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Simulation CFD Spotlight

Is this YOU? - It is not working as expected, now what?

All too often you and your design teams run into challenges. Sometimes you are fortunate enough to catch that while it is still in your hands. At other times it is YOUR CLIENT who is in PAIN and needs help NOW...What do you do?

D3 has the resources to help you. Here is feedback where our client needed to bring the tools in house to solve the problems; however, they had an immediate need addressing some issues for their client and could not wait to get trained. We were able to work with them, so that they could get the information they needed into their clients' hands. After the crisis was solved, we then got them the training they needed to continue down the road...Do YOU need help?

"The speed at which you've been able to run these simulations has really helped us reassure our customer that we are doing everything we can to get them up and running correctly" Kansas City - Engineering Manager Simulation CFD

Join Us on May 13^{th} - 15^{th} for a "Hands On" Simulation CFD Level 1 Class (2 days) and/or Advanced CFD Level 2 Class (1 day).



If you need help or would like to know more about software training, contact us.

Special Offers

D3 would like to congratulate our most recent **Facebook winner** for the Microsoft Surface Tablet.

Congratulations
Cynthia Haenchen!

Like our page for future offers & opportunities to win!



Register for a FREE Simulation CFD Webcast on **March 18th**.



Register for a FREE Simulation (FEA) Mechanical Webcast on **April 2nd**.



<u>Contact Us</u> today to learn about our promotions and special offers on software, hardware, or training.

You can always visit our Website or Social Network pages to learn about promotions or special events. Click the icons below to visit the pages:





Quick Links

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Inventor HSM Beta

Status Update – HSMXpress for 2.5 axis has been available now for free download and is proving to be a fit. Now, Inventor HSM is about ready for Beta and is expected to have a very short window before full release. Why is this exciting?

- Because with our Adaptive Roughing, conservatively we can cut tool wear by more than 25% and
 reduce roughing time by the same. Results like this for the Solidworks users built a client base that
 had former Mastercam clients making up roughly 35% of the user base. Now it's Inventor's turn.
- The user interface is so easy to use that clients normally don't need training beyond the available online tools.
- And it is built on a modern software architecture, unlike every other CAM out there. Even though it is
 considered new, the core software was developed by a company that made CAM for other companies
 (Including the High Speed Performance Pack for Mastercam) for 11 years before writing HSMWorks. So,
 the developers are some of the most experienced CAM people in the industry.

All of this leads to some very exciting advancements for CAM and the Inventor user. Stay tuned, more to come. To discuss more or address questions, contact us.

Watch the video below for a quick preview of the Inventor HSM Express tool:

Autodesk Inventor HSM Express CAM Solution Video Preview

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Workflow Automation: iLogic, .NET, & ETO

Which is Best: iLogic, .NET, or ETO?

Of late, regarding automating workflows, I have seen several discussions play out around what tools are best and for what tasks they are best for. Below, I will try to outline, at a high level, what we have seen and have experienced. My qualifier is that we use all three approaches and fully understand the upside and downside of each. We have a team that is fully dedicated to Quote-to-Design Automation.

iLogic - This is a great tool at a user level for someone that also has a seat of CAD:

- Good for small to medium size assemblies in the product configuration process for BOM
- Configurations for all potential scenarios must be accounted for in the table structure
- Is not good with integration needs to other systems
- It can do drawings but does not have the flexibility for complex drawings
- It cannot be used for Web frontends or Mobile Apps for Sales
- Not an enterprise solution

.NET – this is a great all-purpose programming tool. It <u>can</u> be used to drive 3D design tools and many of the workflows:

- · Good for small to medium size assemblies for outputting BOM
- Large files will choke the system
- It can integrate to other systems tools like ERP
- It can do drawings, but does not have the flexibility for complex drawings
- It does require a very large amount of code development, thus cumbersome and costly to maintain
- There are lots of programmers, very common platform

ETO - Web based and Mobile app solutions. Specifically designed to drive 3D design tools:

- Nothing is too large because it is Instance driven creates only what is needed, as it is needed to pass along
- Only the templates for the product family need to be created rules drive the creation of each instance
- Fully integratable can drive external tools or systems, can feed data and process returned data
 Fully customizable User Interface
- Capable of very complex drawing outputs or any other output needed
- The easiest to scale with new product families or make edits to program generative, meaning it uses the new code in the next instance it is called out
- Requires the least amount of resource to support and maintain for enterprise solution

So if you are taking on an enterprise wide solution, the decision then lies between choosing something that is built on a more common platform with known limitations (.NET) or a new, but similar platform, that can give you the ideal scenario (ETO).

