

Contents

CIMdata News	2
The Social Network & Product Development by Peter Bilello	2
Company News	5
Autodesk Opens Voting for 2010 “Inventor of the Year”	5
Autodesk Shows Green Real Estate Focus with Seventh LEED-Certified Office	7
Cimatron Announces Third Reseller in Brazil	8
Cortona3D Partners with Solid Applications Ltd to Jointly Deliver Cost-Effective 3D Publication Solutions to the British PLM Market	8
Equalis Appoints TechPassion as its Reseller and Scilab On-line Support Partner for India	9
Flow Science Announces Extended Association with XC Engineering (France & Italy)	10
Founder of Zephyris, Jean-Marie Cottineau, Joins PCO Innovation	10
Lectra appoints Edouard Macquin Worldwide Sales Director	11
Record Number of Students Compete in Knovel's University Challenge	11
SVP Product & Marketing Thomas Petersson leaves IFS	12
Events News	12
Agilent Technologies to Demonstrate Newest High-Speed Digital Design Techniques at DesignCon 2011	12
AspenTech Announces OPTIMIZE™ 2011 Global Conference	14
Autodesk Releases Carbon Impact of Autodesk University 2010	14
AVEVA's Muldoon to Give Instrumentation Symposium Keynote Address	15
BOXX Demos World's Fastest SolidWorks Solutions at SolidWorks World 2011	16
Cimatron Offers Practical Advice for Micro-Milling	17
Delcam to Host UKTI Aerospace Meet the Buyer	18
Delcam's New PowerMILL to be Launched at Dormer and Mazak	18
Delcam's Sales Partner Meeting Attracts Record Attendance	19
ESI's First Expert Composites Seminar Declared a Resounding Success	20
KeyShot® Supports SolidWorks 2011®	21
Lattice Technology at Upcoming Aerospace & Defense Summit 2011	21
NEi Software to Unveil Engineering Cloud Application on Feb 10	22
ProSTEP iViP and Siemens PLM Software Initiate Process to Establish JT Data Format as ISO International Standard	22
Synopsys to Showcase DesignWare IP, FPGA Design, FPGA-Based Prototyping and HSPICE Solutions at DesignCon 2011	24
Financial News	26
ANSYS to Release Fourth Quarter and 2010 Earnings on February 24, 2011	26
Aspen Technology Announces Date of Second-Quarter Fiscal 2011 Financial Results Release, Conference Call and Webcast	26
EMC Reports 61% Increase in Quarterly Profit; Achieves All-Time Record Quarterly and Full-Year Revenue and Profit	27
Geometric Declares Revenues of Rs. 1,632.02 Mn up 7.4% Q-o-Q and 28.6% Y-o-Y	31
PTC Announces Q1 Results and Initiates Q2 Guidance, Maintains FY Targets	32
PTC's Q1 Fiscal 2011 Prepared Remarks	35
SAP Reports Record Fourth Quarter 2010 Software Revenue	36
VISTAGY's Revenues Grow 29% in 2010	42
Implementation Investments	43

CIMdata PLM Industry Summary

Collaborating Universities Score Big in Formula SAE with Dassault Systèmes Solutions	43
Delcam Customer Tower Tools Seals Boeing Success	44
DS SolidWorks Corp. Sells Millionth Education License	45
Global Organizations Choose Z Corporation 3D Printers to Accelerate Product Design	46
Hyundai Motor Company and Kia Motors Corporation Selects PTC's Windchill as Its Enterprise PLM Solution	47
LivingRoomCraftZ Increases Productivity with AutoCAD for Mac	49
Mentor Graphics Calibre PERC Programmable Electrical Rule Checker Improves Fujitsu Chip Reliability	50
Motor Sich PJSC and Concepts NREC Announce Successful Design Collaboration Outcome on a High Pressure Ratio Centrifugal Compressor for a Helicopter Gas Turbine Engine	50
NIAR and Dassault Systèmes Partner to Foster Composites Innovation in Aviation	51
Parametric Solutions, Inc. Has Selected AxSTREAM to Develop Its Gas Turbine Design Technologies	52
Pioneering Engineering Firm Gordon Murray Design Selects HyperWorks to Develop the T.25 City Car	53
Swedish Technical Consulting Company Solvina Chooses Dassault Systèmes Solution	54
303 Seats of Edgecam for Chinese College	55
To the Moon Together with KOMPAS-3D; ASCON Supports Team "Selenokhod" at Google Lunar X PRIZE	55
UK's Moonstone Project Achieves Zero Carbon Rating with ArchiCAD	56
Valiant Designs Manufacturing Equipment 20 Percent Faster with Autodesk Software	57

Product News	58
Apriso Expands Paperless Manufacturing Capabilities for Aerospace & Defense Manufacturers	58
Aras Announces Membership in SolidWorks Partner Program	59
Berkeley Design Automation and Accelicon Technologies Accelerate SPICE Model Generation and Characterization	59
Bluebeam Software Announces Time-Saving Licensing Option for Enterprise Customers	60
BobCAD-CAM, Inc. Releases the Pro Version of their CAD-CAM Software for Advanced Machining	61
Bunkspeed Brings the Interactive 3D Photograph to the Cloud	61
CALMAC Introduces Autodesk Revit Models for Energy Storage Systems	63
CCE's Oceans SDK Enables Creation of Browser-Based CAD Interfaces for ERP/PDM/PLM	63
ecVision's B2B Supply Chain Collaboration Capabilities Focus on Suppliers	64
ESI Helps Car Manufacturers Improve Biofidelity for Vehicle Safety	64
GRAPHISOFT Releases ArchiCAD STAR(T) Edition 2011	66
Luxology Announces New Studio Environment Set 1 Kit	67
New STEP Application Protocol 242 in ISO	67
New Version of 3DModelSpace.com CAD Model Search Engine Now Live	68
OpenText Licensing Agreement Brings Advanced Content Analytics to Market	68
SAP Reduces 2010 Green House Gas Emissions Despite Double-Digit Revenue Growth	70
STARC Advances Test of Low Power ICs Using Mentor Graphics Tessent TestKompress	70
STARC and Cadence Develop In-Design DFM for 32/28-Nanometer Silicon Realization	71
Synopsys' DesignWare DDR PHY Compiler Eases Integration of Memory Interface IP	72
T-Splines, Inc Introduces tsElements™ for SolidWorks®	73

CIMdata News

The Social Network & Product Development by Peter Bilello

6 January 2011

Columns From: [Time Compression](#), Peter Bilello President, CIMdata Inc.

Social networking continues its meteoric rise, with time spent on media such as wikis, blogs, instant

CIMdata PLM Industry Summary

messaging, visual conferencing, and chat rooms growing exponentially in recent years.

According to Nielsen Online, time spent on social networks increased 277% in the United States during 2009, and Twitter grew 1,382% year-over-year in February 2009. A presentation at a recent Twitter developer conference noted that an average of 180-million people visit the site monthly. The site signs up new users at a daily rate of 300,000 and its search engine receives about 600-million queries every day. Facebook claims to have more than 500-million active users, half of whom log onto the site on any given day. As an indication of global reach, about 70% of Facebook users are outside the U.S. A growing number of social media sites are being used for business purposes. According to a survey by Jobvite, an Internet platform for referral hiring, 83% of its respondents use or plan to use social networks for job recruiting in 2010: 78% using LinkedIn, 55% Facebook, and 45% Twitter. These statistics are stunning—even to the most cynical business analyst—and they demonstrate that social networks aren't merely a passing fad just for kids.

In contrast to websites where users passively view content, social networks and social media are based on Web 2.0 social computing technology with applications that facilitate creation and interactive sharing of information among groups of users. As such, the sites facilitate collaboration with highly iterative exchanges of information and opinion among potentially very large groups of participants.

Game-Changing Impact

Part of the popularity of social networking may stem from the innate need for people to communicate and connect with one another. Humans are hard-wired to cooperate and share opinions, notes *Tribalization of Business: Transforming Companies with Communities and Social Media*, a 2009 study from Deloitte LLP. It reports that the positive impact of social networking communities on business has the potential to be game-changing. The study—which measured responses of more than 400 organizations, including a hundred Fortune 500 companies with online communities—found that the top business objectives are to engage with customers, partners, and employees to increase word-of-mouth, customer loyalty, branding, idea generation, and improved customer support. Resolving a customer problem through an on-line community, for example—either by a company representative or by another community member—can boost customer satisfaction and amounts to a tremendous cost savings.

At many of these companies the primary driver of such initiatives is the marketing group, which views on-line communities as a low-cost—or no cost—way of amplifying the company's marketing message. Consequently, efforts usually are not focused on gathering or disseminating data or insights that could prove useful to other groups within the enterprise such as product design and engineering. A recent CIMdata opinion poll indicated some companies are starting to use social computing and other Web 2.0 technologies in their product development processes, although on a very limited basis. Specifically, 9% indicated they use these solutions a great deal, 25% indicated some use, and 24% very limited use.

What Holds Companies Back

One major factor holding many companies back from embracing social networking is the view of social computing as an amorphous concept—an approach that cannot be tightly controlled or managed for significant benefit to the company. Rather, employees are perceived as wasting time on non-business activities instead of explicitly collaborating among the various individuals and groups working within the context of product development. This perception of abuse is reflected in company policies at a large number of organizations. David Armano, a senior vice president at communications firm Edelman Digital, wrote in the November 2, 2009 issue of *Harvard Business Review* that approximately 70% of organizations ban the use of social media, thus reinforcing the trend for people to increasingly interact

CIMdata PLM Industry Summary

with networks using mobile devices. Facebook reports that more than 150,000 active users assess their network through mobile devices and that these users are twice as active on Facebook as non-mobile users.

Companies may also be concerned that commercial social computing solutions have not been designed with privacy and data security as fundamental capabilities and that this could put product designs, sensitive information, and proprietary data at risk. Indeed, the social networking technologies offered by today's PLM solution suppliers are relatively new and basic in nature—but nevertheless represents significant steps forward. Some PLM solution suppliers are cultivating their own customer communities while others offer social networking enabling technologies from Microsoft and other software suppliers. A few PLM solutions are designed to mine the managed data of knowledge buried in social networks.

Analytics Unlock Huge Potential

Beyond monitoring social networks, such PLM search capabilities and analytics of making sense from captured information hold the key to unlocking huge potential benefits of social computing. This involves more than merely monitoring and reporting of raw numbers; such capabilities provide knowledge-based intelligence technologies to gain insight and identify patterns or trends from volumes of seemingly random or unrelated data, and filter out the noise and chatter from meaningful knowledge useful to a company. Such insight has the potential to integrate the voice of the customer into product development, capture requirements, evaluate sentiment, predict trends, and anticipate buy preferences—all of incredible value in the early stages of product development when design concepts are just starting to take shape. Some companies are beginning to look to social networking as a mechanism to support “crowdsourcing,” where individuals outside the company (e.g., suppliers, partners, customers, and the general public) are invited to contribute ideas and suggestions for new products and perhaps even create new designs in what is known as “community-based design” or “distributed participatory design.” Additionally, some companies are expanding the scope of these activities to include other product lifecycle management tasks.

Other companies are using social computer technology to establish internal collaborative product development sites that allow participants—often in different locations and time zones—to pose questions and share comments as well as exchange CAD files, documents, spreadsheets, presentations, etc. By bringing in people from departments such as manufacturing, finance, marketing, or customer service, for example, product development specialists can get input from a diverse group on various aspects of a new product that might otherwise might not be considered or accurately perceived. This collaborative social computing approach manages these seemingly unstructured exchanges by collapsing comments strings and attaching the initial image or statement that prompted it—much like Facebook does.

Benefits & Challenges

Getting the most from this new way of working and the social computing technologies offered is yet to be fully understood within the context of product development—generally a hugely under-exploited area of social networking. CIMdata's experience is that, if properly implemented, social networking within a product lifecycle management context has the potential of providing huge benefits. Collaboration takes place in bringing people together—often from different disciplines—in an unstructured way. Valuable information and insights are gained by interacting with people from outside the company, especially interacting with customers on a more interactive basis. Early product concepts can be readily evaluated.

What's more, to attract the brightest and best employees, companies must recognize that today's and tomorrow's knowledge workers expect to interact in this highly-collaborative manner. Benefits such as

CIMdata PLM Industry Summary

these may prove to be elusive to many organizations, however, that apply traditional cost-benefit evaluations to new ways of working that have yet to even begin to reach their full potential.

The PLM industry has an opportunity to lead the way in using social networking within a business environment. Indeed, the knowledge obtained from social networking could become an important element in the body of diverse information managed by PLM, which serves as a digital highway supporting the collaborative creation, management, dissemination, and use of product definition information across the extended enterprise, and spanning from product concept to end of life—integrating people, processes, business systems, and information.

Social networking within the business context is still in its infancy, however, and much work remains in adapting this new tool for use within a business context. Building on initial strides already made, many challenges remain in extending existing social computing capabilities and breaking new ground in areas such as:

- Capturing, analyzing, and managing social media information.
- Extracting meaningful data and useful knowledge out of unstructured data.
- Putting structure to social computing without hindering transparency and free flow of ideas, concepts, and product-related information.
- Directing social networking initiatives within a broad range of disciplines for the overall benefit of the enterprise.
- Establishing corporate policies that enable employees to participate in social networking without compromising corporate intellectual property or risking the release of potentially damaging information.

The overall objective should be to utilize social computing technologies in providing enhanced collaborative environments for PLM users that further expand the use of PLM within and across extended enterprises. The competitive advantage of leveraging social networking in product development process could be enormous, as are the business risks for companies ignoring the yet untapped sources of knowledge they never knew existed.

 [Click here to return to Contents](#)

Company News

Autodesk Opens Voting for 2010 “Inventor of the Year”

27 January 2011

Autodesk, Inc. has kicked off the company’s official “Inventor of the Year” voting process. Autodesk is encouraging interested members of the manufacturing community to visit the [community website](#) and vote one of the 2010 [Autodesk Inventor of the Month](#) recipients as “Inventor of the Year.”

The Inventor of the Month program recognizes the most innovative design and engineering advancements made among the hundreds of thousands of users of [Autodesk Inventor](#) software -- technology that takes manufacturers beyond 3D to [Digital Prototyping](#). Simply put, a digital prototype helps users design, visualize and simulate how a product will perform before it is built, which in turn helps to reduce costs, speed time to market and increase competitive advantage.

The Inventor of the Year is chosen from the monthly award winners for 2010. The monthly winner with

CIMdata PLM Industry Summary

the highest rating from community members will be named Inventor of the Year. Voting is under way and closes Feb. 27 at 5 p.m. eastern time.

Inventor of the Month Winners for 2010

January 2010: [ideas*](#), an Australian engineering services firm, used Autodesk Inventor to design and develop the world's most advanced construction recycling facility. The massive facility in Victoria, Australia, is capable of recycling one million tons of demolition materials a year.

February 2010: [StructureCraft](#), a custom design-builder based in British Columbia, Canada, used Autodesk Inventor to design and develop the innovative WoodWave roof for the Richmond Olympic Oval long-track speed-skating venue.

March 2010: [RND Automation](#), a manufacturer of custom factory automation, robotic work cell, packaging and material-handling equipment, uses Autodesk Inventor to effectively design customized automation solutions for a wide range of customers, including manufacturers of hydraulic valves, contact lenses and insulated beverage containers.

April 2010: [Vindby](#), a Danish supplier of renewable energy solutions, used Autodesk Inventor to develop the Vindby 1A, the first wind turbine approved for home use in Denmark.

May 2010: [Preciosa](#), a Czech-based producer of cut crystal chandeliers and lighting fixtures, uses Autodesk Inventor, in conjunction with AutoCAD Mechanical and Autodesk Vault Professional software, to design, visualize and simulate its products in 3D and easily share digital prototypes with customers — helping them design their dazzling wares in half the time and with 70 percent fewer mistakes.

June 2010: [West Hills Construction](#) uses Autodesk Inventor to deliver energy efficiency, management, storage and distributed generation solutions. Using a combination of technologies, West Hills Construction helps customers not only reduce their energy use, but also generate energy on-site from renewable resources. The result has both environmental and economic benefits for all involved.

July 2010: [Brookhaven National Laboratory](#), a national research laboratory overseen by the Office of Science of the U.S. Department of Energy, relied on Autodesk Inventor to design the innovative, next-generation nanotechnology equipment in National Synchrotron Light Source (NSLS) II facility, one of the world's most widely used scientific user research facilities.

August 2010: [Mark Richey Woodworking](#), a high-end architectural woodworking firm, used Autodesk Inventor in developing and installing the precision millwork required for a new performing arts center. Without Inventor software, fabricating and installing the woodwork in Helzberg Hall would have taken two to three times longer — and cost three times as much.

September 2010: [Joy Mining Machinery](#), a leading global supplier of underground mining systems, used Autodesk Inventor Digital Prototyping software to develop its JOY 14ED25 continuous miner-bolter machine that helps promote zero harm in the underground mining environment.

October 2010: A [Stanford University team](#) of graduate students used Autodesk Inventor to develop a prototype of the recyclable Bloom laptop. Creating 3D digital prototypes of the hardware components in the laptop aided in creating a readily accessible laptop design that is also easy to disassemble.

November 2010: [Ritter Sport](#), Germany's producer of the square chocolate bar of the same name, uses Autodesk Inventor software to more quickly change its candy bar designs. While the company's famous 100-gram chocolate square remains an unchanging staple of its product lineup, Autodesk Inventor helps

CIMdata PLM Industry Summary

the company create new designs 30 percent faster than previously to more quickly respond to market trends.

December 2010: [Pi Mobility](#) used Autodesk Inventor to more efficiently design the Pi Cycle, a new generation of sturdy, long-lasting electric bicycles. Producing a 3D digital prototype of the Pi Cycle showed that by increasing the diameter of the bike's tube by a half an inch, the company could immediately save a significant amount of money.

To see a Flickr set of photos featuring all the 2010 Inventor of the Month winners, visit <http://www.flickr.com/photos/58803052@N05/sets/72157625918709828/>. Also, video interviews with all the 2010 Inventor of the Month winners can be viewed at the Autodesk YouTube Channel at <http://www.youtube.com/user/autodesk>.

About the Autodesk Inventor of the Month Program

Each month, Autodesk selects an Inventor of the Month from the users of Autodesk Inventor software. Winners are chosen for engineering excellence and groundbreaking innovation. For more information about Autodesk Inventor of the Month, contact IOM@autodesk.com.

 [Click here to return to Contents](#)

Autodesk Shows Green Real Estate Focus with Seventh LEED-Certified Office

27 January 2011

[Autodesk, Inc.](#) showed its commitment to environmentally responsible real estate choices at its first Sustainability Summit, by announcing plans to move into its first green office space in Asia-Pacific. The company's 56,000 square feet of leased office space in Singapore brings the Autodesk LEED-certified facility count to seven, or 23 percent of the company's total office space.

“Although Autodesk's overall building stock and associated carbon footprint is relatively small compared to many other large companies, we strive to implement best practices to consistently measure, manage and reduce our own impact,” said Lynelle Cameron, director of sustainability at Autodesk. “With more than 40 percent of global energy use attributable to buildings, Autodesk and our customers face the challenge of designing high performance office spaces and optimizing our buildings' operations. Relying on Building Information Modeling and our portfolio of sustainable design solutions makes it easy for us to demonstrate eco-responsible decision making.”

Autodesk to Move into Its First LEED-Certified Office in Asia-Pacific

In February, Autodesk will move into its first green location in Asia-Pacific, a LEED Commercial Interiors certified office in Singapore. The environmental benchmark for tenant improvement to existing buildings, LEED Commercial Interiors certification creates healthy places to work with fewer toxins in interior materials, more daylight and clean air, and less energy required to operate. The company's office space is in the Solaris building, and Autodesk is one of the first tenants in the new structure.

Building Information Modeling Used in Design of Autodesk's Sustainable Office Spaces

As with its LEED-certified locations in McLean, Va.; San Francisco; and Waltham, Mass., Autodesk and its design team employed a [Building Information Modeling](#) (BIM) process and the company's portfolio of 3D model-based design solutions in the design of the Singapore project. BIM is an

CIMdata PLM Industry Summary

intelligent 3D model-based design process that provides insight for creating and managing building and infrastructure projects faster, more economically, and with less environmental impact.

[Autodesk Revit Architecture](#) was used extensively for the Singapore project, helping visualize the real-world appearance, performance and cost of the interior build-out, and keeping the designers, contractors and Autodesk in sync. [Autodesk Revit MEP](#), the BIM solution for building systems design, was used to help plan air ducting and electrical layout on the two and a half floors Autodesk will occupy. To render the interior spaces with beautiful detail, the designers used [Autodesk 3ds Max Design](#).

 [Click here to return to Contents](#)

Cimatron Announces Third Reseller in Brazil

24 January 2011

Cimatron Limited announced that Fitso Solucoes em Tecnologia Ltda. has been appointed to serve as a reseller of Cimatron's products in the Sorocaba region and parts of Sao Paulo city, Brazil.

Fitso is based in Sorocaba city, a large industrial region around 100 km from Sao Paulo city. The company was founded by Davi Assaf, a CAD/CAM expert with several years of experience in CimatronE. Assaf and his team will provide tool makers and manufacturers in the region with full sales and support services, and help customers to shorten delivery times and reduce costs.

The appointment of Fitso as reseller is part of an aggressive growth plan in Brazil, which is one of the largest industrial centers in the global community. Last December, Cimatron announced two new resellers for Brazil: CimCAD, based in Joinville city, which covers the Santa Catherina state area in southern Brazil, and MTC, located in Indaiatuba city, which serves the Campinas region of Brazil.

"We are happy to welcome Fitso as Cimatron's third Reseller in Brazil", said Alexandre Censi, Cimatron's country manager for Brazil. "Our efforts to expand our presence through Resellers are proving successful, and we are getting the word out that Cimatron is now stronger and more established in Brazil."

 [Click here to return to Contents](#)

Cortona3D Partners with Solid Applications Ltd to Jointly Deliver Cost-Effective 3D Publication Solutions to the British PLM Market

26 January 2011

Cortona3D announced the completion of a reseller agreement with Solid Applications Ltd in the UK. Solid Applications will represent the Cortona3D RapidTools to the British Aerospace & Defense, Industrial, Electronics & High Tech, Automotive and other industries. Solid Applications Ltd. specialises in the supply, implementation and support of Siemens PLM Software based solutions.

Cortona3D software enables manufacturers to provide more efficient and effective technical documentation – parts catalogs, technical manuals, operating procedures, work instructions and training materials without re-work. Cortona's Rapid family of tools is proven in use on projects run by Boeing and The European Space Agency amongst many others.

"Solid Applications is pleased to have been selected as the partner to deliver Cortona3D in the United Kingdom", commented Director, Michael Howells. "We are constantly looking for areas where our

CIMdata PLM Industry Summary

customers can streamline their use of PLM throughout the business. Maintenance, spares and technical publications is one of those traditional areas that have a lot of manual processes. These areas can now benefit from the technology Cortona delivers. This is an exciting complimentary product to our portfolio of market leading innovative PLM products.”

It is a pleasure to be working with an organization of such quality, who knows the local market thoroughly. said Matthew Booth ,VP Sales, Cortona3D.

About SOLID Applications Ltd

SOLID Applications Ltd. specialises in the supply, implementation and support of Siemens PLM Software based solutions. SOLID Applications Ltd. are an award winning UK supplier of the Siemens PLM Software Velocity Series software and services and three times winner of the prestigious Siemens PLM Software Business Partner of the Year award. They also provide network design, installation and implementation services to individual customers’ requirements. Customers include Dennis Eagle, Anglian Water, Balfour Beatty, Babcock, Honeywell and Malvern Instruments

About Cortona3D

Cortona3D provides 3D visual communication and publishing software to equipment manufacturers worldwide. Cortona3D open standards tools give manufacturers the power to rapidly author web-based interactive, animated 3D product documentation from existing CAD assets. Proven benefits are three times faster production, 80%+ cost savings, and improved quality. Customers include Boeing, Ford, GE, ESA and Airbus.

 [Click here to return to Contents](#)

Equalis Appoints TechPassion as its Reseller and Scilab On-line Support Partner for India

25 January 2011

[Equalis](#), the innovative on-line destination for the mathematics community, announced that it has appointed TechPassion as its partner for India. TechPassion, an engineering product and services company, has strong experience in numerical analysis and working with major Indian industrial companies and education institutions. Through this partnership, Equalis and TechPassion will drive adoption of the Scilab open source math application by providing customers direct access to a local, dedicated team of applications specialists to solve challenges fast.

