

Renderings:

For the Autodesk Government Community



Spring 2009

It's here ...

As Advanced Solutions expands into new territories, we like to provide our clients with information about Advanced Solutions, Inc., Autodesk, and "CAD community" events.

This is your link to all the upcoming and current promotions, events, and training classes. We will also feature a section where Advanced Solutions professionally trained technical engineers help you with your everyday software needs by providing tips and tricks. All this and much more are now accessible to you with just a click.

Autodesk, AutoCAD, Alias, Civil 3D, Inventor, LT, MapGuide, Maya, Moldflow, Navisworks, Revit, Showcase, and 3ds Max are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. © 2009 Autodesk, Inc. All rights reserved.

Product Updates

Autodesk 2010 Manufacturing Software Demonstrates Power of Digital Prototyping

Autodesk unveiled the latest releases of its 2D and 3D design and engineering software for manufacturers on Wednesday, February 18. Significant enhancements and newly packaged suites of the company's industry-leading products can help manufacturers build better products, ranging from mobile phones to bulldozers, in less time.

The new 2010 product lineup for manufacturers includes Autodesk Inventor® family of products, AutoCAD® Mechanical, AutoCAD Electrical, Autodesk Alias® family of products, Autodesk Moldflow®, Autodesk Navisworks®, Autodesk Showcase™, Autodesk 3ds Max® Design and Autodesk Vault software – industry-leading applications that constitute the Autodesk solution for Digital Prototyping. The 2010 software releases introduce an even greater range of design, visualization and simulation capabilities, along with tighter interoperability than ever before with both Autodesk software applications and other CAD tools. ([Learn More](#))

Autodesk Unveils 2010 Software Portfolio for Building Information Modeling

Autodesk recently announced new conceptual design tools and a consistent user interface to four key architecture, engineering and construction (AEC) product lines. The new versions of its software products for the AEC industry are designed to help increase industry adoption of the building information modeling (BIM) process. Updated software in Autodesk's BIM portfolio includes Autodesk Revit® Architecture 2010 software, Autodesk Revit Structure 2010 software, Autodesk Revit MEP 2010 software, AutoCAD® Civil 3D® 2010 software and Autodesk Navisworks® 2010 software solutions. ([Learn More](#))

Autodesk Announces New Infrastructure Modeling Software for Utilities, Telecommunications and Governments

Autodesk recently announced the new 2010 Infrastructure Modeling software products. These latest applications improve the design and management of infrastructure projects for users in utilities, telecommunications organizations, and government. Autodesk's portfolio of products – including AutoCAD Map 3D 2010, AutoCAD Raster Design 2010, Autodesk MapGuide® Enterprise 2010, and Autodesk Topobase™ 2010 – provides users with an intelligent and comprehensive solution for designing, visualizing, simulating and analyzing infrastructure assets and development plans. ([Learn More](#))

Autodesk 3ds Max CAT (Character Animation Toolkit Plug-in)

Autodesk 3ds Max® CAT software is a complete character animation toolset for Autodesk 3ds Max 2009 and Autodesk 3ds Max Design 2009 software. With this latest addition of Character Animation Tools (CAT) to the 3ds Max 3ds Max Design software, Autodesk continues to demonstrate its industry leadership in character animation by providing artists with even more flexibility to create complex 3D characters and animations inside the award winning 3ds Max software. 3ds Max CAT offers artists in the film, post-production, design visualization, and gaming industries an environment to produce better animations faster. Previously offered at an additional cost of \$995 USD, Autodesk 3ds Max CAT is now offered exclusively to Autodesk Subscription customers as a free download.

Download these releases via the Subscription Center, www.autodesk.com/subscriptionlogin.

SmartBIM Library v3.2 Released

Reed Construction Data, a leading provider of building information modeling (BIM) solutions and construction information, has announced a February 2009 launch for SmartBIM Library™ (SBL) v3.2, the leading BIM content management tool for architects and engineers.

Reed Construction Data launched its SmartBIM solutions in mid-2008 to further enhance the Autodesk Revit software user experience through its comprehensive object-organization solution (SmartBIM Library) while providing high-quality, parametric BIM objects (SmartBIM Objects) and enhanced ability to value a project (RSMMeans Quick Cost Estimator).

