

Contents

Acquisitions	2
Gerber Technology Announces Acquisition of Yunique Solutions	2
CIMdata News	3
CIMdata Announces Date and Location of Its Next CIMdata PLM Certificate Program	3
Company News	4
Autodesk Launches Expanded Marketing Channel for Building Product Manufacturers	4
Autodesk Education Community Hits Major Milestone With One Million Members	5
Infor Kicks Off UK Recruitment Campaign for New PM and EAM Channel Partners Infor Acquires 50 New Partners Across EMEA in 2009	5
Knovel Launches Nanotechnology Collection	6
Planet Vectorworks Offers a New Way to Get News about Nemetschek North America and Vectorworks	7
STAR-CCM+ V4.06 Becomes Most Popular Product in CD-adapco History	7
Think3 Transitions Engineering Services Division to BWIR	8
Zuken Announces Massive Expansion of CADSTAR Sales Agents Network in North America	9
Events News	9
Agilent Technologies to Demonstrate Connected SCA-Compliant Design Tools at SDR Forum 2009	9
Battery Modeling Expert to Unveil Coupled Li-ion Simulation Tool	10
Delcam to Launch Latest Orthotics CAD/CAM in Orlando	11
Delcam to Launch Solid Doctor for Data Repair at Euromold	12
RAND Worldwide Participates in Autodesk University 2009	13
Webinar on Lean Project Management: How to increase efficiency and visibility in your projects using VdotT	14
Financial News	15
Magma Reports Revenue of \$29.7 Million for Second Quarter -- Exceeds All Financial Guidance	15
Mentor Graphics Reports Fiscal Third Quarter Results	17
Synopsys Posts Financial Results for Fourth Quarter and Fiscal Year 2009	21
Implementation Investments	25
Catalog Data Solutions Online Catalog Selected by General Bearing Corporation	25
CGTech NC Software Offers Precision Verification	26
China's Power Industry Continues Investments in AVEVA Solutions	27
Delcam's PowerMILL Aids Move to Five-Axis Machining at Messier-Bugatti	28
el dorado inc. Uses Autodesk Software To Design Sustainable Kansas City Police Facilities	29
Exar Corporation Selects Magma's Titan ADX to Accelerate Analog Design	30
Landing Gear Advanced Manufacturing Corporation in China Deploys MSC.Software's Engineering Analysis Solutions	30
Oerlikon Solar Selects Intergraph(R) SmartPlant(R) 3D and P&ID Design Software	31
Peugeot Sport Selects HyperWorks Suite to Streamline Development Processes of LMP1 Race Car	31
PROSTEP Awarded Multi-Million-Euro Contract	32
Ricardo Adopts Windchill® to Manage Global Engineering Processes	32
SHP Leading Design Earns Autodesk BIM Experience Award	33
SolidWorks Customer BUB Racing Recaptures Motorcycle World Land Speed Record	35
Technia Delivers PLM Solution to the Electric Power Producer OKG	36
Terex Selects Zuken as Vendor of Choice for Electrical Design	36

CIMdata PLM Industry Summary

Product News	37
ANSYS Releases Ansoft Designer with Nexxim 5.0 Software	37
ArchiCAD 13 Greek Version Released	39
BlueCielo Ships InnoCielo 2009a Engineering Content Management Suite	39
BSD Announces BIM Linking Solution	40
CFdesign's New Autodesk Revit Integration Gives Architecture and Design Engineers The Power of Performing AEC and MEP Design Studies	40
Delcam Adds Parasolid Kernel to PowerSHAPE CAD Software	41
Delcam's New FeatureCAM 2010 on Video	42
Design Professionals Hit The Jackpot With New NVIDIA Quadro Graphics Solutions For Autodesk Applications	43
ESI Announces the Sheet Metal Forming Simulation Suite Version 2009	44
ESI Releases the PAM-CEM Simulation Suite Version 2009	45
ESPRIT 2010 CAM Software Now Shipping	46
Fast Kineo Collision Detector KCD V2.05	48
Flow Science Announces Release of FLOW-3D/MP Version 4.0	49
KOMPAS-3D V11 Released	49
Kubotek Officially Releases KeyCreator Version 9	51
Latest Gridgen Release Cuts Hybrid Mesh Sizes by More Than Half	52
Lattice Technology Releases New XVL Converter for Autodesk Inventor 2010	53
Magma Announces Talus Design 1.1 and Talus RTL 1.1 -- Enhanced Synthesis Products Deliver New Capabilities, Reference Flows and Interfaces	53
Magma Announces Talus-Based RTL-to-GDSII Reference Flow for Imagination Technologies' POWERVR Graphics Accelerator -- Delivers Repeatable Results, Speeds Deployment	55
Micro Estimating Partners with Dassault Systèmes SolidWorks Corporation	56
New Sopheon Strategic Roadmapping Software Enables Users to Quickly Adjust Strategies in Response to Changing Market Conditions	57
Oce Solutions Showcased at Autodesk University 2009 Enable AEC Users to Streamline Operations, Leverage the Value of Color	58
PDF3D 10th Release Extends Rich Media Creation to Windows 7	60
SYCODE Releases CATIA V4 and V5 File Import Plug-ins for AutoCAD	61
SYCODE Releases Inventor File Import Plug-in for AutoCAD	61
SYCODE Releases Pro/ENGINEER File Import Plug-in for AutoCAD	62
SYCODE Releases Six Neutral CAD File Format Data Exchange Plug-ins for AutoCAD	63
3DVIA Composer Features Automatic Path Planning	64
TXT e-solutions Continue Innovating and Reinforcing PLM Offering for Fashion with New PDMi (Product Data Management and Intelligence)	65
VISTAGY's Seat Design Environment™ 2009 Speeds Time to Market by Automating Entire Engineering Process	66

Acquisitions

Gerber Technology Announces Acquisition of Yunique Solutions

2 December 2009

[Gerber Technology](#) announced the strategic acquisition of Yunique Solutions, Inc. This acquisition will ensure that Gerber provides an innovative end-to-end solution with user productivity and enterprise connectivity at its core.

“The Yunique acquisition is another step in expanding our investment in our software business by

CIMdata PLM Industry Summary

instantly upgrading Gerber's PLM technology platform," said John Hancock, President, Gerber Technology. "As a result of our intensified focus on software, Yunique becomes part of the recently formed Gerber Technology Software Systems Group – created with the primary focus of helping customers deliver products to market in less time, with reduced cost, higher quality and improved visibility."

"Yunique's employees, innovative spirit and proven Microsoft .NET technology platform make it an ideal fit with Gerber's unparalleled industry expertise and global sales and service – creating a combined powerhouse PLM solution," added Hancock.

"The combination of Yunique and Gerber Technology represents an enormous opportunity for users, design houses, manufacturers and retailers seeking innovation, leading technology, flexibility, and global service and support," said Daniel Pak and Darioush Nikpour, Yunique's co-founders and principal owners. "With both native MAC and PC compatibility, our software applications fit the requirements of the diverse demands, locations and working styles of users in the fields of design, development, sourcing, planning, operations, manufacturing, production and retail."

 [Click here to return to Contents](#)

CIMdata News

CIMdata Announces Date and Location of Its Next CIMdata PLM Certificate Program

1 December 2009

CIMdata, Inc., the leading global Product Lifecycle Management (PLM) consulting and research firm announces that the next CIMdata PLM Certificate Program is to be held in Ann Arbor, MI from January 25-29, 2010. The [CIMdata PLM Certificate Program](#) is the flagship offering of CIMdata PLM Leadership—the PLM industry's most comprehensive non-biased education and training offering for today's PLM professionals.

The CIMdata PLM Certificate Program prepares PLM professionals at several levels to successfully address the challenges inherent in PLM implementations. This assessment-based certificate program includes an intimate classroom experience, individual and team-based exercises, and individual evaluations of achievement. Additionally, the program provides candidates with intensive and extensive exposure to a team of CIMdata experts. Upon successful completion of the program, each participant receives a CIMdata PLM Certificate and thereby becomes a member of CIMdata's global *PLM Leadership* community.

According to Mr. Peter Bilello, CIMdata's Vice President, "CIMdata is excited to announce the location of our first CIMdata PLM Certificate Program for 2010. The Ann Arbor program represents the first in a series of programs scheduled for 2010." He went on to state, "As announced a few months ago, CIMdata is offering two ways in which individuals can become a member of CIMdata's PLM Leadership community." Program participants can complete all 9 sessions in one of two ways:

1. By attending the full program delivered over 5 consecutive days; or
2. By attending the prerequisite Core PLM Certificate sessions offered over 3 consecutive days and at a later time, within a 12-month period, completing the remaining sessions given over 2 consecutive days.

CIMdata PLM Industry Summary

PLM Certificate Program participants can register online for either the 3-day or complete 5-day program. This certificate program is available to industrial companies who are considering and/or implementing PLM, and to PLM technology and service suppliers. The CIMdata PLM Certificate Program is built on CIMdata's more than 25 years of extensive worldwide experience guiding industrial companies in successfully defining and implementing best-in-class PLM strategies and tactics. Please refer to CIMdata's website at www.CIMdata.com for detailed information on the CIMdata PLM Certificate Program, and for registering to it.

 [Click here to return to Contents](#)

Company News

Autodesk Launches Expanded Marketing Channel for Building Product Manufacturers

2 December 2009

[Autodesk, Inc.](#) announced that it is expanding the [Autodesk Seek](#) web service to include additional targeted marketing channels for building product manufacturers (BPMs) that will help them reach and engage commercial and residential design professionals as well as homeowners. Autodesk is connecting Autodesk Seek to two Autodesk technology previews, [Project Dragonfly](#), a home design application, and [Project Showroom](#), an interactive web service that enables users to mix and match products in lifelike room settings.

Autodesk Seek is a web service that provides building designers with branded and generic building product models and associated design content via a web browser or directly from [AutoCAD](#) and [Revit](#)-based software applications. Designers can use Seek to search and embed building products – including 3D models, 2D drawings and performance data – in their projects, which can greatly facilitate the [building information modeling \(BIM\)](#) process. First launched in 2008, Autodesk Seek has grown to encompass more than 36,000 products from nearly 1,200 manufacturers.

Dacor Kitchen Appliances Now Available in Project Dragonfly

The integration of Autodesk Seek with Project Dragonfly and Project Showroom offers new opportunities for BPMs to connect directly with homeowners and to provide a personalized experience for their customers. Dacor, a leading luxury kitchen appliance design, manufacturing and distribution company, is now offering customers the ability to design, visualize and experiment with their products using Project Dragonfly, an intuitive and highly engaging, free** web application that homeowners can use to configure room designs and layouts on the fly from any computer or browser.

Dacor plans to take advantage of the new integration between Autodesk Seek and Project Showroom, a hosted service for delivery of “synthetic photography” that building product manufacturers can provide via their websites. Using Project Showroom, Dacor will offer a branded version of Showroom on its website that will enable visitors to mix and match products and create photorealistic room settings that show how the combined design, products, colors and lighting will look.

More information about Autodesk Seek, Project Dragonfly and Project Showroom is available at:

* <http://seek.autodesk.com/>

* <http://projectdragonfly.autodesk.com>

* <http://showroom.labs.autodesk.com/>

 [Click here to return to Contents](#)

Autodesk Education Community Hits Major Milestone With One Million Members

1 December 2009

[Autodesk, Inc.](#) has announced that its online [Education Community](#) has grown to one million student and educator members representing over 28,000 educational institutions in 147 countries since its launch in 2006.

As one of Autodesk's many education offerings, the Autodesk Education Community represents an ongoing commitment to helping students and educators get access to Autodesk technology and resources. On the Community, students and educators can download -- for free* -- the 2010 releases of 25 full-feature Autodesk titles; access high-quality training resources, including instructor guides, student workbooks, data sets and videos that reinforce key concepts; search for internships and jobs; and share designs among peers with 13-month licenses. Free*, six-month trials of [Autodesk 3ds Max](#), [Autodesk 3ds Max Design](#) and [Autodesk Maya](#) software are also now available for download from the Autodesk Education Community, where students can explore both design ideas and careers in architecture, engineering and the digital arts.

Autodesk Education Initiatives

Autodesk supports students and educators by providing design software, innovative programs and other resources designed to inspire the next generation of professionals. By supporting educators to advance design education and science, technology, engineering and math (STEM) skills, Autodesk is helping prepare students for future academic and career success. Autodesk supports schools and institutions of higher learning worldwide through substantial discounts, subscriptions, grant programs, training, curriculum development and community resources. For more information about Autodesk education programs and solutions, visit autodesk.com/education.

 [Click here to return to Contents](#)

Infor Kicks Off UK Recruitment Campaign for New PM and EAM Channel Partners Infor Acquires 50 New Partners Across EMEA in 2009

30 November 2009

Infor announced plans to increase its EMEA channel partners by 20% by mid 2010. The recruitment will focus on seven countries, including the UK where Infor is seeking partners for its Performance Management ([PM](#)) and Enterprise Asset Management ([EAM](#)) solutions.

Infor EAM helps companies save time and money through optimising planned and preventative maintenance resources, improving staff productivity, and enabling efficient inventory management of spare parts and production machinery. Infor PM combines the strengths of financial performance management and business intelligence to create true closed-loop performance management.

"Our approach to channel recruitment is totally focused on quality over quantity," maintains Jean-Philippe Pommel, Vice-President, EMEA Channels, Infor. "We are not looking to take on thousands of partners and risk dilution of our focused approach, but a smaller number of partners who are well aligned with our products and company ethos."

Infor has already successfully recruited 50 EMEA partners during 2009, whilst many existing partners

CIMdata PLM Industry Summary

have also signed up to sell additional Infor solutions. Infor's channel partners contribute 24% of global license sales.

The quality of Infor's channel partner relations was demonstrated at the company's third annual EMEA partner conference, held in Baveno, Italy, in September, drawing 265 attendees from across EMEA. "Our commitment to providing a world-class channel program was evident in the largest attendance ever at our partner conference," states Pommel. "Our numbers were up 45% from last year, no doubt due to some of the great incentives we have just launched. We now offer our partners interest free financing and also incredible license and services rates for upgrades and exchanges within our new Flex program.

"But a happy, long-term vendor : partner relationship is never solely down to money. Our partners get huge support by regularly drawing upon Infor's industry knowledge and deep domain expertise within sales cycles. Furthermore they also benefit from first-class training and educational facilities throughout the year. So, despite the current economic climate, it is an exciting time to be an Infor partner," concludes Pommel.

Additional Resources

Infor Global Channel Program Website - <http://sn.im/jx6pc?cid=WW-ALL-US-UND-0309-CP-PRESSRELEASES-WIPG1>

Infor Channel Program Brochure (registration required) - <http://sn.im/jx6s7?cid=WW-ALL-US-UND-0309-CP-PRESSRELEASES-WIPG1>

Infor EAM: <http://sn.im/t9gv1>

Infor PM: <http://snipurl.com/s4dqy>

 [Click here to return to Contents](#)

Knovel Launches Nanotechnology Collection

1 December 2009

[Knovel](#), an online resource that helps engineers find reliable technical information faster, announces availability of the Nanotechnology collection featuring content from leading publishers including Elsevier, McGraw-Hill, Springer, Smithers Rapra, Royal Society of Chemistry, World Scientific and Wiley. This new collection focuses on nanoscale materials, nanostructure-dependent properties and phenomena data as well as fabrication and manufacturing techniques.

Research predicts there will be \$3 trillion worth of nanotechnology products in 2015. To invest appropriately and for research and development, companies need reliable information on the best practices of applications, fabrications, manufacturing and safety. Demand is particularly strong in the semiconductor, chemical and energy industries where the technology is advancing rapidly.

Engineers working with nanoscale materials, for example, will find technical information on processing techniques, quick tips for materials handling and recommendations for managing defects, impurities.

Subtopics within the Nanotechnology collection include:

- Nanostructures and Micro/Nanodevices
- Micro/Nanofabrication and Manufacturing Techniques
- Nanobiotechnology

CIMdata PLM Industry Summary

- Environmental Nanotechnology and Environmental Safety
- Nanocomposites

Knovel's comprehensive collection of content currently includes 23 subject areas and is continually updated as new titles are published. For pricing and subscription information, contact Knovel sales at +1.866.240.8174. Promotional discounts are available through December 31, 2009.

 [Click here to return to Contents](#)

Planet Vectorworks Offers a New Way to Get News about Nemetschek North America and Vectorworks

30 November 2009

Nemetschek North America announced the unveiling of Planet Vectorworks®, a new community-focused component of their website that offers global news to English-speaking customers, prospects and members of the press.

"Telling the stories of what's happening with Vectorworks software and our customers around the world is an exciting next step for us," explains Theresa Downs, Communications Director at Nemetschek North America. "Designers in over 85 countries use our software, but before Planet Vectorworks, it was challenging to communicate the global reach of our products and community. We're quite delighted to launch this site and bring even more news and value to our customers."

In addition to weekly news posts—ranging from language-specific resources, to kudos to award-winning firms from around the world, to news from Nemetschek North America—Planet Vectorworks also includes links to Nemetschek North America's social networking sites, such as Facebook, Flickr, and Twitter. Live delicious.com feeds from Vectorworks-focused news and fresh updates from Flickr stream into the site as well.

Visitors to Planet Vectorworks can browse the site at their convenience by going to <http://planet.vectorworks.net>. Visitors can also subscribe to an RSS feed and/or receive the updates via e-mail.

The site, while oriented to English-speaking users, includes a growing list of international resources, community boards, and social networking sites, so that users around the world can connect, either by language or geographically.

 [Click here to return to Contents](#)

STAR-CCM+ V4.06 Becomes Most Popular Product in CD-adapco History

26 November 2009

Polling more than a 1000 downloads in its first few hours of release, CD-adapco announced that STAR-CCM+ V4.06 is the fastest downloaded product in the company's 30 year history.

"The popularity of the STAR-CCM+ V4.06 is a clear endorsement of our four-monthly release strategy, and an indication of our rapidly growing user base," boasts VP Product Management Jean-Claude Ercolanelli. "I encourage every STAR-CCM+ user that has not already upgraded to V4.06 to do so today."

In the six years since its first release, STAR-CCM+ has evolved into more than just a CFD code, and is

CIMdata PLM Industry Summary

now an integrated platform for multi-disciplinary engineering simulation, including: combustion; multiphase flow; heat transfer through solids and fluids; dynamic fluid body interaction; and solid stress: all from within a single environment. Principal new features of STAR-CCM+ V4.06 include models to simulate broadband aeroacoustic noise and aerodynamic flutter, together with a range of customer requested enhancements aimed at increasing both user productivity and simulation capability.

Ercolanelli does not expect that this record will be a long standing one, however: “STAR-CCM+ V5, which will be officially launched at the [2010 STAR European Conference](#), will represent a paradigm shift in engineering simulation, and looks set to be the most important software release in our company’s history. “

 [Click here to return to Contents](#)

Think3 Transitions Engineering Services Division to BWIR

3 December 2009

[Think3](#) has announced the signing of an agreement with Barry-Wehmiller International Resources (BWIR), a global provider of business and technology solutions to the manufacturing domain, for the transition of its India-based engineering services division serving the European market. The division will be integrated with BWIR’s engineering services operation in Chennai, India, further expanding the firm’s delivery and execution capabilities to a broad range of clients worldwide.

The agreement provides current and future think3 customers with the opportunity to leverage BWIR’s extensive service offerings and offshore expertise to enhance their competitive advantage in the global marketplace by optimizing the value of their think3 product investments.

As part of the consulting platform of St. Louis-based Barry-Wehmiller Companies, Inc., BWIR has been a pioneer in the engineering services domain for more than a decade and offers a breadth of services ranging from machine design, new product development, controls engineering and CAD services. The agreement with think3 complements [BWIR](#)’s pattern of aggressive revenue growth of 40 percent compounded annually, while strengthening its growing presence in the European market.

With a record of innovation spanning 30 years, think3 has emerged as one of the most significant global players in the CAD and PLM market, with operations in the U.S., Italy, Germany, France, Japan and China. In addition to the transition of think3 engineering services, the agreement designates BWIR as a global implementation provider for think3’s PLM product solutions, adding a new dimension to the evolving partnership between the two companies.

“BWIR’s proven engineering services and PLM implementation capabilities, complemented by the complete suite of think3 products, will enable BWIR to expand its ability to offer world-class engineering solutions to a diverse client base that already includes a variety of mid-market and Fortune 500 companies around the globe,” explained BWIR Senior Partner Senthilkumar Deivasigamany.

Commenting on the agreement, think3 CEO Filippo Zuccarello stated, *“Beyond the transition of think3’s engineering services division to BWIR, we look forward to pursuing opportunities in which the synergy between think3 and BWIR will provide greater resource capabilities to meet our global strategic objectives. Through this new partnership, think3 and BWIR customers will have access to a comprehensive range of quality products and services suitable for a competitive manufacturing company.”*

 [Click here to return to Contents](#)

Zuken Announces Massive Expansion of CADSTAR Sales Agents Network in North America

17 November 2009

Zuken has announced that CADSTAR has now become significantly more accessible in North America, with the appointment of five new Sales Agents spanning across the continent. This expansion which comes as part of a recent recruitment effort enables Zuken to serve the massive market opportunities while providing current and potential users of the software more localized support.

The five new Sales Agents span across countries and states: includes Tiberius Solutions, Algozen Corporation, MidWest Design Solutions, ASICSOFT and FOM Systems. All are experienced veterans in the PCB design market and have extensive local market knowledge.

To highlight this new sales network in the USA, Zuken has decided to re-introduce the USA product bundles.

For more information about the new sales agents please visit <http://www.zuken.com/wheretobuy>.