Equalis is driving the most vibrant and far reaching on-line math-centric community. It enables the free flow of ideas, cutting-edge research, open source technology, problem solving, and job opportunities for individuals and organizations with a common interest in math and math-centric endeavors. Equalis is a member of the Scilab Consortium, and exclusive worldwide Scilab On-line Support (SOS) partner of Scilab Enterprises, the development and service company for Scilab, the leading Open Source numerical computation platform. The SOS program provides Scilab users a full range of premium benefits, including; advanced user documentation, email support, video tutorials, priority bug fixes, and real-time support via chat, phone, and desktop connect. Equalis also provides support migrating Matlab users to the Scilab application.

TechPassion has developed a VMAP solution, integrated with Scilab, to bridge the gap between virtual prototyping and physical testing and experimentation in the product design cycle. TechPassion also has extensive expertise in providing Scilab training and deploying Scilab solutions.

CIMdata PLM Industry Summary

"We are delighted to expand our coverage for our fast growing Indian customer base through this partnership with [TechPassion](#) whose domain expertise will provide accelerated deployments and strong local support", said Neil Mitchell, COO and Co-founder, Equalis. "We look forward to continuing to grow the adoption of Scilab in India".

"We are excited to join the Equalis team and support their global operations", said Dhanushkodi Mariappan, CEO, TechPassion. "We look forward to bringing our expertise to bear in supporting more Scilab customer programs".

 [Click here to return to Contents](#)

Flow Science Announces Extended Association with XC Engineering (France & Italy)

25 January 2011

[Flow Science, Inc.](#) announced that it has entered into an agreement with XC Engineering Srl, to represent Flow Science's FLOW-3D software in France. XC Engineering has been Flow Science's associate in Italy since 2002.

"We are very excited to represent Flow Science in France. We are committed to providing the best support to our customers in France, and we have added the resources necessary to do this," commented Alessandro Incognito, President of XC Engineering.

Flow Science, Inc. is a privately-held software company specializing in transient, free-surface CFD modeling software for industrial and scientific applications worldwide. Flow Science has distributors for FLOW-3D sales and support in nations throughout the Americas, Europe, Asia and Australia. Flow Science's headquarters is located in Santa Fe, New Mexico.

[XC Engineering](#) is a privately-held engineering company, which specializes in selling and supporting simulation and process optimization software. XC Engineering is located in Cantù, Italy.

 [Click here to return to Contents](#)

Founder of Zephyris, Jean-Marie Cottineau, Joins PCO Innovation

3 December 2010

[PCO Innovation](#) announced that the founder and CEO of Zephyris and a part of his staff have recently joined its team in Paris.

Founded in 2004, Zephyris has built an excellent reputation in the French marketplace by helping clients successfully implement PLM solutions, especially those using PTC.

"We are excited and proud to welcome Zephyris' team, all of whom bring their experience in utilizing PTC technology," said Marc Monier, Director of Operations, PCO Innovation, France.

According to the founder of Zephyris, Jean-Marie Cottineau, "We are going to carry on our business development within the PCO Innovation's environment, sharing the same values."

Strengthened with this addition of new talent, PCO Innovation continues its extended globalization efforts while remaining dedicated to its mission of providing its customers with valued professional services through its consultants and technology experts in PLM and process innovation.

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

Lectra appoints Edouard Macquin Worldwide Sales Director

26 January 2011

Lectra announced the appointment of Edouard Macquin as Worldwide Sales Director, effective January 1, 2011.

Since 2005 Edouard Macquin has served as Director of Lectra South America. His remarkably varied career has earned him extensive knowledge of the trade sectors relevant to Lectra's customers, as well as an in-depth understanding of the company's technology and services offer and its added value.

The Group is seeing a very strong rebound in its activity, with orders for new systems up 70% during the first nine months of 2010. Edouard Macquin will have the dual task of maintaining this profitable double figure growth and continuing to pursue the strategy of value development, initiated in 2009 by Daniel Harari, Lectra CEO, who held the role of Worldwide Sales Director at the time.

"Proximity to our customers wherever they are in the world is one of the keys to our success," said Edouard Macquin. "By choosing our solutions, they benefit not only from innovative technologies with excellent added value, but also from our teams' extensive expertise and know-how."

"Edouard brings together a rare combination of qualities and experience. In a difficult global economic climate, he successfully developed Lectra's operations in South America, achieving exceptional results, particularly in Brazil. There, he was able to make the country's economic dynamism work with Lectra's assets, earning great respect from his teams and his peers," explains Daniel Harari. "I am counting on him to further strengthen Lectra's leadership by capitalizing on our recent successes and our offer, which is currently the best on the market."

Edouard Macquin, 45, holds an MBA from São Paulo Business School and speaks French, English, Portuguese, Spanish, and Italian. He joined Lectra in 1987 in R&D and later assumed various positions in services and then marketing, in France, Italy, the United States, and Brazil. In 2000, he was appointed Director of Lectra Brazil, where he reinforced Lectra's position as Number One.

Based in Paris, Edouard Macquin reports directly to Daniel Harari.

 [Click here to return to Contents](#)

Record Number of Students Compete in Knovel's University Challenge

24 January 2011

[Knovel](#) announced the winners of the 2010 University Challenge. With more than 10,000 eligible entries submitted from students representing more than 500 universities worldwide, the 2010 competition was the most successful since the program launched in 2007. Each year, the Knovel University Challenge presents 12 questions on engineering-related topics, and students can use Knovel to research and find the answers. Eligible entries are based upon correctly answering a minimum of three questions out of twelve.

The worldwide competition, which launches each fall, has become a way for University librarians to introduce top-notch library resources to students as they learn how to research, problem solve, and prepare for a competitive workforce. In fact, participation in the 2010 competition was a requirement for more than [600 students in a freshmen engineering program](#) at the University of Arkansas, Fayetteville.

Patricia Kirkwood, Engineering and Mathematics librarian and associate professor, explains why the

CIMdata PLM Industry Summary

University Challenge is now required for her students, "We want them to learn how to use high quality resources and the Knovel Challenge shows them that that's easier than expected. Unlike web search engines, Knovel searches always find data and information from reliable technical resources. You don't have to pore through a page of questionable options."

Knovel awarded 21 prizes this year including a special prize for the school that had the most entries. That prize went to Benjamin Sissons from University of Arkansas. Nine others schools qualified for the "contest-within-the-contest" by having more than 100 students participate.

The 2010 grand prize recipient was Moustapha Adoum from the University of California, San Diego. The first prize recipient was Jacob Dodson of Virginia Tech.

For a complete list of the 2010 Knovel University Challenge winners, visit <http://www.knoveluniversitychallenge.com/winners.htm>

 [Click here to return to Contents](#)

SVP Product & Marketing Thomas Petersson leaves IFS

28 January 2011

Effective 31st January 2011, Thomas Petersson will be leaving IFS to pursue other interests. Petersson's responsibilities will be transferred to existing members of his management team.

Thomas Petersson has held several management positions within IFS, most recently as Head of Product & Marketing, IFS World Operations AB. IFS would like to take this opportunity to thank Thomas Petersson for his contributions to the continuing growth and profitability of IFS and wish him well in his future endeavours.

 [Click here to return to Contents](#)

Events News

Agilent Technologies to Demonstrate Newest High-Speed Digital Design Techniques at DesignCon 2011

26 January 2011

Agilent Technologies Inc. announced it will demonstrate its high-speed digital test solutions at [DesignCon 2011](#), Jan. 31- Feb. 2, at the Santa Clara Convention Center, Booth 201.

Agilent's solution set ensures the best digital test tools for smartphones, laptops, and emerging devices. High-speed digital products include tools for high-performance probing, signal integrity testing, high-speed interconnect analysis/simulation, jitter analysis, FPGA debugging, and analysis of FBD/DDR memory, Serial-ATA, PCI Express[®], USB 3.0, HDMI 1.4, DisplayPort, Gigabit Ethernet and Fibre Channel.

Agilent at DesignCon 2011

[IBIS AMI model simulation](#) with Agilent's EDA tool, ADS 2011.01. The input/output buffer information specification algorithmic modeling application programming interface (IBIS AMI) standard allows IC vendors to share "executable datasheets" of the high-speed digital SERDES without proprietary encryption.

CIMdata PLM Industry Summary

[Power integrity solutions](#) with Agilent's ADS Momentum. ADS 2011.01 solves power integrity problems that are complicated by heavily perforated power and ground planes. Momentum now models the effects of frequency-dependent dielectric loss and the surface roughness of copper traces.

[Simulation and measurement tools](#) using Agilent's N1010A FlexDCA Remote Access Software. The tools help engineers characterize high-speed digital designs with improved margins and offers de-embedding, embedding, offline analysis, and built-in simulator capability. To validate IBIS-AMI models, engineers can compare simulated signals generated by Agilent's SystemVue software with actual hardware measurements performed using the 86100C/D DCA oscilloscope.

[Physical layer test](#) with the Agilent's N1930B (PLTS). Software version 6.0 provides additional features to complement the signal integrity laboratory. It allows users to add automatic calibration and measurement to the test suites. A new data integrity check allows users to verify and enforce the passivity, reciprocity and causality of S-parameters.

[Interconnect analysis](#) using Agilent's 16-port 70-GHz PLTS. This system enables industry-first bandwidth of 70 GHz with 16 ports for measurement of four differential channels simultaneously. Employing an electronic calibration module, users can make a complete 16-port measurement in less than three minutes. The resulting 'filename'.s16p Touchstone file enables worst-case crosstalk analysis of four differential interconnect channels.

[PCIe® 3.0 receiver tolerance characterization](#) with the Agilent J-BERT N4903B. For R&D and validation teams, this product provides accurate receiver tolerance testing of PCI Express 3.0, USB 3.0, SATA, QPI and other serial bus interfaces operating up to 14.2 Gb/s.

[Digital and mixed signal test](#) with Agilent 81160A Pulse Function Arbitrary Noise Generator. This is a plug-and-play solution, with minimal cabling, low space overhead and functions built in to reduce development time. The pulse function arbitrary noise generator is an adaptable and efficient test tool to accurately test devices and not your test source / stimulus up to 330 MHz pulse, 500 MHz sine waves and random and repeatable white Gaussian noise.

[High-speed digital design measurements](#) with the new Agilent 86100D DCA-X Wide-Bandwidth Oscilloscope. This is a premier solution for accurate and precise measurements from 50 Mb/s to over 80 Gb/s. The modular DCA platform can be configured for electrical, optical, TDT/TDT and S-parameter measurement supporting up to 16 measurement channels.

[Debugging data signal integrity](#) using the Agilent ENA Option TDR. The ENA Option TDR is a one-box solution for analyzing high-speed serial interconnects, including TDR/TDT, eye diagrams, and S-parameters. Inheriting the excellent accuracy of the E5071C network analyzer and adding the versatility of TDR oscilloscopes, the ENA Option TDR changes the world of TDR measurements, providing fast and accurate measurements, simple and intuitive operation, and robustness against ESD. Agilent also offers method-of-implementation (MOI) documents for compliance testing high-speed serial standards such as USB 3.0, HDMI and Serial-ATA.

[Agilent presentations and forum topics](#) include:

“A Really Simple Method to Characterize Differential Interconnects”;

“Measurement Uncertainty of VNA-Based TDR/TDT Measurement”;

“USB 3.0 Serial Link Design, Optimization and Validation”;

“A Simple, Yet Powerful Method to Characterize Differential Interconnects.”

CIMdata PLM Industry Summary

Jay Alexander, general manager and vice president of Agilent's oscilloscopes business will give the DesignCon 2011 keynote – “The Electronics Industry in 2011 and Beyond: Observations and Opportunities” – at noon on Feb. 1.

Agilent experts will be on hand in Booth 201, demonstrating Agilent’s high-speed digital solution set. The solutions provide a range of essential tools for engineers in design and simulation, helping them cut through the challenges of gigabit digital designs.

Agilent is the official sponsor of this year’s event. Additional information is available at <http://www.agilent.com/find/DesignCon>.

 [Click here to return to Contents](#)

AspenTech Announces OPTIMIZE™ 2011 Global Conference

25 January 2011

Aspen Technology, Inc. announced its global conference, OPTIMIZE 2011, will be held in Washington, D.C. in May 2011. OPTIMIZE 2011 will showcase how the world’s leading process industry companies use process optimization to achieve financial and operating results. The 2011 conference will also commemorate [AspenTech’s 30 years of leadership and innovation in the process industries](#).

AspenTech has re-named the conference “OPTIMIZE” to highlight the company’s core customer value – optimizing engineering, manufacturing and supply chain processes to help customers achieve superior financial and operating results.

OPTIMIZE 2011 is expected to draw upwards of 1,000 attendees from more than 40 countries, and will feature dozens of customer stories on process optimization best practices for engineering, manufacturing and supply chain professionals across energy, chemicals, pharmaceuticals, engineering and construction, and other process industries.

Conference tracks - under the themes Optimize Engineering, Optimize Manufacturing, Optimize Supply Chain, Optimize IT and Energy Optimization - will highlight how process manufacturers from around the world use aspenONE software to support their key business processes and people, while improving return on capital by integrating engineering, manufacturing and supply chain operations.

OPTIMIZE 2011 will be held at the Gaylord National Hotel and Conference Center, on the banks of the Potomac River, from May 23-25, 2011. AspenTech customers can register now at <http://www.regonline.com/Register/Checkin.aspx?EventID=921668>

Supporting Resources

[OPTIMIZE 2011 Global User Conference](#)

[Register for OPTIMIZE 2011](#)

[Twitter: @AspenTech](#)

<http://www.facebook.com/aspentechFacebook: AspenTech>

 [Click here to return to Contents](#)

Autodesk Releases Carbon Impact of Autodesk University 2010

27 January 2011

CIMdata PLM Industry Summary

Autodesk, Inc. chose its inaugural Sustainability Summit to announce the greenhouse gas (GHG) and other environmental impacts of [Autodesk University](#) (AU) 2010. The results revealed that in-person attendance at the company's main annual user conference in Las Vegas grew 16 percent, even as the per-attendee carbon footprint was reduced by 4 percent over 2009 due to increased online participation.

"Each year, Autodesk hosts several conferences attended by thousands from across the globe. While these events are important for our business, they can have a profound impact on the environment, mainly in the form of greenhouse gas emissions from travel, energy, and lodging, as well as materials use and waste," said Lynelle Cameron, director of sustainability at Autodesk. "In fiscal year 2010, our largest events contributed 14 percent of the total Autodesk carbon footprint, but we're working to continue lowering that number and reducing the overall environmental impact of our events. One of our key strategies to that end is driving more online attendance through events like AU Virtual."

Increased Eco-Responsibility at AU2010

In 2010, AU brought together a record 30,000 attendees for live conferences in Las Vegas, Tokyo, and Beijing, and online through [AU Virtual](#). Online participants in the event increased 18 percent over 2009, while physical attendees at the main event in Las Vegas increased 11 percent. Even with these attendee increases, however, the analysis conducted by the company shows the benefits of impressive efforts to reduce the environmental impact of the event:

- **Reduction in materials use remains high:** Beginning with AU2009, Autodesk reduced the amount of water bottles at the event, saving 3.3 tons of plastic from landfill. In addition, the company moved from printed show guides to a mobile device-based application for attendees, while eliminating handouts for AU classes, reducing paper use enough to save 314 trees.
- **Solid waste diversion keeps materials from landfill:** For AU2010, more than 92 percent of all solid waste generated by the event was diverted from landfill, with food scraps going to a local pig farm and all recyclable materials being processed in Las Vegas.
- **Attendee travel continues to be largest impact:** As ever with such large events, travel of attendees and employees to and from the event—Scope Three emissions—was the primary contributor to carbon impacts. These emission numbers remained flat per physical attendee, however, even as event participation grew, due in large part to an increase in online attendees.
- **Greening event is important to attendees:** In a post-event survey of AU2010 attendees, more than 61 percent of respondents said it was important to them that Autodesk considers sustainability in its operation of the event.

 [Click here to return to Contents](#)

AVEVA's Muldoon to Give Instrumentation Symposium Keynote Address

24 January 2011

AVEVA announced that William Muldoon, Executive Vice President, will be the keynote speaker at the upcoming 66th Annual Instrumentation Symposium for the Process Industries, at Texas A&M University's Rudder Theatre January 25.

Muldoon, a Texas A&M graduate (BS Engineering and MBA), will discuss "The Pursuit of Operational Excellence and Business Agility: Can You Achieve It with Homegrown Automation, or Will You Need to Integrate an Enterprise Solution?" Muldoon's address kicks off the symposium, which lasts through January 27.

CIMdata PLM Industry Summary

"We are all operating in a 'competitive environment,'" Muldoon said. "Corporate mandates are calling for sustained business productivity. To complicate it further, recent industrial accidents have highlighted the need for more certainty in our decisions based on real and accurate data. During my address, I want to challenge the attendees to make subtle changes in 2011 that can have a high impact without having to throw away years of investments."

AVEVA will also be exhibiting its suite of engineering design and information management solutions at the conference. This includes AVEVA Instrumentation and AVEVA IntelliLaser which enables 3D laser survey data to be turned into a rich data source for asset management via the web.

The Instrumentation Symposium for the Process Industries features technical presentations and booths designed to educate professionals and students involved in instrumentation operations, engineering and maintenance in industrial process plants across the Southwest. Last year's event drew more than 300 attendees.

 [Click here to return to Contents](#)

BOXX Demos World's Fastest SolidWorks Solutions at SolidWorks World 2011

24 January 2011

BOXX Technologies, an supplier of high-performance computing systems for product design, engineering, VFX, animation, advanced visualization, and post production, announced that 3DBOXX XTREME workstations, that provide solutions for running [SolidWorks](#), will demonstrate the 3D CAD software in BOXX booth #306 at SolidWorks World 2011 at the Henry B. Gonzalez Convention Center in San Antonio, Texas, January 23-26. BOXX will also showcase the GoBOXX 2650 mobile workstation, the world's fastest mobile SolidWorks solution. SolidWorks World features the latest in 3D CAD technology from over 100 exhibitors, as well as networking and educational opportunities.

"3DBOXX workstations and GoBOXX mobile workstations are outstanding platforms for DS SolidWorks," said Nick Iwaskow, Manager, Alliances, Dassault Systèmes SolidWorks Corp. "As SolidWorks users themselves, BOXX relies on years of knowledge and experience to develop professional hardware solutions that both meet our standards and result in a positive experience for the end-user."

With an over-clocked, six-core Intel® Core™ i7 processor capable of reaching 4.15 GHz, the liquid-cooled 4860 XTREME provides high-powered, multitasking performance for 3D product design, engineering, animation, VFX, and more. Also featured at the BOXX booth is the 3DBOXX 8550 XTREME, a performance-enhanced dual six core Intel® Xeon® workstation. The fastest workstation in the world, 8550 XTREME owns the top two spots on the SolidWorks Performance Test, a SolidWorks website feature which provides users with tests to compare their systems against others.

"3DBOXX XTREME workstations powered by Quadro graphics solutions open up creative opportunities that were never possible before," said Jeff Brown, general manager, Professional Solutions Group, NVIDIA. "The innovative Fermi architecture of our GPUs enables designers and engineers to perform interactive, photorealistic visualization and complex simulation on a single workstation."

The BOXX booth will also include GoBOXX 2650. GoBOXX features a desktop level processor (six core Intel® Core™ i7), allowing users to create on the go without sacrificing professional workstation performance. At the NVIDIA booth #401, a 3DBOXX featuring NVIDIA GPUs will perform interactive ray tracing with SolidWorks and Bunkspeed® SHOT™, while at the Luxology booth #138, an

CIMdata PLM Industry Summary

additional 8550 XTREME along with a BOXX renderPRO, will demonstrate Modo and PhotoView 360 within the SolidWorks workflow.

Since 2001, BOXX engineers have relied on SolidWorks applications when designing BOXX hardware chassis, so as an official SolidWorks Solution Partner, BOXX is inviting SolidWorks World attendees to bring their most challenging image on a USB drive for demonstration on their solutions.

"To read about the power and record-setting performance of our solutions is only part of the equation," said Shoaib Mohammad, Director of Marketing and Business Development at BOXX. "Our unique offer provides an opportunity for SolidWorks users to personally experience why BOXX is clearly the professional's choice."

Learn more about 3DBOXX workstations and BOXX rendering solutions, BOXX Finance options, and how to contact one of their worldwide resellers, by visiting <http://www.bboxtech.com>.

 [Click here to return to Contents](#)

Cimatron Offers Practical Advice for Micro-Milling

26 January 2011

[Cimatron Technologies Inc](#) announced that it will host a webinar offering practical tips on how to meet the challenges of the micro-milling industry on Feb 17th 2011.

Cimatron is a leading provider of integrated CAD/CAM solutions for mold, tool and die makers as well as manufacturers of discrete parts.

More and more industries (medical, optics, computer equipment, etc.) depend on the ability to cost-effectively manufacture very small, high-precision molds and parts. The increasing demand provides attractive opportunities for mold makers and manufacturers who are able to fulfill the quality and delivery time requirements of such jobs.

Micro-scale components and products also present toolmakers with new and diverse challenges; micro-molders often work with new materials, they utilize special mold coatings, machine with very small tools and must reach sub-micron-level accuracy.

The Feb 17th webinar will provide practical tips to help manufacturers overcome these challenges and make the most out of the micro-milling opportunity.

The webinar will be led by Ralph Picklo, VP Sales at Cimatron Technologies. Picklo works closely with customers in the micro-molding and micro-production fields to increase quality and reduce delivery times in cost effective ways. He has over 20 years of experience in the manufacturing industry.

"Micro-milling is a hot topic right now," said Picklo. "Cimatron was the first to release a CAM solution dedicated to micromilling several years ago, and has gathered a wealth of experience regarding all aspects of micro-production. We're looking forward to the opportunity to share our knowledge with customers and other manufacturers that will attend this webinar."

To sign up for the webinar, which takes place on Thursday, February 17 @ 2:00pm EST, please go to <https://www2.gotomeeting.com/register/335165058>.

 [Click here to return to Contents](#)

Delcam to Host UKTI Aerospace Meet the Buyer

24 January 2011

Delcam is to host an international Aerospace Meet the Buyer event at its Birmingham headquarters on Wednesday, 2nd March. The event is being organised by UK Trade & Investment and the Enterprise Europe Network, in partnership with the Midlands Aerospace Alliance and Advantage West Midlands.

More than 30 aerospace OEMs and tier-one manufacturers are expected to attend, to meet sub-contractors and talk about their supply-chain requirements. Companies already committed to taking part include Rolls Royce, Aerotech Peissenberg, Lufthansa Technik and Hispano-Suiza.

“Our Meet the Buyer event will help aerospace suppliers to meet high-calibre, budget-holding buyers from the international aerospace sector,” explained Peter Stevenson, International Trade Adviser with UKTI. “It will give them the opportunity to obtain qualified sales leads that are essential to grow their businesses in the current climate. Overall, we expect to arrange over 500 meetings between 30 international buyers and 90 UK companies.”

“We were very happy to support UKTI by providing the venue for the event,” said Delcam Marketing Manager, Peter Dickin. “Staff from UKTI have given us significant help in building our international business so hosting this meeting will go a small way towards repaying them.”

For further information on the Aerospace Meet the Buyer event and to register, please go to <http://www.aerospaceopportunities2011.co.uk>.

 [Click here to return to Contents](#)

Delcam's New PowerMILL to be Launched at Dormer and Mazak

25 January 2011

Delcam will launch the 2011 version of its PowerMILL CAM system for five-axis and high-speed machining at two events in February. The first will be at Dormer Tools new site on the Advanced Manufacturing Park in Sheffield on 22nd February and the second at Mazak's recently-opened European Technology Centre in Worcester on 24th February. The meetings are mainly aimed at existing PowerMILL users but they will also be of value to experienced operators of other CAM systems who are thinking about changing to the Delcam software.

Each day will comprise morning and afternoon sessions of hands-on time to trial the latest features in the software under the guidance of Delcam's expert engineers. Delegates attending the meetings at Dormer will be able to learn about the company's wide range of cutting tools, while those at the sessions at Mazak will be able to view the range of machines in the European Technology Centre and have a factory tour.

The 2011 PowerMILL release makes the programming of safe toolpaths easier than ever thanks to new stock-model-engagement options that protect both the cutting tool and the machine from excessive loading. Other enhancements include new editing capabilities to simplify the machining of duplicate items; more versatile control of feed-rates for leads and links; and extra functionality for sketching, plus the completion of the move to the new clearer forms for the complete range of strategies.

