Atomic Fiction

Innovative studio leverages HP solutions for artistic business success

Industry
Media & Entertainment

Objective
Combine talent and technology in innovative ways to become world's best visual effects studio

Approach
Enable remote collaboration, workflow efficiency with HP Remote Graphics Software, HP Z Workstations, and HP DreamColor professional displays

IT matters
• Enable remote collaboration among geographically dispersed teams

• Run demanding production applications at peak efficiency

• Maximize productivity of creative talent

Business matters
• Nurture culture of joyful creativity

• Avoid travel and lodging costs, time waste

• Enable phased business plan for growth, efficiency

• Reduce software licensing costs

"We want a trusted vendor that knows the business and recommends the right solutions. HP is on our side, with solutions like HP Remote Graphics Software and HP Z Workstations."

– Kevin Baillie, CEO and VFX Supervisor, Atomic Fiction

Visual effects studio Atomic Fiction describes itself as artists, designers, and change makers in pursuit of mind-blowing perfection, and its credits serve as illustrations. *Deadpool, The Walk,* and *Star Trek Beyond* are just three examples of blockbusters featuring stunning visual effects from Atomic Fiction. Founded in 2010 and headquartered in Oakland, California, the studio's creative successes have led to rapid business growth with offices in Los Angeles and Montreal. To enable collaboration of its far-flung workforce, Atomic Fiction relies on HP Remote Graphic Software (RGS). For the processing and graphics power to run highly demanding software applications, the company is turning to HP Z Workstations.

At the time co-founders Ryan Tudhope and Kevin Baillie launched Atomic Fiction in 2010, many visual effects studios were struggling, some even undergoing bankruptcy. Tudhope and Baillie knew they had to set their studio apart, not only in the quality of creative output but in business efficiency. They implemented cloud computing for rendering (Baillie, CEO and VFX supervisor at Atomic Fiction, is also CEO of ConductorIO, a groundbreaking company that offers high-capacity, on-demand rendering using cloud technologies).

Atomic Fiction embraces remote collaboration to keep its multiple offices working together as a single team. Artistic excellence, coupled with astute operational management, bred business success. With the recent addition of its Montreal office, Atomic Fiction quadrupled in size to more than 200 employees, including animators, compositors, and visual effects specialists.

"Our mission is not to be the biggest studio, but the best," Baillie says. "We achieve that by combining talent and technology in innovative ways."

HP Remote Graphics Software (RGS) enables collaboration

After experimenting with various options, Atomic Fiction chose HP RGS as its desktop collaboration solution. HP RGS is designed to connect dispersed creative teams and to give individual users remote access to their visual FX, video editing, animation, and broadcasting applications. Users can access, share, and broadcast their Microsoft® Windows® and Linux® workstation apps in high-speed clarity from any remote PC, Mac®, or Windows tablet. Because HP RGS sends encrypted pixels, not data, the solution is highly secure. Its seamless performance enables creative teams to collaborate at peak efficiency across distances.

"HP RGS delivers the highest fidelity and the highest frame rate with the lowest latency we've seen in a remote desktop application," Baillie says.

Atomic Fiction users of HP RGS include lighting and digital environment artists, CG supervisors, and VFX supervisors across geographic sites or even on different floors of the same office. HP RGS enables Atomic Fiction to divide responsibilities, troubleshoot challenges, and avoid travel time and expense.

Recently when an artist in Oakland unexpectedly had to take a few weeks off, Atomic Fiction saved thousands of dollars in travel and lodging costs alone by enabling a Montreal artist to take over via HP RGS. Supervisors use HP RGS to collaborate with artists on dailies—without having to copy or move files back and forth.

"We have a variety of typical situations in which HP RGS enables collaboration and keeps the workflow efficient across geographic distances," says Shawn Wallbridge, head of systems at Atomic Fiction.

"HP Z Workstations are an investment that pays off in reliability and high performance. You don't want expensive creative talent hampered by mediocre technology."

– Kevin Baillie, CEO and VFX Supervisor, Atomic Fiction

The production software applications Atomic Fiction uses include: Autodesk® Maya® for 3D modeling, animation, simulation, and rendering; Autodesk Mudbox® and Pixologic ZBrush for digital painting and sculpting; Autodesk Shotgun® for production pipeline management; NUKE compositing from The Foundry®; KATANA lighting and look development from The Foundry; MARI 3D painting from The Foundry; Houdini™ 3D animation from SideFX®; Adobe® Photoshop™ CC image editing and compositing; Chaos Group® V-Ray for rendering.