The other choice to make is whether to take the cheaper up-front solution (.NET) or the one with the least total cost of ownership (ETO)...



Contact <u>Daryl Price</u> if you would like more information.

Daryl Price is the lead interface to D3's Automation team and serves our consulting teams, other Autodesk partners and Autodesk's sales teams in providing solutions around the world.

2-Minute Video Sample of One of D3's Automation Approaches

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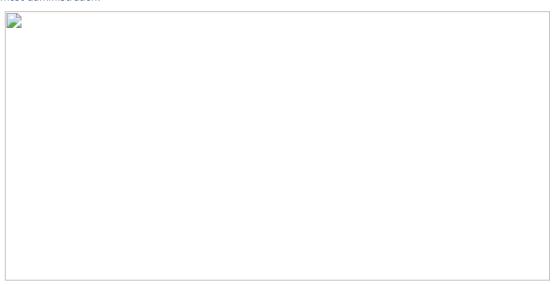
Tech Tip: Quicker Remote Access to Vault Files

Need quicker access to your vaulted files at a remote location?

There are a couple of different ways to configure remote servers depending on your environment. Ranging from Fastest (most complicated) to Lightweight (easiest to manage).

Autodesk Data Management Server (ADMS) otherwise referred to as your Vault Server is required at one location. Note that all of the scenarios listed below are scalable so that you can add multiple sites mixing the methods described.

Scenario 1 – Includes 2 full ADMS Servers, 2 Full SQL servers each with identically replicated information on both. This Option would be used when you have equally heavy users at both sides and collaboration is common between each site. It provides the fasted end user experience on both sides, but also requires the most administration.



Scenario 2 – Includes 2 full ADMS Servers, with only 1 SQL Server in this option the only thing that is replicated is the File Store, it does allow for configuration to happen from either Site. This requires more administration that Scenario 3, and is largely replaced with the release of Autodesk Vault File Server



Scenario 3 – Autodesk Vault File Server it is available on the subscription site for Autodesk Vault Professional users. ADVS is a much lighter weight installation, and relies on a full ADMS at a remote site for its configurations. The ADVS set up is much quicker and still has the capabilities for full replicate the files store and optionally manage its own set of licenses.



Contact your local D3 Solutions Consultant for help planning and optimizing your Data Management system.

Click Here to download the PDF tutorial.

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D3's New Employees

D3 Recently welcomed to Inside Account Representatives, Chris Cox and Derek Messer, to the team.

Chris Cox

Chris Cox works out of D3's headquarters in Springfield, Missouri. Here are some quick facts about Chris:

Education:

Chris has attended Evangel University and Ozarks Technical Community College where he received an Associate of Arts Degree. In addition, Chris graduated from Naval Submarine School.

Work History:

Chris previously worked for Expedia.com, Strategic Fundraising, East Valley Consulting, and recently got out of the Navy in 2013.

Position at D3:

As an integral part of the sales team, Chris will be working as an Inside Account Representative (IAR) out of D3's Springfield, MO headquarters. Chris will be working closely with assigned Solution Executives (SE), outside sales role to meet and exceed company revenue and customer satisfaction objectives.

Derek Messer

Derek Messer works out of D3's Springfield, Missouri headquarters. Here are some quick facts about Derek:

Education:

Southwest Area Career Center - Drafting & Design - 2004

Ozarks Technical Community College - Web Design - 2010



Work History:

Derek started his career with EFCO Corporation doing

shop drawings for commercial windows, doors, curtain walls, and storefronts. He then moved on to Miracle Recreation where he was a Proposal Draftsman/Engineering Support Specialist. His main duties were to create 3D renderings of commercial playground equipment. He later switched to work for Boyd Aluminum where he started as a draftsman but was quickly promoted to Project Engineer. His main duties included product testing & design, customer service, and project management.

Position at D3:

As an Inside Account Representative (IAR), Derek will be assisting Solution Executives in managing some of the day-to-day activities to secure stronger relationships with their clients while prospecting for new business opportunities.

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Employee Spotlights

Kim Hendrix

Meet Kim Hendrix, Solution Consultant at D3's Tulsa, OK office and training center. Kim started working at D3 Technologies in September of 2008 and specializes in Autodesk Inventor, Plant & Data Management.



Click Here to learn more about Kim Hendrix and read the interview.