The options to optimise tool loading will help overcome a constant conflict for programmers. On the one hand, they want to maximise productivity by setting feed-rates as fast as their machines will allow; on the other hand, they need to ensure safe speeds that will not break the tool.

CIMdata PLM Industry Summary

A number of CAM programs incorporate strategies based on the extent of cutter engagement to give more consistent loading on the tool and so allow higher feed-rates. However, these options are usually limited to the initial roughing operations, or to only roughing and rest-roughing. PowerMILL's new stock engagement technology can also be employed with all of the system's finishing and rest-finishing strategies so ensuring that the safest-possible toolpaths are run on the machine at all stages.

The key to this more comprehensive solution is the accuracy of the stock models produced within PowerMILL after each machining stage has been completed. These models give a precise representation of the material still remaining on the part and are used to ensure that the cutter is never asked to remove more material than it can safely cut. At the same time, the stock models also ensure that toolpaths are not produced where there is no material remaining so the machine tool is never left cutting air.

 [Click here to return to Contents](#)

Delcam's Sales Partner Meeting Attracts Record Attendance

28 January 2011

Delcam's 2011 Sales Partner Meeting, which was held in Birmingham this week, attracted over 210 delegates from 35 countries, the highest attendance in the company's history. This record number of delegates for the event reflected Delcam's growth over recent years, both in terms of its geographic reach and its diverse range of software.

Delcam's Chief Executive Clive Martell told the Meeting about his ambitious plans for the year ahead, with higher sales growth being targeted in all areas of the company's business. He felt that this was quite achievable with a recovery in manufacturing being reported across Europe and America, while growth in Asian manufacturing was expected to continue. In particular, global machine tool sales were seeing strong increases and, historically, this has led to increased CAM sales.

Delcam's decision to maintain its high level of investment in research and development during the recession had placed the company in a much stronger position, according to Mr. Martell. "Even though we employ the largest development team in the CAM industry, we continued to spend more on R & D over the last two years," he claimed. "I doubt that many of our competitors could say the same."

The results of this investment were demonstrated over the three days of the meeting. Major releases are planned for the full range of the company's software during the coming months, both for the established manufacturing products and for the newer systems for the healthcare industry.

Delegates were also told about Delcam's plans to increase its level of marketing activity over the year. For example, on average, the company and its representatives will attend two exhibitions each week, giving potential customers many opportunities to see the latest software. In addition, a further expansion is planned for the company's unique on-line TV channel, <http://www.Delcam.tv>. This now contains over 150 videos showing software updates, customer testimonials and machining demonstrations.

At the awards ceremony during the meeting, Delcam USA was presented with the Top Sales Partner for 2010, further evidence of the strong recovery for manufacturing in the country that is still the world's biggest market for CAD/CAM. Delcam reached 10,000 customers in North America during the year, as software sales in the country hit record levels.

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

ESI's First Expert Composites Seminar Declared a Resounding Success

25 January 2011

ESI's first [Expert Composites Seminar](#), a two-day course on composites modeling, took place on October 4 and 5, 2010 in Bordeaux, France. The seminar offered attendees a variety of lectures about the contribution of multi-domain simulation to advanced composite parts development.

Guest speakers from renowned research institutions included Professor Christophe Binetruy (ENSTIM Douai, France), Professor Philippe Boisse (INSA Lyon, France), Eric Deneux (Pôle de Plasturgie de l'Est, France), Dr. Alastair Johnson (German Aerospace Institute, Germany), Professor Stepan Lomov (Katholieke Universiteit Leuven, Belgium), Serge Mouton (University of Bordeaux, France), Dr. Alex Skordos (Cranfield University, UK) and Dr. Magnus Svanberg (Swerea SICOMP AB, Sweden). An intimate setting allowed for much interaction and exchange between the speakers and the delegates, who joined the seminar from more than 14 companies and academic institutions, in 7 different countries.

Learning from the latest advances in composites modeling allows CAE engineers and scientists from industry and research centers to overcome design and manufacturing challenges of composite components thanks to [Virtual Prototyping](#). By discussing new market trends and with the latest state-of-the-art technology for composites simulation presented, participants were able to brainstorm and exchange ideas about the future enhancements needed in composites simulation.

“The recent Expert Composites Seminar provided me with the perfect networking opportunity to meet with many technical experts and people generally interested in the niche field of advanced composite process modeling and structural analysis simulation,” said Ms. Janna Fabris, Research Engineer at Boeing Research and Technology Australia. “I thoroughly enjoyed listening to the many speakers addressing the fundamental process physics in composites simulation and emerging trends with respect to automating and integrating this advanced technology into reliable software tools.”

“The effort to bring together experts from the composite community was both remarkable and necessary,” declared Mr. HG Prasad, Lead Engineer, Process design at LM Wind Power. “Irrespective of the software product, the challenges faced in the industry are the same, and solutions do exist in various parts of the community. Until now, we were just missing a platform to share these good practices, which is what ESI achieved by bringing in experts to share their solutions. This forum needs to be kept alive by meeting at regular intervals.”

The variety of attendees highlighted the challenges faced in different industry sectors including automotive, aerospace, aeronautics, marine and wind energy.

The overall feedback on the seminar was very positive, with 100% of attendees feeling that their expectations in terms of presentation quality and content were either fully satisfied or overachieved. 100% of the participants expressed interest in attending the next Expert Composites Seminar in 2011 and over 70% in attending other ESI [Expert Seminars](#) relevant to their business.

“We believe that this first Expert Composites Seminar provided a great insight into many domains that are going to form the building blocks of the best-practice that is currently under development. To be more specific, the Manufacturing Process Simulation and its use, not only in manufacturing but also in economical, robust and safe design, were extensively discussed amongst the participants,” said Dr. Patrick de Luca, Composites Solution Manager at ESI Group. “With a diverse range of thought-provoking presentations, this seminar turned out to be a great place for networking and discussions. ESI will continue to host other Expert Seminars to encourage the integration of new industrial methodologies

into the development of composite materials.”

Learn about other ESI expert course opportunities at:
www.esi-group.com/corporate/events/expert-seminars

 [Click here to return to Contents](#)

KeyShot® Supports SolidWorks 2011®

24 January 2011

Luxion will be demonstrating native support of SolidWorks 2011® as part of a greatly enhanced import pipeline for KeyShot at SolidWorks World 2011, held from January 23 through 26 in San Antonio, TX.

At its booth (**#324**) **Luxion** will show off the latest version of KeyShot 2 with the following additions and improvements:

- Native import of SolidWorks 2011 data and prior
- Improved import pipeline that imports data faster than before
- Complete preservation of the CAD model’s part and assembly structure
- Support of additional file formats including CATIA® V5

In addition, Luxion will preview an all new KeyShot plugin for SolidWorks. This plugin will greatly enhance the interoperability between the 2 applications by allowing users to establish an associative link between SolidWorks and KeyShot. This will allow users to push their design changes directly to KeyShot where it will automatically replace the existing model while preserving all previous material assignments and environment settings.

“We are very excited that we can finally deliver the long awaited support for SolidWorks 2011 to our customers,” said Dr. Henrik Wann Jensen, Co-founder and Chief Scientist of Luxion. “The new importer along with the new plugin and the overall improved import pipeline will allow SolidWorks users to create amazing shots from their designs even faster.”

The support for SolidWorks 2011 is currently only available for PC, and will be included in KeyShot 2.2, scheduled to be released at the end of the month.

To learn more about KeyShot, download a free trial or purchase a license, visit <http://www.keyshot.com>.

 [Click here to return to Contents](#)

Lattice Technology at Upcoming Aerospace & Defense Summit 2011

27 January 2011

Lattice Technology® Inc. announced it will be participating in the upcoming Aerospace & Defense Summit being held in Hollywood, FL, February 9-11, 2011.

The Aerospace & Defense Summit (<http://www.aerospacedefensesummit.com>) is a closed business event that has been designed to provide a unique interactive forum for corporate benefit executives working in a cross-section of industries.

At the summit Bill Barnes, Lattice Technology, Inc. General Manager, will present a Master Class titled "Process Planning and the Re-Use of Existing Data Assets to Streamline Technical Communications."

CIMdata PLM Industry Summary

The presentation will show how current customers in aerospace, defense and other industries are using Lattice Technology solutions to improve their manufacturing and technical documentation processes.

For the period of three days, a carefully scheduled series of presentations, case studies and one-to-one business meetings will provide Lattice Technology, Inc with strategic advice as well as networking opportunities with leading industry experts. Lattice Technology, Inc. representatives will have a number of pre-scheduled meetings with senior executives.

The Aerospace & Defense Summit, attendees will follow a personalized agenda designed to maximize their limited time and to effectively meet their business needs and interests. The keynote speakers include:

- Gene Fraser, Senior Vice President, Aerospace Engineering, Aerospace Systems
- John Schumacher, Vice President, Washington Operation, Aerojet
- Gary Stanley, President, Global Legal Services, PC
- Dennis Wisnosky, Chief Architect and Chief Technical Officer, Business Mission Area, ODCMO, U.S. Department of Defense

To find out more about the Aerospace & Defense Summit please visit <http://www.aerospacedefensesummit.com>.

 [Click here to return to Contents](#)

NEi Software to Unveil Engineering Cloud Application on Feb 10

January 2011

NEi Software will unveil a groundbreaking FEA application powered by NEi Nastran and cloud technology, enabling engineers to solve product design questions anywhere and anytime. The product will be unveiled at 11:00AM on Feb 10 at the Pacific Design and Manufacturing Show. Media unable to attend the press briefing can request more information from NEi Software. Those new to Finite Element Analysis (FEA) can attend a presentation at 1:30PM on Feb 10 at **booth 5293** or online on Feb 15 at <http://www.NewtoFEA.com>.

When & Where:

Pacific Design & Manufacturing 2011

Date: Feb 10, 2011

Time: 11:00AM

Press Room in Hall E

Anaheim Convention Center

800 West Katella Avenue

Anaheim, CA 92802

 [Click here to return to Contents](#)

ProSTEP iViP and Siemens PLM Software Initiate Process to Establish JT Data Format as ISO

CIMdata PLM Industry Summary

International Standard

24 January 2011

Siemens PLM Software and ProSTEP iViP, a global consortium instrumental in advancing open standards, announced they have initiated the formal process to establish the [JT™ data format](#) as an ISO (International Organization for Standardization) standard for lightweight 3D data.

Speaking at the recent 2010 JT Open International Conference in Orlando, Florida, Dr. Steven Vettermann of the ProSTEP iViP Association said, “The publication of the JT File Format Reference document as a Publicly Available Specification (ISO PAS 14306) in October 2009 was the first step towards becoming an International Standard. ProSTEP iViP and Siemens PLM Software are working hand in hand to complete the process of gaining International Standard status for JT.”

Lightweight 3D data represents a subset of the more complete product data definition typically created by computer aided design (CAD) software applications. When the lightweight format is open and widely adopted, it extends the reach of information, traditionally locked in proprietary systems, to applications such as Digital Mockup (DMU), simulation, design in context and simplified drawings. Today, there is a broad application rate of the JT data format in several industries and disciplines such as automotive, aerospace, defense, shipbuilding, mechanical and plant engineering etc. As a result, there is a significant global request for standardizing JT.

“JT as an open visualization standard will expand the usage of 3D data into several process areas outside engineering design, and will open a window of significant opportunities for independent software vendors to provide advanced IT solutions based on JT,” said Prof. Alfred Katzenbach, Director Engineering IT at Daimler and head of the VDA working group PLM. “As a result, more applications will be available to work seamlessly within open environments, freeing the user community to be independent from the closed systems of a single vendor. This is a significant reason why the international automotive OEMs are fully committed to JT ISO standardization.”

ISO requires that new International Standards begin with the definition of a balloted New Work Item Proposal. The JT ballot was issued on August 24, 2010, and, after review, has been accepted as a new item that will be added to the program of work of the committee. To support the new work effort Siemens PLM Software has published an updated JT file format specification. The JT File Format Specification version 9.5 will be brought forward through the ISO process as the new standard.

In a joint statement to the JT Open Management Review Board, Jim Marchant and Jason Bilsland, who are responsible for visualization data assets strategy at Rolls-Royce said, “Rolls-Royce global business has been using JT as a visualization format for many years. The advent of JT as a PAS helped us in broadening the scope of potential usage of JT in our business, however, we see the full adoption of JT as an ISO standard as further validation of our overall PLM strategy. We look forward to this being the next step towards recognition by other major international standards bodies such as ASME, which is important for us, particularly in the US.”

“Siemens PLM Software committed to making JT an ISO standard at the ProSTEP iViP Symposium held in April 2010,” said Chuck Grindstaff, President of Siemens PLM Software. “Having ProSTEP iViP – a recognized industry expert in standards, and a vendor-neutral organization – take the lead in this effort, is a testament to the openness and wide-spread adoption of JT in the global manufacturing industry. Siemens PLM Software will continue to work closely with ProSTEP iViP as the ISO process goes forward.”

CIMdata PLM Industry Summary

ProSTEP iViP's mission is to assure that solutions provided to its membership meet their requirements, fit together and are driven by standards.

 [Click here to return to Contents](#)

Synopsys to Showcase DesignWare IP, FPGA Design, FPGA-Based Prototyping and HSPICE Solutions at DesignCon 2011

28 January 2011

Synopsys, Inc. will showcase its latest DesignWare® DDR PHY Compiler, Synplify® FPGA design tools, HAPS® FPGA-based prototyping platform, and HSPICE® solutions at DesignCon 2011 in Santa Clara, California on February 1-2, 2011. See live demonstrations, speak with our product experts and find out how Synopsys can help you achieve predictable success.

DesignCon® is the definitive event for electronic design experts spanning chip, package, board, and system domains, addressing common issues in signal integrity, power management, interconnection and design verification.

To find out more about Synopsys participation at DesignCon, visit our website at <http://www.synopsys.com/IP/Pages/DesignCon2011.aspx>

WHAT: Synopsys will be showcasing its latest developments in DesignWare DDR IP, FPGA Design, FPGA-based prototyping, AMS/custom design and HSPICE solutions in Synopsys **Booth #606**. In addition, Synopsys will be participating in a number of presentations, tutorials and panels at the show.

Synopsys will also host its first HSPICE Special Interest Group (SIG) event on the evening of January 31, 2011 at the Santa Clara Hyatt hotel, coincident with DesignCon. Attendees will have an opportunity to hear what industry leaders have to say about using HSPICE in some of today's most challenging designs and talk with Synopsys HSPICE R&D personnel as well as HSPICE Integrator Program (HIP) partners. Those interested in attending can [register online](#).

WHEN: February 1-2, 2011

WHERE: Santa Clara Convention, 5001 Great America Pkwy., Santa Clara, CA 95054, Synopsys booth #606

EXHIBIT HOURS:

Tuesday, February 1 12:30pm - 6:00pm

Wednesday, February 2 12:30pm - 6:00pm

Visit booth #606 to enter a drawing for Bose headphones

DEMO DESCRIPTIONS:

DesignWare DDR PHY Compiler

CIMdata PLM Industry Summary

Synopsys' DesignWare DDR PHY Compiler demonstration will show how to optimize a DDR PHY for pinout, area and performance. In addition, we will highlight several features of the DesignWare DDR3/2 PHY IP in 40nm technology as it achieves speeds up to 1600Mbps utilizing Synopsys' characterization platform.

DesignWare HDMI 1.4 Tx and RX IP

HDMI is gaining significant traction in delivering 3D functionality in digital home theater systems, gaming consoles and other portable multimedia devices. The Synopsys DesignWare HDMI 1.4 IP supports the latest HDMI 1.4a specification, including various 3D formats. This demonstration will show how Synopsys' silicon-proven HDMI 1.4 IP will deliver 3D content to a high resolution display.

Synplify FPGA Design Tools

In this demonstration we will address key challenges faced by today's FPGA designers such as fast timing closure for demanding applications, timing-driven synthesis for cost reduction and incremental design flows. New hierarchical design capability for supporting distributed development, IP integration and reuse will be highlighted along with new technology for dynamic power reduction.

HAPS FPGA-Based Prototyping Solution

Synopsys' FPGA-based prototyping solutions enable pre-silicon software development and hardware/software co-verification of complete systems at near real-time operating speeds using real-world interfaces. We will demonstrate the new UMRBus for the HAPS-60 series which delivers programmability and flexibility without compromising "at-speed" system performance.

HSPICE Precision Parallel Technology

With up to 7X speed up on eight cores, 10-million-element capacity, comprehensive analysis and out-of-the-box convergence, analog design teams can use HSPICE Precision Parallel technology to accelerate verification of circuits across process corners and minimize the risk of missing project timelines and silicon respins. See how HSPICE can improve analog designers' productivity through superior performance and accuracy and tight integration with Galaxy Custom Designer ® .

HSPICE Statistical Eye Diagram Analysis

Analysis of high-speed serial interfaces requires processing of millions of bits of data. Using traditional transient analysis to evaluate eye diagrams and bit error rates (BER) leads to impractically long simulation times. Synopsys will show how the HSPICE statistical eye diagram feature can evaluate eye diagrams and bit error rate quickly and accurately. We will also demonstrate statistical setup, input syntax and outputs.

Synopsys Papers, Presentations and Tutorials at DesignCon

- [Tutorial: Verification Planning and Management in a System-Level Design Flow](#)
- [Panel: Challenges in Designing, Verifying, and Integrating Power-managed IPs](#)
- [Panel: Phase Noise and Jitter Translations for Signal Integrity](#)
- [Paper: Life Without Termination - Delivering Successful LPDDR/LPDDR2 Interfaces](#)
- [Presentation: PDKs for Analog IC Design - A Stakeholder Discussion](#)

CIMdata PLM Industry Summary

- [Presentation: Cloud Computing for Electronic Co-Design: Challenges and Opportunities](#)

For more information on the products being showcased at DesignCon, please visit the following:

- DesignWare IP - <http://www.synopsys.com/designware>
- FPGA Design - <http://www.synopsys.com/fpga>
- FPGA-based prototyping solutions - <http://www.synopsys.com/fpga-based-prototyping>
- HSPICE- <http://www.hspice.com/>
- Synopsys' unified custom design solution - http://www.synopsys.com/custom_design.aspx

 [Click here to return to Contents](#)

Financial News

ANSYS to Release Fourth Quarter and 2010 Earnings on February 24, 2011

25 January 2011

ANSYS, Inc. announced that the Company expects to release its fourth quarter and 2010 earnings on Thursday, February 24, 2011. The Company will hold a conference call conducted by James E. Cashman III, president and chief executive officer, and Maria T. Shields, chief financial officer, at 10:30 a.m. Eastern Time to discuss fourth quarter and 2010 results and future outlook.

Conference Call Information:

What: ANSYS Fourth Quarter and 2010 Earnings Conference Call

When: 2/24/2011 at 10:30 a.m. Eastern Time

Where: <http://investors.ansys.com>

The conference call dial-in numbers are (866) 524-3160 (US), (866) 605-3852 (CAN), or (412) 317-6760 (INT'L)

Passcode: 447809

The call will be recorded with replay available within two hours after the call at <http://investors.ansys.com> or at (877) 344-7529 (US) or (412) 317-0088 (CAN and INT'L)

Passcode: 447809

 [Click here to return to Contents](#)

Aspen Technology Announces Date of Second-Quarter Fiscal 2011 Financial Results Release, Conference Call and Webcast

26 January 2011

Aspen Technology, Inc. announced that it will release financial results for its second-quarter fiscal 2011, ended December 31, 2010, after the U.S. financial markets close on Tuesday, February 8, 2011.

CIMdata PLM Industry Summary

In conjunction with this announcement, AspenTech will host a conference call and webcast on February 8, 2011, at 4:30 p.m. (Eastern Time) to discuss the company's financial results, business outlook, and related corporate and financial matters.

The live dial-in number is (877) 245-0126, conference ID code 37267908. Interested parties may also listen to a live webcast of the call by logging on to the Investor Relations section of AspenTech's website, <http://www.aspentech.com/corporate/investor.cfm>, and clicking on the "webcast" link. A replay of the call will be archived on AspenTech's website and will also be available via telephone at (800) 642-1687 or (706) 645-9291, conference ID code 37267908 through February 15, 2011.

 [Click here to return to Contents](#)

EMC Reports 61% Increase in Quarterly Profit; Achieves All-Time Record Quarterly and Full-Year Revenue and Profit

25 January 2011

Highlights

- Record quarterly and full-year revenue up 19% and 21% year over year, respectively
- Record quarterly and full-year GAAP net income up 61% and 75% year over year, respectively
- Record quarterly and full-year non-GAAP net income up 32% and 46% year over year, respectively
- Record quarterly and full-year free cash flow

EMC Corporation reported record fourth-quarter and full-year 2010 financial results. For the fourth quarter 2010, the company achieved all-time record consolidated revenue, net income and free cash flow. Full-year 2010 results were highlighted by all-time record consolidated revenue and profit that exceeded prior company outlook and record free cash flow.

For the fourth quarter, consolidated revenue was \$4.9 billion, an increase of 19% compared with the year-ago quarter; GAAP net income attributable to EMC increased 61% year over year to \$628.6 million; and GAAP diluted earnings per share were \$0.29, up 53% year over year. Non-GAAP(1) net income attributable to EMC for the fourth quarter was \$920.1 million, an increase of 32% compared with the year-ago quarter, and non-GAAP(1) earnings per diluted share were \$0.42, an increase of 27% year over year.

During the quarter EMC generated record quarterly operating cash flow and free cash flow of \$1.5 billion and \$1.2 billion, which grew 50% and 54% year over year, respectively. For the quarter and full-year 2010, EMC expanded gross margin and operating margin percentages substantially on a year-over-year basis. The company completed the quarter with \$9.5 billion in cash and investments.

For the full year 2010, consolidated revenue was \$17.0 billion, an increase of 21% year over year; GAAP net income attributable to EMC increased 75% year over year to \$1.9 billion; and GAAP diluted earnings per share were \$0.88, up 66% year over year. Non-GAAP(2) net income attributable to EMC for 2010 was \$2.7 billion, an increase of 46% year over year, and non-GAAP(2) earnings per diluted share were \$1.26, an increase of 40% year over year. The company achieved record full-year operating cash flow and free cash flow of \$4.5 billion and \$3.4 billion, which grew 36% and 31%, respectively, compared with 2009.

Joe Tucci, EMC Chairman and Chief Executive Officer, said, "EMC's performance in 2010 was the best

CIMdata PLM Industry Summary

in company history, marked by rapid growth, market share gains, financial leverage and significant investment in technology innovation. The platform for change in the IT industry has arrived with the biggest opportunity residing at the intersection of trusted cloud computing, enterprise data and 'Big Data.' Equipped with the strongest, most distinctive product and services portfolio and strategic partners, we have never been more confident in EMC's position to lead this transformational shift to IT as a service."

David Goulden, EMC Executive Vice President and Chief Financial Officer, said, "In 2010 we executed our triple play impressively – simultaneously taking market share, reinvesting meaningfully in our business and delivering improved profitability. Tremendous progress on all of these objectives throughout the year puts EMC in its best financial and operational shape ever. We are in great position to continue to deliver our triple play results in 2011; continue to achieve solid double-digit revenue and profit growth, expand operating margins and grow free cash flow for the year; and further strengthen EMC's strategic position for the long term."

Fourth-Quarter and 2010 Highlights

Fourth-quarter highlights included strong customer demand and double-digit revenue growth for the company's high-end EMC Symmetrix storage product portfolio, which increased 19% compared with the year-ago quarter, and EMC's mid-tier storage product portfolio(3), which grew revenue 23% year over year. Revenues from EMC's RSA information security business and VMware, which is majority-owned by EMC, hit record amounts, growing 28% and 38% year over year, respectively. Additional fourth-quarter highlights included continued strong customer demand for EMC's backup and recovery solutions as part of the company's fast-growing Backup and Recovery Systems Division. Also in the fourth quarter, EMC completed its acquisition of Isilon Systems, a leader in fast-growing "scale-out" network attached storage.

EMC consolidated fourth-quarter revenue from the United States reached \$2.6 billion, an increase of 20% year over year, representing 53% of consolidated fourth-quarter revenue. Revenue from EMC's business operations outside of the United States reached \$2.3 billion, an increase of 19% year over year, representing 47% of consolidated fourth-quarter revenue. Within this, revenue increased 13%, 30% and 34% year over year, respectively, in EMC's Europe, Middle East and Africa; Asia Pacific and Japan; and Latin America regions.