 [Click here to return to Contents](#)

Events News

Agilent Technologies to Demonstrate Connected SCA-Compliant Design Tools at SDR Forum 2009

1 December 2009

Agilent Technologies Inc. announced it will demonstrate connectivity between its [SystemVue](#) platform and the [Spectra CX](#) platform, co-developed by PrismTech and Zeligsoft, at the [Software-Defined Radio \(SDR\) Forum 2009](#) conference, Dec. 1–4, in Washington, D.C. The demonstration will show how the connectivity solution reduces manual integration steps that cost SDR application developers time, transportability and reliability. The demonstration also will highlight rapid waveform algorithm development and Software Communication Architecture (SCA) compliance.

Rapid Deployment of SDR Waveforms

SDR waveform application developers will now have a streamlined flow from physical-layer baseband algorithms and RF communications links directly into higher-level, SCA-compliant implementations, enabling greater transportability within the SDR community. Conversely, SCA-compliant waveform objects can be verified directly against simulated and measured references using Agilent SystemVue. This allows for model-based design closure at the block level, as well as standards compliance and throughput at the link level.

The new connectivity is made possible through Agilent's collaboration with PrismTech and Zeligsoft. The benefit to customers is rapid deployment of real-world SDR waveforms, along with breakthrough performance and effortless standards-based re-use.

“The ability to transform physical layer designs easily into SCA components and then test with the Operating Environment in the original simulation loop will be of interest to developers wanting a radio prototyping capability,” said Shahzad Aslam-Mir, SCA Lead Software Engineer at Datasoft. “By integrating two specialized design tools, Agilent Technologies, PrismTech and Zeligsoft have made it

much easier for radio developers.”

“We are pleased that our collaboration with PrismTech and Zeligsoft is quickly producing tangible results,” said Frank Ditore, product manager for SystemVue in Agilent’s EEs of EDA organization. “By connecting our best-in-class waveform development and software engineering tools, we make it easier for SDR application developers to deal with the escalating performance and complexity of today’s evolving SDR requirements.”

For more information on the connectivity demonstration or the System and Spectra CX platforms, visit Agilent at booth 36 at the SDR Forum 2009 exhibition. You also may contact your local representatives from Agilent or PrismTech.

 [Click here to return to Contents](#)

Battery Modeling Expert to Unveil Coupled Li-ion Simulation Tool

9 November 2009

CD-adapco announced a collaboration with Battery Design LLC, a world leading provider of battery modeling software, with the aim of delivering a coupled simulation capability in early 2010. Battery modeling expert Robert Spotnitz will discuss these developments at two upcoming events.

The collaboration (which was initiated in early 2009) will add an additional simulation capability to CD-adapco's flagship STAR-CCM+ simulation tool, providing the automotive industry with the first comprehensive tool to enable the study of interaction between a cell or battery and its automotive environment. Initial applications will focus on the critical thermal management issues that have a direct influence on both battery temperature and safety.

Robert Spotnitz, President of Battery Design LLC, will be delivering a presentation and participating in a Round Table Discussion at the [STAR Global Transportation Forum](#) in Detroit MI, December 8-9, 2009, the theme of which is "Alternative Transportation and Electric Vehicle Technology Advancements": Also participating will be development experts from Chrysler, Ford, GM and others:

Robert Spotnitz, said *"We are delighted to be working with CD-adapco. Extending Battery Design's models into a full 3D environment will further enhance our understanding of installation effects and the behavior of large-scale battery systems. The collaboration between CD-adapco and Battery Design will deliver an analysis tool that will accelerate product development and support vehicle programs across the globe."*

Richard Johns, CD-adapco's Automotive Director, commented: *"The rapid growth in the electric vehicle market and the need for a powerful analysis capability has resulted in the partnership with Battery Design and the development of a tool for fully coupled simulation from the cell to the pack and installation levels, which will be released in STAR-CCM+ in early 2010. We have also given considerable attention to developing an engineering process that will allow our customers to perform simulations based on data that is realistically available to them from Li-ion cell producers. We have had huge interest from our automotive customers and we anticipate this analysis tool will enable them to bring electric vehicles to the market faster and with more confidence."*

Spotnitz and Johns will be discussing the development of the fully coupled battery design tool in a webinar on December 3, 2009: www.cd-adapco.com/events/webinars/2009/batteries.html

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

Delcam to Launch Latest Orthotics CAD/CAM in Orlando

27 November 2009

Delcam will launch new versions of its OrthoModel and OrthoMill software for, respectively, the design and manufacture of custom orthotic insoles at the Science & Management [Symposium of the Florida Podiatric Medical Association](#) to be held in Orlando from 20th to 23rd January. The 2010 versions of the programs include enhancements that will enable the design of a broader range of orthotics and more efficient manufacture of those designs.

Delcam's software helps to increase productivity, profitability and patient satisfaction, both for those prescribing or manufacturing custom devices to help diabetic or rheumatoid patients, and for practitioners working to correct abnormalities caused by a biomechanical miss-alignment of the musculoskeletal system.

[Delcam](#) has coupled its 30 years of experience in the design and manufacture of complex free-form shapes for the aerospace and automotive sector with knowledge and expertise from a panel of orthopaedic, podiatric and orthotics experts to create a digital solution for foot-care specialists. The software has been developed in association with laboratories, podiatrists and orthotists from around the world, together with the knowledge of footwear design and manufacture that has been gained within Delcam from its relationships with leading brands such as Nike and Reebok. It replaces the expensive, slow and messy casting process with a simple, non-contact digital solution.

The new OrthoModel options will give more flexibility, including the ability to create flat-bottom orthotics as well as constant-thickness designs across the various modelling methods. In addition, users can add "skive" (a flat correcting surface) to either the medial and lateral side of the orthotic and can vary the angle of the plane. Previously, the software was limited to a 15 degree plane on the medial side of the design.

More functions have been added to adapt for individual patients the range of standard base models supplied with the software. The extra morphing tools allow whole-model editing of the standard designs so that the desired modifications can be completed quickly and easily.

A range of measurement tools have been added so the distances can be determined more quickly between the different key points within the orthotic. For example, foot dimensions can be extracted from Sharp Shape scans, including the heel point, and first and fifth metatarsal points, as well as the heel width, forefoot width and foot length. In addition, undercut shading has been added to help with arch height selection, while dynamic sectioning gives the ability to use front or rear section planes to view and take measurements from a cross section of the model.

The most significant addition in OrthoMill is the ability to "batch" machining calculations. This allows the operator to input designs for a number of orthotics, either to be cut from a single block or from several pieces of material. The software can then generate all the required toolpaths in a continuous series of calculations. The process can even be carried out overnight, to give maximum productivity for the programmer.

A related change is the option to apply different machining templates to each of a group of orthotics that will be cut from one block of material in a single manufacturing sequence. The templates provide the automated machining routines for the orthotics. Previously, all items produced in one operation had to use the same template, which reduced the overall machining efficiency. Extra flexibility has also been added with the ability to vary the Z-heights of each item within the block, and to vary the size and the

CIMdata PLM Industry Summary

number of machining tabs for each orthotic.

In addition, set-up sheets can now be generated showing the layout of the orthotics within the block, together with the patient information for each device. This will be especially helpful in cases where the manufacturing is being carried out by a different technician from the programming.

 [Click here to return to Contents](#)

Delcam to Launch Solid Doctor for Data Repair at Euromold

26 November 2009

[Delcam](#) will launch the Solid Doctor for the repair of CAD models at the [Euromold](#) exhibition to be held in Frankfurt from 2nd to 5th December. Solid Doctor will be available as part of the new releases of Delcam's PowerSHAPE CAD software and the CopyCAD Pro reverse engineering program. Both programs will incorporate Parasolid® software, the geometric modelling component from Siemens PLM Software.

The addition of Parasolid, together with Delcam's existing tools, allows the Solid Doctor to read in and repair models from all sources, including IGES and native CATIA files, and output a Parasolid XT file that can be read directly into all software based on Parasolid, including IronCAD, SolidWorks, TopSolid, T-Flex and VisiCAD, as well as Siemens PLM Software's own Solid Edge® software and NXTM software products.

The Solid Doctor is a major step towards true interoperability with many popular CAD systems. Parasolid is the component modelling engine on which more CAD systems are based than any other, while others such as Autodesk's Inventor and PTC's Pro/Engineer, have import/export filters for the Parasolid native XT file format. As such, once a valid Parasolid model has been created, these systems can exchange the data without translation and the inherent further re-work such translation entails.

With the Solid Doctor, users will be able to tackle all the common problems that can be found when translating low precision and incomplete data, including gaps and overlaps between surfaces, or duplicated and missing surfaces, and generate a valid, high-precision Parasolid model.

The Solid Doctor uses the automatic data repair tools that are provided as part of Parasolid, together with the surface creation and editing options that are available from PowerSHAPE. This combination means that simple repairs can be carried out quickly and easily, while more complex problems can be overcome by deleting and replacing the existing surfaces within the model.

The first stage in using the Solid Doctor is to analyse the model using the Parasolid checking mechanisms, to determine the extent of any inconsistency issues in topology or geometry when the data is examined with the high levels of precision of Parasolid. Solid Doctor divides these issues into separate categories and labels the model. For each category or class of inconsistency, Solid Doctor recommends the most appropriate course of action, including a possible automatic fix.

The user then applies the automated repair sequence. This uses a combination of the healing technology in Parasolid, plus some extra Delcam tools, for example, to correct surfaces that have had their orientation reversed. These automated tools are typically different for each class of inconsistency, as experience has shown that what is effective in one case does not necessarily work for another. Each corrected issue has its label changed from red to green as it is repaired. The repairs can be inspected individually to ensure that the results are as required or the whole model can be checked again to highlight any further inconsistencies.

CIMdata PLM Industry Summary

The second repair stage involves using Delcam's trim region editing tools to correct larger issues that require manual repair by a skilled user, such as mismatches between the edges of the various surfaces within the model. These include direct editing options for the trim boundaries, which allow very quick and flexible adjustment of the surface edges to overcome errors in the model.

For the more serious problems that remain, it will usually be necessary to generate replacement surfaces in the affected area. This can be done easily using PowerSHAPE's Smart Surfacing technology. The user simply deletes the existing surfaces and sketches around the area to be repaired. PowerSHAPE will then analyse the boundary and suggest the most appropriate type of surface to fill the space. Tangency can be maintained with the surrounding surfaces if required. If the user is not happy with the initial selection made by the software, he can run through alternative solutions until he is satisfied with the result.

Once the user is happy with the quality of the repaired surfaces, they are automatically incorporated back into the Parasolid model. This process continues until all the inconsistencies have been resolved and a valid Parasolid model created. By giving the user total control over how the part is repaired, even very poor quality or badly damaged data can be repaired quickly and efficiently to create a valid Parasolid model.

Despite the many improvements made in data translation in recent years, it still remains a multi-million dollar problem for manufacturers that need to pass CAD data up and down a supply chain. Delcam's Solid Doctor will provide a quick and easy solution to this problem and so allow faster and more efficient new product development.

 [Click here to return to Contents](#)

RAND Worldwide Participates in Autodesk University 2009

2 December 2009

RAND Worldwide® announced that both its IMAGINiT Technologies and ASCENT divisions are speaking and exhibiting at Autodesk University (AU) 2009. AU 2009 is being held this week, December 1-3, 2009 at the Mandalay Bay Resort in Las Vegas, NV.

IMAGINiT Technologies, Autodesk's largest global reseller, will be showcasing a gallery of their clients' successes in Booth #301. These success stories demonstrate what can be achieved when the software tools provided by Autodesk are coupled with the technical expertise, training and implementation best practices offered by IMAGINiT. In addition to having a booth, several technical experts from IMAGINiT will be delivering the following classes on the Autodesk products at AU:

Malcolm Fernandes will lead a class called "[Lots More: Rules Based Lot Grading](#)" which will teach students how to leverage AutoCAD® Civil 3D® 2010 to quickly and efficiently design or grade a lot and ensure that the revisions are dynamic, as are all the other objects within Civil 3D.

Mark Flayler will be presenting "[It's Not Sign Language: Designing Custom Sketched Symbols in Drawings Using Autodesk® Inventor®](#)." This session takes a look at the tools available in the drawing manager that can help you document your designs and standardize your company's notations.

George Ikonomakis will deliver a class called "[Maximize the Use of Autodesk® Revit® Structure Extensions](#)" that will cover how to use extension tools so that you can work more collaboratively with software products such as AutoCAD® Structural Detailing, Civil 3D® and possibly Autodesk Robot™ Structural Analysis.

CIMdata PLM Industry Summary

Warren Medernach will be teaching a class entitled “[From AutoCAD® Map 3D to Autodesk MapGuide® in Three Simple Steps: Connect, Stylize, Publish.](#)” This class explores how to connect to a variety of data sources through FDO Technology, stylize and theme your data to create a cartographic masterpiece, and finally, how to publish the data to MapGuide Enterprise.

ASCENT - Center for Technical Knowledge® will be promoting their latest Autodesk courseware titles in Booth # 209.

ASCENT technical expert, Elvis Sverko will be delivering a class “[Real Life Applications: Practical Engineering Purposes for AutoCAD Electrical – It’s Not Just for Drafting](#)” this class takes you beyond creating and modifying your companies’ electrical control system drawings with AutoCAD® Electrical. It will help you better design and engineer your control systems. Elvis will also be presenting a session called “[Inventor: 20 Tips in 20 Minutes](#)” in the Autodesk Theatre. Don’t miss out on these great tips that you can put to use right away.

 [Click here to return to Contents](#)

Webinar on Lean Project Management: How to increase efficiency and visibility in your projects using VdotT

November 2009

Join ESI for this FREE live webinar.

When: Tuesday, December 1, 4pm (Paris time)

The [Vdot](#)™ lean process platform is used to actively manage and continuously improve product development and business processes, saving companies 50% or more in cycle time and cost.

The core research behind [Vdot](#)™ originated within Boeing’s PhantomWorks unit in coordination with the Defense Advanced Research Projects Agency (DARPA). [Vdot](#)™ rapidly captures your best practices, deploys them to your teams, and then provides real-time visibility as it helps teams execute your processes more productively than ever before.

What a customer says about VdotT:

"Vdot was extremely impressive right from the start of our project. The immediate visibility into current project status made my job as Program Manager much easier. Vdot ensured my people were working on the right tasks, with the right data, at all times. Vdot gave me confidence knowing that the real-time project status was based on what was actually delivered. We found Vdot to be extremely easy to set up and very flexible while executing the project, no need to bring in consultants when we need to set-up the project or make modifications on the fly. The implementation of Vdot enabled us to finish our project on time and under budget."

Roger Herdy, Program Manager at NASA Marshall Space Flight Center.

Agenda:

Tuesday, December 1, 4pm (Paris time)

Overview of [Vdot](#)™ and ESI

Live demo

The webinar will last 1 hour.

Registration:

[Click Here to Register](#) (Free of Charge!)

 [Click here to return to Contents](#)

Financial News

Magma Reports Revenue of \$29.7 Million for Second Quarter -- Exceeds All Financial Guidance

3 December 2009

Magma® Design Automation Inc. reported revenue of \$29.7 million for its fiscal 2010 second quarter ended Nov. 1, 2009.

"Traction continues to grow for our core Talus® platform as well as for our newer products -- just last week Hynix announced it is standardizing on FineSim™ for circuit simulation, Toshiba is adopting Quartz™ for physical verification of advanced flash memory designs, and today we announced Exar selected Titan™ ADX to accelerate analog design," said Rajeev Madhavan, chairman and CEO of Magma. "Second-quarter results once again included strong positive cash flow as we exceeded our guidance ranges for revenue and all other financial metrics."

GAAP Results

In accordance with generally accepted accounting principles (GAAP), Magma reported net income of \$4.3 million, or \$0.09 per share (basic and diluted), for the second quarter, compared to a net loss of \$(26.3) million, or \$(0.60) per share (basic and diluted), for the year-ago second quarter. The second quarter of fiscal 2010 was favorably impacted by a non-recurring net tax benefit of \$7.7 million, or \$0.16 per share (basic), \$0.13 per share (diluted), which was primarily due to a discrete adjustment reducing the reserves for foreign taxes.

Non-GAAP Results

Magma's non-GAAP net income was \$1.7 million for the second quarter, or \$0.03 per share (basic and diluted), which compares to a non-GAAP net loss of \$(6.3) million, or \$(0.14) per share (basic and diluted), for the year-ago second quarter.

Non-GAAP net income for the second quarter of fiscal 2010 excludes the effects of amortization of developed technology, amortization of intangible assets, stock-based compensation, amortization of debt issuance costs, debt discount and premium accretion, charges associated with losses on equity investments and other investments, restructuring charges, acquisition-related expenses and the related provision for income taxes. Non-GAAP net income for the second quarter of fiscal 2009 excludes the effects of amortization of developed technology, amortization of intangible assets, amortization of deferred stock-based compensation, amortization of debt issuance costs, debt discount accretion, charges associated with losses on equity investments, restructuring charges, acquisition-related expenses and the related provision for income taxes. A reconciliation of our non-GAAP results to GAAP results is included in this press release.

In the second quarter Magma generated cash flow from operations of approximately \$3.9 million.

Business Outlook

For Magma's fiscal 2010 third quarter, ending Jan. 31, 2010, the company expects total revenue in the

CIMdata PLM Industry Summary

range of \$29.5 million to \$30.0 million. GAAP net loss per share is expected to be in the range of \$(0.14) to \$(0.13) and non-GAAP earnings per share (EPS) are expected to be in the range of \$0.02 to \$0.03. A Financial Data Supplement containing additional third quarter and full fiscal year 2010 guidance, as well as detailed financial information intended to provide guidance and further insight into our business, is available online in the Investor Relations section of the Magma website.

GAAP Reconciliation

Magma provides non-GAAP financial information to assist investors in assessing its current and future operations in the way that Magma's management evaluates those operations. Magma believes that this non-GAAP information provides useful information to investors by excluding the effect of some expenses that are required to be recorded under GAAP but that Magma believes are not indicative of Magma's core operating results, or that are expected to be incurred over a limited period of time.

Magma's management evaluates and makes operating decisions about its business operations primarily based on bookings, revenue and the core costs of those business operations. Management believes that the amortization of developed technology and intangible assets, stock-based compensation, amortization of debt issuance costs, debt discount and premium accretion, charges associated with losses on equity and other investments, restructuring charges, acquisition-related expenses and the related provision for income taxes, and other significant unusual items are not operating costs of its core software and service business operations. Therefore, management presents non-GAAP financial measures, along with GAAP measures, in this earnings release by excluding these items from the period expenses. The income statement line items affected are as follows: (1) cost of revenue, licenses; (2) cost of revenue, bundled licenses and services; (3) cost of revenue, services; (4) operating expenses, research and development; (5) operating expenses; (6) operating expenses, sales and marketing; (7) operating expenses, general and administrative; (8) operating expenses, amortization of intangible assets; (9) operating expenses, restructuring charge; (10) interest expense; (11) valuation gain (loss), net; (12) other income (expense), net; (13) provision for income taxes and (14) net income (loss) per share.

For each such non-GAAP financial measure, the adjustment provides management with information about Magma's underlying operating performance that enables a more meaningful comparison of its financial results in different reporting periods. For example, since Magma does not acquire businesses on a predictable cycle, management excludes acquisition-related charges, such as in-process research and development charges, to make more consistent and meaningful evaluations of Magma's operating expenses. Similarly, since Magma does not undertake significant restructuring or realignments on a predictable cycle, management would have difficulty evaluating Magma's profitability as measured by gross profit, operating profit, income before taxes and net income on a period-to-period basis unless it excluded these charges. Management also uses these measures to help it make budgeting decisions between those expenses that affect operating expenses and operating margin (such as research and development, sales and marketing, and general and administrative expenses), and those expenses that affect cost of revenue and gross margin (such as product development expenses).

Further, the availability of non-GAAP financial information helps management track actual performance relative to financial targets, including both internal targets and publicly announced targets. Making this non-GAAP financial information available also helps investors compare Magma's performance with the announced operating results of its principal competitors, which regularly provide similar non-GAAP financial information.

Management recognizes that the use of these non-GAAP measures has limitations, including the fact that management must exercise judgment in determining whether some types of charges, such as stock-

CIMdata PLM Industry Summary

based compensation relating to stock grants and acquisition related charges, should be excluded from non-GAAP financial measures. Management believes, however, that providing this non-GAAP financial information facilitates consistent comparison of Magma's financial performance over time. Magma has historically provided non-GAAP results to the investment community, not as an alternative but as a supplement to GAAP information, to enable investors to evaluate Magma's core operating performance in the way that management does.

Conference Call

Magma will discuss the financial results for the recently completed quarter, along with forward-looking guidance, during a live earnings call today at 1:30 p.m. PST, available live by both webcast and telephone. Following completion of the call, a webcast replay of the call will be available at <http://investor.magma-da.com/medialist.cfm> through Dec. 10, 2009. Those without Internet access may listen to a replay of the call by telephone until 11:59 p.m. PST on Dec. 10, 2009 by calling:

U.S. & Canada: (888) 203-1112, code #2460625

Elsewhere: (719) 457-0820, code #2460625

Click [here](#) for the unabridged press release with financial tables.

 [Click here to return to Contents](#)

Mentor Graphics Reports Fiscal Third Quarter Results

3 December 2009

Mentor Graphics Corporation announced results for the fiscal third quarter 2010, ending October 31, 2009. For the quarter, the company reported revenues of \$189.2 million, non-GAAP earnings per share of \$.05, and a GAAP loss per share of \$.28.

“During the quarter, we saw positive signs of recovery in the semiconductor market with semiconductor unit shipments and revenue, as well as foundry revenue and utilization, up sharply,” said Walden C. Rhines, CEO and chairman of Mentor Graphics. “The diversity of our product line continues to help us weather the difficult economic environment. Embedded software and cabling solutions are both up for the quarter. Strong results from our design-to-silicon platform, including Calibre, Olympus-SoC place and route, and Tessent silicon test products, and a recovery in our emulation business also helped drive results.”