"This release will give Revit users a way to significantly reduce the time spent looking for or creating BIM objects," said Candice Dobra, director of BIM solutions, Reed Construction Data. "The high-quality SmartBIM objects delivered in SmartBIM Library combined with the ability to easily manage existing content, bring a new level of efficiency in the design process." ([Learn More](#))

Industry in the News

Technology Preview – Project Newport

Autodesk Project Newport - real-time 3D story building technology for architectural visualization and presentation. With game-engine technology and breakthrough ease-of-use, Project Newport enables architects to show their design in context, rapidly explore design options, and create vivid and immersive 3D presentations. Newport brings architectural designs to life by expressing design intent at every stage of a project.

Sign up now to receive the latest news regarding availability of Project Newport, visit labs.autodesk.com/technologies/newport/.

You are Wasting Your Money

Written by Dennis Neeley, Reed Construction Data

You are wasting your money! If you have 40 employees using Revit you are most likely wasting \$4,000 a day, that's over one million dollars a year!

Do not jump to the conclusion that Revit is the problem. Revit is a productivity tool of unprecedented proportions that will lead to better designs, lower construction costs, increased architects' and engineers' fees and better buildings. Revit is not only a better way to create contract documents it is the foundation for analysis, simulation and facilities management that will lead to significantly better designs and building.

To read further, please visit www.reedconstructiondata.com/articles/read/you-are-wasting-your-money.

Inventor iLogic 2009 Extension Available Exclusively for Subscription Customers

Exclusively available for Autodesk Inventor Subscription customers, the Inventor iLogic Extension 2009 enhances the parametric design capabilities of Inventor 2009 software by providing a powerful and elegant solution for rules-based design. With its easy-to-use rules authoring capabilities and an intuitive user interface seamlessly integrated with Inventor, Inventor iLogic shatters barriers to automating tedious design tasks and adds higher levels of design intelligence to your digital prototypes.

Inventor iLogic enables Inventor users to easily create “smart” parts and assemblies that define multiple product configurations and automatically update in real-time based on logical relationships between design parameters such as mass, volume, dimensional values, material types, feature and component activation or suppression, patterns, and many more.

For example, Inventor iLogic lets you easily create a design rule that lengthens a cross-beam, adds an additional support strut, and changes the material of the entire structure from aluminum to steel if the mass of the load it supports exceeds 200 kg. This simple example barely scratches the surface of Inventor iLogic's exciting capabilities.

Without Inventor iLogic, writing such design rules in raw programming language would require hundreds or thousands of lines of code. This is a time-consuming and error-prone process for expert programmers and next to impossible for anyone with less than expert programming skills. Inventor iLogic dramatically simplifies rules-based design with easy to use, clickable tools that any Inventor user working at the individual and engineering workgroup level can use – even those with little or no programming experience.

Autodesk recently acquired the original iLogic technology from Autodesk Authorized Developer Logimetrix, Inc., who previously offered iLogic for up to \$4,300 USD per license as an Autodesk Inventor 2009 Certified add-in. Autodesk is pleased to address this common Inventor customer request and add additional value to your investment in Autodesk Subscription.

The Inventor iLogic 2009 Add-in is available as English software only, and it can be installed and used on any language version of Autodesk Inventor 2009 family of software products. ([Learn More](#))

Autodesk Announces Inventor Fusion Technology

Autodesk unveiled its plans for Autodesk Inventor Fusion Technology, new Digital Prototyping technology that unites the power and control of parametric, history-based modeling with the ease of use and productivity advantages of direct, history-free modeling.

"Just as manufacturers need both 3D and 2D design tools, we believe manufacturers need the full power of both parametric, history-based modeling and direct modeling," said Andrew Anagnost, vice president of CAD/CAE for Autodesk Manufacturing Solutions. "Customers shouldn't have to make a choice. Inventor Fusion Technology is a unique approach that enables the coexistence of both these modeling approaches within a single digital model."

Only Inventor Fusion Technology delivers bidirectional parametric and direct workflows. This technology provides a powerful solution for companies that need to make rapid changes to a design through direct manipulation, but also have many years worth of feature- and history-based data and design intent that they need to access, use and maintain. This advancement enables users to adopt the modeling approach that is most appropriate to the task at hand.

Using Inventor Fusion Technology, designers and engineers can explore what-if scenarios and make rapid design changes without the limitations of feature order, dependencies or the original 3D CAD system used to create the design.

