

EVOLUTIONARY IMPROVEMENTS DELIVER REVOLUTIONARY EXPERIENCES

Industry:

Visual effects, 3-D Animation Software

Services Provided:

Staff Augmentation QA Automation





Lifelike imagery, at 24 frames per second

Grabbing a viewer's attention, and capturing their imagination, with visual effects has been a hallmark of the entertainment industry since the first moving pictures. Technology moved the industry from prosthetics, makeup, and real explosions to today's nearly \$264B VFX, animation, and video game industry with the pixel-perfect details of today's Computer-Generated Imagery.

With each movie, ad, and video game produced, designers push the limits of the technology and demand more, and better, effects. They also want it to render faster. Engineers advance the technology to deliver more and more lifelike experiences and continue to blur the line of what's real and what's an effect.





More. Better. Faster. For less.

Companies in every industry look to digital solutions for ways to improve their profitability, and the media and entertainment business is no different. To attract and hold more eyes, the visual effects need to improve with each movie or video game released, so designers are continually asking for more features, better graphics, and faster rendering times.

For the best in 3-D modeling software, Maya, by Autodesk, is the gold-standard for animation, motion graphics, and visual effects.

Maintaining that position requires **constant upgrades** and new module creation to meet market demands. Because Maya works across Windows, macOS, and Linux, programming for compatibility with new technologies requires mastery of multiple languages. It requires the Top 1% of Talent.

Autodesk called BairesDev for help.





Compatibility begins with understanding.

To support Autodesk with knowledgeable, senior engineers, BairesDev used Staffing Hero[™] to search its database of the top 1% of software engineering talent to identify the best team for the job.

Autodesk needed seasoned people with experience integrating new technologies with the existing codebase, some of which was more than 30-years-old.

They required software engineers capable of creating features to meet market demands. And required meticulous and curious QA engineers to ensure compliance with project requirements and end-user needs.

Technologies Used:









Maya is a very complex and highly specialized software package with a very high standard of performance. Creating and integrating new features and technology with the millions of lines of existing code requires a special kind of talent, and the BairesDev team enabled us to keep Maya on the cutting edge of the industry with the addition of Bifrost and other key components.

BairesDev



Raising the bar through upgrades, integrations, and reimaginations.

