



Autodesk 3ds Max 2011: Market Perspectives, Productivity and Return on Investment

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Introduction

About this Report

This report presents the findings of a market specific benchmarking project conducted by Pfeiffer Consulting for Autodesk, combined with technology analysis of the latest release of Autodesk 3dsMax.

Productivity measures, based on the Pfeiffer Consulting methodology for productivity benchmarking, compared work flow productivity based on the Autodesk 3dsMax 2011 with the 2008 release of the software. Work flow benchmarks and efficiency measures analyzed the productivity impact of features introduced in 3dsMax 2011, and previous releases on work flows using 3dsMax 2008. For details on the methodology used for the productivity benchmarks, please refer to the methodology sidebar on the page 5, or to the complete benchmark report.

Structure of this Report

This report is structured in 3 sections:

Pushing the Envelope of 3D Production (page 4) analyzes the challenges of 3D software and the feature additions of 3ds Max 2011.

Productivity in 3D Modeling and Animation (page 6) concentrates on the productivity impact of new features in 3ds Max 2011.

The Cumulative Effect of Productivity Gains (page 8) analyzes the effect of productivity gains on return on investment.

About Pfeiffer Consulting

Pfeiffer Consulting's mission is to provide unique high-level, international market intelligence and strategic consulting for both content and technology providers.

Pfeiffer Consulting is the publisher of the Pfeiffer Report on Emerging Trends and Technologies, an online resource on trends in the technology and content industry, as well as numerous specialized studies and reports.

For more information, please visit: www.pfeifferconsulting.com.

Major Findings

- 3ds Max 2011 introduces several significant new features that can help expand creative possibilities as well as operating efficiency.
- Productivity research conducted for this project show that 3ds Max 2011 offers significantly enhanced productivity over older releases in a variety of product areas.
- Return on investment projections show that 3ds Max 2011 can yield return on investment of close to \$16,000 per workstation per year.

About Pfeiffer Consulting

- Pfeiffer Consulting is an independent technology research institute and consulting operation focused on the needs of digital content professionals.
- Download the complete Autodesk 3ds Max 2011 Benchmark Report at www.pfeifferreport.com.



Pushing the Envelope of 3D Production

Major Points

- Professional 3D software faces the double challenge of providing cutting edge functionality while constantly improving production efficiency.
- 3ds Max 2011 features CAT (Character Animation Toolkit), which significantly helps to streamline the rigging process by providing a wider variety of highly customizable, pre-rigged characters.
- The Quicksilver hardware renderer is a new rendering option that uses the processors of display cards to more quickly produce superior quality animatics and draft renderings.

The Double Challenge

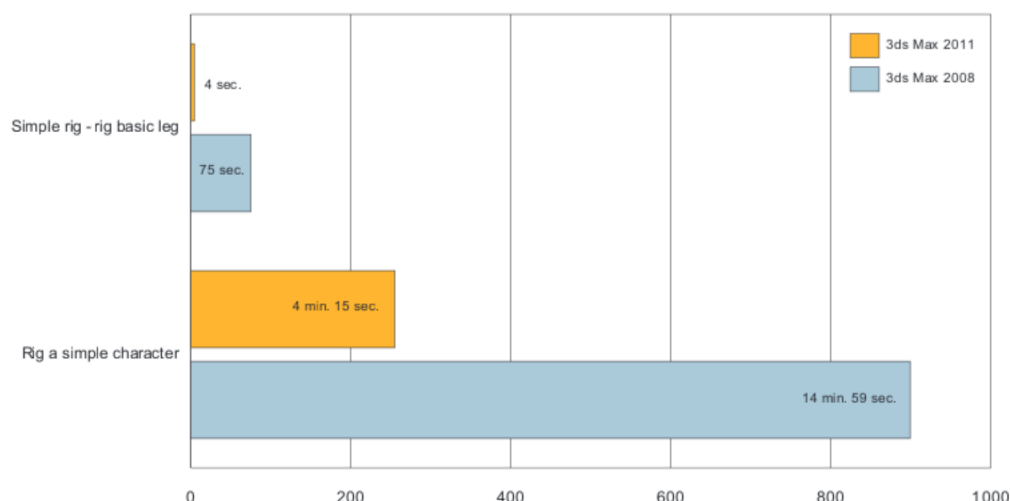
Generally, developers of software applications face two contradictory challenges: On one hand, they have to add functionality to increase the overall usefulness and competitiveness of their products; on the other they have to strive as best they can to make their software packages simpler to use and more efficient in production tasks.

Nowhere is this double challenge more clearly visible than in professional 3D software. Despite the fact that programs such as Autodesk 3dsMax or Autodesk Maya have seen their functionality and capabilities expand significantly over the past decade, it is surprising how much new ground these programs still manage to break with subsequent releases. (Additions such as CAT, the Character Animation Toolkit introduced with 3dsMax 2011, for instance, constitutes an important feature extension for the vital area of character rigging, essential in game and film production alike.)

But with power comes complexity: 3D workflows are characterized by a seemingly endless chain of complex, repetitive manipulations, that can

CAT: Expanding the Boundaries of Character Rigging

CAT: Character Rigging Benchmark
Time scale in seconds. Shorter is better.



Character Animation Toolkit, (or CAT for short) is exactly what the name implies: a toolbox to assist the rapid creation of a variety of fully rigged characters. While the basic approach of CAT is similar to the Biped module in 3dsMax, its capabilities exceed its ancestor: CAT makes it easy to create and adapt characters and all sorts of animals and fantasy creatures, which are ready to be animated.

The benchmark results from this project underline the gain in efficiency CAT provides.