Throughout 2010, EMC executed on numerous strategic initiatives that collectively helped strengthen the company's technology leadership and services expertise in enterprise data, cloud computing and "Big Data"; advance its competitive lead; and gain market share. This included sustained aggressive investment in research and development, totaling 11% of annual consolidated 2010 revenue, which resulted in broad and deep innovation across all of EMC's business units. EMC also continued to use its financial strength to make strategic acquisitions targeted at high-growth areas, including Isilon, data warehousing and business analytics pioneer Greenplum, and leading enterprise governance, risk and compliance (eGRC) software provider Archer Technologies. Additionally, the company further strengthened alignment with strategic partners demonstrated by the strong momentum of VCE, The Virtual Computing Environment Company, and expanded relationships with technology, solutions and service providers around the world.

Business Outlook

The following statements are based on current expectations. These statements are forward-looking, and actual results may differ materially. These statements do not give effect to the potential impact of

CIMdata PLM Industry Summary

mergers, acquisitions, divestitures or business combinations that may be announced or closed after the date hereof. These statements supersede all prior statements regarding 2011 financial results set forth in prior EMC news releases.

All dollar amounts and percentages set forth below should be considered to be approximations.

Consolidated EMC revenues are expected to be \$19.6 billion for 2011.

Consolidated GAAP operating income is expected to be 16% of revenues for 2011 and consolidated non-GAAP operating income is expected to be 23% of revenues for 2011. Excluded from consolidated non-GAAP operating income are restructuring and acquisition-related charges, stock-based compensation expense and intangible asset amortization, which are expected to account for less than 1%, 5% and 2% of revenues, respectively.

Total consolidated non-operating expense, which includes investment income, interest expense and other expense, is expected to be \$100 million in 2011.

Consolidated GAAP net income is expected to be \$2.4 billion in 2011 and consolidated non-GAAP net income is expected to be \$3.25 billion in 2011. Excluded from consolidated non-GAAP net income are restructuring and acquisition-related charges, stock-based compensation expense and intangible asset amortization, which are expected to account for approximately \$100 million, \$600 million and \$200 million, respectively.

Consolidated GAAP diluted earnings per share are expected to be \$1.07 for 2011 and consolidated non-GAAP diluted earnings per share are expected to be \$1.46 for 2011. Excluded from consolidated non-GAAP diluted earnings per share are restructuring and acquisition-related charges, stock-based compensation expense and intangible asset amortization, which are expected to be \$0.03, \$0.27 and \$0.09 per diluted share, respectively, for 2011.

The consolidated GAAP income tax rate is expected to be 20% for 2011. Excluding the impact of restructuring and acquisition-related charges, stock-based compensation expense and intangible asset amortization, which are expected to collectively impact the tax rate by 2%, the consolidated non-GAAP income tax rate is expected to be 22% for 2011.

The weighted average outstanding diluted shares are expected to be 2.23 billion for 2011.

EMC expects to repurchase \$1.5 billion of the company's stock in 2011.

Supporting Resources

EMC will host its 2010 fourth-quarter earnings conference call today at 8:30 a.m. ET, which will be available on EMC's web site at <http://www.emc.com/about/investor-relations/index.htm>

Additional information regarding EMC's financials, as well as a webcast of the conference call, will be available at 8:30 a.m. ET at <http://www.emc.com/about/investor-relations/index.htm>

Visit <http://ir.vmware.com> for more information about VMware's fourth-quarter financial results.

(1) Items excluded from the non-GAAP results for the fourth quarters of 2010 and 2009 are amounts relating to restructuring and acquisition-related charges, stock-based compensation expense, intangible asset amortization and special income tax charges. In addition, for the fourth quarter of 2009, amounts relating to provisions for litigation are also excluded. See attached schedules for reconciliation of GAAP to non-GAAP.

(2) Items excluded from the non-GAAP results for the full year 2010 and 2009 are amounts relating to

CIMdata PLM Industry Summary

restructuring and acquisition-related charges, stock-based compensation expense, intangible asset amortization and special income tax charges. In addition, for 2009, amounts relating to provisions for litigation and gains on Data Domain and SpringSource common stock are also excluded. See attached schedules for reconciliation of GAAP to non-GAAP.

(3) Mid-tier platform products include hardware and software products from EMC CLARiiON, EMC Celerra, EMC Centera, EMC Data Domain, EMC Avamar and EMC Atmos.

Use of Non-GAAP Financial Measures

This release, the accompanying schedules and the additional content that is available on EMC's website contain non-GAAP financial measures. These non-GAAP financial measures, which are used as measures of EMC's performance or liquidity, should be considered in addition to, not as a substitute for, measures of EMC's financial performance or liquidity prepared in accordance with GAAP. EMC's non-GAAP financial measures may be defined differently from time to time and may be defined differently than similar terms used by other companies, and accordingly, care should be exercised in understanding how EMC defines its non-GAAP financial measures in this release.

Where specified in the accompanying schedules for various periods entitled "Reconciliation of GAAP to Non-GAAP," certain items noted on each such specific schedule (including, where noted, amounts relating to restructuring and acquisition-related charges, stock-based compensation expense, intangible asset amortization, special income tax charges, provisions for litigation and amounts relating to gains on Data Domain and SpringSource common stock) are excluded from the non-GAAP financial measures.

EMC's management uses the non-GAAP financial measures in the accompanying schedules to gain an understanding of EMC's comparative operating performance (when comparing such results with previous periods or forecasts) and future prospects and excludes the above-listed items from its internal financial statements for purposes of its internal budgets and each reporting segment's financial goals. These non-GAAP financial measures are used by EMC's management in their financial and operating decision-making because management believes they reflect EMC's ongoing business in a manner that allows meaningful period-to-period comparisons. EMC's management believes that these non-GAAP financial measures provide useful information to investors and others (a) in understanding and evaluating EMC's current operating performance and future prospects in the same manner as management does, if they so choose, and (b) in comparing in a consistent manner the Company's current financial results with the Company's past financial results.

This release also includes disclosures regarding free cash flow which is a non-GAAP financial measure. Free cash flow is defined as net cash provided by operating activities less additions to property, plant and equipment and capitalized software development costs. EMC uses free cash flow, among other measures, to evaluate the ability of its operations to generate cash that is available for purposes other than capital expenditures and capitalized software development costs. Management believes that information regarding free cash flow provides investors with an important perspective on the cash available to make strategic acquisitions and investments, repurchase shares, service debt and fund ongoing operations. As free cash flow is not a measure of liquidity calculated in accordance with GAAP, free cash flow should be considered in addition to, but not as a substitute for, the analysis provided in the statement of cash flows.

All of the foregoing non-GAAP financial measures have limitations. Specifically, the non-GAAP financial measures that exclude the items noted above do not include all items of income and expense that affect EMC's operations. Further, these non-GAAP financial measures are not prepared in

CIMdata PLM Industry Summary

accordance with GAAP, may not be comparable to non-GAAP financial measures used by other companies and do not reflect any benefit that such items may confer on EMC. Management compensates for these limitations by also considering EMC's financial results as determined in accordance with GAAP.

Financial tables referenced in the above are available by clicking [HERE](#).

 [Click here to return to Contents](#)

Geometric Declares Revenues of Rs. 1,632.02 Mn up 7.4% Q-o-Q and 28.6% Y-o-Y

24 January 2011

[Geometric Ltd.](#) announced its Q3 FY 2010-2011 financial results.

Highlights for quarter ended December 31, 2010 Dollar revenues increase to USD 36.25 Mn, a Q-o-Q rise of 10.5% and Y-o-Y rise of 33.6% Net profit rises to Rs. 152.73 Mn, Q-o-Q growth of 10.5% Added ten new customers this quarter Employee base crosses the 3600 mark New business of USD 9.42 Mn An EPS of Rs. 2.45, an increase of 10.5% Q-o-Q

Geometric today announced a rise in the company's consolidated operating revenues to Rs. 1,632.02 Mn this quarter, a growth of 7.4% from the previous quarter revenues of Rs. 1,519.31 Mn; and of 28.6% from revenues of Rs. 1,268.75 Mn in the same quarter last year. The company declared a profit after tax (after extraordinary items) of Rs. 152.73 Mn as compared to the previous quarter's profit of Rs. 138.18 Mn and Rs. 162.41 Mn in the same quarter last year.

Announcing the results, Mr. Ravishankar G., Managing Director & CEO said, "Our revenues have seen good volume growth; the upward movement of revenues was driven by volume growth in PLM services, followed by engineering services. The Products business has also shown a good upward trend, due to strong sales of CAMWorks© and Feature Recognition technology. With customers globally looking at augmenting their product portfolios and expanding into growth markets, while driving capital and operational efficiencies, the demand for PLM and Engineering services is expected to be on the increase, as we go along.

We were able to deliver on this growth, while sustaining our margins, even after absorbing the impact of mid-term salary hikes, variable pay, and increase in training costs. We have added ten new customers this quarter, despite the quarter being traditionally a slow quarter due to the holiday season in our major markets.

Resource acquisition today is one of the biggest challenges for the Indian IT sector. In the last couple of quarters, we have laid a lot of emphasis on employee engagement and retention initiatives, and have also increased our focus on building in-house capabilities, which have helped us reduce our attrition levels significantly this quarter."

With the verticalized structure in place, this quarter saw a considerable shift in the company's go-to-market approach. The company has now started offering its customers verticalized solutions leveraging capabilities across engineering services, software services and its own intellectual property to deliver value.

At the end of the quarter, the company had an employee base of 3,659.

Business Highlights

CIMdata PLM Industry Summary

The Company added ten new customers during Q3, and at the end of the quarter, it had 111 active customers, including 18 customers with million dollar plus revenues. Some of the significant wins this quarter include:

A significant Product Engineering contract with a leading automation systems company in USA

An Engineering Services engagement with a leading tools and equipment engineering company in USA

Process and methods development engagement for the launch of a product for a leading industrial equipment company in USA

Teamcenter transition contract with a leading automotive company in Europe

Containerization and packaging services for a truck program of a leading automotive company in USA

PLM Upgrade contract for an auto major in Japan

A tools and equipment engineering contract for an automotive company in USA

Teamcenter upgrade engagement for a filtration systems company in US

A containerization and packaging strategies engagement for a car management program for a leading automotive company in US

An ENOVIA implementation for a leading automotive manufacturer in India

Other important business highlights for the quarter include:

The signing of a [Global Services Agreement with Dassault Systèmes \(DS\)](#) making Geometric a preferred vendor for services on DS' products and technologies

Partnership with India's leading CNC Vertical and Horizontal Machine manufacturer, [Ace Manufacturing Systems Ltd. \(AMS\)](#) for supporting CAMWorks on its CNC Machines

Agreement with Dassault Systèmes to integrate [DELMIA's India Laboratory into 3D PLM Software Solutions Ltd \(3DPLM\)](#), their joint venture company.

Alliance with leading part catalogue provider CADENAS, granting CAMWorks users access to CADENA's CAD model library through [CAMWorks PARTCommunity](#)

Appointment of [Digitek](#) as an authorized reseller of DFMPro in Korea

Upgrade to [ISO 9001:2008 certification](#) for engineering services

Release of [DFMPro version 2.3 for Pro/ENGINEER®](#) and [NestLib® 2010 R3](#)

 [Click here to return to Contents](#)

PTC Announces Q1 Results and Initiates Q2 Guidance, Maintains FY Targets

27 January 2011

PTC reported results for its first fiscal quarter ended January 1, 2011.

Highlights

•Q1 Results: Revenue of \$266.6 million and non-GAAP EPS of \$0.22; GAAP EPS of \$0.11

◦Non-GAAP operating margin of 13.3%; GAAP operating margin of 6.4%

CIMdata PLM Industry Summary

- Q1 EPS negatively impacted by \$0.03 to \$0.04 related to contract accounting treatment of the first phase of our expected multi-year engagement with Hyundai Motor Company and Kia Motors Corporation, a strategic Automotive OEM win

- Relative to Q1 guidance (\$255 - \$265 million in revenue with \$0.22 to \$0.26 non-GAAP EPS), currency fluctuations did not impact EPS

- Q2 Guidance: Revenue of \$260 to \$270 million and non-GAAP EPS of \$0.22 to \$0.26

- GAAP EPS of \$0.11 to \$0.15

- Assumes \$1.37 USD / EURO

- FY'11 Targets: Revenue of \$1,110 to \$1,130 million and non-GAAP EPS of \$1.20 to \$1.25

- GAAP EPS of \$0.73 to \$0.78

- License revenue growth target of 20% to 25% year-over-year growth

- Non-GAAP operating margin of 17% to 18%; GAAP operating margin of 11% to 12%

- Assumes \$1.37 USD / EURO

The Q1 non-GAAP results exclude \$11.0 million of stock-based compensation expense, \$7.2 million of acquisition-related intangible asset amortization, \$0.7 million of foreign currency transaction losses, and \$5.8 million of income tax adjustments. The Q1 non-GAAP results include a tax rate of 23% and 121 million diluted shares outstanding. The Q1 GAAP results include a tax rate of 13% and 121 million diluted shares outstanding.

Results Commentary

James Heppelmann, president and chief executive officer, commented, "PTC had a very strong Q1, with revenue above our guidance range and EPS that would have been at the high-end of the range prior to the Hyundai Motor Company and Kia Motors Corporation contract accounting treatment. As reflected in our EPS guidance for FY '11 we will save a commensurate amount throughout the balance of the year and continue to expect to deliver full year non-GAAP EPS of \$1.20 to 1.25."

"We were pleased to see that our license revenue of \$75.5 million included 36% year-over-year growth in Desktop license revenue, led by significant strength with several large customers and matched with broad-based strength in the SMB market," Heppelmann continued. "We are sensing the market is as excited as we are about our new Creo platform for CAD, which we expect to deliver in the third quarter. Our results were further bolstered by continued strong performance of our Enterprise PLM license revenue, though you will recall we are comparing against a year ago period where we had a handful of very large Enterprise PLM transactions in North America which drove significant (more than \$20 million) upside to our license revenue performance. Overall, solid strength across the board allowed us to perform well against this comparison as total Q1 revenue was up 4% on a constant currency basis and license revenue was up 2% compared to the strong year ago period."

"Our continued revenue momentum in the PLM market included transactions with 3 new strategically important 'domino' accounts during Q1," Heppelmann said. "Since 2009, we have won 22 domino accounts, all of which are large multinational companies who have chosen to standardize their PLM initiatives on our Windchill platform. Dominoes represent the largest of many competitive displacement opportunities, and we believe they demonstrate that PTC is gaining share and becoming recognized as the industry leader for both our technology and product development process expertise in the PLM

CIMdata PLM Industry Summary

market. Of particular note, late in Q1 we won a 2 year benchmark and began a Windchill implementation at Hyundai Motor Company and Kia Motors Corporation, one of the world's largest and fastest growing automotive OEM brands. This was PTC's most strategic sales campaign of FY'11 and we believe this important win will further bolster our momentum in the large and important automotive vertical. We continue to expect we will win a cumulative total of 30 domino accounts by the end of FY'11."

Please refer to the standalone Hyundai Motor Company and Kia Motors Corporation press release issued earlier today for more details on this important engagement.

Heppelmann added, "We had 22 large deals (license + services revenue of more than \$1 million) in Q1'11, compared to 10 in Q1'10. We believe this is an indicator of the strength of our pipeline for business opportunities with new and existing customers. During the quarter we recognized revenue from leading organizations such as Fresenius Medical, Gemalto, GKN, Lockheed Martin, Northrup Grumman, Raytheon, Schaeffler, System SPA, and Vestas Wind Systems."

Jeff Glidden, chief financial officer, commented, "From a profitability standpoint, while we outperformed our revenue targets, our non-GAAP EPS result of \$0.22 was adversely impacted by approximately \$0.03 to \$0.04 related to contract accounting treatment of the first phase of our expected multi-year engagement with Hyundai Motor Company and Kia Motors Corporation, for which we did not recognize any revenue during the quarter."

"We ended the first quarter with \$183 million of cash, which was negatively impacted by approximately \$48 million related to a previously announced litigation settlement in Japan," continued Glidden. "Our non-GAAP tax rate was lower than expected during the quarter primarily due to the extension of the R&D tax credit."

Outlook Commentary

"Based on the market momentum we are seeing, the strength of our pipeline, our sales capacity, many important product initiatives such as the launches of Windchill 10 and Creo, and the significant interest we are seeing in other products such as Arbortext, Relex and InSight, we continue to be excited about our long-term growth opportunity," said Heppelmann. "We remain confident and committed to achieving our goal of a 20% non-GAAP EPS CAGR through 2014."

"For Q2 we are providing guidance of \$260 to \$270 million in revenue with non-GAAP EPS of \$0.22 to \$0.26," Glidden added. "From a revenue perspective, we are expecting approximately 20% to 25% year-over-year growth in our license revenue in Q2, with our combined services and maintenance businesses up in the mid-single digit range resulting in high single- to low double-digit year-over-year growth in total revenue." For Q2 the GAAP EPS target is \$0.11 to \$0.15.

The Q2 guidance assumes a non-GAAP tax rate of 24%, a GAAP tax rate of 25% and 122 million diluted shares outstanding. The Q2 non-GAAP guidance excludes approximately \$10.2 million of stock-based compensation expense, \$7.5 million of acquisition-related intangible asset amortization expense and their related income tax effects.

Glidden continued, "Looking to the full year FY'11, we are continuing to target revenue growth of 10% to 12%. We are expecting license revenue growth of approximately 20% to 25%, services revenue growth of approximately 10% and maintenance revenue growth of approximately 5%. We are committed to achieving our non-GAAP EPS target of \$1.20 to \$1.25, while balancing investments in future growth with our commitment to 20% non-GAAP EPS growth." For FY'11 the GAAP EPS target

CIMdata PLM Industry Summary

is \$0.73 to \$0.78.

The FY'11 targets assume a non-GAAP tax rate of 24%, a GAAP tax rate of 25% and 122 million diluted shares outstanding. The FY'11 non-GAAP guidance excludes approximately \$44.2 million of stock-based compensation expense, \$29.1 million of acquisition-related intangible asset amortization, \$0.7 million of foreign currency transaction losses, and their related income tax effects.

Q1 Earnings Conference Call and Webcast

Prepared remarks for the conference call have been posted to the investor relations section of their website. The prepared remarks will not be read live; the call will be primarily Q&A.

What: PTC Fiscal Q1 Conference Call and Webcast

When: Thursday, January 27th, 2011 at 8:30 am (ET)

Replay: The audio replay of this event will be archived for public replay until 4:00 pm (CT) on February 1, 2011 at 1-800-839-1117 or 203-369-3355. To access the replay via webcast, please visit <http://www.ptc.com/for/investors.htm>.

Important Information about Non-GAAP References

PTC provides non-GAAP supplemental information to its financial results. Non-GAAP operating expenses, margin and EPS exclude stock-based compensation expense, amortization of acquired intangible assets, foreign currency transaction losses related to a litigation resolution, and the related tax effects of the preceding items and any one-time tax items. We use these non-GAAP measures, and we believe that they assist our investors, to make period-to-period comparisons of our operational performance because they provide a view of our operating results without items that are not, in our view, indicative of our core operating results. We believe that these non-GAAP measures help illustrate underlying trends in our business, and we use the measures to establish budgets and operational goals, communicated internally and externally, for managing our business and evaluating our performance. We believe that providing non-GAAP measures affords investors a view of our operating results that may be more easily compared to the results of peer companies. In addition, compensation of our executives is based in part on the performance of our business based on these non-GAAP measures. However, non-GAAP information should not be construed as an alternative to GAAP information as the items excluded from the non-GAAP measures often have a material impact on PTC's financial results. Management uses, and investors should consider, non-GAAP measures in conjunction with our GAAP results.

For unabridged press release including financial tables please click [HERE](#).

 [Click here to return to Contents](#)

PTC's Q1 Fiscal 2011 Prepared Remarks

26 January 2011

PTC has issued Q1 Fiscal 2011 detailed prepared remarks covering their long term view, Q1 results vs. guidance, Domino Account wins, Q2 and FY'11 outlook, revenue by line of business and much more.

Click [HERE](#) for full details.

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

SAP Reports Record Fourth Quarter 2010 Software Revenue

26 January 2011

- Fourth Quarter 2010 Software Revenue Increased 35% (25% at Constant Currencies) to €1.5 Billion
- Full-Year 2010 Non-IFRS Software and Software Related Service Revenue Increased 20% (13% at Constant Currencies) and Exceeded Company Guidance
- Full-Year 2010 Non-IFRS Operating Margin At Constant Currencies Meets Company Guidance; Full-Year 2010 IFRS Operating Margin Negatively Impacted by Litigation Provision
- SAP Executive Board Will Recommend to the SAP Supervisory Board to Increase the 2010 Dividend by 20% from €0.50 to €0.60 Per Share

[SAP AG](#) announced its preliminary financial results for the fourth quarter and full-year ended December 31, 2010.

[View the Detailed Results](#) (PDF)

[Presentation](#) (PDF)

FINANCIAL HIGHLIGHTS – Fourth Quarter 2010

€million, unless stated otherwise	Fourth Quarter 2010 ¹⁾						
	IFRS			Non-IFRS ²⁾			
	Q4 2010	Q4 2009	% change	Q4 2010	Q4 2009	% change	% change constant currency ³⁾
Software revenue	1,507	1,120	35%	1,507	1,120	35%	25%
Software and software-related service revenue	3,273	2,566	28%	3,309	2,566	29%	20%
Total revenue	4,058	3,190	27%	4,094	3,190	28%	20%
Total operating expenses	-3,515	-2,168	62%	-2,484	-2,055	21%	15%
- thereof TomorrowNow litigation	-933	-49	>100%	na	na	na	na
Operating profit	543	1,022	-47%	1,610	1,134	42%	30%
Operating margin (%)	13.4	32.0	-18.6pp	39.3	35.5	3.8pp	3.0pp
Profit after tax	437	682	-36%	1,103	761	45%	
Basic earnings per share (€)	0.37	0.57	-35%	0.93	0.64	45%	

1) All figures are preliminary and unaudited.

2) Adjustments in the revenue line items are for the support revenue that would have been recognized had the acquired entities remained stand-alone entities but that SAP is not permitted to recognize as revenue under IFRS as a result of business combination accounting rules. Adjustments in the operating expense line items are for acquisition-related charges and discontinued activities.

3) Constant currency revenue and operating profit figures are calculated by translating revenue and operating profit of the current period using the average exchange rates from the previous year's respective period instead of the current period. Constant currency period-over-period changes are calculated by comparing the current year's Non-IFRS constant currency numbers with the Non-IFRS number of the previous year's respective period.

Revenue – Fourth Quarter 2010

- IFRS software revenue was €1.51 billion (2009: €1.12 billion), an increase of 35% (25% at constant currencies).
- IFRS software and software-related service revenue was €3.27 billion (2009: €2.57 billion), an increase of 28%. Non-IFRS software and software-related service revenue was €3.31 billion (2009: €2.57 billion), an increase of 29% (20% at constant currencies).
- Excluding the contribution from Sybase, SAP's business contributed 21 percentage points to the growth of IFRS and Non-IFRS software and software related service revenue (13 percentage points at constant currencies).
- IFRS total revenue was €4.06 billion (2009: €3.19 billion), an increase of 27%. Non-IFRS total revenue was €4.09 billion (2009: €3.19 billion), an increase of 28% (20% at constant currencies).

Fourth quarter 2010 Non-IFRS software and software-related service revenue as well as total revenue exclude a deferred support revenue write-down from acquisitions of €36 million.

Income – Fourth Quarter 2010

- IFRS operating profit was €543 million (2009: €1.02 billion), a decrease of 47%. Non-IFRS operating profit was €1.61 billion (2009: €1.13 billion), an increase of 42% (30% at constant currencies). In the fourth quarter of 2009, the IFRS and Non-IFRS operating profit was impacted by restructuring charges of €5 million and €6 million, respectively, resulting from a reduction of positions. In contrast, restructuring charges were insignificant in the fourth quarter of 2010. In the fourth quarter of 2010, IFRS operating profit was negatively impacted by €933 million (2009: €49 million), resulting from an increase in the provision for the TomorrowNow litigation.
- IFRS operating margin was 13.4% (2009: 32.0%), a decrease of 18.6 percentage points. Non-IFRS operating margin was 39.3% (2009: 35.5%), or 38.5% at constant currencies, an increase of 3.8 percentage points (3.0 percentage points at constant currencies). In contrast to the respective quarter in 2009, the fourth quarter of 2010 was not materially impacted by restructuring expenses which had, in the fourth quarter of 2009, negatively impacted the IFRS and Non-IFRS operating margin by 0.2 percentage points. In the fourth quarter of 2010, the IFRS operating margin was negatively impacted by 23.0 percentage points (2009: 1.5 percentage points), resulting from an increase in the provision for the TomorrowNow litigation.