During the quarter, the company announced that its low power RTL-to-GDSII tool flow has been included in Taiwan Semiconductor Manufacturing Company, Ltd. (TSMC) Reference Flow 10.0. TSMC also selected the Calibre® physical verification platform for its Integrated Sign-Off Flow. In October, the company signed a definitive merger agreement with Valor Computerized Systems Ltd., a world leader in printed circuit board design manufacturing software solutions.

In August, the company closed its acquisition of LogicVision Inc., a market leader in built-in-self-test silicon test solutions. In November, the company unveiled its strategy for silicon test and yield analysis solutions incorporating both the company’s existing product line and LogicVision’s technologies under the Tessent™ brand.

“Despite the continuing challenges of the market, we saw annualized contract values of renewals in our top ten contracts increase 5% in the quarter,” said Gregory K. Hinckley, president of Mentor Graphics. “In addition, our cost control efforts are ahead of plan, with operating expenses down about 3% over the

CIMdata PLM Industry Summary

year ago third quarter.”

Special charges were primarily related to headcount, acquisitions and ongoing investment banking fees.

Outlook

For the fiscal fourth quarter ending January 31, 2010, the company expects revenue of about \$230 million, non-GAAP earnings per share of about \$.28 and GAAP earnings per share of about \$.33. GAAP earnings in the fiscal fourth quarter will be relatively stronger as a portion of the tax provision recorded earlier in the fiscal year is recaptured. For fiscal 2010, the company expects full year revenues to increase one percent from fiscal 2009 to approximately \$795 million, non-GAAP earnings per share of about \$0.44 and a GAAP loss per share of approximately \$.28. In Fiscal 2009, the company had revenues of \$789 million.

Cash flow is expected to be approximately \$15 million for the fiscal fourth quarter and consistent with the same quarter last year. Fiscal 2010 year cash flow from operations is expected to be approximately \$45 to \$50 million up from \$23 million in fiscal 2009.

Fiscal Year Definition

Mentor Graphics fiscal year runs from February 1st to January 31st. The fiscal year is dated by the calendar year in which the fiscal year ends. As a result, the first three fiscal quarters of any fiscal year will be dated with the next calendar year, rather than the current calendar year.

Adoption of Accounting Guidance for Convertible Debt

During the first quarter of fiscal 2010, Mentor Graphics adopted the Financial Accounting Standard Board's (FASB) new accounting guidance for accounting for convertible debt instruments that may be settled in cash upon conversion. This new guidance requires retroactive application to all prior periods reported. Accordingly, we have adjusted the applicable prior period balance sheets, statements of operations (including net income (loss) per share), and statements of cash flows to reflect the adjusted balance of the convertible notes and related items, and to record the amortization of the discount on the convertible notes as a non-cash interest expense. A reconciliation of our adjusted Condensed Consolidated Balance Sheets as of January 31, 2009, our adjusted Condensed Consolidated Statements of Operations, and our adjusted Condensed Consolidated Statements of Cash Flows for the three and nine months ended October 31, 2008 to their original filings is included with this release. Interest expense associated with the adoption of the guidance was \$0.7 million for the three months ended October 31, 2009 and \$0.6 million for the three months ended October 31, 2008. Interest expense was \$2.1 million for the nine months ended October 31, 2009 and \$1.9 million for the nine months ended October 31, 2008.

Discussion of Non-GAAP Financial Measures

[Mentor Graphics](#) management evaluates and makes operating decisions using various performance measures. In addition to our GAAP results, we also consider adjusted gross margin, operating margin and net income (loss), which we refer to as non-GAAP gross margin, operating margin, net income (loss), and earnings (loss) per share, respectively. These non-GAAP measures are derived from the revenues of our product, maintenance, and services business operations and the costs directly related to the generation of those revenues, such as cost of revenue, research and development, sales and marketing, and general and administrative expenses, that management considers in evaluating our ongoing core operating performance. These non-GAAP measures exclude amortization of intangible assets, in-process research and development, special charges, equity plan-related compensation expenses

CIMdata PLM Industry Summary

and charges, interest expense attributable to net retirement premiums or discounts on the early retirement of debt and associated debt issuance costs, interest expense associated with the amortization of debt discount on convertible debt, impairment of cost method investments, and the equity in income or losses of unconsolidated entities, which management does not consider reflective of our core operating business.

Identified intangible assets consist primarily of purchased technology, backlog, trade names, customer relationships, and employment agreements. In-process research and development charges represented products in development that had not reached technological feasibility at the time of acquisition. Special charges primarily consist of costs incurred for employee terminations due to a reduction of personnel resources driven by modifications of business strategy or business emphasis. Special charges may also include expenses incurred related to potential acquisitions, excess facility costs, asset-related charges, post-acquisition rebalance costs and restructuring costs, including severance and benefits. Equity plan-related compensation expenses represent the fair value of all share-based payments to employees, including grants of employee stock options. For purposes of comparability across other periods and against other companies in our industry, non-GAAP net income (loss) is adjusted by the amount of additional tax expense or benefit that we would accrue using a normalized effective tax rate applied to the non-GAAP results.

Management excludes from our non-GAAP measures certain recurring items to facilitate its review of the comparability of our core operating performance on a period-to-period basis because such items are not related to our ongoing core operating performance as viewed by management. Management considers our core operating performance to be that which can be affected by our managers in any particular period through their management of the resources that affect our underlying revenue and profit generating operations during that period. Management uses this view of our operating performance for purposes of comparison with our business plan and individual operating budgets and allocation of resources. Additionally, when evaluating potential acquisitions, management excludes the items described above from its consideration of target performance and valuation. More specifically, management adjusts for the excluded items for the following reasons:

- Amortization charges for our intangible assets are inconsistent in amount and frequency and are significantly impacted by the timing and magnitude of our acquisition transactions. We therefore consider our operating results without these charges when evaluating our core performance. Generally, the most significant impact to inter-period comparability of our net income (loss) is in the first twelve months following an acquisition.
- Prior to adopting the FASB's authoritative guidance on business combinations in February 2009, in-process research and development was expensed upon acquisition. These charges are largely disregarded as acquisition decisions are made since they often result in charges that vary significantly in size and amount. Management excludes these charges when evaluating the impact of an acquisition transaction and our ongoing performance.
- Special charges are incurred based on the particular facts and circumstances of acquisition and restructuring decisions and can vary in size and frequency. These charges are not ordinarily included in our annual operating plan and related budget due the unpredictability of economic trends and the rapidly changing technology and competitive environment in our industry. We therefore exclude them when evaluating our managers' performance internally.
- We view equity plan-related compensation as a key element of our employee retention and long-term incentives, not as an expense that we use in evaluating core operations in any given period. Management

CIMdata PLM Industry Summary

also believes this information is useful to investors to compare our performance to the performance of other companies in our industry who present non-GAAP results adjusted to exclude stock compensation expense.

- Interest expense attributable to net retirement premiums or discounts on the early retirement of debt, the write-off of associated debt issuance costs and the amortization of the debt discount on convertible debt were excluded. Management does not consider these charges as a part of our core operating performance. The early retirement of debt and the associated debt issuance costs is not included in our annual operating plan and related budget due to unpredictability of market conditions which could facilitate an early retirement of debt. We consider the amortization of the debt discount on convertible debt not to be a direct cost of operations. We also believe this presentation is more useful to investors in comparing our performance to the performance of other companies in our industry who present non-GAAP results adjusted to exclude such items.
- Impairment of cost method investments can occur when the fair value of the investment is less than its cost. This can occur when there is a significant deterioration in the investee's earnings performance, significant adverse changes in the general market conditions of the industry in which the investee operates, or indications that the investee may no longer be able to conduct business. These charges are inconsistent in amount and frequency. We therefore consider our operating results without these charges when evaluating our core performance.
- Equity in income or losses of unconsolidated subsidiaries represents the net income (losses) in an investment accounted for under the equity method. The amounts represent our equity in the net income (losses) of a common stock investment. The carrying amount of our investment is adjusted for our share of earnings or losses of the investee. The amounts were excluded as we do not control the results of operations for these investments and management does not consider this activity a part of our core operating performance.
- Income tax expense (benefit) is adjusted by the amount of additional tax expense or benefit that we would accrue if we used non-GAAP results instead of GAAP results in the calculation of our tax liability, taking into consideration our long-term tax structure. We use a normalized effective tax rate of 17%, which reflects the weighted average tax rate applicable under the various tax jurisdictions in which we operate. This non-GAAP weighted average tax rate is subject to change over time for various reasons, including changes in the geographic business mix and changes in statutory tax rates. Our GAAP tax rate for the nine months ended October 31, 2009 is (55)%, after the consideration of period specific items. Without period specific items of \$4,201 thousand, our GAAP tax rate is (66)%. Inclusive of period specific items, our full fiscal year 2010 GAAP tax rate is projected to be (48)%. The GAAP tax rate considers certain mandatory and other non-scalable tax costs which may adversely or beneficially affect our tax rate depending upon our level of profitability in various jurisdictions.

In certain instances our GAAP results of operations may not be profitable when our corresponding non-GAAP results are profitable or vice versa. The number of shares on which our non-GAAP EPS is calculated may therefore differ from the GAAP presentation due to the anti-dilutive effect of stock options in a loss situation.

Non-GAAP gross margin, operating margin, and net income (loss) are supplemental measures of our performance that are not required by, or presented in accordance with, GAAP. Moreover, they should not be considered as an alternative to any performance measure derived in accordance with GAAP, or as an alternative to cash flow from operating activities as a measure of our liquidity. We present non-GAAP gross margin, operating margin, and net income (loss) because we consider them to be important

CIMdata PLM Industry Summary

supplemental measures of our operating performance and profitability trends, and because we believe they give investors useful information on period-to-period performance as evaluated by management. Non-GAAP net income (loss) also facilitates comparison with other companies in our industry, which use similar financial measures to supplement their GAAP results. Non-GAAP net income (loss) has limitations as an analytical tool, and therefore should not be considered in isolation or as a substitute for analysis of our results as reported under GAAP. In the future we expect to continue to incur expenses similar to the non-GAAP adjustments described above and exclusion of these items in our non-GAAP presentation should not be construed as an inference that these costs are unusual, infrequent or non-recurring. Some of the limitations in relying on non-GAAP net income (loss) are:

- Amortization of intangibles represents the loss in value as the technology in our industry evolves, is advanced, or is replaced over time. The expense associated with this loss in value is not included in the non-GAAP net income (loss) presentation and therefore does not reflect the full economic effect of the ongoing cost of maintaining our current technological position in our competitive industry, which is addressed through our research and development program.
- We regularly engage in acquisition and assimilation activities as part of our ongoing business and regularly evaluate our businesses to determine whether any operations should be eliminated or curtailed. We therefore will continue to experience special charges on a regular basis. These costs also directly impact our available funds.
- We perform impairment analyses on cost method investments when triggering events occur and adjust the carrying value of assets when we determine it to be necessary. Impairment charges could therefore be incurred in any period.
- Our stock option and stock purchase plans are important components of our incentive compensation arrangements and will be reflected as expenses in our GAAP results.
- Our income tax expense (benefit) will be ultimately based on our GAAP taxable income and actual tax rates in effect, which often differ significantly from the 17% rate assumed in our non-GAAP presentation.
- Other companies, including other companies in our industry, calculate non-GAAP net income (loss) differently than we do, limiting its usefulness as a comparative measure.

Click [here](#) for an unabridged press release containing financial tables.

Synopsys Posts Financial Results for Fourth Quarter and Fiscal Year 2009

2 December 2009

[Synopsys, Inc.](#) reported results for its fourth quarter and fiscal year ended October 31, 2009.

For the fourth quarter of fiscal 2009, Synopsys reported revenue of \$338.3 million compared to \$352.8 million for the fourth quarter of fiscal 2008. Revenue for fiscal year 2009 was \$1.36 billion, an increase of two percent from \$1.34 billion in fiscal 2008.

"Synopsys met or exceeded almost every goal we set at the beginning of the year, a notable accomplishment given the turbulence that characterized the economic environment," said Aart de Geus, chairman and CEO of Synopsys. "Looking forward into 2010, we intend to continue to control expenses, invest to accelerate our strong technology momentum, and focus on growing our customer relationships."

CIMdata PLM Industry Summary

GAAP Results

On a generally accepted accounting principles (GAAP) basis, net income for the fourth quarter of fiscal 2009 was \$19.5 million, or \$0.13 per share, compared to \$46.4 million, or \$0.32 per share, for the fourth quarter of fiscal 2008. GAAP net income for fiscal year 2009 was \$167.7 million, or \$1.15 per share, compared to \$190.0 million, or \$1.29 per share, for fiscal 2008, which included a \$17.3 million tax benefit associated with the settlement of an IRS tax issue for fiscal years 2000 and 2001.

Non-GAAP Results

On a non-GAAP basis, net income for the fourth quarter of fiscal 2009 was \$49.5 million, or \$0.33 per share, compared to non-GAAP net income of \$62.7 million, or \$0.43 per share, for the fourth quarter of fiscal 2008. Non-GAAP net income for fiscal year 2009 was \$255.3 million, or \$1.75 per share, compared to non-GAAP net income of \$252.9 million, or \$1.71 per share, for fiscal 2008.

Reconciliation between GAAP and non-GAAP results is provided at the end of this press release.

Financial Targets

Synopsys also provided its financial targets for the first quarter and full fiscal year 2010. These targets constitute forward-looking information and are based on current expectations. For a discussion of factors that could cause actual results to differ materially from these targets, see "Forward-Looking Statements" below.

Note: in the second quarter of 2009, Synopsys reached a tentative settlement with the IRS that would resolve a dispute regarding its 2002-2004 returns, primarily associated with Synopsys' acquisition of Avant!. If approved, it is expected to result in a decrease in forecasted GAAP income tax expense in fiscal 2010 (for additional detail, refer to the Quarterly Report on Form 10-Q for the fiscal quarter ended July 31, 2009). The targets below exclude this potential impact.

First Quarter of Fiscal Year 2010 Targets:

- Revenue: \$325 million - \$333 million
- GAAP expenses: \$269 million - \$286 million
- Non-GAAP expenses: \$245 million - \$255 million
- Other income and expense: \$0 - \$3 million
- Tax rate applied in non-GAAP net income calculations: approximately 27 percent
- Fully diluted outstanding shares: 148 million - 153 million
- GAAP earnings per share: \$0.23 - \$0.28
- Non-GAAP earnings per share: \$0.38 - \$0.40
- Revenue from backlog: greater than 90 percent

Full-Year Fiscal Year 2010 Targets:

- Revenue: approximately \$1.33 billion - \$1.35 billion
- Other income and expense: \$4 million - \$8 million
- Tax rate applied in non-GAAP net income calculations: approximately 27 percent
- Fully diluted outstanding shares: 150 million - 155 million

CIMdata PLM Industry Summary

- GAAP earnings per share: \$1.01 - \$1.20
- Non-GAAP earnings per share: \$1.52 - \$1.62
- Cash flow from operations: \$200 million - \$220 million

GAAP Reconciliation

Synopsys continues to provide all information required in accordance with GAAP, but believes evaluating its ongoing operating results may not be as useful if an investor is limited to reviewing only GAAP financial measures. Accordingly, Synopsys presents non-GAAP financial measures in reporting its financial results to provide investors with an additional tool to evaluate Synopsys' operating results in a manner that focuses on what Synopsys believes to be its ongoing business operations and what Synopsys uses to evaluate its ongoing operations and for internal planning and forecasting purposes. Synopsys' management does not itself, nor does it suggest that investors should, consider such non-GAAP financial measures in isolation from, or as a substitute for, financial information prepared in accordance with GAAP. Synopsys' management believes it is useful for itself and investors to review, as applicable, both GAAP information that includes: (i) stock compensation; (ii) the amortization of acquired intangible assets and in-process research and development charges; (iii) other significant items, including the effect of a tax benefit from a settlement with the Internal Revenue Service and a facility restructuring charge, and (iv) the income tax effect of non-GAAP pre-tax adjustments from the provision for income taxes; and the non-GAAP measures that exclude such information in order to assess the performance of Synopsys' business and for planning and forecasting in subsequent periods. Whenever Synopsys uses such a non-GAAP financial measure, it provides a reconciliation of the non-GAAP financial measure to the most closely applicable GAAP financial measure. Investors are encouraged to review the related GAAP financial measures and the reconciliation of these non-GAAP financial measures to their most directly comparable GAAP financial measure as detailed below.

GAAP to Non-GAAP Reconciliation of Fourth Quarter and Fiscal Year 2009 Results

(unaudited and in thousands, except per share amounts)

	Three Months Ended		Twelve Months Ended	
	October 31,		October 31,	
	2009	2008	2009	2008
GAAP net income	\$19,528	\$46,397	\$167,681	\$189,978
Adjustments:				
Amortization of intangible assets	11,638	9,250	45,474	44,091
Stock compensation	14,137	14,666	56,936	65,472
In-process research and development	1,200	-	2,200	4,800
Facility restructuring charge	4,538	-	4,538	-
Tax benefit from IRS settlement	-	-	-	(17,253)
Tax effect	(1,543)	(7,635)	(21,534)	(34,230)
Non-GAAP net income	\$49,498	\$62,678	\$255,295	\$252,858

Three Months Ended Twelve Months Ended

CIMdata PLM Industry Summary

	October 31,		October 31,	
	2009	2008	2009	2008
GAAP net income per share	\$0.13	\$0.32	\$1.15	\$1.29
Adjustments:				
Amortization of intangible assets	0.08	0.06	0.31	0.30
Stock compensation	0.09	0.10	0.39	0.44
In-process research and development	0.01	-	0.02	0.03
Facility restructuring charge	0.03	-	0.03	-
Tax benefit from IRS settlement	-	-	-	(0.12)
Tax effect	(0.01)	(0.05)	(0.15)	(0.23)
Non-GAAP net income per share	\$0.33	\$0.43	\$1.75	\$1.71
Shares used in calculation	149,332	145,638	145,857	147,672

Reconciliation of Target Operating Results

The following tables reconcile the specific items excluded from GAAP in the calculation of target non-GAAP operating results for the periods indicated below:

GAAP to non-GAAP Reconciliation of First Quarter Fiscal Year 2010 Targets (in thousands, except per share amounts)

	Range for Three Months Ending January 31, 2010	
	Low	High
Target GAAP expenses	\$269,000	\$286,000
Adjustment:		
Estimated impact of amortization of intangible assets	(10,000)	(13,000)
Estimated impact of stock compensation	(14,000)	(18,000)
Target non-GAAP expenses	\$245,000	\$255,000

	Range for Three Months Ending January 31, 2010	
	Low	High
Target GAAP earnings per share	\$0.23	\$0.28
Adjustment:		
Estimated impact of amortization of intangible assets	0.09	0.07
Estimated impact of stock compensation	0.12	0.09
Net non-GAAP tax effect	(0.06)	(0.04)
Target non-GAAP earnings per share	\$0.38	\$0.40

CIMdata PLM Industry Summary

Shares used in non-GAAP calculation (midpoint of target range)	150,500	150,500
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GAAP to Non-GAAP Reconciliation of Fiscal Year 2010 Targets

	Range for Fiscal Year Ending October 31, 2010	
	Low	High
Target GAAP earnings per share	\$1.01	\$1.20
Adjustment:		
Estimated impact of amortization of intangible assets	0.33	0.26
Estimated impact of stock compensation	0.39	0.34
Net non-GAAP tax effect	(0.21)	(0.18)
Target non-GAAP earnings per share	\$1.52	\$1.62

Shares used in non-GAAP calculation (midpoint of target range)	152,500	152,500
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Earnings Call Open to Investors

Synopsys will hold a conference call for financial analysts and investors today at 2:00 p.m., Pacific Time. A live webcast of the call will be available at Synopsys' corporate website at <http://www.synopsys.com/> A recording of the call will be available by calling +1-800-475-6701 (+1-320-365-3844 for international callers), access code 122503, beginning at 4:00 p.m. Pacific Time today. A webcast replay will also be available on the website from approximately 5:30 p.m. Pacific Time today through the time Synopsys announces its results for the first quarter fiscal 2010 in February 2010. Synopsys will post copies of the prepared remarks of Aart de Geus, chairman and chief executive officer, and Brian Beattie, chief financial officer, on its website following the call. In addition, Synopsys makes additional financial information available in a financial supplement also posted on the corporate website. Click [here](#) for the full text of this press release including financial tables.

Availability of Final Financial Statements

Synopsys will include final financial statements for the fourth quarter and full fiscal year in its Annual Report on Form 10-K to be filed by December 30, 2009.

1) Synopsys' fourth quarter ended on the Saturday nearest October 31.

For presentation purposes, the Unaudited Consolidated Statements of

Cash Flows refer to a calendar month end.

 [Click here to return to Contents](#)

Implementation Investments

Catalog Data Solutions Online Catalog Selected by General Bearing Corporation

1 December 2009

CIMdata PLM Industry Summary

[Catalog Data Solutions](#) (CDS) announced that General Bearing Corporation and their web site designer [Top Floor Technologies](#) have selected CDS's interactive catalog solution to present [General Bearing products online](#).

General Bearing supplies quality bearing components and bearing products, including ball bearings, tapered roller bearings, spherical roller bearings, and cylindrical roller bearings. "A digitally searchable product catalog on our web site will save our customers time in locating and specifying the right products," said Jim McDonald, Director of Business Processes, General Bearing. "CDS's [online catalog system](#) allows us to exhibit our entire product lineup with all of the clarity of a traditional print catalog and with many benefits unique to a digital presentation."

"A critical factor in the success of any website is providing the visitors an easy path to the information they want and then making it easy for them to take the next step in the buying process," said Jim Bernthal, President and owner of Top Floor Technologies. "In the industrial market that often means providing users the ability to search a product catalog by a specific specification parameter and then providing them an easy way to submit a 'Request for Quote'. Catalog Data System's interactive catalog provides this exact type of functionality making it a natural fit for a company like General Bearing"

 [Click here to return to Contents](#)

CGTech NC Software Offers Precision Verification

1 December 2009

Providing high precision engineering services to a range of very demanding industry sectors, such as aerospace and defence, medical hardware, pump and food processing industry, systems integration and automation equipment, as well as motorsport, Flexible Machining Systems (FMS) ensures its machine tools are safe with NC program verification software from CGTech.

