HP Workstation Innovation News

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Autodesk Design Suites and HP Z Workstations Deliver Powerful Support for 3D Workflows

Autodesk and HP product experts discuss how to maximize design and engineering productivity and get the most from your software investment.

It's been almost three years since Autodesk introduced the Autodesk Design and Creation Suites — a family of solutions which provide expanded toolsets, unique interoperability, and a consistent user experience for building design, product design, entertainment creation, and more. Today, with introduction of pay-as-you-go rental plans, Suites have become the most flexible way to access and use Autodesk desktop software solutions while continuing to help designers, engineers, and animators around the world better manage their 3D CAD design and entertainment creation workflows.

To harness the power of Suites, Autodesk recommends HP Z Workstations with Intel® Xeon® processors, certified by Autodesk and HP for performance and reliability. The high level of performance from HP Z Workstations with Intel® Xeon® processors, coupled with the workflow efficiencies afforded by a fully interoperable suite of Autodesk software, can accelerate design and engineering workflows for professionals in any industry.

Jeff Wright, senior vice president, Cross Industry Marketing at Autodesk and Sean Young, worldwide segment manager, Product Development & AEC at HP, discussed how Autodesk Design Suites and HP Z Workstations with Intel® Xeon® processors work together to maximize 3D CAD productivity and the return on your software investment.

Describe the Autodesk Design Suites that are available to support 3D design and engineering.

Autodesk: Each suite is available in three editions — Standard, Premium, and Ultimate — which provide increasingly sophisticated workflow and features. Autodesk Subscription continues to be the best way for customers to stay up-to-date with the latest software, features, and other benefits such as basic support.

Autodesk Building Design Suite 2014 combines building information modeling

(BIM) and CAD tools to help architects, engineers, and contractors design, simulate, visualize, and build better buildings. Use it to produce realistic 3D visualizations, use integrated simulation and analysis tools, create higher-quality construction documentation, and make more informed design and construction decisions.

[Autodesk Infrastructure Design Suite 2014](#) is a BIM-for-infrastructure software solution that combines intelligent, model-based tools to help users gain more accurate, accessible, and actionable insight throughout the project execution and lifecycle of transportation, land, and water projects.

[Autodesk Plant Design Suite 2014](#) supports process plant design, intelligent 3D modeling, and review. The Suite includes plant-specific content and functionality to drive greater productivity and better project coordination, helping projects stay on schedule and within budget.

Visit [autodesk.com/suites](#) to learn more about the Standard, Premium and Ultimate editions of each Suite.

What are the advantages of adopting an Autodesk Design Suite over other options such as using standalone software?

Autodesk: To further Autodesk's goal of democratizing design and creativity tools, the Suites make it easier for customers across a range of industries to adopt and use a broader set of Autodesk software, fully leverage designs, and work efficiently in multidisciplinary environments. Compared to individual products, Autodesk Suites offer a more convenient and cost-effective way to access the tools most designers and engineers need. It's also easier to standardize on a single Suite across multiple departments, which provides greater flexibility to innovate and more easily respond to changing business requirements.

For most customers, the Autodesk Design and Creation Suites have become digital toolboxes. Each suite enables users to pick the right tool for the right time and the right place. Plus by taking advantage of interoperability between tools, customers have gained efficiency in ways they were unable to when they relied single product alone.

By taking advantage of interoperability between software, customers can gain efficiency in ways that would be impossible using a single product. You can't efficiently hammer a nail with a wrench, so why limit yourself to the functionality of a single software application when you can get access to a wide range of features designed to do what you need?

Powered by HP Z Workstations with Intel® Xeon® processors, Suites can make it easier for customers to explore new products and technologies, and they provide a consistent user experience, making it easier to learn and use multiple Autodesk tools. Autodesk's cloud service, [Autodesk 360](#), expands software capabilities beyond the desktop with powerful cloud-based services that help streamline workflows and unlock new ways to innovate. Cloud services vary depending on your choice of Suite title and edition.

What are you seeing in terms of adoption rates of Autodesk Design Suites by existing and new customers?

Autodesk: Suites have become the most popular way for customers to buy our desktop software solutions. Suite adoption has resulted in customers getting much more value from our tools. With Suites, we're bringing solutions to new and existing customers that help them solve problems in different ways. More and more, we're seeing Suite customers dramatically changing their go-to market strategies and winning more business by leveraging solutions of ours that they didn't have before. They're able to use our tools to win business and gain competitive advantage in their markets.

A properly configured workstation is key to software performance — wouldn't you agree?

Autodesk: Absolutely. A properly configured workstation is a must to ensure optimum software performance and user productivity. Problems can arise when customers use old hardware, hardware that's not certified, or improperly configured hardware — any of

which can cause slow software response, long wait times to perform advanced operations, and in some cases, erratic system behavior and even an unexpected system crash.

Primary workstation considerations are not surprising: graphics card performance, storage, the amount of RAM, and processing speed. In very general terms — and this advice depends on your specific use case. We recommend you specify as much processing speed as you can afford. Graphics card choice typically depends on the complexity of your modeling and rendering.

