



## Case Study Software Testing

### Black Box Testing of Gaming Engine

#### Business Need

At last count, the video game industry in the US had already climbed past the \$10 billion mark in retail sales. This figure is itself diluted by seasonal and cyclical price cuts that console and game makers use to clear out inventory before new versions launch. In recent years, moreover, successive launches of the Xbox 360, the Nintendo Wii, the PlayStation Portable and its PS3 sibling have raised gamer excitement even higher.

In the face of sustained industry growth and merciless competition, our client BST Games<sup>1</sup> had to surmount ever higher standards of gamer acceptance. Chat rooms and the Internet in general spread the news of vapid and buggy software even faster. With development cycles taking six months to two years, it was crucial to wind up the process with robust integration testing, using black box methods, that would guarantee:

- Validation: exciting game design and game play.
- Verification: optimize game balance and stability, eliminate bugs and freezes.
- General usability testing: Bug free rules and rewards engine.

#### Solution

For the next high-potential RPG shooter game of BST Games, HyTech Professionals took on the responsibility for independent, third-party integration testing parlaying our expertise in rigorous black box methods. We turned around the task in a shorter time frame and at substantially reduced cost with a most complete system that comprised:

- Automated functional, regression, manual, data-driven, object-driven, and distributed (the game was a multi-player offering) tests.
- Flexibly accommodating both 32- and 64-bit platforms.
- Any convenient mix of pre-recorded playing behavior, script code, calls to the internal test library, and debugger script worked to run the game through its paces.
- Holding the line on training costs by complying with several popular scripting languages: V BScript, JScript, C++Script, C#Script and DelphiScript.
- Iterative-V testing to ensure continuous development and quality check.
- And Bugzilla for bugs and fix recording and tracking

#### Our Role

HyTech Professionals unit Quality SoftPro engaged with BST Games as an independent tester. Our team of test architects and test engineers tested and successfully brought the RPG shooter game to beta under deadline and way under budget.

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<sup>1</sup> The proprietary and “work for hire” nature of our independent software development services requires that client names, revenue projections and other sensitive information be kept confidential and disguised.

### HyTech Professionals

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## **Solution Benefits**

- ▶ Compressed development cycle with higher confidence in game quality.
- ▶ After BST Games unclogged the critical hardware/software bottlenecks HyTech Professionals brought to light, the RPG shooter had lowest incidence of fixes and patches that needed to be urgently addressed during the crucial 30 days after release to the trade.
- ▶ All these ROI and corporate image gains at a fraction of the price for independent black box software test service.

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