 30 years. We ended up flying to Vancouver to present the test shots. Once John Bruno, VFX Supervisor, got hold of the DVD and viewed the work he went off to show it to Brett Ratner. Everyone was relieved after viewing the test shot, proving that we can actually pull it off. The majority of the work is done in Inferno using built-in warping tools to change the shape of the face and in house methodologies for retaining skin texture. Everything from the jaw line, neck, eyes, nose, ears, is re-shaped or altered in some form. We remove most of the age wrinkles, change skin and hair color, lift drooping eyes, etc. It is very easy to make someone look androgynous (similar to bad plastic surgery) by changing even the most minor facial characteristics. That's where the plastic surgeon comes in. Dr. Andrew Frankel (Laskey Clinic) ensures that the

size and placement of the eyes, nose, chin, cheeks, and forehead are in the correct geometric proportions.

**Q:** What characters were particularly challenging to make younger for the film and why?

**Thomas Nittmann:** Ensuring anatomical facial continuity through shots at different camera angles and lighting is always difficult. Patrick Stewart was challenging because we couldn't add hair; we had to rely on wrinkle reduction and facial re-structuring only.

**Q:** What were the actors/actresses reactions to their youthful appearance?

**Thomas Nittmann:** Both Ian McKellen and Patrick Stewart were quite pleased with the work. Edson Williams (VFX Supervisor) and Guy Botham (Sales) met Patrick Stewart on a plane from LA to Vancouver



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## Lola VFX - X-Men: The Last Stand technical information

### Main Scenes

The primary age reduction work was completed on the opening 'Young Jean' sequence. It's a flashback where Xavier and Magneto meet a young Jean Grey.

### Number of Shots

Twenty-two age reduction shots were completed, including the 45 second opening shot where Xavier and Magneto pull up to Jean Grey's house, get out of their car, and walk to the front door. We also completed over 100 additional clean-up shots.

### Tools used

Aside from using Boujou for a specific instance that required advanced 3D tracking, the entire pipeline was based on Discreet Inferno.

and he was very excited about the whole process.

**Q:** What tools in Inferno did you use to accomplish the youthful appearance?

**Thomas Nittmann:** The entire age reduction workflow is based on Discreet Inferno and special methodologies we have developed to handle skin texture. Many of the standard Inferno tools such as the mesh warper, 3D tracker, etc are used.

**Q:** What kind of efficiency gains did you get by using Inferno as opposed to another tool?

**Thomas Nittmann:** Without using an Inferno and our burn render farm we wouldn't be able to complete the age reduction. We have over 32 burn nodes (64 procs) total, meaning that our artists are free to work on the next shot while their current one renders in the background. There really isn't any other software available out there that would allow us to handle the scope of work as fast as we did.

### For More Information:

**Lola VFX Home:** <http://www.lolavfx.com>

**Lola Cosmetic Enhancement:** <http://www.lolavfx.com/what.php>

**Autodesk Home:** <http://www.autodesk.com>

**Autodesk Discreet Inferno:** <http://usa.autodesk.com/adsk/servlet/index?id=5562767&siteID=123112>