By removing unnecessary steps for users to capture and express their design ideas, Inventor Fusion Technology redefines ease of use. Context-sensitive, point-of-access tools present only what is needed right at the cursor, thus moving the user's attention from toolbars and dialog boxes and refocusing it on directly manipulating their digital prototypes.

"Many companies are seeking to take advantage of direct modeling in certain situations," said Anagnost. "Meanwhile, parametric, history-based modeling continues to be relevant and important. Inventor Fusion Technology is an exciting new step in realizing the promise of Digital Prototyping, bringing a new level of ease of use and productivity gain to an even broader group of manufacturers."

Autodesk intends to offer a free download of Inventor Fusion Technology Preview on Autodesk Labs later this year. For more information, please visit www.inventorfusion.com.

Promotions

AutoCAD LT New Seat Promotion

The AutoCAD LT® New Seat Rebate Promotion offers significant savings of up to US\$1,000 for eligible customers. This promotion is available to U.S. and Canadian commercial customers purchasing new licenses of AutoCAD LT software (five-seat limit) through March 31, 2009. Eligible customers will receive a US\$200 rebate for each new license (seat) purchased, after they submit an online request and provide proof-of-purchase documentation. ([Learn More](#))

Autodesk Maya 8 Promotion

Customers with valid licenses of Autodesk Maya® Complete 8 software or Autodesk Maya Unlimited 8 software now have the opportunity to purchase new licenses of the latest Autodesk Maya Unlimited product available at time of purchase at 10% off SRP when purchased with Autodesk Subscription. Subscription holders receive benefits including incremental product enhancements, personalized web support and self-paced training options with one annual fee.

The Autodesk Maya 8 Promotion qualifying purchase period runs through April 17, 2009. Upgrade your Autodesk Maya Complete 8 software or your Autodesk Maya Unlimited 8 software to the latest release of the Maya product. ([Learn More](#))

Autodesk Maya Legacy

Customers with valid licenses of Autodesk Maya Complete 7.0.1 software or Autodesk Maya Unlimited 7.0.1 software now have the opportunity to purchase new licenses of the latest Autodesk Maya Unlimited product available at time of purchase at 30% off SRP when purchased with Autodesk Subscription. Autodesk Subscription is required on all Legacy purchases. Subscription holders receive benefits including incremental product enhancements, personalized web support and self-paced training options with one annual fee.

The Autodesk Maya Legacy Program qualifying purchase period runs through April 17, 2009. Currently the Maya Legacy Program is not available for customers looking to move to Autodesk Maya Complete 2008 product or Autodesk Maya Complete 2009 product. ([Learn More](#))

AutoCAD Land Desktop Transition

As technology has advanced and the challenges facing engineering organizations have become increasingly complex, we have decided it is time to look beyond AutoCAD Land Desktop to new technology that better addresses the demands of today's engineering organizations. As a result, AutoCAD Land Desktop 2009 products will be the last release of Land Desktop software. AutoCAD Civil and AutoCAD Civil 3D software products are Autodesk's next generation of model-centric civil engineering software. They provide project teams with a comprehensive surveying, design, analysis, and documentation solution to deliver land development, transportation, and environmental projects faster and with improved accuracy.

Eligible AutoCAD Land Desktop 2006, 2007, 2008, and 2009 customers can crossgrade to AutoCAD Map 3D, AutoCAD Civil, or AutoCAD Civil 3D for a special promotional price until April 17, 2009. ([Learn More](#))

Events Calendar

2010 Product Launch – Executive & Technical Event Series

Discover how new Autodesk 2010 software can help you break down design barriers, accelerate time to market, and yield more impressive work. Now more than ever, you can visualize, simulate, and analyze your ideas to the fullest extent – so even your most ambitious “What If?” scenarios can become a reality. Autodesk 2010 software makes it happen, whether you're a designer, architect, engineer, or digital artist. Learn how Autodesk 2010 software products deliver groundbreaking new capabilities to tackle the most challenging design problems with ease.

Executive Events are developed for the business executive and decision maker; each session will cover 6-8 high level business issues and an overview of the 2010 software products. *Technical Events* are developed for the software user; each session will cover 6-8 technical issues that may be resolved with the 2010 software products.

Sign-up and attend a live event in your local Advanced Solutions Office or experience our events from the comfort of your own desk by registering for a webcast. Events run from March 24-27. Register online at www.AdvancedSolutionsOnline.com/productlaunch or call 1-877-438-2741.