CIMdata PLM Industry Summary

- IFRS profit after tax was €437 million (2009: €682 million), a decrease of 36%. Non-IFRS profit after tax was €1.10 billion (2009: €761 million), an increase of 45%. IFRS basic earnings per share was €0.37 (2009: €0.57), a decrease of 35%. Non-IFRS basic earnings per share was €0.93 (2009: €0.64), an increase of 45%. The impact, net of tax, of the restructuring expenses incurred in the fourth quarter 2009 on the fourth quarter 2009 IFRS and Non-IFRS basic earnings per share was insignificant. In the fourth quarter of 2010, IFRS basic earnings per share was negatively impacted by €0.49 (2009: €0.03), resulting from an increase in the provision for the TomorrowNow litigation. The IFRS effective tax rate in the fourth quarter of 2010 was 3.1% (2009: 31.1%). Approximately 24 percentage points of the decrease in the IFRS effective tax rate for the fourth quarter 2010 was due to a tax effect resulting from an increase in the provision recorded for the TomorrowNow litigation.

Fourth quarter 2010 Non-IFRS operating profit excludes a deferred support revenue write-down from acquisitions of €36 million plus acquisition-related charges of €96 million (2009: €64 million) and discontinued activities totaling €935 million (2009: €49 million). Fourth quarter 2010 Non-IFRS profit after tax and Non-IFRS basic earnings per share exclude a deferred support revenue write-down from acquisitions of €23 million plus acquisition-related charges of €67 million (2009: €49 million) and discontinued activities totaling €575 million (2009: €30 million) net of tax. The amounts excluded from operating profit for discontinued activities related to the TomorrowNow litigation was €933 million (2009: €49 million), and €586 million (2009: €31 million), net of tax

“We finished 2010 with the highest fourth quarter for software revenue in our history. Our strong performance and our business outlook for 2011 demonstrate that SAP is confident about achieving double-digit growth and continued margin expansion,” said Werner Brandt, CFO of SAP. “Moreover, in light of our excellent results and our confidence in our business going forward, we will recommend to the Supervisory Board that we increase our dividend by 20% from €0.50 to €0.60 per share payable in 2011.”

“Our results prove that SAP is back to being a growth company,” said Bill McDermott, Co-CEO of SAP. “We showed rock solid revenue across the globe, particularly in the fast growing emerging markets where customers still have the most choice and are rapidly expanding their businesses. We also performed extremely well in all key customer segments. We have excellent momentum and we are confident in 2011 and beyond.”

“SAP fundamentally believes in innovation and choice as a sustainable business model for us and our customers,” said Jim Hagemann Snabe, Co-CEO of SAP. “We have a full pipeline of innovations and are expanding into new markets for mobility, on demand and in-memory computing. We are convinced that these new innovations will help us drive double digit growth and reach 1 billion users by 2015.”

TomorrowNow Litigation

SAP has great respect for the US legal system and Court decisions. However, SAP believes that the amount awarded by the jury in Oracle v. SAP/TomorrowNow is disproportionate and wrong. After the Court has entered final judgment SAP intends to file post-trial motions in the coming weeks asking the Court to reduce the amount of damages awarded, or to order a new trial. Depending on the outcome of the post-trial motion process, SAP may consider an appeal. Because the motions have not yet been filed and the outcome of the motions remains uncertain the amount by which the jury award would be reduced cannot be reliably measured at this time. Therefore, SAP has based the provision on the jury award. SAP will consider all new information and developments emerging over the coming weeks to

CIMdata PLM Industry Summary

determine the appropriate provision amount for SAP's final full year 2010 financials. Therefore, SAP cannot exclude the possibility that the final provision differs from the preliminary amounts presented in this earnings release.

FINANCIAL HIGHLIGHTS – Full-Year 2010

€million, unless stated otherwise	Full-Year 2010 ¹⁾						
	IFRS			Non-IFRS ²⁾			
	FY 2010	FY 2009	% change	FY 2010	FY 2009	% change	% change constant currency ³⁾
Software revenue	3,265	2,607	25%	3,265	2,607	25%	16%
Software and software-related service revenue	9,794	8,198	19%	9,866	8,209	20%	13%
Total revenue	12,464	10,672	17%	12,536	10,683	17%	11%
Total operating expenses	-9,875	-8,084	22%	-8,592	-7,756	11%	6%
- thereof TomorrowNow litigation	-980	-56	>100%	na	na	na	na
Operating profit	2,589	2,588	0%	3,944	2,927	35%	23%
Operating margin (%)	20.8	24.3	-3.5pp	31.5	27.4	4.1pp	3.1pp
Profit after tax	1,816	1,750	4%	2,694	2,001	35%	
Basic earnings per share (€)	1.53	1.47	4%	2.27	1.68	35%	

1) All figures are preliminary and unaudited.

2) Adjustments in the revenue line items are for the support revenue that would have been recognized had the acquired entities remained stand-alone entities but that SAP is not permitted to recognize as revenue under IFRS as a result of business combination accounting rules. Adjustments in the operating expense line items are for acquisition-related charges and discontinued activities.

3) Constant currency revenue and operating profit figures are calculated by translating revenue and operating profit of the current period using the average exchange rates from the previous year's respective period instead of the current period. Constant currency period-over-period changes are calculated by comparing the current year's Non-IFRS constant currency numbers with the Non-IFRS number of the previous year's respective period.

Revenue – Full-Year 2010

- IFRS software revenue was €3.27 billion (2009: €2.61 billion), an increase of 25% (16% at constant currencies)

CIMdata PLM Industry Summary

- IFRS software and software-related service revenue was €9.79 billion (2009: €8.20 billion), an increase of 19%. Non-IFRS software and software-related service revenue was €9.87 billion (2009: €8.21 billion), an increase of 20% (13% at constant currencies).
- Excluding the contribution from Sybase, SAP's business contributed 16 percentage points to the growth of IFRS and Non-IFRS software and software related service revenue (10 percentage points at constant currencies).
- IFRS total revenue was €12.46 billion (2009: €10.67 billion), an increase of 17%. Non-IFRS total revenue was €12.54 billion (2009: €10.68 billion), an increase of 17% (11% at constant currencies).

Full-year 2010 Non-IFRS software and software-related service revenue as well as total revenue exclude a deferred support revenue write-down from acquisitions of €72 million (2009: €11 million).

Income – Full-Year 2010

- IFRS operating profit was €2.59 billion (2009: €2.59 billion). Non-IFRS operating profit was €3.94 billion (2009: €2.93 billion), an increase of 35% (23% at constant currencies). For the full-year 2009, the IFRS and Non-IFRS operating profit was impacted by restructuring charges of €198 million and €194 million, respectively, resulting from a reduction of positions. In contrast, restructuring charges were insignificant for the full-year 2010. For the full-year 2010, IFRS operating profit was negatively impacted by €980 million (2009: €56 million), resulting from an increase in the provision for the TomorrowNow litigation.
- IFRS operating margin was 20.8% (2009: 24.3%), a decrease of 3.5 percentage points. Non-IFRS operating margin was 31.5% (2009: 27.4 %), or 30.5% at constant currencies, an increase of 4.1 percentage points (3.1 percentage points at constant currencies). In contrast to the full-year 2009, the full-year 2010 was not materially impacted by restructuring expenses which had, for the full-year 2009, negatively impacted the IFRS and Non-IFRS operating margin by 1.9 percentage points and 1.8 percentage points, respectively. For the full-year 2010, the IFRS operating margin was negatively impacted by 7.9 percentage points (2009: 0.5 percentage points), resulting from an increase in the provision for the TomorrowNow litigation.
- IFRS profit after tax was €1.82 billion (2009: €1.75 billion), an increase of 4%. Non-IFRS profit after tax was €2.69 billion (2009: €2.00 billion), an increase of 35%. IFRS basic earnings per share was €1.53 (2009: €1.47), an increase of 4%. Non-IFRS basic earnings per share was €2.27 (2009: €1.68), an increase of 35 %. The impact, net of tax, of the restructuring expenses incurred for the full-year 2009 on the full-year 2009 IFRS and Non-IFRS basic earnings per share was €0.12. For the full-year 2010, IFRS basic earnings per share was negatively impacted by €0.52 (2009 €0.03), resulting from a provision for the TomorrowNow litigation. The IFRS effective tax rate for the full-year 2010 was 22.3% (2009: 28.1%). Approximately 5 percentage points of the decrease in the IFRS effective tax rate for the full-year 2010 was due to a tax effect resulting from an increase in the provision recorded for the TomorrowNow litigation.

Full-year 2010 Non-IFRS operating profit excludes a deferred support revenue write-down from acquisitions of €72 million (2009: €11 million) plus acquisition-related charges of €300 million (2009: €271 million) and discontinued activities totaling €983 million (2009: €57 million). Full-year 2010 Non-IFRS profit after tax and Non-IFRS basic earnings per share exclude a deferred support revenue write-down from acquisitions of €47 million (2009: €7 million) plus acquisition-related charges of €217 million (2009: €202 million) and discontinued activities totaling €614 million (2009: €35 million) net of

CIMdata PLM Industry Summary

tax. The excluded amounts from discontinued activities related to the TomorrowNow litigation was €980 million (2009: €56 million) and €615 million (2009: €36 million), net of tax

Cash Flow – Full-Year 2010

Operating cash flow for the full-year 2010 was €2.95 billion (2009: €3.02 billion). Free cash flow was €2.62 billion (2009: €2.79 billion), a decrease of 6%. Free cash flow was 21% of total revenue (2009: 26%). At December 31, 2010, SAP had a total group liquidity of €3.53 billion (December 31, 2009: €2.28 billion), which includes cash and cash equivalents and short term investments. Net liquidity at December 31, 2010 was -€850 million, which included €4.38 billion of debt, of which €2.20 billion resulted from the proceeds of two successful bond transactions. These debt offerings were very well received in the market.

SAP Executive Board Recommends Dividend Increase

The SAP Executive Board will recommend to the SAP Supervisory Board to propose at the AGM to increase the dividend by 20% from €0.50 to €0.60 per share for the fiscal year 2010, payable in 2011.

Business Outlook

For 2011, the Company is adjusting its definition of Non-IFRS operating profit and Non-IFRS operating margin to align with the performance measures used internally in managing SAP's segments and reflected in SAP's segment reporting, and to enhance comparability with other software companies. For 2011, Non-IFRS operating profit and Non-IFRS operating margin will exclude stock based compensation expenses and restructuring charges, in addition to the items that were already excluded in the past (deferred support revenue write-downs from acquisitions, acquisition related charges and discontinued activities).

SAP is providing the following outlook for the full-year 2011.

- The Company expects full-year 2011 Non-IFRS software and software-related service revenue to increase in a range of 10% – 14% at constant currencies (2010: €9.87 billion).
- The Company expects full-year 2011 Non-IFRS operating profit to be in a range of €4.45 billion – €4.65 billion at constant currencies (2010: €4.00 billion), resulting in a 2011 Non-IFRS operating margin increasing in a range of 0.5 - 1.0 percentage points at constant currencies (2010: 31.9%).
- For the full-year 2011, the Company projects an IFRS effective tax rate of 27.0% – 28.0% (2010: 22.3%) and a Non-IFRS effective tax rate of 27.5% - 28.5% (2010: 27.2%).

Major Customer Wins

In the fourth quarter of 2010, SAP closed major contracts in key regions.

EMEA:

SAP - Gruppa VISTA (Vertical Integrated Solutions, Technology and Architecture), LLC, United Nations Industrial Development Organization, Nottinghamshire County Council, Sociedad de Prevención de FREMAP, Saudi Electricity Company (SEC), Novartis International AG.

Sybase - European Southern Observatory, Odyssey Financial Technologies, Telefonica Group.

Americas:

SAP - Glazer's Wholesale Distributors, American Family Life Assurance Co., Tyco International,

CIMdata PLM Industry Summary

Halliburton, Banco Compartamos, S.A., Sonda Supermercados Exportacao.
Sybase - CARMAX, comScore, University of São Paulo.

Asia Pacific/Japan:

SAP - China Datang Corporation, Akebono Brake Industry Co., Ltd., China National Chemical Corporation, Vedan International (Holdings) Limited, Thai Airways International Public Company Limited, KOBELCO CONSTRUCTION MACHINERY CO., LTD., BlueScope Steel Limited.
Sybase - Korea Exchange Bank, Total Access Communication (dtac).

SAP Business ByDesign

De Villiers Walton Solutions, Edson Consulting, Airsolia, KPF, Global Office, IS4IT, TVN, Standard Calibrations, Silicon Valley Sports and Entertainment, Longre Education, Octopus e-Internation, Affordable Business Solutions, Zinnov.

Webcast / Supplementary Financial Information

SAP senior management will host a press conference in Frankfurt today at 10:00 AM (CET) / 9:00 AM (GMT) / 4:00 AM (Eastern) / 1:00 AM (Pacific), followed by an investor conference at 2:00 PM (CET) / 1:00 PM (GMT) / 8:00 AM (Eastern) / 5:00 AM (Pacific). Both conferences will be web cast live on the Company's website at www.sap.com/investor and will be available for replay. Supplementary financial information pertaining to the full-year and quarterly results can be found at www.sap.com/investor.

2010 Annual Report

The 2010 Annual Report is scheduled to be published on March 24, 2011, and will be available for download at www.sap.com/investor.

Follow SAP Investor Relations on Twitter at [@sapinvestor](https://twitter.com/sapinvestor).

[Appendix](#) – Financial Information to Follow

 [Click here to return to Contents](#)

VISTAGY's Revenues Grow 29% in 2010

26 January 2011

VISTAGY, Inc. announced that its revenues grew 29 percent and product license sales expanded 36 percent in 2010 as the company realized the benefits of developing comprehensive solutions by industry and its investment in reaching new customers in key emerging markets. The revenue and product license growth was reflected across North America, Europe, and Asia Pacific. This acceleration in revenue is a clear demonstration that the world's leading manufacturers are recognizing VISTAGY's ability to support their most challenging programs.

VISTAGY achieved significant growth in its target industries-aerospace, wind energy, and automotive-as manufacturers and suppliers continued to seek out VISTAGY's best-in-class tools that support the entire design-to-manufacturing process for highly engineered products. For instance, VISTAGY picked up eight new wind energy customers, including many of the world's premier firms. It also significantly enlarged its footprint in the emerging Chinese and Russian aerospace markets.

With opportunities growing across the globe, VISTAGY also adopted an aggressive hiring policy in

2010, increasing its head count by 12 percent.

The year was highlighted by sales to a number of industry leaders, including BAE Systems, Bombardier Aerospace, Cobham Antenna Systems, Kaman Helicopters, and GKN Aerospace; premier Chinese wind firm Sinomatech; automotive supply giant Lear, and Russian shipbuilder SNSP.

VISTAGY also announced several key partnerships in 2010, including integrating the firm's FiberSIM® composites engineering software and ANSYS Composite PrepPost, thus enabling customers to close the loop between design and analysis. VISTAGY also participated in PTC's highly anticipated launch of Creo.

"We've made a significant investment in developing industry-specific solutions and reaching out to customers across the world so our 2010 results validate that strategy," said Steve Luby, president and CEO of VISTAGY.

"We are focused on critical areas of technology-composites, airframe assembly, transportation interiors—that are transforming many industries, especially our target markets of aerospace, wind energy, and automotive. Our products are helping to drive that transformation by providing support for the entire product development process. As a result, I believe that our solutions will continue to resonate with global manufacturers and suppliers."

 [Click here to return to Contents](#)

Implementation Investments

Collaborating Universities Score Big in Formula SAE with Dassault Systèmes Solutions

25 January 2011

Dassault Systèmes (DS) announced that collaborative design with Dassault Systèmes solutions contributed to the Global Formula Racing team from [Oregon State University](#) and its partner, [Duale Hochschule Baden Württemberg-Ravensburg](#) in Germany, experiencing its most successful Formula SAE season, winning 25 first place event finishes and three first place overall finishes out of six competitions. DELMIA digital manufacturing tools were used to create ergonomic simulations that verified cockpit fit and controls reachability. Student teams from both universities designed everything in CATIA based upon one large CAD model from a single database that the entire team could access.

"A lot of universities have done distributed design, but nothing has been done at the complexity of a FormulaSAE/Formula Student (FSAE/FS) vehicle," said Robert Paasch, OSU Boeing Professor of Mechanical Engineering Design. "We attribute much of our achievements to DELMIA and CATIA with anticipation of the 2010-11 season producing an even more successful vehicle."

The students used DELMIA to run assembly simulations to ensure that their final body design would not interfere in the ability to service the engine. Design, manufacturing and testing occurred at both schools with the final design used to manufacture two identical cars – one at the OSU campus and one in Friedrichshafen Germany.

Playing an exceptionally critical role in the carbon fiber monocoque chassis design was the surfacing and finite element analysis capability of the CATIA Composites workbench. With the ability to predict structural properties, the student team was able to optimize the stiffness, strength and aerodynamics of its vehicle body. Complex surfaces and layouts were created by varying thicknesses of the core material,

designing different orientation of the layers as well using different core materials at different structural points of the vehicle body.

The two universities began their original collaboration in 2007 with the 2009-10 season being the first time ever that a global student team has jointly shared their physical and intellectual resources for the development of a common FSAE/FS vehicle. The team, which consisted of 25 students from Oregon State and 40 students from Duale Hochschule, was split into design groups with responsibility for a particular area of the vehicle, such as the suspension or chassis. All design groups consisted of students collaborating from both universities with CATIA serving as the common language.

“This is the largest, most complex university level project in the world,” said Roy Smolky, worldwide academic sales operations, Dassault Systèmes. “It is exciting to be part of it and see how the application of our tool set gains a competitive advantage for this team.”

For this project, much of the communication was accomplished via email, live chat, Skype and Google docs. Added Professor Paasch, “Our hope is that by the 2011-12 season we will be working in the DS V6 platform, providing the ability to share all data via the web in real time, taking our collaborative efforts to the next level.”

About Formula SAE

Formula SAE® is a student design competition organized by SAE International (formerly Society of Automotive Engineers) based upon the concept that a manufacturing company has contracted a design team to develop a small Formula-style race car. The prototype race car is to be evaluated for its potential as a production item. The target marketing group for the race car is the non-professional weekend autocross racer. Each student team designs, builds and tests a prototype based on a series of rules whose purpose is both to ensure onsite event operations and promote clever problem solving. Formula SAE takes students out of the classroom and allows them to apply textbook theories to real work experiences.

<http://students.sae.org/competitions/formulaseries/>

 [Click here to return to Contents](#)

Delcam Customer Tower Tools Seals Boeing Success

27 January 2011

Delcam customer Tower Tools has recently completed its largest project with its Delcam manufacturing software, the tooling for the cargo-door seal for the freight version of the Boeing 777. The seal measures three by three metres square, and has a small and variable cross-section. Like many of the company’s projects, the moulds and the associated checking fixture were supplied to Meggitt Polymers and Composites.

“When the Boeing representative visited us, he seemed a little nervous about having a relatively small company responsible for the tooling for such a critical component,” admitted Myles Ball, Managing Director at Tower Tools. “He was a lot happier when the first seal was delivered in 18 weeks, six weeks earlier than the norm for a seal of that size. In addition, the seal fitted perfectly and worked first time.”

Tower Tools has specialised in moulds for rubber products, in particular for aerospace seals, since it was founded in 1957 in the centre of Leicester. The company took its name from the nearby clock tower. It moved to its present site in 1995, where it has bigger and better premises with easier access to the motorway network. Meggitt, together with GKN and Trelleborg, are the company’s major customers, but it also undertakes work in other transport sectors and for medical applications.

CIMdata PLM Industry Summary

Unlike many customers who have bought Delcam software after a recommendation from an existing user, Mr. Ball first invested in the software in 1998 after speaking to a company that had decided on a cheaper CAD/CAM package. “The owner told me that he had made a big mistake and that he wished he had paid the extra for the Delcam system,” remembered Mr. Ball. “From that moment, I knew I had to have Delcam software. The demonstration convinced me; the software seemed to be far more intuitive than the other packages I’d seen.”

Comments from a Delcam user were important when new Engineering Manager, Andy Lowe, arrived at Tower Tools and began using the PowerSHAPE design software. “I found PowerSHAPE to be very different from the system I had used previously,” he explained, “but a sub-contract draughtsman that we used told me it was the best system for tooling design so I stuck with it. Ironically, I became so much more productive once I got used to the different way of working that we didn’t need to subcontract as much of our design work.”

“The flexibility of the software is important to us,” added Mr. Ball. “For some projects, we are supplied with a fully-detailed CAD design of the seal so we use PowerSHAPE just to create the mould. At the other extreme, we can be sent drawings of two adjacent parts and are told to create something to fill the gap between them so we need to design the seal from scratch. PowerSHAPE also makes it very easy to make checking fixtures from the tool designs.”

“The PowerMILL CAM system also gives us many benefits, not least the ability to machine undercuts in three-axis by using special cutters,” he continued. “The flexibility of rubber means that undercuts are far more common in rubber moulds than in those for plastics.”

“Even more important has been the support that we have received from Delcam,” he concluded. “Whenever we have any problems, the help-desk staff goes out of their way to help us. The regular training days are invaluable in keeping us up to date with developments in the software and the latest design and machining techniques.”

 [Click here to return to Contents](#)

DS SolidWorks Corp. Sells Millionth Education License

26 January 2011

Dassault Systèmes (DS) SolidWorks Corp. announced that one million [SolidWorks® design software](#) licenses have been purchased by educational institutions. Many millions of students at these institutions have fuelled their studies in science, technology, engineering,

The roster of premier institutions using SolidWorks spans all continents and includes: [MIT \(USA\)](#), [Indian Institute of Technology Delhi \(India\)](#), [Politecnico di Torino \(Italy\)](#), [Tokyo Metropolitan Rokugou Technical High School \(Japan\)](#), [Universidad del Valle de Mexico \(Mexico\)](#), [University of Cambridge \(UK\)](#), [RENATESENTERET\(Norway\)](#), [Tsinghua University \(China\)](#), University of Manitoba (Canada), [University of South Australia \(Australia\)](#), [The University of Applied Sciences Stralsund \(Germany\)](#), and [Lycée Technique Privé Saint Etienne \(France\)](#).

“We want our students learning and applying science and engineering, not struggling with unnecessarily complex software,” said industrial engineering professor Andrés-Amador García Granada, Ph.D., of the IQS-URL engineering university in Barcelona. “SolidWorks gives students all the capabilities a professional engineer needs – including uniquely integrated [Simulation software](#) that we use to teach statics, dynamics, thermal problems, elasticity, and fluid-dynamics – in the most intuitive package

CIMdata PLM Industry Summary

available. As a result, students start learning sooner, learn more over time, and graduate better prepared for their careers. At IQS, 70 out of 150 students obtained a [Certified SolidWorks Associate \(CSWA\) certification](#) as a common requirement to start working on a final-year project for industry.”

Many students combine their learning with competition. “SolidWorks helps us continuously refine our ‘Thunderstruck’ robot’s design for the [Battlebots IQ](#) competition, blending the best of offense, defense, weight, material strength, and sheer destructiveness,” said Senai Andai, 20, a junior-year mechanical engineering student at the [University of Texas at Arlington](#) (UTA). “The integrated SolidWorks Simulation software and intuitive user interface help us apply classroom theory to hands-on design, manufacturing, and ‘field testing.’ This is invaluable preparation for our futures as engineers.”

DS SolidWorks backs up its software with rich educational resources, including:

[Robotics Tutorials](#) that introduce basic concepts of robot design from one’s first part to a complete assembly;

[SolidWorks Teacher Blog](#) for educators at all levels who use SolidWorks software for design and engineering instruction;

[Anytime, anywhere access to SolidWorks](#), including on student laptops and home computers;

[Competitive opportunities](#) in Formula One-style racing, robotics, solar cars, and much more;

[Instruction in sustainable design](#), a discipline gaining prominence among designers and or engineers; and

[Certification](#) to demonstrate solid design skill sets to first employers.