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Global Field Promotion: One Year Free Subscription with Select Upgrades

Transform the way you work. Upgrade now and get a **free year of Subscription**. When you add Autodesk Subscription, you will always have the very latest software at your fingertips as well as many other enhanced benefits to help you stay competitive:

- The most advanced tools
- More powerful capabilities
- Technical support
- Flexible licensing
- Autodesk 360 cloud services
- Future software upgrades

If you have any questions about the upgrading your software and receiving a free year of Subscription, please <u>contact</u> your local D3 representative.

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Software Upgrade Discontinuation

As of February 1st, 2015, upgrades from previous releases will only be available on Subscription. Get current and subscribe before April 25th 2014 to save up to 30%* on your upgrade price.

If you have Autodesk 2008 software, be sure to take advantage of the Global Field Promotion mentioned above, as 2008 version products will only be eligible to upgrade until **March 31, 2014**. After that date, it will be necessary to purchase a new license.

If you have any questions about the upgrade discontinuation or Autodesk pricing policy changes, please <u>contact</u> your local D3 representative.

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Subscription Renewal Price Changes

Make sure you don't miss out on the chance to renew an expired or expiring Subscription contract before prices increase on **March 28, 2014**. If you have previously expired contracts or contracts within 90 days of their end date, you are eligible to renew under current Subscription renewal pricing before the increases are effective.

Enjoy these exclusive benefits with Autodesk Subscription:

- Extend workflows to the cloud <u>www.autodesk.com/subscription/cloud-services</u>
- Increase mobility and improve collaboration How to access cloud storage and services
- Access to the newest technology & design tools How to download your software
- Flexible access that fits the way you work: Home, Office, Mobile How to request an at-home license
- Technical support when you need it How to request support

If you have any questions about the Subscription renewal price changes, please <u>contact</u> your local D3 representative.

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Hankook Tire's Success Using 3D Systems 3D Printing

The design department at Hankook Tire recently invested in a ProJet 660 3D printer by 3D Systems to create perfect full color models that can be used to assess form and function. 3d printing has become a key part of Hankook Tire's concept design process and has helped the design team deliver better communication between departments, save on costs, and improve design data security.

Myungjoon Lee, CAD professional at Hankook Tire, has found that a significant benefit of 3D printing is that it reduces many communication errors with the engineering departments. There can be a lot of friction between the design and engineering departments during the decision-making process. Now, with detailed, realistic 3D prints on hand, to touch, review and observe, communication and decision-making in this process has noticeably improved, with meeting time for this part of the process being about 70% shorter than before.

See Full Article

ColorJet 3D Printing Process Video

To learn more, please contact <u>Barbara Miller-Webb</u> or visit the <u>3D</u> Systems website.

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North Kansas City Grand Opening - Recap

On February 20th, D3 opened their doors for their Grand Opening event in their new office and training center in North Kansas City, MO. The entire solutions team from D3 was in attendance along with several Autodesk executives including, Tom Kopinski, co-developer of Autodesk's Digital Prototyping Story, and Geomagic Solutions' Evan Fader who was available to discuss the capabilities of 3D Systems' new 3D scanner.

The event was, by all measures, a HUGE success!!...There was not an empty seat in the house! We had over 100 total people in attendance with 24 competitors in the Ultimate Inventor Warrior Challenge.

The feedback was overwhelmingly positive on everything: the presentations, the Warrior Challenge, the food, the prizes, the venue, the new D3 office and training center...It really was a fantastic night!...Here was the format:

Who's D3: D3's Daryl Price kicked off the night by communicating who we are at D3 Technologies, how we were founded by manufacturing engineers & designers, and how we've evolved into who we are today.

What's Digital Prototyping: Autodesk's Tom Kopinski presented on how Autodesk's solution to Digital Prototyping can help you design better products, reduce your development times, and get to market faster. Click here to learn about Autodesk's Digital Prototyping.

Why D3: D3's Troy Beck discussed the many reasons why D3 is your best choice in an Engineering & Design Technology Partner for the success of your manufacturing business. <u>Click here</u> for our "Why D3" flyer

Following the presentations, we had a time for networking and demonstration of 3D Systems' 3D scanner and 3D printed parts.



The Ultimate Inventor Warrior Challenge: We ended the night with a bang! Eight teams formed to face off against each other in a head-to-head race to recreate parts in Autodesk Inventor as accurately as possible. Two teams made it to the final round, and only one walked away with the gold, or in this case, gift cards to the whole team and an AU pass to the 1st place winner.

There has already been talk about making this an annual event. If you're up for that let us know! We hope you'll be back next year ready for round 2!

Go to our $\underline{Facebook\ page}$ (and Like us) to see our Ultimate Inventor Warrior and the other winners and congratulate them!