BIM for Construction

The benefits of implementing Building Information Modeling (BIM) are difficult to ignore. However there is a great need to understand how BIM influences the workflow of an average construction company. Advanced Solutions invites you to attend our 3½-hour workshop designed to help you leverage BIM solutions in your construction company.

After the session, you will leave with a better understanding of BIM in the context of constructability. You will also gain the knowledge to discuss and describe 3D and 4D coordination and sequencing. You will also learn the differences between the numerous BIM design software solutions and how they differ for CAD based applications.

Date & Location: 3/31/09 – [Hampton Inn & Suites Cleveland-Airport/Middleburg Heights](#)
Time: 8:00am – 11:30am (EST)

BIM for MEP Engineering

Designing Building Information Models is becoming the prevalent workflow for many Architects in our community. As the design progresses to the MEP engineer the model often has to be exported to traditional 2D information. We will demonstrate how you can leverage the rich data that is created from the architects' original model to design better, more coordinated MEP designs and documents.

Date & Location: 4/23/09 – [Hilton Garden Inn Columbus-University Area](#)
Time: 8:00am – 12:00pm (EST)

Training Classes

As an Autodesk Authorized Training Center (ATC), Advanced Solutions, Inc. provides top-quality professional training and continuing education programs, for optimum productivity, to maximize the return on your software investment. We combine professional courseware, expert instructors, state-of-the-art computer systems, and high-resolution projectors to provide you with the highest quality training available. We encourage you to take advantage of this valuable resource and we look forward to being a part of your continuing professional development.

Choose the product and experience level that fits you best. To view dates and locations, click on the class title listed below.

- **Beginning / Existing User**
 - [AutoCAD 2009 / AutoCAD LT 2009: Essentials](#)
 - [AutoCAD 2009: Transitioning from AutoCAD 2008](#)
 - [AutoCAD Architecture 2009: Essentials](#)
 - [Revit Architecture 2009: Essentials](#)
 - [Revit MEP 2009 - Project Administration](#)
 - [Revit MEP 2009 - Mechanical Essentials](#)
 - [Revit MEP 2009 - Electrical Essentials](#)
 - [Revit MEP 2009 - Plumbing/Piping Essentials](#)
 - [Revit MEP 2009 - Family Creation](#)
 - [Revit Structure 2009: Essentials](#)
 - [AutoCAD Civil 3D 2009: Essentials](#)

- **Beginning / Existing User**
 - [AutoCAD Map 3D 2009: Essentials](#)
 - [AutoCAD Civil 3D 2009 - Surveying](#)
 - [AutoCAD Map 3D 2009: Essentials for Geospatial](#)
 - [AutoCAD Electrical Essentials: 2009 \(JIC Standard\)](#)
 - [AutoCAD Mechanical 2009: Essentials](#)
 - [Autodesk Inventor 2009: Essentials](#)
 - [Autodesk Inventor 2009: Transitioning from Autodesk Inventor 2008](#)
 - [Autodesk Vault 2009: Essentials](#)
 - [Autodesk Productstream 2009: Essentials](#)
- **Intermediate User**
 - [AutoCAD 2009: Creating and Presenting 3D Models](#)
 - [AutoCAD 2009: Intermediate](#)
 - [AutoCAD MEP 2008: Projects & Tools Essentials](#)
 - [AutoCAD MEP 2008: Mechanical Essentials](#)
 - [AutoCAD MEP 2008: Electrical Essentials](#)
 - [AutoCAD MEP 2008: Plumbing Essentials](#)
 - [AutoCAD MEP 2008: Piping Essentials](#)
 - [AutoCAD Architecture 2009: Advanced](#)
 - [AutoCAD MEP 2009: HVAC Essentials](#)
 - [AutoCAD MEP 2009: Mechanical Essentials](#)
 - [AutoCAD MEP 2009: Electrical Essentials](#)
 - [AutoCAD MEP 2009: Plumbing Essentials](#)
 - [AutoCAD MEP 2009: Piping Essentials](#)
 - [AutoCAD Civil 3D 2008: Introduction to Commercial Site Grading Plans](#)
 - [AutoCAD Civil 3D 2009: Residential Grading](#)
 - [AutoCAD Civil 3D 2009: Designing Intersections and Cul-de-Sacs](#)
 - [AutoCAD Civil 3D 2009: Creating and Managing Plan Sets](#)
 - [AutoCAD Civil 3D 2009: Interchange Design](#)
 - [Autodesk Inventor 2009: Advanced Assembly and Machine Design](#)
 - [Autodesk Inventor 2009: Sheet Metal Design](#)
- **Advanced User**
 - [Revit Architecture 2009: Advanced](#)
 - [Revit Structure 2009: Advanced](#)
 - [Autodesk NavisWorks 2009: Essentials](#)
 - [AutoCAD Civil 3D 2009 - CAD Management](#)
 - [Autodesk Inventor Professional 2009: Dynamic Simulation and Stress Analysis](#)
 - [Autodesk Inventor Professional 2009: Tube and Pipe Design](#)
 - [Autodesk Inventor Professional 2009: Cable and Harness Design](#)