Horsham-based FMS currently supply to the medical, aerospace and defence sectors, which includes scheduled work released against contract requirements. And, the company's intension is to expand its customer base within these sectors having been recently AS9100 approved.

Although commercial engineering work is undertaken by the company, it is predominantly equipped to machine high precision parts and significant capital equipment investments have been made during the past five years, updating machining centres and turning capacity together with inspection.

The majority of milled components produced by the company are programmed off line, This high precision work is supported by an IT infrastructure running software such as Vericut from CGTech.

There are three distinct but entwined software steps for FMS, as Technical Support Manager, Peter Smith, explains: "We use Solid Works CAD and Open Mind as our CAM system to create NC cutting tool paths. These files are transferred to Vericut where we verify the CNC code for the part before performing the machining operation."

Where 3D models are issued, FMS imports the customer data in STEP format. If the company is issued with 2D drawings it always builds a 3D model to work from. The model is passed seamlessly into the CAM system and the NC code is transferred to Vericut. "This ensures we have set up the part correctly in the CAM system, and that we will machine it correctly. We complete a full virtual reality machining operation through Vericut and if there are any mistakes in the program, the software will find them, and highlight what exactly is wrong. It will tell us if we have taken too much material off or if further material needs to be removed," say Peter Smith.

CIMdata PLM Industry Summary

CGTech modelled all of the machines for FMS, providing a virtual representation of every machining centre. As some of the 3-axis vertical machining centres can be fitted with a fourth axis rotary unit these have also been modelled to cover every production scenario.

The company builds the manufacturing process from the CAD system and gathers all the data needed into the software. Every cutter and tool holder used by the company is held in a database with around 4,000 combined variations. These can be selected in the CAM system and the tooling data is transferred into Vericut. All the datum points are also taken across and these will be issued as part of the machine set up procedure.

FMS has been using solid modelling for over 10 years and Vericut for around five years. As the components produced by FMS have become more complicated so the need to prove that the job is right when it leaves the CAM office has evolved. “With jobs becoming more complex, we absolutely need Vericut to prove that we have done it right, because you can miss bits and the software will pick it up every time. In fact, the software is so well thought of that one of our aerospace customers insists that all their parts go through Vericut, and they will monitor and audit us on this requirement,” says Peter Smith.

Machining complex parts was the reason for a recent investment in a Mazak Variaxis 5-axis machining centre. Says Peter Smith: “The multi axis machine can perform five sided machining operations. And, sometimes we can finish a part in a single set up using special fixturing and snap tags. We installed the CAM system to support the 5-axis machine tool, and had to have the post processor written for the machine. To prove the post processor, we run it through Vericut and if an error was identified it could be corrected – using Vericut allows you to see exactly what is happening. This worked fantastically because all the problems with the post were found straight away. Basically, Vericut ironed out all of the issues within the post processor.”

One of Peter Smith’s responsibilities is making the company more efficient by getting the most out of the machine tools. As far as he is concerned multi-axis machines are the way ahead, machining parts in fewer set ups and operations. He confirms: “If you are using multi-axis machining techniques Vericut is crucial. It minimises the risk of having a collision, you see any accidental crashes on screen so the machine tool is protected. It is much easier to correct it virtually in the CAM system than face the problems associated with an actual collision.”

No milling programs are manually edited at FMS and any changes are made in the CAM system and re-processed by Vericut to confirm the changes are correct to machine. “We are eliminating as many errors as possible up front,” Peter Smith says. “It’s much more efficient for a business to run a verification process and Vericut is the best one available. I would not want to do any programming without Vericut. The CAM system offers verification but it does not check the G code of the actual program. Vericut is driven by the actual NC program so every motion is a response to the driving code and the software will act exactly as the machine will, which makes a huge difference.”

 [Click here to return to Contents](#)

China's Power Industry Continues Investments in AVEVA Solutions

30 November 2009

AVEVA announces multiple wins from China's power industry for AVEVA Plant and AVEVA NET, AVEVA's Engineering & Design and Lifecycle Management solutions.

The wins, recorded from the beginning of AVEVA's financial year in April, came mostly from Class A

CIMdata PLM Industry Summary

Certified Chinese Electrical Power Plant Design Institutes, of which 85% subscribe to AVEVA solutions. They include Northeast Electric Power Design Institute, Guangdong Electric Power Design Institute, Shandong Electric Power Engineering Consulting Institute and Inner-Mongolia Electric Power Survey & Design Institute. Other power companies renewing their investments in AVEVA Plant include are Beijing Bootes Electric Power Sci-Tech, China Huadian Engineering and China Nuclear Power Design Company (Shenzhen).

Peter Finch, President, AVEVA Asia Pacific said:

"There is great demand for energy to power China's economy. As AVEVA is China's top solutions provider to the power industry, and a majority of the Electrical Power Plant Design Institutes subscribe to our solutions, we can cooperate easily in a unified approach, unifying standards and sharing a common platform to promote design innovation and optimization, to effectively improve design quality, productivity, and to reduce project cost."

Peter continued:

"An exciting development for us comes from the nuclear sector as there are plans to increase the installed capacity of nuclear power plants from the current 9,000 MW to 60,000 MW by 2020. We have established long term partnerships with China's leading nuclear design companies. One of such, China Nuclear Power Design Company (Shenzhen), recently signed an agreement to subscribe to AVEVA NET, this comes after signing a similar multi-million USD contract last year. AVEVA is looking forward to further enhancing ties with China's conventional and nuclear design sectors."

 [Click here to return to Contents](#)

Delcam's PowerMILL Aids Move to Five-Axis Machining at Messier-Bugatti

3 December 2009

Messier-Bugatti, a leading provider of aircraft braking systems, has switched to Delcam's PowerMILL CAM system to support its move into five-axis machining. Previously, Messier-Bugatti only had equipment with up to four axes. However, with the move to continuous five-axis machines, the company felt that it needed a more efficient CAM system to make the most of its new capabilities.

A SAFRAN Group company with a global workforce of 1,500 employees mainly based in France, the US and Singapore, Messier-Bugatti specialises in aeronautical braking systems and carbon brakes. The company has equipped more than 3,500 commercial aircraft. It has been an Airbus partner for more than 20 years and was recently selected to design, develop and manufacture the wheels and carbon brakes for the new A350XWB long-haul commercial jet. Messier-Bugatti is also an OEM supplier for Boeing, Bombardier and Dassault Aviation.

The Molsheim works in eastern France, where the PowerMILL seats have been installed, is the company's historical birthplace. It is now the production plant for wheels and brakes, hydraulic systems and equipment, as well as handling carbon-disk refurbishment for customers worldwide.

Production Manager Mr. Fonferrier and his team ran trials with PowerMILL on landing gear components and hydraulic manifolds. The results were so conclusive that the company bought the software in 2007. The most important factors in the decision were the flexibility offered by PowerMILL, together with the high efficiency of the resulting programs.

In addition, even though most of its parts are made of aluminium, Messier-Bugatti also machines

CIMdata PLM Industry Summary

titanium. This is a very demanding material, which requires high-quality toolpaths.

Stéphane Schneider, Manufacturing Process Engineer, described how the Delcam software has become a major asset for them. “We find it easy to import CATIA parts into PowerMILL, thanks to Delcam’s Exchange translation software,” he explained. “Then we create the programs within PowerMILL. Finally, we check the toolpaths in Vericut. If needed, we can modify any sections of the toolpaths quickly before machining the parts.”

Among the many advantages that PowerMILL bring to his work, he appreciates especially the control over the different high-speed machining strategies, the smoothness of the toolpaths and the significant reduction in the vibration of the parts during machining. As well as helping to maintain accuracy, this protects the tooling and the machines.

“Thanks to PowerMILL, the Messier-Bugatti team saves programming time and avoids programming errors by reducing the number of manual operations,” he added. “The [Delcam](#) support is very quick to respond, no matter what request we have. In fact, we have a very good relationship with the whole Delcam team.”

 [Click here to return to Contents](#)

el dorado inc. Uses Autodesk Software To Design Sustainable Kansas City Police Facilities

1 December 2009

Architects from el dorado inc., relied on [Autodesk Revit Architecture](#) 2008 and [Autodesk 3ds Max Design](#) 2010 software to help design a new automobile forensics center and vehicle impound facility for the Kansas City Police Department (KCPD). Product interoperability and lighting analysis features in 3ds Max Design helped the firm create sustainable designs that met strict Leadership in Energy and Environmental Design (LEED) certification requirements for both projects.

While the KCPD wanted a sustainable building for its forensics center, the top priority was the accuracy of its forensics work. This required a high level of light control, which was achieved using the lighting simulation and analysis tools in Autodesk 3ds Max Design modeling, animation and rendering software. The yet-to-be completed forensics center, is currently tracking toward a LEED Silver rating.

“We modeled the police forensics facility using Revit Architecture software,” said Steve Salzer, project architect at el dorado. “The ability to go straight into 3ds Max Design software for very quick daylight analysis was invaluable. We could experiment and test certain building features and technical details much earlier in the process, and the software made it almost seamless.”

“The combination of Revit Architecture and 3ds Max Design software also enabled us to show our clients the tangible benefits of proper design and building orientation,” added Dan Maginn, principal and project architect at el dorado.

The KCPD vehicle impound facility designed by el dorado achieved a LEED Gold rating from the U.S. Green Building Council. For this project, el dorado contracted the Architectural Energy Corporation to perform daylight analysis using models created in Autodesk Revit Architecture building information modeling software.

“The Kansas City vehicle impound facility is not just an industrial project,” explained Maginn. “The facility also has a very public face and a sizable number of employees. At el dorado, we are most interested in working on structures that are highly functional, but also offer a good experience for

workers, visitors, and owners. We're also very committed to sustainable design in all the work we do."

 [Click here to return to Contents](#)

Exar Corporation Selects Magma's Titan ADX to Accelerate Analog Design

3 December 2009

[Magma® Design Automation Inc.](#) announced Exar Corporation has adopted the Titan™ ADX analog migration and optimization software. Exar selected Titan ADX to enable circuit optimization and streamline analog design porting.

"For nearly 40 years, Exar Corporation has built a reputation for delivering differentiated analog/mixed-signal silicon that meets the technical and cost requirements of the communications, interface and power management IC markets," said George Apostol, senior vice president and CTO of Exar Corporation. "With its ability to shorten the analog design process and reduce power and area requirements, Titan ADX enables us to efficiently leverage our engineering resources to improve design performance."

"As analog content continues to rise in market-leading ICs, the analog design process must be accelerated and automated to enable designers to deliver the required combination of efficiency, productivity and innovation," said Anirudh Devgan, general manager of Magma's Custom Design Business Unit. "By making analog design modular, predictable and re-usable, Titan ADX takes the guesswork out of analog design and enables designers to achieve their time-to-market and performance goals."

Titan ADX: Streamlining Analog Design Optimization and Porting

Titan ADX, an integral part of Magma's Titan mixed-signal design platform, focuses on solving analog/mixed-signal design, optimization and porting challenges. The Titan ADX model-based approach allows circuit optimization and porting in a fraction of the time required by simulation-based techniques. The technology enables product groups to push the design envelope for extreme performance, to center the design for multiple process, voltage and temperature (PVT) corner cases, and to reduce power and jitter. In addition to providing an efficient and predictable method to store analog circuits, Titan ADX reduces design porting time from several weeks to days.

 [Click here to return to Contents](#)

Landing Gear Advanced Manufacturing Corporation in China Deploys MSC.Software's Engineering Analysis Solutions

1 December 2009

MSC.Software announced that Landing Gear Advanced Manufacturing Corporation ([LAMC](#)) in China has selected its engineering analysis solutions including [Nastran](#) and [Adams](#) to improve engineering and development of aircraft landing gear.

Developing complex, mission critical systems like [aircraft landing gear](#) is a multidiscipline challenge that requires that engineers can validate and optimize designs with speed - and absolute reliability. To arrive at optimal designs, LAMC engineers must consider many design derivatives and account for the complex interaction of various components in different application scenarios in every analysis.

"With MSC.Software solutions, we can gain a detailed insight into the dynamic behavior of the landing

CIMdata PLM Industry Summary

gears, and its overall performance in terms of structural reliability and safety,” said Mr. She Shi Qiang, Strength Test and Development Manager, LAMC. “MSC’s integrated, **multidiscipline** solution supports analysis of the behavior of the landing gear in all application maneuvers. This enables faster design cycles and reduces the time-to-solution cycle significantly while encouraging innovation by enabling studies of new designs.”

“MSC.Software has been a long-time contributor to the aerospace industry in Asia Pacific. Our partnership with LAMC will allow us to develop further expertise and contribute to the aerospace industry by providing innovative technologies,” said David Yuen, vice president and general manager, MSC.Software Asia Pacific.

“Our cooperation with LAMC further validates MSC.Software’s dominance in the aerospace industry. Landing gear applications are just one of the many specialized applications in the aerospace industry where MSC.Software has gained tremendous experience through close cooperation with leading aircraft and landing gear manufacturers around the world,” said Kevin Zhao, country manager for MSC.Software China.

 [Click here to return to Contents](#)

Oerlikon Solar Selects Intergraph(R) SmartPlant(R) 3D and P&ID Design Software

3 December 2009

Oerlikon Solar has selected Intergraph® SmartPlant® 3D and P&ID engineering design software to increase productivity and accelerate plant project completion. With business doubling in just two years, Oerlikon Solar outgrew its previous CAD 2D design software. To meet growth demands, the company chose SmartPlant 3D, Intergraph's next-generation, data-centric 3D design system combined with SmartPlant P&ID. [Oerlikon Solar](#) will use SmartPlant 3D and P&ID for end-to-end manufacturing lines for the mass production of thin film silicon solar modules. The end-to-end production lines are complete systems, yet modular and upgradeable in both throughput and process technology.

Customers using SmartPlant 3D typically realize 25- to 35-percent initial increases in productivity compared to other systems, higher quality deliverables and shorter schedules.

"After realizing the limitations of our previous design system, we expect to have measurable improvements in the quality of our designs with SmartPlant 3D and P&ID," said Orlando Derungs, project manager Fab Engineering & Planning for Oerlikon Solar. "Our growth necessitates that we maintain a more organized and productive design environment, and we look forward to working with [Intergraph](#) to improve our Basic and Detail Engineering."

 [Click here to return to Contents](#)

Peugeot Sport Selects HyperWorks Suite to Streamline Development Processes of LMP1 Race Car

30 November 2009

[Altair Engineering, Inc.](#) announced that Peugeot Sport, the racing department of the Peugeot brand, has chosen the HyperWorks Suite to optimize composite development processes.

"A major reason to choose the HyperWorks Suite is the user friendliness of HyperMesh, especially for the creation of composites models," said Livio Galassi, composite design engineer and structure analyst at Peugeot Sport. "The interface is very intuitive and easy to learn. Furthermore, I see many great

CIMdata PLM Industry Summary

improvements in the area of composite model creation and optimization in the recent version of the software suite. This new approach allows us a faster and more efficient design of composite parts."

Peugeot Sport is using HyperMesh, the pre-processor of the suite; OptiStruct for optimization; and HyperView for the post-processing of the data. The software suite is mainly used to design and optimize structural elements in composites, i.e., for the chassis and bodywork of Peugeot's LMP1 car. Especially in racecar development, a flexible and fast way to evaluate the design of composite parts is essential to improve the overall car performance.

"Another important reason to choose HyperWorks is the flexible license system Altair offers," said Galassi. "We can use the [HyperWorks](#) units we already have for any HyperWorks application needed and can also use them for Altair's partner products of the HWEC (HyperWorks Enabled Community). Even if we haven't done this yet, it is an option we are thinking about as it will help us to consolidate our software costs. Moreover, Altair's customer support and the customer communication with its homepage, newsletter and events is excellent,"

"We appreciate [Peugeot Sport](#)'s selection of HyperWorks," said Mauro Guglielminotti, managing director Altair, France. "The motorsport and the aerospace industries are the leaders in composite design, but it does get used more and more in every industry that is looking to produce lighter and better products. With the HyperWorks suite, we offer the right tools to optimize composite development processes, a solution that wins growing acceptance throughout all industries."

 [Click here to return to Contents](#)

PROSTEP Awarded Multi-Million-Euro Contract

November 2009

PROSTEP has been awarded a contract by Airbus. Within the framework of this contract, the company will assume responsibility for the integration of digital mock-up (DMU) data for the A380, long-range and single-aisle aircraft programs as an external service provider. Integration will be performed at the Airbus facilities in Toulouse, Hamburg and Bremen by a number of teams comprising both PROSTEP experts and employees from partner companies. The project is slated to run for two and a half years.

The large contract is a continuation of the long-standing collaboration between the two companies with regard to DMU integration during development of the Airbus A380. "Our job is to ensure the completeness and quality of the digital mock-up in the development process of the customer-specific aircraft", stresses Dr. Markus Sachers, managing director of PROSTEP ITS GmbH, which is part of the PROSTEP Group and focuses primarily on customers in the aerospace and shipbuilding industries. "This represents a considerable expansion of our previous area of responsibility."

PROSTEP has been providing a number of services to Airbus, EADS and their suppliers for some time now. [PROSTEP](#) is also an equal partner in the joint venture CenProCS AIRliance GmbH, which has been a prime contractor for EADS with regard to IT application services for a number of years. This means that all Airbus facilities can make direct use of PROSTEP's services.

 [Click here to return to Contents](#)

Ricardo Adopts Windchill® to Manage Global Engineering Processes

1 December 2009

CIMdata PLM Industry Summary

[PTC](#) announced that Ricardo, a leading provider of technology, product innovation, engineering solutions and strategic consulting to the world's automotive industries, has adopted Windchill® for product lifecycle management (PLM). Windchill, the PTC® PLM software solution, enables designers to manage any type of product data – including mechanical, electronic and software data within the product development life cycle. The use of Windchill will enable Ricardo to improve collaboration across global engineering teams and manage many differing types of product information, including models designed in multiple CAD tools, across all their international locations.

Headquartered in the UK, Ricardo has offices in the USA, Germany, Czech Republic, Russia, Japan, India and China. With all of these disparate locations, getting control of product information on an international scale is imperative. Ricardo has implemented Windchill to manage all CAD data for its 4 primary CAD systems across the USA, UK, Czech Republic, Germany and China. Further planned implementations of Windchill include collaborative engineering as well as change and configuration management.

“Historically, when Ricardo first bought Pro/ENGINEER® in the early 1990s we were on one site in one country and were a relatively small 250 person company,” says Martin Hill, Vice President, Ricardo, Prague. “We are now 1600 people in several countries and managing design information and communication becomes increasingly difficult without PLM. Implementing a common product development infrastructure based on Windchill will increase efficiency and improve collaboration across disparate sites, ultimately helping us to shorten time to market and deliver higher quality products.”

Windchill will be used on all design projects whether the product is a new or an existing product in need of redesign or refurbishment. The project managers and the chief engineers will have much better visibility of drawing and models status and the system will significantly improve Ricardo's ability to manage and deliver their projects on time and to budget.

"Ricardo is a very successful automotive engineering consulting firm with significant client impact worldwide," says Sin Min Yap, Director, Product and Market Strategy at PTC. "PTC's strength in managing complex data in a distributed environment is critical for automotive clients like Ricardo. The integral and flexible architecture of Windchill enables clients to support global multi-sites product development team effectively, and help streamline and optimize key product development processes."

About Ricardo

Combining business, product and process strategy with fundamental technical research and the implementation of large-scale new product development programmes, Ricardo is able to take on the greatest challenges in the industry including business strategy and restructuring, process re-engineering, vehicle, engine, transmission and driveline design, engineering, testing and systems integration.

 [Click here to return to Contents](#)

SHP Leading Design Earns Autodesk BIM Experience Award

3 December 2009

[Autodesk, Inc.](#) announced that [SHP Leading Design](#), a multidisciplinary architectural design and engineering firm based in Ohio, has been selected to receive an [Autodesk BIM Experience Award](#) for its industry-wide advocacy of [building information modeling](#) (BIM) as a process, and its extensive use of BIM for integrated design and construction, sustainable design and facilities management.

The award also highlights the firm's more than 150 BIM process-based projects to date, as well as its

CIMdata PLM Industry Summary

work with educational clients such as the Southern Baptist Theological Seminary and Indiana University.

“With BIM we can develop projects that are extremely well integrated and coordinated, substantially increasing our efficiency and lessening construction time,” said Dick Thomas, vice president, SHP Leading Design. “Our commitment to BIM, use of an extensive set of Autodesk software for BIM, and our requirement that our consultants use Autodesk Revit platform software help make it possible for us complete projects on time and on budget.”

Exemplary Application of BIM for Educational Clients

In addition to SHP Leading Design’s BIM-based general body of work, the award also highlights two noteworthy educational client projects: the \$6.3-million Welcome Pavilion project for the Southern Baptist Theological Seminary in Louisville, Kentucky, and development of the *Building Information Modeling (BIM) Guidelines and Standards for Architects, Engineers and Contractors* for Indiana University.

For the Southern Baptist Theological Seminary the goal was to create an updated facility where visitors and new students could obtain information and orient themselves with campus beliefs and ideals. Translating this need, the firm restructured the architecture of the main building, turning it into a Welcome Pavilion to honor the Seminary’s 150th anniversary. The focal point of the Pavilion is the 30-foot-wide by 40-foot-tall dome that includes a new reception hall and security offices. The project entailed the renovation of existing facilities, including the development of the institution’s admissions and events planning offices, as well as upgrades to the dining area, coffee shop, men’s clothing store and campus bookstore. A new landmark tower and entry gatehouse with prominent landscaping were also part of the new construction scope.