Ultimate In	ventor Warrior Challenge

Inventor Warrior Challenge in process: 3-person teams face-off to recreate the part on the screen down to the exact dimensions



Daryl Price, D3 Technologies, discusses the upcoming Automation Lunch & Learn in North Kansas City



Ryan O'Neal from Muyang USA, Scott Lucas from LSI, and Brad Bland from KCI competing for the grand prize

See the rest of the pictures on our Facebook page!.....Don't forget to Like us!

D3's new office location is at the following address:

D3 Technologies 1321 Burlington St., Suite E North Kansas City, MO 64116

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D3 Launches Prototyping Solutions Division

We are excited to announce our recent acquisition of a local machine shop which included two CNC Lathes and two CNC Mills. The plan is to add this equipment to our existing 3D Printing and 3D Scanning capabilities to form D3's Prototyping Solutions Division.

Along with this acquisition, D3 has hired a 21-year veteran machinist and CNC programmer, Dane Wilgus, to oversee the operation, as well as, two other CNC Operators/Programmers.

"Adding CNC machining capabilities fits perfectly into the direction we are going to best support our clients," said Kevin Schlack, President of D3. "During the validation phase of the design process, many of our customers have the need for physical prototypes to be machined to check fit, form, and function. Not only will we now be able to provide those physical prototypes, but we will be using Autodesk's Integrated CAM Solutions to create all the G-Code to make it happen."

Kevin further stated, "Along with the acquisition of two CAM companies, Autodesk has made it clear that they have every intention of revolutionizing the CAM industry by integrating their solutions directly within the design tools giving machinists, engineers, and designers the ability to adapt to real-time changes and instantly

update tool paths. So naturally, as the leader in Autodesk Manufacturing Solutions, D3 will be the leader in providing their CAM solutions, as well."	CAM	
Read the Full Article		
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D3 Awarded Partner of the Quarter		
D3 is excited to announce they have been named Autodesk Channel Partner of the Quarter. D3 was presented with this top seller award during a quarterly wrap-up call on March 3, 2014. The Autodesk Channel Partner of the Quarter award is the most coveted title given out by Autodesk each quarter.		
Channel Partner of the Quarter Awards are given to those Autodesk resellers who demonstrate overall strength & performance over the previous quarter along with working as a cohesive partner with Autodesk. D3 achieved this special recognition due to their outstanding numbers in both overall growth and revenue. This is the third time D3 has received Partner of the Quarter recognition; the first time was in the third quarter of fiscal year 2007, and the second time was in the fourth quarter of fiscal year 2008.		
Read the Full Article		
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Steel Tank Institute (STI/SPFA) Conference	ence	
Due to the success with automating the Quote-to-Design process America, we will be at the STI/SPFA Annual Meeting March 16th . Coronado Bay Resort, San Diego, CA. As a Platinum Sponsor, D3 w available at the booth to meet, greet, and answer questions aroun industry.	The meeting will take place at the Loews will be giving a short presentation and will be	
If you plan on attending the conference, please respond to Daryl I	Price for a special dinner invite.	
View the Program Agenda		

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Simulation Mechanical (FEA) Webinar

See what Simulation mechanical can do to help designers with their job without having to be an FEA expert.

If you are interested in attending or learning more about this webinar, please contact $\underline{\mathsf{Dan}}$ $\underline{\mathsf{Hunsucker}}$.

Register Now for a FREE Autodesk® Simulation (FEA) Mechanical Webinar on April 2, 2014.

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FEA Webinar

CFD Webinar

Simulation CFD Events

Simulation CFD Webinar

In this free webinar, you will see flow control-related applications and case study examples of how top manufacturers are incorporating Digital Prototyping in their design processes using Autodesk Simulation software. You will also see examples of how to:

- Measure flow performance and flow coefficient (Cv)
- · Predict flow separation, and recirculation
- · Validate mechanical performance and integrity
- Reduce design verification costs
- Decrease time to market while delivering best in class product performance

Register Now for this FREE Autodesk® Simulation CFD Webinar on March 21st.

If you are interested in learning more about this webinar, please contact Kevin Marchant.

Simulation CFD 2-Day Public Class

In this "Hands On", "Over the Shoulder" training course, you will be introduced to the Simulation CFD interface and establish fundamental best practices for CFD, while maintaining an emphasis on results validation. Steady state flow and thermal simulations; users are introduced to other simulation options during day 2.

