

Mono Success Story

OTEE Implements Award-Winning 3D Game Development System Using Mono

OVERVIEW

OTEE, based in Copenhagen, Denmark, is the creator of the product Unity, a game development system built around their own powerful 3D engine. Unity enables a wide range of users to build dazzling games with animated characters, physics, and impressive graphics.

Unity is used by leading game development studios worldwide, and was recently awarded a runner-up Apple Design Award for "Best Use of Mac OS X Graphics" at Apple's World Wide Developer Conference. This is the first time that a game development tool has reached the level of quality and ease of use required to win this prestigious award.

BUSINESS CHALLENGES

From the beginning OTEE had been using Python for scripting. As their code base grew, however, Python was proving to be too slow and unwieldy. Thus, they began the search for a technology to replace Python, and the requirements were pretty steep:

- The new solution had to be very fast because game code runs in real-time, with pieces of the code being run hundreds of times per second.
- The solution had to be portable in order to support making games for multiple platforms.
- It had to be easy to understand and accommodate a wide range of users and skill levels.

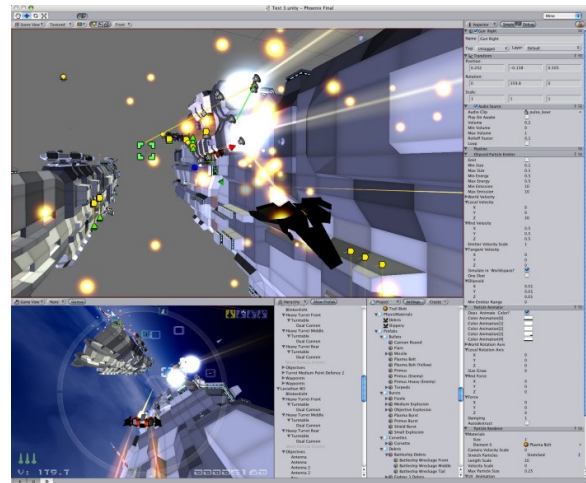
Many of the solutions they considered did not fit the first two requirements, and all of the alternatives had the significant problem of restricting their users to just one language.

NOVELL SOLUTION

After reviewing several alternative solutions, OTEE discovered Mono. Mono met their cross-platform requirements, allowing Unity to run on both Windows and Mac OSX, and immediately resulted in a huge speed increase when compared to Python, Mozilla JavaScript, or Lua.

An extremely important feature for OTEE is Mono's cross-language capability, according to Joachim Ante, CTO and co-Founder of OTEE. "Unity's developer community comes from a wide range of backgrounds and while some are proficient in Macromedia's ActionScript or JavaScript, others are hardcore programmers with experience in C++ or Java." Mono allowed OTEE to give their developers a choice between JavaScript, C# and Boo, resulting in a very short learning curve and immediate familiarity with scripting in Unity.

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CTO & co-Founder
Otee

sacrificing performance. Together, this brings great flexibility to Unity making it possible to create a wide variety of high performance games with intense graphics.

The process of getting Unity implemented in Mono was straightforward, fast and cost effective for OTEE. “Because the whole system is conceptually clear and well implemented”, says Ante “Mono was easy to embed into Unity, and the time spent on code that doesn’t directly affect our bottom line is minimal. And with Mono, supporting extra language was easy – the whole process was like riding the fast train.”

RESULTS

All in all the bang-for-the-buck factor of Mono is huge for OTEE. Unity now enjoys a rapidly growing user base on both Windows and Mac OSX, and powers many types of game development, architecture visualization, advertising and educational solutions. “Looking back”, says Ante, “without Mono Unity wouldn’t have been possible.”