“Our software is packed with all the sophisticated capabilities that professional engineers use,” said Marie Planchard, director of world education markets for DS SolidWorks. “We think it’s important that students have easy access to these capabilities so they can bring the advantage of experience to their internships and entry-level positions.”

DS SolidWorks’ contribution to engineering education also includes a long list of sponsorships. One recipient is [Assabet Valley \(Mass.\) Regional Technical High School](#), featured in the [latest episode](#) of the DS SolidWorks Web-based reality show, [Let’s Go Design](#). Students there are gearing up for competition in the [National Robotics League](#) using a robot they not only designed and assembled, but for which they machined the parts.

 [Click here to return to Contents](#)

Global Organizations Choose Z Corporation 3D Printers to Accelerate Product Design

27 January 2011

Z Corporation announced that world-renowned manufacturers and schools have selected ZPrinter[®] 3D printers to enhance design engineering. These organizations and global brands include:

- [Airbus Operations GmbH](#)
- [Hyundai-Kia Motors](#)
- [Sketchers](#)

CIMdata PLM Industry Summary

- [Stanley Black & Decker, Inc.](#)
- [GE Energy](#)
- [Foster + Partners](#)
- [SHoP Architects](#)
- [Israeli Defense Forces](#)
- [RMIT University School of Architecture and Design](#)
- [The American University , UAE](#)
- [Helwan University](#)

3D printers create physical objects from 3D computer-aided design (CAD), building information modeling (BIM) and other digital data much as a 2D printer creates documents from word-processing text. [ZPrinter 3D printers](#) turn product, building and other designs into physical color models, streamlining design from idea through mid-stage evaluation and presentation.

ZPrinters set the standard for speed, affordability, color and ease of use, offering:

- **Fastest print speed:** 5x-10x faster than all other 3D printing technologies
- **Lowest operating cost:** one-fifth the cost of other technologies
- **World's only multicolor 3D printers:** full 24-bit color, just like a 2D printer
- **Ease of use:** only ZPrinters perform most operations automatically

"We are thrilled to help such prominent companies in so many industries improve product development through on-demand prototyping," said Ed DeArias, Z Corp.'s vice president of global sales and service. "It's inspiring to see our customers create innovative uses for ZPrinting and see the tangible business benefits."

 [Click here to return to Contents](#)

Hyundai Motor Company and Kia Motors Corporation Selects PTC's Windchill as Its Enterprise PLM Solution

26 January 2011

PTC® announced that Hyundai Motor Company and Kia Motors Corporation, the fifth-largest and fastest-growing global automobile manufacturer by market share, has selected PTC as its strategic partner for its enterprise PLM initiative.

Following an extensive two-year benchmark testing and selection process, Hyundai Motor Company and Kia Motors Corporation selected PTC's Windchill® as its enterprise PLM solution to consolidate multiple existing systems into a single platform for managing critical product data and related processes for vehicle development. Hyundai Motor Company and Kia Motors Corporation is adopting the Windchill PLM system in its core R&D groups and intends to extend use of the solution through its

CIMdata PLM Industry Summary

internal and external value chain.

Dr. H. S. Lee, Vice Chairman of HKMC's R&D center, said, "In order to support our ambitious growth plans, we have prioritized the need for a faster and more efficient environment to facilitate global concurrent product development and support the rapidly changing requirements for our vehicle programs. Two years ago we began looking at all available PLM solutions to meet our requirements. We selected and procured with PTC because of Windchill's impressive results in our comprehensive benchmarking process, PTC's proven track record as an effective partner in powertrain development, and its growing strength in the automotive industry."

The first phase of delivery, which has already begun, establishes a system of record for the complete vehicle -- the engineering Bill of Materials -- and for Change Management. Phase I also includes CATIA data management and a Digital Mock-Up (DMU) environment. The system gradually is expected to be expanded globally.

"PTC is proud to work with Hyundai Motor Company and Kia Motors Corporation, one of the largest, fastest-growing and most important brands in the global automotive industry," said Jim Heppelmann, President and CEO of PTC. "As a global automotive OEM, Hyundai Motor Company and Kia Motors Corporation can now benefit from a single source for accessing data and managing processes across vehicle design programs in order to quickly respond to changes, to address the unique needs of global markets, and to ensure quality through production in many countries."

Heppelmann added: "We are very excited that Hyundai Motor Company and Kia Motors Corporation has chosen us to help it move forward in what is a very dynamic and demanding industry. This selection clearly demonstrates PTC's PLM momentum in the automotive sector."

PTC solutions for automotive needs are designed to meet the product design and product life cycle management needs of both OEMs and suppliers in the automotive industry. PTC's customers in the automotive industry utilizing PTC's enterprise 3D design, product data management and/or collaboration solutions include eight of the Top 10 power train suppliers and three of the Top Five automotive OEMs.

About Hyundai Motor Company and Kia Motors Corporation

Hyundai Motor Company and Kia Motors Corporation is the world's fifth-largest automaker and is made up of Hyundai Motor Co. and Kia Motors Corp.

About Hyundai Motor Company

Established in 1967, Hyundai Motor Co. has grown into the Hyundai Motor Group which has ranked as the world's fifth-largest automaker since 2007 and includes more than two dozen auto-related subsidiaries and affiliates. Hyundai Motor Co., which has six manufacturing bases outside of South Korea, sold approximately 3.6 million vehicles globally in 2010. Hyundai vehicles are sold in 186 countries through some 5,300 dealerships and showrooms. Further information about Hyundai Motor Co. and its products is available at <http://www.hyundai.com>.

About Kia Motors Corporation

Kia Motors Corp. was founded in 1944 and is Korea's oldest manufacturer of motor vehicles. As part of the Hyundai Motor Group, Kia aims to become one of the world's premier automotive brands. More than 1.5 million vehicles a year are produced in 13 manufacturing and assembly operations in eight countries which are then sold and serviced through a network of distributors and dealers covering 172

countries. Kia today has more than 42,000 employees worldwide and annual revenues of over US \$14.6 billion

 [Click here to return to Contents](#)

LivingRoomCraftZ Increases Productivity with AutoCAD for Mac

28 January 2011

LivingRoomCraftZ, a Dutch design firm and technology consultancy, has increased productivity and streamlined their all-Mac based workflow by adopting AutoCAD for Mac software. Since Autodesk, Inc. released [AutoCAD for Mac](#) late last year, a range of design and engineering firms have deployed this native Mac version of AutoCAD to help them increase productivity and improve their design workflows by replacing previous solutions that include virtualization and maintaining dedicated non-Mac hardware for AutoCAD.

“As an active participant in the beta program, it was immediately clear that adding AutoCAD for Mac to our workflow would be very beneficial to us and to our customers,” said Silvia Taurer, owner, LivingRoomCraftZ. “Moving to a native version of AutoCAD has taken out the middle man of virtualization and resulted in significant productivity gains for us.”

LivingRoomCraftZ recently used AutoCAD for Mac as part of their consulting work supporting the construction of the Hamburg Philharmonic Hall. Working in 3D the team created complex solid models of the prefabricated concrete panels necessary to the design. “This project is pushing the horizon of what is possible in the prefabrication of concrete panels,” notes Martin Taurer, project architect, LivingRoomCraftZ, “and the way we achieved the high degree of accuracy required in the model was to use AutoCAD.”

“On most of our projects we work with many different stakeholders – passing drawing files back and forth, as well as working with output from Revit and other software and fine-tuning it using AutoCAD,” said Taurer. “Working natively with AutoCAD for Mac has helped us speed up these processes and enabled us to increase the amount of work we can do, the kinds of projects we are able to tackle, and the companies we are partnering with.”

“There has been a huge resurgence of the Mac with our customers,” said Amy Bunszel, Senior Director, AutoCAD product management. “Autodesk is committed to meeting the needs of these customers, and we’re thrilled to have helped many Mac-only firms, like LivingRoomCraftZ, use AutoCAD more efficiently and effectively to accelerate better design.”

Availability

AutoCAD for Mac is now available for purchase in English and French in North America and Europe from leading resellers, online retailers and Autodesk.com. For details, purchase options or to download the free 30-day trial, visit <http://www.autodesk.com/autocadformac>. Students and educators are also eligible to purchase commercial seats of AutoCAD for Mac at a substantial discount. For more information and to download the free* education version, visit <http://www.autodesk.com/mac4students>.

 [Click here to return to Contents](#)

Mentor Graphics Calibre PERC Programmable Electrical Rule Checker Improves Fujitsu Chip Reliability

25 January 2011

Mentor Graphics Corporation announced that Fujitsu Semiconductor Limited is now using the [Calibre® PERC](#) product for electrical rules checks that improve the correctness and reliability of its IC designs before committing to manufacturing. The product, which automates electrical checks based on user-defined rules, is designed to address customers' need to improve reliability by identifying areas of vulnerability to catastrophic electrical failures in ICs during factory test, transport, and field operation. Among the specific checks being performed at Fujitsu Semiconductor are electrostatic discharge (ESD) protection circuit checking, cross-domain and multi-cross-domain protection checking, level shifter checking, and optimal ESD I/O placement checking.

According to Masaru Ito, Director of System LSI Technology & Product Department, Technology Development Division, IP & Technology Development and Manufacturing Unit at Fujitsu Semiconductor Limited, "In the past we have used a combination of visual layout inspection and custom scripts to find issues associated with circuitry to protect against ESD events and to support multiple voltage domains. Of course, this was very time consuming and not very reliable. We found the combination of features in Calibre PERC combined with its extensive programmability allowed us to define and perform all the checks we need to make, and it gives us the flexibility we need to adapt to future requirements. Initially, we are using Calibre PERC for a part of our design technology, and in the future we will expand usage to all IC development in order to improve overall product reliability and verification efficiency."

"Calibre PERC gives IC designers a new tool to address reliability challenges by assessing critical circuits both geometrically and electrically, while greatly reducing the manual time and effort required for verification," said Joseph Sawicki, Vice President and General Manager of Mentor's Design-to-Silicon division. "Its programmability also gives PERC a unique ability to adapt to multi-voltage, mixed-signal environments and continue to grow with customer needs."

 [Click here to return to Contents](#)

Motor Sich PJSC and Concepts NREC Announce Successful Design Collaboration Outcome on a High Pressure Ratio Centrifugal Compressor for a Helicopter Gas Turbine Engine

24 January 2011

Motor Sich PJSC, Zaporozhye, Ukraine, and [Concepts NREC](#), Wilder, Vermont, USA announced the achievement of a successful outcome in their design collaboration on a high pressure centrifugal compressor for a helicopter gas turbine engine. Motor Sich designed the centrifugal compressor stage using Concepts NREC's compressor design/analysis software and technical assistance. The compressor has undergone several rounds of development testing in Motor Sich's test facilities for a number of different diffuser configurations.

The latest compressor design achieved target performance levels, including a design pressure ratio of 11.5 and a maximum stage efficiency of over 80%. As stated by Motor Sich, the achieved compressor performance will allow significant time savings in the certification cycle and flight testing of the engine. Motor Sich and Concepts NREC are expanding collaboration to other turbomachinery design projects, including multistage axial and radial stages.

About Motor Sich

JSC "Motor Sich" is a leading worldwide company, that for more than 95 years has performed all phases of the life cycle of products - from marketing studies, design and manufacture to maintenance service and repair. The company designs, develops and manufactures: aviation aircraft and helicopter engines of various designations, gas-turbines for gas transportation, gas lift, oil transportation units, gas turbine power plants from 1 to 10 MW, , heat exchangers for aviation engines and gas turbine drives. Quality and reliability of the products, manufactured by the company, is confirmed by their successful operation in over 120 countries. Motor Sich is headquartered at: JSC Motor Sich, 15, Motorostroiteley Avenue Zaporozhye 69068, Ukraine, Tel:+38 (061) 720-48-14; Fax:+38 (061) 720-50-05, For more information, go to: <http://www.MotorSich.com>

 [Click here to return to Contents](#)

NIAR and Dassault Systèmes Partner to Foster Composites Innovation in Aviation

26 January 2011

Dassault Systèmes announced an expanded partnership with the National Institute for Aviation Research (NIAR) to sustain innovation and advanced use of composites materials in the aerospace industry. With the reliance on composites materials significantly growing with every new aircraft program, the industry has gone through major transformations. These developments make it critical for manufacturers to leverage the most advanced software and methodologies to fully capitalize on the benefits such as durability, weight savings, contribution to fuel efficiency, and lower CO₂ emissions. NIAR's CAD/CAM Laboratory is supporting the transition by empowering employees of leading aerospace manufacturers and university students through hands-on instruction on a single platform with Dassault Systèmes end-to-end solutions.

“For more than a century, metal parts have been the de facto standard in the aerospace industry. Moving to composites has revolutionized what’s possible in aerospace design, but transitioning an entire industry is a momentous task,” said Shawn Ehrstein, director of NIAR’s CAD/CAM Laboratory. “We now give students and aerospace professionals the ability to learn how to master composites technology and optimize industrial practices with a cutting-edge comprehensive solution combining CATIA, SIMULIA and DELMIA from Dassault Systèmes. It represents a significant contribution to moving the industry forward.”

Located at Wichita State University, NIAR provides research, development, testing and certification services to the aviation manufacturing industry, government agencies, educational entities and other clients. The Institute has provided training on CATIA and other Dassault Systèmes products since the mid-1990s and has broadened its offerings to specifically address the industry’s demand for knowledge of composites-based engineering. Traditional composites solutions address design, simulation, and manufacturing separately, resulting in a slow, tedious and strictly sequential process. Dassault Systèmes’ integrated solution removes barriers between teams and enables real-time collaborative engineering throughout the composites process to accelerate core activities, reduce risks and costs, and improve productivity.

“Dassault Systèmes is part of a global composites community. Building strong partnerships with leading composites academic institutions, research centers, and industry clusters is a key focus for us to remain at the forefront of technological innovation and accompany our customers through their business transformation,” said Philippe Savignard, composites domain leader, Dassault Systèmes. “Training

CIMdata PLM Industry Summary

current and future employees of leading aerospace manufacturers in a single environment that provides end-to-end collaboration between design, analysis and manufacturing teams is crucial. Through its research, training and consulting activities, NIAR provides an invaluable service to the aerospace industry, and we're proud to play an active part in its success."

Instruction is offered primarily on CATIA for Composites, a solution that addresses the needs of designing with composites, along with instruction on SIMULIA, for realistic simulation. The Institute plans to offer instruction on DELMIA, for digital manufacturing, within the coming months.

About the National Institute for Aviation Research at WSU

The National Institute for Aviation Research, an unincorporated division of Wichita State University, is an aerospace research and development laboratory with global reach and expertise in research, development, testing, and certification. The Institute's clientele includes many of the world's aerospace manufacturers, NASA and the FAA. It is the largest aviation R&D academic institution in the United States. <http://www.niar.wichita.edu>

 [Click here to return to Contents](#)

Parametric Solutions, Inc. Has Selected AxSTREAM to Develop Its Gas Turbine Design Technologies

24 January 2011

SoftInWay Inc. announced an addition of a new client to its extensive international client and partner network, providing the global market with effective tools for axial and radial turbomachinery flow path design. Parametric Solutions, Inc. (PSi), a USA-based provider of engineering consulting services for OEMs, has purchased AxSTREAM software suite for multidisciplinary design, analysis and optimization.

For the SoftInWay team the partnership with PSi has supported a very strong year marked by significant marketing and expansion achievements. With over 17 years of experience in the market, PSi is one of the leaders of the aerospace, consumer products, medical and recreational equipment, green energy, and transportation industries. Starting from gas turbine engine design, PSi has expanded its service range, serving 12 diverse industry sectors and over 90 clients, including GE, Pratt & Whitney, Siemens-Westinghouse and Motorola, to name just a few.

To consolidate its market positions, PSi has to select its partners very thoroughly, giving preference only to the most advanced and professional solutions. The AxSTREAM design suite has become one of the most remarkable PSi's recent acquisitions. Capable of accomplishing multiple design tasks for turbomachinery and characterized by such high-end features as Design of Experiment Engine (DoE), Streamline Solver etc, AxSTREAM was the perfect fit for PSi.

"The AxSTREAM design system allows PSi to rapidly develop advanced gas turbine configurations in a fraction of the time required by more traditional, non-integrated design systems. By using AxSTREAM, our team can evaluate a wider design space, achieving higher performance at a lower cost for our customers.", Samer Abdel-Wahab, PSi Aero Discipline Leader.

"SoftInWay is pleased to provide the PSi engineering team with the appropriate technological background for further innovations in the area of gas turbine design and optimization. We believe the current deal will contribute to mutual benefit of the two companies", added Dr. Leonid Moroz, President and CEO of SoftInWay Inc.

About Parametric Solutions, Inc.

PSi is a product development company. Since its founding in 1993, PSi has diversified and expanded from its gas turbine engine design roots into numerous industries including Aerospace, Consumer Products, Medical Equipment, Green Energy, Transportation, and Recreational Equipment.

Parametric Solutions' staff of over 45 engineers have experience in mechanical design and analysis, kinematic synthesis and optimization, prototyping, hardware procurement, and product testing. PSi's staff of highly experienced, multi-disciplined professionals allows it to assemble well rounded teams tailored to meet individual project needs.

Whether a project entails the complete product development cycle from initial concept to production, the redesign of an existing product, or modeling, analysis and verification of a new design concept, PSi's staff and extensive product development infrastructure can help meet and exceed your project goals and timeline requirements.

PSi is an ISO 9001:2008 certified company.

 [Click here to return to Contents](#)

Pioneering Engineering Firm Gordon Murray Design Selects HyperWorks to Develop the T.25 City Car

24 January 2011

[Altair Engineering, Inc.](#) announced that Surrey-based Gordon Murray Design chose the [HyperWorks](#) product suite to develop the T.25 City Car.

The 30-people strong team with over 500 years of combined automotive industry experience has produced a revolutionary city car that addresses congestion, carbon footprint and emissions. With aggressive targets, including a weight of 550kg, fuel consumption of less than half of the UK average and best in class CO2 emissions, the team turned to HyperWorks to help achieve their ambition.

"We decided to invest in HyperWorks because it offers the most integrated range of computer aided engineering applications," said Frank Coppuck, Engineering Director of Gordon Murray Design.

The HyperWorks pre-processor HyperMesh was used to build and assemble the T.25 CAE model, which was subsequently analyzed for a variety of load cases and performance measures using the suite's RADIOSS solver. The results were then post-processed and visualized in Altair HyperView. The combined use of the HyperWorks tools helped the engineering team design a lighter car in a significantly reduced timescale. The light weight will further enhance the city car's road performance through less fuel consumption and, ultimately, lower CO2 emissions.

OptiStruct, Altair's optimization tool, will be used by Gordon Murray Design in the future to help further refine primary structures. In the meantime, RADIOSS is used to analyse the torsion stiffness, bending stiffness, frontal offset loading and normal mode characteristics of the vehicle.

"RADIOSS correlates really well with reality and has exceeded our expectations. The team needed the tests to be as close to reality as possible and achieved correlation within two percent for the torsion and bending stiffness load cases. Less than five percent is a good result, less than two percent is excellent," said Simon Maher, Senior Stress and Materials Engineer responsible for CAE and test correlation at Gordon Murray Design.

CIMdata PLM Industry Summary

"Another important benefit of choosing HyperWorks is the flexible licensing system," said Simon Maher. "You can buy the software through tokens and that lets you bring new software into play as and when you need it, and that's really an advantage for a small engineering firm like us. Furthermore, the Altair support team has and continues to provide an excellent level of assistance."

"HyperWorks has proved to be invaluable to our engineers' everyday life at Gordon Murray Design and has assisted our business in continuing to develop innovative vehicles," says Gordon Murray, Engineering Director at Gordon Murray Design.

"We are delighted [Gordon Murray Design](#) chose to invest in HyperWorks to develop the T.25 city car," said David Mason, Managing Director for Altair, UK. "The breadth and advanced capabilities of HyperWorks together with Altair's value-based licensing system offers smaller high-tech engineering firms a complete MCAE platform to streamline the development of award winning products. We look forward to continuing to work with Gordon Murray Design to deeply embed optimization and CAE automation as part of their development process to help achieve their business objectives."

To learn more about how HyperWorks, attend the Altair Technology Conference on May 10, 2011 at The Heritage Motor Centre in Gaydon, Warwickshire. To register for the free event, visit <http://www.altairhyperworks.co.uk/Technology>

 [Click here to return to Contents](#)

Swedish Technical Consulting Company Solvina Chooses Dassault Systèmes Solution

25 January 2011

[Dassault Systèmes](#) (DS) announced that the Swedish technical consulting company [Solvina](#) has chosen its Dymola modeling and simulation solution to optimize the development of effective control strategies for plant productivity and energy consumption.

“The advantage with Dymola is its top-down approach, which enables us to represent the plant with few components and from this model we can test different control strategies much faster than if we had to include all the plant details in our model from the beginning”

.Poorly configured control systems can lead to excessive energy consumption and production inefficiency. Therefore, many of Solvina’s customers are in great need of energy optimization. One example is the pulp and paper industry where optimized steam net control enables maximized energy production and minimized oil heating, without dumping of steam and with a stabilized pressure level to all steam consumers.

In order to manage these challenges, Solvina leverages the Dymola modeling and simulation solution by Dassault Systèmes to define the optimal control strategy and configuration, then improving production and energy usage at the plant. The solution is also used to evaluate and adapt control solutions by simulation before implementation.

“A project for a Swedish pulp mill resulted in power savings of 20 MWh/day, which implies cost savings of approximately 500,000 Euros per year,” said Veronica Olesen, project and systems engineer at Solvina. “Without Dymola, we simply could not do our job. It’s the best way to help plant operators achieve enhanced performance and plant availability. If the controller works in the virtual world, it will work in the physical plant.”

Dymola makes it possible to simulate dynamic and complex interactions between, for example,

CIMdata PLM Industry Summary

mechanical, electrical, thermodynamic, hydraulic and control systems. This means users can create more integrated models, thereby obtaining simulation results closer to reality.

“The advantage with Dymola is its top-down approach, which enables us to represent the plant with few components and from this model we can test different control strategies much faster than if we had to include all the plant details in our model from the beginning,” said Olesen.

Dymola is based on the modeling language Modelica, allowing users to create their own library of models, or modify existing models, so that they will match users’ unique modeling and simulation needs to a higher degree.

Among Solvina’s customers are large companies such as ABB, AkzoNobel, Banverket, Fortum, Holmen Paper, SCA, Vattenfall and Volvo.

 [Click here to return to Contents](#)

303 Seats of Edgecam for Chinese College

28 January 2011

Hundreds of students graduate from the Beijing Industry and Trade Technicians College (BITTC) every year, many of them having been trained in CNC technology using [Edgecam](#). And the Edgecam textbook, published by Edgecam’s China office, has been appointed exclusively as the handbook for students on courses involving CNC programming.

China’s leading Edgecam reseller, Beijing Uniok Technology Co. Ltd., supplied BITTC with its first 50 seats of Edgecam six years ago, along with ongoing technical support. Uniok also provided support for BITTC’s CAM course and examinations.

Shortly afterwards, BITTC increased its Edgecam to 100 seats, and as the college expanded with additional branches and campuses, has now brought its total up to 303 seats.

Part of the [Planit](#) range of CNC software, Edgecam is a market leading CAM system capable of programming milling, turning and mill-turn machines, combining unrivaled ease of use and sophisticated toolpath generation. Planit’s general manager in China, William Zu, says BITTC are ensuring that its students are given the best possible chance of getting jobs in manufacturing by learning about Edgecam programming. “A vast number of companies use it, so they’re giving their students a distinct advantage.

“Jack Yang’s team from Uniok are in regular contact with BITTC, providing technical support from Daniel Liu, and account management from Qi Yi.”

 [Click here to return to Contents](#)

To the Moon Together with KOMPAS-3D; ASCON Supports Team “Selenokhod” at Google Lunar X PRIZE

25 January 2011

ASCON Group, developer and vendor of professional CAD solution, KOMPAS-3D, became an official partner of “Selenokhod” team, the only one Russian participant of Google Lunar X PRIZE. The aim of the contest is to create and to send a first privately owned robot to the moon, to travel 500 meters and to transmit video, images and data back to the Earth. In the frame of cooperation ASCON supported the

CIMdata PLM Industry Summary

team with powerful 3D modelling system, KOMPAS-3D, for lunar rover' designing.