PILOT Program

Need training? Can't find a convenient Autodesk Authorized Training Center close by? The Advanced Solutions Professional Instructor Led Online Training (PILOT) can help. PILOT is a virtual online training enrollment option available for all of our regularly scheduled Autodesk Certified classes.

With the PILOT program, you can experience the benefits of our “in class” instructor led program without leaving your office.

Benefits of the PILOT program:

- Save on travel expenses
- Experience live training
- View the instructor's screen just like you were present in the classroom
- See and hear the instructor's lessons in real time

Don't settle for “canned” video training or “how to” books – join us in our Professional Instructor Led Online Training today! [Click here](#) to view the list of online training classes available.

Using AutoCAD Mechanical or AutoCAD Electrical as AutoCAD

Written by Adam Brown, Support Specialist

Issue: Although your installed product is either AutoCAD Mechanical or Electrical, there may be times that you only want to load the standard AutoCAD interface. There is a known issue regarding a workspace problem when doing this.

Resolution: The workspace issue arises whenever you open your vertical product with the Mechanical or Electrical shortcut. To get around this issue ... Want to read further? Visit our Client Center at www.AdvancedSolutionsOnline.com/clientcenter.

Section Lines in Inventor Professional Not Straight?

Written by Justin Chartier, Technical Engineer

Issue: Often times when attempting to create straight (linear) lines to be used as a sectioning line it can be difficult to do, resulting in a skewed sectioned view.

Resolution: By right clicking on the sectioning line and clicking edit, this will take you into the Sketch Environment. Next, you can apply ... Want to read further? Visit our Client Center at www.AdvancedSolutionsOnline.com/clientcenter.

Revit Architecture 2009: Rotating Views

Written by Jonathan Weinhold, Technical Engineer

Issue: Usually when you try to rotate any view placed on a sheet, you will find that the rotate tool is grayed out. Another option would be to rotate the whole project, which in many cases means redefining the cardinal directions. If you just need a simple view rotated to fit on a sheet, you would not want to rotate the entire project and risk causing errors in directionality.

Resolution: To rotate the view, select the view window and right click to select "Activate in View." This will ... Want to read further? Visit our Client Center at www.AdvancedSolutionsOnline.com/clientcenter.

AutoCAD Civil 3D: General Notes

Written by Erik Wolf, Technical Engineer

Issue: Ever find yourself typing the same notes over and over? And after typing the note, adding a leader line? Then the boss changes the scale of the drawing?

Resolution: General Notes to the rescue! General Notes are a Civil 3D Label, and have label styles applied to control text height, leader lines when dragged, colors assigned to text and even borders where needed. Additionally, they can have text placed inside the style, so that when added, the exact text you need is placed ... Want to read further? Visit our Client Center at www.AdvancedSolutionsOnline.com/clientcenter.

New to the Team

Please welcome Ed Rinaldi to our team! Ed is our new Manufacturing Technical Engineer in our Cincinnati, OH Authorized Training Center

Building Information Modeling and Building Products Survey

Share your thoughts, opinions and perspectives in a Building Information Modeling and Building Products survey. Your input will be aggregated with others and the results will be used to improve the quantity, quality and availability of Building Product information for the AEC community.

Please take 10 to 15 minutes to complete this web-based survey!

In appreciation for your time, upon completing the survey, your name will be entered in a drawing to win one of two \$200 USD Amazon.com gift cards.

To complete the survey, simply click the link shown below (or copy the address into your browser). team1.advsolinc.sgizmo.com