SHP Leading Design effectively applied a BIM process to complete the construction and renovation work in the remarkable time frame of less than one year. To meet the aggressive project timeline, SHP’s architectural designers, and the project’s mechanical, electrical, and plumbing (MEP) and structural engineering consultants, collaborated using [Autodesk Revit Architecture](#), [Autodesk Revit Structure](#) and [Autodesk Revit MEP](#) software. The team used [Autodesk Navisworks](#) software to create a single 3D digital model for clash detection, to help keep costly field change orders to a minimum and sustain an aggressive construction schedule. Another key to the success of this project was the use of an integrated design and construction practice model developed by 2enCompass (a design-build joint venture involving SHP Leading Design and its construction partner Messer Construction). SHP Leading Design, Messer Construction Company and all of the design consultants employed the 2enCompass model along with an integrated project delivery (IPD) approach to foster shared stakeholder responsibilities, and to help increase design and construction accuracy to reduce financial risk for their client.

Early this year, Indiana University commissioned SHP Leading Design to develop “[BIM Standards](#)” for the institution. The objective was to create an approach for moving the institution and the marketplace from one set of delivery models to a new set built on the foundation of BIM. The new BIM Standards will initially be applied to future Indiana University projects of \$5 million or more. By mid-year 2011 all projects at any scale will be produced per the guidelines.

Founded in 1901, SHP Leading Design is a multidisciplinary design practice with 135 employees and three offices in Ohio. The firm offers planning, architecture, interior design, engineering, construction administration and facilities management services. SHP adopted a BIM process in 2005. In addition to Autodesk Revit Architecture, Autodesk Revit MEP, Autodesk Revit Structure and Autodesk

CIMdata PLM Industry Summary

Navisworks, the firm also uses [Autodesk Ecotect Analysis](#), [Autodesk 3ds Max Design](#) and [AutoCAD](#) software. Louisville, Kentucky-based [Advanced Solutions, Inc.](#) (ASI) provides Autodesk software and implementation support to SHP Leading Design.

The Autodesk BIM Experience Award recognizes professionals and educators around the world who are helping to drive industry transformation through building information modeling. Autodesk honors organizations for their innovation, leadership and excellence in implementing BIM with the help of core BIM products, including one or more of the Autodesk Revit platform products, and/or [AutoCAD Civil 3D](#) software, and other Autodesk products that complement the BIM process, such as AutoCAD software.

 [Click here to return to Contents](#)

SolidWorks Customer BUB Racing Recaptures Motorcycle World Land Speed Record

30 November 2009

Dassault Systèmes SolidWorks Corp. (DS SolidWorks) customer Denis Manning and his BUB Enterprises racing team have set the motorcycle world land speed record, recapturing a title Manning has now held three times since 1970.

The missile-shaped motorcycle, designed in SolidWorks® CAD software and optimized in SolidWorks Simulation software, broke the previous record by a margin of more than 8 mph. Piloted by Chris Carr, the BUB Racing Streamliner officially clocked in at 367.382 mph on Thursday, Sept. 24, 2009 over a measured mile at the hallowed Bonneville Salt Flats in Utah (see video: <http://is.gd/3Qw8d>).

“The last thing we did before the run was make an eighth-inch change to the aerodynamics, and that made all the difference,” said Manning, CEO of BUB Enterprises. “The data was telling us the nose was trying to dive, so we raised it up and it worked. Our new alcohol-fueled V4 engine put the record within reach.”

Manning set his first motorcycle land speed record in 1970, and his team has since traded the record with opponents. As his Streamliner designs grew increasingly sophisticated, the BUB team realized it needed to use advanced mechanical design, simulation, and manufacturing technologies to stay ahead of its competitors.

“Until recently, going really fast basically required money,” Manning explains. “Breaking the record used to be pretty much, ‘Gentlemen, start your checkbook.’ Now it’s, ‘Gentlemen, start your gray matter.’ The designs that have a legitimate shot at speeds over 350 mph require a whole new level of engineering know-how and technology like SolidWorks helps deliver. CAD is our virtual prototyper, and Simulation is our crystal ball.”

BUB selected SolidWorks because it helps the team easily transform ideas into reality and successfully confront its steepest technical challenges. “SolidWorks software helped lower the bar for us to accomplish this record,” said Manning. “Because of the design and simulation tools, we no longer had to build and smash the bike a few times, or blow an engine, before we were ready for a record attempt. We knew the numbers, we knew how to do this, and we set the record again.”

BUB also uses [SolidWorks](#), including its Flow Simulation software, to design and analyze its BUB commercial exhaust systems. BUB Enterprises relies on authorized SolidWorks reseller GoEngineer for ongoing software training, implementation, and support.

 [Click here to return to Contents](#)

Technia Delivers PLM Solution to the Electric Power Producer OKG

11 November 2009

Technia has signed an extended agreement valued at more than SEK 14 M with their existing customer OKG. The agreement extends over 2010 and comprises the delivery of an ENOVIA PLM Solution from Dassault Systèmes, with corresponding services and maintenance agreement. The agreement pertains to an extension of OKG's existing PLM solution that Technia implemented in 2008. The new implementation will replace five of OKG's legacy systems. With this order Technia continues to show its PLM leadership in the Energy& Process industry.

OKG is one of Kalmar County's largest employers with approximately 900 employees. OKG is placed on the Simpevarp half island, 30 km north of Oskarshamn. Located here are three of Sweden's nuclear power reactors; the Oskarshamn works 1, 2 and 3 - that OKG owns and runs. The reactors are called O1, O2 and O3 in common language. By producing ten percent of Sweden's electricity OKG is one of the largest suppliers of electricity and base power to the Nordic electricity net.

The solution from Technia will replace five of OKG's present legacy systems. OKG's PLM solution gathers and systemizes all relevant information regarding equipment, specifications, service contracts and spare parts into one system. The information is updated when improvements and current maintenances of the facility are carried out. Moreover, there are high requirements from the authorities concerning safety and environmental regulations and therefore the ability to get access to the right information at the right time is a necessity for safe operations and less production stops. There is also the dilemma of highly skilled workers going into retirement, thus invaluable knowledge is leaving the company with them. This puts not only future investments at risk, but also jeopardize quality control and regulatory requirements. The PLM-solution deals with this problem.

"This agreement is an extension of the assignment Technia received from OKG for project phase one in the beginning of 2009. We are very pleased with Technia's performance and therefore we are signing this agreement for project phase 2 that extends over 2010", says Ramona Hunt, Manager Information Management, OKG.

"I'm very pleased and proud of that OKG gave Technia its continued confidence. OKG is a very important customer for us in the Energy & Process segment", says Ylva Berg.

 [Click here to return to Contents](#)

Terex Selects Zuken as Vendor of Choice for Electrical Design

19 November 2009

Terex Corporation, a global manufacturer of construction and mining equipment, has named Zuken as its preferred supplier of electrical design software. The decision was based on a combination of [E³.series](#) technical functionality and Zuken's global support network.

E³.series, Zuken's software solution for the engineering of complex systems includes design tools for electro-mechanical, pneumatic, hydraulic, cabling and wiring harness applications. E³.series' overall ease of use enables new users migrating from other systems to minimize ramp-up time. E³.series will be adopted globally across Terex and will help integrate the company's manufacturing processes to realize

operational synergies.

Zuken offers a worldwide support profile that facilitates the roll out of this highly flexible, modular, electrical design software, providing a single common library, easy to use, enterprise-wide solution. By providing global licensing, along with a worldwide product support and training program, Zuken was able to meet the diverse needs of this global company.

Dr. Suresh Natarajan, Global Director, Electrical Systems for Terex, states, "In addition to showing their technical superiority during the search, Zuken's business structure will support our own internal efforts to become one Terex."

To find out more about E³.series go to www.zuken.com/e3series or for further details on Terex please visit www.terex.com

 [Click here to return to Contents](#)

Product News

ANSYS Releases Ansoft Designer with Nexxim 5.0 Software

2 December 2009

[ANSYS, Inc.](#) announced its Ansoft Designer® 5.0 and Nexxim® 5.0 products. This engineering simulation platform and integrated technology supports Simulation Driven Product Development™ of electronic products. Powerful new features have been added to these latest versions that compress the electronic design and analysis cycle. For example, links with ANSYS® DesignXplorer™ software enable design of experiments, sensitivity studies and six-sigma design. Additionally, a distributed-solve high-performance computing (HPC) capability has been added that allows engineers to analyze process variations within a full signal integrity (SI) analysis across a network of computers. For radio frequency (RF) and microwave design, Ansoft Designer 5.0 with Nexxim 5.0 feature a new system simulation engine that allows engineers to simulate entire wireless systems while linking to highly accurate transistor and electromagnetic models.

The Ansoft Designer 5.0 and Nexxim 5.0 suite also offers new product packaging that customizes and streamlines Ansoft Designer and Nexxim simulation technology into application-specific software tools for engineers focused on signal integrity analysis or RF and microwave design. The new packages, named DesignerSI™ and DesignerRF™, integrate technology from Ansoft Designer and Nexxim into application-specific engineering platforms that are easy to use and straightforward to acquire.

The DesignerSI package includes the Ansoft Designer integrated schematic capture and layout graphical user interface (GUI), 2-D quasi-static field solver and the Nexxim circuit simulation technology (transient, fast convolution, statistical, and IBIS-AMI). DesignerRF includes the Ansoft Designer desktop, 3-D planar electromagnetic field solver, RF system simulation tool, design synthesis tools, circuit simulation, powered by Nexxim (linear and nonlinear frequency domain). Both packages include a powerful design management front end for the Ansoft best-in-class electromagnetic field simulation technologies HFSS™, Q3D Extractor® and SIwave™ software.

"In the electronics industry, driving product development with engineering simulation is a key strategy to develop more innovative products, to lower development and manufacturing costs, and to accelerate time to market," said Zol Cendes, chief technology officer and general manager at Ansoft. "By adding these powerful new features and introducing new packaging, we can deliver application-specific

CIMdata PLM Industry Summary

simulation technology for engineers wanting to perform signal integrity analysis and RF and microwave system design.”

Brocade Communications Systems, Inc., based in the United States, uses Ansoft Designer and related products in developing technologies that enable highly reliable and secure data center connectivity. “Designer SI software mitigates limitations imposed by the proprietary nature of high-speed serial silicon intellectual property by providing a robust IBIS-AMI solution. Not only does the package address the need for high-speed serial architectures, it continues solving more common SI problems by providing one design environment for all circuit simulations, whether it be transient, statistical or IBIS-AMI. By understanding tomorrow’s signal integrity challenges, Ansoft has been able to take a leadership role in providing solutions that overcome today’s obstacles,” said Shahriar Mokhtarzad, manager, hardware engineering at Brocade.

The DesignerSI product suite is ideal for engineers designing high-speed electronic interfaces including XAUI™, XFI, Serial ATA, PCI Express™, HDMI™, DDR, DDR2 and DDR3. Engineers using DesignerSI can leverage its optimization algorithms, design of experiments, tuning and post-processing capabilities for key signal-integrity metrics, such as time-domain reflectometry (TDR), bit-error-rate (BER), timing analysis and eye diagrams. All SI analyses can dynamically link to rigorous electromagnetic extraction. New signal integrity analysis features include:

- IBIS-AMI simulation: fully supports the latest IBIS standard, enabling fast behavioral modeling of electronic systems with silicon vendor-supplied driver and receiver models
- QuickEye™ and VerifEye™ enhancements: separate rise/fall step responses, step response parallel processing, improved BER noise floor and enhanced jitter algorithms
- Design of experiments: large data handling, statistical eye plotting and text array variable support
- Reporter improvements: statistical eye, mixed mode reporting and network data explorer enhancements
- Model enhancements: S and W elements wizard, MATLAB™ models, S model caching and multi-source components

The DesignerRF product suite is tailored to the needs of engineers who design radio frequency integrated circuits (RFICs), monolithic microwave integrated circuits (MMICs), wireless transmission, system-on-chip (SoC) and other RF and microwave devices. New enhancements for RF and microwave design include:

- System simulator integrated in circuit design with baseband and envelope simulation of advanced communication systems
- Filter synthesis tool that generates ideal and physical filters for circuit and EM tools
- Library expansion through downloadable vendor libraries as well as physical library expansion along with the latest active industry models
- EM improvements with design hierarchy, post-processing variables, thick conductor Q enhancements, and parametric snapshot improvements with dynamic links

 [Click here to return to Contents](#)

ArchiCAD 13 Greek Version Released

26 November 2009

[GRAPHISOFT](#) announced that the Greek version of ArchiCAD® 13 has been released.

The Greek version is the 20th in the release schedule after the already released International, German, US, Australian, New Zealand, French, Italian, Austrian, Hungarian, Finnish, Russian, Norwegian, Swedish, Japanese, Spanish, Portuguese, Dutch, Polish, and Czech versions of ArchiCAD 13. For more information, please visit www.topsware.com. Other localized versions will be released during the fall.

Shipping starts on November 26.

 [Click here to return to Contents](#)

BlueCielo Ships InnoCielo 2009a Engineering Content Management Suite

2 December 2009

[BlueCielo](#) ECM Solutions announced that it has released the InnoCielo 2009a product family consisting of InnoCielo Meridian Enterprise 2009a, its optional modules and InnoCielo TeamWork 2009a.

InnoCielo Meridian Enterprise provides industry-specific engineering content management solutions for companies looking to optimize the management of their production assets, including plants, production facilities and infrastructure.

The InnoCielo 2009a release extends the functional themes introduced in the 2009 version. The main enhancements are related to remote engineering and the integration of AutoVue 2D and AutoVue 3D. The InnoCielo 2009a release also includes support for the latest version of Autodesk products such as AutoCAD and Autodesk Inventor, as well as MicroStation and SolidWorks.

InnoCielo Meridian Enterprise 2009a provides fully functional pre-configured management of change functionality. More advanced management of change functionality is available through the InnoCielo Advanced Project Workflow module, which supports complex project workflow and concurrent projects.

The following modules that can be added to expand specific functionality in InnoCielo Meridian Enterprise are available with this release:

- InnoCielo Email Management 2009a
- InnoCielo Asset Management 2009a
- InnoCielo Transmittal Management 2009a
- InnoCielo Advanced Project Workflow 2009a
- InnoCielo Global Collaboration Framework 2009a
- InnoCielo Publisher 2009a
- InnoCielo Explorer 2009a

 [Click here to return to Contents](#)

BSD Announces BIM Linking Solution

1 December 2009

Building Systems Design, Inc. (BSD) announced the simultaneous release of its latest specifications software and the Beta release of software designed for interoperability with Autodesk's Revit. BSD SpecLink-E (SLE) is the successor to BSD's BSD SpecLink+ software currently being used by thousands of design professionals nationwide to produce specifications for over 25,000 commercial, industrial, and institutional projects annually. BSD LinkMan-E (LME) is a brand-new linking product that has been designed from the ground up to work with SLE.

SpecLink-E participates in the building information modeling (BIM) process through integration with CAD environments such as Revit Architecture 2009 and 2010 via LinkMan-E, which acts as a communications conduit and an integration manager. With LinkMan-E and SpecLink-E in place on the same computer or the same network, relevant project data can be transferred in both directions between the CAD environment and the specifications environment. LinkMan-E is designed for use by a project manager to review and coordinate data on the same project from all connected applications. Dashboard views show the status of objects in each of the linked applications, and LME can also be set to "turn on" any missing products in the SpecLink-E application, based on data from Revit.

In addition to its BIM linking ability, SpecLink-E has been equipped with many new features that build on the success of its predecessor, BSD SpecLink+. For example, its database can be collapsed or expanded to produce outline, short form, and full construction specs without the need to maintain separate documents for various phases of a project. It has also been designed to allow real-time updating of its master database over the Internet at any convenient time. Updates to the individual user's client software take advantage of Microsoft technology called ClickOnce installation. This allows the client software on each user's computer to update itself automatically from a central location on the network once the site manager decides to make the update available to users at that site. As with the previous generation SpecLink+ software, data updates to SLE will not overwrite user modifications in any existing projects, including so-called "office master" projects, because of SLE's unique database structure. Project-specific information entered by a user is stored in separate project overlay tables that are automatically merged with the master database content when a project is viewed or printed.

SLE is now available to new customers and can be installed by current BSD SpecLink+ subscribers at no additional cost. The LME software is available to current customers who wish to participate in the beta test. Initial general release of BSD LinkMan-E is scheduled for March 2010.

[Building Systems Design](#) offers innovative software tools for the architecture, engineering, and construction markets of North America. Founded in 1983, the company creates, maintains, and supports advanced cost estimating and specification writing products used for thousands of projects annually.

 [Click here to return to Contents](#)

CFdesign's New Autodesk Revit Integration Gives Architecture and Design Engineers The Power of Performing AEC and MEP Design Studies

1 December 2009

Blue Ridge Numerics, Inc. announced the full integration of CFdesign 2010 with Autodesk Revit. This development allows architecture and MEP engineers for the first time to run computational fluid dynamic (CFD) studies seamlessly from the Revit environment. Previously, traditional CFD software

CIMdata PLM Industry Summary

presented too many technical and time consuming barriers to be used by engineers at AEC firms.

CFdesign provides a straightforward flexible workflow with full associativity to the Revit model. This integration means Revit users won't have to export/import their models. Now real world validation can be conducted on models at their desktop to understand how design changes can help achieve environmental objectives and energy certifications.

“The CFdesign and Autodesk Revit integration opens new doors for AEC firms. Never before have architecture and MEP engineers been so empowered to look at multi-scenario comprehensive fluid flow and heat transfer studies that seamlessly integrate with the Revit environment,” explains Derrek Cooper, product manager, Blue Ridge Numerics. “CFdesign 2010 enables engineers to quickly create and compare different models and make important design decisions early in the development process. AEC firms now have the ability to offer their customers more effective design options with greater efficiency and with less risk.”

With CFdesign architecture and MEP engineers can both validate and explore their Revit models for thermal comfort, energy audits, solar loading, smoke egress/ LMA, occupancy safety, and external wind loading. In addition, CFdesign allows you to perform simulations for data center cooling and clean room design.

To learn more about how CFdesign can help with architectural engineering [click here](#).

To learn more about Autodesk Revit products [click here](#).

 [Click here to return to Contents](#)

Delcam Adds Parasolid Kernel to PowerSHAPE CAD Software

1 December 2009

Delcam has reinforced the solid modelling ability of its PowerSHAPE CAD software by incorporating the Parasolid kernel alongside its well-established surface modelling operations. The new version will offer significant benefits both to designers that undertake conceptual design with PowerSHAPE and to toolmakers that use the software for data translation and tooling design. Full details, including video demonstrations of the new functionality, are available at <http://www.delcam.tv/powershape2010>.

Delcam has been developing its surface modelling technology for more than 30 years. This long history has given PowerSHAPE ability to design and edit the most complex shapes. The addition of the Parasolid kernel will give equal strength in the development of history-based geometric models.

The combination of the two technologies is especially important for designers of plastic products and housings. These frequently need surface modelling to create an attractive external shape but require solid modelling to generate the more geometric internal features, such as reinforcing ribs and bosses for fixing.

A similar mix of technology is needed for tooling design. Surface modelling is essential to undertake detailed operations like creating and adjusting split lines. History-based solid modelling can even be a disadvantage at this stage because it can become difficult to change a single fillet radius or draft angle without affecting other parts of the model.

Solid modelling really comes into its own when the designer moves from creating the core and cavity into building the rest of the tool. Most of these other components are made up from simpler prismatic shapes and the Parasolid kernel is the acknowledged leader for this type of design work. Delcam's

implementation of this technology within PowerSHAPE will give both faster creation of the initial design and much quicker regeneration of the complete design following any modifications.

The addition of Parasolid will also enhance Delcam's Power Features technology. Components that contain Power Features react automatically as they are placed within an assembly, adding all the necessary fit-features to the connecting components. As each part is added, the tolerances between the various components are also defined automatically. This automatic creation of relationships makes the development of the overall design much quicker than other CAD systems and also makes errors in the design process far less likely.

The new release of PowerSHAPE will also provide an extremely flexible method for translating data from other software into the Parasolid format that can be read directly into programs including SolidWorks, Solid Edge and Siemens NX. The ability to import poor-quality data has been one of PowerSHAPE's main strengths for many years and one of the key reasons why the software has become so popular with toolmakers and other subcontractors. In the new version, users will be able to apply all of PowerSHAPE's tools to correct common problems with files, including inaccurate trimming, poorly-matched surface edges, missing fillets and duplicated surfaces. Then, the repaired file can be output as a fault-free Parasolid file.

 [Click here to return to Contents](#)

Delcam's New FeatureCAM 2010 on Video

4 December 2009

Delcam has created a special section of its Delcam.TV online TV channel covering enhancements in the 2010 version of its FeatureCAM feature-based machining software. This includes videos highlighting all the important new features in the latest release, including demonstrations of the much faster calculation times and the novel combination drill/mill functionality. The latest customer testimonials can also be viewed. The new area can be seen at <http://www.delcam.tv/featurecam2010>.

The main development in the 2010 version to make FeatureCAM even quicker is support for multi-threading when generating 3D toolpaths. This allows calculations to be spread across multiple cores in dual- or quad-core computers. Average time savings are around 25% on a dual-core PC.

The combined drilling and milling functionality allows more efficient hole creation on machines fitted with automatic tool changing. It generates roughing and finishing toolpaths to produce any holes for which the appropriate drill is not loaded, using the existing tooling within the machine's crib.

The new option is much faster than having to change the tooling available to match the set of hole sizes in each job, especially for companies manufacturing prototypes or short-run components. It will allow complex parts to be produced more easily in cases where the range of hole sizes is larger than the number of positions in the crib. In addition, the number of different tools that need to be stocked can be reduced and it will be much simpler to move jobs between different machine tools.

Companies that do not have automatic tool changing on their machines can also benefit. In some cases, it will be possible to use a combination of drilling and milling with a single cutter to generate all the holes in the part. This could then allow the complete sequence to be run without the machine needing to be manned and without interruptions to change the tooling.