The idea of a new lunar rover inspired and joined researchers, designers and manufacturers all over the world. At the moment the draft proposals of the project are already approved and new technologies and solutions to be used on the moon are under the testing.

“We always try to support daring engineering projects therefore decided to partner “Selenokhod” team. KOMPAS-3D software is used at the majority enterprises of rocket and space industry, so the team' specialists also chose KOMPAS-3D for their work. We wish “Selenokhod” to win the competition and hope Russian space industry again will confirm its leading position in the industry” - said Dmitry Osnach, marketing director of ASCON.

Nikolay Dzis-Voynarovskiy, “Sekenokhod” team leader: “We are very glad, that ASCON supported us with their solution. “Selenokhod” is one of the favourites at the contest and KOMPAS-3D – one of the best CAD systems for 2D and 3D Modelling. We hope the solution will increase our chances for winning the competition”.

About the contest

The Google Lunar X PRIZE is igniting a new era of lunar exploration by offering the largest international incentive prize of all time. A total of \$30 million in prizes are available to the first privately funded teams to safely land a robot on the surface of the Moon and have that robot travel 500 meters over the lunar surface and send images and data back to the Earth. Teams must be at least 90% privately funded, though commercially reasonable sales to government customers are allowed without limit.

Find out more about ASCON and KOMPAS-3D at <http://www.ascon.net>

More Information about „Selenokod“ team and the contest at <http://www.googlelunarprize.org/lunar/teams/selenokhod>

 [Click here to return to Contents](#)

UK's Moonstone Project Achieves Zero Carbon Rating with ArchiCAD

26 January 2011

The award-winning [Moonstone Project](#), designed using GRAPHISOFT's ArchiCAD BIM software, is one of the UK's best performing houses, exceeding the UK's Code 6 Sustainable Homes Guide; the house also exceeds the German 'Passivhaus' top standard for energy efficiency by over 65%.

At 16,000 square feet (1,500 square meters), with a third of its structure underground, Moonstone meets a zero carbon footprint – an incredible accomplishment considering the house is 21 times larger than the average UK home. The house has no heating demand, is not connected to mains water or sewerage, uses no fossil fuels, and is lit entirely by ultra low LED lighting. The building is self-sufficient in its energy requirements by utilizing an array of discretely positioned PV panels, which supply more electricity than the house uses. The surplus is fed back into the grid, generating an estimated income of £3,500/year.

“ArchiCAD BIM is a tool we definitely could not have lived without,” said John Croft, owner of Moonstone. “It certainly saved us tens of thousands of pounds in cost savings on the project as we were able to analyze any design mistakes, clashes of materials, know where the MEP runs were going to go as well as evaluate building performance,” he added. The project also utilized GRAPHISOFT's [EcoDesigner](#), which performs dynamic building energy evaluations, including annual consumption, carbon footprint and monthly energy balance.

CIMdata PLM Industry Summary

A [free Best Practice InfoKit](#) is available from Applecore Designs – a GRAPHISOFT partner, which supported the Moonstone Project design team. The kit includes the Moonstone Project case study in .pdf format; image gallery; Moonstone Virtual Building Explorer (VBE) interactive model download, and instructional keyboard card. The InfoKit can be downloaded from http://infokit.applecoredownloads.com/moonstone_worldwide/form.php

 [Click here to return to Contents](#)

Valiant Designs Manufacturing Equipment 20 Percent Faster with Autodesk Software

27 January 2011

Autodesk, Inc. has named [Valiant Corporation](#) — a global provider of manufacturing solutions — as the [Autodesk Inventor of the Month](#) for January 2011. The award recognizes Valiant’s innovative use of [Autodesk Digital Prototyping](#) software in designing the largest and most challenging manufacturing equipment for customers in sectors ranging from automotive to aerospace.

On a recent project for The Boeing Company, Valiant used [Autodesk Inventor](#) software and [Autodesk Algor Simulation](#) software to more efficiently design and engineer a portable cargo loader. The complex design called for eight telescopic hydraulic cylinders, each capable of lifting 90,000 pounds. With help from Inventor, Valiant was able to design and package telescopic cylinders in three sections instead of the usual four, increasing load capacity while reducing cost. Additionally, the advanced finite element analysis (FEA) functionality in Algor Simulation helped enable Valiant to minimize the weight of the design while meeting customer performance requirements.

“With Inventor software, we’re able to be much more competitive,” said Marty Solcz, chief operating officer of Valiant. “Our engineers can spend 80 percent of their mental energy innovating and 20 percent deciding how to draw lines. Inventor software frees us up to think about the next big idea. With the added talents of our people, that creates outstanding possibilities and potential.”

Digital Prototyping Across Multiple Industries

Valiant uses the Autodesk solution for Digital Prototyping in all areas of its business. The company’s automotive division, for example, frequently designs automated assembly systems for automotive body and power-train manufacturing, among other tasks, with up to 200,000 parts, and as many as 8,000 unique parts.

Using the advanced dynamic simulation functionality in Autodesk Inventor software, Valiant’s engineers can perform on-the-fly validation to check for possible interference between thousands of different parts throughout the range of operation. In addition, the iAssemblies and iParts functionality in Inventor software has enabled Valiant to develop a library of models, promoting reuse while reducing the time required creating new line layouts. Working in conjunction with Autodesk Gold Partner, SolidCAD, Valiant estimates that giving its global workers — who often work in parallel on the same project — access to Inventor software results in efficiency improvements of up to 30 percent.

The benefits of Autodesk software also extend beyond design and engineering phases: Valiant can take a model developed in Inventor software and photorealistically render it with [Autodesk 3ds Max](#) software, creating a stunning visual for marketing materials, proposals and even maintenance manuals.

“Autodesk software is providing competitive value to Valiant and its customers at every stage of the product lifecycle — from design and engineering, to marketing and promotion, to post-sales service,” said Robert “Buzz” Kross, senior vice president, Manufacturing Industry Group at Autodesk.

About the Autodesk Inventor of the Month Program

Each month, Autodesk selects an Inventor of the Month from the users of Autodesk Inventor software, which takes manufacturers beyond 3D to Digital Prototyping. Winners are chosen for engineering excellence and groundbreaking innovation. For more information about Autodesk Inventor of the Month, contact us at IOM@autodesk.com.

 [Click here to return to Contents](#)

Product News

Apriso Expands Paperless Manufacturing Capabilities for Aerospace & Defense Manufacturers

27 January 2011

Apriso announced improved paperless manufacturing and reporting capabilities, ideally suited for the Aerospace & Defense manufacturing industry. Aerospace & Defense manufacturers are under an increasing burden to better manage the complexity inherent in their design and manufacturing processes – a complexity that can be effectively reduced by removing inefficient paper systems. These capabilities are an embedded component of FlexNet 9.5.

Apriso's [Aerospace & Defense industry solution](#) leverages FlexNet's adaptive manufacturing platform to provide a unified solution supporting all manufacturing operations, including production, quality, maintenance, time and labor, and warehouse functions. This solution makes it possible for Aerospace & Defense manufacturers to:

- Cost effectively enhance paperless reporting for manufacturing, nonconformances and Engineering Change Management
- Improve operational excellence while adhering to regulatory compliance requirements
- Maintain comprehensive paperless traceability while effectively supporting emerging manufacturing and supply chain models

As this industry embarks on a transformation into new manufacturing processes and supply chain requirements to support new design and build cycles, A&D manufacturers have chosen Apriso's FlexNet to meet their needs. FlexNet provides the necessary flexibility to adjust manufacturing workflows while providing the "as-built" and "as-maintained" records that product life cycle management demands.

Earlier this year, it was announced that [Apriso joined PTC's PartnerAdvantage Program](#) at the Gold Tier, as a result of an extensive review of Apriso's FlexNet. In addition to enabling customers to reduce time and avoid errors when transferring "as-designed" and "as-planned" Bills of Materials (BOMs) to production, the integration of PTC and FlexNet bridges the gap between product and process design and product execution. By working with firms like PTC, Dassault Systèmes and industry analysts, Apriso is helping customers to achieve the goal of closing the loop between PLM and manufacturing operations.

A strategic approach for Aerospace & Defense manufacturers to navigate their industry transformation is to embrace a three platform strategy, comprising enterprise wide ERP, PLM and MES systems. Apriso supports this strategy with a platform-based enterprise [Manufacturing Execution System](#) that ensures products are made with the right version of the Bill of Materials and work instructions while

CIMdata PLM Industry Summary

enforcing the steps for manufacturing and rework. By synchronizing and executing to third party PLM and ERP systems, Apriso effectively manages the collaboration of technical, functional and business dynamics within heterogeneous systems environments, capturing necessary materials, processes and histories of production output for reporting and compliance.

“Apriso’s FlexNet solution effectively captures, standardizes and deploys industry best practices through FlexNet’s unique business process management capabilities (BPM), helping to efficiently manage collaboration and change control for virtually continuous design and process improvement,” states Rick Gallisa, Industry Director of Aerospace & Defense at Apriso. “As a result, our A&D customers can enhance collaboration internally and externally between production processes and their suppliers while eliminating inefficient paper systems that encumber this industry’s extended product life cycle.”

 [Click here to return to Contents](#)

Aras Announces Membership in SolidWorks Partner Program

25 January 2011

[Aras®](#) announced at SolidWorks World 2011 that the ongoing relationship with the SolidWorks product line has expanded to formal membership in the SolidWorks Partner Program.

Partner program membership brings the advanced PLM solutions of Aras to SolidWorks and Enterprise PDM users and resellers around the world. The Aras solutions provide easy-to-use functionality for enterprise-wide PLM processes such as New Product Development and Introduction (NPDI), Complex Configuration Management, Enterprise Change Management, Outsourced Manufacturing, Quality Compliance and more.

The Aras PLM platform is ideal for companies that use SolidWorks in a multi-CAD environment or for businesses that need to complement and extend Enterprise PDM to enable global PLM processes. The highly flexible pure Web architecture, robust security, multi-site replication and powerful scalability mean Aras is well suited for complicated deployment scenarios with thousands of users across the extended enterprise. And Aras is the only PLM suite delivered in an open source format that eliminates PLM license expenses and provides a predictable, fixed cost structure - especially important for large scale deployments.

 [Click here to return to Contents](#)

Berkeley Design Automation and Accelicon Technologies Accelerate SPICE Model Generation and Characterization

25 January 2011

[Berkeley Design Automation, Inc.](#) and [Accelicon Technologies, Inc.](#), a leading device-modeling and PDK solutions and services provider, announced the support of Berkeley Design Automation Analog FastSPICE Platform in Accelicon's Model Quality Assurance (MQA) product.

Circuits implemented in nanometer-scale processes have increasingly tight specifications that design teams must meet despite increasing statistical and deterministic variation. Ensuring yield while meeting these requirements with minimal margin requires high correlation between actual silicon and nanometer circuit verification using advanced device models. Delivering this capability requires a high degree of cooperation and integration between leading modeling tool and nanometer circuit simulation providers.

CIMdata PLM Industry Summary

The integration of Berkeley Design Automation Analog FastSPICE with Accelicon MQA provides an important foundation to address this need.

"Mutual customers have requested support for the Analog FastSPICE Platform in MQA," said Tim K Smith, Accelicon's CEO. "AFS accuracy and performance will maximize productivity of modeling engineers and designers using MQA for SPICE model validation and analysis, while ensuring outstanding correlation to silicon."

The Analog FastSPICE Platform is the industry's only unified verification platform for nanometer analog, RF, mixed-signal, and custom digital circuits. The AFS Platform combines foundry-certified nm SPICE accuracy, 5x-10x faster single-core performance than any other SPICE circuit simulator, >10M-element capacity, and the industry's only comprehensive silicon-accurate device noise analysis. The AFS Platform is a single executable that uses advanced algorithms and numerical analysis to rapidly solve the original device equations and full-circuit matrix without any approximations. It includes licenses for AFS Nano SPICE simulation, AFS circuit simulation, AFS Transient Noise Analysis, AFS RF Analysis, and AFS Co-Simulation.

"Accurate SPICE models are critical for IC designers, especially for nanometer high-precision analog, mixed-signal, and RF circuits," said Ravi Subramanian, president and CEO of Berkeley Design Automation. "The combination of our AFS Platform with Accelicon MQA establishes an excellent foundation for ensuring silicon correlation."

Accelicon sells the market-standard SPICE model validation and analysis solution, Model Quality Assurance (MQA), and leading SPICE model generation software, Model Builder Program (MBP). MQA provides a critical link between Fab and design, comparing, documenting, and validating foundry-supplied models. Differences between technology nodes, library versions, and even other foundry models can be assessed. MBP allows modeling engineer to tweak and optimize SPICE model library in order to best reflect silicon data and meet designer's particular requirement for a specific type of design.

 [Click here to return to Contents](#)

Bluebeam Software Announces Time-Saving Licensing Option for Enterprise Customers

21 January 2011

For years [Bluebeam PDF Revu](#), the PDF editor from Bluebeam Software, has helped architecture, engineering and construction professionals save time by sharing, reviewing and distributing PDF drawings and documents electronically. Now, Bluebeam is offering a new [License Management System](#) (LMS) to extend Revu's time-saving benefits to IT departments by automatically tracking license usage and releasing inactive seats that, in turn, become available to install on other computers.

"Bluebeam's License Management System is an IT Manager's dream," said Sasha Reed, Bluebeam Director of Account Services. "By tracking the usage of seats and releasing unused seats, Bluebeam is making license management effortless for IT departments and saving a tremendous amount of their time."

The Bluebeam LMS is available to Bluebeam customers with 50 or more seats of Bluebeam PDF Revu and may be applied to both new and existing licenses. The system releases seats that have not been used for 30 days and makes the seats available to install on new computers – an ideal solution for large organizations that frequently reimage, repurpose or replace computers. For full details including pricing for LMS, contact Bluebeam's Account Services Department at 626.296.2140 or toll free at

866.496.2140.

Bluebeam products are sold direct and through a global network of resellers. For more information, visit <http://www.bluebeam.com/>

 [Click here to return to Contents](#)

BobCAD-CAM, Inc. Releases the Pro Version of their CAD-CAM Software for Advanced Machining

28 January 2011

BobCAD-CAM software has officially released their Pro upgrade for their new Version 24 CAD-CAM software product providing significant enhancements to 3 Axis Roughing and Finishing operations as well as side roughing and contour ramping capabilities for profiling open shapes. Profile milling is standard practice in most shops and when using the V24 Pro CAD-CAM software there is now an option for a Contour Ramp type toolpath pattern which allows the user to generate a continuous ramping motion around the perimeter of the part. The user can enter an angle of decent, or a depth per pass to determine the number of rotations around the part. This new feature eliminates the need to pre-drill small pockets in most cases and is great in milling out slots. This new feature is also great for cutting small irregular shaped pockets where a single pass around the perimeter will clear all the material due to the size of the tool. In addition to this 2 Axis operation, the software is now capable of generating clean side roughing toolpaths for open shape profiles.

The V24 Pro CAD-CAM software now offers new 3 Axis toolpaths. The new Advanced Roughing operation includes Intermediate Steps where after the initial roughing stage has occurred, the tool comes back up the contour making intermediate cuts that reduce the stair step effect that roughing can cause. This makes finishing the part more efficient in complex part machining. Included in this is a Rest Roughing option where the CAD-CAM Software will calculate where the larger tool could not cut and produce toolpath for a smaller cutter to machine. Other new advanced toolpaths are Flatlands where the software will machine all of the flat areas of the part, new Pencil Machining will machine internal corners and fillets with smaller radius tools to remove the remaining material that were inaccessible with larger tools used for previous roughing, semi-finishing, and finishing toolpaths. The Version 24 Pro CAD-CAM software also includes an advanced Equi-Distant Offset Contour toolpath which maintains the exact step over for the cutting tool regardless of the complexity of the surfaces being machined. This finishing toolpath is capable of producing a near polished part in many cases.

All of these new features come with a compliment of user definable variables such as tool lead-ins and Outs, toolpath linking options and much more. The new Tool Library also makes adding and customizing tools more efficient. The new Version 24 Pro CAD-CAM software is powerful enough to compliment the serious machine shop that requires advanced cutting capabilities while being priced affordably enough for the home machinist to be able to acquire. For more information and a free downloadable demo, visit bobcad.com or contact BobCAD-CAM directly at 877-262-2231 or 727-442-3554.

 [Click here to return to Contents](#)

Bunkspeed Brings the Interactive 3D Photograph to the Cloud

24 January 2011

Bunkspeed® introduced the Bunkspeed® Cloud Solution at Solidworks World 2011 in San Antonio.

CIMdata PLM Industry Summary

The Bunkspeed Cloud Solution, including Bunkspeed SHOT Pro™, leverages NVIDIA® GPUs to enable to publish photorealistic scenes or 3D content to the Web for real time visualizing and interacting from anywhere in the world, on almost any device via a web browser.

“When it comes to accurately simulating the physical world – details matter,” says Philip Lunn, Bunkspeed founder and CEO. “With the introduction of the Bunkspeed Cloud Solution, we are further offering our users a way to communicate and share their creativity without sacrificing the rendering quality and speed that makes Bunkspeed technology standout.”

Running in an NVIDIA GPU-based cloud environment, the Bunkspeed Cloud solution uses the mental images’ RealityServer® 3D web application services platform to empower users in the automotive design, architectural visualization, engineering, marketing, and consumer product design fields to create and collaborate on stunningly photorealistic visualizations without having to wait for images to render on their workstation. It also allows for non-CAD decision-makers to view and review such projects, all through the web, a platform that provides hardware resources that dynamically scale based on utilization requirements

“Providing interactive and photorealistic 3D web solutions in the Cloud with our RealityServer and iray technologies is where the industry is heading,” says Randy Ochs, mental images VP Business Development and Sales, North America. “Seeing what Bunkspeed has done with Bunkspeed Cloud to deliver this seamlessly to anybody, anywhere will change the game, yet again.

About Bunkspeed SHOT Pro

SHOT Pro is the world’s first hybrid 3D rendering application that produces stunningly photorealistic images and 360-degree animation with ease. SHOT Pro empowers digital designers to turn concepts into reality with its “all digital camera” with interactive ray-tracing and intuitive interface. SHOT Pro enables users to perfectly simulate real-world lighting and materials -- including the subtle effects of indirect illumination and refraction -- in minutes rather than hours. Additionally, SHOT Pro integrated with mental image's iray® rendering technology leverages NVIDIA® Quadro® professional graphics solutions to enable a combination of unprecedented power, elegance and accuracy.

SHOT Pro integrates with Solidworks 2011 and other leading CAD applications – via a plug-in or importer – allowing users to add materials, change out lighting environments and apply various back plates to produce photorealistic results.

Demonstrations of SHOT Pro and the Bunkspeed Cloud Solution are available at the **NVIDIA booth (#401)** during SolidWorks World 2011.

Pricing and Availability

Bunkspeed SHOT Pro is currently available for the Windows platform for \$3,495 USD. For more information or to request a trial version, visit: <http://www.bunkspeed.com/SHOT> or contact Bunkspeed at: sales@bunkspeed.com.

Information and pricing for Bunkspeed Cloud-based configurations are available upon request. Please contact Bunkspeed at: sales@bunkspeed.com.

Additional information on mental images’ products can be found at: <http://www.mentalimages.com>; additional information on NVIDIA Quadro can be found at: <http://www.nvidia.com/quadro>.

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

CALMAC Introduces Autodesk Revit Models for Energy Storage Systems

26 January 2011

[CALMAC](#), a leader in energy storage systems, announced that its product line is now available through the [Autodesk® Seek](#) web service, allowing design professionals to search for and access the company's high-quality building product information and design files from the Seek website or directly from their Revit-based design applications. With the addition of CALMAC models to their building design model, customers are now able to visualize a real-life representation of an energy storage system in the context of a whole building design. By hosting CALMAC's Autodesk Revit® models, Autodesk Seek provides architects and engineers with predictability and visual context in the placement of [energy storage systems](#) in new construction and retrofit projects.

“By enhancing the design process with 3D modeling, architects and engineers are better equipped to visualize how the energy storage system components fit into a project long before a structure is even built,” said Mark MacCracken, CEO of CALMAC and Chair, [USGBC](#). “Building information modeling helps users preview the integration of our system into a building's design, offering a glimpse of the end result throughout the design stage. With a presence in Autodesk Seek, our products will now be at the fingertips of millions of architects and engineers as they design.”

[Autodesk Seek](#) allows design professionals to search specifically for the building product design files they need – in the form of 3D models, 2D drawings, visual images, and part and product specification data. The service includes access to existing content from Autodesk applications and building product manufacturers into a single, unified search experience. Architects and engineers can now preview 3D representations of CALMAC's product designs, from structural composition to the way components fit together in the field, and can be confident that CALMAC models are compliant with Seek's stringent guidelines. This capability makes for better informed decisions based on more detailed project data during the conceptual design process and throughout the project lifespan.

“It is increasingly important for design professionals and builders to be able to rely on high quality data as the AEC industry moves to BIM,” said David Bandi, Director, Autodesk Seek Network . “The addition of CALMAC's information-rich IceBank energy storage systems models to the Autodesk Seek web service is one more step in delivering a ‘critical mass’ of product information to designers who can now take a more comprehensive approach to their green building designs.”

For more information, visit <http://seek.autodesk.com> and search for “CALMAC” or “energy storage.” Revit (BIM) files may also be downloaded at <http://calmac.com/support/revit.asp>.

 [Click here to return to Contents](#)

CCE's Oceans SDK Enables Creation of Browser-Based CAD Interfaces for ERP/PDM/PLM

25 January 2011

CCE announced an update to Oceans SDK (OSDK), a first-of-its-kind technology for 3D CAD integration in enterprise applications. OSDK provides access to native product information stored in files of all major 3D CAD formats, via a unified API architecture, and without the need for a CAD license.

The recent update adds COM API to OSDK in addition to the existing C++ API. OSDK's COM API can be used with common scripting languages to develop lightweight browser-based CAD interfaces for ERP/PDM/PLM systems.

CIMdata PLM Industry Summary

"Our initial focus was on desktop-based applications. But over the past year, we have seen an increasing demand from our enterprise application customers to offer browser-based applications. To address this demand we have added the COM API in Oceans SDK", says CCE's V.P. Sales & Marketing, Vinay Wagle.

OSDK provides an easy, non-royalty based solution to all such enterprise application providers, thereby providing them with a significant edge over competition. OSDK's single API for all the CAD formats makes the integration development a lot easier and keeps the maintenance costs low.

OSDK is based on CCE's ODX libraries that provide native access to major CAD systems, and is currently used by many Independent Software Vendors for their CAD-independent viewers and translators.

For additional information, please visit <http://www.cadcam-e.com/development-tools/oceans-sdk.aspx>

 [Click here to return to Contents](#)

ecVision's B2B Supply Chain Collaboration Capabilities Focus on Suppliers

25 January 2011

Retailers are heaving a sigh of relief after the 2010 holiday shopping season ended on an upbeat note, but optimism still looms as costs are still higher than average for material, labor and transportation -- the three main tenets for meeting price margins. The best course of action is to introduce collaborative practices throughout the entire supply channel, starting with supplier community. With its enhanced technology platform for B2B collaboration, ecVision is making it simple for retailers to keep the momentum rolling and gain the competitive edge.

ecVision's customers have seen results through collaboration and visibility tools -- some realizing measurable margin growth. "The concept of Collaborative Planning, Forecasting and Replenishment (CPFR), with its roots dating back nearly 20 years to the retail giant Wal-Mart, is the basis of our advanced solutions for 2011," says Gary Barraco, director of product marketing for ecVision. "Supply chain complexity and globalization is forcing retailers to work more closely with suppliers to maintain competitive advantage. Supplier relationships need to be built on joint communication flow and mutual benefit to all parties."

ecVision's B2B Portal differentiates from other supply chain products in two primary ways; first by focusing on collaboration during product design and development, a strategy outside of the norm for typical PLM solutions; and then by providing the ability to reach deeper into the supply network to encompass raw material manufacturers, service providers, vendors, and factories.

In a December 2010 report Citibank's Deborah Weinswig noted that retailers that process changes "can expect to realize a 20-50% reduction in cycle times." The process changes Weinswig refers to in her report include fabric pre-positioning, sample management, and production diversification -- all capabilities in ecVision B2B Portal.