More powerful hardware is often necessary in specific situations, such as regularly designing and manipulating large assemblies — for example, assemblies consisting of thousands of parts assembled as tens of thousands of occurrences — where RAM most critical. When performing visualization, you'll want more graphics card power, RAM, processing speed, and multiple cores. It's important to be purposeful about where you spend your money. Consult your Autodesk software reseller for advice, as well as Autodesk and Autodesk partners such as HP.

The following online resources are available from Autodesk:

- 2014 System Requirements for Suites
- Find Recommended Hardware interactive database

Autodesk and HP work closely to ensure that Suites customers have the best possible experience with their software. We collaborate with HP, Intel®, NVIDIA, AMD, and Microsoft to identify and address compatibility and performance issues, in an effort to minimize customers' downtime and optimize their success with our respective products.

The HP ZBook 17 with an Intel® Core™ i7 processor is one of many HP mobile workstations developed to help designers work in the field, on the road, and in the office.

HP: For Autodesk Design Suite customers, HP recommends 8 GB of RAM, and we often see customers opting for 16 GB of RAM or even more. The most important course of action is to match your software investment with an investment in workstations that are certified for the software in your Autodesk Design Suite. If you ignore the workstation part of the software-performance equation, you won't have a solid foundation for your software and you'll limit the benefits that your new software can deliver.

To get the most of Autodesk software, we recommend HP Z Workstations with Intel® Xeon® processors. HP offers a complete range of desktop and mobile workstations built for the challenges of designers and engineers in the building and manufacturing industries, from digital prototyping to building information modeling (BIM) to cinematic-quality rendering, analysis, and simulation. HP ZBook Workstations are perfect for mobile use in the field, for travel, and on the shop floor, offering high performance with exceptional battery life, extreme durability, and aerospace-inspired design. HP Z

[Workstation desktop models](#) include high-performance options, solutions for space-constrained environments, and the industry's first all-in-one professional workstation.

What is hardware certification and how important is it?

Autodesk: Certified hardware meets Autodesk's *minimum* hardware requirements for a given Autodesk software product or Suite. For each software offering, we provide at least one configuration — for example, CPU + GPU + RAM + hard drive + BIOS — that has passed tests designed to verify that the hardware supports the product's features.

For more information, see [Certified Hardware](#) and [Frequently Asked Questions](#) on the Autodesk web site.

Certified hardware is important to ensure customer satisfaction with our software. Hardware that is not Autodesk recommended or certified may not adequately support advanced product features; in some cases, it may result in problems during use. Naturally, we want customers to have a good experience with our software.

HP: Every year, HP provides new Z Workstation models, in dozens of configurations, to Autodesk Quality Assurance teams for testing and official Autodesk certification. HP, Autodesk, Intel®, NVIDIA, AMD, and Microsoft collaborate to identify, escalate, and resolve any hardware-related issues. When Autodesk certifies HP Z Workstation configurations, you can be confident that they have been rigorously tested and are officially Autodesk approved.

The HP Z1 G2, the latest in HP's all-in-one Intel®-powered workstations, saves desk space, offers high-end design power, and includes a bright, large-screen display.

What else is key to obtaining the best performance and value from an Autodesk Design Suite?

Autodesk: First, take full advantage of the comprehensive set of tools in your Suite to improve workflows within your firm. Make sure you're running the current version to reap all the benefits of the latest technology. Review the [Autodesk Documentation & Online Help](#) for additional information.

In addition to certified professional hardware, perhaps most important for ensuring value from your investment in an Autodesk Design Suite is training. Autodesk and Autodesk partners such as HP offer a variety of training resources to help realize maximum ROI on your Suite investment. For example, [Autodesk University](#) offers the world's broadest curriculum of technical content designed specifically for Autodesk product users. And throughout the year, a global network of [Autodesk Training Centers](#) helps provide training.

Any additional comments?

Autodesk: At Autodesk, we spend a lot of time with our hardware partners, like HP, to test our software with their hardware so customers have the best possible experience using the combination to be more productive. Our partnership with HP is very important to us. Not only are we helping our existing customers get more out of their Design or Creation suite with the right hardware, we are working together to reach new audiences. We recendly launched a contest in partnership with the Morgan Motor Company and Talenthouse to encourage graphics designers to use an Autodesk Suite to create the next advertising campaign for a new 3-wheeler.

HP: Autodesk Design Suites provide expanded toolsets, unique interoperability, and a consistent user experience. HP and Autodesk work closely to deliver a complete technology solution to Autodesk customers. As a result, HP Z Workstations with Intel® Xeon® processors deliver an enhanced experience with Autodesk Design Suites and help you take Autodesk software performance and productivity further. Autodesk has standardized on HP Z Workstations to develop, test, and demonstrate Autodesk software.

HP helps you stay ahead of the curve with professional desktop and mobile workstations designed for large and complex datasets, dispersed teams, and tight deadlines. HP Z Workstations with Intel® Xeon® processors deliver the innovation, high performance, expandability, and extreme reliability you need to deliver your 3D CAD projects in less time. For more information, see "HP Workstations and Autodesk" on the HP web site.

Notes and Disclaimers