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

Design Professionals Hit The Jackpot With New NVIDIA Quadro Graphics Solutions For Autodesk Applications

1 December 2009

NVIDIA Corp. launched new [Quadro® professional graphics solutions](#) for desktop and mobile workstations, designed to boost productivity and enhance creativity of 3D design professionals running Autodesk applications.

Optimized and certified for AutoCAD, 3ds Max and other Autodesk software, the new offerings include:

NVIDIA® [Quadro® FX 380 LP](#) low profile entry-level graphics solution

The most affordable and flexible Quadro professional graphics solution, with an MSRP of \$169 (USD), is perfect for design professionals moving from 2D to 3D

Best-in-class performance increases productivity with up to a 10X acceleration in AutoCAD 2009 versus consumer graphics cards¹

512 MB of graphics memory enables designers, animators, architects and engineers to create and interact with more complex models and scenes while increasing visual quality

Low profile design easily fits into small form factor desktop systems

EnergyStar compliant, ultra-low 28W maximum power consumption

Meets stringent performance and reliability requirements for business critical applications

NVIDIA [Quadro® FX 3800M](#) and [Quadro® FX 2800M](#) mobile workstation solutions

Ideal for demanding design professionals on the go

Delivers the highest level of graphics performance in the new Dell Precision M6500 17-inch mobile workstation

Features up to 128 CUDA™ cores for massively parallel computational graphics

Delivers 30-bit color accuracy for display of over one billion colors

1 GB dedicated graphics memory enables efficient manipulation of larger data sets in graphics-intensive 3D applications, such as Autodesk Revit Architecture, Inventor and Moldflow

Combines high-performance graphics with high-performance computation to enable real-time ray tracing, interactive volume rendering, and the fastest video encoding available in a mobile workstation

PowerMizer® 9.0 intelligent power management technology for extended battery life while maintaining optimal performance

At the NVIDIA booth, as well as the HP and Dell booths, Autodesk University attendees can experience the range of Quadro solutions built for professionals to do their jobs more efficiently, with greater precision, and with higher levels of creativity.

Additional demonstrations include:

The [NVIDIA® RealityServer®](#) platform, featuring mental images® iray® technology for 3D cloud computing that enables the streaming of interactive, photorealistic 3D applications to any web connected PC, laptop, netbook or smart phone

[NVIDIA Quadro Plex](#) scalable visualization solutions, featuring [NVIDIA 3D Vision™](#) technology to

CIMdata PLM Industry Summary

create immersive and collaborative design review environments;

Cutting-edge digital prototyping with [NVIDIA CUDA](#)-based Autodesk Moldflow software;

[NVIDIA “Built for AutoCAD Professionals”](#) Dell Precision T1500 desktop workstation demonstration, featuring the NVIDIA Quadro FX 580 professional graphics solution

Quotes:

“Leveraging the massively parallel CUDA computing architecture, the new NVIDIA [Quadro® FX 3800M](#) and [Quadro® FX 2800M](#) graphics solutions transform the Dell Precision M6500 into a high performance mobile workstation that’s ideal for the most demanding 3D design professional.”

- Shawn Worsell, product manager, NVIDIA Professional Solutions Group

“The new NVIDIA [Quadro® FX 380 LP](#) is the most affordable 512MB professional graphics solution on the market. Despite its small size and ultra-low power consumption, it delivers best-in-class performance and over twice the speed of consumer cards when running professional applications.”

-Jeff Brown, general manager, NVIDIA Professional Solutions Group

“NVIDIA Quadro professional graphics cards—that’s what you want, and that’s what you need if you want to see AutoCAD running properly.”

-Lynne Allen, Autodesk Evangelist

Useful Links / Videos:

[NVIDIA at Autodesk Univ.](#)

[Hardware Recommendations for AutoCAD, incl. the Dell T1500—Lynne Allen](#)

[New NVIDIA Quadro® FX 380 LP “Built for Professionals” low profile desktop system graphics solution](#)

[New NVIDIA Quadro® FX 3800M, 2800M professional graphics solutions options for new Dell M6500 mobile workstation](#)

[NVIDIA Quadro Professional Solutions](#)

[NVIDIA Quadro “Built for Professionals” information](#)

[↑ Click here to return to Contents](#)

ESI Announces the Sheet Metal Forming Simulation Suite Version 2009

3 December 2009

[ESI Group](#) announced the release of its [Sheet Metal Forming Simulation Suite](#) Version 2009, including [PAM-STAMP 2G](#) and [PAM-TUBE 2G](#). Dedicated to all engineers involved in the Sheet Metal Forming process, the main objective of the simulation suite is to significantly shorten time to market by allowing users to make fast decisions from an early stage of the design right through to production in a continuous improvement process and within a collaborative environment.

[PAM-STAMP 2G](#), [ESI](#)’s complete and integrated streamlined stamping solution, covers the entire tooling process and provides a trade-oriented application for Automotive, Aerospace, and general Sheet Metal Forming applications.

While [PAM-STAMP 2G](#) Version 2009 keeps on improving the accuracy of the simulation with precise

CIMdata PLM Industry Summary

springback results and capabilities extension, this latest release includes several new process simulations, such as:

- * Rollhemming, enabling the simulation of the real robotic roller movement;
- * Superplastic forming;
- * Buckling analysis for stamping process instability analysis.

In addition, as well as offering a number of optimization tools including Blank outline optimization, Trim line optimization and Die compensation which drastically reduce cost and time, [PAM-STAMP 2G](#)'s performance has been improved thanks to the set-up simplification through automatic tools, multi-layer material dedicated set-up and new post-process functionalities.

[PAM-TUBE 2G](#) Version 2009 also hosts a variety of enhancements based on users' feedback from the last version, among which:

- * Design of the pre-forming tools, providing the end-user with a more complete end-to-end solution for complicated hydroforming parts;
- * Functionalities improvements and simplifications in Tubemaker, such as a true one-click solution for the addendum creation;
- * Interactive creation of tailored tube as well as the subsequent simulation through all stages for bending and hydroforming to meet the growing demand for special parts with tailored material and/or thickness;
- * Automated bending macro creator to simulate multi-stage processes;
- * Support for 3 new variations of bending: stretch-, press- and freeform bending.

The [Sheet Metal Forming Simulation Suite](#)'s latest release thereby offers an accurate and realistic modeling tool for tube forming simulation, which includes an intuitive pre-processing module leading the user through process design in order to ensure better forming results.

“The most significant state-of-the-art physical parameters identified by PSA’s hemming specialists were integrated into PAM-STAMP 2G,” said Patrice Auger, R&D Manager for Assembly processes PSA-Peugeot-Citroën. *“Validated through real-life industrial cases, this new tool has quickly become essential to guarantee successful product definition and process reliability.”*

“The enhancements within PAM-STAMP 2G Version 2009 represent a significant advancement in the software’s modeling capabilities. The usage of simulation for predicting new industrial processes is also enlarged thanks to the set up focusing on real industrial data,” said Caroline Borot, Sheet Metal Forming Product Manager, ESI Group. *“Those benefits, coupled with continuous improvements in our core strengths which are stamping accuracy and springback prediction, deliver great value to ESI’s customers”.*

For more information, please visit: www.esi-group.com/products/metal-forming



[Click here to return to Contents](#)

ESI Releases the PAM-CEM Simulation Suite Version 2009

1 December 2009

[ESI Group](#) announced the release of the 2009 version of its [PAM-CEM](#) software package for Computational Electromagnetics.

The PAM-CEM Simulation Suite offers industrial coupling capabilities to fully address realistic models in their early design stage and to assess real electromagnetic multi-scale phenomena occurring in the middle and high frequency ranges. A major benefit to end users is PAM-CEM's ability to handle fully

CIMdata PLM Industry Summary

equipped 3D models featuring on-board complex antennas, as well as realistic cable networks.

PAM-CEM Version 2009 includes several key enhancements of significant benefit for transportation, aeronautics and defense, as well as telecommunications and electronics industries, among which:

- * Direct access to the electromagnetic fields radiated in the so-called “near zone” surrounding the 3D computational domain and allowing to account for distant antennas or high frequency on-board automotive RADAR devices, without major computational drawbacks
- * Improvement of the EMS (Immunity) interpolation scheme allowing Cable Networks to run very close to the metallic (meshed) structures and thus avoiding hand-made running path redesign
- * Full review of the PAM-CEM/FD output process with dedicated calibrating and/or normalizing options (fully automatic or user controlled), dedicated output of induced currents along Cable Networks for 3D display with Visual-Viewer

The overall performance, including graphical user interface and ease-of-use, has been significantly improved in this latest release with the development of Visual-CEM 5.5, a dedicated user environment allowing the management of billions of unknowns, leading to higher operating frequencies.

“Together with the very first Visual-CEM dedicated environment, issued earlier this year, the PAM-CEM 2009.0 release helps our customers analyze and design within a continuously expanding electromagnetic spectrum”, said Dr. Jean-Claude Kedzia, PAM-CEM Product Manager, ESI Group. “Realistic modelling with an increasing operating frequency is the challenge not only for Aeronautics & Defense, but other industries as well. With all of the new navigation and anti-collision systems, industrial requirements from the automotive sector are now quite similar when targeting Active Safety.”

For more information, please visit: <http://www.esi-group.com/products/electromagnetism/pam-cem/benefits>



[Click here to return to Contents](#)

ESPRIT 2010 CAM Software Now Shipping

1 December 2009

[DP Technology](#) announced that ESPRIT® 2010, the production release of the latest version of its ESPRIT flagship product, is now shipping.

New developments within this latest version of ESPRIT place great emphasis on providing existing ESPRIT customers with additional tools that will increase their productivity.

"We believe that concentrating on serving the needs of our existing customers is the best investment we can make," says Chuck Mathews, DP's vice president and director of product development. "With the 2010 release of ESPRIT, more than ever before, we are utilizing the latest computer technology to solve the practical real-world challenges our customers face on a daily basis."

ESPRIT 2010 has been optimized to fully embrace the capabilities of the latest multi-core computers, an especially valued time-saving characteristic for 3-axis and 5-axis programming. ESPRIT 2010 runs on Microsoft® Windows® XP, Windows® Vista™ and Windows® 7™ operating systems.

Improvements That Every Customer Will Enjoy

CIMdata PLM Industry Summary

Every ESPRIT customer will enjoy the benefits of an all new, faster-to-use, graphical user interface (GUI) used to define machining operations throughout ESPRIT. This new tree-style GUI is used to define machining parameters used for cutting parts in milling, turning and wire EDM programming. Using the new GUI, cutting parameters are entered and immediately validated for the given workpiece. The GUI also adapts to display only questions pertinent to the given cutting environment, minimizing the number of choices the programmer needs to consider. The new tree-style GUI uses a small portion of the screen, providing the programmer with a clear, unobstructed view of the workpiece at all times. This new GUI is designed to look familiar to existing ESPRIT customers, allowing them to easily transition to and gain the productivity benefits of ESPRIT 2010.

Thanks to the new multi-threaded stock automation engine in ESPRIT 2010, customers can now benefit from instantly starting the part program simulation at any time and at any point in the program. This new feature eliminates the need to simulate all operations from the beginning or to save the results of previous simulations. Now ESPRIT customers can start a simulation with the stock that results from the completion of all previous operations without first waiting for the simulation of the previous operation. The use of multi-threading technology — with which stock calculations are done in the background, which doesn't slow the programmer down — makes this ideal scenario a reality in ESPRIT 2010.

Machining pockets has just become significantly easier with ESPRIT 2010 due to advancements in feature recognition. The upgraded advanced feature recognition now automatically recognizes pockets with any combination of open and closed walls, fillets, chamfers and tapered walls. In addition, undercut areas that can't be reached with the given tooling are automatically excluded. These new pocket features may also be based on native CAD features, resulting in the features in ESPRIT being associative with the original CAD model. As a result, if the CAD model changes, the user is notified and can choose whether to automatically update the ESPRIT feature and its associated machining to match the CAD model. This association is maintained from the CAD model to the finished toolpath.

Support for the Latest CNC Machine Tools

ESPRIT 2010 offers improvements in the support of integrated multi-tasking, mill-turn machine tools. All ESPRIT milling and turning machining capability, from 2-axis turning to 5-axis milling, is available for any type of mill-turn machine tool, including lathes that perform milling, mills that perform turning, Swiss-style machines and other “integrated mill-turn machining centers.” In the 2010 release, support for these multi-tasking machine tools has been enhanced through increased flexibility in cutting tool configurations and orientations, enabling the support of a wide variety of machines. The newly added support for additional rotary axes, three or more, allows the ESPRIT customer to completely program and easily simulate the most complex and sophisticated machine tools currently available on the market.

For the ESPRIT wire-EDM customer, the 2010 version includes support for EDM machines with rotary axes. This allows EDM programmers to perform wire-EDM cutting in 5- and 6-axis using turn-and-burn (indexing the rotary table), and turn-while-burn full 5-axis simultaneous cutting with a rotary table. This new version also provides EDM programming with an innovative new 4-axis pocketing, no-core cutting, machining cycle.

New 3D Machining Techniques

ESPRIT 2010 includes 13 new FreeForm 3- and 5-axis machining cycles that are available for milling, mill-turn and Swiss-turn machine tools. These high-speed, multi-axis machining cycles offer a wide variety of new choices and capabilities for ESPRIT customers who are performing 3D machining. Additions for 3-axis include a new roughing cycle that can also be used for rest-machining, seven new

finishing cycles and three specialized cycles — 3D contouring, pencil tracing and corner machining. Two new specialized 5-axis machining cycles are also included within this release, swarf machining and impeller machining. All of these machining cycles, which add up to a tremendous amount of new technology, will be provided to existing ESPRIT FreeForm customers as part of their ESPRIT software maintenance contract (SMC).

Availability

ESPRIT 2010 is now shipping to existing ESPRIT customers with active software maintenance contracts (SMC). We expect that all North American customers will receive their updates before the end of 2009. International SMC updates are starting in December and will continue into the first quarter of 2010. ESPRIT 2010 is also available now to new ESPRIT customers.

 [Click here to return to Contents](#)

Fast Kineo Collision Detector KCD V2.05

17 November 2009

[Kineo Cam](#) announced the new release of KCD, a leading software library for collision detection.

Kineo Collision Detector KCD is the high efficiency collision detector from Kineo CAM that comes as a software library, which allows an easy integration through its C++ programming API; using 3D geometrical data, KCD compares two lists of geometrical objects and quickly returns a series of results such as interferences and distances. In digital 3D mock-up, KCD performs static or dynamic clash analysis. In robotic monitoring systems, KCD enables continuous collision avoidance.

In May 2004 Kineo CAM announced its version V1R1.5 with an improvement of performance of over 50%; consecutively several major software editors adopted KCD in their CAD/CAM or 3D mock-up products.

Last year, CYBERNETIX announced the integration of KCD into CyxPro® its software platform for graphical monitoring of remotely-operated systems. “It was important for us to rely on a collision detector which is both fast and robust. We did a careful comparison of available options and selected KCD,” explained Eric Auschitzky, Nuclear BU Director.

Today, with KCD V2.05 Kineo CAM achieves a major step of performance on speed as it is multi-threaded and fully leverages multi-core systems. Indeed, collision tests are always more than twice as fast in version 2.05 compared to version 2.04.

“Tests of performance show that KCD V2.05 performs dynamic collision detections in only 114 microseconds on large 3D models of 400 000 triangles. With such models, most of the other collision checkers would be four times slower,” says Laurent Maniscalco, Kineo CAM CEO.

Memory consumption is another important parameter that is particularly optimized in KCD V2.05. Benchmarks involving KCD and other tested collision detectors show that KDS’s memory consumption is up to six times lower. On the Apollo model used for standard benchmarking of collision detectors, KCD needs no more than 24 MB of memory.

This value can even be drastically lowered by using a KCD feature called virtual polyhedrons. In this case, memory space used by geometry falls to zero and only optimized KCD structures (collision entities) benefit from available memory.

Initialization time. Any 3D software user has experienced waiting time of variable length, always unpleasant and unproductive, when using software tools. As far as applications with interference checking are concerned, this initialization time is used to compute collision entities. One can easily understand the interest of minimizing this time as much as possible. The Apollo case requires a 0.2 second initialization time with KCD, against 5 seconds for the second best tested solution.

A thread-safe mode has been introduced among other significant improvements; KCDV2.05 can run different tests over the same scene in simultaneous threads. This offers a whole new world of possibilities to multithreaded applications aimed at performance and reactivity.

For the developers, KCD V2.05 offers a fully modular collision detection and distance measurement framework. It is possible to implement proprietary collision detection primitives as new elementary computation bricks. This allows developers to just focus on the mathematical definition of the collision, while trusting KCD to manage the optimized geometry filtering algorithm. Possible applications include: molecules, laser or particle beams, non-triangulated procedural geometry, voxels, etc.

 [Click here to return to Contents](#)

Flow Science Announces Release of FLOW-3D/MP Version 4.0

24 November 2009

Flow Science, Inc. announces that a new release of the distributed-memory version of its FLOW-3D computational fluid dynamics (CFD) software, *FLOW-3D/MP*, is now available.

FLOW-3D/MP Version 4.0 offers substantial performance improvements, including significant decreases in problem setup and simulation times. Crucial developments to the software have reduced the amount of data sent via MPI communication, cut down on the number of synchronization points and improved computational load balancing using the automatic domain decomposition tool (ADT). ADT allows users to decompose the domain quickly and efficiently, instead of relying on a tedious and often inaccurate manual procedure. All of this makes it possible to extend scaling to up to 32 cores and achieve runtime improvements of as much as 16x.

The physical models and numerical methods of *FLOW-3D/MP* v4.0 are based on *FLOW-3D* v9.3.2. [Read a complete list of these features.](#)

“This new version will enable our user community to achieve highly-accurate and reliable answers in a half day or less which might have previously taken a week,” said David Souders, Flow Science’s Vice President of Sales & Marketing.

FLOW-3D/MP, first released in 2006, uses multi-block methodology to decompose the computational domain into blocks, which are then distributed among the nodes in a cluster. *FLOW-3D/MP* has been benchmarked and tested extensively on both Windows Compute Cluster and Linux workstations.

Flow Science has commenced shipment of this new release to customers under maintenance contracts. [Read more about *FLOW-3D/MP* 4.0.](#)

 [Click here to return to Contents](#)

KOMPAS-3D V11 Released

1 December 2009

CIMdata PLM Industry Summary

ASCON Group announced the release of its new, improved and even more powerful and easy-learning version of professional 3D and 2D software solution for Mechanical CAD – KOMPAS-3D V11.

This new release offers innovations to increase efficiency, quality and speed of the designing process, for fast and simple familiarization with the software, and to provide special tools for vertical industries domains, such as steel construction, piping, sheet-metal design. KOMPAS-3D V11 users still get all these powerful abilities at a very reasonable price.

Innovative features and new add-ons in KOMPAS-3D V11 include:

3D Parametric Modelling and Design Improvements

New features for 3D modeling of parts and assemblies:

- Mechanical mates in assembly help to simulate movement,
- Local coordinate in 3D systems considerably increase possibility of part and assembly modelling,
- Scale for 3D models help change a scale of parts,
- Different types of assembly loading help increase speed of working with large assemblies more than 10 times.
- Bend by Sketch, Part to assembly and Assembly to part transformation and many others increase efficiency and speed of 3D modelling process.

Trial and Demo mode protection update

A 30-Days full-functioning Trial version of KOMPAS-3D is absolutely FREE. A capability is introduced for working with the solution and its components in 30 days period for familiarization and trying in use all the wide range of features of KOMPAS solutions. Download Professional KOMPAS-3D V11 at <http://ascon.net/download.php>

Unwrap library

The add-on is included in the basic package of KOMPAS-3D V11. The library is intended to automate the design of dust, gas and air flues, pipelines and similar parts of sheet material.

This add-on automates labour-consuming calculations and constructions and considerably increases the speed of creation of working drawing for blanks of such parts.

Standard Parts library

The database supplied with KOMPAS-3D V11 and contains fasteners according to DIN and ISO standards.

Steel structures 3D

The library is also included in the delivery package. It is intended for automation of design process of metal constructions from metal rolling profiles.

Interface improvements

Context bar - it contains buttons of the frequently used editing commands and is displayed on the screen at selecting objects of the document and considerably increase speed of working with KOMPAS-3D.

CIMdata PLM Industry Summary

New Icon Design – contains different sizes of icons, which able to supply High resolution Displays supporting. Extended command toolbars gives more for interface customization.

New abilities for 3D curves and surfaces modeling

The new commands for creating of 3D-lines considerably improve design of complex 3D paths and trajectories. The Deviation of Surfaces helps to measure the mutual deviation of two faces (or a face and a surface).

Import/Export improvements

Enhancements in import of various CAD formats (SAT, STEP, IGES, Parasolid, STL) etc. Today it is possible to import 3D-models from DXF and DWG in KOMPAS-3D.

New features for working with 2D documents

The Multiline command creates a multiline – geometrical object consisting of several lines that are equidistant to the reference line. The Cut command is introduced in the Edit menu. It hides the portions of the raster image that are out of closed contour. Using of Hyperlinks - a capability is introduced for creation of hyperlinks to current document objects, external files, web pages, e-mail addresses. The hyperlink is added to the object of the document as one of properties.

These are not the only novelties and enhancements in KOMPAS-3D V11 – in the new version are included more than 50 updates and improvements. For more information please visit <http://ascon.net>, contact us directly at contact@ascon.net or find KOMPAS reseller nearest to you in more than 30 countries at <http://ascon.net/purchase/resellers/>

Download KOMPAS-3D V11 30-days Trial Version at <http://ascon.net/download.php>.