 [Click here to return to Contents](#)

ESI Helps Car Manufacturers Improve Biofidelity for Vehicle Safety

28 January 2011

CIMdata PLM Industry Summary

Based on the positive experience of high-quality dummy model developments within the German Association for Research on Automobile Technology (FAT), five German car manufacturers representing the Partnerships for Dummy Technology and Biomechanics (PDB) and software vendors including ESI, worked together to develop a high-quality WorldSID 50th Finite Element (FE) model - a new advanced worldwide accepted dummy of improved biofidelity to assess the injury risk to vehicle occupants in side impacts.

As global markets require international rules and standards, harmonized safety regulations are essential. The PDB, which was founded in 2002 as a cooperative venture between Audi, Mercedes, Porsche, BMW and Volkswagen in the field of crash test dummy technology, biomechanics and simulation, participates in national and international committees to support worldwide efforts towards harmonization. The main objective of the WorldSID 50th FE model, representing an average sized adult, is to replace the EuroSID-2 and US DOT SID simulation models.

The requirement of a validated and high-quality FE model, such as the WorldSID 50th, also stems from the constant need for vehicle manufacturers to reduce costs and save time. Indeed, dummy models are key for vehicle manufacturers as they are the measuring tool of a car's overall quality. Physical dummies are expensive and it typically requires 6 to 7 hours to perform a single crash test. In contrast the virtual counterpart of a dummy model allows for the completion of dozens of virtual crash tests per day.

The WorldSID 50th FE model is based on the latest version of the physical dummy whose FE mesh was developed using the CAD Data of ISO 15830 of 2005. The development of the WorldSID 50th FE model is primarily based on customer requirements, as communicated through the PDB. Validation tests covered a wide range of expected load conditions in vehicle environments, and the validation process went far beyond the certification or component tests. The complete dummy was validated against different barrier-sled tests which illustrated the behavior inside the car cell. By checking and improving test equipment and the corresponding virtual models, the PDB helps manufacturers reliably fulfill their high-quality standards in the field of vehicle safety.

"During the project, the collaboration between Audi and ESI was excellent," said Björn Hohage, Occupant Simulation, Side Impact, AUDI AG. "I had the opportunity to test, early in the development process, the latest enhancements of the new WorldSID 50th FE model developed by ESI engineers, and to provide them with feedback to improve it. This new dummy model is now ready to be used at an industrial level."

[ESI](#) first contributed to the improvement of the simulation model to allow the release of the first official industrial version of the WorldSID 50th FE model. While the first R&D version (V1.5) already provided good results in all investigated load cases from more than 200 tests, the current industrial version (V2.0) benefits from a number of enhancements, including new features of ESI's solution for crash and safety simulation ([Virtual Performance Solution](#) version 2010), fine tuning of the neoprene suit of the dummy, new material properties for the lower leg area and shoes, as well as extended friction parameters for knee and ankle joints. A detailed user manual also presents the correlation between simulation and experimental results.

ESI is an official reseller of the WorldSID 50th FE model and further work in dummy development is in progress.

"We are particularly proud of our WorldSID 50th FE model. The model already correlates very well with the complete set of component, calibration and barrier tests. This is the result of systematic and accurate

CIMdata PLM Industry Summary

work where every detail was modeled in-depth,” said **Dr. Charles Thibaud**, Technical Director at ESI GmbH. “During the FE model development, the stability, accuracy and speediness of Virtual Performance Solution have positively supported our efforts.”

ESI also offers a wide library of validated dummy models, covering all safety standards. For frontal impact, the Hybrid III FE and Multi Body models – and the THOR FE model are available. For side impact the EUROSID2, the US DOT SID and the SID-IIs are also available. For rear impact, the BioRID II is available. As well as dummies, ESI’s model library also includes barriers and biomechanical human models.

For more information, please visit: <http://www.esi-group.com/products/biomechanics>



[Click here to return to Contents](#)

GRAPHISOFT Releases ArchiCAD STAR(T) Edition 2011

18 January 2011

GRAPHISOFT, the global leader in Virtual Building™ solutions, announced the release of ArchiCAD STAR(T) Edition 2011 German and Austrian versions, the latest release of its entry-level Building Information Modeling (BIM) solution.

“ArchiCAD STAR(T) Edition 2011 brings the benefits of BIM to a wide array of customers at a very competitive price,” said Miklos Szovenyi-Lux, Vice President of Product Management, GRAPHISOFT. “ArchiCAD STAR(T) Edition 2011 allows architects on tight budgets to use a powerful BIM solution they could not previously afford.”

About ArchiCAD STAR(T) Edition 2011

The new ArchiCAD STAR(T) Edition 2011 is based on the Virtual Building technology of ArchiCAD 14, but with a feature set and price tailored to the needs of small architectural practices, home builders, and building contractors. ArchiCAD STAR(T) Edition 2011 contains all the tools necessary to create the Virtual Building model from which the entire architectural documentation is derived. New features in the 2011 Edition include:

- Partial Structure Display
- Oriented Views
- Shadows in Open GL
- Refined management of Object Libraries
- Dimension Text prefix/suffix
- Improved handling of Schedules
- Ruler
- Direct import of site-survey data
- MEP support
- Streamlined AutoCAD 2010 I/O
- Performance optimizations

CIMdata PLM Industry Summary

The German and Austrian versions of ArchiCAD STAR(T) Edition 2011 begin shipping on January 17, 2011. For more information, please visit the official product [website](#). Other localized versions will follow during Q1, 2011.

 [Click here to return to Contents](#)

Luxology Announces New Studio Environment Set 1 Kit

25 January 2011

[Luxology® LLC](#) announced the availability of the Studio Environment Set 1 (SES 1) Kit, a new collection of high dynamic range (HDR) spherically mapped images that provide an excellent source of interior lighting for architectural renderings, industrial design presentations, engineering visualization and packaging design. This extensive library of images was produced exclusively for Luxology by Yazan Malkosh of [9b studios](#) and is designed for use with [modo 501](#), Bentley Systems' [MicroStation](#) and [PhotoView 360](#) from [SolidWorks](#).

SES 1 provides a library of 51 HDR spherical images that provide photographic studio-like lighting for product shots, engineering visualizations, advertising art and packaging shots. The collection is designed for architects, industrial designers, engineers, packaging specialists and CAD visualization professionals who would like to be able to choose studio/interior lighting scenes without investing the time to create custom lighting set ups for each project.

“SES 1 will go a long way toward helping modo, MicroStation and SolidWorks users create stunning scenes in mere minutes,” said Brad Peebler, president of Luxology. “HDR images are an incredibly efficient lighting tool and this specially crafted collection provides users with true studio quality lighting.”

Pricing and Availability

The Studio Environment Set 1 Kit is available immediately from Luxology at a price of USD \$69. modo 501 is available with dual licenses that support both Mac OS X and Windows. The software sells for a suggested retail price of USD \$995 and existing modo users (any version) can upgrade for \$395. To see a tour of modo 501's features, and an extensive image gallery, please visit Luxology's website at <http://www.luxology.com>.

 [Click here to return to Contents](#)

New STEP Application Protocol 242 in ISO

26 January 2011

On January 25th, 2011 ISO (International Organization for Standardization) announced that the proposal for the standardization of STEP AP 242 was accepted. The aim of the project is to create a globally accepted backbone for the automotive and aerospace industry by the end of 2011.

The development of AP 242 is driven by the international bodies PDES, Inc., JAMA, AIA, ASD-SSG, GALIA, VDA and NIST and representatives of industry such as EADS, BoostAero, Boeing, Lockheed Martin and Rockwell Collins. The project leadership is at ProSTEP iViP.

About the ProSTEP iViP Association

The ProSTEP iViP Association is an international branch-specific community comprising leading

CIMdata PLM Industry Summary

companies in the automotive and aerospace industries, system vendors and research institutes. The aim of the ProSTEP iViP Association is to find solutions for the challenges facing the manufacturing industry as a result of networked collaboration in a worldwide development network.

A concept based on a coherent, cross-organizational and cross-domain view of data, processes and systems provides a solid foundation for meeting these challenges. The Association's five main areas of focus reflect this approach: process management, system integration, product data standardization, engineering collaboration and knowledge transfer.

The ProSTEP iViP Association is headquartered in Darmstadt, Germany, and was founded in October 1993 by 38 industrial companies and a number of system vendors as part of the German STEP initiative. Members of the ProSTEP iViP Association currently include about 160 companies and organizations from 17 nations.

 [Click here to return to Contents](#)

New Version of 3DModelSpace.com CAD Model Search Engine Now Live

25 January 2011

Catalog Data Solutions Inc. (CDS), creator of 3DModelSpace.com, announced immediate availability of a new version of the CAD Model Search Engine that enables industrial suppliers with online CAD models/drawings to be found by design engineers.

“Based on user feedback, the new version provides an enhanced user interface (UI) with category selection and more relevant search results. As always any manufacturer or distributor can now ensure that their downloadable CAD models/drawings can be found on 3DModelSpace under whatever search terms they choose,” said John Major, CEO, Catalog Data Solutions. “For industrial suppliers’ online marketing to be successful they first need a good website, second they must ensure that their content is syndicated and found.”

“Already over a million designers and engineering are accessing 3DModelSpace each month from inside Pro/Engineer Wildfire, Autodesk Manufacturing Community, and all the general search engines. If you have invested in online CAD drawings and models for your website you should ensure that 3DModelSpace points to them and helps ensure they get found.”

Suppliers’ drawings and models stay on their own sites – nothing is copied to 3DModelSpace so nothing gets out of date. Simply give 3DModelSpace the links for your CAD drawings and models, and select the search terms under which you want your products to be found.

Watch the 3DModelSpace video [here](#).

 [Click here to return to Contents](#)

OpenText Licensing Agreement Brings Advanced Content Analytics to Market

25 January 2011

OpenText announced that the company will bring content analytics capabilities to market for improved business productivity through an Intellectual Property (IP) licensing agreement with the National Research Council of Canada (NRC). The NRC innovations will be incorporated into OpenText's flagship Enterprise Content Management (ECM) Suite, with the first version expected to be available by

CIMdata PLM Industry Summary

spring, 2011.

"OpenText is pleased to collaborate with the National Research Council of Canada to commercialize leading-edge technology that fundamentally brings more powerful content analytics capabilities to the enterprise," said Eugene Roman, Chief Technology Officer at OpenText.

Businesses and governments are increasingly engaging with workers, partners and customers across a range of electronic and social media to collaborate, find new ideas, measure sentiment, identify important trends and predict future outcomes based on content analytics. With added content analytics capabilities incorporated into the OpenText ECM Suite, businesses will gain more value from their content through improved data mining and analysis.

"Content analytics is the key to extracting business value from social media and text-rich online and enterprise information sources, an essential technology for marketing, online commerce, customer service, and improved search and Web experience. Given the mind-boggling growth in information volumes, no wonder uptake is booming, powered by rapid technical advances from leading-edge vendors such as OpenText," said Seth Grimes, analytics strategist with Alta Plana Corporation.

Research and development (R&D) for the new project is already under way in the Ottawa NRC facilities in collaboration with OpenText's Montreal R&D center that develops its content analytics solutions, based on the acquisition of Nstein Technologies last year. The project is focused on developing software for analyzing large collections of structured and unstructured data that reside within organizations.

"Analysis of information, which can be described as a mixture of social and enterprise content managed in silos, is critical in order to provide valuable, actionable business insight," Roman explained. "With this solution, businesses will have the ability to source increasingly precise responses related to specific business questions which can save them time and money."

Content Analytics addresses the discovery of answers to those important business questions through the use of semantic technologies such as natural language processing and sentiment analysis. The collaboration between the National Research Council of Canada and OpenText will enable more efficient data mining capability to locate entities -names, product brands, geographic locations, currencies, ticker symbols for example - plus uncover facts such as financial statements, merger and acquisition announcements, etc. and then connect relationships between those entities and facts. The software can search for pieces of text or metadata that cannot be specified in common search engines, and the results from those queries can be presented much more flexibly than would be possible using traditional business intelligence solutions.

In April 2010, OpenText announced its Content Analytics strategy whereby OpenText will be the first vendor to make content analytics pervasive across an entire ECM suite of products. OpenText's ECM Suite 2010 has wide ranging new functionality covering 90 products and modules linked through a consistent integration framework, and spanning everything from compliance, business process management and portals to integrated mobile experience and enterprise information archiving. The result gives customers the most complete content management environment available to handle the vast array of content types, languages, applications, user needs and business processes in their organizations.

Follow developments with OpenText [@OpenText](#) on Twitter

 [Click here to return to Contents](#)

CIMdata PLM Industry Summary

SAP Reduces 2010 Green House Gas Emissions Despite Double-Digit Revenue Growth

26 January 2011

[SAP AG](#) announced its preliminary report of greenhouse gas (GHG) emissions for 2010. The company's worldwide GHG emissions for 2010 totaled 430 kilotons, a four percent decrease from the 450 kiloton level of 2009. In its third year of consecutive reductions, SAP has cut GHG emissions by 24 percent from its peak levels in 2007, putting the company well on track to achieve its target of reducing emissions to 2000 levels by 2020.

Using its own software to measure, report and reduce its carbon footprint, SAP can attribute the emissions decrease to a variety of efforts and investments in energy and carbon efficiency projects. Contributing factors to the company's footprint reduction also include changes in employees' commuting practices and the purchase of renewable energy.

"SAP's vision is to help the world run better. And in a better run world, companies perform more profitably and more sustainably," said Peter Graf, chief sustainability officer, SAP AG. "Having just announced double-digit company growth, I am proud of the fact that we managed to achieve this growth while further reducing our worldwide greenhouse gas emissions. Thanks to the use of sustainability solutions from SAP, we were able to track and report energy use and emissions quarterly — taking appropriate action throughout the year to actively manage our sustainability performance."

The year 2010 was the first in which SAP used its sustainability reporting and analytics solutions to track GHG emissions quarterly (Q1: 106 ktons, Q2: 109 ktons, Q3: 112 ktons, Q4: 103 ktons). In line with industry best practices, SAP re-baselined its emissions in 2010 and included more greenhouse gases like nitrogen oxide, methane and hydro fluorocarbons into its emissions accounting. Additionally, SAP adjusted the accounting of carbon emissions caused by electricity use to more precisely reflect the energy mix in regional grids.

SAP uses the [SAP® Carbon Impact OnDemand](#) solution to report greenhouse gas emissions on a quarterly basis. Further automation in the data collection process enables SAP to report its emissions months earlier than previously possible. The company will report in-depth, audited carbon footprint details in the 2010 SAP Sustainability Report, to be issued in spring 2011.

SAP Carbon Impact OnDemand is part of the comprehensive portfolio of sustainability solutions from SAP, including the [SAP® BusinessObjects™ Sustainability Performance Management](#) application, the [SAP® Environment, Health, and Safety Management](#) application and [SAP® Best Practices packages for sustainability](#). For more details, visit the [Sustainability Newsroom](#).

Follow SAP on Twitter at [@sapnews](#).

 [Click here to return to Contents](#)

STARC Advances Test of Low Power ICs Using Mentor Graphics Tessent TestKompress

24 January 2011

Mentor Graphics Corporation announced that the Semiconductor Technology Academic Research Center, STARC, has successfully employed the Tessent™ TestKompress® product to expand its low

power IC test methodology for ICs used in battery-powered mobile devices and other power-sensitive products. Using Mentor Graphics technology, STARC is able to detect bridge and small delay failures and to prevent IR drop and power noise in nanometer devices, while minimizing test time and IC power consumption during test.

“The combination of Mentor tools and application expertise was of critical value in our efforts to solve these significant challenges,” said Takashi Aikyo, Senior Manager, Test and Diagnosis Group Development Department-2 at STARC, the semiconductor research consortium located in Yokohama. “Using standard power format-directed scan chain insertion and unique pattern generation algorithms, TestKompress helped us achieve an ideal combination of highly compressed patterns to reduce test time, and efficient multi-domain test controls to minimize power during test. Using TestKompress, we were able to achieve test compression of 100X with a toggle rate under 20% in order to meet our test quality and power budget requirements, while staying with our manufacturing test cost constraints.”

“Tessent TestKompress has been successful in a wide variety of low-power IC test applications,” said Greg Aldrich, Director of Marketing for the Silicon Test Solutions product group at Mentor Graphics. “Its inherently efficient test pattern generation technology—combined with special features to minimize switching activity and manage multiple test domains—makes it the most capable solution available for low power as well as general IC test.”

 [Click here to return to Contents](#)

STARC and Cadence Develop In-Design DFM for 32/28-Nanometer Silicon Realization

24 January 2011

Cadence Design Systems, Inc. announced that it has teamed with the Semiconductor Technology Academic Research Center (STARC), a Japanese design consortium, and created an innovative Cadence®-based 32/28-nanometer design-for-manufacturing (DFM) flow. Using the Encounter® Digital Implementation (EDI) System as the end-to-end implementation vehicle, the in-design DFM flow built into STARC’s STARCAD-CEL methodology enabled chip DFM signoff up to 100 times faster than traditional industry DFM methods.

The productivity gains STARC enjoyed were the result of moving the DFM steps into the implementation stage of chip development and deploying new pattern-matching technology rather than the traditional model-based approach. The new flow extends Cadence’s longtime collaboration with STARC into the 32/28-nanometer arena and further expands its Silicon Realization offerings.

The in-design flow for implementation is focused on maintaining designers’ intent and leveraging accurate abstraction of manufacturing models and rules to deliver blazing fast silicon convergence for DFM variability hotspots. The flow encompasses all elements for hotspot prevention, optimization, and silicon-accurate fixing. The flow makes use of ground-breaking, extremely accurate abstraction technology from core Cadence Silicon Realization tools—including NanoRoute’s litho prevention, Litho Physical Analyzer, CMP Predictor and Layout-Dependent-Effect Electrical Analyzer.

The DFM offering tightly integrates and concurrently optimizes in conjunction with other in-design signoff capabilities already inside EDI System, such as extraction, timing, signal integrity, and power analysis. These capabilities provide the ultimate in risk reduction for yield-limiting DFM hotspots while considering the bigger context of overall systematic and random physical and electrical variability.

“To cope with the complexity of designing at 32/28 nanometers, we had to set aggressive performance

and quality targets for accelerating the convergence of DFM issues to address both physical and electrical variability,” said Nobuyuki Nishiguchi, vice president and general manager of development at STARC. “With the new in-design DFM flow, the targets were surpassed with dramatic time savings, and at no cost to quality. The ability to accurately model and optimize for DFM during design enabled us to do intelligent, preventative work during digital implementation, thereby avoiding time-consuming iterations at signoff. STARC's hierarchical design approach and pattern matching performed world-class litho analysis and resulted in 100 times faster than a full simulation-based litho analysis. STARC believes that this flow is the most practical methodology for 32/28 nanometers and below.

As an example, with STARC now fully deploying the Cadence Silicon Realization technology, design teams can leverage Encounter DFM’s advanced analysis capability in which abstracts silicon failures or variability hotspots into patterns while maintaining the original design intent. This accurate abstraction helped STARC reduce the DFM analysis turnaround time during digital implementation with EDI System by 100 times compared to traditional standalone signoff methods. In addition, STARC achieved 100% DFM hotspot silicon convergence given the accuracy of the in-design DFM technology, saving several days of DFM error iteration cycle time.

Aligned with the [EDA360 vision](#), the flow supports the Cadence goal of delivering a complete end-to-end Silicon Realization product line that offers unified intent, abstraction and convergence.

“This latest collaboration with STARC has produced a flow that meets stringent accuracy requirements and can save design teams valuable cycle time and risk as they prepare to hand their design over for manufacturing,” said David Desharnais, group director of product management at Cadence. “Our multiple, successful collaborations with STARC around Cadence Silicon Realization have resulted in advanced flows and methodologies that enable technology companies to tighten the profitability gap as well as the productivity gap.”

 [Click here to return to Contents](#)

Synopsys' DesignWare DDR PHY Compiler Eases Integration of Memory Interface IP

26 January 2011

Synopsys, Inc. announced the immediate availability of the DesignWare® DDR PHY compiler, supporting DDR2, DDR3, LPDDR and LPDDR2 SDRAMs. The DesignWare DDR PHY compiler offers designers a web-based GUI to assemble a customized, high-performance DDR PHY for their system-on-chips (SoCs). The DesignWare DDR PHY compiler evaluates more than 60 variables and allows the evaluation of unlimited 'what-if' scenarios. The output of the PHY compiler is a customized hard DDR PHY that is optimized for the target application.

"As a leading fabless design integrator, GUC is committed to delivering high-quality designs to our customers," said Dr. Keh-Ching Huang, head of Marketing and IP Solution Planning at Global UniChip. "Synopsys' DesignWare DDR PHY compiler has helped us resolve what has traditionally been a very complex and time consuming task. We have used the compiler to refine the DesignWare DDR PHY to reach our ideal PHY implementation, saving us significant time and effort."

Supporting the DesignWare DDR2/3-Lite, DDR 3/2 and DDR multiPHY IP products, the DesignWare DDR PHY compiler's GUI steps the user through a series of decisions as they construct their DDR PHY from hard IP components, including application-specific DDR I/Os. Designers have control over multiple variables including supported DRAM types (such as DDR3, DDR2, Mobile DDR and/or LPDDR2), foundry and process node, memory channel width, power-to-signal ratios, core power

CIMdata PLM Industry Summary

requirements and other physical placement variables. The DesignWare DDR PHY compiler produces an instantly viewable image of the DDR PHY layout, a list of the pins, area, a power consumption report, placement scripts and an RTL model of the PHY.

"The DDR interface is a crucial component of most SoCs, particularly the I/O ring, which can significantly impact the die size and power of the design," said John Koeter, vice president of marketing for the Solutions Group at Synopsys. "Synopsys developed the DesignWare DDR PHY compiler to address our customers' need for application-specific DDR PHYs that meet their aggressive power and area requirements."

Synopsys' comprehensive DesignWare DDR IP offering consists of digital controllers and PHY IP supporting DDR, DDR2, DDR3, Mobile DDR and LPDDR2. The DesignWare DDR PHY IP supports leading process technologies and includes a DFI 2.1-compliant interface. Synopsys' DesignWare Universal DDR Memory and Protocol Controller IP complement the DesignWare DDR PHY IP, offering a comprehensive DDR interface solution from a single IP vendor. Synopsys helps lower integration risk by providing high-quality DDR IP solutions that have been implemented in hundreds of applications and are shipping in volume production.

Synopsys will be demonstrating the DesignWare DDR PHY compiler at the upcoming [DesignCon 2011 Conference](#) (booth number 606) on February 2-3 at the Santa Clara Convention Center in Santa Clara, California.

Availability

The DesignWare DDR PHY compiler is available to licensed customers of select DesignWare DDR PHY IP today. For access to the DesignWare DDR PHY compiler as part of the Synopsys "Try the PHY" program, visit: <https://www.synopsys.com/dw/ddrphy.php>

 [Click here to return to Contents](#)

T-Splines, Inc Introduces tsElements™ for SolidWorks®

24 January 2011

T-Splines, Inc., creators of precise and flexible 3D surface modeling tools with full industry standard compatibility, announced the introduction of tsElements for SolidWorks, the first integrated application to bring T-Splines' organic modeling technology to the SolidWorks user community.

Over a thousand customers across a broad range of industries, from jewelry design, to marine design, to architectural design and consumer products, are leveraging T-Splines in their design workflow to iterate faster on concepts, be more responsive to client requirements, and build gap-free manufacturable prototypes without having to make styling or aesthetic compromises. With the introduction of tsElements, some capabilities of T-Splines are now available for the first time within SolidWorks.

Key Features of tsElements for SolidWorks include

Import .obj models: tsElements for SolidWorks is the only way to import quad-based .obj models from subdivision modelers or T-Splines for Rhino as editable, watertight solid or surface bodies.

“Push/pull” modifications: Push and pull on faces, edges, and control points to tweak the model inside SolidWorks.

Push-button conversion: Your imported model is automatically converted to a NURBS surface or

CIMdata PLM Industry Summary

solid. The T-Splines technology that is at the core of tsElements ensures 100% compatibility to NURBS.

Feature tree integration: The rest of the feature tree will see the shape as a standard surface or solid and update when modifications are made, so you can harness the power of SolidWorks to add exact details to your model.

“We are looking forward to introducing T-Splines to the broader SolidWorks community,” said Matt Sederberg, CEO of T-Splines. “tsElements for SolidWorks is available as an integrated add-on application to SolidWorks, and is the first version of what we see as many innovative new surface modeling applications for this market.”

Please stop by the **T-Splines booth (# 643)** at the SolidWorks World Conference and take advantage of their special show product promotions. Or visit <http://www.tsplines.com/solidworks> to learn more.

 [Click here to return to Contents](#)