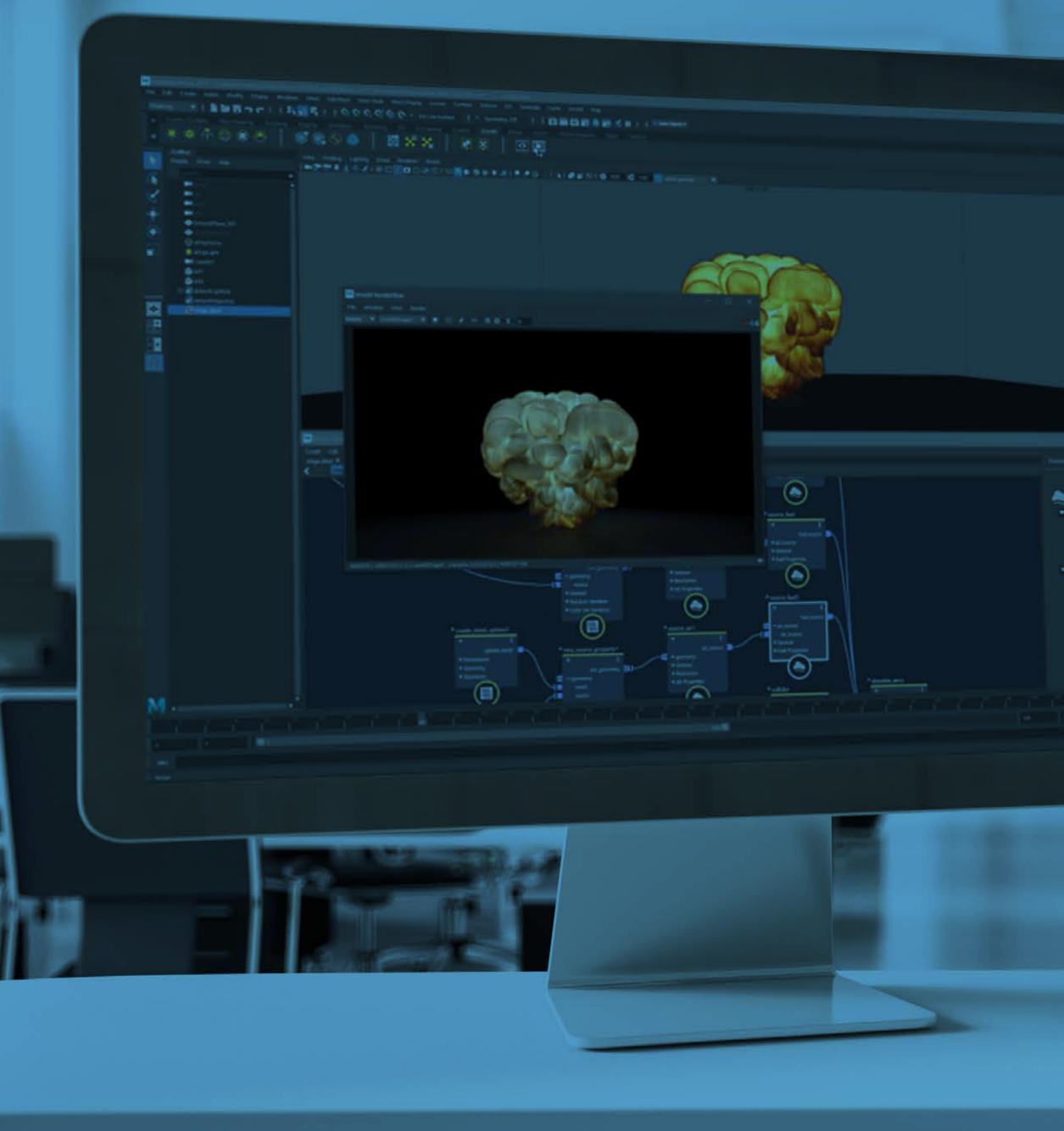
Based on the program needs, Staffing Hero[™] identified a team of engineers with the collection of skills required to navigate and successfully maintain millions of lines of C++ codebase, update and upgrade the software to provide new functionalities and improve **compatibility** with new file formats, and integrate the latest Python 4 release.

One key skill that differentiated the team was their forensic ability during the QA phase of supporting the Autodesk team. Finding and fixing the bugs that appeared in the codebase when new elements were added required consulting and collaborating with other teams, and methodical curiosity to root out issues and propose the best fix solutions.











Creating a new product is the fun part of programming, and the BairesDev team was great at it, but what wowed me was the curiosity and determination that drove their approach to QA. Some of our code is older than many of our programmers, and when integrating the new with the old, bugs happen. Finding them requires investigation and experimentation, as well as communication and team skills, and with BairesDev we launched products with scores of new features that all work flawlessly.

BairesDev



Critical Acclaim for an Enthusiastic User Base

The updates and product improvements BairesDev engineers helped Autodesk develop for its Maya software enable filmmakers and game designers to produce better work, faster. With more functionalities in graphing and previews, improved cached playback for faster animation, and instancing capabilities that enable faster rendering, designers can focus on creating the highest quality output.

With the improvement of VFX through the high-performance particle system and the material point method for tickling realistic fabrics, as well as physically-based solvers to create natural-looking fire effects and hundreds of other minute details, perhaps the greatest result of them all came at a recent Academy Awards Ceremony. All five films nominated in the "Best Visual Effects" category utilized Autodesk tools.





ABOUT US

What Sets BairesDev Apart?

Only BairesDev hires the Top 1% of IT Talent in Latin **America.** From augmenting client teams for full integration to assembling dedicated teams for independent production, no other solution comes close to offering the speed and efficiency of BairesDev talent. But these developers and engineers also offer another essential element to excellence in technology innovation: a design thinking mindset.

> POWERED BY TECHNOLOGY DRIVEN BY TALENT



What's a Design Thinking Mindset?

Design Thinking is both an ideology and a process dedicated to solving complex problems in a user-centric way. Every BairesDev employee follows a Design Thinking mindset as described by the Stanford Design School. These innovation-driven principles transform the way companies produce and deliver value.