 [Click here to return to Contents](#)

Kubotek Officially Releases KeyCreator Version 9

3 December 2009

-Kubotek USA has officially released [KeyCreator Version 9](#). KeyCreator is a complete 3D direct modeler, and a pioneer of 3D direct modeling and editing. KeyCreator's versatility is ideal for conceptualizing solutions and rapid design of the most challenging one-of-a-kind engineering projects.

KeyCreator's approach to 3D direct modeling gives users the freedom they need to be creative, practical and efficient in their design. This no nonsense style to CAD design and productivity uses Direct Dimension Editing to instantly drive changes to the model. Direct Dimension Editing means that model building and editing is done without concern for how the model was created, who created it, and in what order it was created.

The Version 9 release offers current users [significant enhancements and performance improvements](#). For instance, KeyCreator internal updating algorithms have been optimized for Version 9.0 to reduce the time needed to complete a variety of editing operations. This performance improvement results in transform operations that are an average 73% faster.

Other performance metrics show that KeyCreator files open on average 33% faster. Display performance has improved considerably, as well. The display improvements are especially important to overall productivity since they are normally used many times throughout a design session.

CIMdata PLM Industry Summary

Additionally, the Dimension Driven Edit function's initial selection prompt has been expanded from accepting just dimensions to also allow selection of edges. This supports quickly creating dimensions and driving edits on those faces without having to exit the function to dimension them. Dozens of other new features, performance and productivity improvements were asked for and added into KeyCreator Version 9.

Says Charley Gressett, Senior Project Engineer from RTS Packaging, LLC, "KeyCreator V9 manipulates my largest, fully weighted, assembly models effortlessly. This release stands heads and shoulders above all of Kubotek USA's previous efforts."

[Click here to see highlights of KeyCreator Version 9.](#)

For customers on active maintenance, KeyCreator Version 9 can be downloaded immediately from the Kubotek USA customer support site. New seats of KeyCreator Version 9 will be sold at \$2,995 (a \$700 discount) until December 31, 2009. A [test drive](#) of KeyCreator Version 9 is also available. Users interested in purchasing new seats or upgrading to KeyCreator Version 9 are encouraged to contact their local reseller or Kubotek USA at sales@kubotekusa.com.

 [Click here to return to Contents](#)

Latest Gridgen Release Cuts Hybrid Mesh Sizes by More Than Half

24 November 2009

Pointwise released the latest update to its Gridgen meshing software for computational fluid dynamics (CFD) with new tools for drastic size reductions in hybrid meshes.

"Customers love hybrid meshes because they can be generated very quickly using Gridgen's T-Rex technique, but the resulting meshes can be very large," said Dr. John Steinbrenner, Pointwise's vice president for research and development. "In the latest Gridgen release, improvements to the algorithm that combines tetrahedra into prisms produce up to a 57 percent reduction in total cell count relative to the previous version of the software."

Gridgen's T-Rex technique extrudes layers of high quality, high aspect ratio tetrahedra for boundary layer resolution, gradually transitioning to isotropic tets away from the body. An optional post-processing step combines adjacent tetrahedra into pyramid and prism elements in the extrusion layer. Prism recombination was frequently halted in previous versions by mesh quality issues and cell topology restrictions on symmetry planes. By removing many of these limitations in the new Gridgen Version 15.15, final cell counts can be reduced dramatically. Customers benefit because a smaller grid requires less memory, runs faster in the CFD solver and produces results sooner.

"A 27 million cell mesh for a modern, complex fighter aircraft was reduced to 12 million cells, and similar reductions were obtained for the AIAA shock boundary layer interaction benchmark case," said Steinbrenner. "Combined with the automation of this technique, these smaller meshes make hybrid meshing very effective for the CFD practitioner."

Pointwise, Inc. is solving the top problem facing engineering analysts today - mesh generation for computational fluid dynamics (CFD). The company's Gridgen and Pointwise software generates structured, unstructured and hybrid meshes; interfaces with CFD solvers, such as ANSYS FLUENT, STAR-CD, ANSYS CFX and OpenFOAM as well as many neutral formats, such as CGNS; runs on Windows (Intel and AMD), Linux (Intel and AMD), Mac and Unix, and has scripting languages that can automate CFD meshing. Large manufacturing firms and research organizations worldwide rely on

CIMdata PLM Industry Summary

Pointwise as their complete CFD preprocessing solution. More information about Gridgen and Pointwise is available at pointwise.com.

The Propulsive Wing is a new patented aerodynamic platform that integrates an embedded, distributed cross-flow fan propulsion system within a thick wing. Image courtesy of Dr. Joseph Kummer, president and principal scientist at Propulsive Wing LLC in Elbridge, NY. More information about Propulsive Wing is available at <http://www.propulsivewing.com>.

 [Click here to return to Contents](#)

Lattice Technology Releases New XVL Converter for Autodesk Inventor 2010

1 December 2009

Lattice Technology® Inc. released its latest converter for Autodesk Inventor® 2010.

The XVL Converter Plug-in for Autodesk Inventor allows 3D data created in Autodesk Inventor 2010 to be compressed to an average 0.5% of its original size with no loss of accuracy. As XVL data the 3D designs can be rapidly mocked up for simulation, design review, process design, kinematics, human interaction on the assembly line, and more, in the Lattice Technology applications. XVL data is also used to directly and rapidly create print-ready and interactive digital documentation for mBOMs, process and work instructions, and technical illustrations.

Lattice Technology's applications allow 3D design data from diverse sources and CAD platforms to be integrated into a single assembly model, and, because of the industry-leading compression, can still be easily used and manipulated on low specification PCs. The small size of the data means that it can be used interactively in locations such as the shop floor and shipping departments which have typically never benefitted from 3D data before. Automatic updates of mock ups, simulations, and technical documentation when the original 3D data is changed is also easy with the Lattice Technology Solutions.

“Autodesk Inventor continues to be the CAD system of choice for many of our customers, who are creating ever bigger and more complex assemblies in 3D,” said Bill Barnes, GM, Lattice Technology Inc. “Using that 3D data downstream becomes difficult in the absence of industry-leading tools such as the Lattice Technology Solutions and the XVL lightweight format.”

This latest converter is available now for customers with current maintenance contracts and for trial at: <http://www.lattice3d.com>

 [Click here to return to Contents](#)

Magma Announces Talus Design 1.1 and Talus RTL 1.1 -- Enhanced Synthesis Products Deliver New Capabilities, Reference Flows and Interfaces

2 December 2009

Magma® Design Automation Inc. announced the availability of Talus® Design 1.1 and Talus RTL 1.1, Magma's full-chip synthesis products for advanced integrated circuits. Capabilities in these new versions include GlassBox™ abstraction technology; enhanced optimization algorithms; RTL-to-GDSII reference flows for leading IP providers including ARM, MIPS and Imagination Technologies (see related announcement today); and additional interfaces for commonly used third-party design-for-test (DFT) and formal verification tools. These enhanced synthesis products with new out-of-the box synthesis flows eliminate the need to develop customized scripts, significantly reducing the time and

effort required to achieve timing, area and power goals.

"Design teams are facing increasing pressure to achieve more with less and to reduce design iterations and turnaround time while meeting performance objectives," said Premal Buch, general manager of Magma's Design Implementation Business Unit. "To help designers address these challenges, Magma created version 1.1 of the Talus RTL-to-GDSII solution to deliver optimal quality of results out of the box. The recent enhancements to the Talus synthesis products provide designers with all the capabilities they need to generate high-quality netlists. Plus, the seamless integration with Magma's Talus Vortex implementation solution provides our users with increased confidence in achieving excellent results while shortening the time to final design closure."

"Using Talus Design within Magma's Talus implementation system has allowed us to significantly improve our productivity and time to market," said Andreas Olofsson, president of Adapteva, a manufacturer of multi-core processors that provide ultra low-energy solutions for high-performance portable applications. "The Magma system delivers outstanding turnaround time; it enabled us to complete our most recent multimillion-gate 65-nanometer design in just 6 weeks. The tight link between Talus Design and Talus Vortex also provided the platform we needed to achieve an order of magnitude improvement in power and performance."

"We use Magma's complete RTL-to-GDSII solution, including Talus Design," said Mats Lofling, vice president ASIC and Hardware Development for Xelerated, a leading provider of high-performance network processors. "The tight integration between Talus Design and Talus Vortex helps us achieve our demanding high-performance targets quickly and efficiently."

Talus Design 1.1 and Talus RTL 1.1: Fast, High-Capacity Synthesis

Talus RTL and Talus Design are full-featured RTL logic synthesis solutions that optimize for power, area and timing, and generate both gate-level netlists or Magma Volcano™ databases for handoff. Talus RTL provides a complete RTL-to-netlist synthesis solution while Talus Design adds physical synthesis capabilities to deliver higher levels of predictability and performance. Unlike traditional synthesis tools, a single Talus Design or Talus RTL license provides a fast, high-capacity synthesis solution with seamless scan insertion and scan optimization that supports VHDL, Verilog and System Verilog. The Magma synthesis tools are the first to support both the Common Power Format (CPF) and Unified Power Format (UPF) for specifying low-power design intent.

The new GlassBox capability in the enhanced Talus synthesis products creates logical abstractions for each block in the design. These abstractions retain only the critical information required for top-level synthesis, eliminating the need to re-synthesize each block, reducing turnaround time and minimizing hardware memory requirements.

Enhanced Interoperability

To ensure high performance and highly testable systems on a chip (SoCs), Magma synthesis tools provide automatic scan insertion capabilities and include seamless interfaces to Mentor's industry-leading Tessent™ TestKompress® automatic test pattern generation (ATPG) and Tessent LogicBIST built-in self test (BIST) products. This ensures that test structures and their effects can be considered throughout the design flow to deliver the highest test coverage and efficiency with minimum impact to the design.

Today, most SoC designers use formal verification tools to confirm the final design is equivalent to the source RTL. The process of determining whether identified errors are actual problems often lengthens

CIMdata PLM Industry Summary

the design cycle. Talus Design 1.1 and Talus RTL 1.1 include output scripts that simplify and accelerate verification for users of Cadence's industry-leading equivalence checker, Conformal®. To further accelerate equivalence checking, scripts are included that identify swept or cloned flip-flops, scan-enable signals and integrated clock gates.

Talus Design 1.1 and Talus RTL 1.1 are available now. Please contact Magma via e-mail at sales@magma-da.com for more information.

 [Click here to return to Contents](#)

Magma Announces Talus-Based RTL-to-GDSII Reference Flow for Imagination Technologies' POWERVR Graphics Accelerator -- Delivers Repeatable Results, Speeds Deployment

2 December 2009

[Magma\(R\) Design Automation Inc.](#) announced the availability of an RTL-to-GDSII reference flow for system-on-chip (SoC) designs that incorporate POWERVR™ SGX graphics accelerator cores from [Imagination Technologies](#), a leader in SoC intellectual property (IP). Based on Talus(R) 1.1, the latest release of Magma's design implementation system, the flow leverages the recently enhanced optimization capabilities of the Talus Design 1.1 synthesis tool and the Talus CORE™ technology that performs timing optimization concurrently during routing.

Also included is the Talus Flow Manager™ which provides an out-of-the-box reference flow that engineers can quickly and easily tune for their specific SGX-based designs. With the reference flow and Imagination Technologies' POWERVR graphics processors, designers can achieve faster overall design closure with better performance and predictability for their consumer and wireless multimedia processing applications.

"The drive to get to market faster than the competition is stronger than ever, so our customers don't have time to waste setting up and validating design flows," said Martin Ashton, vice president of POWERVR Visual IP at Imagination Technologies. "With the Talus-based reference flow, our customers can design and deliver innovative SoC devices utilizing the industry's most advanced graphics acceleration technologies in record time."

"Dealing with the complexities of 65-nanometer and smaller process geometries is a significant challenge," said Premal Buch, general manager of Magma's Design Implementation Business Unit. "By incorporating advanced capabilities such as early clock tree modeling, advanced crosstalk optimization, concurrent optimization during routing into Talus 1.1, and providing reference flows, Magma is equipping designers with the technology they need for silicon success."

The reference flow is available now from Magma. Please send e-mail to sales@magma-da.com for more information.

Talus: Fastest Path to Silicon™

Talus 1.1 was created to deliver optimal quality of results out of the box at advanced process nodes. It has already been used to tape out numerous production chips at 40 nanometers (nm), and is ready for designs at 32 nm and 28 nm.

Talus Design and Talus Vortex are key components of Magma's RTL-to-GDSII system. Talus Design performs RTL synthesis and physical optimization. Talus Vortex performs placement, clock tree synthesis and routing.

Talus COre Technology

The heart of the improvements in Talus 1.1 is its Concurrent Optimizing Routing Engine (COre) technology. At advanced geometries, complex resistance effects, increased via resistance and crosstalk can create a large timing disconnect between placed gates and final routing. Dealing with optimization and routing sequentially results in a suboptimal solution with unpredictable results. Traditional solutions optimize the design after routing to get the necessary accuracy, lengthening runtimes. Leveraging Magma's unique unified data model architecture, Talus COre applies the full scope of timing optimization concurrently during routing. Every aspect of the routing algorithms -- from topology generation to layer assignment, track assignment and DRC cleanup -- is timing and crosstalk aware. This allows design convergence and eliminates post-route timing surprises. Talus COre is coupled with Talus' Standard Delay Format (SDF)-based optimization to remove the need for manual engineering change orders (ECOs) to close timing.

The addition of the Talus COre technology allows Talus 1.1 to deliver optimal quality of results out of the box for designs implemented in advanced process technologies. It has already been used to complete production designs where it provided runtime that was more than 5 times faster than competitive solutions. In customer beta testing on 40-nm designs ranging from 2 million to 4 million gates, with frequencies from 400 MHz to 800 MHz, Talus 1.1 produced 75 percent better timing with 10 percent fewer vias than competitive tools.

Talus Flow Manager

Talus 1.1 also introduces the new Talus Flow Manager that provides an out-of-the-box Talus RTL-to-GDSII design flow tuned to deliver optimal results. Designers can easily customize the reference flow and tailor it to their own requirements, developing specific flows for various projects or applications. Additional reference flows include templates for the implementation of multiple-voltage (MVdd), multiple-mode and multiple-corner (MMMC) designs, as well as low-power and high-performance designs. Ease of use and cost of adoption is dramatically improved through the use of these pre-qualified flows.

 [Click here to return to Contents](#)

Micro Estimating Partners with Dassault Systèmes SolidWorks Corporation

1 December 2009

Micro Estimating Systems (MES) announced it has joined the DS SolidWorks Solution partner program.

"Micro Estimating Systems delivers the state-of-the-art estimating tool that engineers need," said Nick Iwaskow, SolidWorks Manager, Alliances. "Together, Micro Estimating and SolidWorks give engineers the innovative tools and productivity to streamline product development and be more successful."

MES is an industry leader in Manufacturing Process Management, Computer-Aided Estimating, and Process Optimization for the machining, fabrication, and metal service center industries. It strives to stay abreast of changes in the industry by constantly adapting its state-of-the-art product line, as evidenced by its upcoming launch of Version 12.0.

MES President Mike Holland is excited about the opportunity to work with DS SolidWorks more closely. "By partnering with DS SolidWorks, the customers of our organizations will now have the benefit of our expertise in estimating and Feature Recognition, as well as the distinctive, parasolid based approach to design models and assemblies that SolidWorks uses to stay successful in a highly

competitive environment."

 [Click here to return to Contents](#)

New Sopheon Strategic Roadmapping Software Enables Users to Quickly Adjust Strategies in Response to Changing Market Conditions

2 December 2009

Sopheon announced the introduction of a new version of its Accolade Vision Strategist strategic roadmapping software. Referred to as version 5.0, the enhanced solution offers functionality that simplifies the creation and maintenance of roadmaps. Its enriched graphic content and support for the standardization of mapping language make roadmaps easier to understand and increase their accuracy as forecasting tools. According to Sopheon, one of the principal values of the new software is that it enables users to quickly reshape market, product, and technology strategies in response to ongoing developments in the marketplace.

Sopheon's Vision Strategist solution enables strategic agility. For most organizations, the development and maintenance of roadmaps is coupled with strategic and operational planning as a once-a-year event. Obsolete almost as soon as they are published, such maps have diminishing value and can prompt costly wrong decisions. Roadmapping experts have long regarded dynamic, "living" roadmaps, characterized by continuous updating, as an elusive ideal. The latest version of Vision Strategist makes them a reality. The software allows roadmaps to be embedded as deliverables within the innovation process, raising their visibility and encouraging users to update content as part of daily operational activity. Working with reliable, current data, decision makers are able to move quickly and confidently from insight to action in response to changes in the marketplace.

Enhancements included in Vision Strategist 5.0 provide a range of planning advantages to users. Features being introduced in the software will enable organizations to:

- **Achieve wider adoption of planning and roadmapping processes.** With Vision Strategist 5.0, roadmapping becomes an integral part of the user's day-to-day work life. Maps reside next to active new product project plans and other gated-process documentation where they are more visible and accessible. Simplified data input and a range of other new features make roadmaps easier to update and share, and encourage broad participation in the planning process. As a result, more individuals within the organization see how their roles are impacting strategies and can take action when those strategies are at risk.
- **Develop easily understood, insightful views of the future.** Graphically rich representations of future market, product and technology opportunities include depictions of the relationships among roadmap elements. Visuals stretch the thinking of decision makers, enabling them to identify strategic gaps and zero in on the long- and short-term implications of various investment scenarios. Standardization of mapping language and graphic symbols helps to ensure that strategies are communicated clearly and consistently across the organization.
- **More effectively synchronize strategies with supply chain and other external partners.** With Vision Strategist 5.0, market, technology and product plans are easily shared across functions, operating units and even with external entities, facilitating contribution and adjustment and strengthening alignment. Roadmaps are transferred onto "smart" Excel® worksheets and transmitted in a secure mode that supports open innovation. External partners can use these already familiar worksheet capabilities, free of the need for technical support, to provide updates or to create new roadmaps on their own.

CIMdata PLM Industry Summary

“The continued uncertainty in today’s markets is placing more emphasis on the importance of strategic roadmapping,” said Bryan Seyfarth, director of product marketing for Sopheon. “The planning support provided by this latest version of Vision Strategist not only promises to strengthen roadmapping adoption and effectiveness, it makes it possible for users to adjust strategies and tactical plans far faster than the competition can draft a course of action. The value of deploying Vision Strategist can be boiled down to this: it helps to align innovation strategy and operational decision making, and unlocks new business growth opportunities for today, tomorrow and beyond.”

Sopheon’s Vision Strategist is the most widely used roadmapping support technology in the marketplace. Examples of companies that have adopted the software include Electrolux, BAE Systems, Corning, Honeywell, Lockheed Martin, Motorola, Northrop Grumman, PepsiCo and Textron.

Accolade Vision Strategist 5.0 is available immediately for purchase and implementation.

 [Click here to return to Contents](#)

Oce Solutions Showcased at Autodesk University 2009 Enable AEC Users to Streamline Operations, Leverage the Value of Color

1 December 2009

Oce, will display its large format print and print management solutions designed to help architecture, engineering and construction (AEC) users leverage the value of color and streamline their daily print operations during Autodesk University 2009, December 1-3 in Las Vegas, NV. These solutions include the Oce PlotWave® 300, the next wave in monochrome, single footprint systems; Oce Repro Desk® Studio, the newest print software for CAD environments that eliminates complexity and reduces time spent on print jobs; and a range of innovative color print systems that make it easy to integrate the clarity and effectiveness of color into daily CAD workflow.

"Even with incremental improvements in the economy, the AEC industry is still under pressure to improve productivity and cost effectiveness," said Sal Sheikh, Vice President, Marketing, Oce Wide Format Printing division of Oce North America. "The Oce solutions on display at Autodesk University support AEC firms as they rethink traditional ways of moving from concept to construction. These solutions deliver economical wide format monochrome and color CAD printing and seamless print management to better enable users to finish projects on time, under budget and with reduced risk."

New Simple, Green, Durable, All-in-One Printer Saves Money and Space

The compact Oce PlotWave 300 all-in-one large format monochrome print/copy/scan system is ideal for lower volume monochrome print users. The system incorporates Oce Radiant Fusing technology, the most efficient way to fuse toner onto paper, with benefits such as no warm-up time, half the energy use of comparable systems, and virtually no ozone emissions - all while maintaining superior image quality for even the most complex documents. The Oce PlotWave 300 printer's eco-friendly design aids AEC users as they strive to meet their design and construction sustainability goals.

The Oce PlotWave 300 system does not need extra tables, paper racks or ventilation so it can easily fit into tiny spaces. Designed with simplicity in mind, the system includes features such as a built-in USB flash drive for printing and scanning at the system, an output delivery tray on the top of the machine, air separation to prevent prints from curling, and a scroll and click panel and smart buttons that make it easy to use for both experienced and new walk-up users. The system is constructed of solid, hard-wearing materials designed to make it last longer than comparable systems - perfect for AEC users looking to

keep equipment costs in check.

With its energy efficiency, quiet operation, instant print-ready functionality, simple operation, space-saving design and ability to withstand the workload of multiple users, the Oce PlotWave 300 system is ideally configured to address the needs of decentralized print users.

New Innovative Software Solution Provides Productivity "On Demand"

Oce Repro Desk Studio software allows end users to build, preview, and submit print jobs to a wide variety of printers - whether from Oce or other brands, wide or small format, color or black & white, local or remote - all with the same user interface. It also allows jobs to be submitted to local printers or even to an external print provider. Specific workflow rules can be created for the automatic distribution of jobs to the most suitable printers, for example by document format, use of color or size of the print job. Jobs can be created from multiple documents using the free Oce Client Tools™ print submission software. Individual documents can then be previewed before printing with true WYSIWYP functionality - What You See Is What You Print - that shows exactly how they will print on the selected printer, allowing accurate checking of document contents and print settings.