D3 Partner and Simulation Expert, Tommy Mello, will be teaching this course. Tommy has been using Simulation CFD day in and day out for years, providing custom training, mentoring & Consulting to solve product development challenges. His knowledge includes decades of CAD & CAE experience stemming from days with Blue Ridge Numerics Inc. (BRNI), CFdesign, acquired by Autodesk, now Simulation CFD, Algor (also acquired by Autodesk as Simulation Mechanical), PTC & Solidworks. Much of his time was with the product development industry. D3 Technologies is proud to call Tommy a partner, as we address the challenges that our clients face.

Register Now for the Autodesk® Simulation CFD 2-Day Public Class on May 13th - 14th.

Click here to request more information about this event.

Simulation CFD - Advanced Class

This advanced training class will take place the day following the the 2-Day Simulation CFD Introductory course. The advanced class is designed for users with prior CFD experience and will also be taught by Simulation Specialist, Tommy Mello.

Advanced CFD Topics to be covered:

- Transient simulation Best practices and considerations for time dependent analysis
- Motion Linear, angular, combined; rotating / turbo machinery; flow driven
- Scalar Mixing
- Miscellaneous advanced topics (time permitting / group relevance) Height of fluid, turbulence models & applications, advanced meshing, external aerodynamics

Register Now for the Autodesk® Simulation CFD Advanced training course on May 15th.

<u>Click here</u> to request more information about this event.

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Virtual Advanced Training ACADEMY - NEW ONLINE TRAINING

Now you can get trained in a virtual classroom setting without having to leave the office!

D3 Technologies has recently formed an alliance with three other Autodesk Channel Partners and Authorized Training Centers for the delivery of online, live, interactive Autodesk solutions training.

This alliance will provide best-in-class online learning opportunities to users of more advanced and specialized Autodesk design and simulation tools.

Upcoming classes:

- Factory Design Suite Fundamentals March 31st April 2nd
- AutoCAD Plant 3D Essentials April 7th 8th
- Inventor iLogic Essentials April 15th 17th
- Inventor Tube & Pipe April 21st 23th
- Inventor Sheet Metal May 6th 8th
- ullet 3ds Max for Manufacturing May 27^{th} 30^{th}
- Intro to Autodesk Simulation May 28th 30th

Enrollment is now open!

Enroll Today for the class(es) of your choice and get trained right from your office.

If you are interested in attending or learning more about the Virtual Advanced Training ACADemy courses, contact your local D3 representative.

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3D Systems 3D Printer Seminars

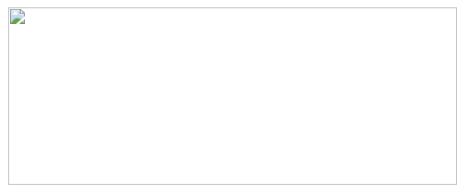
This seminar will show you how our 3DPRINTING 2.0 initiative can help you Manufacture the Future and accelerate your design-to-manufacturing needs. Learn how to choose between vastly different technology options – key buying criteria including single-source advantages. Come learn:

- Latest developments in ColorJet 3D printing now in full-color plastic
- · Expanded capabilities in MultiJet 3D printing with simultaneous, multi-material composite printing
- Fab-grade performance of the newest SLA 3D printer enabling high volume manufacturing
- Production-grade SLS 3D printing delivering injection molding-like part quality
- · Industrial-grade direct metal 3D printing with a large choice of metals and ceramics
- Low cost jewelry and dental 3D printing options
- How to choose the right 3D printer for any application, from a wide range of technologies and price points

Don't miss your chance to get an up close and personal view of the latest groundbreaking advancements in 3D printing.

Register now for a 3D Systems 3D Printer Seminar near you:

- Springfield, MO Headquarters March 27, 2014
- St. Louis, MO St. Louis Community College Florissant Valley April 9, 2014
- Wichita, KS Wichita State University Industrial and Manufacturing Engineering April 24, 2014
- Fayetteville, AR Courtyard Marriott May 15, 2014
- Tulsa, OK Tulsa Technology Center Broken Arrow Campus June 19, 2014



If you are interested in attending or learning more about this event, contact Barbara Miller-Webb.

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About D3 TECHNOLOGIES

D3 TECHNOLOGIES is an engineering & design technology consulting firm that provides solutions to increase engineering efficiency in the manufacturing, plant, and process industries. D3 is an Autodesk Gold partner and maintains training centers at each of its locations. Our goal is to provide clients with high quality service so they may receive an improved return on their investment.

If you would like to know more about us, please visit our website: http://www.d3tech.net



If you'd like to change the way we communicate with you, please contact us to specify which types of emails you'd like to receive or click on the link at the bottom of this email to have your name deleted from our mailing list.

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