Creating highly realistic visual effects

Leading filmmakers often turn to Atomic Fiction when they want highly realistic visual effects—scenes that look like live action but are digitally created. The makers of *Deadpool,* for example, decided that shooting the opening car chase sequence in live action would be too dangerous; they asked Atomic Fiction to create the scene. The project required intensive collaboration across the company's dispersed offices. The character animation was done in Oakland, while the final lighting and rendering of both the character and vehicle animations

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were done in Montreal—essentially splitting the front and back ends of the production workflow, with much back-and-forth communication in between.

"A lot of people were shocked when they found out that first part of the movie was essentially an animated film; it looked so real," Baillie says. "We were able to tap into some of the most talented animators in the world, while maintaining high productivity momentum." In *Star Trek Beyond,* the division of work was even more mixed, with parts of each scene created in each of the company's locations. "Everyone does their part and passes the work on to others. With so many moving parts, it's easy for things to break," Baillie says. "But we've honed our tools and workflows to efficiently deliver high quality."

HP Z Workstations deliver reliable high performance

The complex datasets and demanding applications Atomic Fiction uses require substantial compute power. The company over the years has tried various hardware makes and models, including some that seemed to be a bargain at first but cost more over long term because of performance and reliability issues. For its recent expansion in Montreal, the company upgraded to HP Z640 Workstations configured with high-end NVIDIA Quadro GPUs. The workstations were first used by lighting specialists to run KATANA. Then compositors, texture painters, and other artists who need robust system performance heard about the HP Z640 Workstations and began requesting the powerful new machines.

HP Z Workstations help studios boost productivity with multi-core processors, large memory capacities, leading-edge graphics, and unique technologies built for the media and entertainment industries—such as Thunderbolt™ for I/O connectivity and the HP Z Turbo Drive—ultra-fast PCIe SSDs. What's more, HP RGS licenses are included at no additional cost on HP Z Workstations. For use on any other hardware, the sender license must be purchased.

"When we started Atomic Fiction, Ryan and I plowed every penny we earned back into the company. Every dollar counts," Baillie says. "HP Z Workstations are an investment that pays off in reliability and high performance. You don't want expensive creative talent hampered by mediocre technology."

Looking ahead: Evolving technology, new projects

Among Atomic Fiction's recent projects is work on renowned director Robert Zemeckis's film *Allied,* a romantic thriller starring Brad Pitt and Marion Cotillard. In fact, Atomic Fiction was nominated for the prestigious Outstanding Supporting Visual Effects in a Photoreal Feature Award by the Visual Effects Society for the 15th Annual VES (Visual Effects Society) Awards. Another project with Zemeckis is in the pipeline after that, and Atomic Fiction continues to strengthen its relationships with the world's top filmmakers.

Customer at a glance

Application
Visual effects for film industry

Hardware
- HP Z640 Workstations
- HP DreamColor Professional Displays

Software
- HP Remote Graphics Software
- Adobe Photoshop CC
- Autodesk Maya
- Autodesk Mudbox
- Autodesk Shotgun
- Chaos Group V-Ray
- Pixologic ZBrush
- The Foundry, NUKE
- The Foundry, KATANA
- The Foundry, MARI 3D
- SideFX, Houdini 3D

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"We're trying to create something that's unique in the industry and so far have succeeded," Baillie says. "Our goal is to be the best visual effects company to work with. To that end, we pay careful attention to everything from the office environment to our production tools," Baillie says. "We want to attract top talent, create great work, and have fun doing it. Directors can feel this. They know they can trust us." Atomic Fiction also stays alert for entrepreneurial ways to create value, as it did with spinoff company ConductorIO.

Over time, Atomic Fiction plans to transition all its offices to HP Z Workstations, for the benefits of high performance and simplified management. The company also recently ordered HP DreamColor Professional Displays to maintain color consistency across digital workflows. With 10-bit color precision, out-of-the-box color calibration, along with BT709 and full Adobe RGB coverage, HP DreamColor has become the standard color-critical display at major animation and VFX studios worldwide.

"Color accuracy is a big deal for us," says Atomic Fiction Head of Systems, Wallbridge. "In addition, having the calibration software built into the monitors instead of installed on the workstations helps make things a lot easier and consistent regardless of the variety of technologies we employ."

Atomic Fiction relies on its HP contacts to keep it abreast of the latest technologies for improving workflows and performance—and of HP's knowledge of and commitment to the media and entertainment industry as well.

"We want a reliable, educated, trusted person on the vendor side who knows the business and can make solid recommendations, make sure we get the right solutions," Baillie says. "HP is on our side to help us."

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