With its integrated job tracking and accounting capabilities, Oce Repro Desk Studio software is a significant advance in wide format print software functionality. The accounting features of Oce Repro Desk Studio software allow all print, scan and copy jobs on wide format devices to be tracked automatically. As well as optimizing internal cost control, these functions ensure that printing costs can be charged to projects or customers instead of disappearing into overhead. Oce Repro Desk Studio is part of the Oce Repro Desk software family of end-to-end print management solutions.

Large Format Color Solutions Build the Case for Color CAD Print Adoption

The use of color in CAD documents leads to faster, more accurate decision-making and reduces the risk of misinterpretation, lowering the potential for mistakes in both the early approval phases and throughout the entire project lifecycle. It can improve communications between AEC team members, reduce mistakes and rework, speed project completion and reduce construction delays. The Oce large format printing systems on display at Autodesk University are designed to make it easy and economical for entry-level to high volume users to integrate color CAD printing into their downstream operations.

Oce ColorWave® 600 Printer

The Oce ColorWave 600 printer uses unique Oce CrystalPoint™ technology to produce high-quality prints on lower cost plain and recycled paper through the use of solid Oce TonerPearls® toner. This technology combines the best of both toner and inkjet in one environmentally-sensitive machine. Blending the best of both technologies allows AEC professionals to re-invent the way they approach color production. The system's environmentally conscious design - no ozone, fine powder, or ink pollution - also helps AEC professionals meet their sustainability goals.

Oce TCS500

The Oce TCS500 large format multifunction system harnesses the power of concurrent processing, printing, copying and scanning to make it the most productive CAD and GIS large format color inkjet system on the market. Highly intuitive, Oce's Dynamic Switching technology automatically optimizes print speed and print quality when printing lines, text and images in the same document - making it a great choice for printing detailed CAD drawings and complex GIS and technical files.

Oce CS2236

CIMdata PLM Industry Summary

This entry-level, thermal inkjet color plotter is designed for users in very low volume environments who demand high quality 2400 x 1200 dpi printing of their technical color applications - line drawings, renderings, GIS aerials - and business/consumer graphics. Océ predefined settings provide the user with one-touch printing and right-the-first-time results.

Product Availability

All systems and solutions are available now. For more information, call Océ at 800-714-4427 or visit <http://www.oceusa.com>.

 [Click here to return to Contents](#)

PDF3D 10th Release Extends Rich Media Creation to Windows 7

30 November 2009

At the 10th release PDF3D® solutions add rich media Flash® controls to 3D PDF generation, enabling everyone with the free Adobe® Reader 9 or higher enhanced team communication, collaboration, improved distributed decision making. Extended to 64-bit versions of Windows 7, Windows 2008 R2 and Linux, PDF3D v1.10.0 end-user and development tools are available immediately from <http://www.pdf3d.co.uk>

Highlights of PDF3D version 1.10.0 new features include:

- Windows 7, Windows 2008R2 (x64) platforms support added
- Flash-based Interactive Controls added, modern look & feel, custom model tree menu, advanced animation, mouse probe reporting, model height, transparency and other controls for the 3D PDF generated scene. (Requires Acrobat or Adobe Reader 9 or higher),
- Custom 3D Hierarchy methods added allowing filtering of the model hierarchy as presented to users through the new Model Tree Controls Flash-based interface.
- Face Color and Indexed Color methods added to Interface APIs
- Expanded source examples added to show worked examples of key-frame and model sequence animation
- Over 50 technical improvements

By utilizing the convergence of Flex, Flash, Actionscript, Javascript and 3D scenes in the Adobe release 9, the PDF3D team has developed 3D PDF generation drop-in solutions which combine the best of rich media interactive computer graphics technology. The new Flash based controls offer a new level of sophisticated controls for manipulating 3D model visualizations, improving the communication and ease of use to readers, accessible to users and developers without any knowledge of the underlying technology. New Flash controls are available through PDF3DReportGen 3D PDF generator, PDF3DXmlServer and the full PDF3D-SDK toolkit for developers.

PDF3D (<http://www.pdf3d.co.uk>) is an independent 3D technical publishing technology for 3D models viewable in PDF documents. Covering a wide range of applications from geology, aerospace, architecture, product packaging, and online sales & marketing, PDF3D makes it practical to distribute interactive 3D documents to everyone with the free Adobe Reader.

The ISO9001:2000 certified professional services team provides custom 3D PDF workflows, system

integration and novel user interface development services.

Contact Details:

PDF3D, Visual Technology Services Ltd.

Tel: +44(0)7787 517529

 [Click here to return to Contents](#)

SYCODE Releases CATIA V4 and V5 File Import Plug-ins for AutoCAD

27 November 2009

SYCODE has released CATIA V4 and V5 file import plug-ins for AutoCAD. These plug-ins allow users to import CATIA V4 and V5 part and assembly files into AutoCAD without the need of a CATIA license on the computer or network.

"Over the past few releases Autodesk has been morphing AutoCAD from a 2D drafting and documentation solution to a 3D modeling and analysis one," explains Deelip Menezes, Founder and CEO of SYCODE. "However, for AutoCAD customers to fully harness the power of 3D they not only need to be able to create 3D models from scratch in AutoCAD but also be able to edit 3D solid models created in other CAD systems. CATIA is widely used in the aerospace, automotive, shipbuilding and related industries. We believe our CATIA V4 and V5 import plug-ins for AutoCAD will go a long way in helping AutoCAD users exchange data effectively with CATIA users by not having to rely on neutral file formats for data exchange."

The plug-ins released today are called CATIA V4 Import for AutoCAD and CATIA V5 Import for AutoCAD. The V4 plug-in can read CATIA V4 part and assembly (.model), export (.exp) and session (.session) files from CATIA 4.1.9 to CATIA 4.2.4. The V5 plug-in can read CATIA V5 part (.CATPart), assembly (.CATProduct) and graphics (.cgr) files from CATIA V5 R2 to CATIA V5 R19. The plug-ins are powered by the widely used 3D InterOp technology from Spatial. 3D InterOp is the industry standard for proprietary CAD file format data exchange and is used in almost all the major CAD systems. Besides data exchange 3D InterOp also offers powerful repairing and healing features which are extensively used in these plug-ins. Repairing involves checking the file for corrupted data and fixing invalid data. Healing corrects the differences in precision. The plug-ins also create detailed log files which are extremely useful in identifying data translation problems and aid in locating and fixing errors.

The plug-ins work with AutoCAD 2000 through to AutoCAD 2010, 32 Bit as well as 64 Bit and is available as a fully functional trial. They come with installers and detailed documentation in the form of compiled HTML help files which contains step-by-step tutorials to get end users started in the shortest possible time.

More information about the plug-ins and a download can be found at the SYCODE web site:

- CATIA V4 Import for AutoCAD - http://www.sycode.com/products/catia_v4_import_ac/
- CATIA V5 Import for AutoCAD - http://www.sycode.com/products/catia_v5_import_ac/

 [Click here to return to Contents](#)

SYCODE Releases Inventor File Import Plug-in for AutoCAD

25 November 2009

CIMdata PLM Industry Summary

SYCODE has released an Autodesk Inventor file import plug-in for AutoCAD. The plug-in allows users to import Inventor part and assembly files into AutoCAD without the need of an Inventor license on the computer or network.

"We have been receiving requests from AutoCAD users wanting to import part and assembly files created in Autodesk Inventor," explains Deelip Menezes, Founder and CEO of SYCODE. "Inventor already has the ability to exchange 3D data with AutoCAD via the AEC Exchange method. However, this method requires a license of Inventor in order to perform the conversion. In the event that an AutoCAD user gets an Inventor Part (IPT) or Assembly (IAM) file and does not have access to Inventor, there is no way to get the 3D data stored in the IPT or IAM file into AutoCAD. That is precisely when Inventor Import for AutoCAD will come in handy".

Inventor Import for AutoCAD can read Inventor part IPT files from Inventor 6 to Inventor 2010 and assembly IAM files from Inventor 11 to Inventor 2010. The plug-in is powered by the widely used 3D InterOp technology from Spatial. 3D InterOp is the industry standard for proprietary CAD file format data exchange and is used in almost all the major CAD systems. Besides data exchange 3D InterOp also offers powerful repairing and healing features which are extensively used in Inventor Import for AutoCAD. Repairing involves checking the file for corrupted data and fixing the invalid data. Healing corrects the differences in precision. Inventor Import for AutoCAD also creates a detailed log file which is extremely useful in identifying data translation problems and aids in locating and fixing errors.

Inventor Import for AutoCAD works with AutoCAD 2000 through to AutoCAD 2010, 32 Bit as well as 64 Bit and is available as a fully functional trial. The plug-in comes with an installer and detailed documentation in the form of a compiled HTML help file which contains a step-by-step tutorial to get the end user started in the shortest possible time.

More information about Inventor Import for AutoCAD and a download can be found at http://www.sycode.com/products/inventor_import_ac/



[Click here to return to Contents](#)

SYCODE Releases Pro/ENGINEER File Import Plug-in for AutoCAD

26 November 2009

SYCODE has released a Pro/ENGINEER file import plug-in for AutoCAD. The plug-in allows users to import Pro/ENGINEER part and assembly files into AutoCAD without the need of a Pro/ENGINEER license on the computer or network.

"Data exchange between Pro/ENGINEER and AutoCAD is largely one way street," explains Deelip Menezes, Founder and CEO of SYCODE. "Pro/ENGINEER has the ability to read 2D and 3D data from AutoCAD DWG and DXF files. But the reverse is not possible. This is not that big a problem since data exchange between AutoCAD and Pro/ENGINEER mostly involves converting a 2D drawing or a 3D solid in AutoCAD to a 3D model in Pro/ENGINEER. However, in recent releases Autodesk has added significant 3D solid modeling capabilities to AutoCAD, but has not matched it with the ability to read proprietary 3D data from solid modeling systems like Pro/ENGINEER. Pro/ENGINEER Import for AutoCAD gives AutoCAD users the ability to open 3D solid models designed in Pro/ENGINEER and carry out solid modeling operations on them."

Pro/ENGINEER Import for AutoCAD can read Pro/ENGINEER part PRT and assembly ASM files from Pro/ENGINEER version 16 to Pro/ENGINEER Wildfire 4.0. The plug-in is powered by the widely

CIMdata PLM Industry Summary

used 3D InterOp technology from Spatial. 3D InterOp is the industry standard for proprietary CAD file format data exchange and is used in almost all the major CAD systems. Besides data exchange 3D InterOp also offers powerful repairing and healing features which are extensively used in Pro/ENGINEER Import for AutoCAD. Repairing involves checking the file for corrupted data and fixing the invalid data. Healing corrects the differences in precision. Pro/ENGINEER Import for AutoCAD also creates a detailed log file which is extremely useful in identifying data translation problems and aids in locating and fixing errors.

Pro/ENGINEER Import for AutoCAD works with AutoCAD 2000 through to AutoCAD 2010, 32 Bit as well as 64 Bit and is available as a fully functional trial. The plug-in comes with an installer and detailed documentation in the form of a compiled HTML help file which contains a step-by-step tutorial to get the end user started in the shortest possible time.

More information about Pro/ENGINEER Import for AutoCAD and a download can be found at http://www.sycode.com/products/pro_engineer_import_ac/

 [Click here to return to Contents](#)

SYCODE Releases Six Neutral CAD File Format Data Exchange Plug-ins for AutoCAD

3 December 2009

SYCODE has released six neutral CAD file format data exchange plug-ins for AutoCAD. These plug-ins give AutoCAD the ability to read and write IGES, STEP and SAT files.

"AutoCAD can already read and write ACIS SAT files," explains Deelip Menezes, Founder and CEO of SYCODE. "However, this ability is restricted to ACIS version 7.0 only. This can pose a huge data exchange problem for AutoCAD users, especially since ACIS has reached version 20 and most CAD systems read and write SAT files later than version 7.0. The SAT import and export plug-ins that we are releasing today will eliminate this problem since they use authentic libraries from Spatial, the developers of ACIS, and hence will always be compatible with the latest version of ACIS.

SYCODE already offers plug-ins to import IGES and STEP files. However, these are mostly effective to import 2D data. 3D data is imported as wireframe curves, not solids. The IGES and STEP import plug-ins have been completely rewritten and can now import 3D data stored in IGES and STEP files as 3D solid objects in AutoCAD. This is a significant improvement as it greatly increases the ability of AutoCAD to exchange 3D data with other CAD systems. The IGES and STEP export plug-in are new products. When used along with the import plug-ins, they give AutoCAD the ability to do a complete round trip of 2D and 3D data. As an Autodesk partner, SYCODE is committed to offering AutoCAD users robust data exchange solutions that go to solve the data exchange problems that they face in a multi-CAD environment.

All six plug-ins are powered by the widely used 3D InterOp technology from Spatial. 3D InterOp is the industry standard for proprietary and neutral CAD file format data exchange and is used in almost all the major CAD systems. Besides data exchange 3D InterOp also offers powerful repairing and healing features which are extensively used in these plug-ins. Repairing involves checking the file for corrupted data and fixing invalid data. Healing corrects the differences in precision. The plug-ins also create detailed log files which are extremely useful in identifying data translation problems and aid in locating and fixing errors.

The plug-ins work with AutoCAD 2000 through to AutoCAD 2010, 32 Bit as well as 64 Bit and is

CIMdata PLM Industry Summary

available as a fully functional trial. They come with installers and detailed documentation in the form of compiled HTML help files which contains step-by-step tutorials to get end users started in the shortest possible time.

More information about the plug-ins and free downloads can be found at the SYCODE web site:

IGES Import for AutoCAD - http://www.sycode.com/products/iges_import_ac/

IGES Export for AutoCAD - http://www.sycode.com/products/iges_export_ac/

STEP Import for AutoCAD - http://www.sycode.com/products/step_import_ac/

STEP Export for AutoCAD - http://www.sycode.com/products/step_export_ac/

SAT Import for AutoCAD - http://www.sycode.com/products/sat_import_ac/

SAT Export for AutoCAD - http://www.sycode.com/products/sat_export_ac/

 [Click here to return to Contents](#)

3DVIA Composer Features Automatic Path Planning

30 November 2009

Dassault Systèmes (DS) announced that the leading technology for automatic motion and path planning from Kineo Computer Aided Motion (Kineo CAM), an independent software developer, has been integrated with 3DVIA Composer. This integration, named 3DVIA Path Planning, allows users to effectively communicate the most complicated steps of interactive documentation with automatically generated, lifelike animations, rather than photos and text.

Assembly and maintenance tasks of tightly fitting components have always been difficult to describe, regardless of the communication tool used. These processes are complex to explain using traditional photo and text instructions, often leading to misinterpretation, reduced quality, or damage to sensitive components. A potential solution to this challenge is to provide users with 3D interactive and animated instructions, which are more effective in communicating difficult concepts. For example, an assembly worker with a 3D animated instruction for the difficult removal of a component is better equipped to successfully remove the part than a colleague that has been provided instructions with images and text. Creating these 3D animations, unfortunately, has traditionally been difficult and time consuming.

The combination of 3DVIA Composer and 3DVIA Path Planning now automates the animation creation process, increasing the quality and productivity of 3D interactive experience authoring to deliver superior lifelike experiences that improve comprehension and error-free execution by end users.

“We are very pleased that our software technology has been integrated within 3DVIA Composer, making it easier for users to access the power of our collision detection engine,” said Laurent Maniscalco, CEO Kineo CAM. “With 3DVIA Path Planning, content creators can automatically generate non-colliding animated paths between desired components, helping to quickly plan and illustrate complex processes.”

3DVIA Composer revolutionizes the product documentation process for enterprises of all sizes. With its easy-to-use, desktop content-creation system, 3DVIA Composer automates the creation of assembly and disassembly procedures, technical illustrations, interactive 3D product experiences, training materials, marketing materials, sales tools and more. “With shrinking budgets and increasing pressures to bring products to market quickly, companies are unable to spend as much time creating technical

CIMdata PLM Industry Summary

documentation as they would like,” said Garth Coleman, 3DVIA director of product marketing, Dassault Systèmes. “Kineo CAM offers incredible capabilities will really benefit our users in all industries that are tasked with providing improved and more comprehensive instructions on shrinking budgets and delivery times. By combining the ability to create complex animations using 3DVIA Path Planning with the superior interactive capabilities of 3DVIA Composer, companies can quickly and easily create lifelike 3D experiences to improve comprehension of complex technical procedures.”

3DVIA Composer and 3DVIA Path Planning are currently available. For more information, please visit: <http://www.3ds.com/products/3dvia/3dvia-composer>.

3DVIA Path Planning video at <http://www.3dmojo.com/>

 [Click here to return to Contents](#)

TXT e-solutions Continue Innovating and Reinforcing PLM Offering for Fashion with New PDMi (Product Data Management and Intelligence)

30 October 2009

TXT e-solutions is launching the completely renewed PDM module, now an integral part of TXTPERFORM2008 Fashion & Apparel suite launched in 2008

Product Data Management and Intelligence, brings a host of new capabilities within a full Product Lifecycle Management experience carefully developed in collaboration with our customers and early adopters of the solution. The objective is to bring an enhanced experience in areas such as supplier collaboration and its integration with demand and merchandise management related activities. The Web 2.0 portal provides and a flexible User Interface cockpit approach which will contribute to easier end to end collection development and management and thus extend the leadership [TXTe- solutions](#) has in the market, with over 230 apparel customers worldwide.

With the new PDMi, TXTPERFORM2008 Fashion & Apparel provides a PLM offering, effectively covering all processes from design to store. The role-based workflow capabilities provide not only a reliable and repeatable process but also forms the basis of continuous improvements. The intelligence and performance management capabilities extend beyond standard reporting, to provide sophisticated trends analysis based on best sellers, pricing, geographies, product attribute, as well as visibility of collection status and progress. This information provides an organisation with a newfound insight that if allowed to drive the product development process guarantees successful collections, as it now benefits from better understanding of consumer buying behaviour. Communication between merchandisers, the design team and the suppliers is seamless and reconciles all teams under one single business objective through Merchandise driven PLM process.

“This is another mile stone for TXT” comments Riccardo Proni R&D director at TXT, “our investment in making this suite a success has been considerable, and not only through our own work, but also through the time we have invested in working closely with our customers to incorporate their feedback.” He adds “Because all the modules in the TXTPERFORM2008 suite are native to it, implementation time and costs are significantly reduced. The flexibility of the Microsoft technology used throughout the suite, also allows customers to adapt the solution if and where needed, it is highly scalable and can be extended to a broad community of users and this was an important requirement for them.”

“TXT is undoubtedly a worldwide leader in providing solutions for the Apparel & Fashion Market, not only do we have an unmatched set of customers, but we also have a clear vision of what they need. It

CIMdata PLM Industry Summary

was an important part of our objective to get to the day when we would be able to offer one solution to cover their end to end processes without compromising on the depth and richness of functionality – we know this is a challenge for larger vendors.” Says Stefano Lena Vice President Global Sales. “We have long understood that what manufacturers and retailers need in light of the challenges they face, is not only an exceptional solution but also a team with deep expertise in delivering the project and we know that based on customer feedback, we now possess both.”

PDMI (Product Data Manager and Intelligence) was launched on the 30th October 2009.

 [Click here to return to Contents](#)

VISTAGY's Seat Design Environment™ 2009 Speeds Time to Market by Automating Entire Engineering Process

1 December 2009

[VISTAGY, Inc.](#) announced the release of Seat Design Environment™ 2009 (SDE), which provides an accurate 3D master model of the trim cover from the earliest stages of design to manufacturing by enabling seat cover manufacturers to bring flat patterns that have been altered with 2D editing software back into the 3D CAD model. This master model definition can be used to automatically update engineering and manufacturing data to create a faster, more precise process for delivering seat covers to market, a key concern in the highly competitive automotive industry.

The traditional 2D-based seat trim cover design and manufacturing process requires a significant amount of translation and verbal communication to transfer data between numerous people and software packages. Creating documents, such as drawings, bills of materials (BOMs), cost assessments and sewing instructions, is a manual, error-prone task that requires frequent data re-entry. This traditional process is highly inefficient because there is no single master model containing all the most up-to-date information and, most importantly, there is no way to obtain timely design feedback.

Previous versions of SDE have always provided a way for data and documentation—such as flat patterns, costing information, sew reports and BOMs—to be automatically created from a 3D CAD master model. But SDE 2009 enhances the master model by providing an environment integrated into commercial CAD systems where geometric and non-geometric information can be captured within a single 3D CAD model throughout the entire design process; from initial generation of flat patterns to final detail design as required for manufacturing. Now design and manufacturing engineers and their suppliers can efficiently create and modify seat trim cover product definitions and generate associated engineering data automatically for use throughout a company and its supply chain.

SDE 2009 also provides enhanced capabilities for communicating design information, generating documentation, simulating producibility and defining seat covers:

* **Improved communication and documentation** - Engineering as well as manufacturing drawings can now be created with SDE 2009. This includes the ability to show and hide cutouts in drawings on sewing reports and engineering drawings as well as the ability to highlight colors on sewing reports to show seam types (French/Deck, etc.) in isometric and flat pattern views. This dramatically improves the communication of the designer's intent to the manufacturing team, speeding overall development time and increasing accuracy.

* **Enhanced producibility simulations** - With improved display of producibility results, the simulation can be inspected and used to identify issues that need to be addressed to make better flat patterns more

easily.

* **Improved capabilities for defining seat covers** - There are now more options for creating attachments (by center point and length, by start and end points, and by point and length) and for creating manufacturing sew lines (by curve, attachment or backing pad).

"There is tremendous pressure on seat cover manufacturers to get to market quickly and on budget," said Ed Bernardon, vice president of business development for VISTAGY. "The introduction of SDE 2009 means they can now create an invaluable master model for use throughout the entire trim design and manufacturing process by bringing flat patterns altered with 2D editing software back into the 3D CAD model so engineering and manufacturing documentation and data can be automatically updated. With SDE 2009, we continue to enhance our customers' competitiveness by improving data accuracy and streamlining the engineering process."

SDE 2009 is currently available.

 [Click here to return to Contents](#)